



RE: 400675
Lot 19 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

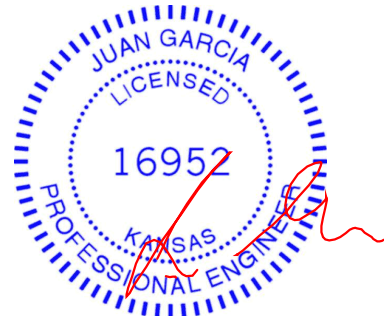
Floor Load: N/A psf

This package includes 65 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43059520	A1	10/2/2020	27	I43059546	E3	10/2/2020
2	I43059521	A2	10/2/2020	28	I43059547	E4	10/2/2020
3	I43059522	A3	10/2/2020	29	I43059548	E5	10/2/2020
4	I43059523	A4	10/2/2020	30	I43059549	G1	10/2/2020
5	I43059524	B1	10/2/2020	31	I43059550	G2	10/2/2020
6	I43059525	B2	10/2/2020	32	I43059551	G3	10/2/2020
7	I43059526	B3	10/2/2020	33	I43059552	G4	10/2/2020
8	I43059527	B4	10/2/2020	34	I43059553	G5	10/2/2020
9	I43059528	B5	10/2/2020	35	I43059554	G6	10/2/2020
10	I43059529	B6	10/2/2020	36	I43059555	G7	10/2/2020
11	I43059530	B7	10/2/2020	37	I43059556	G8	10/2/2020
12	I43059531	C4	10/2/2020	38	I43059557	G9	10/2/2020
13	I43059532	C5	10/2/2020	39	I43059558	G10	10/2/2020
14	I43059533	C6	10/2/2020	40	I43059559	H1	10/2/2020
15	I43059534	C7	10/2/2020	41	I43059560	H2	10/2/2020
16	I43059535	C8	10/2/2020	42	I43059561	J1	10/2/2020
17	I43059536	C9	10/2/2020	43	I43059562	J2	10/2/2020
18	I43059537	C10	10/2/2020	44	I43059563	J3	10/2/2020
19	I43059538	D1	10/2/2020	45	I43059564	J4	10/2/2020
20	I43059539	D2	10/2/2020	46	I43059565	LAY1	10/2/2020
21	I43059540	D3	10/2/2020	47	I43059566	LAY2	10/2/2020
22	I43059541	D4	10/2/2020	48	I43059567	LAY3	10/2/2020
23	I43059542	D5	10/2/2020	49	I43059568	LAY4	10/2/2020
24	I43059543	D6	10/2/2020	50	I43059569	P1	10/2/2020
25	I43059544	E1	10/2/2020	51	I43059570	P2	10/2/2020
26	I43059545	E2	10/2/2020	52	I43059571	R1	10/2/2020

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.



October 02, 2020



RE: 400675 - Lot 19 HT

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

Site Information:

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

Subdivision:

State:

No.	Seal#	Truss Name	Date
53	I43059572	V1	10/2/2020
54	I43059573	V2	10/2/2020
55	I43059574	V3	10/2/2020
56	I43059575	V4	10/2/2020
57	I43059576	V5	10/2/2020
58	I43059577	V6	10/2/2020
59	I43059578	V7	10/2/2020
60	I43059579	V8	10/2/2020
61	I43059580	V9	10/2/2020
62	I43059581	V10	10/2/2020
63	I43059582	V11	10/2/2020
64	I43059583	V12	10/2/2020
65	I43059584	V13	10/2/2020



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Wind Code: N/A

Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.4

Wind Speed: 115 mph

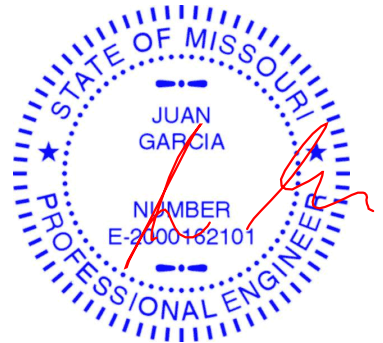
Floor Load: N/A psf

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

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63	I43059582	V11	10/2/2020
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65	I43059584	V13	10/2/2020

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059520
400675	A1	Hip Girder	1	2	Job Reference (optional)	

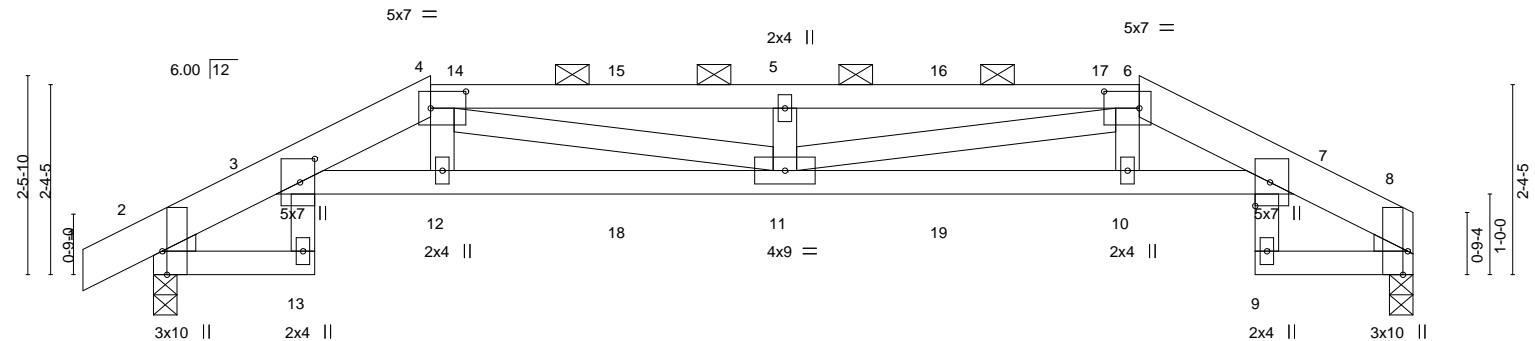
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:25 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-lXmf5?mjpocXUEKBOJwjK2ucDsskOKnEPovJyuyXTfa

-0-10-8	2-0-0	3-5-4	7-10-0	12-2-12	13-8-0	15-7-8
0-10-8	2-0-0	1-5-4	4-4-12	4-4-12	1-5-4	1-11-8

Scale = 1:28.6



	2-0-0	3-5-4	7-10-0	12-2-12	13-8-0	15-7-8
	2-0-0	1-5-4	4-4-12	4-4-12	1-5-4	1-11-8

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-3-8,0-2-3], [4:0-5-4,0-2-8], [6:0-5-4,0-2-8], [7:0-3-8,0-2-3], [8:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.11	11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.21	11	>887	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.16	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	11	>999	240	Weight: 119 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
Max Horz 2=40(LC 12)
Max Uplift 2=-228(LC 8), 8=-204(LC 9)
Max Grav 2=1031(LC 1), 8=957(LC 22)

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

TOP CHORD 2-3=-608/163, 3-4=-2669/663, 4-5=-3546/917, 5-6=-3546/917, 6-7=-2668/653,
7-8=-619/155
BOT CHORD 3-12=-626/2567, 11-12=-625/2601, 10-11=-603/2600, 7-10=-605/2565
WEBS 4-12=0/284, 4-11=-296/977, 5-11=-335/164, 6-11=-297/986, 6-10=0/283

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=228, 8=204.
- This truss 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.



October 2,2020

Continued on page 2

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

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 19 HT
400675	A1	Hip Girder	1	2	I43059520
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:25 2020 Page 2
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-lXmf5?mjpoCXUEKBOJwjK2ucDsskOKnEPovJyuyXTfa

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 154 lb down and 106 lb up at 3-5-4, 69 lb down and 49 lb up at 3-10-0, 74 lb down and 49 lb up at 5-10-0, 74 lb down and 49 lb up at 7-10-0, 74 lb down and 49 lb up at 9-10-0, and 69 lb down and 49 lb up at 11-10-0, and 154 lb down and 106 lb up at 12-2-12 on top chord, and 90 lb down and 21 lb up at 3-5-4, 37 lb down and 26 lb up at 3-10-0, 37 lb down and 26 lb up at 5-10-0, 37 lb down and 26 lb up at 7-10-0, 37 lb down and 26 lb up at 9-10-0, and 37 lb down and 26 lb up at 11-10-0, and 90 lb down and 21 lb up at 12-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-6=-70, 6-8=-70, 2-13=-20, 3-7=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 4=-36(F) 6=-36(F) 12=-127(F) 11=-37(F) 5=-16(F) 10=-127(F) 14=-16(F) 15=-16(F) 16=-16(F) 17=-16(F) 18=-37(F) 19=-37(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059521
400675	A2	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:26 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-DkK2ILmLa6KO6OvNy0SysGQH1GAW7nhNeSetUKyXTfZ

Job Reference (optional)

1-11-8	5-4-12	10-2-4	13-7-8	15-7-0
1-11-8	3-5-4	4-9-8	3-5-4	1-11-8

Scale = 1:27.1

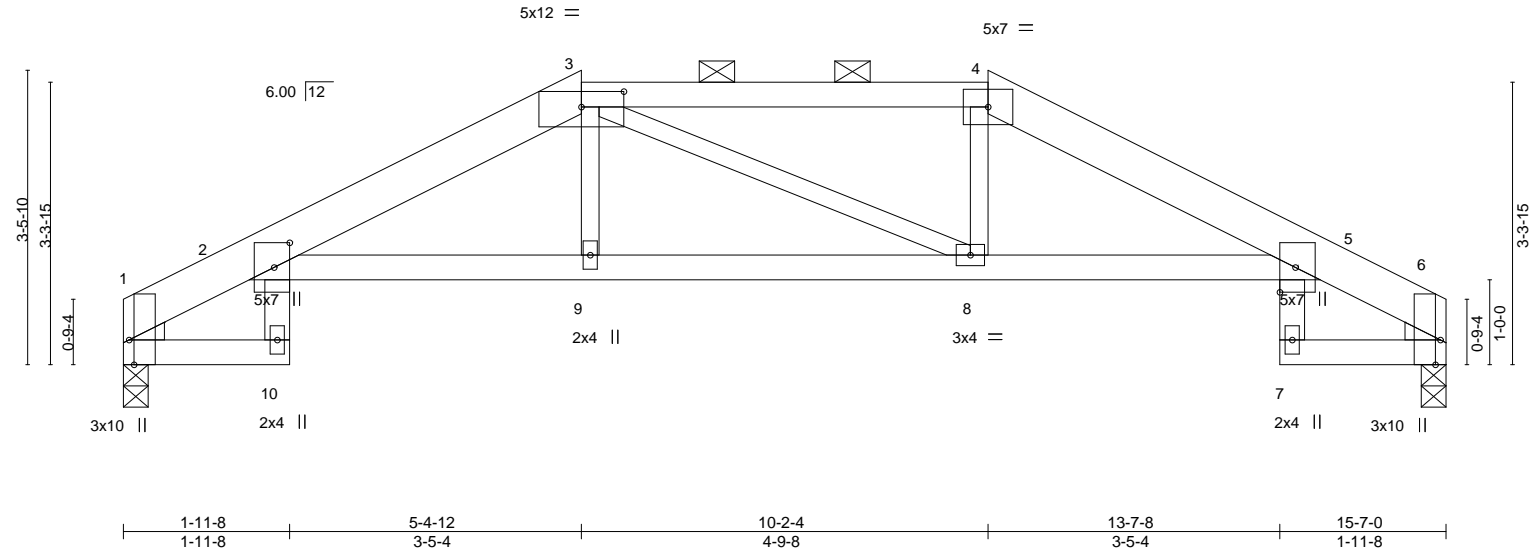


Plate Offsets (X,Y)--		[1:0-3-8,Edge], [2:0-3-8,0-2-3], [3:0-6-0,0-2-3], [5:0-3-8,0-2-3], [6:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65
TCDL 10.0	Lumber DOL	1.15	BC 0.57
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.10 2-9 >999 360
			Vert(CT) -0.19 2-9 >971 240
			Horz(CT) 0.25 6 n/a n/a
			Wind(LL) 0.07 10 >999 240
			PLATES
			MT20
			GRIP
			197/144
			Weight: 56 lb FT = 10%

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2 , Right: 2x3 SPF No.2

REACTIONS.

(size) 1=0-3-8, 6=0-3-8
Max Horz 1=-54(LC 9)
Max Uplift 1=-60(LC 8), 6=-60(LC 9)
Max Grav 1=697(LC 1), 6=697(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-441/66, 2-3=-1352/102, 3-4=-1239/90, 4-5=-1352/84, 5-6=-441/59
BOT CHORD 2-9=-78/1233, 8-9=-75/1239, 5-8=-37/1234

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



October 2,2020

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Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059523
400675	A4	Roof Special	1	1		

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8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:27 2020 Page 1

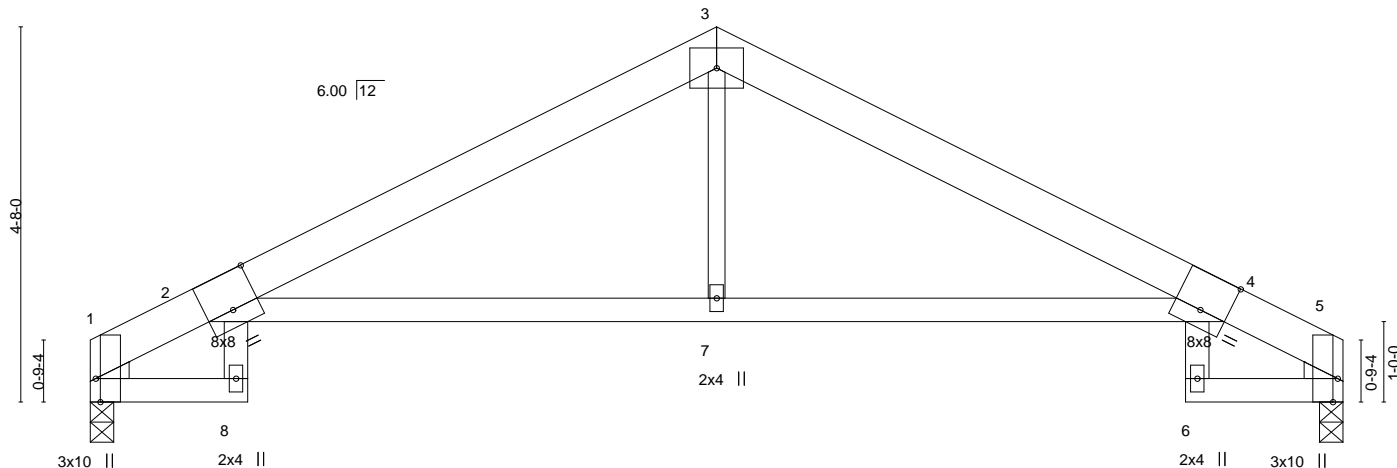
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Job Reference (optional)

1-11-8	7-9-8	13-7-8	15-7-0
1-11-8	5-10-0	5-10-0	1-11-8

6x8 =

Scale = 1:28.7



1-11-8	7-9-8	13-7-8	15-7-0
1-11-8	5-10-0	5-10-0	1-11-8

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [2:0-4-0,0-5-7], [4:0-4-0,0-5-7], [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 0.73	Vert(LL)	-0.15	4-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.29	4-7	>630	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.34	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13	2-7	>999	240	Weight: 56 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2

WEDGE

Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=75(LC 8)
Max Uplift 1=-79(LC 8), 5=-79(LC 9)
Max Grav 1=697(LC 1), 5=697(LC 1)

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

TOP CHORD 1-2=-441/97, 2-3=-1093/103, 3-4=-1093/131, 4-5=-441/72
BOT CHORD 2-7=-46/972, 4-7=-46/972
WEBS 3-7=0/319

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) 1, 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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059524
400675	B1	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-dJ?AxNpDt1jzzseyd8?fUu2NLTJZK6EqKQtX5fyXTfW

Job Reference (optional)

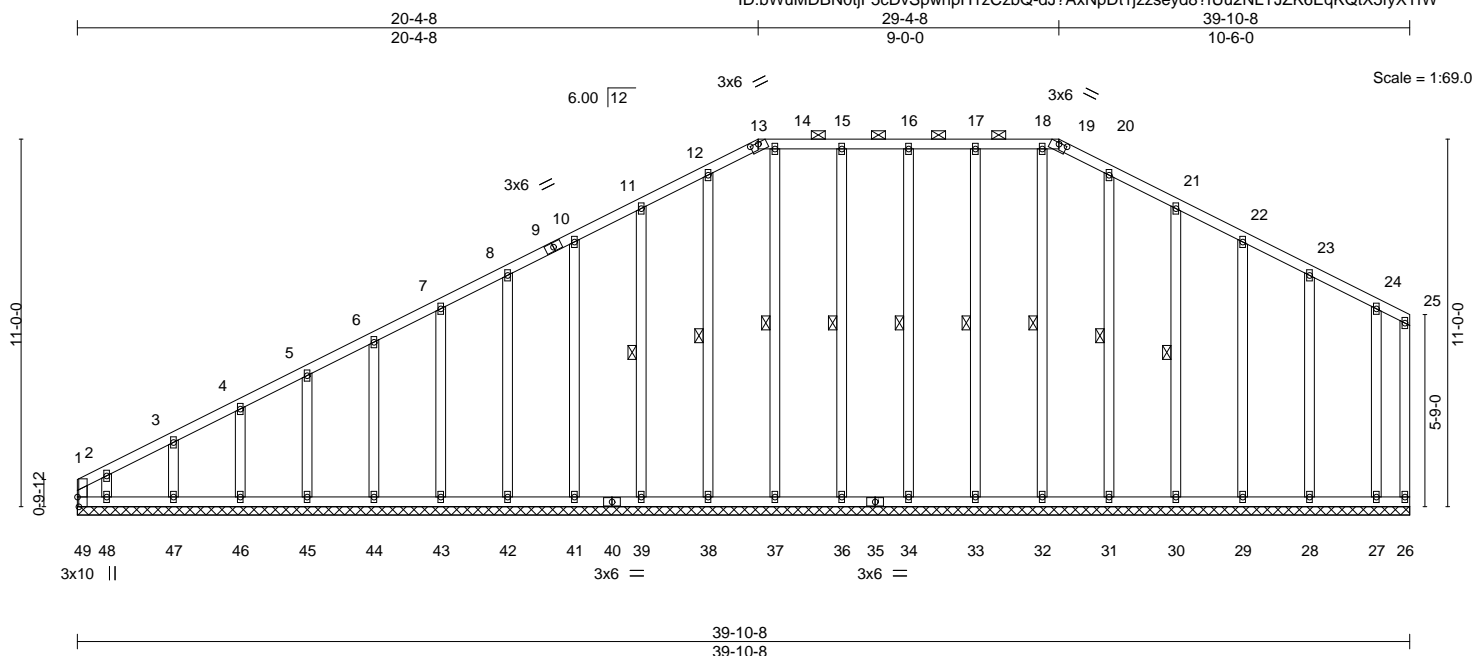


Plate Offsets (X,Y)--		[13:0-3-0,0-0-7], [19:0-3-0,0-0-7], [49:0-3-8,Edge]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.13	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(LL) n/a - n/a 999
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Vert(CT) n/a - n/a 999
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) -0.01 26 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 265 lb FT = 10%

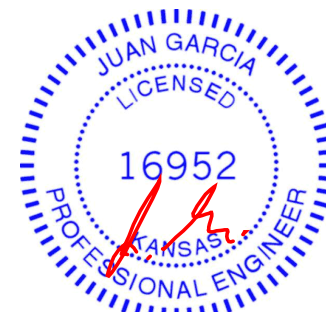
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-19.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 11-39, 12-38, 14-37, 15-36, 16-34, 17-33, 18-32, 20-31, 21-30
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 39-10-8.
 (lb) - Max Horz 49=294(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 26, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 except 49=133(LC 6), 48=263(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 26, 48, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 except 49=332(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-309/126

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed on 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, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 except (jt=lb) 49=133, 48=263.
- This truss 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.



October 2,2020

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Scale = 1:81.1

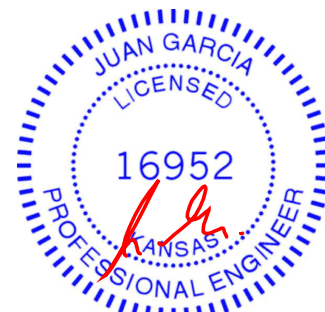
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-4456/718, 3-4=-4770/771, 4-5=-4869/617, 5-7=-3255/404, 7-8=-3243/569,
8-9=-2039/333, 9-10=-2033/333, 10-11=-1490/232, 11-12=-1730/242, 12-13=-1379/168,
2-25=-2073/363, 13-14=-1907/163

BOT CHORD 24-25=-326/470, 23-24=-1369/8799, 22-23=-1395/8877, 20-22=-661/4349,
19-20=-208/2049, 16-17=-106/1193

WEBS 3-24=-323/2149, 4-24=-4256/467, 4-23=-360/110, 4-22=-4557/739, 5-22=-15/887,
5-20=-1650/374, 7-20=-529/297, 8-20=-388/1543, 17-19=-196/1591, 10-19=-121/686,
10-17=-955/175, 11-17=-58/519, 12-17=-81/609, 12-16=-1003/134, 2-24=-562/3512,
13-16=-92/1668

Contiguity of bearing surface.



October 2, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT
400675	B2	PIGGYBACK BASE GIRDE	1	2	I43059525
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ah7xL2qTPezhC9oLiZ17ZJ8eGHpyovj6nkMe9XyXTfU

- NOTES-**
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 25=270, 14=139.
 - 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19 lb down and 32 lb up at 1-5-4 on top chord, and 3 lb down and 0 lb up at 1-8-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-8=-70, 8-11=-70, 11-13=-70, 24-25=-20, 19-24=-20, 14-18=-20
 - Concentrated Loads (lb)
 - Vert: 24=0(F)

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059526
400675	B3	PIGGYBACK BASE	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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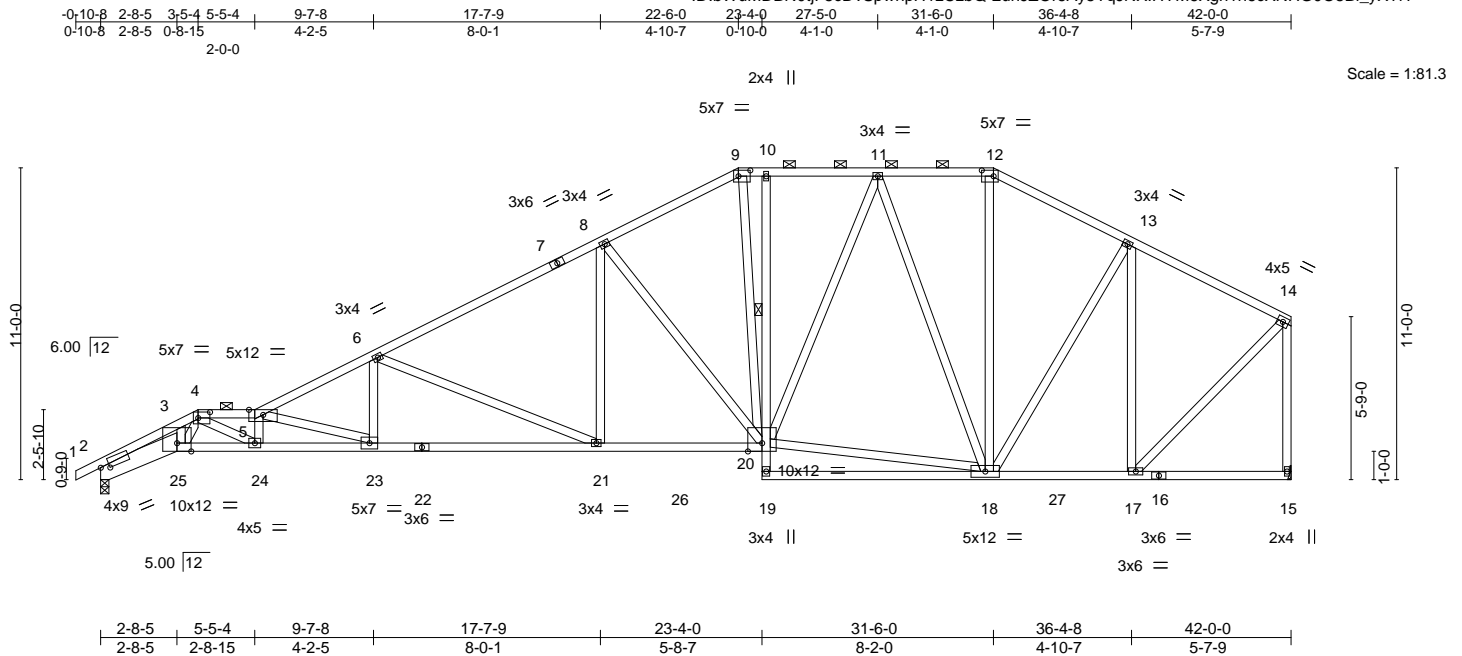


Plate Offsets (X,Y)--		[2:0-3-12,0-1-7], [4:0-5-0,0-2-8], [9:0-5-0,0-2-8], [12:0-5-0,0-2-8]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
CSL	DEFL.	in (loc) l/defl L/d
TC 0.61	Vert(LL)	-0.29 21-23 >999 360
BC 0.98	Vert(CT)	-0.53 21-23 >947 240
WB 0.52	Horz(CT)	0.22 15 n/a n/a
Matrix-S	Wind(LL)	0.20 23-24 >999 240
PLATES	GRIP	
MT20	197/144	
Weight: 500 lb		FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-25: 2x8 SP DSS
 WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-13 max.): 4-5, 9-12.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 2-2-0 oc bracing: 23-24.
 1 Row at midpt 10-20

REACTIONS.

