



RE: 400420
Lot 37 HT

MiTek USA, Inc.

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

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

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

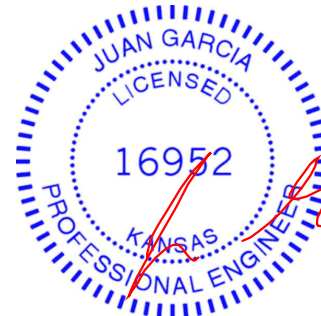
Floor Load: N/A psf

This package includes 69 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I42027002	A1	7/15/2020	27	I42027028	E9	7/15/2020
2	I42027003	A2	7/15/2020	28	I42027029	E10	7/15/2020
3	I42027004	A3	7/15/2020	29	I42027030	E11	7/15/2020
4	I42027005	A4	7/15/2020	30	I42027031	G1	7/15/2020
5	I42027006	B1	7/15/2020	31	I42027032	G2	7/15/2020
6	I42027007	B2	7/15/2020	32	I42027033	H1	7/15/2020
7	I42027008	C1	7/15/2020	33	I42027034	H2	7/15/2020
8	I42027009	C2	7/15/2020	34	I42027035	H3	7/15/2020
9	I42027010	C3	7/15/2020	35	I42027036	J1	7/15/2020
10	I42027011	C4	7/15/2020	36	I42027037	J2	7/15/2020
11	I42027012	C5	7/15/2020	37	I42027038	J3	7/15/2020
12	I42027013	C6	7/15/2020	38	I42027039	J4	7/15/2020
13	I42027014	C7	7/15/2020	39	I42027040	J5	7/15/2020
14	I42027015	C8	7/15/2020	40	I42027041	J6	7/15/2020
15	I42027016	C9	7/15/2020	41	I42027042	J7	7/15/2020
16	I42027017	C10	7/15/2020	42	I42027043	J8	7/15/2020
17	I42027018	D1	7/15/2020	43	I42027044	J9	7/15/2020
18	I42027019	D2	7/15/2020	44	I42027045	J10	7/15/2020
19	I42027020	E1	7/15/2020	45	I42027046	J11	7/15/2020
20	I42027021	E2	7/15/2020	46	I42027047	J12	7/15/2020
21	I42027022	E3	7/15/2020	47	I42027048	J13	7/15/2020
22	I42027023	E4	7/15/2020	48	I42027049	J14	7/15/2020
23	I42027024	E5	7/15/2020	49	I42027050	J15	7/15/2020
24	I42027025	E6	7/15/2020	50	I42027051	J16	7/15/2020
25	I42027026	E7	7/15/2020	51	I42027052	J17	7/15/2020
26	I42027027	E8	7/15/2020	52	I42027053	J18	7/15/2020

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.



July 15, 2020



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MiTek USA, Inc.

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

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
53	I42027054	J19	7/15/2020
54	I42027055	K1	7/15/2020
55	I42027056	K2	7/15/2020
56	I42027057	K3	7/15/2020
57	I42027058	L1	7/15/2020
58	I42027059	L2	7/15/2020
59	I42027060	L3	7/15/2020
60	I42027061	LAY2	7/15/2020
61	I42027062	LAY3	7/15/2020
62	I42027063	V1	7/15/2020
63	I42027064	V3	7/15/2020
64	I42027065	V4	7/15/2020
65	I42027066	V5	7/15/2020
66	I42027067	V6	7/15/2020
67	I42027068	V7	7/15/2020
68	I42027069	V8	7/15/2020
69	I42027070	V9	7/15/2020



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Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

Floor Load: N/A psf

This package includes 69 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I42027002	A1	7/15/2020	27	I42027028	E9	7/15/2020
2	I42027003	A2	7/15/2020	28	I42027029	E10	7/15/2020
3	I42027004	A3	7/15/2020	29	I42027030	E11	7/15/2020
4	I42027005	A4	7/15/2020	30	I42027031	G1	7/15/2020
5	I42027006	B1	7/15/2020	31	I42027032	G2	7/15/2020
6	I42027007	B2	7/15/2020	32	I42027033	H1	7/15/2020
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8	I42027009	C2	7/15/2020	34	I42027035	H3	7/15/2020
9	I42027010	C3	7/15/2020	35	I42027036	J1	7/15/2020
10	I42027011	C4	7/15/2020	36	I42027037	J2	7/15/2020
11	I42027012	C5	7/15/2020	37	I42027038	J3	7/15/2020
12	I42027013	C6	7/15/2020	38	I42027039	J4	7/15/2020
13	I42027014	C7	7/15/2020	39	I42027040	J5	7/15/2020
14	I42027015	C8	7/15/2020	40	I42027041	J6	7/15/2020
15	I42027016	C9	7/15/2020	41	I42027042	J7	7/15/2020
16	I42027017	C10	7/15/2020	42	I42027043	J8	7/15/2020
17	I42027018	D1	7/15/2020	43	I42027044	J9	7/15/2020
18	I42027019	D2	7/15/2020	44	I42027045	J10	7/15/2020
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26	I42027027	E8	7/15/2020	52	I42027053	J18	7/15/2020

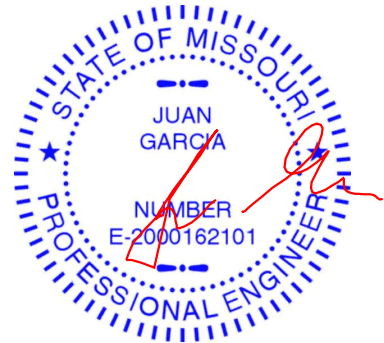
The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2020.

Missouri COA: 001193

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56	I42027057	K3	7/15/2020
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61	I42027062	LAY3	7/15/2020
62	I42027063	V1	7/15/2020
63	I42027064	V3	7/15/2020
64	I42027065	V4	7/15/2020
65	I42027066	V5	7/15/2020
66	I42027067	V6	7/15/2020
67	I42027068	V7	7/15/2020
68	I42027069	V8	7/15/2020
69	I42027070	V9	7/15/2020

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

Scale = 1:22.8

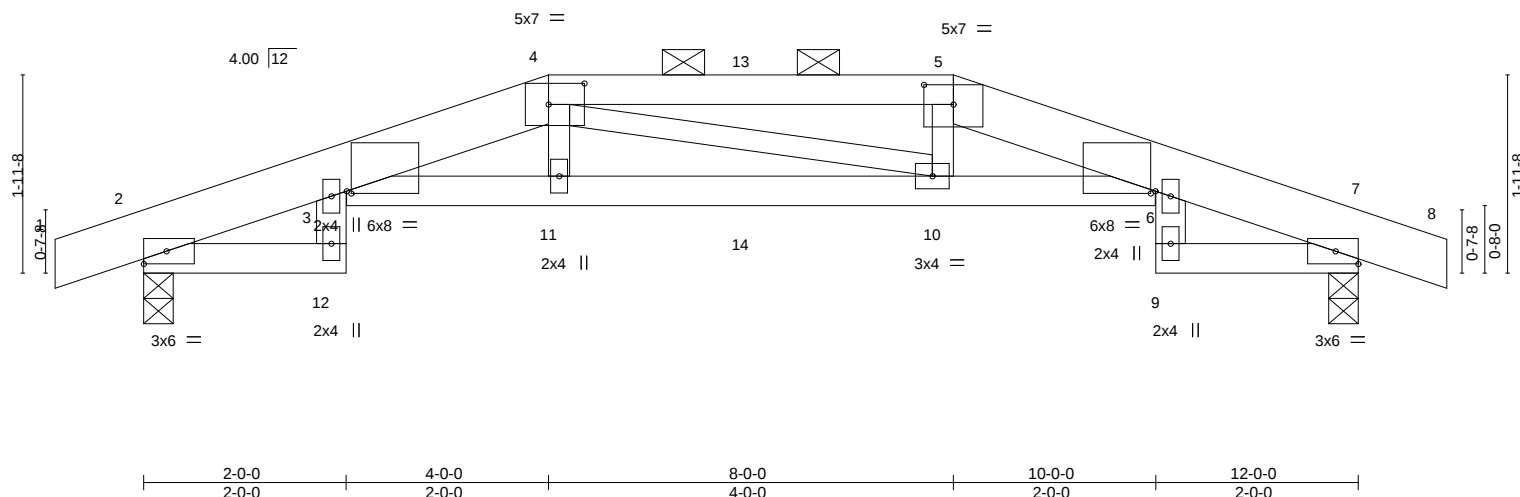


Plate Offsets (X,Y)-- [3:0-9,0-0-4], [4:0-4-4,0-2-8], [5:0-3-8,0-2-5], [6:0-0-9,0-0-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.17	10-11	>807	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.32	10-11	>442	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.25	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14	10-11	>999	240	Weight: 42 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SPF 1650F 1.4E *Except*
	4-5: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	3-6: 2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
Max Horz 2=30(LC 8)
Max Uplift 2=-199(LC 4), 7=-199(LC 5)
Max Gray 2=899(LC 1), 7=899(LC 1)

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

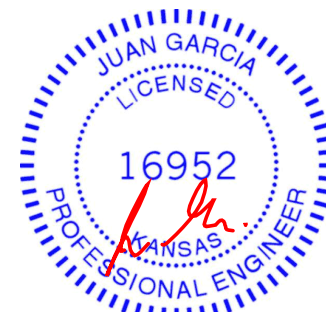
TOP CHORD 2-3=-415/96, 3-4=-2590/471, 4-5=-2688/481, 5-6=-2668/469, 6-7=-415/91
BOT CHORD 3-11=-445/2604, 10-11=-438/2611, 6-10=-435/2688

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=199, 7=199.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 52 lb up at 4-0-0, and 81 lb down and 52 lb up at 6-0-0, and 81 lb down and 52 lb up at 8-0-0 on top chord, and 231 lb down and 65 lb up at 4-0-0, and 34 lb down at 6-0-0, and 231 lb down and 65 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



July 15, 2020

Continued on page 2



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCS1 Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027002
400420	A1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:33 2020 Page 2
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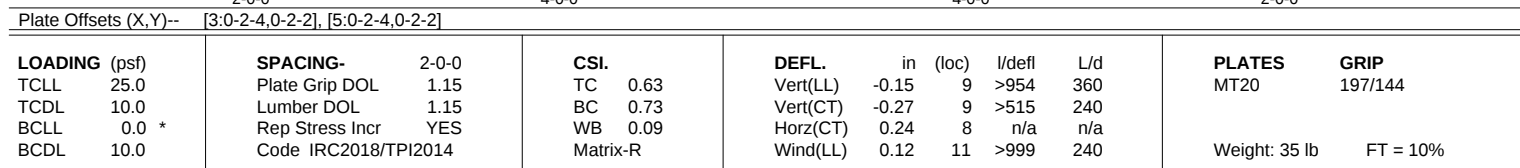
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 4=-37(F) 5=-37(F) 11=-231(F) 10=-231(F) 13=-37(F) 14=-34(F)

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:33 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-SUAHiUSYBkKLIAjYALoC1SYF?Qs47kbzVf?R7Ayy4lu

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

Scale = 1:22.4



REACTIONS. (size) 12=0-3-8, 8=0-3-8
 Max Horz 12=-27(LC 13)
 Max Uplift 12=-113(LC 4), 8=-113(LC 5)
 Max Grav 12=614(LC 1), 8=614(LC 1)

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

TOP CHORD	3-4=-1143/105, 4-5=-1143/116, 2-12=-615/123, 6-8=-615/121
BOT CHORD	3-10=-55/1062, 5-10=-55/1062
WEBS	4-10=0/300

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=113, 8=113.
- 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.



July 15, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027004
400420	A3	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:34 2020 Page 1
ID:Lek3CAAnj_gYbKvtCQHtmQzKvNM-wgk3VqSAy2SCNjIkj3KRaf5Q_pDfsBv6kJI_fcyy4lt

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

Scale = 1:20.7

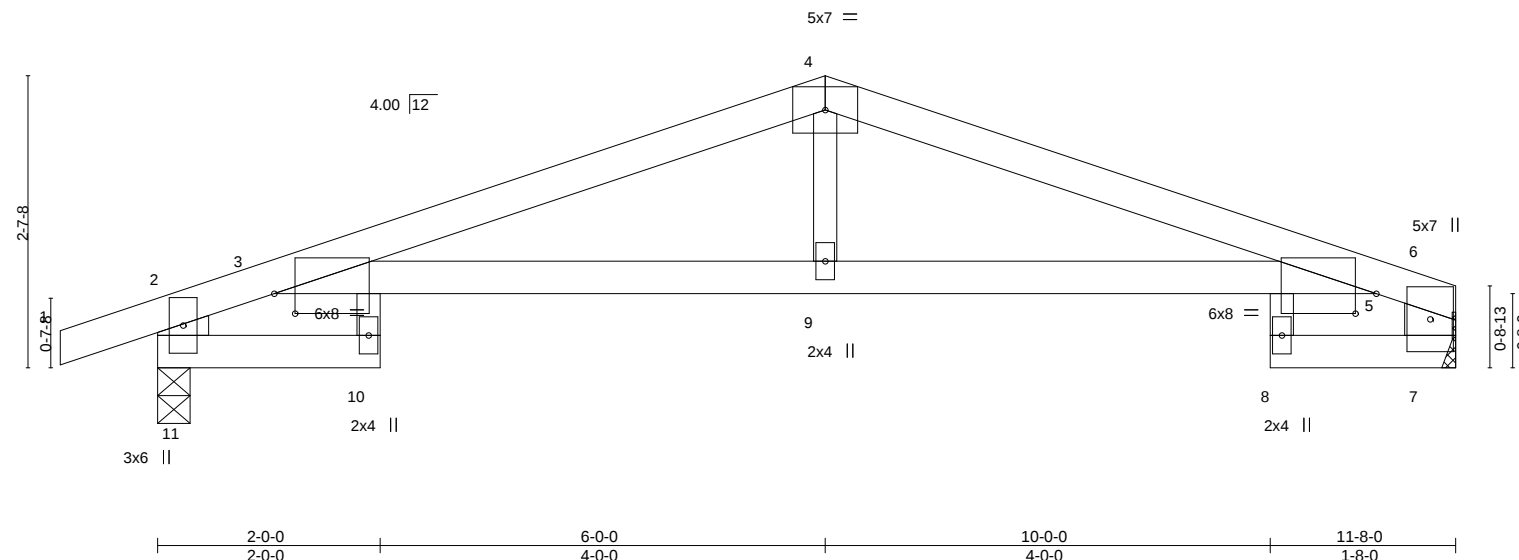


Plate Offsets (X,Y)--		[3:0-2-4,0-2-2], [5:0-2-4,0-2-2]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.62	Vert(LL)	-0.14	10	>971	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.26	10	>525	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.20	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.12	10	>999	240	Weight: 33 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-10,5-8: 2x3 SPF No.2
WEBS 2x6 SPF No.2 *Except*
4-9: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 11=0-3-8, 7=Mechanical
Max Horz 11=33(LC 12)
Max Uplift 11=-113(LC 4), 7=-61(LC 5)
Max Grav 11=602(LC 1), 7=519(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1087/118, 4-5=-1091/118, 2-11=-602/123, 6-7=-515/70
BOT CHORD 3-9=-66/1008, 5-9=-66/1008
WEBS 4-9=0/287

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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 11=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027005
400420	A4	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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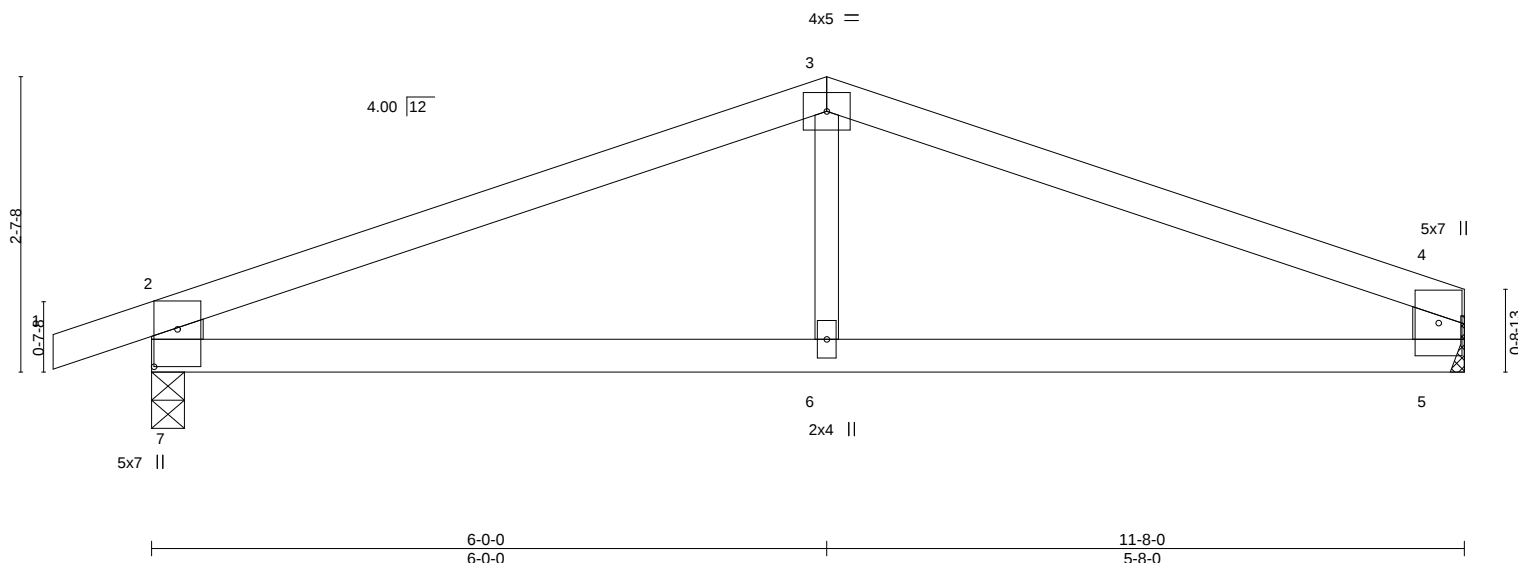


Plate Offsets (X,Y)--		[7:0-4-0,0-2-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.04	6-7	>999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.08	6-7	>999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	5	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6-7	>999	Weight: 31 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 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=Mechanical
 Max Horz 7=33(LC 8)
 Max Uplift 7=-123(LC 4), 5=-72(LC 5)
 Max Grav 7=585(LC 1), 5=501(LC 1)

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

TOP CHORD 2-3=-742/99, 3-4=-736/99, 2-7=-521/159, 4-5=-425/103
 BOT CHORD 6-7=-48/635, 5-6=-48/635

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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=123.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027006
400420	B1	Monopitch	5	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-OsIRj9TojMa3_TtxHmrg6tebfDeFbZPGzzUYB2yy4ls

-0-10-8
0-10-8

8-0-0
8-0-0

Scale = 1:20.4

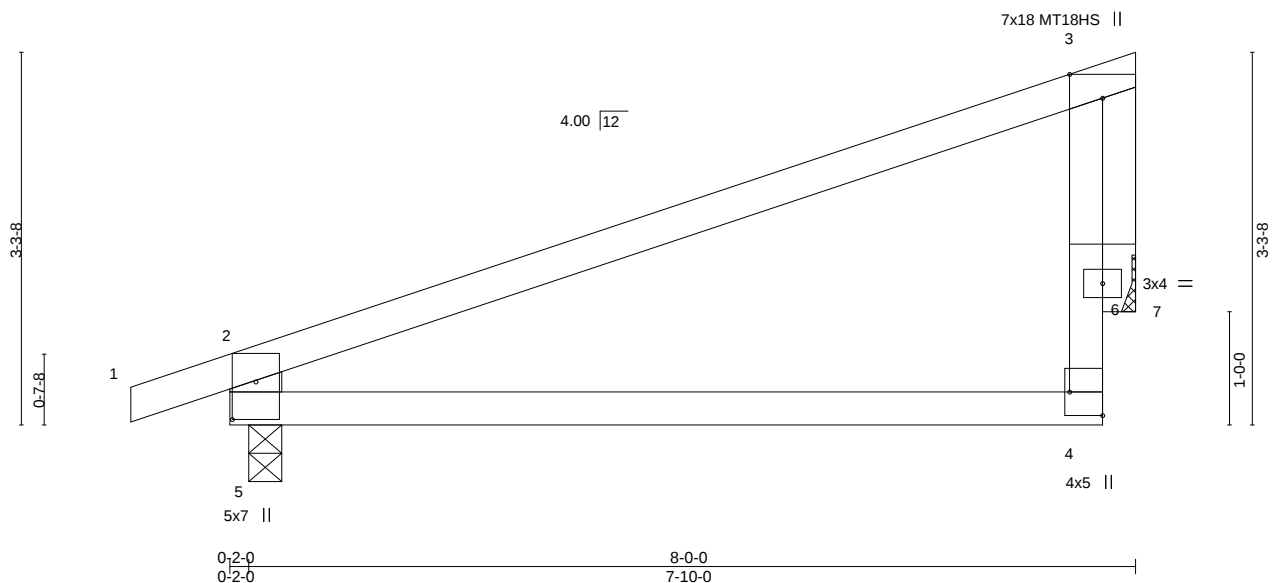


Plate Offsets (X,Y)--		[4:Edge,0-3-8], [5:0-4-0,0-2-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.62
TCDL 10.0	Lumber DOL	1.15	BC 0.36
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.06 4-5 >999 360
			Vert(CT) -0.13 4-5 >710 240
			Horz(CT) 0.01 7 n/a n/a
			Wind(LL) 0.04 4-5 >999 240
			PLATES
			MT20 197/144
			MT18HS 197/144
			Weight: 25 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 7=Mechanical
Max Horz 5=99(LC 5)
Max Uplift 5=-94(LC 4), 7=-77(LC 8)
Max Grav 5=429(LC 1), 7=308(LC 1)

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

TOP CHORD 2-3=-306/27, 3-6=-295/241, 2-5=-385/152

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



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027007
400420	B2	Monopitch	3	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-s3spwVUQUfivcdS7rTMvf4Ap1d1DK6qPBdE5kVvy4lr

Job Reference (optional)

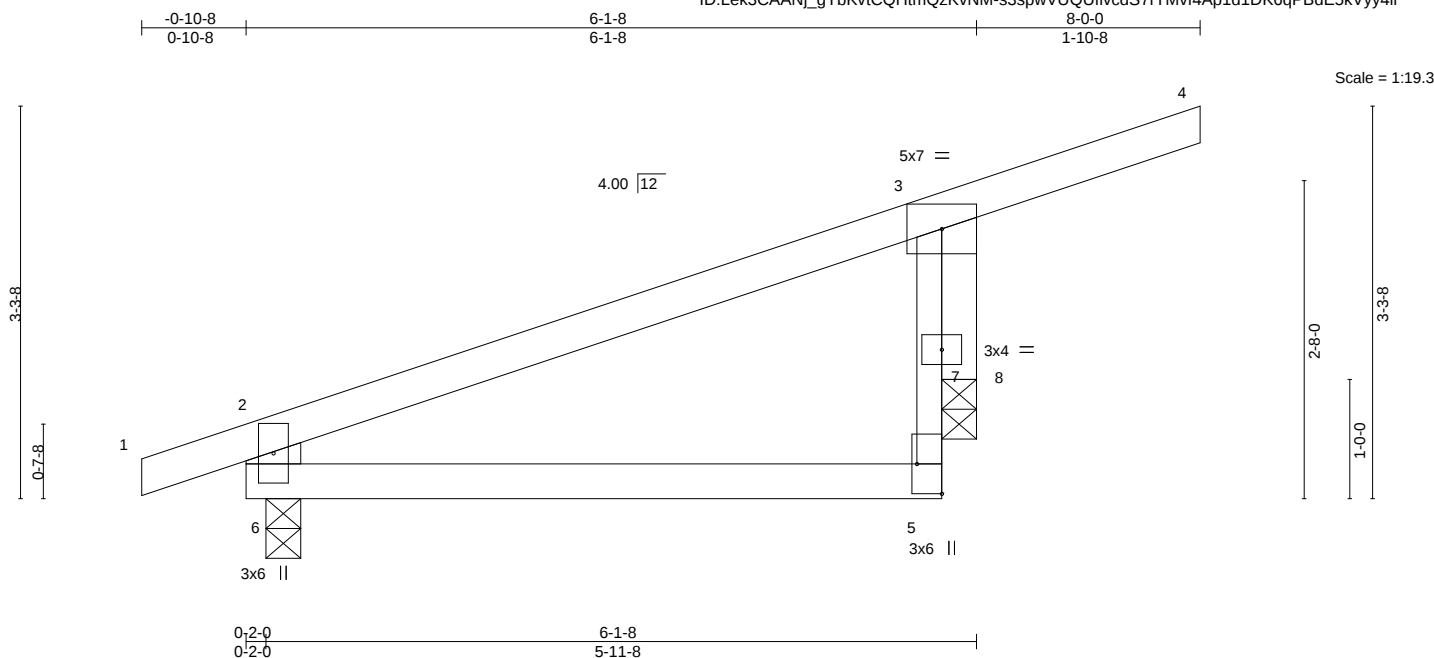


Plate Offsets (X,Y)--		[5:Edge,0-2-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.39
TCDL 10.0	Lumber DOL	1.15	BC 0.19
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.02 5-6 >999 360
			Vert(CT) -0.05 5-6 >999 240
			Horz(CT) -0.00 8 n/a n/a
			Wind(LL) 0.01 5-6 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 21 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

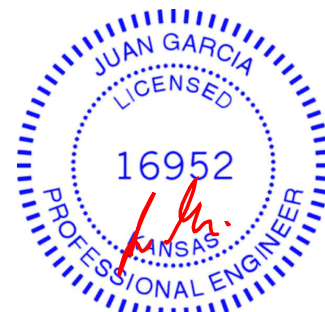
(size) 6=0-3-8, 8=0-3-8
 Max Horz 6=113(LC 5)
 Max Uplift 6=63(LC 4), 8=130(LC 8)
 Max Grav 6=318(LC 1), 8=413(LC 1)

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

TOP CHORD 2-6=-278/108

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=130.
- 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.



