

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	143059520	A1	10/2/2020	27	143059546	E3	10/2/2020
2	143059521	A2	10/2/2020	28	143059547	E4	10/2/2020
3	143059522	A3	10/2/2020	29	143059548	E5	10/2/2020
4	143059523	A4	10/2/2020	30	143059549	G1	10/2/2020
5	143059524	B1	10/2/2020	31	143059550	G2	10/2/2020
6	143059525	B2	10/2/2020	32	I43059551	G3	10/2/2020
7	143059526	B3	10/2/2020	33	143059552	G4	10/2/2020
8	143059527	B4	10/2/2020	34	143059553	G5	10/2/2020
9	143059528	B5	10/2/2020	35	143059554	G6	10/2/2020
10	143059529	B6	10/2/2020	36	143059555	G7	10/2/2020
11	143059530	B7	10/2/2020	37	143059556	G8	10/2/2020
12	143059531	C4	10/2/2020	38	143059557	G9	10/2/2020
13	143059532	C5	10/2/2020	39	143059558	G10	10/2/2020
14	143059533	C6	10/2/2020	40	143059559	H1	10/2/2020
15	143059534	C7	10/2/2020	41	143059560	H2	10/2/2020
16	143059535	C8	10/2/2020	42	143059561	J1	10/2/2020
17	143059536	C9	10/2/2020	43	143059562	J2	10/2/2020
18	143059537	C10	10/2/2020	44	143059563	J3	10/2/2020
19	143059538	D1	10/2/2020	45	143059564	J4	10/2/2020
20	143059539	D2	10/2/2020	46	143059565	LAY1	10/2/2020
21	143059540	D3	10/2/2020	47	143059566	LAY2	10/2/2020
22	143059541	D4	10/2/2020	48	143059567	LAY3	10/2/2020
23	143059542	D5	10/2/2020	49	143059568	LAY4	10/2/2020
24	143059543	D6	10/2/2020	50	143059569	P1	10/2/2020
25	143059544	E1	10/2/2020	51	143059570	P2	10/2/2020
26	143059545	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.



1 of 2



RE: 400675 - Lot 19 HT

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

Site Information:

Project Name:

Project Customer: Lot/Block: Address: Subdivision:

City, County: State:

No.	Seal#	Truss Name	Date
53	143059572	V1	10/2/2020
54	143059573	V2	10/2/2020
55	143059574	V3	10/2/2020
56	143059575	V4	10/2/2020
57	143059576	V5	10/2/2020
58	143059577	V6	10/2/2020
59	143059578	V7	10/2/2020
60	143059579	V8	10/2/2020
61	143059580	V9	10/2/2020
62	143059581	V10	10/2/2020
63	143059582	V11	10/2/2020
64	143059583	V12	10/2/2020
65	143059584	V13	10/2/2020



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

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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	143059520	A1	10/2/2020	27	143059546	E3	10/2/2020
2	I43059521	A2	10/2/2020	28	143059547	E4	10/2/2020
3	143059522	A3	10/2/2020	29	143059548	E5	10/2/2020
4	143059523	A4	10/2/2020	30	143059549	G1	10/2/2020
5	143059524	B1	10/2/2020	31	143059550	G2	10/2/2020
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7	143059526	B3	10/2/2020	33	143059552	G4	10/2/2020
8	143059527	B4	10/2/2020	34	I43059553	G5	10/2/2020
9	143059528	B5	10/2/2020	35	143059554	G6	10/2/2020
10	143059529	B6	10/2/2020	36	143059555	G7	10/2/2020
11	143059530	B7	10/2/2020	37	143059556	G8	10/2/2020
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24	143059543	D6	10/2/2020	50	143059569	P1	10/2/2020
25	143059544	E1	10/2/2020	51	143059570	P2	10/2/2020
26	143059545	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 Missouri is December 31, 2020.

Missouri COA: 001193

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



October 02, 2020



RE: 400675 - Lot 19 HT

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

Site Information:

Project Name:

Project Customer: Lot/Block: Address: Subdivision:

City, County: State:

No.	Seal#	Truss Name	Date
53	143059572	V1	10/2/2020
54	143059573	V2	10/2/2020
55	143059574	V3	10/2/2020
56	143059575	V4	10/2/2020
57	143059576	V5	10/2/2020
58	143059577	V6	10/2/2020
59	143059578	V7	10/2/2020
60	143059579	V8	10/2/2020
61	143059580	V9	10/2/2020
62	143059581	V10	10/2/2020
63	143059582	V11	10/2/2020
64	143059583	V12	10/2/2020
65	143059584	V13	10/2/2020

Job Truss Truss Type Qty Ply Lot 19 HT 143059520 400675 A1 Hip Girder | **Z** | Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:25 2020 Page 1 Wheeler Lumber, Waverly, KS 6687 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-lXmf5?mjpoCXUEKBOJwjK2ucDsskOKnEPovJyuyXTfa -0-10-8 0-10-8 12-2-12 13-8-0 15-7-8 3-5-4 1-5-4

4-4-12

1-5-4

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

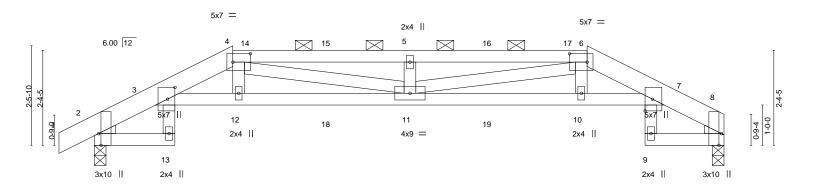
2-0-0 oc purlins (6-0-0 max.): 4-6.

Rigid ceiling directly applied or 6-0-0 oc bracing.

1-11-8

4-4-12

Scale = 1:28.6



	2-0-0 3-5-4	1	7-10-0		1		12-2-12	2		13-8-0	15-7	7-8
	2-0-0 1-5-4		4-4-12		1		4-4-12			1-5-4	1-11	I-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,Edg	e]					
LOADING (psf)	SPACING-	2-0-0	CSI.		EFL.	in	(loc)	I/defI	L/d	PLAT	ES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.52	\ \ \	/ert(LL)	-0.11	11	>999	360	MT20		197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.48	v	/ert(CT)	-0.21	11	>887	240			
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.12	+	lorz(CT)	0.16	8	n/a	n/a			
BCDL 10.0	Code IRC2018/T	PI2014	Matrix-S	v	Vind(LL)	0.11	11	>999	240	Weigl	nt: 119 lb	FT = 10%
					. ,							

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except* 4-6: 2x4 SPF No.2

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

2-0-0

WEBS WEDGE

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

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 WFBS 4-12=0/284, 4-11=-296/977, 5-11=-335/164, 6-11=-297/986, 6-10=0/283

NOTES-

1) 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.

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

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

- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=228, 8=204
- 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.

MIS **GARCIA** NUMBER -2000162101 ONALE 16952 ANSAS ONALEN October 2,2020 October 2,2020

Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	
400675	A1	Hip Girder	1	_	14;	3059520
400075	A1	Inip Gildei	'	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 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 11-10-0, and 154 lb down and 49 lb up at 11-10-0, and 154 lb down and 49 lb up at 11-10-0, and 154 lb down and 49 lb up at 11-10-0, and 154 lb down and 106 lb up at 11-10-0, and 154 lb up at 11-10-0, 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)



Job Truss Truss Type Qty Lot 19 HT 143059521 Hip 400675 A2 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:26 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-DkK2lLmLa6KO6OvNy0SysGQl1GAW7nhNeSetUKyXTfZ

10-2-4

4-9-8

Scale = 1:27.1

15-7-0

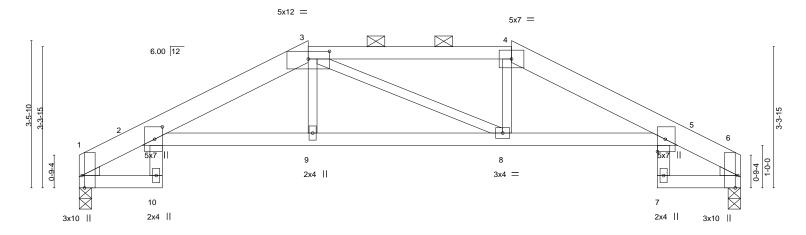
1-11-8

13-7-8

Structural wood sheathing directly applied or 4-6-8 oc purlins, except

2-0-0 oc purlins (5-0-0 max.): 3-4.

Rigid ceiling directly applied or 6-0-0 oc bracing.