(size) 2=0-3-8, 15=Mechanical
 Max Horz 2=297(LC 7)
 Max Uplift 2=270(LC 8), 15=138(LC 9)
 Max Grav 2=2018(LC 2), 15=1981(LC 2)

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

TOP CHORD 2-3=-7433/1150, 3-4=-6232/1031, 4-5=-7712/1058, 5-6=-5074/654, 6-8=-3264/406, 8-9=-2332/338, 9-10=-2094/335, 10-11=-2089/335, 11-12=-1476/231, 12-13=-1713/241, 13-14=-1377/167, 14-15=-1892/164
 BOT CHORD 2-25=-1193/6558, 24-25=-926/5244, 23-24=-1152/7534, 21-23=-669/4538, 20-21=-295/2828, 17-18=-105/1176
 WEBS 4-25=-262/996, 4-24=-285/2814, 5-24=-1435/192, 5-23=-3110/502, 6-23=-55/1103, 6-21=-1847/403, 8-21=-60/1006, 8-20=-1302/316, 9-20=-81/821, 18-20=-211/1690, 11-20=-122/761, 11-18=-1048/187, 12-18=-58/514, 13-18=-80/611, 13-17=-1004/129, 14-17=-89/1645, 3-25=-195/1745

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb)

Continued on page 2



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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059526
400675	B3	PIGGYBACK BASE	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-2uhJZOr6Ay5YqJNXIH YM6Xgn1h6cXNHG0O5Bi_yXTfT

- NOTES-**
- 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.
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059527
400675	B4	Piggyback Base	1	1		

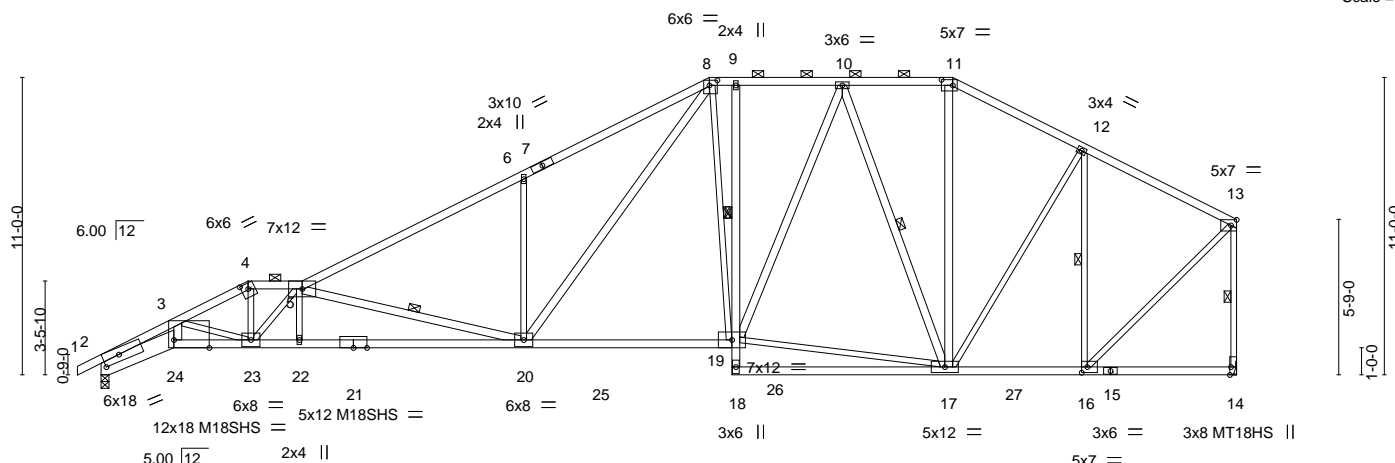
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:34 2020 Page 1

ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-Gp3_4tMhZLG3dWwQibqBym3CUo??CZZTialmsyXTfR

-0-10-8-2-8-5 | 5-5-4 | 7-5-4 | 15-7-9 | 22-6-0 | 23-4-0 | 27-5-0 | 31-6-0 | 36-4-8 | 42-0-0
0-10-8-2-8-5 | 2-8-15 | 2-0-0 | 8-2-5 | 6-10-7 | 0-10-0 | 4-1-0 | 4-1-0 | 4-10-7 | 5-7-9

Scale = 1:85.2



2-8-5 | 5-5-4 | 7-5-4 | 15-7-9 | 22-6-0 | 23-4-0 | 31-6-0 | 36-4-8 | 42-0-0
2-8-5 | 2-8-15 | 2-0-0 | 8-2-5 | 6-10-7 | 0-10-0 | 8-2-0 | 4-10-7 | 5-7-9

Plate Offsets (X,Y)-- [2:0-7-4,0-3-0], [4:0-3-0,0-2-7], [8:0-3-8,0-2-4], [11:0-5-0,0-2-8], [14:0-3-8,Edge], [16:0-2-8,0-2-8], [24:1-3-11,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 0.89	Vert(LL)	-0.47 20-22	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.98	Vert(CT)	-0.85 20-22	>593	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.85	Horz(CT)	0.34 14	n/a	n/a	MT18HS	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.22 20-22	>999	240	Weight: 230 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4,7-8: 2x4 SPF 2100F 1.8E, 5-7: 2x4 SPF 2400F 2.0E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-24: 2x8 SP DSS, 9-18,14-15: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-24,5-20,8-20,10-19,10-17,11-17: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-6-10 max.): 4-5, 8-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 23-24.
WEBS 1 Row at midpt 9-19
1 Row at midpt 5-20, 8-19, 10-17, 12-16, 13-14

REACTIONS.

(size) 2=0-3-8, 14=Mechanical
Max Horz 2=240(LC 7)
Max Uplift 2=41(LC 8)
Max Grav 2=2031(LC 2), 14=1996(LC 2)

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

TOP CHORD 2-3=-7310/242, 3-4=-4744/120, 4-5=-4351/122, 5-6=-3672/69, 6-8=-3693/198,
8-9=-2136/95, 9-10=-2128/96, 10-11=-1495/71, 11-12=-1735/70, 12-13=-1384/41,
13-14=-1913/0
BOT CHORD 2-24=-316/6442, 23-24=-278/5603, 22-23=-152/5533, 20-22=-157/5528, 19-20=-35/2147,
16-17=0/1197
WEBS 3-24=-74/2348, 3-23=-1438/127, 4-23=-41/1887, 5-23=-1795/0, 5-20=-2402/137,
6-20=-627/206, 8-20=-165/1846, 17-19=-37/1739, 10-19=-23/798, 10-17=-1057/80,
11-17=-2/521, 12-17=-24/609, 12-16=-1000/35, 13-16=0/1673

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- This truss 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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	
400675	B5	PIGGYBACK BASE	1	1		I43059528

Wheeler Lumber, Waverly, KS 66871

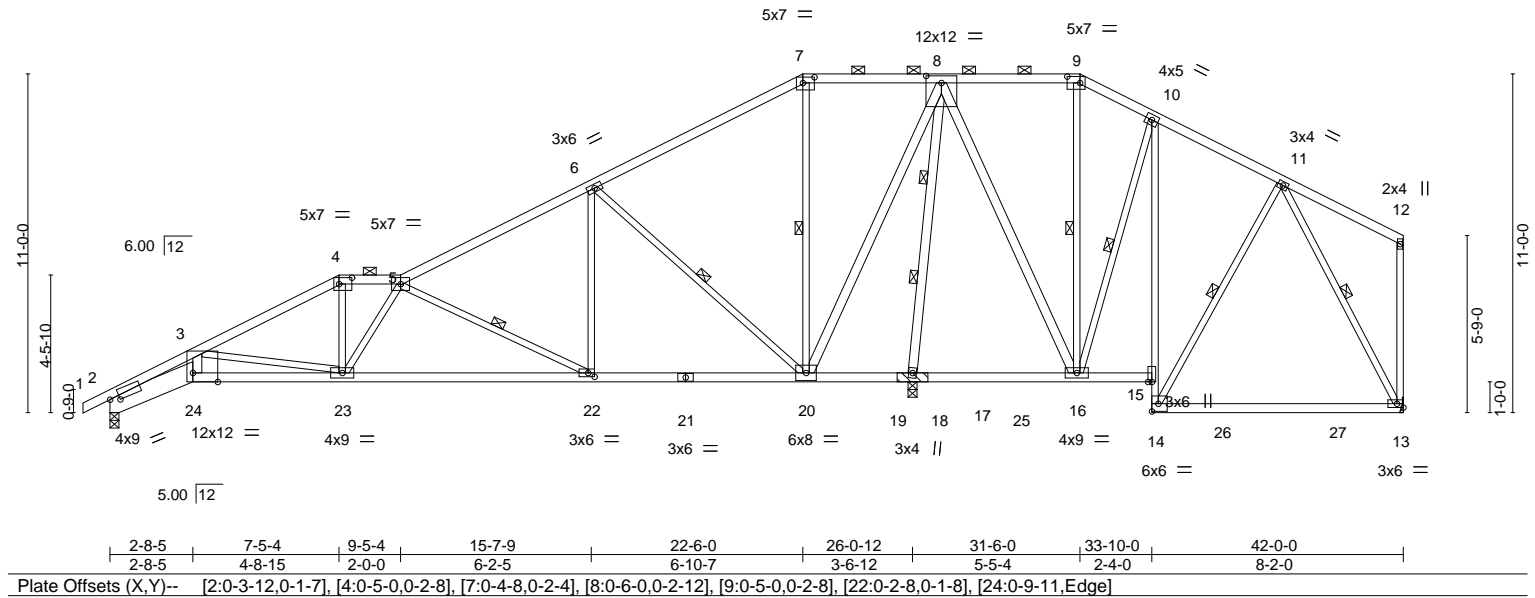
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:35 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-STNRBQt_SiT6hn56_P63k9llvuAhkeSiiMKrJjyXTfQ

Job Reference (optional)

0-10-8	2-8-5	7-5-4	9-5-4	15-7-9	22-6-0	27-0-0	31-6-0	33-10-0	37-11-15	42-0-0
0-10-8	2-8-5	4-8-15	2-0-0	6-2-5	6-10-7	4-6-0	4-6-0	2-4-0	4-1-15	4-0-1

Scale = 1:74.8



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ID:bWuMDBN0tiF5cDvSpwhpH1zCzbQ-wfwPmucDAbzJxglX6dIGNrQZIZOT5zrx03PrlyXTfP



BRACING- TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-8 max.): 4-5, 7-9.	
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	
WEBS	1 Row at midpt	3-23, 6-20, 7-20, 9-16, 10-16, 11-14, 11-13
	2 Rows at 1/3 pts	8-18

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

TOP CHORD 2-3=-3703/292, 3-4=-1469/84, 4-5=-1249/104, 5-6=-758/82, 6-7=-77/402, 7-8=-25/284,
8-9=-46/271, 9-10=-66/314

BOT CHORD 2-24=-371/3348, 23-24=-339/2881, 22-23=-77/1185, 20-22=-22/663, 18-20=-857/101,
16-18=-622/97, 14-15=-19/327, 10-15=-19/385

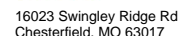
WEBS 3-24=-58/1336, 3-23=-1673/256, 4-23=0/304, 5-22=-736/77, 6-22=0/788,
6-20=-1144/129, 7-20=-498/84, 8-20=-66/1487, 8-18=-2545/74, 8-16=-19/984,
9-16=-314/52, 10-16=-532/75, 11-13=-308/184

- 1) 2x4 SPF No.2 bearing block 12" long at jt. 18 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6'-0" tall by 2-0'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 13.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2, 2020

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Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	143059530
400675	B7	PIGGYBACK BASE	1	1		

Wheeler Lumber, Waverly, KS 66871

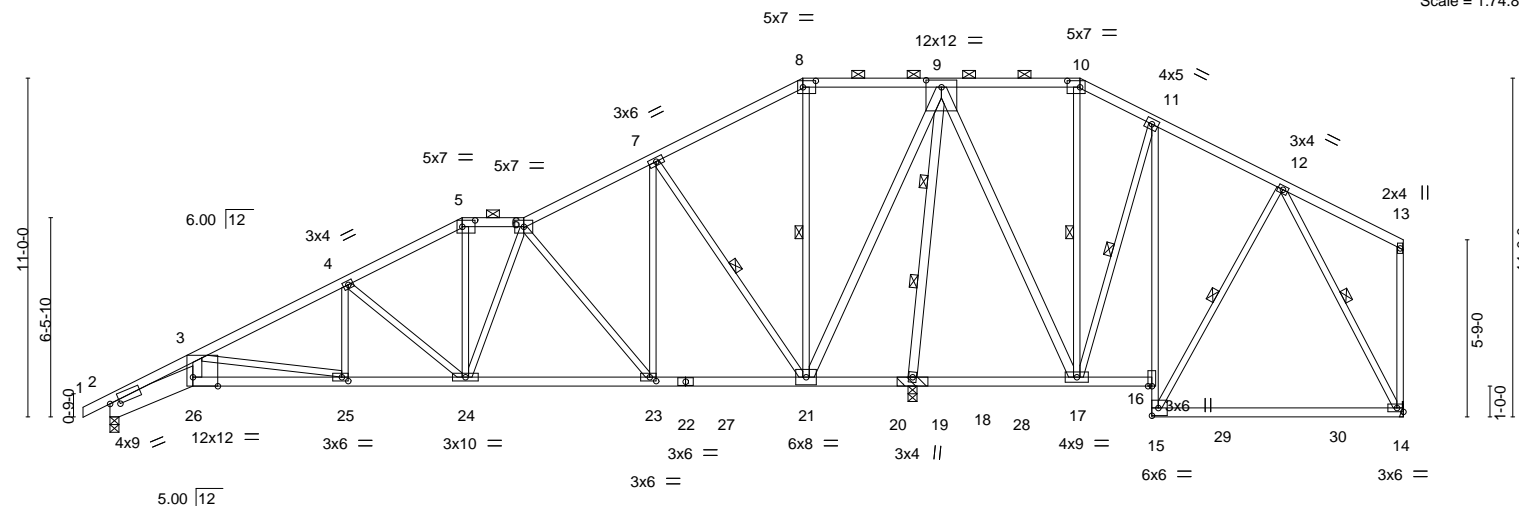
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:38 2020 Page 1

ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-s22apSwslohrYEhfxmLowp15CNx1w8OKYVvdyXTfN

Job Reference (optional)

0-10-8	2-8-5	7-7-9	11-5-4	13-5-4	17-7-9	22-6-0	27-0-0	31-6-0	33-10-0	37-11-15	42-0-0
0-10-8	2-8-5	4-11-4	3-9-11	2-0-0	4-2-5	4-10-7	4-6-0	4-6-0	2-4-0	4-1-15	4-0-1

Scale = 1:74.8



	2-8-5	7-0-12	11-5-4	17-11-10	22-6-0	26-0-12	31-6-0	33-10-0	42-0-0
	2-8-5	4-4-8	4-4-8	6-6-6	4-6-6	3-6-12	5-5-4	2-4-0	8-2-0

Plate Offsets (X,Y)-- [2:0-3-12,0-1-7], [5:0-5-0,0-2-8], [8:0-5-0,0-2-8], [9:0-6-0,0-2-12], [10:0-5-0,0-2-8], [23:0-2-8,0-1-8], [25:0-2-8,0-1-8], [26:0-9-11,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 0.58	Vert(LL)	-0.24 14-15	>808	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.89	Vert(CT)	-0.38 14-15	>495	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.13 19	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10 25-26	>999	240	Weight: 227 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6, 8-10.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
2-26: 2x8 SP DSS, 11-15: 2x3 SPF No.2, 14-15: 2x4 SPF 2100F 1.8E	WEBS 1 Row at midpt 7-21, 8-21, 10-17, 11-17, 12-15, 12-14
WEBS 2x3 SPF No.2 *Except*	2 Rows at 1/3 pts 9-19
3-26,9-21,9-19,9-17: 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 19=(0-3-8 + bearing block) (req. 0-4-4), 14=Mechanical
Max Horz 2=240(LC 7)
Max Uplift 2=43(LC 8), 19=26(LC 5), 14=66(LC 4)
Max Grav 2=1022(LC 21), 19=2719(LC 2), 14=490(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3541/265, 3-4=-1686/106, 4-5=-1144/99, 5-6=-973/102, 6-7=-497/90, 7-8=-63/367, 8-9=-25/281, 9-10=-49/260, 10-11=-70/298
BOT CHORD 2-26=-339/3168, 25-26=-302/2724, 24-25=-125/1480, 23-24=-54/884, 21-23=-11/404, 19-21=-835/98, 17-19=-602/94, 15-16=-18/319, 11-16=-17/376
WEBS 3-26=-70/1264, 3-25=-1271/179, 4-25=0/371, 4-24=-689/94, 5-24=-1/349, 6-24=-29/308, 6-23=-761/95, 7-23=-2/841, 7-21=-1041/115, 8-21=-413/67, 9-21=-66/1427, 9-19=-2489/81, 9-17=-18/962, 10-17=-303/51, 11-17=-525/74, 12-14=-314/172

- NOTES-**
- 2x4 SPF No.2 bearing block 12" long at jt. 19 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

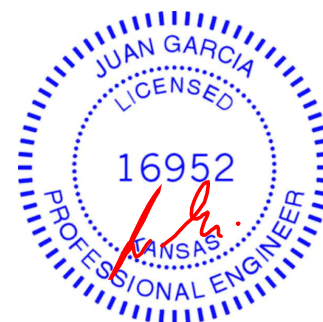
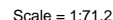
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

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ID:bWuMPDBN0tjF5cDvSpwhpH1zCzbQ-pQAKE7x7HP5PnY 3mviERD?5twviP?IRse1c WyXTfL



 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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Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	143059532
400675	C5	Piggyback Base	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-HckiSTyl2jDGPiZGKgDTzQYImJHK8Mub4InAWyyXTfK

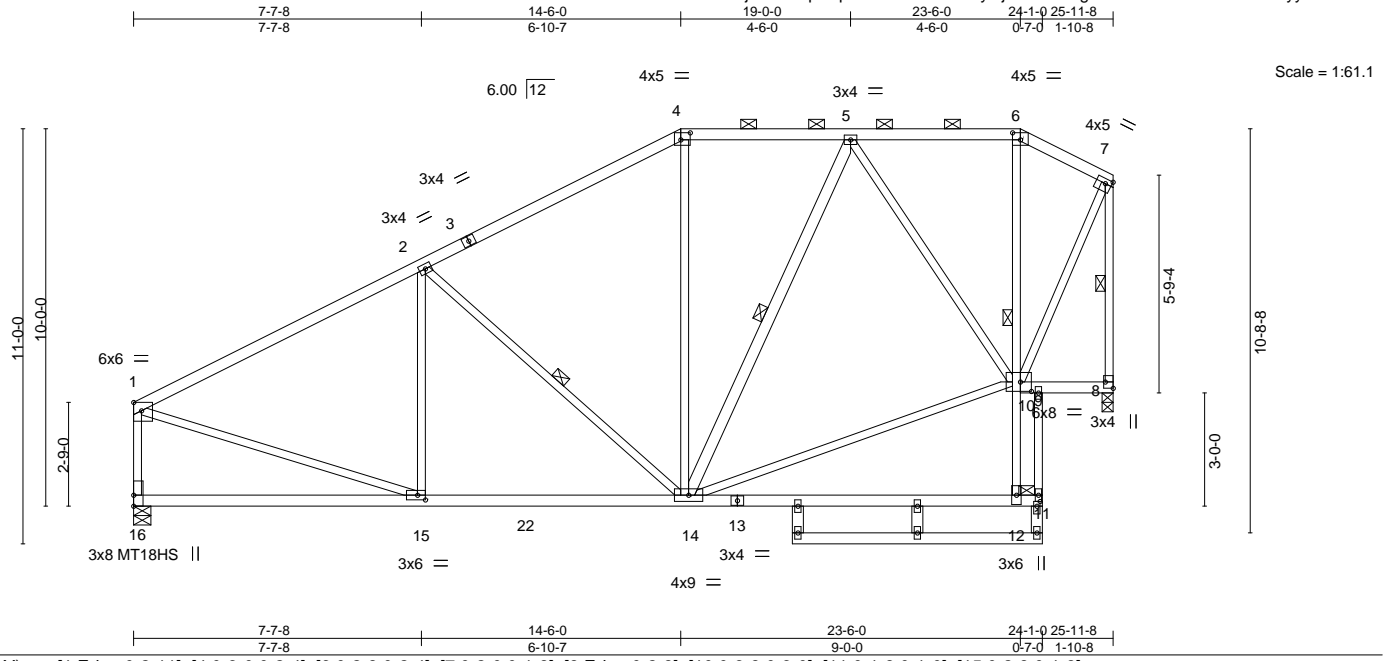


Plate Offsets (X,Y)-- [1:Edge,0-2-11], [4:0-3-0,0-2-4], [6:0-2-8,0-2-4], [7:0-2-0,0-1-8], [8:Edge,0-2-8], [10:0-3-8,0-3-0], [11:0-1-8,0-1-0], [15:0-2-8,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.12 12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.25 12-14	>999	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.02 8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 14-15	>999	240	Weight: 145 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 5-14,17-19,11-18,20-21: 2x4 SPF No.2

REACTIONS.