July 15, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027008
400420	C1	Roof Special Supported Gable	1	1		

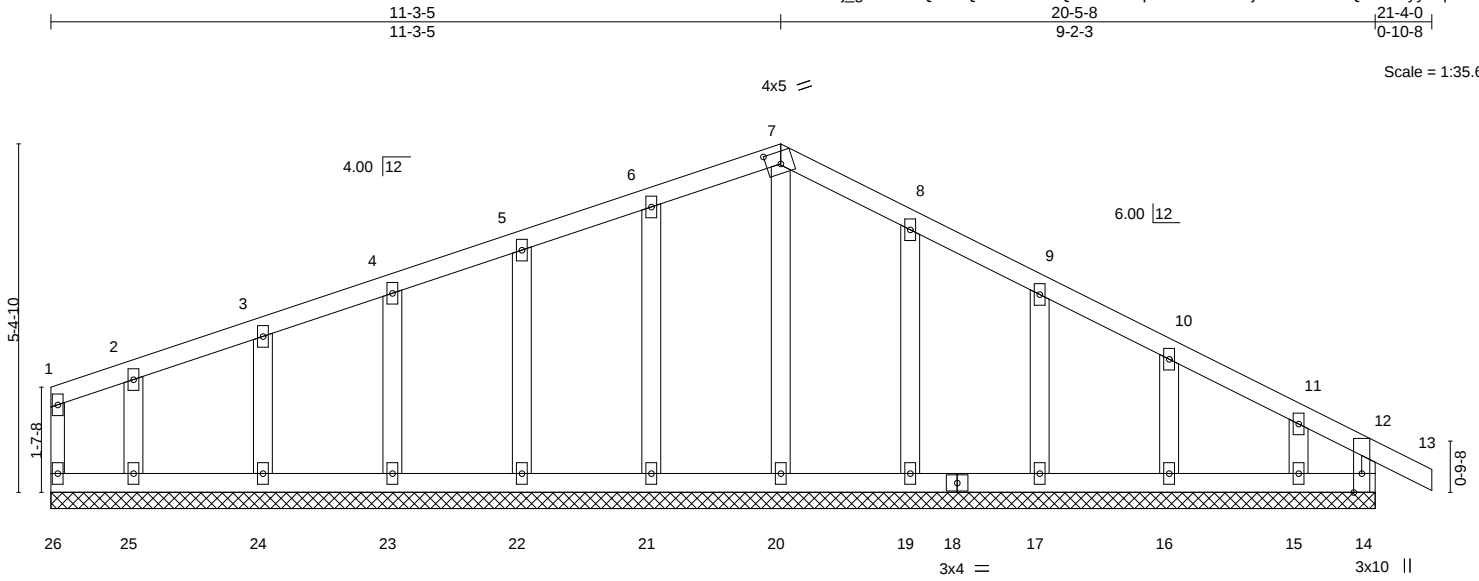
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHmQzKvNM-KFQC7rV3FzqmEn1JPBt8Clj3k1Om3Z9ZQHfGxyy4lq

20-5-8 21-4-0
9-2-3 0-10-8

Scale = 1:35.6



20-5-8											
20-5-8											
Plate Offsets (X,Y)-- [7:0-2-11,0-2-4]											
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 0.07	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 83 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 20-5-8.
(lb) - Max Horz 26=84(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 26, 14, 21, 22, 23, 24, 25, 19, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 26, 14, 20, 21, 22, 23, 24, 25, 19, 17, 16, 15

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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 14, 21, 22, 23, 24, 25, 19, 17, 16, 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.



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027009
400420	C2	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

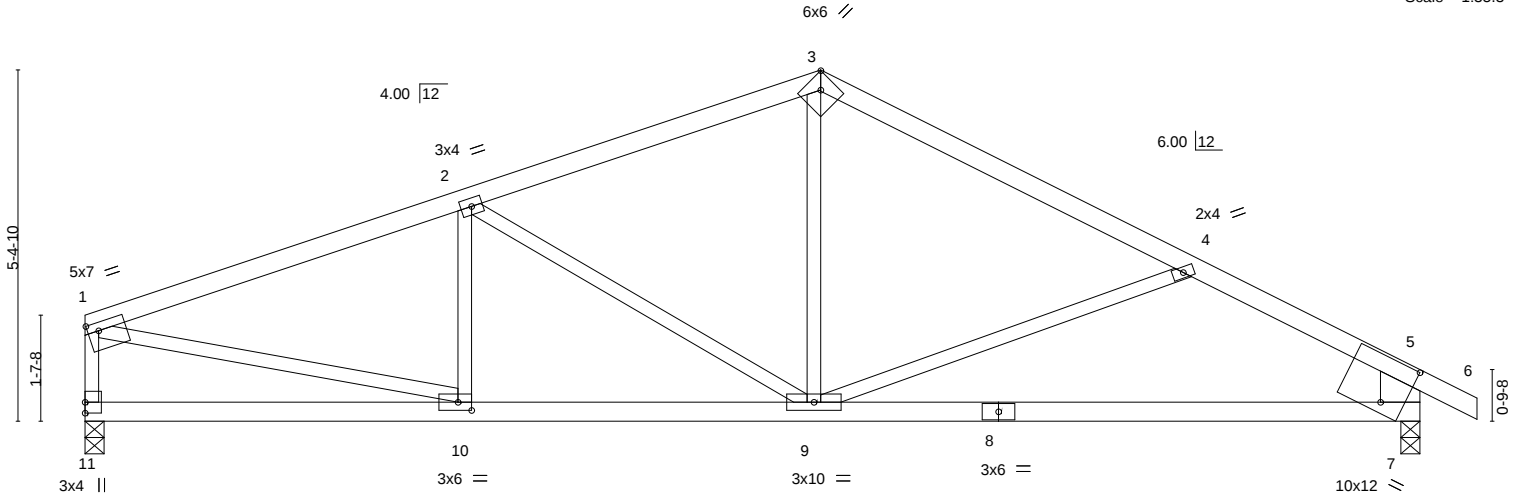
8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:39 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-GeYyYXWJna4UT5AiWcvchJoF3qxlXNQrtbSIKqyy4lo

Job Reference (optional)

5-9-13	11-3-5	16-9-15	20-5-8	21-4-0
5-9-13	5-5-7	5-6-11	3-7-9	0-10-8

Scale = 1:35.3



		5-9-13		11-3-5		20-5-8			
		5-9-13		5-5-7		9-2-3			
Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [3:0-2-8,Edge], [7:0-4-1,0-8-2], [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	0.72	Vert(LL)	-0.17 7-9 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.58	Vert(CT)	-0.33 7-9 >721 240		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.39	Horz(CT)	0.03 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05 9-10 >999 240	Weight: 73 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-7: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 11=0-3-8, 7=0-3-8
Max Horz 11=86(LC 7)
Max Uplift 11=-130(LC 4), 7=-130(LC 9)
Max Grav 11=900(LC 1), 7=987(LC 1)

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

TOP CHORD 1-2=-1319/196, 2-3=-1034/150, 3-4=-1083/158, 4-5=-1296/210, 1-11=-841/160,
5-7=-889/178
BOT CHORD 9-10=-159/1198, 7-9=-128/1046
WEBS 2-9=-388/153, 3-9=-0/409, 1-10=-141/1142

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=130, 7=130.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	
400420	C3	Roof Special Girder	1	1		I42027010
Job Reference (optional)						

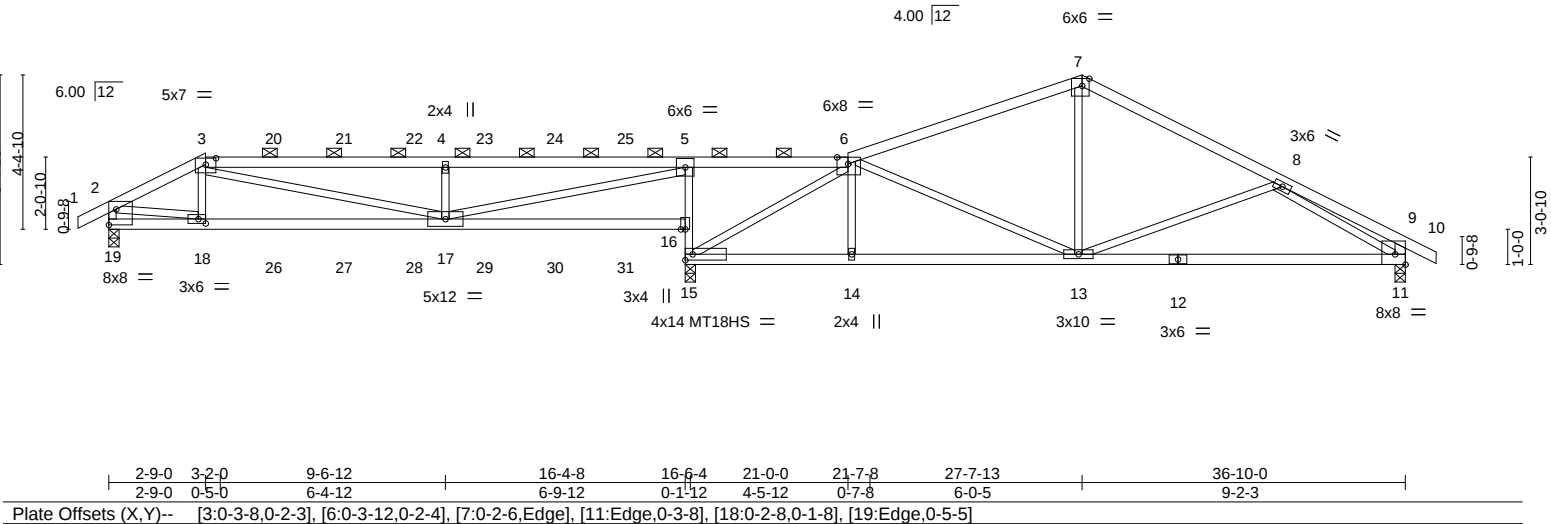
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-D0fzDYZJCKCiOK5e1y4M8tawebL?898LvxsPiyy4lm

0-10-8 2-9-0 9-6-12 16-4-8 21-0-0 27-7-13 33-2-8 36-10-0 37-8-8
0-10-8 2-9-0 6-9-12 6-9-12 4-7-8 6-7-13 5-6-11 3-7-8 0-10-8

Scale = 1:65.5

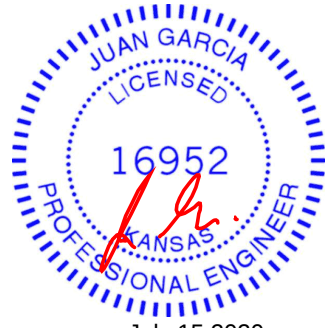


LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL)	-0.18 11-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT)	-0.36 11-13	>676	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr NO	WB 0.95	Horz(CT)	-0.02 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.13 17-18	>999	240	Weight: 131 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 3-6: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-8-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-10 max.): 3-6.
BOT CHORD 2x4 SPF No.2 *Except* 5-15: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 3-7-7 oc bracing.
WEBS 2x3 SPF No.2 *Except* 9-11: 2x4 SPF No.2	

REACTIONS.	(size) 19=0-3-8, 15=0-3-8, 11=0-3-8 Max Horz 19=-93(LC 30) Max Uplift 19=-264(LC 8), 15=-363(LC 8), 11=-151(LC 30) Max Grav 19=1129(LC 21), 15=2021(LC 1), 11=944(LC 1)
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-1691/370, 3-4=-2431/562, 4-5=-2431/562, 6-7=-1003/180, 7-8=-1066/175, 8-9=-360/0, 2-19=-1132/258, 9-11=-287/38	
BOT CHORD 17-18=-335/1507, 15-16=-1278/307, 5-16=-1169/350, 14-15=-194/966, 13-14=-191/970, 11-13=-180/1085	
WEBS 3-17=-242/954, 4-17=-682/331, 5-17=-562/2657, 6-15=-1342/185, 7-13=-3/383, 8-13=-298/206, 2-18=-284/1472, 8-11=-1025/294	

- 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) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=264, 15=363, 11=151.
 - 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) 100 lb down and 68 lb up at 4-8-2, 100 lb down and 68 lb up at 6-8-2, 100 lb down and 68 lb up at 8-8-2, 100 lb down and 68 lb up at 10-8-2, and 100 lb down and 68 lb up at 12-8-2, and 100 lb down and 68 lb up at 14-8-2 on top chord, and 217 lb down and 84 lb up at 2-9-0, 33 lb down at 4-8-2, 33 lb down at 6-8-2, 33 lb down at 8-8-2, 33 lb down at 10-8-2, and 33 lb down at 12-8-2, and 33 lb down at 14-8-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Continue to Page CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



July 15, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027010
400420	C3	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:41 2020 Page 2
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-D0fizDYZJCKCiOK5e1y4M8tawebL?898LvxsPiy4lm

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, 3-6=-70, 6-7=-70, 7-9=-70, 9-10=-70, 16-19=-20, 11-15=-20
 - Concentrated Loads (lb)
 - Vert: 18=-217(B) 20=-50(B) 21=-50(B) 22=-50(B) 23=-50(B) 24=-50(B) 25=-50(B) 26=-24(B) 27=-24(B) 28=-24(B) 29=-24(B) 30=-24(B) 31=-24(B)

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027011
400420	C4	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvCQHtmQzKvNM-hDD5BZZB4VS3KYvHBkTJvLQn22_mkehlaZhPx9yy4ll

0-10-8	4-3-0	10-3-12	16-4-8	23-3-0	27-7-13	33-5-7	36-10-0	37-8-8
0-10-8	4-3-0	6-0-12	6-0-12	6-10-8	4-4-13	5-9-10	3-4-9	0-10-8

Scale = 1:65.6

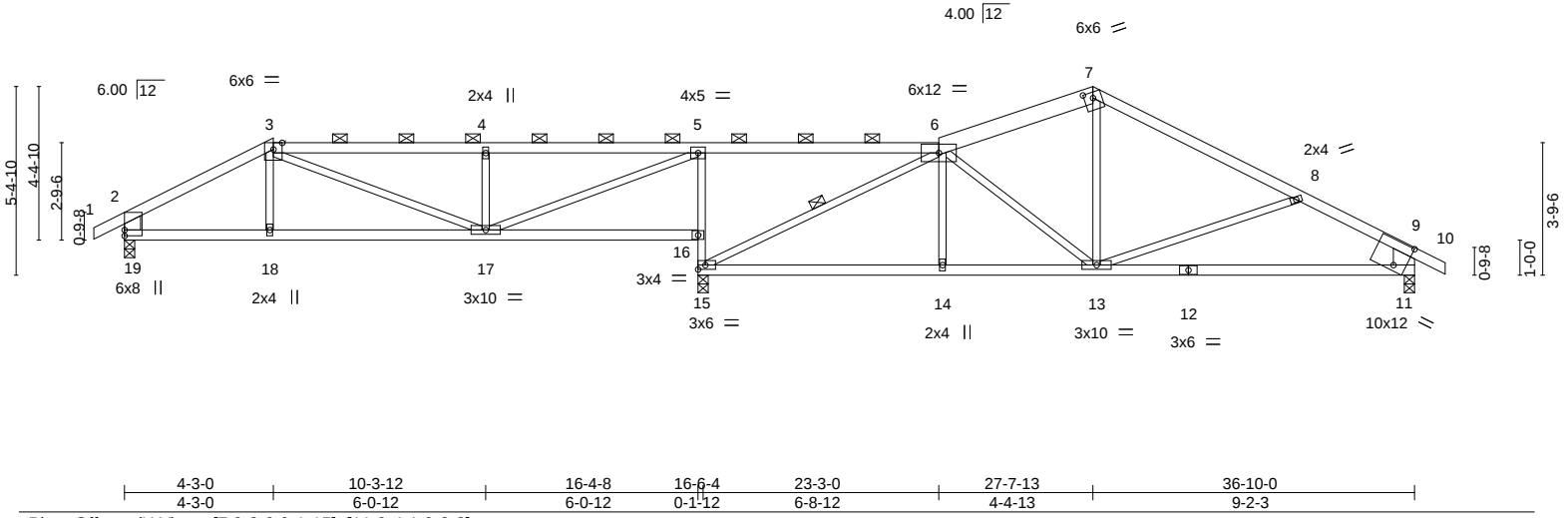


Plate Offsets (X,Y)--		[7:0-3-0,0-1-15], [11:0-4-1,0-8-2]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.16 11-13 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.32 11-13 >754 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) -0.04 15 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06 17-18 >999 240	Weight: 132 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 4-9-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-13 max.): 3-6.
6-7: 2x6 SPF No.2, 7-10: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
BOT CHORD 2x4 SPF No.2 *Except*	6-0-0 oc bracing: 16-17
5-15: 2x3 SPF No.2	4-0-1 oc bracing: 15-16.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 6-15
2-19: 2x6 SPF No.2, 9-11: 2x8 SP DSS	

REACTIONS.	(size) 19=0-3-8, 15=0-3-8, 11=0-3-8
Max Horz 19=-90(LC 9)	
Max Uplift 19=-150(LC 8), 15=-285(LC 8), 11=-143(LC 9)	
Max Grav 19=764(LC 21), 15=1724(LC 1), 11=944(LC 1)	
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-975/180, 3-4=-1041/223, 4-5=-1039/221, 6-7=-942/168, 7-8=-1016/139, 8-9=-1225/233, 2-19=-676/164, 9-11=-848/191	
BOT CHORD 18-19=-125/793, 17-18=-127/792, 15-16=-1053/257, 5-16=-988/287, 14-15=-94/1032, 13-14=-92/1035, 11-13=-150/986	
WEBS 3-17=-95/268, 4-17=-456/188, 5-17=-231/1305, 6-15=-1329/155, 6-13=-308/100, 7-13=0/387	

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=150, 15=285, 11=143.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027012
400420	C5	Roof Special	1	1		

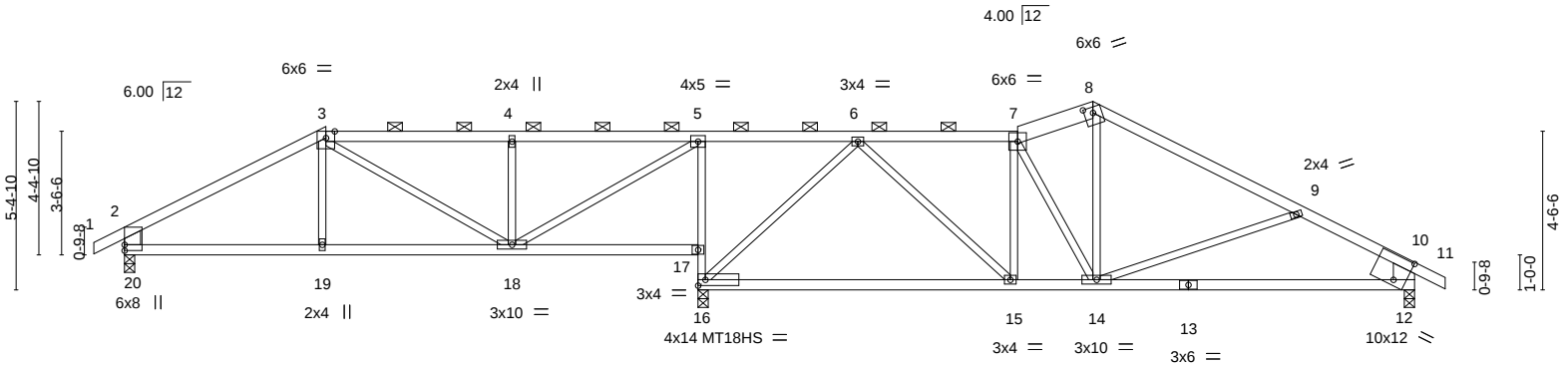
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:43 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-9PnTOvZpqpawyiUTIS_YRZzyjSlpT2qRoDQzUbyy4Ik

0-10-8 5-9-0 11-0-12 16-4-8 20-11-4 25-6-0 27-7-13 33-5-7 36-10-0 37-8-8
0-10-8 5-9-0 5-3-12 5-3-12 4-6-12 4-6-12 2-1-13 5-9-10 3-4-9 0-10-8

Scale = 1:65.6



		5-9-0	11-0-12	16-4-8	16-6-4	25-6-0	27-7-13	36-10-0		
		5-9-0	5-3-12	5-3-12	0-1-12	8-11-12	2-1-13	9-2-3		
Plate Offsets (X,Y)--		[8:0-3-0,0-1-15], [12:0-4-1,0-8-2]								
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 0.68	Vert(LL)	-0.19 15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.39 15-16	>614	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	-0.04 16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05 18-19	>999	240	Weight: 136 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-8: 2x6 SPF No.2, 8-11: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
5-16: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-20: 2x6 SPF No.2, 10-12: 2x8 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-14 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18
4-4-0 oc bracing: 16-17.

REACTIONS.

(size) 20=0-3-8, 16=0-3-8, 12=0-3-8
Max Horz 20=-90(LC 9)
Max Uplift 20=-154(LC 8), 16=-277(LC 8), 12=-147(LC 9)
Max Grav 20=776(LC 21), 16=1706(LC 1), 12=953(LC 1)

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

TOP CHORD 2-3=-956/186, 3-4=-764/199, 4-5=-762/197, 6-7=-994/162, 7-8=-921/174,
8-9=-1032/147, 9-10=-1236/239, 2-20=-699/188, 10-12=-855/194
BOT CHORD 19-20=-111/760, 18-19=-113/758, 16-17=-941/211, 5-17=-878/236, 15-16=-73/608,
14-15=-55/998, 12-14=-155/996
WEBS 4-18=-411/173, 5-18=-182/1016, 6-16=-1000/175, 6-15=0/532, 7-14=-365/86,
8-14=-25/415

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=154, 16=277, 12=147.
- This truss 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.



July 15, 2020

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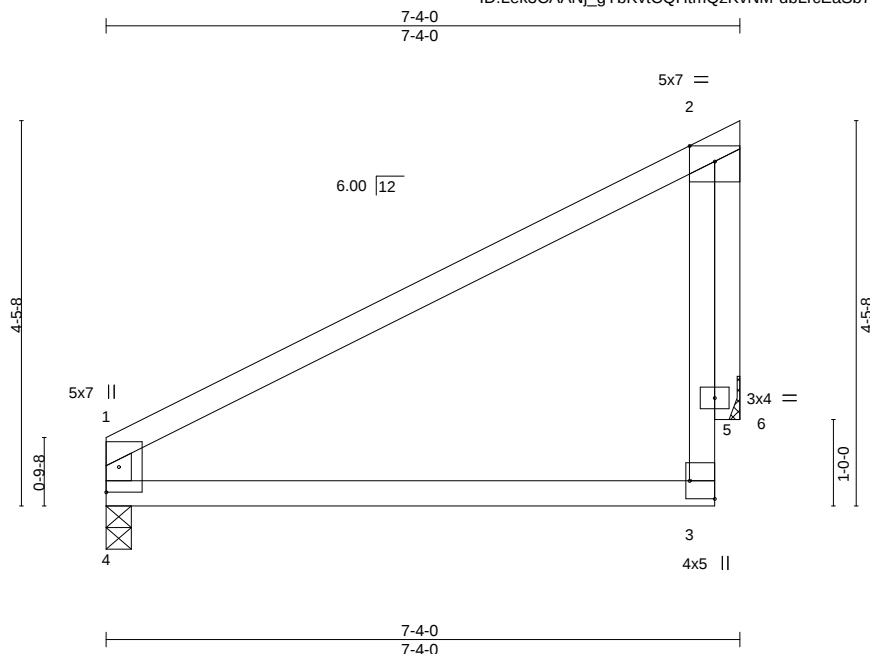


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027013
400420	C6	Monopitch	1	1		

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:26.7

Plate Offsets (X,Y)--		[3:Edge,0-3-8]	
LOADING (psf)		SPACING-	2-0-0
TCLL 25.0		Plate Grip DOL	1.15
TCDL 10.0		Lumber DOL	1.15
BCLL 0.0 *		Rep Stress Incr	YES
BCDL 10.0		Code IRC2018/TPI2014	
		CSI.	
		TC 0.53	
		BC 0.30	
		WB 0.34	
		Matrix-R	
		DEFL.	
		in (loc)	l/defl
		Vert(LL) -0.05	3-4 >999 360
		Vert(CT) -0.10	3-4 >822 240
		Horz(CT) -0.01	6 n/a n/a
		Wind(LL) 0.04	3-4 >999 240
		PLATES	GRIP
		MT20	197/144
		Weight: 26 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=0-3-8, 6=Mechanical
Max Horz 4=113(LC 8)
Max Uplift 4=-18(LC 8), 6=-96(LC 8)
Max Grav 4=320(LC 1), 6=288(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-4=-281/78

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



July 15, 2020

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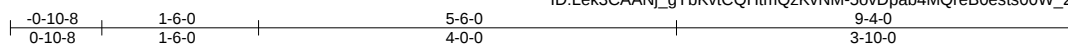
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027014
400420	C7	Roof Special Girder	1	1	Job Reference (optional)	

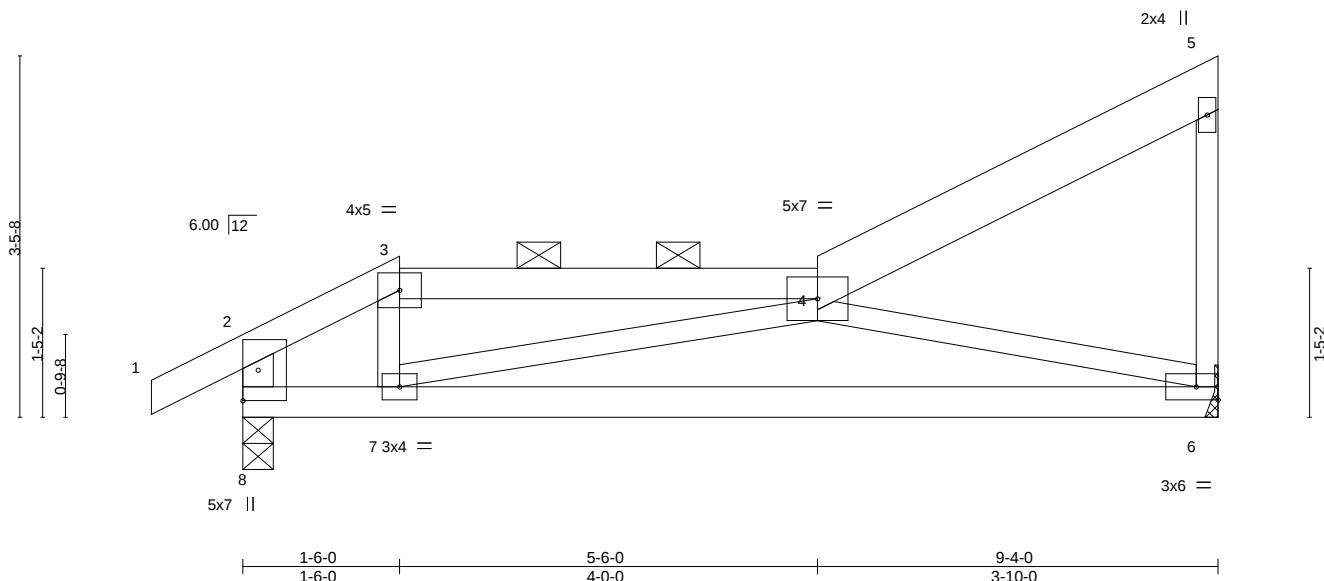
Wheeler Lumber, Waverly, KS 66871

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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 0.35	Vert(LL)	-0.11	6-7	>971	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.23	6-7	>467	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.30	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	6-7	>999	240	Weight: 36 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
 4-5: 2x6 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-8: 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) 6=Mechanical, 8=0-3-8
 Max Horz 8=133(LC 5)
 Max Uplift 6=-85(LC 8), 8=-92(LC 8)
 Max Grav 6=405(LC 1), 8=483(LC 1)

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

TOP CHORD 2-3=-562/14, 3-4=-438/35, 2-8=-439/35
 BOT CHORD 7-8=-60/449, 6-7=-192/732
 WEBS 3-7=0/286, 4-7=-306/180, 4-6=-748/236

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) 67 lb down and 76 lb up at 1-6-0 on top chord, and 11 lb down and 1 lb up at 1-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



July 15, 2020

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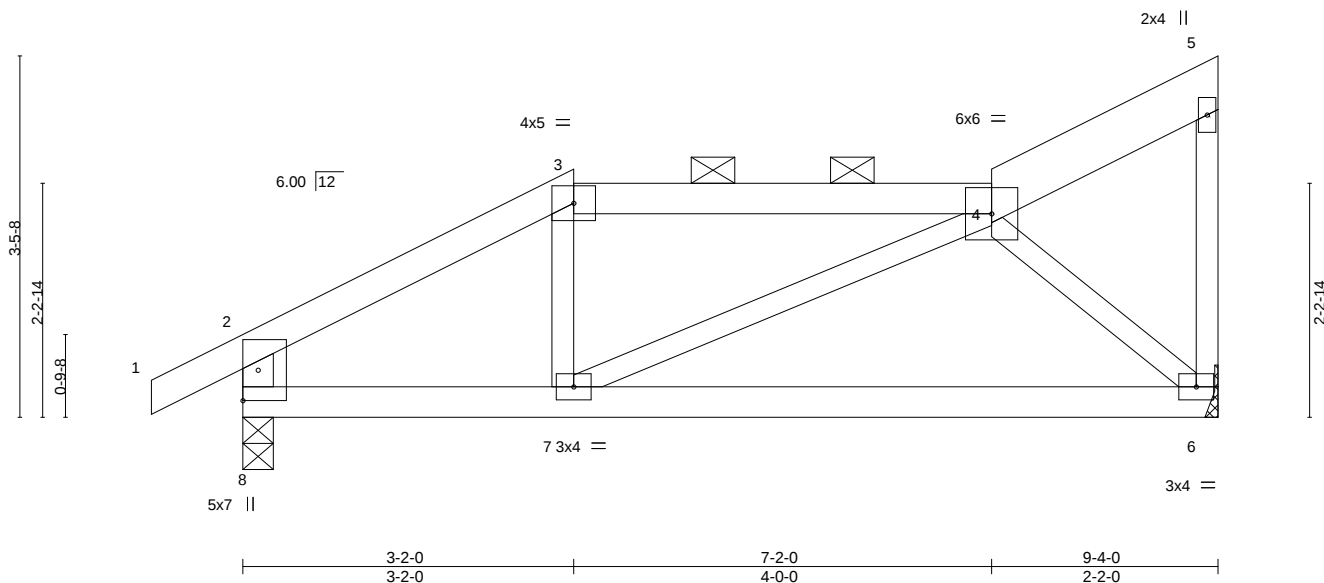
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027015
400420	C8	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:46 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Z_Tb0wci7kzVpAD2QaXF3BbYefPogcbtUBfd4wyy4lh

-0-10-8	3-2-0	7-2-0	9-4-0
0-10-8	3-2-0	4-0-0	2-2-0

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 0.32	Vert(LL)	-0.05	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.11	6-7	>976	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	6-7	>999	240		
									Weight: 35 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 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.