	1-1	1-8	3-5-4			4-9-8			1	3-5-4		1-11-8
Plate Offs	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	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.10	2-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.19	2-9	>971	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.25	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.07	10	>999	240	Weight: 56 lb	FT = 10%
						` ′						

BRACING-

TOP CHORD

BOT CHORD

10-2-4

LUMBER-

2x6 SPF No.2 *Except* TOP CHORD 3-4: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 2x3 SPF No.2 *Except*

1-11-8

WEBS 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)

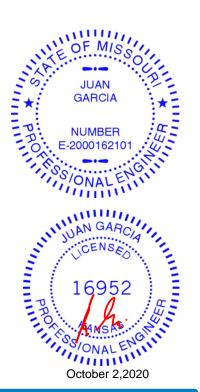
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

5-4-12

3-5-4

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

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



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



Job Truss Truss Type Qty Lot 19 HT 143059522 400675 **A3** Hip Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:26 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-DkK2lLmLa6KO6OvNy0SysGQkDG927nFNeSetUKyXTfZ 8-2-4 0-9-8 15-7-0 1-11-8 5-5-4 5-5-4 1-11-8 Scale = 1:27.9 6x8 = 6x8 = 6.00 12 9 8 9 0-9-4 0-9-4 = 3x4 2x4 10 72x4 || 3x10 || 2x4 Ш 3x10 || 1-11-8 Plate Offsets (X,Y)--[1:0-3-8,Edge], [2:0-4-0,0-5-7], [5:0-3-8,0-2-3], [6:0-3-8,Edge] GRIP LOADING (psf) SPACING-DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.76 Vert(LL) -0.17 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.60 Vert(CT) -0.32 >571 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.11 Horz(CT) 0.33 6 n/a n/a

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.12

>999

6-0-0 oc bracing: 1-10.

7

240

2-0-0 oc purlins (5-1-1 max.): 3-4.

Structural wood sheathing directly applied or 3-11-6 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

Weight: 59 lb

FT = 10%

LUMBER-

BCDL

2x6 SPF No.2 *Except* TOP CHORD

10.0

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. 1=0-3-8, 6=0-3-8 (size)

Max Horz 1=71(LC 12)

Max Uplift 1=-76(LC 8), 6=-76(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=-441/91, 2-3=-1097/96, 3-4=-983/132, 4-5=-1104/105, 5-6=-390/68

Code IRC2018/TPI2014

BOT CHORD 2-9=-49/975, 8-9=-21/983, 5-8=-22/979

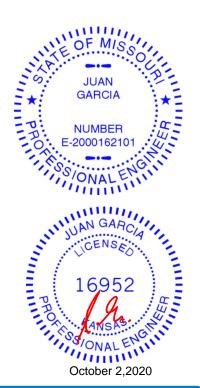
WFBS 3-9=-106/311

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60

Matrix-S

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





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



Job Truss Truss Type Qty Lot 19 HT 143059523 400675 A4 Roof Special Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:27 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-hwuQWhnzLPSFjYUaWjzBPTzvPgVVsDbXs6OQ0myXTfY 15-7-0 1-11-8 5-10-0 5-10-0 1-11-8 Scale = 1:28.7 6x8 = 3 6.00 12 7 1-0-0 0-9-4 2x4 || 8 6 2x4 || 2x4 || 3x10 || 3x10 - 11 13-7-8 1-11-8 5-10-0 5-10-0 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] SPACING-GRIP LOADING (psf) CSI. DEFL. (loc) I/defI L/d **PLATES 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 Code IRC2018/TPI2014 Wind(LL) FT = 10% BCDL 10.0 Matrix-S 2-7 >999 240 Weight: 56 lb 0.13 LUMBER-**BRACING-**TOP CHORD TOP CHORD 2x6 SPF No.2 Structural wood sheathing directly applied or 4-2-11 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

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)

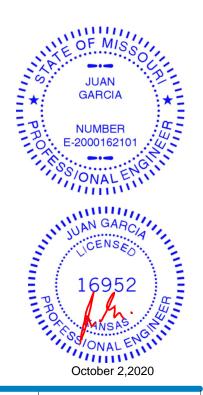
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-441/97, 2-3=-1093/103, 3-4=-1093/131, 4-5=-441/72

2-7=-46/972, 4-7=-46/972 **BOT CHORD**

3-7=0/319 **WEBS**

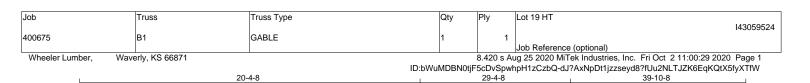
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber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





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





9-0-0

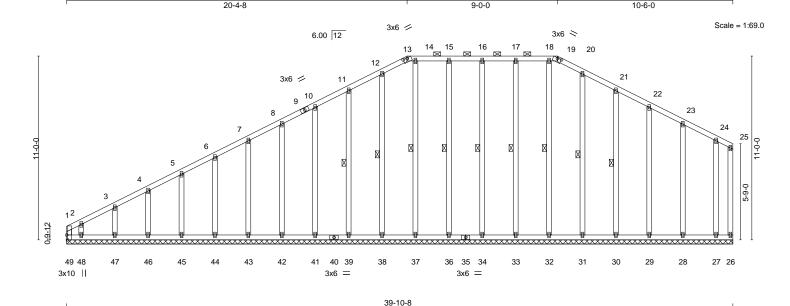


Plate Offsets (X,Y)--[13:0-3-0,0-0-7], [19:0-3-0,0-0-7], [49:0-3-8,Edge] SPACING-GRIP LOADING (psf) DEFL. in (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.13 Vert(LL) 999 MT20 197/144 n/a n/a **TCDL** 10.0 Lumber DOL 1.15 BC 0.10 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES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

LUMBER-**BRACING-**

20-4-8

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

TOP CHORD **BOT CHORD**

WEBS

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

1 Row at midpt

11-39, 12-38, 14-37, 15-36, 16-34, 17-33, 18-32, 20-31, 21-30

REACTIONS. All bearings 39-10-8.

(lb) -Max Horz 49=294(LC 5)

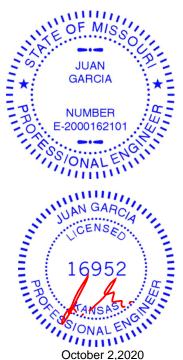
Max Uplift All uplift 100 lb or less at joint(s) 26, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 except 49=-133(LC 6), 48=-263(LC 8)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60
- 3) 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.
- 4) Provide adequate drainage to prevent water ponding
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) 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.
- 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.



October 2,2020



Job Truss Truss Type Qty Lot 19 HT 143059525 400675 B2 PIGGYBACK BASE GIRDE | **Z** | Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:31 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ah7xL2qTPezhC9oLlZ17ZJ8eGHpyovj6nkMe9XyXTfU 16-8-5 42-0-0 27-5-0 31-6-0 1-5-4 Scale = 1:81.1 2x4 || 5x7 5x7 = 3x4 =9 8 11 10 2x4 || 3x4 < 3x6 / 12 6 4x5 > 13 3x4 / 5 9x12 M18SHS = 6.00 12 6x12 / 2-9-0 1-5-10, 0-9-0 0-7-0 19 ²² 21 24 20 23 27 26 28 15 18 17 16 14 5x7 = 4x9 =25 3x4 || 5x12 = 3x6 =2x4 | 5x7 = 8x8 7x12 _ 5.00 12 3x6 =1-8-6 3-5-4 1-8-6 1-8-14 22-6-0 31-6-0 42-0-0 8-0-0 4-1-0 4-1-0 Plate Offsets (X,Y)--[3:0-10-0,0-2-8], [8:0-5-0,0-2-8], [11:0-5-0,0-2-8], [25:0-2-8,0-2-12] **PLATES** GRIP LOADING (psf) SPACING-DEFL. (loc) I/defl L/d 197/144 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.49 Vert(LL) -0.30 22-23 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.87 Vert(CT) -0.53 22-23 >951 240 M18SHS 197/144 **BCLL** 0.0 Rep Stress Incr NO WB 0.60 Horz(CT) 0.19 14 n/a n/a Code IRC2018/TPI2014 Wind(LL) **BCDL** 10.0 Matrix-S 0.21 22-23 >999 240 Weight: 491 lb FT = 10% LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins, **BOT CHORD** 2x4 SPF No.2 *Except* except end verticals, and 2-0-0 oc purlins (5-5-9 max.): 3-4, 8-11. 21-24: 2x4 SPF 2100F 1.8E **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 2x4 SPF No.2 *Except* **WEBS** 9-19 1 Row at midpt 2-24,13-14: 2x3 SPF No.2 REACTIONS. 25=0-3-8, 14=Mechanical (size) Max Horz 25=304(LC 5) Max Uplift 25=-270(LC 8), 14=-139(LC 9) OF MIS Max Grav 25=2026(LC 26), 14=1992(LC 26) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-4456/718, 3-4=-4770/771, 4-5=-4869/617, 5-7=-3255/404, 7-8=-3243/569, TOP CHORD 8-9=-2039/333, 9-10=-2033/333, 10-11=-1490/232, 11-12=-1730/242, 12-13=-1379/168, **GARCIA** 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 NUMBER **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, E-2000162101 10-17=-955/175, 11-17=-58/519, 12-17=-81/609, 12-16=-1003/134, 2-24=-562/3512, GI 16952