(size) 16=0-5-8, 8=0-3-8
 Max Horz 16=311(LC 5)
 Max Uplift 16=-139(LC 8), 8=-149(LC 5)
 Max Grav 16=1219(LC 2), 8=1212(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1343/167, 2-4=-1016/178, 4-5=-819/201, 5-6=-414/97, 6-7=-482/104,
 1-16=-1102/176, 7-8=-1228/128
 BOT CHORD 15-16=-288/137, 14-15=-230/1127
 WEBS 9-11=-343/0, 2-14=-446/207, 5-14=-73/271, 5-10=-593/134, 10-12=0/539,
 1-15=-68/1123, 7-10=-147/1050, 10-14=-195/757

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=139, 8=149.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059533
400675	C6	Piggyback Base	1	1		

Wheeler Lumber, Waverly, KS 66871

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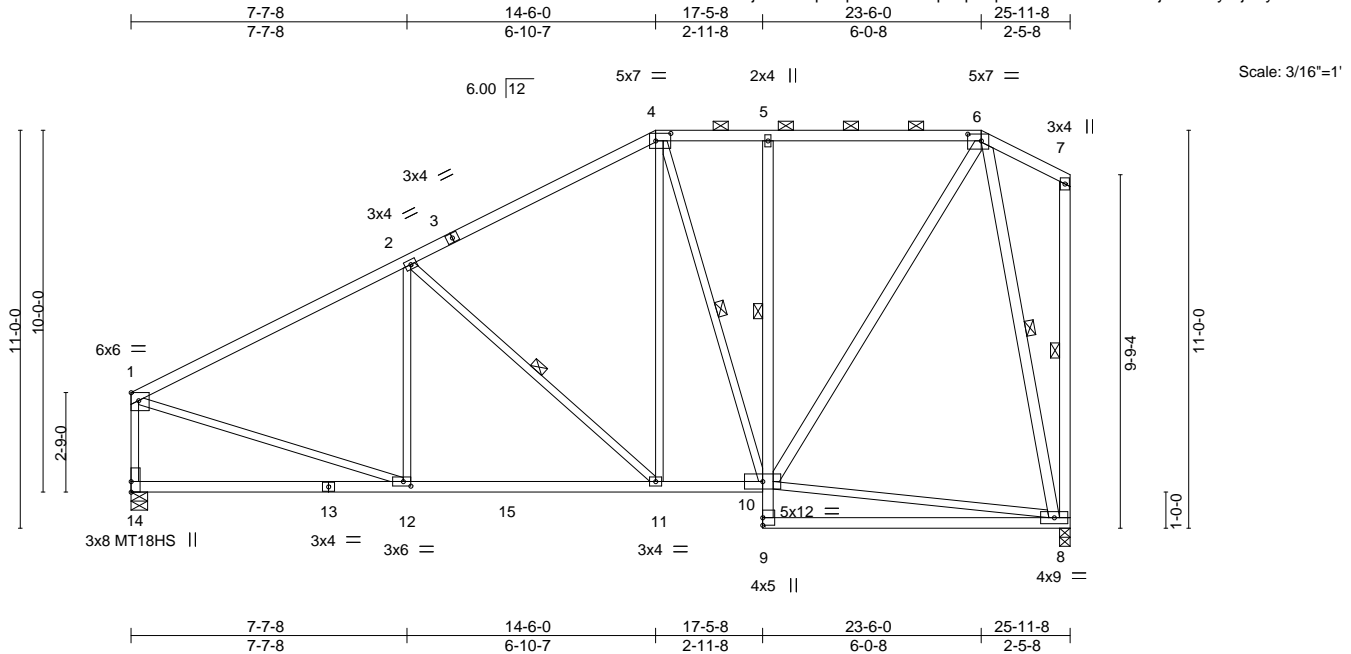


Plate Offsets (X,Y)--		[1:Edge,0-2-11], [4:0-5-0,0-2-8], [6:0-4-8,0-2-4], [12:0-2-8,0-1-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.74	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(LL) -0.17 8-9 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.58	Vert(CT) -0.35 8-9 >893 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.03 8 n/a n/a
			Wind(LL) -0.06 8-9 >999 240
			PLATES GRIP
			MT20 197/144
			MT18HS 197/144
			Weight: 151 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 9-5-14 oc bracing. Except:
WEBS 2x3 SPF No.2 *Except*	1 Row at midpt 5-10
6-10,7-8,6-8: 2x4 SPF No.2	1 Row at midpt 2-11, 4-10, 7-8, 6-8

REACTIONS.	(size) 14=0-5-8, 8=0-3-8
	Max Horz 14=390(LC 7)
	Max Uplift 14=141(LC 8), 8=152(LC 5)
	Max Grav 14=1216(LC 2), 8=1203(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1344/169, 2-4=-1007/188, 4-5=-709/182, 5-6=-710/183, 1-14=-1103/178
BOT CHORD	12-14=-362/173, 11-12=-292/1133, 10-11=-232/812, 5-10=-380/161
WEBS	2-11=-461/200, 4-11=-67/514, 4-10=-392/100, 6-10=-159/928, 1-12=-70/1125, 6-8=-1068/312

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=141, 8=152.
 - This truss 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.



October 2,2020

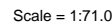
Waverly, KS 66871

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143059534

Job Reference (optional)

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:43 2020 Page 1
ID:bWuMPBN0tiF5cDvSpwhpH1zCzbQ-D?sTt9z?akT_e?ieS5Fx2rdf16v4cKftYbGGbrvXTf



TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	7-11: 2x3 SPF No.2, 10-11: 2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2 *Except*
	5-16,5-14.5-13: 2x4 SPF No.2

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3, 4-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 14-16, 13-14.
WEBS	1 Row at midpt 3-16, 4-16, 5-14, 6-13, 7-13, 8-10

REACTIONS. (size) 18=0-5-8, 14=0-3-8, 10=Mechanical
 Max Horiz 18=270(LC 7)
 Max Uplift 18=-151(LC 8), 14=-206(LC 5), 10=-54(LC 4)
 Max Grav 18=841(LC 23), 14=1762(LC 2), 10=743(LC 16)

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

TOP CHORD 1-2=-704/131, 2-3=-572/160, 3-4=-381/172, 4-5=-257/208, 5-6=-274/167, 6-7=-343/177,
7-8=-444/154, 1-18=-790/168

BOT CHORD 17-18=-251/202, 16-17=-116/608, 12-13=-8/297, 10-11=-69/255

WEBS 3-16=-478/171, 4-16=-336/123, 5-16=-107/890, 5-14=-1628/238, 5-13=-123/585,
7-13=-258/157, 1-17=-80/660, 8-10=-529/71

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 18=151, 14=206.
- 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.



October 2, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

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Job Reference (optional)

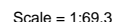
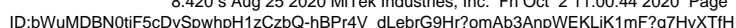


Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [2:0-2-8,0-2-4], [4:0-4-0,0-1-15], [6:0-5-0,0-2-8], [9:0-3-8,Edge]

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=170, 9=132.
- 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.



October 2, 2020



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Chesterfield, MO 63017

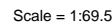
Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:45 2020 Page 1

143059536

Job Reference (optional)

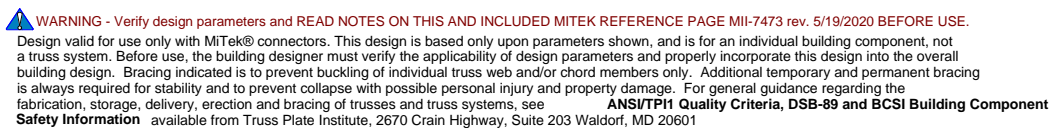
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:45 2020 Page 1
ID:bWuMPDBN0tiF5cDySpwphH1zCzbQ-9OzDhR?F6xkiuJs1ZVHP8GixYwZX4AIA?vInfkvXTfG



- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=170, 10=132.
- 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.



October 2, 2020



Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059537
400675	C10	Piggyback Base	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LEcY1nwVW5zYAOPtDFA?u?TviVXHgS7ld_I3S4yXTfM

0-9-4	2-9-4	7-7-9	14-6-0	19-0-0	23-6-0	30-4-6	34-0-0
0-9-4	2-0-0	4-10-5	6-10-6	4-6-0	4-6-0	6-10-6	3-7-10

Scale = 1:62.2

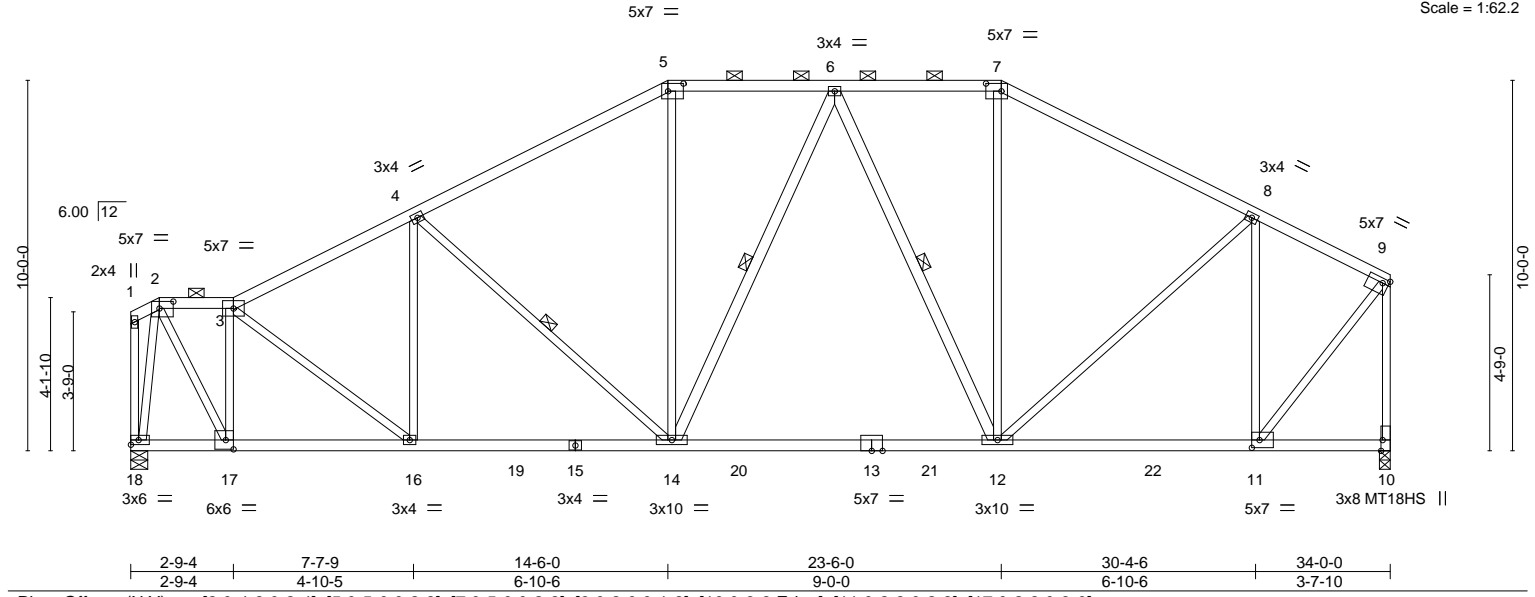


Plate Offsets (X,Y)--		[2:0-4-8,0-2-4], [5:0-5-0,0-2-8], [7:0-5-0,0-2-8], [9:0-2-0,0-1-8], [10:0-3-8,Edge], [11:0-2-8,0-2-8], [17:0-2-8,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.90	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(LL) -0.26 12-14 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Vert(CT) -0.41 12-14 >985 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.06 10 n/a n/a
			Wind(LL) 0.05 14 >999 240
			PLATES GRIP
			MT20 197/144
			MT18HS 197/144
			Weight: 169 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 6-14,6-12: 2x4 SPF No.2

BRACING-

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

REACTIONS.

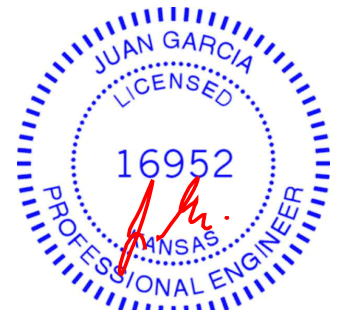
(size) 18=0-5-8, 10=0-3-8
 Max Horz 18=242(LC 5)
 Max Uplift 18=170(LC 8), 10=132(LC 9)
 Max Grav 18=1634(LC 2), 10=1653(LC 2)

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

TOP CHORD 2-3=-1021/88, 3-4=-1816/193, 4-5=-1715/209, 5-6=-1452/234, 6-7=-1276/187, 7-8=-1518/165, 8-9=-1003/98, 9-10=-1613/140
 BOT CHORD 17-18=-205/362, 16-17=-220/1075, 14-16=-214/1598, 12-14=-171/1419, 11-12=-107/887
 WEBS 2-17=-149/1686, 3-17=-1389/187, 3-16=-39/687, 4-16=-271/94, 4-14=-252/173, 5-14=0/421, 6-12=-473/144, 7-12=-0/374, 8-12=-71/546, 8-11=-931/168, 2-18=-1552/187, 9-11=-123/1432

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=170, 10=132.
- This truss 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.



October 2,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059538
400675	D1	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-daXbVB0utFsZVTRD7DpegUF5XKwZpeEKEZUxBayXTfF

0-10-8	7-7-10	13-7-9	20-6-0	25-0-0	29-6-0	31-11-8
0-10-8	7-7-10	5-11-15	6-10-7	4-6-0	4-6-0	2-5-8

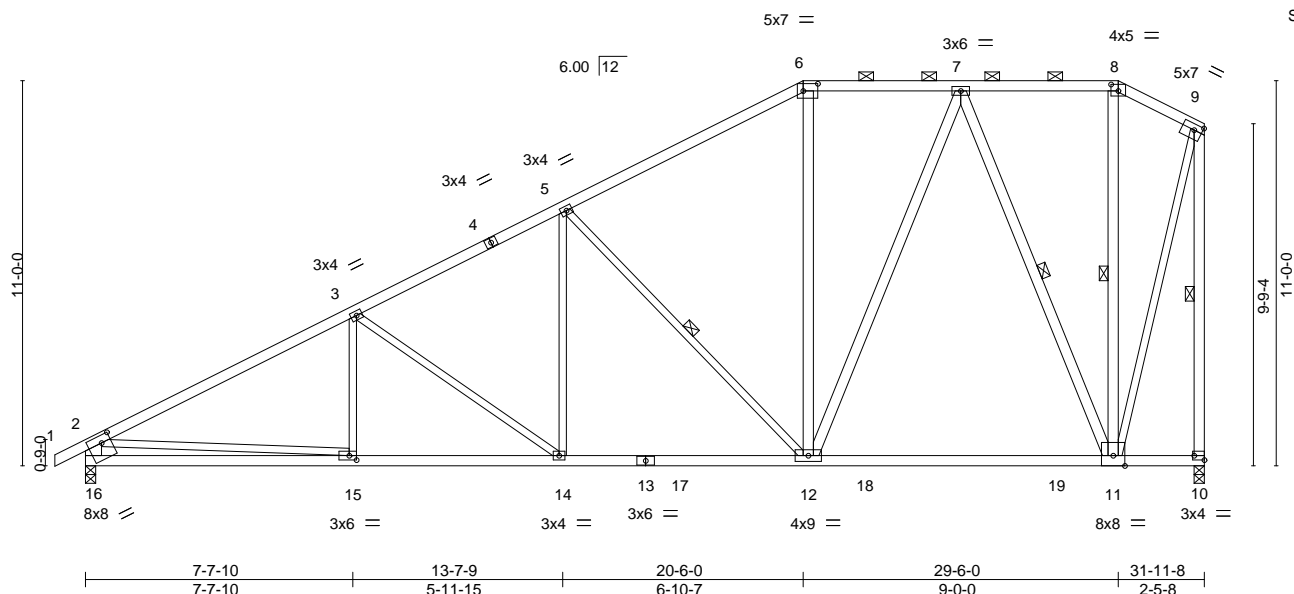


Plate Offsets (X,Y)-- [6:0-5-0,0-2-8], [8:0-2-8,0-2-4], [9:0-2-12,0-2-0], [10:Edge,0-1-8], [15:0-2-8,0-1-8], [16:0-3-4,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.24 11-12 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.40 11-12 >947 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.06 10 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08 14-15 >999 240	Weight: 174 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 6-12,7-12,7-11,8-11,9-10: 2x4 SPF No.2, 2-16: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 16=0-3-8, 10=0-3-8
 Max Horz 16=420(LC 5)
 Max Uplift 16=-219(LC 8), 10=-163(LC 5)
 Max Grav 16=1569(LC 2), 10=1548(LC 2)

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

TOP CHORD 2-3=-2435/309, 3-5=-1948/295, 5-6=-1297/234, 6-7=-1076/257, 7-8=-382/137, 8-9=-472/158, 2-16=-1440/262, 9-10=-1594/163
 BOT CHORD 15-16=-447/829, 14-15=-378/2084, 12-14=-278/1677, 11-12=-199/770
 WEBS 3-14=-507/175, 5-14=-32/531, 5-12=-871/280, 6-12=0/266, 7-12=-137/830, 7-11=-1114/204, 2-15=0/1323, 9-11=-175/1403

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=219, 10=163.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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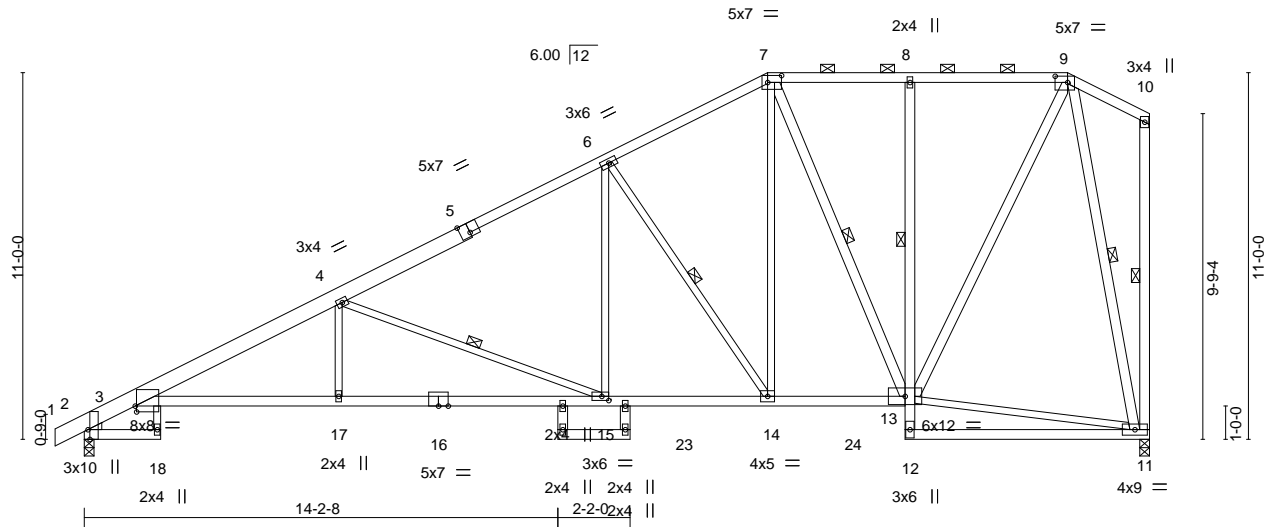
Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059540
400675	D3	Piggyback Base	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-azfMws18Os6GlnbcEer6lVLT67bJHWpchtz1G2yXTfD

-0-10-8	2-3-8	7-7-9	15-7-9	20-6-0	24-7-8	29-6-0	31-11-8
0-10-8	2-3-8	5-4-1	7-11-15	4-10-7	4-1-8	4-10-8	2-5-8



Scale = 1:69.1

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.80	Vert(LL)	-0.27	15-17	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.51	15-17	>743		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.34	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.22	18	>999	Weight: 193 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-18: 2x3 SPF No.2, 3-16: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
4-17,4-15,6-15,6-14,7-14,11-13: 2x3 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-18
2-2-0 oc bracing: 15-17.
1 Row at midpt 8-13
1 Row at midpt 4-15, 6-14, 7-13, 10-11, 9-11

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=414(LC 5)
Max Uplift 2=-209(LC 8), 11=-163(LC 5)
Max Grav 2=1578(LC 2), 11=1509(LC 2)

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

TOP CHORD 2-3=-1084/25, 3-4=-3228/473, 4-6=-2037/300, 6-7=-1354/262, 7-8=-873/203, 8-9=-870/203
BOT CHORD 3-17=-565/2958, 15-17=-564/2957, 14-15=-293/1697, 13-14=-244/1158, 8-13=-361/154
WEBS 4-17=0/330, 4-15=-1355/388, 6-15=-59/760, 6-14=-973/277, 7-14=-177/990, 7-13=-726/155, 9-13=-174/1304, 9-11=-1391/306

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=209, 11=163.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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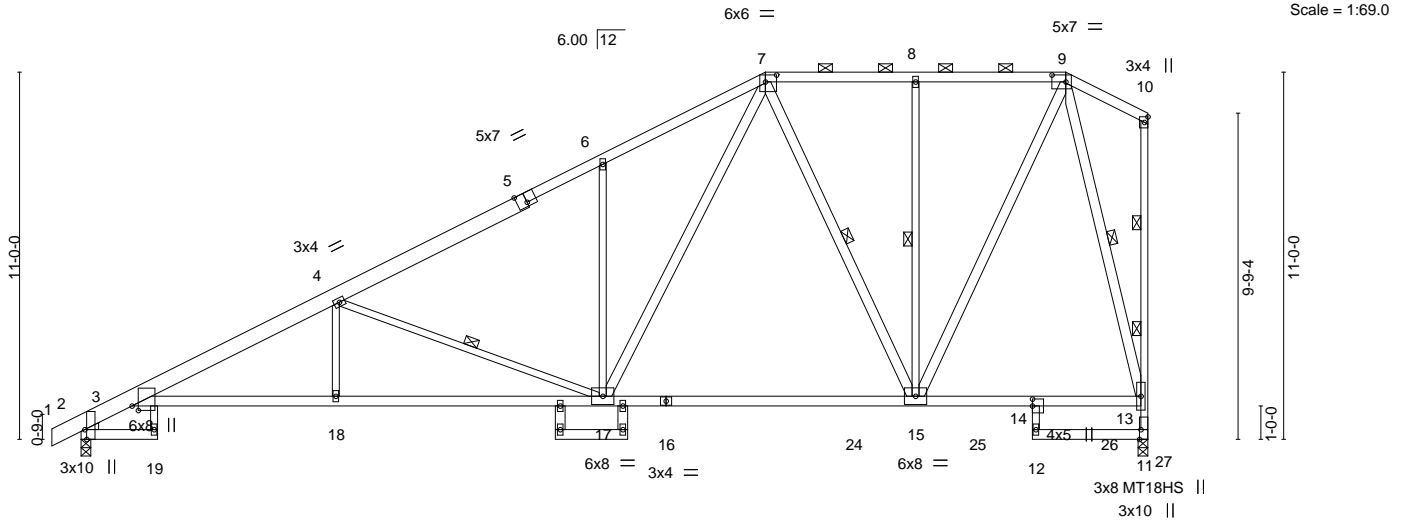
Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059541
400675	D4	Piggyback Base	3	1		

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-29Dk7C2m9AE7MwAoolMLI6teeXxI0zNmWxjboVyXTfC

-0-10-8	2-3-8	7-7-9	15-7-9	20-6-0	25-0-0	28-6-0	29-6-0	31-11-8
0-10-8	2-3-8	5-4-1	7-11-15	4-10-7	4-6-0	3-6-0	1-0-0	2-5-8



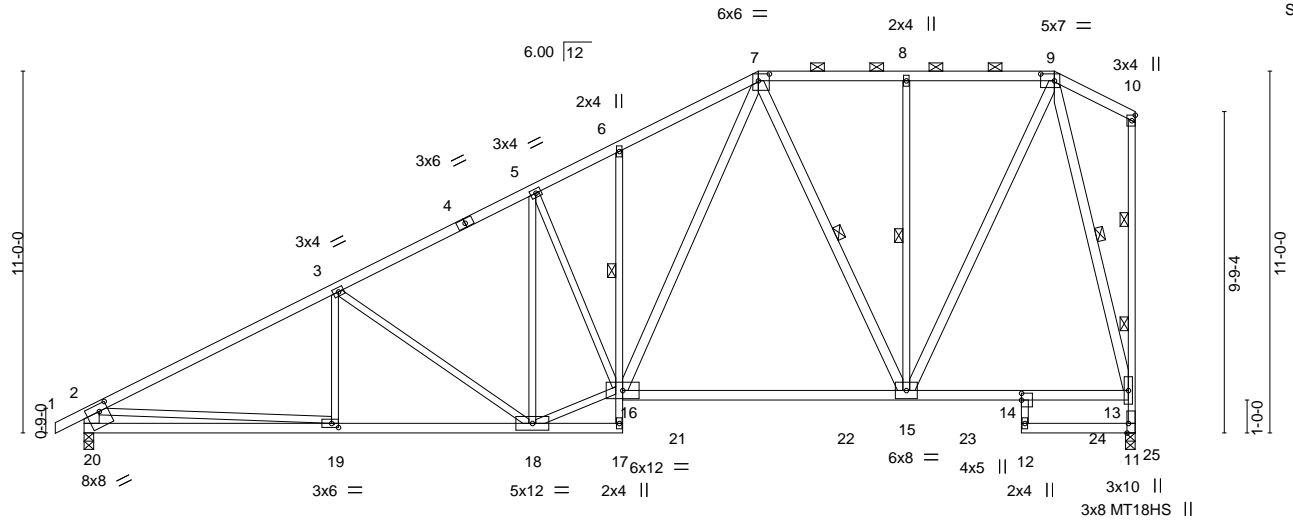
Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059542
400675	D5	Piggyback Base	1	1		

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:50 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-WLn6LY3OwUM_4l_M3tarKQqsxHmlTgv9BS8KxyXTfB

0-10-8 7-7-9 13-7-9 16-4-8 20-6-0 25-0-0 29-6-0 31-11-8
0-10-8 7-7-9 6-0-0 2-8-15 4-1-8 4-6-0 4-6-0 2-5-8



Scale = 1:70.1

Plate Offsets (X,Y)--		[7:0-4-0,0-2-8], [9:0-5-0,0-2-8], [11:0-3-8,Edge], [14:0-2-8,0-0-0], [19:0-2-8,0-1-8], [20:0-3-4,0-2-8]	
LOADING (psf)	SPACING	CSI	DEFL.
TCLL 25.0	2x4 DOL 1.15	TC 0.72	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.92	Vert(LL) -0.27 15-16 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.72	Vert(CT) -0.48 15-16 >795 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.10 11 n/a n/a
			Wind(LL) 0.08 18-19 >999 240
			PLATES
			MT20
			MT18HS
			Weight: 179 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-17,12-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-16,7-15,9-15,9-13: 2x4 SPF No.2, 2-20: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-5 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
1 Row at midpt 6-16
1 Row at midpt 7-15, 8-15, 9-13
2 Rows at 1/3 pts 10-11

REACTIONS.