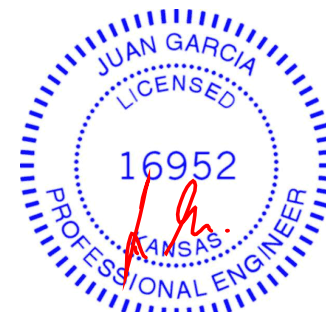
(size) 6=Mechanical, 8=0-3-8
Max Horz 8=133(LC 5)
Max Uplift 6=-85(LC 8), 8=-91(LC 8)
Max Grav 6=405(LC 1), 8=484(LC 1)

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

TOP CHORD 2-3=-535/72, 3-4=-421/90, 2-8=-433/95
BOT CHORD 7-8=-68/420, 6-7=-72/329
WEBS 4-6=-441/143

NOTES-

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



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027016
400420	C9	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-Z_Tb0wci7kzVpAD2QaXF3BbRnfNngX_tUBfd4wy4lh

-0-10-8	3-7-14	7-3-0	14-4-0
0-10-8	3-7-14	3-7-2	7-1-0

Scale = 1:28.5

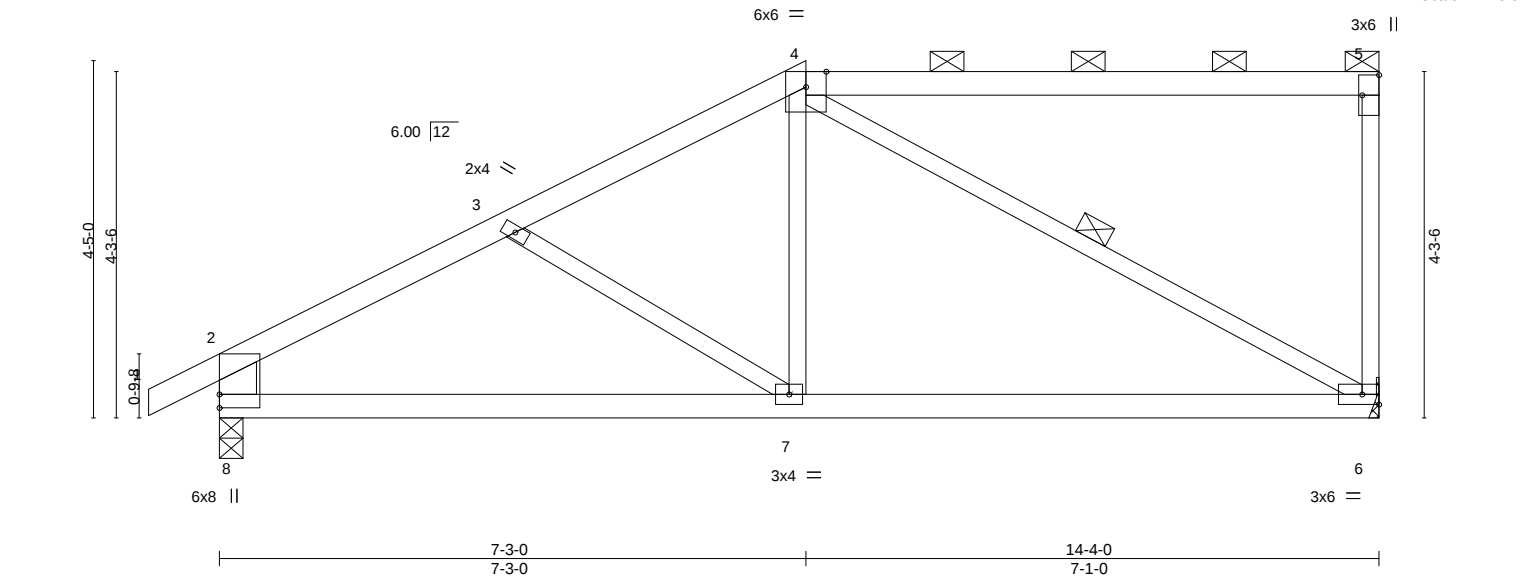


Plate Offsets (X,Y)--		[5:Edge,0-2-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	-0.07	6-7	>999	360	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.15	6-7	>999	240			
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.01	6	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	6-7	>999	240			
									Weight: 51 lb	FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

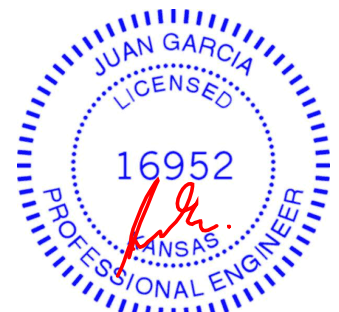
(size) 6=Mechanical, 8=0-3-8
 Max Horz 8=174(LC 5)
 Max Uplift 6=-113(LC 5), 8=-101(LC 8)
 Max Grav 6=627(LC 1), 8=710(LC 1)

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

TOP CHORD 2-3=-837/129, 3-4=-687/79, 2-8=-636/135
 BOT CHORD 7-8=-164/656, 6-7=-127/596
 WEBS 4-7=0/306, 4-6=-654/100

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=113, 8=101.
- This truss 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.



July 15,2020

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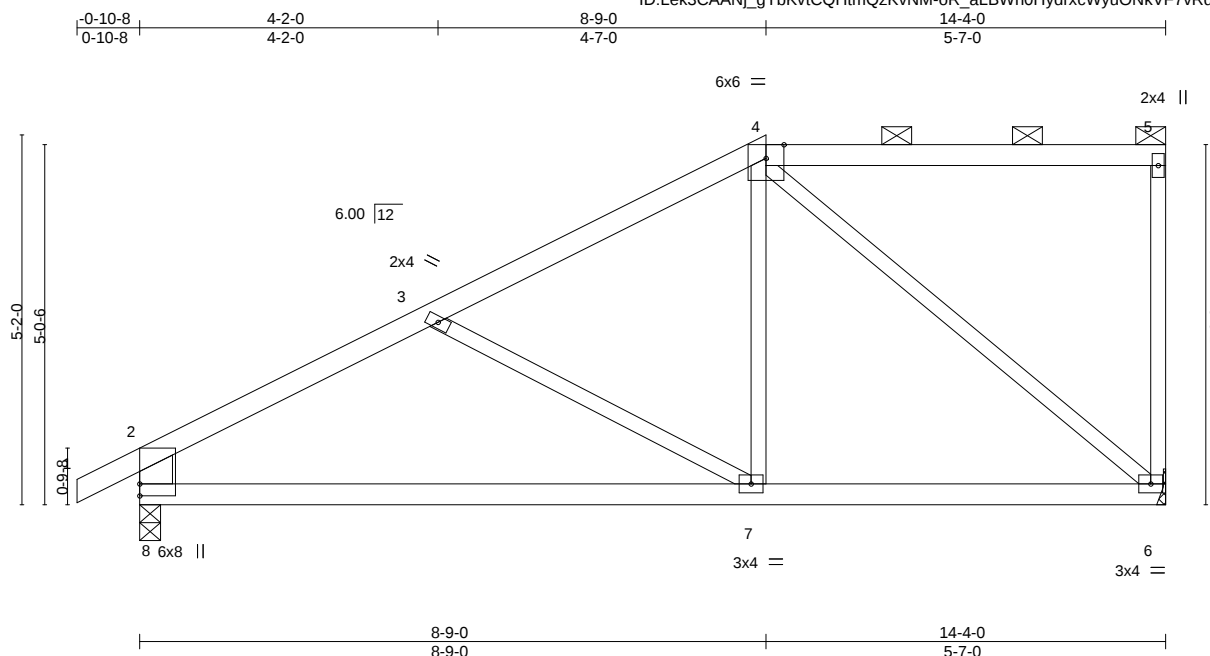
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027017
400420	C10	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-oR_aLBWh0HydrxcWyuONkVF7vRd_oqjifxjCoNyy4lp



Scale: 3/8"=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 0.56	Vert(LL)	-0.12	7-8	>999	360	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.24	7-8	>707	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	6-7	>999	240		
									Weight: 53 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 8=0-3-8
 Max Horz 8=205(LC 5)
 Max Uplift 6=-110(LC 5), 8=-108(LC 8)
 Max Grav 6=627(LC 1), 8=710(LC 1)

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

TOP CHORD 2-3=-842/157, 3-4=-584/80, 2-8=-621/153
 BOT CHORD 7-8=-178/670, 6-7=-107/475
 WEBS 4-7=0/351, 4-6=-616/85

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 6=110, 8=108.
- This truss 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.



July 15, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027018
400420	D1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

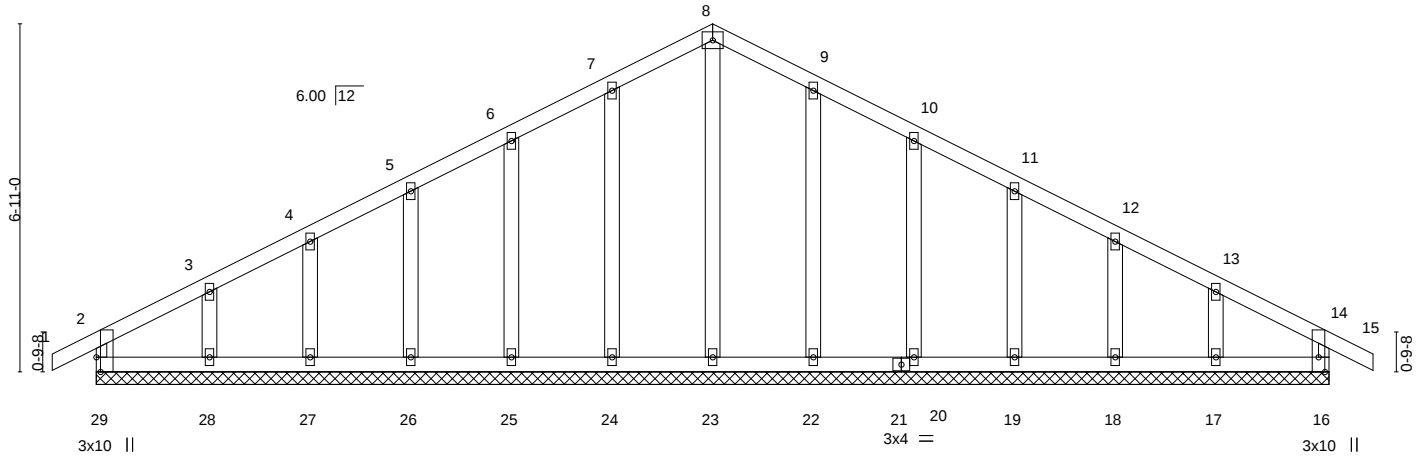
8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:47 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-1A1_EGdKu25MRJoE_H3UcP7m83p8P3o1jrOAdMyy4lg

0-10-8 12-3-0 24-6-0 25-4-8
0-10-8 12-3-0 12-3-0 0-10-8

4x5 =

Scale = 1:45.8



										24-6-0									
Plate Offsets (X,Y)--										[29:0-3-8,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	0.08	Vert(LL)		-0.00	15	n/r		120		MT20		197/144	
TCDL	10.0	Lumber DOL		1.15		BC	0.04	Vert(CT)		-0.00	15	n/r		120					
BCLL	0.0 *	Rep Stress Incr		YES		WB	0.11	Horz(CT)		0.00	16	n/a		n/a					
BCDL	10.0	Code IRC2018/TPI2014				Matrix-R										Weight: 108 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 24-6-0.
(lb) - Max Horz 29=105(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 29, 16, 24, 25, 26, 27, 28, 22, 20, 19, 18, 17
Max Grav All reactions 250 lb or less at joint(s) 29, 16, 23, 24, 25, 26, 27, 28, 22, 20, 19, 18, 17

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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 16, 24, 25, 26, 27, 28, 22, 20, 19, 18, 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027019
400420	D2	Common	7	1		

Wheeler Lumber, Waverly, KS 66871

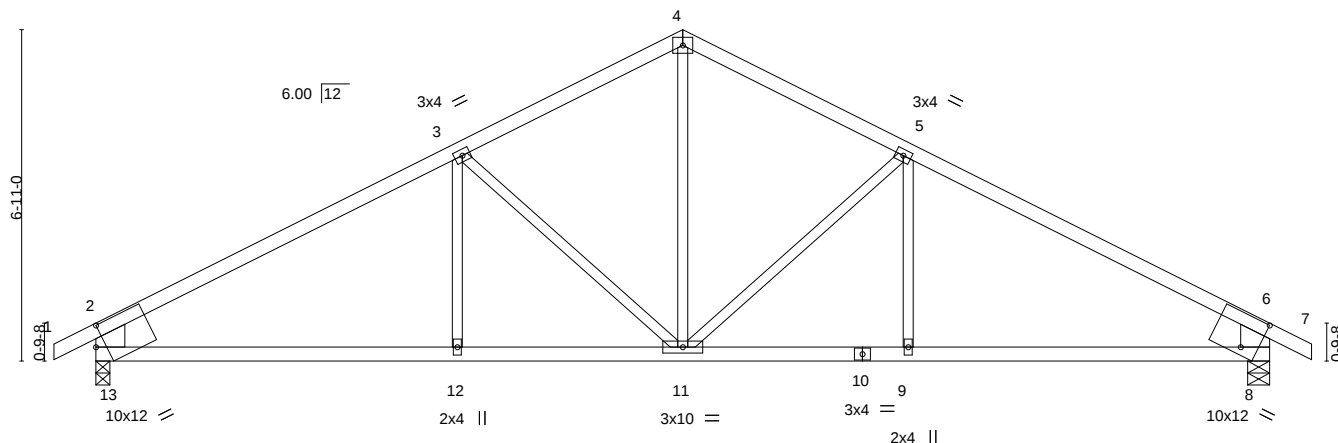
8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:49 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHmQzKvNM-_Z8kfyeaQfL3gdx6i5yhqDyNsLxtu2KB9tHhFyy4le

0-10-8 7-6-9 12-3-0 16-11-8 24-6-0 25-4-8
0-10-8 7-6-9 4-8-8 4-8-7 7-6-8 0-10-8

4x5 =

Scale: 1/4"=1'



7-6-9 12-3-0 16-11-8 24-6-0
7-6-9 4-8-8 4-8-7 7-6-8

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.13 9-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.24 9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.45	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 9-11	>999	240	Weight: 86 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,6-8: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 13=0-3-8, 8=0-5-8
Max Horz 13=109(LC 7)
Max Uplift 13=-160(LC 8), 8=-160(LC 9)
Max Grav 13=1158(LC 1), 8=1158(LC 1)

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

TOP CHORD 2-3=-1586/195, 3-4=-1178/200, 4-5=-1178/200, 5-6=-1586/195, 2-13=-1056/206, 6-8=-1056/206
BOT CHORD 12-13=-168/1286, 11-12=-168/1286, 9-11=-74/1286, 8-9=-74/1286
WEBS 4-11=-100/662, 5-11=-455/187, 3-11=-455/186

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 13=160, 8=160.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027020
400420	E1	Common Structural Gable	1	1		

Wheeler Lumber, Waverly, KS 66871

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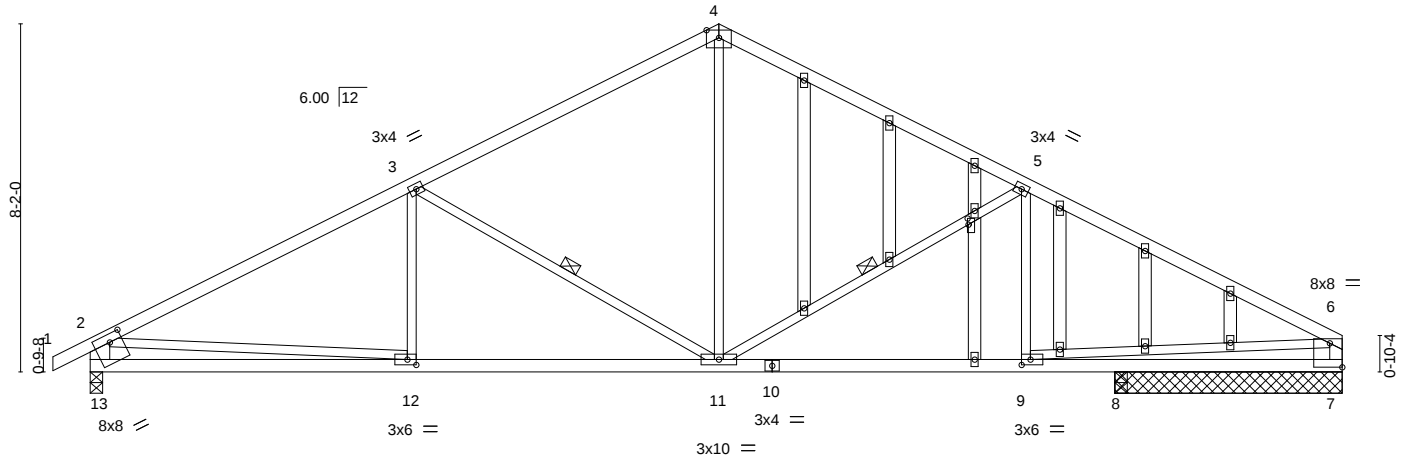
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Job Reference (optional)

0-10-8 7-6-9 14-9-0 21-11-8 29-4-8
0-10-8 7-6-9 7-2-8 7-2-8 7-5-0

5x7 =

Scale = 1:54.1



7-6-9 14-9-0 21-11-8 24-4-0 29-4-8
7-6-9 7-2-8 7-2-8 2-4-8 5-0-8

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

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 0.69	Vert(LL)	-0.12	9-11	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.26	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.05	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08	9-11	>999	Weight: 134 lb	FT = 10%

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

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

REACTIONS. (size) 7=5-4-0, 13=0-3-8, 8=0-3-8
Max Horz 13=127(LC 7)
Max Uplift 7=-174(LC 9), 13=-191(LC 8)
Max Grav 7=1135(LC 1), 13=1348(LC 1), 8=210(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2016/263, 3-4=-1433/240, 4-5=-1436/242, 5-6=-1847/272, 2-13=-1273/231, 6-7=-1117/208
BOT CHORD 12-13=-285/604, 11-12=-262/1700, 9-11=-168/1561, 8-9=-99/293, 7-8=-99/293
WEBS 3-11=-656/235, 4-11=-61/717, 5-11=-520/251, 2-12=-13/1100, 6-9=-78/1272

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=174, 13=191.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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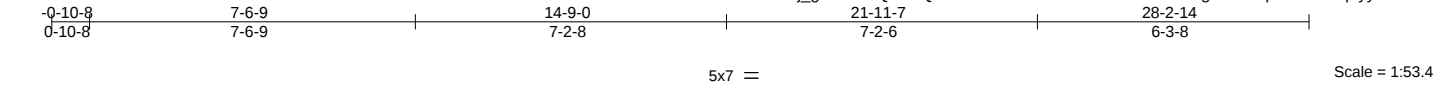


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400420	Truss E2	Truss Type Common	Qty 2	Ply 1	Lot 37 HT Job Reference (optional)	I42027021
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Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:53 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-sKOFUJh5UurV9EFOLY9urgNfZTkdphNv5nrVq0yy4la



		7-6-9		14-9-0		21-11-7		28-2-14	
		7-6-9		7-2-8		7-2-6		6-3-8	
Plate Offsets (X,Y)-- [6:0-2-8,Edge], [7:Edge,0-2-8], [11:0-2-8,0-1-8], [12:Edge,0-5-13]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.09 10-11 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.18 10-11 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.05 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06 10-11 >999 240	Weight: 107 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-10, 5-10

REACTIONS.

(size) 12=0-3-8, 7=Mechanical
Max Horz 12=142(LC 5)
Max Uplift 12=-183(LC 8), 7=-150(LC 9)
Max Grav 12=1332(LC 1), 7=1258(LC 1)

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

TOP CHORD 2-3=-2015/252, 3-4=-1409/221, 4-5=-1408/229, 5-6=-1771/217, 2-12=-1258/224, 6-7=-1199/179
BOT CHORD 11-12=-295/642, 10-11=-256/1700, 8-10=-143/1513
WEBS 3-10=-677/238, 4-10=-49/689, 5-10=-492/207, 2-11=0/1060, 6-8=-112/1425

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
- The Fabrication Tolerance at joint 2 = 2%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=183, 7=150.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

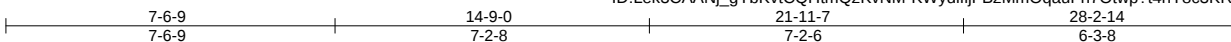
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027022
400420	E3	Common	4	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-KWydfijFBzMMoQauFh7Otwp?4nY8c3KRb2MSyy4IZ

Job Reference (optional)



5x7 =

Scale = 1:52.8

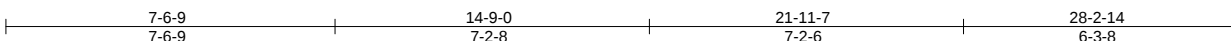
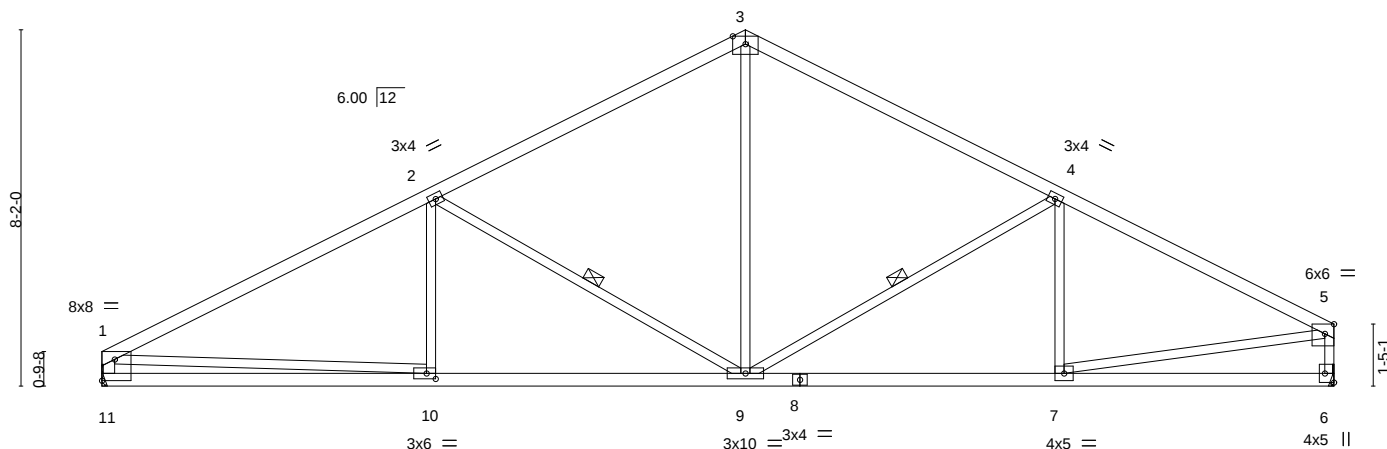


Plate Offsets (X,Y)-- [1:Edge,0-5-13], [5:0-2-8,Edge], [6:Edge,0-2-8], [10:0-2-8,0-1-8]

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 0.74	Vert(LL)	-0.09	9-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.19	9-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.04	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	9-10	>999	240	Weight: 106 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11: 2x4 SPF No.2

BRACING-

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

REACTIONS.