RANSAS

MANSAS

MANSAS ONALEN

13-16=-92/1668

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x3 - 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, 2x3 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify Continuencity of bearing surface



MALEN

October 2,2020

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	
400675	B2	PIGGYBACK BASE GIRDE	1	_		143059525
400073		TIGOT BACK BACE GINDE		2	Job Reference (optional)	

Wheeler Lumber,

Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:31 2020 Page 2 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ah7xL2qTPezhC9oLlZ17ZJ8eGHpyovj6nkMe9XyXTfU

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)

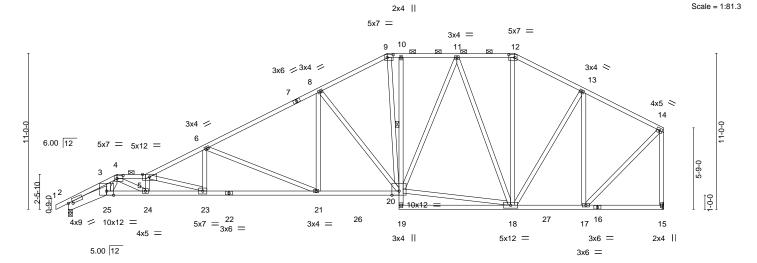
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-8=-70, 8-11=-70, 11-13=-70, 24-25=-20, 19-24=-20, 14-18=-20

Concentrated Loads (lb) Vert: 24=0(F)



Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-2uhJZOr6Ay5YqJNXIHYM6Xgn1h6cXNHG0O5Bi_yXTfT 31-6-0 4-1-0 36-4-8 4-10-7 -0₇10-8 2-8-5 3₇5-4 5-5-4 0-10-8 2-8-5 0-8-15 17-7-9 8-0-1 2-0-0



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

BRACING-

TOP CHORD

BOT CHORD

31-6-0

2-2-0 oc bracing: 23-24. 1 Row at midpt

LUMBER-

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

2-25: 2x8 SP DSS

2-8-5 5-5-4

WEBS 2x4 SPF No.2

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.

9-7-8

2-3=-7433/1150, 3-4=-6232/1031, 4-5=-7712/1058, 5-6=-5074/654, 6-8=-3264/406, TOP CHORD

8-9=-2332/338, 9-10=-2094/335, 10-11=-2089/335, 11-12=-1476/231, 12-13=-1713/241,

17-7-9

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-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.

Bottom chords connected as follows: 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.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) 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.
- 8) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

Continue 700 of 5 at 1 2 2



MARNING - 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

Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an information of unique controlling Component, not a function of the property of



42-0-0

Structural wood sheathing directly applied or 3-10-11 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

10-20

except end verticals, and 2-0-0 oc purlins (4-2-13 max.): 4-5, 9-12.

JNALEN JNALEN JUAN GARCIA CENSES 16952

October 2

Job	Truss	Truss Type	Qty	Ply	Lot 19 HT	
400675	B3	PIGGYBACK BASE	1	2	1430	059526
					Job Reference (optional)	

Waverly, KS 66871 Wheeler Lumber,

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:32 2020 Page 2 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-2uhJZOr6Ay5YqJNXIHYM6Xgn1h6cXNHG0O5Bi_yXTfT

- 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 Lot 19 HT 143059527 400675 B4 Piggyback Base Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:34 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

Structural wood sheathing directly applied, except end verticals, and

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

2-0-0 oc purlins (2-6-10 max.): 4-5, 8-11.

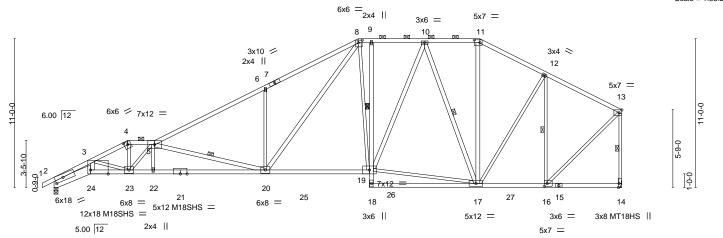
2-2-0 oc bracing: 23-24.

1 Row at midpt

1 Row at midpt

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-_Gp3_4tMhZLG3dWwQibqBym3CUo??CZZTiaImsyXTfR 5-5-4 2-8-15 31-6-0 -0₁10₁8 2-8-5 0-10-8 2-8-5 27-5-0 36-4-8 42-0-0 $\frac{7-5-4}{2-0-0}$ 8-2-5 6-10-7 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	1 22-6-0	23-4-0	31-6-0	36-4-8	42-0-0	
	1 2	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 Off	sets (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], [1	4:0-3-8,Edge], [1	6:0-2-8,0-2-8], [24	4:1-3-11,Edge]		
LOADING	G (psf)	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/TF	PI2014	Matrix-S	Wind(LL)	0.22 20-22	>999 240	Weight: 230 lb	FT = 10%
					. ,				

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD TOP CHORD

2x4 SPF No.2 *Except* 1-4,7-8: 2x4 SPF 2100F 1.8E, 5-7: 2x4 SPF 2400F 2.0E

2x4 SPF 2100F 1.8E *Except*

BOT CHORD 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

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

2-24=-316/6442, 23-24=-278/5603, 22-23=-152/5533, 20-22=-157/5528, 19-20=-35/2147, **BOT CHORD**

16-17=0/1197

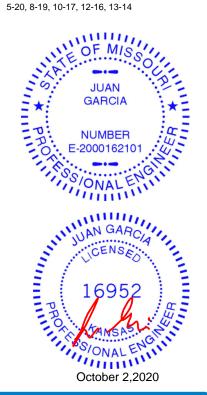
WEBS 3-24=-74/2348, 3-23=-1438/127, 4-23=-41/1887, 5-23=-1795/0, 5-20=-2402/137,

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-

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





MARNING - 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



Job Truss Truss Type Qty Lot 19 HT 143059528 PIGGYBACK BASE 400675 B5 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:35 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

6-10-7

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-STNRBQt_StT6hn56_P63k9IIvuAhkeSiiMKrJJyXTfQ

Structural wood sheathing directly applied or 2-11-7 oc purlins,

8-18

Rigid ceiling directly applied or 5-11-5 oc bracing.

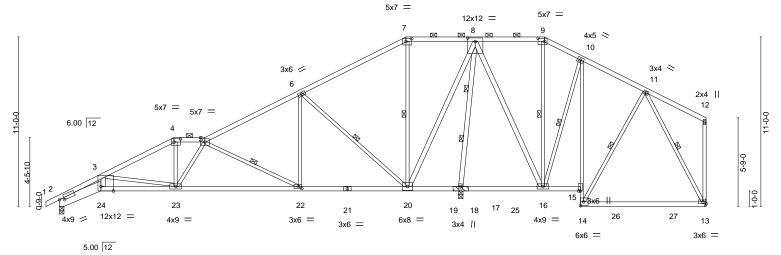
1 Row at midpt

2 Rows at 1/3 pts

except end verticals, and 2-0-0 oc purlins (4-8-7 max.): 4-5, 7-9.