(size) 20=0-3-8, 11=0-3-8
Max Horz 20=420(LC 5)
Max Uplift 20=-219(LC 8), 11=-162(LC 5)
Max Grav 20=1565(LC 2), 11=1642(LC 2)

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

TOP CHORD 2-3=-2435/312, 3-5=-1927/292, 5-6=-1860/321, 6-7=-1871/401, 7-8=-916/194,
8-9=-916/194, 2-20=-1437/261, 11-13=-1566/178
BOT CHORD 19-20=-441/803, 18-19=-383/2086, 15-16=-253/1153, 14-15=-151/356, 13-14=-238/304
WEBS 3-18=-543/193, 16-18=-251/1859, 7-16=-288/1184, 7-15=-596/192, 2-19=0/1350,
8-15=-357/151, 9-15=-154/1355, 9-13=-1457/239

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=219, 11=162.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059543
400675	D6	GABLE	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:52 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-SkutIE4eS5ciDOuNTUv2wVFP18jDWWCcVxPpqXTf9

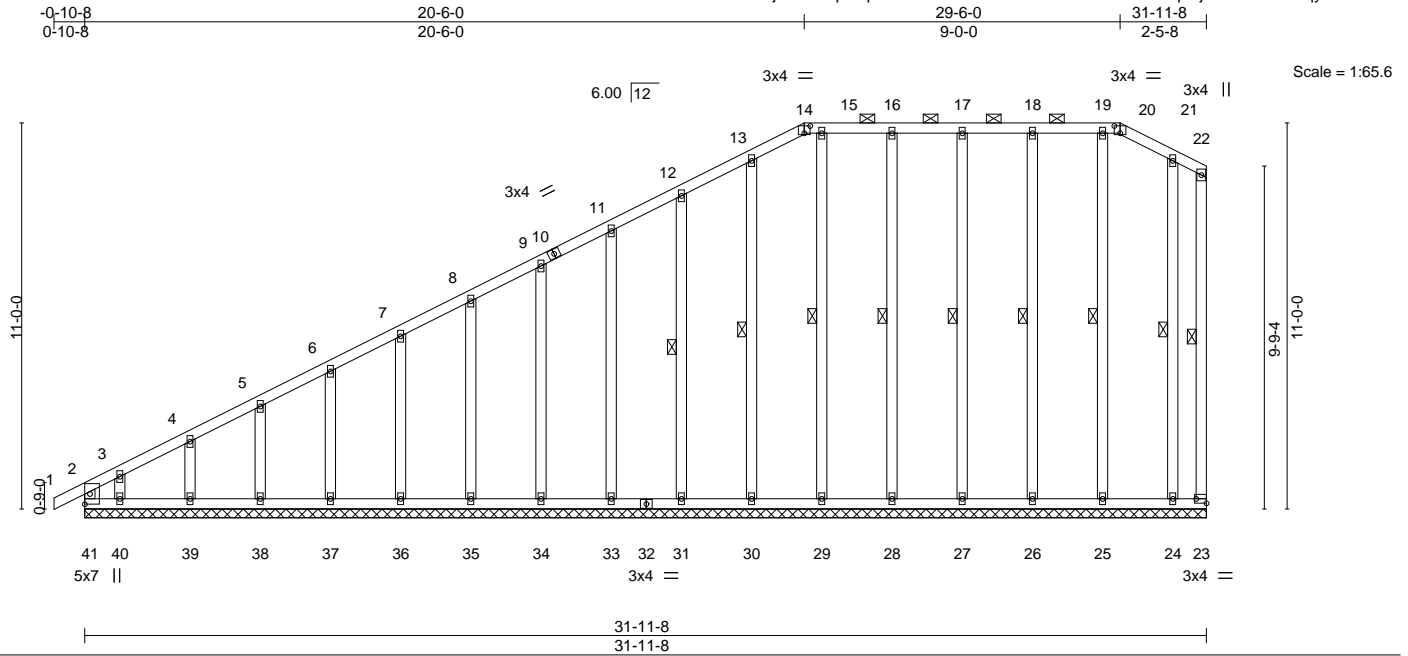


Plate Offsets (X,Y)-- [14:0-2-0,0-2-8], [20:0-2-0,0-2-8], [23:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.43	Vert(LL)	-0.00	1	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	-0.01	23	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 218 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 14-20.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 22-23, 12-31, 13-30, 15-29, 16-28, 17-27, 18-26, 19-25, 21-24
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 31-11-8.
 (lb) - Max Horz 41=420(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 41, 23, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24 except 40=249(LC 5)
 Max Grav All reactions 250 lb or less at joint(s) 23, 40, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24 except 41=373(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-41=-266/29, 2-3=-408/79, 3-4=-333/76, 4-5=-309/75, 5-6=-280/75, 6-7=-252/75

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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) 41, 23, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24 except (jt=lb) 40=249.
- This truss 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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059544
400675	E1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-wwSFza5HDPkZrYTZ1BRHSy2VH8WDy?qMr9hoxGyXTf8

0-10-8 7-0-0 14-0-0 14-10-8
0-10-8 7-0-0 7-0-0 0-10-8

4x5 =

Scale = 1:30.8

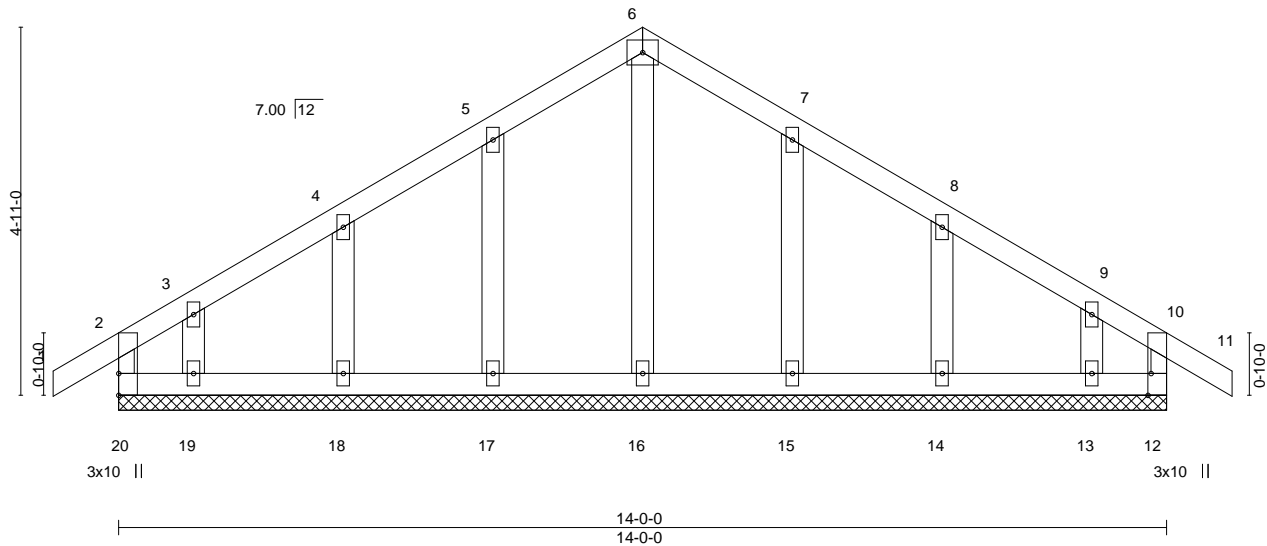


Plate Offsets (X,Y)--		[12:0-3-8,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.07		Vert(LL)	-0.00 11	n/r	120	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.04		Vert(CT)	-0.00 11	n/r	120		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.05		Horz(CT)	0.00 12	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R						Weight: 57 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 14-0-0.
(lb) - Max Horz 20=-142(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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

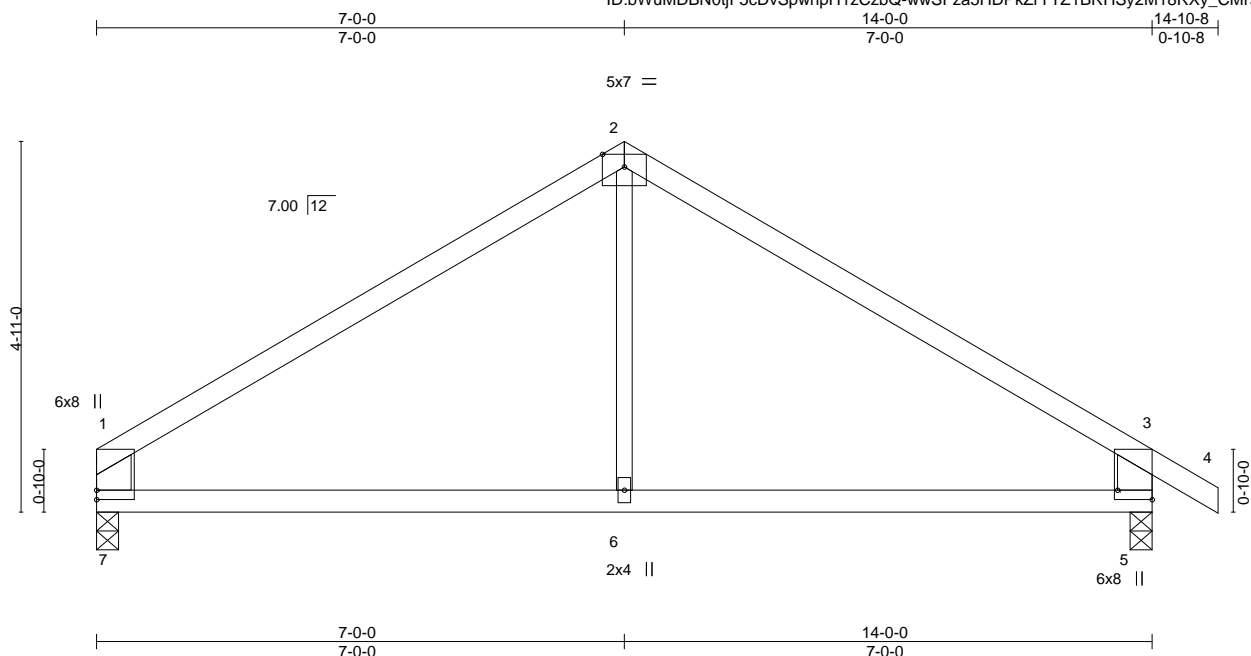
Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059545
400675	E2	Common	2	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-wwSFza5HDPkZrYTZ1BRHSy2M18Rxy_CMr9hoxGyXTf8

Job Reference (optional)



Scale = 1:30.6

Plate Offsets (X,Y)--		[5: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 0.66		Vert(LL)	-0.05 5-6	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.34		Vert(CT)	-0.10 5-6	>999	240		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.09		Horz(CT)	0.01 5	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.04 6-7	>999	240	Weight: 41 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

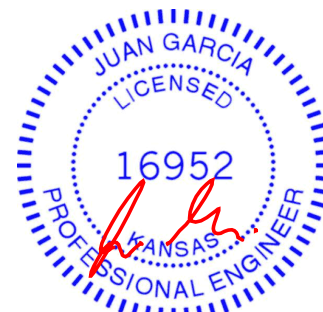
(size) 7=0-3-8, 5=0-3-8
 Max Horz 7=-139(LC 4)
 Max Uplift 7=-71(LC 8), 5=-97(LC 9)
 Max Grav 7=606(LC 1), 5=690(LC 1)

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

TOP CHORD 1-2=-693/108, 2-3=-699/109, 1-7=-534/120, 3-5=-625/148
 BOT CHORD 6-7=-9/490, 5-6=-9/490
 WEBS 2-6=0/283

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) 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.



October 2,2020

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 Chesterfield, MO 63017

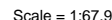
Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 1

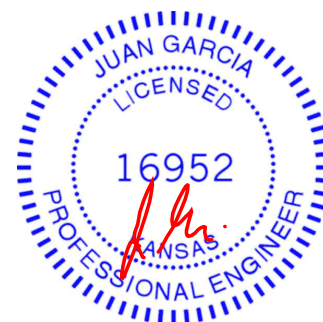
143059546

Job Reference (optional)

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Continued on page 2



October 2, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT
400675	E3	GABLE	1	1	I43059546
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-tJa?OG7XI0_H4rdy9cTIXN7iHy3lQngelTAv08yXTf6

- LOAD CASE(S)** Standard Except:
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-70, 4-6=-70, 6-7=-70, 11-13=-20, 8-10=-20
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-58, 4-6=-58, 6-7=-57, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-4=-20, 4-6=-20, 6-7=-20, 11-13=-40, 8-10=-40
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=-15, 4-6=11, 6-7=5, 11-13=-12, 8-10=-12
 Horz: 1-4=3, 4-6=23, 6-7=17, 1-13=17, 6-8=22
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=11, 4-6=-15, 6-7=-1, 11-13=-12, 8-10=-12
 Horz: 1-4=-23, 4-6=-3, 6-7=11, 1-13=-22, 6-8=-17
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=-35, 4-6=-9, 6-7=-3, 11-13=-20, 8-10=-20
 Horz: 1-4=15, 4-6=11, 6-7=17, 1-13=28, 6-8=10
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=-9, 4-6=-35, 6-7=-29, 11-13=-20, 8-10=-20
 Horz: 1-4=-11, 4-6=-15, 6-7=-9, 1-13=-10, 6-8=-28
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=29, 4-6=11, 6-7=5, 11-13=-12, 8-10=-12
 Horz: 1-4=-41, 4-6=23, 6-7=17, 1-13=14, 6-8=20
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=11, 4-6=29, 6-7=23, 11-13=-12, 8-10=-12
 Horz: 1-4=-23, 4-6=41, 6-7=35, 1-13=-20, 6-8=-14
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=29, 4-6=11, 6-7=5, 11-13=-12, 8-10=-12
 Horz: 1-4=-41, 4-6=23, 6-7=17, 1-13=14, 6-8=20
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-4=11, 4-6=29, 6-7=23, 11-13=-12, 8-10=-12
 Horz: 1-4=-23, 4-6=41, 6-7=35, 1-13=-20, 6-8=-14
 Drag: 6-8=0
 Concentrated Loads (lb)
 Vert: 7=-250
 - Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059546
400675	E3	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 3
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-tJa?OG7XI0_H4rdy9cTIXN7iHy3lQngelTAv08yXTf6

LOAD CASE(S) Standard Except:

- Uniform Loads (plf)
 Vert: 1-4=9, 4-6=-9, 6-7=-3, 11-13=-20, 8-10=-20
 Horz: 1-4=-29, 4-6=11, 6-7=17, 1-13=26, 6-8=8
 Drag: 6-8=0
- Concentrated Loads (lb)
 Vert: 7=-250
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
 Vert: 1-4=-9, 4-6=9, 6-7=15, 11-13=-20, 8-10=-20
 Horz: 1-4=-11, 4-6=29, 6-7=35, 1-13=-8, 6-8=-26
 Drag: 6-8=0

Concentrated Loads (lb)
 Vert: 7=-250
- 14) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)
 Vert: 1-4=-20, 4-6=-20, 6-7=-20, 11-13=-40, 10-36=-40, 36-37=-60, 8-37=-40

Concentrated Loads (lb)
 Vert: 7=-250
- 15) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
 Vert: 1-4=-69, 4-6=-49, 6-7=-45, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35
 Horz: 1-4=11, 4-6=9, 6-7=13, 1-13=21, 6-8=7
 Drag: 6-8=0

Concentrated Loads (lb)
 Vert: 7=-250
- 16) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
 Vert: 1-4=-49, 4-6=-69, 6-7=-64, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35
 Horz: 1-4=-9, 4-6=-11, 6-7=-7, 1-13=-7, 6-8=-21
 Drag: 6-8=0

Concentrated Loads (lb)
 Vert: 7=-250
- 17) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
 Vert: 1-4=-36, 4-6=-49, 6-7=-45, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35
 Horz: 1-4=-22, 4-6=9, 6-7=13, 1-13=19, 6-8=6
 Drag: 6-8=0

Concentrated Loads (lb)
 Vert: 7=-250
- 18) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
 Vert: 1-4=-49, 4-6=-36, 6-7=-31, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35
 Horz: 1-4=-9, 4-6=22, 6-7=26, 1-13=-6, 6-8=-19
 Drag: 6-8=0

Concentrated Loads (lb)
 Vert: 7=-250
- 19) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
 Vert: 1-4=-16, 4-6=-12, 6-7=-12, 11-13=-12, 8-10=-12
 Horz: 1-4=4, 1-13=16

Concentrated Loads (lb)
 Vert: 7=-250
- 20) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
 Vert: 1-4=-12, 4-6=-16, 6-7=-12, 11-13=-12, 8-10=-12
 Horz: 4-6=-4, 6-8=-16
 Drag: 6-8=0

Concentrated Loads (lb)
 Vert: 7=-250
- 21) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)
 Vert: 1-4=-70, 4-6=-20, 6-7=-20, 11-13=-20, 8-10=-20

Concentrated Loads (lb)
 Vert: 7=-250
- 22) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)
 Vert: 1-4=-20, 4-6=-70, 6-7=-70, 11-13=-20, 8-10=-20

Concentrated Loads (lb)
 Vert: 7=-250
- 23) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)
 Vert: 1-4=-58, 4-6=-20, 6-7=-20, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35

Concentrated Loads (lb)
 Vert: 7=-250
- 24) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Continued on page 4

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059546
400675	E3	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 4
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-tJa?OG7XI0_H4rdy9cTIXN7iHy3lQngeITAv08yXTf6

LOAD CASE(S) Standard Except:

- Uniform Loads (plf)
Vert: 1-4=-20, 4-6=-58, 6-7=-57, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35
- Concentrated Loads (lb)
Vert: 7=-250
- 25) User defined: Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-4=-70(F), 4-6=-70(F), 6-7=-70(F), 11-13=-20(F), 8-10=-20(F)
- Concentrated Loads (lb)
Vert: 7=-250

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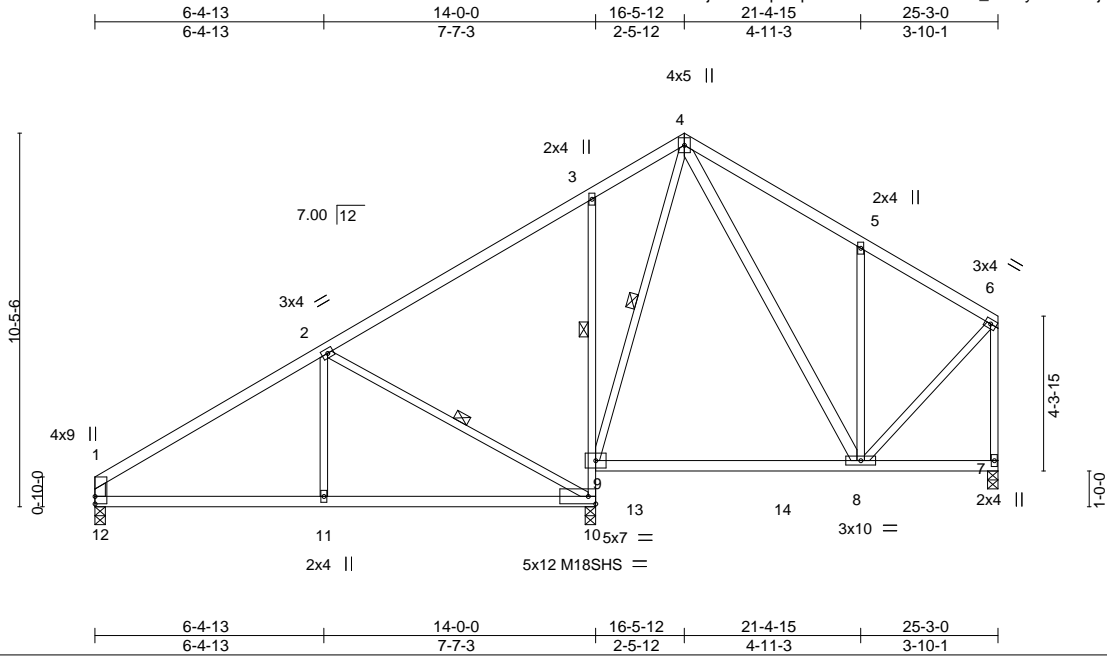


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059547
400675	E4	Roof Special	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 1
ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-tJa?OG7XIO_H4rdy9cTIXN7jky4RQnielTAvo8yXTf6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.15	8-9	>891	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.23	8-9	>588	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	-0.05	7	n/a		n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	10-11	>999		240
									Weight: 111 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-8,1-12: 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 4-1-14 oc bracing. Except:
1 Row at midpt 3-9
WEBS 1 Row at midpt 2-10, 4-9

REACTIONS.

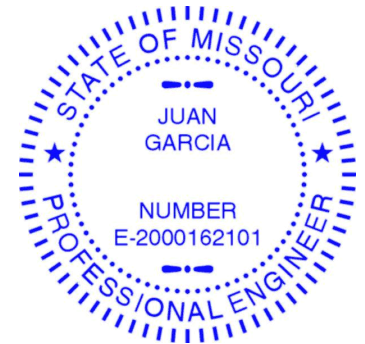
(size) 12=0-3-8, 7=0-3-8, 10=0-3-8
Max Horz 12=317(LC 5)
Max Uplift 12=-77(LC 8), 7=-80(LC 9), 10=-154(LC 8)
Max Grav 12=583(LC 16), 7=502(LC 16), 10=1552(LC 15)

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

TOP CHORD 1-2=-720/98, 2-3=-179/340, 4-5=-430/193, 5-6=-353/82, 1-12=-472/110, 6-7=-488/83
BOT CHORD 11-12=-196/601, 10-11=-196/601, 9-10=-1045/77, 3-9=-454/255
WEBS 2-11=0/308, 2-10=-792/236, 4-9=-467/3, 4-8=-119/468, 5-8=-369/225, 6-8=-40/324

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 7 except (jt=lb) 10=154.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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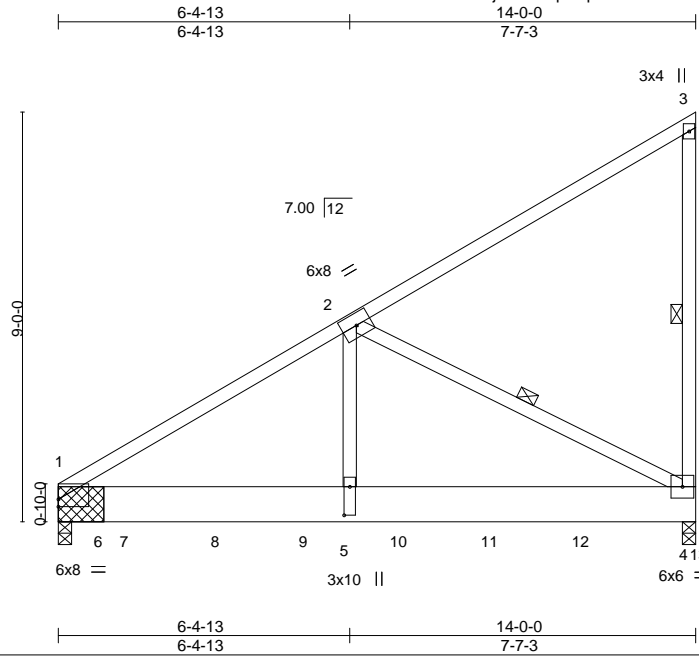


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059548
400675	E5	MONOPITCH GIRDER	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:56 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LV8Nbb89WK68i?C8iJ__4bgqNMQj9C6oX7vSYbyXTf5



Scale = 1:50.6

Plate Offsets (X,Y)-- [1:0-0-0,0-1-15], [5:0-7-8,0-1-8]												
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	0.84	Vert(LL)	-0.07	1-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.12	1-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	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: 207 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x10 SP DSS
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=(0-3-8 + bearing block) (req. 0-4-4), 4=0-3-8
Max Horz 1=333(LC 7)
Max Uplift 1=89(LC 8), 4=252(LC 8)
Max Grav 1=5430(LC 2), 4=3633(LC 2)

FORCES.