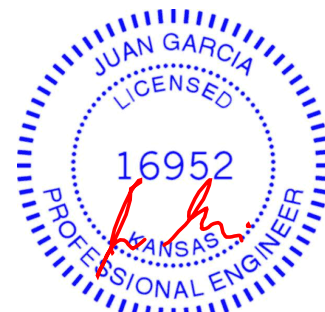
(size) 11=Mechanical, 6=Mechanical
Max Horz 11=113(LC 7)
Max Uplift 11=-17(LC 8), 6=-11(LC 9)
Max Grav 11=1260(LC 1), 6=1260(LC 1)

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

TOP CHORD 1-2=-2020/42, 2-3=-1413/69, 3-4=-1411/74, 4-5=-1774/35, 1-11=-1184/57, 5-6=-1200/41
BOT CHORD 10-11=-96/480, 9-10=-42/1713, 7-9=0/1515
WEBS 2-9=-690/115, 3-9=0/698, 4-9=-492/108, 1-10=0/1239, 5-7=0/1428

NOTES-

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



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027023
400420	E4	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAAnj_gYbKvtCQHtmQzKvNM-0jW?v?jLOV5DOYPnSzCMw5TzDHQmHbCCZ4Kbvuyy4IY

Job Reference (optional)

7-6-10	14-9-0	21-11-7	29-4-8
7-6-10	7-2-6	7-2-7	7-5-1

5x7 =

Scale = 1:53.5

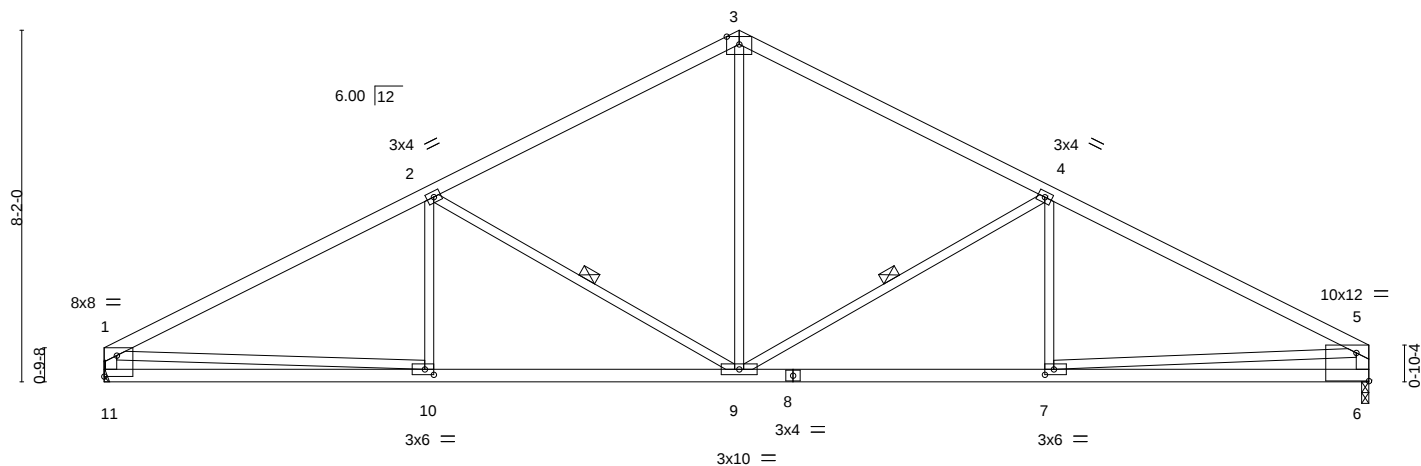


Plate Offsets (X,Y)--	[1:Edge,0-5-13], [5:Edge,0-7-13], [7:0-2-8,0-1-8], [10:0-2-8,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.77	Vert(LL)	-0.10	9-10	>999	MT20	197/144
TCCL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.21	7-9	>999		
BCCL 0.0 *	Rep Stress Incr	YES	WB 0.47	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07	9-10	>999	Weight: 109 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 1-11,5-6: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 11=Mechanical, 6=0-2-0
 Max Horz 11=117(LC 7)
 Max Uplift 11=-162(LC 8), 6=-161(LC 9)
 Max Grav 11=1309(LC 1), 6=1309(LC 1)

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

TOP CHORD 1-2=-2116/258, 2-3=-1515/236, 3-4=-1515/237, 4-5=-2090/255, 1-11=-1233/202,
 5-6=-1234/200
 BOT CHORD 10-11=-209/487, 9-10=-263/1798, 7-9=-152/1778, 6-7=-93/419
 WEBS 2-9=-686/242, 3-9=-59/795, 4-9=-665/238, 1-10=-57/1315, 5-7=-68/1364

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Bearing capacity is increased by the plate at joint(s) 6. Plate must be within 1/4 in of bearing surface.
- 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 at joint(s) 6.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 11=162, 6=161.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

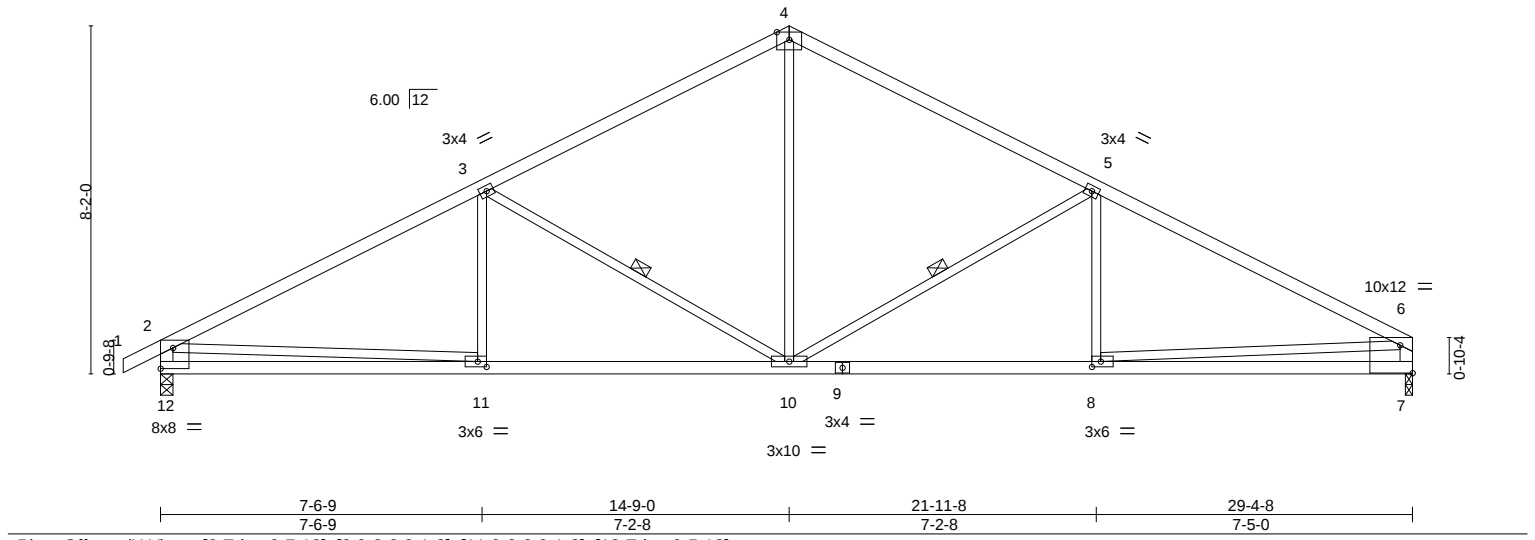
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400420	Truss E5	Truss Type Common	Qty 1	Ply 1	Lot 37 HT	I42027024
Wheeler Lumber, Waverly, KS 66871						8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:15:56 2020 Page 1
Job Reference (optional)						ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Gv3N7LkznpD40i_z0gjbTl?9nhl302SLok49RLyy4IX



LOADING (psf)	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)	-0.10 8-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.21 8-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.47	Horz(CT)	0.05 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 8-10	>999	240	Weight: 111 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12: 2x4 SPF 2400F 2.0E, 6-7: 2x4 SPF No.2

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

REACTIONS. (size) 12=0-3-8, 7=0-2-0
Max Horz 12=128(LC 12)
Max Uplift 12=-186(LC 8), 7=-161(LC 9)
Max Grav 12=1381(LC 1), 7=1307(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2111/258, 3-4=-1511/235, 4-5=-1512/236, 5-6=-2088/255, 2-12=-1307/226, 6-7=-1233/200
BOT CHORD 11-12=-295/656, 10-11=-259/1785, 8-10=-152/1775, 7-8=-93/419
WEBS 3-10=-673/237, 4-10=-57/786, 5-10=-665/238, 2-11=-6/1132, 6-8=-67/1362

- 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
 - The Fabrication Tolerance at joint 2 = 2%
 - Bearing capacity is increased by the plate at joint(s) 7. Plate must be within 1/4 in of bearing surface.
 - 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 at joint(s) 7.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=186, 7=161.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027025
400420	E6	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-I5dmKhkbX6LxdsY9aOEQ0WYHD517IRFV0Opiznyy4IW

Job Reference (optional)

0-10-8 7-6-9 14-9-0 15-4-0 17-10-0 21-11-7 29-4-8
0-10-8 7-6-9 7-2-8 0-7-0 2-6-0 4-1-7 7-5-1

5x7 =

Scale = 1:56.8

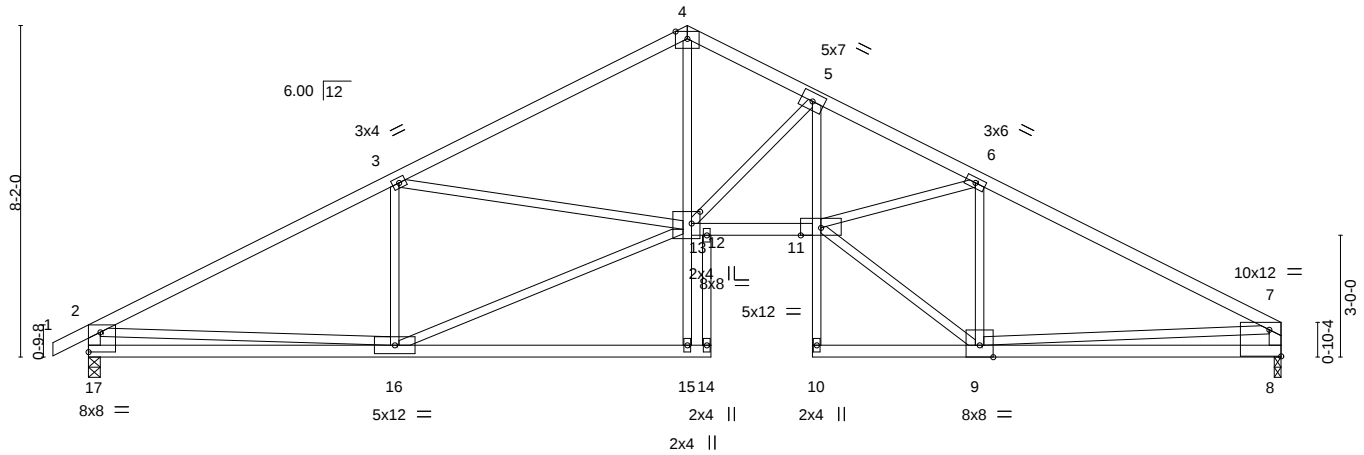


Plate Offsets (X,Y)--	[7:Edge,0-7-13], [13:0-2-8,0-3-8], [17:Edge,0-5-13]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.93	Vert(LL)	-0.21	10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.37	10	>937	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.75	Horz(CT)	0.22	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13	11	>999	240	Weight: 128 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17: 2x4 SPF 2100F 1.8E, 7-8: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 17=0-3-8, 8=0-2-0
Max Horz 17=128(LC 8)
Max Uplift 17=-186(LC 8), 8=-161(LC 9)
Max Grav 17=1381(LC 1), 8=1307(LC 1)

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

TOP CHORD 2-3=-2114/257, 3-4=-2331/248, 4-5=-2264/282, 5-6=-3277/293, 6-7=-2066/246,
2-17=-1308/226, 7-8=-1230/201
BOT CHORD 16-17=-296/647, 12-13=-127/2844, 11-12=-128/2846, 5-11=-115/1173, 8-9=-111/461
WEBS 3-16=-665/201, 3-13=-48/318, 13-15=0/394, 4-13=-101/1605, 5-13=-1215/198,
9-11=-176/2189, 6-11=-46/1139, 6-9=-1336/196, 2-16=-11/1145, 7-9=-64/1294,
13-16=-283/1921

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
- The Fabrication Tolerance at joint 2 = 2%
- Bearing capacity is increased by the plate at joint(s) 8. Plate must be within 1/4 in of bearing surface.
- 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 at joint(s) 8.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=186, 8=161.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027026
400420	E7	Roof Special	2	1		

Wheeler Lumber, Waverly, KS 66871, Mitek

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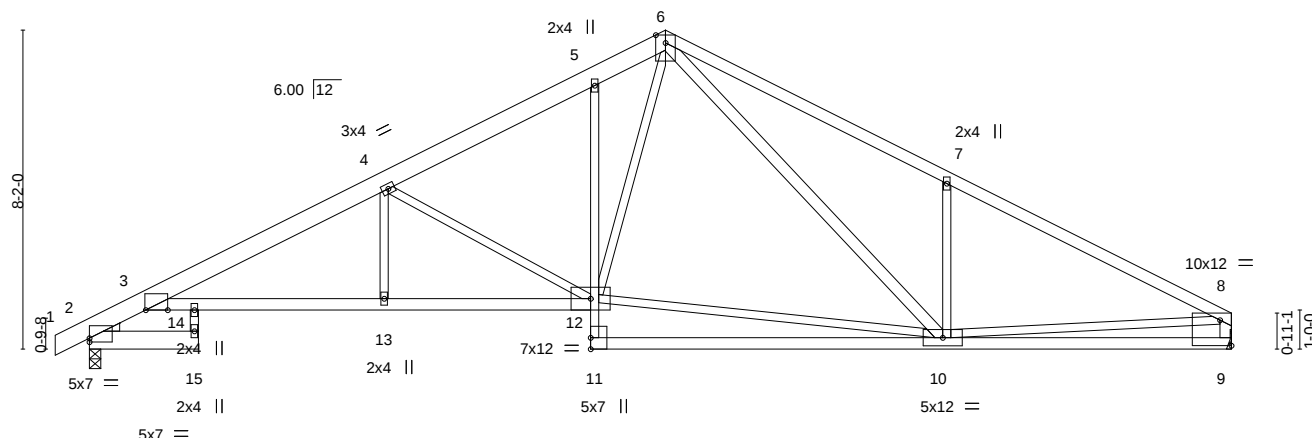
ID:Lek3CAANj_gYbKvCQHtmQzKvNM-EgBWNrBr_jCw8hwzG7zr9yR4hwSJR9C5UCP0JUyxuAU

Job Reference (optional)

0-10-8	2-9-8	7-6-9	12-10-0	14-9-0	21-11-7	29-2-14
0'-10'-8"	2'-9'-8"	4'-9'-1"	5'-3'-7"	1'-11'-0"	7'-2'-7"	7'-3'-7"

6x8 ||

Scale = 1:59.0



2-9-8	7-6-9	12-10-0	21-11-7	29-2-14
2'-9'-8"	4'-9'-1"	5'-3'-7"	9'-1'-7"	7'-3'-7"

Plate Offsets (X,Y)-- [2:0-0-0,0-1-3], [3:0-6-12,0-0-0], [8:Edge,0-7-13]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.22 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.46 10-11	>758	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 1.00	Horz(CT)	0.22 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.12 13-14	>999	240	Weight: 143 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
6-8: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-15: 2x6 SPF No.2, 3-12: 2x4 SPF 2100F 1.8E, 5-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-10,8-9: 2x4 SPF No.2

WEDGE
Left: 2x3 SPF No.2

REACTIONS. (lb/size) 2=1375/0-3-8, 9=1301/Mechanical
Max Horz 2=105(LC 7)
Max Uplift 2=-27(LC 8), 9=-15(LC 9)

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

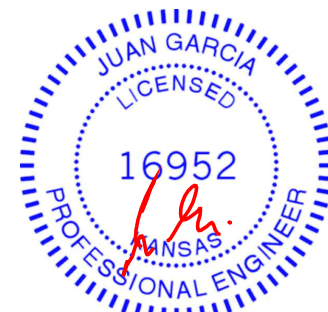
TOP CHORD 2-3=-824/41, 3-4=-2752/50, 4-5=-1882/54, 5-6=-1721/97, 6-7=-2051/146, 7-8=-2063/33, 8-9=-1233/50
BOT CHORD 3-14=-47/2473, 13-14=-47/2473, 12-13=-47/2473, 9-10=-36/351
WEBS 4-13=0/325, 4-12=-1056/104, 10-12=0/1209, 6-12=-48/839, 6-10=-119/679, 7-10=-535/186, 8-10=0/1410

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 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 2 and 15 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.

BRACING-

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



July 15, 2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

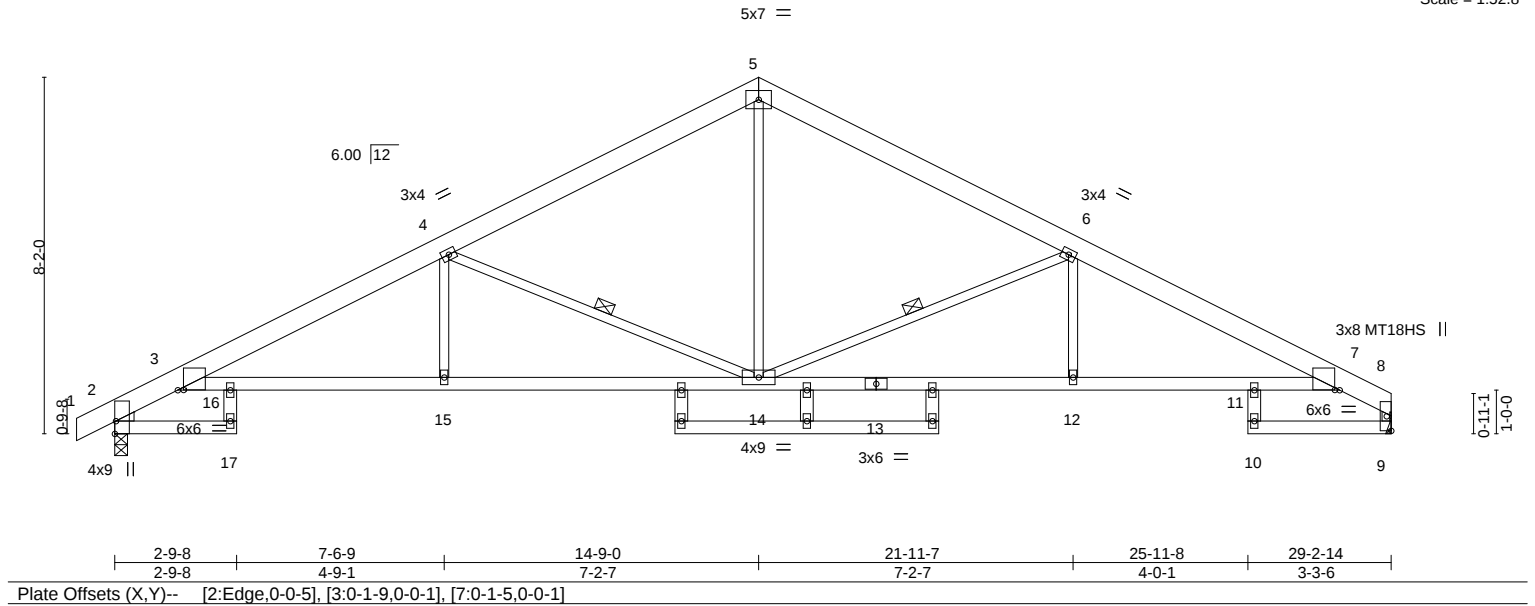
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027027
400420	E8	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-hUIWInMs3kbf9iYhpGI5xdilul4DL8oUilp2fyf4IU

0-10-8	2-9-8	7-6-9	14-9-0	21-11-7	25-11-8	29-2-14
0-10-8	2-9-8	4-9-1	7-2-7	7-2-7	4-0-1	3-3-6

Scale = 1:52.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.67	Vert(LL) -0.24 15-16 >999 360	MT18HS	197/144
BCLL 0.0 *	Lumber DOL 1.15	WB 0.66	Vert(CT) -0.45 15-16 >769 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.42 9 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.14 15-16 >999 240	Weight: 151 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP DSS *Except*
5-8: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-13,7-13: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
16-17,10-11,18-20,19-21,22-23: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 9=Mechanical
Max Horz 2=101(LC 7)
Max Uplift 2=-27(LC 8), 9=-15(LC 9)
Max Grav 2=1377(LC 1), 9=1303(LC 1)

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

TOP CHORD 2-3=-817/42, 3-4=-2750/55, 4-5=-1730/48, 5-6=-1727/59, 6-7=-2701/31, 7-8=-474/14, 8-9=-1291/36
BOT CHORD 3-16=-54/2473, 15-16=-54/2473, 14-15=-54/2473, 12-14=0/2417, 11-12=0/2417, 7-11=0/2417
WEBS 4-15=0/328, 4-14=-1146/135, 5-14=0/1024, 6-14=-1084/118, 6-12=0/320

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027028
400420	E9	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871, Mitek

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-LBTQ5IL?wjr4BgQTWmBtJv9uM_6h?TJ3CGEyxuAH

0-10-8	2-9-8	7-6-9	14-9-0	21-11-7	25-11-8	29-2-14
0-10-8	2-9-8	4-9-1	7-2-7	7-2-7	4-0-1	3-3-6

Scale = 1:51.9

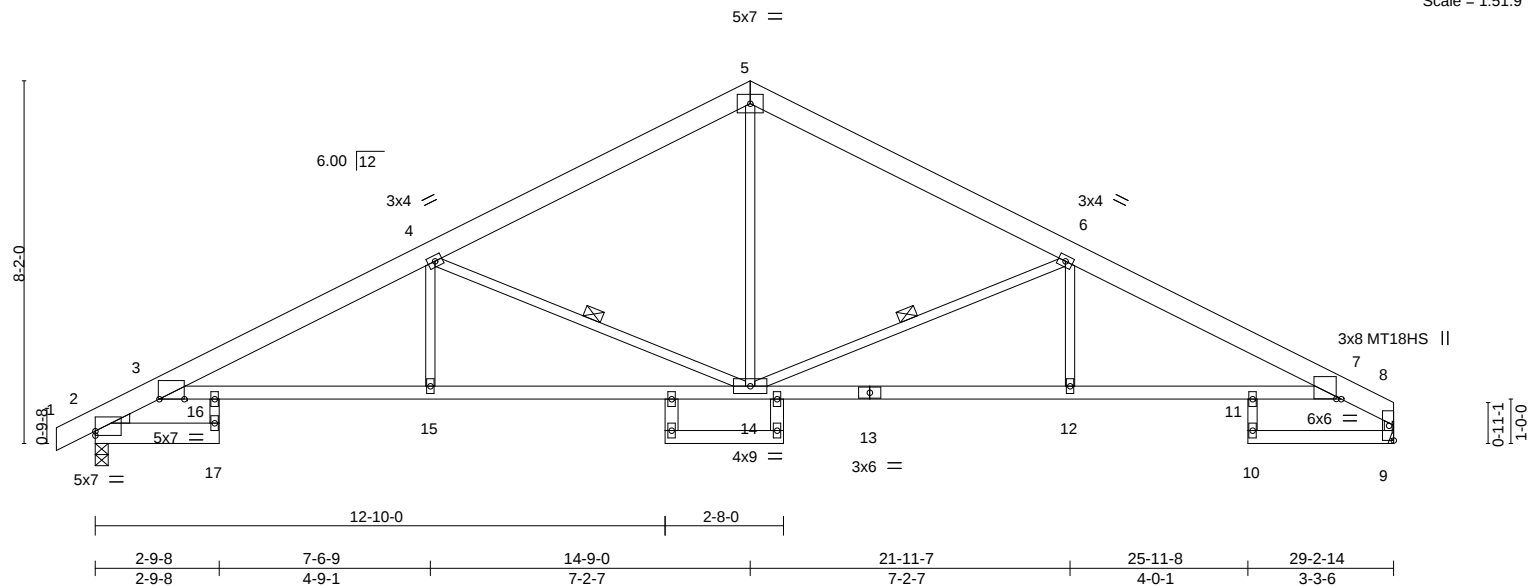


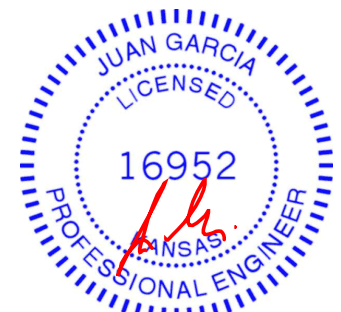
Plate Offsets (X,Y)--		[2:0-0-0,0-1-3], [3:0-6-12,0-0-0], [7:0-1-5,0-0-1]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.24 15-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.44 15-16	>793	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.39 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.19 15-16	>999	240	Weight: 147 lb	FT = 10%

LUMBER-	BRACING-	
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals.
BOT CHORD 2x4 SPF 2100F 1.8E *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except*	WEBS	1 Row at midpt 4-14, 6-14
18-20,19-21: 2x4 SPF No.2		
WEDGE		
Left: 2x3 SPF No.2		

REACTIONS. (lb/size) 2=1377/0-3-8, 9=1303/Mechanical
Max Horz 2=141(LC 12)
Max Uplift 2=-187(LC 8), 9=-161(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-825/149, 3-4=-2750/354, 4-5=-1729/224, 5-6=-1727/242, 6-7=-2701/311, 7-8=-474/66, 8-9=-1290/185
BOT CHORD 3-16=-360/2471, 15-16=-360/2471, 14-15=-360/2471, 13-14=-208/2417, 12-13=-208/2417, 11-12=-208/2417, 7-11=-208/2417
WEBS 4-15=0/332, 4-14=-1143/326, 5-14=-63/1022, 6-14=-1084/293, 6-12=0/320

- 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) All plates are MT20 plates unless otherwise indicated.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 2 and 161 lb uplift at joint 9.
 - 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.



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027029
400420	E10	Roof Special	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-wxGU4egryGbnvx50D77QmFIKXg0LlJFceTMOm7yy4lc

0-10-8 7-6-9 14-9-0 17-7-6 21-11-7 25-11-8 29-6-0 30-4-8
0-10-8 7-6-9 7-2-8 2-10-6 4-4-1 4-0-1 3-6-8 0-10-8

6x8 ||

Scale = 1:57.8

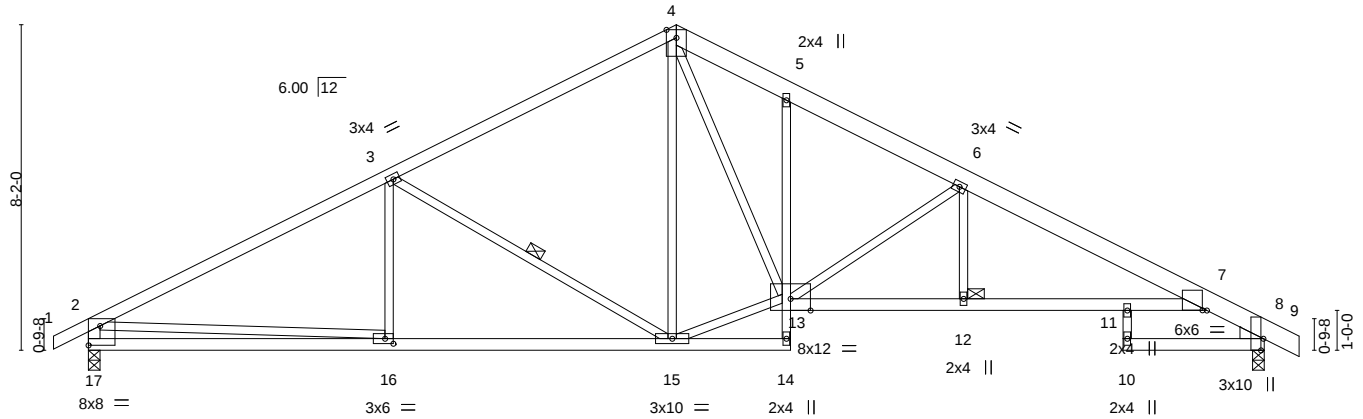


Plate Offsets (X,Y)--		[7:0-1-5,0-0-1], [8:0-3-8,Edge], [16:0-2-8,0-1-8], [17:Edge,0-5-13]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
CSI.	DEFL.	in (loc) l/defl L/d
TC 0.63	Vert(LL)	-0.22 11-12 >999 360
BC 0.67	Vert(CT)	-0.42 11-12 >831 240
WB 0.72	Horz(CT)	0.26 8 n/a n/a
Matrix-S	Wind(LL)	0.16 11-12 >999 240
PLATES	GRIP	
MT20	197/144	
Weight: 140 lb		FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-9: 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
5-14: 2x3 SPF No.2, 7-13: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-17: 2x4 SPF 2400F 2.0E
WEDGE
Right: 2x4 SPF No.2

REACTIONS.