27-0-0 33-10-0 37-11-15 42-0-0 4-6-0 4-6-0 2-4-0 4-1-15 4-0-1

Scale = 1:74.8



2-8	5 ₁	7-5-4	9-5-4	15-7-9		22-6-0	1 26-)-12	3	1-6-0	33-10-0	42-0-0	
2-8	5 '	4-8-15	2-0-0	6-2-5	l l	6-10-7	3-6	-12	5	5-5-4	2-4-0	8-2-0	<u> </u>
Plate Offsets (X,) [2:0-	3-12,0-1-7],	[4:0-5-0,	0-2-8], [7:0-4-8	,0-2-4], [8:	0-6-0,0-2-12],	[9:0-5-0,0-2-8], [22:0-2-8	,0-1-8],	[24:0-9-1	1,Edge]		
LOADING (psf)		SPACING	-	2-0-0	CSI		DEFL.	ir	(loc)	I/defI	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip	DOL	1.15	TC	0.64	Vert(LL)	-0.24	13-14	>804	360	MT20	197/144
TCDL 10.0		Lumber D	OL	1.15	BC	0.89	Vert(CT)	-0.39	13-14	>492	240		
BCLL 0.0	*	Rep Stres	s Incr	YES	WB	0.94	Horz(CT)	0.14	18	n/a	n/a		
BCDL 10.0		Code IRC	2018/TF	PI2014	Mat	rix-S	Wind(LL)	0.10	23-24	>999	240	Weight: 218 lb	FT = 10%
							1					_	

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

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

-0₇10-8 2-8-5 0-10-8 2-8-5

4-8-15

2-0-0

6-2-5

2-24: 2x8 SP DSS, 10-14: 2x3 SPF No.2, 13-14: 2x4 SPF 2100F 1.8E

2x3 SPF No.2 *Except* **WEBS** 3-24,8-20,8-18,8-16: 2x4 SPF No.2

REACTIONS. 2=0-3-8, 18=(0-3-8 + bearing block) (req. 0-4-5), 13=Mechanical (size)

Max Horz 2=240(LC 7)

Max Uplift 2=-41(LC 8), 18=-26(LC 5), 13=-67(LC 4) Max Grav 2=1011(LC 21), 18=2767(LC 2), 13=474(LC 22)

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

TOP CHORD 2-3=-3471/279, 3-4=-1682/85, 4-5=-1488/97, 5-6=-799/75, 6-7=-68/420, 7-8=-16/304,

8-9=-41/287, 9-10=-60/329

2-24=-354/3097, 23-24=-312/2670, 22-23=-123/1528, 20-22=-22/656, 18-20=-878/102, **BOT CHORD**

16-18=-641/98, 14-15=-18/334, 10-15=-19/395

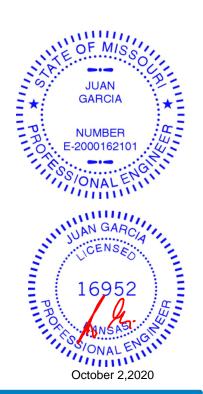
WEBS 3-24=-88/1206, 3-23=-1235/209, 4-23=0/510, 5-22=-979/114, 6-22=0/769,

6-20=-1172/129, 7-20=-496/80, 8-20=-67/1489, 8-18=-2560/75, 8-16=-17/997,

9-16=-319/51, 10-16=-542/74, 11-13=-303/201

NOTES-

- 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; 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
- 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.



5-22, 6-20, 7-20, 9-16, 10-16, 11-14, 11-13



MARNING - 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/TPH Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

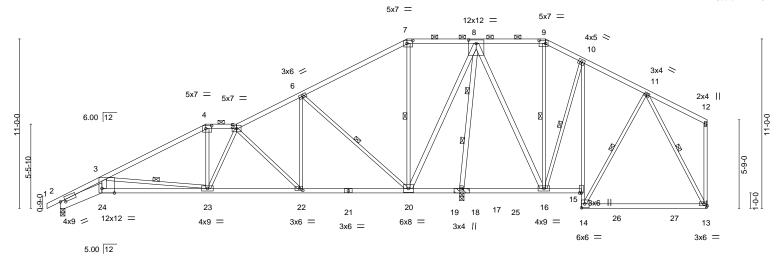
ANS/TPI1 Qu
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 19 HT 143059529 PIGGYBACK BASE 400675 B6 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:36 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-wfwpPmucDAbzJxglX6dlGNrQZlZOT5zrx03PrlyXTfP -0₋10-8 2-8-5 0-10-8 2-8-5 27-0-0 31-6-0 33-10-0 37-11-15 42-0-0 6-8-15 2-0-0 4-2-4 6-10-8 4-6-0 4-6-0 2-4-0 4-1-15 4-0-1

Scale = 1:74.8



	2-8-5	9-5-4	111-5-4	15-7-8	22-6-0	1 26-0	·12	31-6-0	₁ 33-10-0 ₁	42-0-0	
	2-8-5	6-8-15	2-0-0	4-2-4	6-10-8	3-6-	12	5-5-4	2-4-0	8-2-0	ı
Plate Off	sets (X,Y)	[2:0-3-12,0-1-7], [4:0-4-8	3,0-2-4], [7:	0-4-8,0-2-4], [8	:0-6-0,0-2-12],	[9:0-5-0,0-2-8], [2:	2:0-2-8,0	-1-8], [24:0-9-1	1,Edge]		
LOADIN	G (psf)	SPACING-	2-0-0	CSI		DEFL.	in	(loc) I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.24 1	3-14 >805	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.40 2	3-24 >779	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.14	18 n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Mat	rix-S	Wind(LL)	0.12 2	3-24 >999	240	Weight: 220 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

2-24: 2x8 SP DSS, 21-24,13-14: 2x4 SPF 2100F 1.8E

10-14: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

3-24,8-20,8-18,8-16: 2x4 SPF No.2

(size) 2=0-3-8, 18=(0-3-8 + bearing block) (req. 0-4-5), 13=Mechanical

Max Horz 2=240(LC 7)

Max Uplift 2=-41(LC 8), 18=-28(LC 5), 13=-66(LC 4) Max Grav 2=1020(LC 21), 18=2744(LC 2), 13=482(LC 22)

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 3-24=-58/1336, 3-23=-1673/256, 4-23=0/304, 5-22=-736/77, 6-22=0/788,

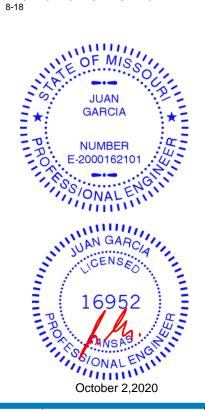
WEBS 6-20=-1144/129, 7-20=-498/84, 8-20=-66/1487, 8-18=-2545/74, 8-16=-19/984,

9-16=-314/52, 10-16=-532/75, 11-13=-308/184

NOTES-

REACTIONS.

- 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; 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
- 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.



3-23, 6-20, 7-20, 9-16, 10-16, 11-14, 11-13

Structural wood sheathing directly applied or 2-2-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt

2 Rows at 1/3 pts

except end verticals, and 2-0-0 oc purlins (4-11-8 max.): 4-5, 7-9.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property 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



Job Truss Truss Type Qty Lot 19 HT 143059530 PIGGYBACK BASE 400675 B7 1 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:38 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

4-11-4

3-9-11

2-0-0

4-2-5

-0₋10-8 2-8-5 0-10-8 2-8-5

Structural wood sheathing directly applied or 2-10-12 oc purlins,

9-19

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt

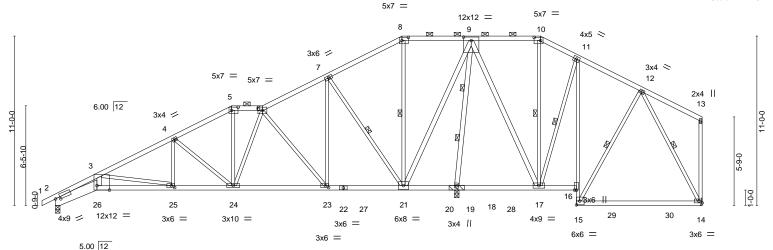
2 Rows at 1/3 pts

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6, 8-10.

7-21, 8-21, 10-17, 11-17, 12-15, 12-14

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-s22apSwslorhYEqhfXfmLowp15CNx1w8OKYVvdyXTfN 37-11-15 27-0-0 31-6-0 33-10-0 42-0-0 4-10-7 4-6-0 4-6-0 2-4-0 4-1-15 4-0-1

Scale = 1:74.8



		42-0-0	₁ 33-10-0	1-6-0	1 3)-12) ₁ 26-0	1 22-6		17-11-10	<u> </u>	11-5-4	7-0-12	2-8-5	
		8-2-0	2-4-0	-5-4	5	-12	3-6	4-6		6-6-6		4-4-8	4-4-8	2-8-5	
		0-9-11,Edge]	8,0-1-8], [26:0	[25:0-2-8	-8,0-1-8],	[23:0-2-	0-5-0,0-2-8],)-2-12], [1) - 6-0,(0,0-2-8], [9:0	J-2-8], [8:0-5-(, [5:0-5-0,0	[2:0-3-12,0-1-7],	sets (X,Y)	Plate Off
íΡ	G	PLATES	L/d	I/defl	n (loc)	in	DEFL.			CSI.	2-0-0	G-	SPACING	G (psf)	LOADIN
/144	1	MT20	360	>808	14-15	-0.24	Vert(LL)	3	0.58	TC	1.15	p DOL	Plate Grip	25.0	TCLL
			240	>495	3 14-15	-0.38	Vert(CT)	9	0.89	BC	1.15	OOL	Lumber D	10.0	TCDL
			n/a	n/a	3 19	0.13	Horz(CT)	3	0.83	WB	YES	ss Incr	Rep Stres	0.0 *	BCLL
T = 10%	lb	Weight: 227 lb	240	>999	25-26	0.10	Wind(LL)		x-S	Matri	2014	C2018/TP	Code IRC	10.0	BCDL
Τ:	lb	Weight: 227 lb	n/a	n/a	3 19	0.13	Horz(CT)		0.83	WB	YES	ss Incr	Rep Stres	0.0 *	BCLL

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

2-26: 2x8 SP DSS, 11-15: 2x3 SPF No.2, 14-15: 2x4 SPF 2100F 1.8E 2x3 SPF No.2 *Except* **WEBS**

3-26,9-21,9-19,9-17: 2x4 SPF No.2

2=0-3-8, 19=(0-3-8 + bearing block) (req. 0-4-4), 14=Mechanical (size)

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.