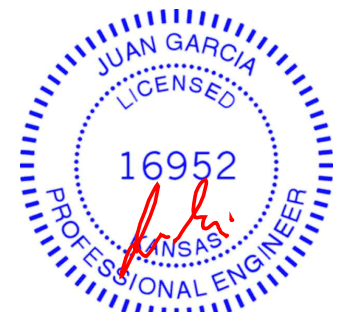
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5355/0
BOT CHORD 1-5=-46/4464, 4-5=-46/4464
WEBS 2-5=0/4779, 2-4=-5051/143

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 2x10 SP DSS bearing block 12" long at jt. 1 attached to each face with 5 rows of 10d (0.131"x3") nails spaced 3" o.c. 20 Total fasteners per block. Bearing is assumed to be SPF No.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
- 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) 4=252.
- This truss 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) 1972 lb down and 159 lb up at 1-6-13, 1961 lb down and 158 lb up at 3-6-13, 1977 lb down at 5-6-0, 454 lb down and 87 lb up at 7-6-0, 462 lb down and 86 lb up at 9-6-0, and 470 lb down and 86 lb up at 11-6-0, and 706 lb down and 67 lb up at 13-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT
400675	E5	MONOPITCH GIRDER	1	2	I43059548
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:56 2020 Page 2
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LV8Nbb89WK68i?C8iJ__4bgqNMQj9C6oX7vSYbyXTf5

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: 7=-1858(B) 8=-1856(B) 9=-1858(B) 10=-436(B) 11=-440(B) 12=-445(B) 13=-609(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059549
400675	G1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:57 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-phimpX8nHdE?K9nLG1VDdoCBwmuyotxmfn041yXTf4

0-10-8 10-0-0 20-0-0 20-10-8
0-10-8 10-0-0 10-0-0 0-10-8

4x5 =

Scale = 1:41.3

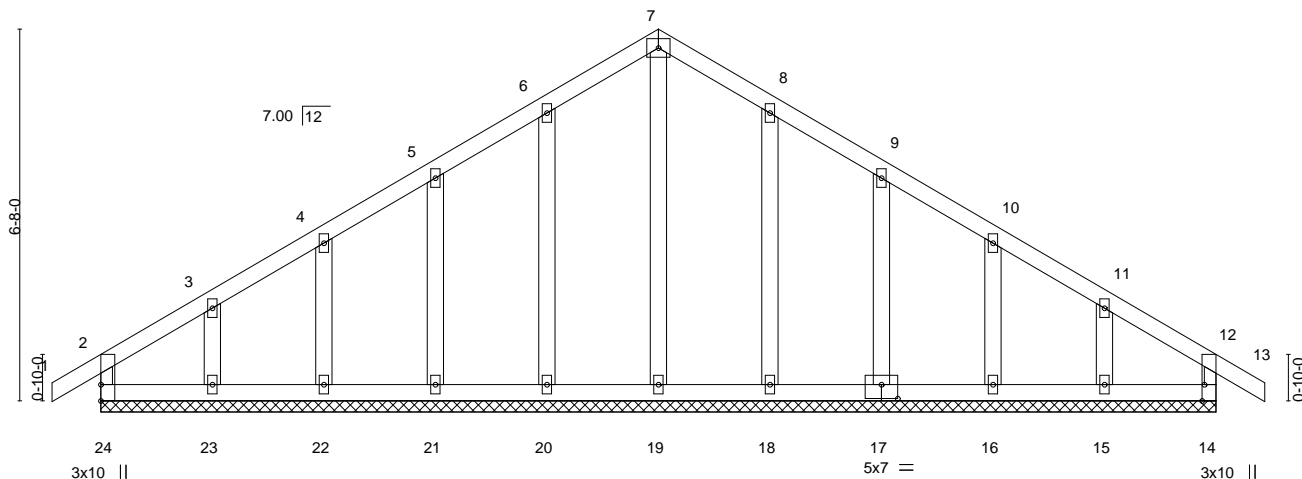


Plate Offsets (X,Y)--	[14:0-3-8,Edge], [17:0-3-8,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	13	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 89 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 20-0-0.
(lb) - Max Horz 24=-188(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 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 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) 24, 14, 20, 21, 22, 23, 18, 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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059550
400675	G2	Common	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-l4pWEa1pFUiZTjOSXhiDLLaZOhMgGED5879wyXTf2

0-10-8 4-9-0 10-0-0 15-2-15 20-0-0 20-10-8
0-10-8 4-9-0 5-2-15 5-3-0 4-9-1 0-10-8

5x7 =

Scale = 1:41.5

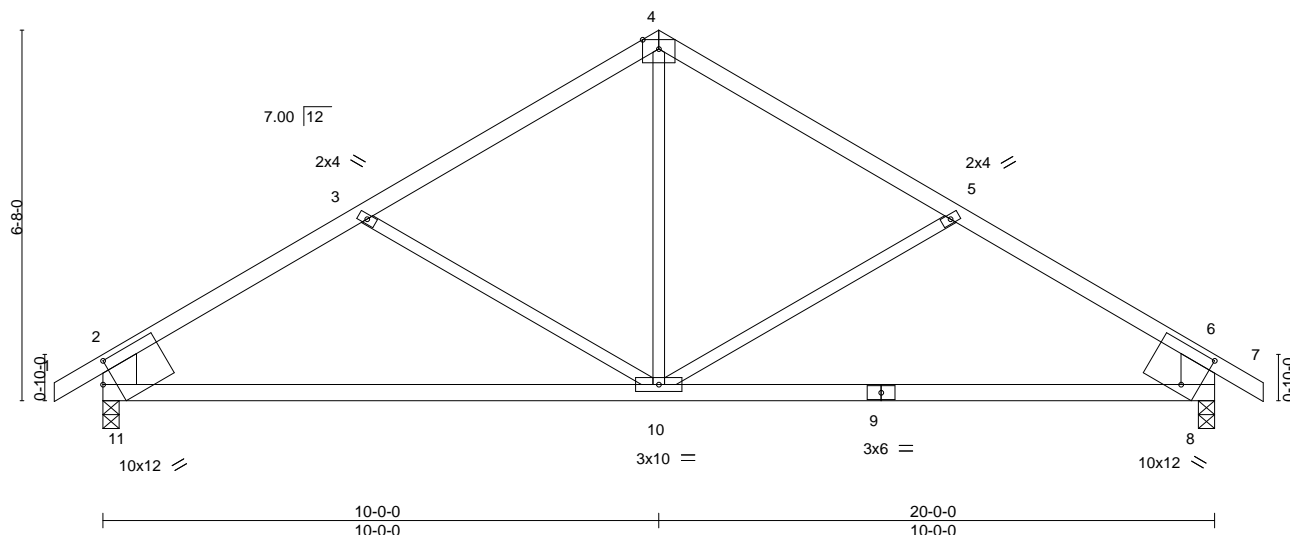


Plate Offsets (X,Y)-- [8:0-3-11,0-8-1], [11:0-2-9,0-4-7]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.17	8-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.35	8-10	>667	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.03	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06	10	>999	240	Weight: 70 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,6-8: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 11=0-3-8, 8=0-3-8
Max Horz 11=192(LC 7)
Max Uplift 11=130(LC 8), 8=130(LC 9)
Max Grav 11=955(LC 1), 8=955(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1148/182, 3-4=-875/141, 4-5=-875/141, 5-6=-1148/183, 2-11=-852/178, 6-8=-852/178
BOT CHORD 10-11=-167/901, 8-10=-79/881
WEBS 4-10=-6/460, 5-10=-255/206, 3-10=-254/206

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 11=130, 8=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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059552
400675	G4	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871, Mitek

8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:08:39 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-JA?kTwtftQ24o69jpoGBTLjL4A?Oh8Xgx?fZSHFYXTXs

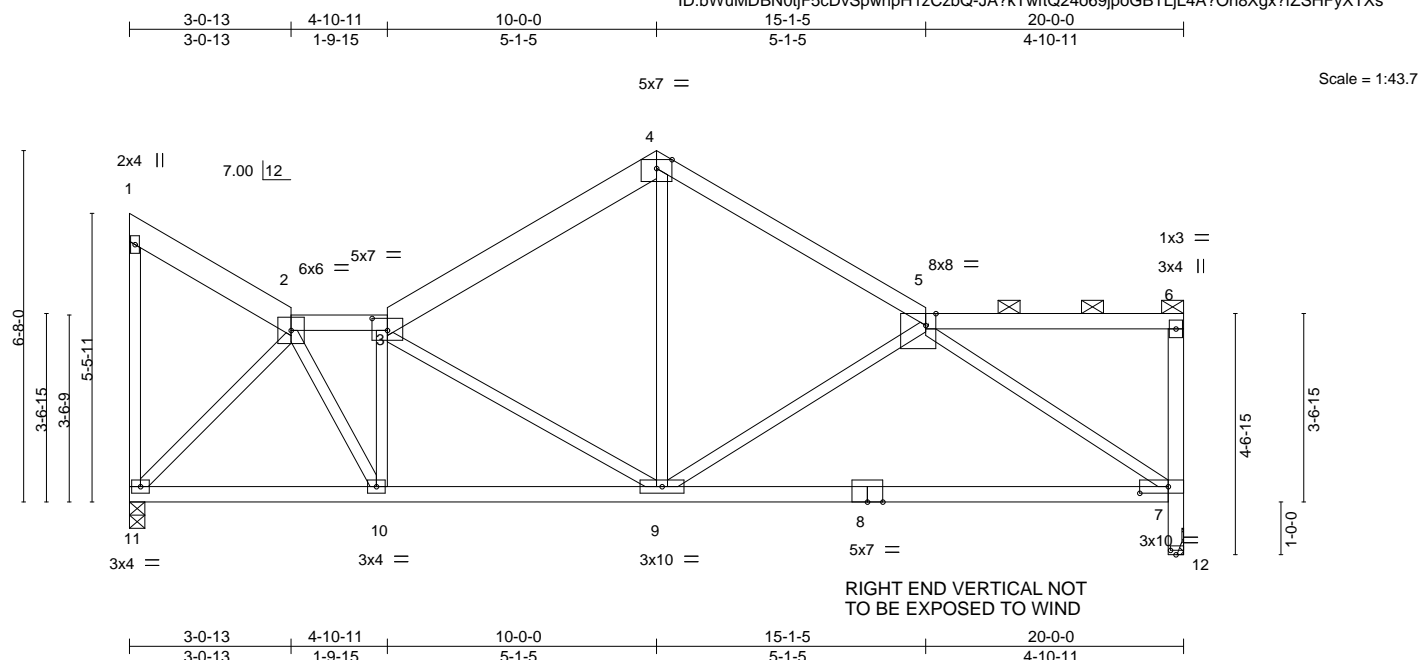


Plate Offsets (X,Y)-- [3:0-3-8,0-2-12], [5:0-2-5,Edge], [7:0-6-8,0-1-8], [12:0-1-4,0-1-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.24	7-9	>991	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.49	7-9	>488	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.06	12	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9	>999	240	Weight: 91 lb FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-2,3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-12: 2x4 SPF No.2

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

REACTIONS. (lb/size) 11=888/0-3-8, 12=889/Mechanical
Max Horz 11=-162(LC 6)
Max Uplift 11=-25(LC 8), 12=-13(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-981/0, 3-4=-916/32, 4-5=-944/16, 7-12=-889/13
BOT CHORD 10-11=-9/678, 9-10=0/997, 8-9=-36/952, 7-8=-36/952
WEBS 2-11=-1005/6, 2-10=0/648, 3-10=-498/44, 3-9=-343/43, 4-9=0/495, 5-9=-279/94, 5-7=-1106/59

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 11 and 13 lb uplift at joint 12.
 - 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.



October 2,2020

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

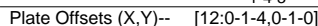
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871, Mitek

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ID:bWuMDeBN0tiF5cDvSpwH1zCzhO-rFzngOsvfz5X1dyukTD?50kRw6uyClog8SlrkvXTXc



LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
 2-3,5-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
 6-12: 2x4 SPF No.2

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

REACTIONS. (lb/size) 11=888/0-3-8, 12=889/Mechanical
 Max Horz 11=-153(LC 6)
 Max Uplift 11=-21(LC 8), 12=-19(LC 9)
 Max Gray 11=931(LC 2), 12=932(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1003/0, 3-4=-1234/29, 4-5=-1248/53, 5-6=-1007/2, 7-12=-932/19, 6-7=-835/50
BOT CHORD 10-11=-57/313, 10-13=0/753, 13-14=0/753, 9-14=0/753, 8-9=0/753
WEBS 2-11=910/54, 2-10=0/963, 3-10=-860/69, 4-10=0/593, 4-8=-28/607, 5-8=-933/111,
6-8=0/1167

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 11 and 19 lb uplift at joint 12.
- 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.



October 2, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059554
400675	G6	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871, Mitek

8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:09:09 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Rxp3mA0iMGrYim0aZzjVZ2b6S5eLA56MuKr1LWYXTXO

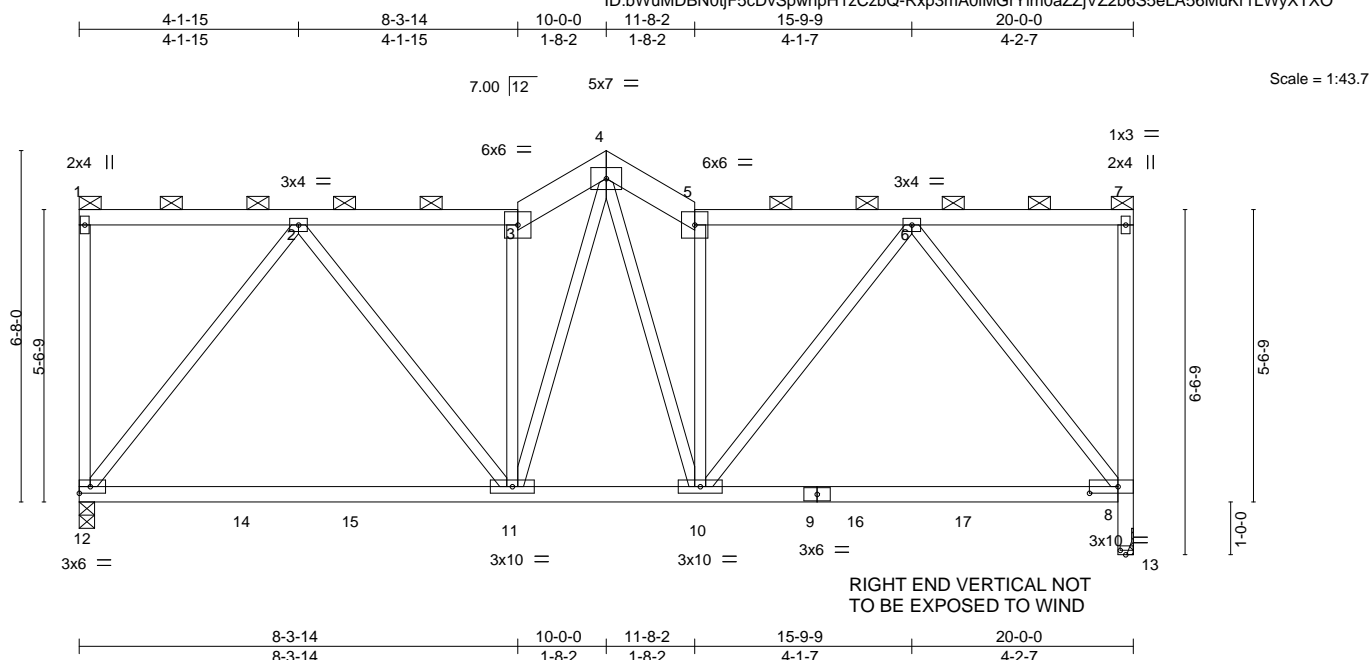


Plate Offsets (X,Y)--	[8:0-6-8,0-1-8], [13:0-1-4,0-1-0]								
LOADING (psf)	SPACING	2-0-0	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.75	Vert(LL)	-0.21 11-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.67	Vert(CT)	-0.37 11-12	>647	240		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.98	Horz(CT)	0.07 13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02 11-12	>999	240	Weight: 99 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 3-4,4-5: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 5-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 7-13: 2x4 SPF No.2	

REACTIONS. (lb/size) 12=889/0-3-8, 13=889/Mechanical
Max Horz 12=175(LC 6)
Max Uplift 12=127(LC 8), 13=131(LC 9)
Max Grav 12=944(LC 2), 13=944(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-890/89, 3-4=-1026/119, 4-5=-1019/131, 5-6=-884/88, 8-13=-944/131
BOT CHORD 12-14=-80/562, 14-15=-80/562, 11-15=-80/562, 10-11=-70/783, 9-10=-96/565,
9-16=-96/565, 16-17=-96/565, 8-17=-96/565
WEBS 2-12=-897/162, 2-11=-2/535, 3-11=-598/111, 4-11=-51/457, 4-10=-73/435,
5-10=-595/134, 6-10=-5/524, 6-8=-879/164

- 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 exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 12 and 131 lb uplift at joint 13.
 - 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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059555
400675	G7	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871, Mitek

ID:bWuMdB0tjF5cDvSpwhpH1zCzbQ-RDLVL_EMMU?77FNpr2dXUleo3uxSUerpspTSRS1yXTX7

Job Reference (optional)

8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:09:26 2020 Page 1

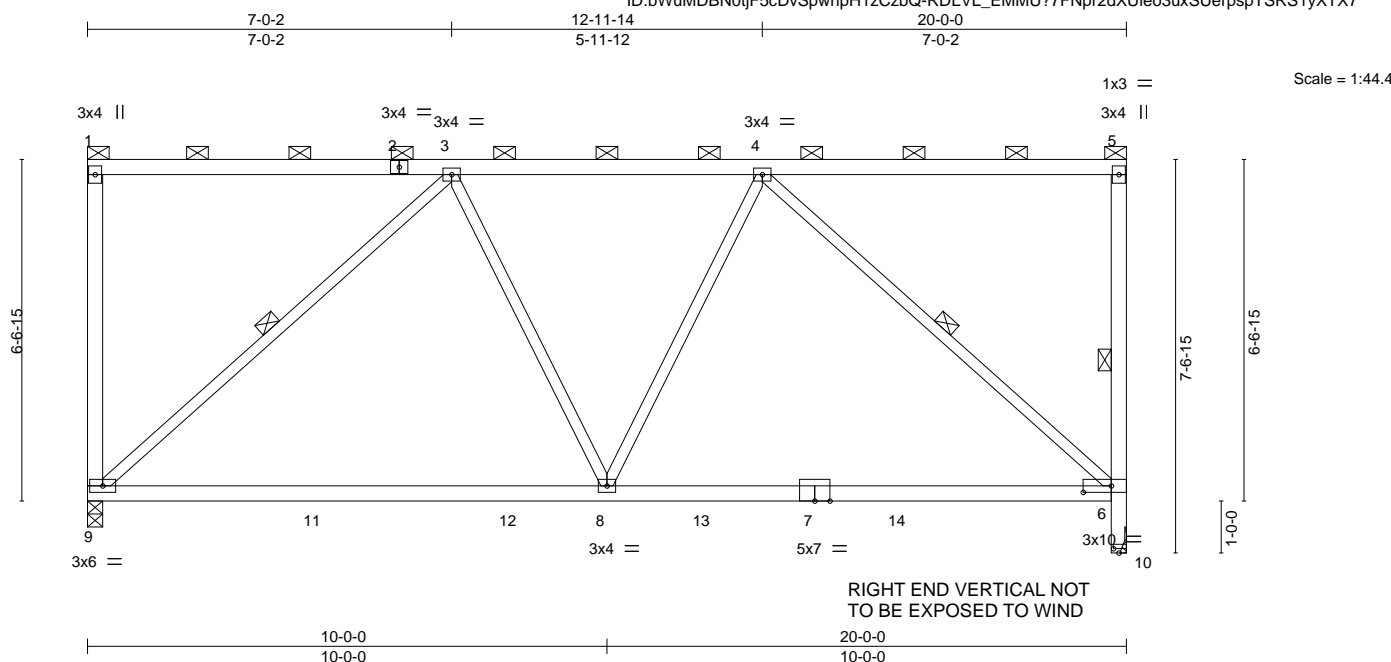


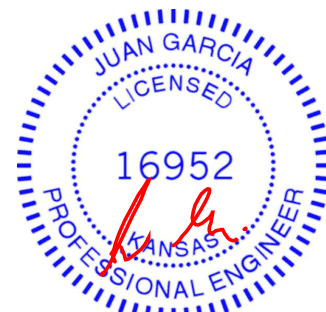
Plate Offsets (X,Y)-- [6:0-6-8,0-1-8], [10:0-1-4,0-1-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.57	Vert(LL)	-0.28	6-8	>857	360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.66	Vert(CT)	-0.46	6-8	>510	240	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.75	Horz(CT)	0.08	10	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-9	>999	240	
										Weight: 86 lb	FT = 10%

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

REACTIONS. (lb/size) 9=887/0-3-8, 10=887/Mechanical
Max Horz 9=-178(LC 6)
Max Uplift 9=-182(LC 4), 10=-187(LC 5)
Max Grav 9=968(LC 2), 10=968(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-839/140, 6-10=-968/187
BOT CHORD 9-11=-182/722, 11-12=-182/722, 8-12=-182/722, 8-13=-163/723, 7-13=-163/723,
7-14=-163/723, 6-14=-163/723
WEBS 3-9=-940/213, 3-8=0/322, 4-8=0/318, 4-6=-934/221

- 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 exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 9 and 187 lb uplift at joint 10.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059556
400675	G8	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871, Mitek

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ZjdP3ROWIudHJNjLJsGyYnNqFJBu7Bjjno_6dOnyXTWw

Job Reference (optional)

8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:09:39 2020 Page 1

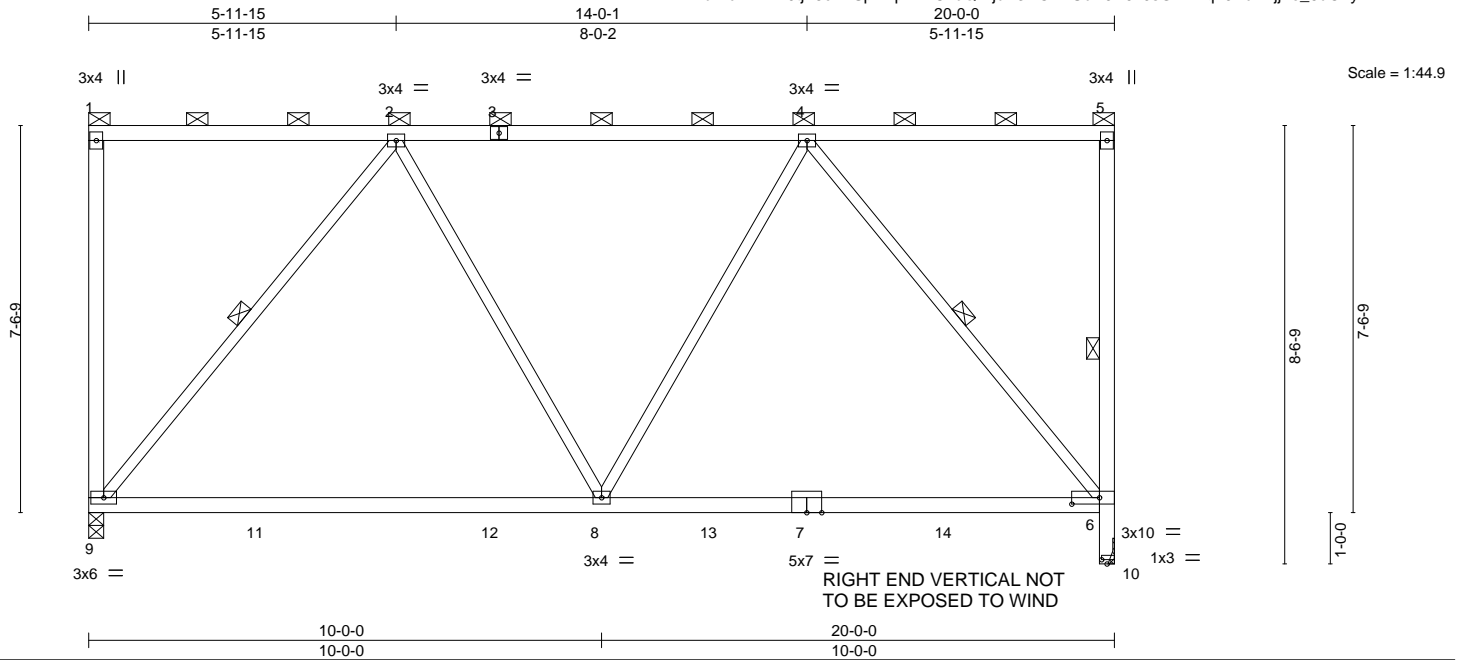


Plate Offsets (X,Y)-- [6:0-6-8,0-1-8], [10:0-1-4,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.66	Vert(LL)	-0.31	6-8	>765	360	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.68	Vert(CT)	-0.50	6-8	>475	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.71	Horz(CT)	0.09	10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.04	8-9	>999	240		
	Code IRC2018/TPI2014							Weight: 90 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 7-9: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2 *Except*
 1-9,5-10: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(lb/size) 9=887/0-3-8, 10=887/Mechanical
 Max Horz 9=-206(LC 6)
 Max Uplift 9=-188(LC 4), 10=-194(LC 5)
 Max Grav 9=980(LC 2), 10=980(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-713/121, 3-4=-713/121, 6-10=-980/194
 BOT CHORD 9-11=-173/575, 11-12=-173/575, 8-12=-173/575, 8-13=-144/576, 7-13=-144/576,
 7-14=-144/576, 6-14=-144/576
 WEBS 2-9=-886/226, 2-8=0/340, 4-8=0/336, 4-6=-880/234