(size) 17=0-3-8, 8=0-3-8
Max Horz 17=-132(LC 9)
Max Uplift 17=-186(LC 8), 8=-186(LC 9)
Max Grav 17=1386(LC 1), 8=1386(LC 1)

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

TOP CHORD 2-3=-2120/257, 3-4=-1526/236, 4-5=-1880/306, 5-6=-2016/245, 6-7=-2778/301,
7-8=-810/129, 2-17=-1312/227
BOT CHORD 16-17=-297/655, 15-16=-254/1793, 12-13=-162/2500, 11-12=-162/2500, 7-11=-162/2500
WEBS 3-15=-655/228, 13-15=-51/1272, 4-13=-177/1111, 6-13=-1006/223, 6-12=0/307,
2-16=-8/1142

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
- The Fabrication Tolerance at joint 2 = 2%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=186, 8=186.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027030
400420	E11	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAAnj_gYbKvtCQHtmQzKvNM-O8qtH_gTjajeX5gCnrefJSrYk4R44D6mt76xIZyy4lb

Job Reference (optional)

0-10-8 14-9-0 21-11-7 29-6-0 30-4-8
0-10-8 14-9-0 7-2-7 7-6-9 0-10-8

5x7 ||

Scale = 1:55.2

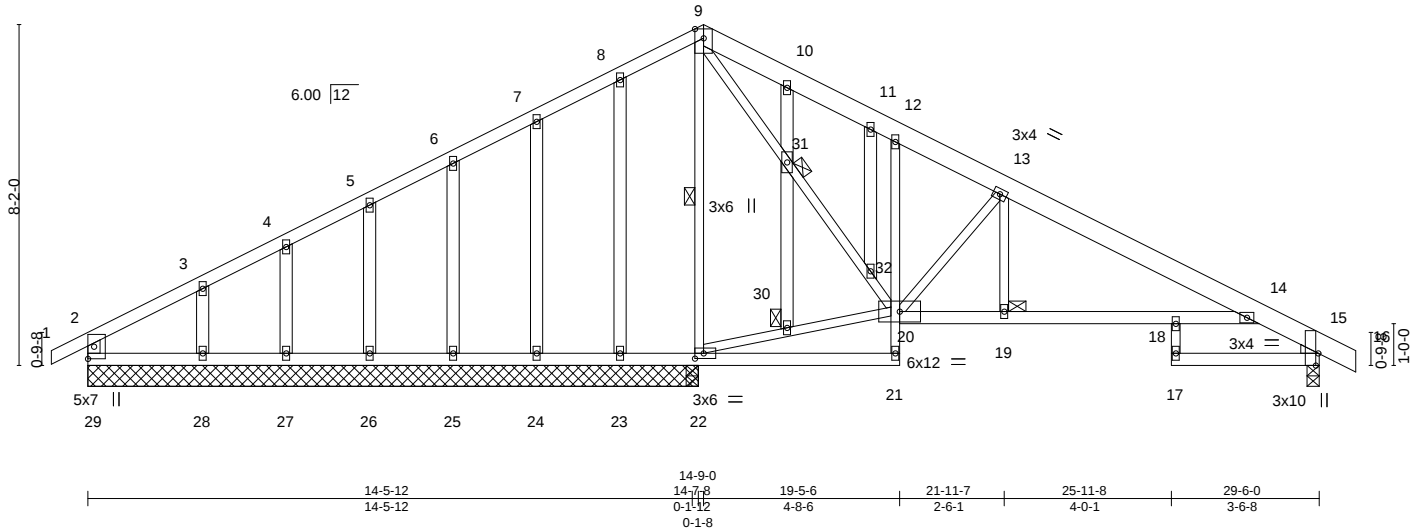


Plate Offsets (X,Y)-- [15:0-3-8,Edge], [22:0-2-8,0-1-8]

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 0.40	Vert(LL)	-0.08	18	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.18	18-19	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.08	15	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07	18	>999		
								Weight: 154 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
9-16: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
12-21: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-29: 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Right: 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, Except:
10-0-0 oc bracing: 21-22,20-21,15-17.
10-0-0 oc bracing: 19-20, 18-19
WEBS 1 Row at midpt 9-22
JOINTS 1 Brace at Jt(s): 19, 30, 31

REACTIONS.

All bearings 14-7-8 except (jt=length) 15=0-3-8.
(lb) - Max Horz 29=-132(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 26, 27 except
29=-292(LC 22), 15=-104(LC 9), 22=-131(LC 9), 28=-121(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 29, 23, 24, 25, 26, 27 except
15=488(LC 1), 22=1238(LC 1), 28=395(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-145/587, 3-4=-76/529, 4-5=-37/548, 5-6=-8/544, 6-7=0/543, 7-8=0/550,
8-9=0/534, 13-14=-391/99, 2-29=-35/261
BOT CHORD 28-29=-463/243, 27-28=-463/243, 26-27=-463/243, 25-26=-463/243, 24-25=-463/243,
23-24=-463/243, 22-23=-463/243, 19-20=-14/321, 18-19=-14/321, 14-18=-14/321
WEBS 9-31=-178/655, 31-32=-166/613, 20-32=-174/650, 22-30=-500/240, 20-30=-480/230,
13-20=-648/168, 13-19=0/256, 3-28=-268/127, 9-22=-966/106

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 25, 26, 27 except (jt=lb) 29=292, 15=104, 22=131, 28=121.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15,2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027031
400420	G1	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:00 2020 Page 1

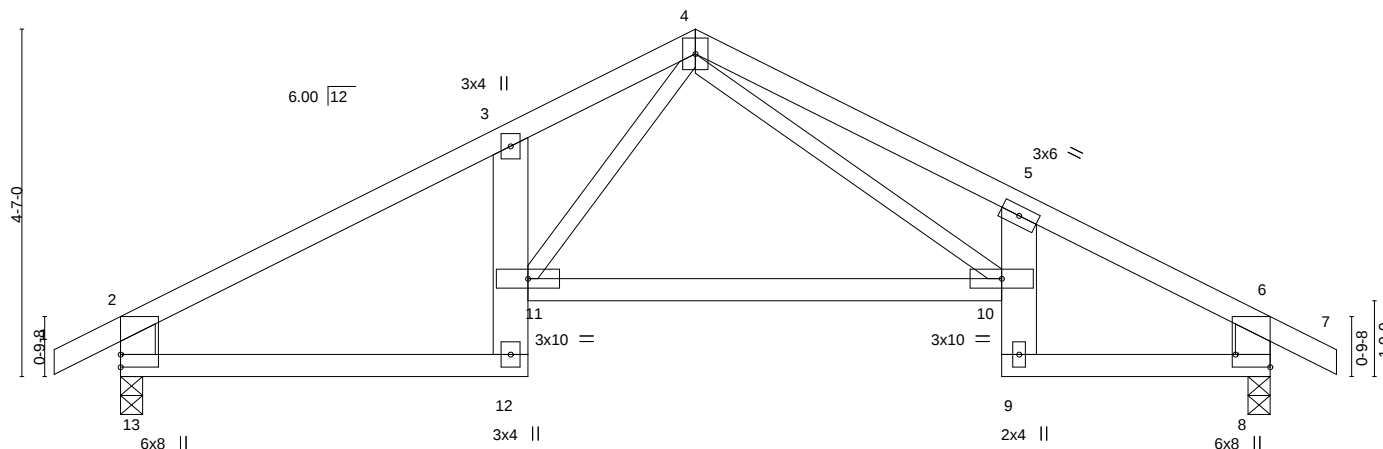
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Job Reference (optional)

0-10-8	5-4-8	7-7-0	11-7-8	15-2-0	16-0-8
0-10-8	5-4-8	2-2-8	4-0-8	3-6-8	0-10-8

4x5 ||

Scale = 1:30.4



5-4-8	11-7-8	15-2-0
5-4-8	6-3-0	3-6-8

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.11 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.25 10-11	>701	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.11 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 10-11	>999	240	Weight: 56 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 3-12,5-9: 2x6 SPF No.2
 WEBS 2x6 SPF No.2 *Except*
 4-11,4-10: 2x3 SPF No.2

BRACING-

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

REACTIONS.

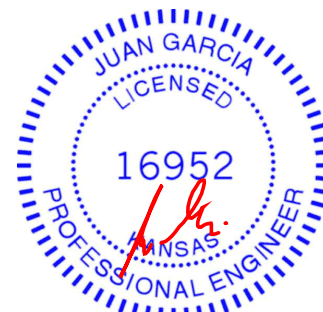
(size) 13=0-3-8, 8=0-3-8
 Max Horz 13=-77(LC 6)
 Max Uplift 13=-107(LC 8), 8=-107(LC 9)
 Max Grav 13=739(LC 1), 8=739(LC 1)

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

TOP CHORD 2-3=-883/117, 3-4=-1211/208, 4-5=-1675/258, 5-6=-845/113, 2-13=-674/141, 6-8=-667/122
 BOT CHORD 12-13=-87/689, 3-11=-345/158, 10-11=-26/725, 5-10=-493/171, 8-9=-48/650
 WEBS 4-11=-115/561, 4-10=-177/901

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=107, 8=107.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15,2020

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16023 Swingley Ridge Rd
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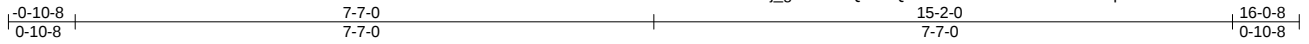
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027032
400420	G2	Common Supported Gable	1	1		

Wheeler Lumber, Waverly, KS 66871

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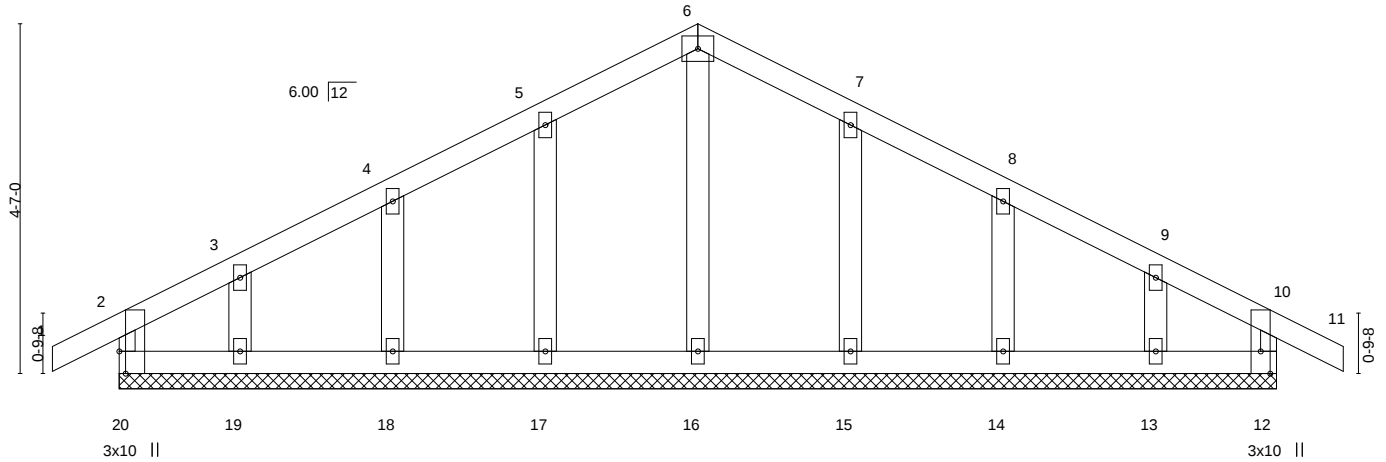
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Job Reference (optional)



4x5 =

Scale = 1:30.2



										15-2-0																			
Plate Offsets (X,Y)--										[20:0-3-8,Edge]										15-2-0									
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	0.07	Vert(LL)		-0.00	11	n/r		120		MT20		197/144											
TCDL	10.0	Lumber DOL		1.15		BC	0.02	Vert(CT)		-0.00	11	n/r		120															
BCLL	0.0 *	Rep Stress Incr		YES		WB	0.04	Horz(CT)		0.00	12	n/a		n/a															
BCDL	10.0	Code IRC2018/TPI2014				Matrix-R										Weight: 58 lb		FT = 10%											

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15-2-0.
(lb) - Max Horz 20=-75(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13
Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 19, 15, 14, 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.



July 15, 2020

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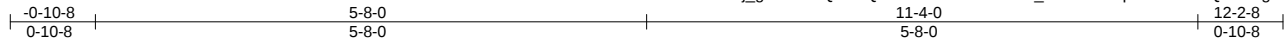
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027033
400420	H1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-53RfNOokMf_DkdR7Mxq?iZFKV6xvQsoEAgXTe_yy4IR



4x5 =

Scale = 1:23.7

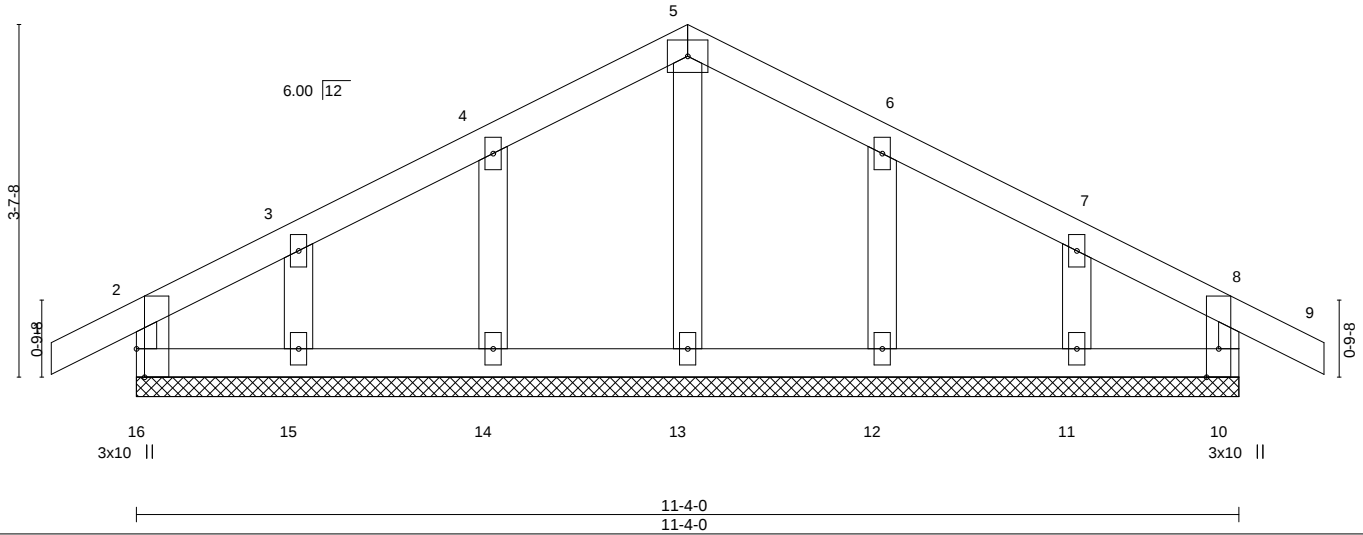


Plate Offsets (X,Y)--		[16:0-3-8,Edge]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	9	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 41 lb FT = 10%		

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-4-0.
(lb) - Max Horz 16=-63(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 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.



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027034
400420	H2	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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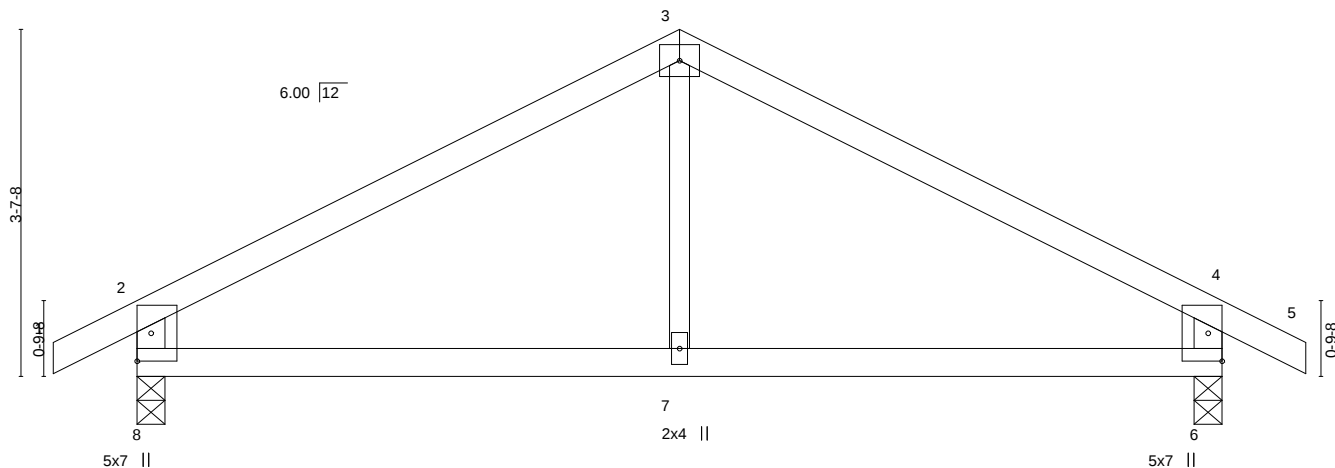
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Job Reference (optional)

0-10-8 5-8-0 11-4-0 12-2-8
0-10-8 5-8-0 5-8-0 0-10-8

4x5 =

Scale: 1/2"=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 0.40	Vert(LL)	-0.02	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.05	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	7-8	>999	240		
									Weight: 33 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-7: 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=-63(LC 6)
Max Uplift 8=-84(LC 8), 6=-84(LC 9)
Max Grav 8=568(LC 1), 6=568(LC 1)

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

TOP CHORD 2-3=-588/85, 3-4=-588/85, 2-8=-510/123, 4-6=-510/123
BOT CHORD 7-8=-12/438, 6-7=-12/438

NOTES-

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



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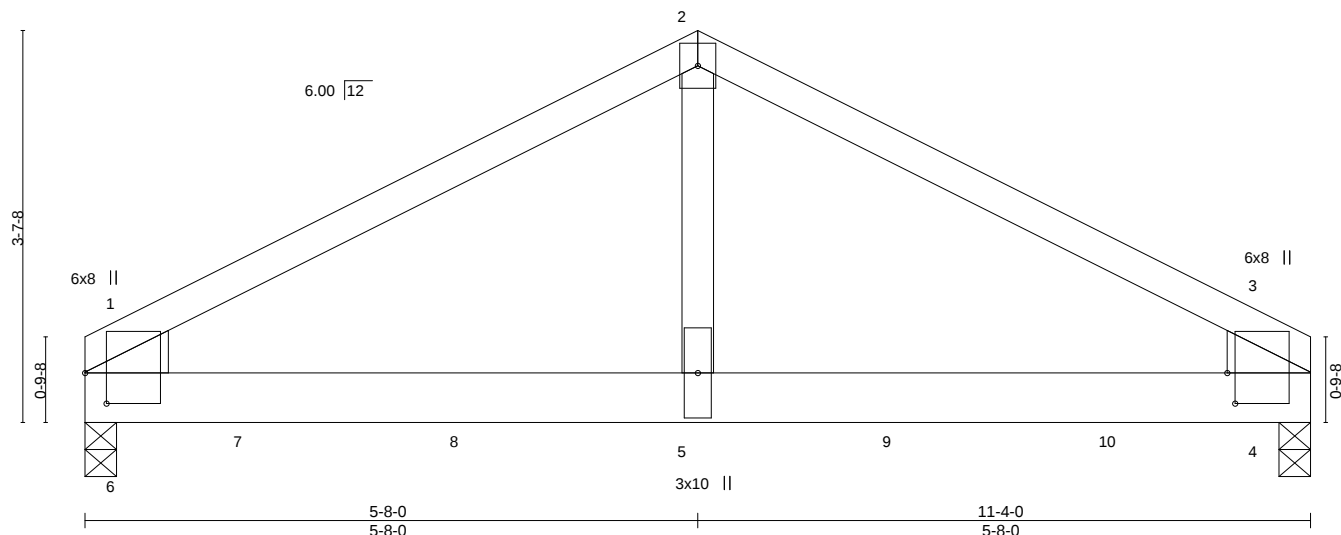
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

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5-8-0 11-4-0
5-8-0 5-8-0
4x5 || Scale = 1:21.3



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP 2400F 2.0E		
WEBS	2x10 SP DSS *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	2-5: 2x4 SPF No.2		

REACTIONS. (size) 6=0-3-8, 4=0-3-8
 Max Horz 6=-57(LC 25)
 Max Uplift 6=-260(LC 8), 4=-145(LC 9)
 Max Grav 6=3667(LC 1), 4=3531(LC 1)

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

TOP CHORD	1-2=-3884/198, 2-3=-3884/198, 1-6=-1917/149, 3-4=-1917/151
BOT CHORD	5-6=-123/3384, 4-5=-123/3384
WEBS	2-5=-52/3113

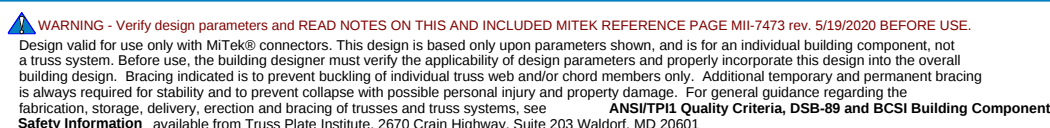
NOTES-

- 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 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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
- 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) except (jt=lb) 6=260, 4=145.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1289 lb down and 182 lb up at 1-6-12, 1240 lb down and 37 lb up at 3-6-12, 1240 lb down and 37 lb up at 5-6-12, and 1240 lb down and 37 lb up at 7-6-12, and 1240 lb down and 37 lb up at 9-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



July 15, 2020



Job	Truss	Truss Type	Qty	Ply	Lot 37 HT
400420	H3	Common Girder	1	2	I42027035
					Job Reference (optional)

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-1SYPo4q_uGExzxbVUMsUo_KcmvVAuhnXd_0ajtyy4IP

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-1240(B) 7=-1289(B) 8=-1240(B) 9=-1240(B) 10=-1240(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027036
400420	J1	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-We6n0QrdfaMob4Ai23NjKctnnJundD_gsem7FJyy4IO

-1-2-14	2-9-3	5-6-6
1-2-14	2-9-3	2-9-3

Scale = 1:13.8

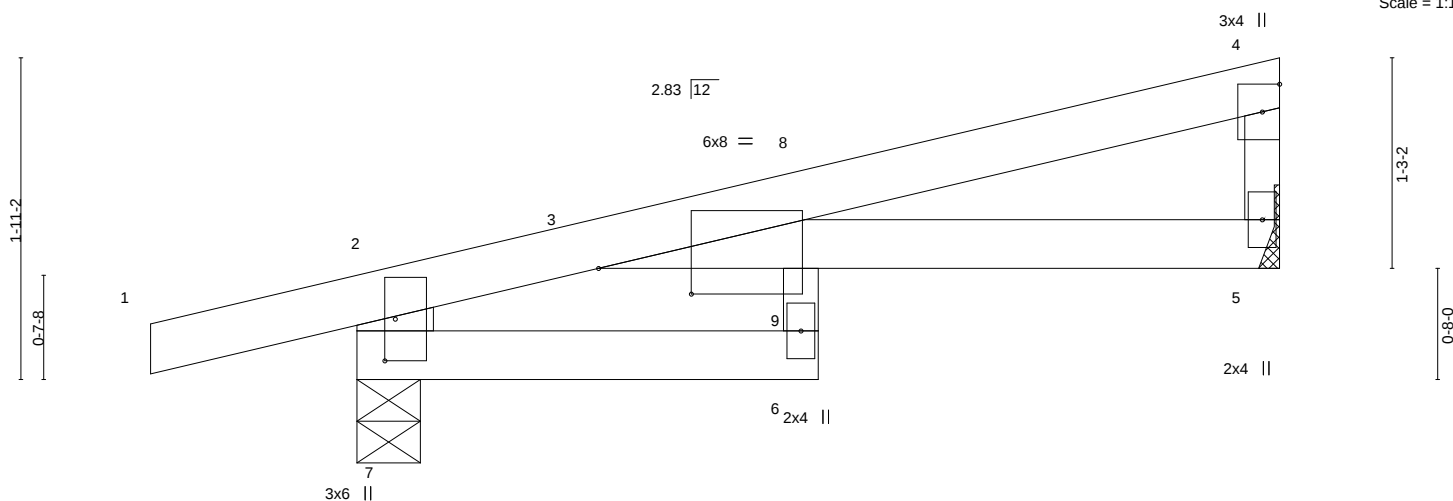


Plate Offsets (X,Y)--	[3:0-6-11,0-1-14], [7:0-3-0,0-0-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.06	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.14	6	>433	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.07	6	>891	240	Weight: 17 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 3-6: 2x3 SPF No.2
 WEBS 2x6 SPF No.2 *Except*
 4-5: 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 7=0-4-9, 5=Mechanical
 Max Horz 7=63(LC 5)
 Max Uplift 7=99(LC 4), 5=-40(LC 8)
 Max Grav 7=364(LC 1), 5=225(LC 1)

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

TOP CHORD 2-7=-342/112

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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) 66 lb down and 27 lb up at 2-9-8, and 66 lb down and 27 lb up at 2-9-8 on top chord, and 4 lb down and 3 lb up at 2-7-15, and 4 lb down and 3 lb up at 2-7-15 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, 3-4=-70, 6-7=-20, 3-5=-20
 Concentrated Loads (lb)
 Vert: 6=6(F=3, B=3)