 $2 - 3 = -3541/265, \ 3 - 4 = -1686/106, \ 4 - 5 = -1144/99, \ 5 - 6 = -973/102, \ 6 - 7 = -497/90, \ 7 - 8 = -63/367, \ 3 - 4 = -1686/106, \ 4 - 5 = -1144/99, \ 5 - 6 = -973/102, \ 6 - 7 = -497/90, \ 7 - 8 = -63/367, \ 3 - 4 = -1686/106, \ 4 - 5 = -1144/99, \ 5 - 6 = -973/102, \ 6 - 7 = -497/90, \ 7 - 8 = -63/367, \ 3 - 4 = -1686/106, \ 4 - 5 = -1144/99, \ 5 - 6 = -973/102, \ 6 - 7 = -497/90, \ 7 - 8 = -63/367, \ 7 - 100/100, \ 7 - 100$ TOP CHORD

8-9=-25/281, 9-10=-49/260, 10-11=-70/298

2-26=-339/3168, 25-26=-302/2724, 24-25=-125/1480, 23-24=-54/884, 21-23=-11/404, **BOT CHORD** 19-21=-835/98, 17-19=-602/94, 15-16=-18/319, 11-16=-17/376

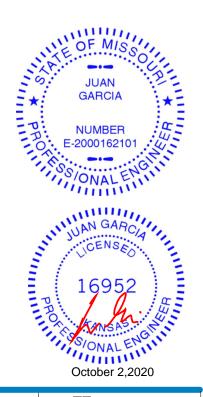
3-26=-70/1264, 3-25=-1271/179, 4-25=0/371, 4-24=-689/94, 5-24=-1/349, 6-24=-29/308,

WEBS 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-

- 1) 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.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 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
- 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, 19, 14.
- 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.



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



Job Truss Truss Type Qty Lot 19 HT 143059531 400675 C4 Piggyback Base Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:40 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-pQAKE7x7HP5PnY_3myiERD?5tvvjP?IRse1c_WyXTfL 34-0-0 23-6-0 30-4-6 6-10-7 2-11-8 6-0-8 6-10-6 3-7-10 Scale = 1:71.2 5x7 = 6.00 12 2x4 || 4x9 = 6 3x4 / 3x4 / 3x4 > 2 5x7 ≥ 10-0-0 11-0-0 6x6 =2-9-0 2-9-0 9 17 18 15 16 $3x4 = _{3x10} =$ 3x8 MT18HS || 3x4 =13 12 10 3x8 MT18HS || 2x4 || 4x9 = 3x4 5x7 = 23-6-0 34-0-0 17-5-8 7-7-8 6-10-7 2-11-8 6-0-8 6-10-6 Plate Offsets (X,Y)--[1:Edge,0-2-11], [4:0-5-0,0-2-8], [6:0-6-8,0-2-4], [8:0-2-0,0-1-8], [9:0-3-8,Edge], [10:0-2-8,0-2-8], [16:0-2-8,0-1-8] SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** 197/144 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.88 Vert(LL) -0.12 15-16 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.70 Vert(CT) -0.21 15-16 >999 240 MT18HS 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.55 Horz(CT) 0.05 9 n/a n/a Code IRC2018/TPI2014 Wind(LL)

0.06 15-16

BRACING-

TOP CHORD

BOT CHORD

WEBS

>999

1 Row at midpt

1 Row at midpt

240

2-0-0 oc purlins (4-5-1 max.): 4-6.

Weight: 181 lb

2-15, 4-14, 6-12, 7-10, 8-9

Structural wood sheathing directly applied, except end verticals, and

Rigid ceiling directly applied or 10-0-0 oc bracing. Except:

5-14

FT = 10%

LUMBER-

BCDL

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

10.0

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

REACTIONS. (size) 18=0-5-8, 9=0-3-8

Max Horz 18=274(LC 7)

Max Uplift 18=-165(LC 8), 9=-132(LC 9) Max Grav 18=1601(LC 2), 9=1616(LC 2)

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

1-2=-1860/201, 2-4=-1649/227, 4-5=-1398/223, 5-6=-1399/224, 6-7=-1333/179, 7-8=-853/107, 1-18=-1487/201, 8-9=-1591/136 TOP CHORD

BOT CHORD 15-16=-233/1590, 14-15=-186/1385, 5-14=-354/154, 10-12=-104/753

2-16=-321/133, 2-15=-329/191, 4-15=-61/438, 4-14=-134/254, 12-14=-127/1015, **WEBS**

6-14=-142/636, 6-12=-384/164, 7-12=-81/528, 7-10=-977/183, 1-16=-100/1609,

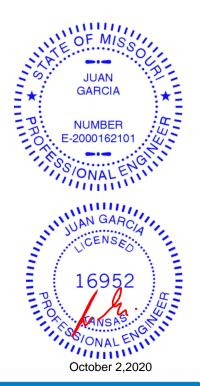
8-10=-122/1390

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60

Matrix-S

- 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) 18=165, 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.





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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property 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





Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-HckiSTyl2jDGPiZGKgDTzQYImJHK8Mub4InAWyyXTfK 24-1-0 25-11-8 0-7-0 1-10-8

24-1-0 25-11-8

Structural wood sheathing directly applied or 2-2-0 oc purlins,

2-14, 5-14, 6-12, 7-8

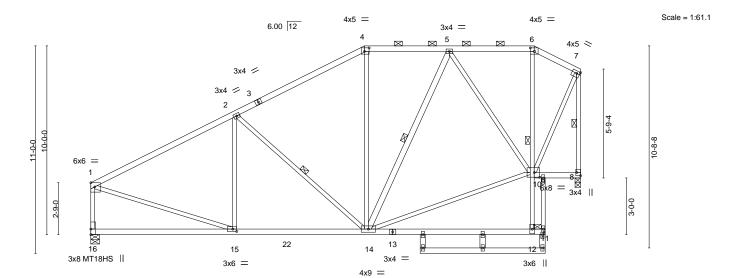
except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.

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

23-6-0

1 Row at midpt

1 Brace at Jt(s): 11



	7-7-8	6-10-7	9	-0-0	0-7-0 1-10-8				
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) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.74 BC 0.62 WB 0.94 Matrix-S	DEFL. in (loc) Vert(LL) -0.12 12-14 Vert(CT) -0.25 12-14 Horz(CT) 0.02 8 Wind(LL) 0.03 14-15	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES MT20 MT18HS Weight: 145 lb	GRIP 197/144 197/144 FT = 10%			

BRACING-

TOP CHORD

BOT CHORD

WEBS

JOINTS

14-6-0

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,

7-7-8

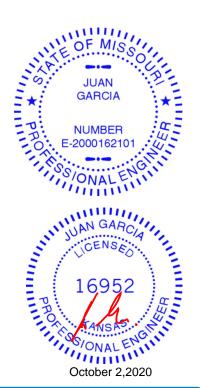
1-16=-1102/176, 7-8=-1228/128 15-16=-288/137, 14-15=-230/1127

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

BOT CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) 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.
- 8) 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.
- 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.