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 exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 9 and 194 lb uplift at joint 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059557
400675	G9	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871, Mitek

ID: bWuMDbN0tjF5cDvSpwhpH1zCzbQ-zZrzGGd3bd9SISrBU3cEbbfidFj0tInjO6ygy5cyXTWc

Job Reference (optional)

8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:09:59 2020 Page 1

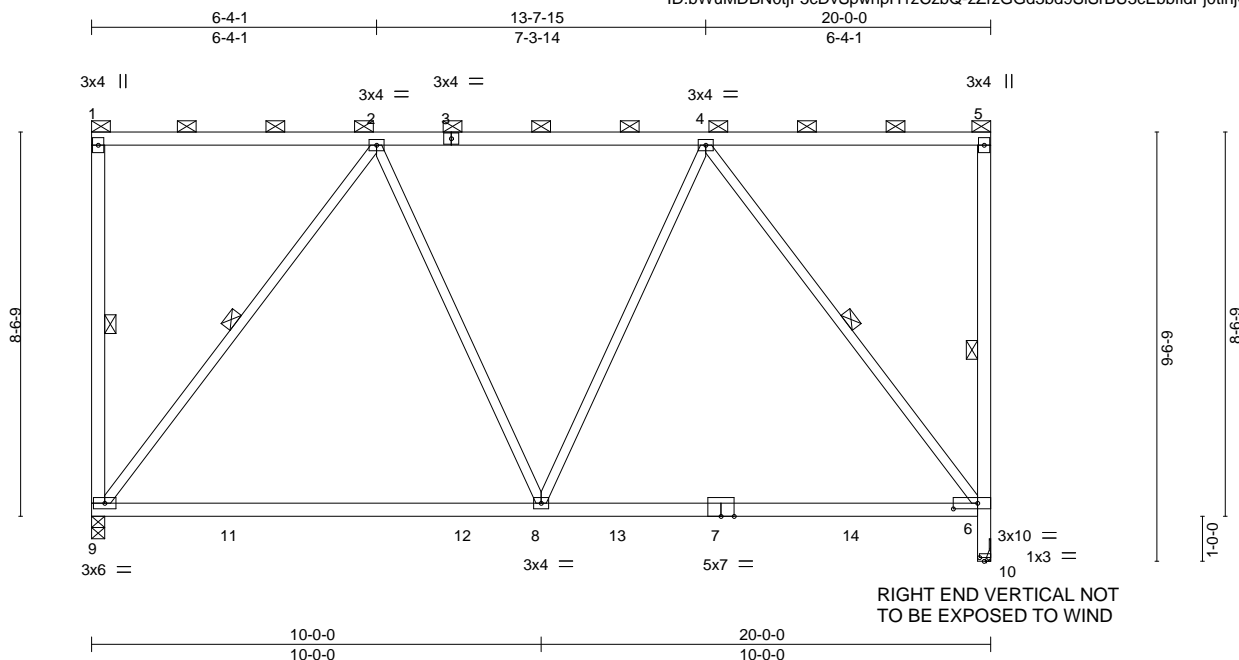


Plate Offsets (X,Y)-- [6:0-6-8,0-1-8], [10:0-1-4,0-1-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.26	6-8	>896	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.42	6-8	>564	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.09	10	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.05	8-9	>999	240	
									Weight: 95 lb		FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD 2x4 SPF 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
6-7: 2x4 SPF 2100F 1.8E	WEBS 1 Row at midpt 1-9, 5-10, 2-9, 4-6
WEBS 2x3 SPF No.2 *Except*	
1-9,5-10: 2x4 SPF No.2	

REACTIONS. (lb/size) 9=887/0-3-8, 10=887/Mechanical
Max Horz 9=-234(LC 6)
Max Uplift 9=-194(LC 4), 10=-203(LC 5)
Max Grav 9=989(LC 2), 10=989(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-641/120, 3-4=-641/120, 6-10=-989/203
BOT CHORD 9-11=-164/526, 11-12=-164/526, 8-12=-164/526, 8-13=-135/528, 7-13=-135/528,
7-14=-135/528, 6-14=-135/528
WEBS 2-9=-849/217, 2-8=0/336, 4-8=0/333, 4-6=-844/227

- 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 exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 194 lb uplift at joint 9 and 203 lb uplift at joint 10.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

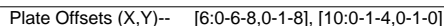
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871, Mitek

8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:10:12 2020 Page 1
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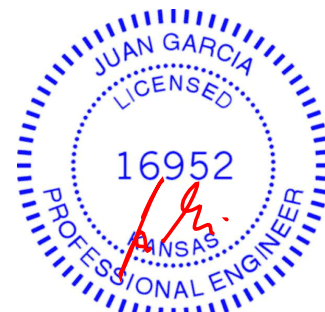
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD	2x4 SPF 2400F 2.0E *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	6-7: 2x4 SPF 2100F 1.8E	WEBS	1 Row at midpt 1-9, 5-10, 3-9, 4-6
WEBS	2x4 SPF No.2 *Except*		
	3-8,4-8: 2x3 SPF No.2		

REACTIONS. (lb/size) 9=887/0-3-8, 10=887/Mechanical
Max Horz 9=-263(LC 6)
Max Uplift 9=-202(LC 4), 10=-212(LC 5)
Max Grav 9=997(LC 2), 10=997(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-584/120, 6-10=-997/212
BOT CHORD 9-11=-158/488, 11-12=-158/488, 8-12=-158/488, 8-13=-129/489, 7-13=-129/489,
 7-14=-129/489, 6-14=-129/489
WEBS 3-9=-821/212, 3-8=0/335, 4-8=0/332, 4-6=-815/226

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 exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 9 and 212 lb uplift at joint 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059559
400675	H1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:04 2020 Page 1

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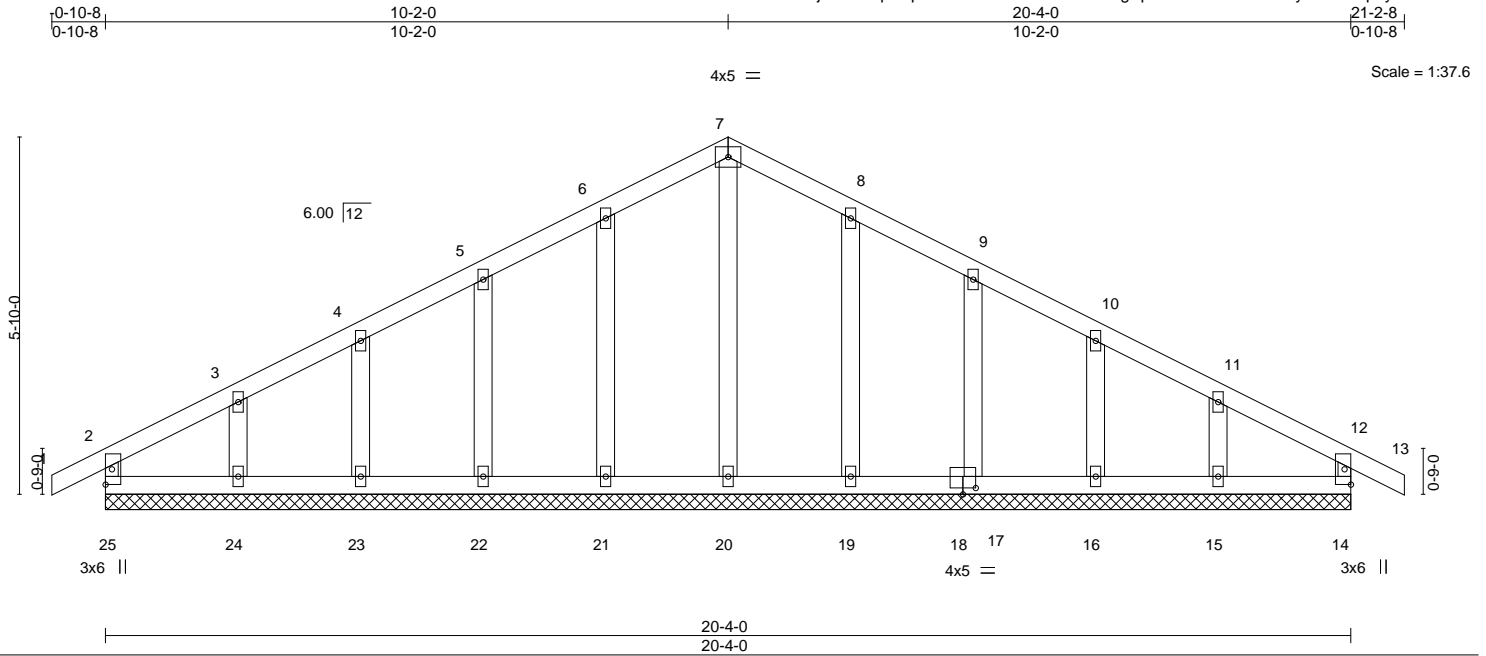


Plate Offsets (X,Y)-- [18:0-2-8,0-1-4]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00 13	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00 13	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	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 10-0-0 oc bracing.

REACTIONS.

All bearings 20-4-0.
(lb) - Max Horz 25=90(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 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) 25, 14, 21, 22, 23, 24, 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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	143059560
400675	H2	Common	5	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

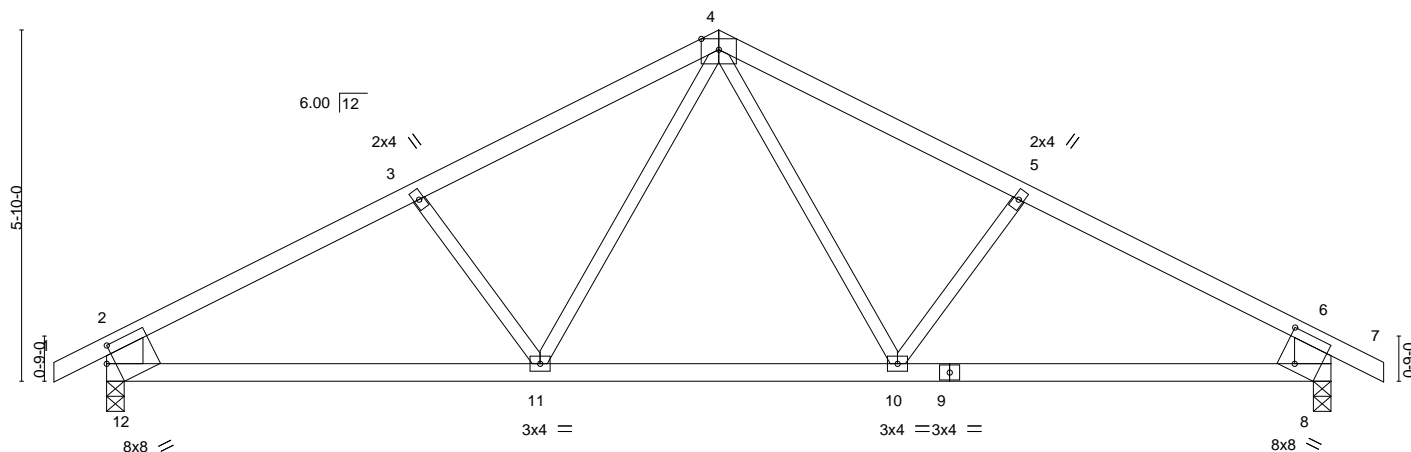
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:05 2020 Page 1

ID:bwuMdbN0tjF5cDvSpwhpH1zCzbQ-aEBnUgFoO5FsHOotkie5xUYMf_UbmPj7b1bRLZyXTey

0-10-8	5-2-4	10-2-0	15-1-12	20-4-0	21-2-8
0-10-8	5-2-4	4-11-12	4-11-12	5-2-4	0-10-8

5x7 =

Scale = 1:38.3



7-2-6	13-1-10	20-4-0
7-2-6	5-11-4	7-2-6

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

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)	-0.14 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.24 10-11	>996	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.03 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 10-11	>999	240	Weight: 70 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-8: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 12=0-3-8, 8=0-3-8
Max Horz 12=-94(LC 6)
Max Uplift 12=-137(LC 8), 8=-137(LC 9)
Max Grav 12=970(LC 1), 8=970(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1302/183, 3-4=-1106/183, 4-5=-1106/183, 5-6=-1302/183, 2-12=-877/173, 6-8=-877/173
BOT CHORD 11-12=-167/1059, 10-11=-28/794, 8-10=-90/1059
WEBS 4-10=-75/346, 4-11=-75/346

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 12=137, 8=137.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059561
400675	J1	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:06 2020 Page 1

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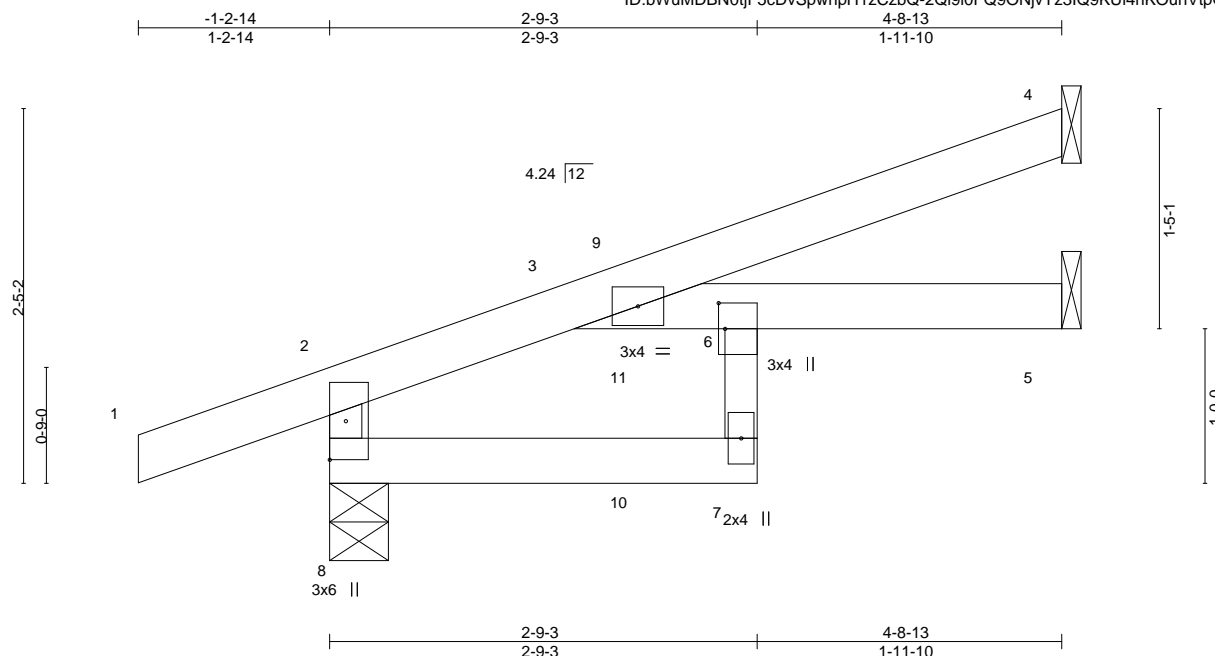


Plate Offsets (X,Y)-- [6:0-2-0,0-0-8]

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 0.24	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.04	6	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	6	>999	240	Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-4-9, 4=Mechanical, 5=Mechanical
 Max Horz 8=84(LC 4)
 Max Uplift 8=77(LC 4), 4=48(LC 8)
 Max Grav 8=323(LC 1), 4=119(LC 1), 5=100(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-8=-302/100

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4.
- 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) 67 lb down and 23 lb up at 1-11-15, and 67 lb down and 23 lb up at 1-11-15 on top chord, and 3 lb down and 2 lb up at 1-11-15, and 3 lb down and 2 lb up at 1-11-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



October 2,2020

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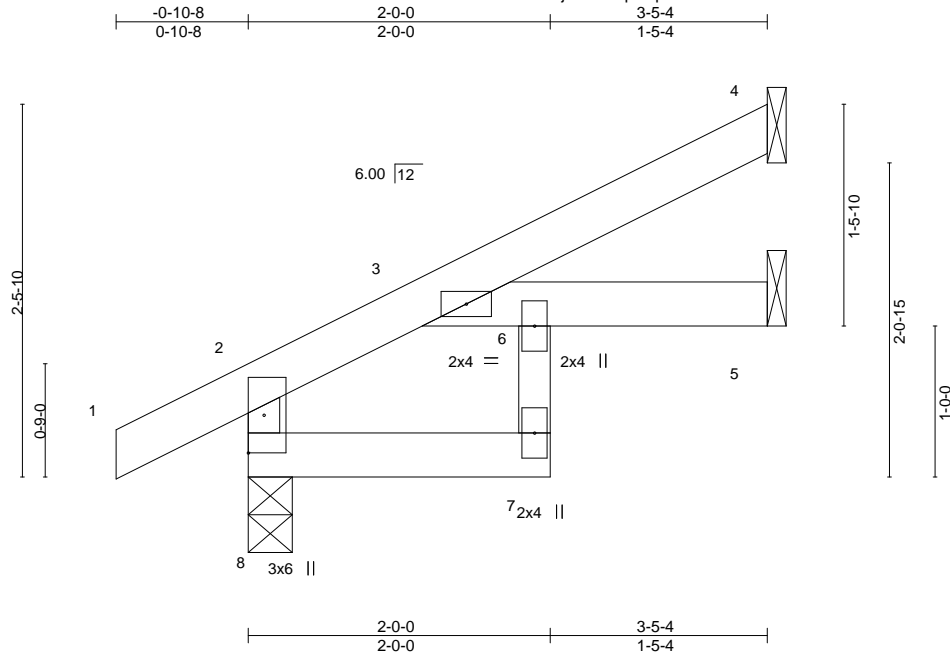
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059562
400675	J2	Jack-Open	7	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwH1zCzbQ-WdlYvMG3wiVaXiYGs7hZ1vduAoHDEK3P3K4YQSyXTew



Scale = 1:15.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.01	3	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.01	6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	3	>999	240		
									Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

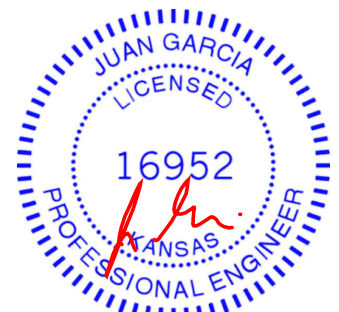
REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=77(LC 8)
 Max Uplift 8=-21(LC 8), 4=-42(LC 8), 5=-6(LC 8)
 Max Grav 8=234(LC 1), 4=86(LC 1), 5=70(LC 3)

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

NOTES-

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



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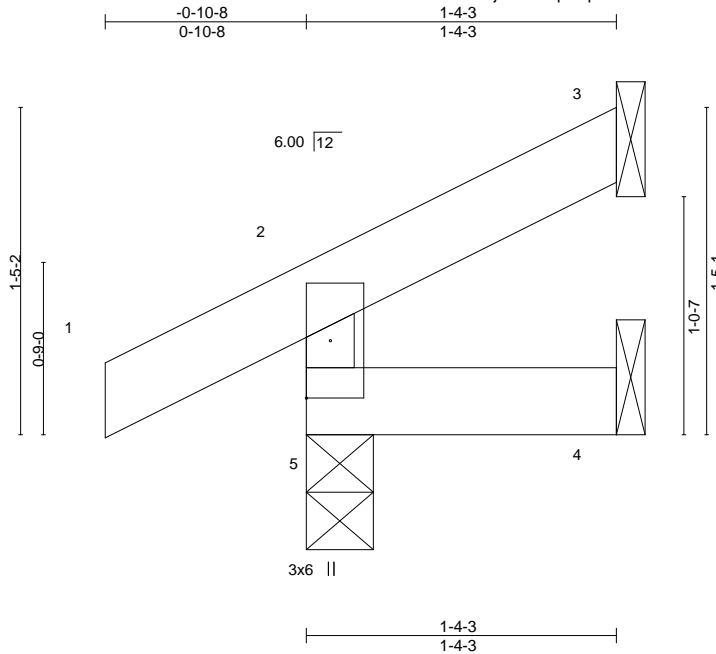
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059563
400675	J3	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:07 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-WdIYvMG3wiVaXiYGs7hZ1vduloItEK3P3K4YQSyXTew



Scale = 1:10.0

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

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=35(LC 5)
Max Uplift 5=-23(LC 8), 3=-20(LC 8)
Max Grav 5=151(LC 1), 3=20(LC 1), 4=22(LC 3)

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

NOTES-

- 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.