July 15, 2020

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



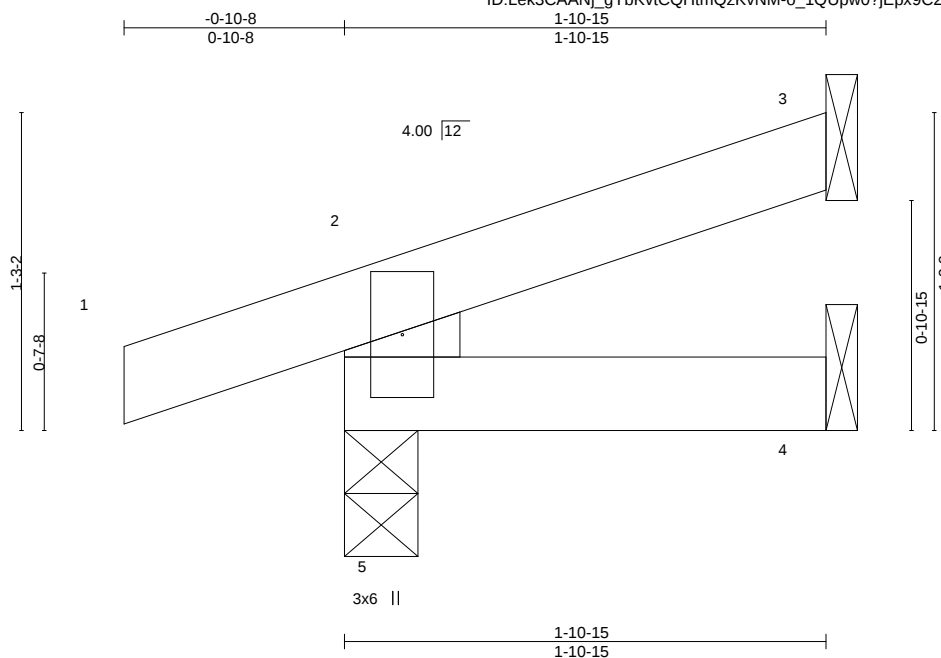
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027038
400420	J3	Jack-Open	4	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-o_1QUpw0?jEpx9C2y1?M6gg2m8LGmOjiTEy??Py4IH



Scale = 1:9.1

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 0.08	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

LUMBER-

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

BRACING-

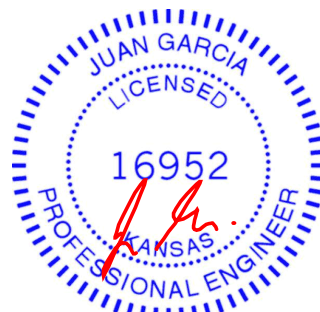
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=36(LC 4)
Max Uplift 5=65(LC 4), 3=-22(LC 8)
Max Grav 5=178(LC 1), 3=40(LC 1), 4=28(LC 3)

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

NOTES-

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



July 15, 2020

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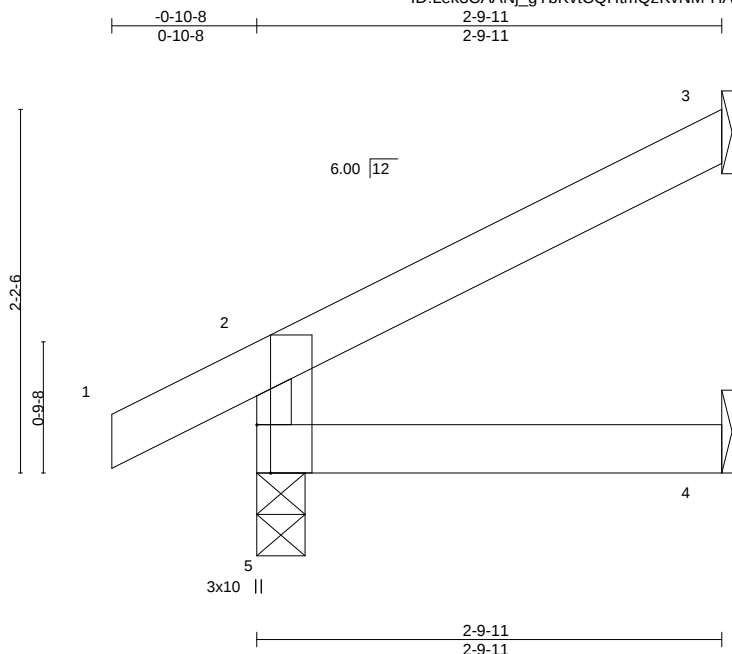
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400420	Truss J4	Truss Type Jack-Open	Qty 1	Ply 1	Lot 37 HT Job Reference (optional)	I42027039
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Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAAnj_gYbKvtCQHmQzKvNM-HAbph9xem1MgYJnEWIWbfuCD0XhvVrzsuiYXsyy4IG



Scale = 1:13.9

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

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-11 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=63(LC 8)
Max Uplift 5=-23(LC 8), 3=-49(LC 8)
Max Grav 5=200(LC 1), 3=78(LC 1), 4=50(LC 3)

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

NOTES-

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



July 15, 2020

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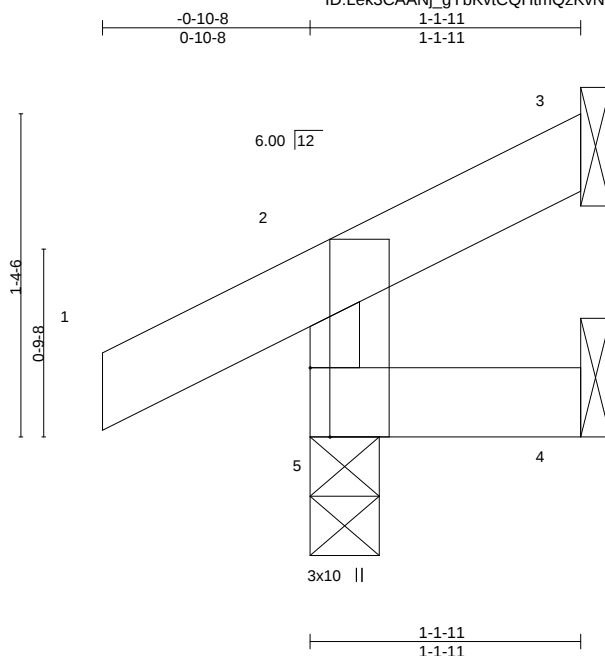
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027040
400420	J5	Jack-Open	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-IN9BuVxGXLUWATMQ3S2qC5lOTx1wEID?xYR64lly4lF



Scale = 1:9.7

Plate Offsets (X,Y)--		[5:0-3-8,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 0.07		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: 4 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-1-11 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=34(LC 5)
Max Uplift 5=23(LC 8), 3=16(LC 8), 4=1(LC 5)
Max Grav 5=147(LC 1), 3=9(LC 15), 4=18(LC 3)

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

NOTES-

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



July 15, 2020

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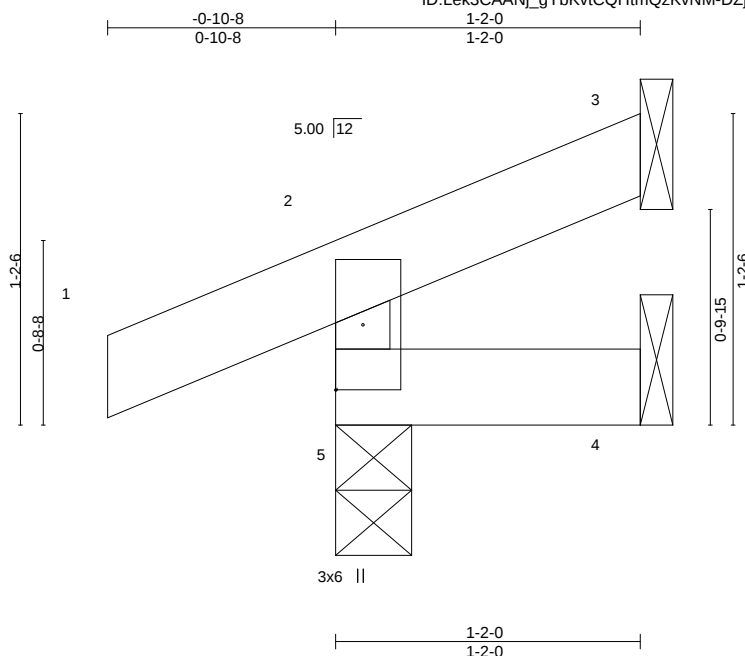
16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400420	Truss J7	Truss Type Jack-Open	Qty 1	Ply 1	Lot 37 HT Job Reference (optional)	I42027042
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Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:15 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-DZjZ6ryulecNodxdddAZ3kJIZELM9zIS89CBfckyy4IE



Scale = 1:8.8

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

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=30(LC 5)
Max Uplift 5=37(LC 4), 3=-13(LC 8)
Max Grav 5=148(LC 1), 3=10(LC 1), 4=19(LC 3)

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

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027043
400420	J8	Jack-Open	1	1		
Job Reference (optional)						

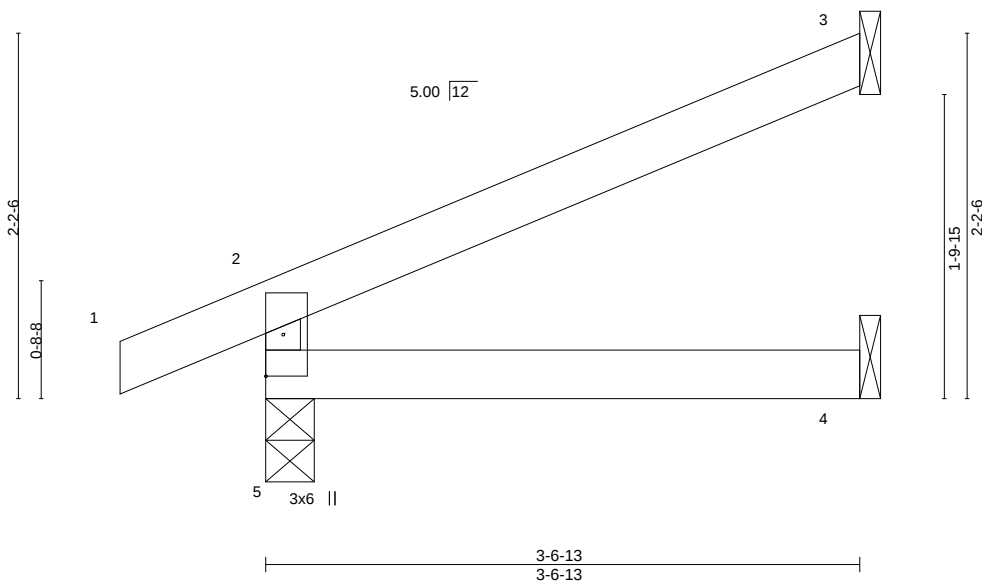
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:16 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-hlHxJBzW3yEPnVpBt4IHwqjShxiCilOswD8Ayy4ID

-0-10-8
0-10-8
3-6-13
3-6-13

Scale = 1:13.8



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 0.16	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=66(LC 8)
Max Uplift 5=34(LC 8), 3=56(LC 8)
Max Grav 5=232(LC 1), 3=105(LC 1), 4=65(LC 3)

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

NOTES-

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



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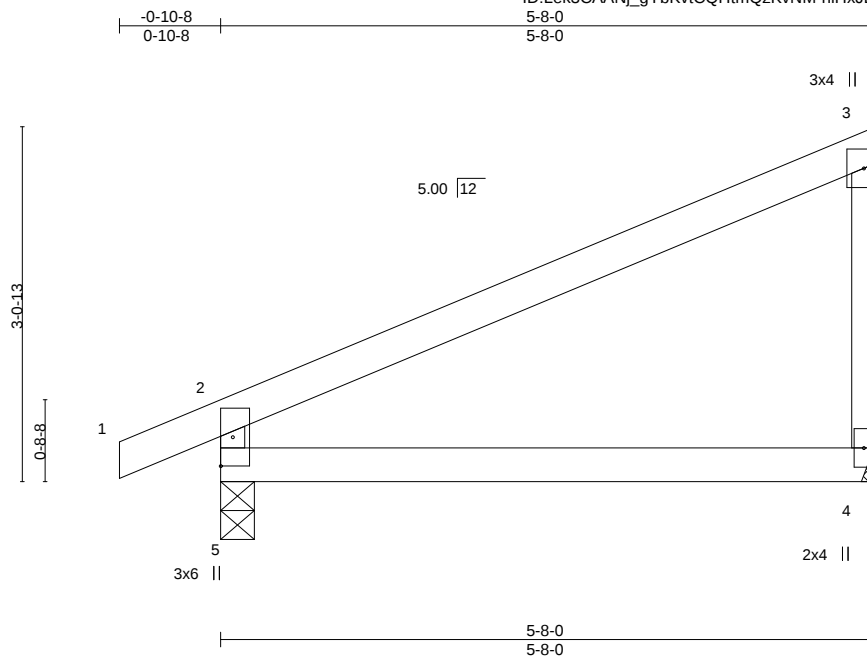
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027044
400420	J9	Jack-Closed	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:16 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-hlHxJBzW3ylEPnVpBt4lHWqfUlfbiCilOswD8Ayy4lD



Scale = 1:19.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.08	4-5	>831	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=125(LC 5)
Max Uplift 5=-57(LC 8), 4=-58(LC 8)
Max Grav 5=320(LC 1), 4=239(LC 1)

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

TOP CHORD 2-5=-279/98

NOTES-

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



July 15, 2020

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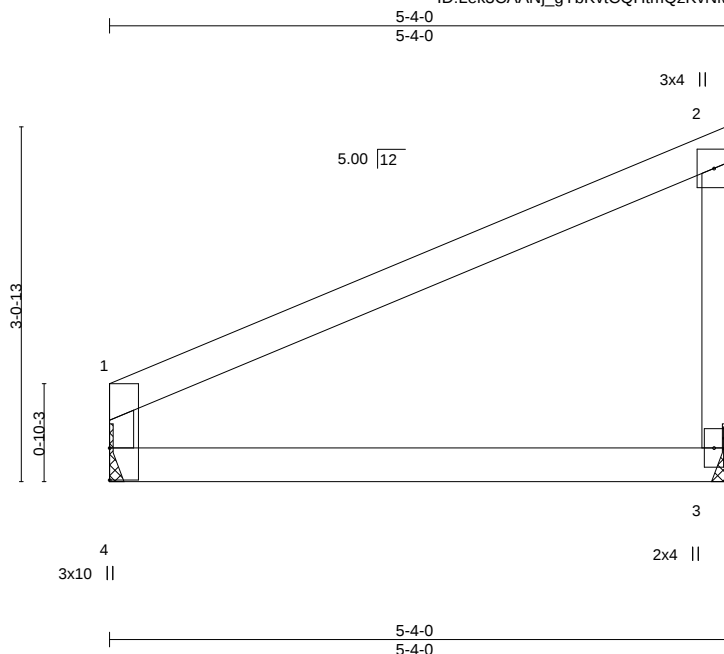


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027045
400420	J10	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:06 2020 Page 1
ID:Lek3CAANj_gYbKvTCQHtmQzKvNM_-qg9DmrFQtUfCElubnuytPQxMjFIMgEq5IVholyy4IN



Scale = 1:19.9

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 0.39	Vert(LL)	-0.03	3-4	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.06	3-4	>988	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	3-4	>999	240	
								Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

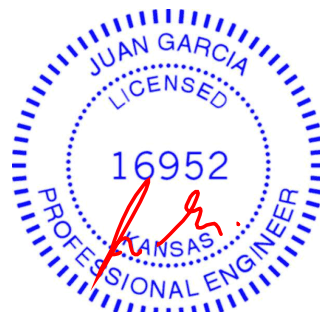
TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 3=Mechanical
Max Horz 4=116(LC 5)
Max Uplift 4=-30(LC 8), 3=-56(LC 8)
Max Grav 4=231(LC 1), 3=231(LC 1)

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

NOTES-

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



July 15, 2020

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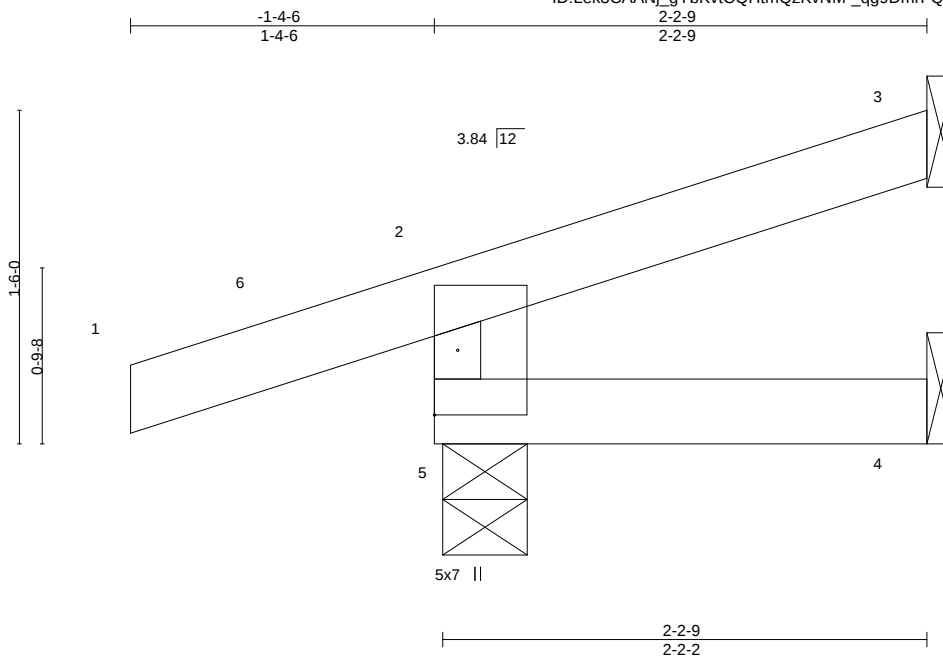


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027046
400420	J11	Jack-Open Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:06 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-_qg9DmrFQtUfCElubnuytPQ09jioMgEq5IVholyy4IN



Scale = 1:10.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	5	>999	360	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-9 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=51(LC 7)
Max Uplift 5=-115(LC 6), 3=-25(LC 12)
Max Grav 5=78(LC 1), 3=24(LC 1), 4=29(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=115.
- 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) 12 lb down and 4 lb up at -1-4-6, and 12 lb down and 4 lb up at -1-4-6 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)

Vert: 1=-19(F=-10, B=-10)

Trapezoidal Loads (plf)

Vert: 1=-0(F=35, B=35)-to-6=-13(F=28, B=28), 6=0(F=35, B=35)-to-2=-13(F=29, B=29), 2=-13(F=29, B=29)-to-3=-49(F=10, B=10), 5=-4(F=8, B=8)-to-4=-14(F=3, B=3)



July 15, 2020

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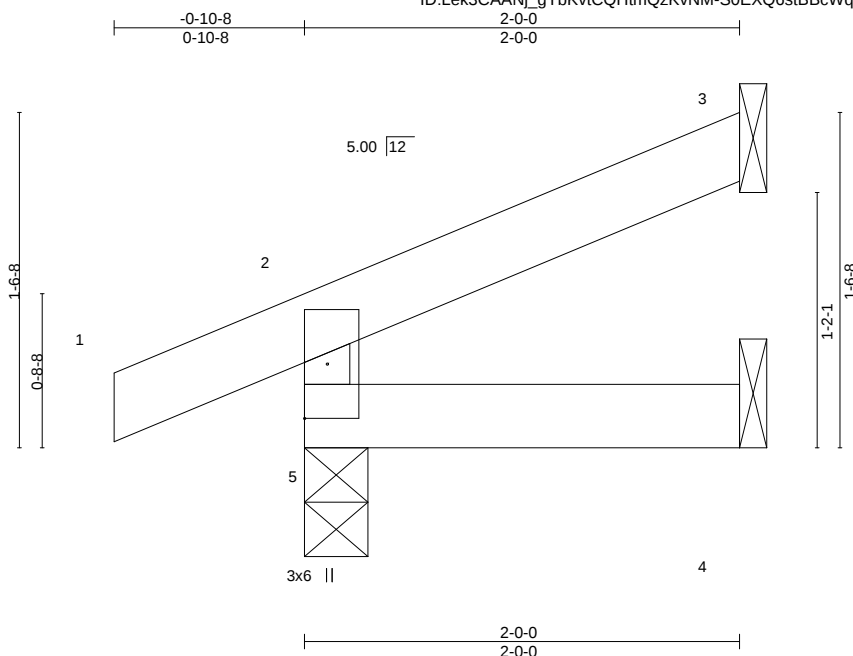
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027047
400420	J12	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-S0EXQ6stBBcWqOJ49UPBPdyBG7e?57UzJyFEKCy4IM



Scale = 1:10.6

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)	-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 = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=40(LC 8)
Max Uplift 5=-32(LC 4), 3=-31(LC 8)
Max Grav 5=171(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 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027048
400420	J13	Jack-Closed Supported Gable	2	1	Job Reference (optional)	

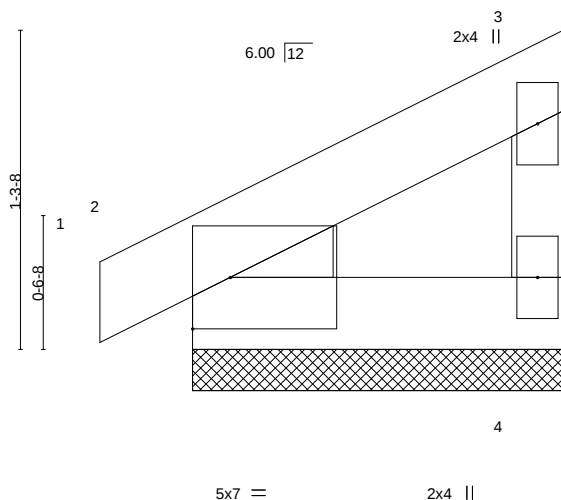
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-S0EXQ6stBBcWqOJ49UPBPdyCs7eA57UzJyFEKCy4IM

-0-4-8 1-6-0
0-4-8 1-6-0

Scale = 1:9.3



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 0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=1-6-0, 2=1-6-0
Max Horz 2=38(LC 5)
Max Uplift 4=-17(LC 8), 2=-15(LC 8)
Max Grav 4=59(LC 1), 2=93(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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) 4, 2.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 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.



July 15, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027049
400420	J14	Jack-Closed	2	1	Job Reference (optional)	

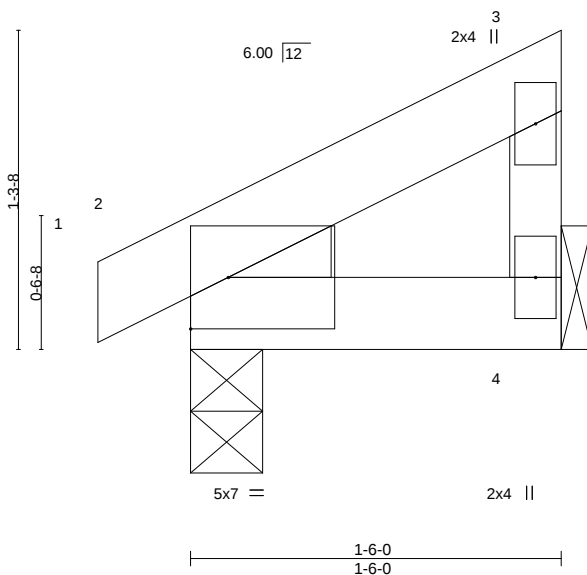
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:08 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-wDoweStVyVkNSYuHjCxQyqVNdW_Bqak7Yc_oseyy4IL

-0-4-8 1-6-0
0-4-8 1-6-0

Scale = 1:9.3



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 0.02	Vert(LL)	-0.00 2	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00 2	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00 2	****	240	Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-6-0 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=38(LC 5)
Max Uplift 4=-17(LC 8), 2=-16(LC 8)
Max Grav 4=57(LC 1), 2=94(LC 1)

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

NOTES-

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



July 15, 2020

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Chesterfield, MO 63017

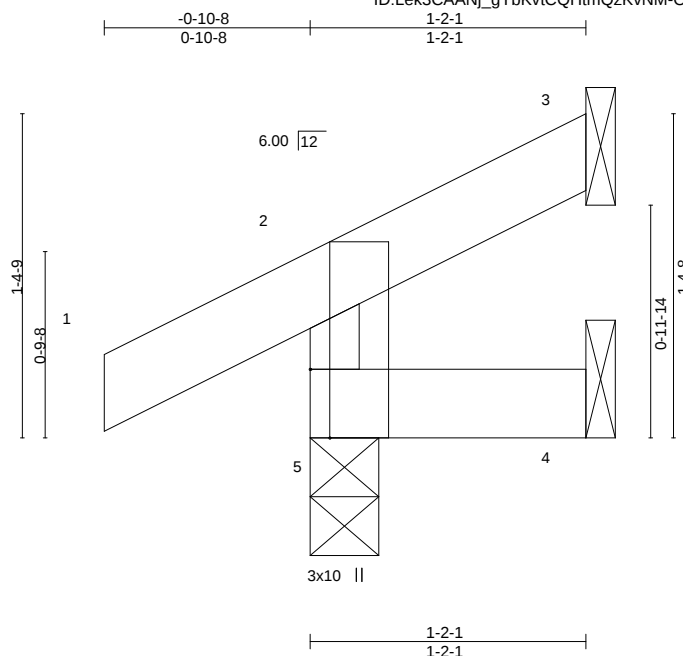
Job 400420	Truss J15	Truss Type Jack-Open	Qty 1	Ply 1	Lot 37 HT Job Reference (optional)
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I42027050

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-OPMlrrou7josE3iTTThvSfV22XkwJkZ1zGnGkLO4yy4IK



Scale = 1:9.8

Plate Offsets (X,Y)--		[5:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.01
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.00 5 >999 360
			Vert(CT) -0.00 5 >999 240
			Horz(CT) -0.00 3 n/a n/a
			Wind(LL) 0.00 5 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 4 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=34(LC 5)
 Max Uplift 5=23(LC 8), 3=17(LC 8), 4=1(LC 5)
 Max Grav 5=148(LC 1), 3=11(LC 15), 4=19(LC 3)