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



Job Truss Truss Type Qty Lot 19 HT 143059533 400675 C6 Piggyback Base Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:42 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-lpI5fpzNp0L71s7SuNkiWe5TTjdeturkJyWj2PyXTfJ 25-11-8 17-5-8 23-6-0 6-10-7 2-11-8 6-0-8 2-5-8 Scale: 3/16"=1' 5x7 = 2x4 || 5x7 = 6.00 12 4 3x4 || 3x4 / 3x4 / 3 11-0-0 6x6 = 2-9-0 9 10 13 12 11 Ř 3x8 MT18HS II = 3x6 = 3x4 = 9 8 4x9 = 4x5 || 25-11-8 23-6-0 7-7-8 6-10-7 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] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d 197/144 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.74 Vert(LL) -0.17 8-9 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.61 Vert(CT) -0.35 8-9 >893 240 MT18HS 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.58 Horz(CT) 0.03 8 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S -0.06 >999 240 Weight: 151 lb 8-9 LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, **BOT CHORD** 2x4 SPF No.2 except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6. WEBS 2x3 SPF No.2 *Except* **BOT CHORD** Rigid ceiling directly applied or 9-5-14 oc bracing. Except: 6-10,7-8,6-8: 2x4 SPF No.2 1 Row at midpt 5-10 **WEBS** 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 $1\hbox{-}2\hbox{--}1344/169, 2\hbox{-}4\hbox{--}1007/188, 4\hbox{-}5\hbox{--}709/182, 5\hbox{-}6\hbox{--}710/183, 1\hbox{-}14\hbox{--}1103/178}$ BOT CHORD 12-14=-362/173, 11-12=-292/1133, 10-11=-232/812, 5-10=-380/161

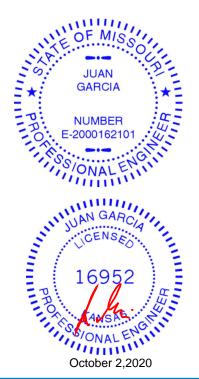
WEBS 2-11=-461/200, 4-11=-67/514, 4-10=-392/100, 6-10=-159/928, 1-12=-70/1125,

6-8=-1068/312

NOTES-

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

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





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Wheeler Lumber, Waverly, KS 66871

Structural wood sheathing directly applied or 6-0-0 oc purlins,

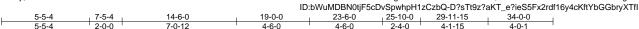
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

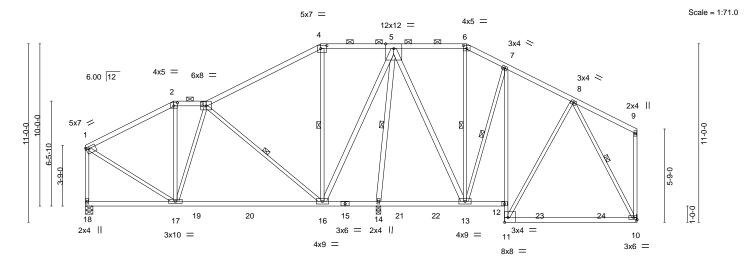
6-0-0 oc bracing: 14-16,13-14.

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3, 4-6.

3-16, 4-16, 5-14, 6-13, 7-13, 8-10





		5-5-4	7-5-4	14-6-0	18-0-12	23-6-0	25-10-0		34-0-0	
		5-5-4	2-0-0	7-0-12	3-6-12	5-5-4	2-4-0		8-2-0	
Plate Offs	ets (X,Y)	[1:0-2-0,0-1-8], [2:0-2-12	2,0-2-4], [4:0-	4-8,0-2-4], [6:0-2-8,	0-2-4], [11:Edge,0	-3-8]				
LOADING	(psf)	SPACING-	2-0-0	CSI.	DE	FL. in (lo	oc) I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.69	9 Ve	t(LL) -0.23 10-1	11 >844	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.6	6 Ve	t(CT) -0.38 16-1	17 >564	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.6	7 Ho	rz(CT) 0.06	10 n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-S	Wii	nd(LL) -0.03 10-1	11 >999	240	Weight: 187 lb	FT = 10%

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

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

(size) 18=0-5-8, 14=0-3-8, 10=Mechanical

Max Horz 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 $1-2=-704/131,\ 2-3=-572/160,\ 3-4=-381/172,\ 4-5=-257/208,\ 5-6=-274/167,\ 6-7=-343/177,\ 4-5=-257/208,\ 5-6=-274/167,\ 6-7=-343/177,\ 4-5=-257/208,\ 5-6=-274/167,\ 6-7=-343/177,\ 6-7=$

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

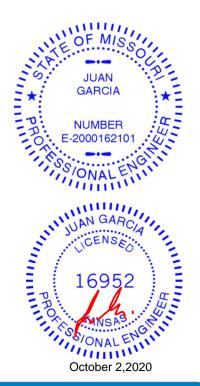
WEBS 3-16=-478/171, 4-16=-336/123, 5-16=-107/890, 5-14=-1628/238, 5-13=-123/585,

7-13=-258/157, 1-17=-80/660, 8-10=-529/71

NOTES-

REACTIONS.

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





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



Job Truss Truss Type Qty Lot 19 HT 143059535 400675 C8 Piggyback Base Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:44 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

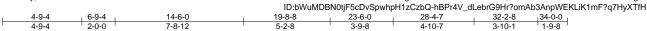
Structural wood sheathing directly applied or 4-1-9 oc purlins,

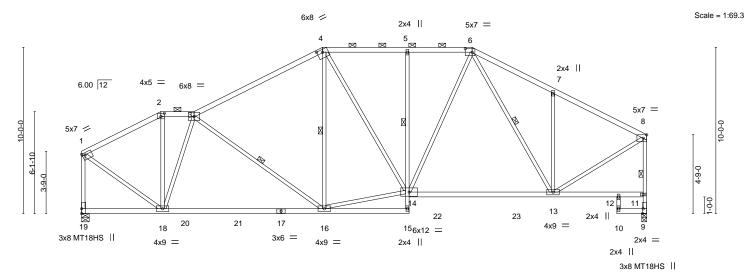
5-14

Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

except end verticals, and 2-0-0 oc purlins (4-5-14 max.): 2-3, 4-6.

3-16, 4-16, 6-13, 8-9





		4-9-4	6-9-4 ₁	14-6-0	1	19-8-8	23-6-0	28-4-7	32-2-8	₁ 34-0-0	
		4-9-4	2-0-0	7-8-12	1	5-2-8	3-9-8	4-10-7	3-10-1	1-9-8	
Plate Offse	ets (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	5-0,0-2-8], [9	9:0-3-8,Edge]					
LOADING	(psf)	SPACING-	2-0-	o CSI.		DEFL.	in (loc)	l/defl L/d	PI	ATES	GRIP
TCLL	25.0	Plate Grip DO	DL 1.1	5 TC	0.88	Vert(LL)	-0.31 13-14	>999 360	M'	Γ20	197/144
TCDL	10.0	Lumber DOL	1.1	5 BC	0.92	Vert(CT)	-0.53 16-18	>770 240	M	T18HS	197/144
BCLL	0.0 *	Rep Stress Ir	ncr YE	S WB	0.96	Horz(CT)	0.07 9	n/a n/a			
BCDL	10.0	Code IRC20	18/TPI2014	Matrix-	·S	Wind(LL)	0.05 13-14	>999 240	W	eight: 164 lb	FT = 10%

BOT CHORD

WEBS

1 Row at midpt

1 Row at midpt

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x4 SPF 2100F 1.8E

2x4 SPF No.2 *Except*

BOT CHORD 5-15,10-12: 2x3 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. (size) 19=0-5-8, 9=0-3-8

Max Horz 19=242(LC 5)

Max Uplift 19=-170(LC 8), 9=-132(LC 9) Max Grav 19=1622(LC 2), 9=1647(LC 2)

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

TOP CHORD 1-2=-1392/136, 2-3=-1201/160, 3-4=-1693/198, 4-5=-1569/195, 5-6=-1573/194,

6-7=-1506/254, 7-8=-1493/119, 1-19=-1593/179, 9-11=-1614/142, 8-11=-1575/148

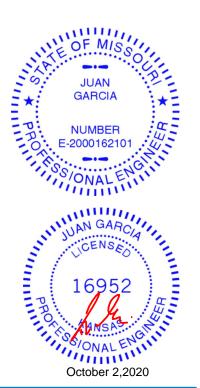
16-18=-219/1515, 5-14=-343/149, 13-14=-136/1338 **BOT CHORD**

WEBS 2-18=-3/443, 3-18=-1037/166, 14-16=-124/1564, 4-14=-81/394, 6-14=-94/646,

6-13=-305/119, 7-13=-426/242, 1-18=-102/1466, 8-13=-69/1495

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip 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.





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



Job Truss Truss Type Qty Lot 19 HT 143059536 400675 C9 Piggyback Base Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:45 2020 Page 1

5-2-8

3-9-8

Wheeler Lumber, Waverly, KS 66871

2-0-0

4-10-6

4-10-6

4-10-7

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-9OzDHr?F6xkiuJs1ZVHP8GjxYwZX4AIA?vINfkyXTfG 28-4-7 32-2-8 34-0-0 19-8-8 23-6-0

3-10-1

1-9-8

Scale = 1:69.5 5x7 = 2x4 || 5x7 = 5 3x4 / 2x4 || 4 6.00 12 5x7 = 5x7 = 2 9 4x5 / 5-1-10 3-9-0 0-0-13 12 14 23 Ш 22 2x4 <mark>製</mark> 10 18 4x9 = 20 19 11 $16_{6x12} =$ 3x8 MT18HS 3x4 =2x4 = 6x8 = 3x4 = 4x9 = 2x4 ||

3x8 MT18HS II

2x4 II

Structural wood sheathing directly applied or 4-1-8 oc purlins,

6-15

Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

except end verticals, and 2-0-0 oc purlins (4-4-3 max.): 2-3, 5-7.