October 2,2020

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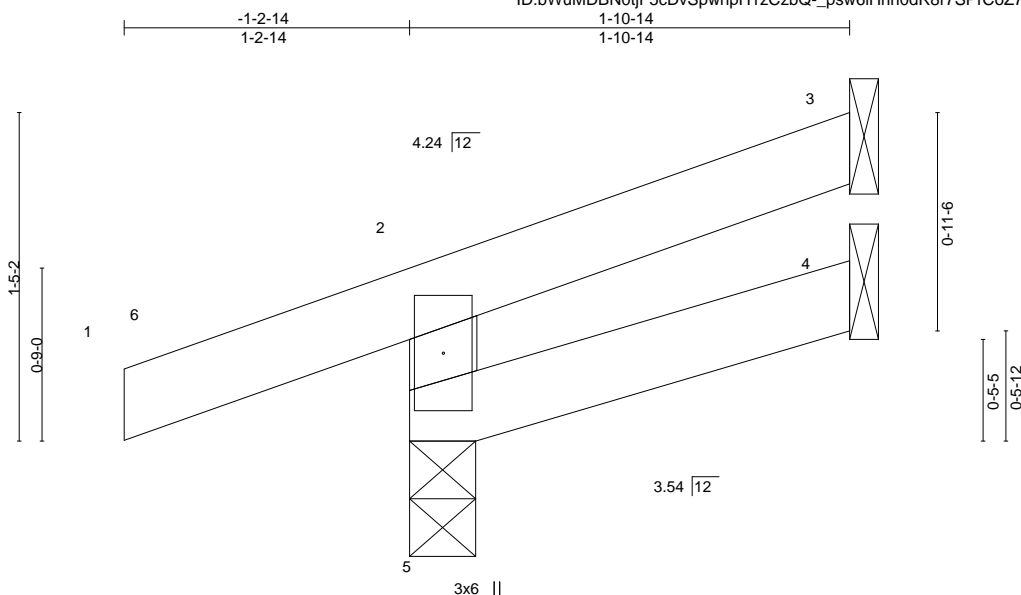
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059564
400675	J4	Jack-Open Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:08 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-_psw6iHh0dR8rSPrCoZ7A3BBE_znIZI_q5yuyXTev



Scale = 1:10.0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	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 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-7, 3=Mechanical, 4=Mechanical
Max Horz 5=51(LC 7)
Max Uplift 5=119(LC 6), 3=-15(LC 12)
Max Grav 5=60(LC 1), 3=27(LC 1), 4=25(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=119.
- This truss 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) 5 lb down and 2 lb up at -1-2-14, and 5 lb down and 2 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-8(F=-4, B=-4)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-6=(F=32, B=32), 6=0(F=35, B=35)-to-2=-19(F=26, B=26), 2=-19(F=26, B=26)-to-3=-50(F=10, B=10), 5=-5(F=7, B=7)-to-4=-14(F=3, B=3)



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059565
400675	LAY1	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

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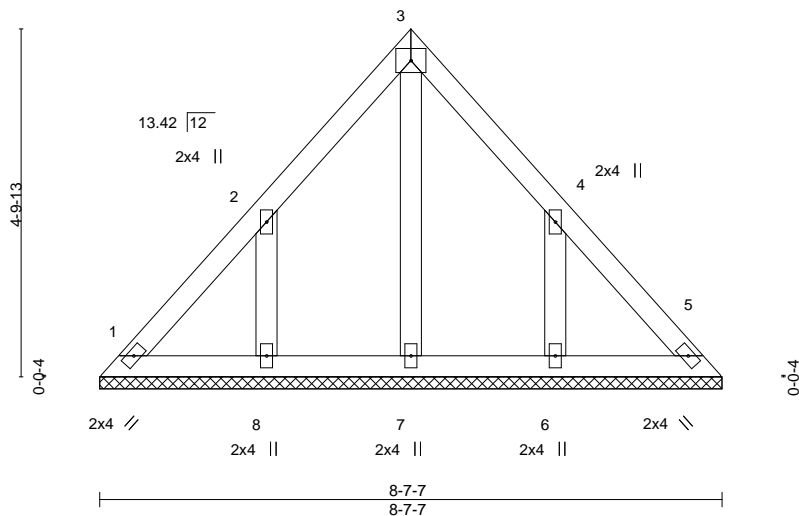
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Job Reference (optional)

4-3-12 4-3-12 8-7-7 4-3-12

4x5 =

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 0.07	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 33 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 8-7-7.
(lb) - Max Horz 1=120(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=169(LC 8), 6=169(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=253(LC 15), 6=253(LC 16)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=169, 6=169.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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16023 Swingley Ridge Rd
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ID:bWuMDBN0tiF5cDvSpwhpH1zCzbQ-S?QIK2IJSJllm?iezYi16KiBFpzbjCPiWeZeUKvXTeu

-3-1-7	-2-7-11	-0-7-11	1-4-5	1-8-2	3-4-5	5-4-5	6-9-1
0-5-12	2-0-0	0-7-11	1-4-5	0-3-13	1-8-3	2-0-0	1-4-12

Scale = 1:42.1

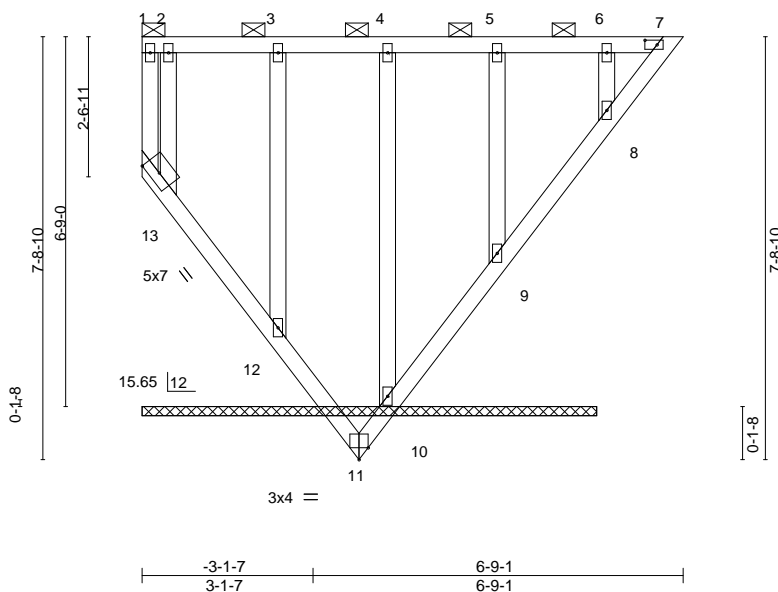


Plate Offsets (X,Y)-- [7:0-2-11,0-1-0], [11:Edge,0-2-10]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 54 lb	FT = 10%

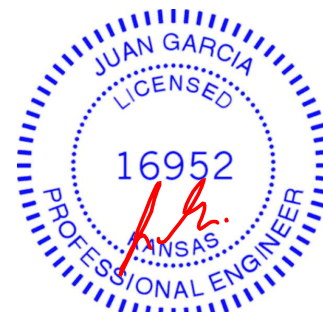
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	2-0-0 oc purlins: 1-7, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SPF No.2		
OTHERS	2x4 SPF No.2		

REACTIONS. All bearings 8-3-9.
(lb) - Max Horz 13=28(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 13, 11, 10 except 9=115(LC 5), 12=118(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 13, 11, 10 except 9=369(LC 1), 12=352(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-13=-311/170
 WEBS 5-9=-253/109, 3-12=-274/129, 2-13=-184/317

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

- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 11, 10 except (jt=lb) 9=115, 12=118.
- 7) Non Standard bearing condition. Review required.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 13, 11, 10, 9, 12.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400675	Truss LAY3	Truss Type GABLE	Qty 1	Ply 1	Lot 19 HT Job Reference (optional)	I43059567
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Wheeler Lumber, Waverly, KS 66871

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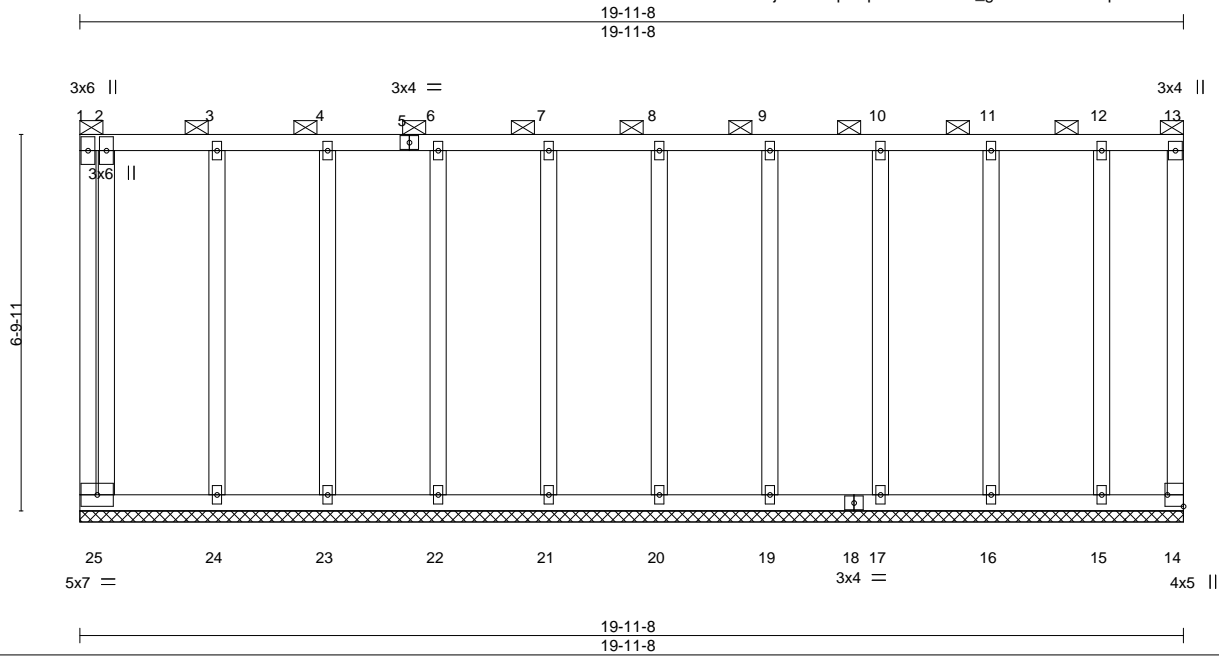


Plate Offsets (X,Y)-- [14:Edge,0-3-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	n/a - n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a - n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	-0.00 14	n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 131 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-13, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 19-11-8.
(lb) - Max Horz 25=-249(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 22, 21, 20, 19, 17, 16 except 25=-338(LC 4), 14=-244(LC 5),
24=-429(LC 5), 23=-126(LC 4), 15=-293(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 14, 23, 22, 21, 20, 19, 17, 16 except 25=322(LC 7), 24=424(LC 15), 15=299(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-25=-942/934
WEBS 2-25=-1127/1172, 3-24=-281/340

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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 21, 20, 19, 17, 16 except (jt=lb) 25=338, 14=244, 24=429, 23=126, 15=293.
- This truss 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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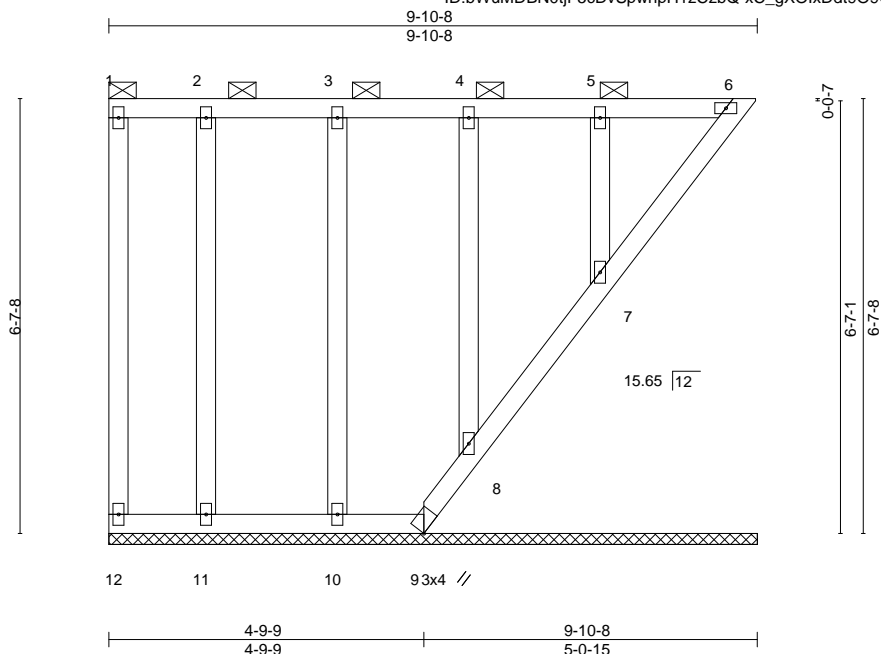
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059568
400675	LAY4	GABLE	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:35.1

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)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 55 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 2-0-0 oc purlins (6-0-0 max.): 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 6-7.

REACTIONS.

All bearings 9-10-8.
(lb) - Max Horz 12=-180(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 12, 11, 10, 8, 7 except 6=-103(LC 5), 9=-112(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 12, 6, 9, 11, 10, 8, 7

FORCES.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 11, 10, 8, 7 except (jt=lb) 6=103, 9=112.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 8, 7.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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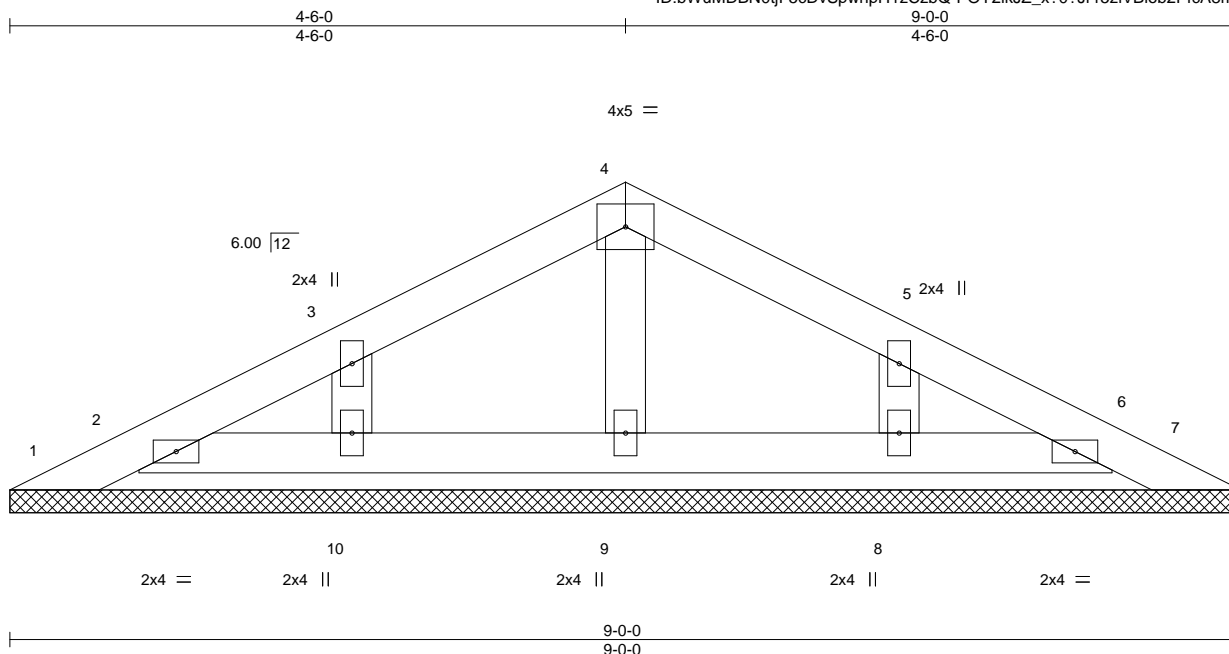


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059569
400675	P1	Piggyback	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:11 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-POY2lkJZ_x?0?Jr15zIvB1ob2PfcA8m?_y2IZDyXTes



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 23 lb	FT = 10%

LUMBER-

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

BRACING-

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

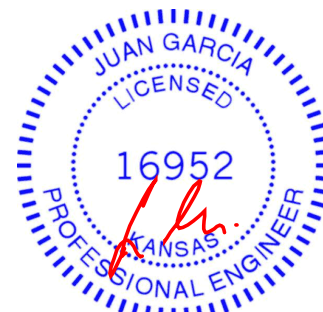
REACTIONS.

All bearings 9-0-0.
(lb) - Max Horz 1=37(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 10, 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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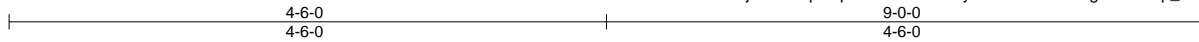


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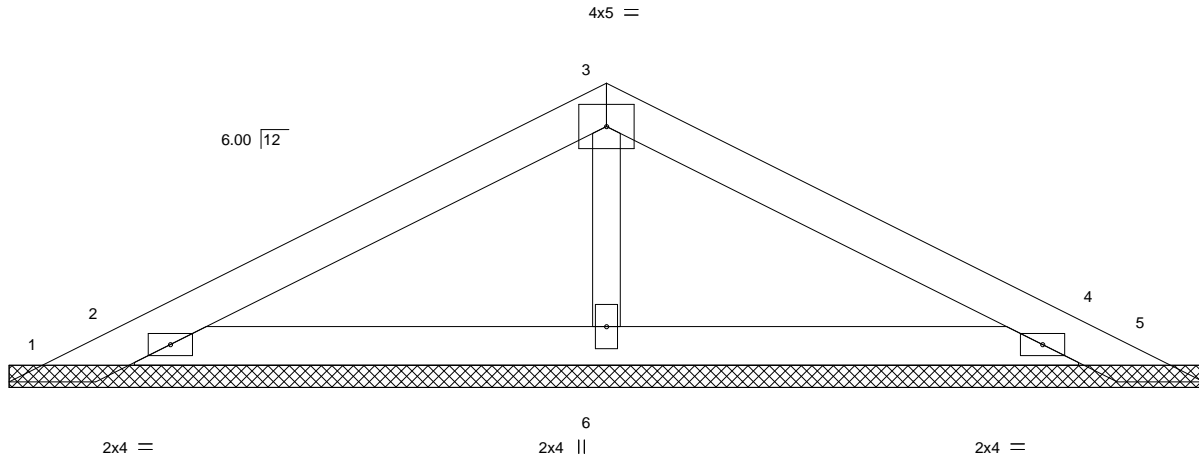
Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059570
400675	P2	Piggyback	22	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:12 2020 Page 1
ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-ta6Ry4KBIE7sdTQDegGkkzKkp_Yvbn9CcoJ5fyXTer



Scale = 1:17.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00				
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.

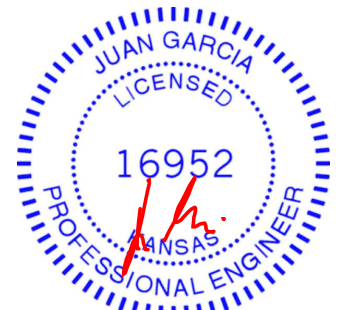
REACTIONS.

All bearings 9-0-0.
(lb) - Max Horz 1=37(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-126(LC 1), 5=-126(LC 1), 2=-157(LC 8), 4=-148(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=371(LC 1), 4=371(LC 1), 6=264(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 126 lb uplift at joint 1, 126 lb uplift at joint 5, 157 lb uplift at joint 2 and 148 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Job	Truss	Truss Type	Qty	Ply	Lot 19 HT
400675	R1	Common Girder	1	2	I43059571
					Job Reference (optional)

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LmgpAPLqWYFjFd?PCOozGAtsWCCFexKIRGXsd6yXTeq

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 1=-874(F) 15=-817(F) 16=-817(F) 17=-817(F) 18=-869(F) 19=-869(F) 20=-869(F) 21=-854(F) 22=-854(F) 23=-854(F)

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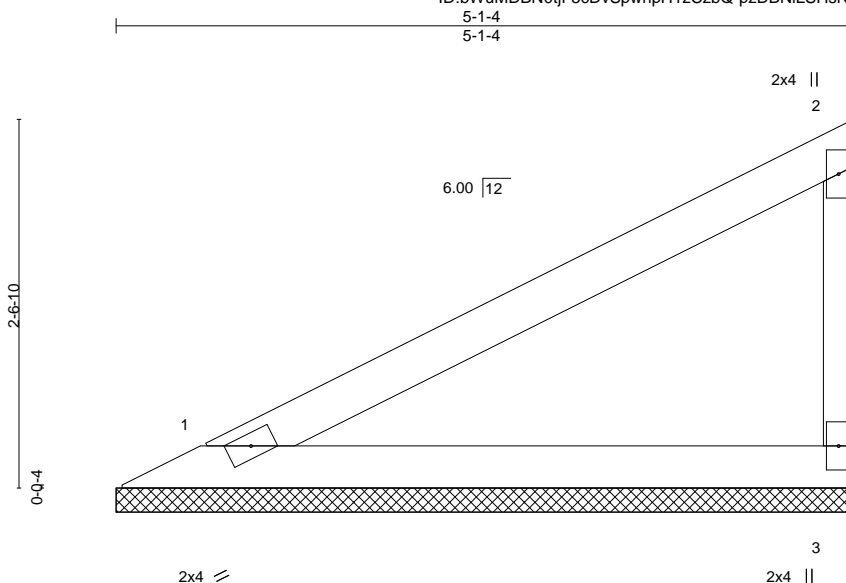
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059572
400675	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-pzDBNLSHsNasmacm5JCpOQ1McedNVnRgWHPAYyXTep



Scale: 3/4\"=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 0.36	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-1-4, 3=5-1-4
Max Horz 1=91(LC 5)
Max Uplift 1=-25(LC 8), 3=-48(LC 8)
Max Grav 1=197(LC 1), 3=197(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 25 lb uplift at joint 1 and 48 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059573
400675	V2	Valley	2	1	Job Reference (optional)	

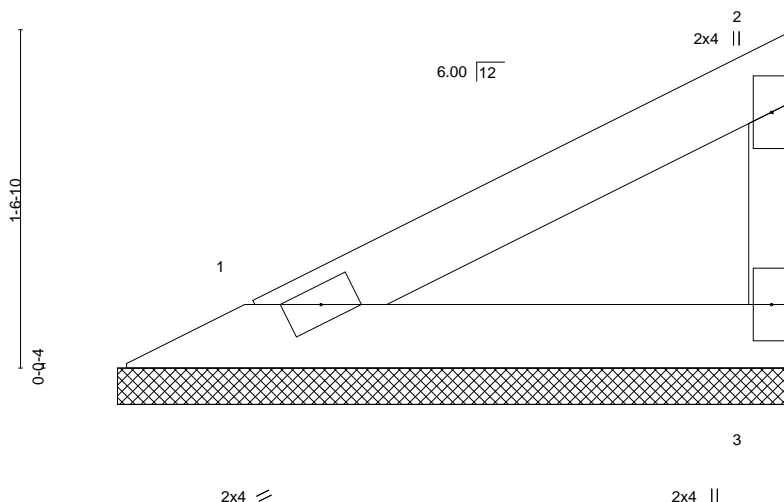
Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ILLxoRNioTdI64k_tWLGupVQ?QNLrPHk7EmWERYXTen

3-1-4
3-1-4

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 0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=3-1-4, 3=3-1-4
Max Horz 1=50(LC 5)
Max Uplift 1=-14(LC 8), 3=-26(LC 8)
Max Grav 1=107(LC 1), 3=107(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 14 lb uplift at joint 1 and 26 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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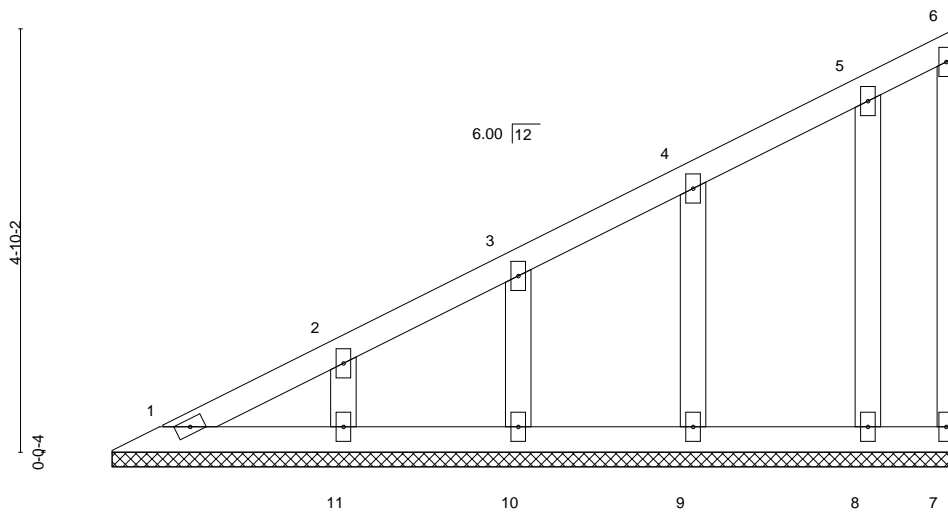
Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059574
400675	V3	GABLE	1	1		
Job Reference (optional)						

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ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-DYvJ?nOKZnm9JEJBREsvR01bWqixasAuMuV4ntyXTem

9-8-4
9-8-4



Scale = 1:26.4

LOADING (psf)	SPACING-	1-5-4	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 36 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 9-7-12.
(lb) - Max Horz 1=134(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 7, 11, 10, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 10, 9, 8