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

NOTES-

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



July 15, 2020

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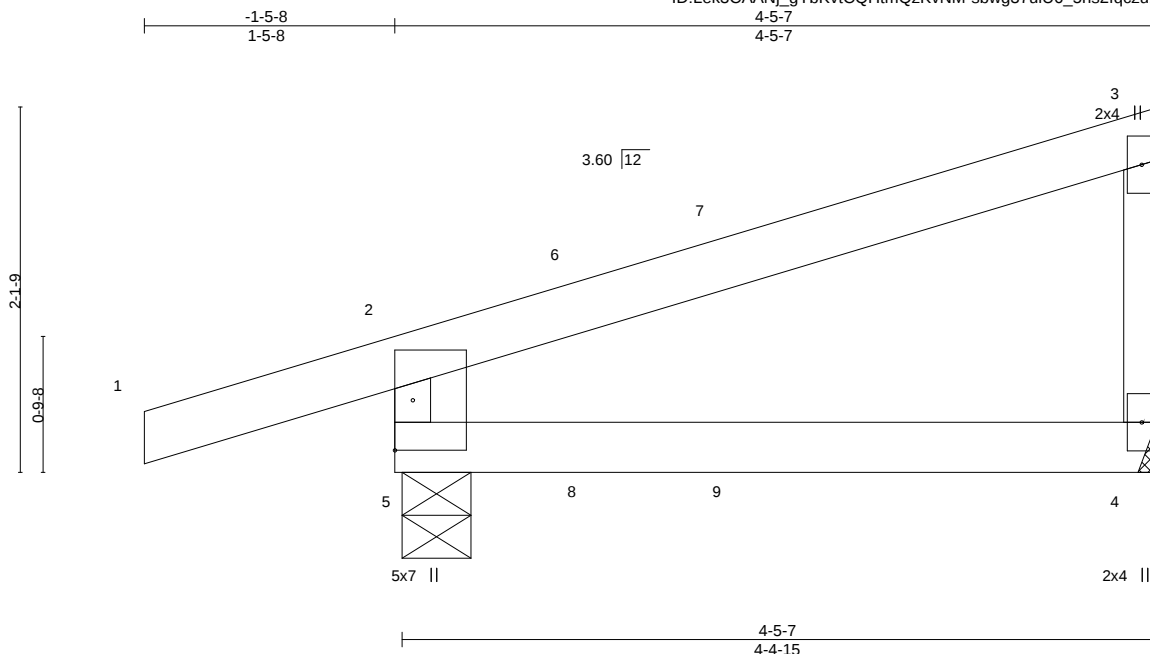


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027051
400420	J16	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:10 2020 Page 1
ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-sbwg37ulU6_5hs2fczu1Fag?KdiiUDP0wTuxXyy4IJ



Scale = 1:13.4

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 0.22	Vert(LL)	-0.01	4-5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.03	4-5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	
								Weight: 14 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-13, 4=Mechanical
Max Horz 5=86(LC 5)
Max Uplift 5=-110(LC 4), 4=-59(LC 8)
Max Grav 5=317(LC 1), 4=242(LC 1)

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

TOP CHORD 2-5=-282/136

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=110.
- This truss 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) 79 lb down and 15 lb up at 1-2-4, and 61 lb down and 17 lb up at 2-0-6, and 75 lb down and 63 lb up at 4-4-3 on top chord, and 2 lb down and 2 lb up at 1-2-4, and 3 lb down and 6 lb up at 2-0-6, and 33 lb down at 4-4-3 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: 3=-50(B) 4=-23(B) 8=2(B) 9=2(F)



July 15, 2020

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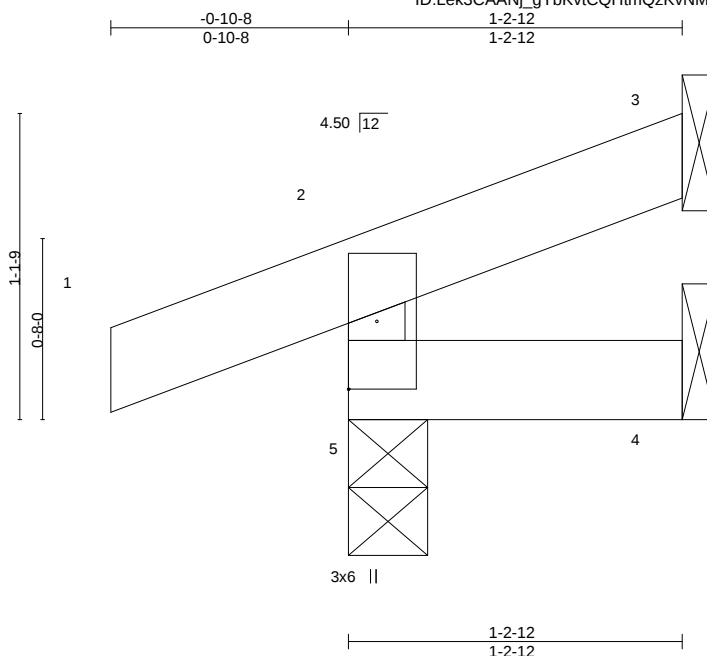


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027052
400420	J17	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:10 2020 Page 1
ID:Lek3CAANj_gYbKvCQHtmQzKvNM-sbwg37ulU6_5hs2fqczu1FajWKfzUDP0wTuxXyy4lJ



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

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-2-12 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=29(LC 5)
Max Uplift 5=53(LC 4), 3=-13(LC 8)
Max Grav 5=149(LC 1), 3=14(LC 1), 4=20(LC 3)

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

NOTES-

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



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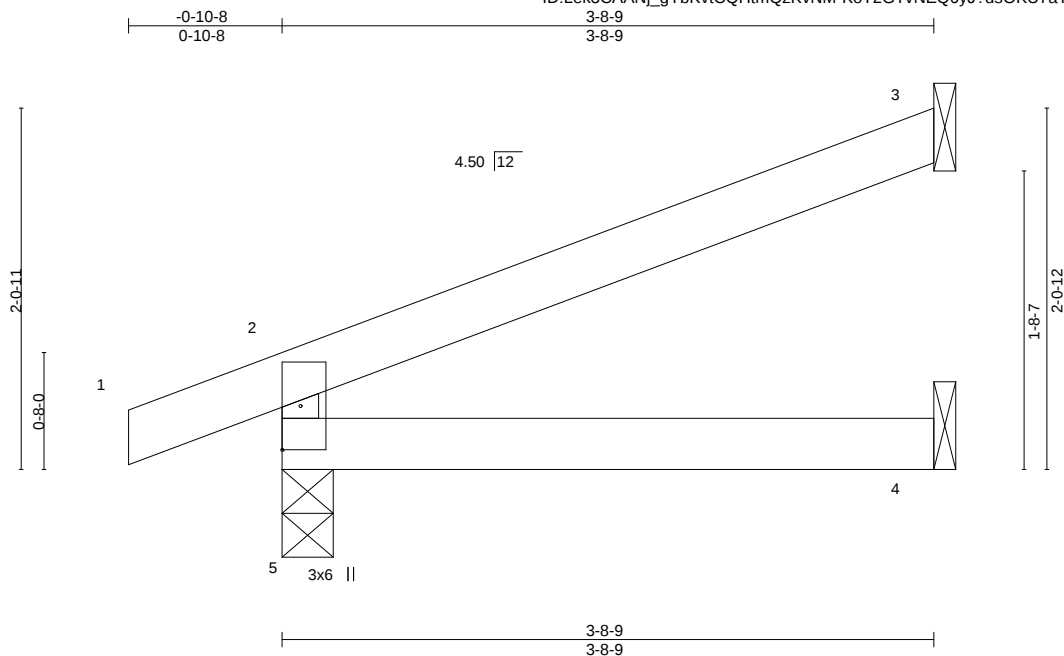
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027053
400420	J18	Jack-Open	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-KoT2GTvNEQ6yJ?dsOKU7aT7sSk_d1xTZEaDSTzyy4ll



Scale = 1:13.1

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 0.18	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

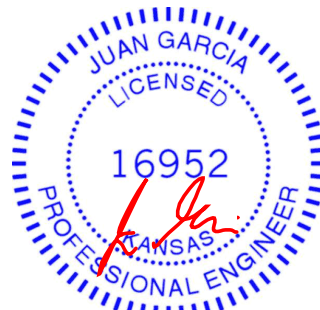
TOP CHORD Structural wood sheathing directly applied or 3-8-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 4)
Max Uplift 5=54(LC 4), 3=55(LC 8)
Max Grav 5=238(LC 1), 3=110(LC 1), 4=67(LC 3)

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

NOTES-

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



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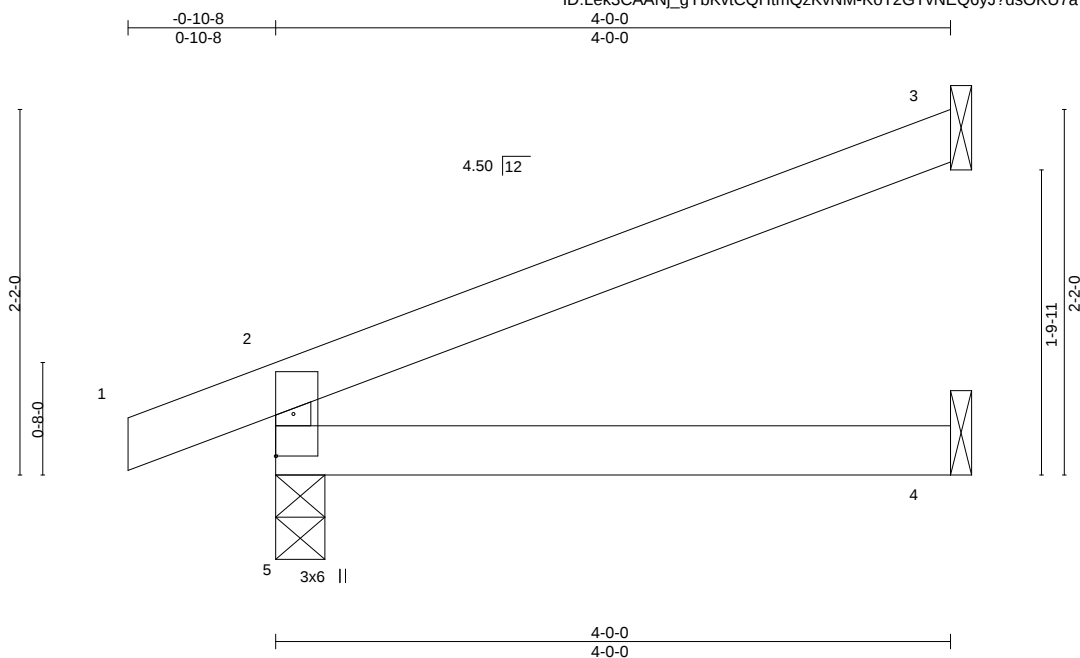
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027054
400420	J19	Jack-Open	6	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-KoT2GTvNEQ6yJ?dsOKU7aT7rvkz1xTZEaDSTzy4ll



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=68(LC 4)
Max Uplift 5=-55(LC 4), 3=-60(LC 8)
Max Grav 5=250(LC 1), 3=120(LC 1), 4=73(LC 3)

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

NOTES-

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



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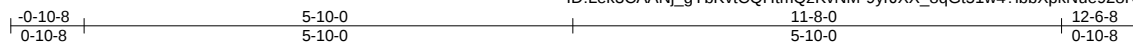
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027055
400420	K1	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:17 2020 Page 1

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3x4 =

Scale = 1:27.5

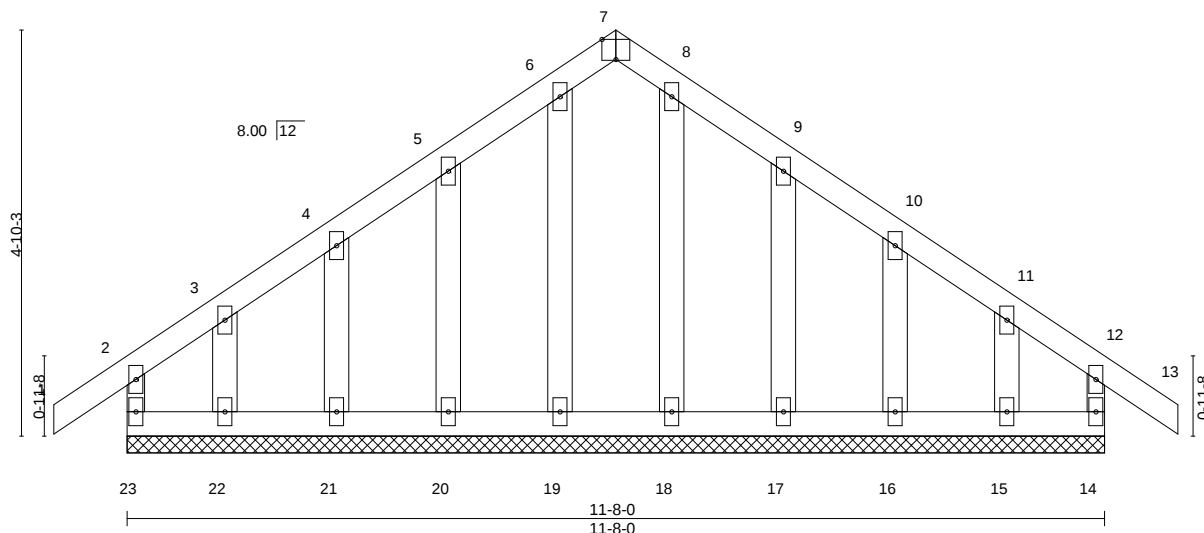


Plate Offsets (X,Y)-- [7:0-2-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	13	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 56 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-8-0.
(lb) - Max Horz 23=-144(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 23, 14, 22, 21, 20, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 23, 14, 22, 21, 20, 19, 18, 17, 16, 15

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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 14, 22, 21, 20, 17, 16, 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.



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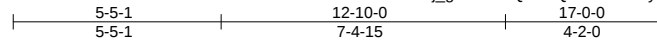
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027056
400420	K2	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

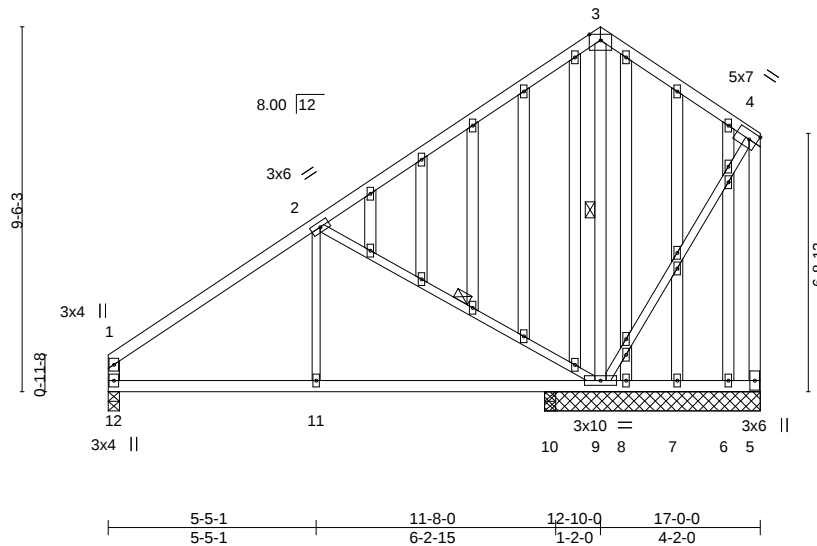
8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:19 2020 Page 1

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5x7 =

Scale = 1:60.1



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 0.66	Vert(LL)	-0.03 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.06 10-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(CT)	0.01 5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01 11	>999	240		
								Weight: 131 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 5-7-8 except (jt=length) 12=0-3-8, 10=0-3-8.
 (lb) - Max Horz 12=328(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 12, 6 except 5=-466(LC 21), 9=-240(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 5, 8, 7, 6 except 12=397(LC 1), 9=1173(LC 1), 10=274(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-411/78, 2-3=-38/377, 3-4=0/339, 1-12=-329/82, 4-5=0/460
 BOT CHORD 11-12=-244/397, 10-11=-244/397, 9-10=-244/397
 WEBS 2-9=-588/263, 3-9=-681/60, 4-9=-457/63

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 6 except (jt=lb) 5=466, 9=240.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15,2020

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

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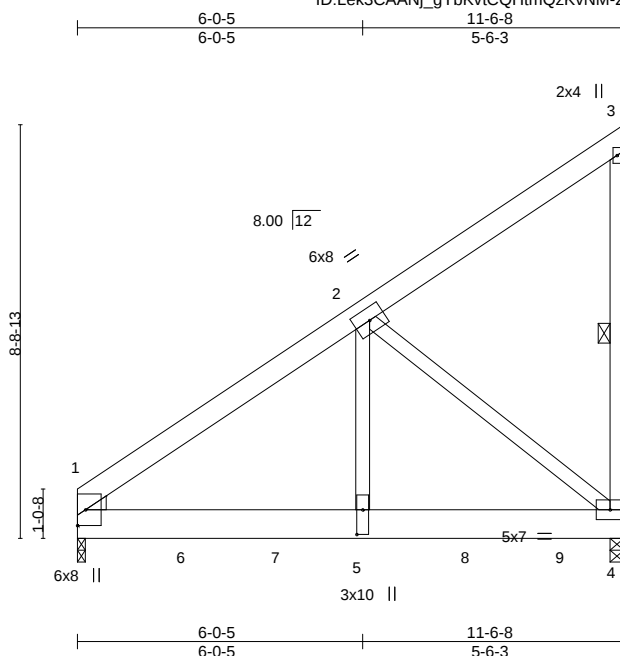
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	
400420	K3	MONOPITCH GIRDER	1	2		I42027057

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-ZXWS9Y017BFguOpaQj8ERM?HVM_7erpuJTUQHyyy4I9



Scale = 1:48.7

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.61	Vert(LL)	-0.04	1-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.08	1-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.70	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	1-5	>999	240	Weight: 164 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
 BOT CHORD 2x8 SP DSS
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 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 3-4

REACTIONS.

(size) 4=0-3-8, 1=0-2-0 (req. 0-3-9)
 Max Horz 1=321(LC 22)
 Max Uplift 4=245(LC 8), 1=356(LC 8)
 Max Grav 4=3890(LC 1), 1=4571(LC 1)

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

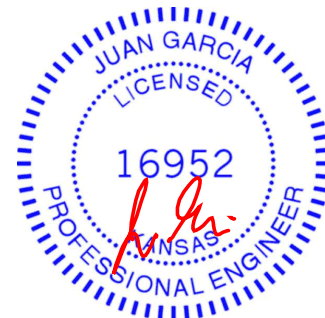
TOP CHORD 1-2=-3816/143
 BOT CHORD 1-5=-220/2995, 4-5=-220/2995
 WEBS 2-5=-96/4248, 2-4=-3885/344

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: 2x8 - 2 rows staggered at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=245, 1=356.
- This truss 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) 1246 lb down and 162 lb up at 0-1-0, 1238 lb down and 170 lb up at 2-3-12, 1240 lb down and 31 lb up at 4-3-12, 1240 lb down and 31 lb up at 6-3-12, and 1240 lb down and 31 lb up at 8-3-12, and 1240 lb down and 31 lb up at 10-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



July 15, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027057
400420	K3	MONOPITCH GIRDER	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-ZXWS9Y017BFguOpaQj8ERM?HVM_7erpuJTUQHyyy4I9

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 1-4=-20
Concentrated Loads (lb)
Vert: 5=-1240(B) 1=-1246(B) 6=-1238(B) 7=-1240(B) 8=-1240(B) 9=-1240(B)

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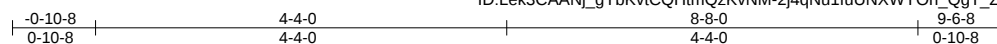
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027058
400420	L1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:21 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-2j4qNu1fuUNXWYOn_QgT_ZXahmQCNSg1Y7e_pOyy4I8



3x4 =

Scale = 1:24.3

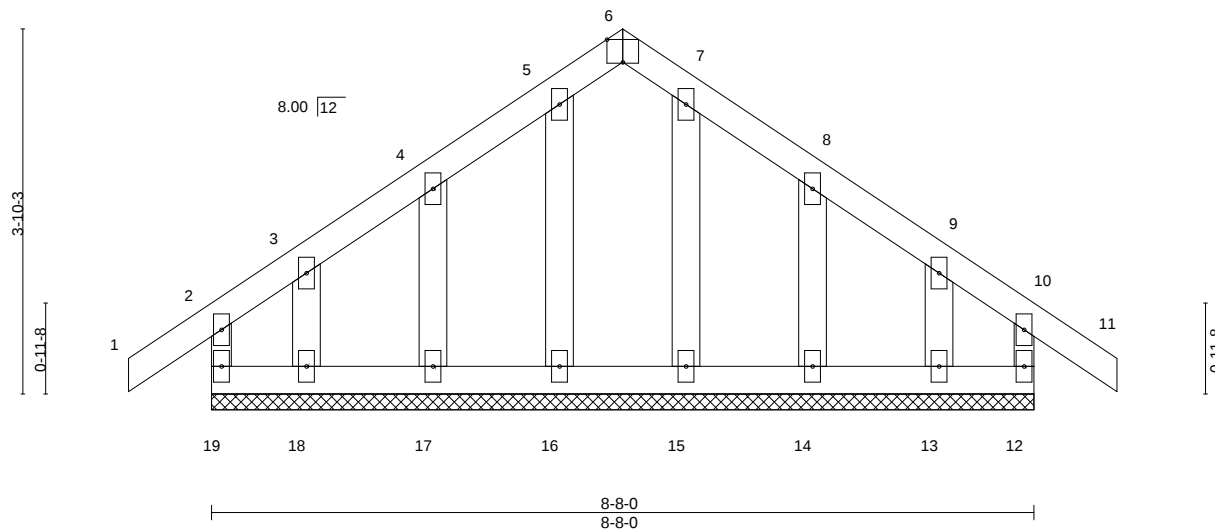


Plate Offsets (X,Y)-- [6:0-2-0,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	11	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 39 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 8-8-0.
(lb) - Max Horz 19=118(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 19, 12, 18, 17, 14, 13
Max Grav All reactions 250 lb or less at joint(s) 19, 12, 18, 17, 16, 15, 14, 13

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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12, 18, 17, 14, 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.



July 15,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

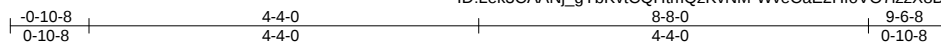
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027059
400420	L2	Common	4	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:22 2020 Page 1

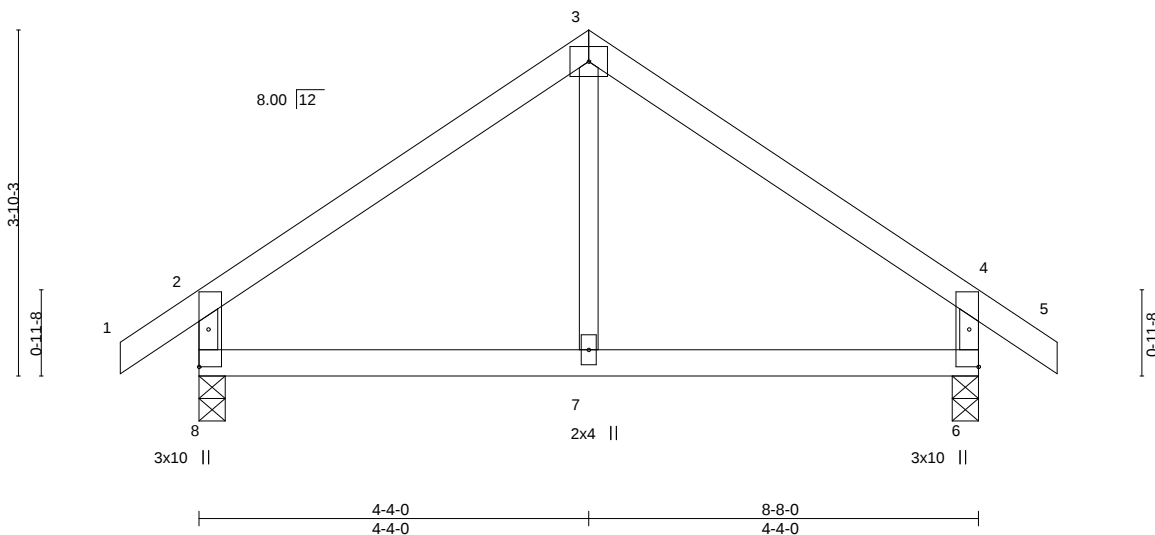
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Job Reference (optional)



4x5 =

Scale = 1:25.6



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 0.38	Vert(LL)	-0.01	7	>999	360	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.03	7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	7-8	>999	240	Weight: 28 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
Max Horz 8=118(LC 7)
Max Uplift 8=-64(LC 8), 6=-64(LC 9)
Max Grav 8=449(LC 1), 6=449(LC 1)

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

TOP CHORD 2-3=-371/72, 3-4=-371/72, 2-8=-392/96, 4-6=-392/96

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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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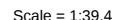
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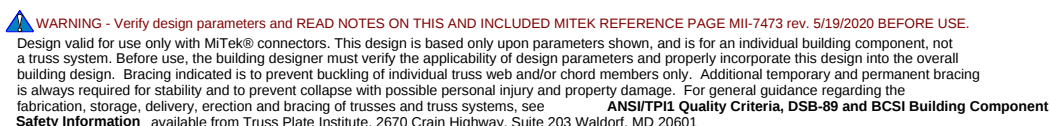
NOTES-

- 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 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=184, 6=207.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1283 lb down and 181 lb up at 1-2-12, 1283 lb down and 35 lb up at 3-2-12, and 1281 lb down and 35 lb up at 5-2-12, and 1281 lb down and 35 lb up at 7-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



July 15, 2020

LOAD CASE(S) Standard



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT
400420	L3	GABLE	1	2	I42027060
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:23 2020 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 4-6=-20
Concentrated Loads (lb)
Vert: 13=-1283(F) 14=-1283(F) 15=-1281(F) 16=-1281(F)

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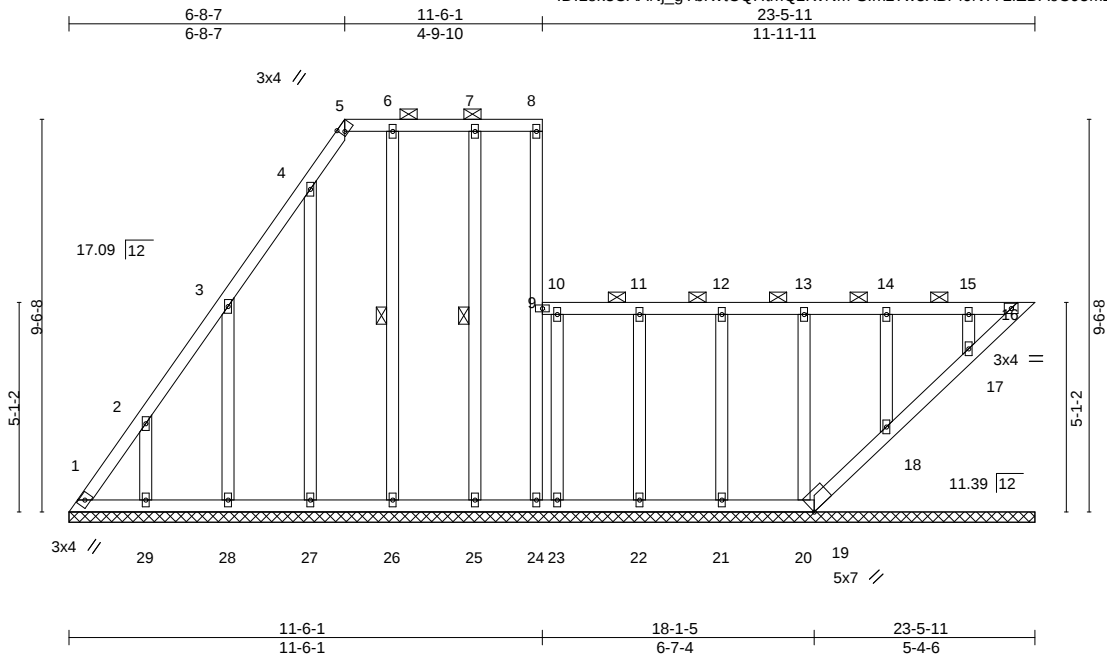


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027061
400420	LAY2	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:24 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Slmz?w3XBPI6N?7LfZDAcC95MzRyam5TE5seQjyy4I5



Scale = 1:56.0

Plate Offsets (X,Y)--		[5:0-1-2,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.10		Vert(LL)	n/a	n/a	999
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 0.23		Horz(CT)	-0.01	16	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S					
								PLATES	GRIP
								MT20	197/144
								Weight: 133 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8, 9-24, 9-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18,16-17.
WEBS 1 Row at midpt 6-26, 7-25

REACTIONS.