4-17, 5-17, 7-14, 9-10

	2-9-4 9-7-10	14-6-0	19-8-8	28-4-7		32-2-8 34-0-0	
Plate Offsets (X,Y)	2-9-4 6-10-6 [1:0-2-0,0-1-8], [2:0-2-8,0-2-4]	4-10-6 [5:0-5-0 0-2-8] [7:0-5-0 0-2	5-2-8	8-7-15	<u> </u>	3-10-1 1-9-8	
Tiale Offsets (X, 1)	[1:0-2-0,0-1-0], [2:0-2-0,0-2-4]	<u>, [3.0-3-0,0-2-0], [7.0-3-0,0-2-</u>	oj, [10.0-3-0,Luge]				
LOADING (psf)	SPACING- 2-0)-0 CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.	15 TC 0.88	Vert(LL)	-0.31 14-15 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.	15 BC 0.92	Vert(CT)	-0.52 14-15 >781	240	MT18HS	197/144
BCLL 0.0 *		ES WB 0.85	Horz(CT)	0.08 10 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI201	4 Matrix-S	Wind(LL)	0.05 14-15 >999	240	Weight: 171 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

1 Row at midpt

1 Row at midpt

LUMBER-

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

6-16,11-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. (size) 21=0-5-8, 10=0-3-8

Max Horz 21=242(LC 5)

Max Uplift 21=-170(LC 8), 10=-132(LC 9) Max Grav 21=1609(LC 2), 10=1647(LC 2)

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

1-2=-1001/95, 2-3=-873/107, 3-4=-1805/207, 4-5=-1633/227, 5-6=-1572/197, TOP CHORD

6-7=-1576/196, 7-8=-1507/254, 8-9=-1493/119, 1-21=-1593/168, 10-12=-1614/142,

9-12=-1575/148

BOT CHORD 19-20=-223/1339, 17-19=-197/1569, 6-15=-352/151, 14-15=-137/1338

2-20=-4/299, 3-20=-1277/156, 3-19=-5/324, 4-17=-337/165, 15-17=-140/1501,

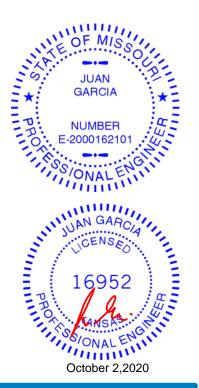
5-15=-74/427, 7-15=-97/653, 7-14=-304/119, 8-14=-426/242, 9-14=-69/1495,

1-20=-121/1386

NOTES-

WEBS

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





Job Truss Truss Type Qty Lot 19 HT 143059537 C10 400675 Piggyback Base 1 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:39 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LEcy1nwVW5zYAOPtDFA?u?TvIVXHgS7ld_I3S4yXTfM 34-0-0 0-9-4 2-9-4 0-9-4 2-0-0 14-6-0 19-0-0 23-6-0 30-4-6 4-10-5 6-10-6 4-6-0 4-6-0 6-10-6 3-7-10 Scale = 1:62.2 5x7 = 5x7 = 3x4 =6 3x4 / 3x4 < 8 6.00 12 5x7 <> 5x7 5x7 = 9 2x4 || 2 4-9-0 3-9-0 18 15 20 13 21 22 17 16 12 11 14 3x6 3x4 = 5x7 = 3x8 MT18HS || 3x4 = 3x10 = 6x6 = 3x10 = 5x7 2-9-4 7-7-9 23-6-0 30-4-6 14-6-0 4-10-5 6-10-6 9-0-0 6-10-6 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] SPACING-GRIP LOADING (psf) CSI. DEFL. (loc) I/defI L/d **PLATES** 197/144 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.90 Vert(LL) -0.26 12-14 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.85 Vert(CT) -0.41 12-14 >985 240 MT18HS 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.90 Horz(CT) 0.06 10 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-S Wind(LL) >999 240 Weight: 169 lb FT = 10% 0.05 14 LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 3-3-3 oc purlins, 2x4 SPF No.2 except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 2-3, 5-7. 2x3 SPF No.2 *Except* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 6-14,6-12: 2x4 SPF No.2 **WEBS** 4-14, 6-14, 6-12 1 Row at midpt REACTIONS.

BOT CHORD WEBS

> (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.

2-3=-1021/88, 3-4=-1816/193, 4-5=-1715/209, 5-6=-1452/234, 6-7=-1276/187, TOP CHORD

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

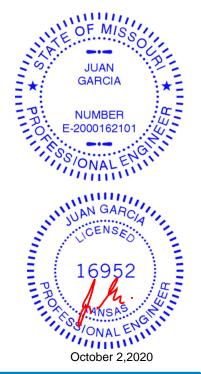
WEBS 2-17=-149/1686, 3-17=-1389/187, 3-16=-39/687, 4-16=-271/94, 4-14=-252/173,

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-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip 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) 18=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.





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



Job Truss Truss Type Qty Lot 19 HT 143059538 D1 400675 Piggyback Base Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:46 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-daXbVB0utFsZVTRD7DpegUF5XKwZpeEKEZUxBAyXTfF 31-11-8 -0-10-8 0-10-8 20-6-0 25-0-0 29-6-0 7-7-10 5-11-15 6-10-7 4-6-0 4-6-0 2-5-8 Scale = 1:65.8 5x7 = 4x5 = 3x6 = 6 6.00 12 8 5x7 ≥ 9 3x4 3x4 / 3x4 / 9-9-4 3 ₩ 10 13 17 18 19 16 15 14 12 11 8x8 3x6 3x4 = 3x6 = 3x4 = 4x9 = 8x8 = 7-7-10 29-6-0 31-11-8 13-7-9 7-7-10 5-11-15 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] **PLATES** GRIP LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d -0.24 11-12 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.93 Vert(LL) >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 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 Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-S Wind(LL) 0.08 14-15 >999 240 Weight: 174 lb

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** 5-12, 7-11, 8-11, 9-10 1 Row at midpt

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.

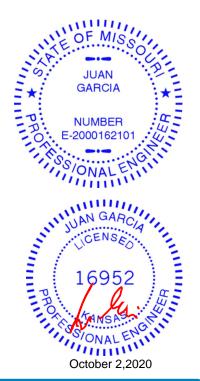
 $2\text{-}3\text{--}2435/309,\ 3\text{-}5\text{--}1948/295,\ 5\text{-}6\text{--}1297/234,\ 6\text{-}7\text{--}1076/257,\ 7\text{-}8\text{--}382/137,}$ TOP CHORD

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=219, 10=163,
- 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.





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



Job Truss Truss Type Qty Lot 19 HT 143059539 400675 D2 Piggyback Base 1 Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:47 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-6m5_iW1WeZ_P7d0QhwKtDholakKmY5RTTDEUkcyXTfE 31-11-8 -0-10-8 2-3-8 0-10-8 2-3-8 20-6-0 . 25-0-0 29-6-0 5-4-1 6-6-15 6-3-8 4-6-0 4-6-0 2-5-8 Scale = 1:69.2 6x6 = 2x4 | 5x7 = 6.00 12 9 3x4 || 2x4 || 5x7 / 3x4 🥢 0-0-1 15 16 ₩ 11 19 2x4 3x10 Ш 17 14 13 3x6 3x6 =2x4 || 5x7 Ш 5x12 31-11-8 20-6-0 25-0-0 29-6-0 2-3-8 2-3-8 7-7-9 14-2-8 5-4-1 6-6-15 4-6-0 Plate Offsets (X,Y)--[2:0-3-8,Edge], [3:0-0-8,0-2-2], [5:0-3-8,Edge], [7:0-4-0,0-2-8], [9:0-4-8,0-2-4], [13:0-5-4,0-2-8] GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.31 13-14 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.61 Vert(CT) -0.68 13-14 >559 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.81 Horz(CT) 0.31 11 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL 10.0 Wind(LL) 0.22 17 >999 240 Weight: 195 lb Matrix-S

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

1-5: 2x6 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 *Except*

3-17,6-14: 2x3 SPF No.2, 3-15,12-14: 2x4 SPF 2100F 1.8E

WEBS 2x4 SPF No.2 *Except*

4-16,4-15: 2x3 SPF No.2

WEDGE

Left: 2x3 SPF No.2

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=1556(LC 2), 11=1522(LC 2)

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

TOP CHORD 2-3=-1070/25, 3-4=-3144/453, 4-6=-2106/329, 6-7=-2064/475, 7-8=-793/193,

8-9=-794/193

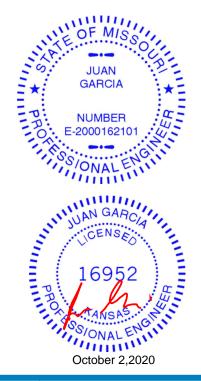
BOT CHORD 3-16=-540/2875, 15-16=-540/2875, 6-15=-390/247, 11-13=-132/304

4-16=0/316, 4-15=-1219/322, 13-15=-264/883, 7-15=-354/1378, 9-13=-137/1273, **WEBS**

9-11=-1384/263, 8-13=-357/154, 7-13=-673/221

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=209 11=163 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.