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 11, 10, 9, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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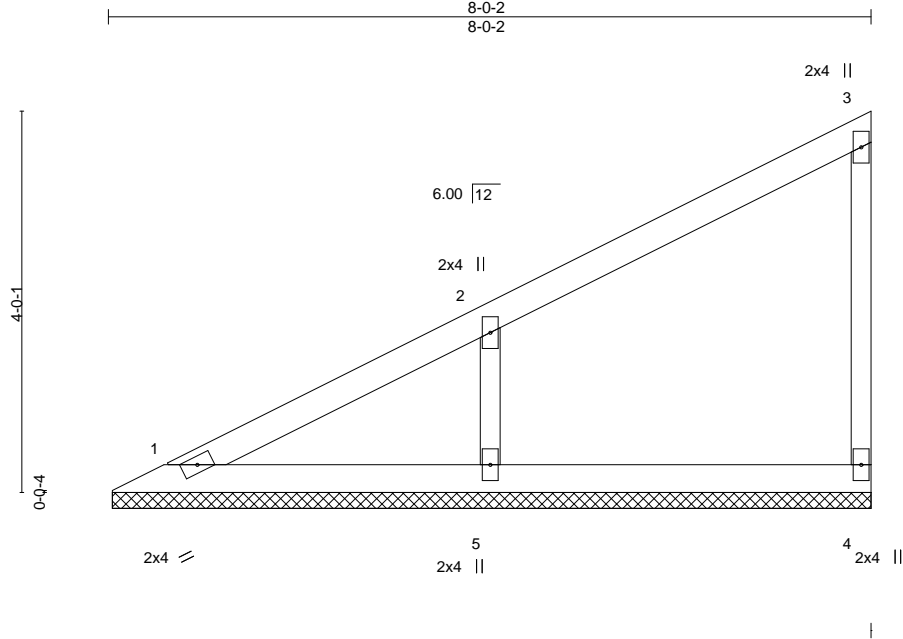
16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059575
400675	V4	Valley	1	1	Job Reference (optional)	

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ID: bWuMDBN0tjF5cDvSpwphH1zCzbQ-DYvJ?nOKZnm9jEJBREsvR01ZrqhdasbuMuV4ntyXTem



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 0.22	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 0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 22 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-11-10, 4=7-11-10, 5=7-11-10
Max Horz 1=152(LC 5)
Max Uplift 4=-26(LC 5), 5=-123(LC 8)
Max Grav 1=115(LC 16), 4=137(LC 1), 5=411(LC 1)

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

WEBS 2-5=-319/178

NOTES-

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



October 2,2020

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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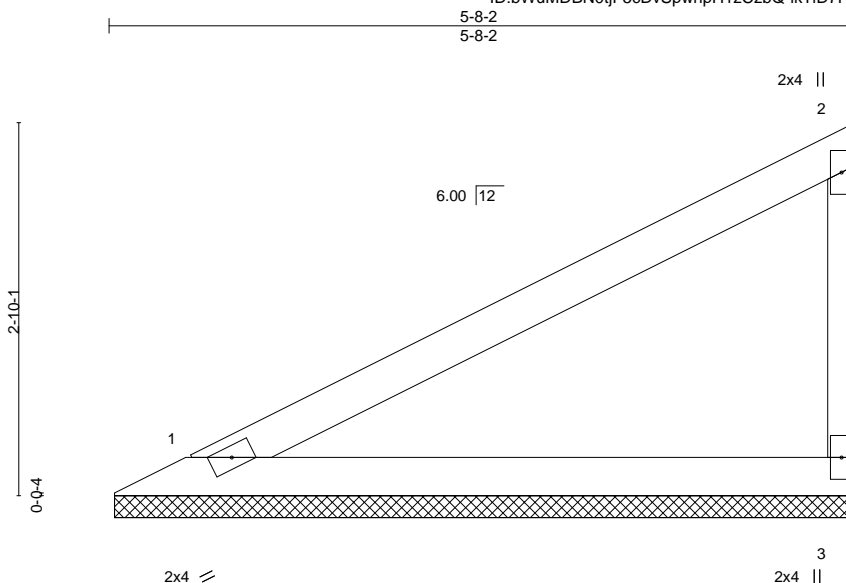
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059576
400675	V5	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:18 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ikTiD7PyK4u0LOuN?xN8zEagcD?eJjN1bYFdJJyXTel



Scale = 1:17.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=5-7-10, 3=5-7-10
Max Horz 1=103(LC 7)
Max Uplift 1=-29(LC 8), 3=-55(LC 8)
Max Grav 1=222(LC 1), 3=222(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.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job Reference (optional)

16023 Swingley Ridge Rd
Chesterfield, MO 63017

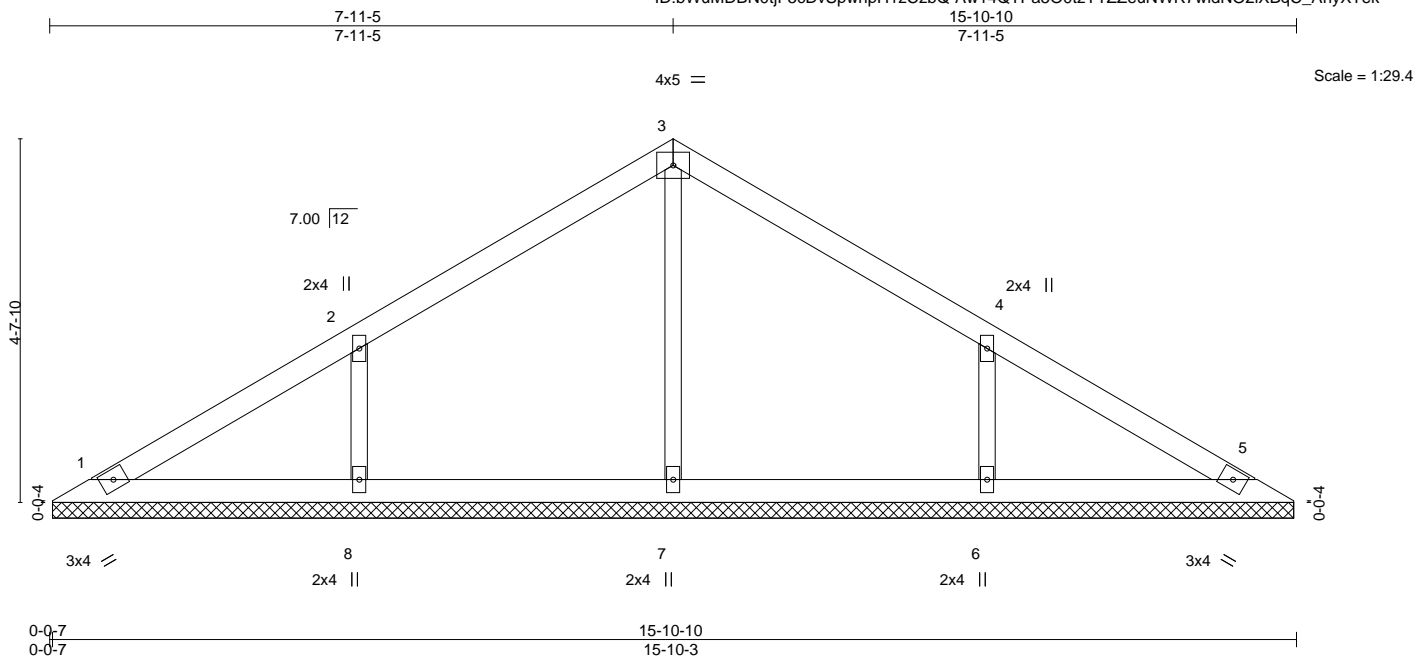
Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059578
400675	V7	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:19 2020 Page 1

ID:bWuMdbN0tjF5cDvSpwphH1zCzbQ-Aw14QTPa5O0tzYTZZeuNWR7wldNO2IXBqC_ArlyXTek

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 0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 44 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 15-9-13.
(lb) - Max Horz 1=-113(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-140(LC 8), 6=-140(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 1), 8=402(LC 15), 6=402(LC 16)

FORCES.

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

WEBS

2-8=-314/184, 4-6=-314/184

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=140, 6=140.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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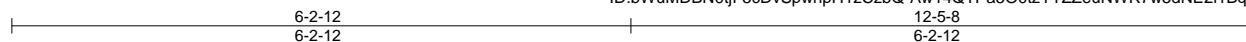
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059579
400675	V8	Valley	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

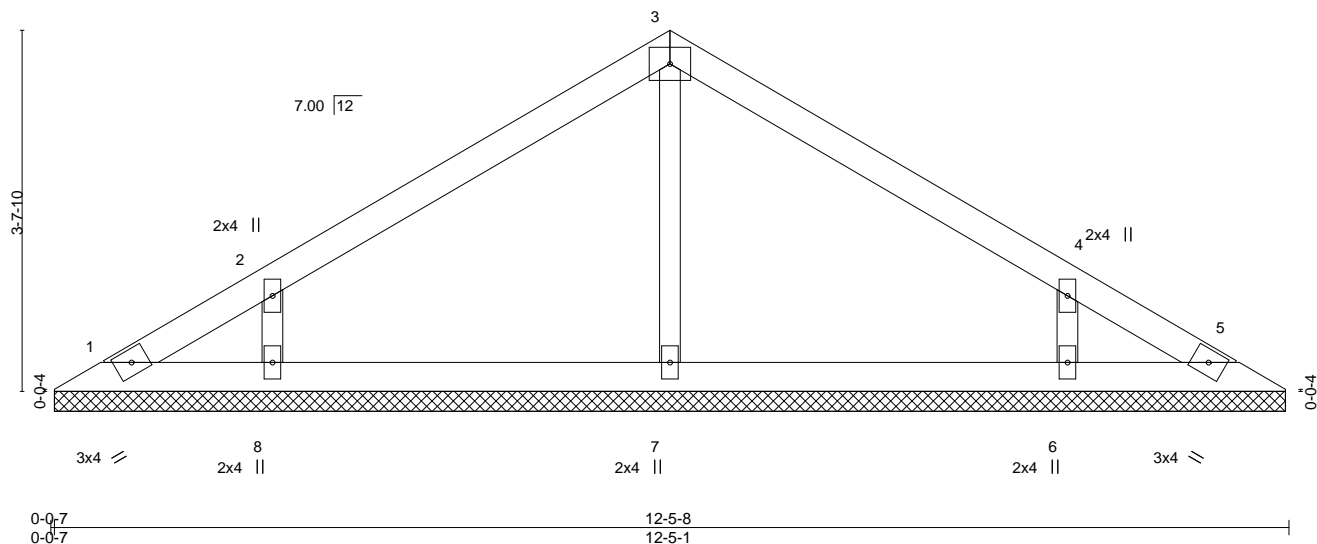
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:19 2020 Page 1

ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-Aw14QTPa5O0tzYTZZeuNWR7w5dNE2l1BqC_ArlyXTek



4x5 =

Scale = 1:23.2



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 0.17	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 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 33 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 12-4-10.
(lb) - Max Horz 1=87(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=122(LC 8), 6=122(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=300(LC 1), 8=338(LC 15), 6=337(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-276/165, 4-6=-275/164

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=122, 6=122.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059580
400675	V9	Valley	1	1	Job Reference (optional)	

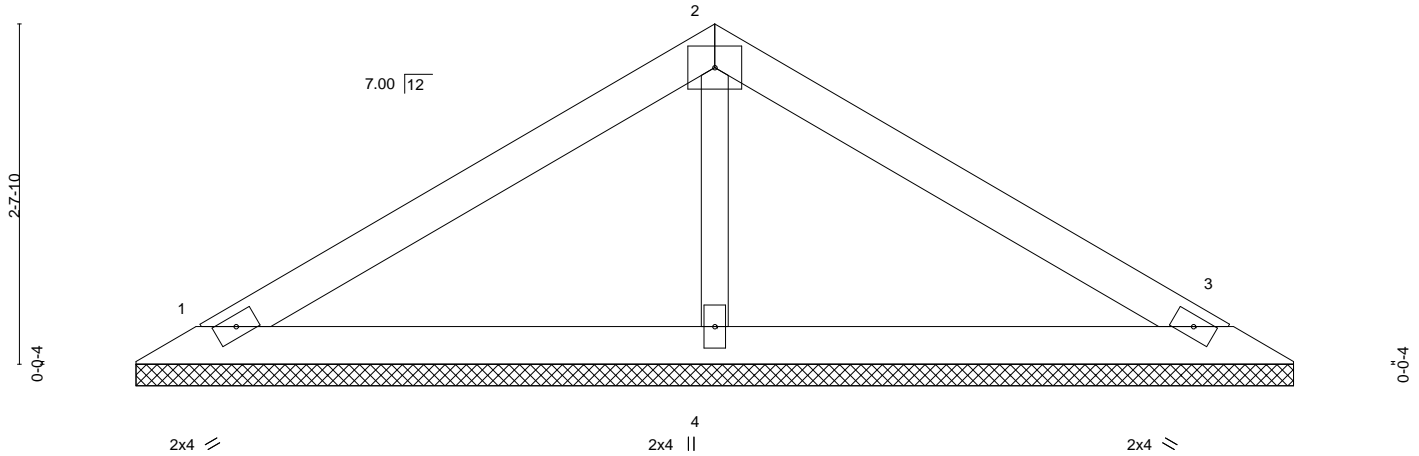
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:20 2020 Page 1
ID:BWuMdBNOtjF5cDvSpwhpH1zCzbQ-e7bSepQDsi8kah1I6MQc2ff3s1i_nDYK2skkNCyXTej



4x5 =

Scale = 1:17.8



0-0-7			9-0-6							
0-0-7			8-11-15							
LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15	TC 0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *		Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-P						Weight: 22 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.

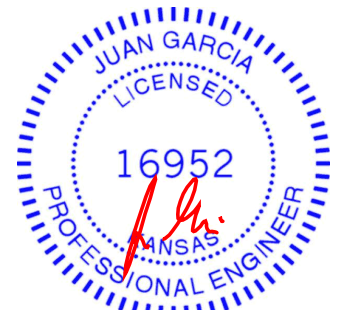
REACTIONS.

(size) 1=8-11-8, 3=8-11-8, 4=8-11-8
Max Horz 1=61(LC 5)
Max Uplift 1=-44(LC 8), 3=-51(LC 9)
Max Grav 1=194(LC 1), 3=194(LC 1), 4=328(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.



October 2,2020

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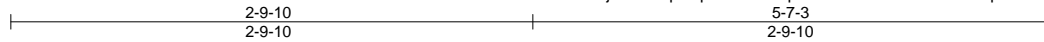
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059581
400675	V10	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

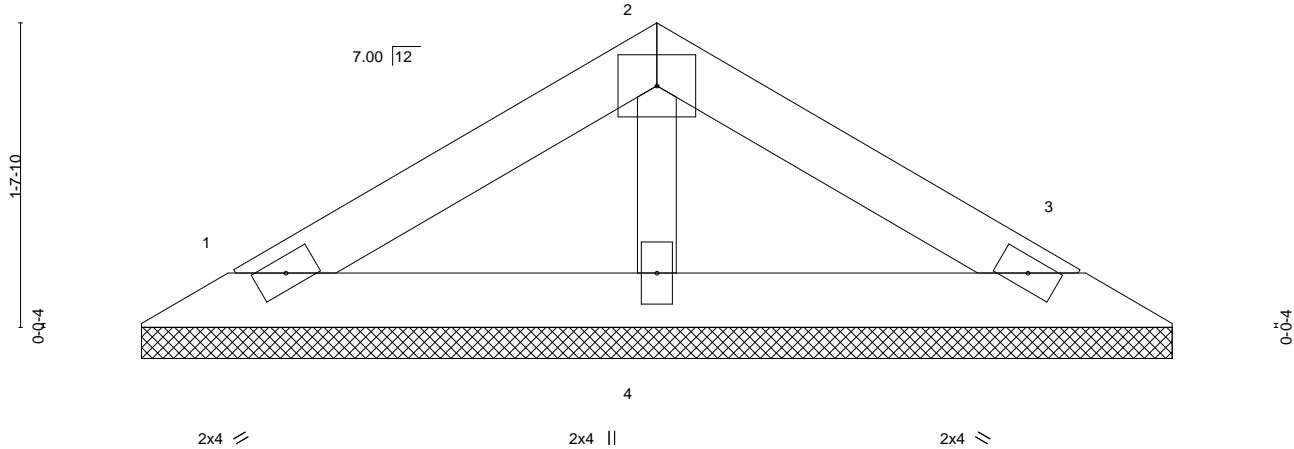
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:14 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-pzDBNLSHsNasmcm5JCpOQ5ech_NVQRgwhPAYyXTep



4x5 =

Scale = 1:12.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-6-6, 3=5-6-6, 4=5-6-6
Max Horz 1=34(LC 5)
Max Uplift 1=-25(LC 8), 3=-29(LC 9)
Max Grav 1=110(LC 1), 3=110(LC 1), 4=186(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 25 lb uplift at joint 1 and 29 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2, 2020

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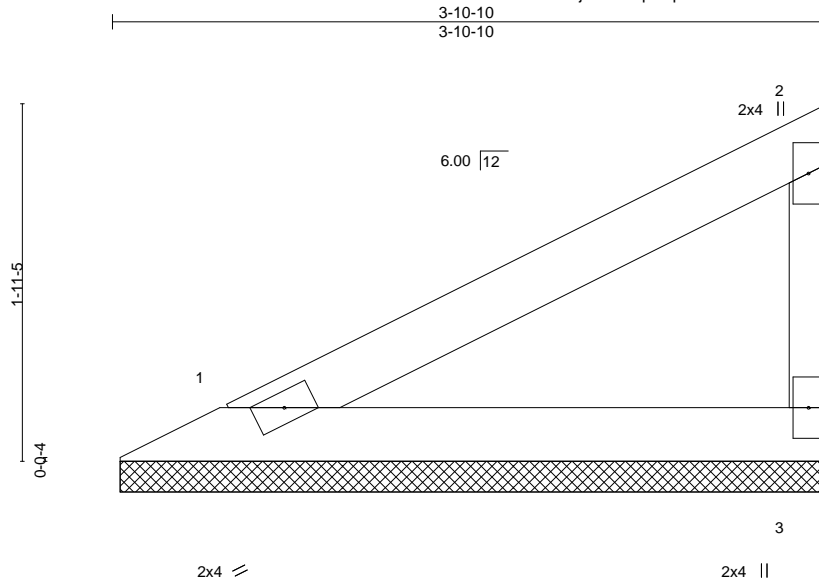
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059582
400675	V11	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:15 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-H9nZa5M419VRUw9oKpqRLbyFz00P6y1bva0zi_yXTeo



Scale = 1:12.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=3-10-2, 3=3-10-2
Max Horz 1=66(LC 5)
Max Uplift 1=-18(LC 8), 3=-35(LC 8)
Max Grav 1=142(LC 1), 3=142(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 18 lb uplift at joint 1 and 35 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2, 2020

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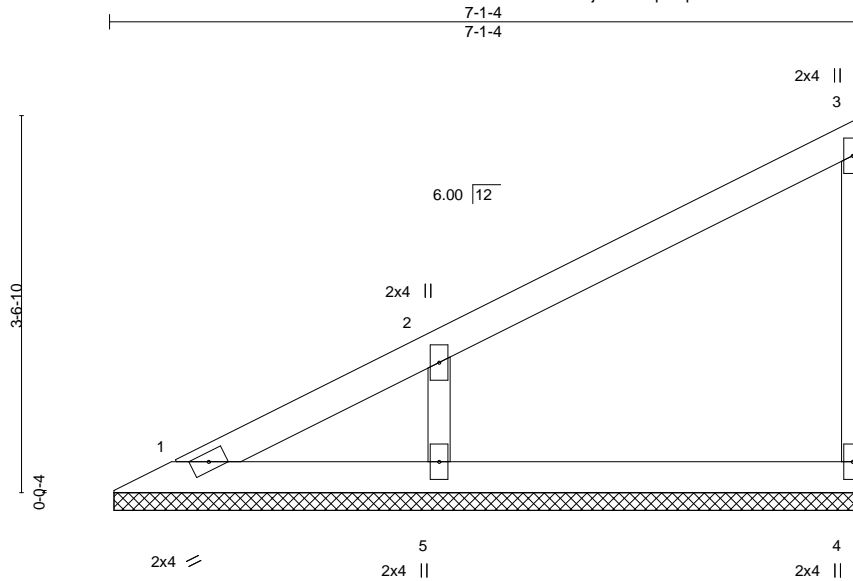
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059583
400675	V12	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:15 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-H9nZa5M419VRUw9oKpqRLbyFp00L6yDbva0zi_yXTeo



Scale = 1:21.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 20 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-0-12, 4=7-0-12, 5=7-0-12
Max Horz 1=133(LC 5)
Max Uplift 4=-27(LC 8), 5=-112(LC 8)
Max Grav 1=75(LC 16), 4=142(LC 1), 5=373(LC 1)

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

WEBS 2-5=-290/162

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 27 lb uplift at joint 4 and 112 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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

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



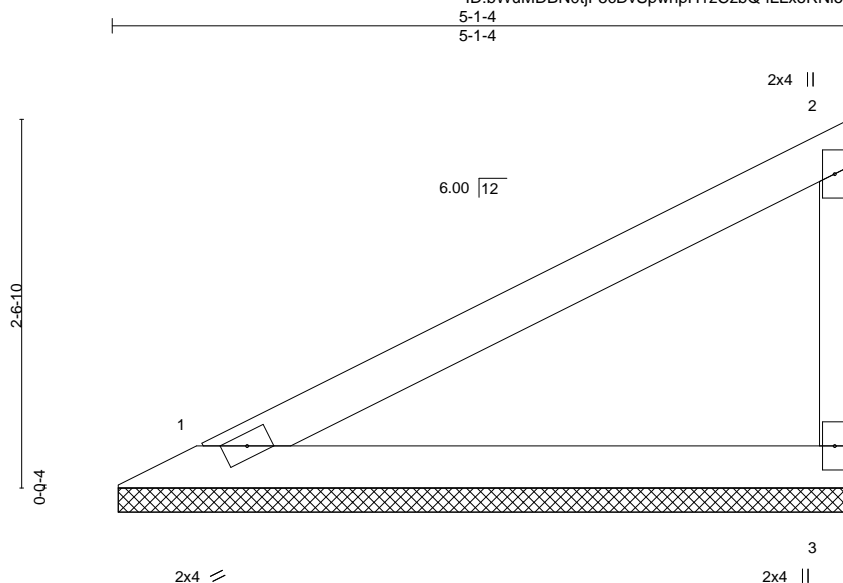
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	I43059584
400675	V13	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-ILLxoRNioTdl64k_tWlgupVMsQK5rPHk7EmWERYXTen



Scale: 3/4"=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 0.36	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

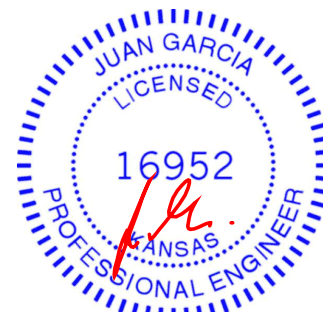
TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-0-12, 3=5-0-12
Max Horz 1=91(LC 5)
Max Uplift 1=-25(LC 8), 3=-48(LC 8)
Max Grav 1=197(LC 1), 3=197(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 25 lb uplift at joint 1 and 48 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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

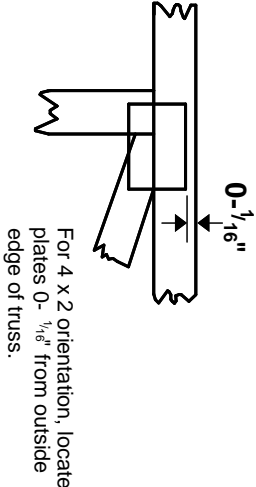
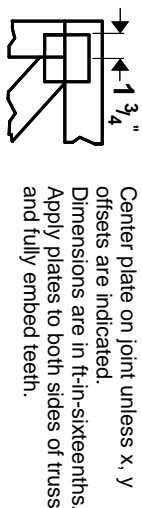
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



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Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

PLATE SIZE

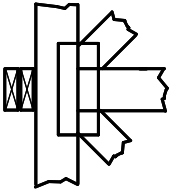
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

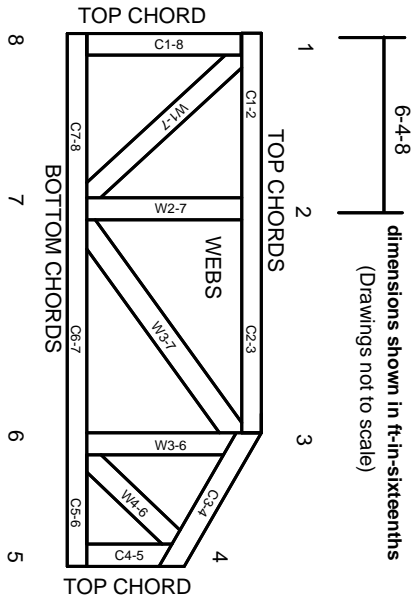
BEARING



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

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:
ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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Mitek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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