All bearings 23-5-11.
(lb) - Max Horz 1=559(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 24, 19, 26, 25, 23, 22, 21, 20, 18, 17 except 1=256(LC 6), 16=104(LC 8), 29=200(LC 8), 28=190(LC 8), 27=243(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 24, 16, 19, 29, 28, 26, 25, 23, 22, 21, 20, 18, 17 except 1=588(LC 8), 27=253(LC 15)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-729/366, 2-3=-539/283, 3-4=-342/198
WEBS 4-27=-213/266

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.
- 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) 24, 19, 26, 25, 23, 22, 21, 20, 18, 17 except (jt=lb) 1=256, 16=104, 29=200, 28=190, 27=243.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16, 18, 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 15,2020

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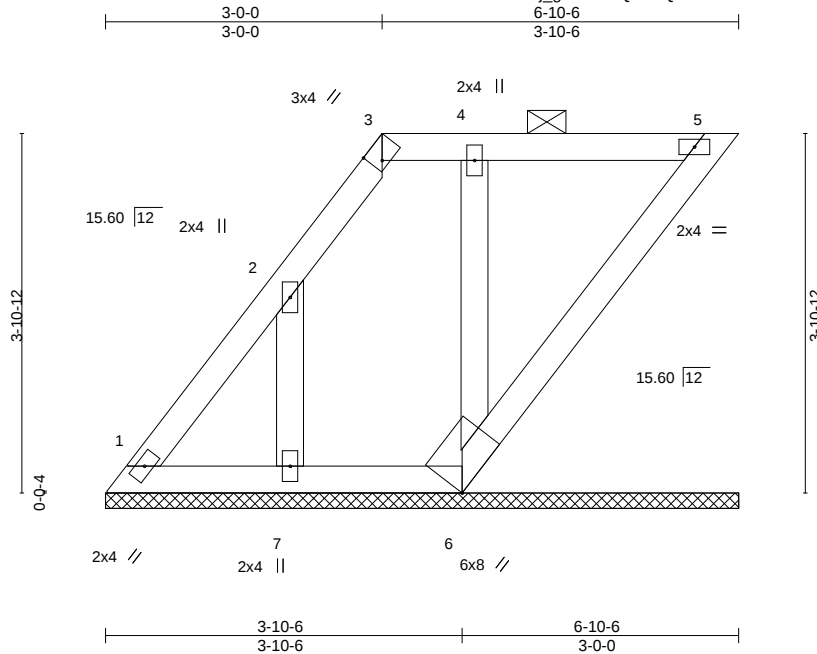
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027062
400420	LAY3	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-wUKLCG4Axjtz_9hYDGkP8PiGSNmSJGLdSlcBz9yy414



Scale = 1:25.0

Plate Offsets (X,Y)--		[3:0-1-4,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 0.08		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 0.04		Horz(CT)	-0.00 5	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P						Weight: 25 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 6-10-6.
(lb) - Max Horz 1=147(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=143(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=143.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 15, 2020

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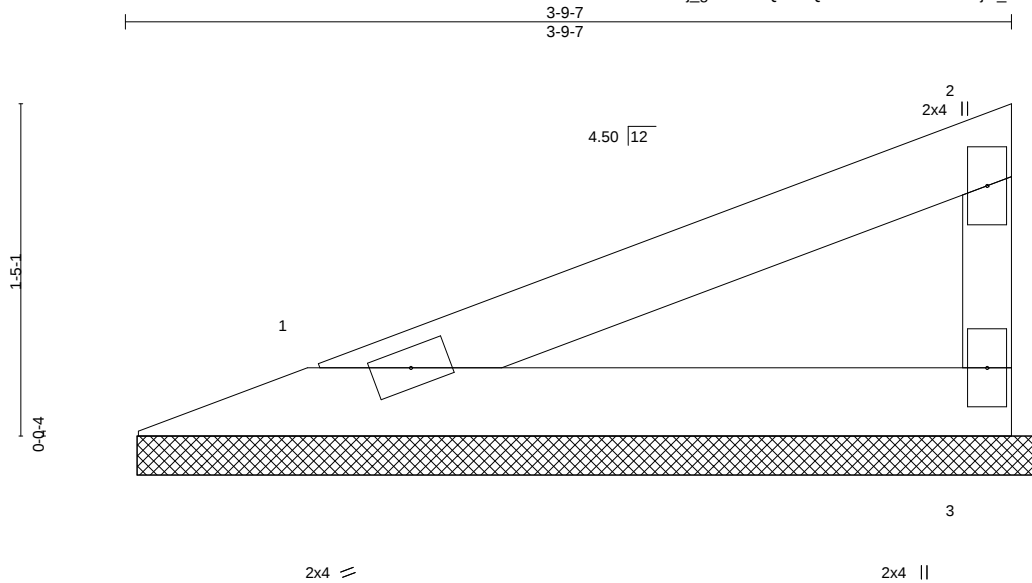
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400420	Truss V1	Truss Type VALLEY	Qty 1	Ply 1	Lot 37 HT Job Reference (optional)	I42027063
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Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-wUKLCG4Axjtz_9hYDGkP8PiFVNmrRJGxdSlcBz9yy4l4



Scale = 1:9.8

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

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-10-5, 3=3-10-5
Max Horz 1=48(LC 5)
Max Uplift 1=-20(LC 8), 3=-28(LC 8)
Max Grav 1=128(LC 1), 3=128(LC 1)

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

NOTES-

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



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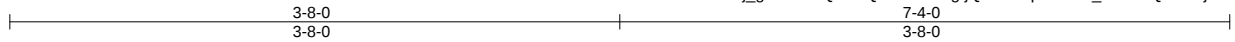


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Chesterfield, MO 63017

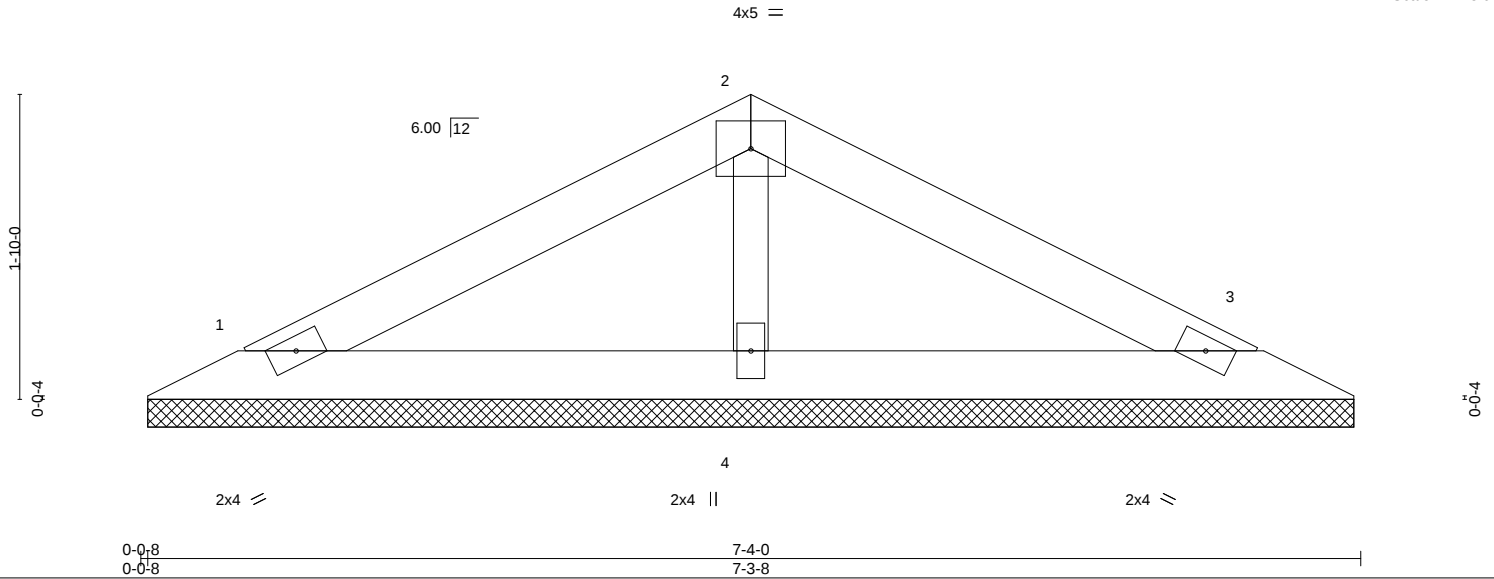
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027064
400420	V3	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvCQHtmQzKvNM-OgtjQc5oi1?pcJGkm_FehdFQvn6f2jfmhPLkVbyy4l3



Scale = 1:13.9



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 0.16	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 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-3-0, 3=7-3-0, 4=7-3-0
Max Horz 1=27(LC 12)
Max Uplift 1=-33(LC 8), 3=-37(LC 9), 4=-3(LC 8)
Max Grav 1=143(LC 1), 3=143(LC 1), 4=261(LC 1)

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

NOTES-

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



July 15, 2020

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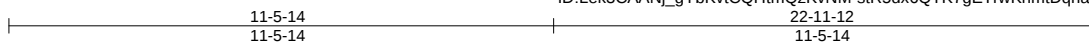
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027065
400420	V4	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-str5dx6QTK7gETrwKhmtDqnaDBRpn7Uww35I12yy4I2



Scale = 1:48.6

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							

Weight: 72 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 22-11-0.
(lb) - Max Horz 1=192(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=-155(LC 8), 13=-132(LC 8), 10=-154(LC 9),
8=-133(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=400(LC 18), 12=489(LC 15), 13=412(LC 15),
10=488(LC 16), 8=412(LC 16)

FORCES.

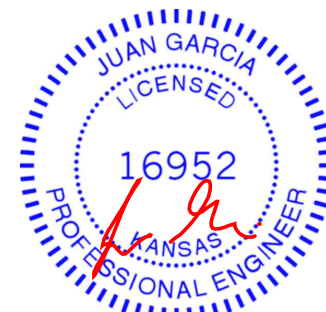
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS

3-12=-319/204, 2-13=-275/174, 5-10=-319/204, 6-8=-276/174

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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=155, 13=132, 10=154, 8=133.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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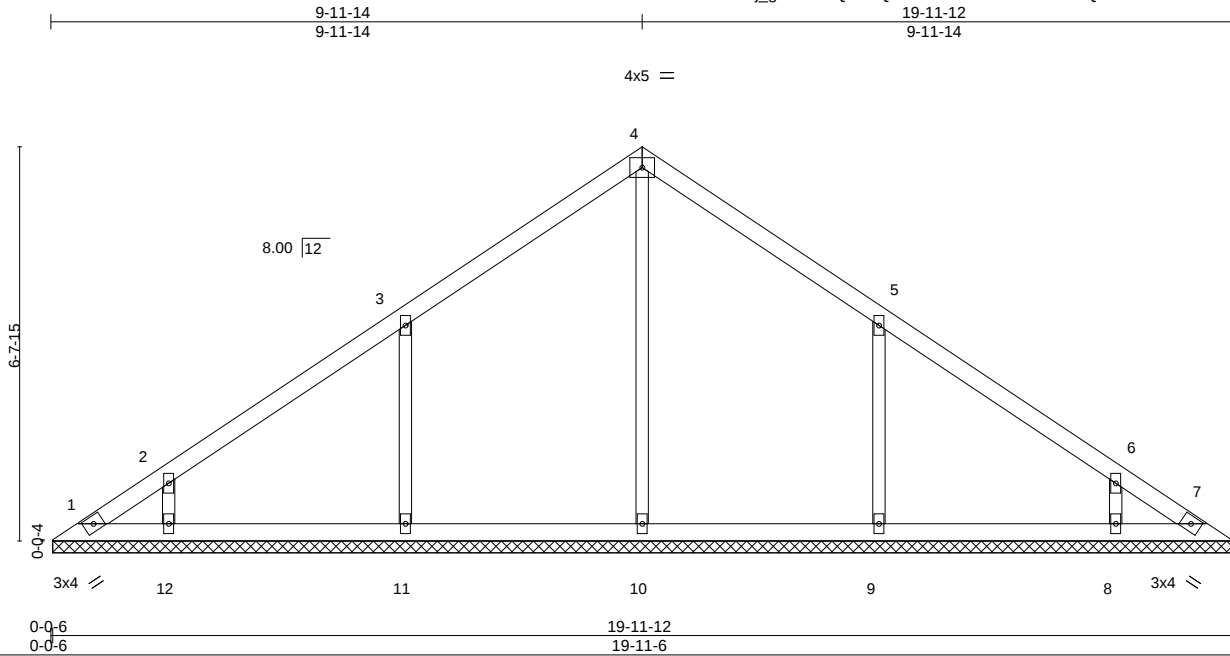
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027066
400420	V5	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-K3?UrH62EeFXrdQ7uOI6m2Klram5Wbm39jqrZUyy4l1

Job Reference (optional)
19-11-12
9-11-14



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 61 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 19-11-0.
(lb) - Max Horz 1=166(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=158(LC 8), 12=111(LC 8), 9=158(LC 9), 8=111(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=384(LC 18), 11=499(LC 15), 12=347(LC 15), 9=499(LC 16), 8=347(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-11=-325/208, 5-9=-325/208

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=158, 12=111, 9=158, 8=111.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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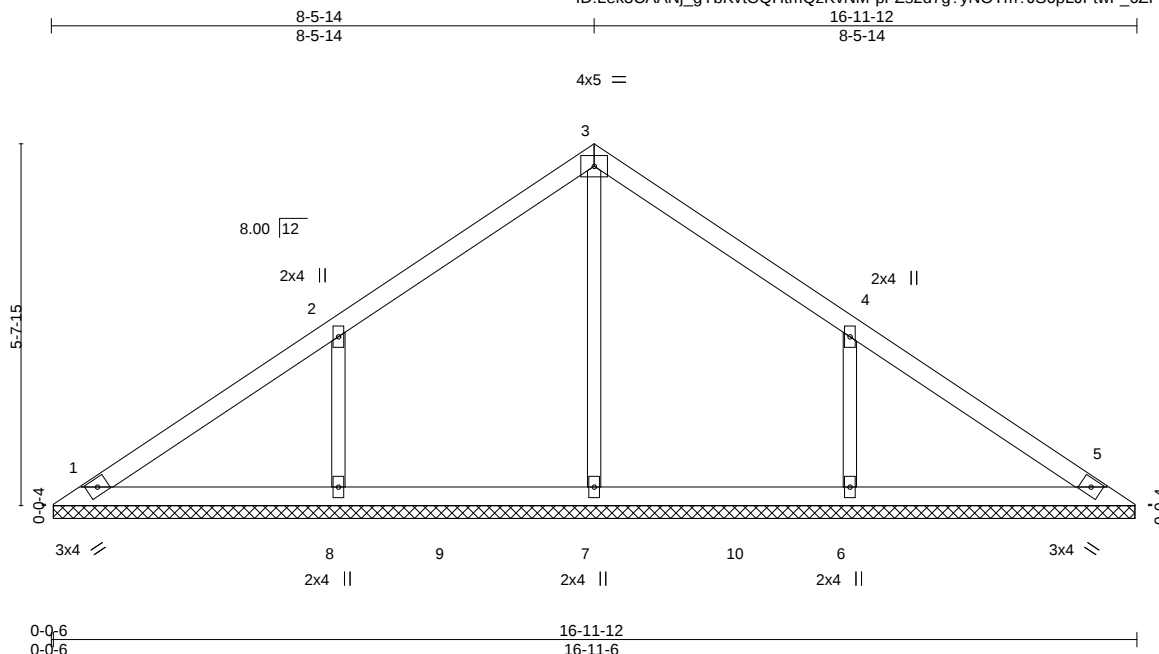
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027067
400420	V6	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-pFZs2d7g?yNOTm?JS6pLJFtwF_6ZF2wCNNaP6wyy4l0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 49 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 16-11-0.
(lb) - Max Horz 1=-139(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-172(LC 8), 6=-171(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=353(LC 15), 8=521(LC 15), 6=521(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-347/218, 4-6=-347/217

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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=172, 6=171.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 15, 2020

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

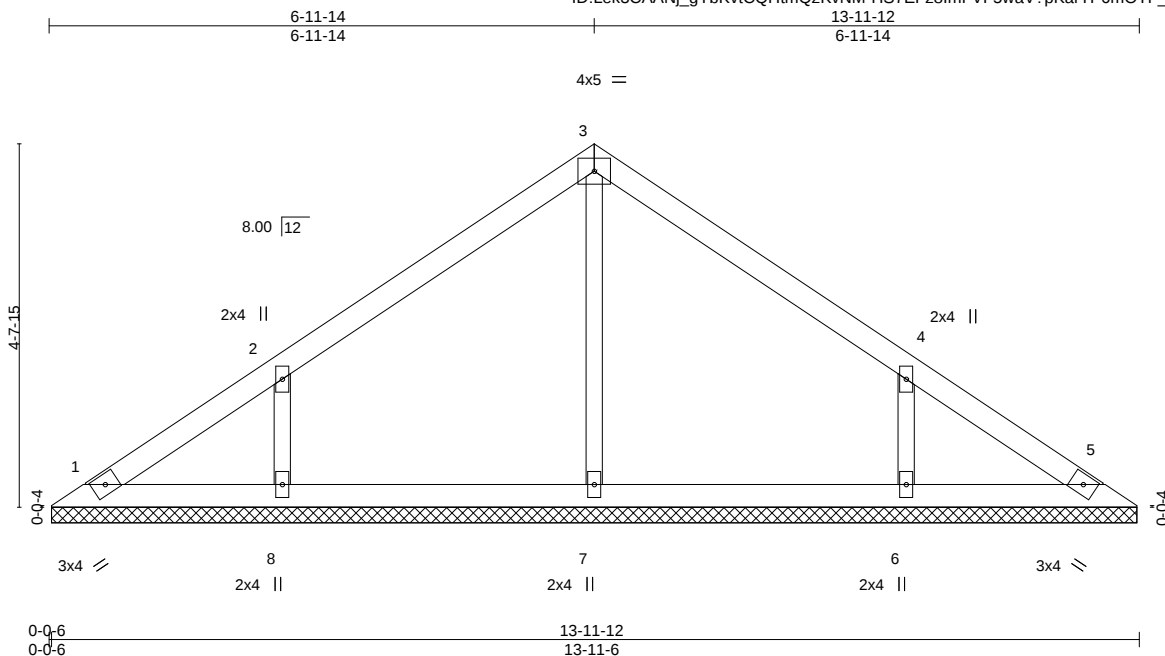
Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	I42027068
400420	V7	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:30 2020 Page 1

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Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 39 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-11-0.
(lb) - Max Horz 1=-113(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-144(LC 8), 6=-143(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 1), 8=363(LC 15), 6=363(LC 16)

FORCES.

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

WEBS

2-8=-290/185, 4-6=-290/185

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=144, 6=143.
- This truss 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 37 HT	I42027069
400420	V8	Valley	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

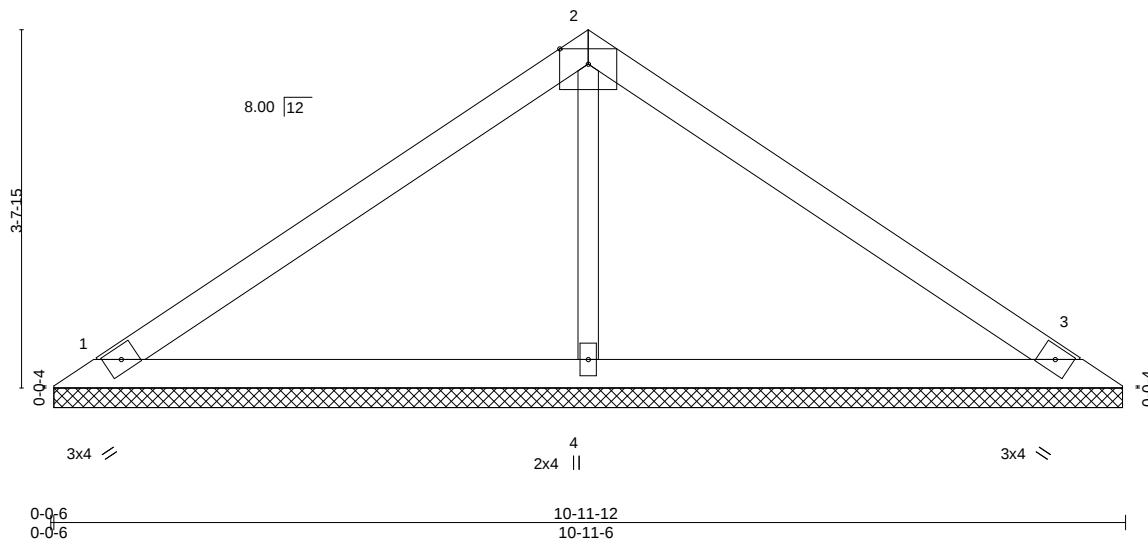
8.410 s May 22 2020 MiTek Industries, Inc. Tue Jul 14 17:16:30 2020 Page 1

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5-5-14 5-5-14 10-11-12 5-5-14

5x7 =

Scale = 1:23.5



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 0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 29 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=10-11-0, 3=10-11-0, 4=10-11-0
Max Horz 1=87(LC 5)
Max Uplift 1=44(LC 8), 3=55(LC 9), 4=17(LC 8)
Max Grav 1=232(LC 1), 3=232(LC 1), 4=438(LC 1)

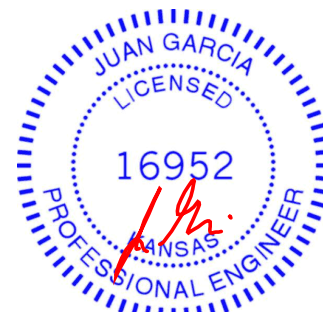
FORCES.

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

WEBS 2-4=-285/73

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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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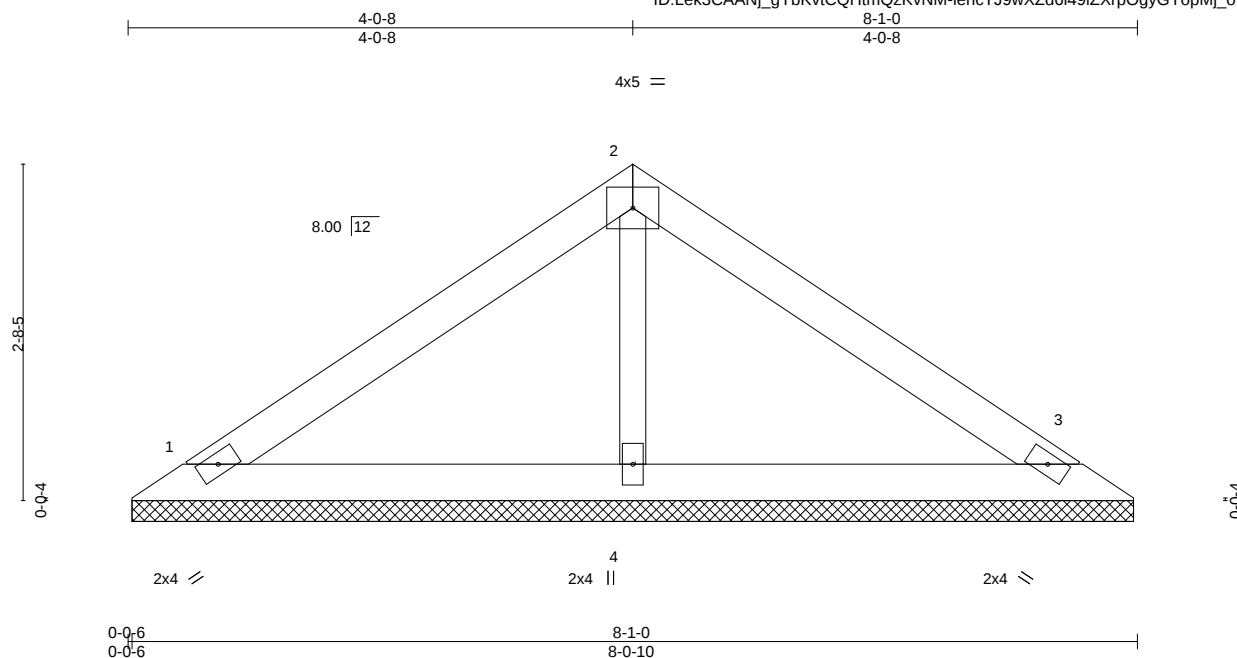


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 37 HT	
400420	V9	Valley	1	1		I42027070
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:18.4

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)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 21 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-0-4, 3=8-0-4, 4=8-0-4
Max Horz 1=-62(LC 4)
Max Uplift 1=-40(LC 8), 3=-48(LC 9)
Max Grav 1=180(LC 1), 3=180(LC 1), 4=280(LC 1)

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

NOTES-

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



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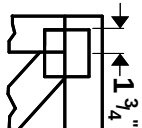
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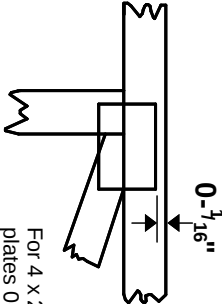
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Chesterfield, MO 63017

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 20120** software or upon request.

PLATE SIZE

4 X 4

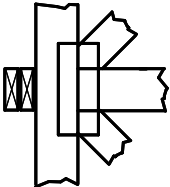
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



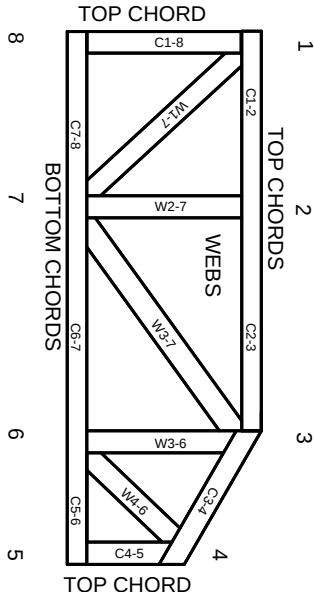
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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. 5/19/2020



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.