Structural wood sheathing directly applied or 2-8-8 oc purlins,

4-15, 10-11, 9-11, 8-13, 7-13

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 2-17.

1 Row at midpt



MARNING - 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 Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property 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



Job Truss Truss Type Qty Lot 19 HT 143059540 400675 D3 Piggyback Base 1 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:48 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-azfMws18Os6GlnbcEer6lvLT67bJHWpchtz1G2yXTfD 31-11-8 -0-10-8 2-3-8 0-10-8 2-3-8 20-6-0 29-6-0 5-4-1 7-11-15 4-10-7 4-1-8 4-10-8 2-5-8 Scale = 1:69.1 5x7 = 2x4 || 5x7 = 6.00 12 9 3x4 II \propto 3x6 / 6 5x7 / 3x4 / 9-9-4 9-0-13 6x12 17 14 16 2x4 || 3x6 = 4x5 = П 3x10 11 18 5x7 = 12 2x4 || 2x4 || 4x9 = 2x4 II 3x6 II 14-2-8 2-2-0_{2x4} || 31-11-8 20-6-0 5-4-1 6-9-9 4-1-8 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] SPACING-GRIP LOADING (psf) CSI. DEFL. (loc) I/defI L/d **PLATES** -0.27 15-17 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.80 Vert(LL) >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.91 Vert(CT) -0.51 15-17 >743 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.93 Horz(CT) 0.34 11 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL 10.0 Matrix-S Wind(LL) 0.22 18 >999 240 Weight: 193 lb **BRACING-**

TOP CHORD

BOT CHORD

WFBS

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

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,

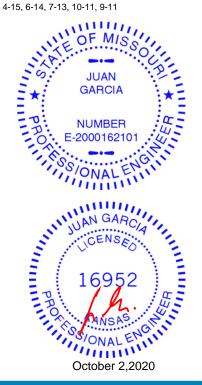
8-9=-870/203

3-17=-565/2958, 15-17=-564/2957, 14-15=-293/1697, 13-14=-244/1158, 8-13=-361/154 **BOT CHORD 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-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=209 11=163 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.



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.

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

1 Row at midpt



\Lambda 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 Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property 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



Job Truss Truss Type Qty Lot 19 HT 143059541 400675 D4 Piggyback Base 1 Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:49 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

7-11-15

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-29Dk7C2m9AE7MwAooLMLl6teeXxl0zNmwXjboVyXTfC 28-6-0 29-6-0 31-11-8 1-0-0 2-5-8 20-6-0 25-0-0 4-10-7 4-6-0 3-6-0

Structural wood sheathing directly applied or 3-1-0 oc purlins,

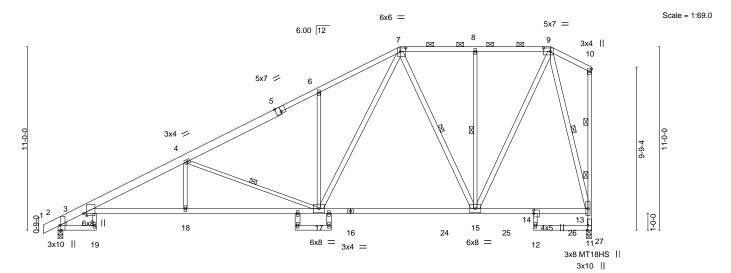
except end verticals, and 2-0-0 oc purlins (5-11-1 max.): 7-9.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 2-19.

1 Row at midpt

2 Rows at 1/3 pts



	2-3-8 7-7-9		25-0-0	28-6-0 2	29-6-Q 31-11-8 <u> </u>
	2-3-8 5-4-1	6-9-9	10-6-13	3-6-0	1-0-0 2-5-8
Plate Offsets (X,Y)	[2:0-3-8,Edge], [3:0-1-10,0-2-4], [5:0-3-8,Edge], [7:0-4-0,0-2-8],	[9:0-5-0,0-2-8], [11:0-3-8,Edge], [14:0	0-2-8,0-0-0]	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.81 BC 0.90 WB 0.91 Matrix-S	Vert(LL) -0.33 15-17 > Vert(CT) -0.56 15-17 > Horz(CT) 0.35 11	/defl L/d .999 360 .677 240 n/a n/a .999 240	PLATES GRIP MT20 197/144 MT18HS 197/144 Weight: 183 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

1-5: 2x6 SP 2400F 2.0E

-0-10-8 2-3-8 0-10-8 2-3-8

5-4-1

BOT CHORD 2x4 SPF No.2 *Except* 3-16: 2x4 SPF 2100F 1.8E, 12-14: 2x3 SPF No.2

WEBS 2x4 SPF No.2 *Except*

3-19,4-18,4-17,6-17,8-15,10-11: 2x3 SPF No.2 WEDGE

Left: 2x3 SPF No.2

REACTIONS. (size) 2=0-3-8, 11=0-3-8

Max Horz 2=413(LC 5)

Max Uplift 2=-209(LC 8), 11=-162(LC 5) Max Grav 2=1593(LC 2), 11=1651(LC 2)

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

TOP CHORD 2-3=-1087/27, 3-4=-3249/469, 4-6=-2094/290, 6-7=-2023/427, 7-8=-922/195,

8-9=-922/195, 11-13=-1576/177

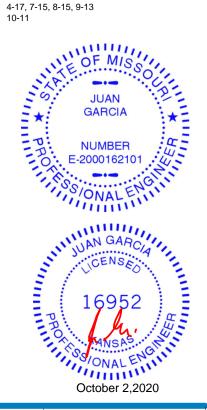
BOT CHORD 3-18=-558/2979, 17-18=-558/2979, 15-17=-251/1167, 14-15=-151/358, 13-14=-238/306

WEBS 4-18=0/299, 4-17=-1325/390, 6-17=-397/247, 7-17=-308/1295, 7-15=-606/189,

8-15=-357/152, 9-15=-155/1365, 9-13=-1466/239

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) 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.
- 8) 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=162,
- 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.





MARNING - 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





2-8-15

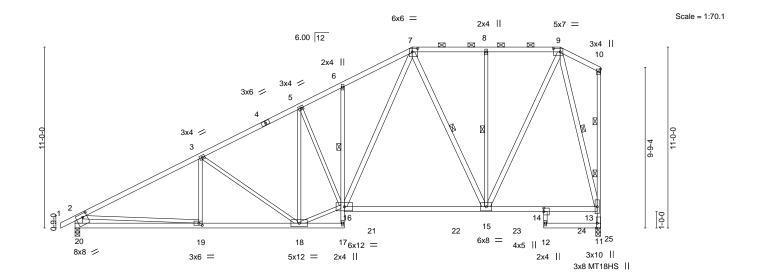
6-0-0

20-6-0

4-1-8

25-0-0

4-6-0



			1010	10 10		_0 0 0		_0 0 0	0.000.	
		7-7-9	6-0-0	2-8-15	1	8-7-8		3-6-0	3-3-0 0-2-8	
Plate Offs	sets (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	3,0-0-0], [19:0	0-2-8,0-1-8], [2	20:0-3-4,0-2-8]				
LOADING	G (psf)	SPACING- 2-0-	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	5 TC 0.7	2	Vert(LL)	-0.27 15-16	>999	360	MT20	197/144
TCDL BCLL	10.0 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES		I	Vert(CT) Horz(CT)	-0.48 15-16 0.10 11	>795 n/a	240 n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.08 18-19	>999	240	Weight: 179 lb	FT = 10%

BOT CHORD

WEBS

1 Row at midpt

1 Row at midpt

2 Rows at 1/3 pts

16-4-8

BRACING-LUMBER-TOP CHORD 2x4 SPF No.2 TOP CHORD

BOT CHORD 2x4 SPF No.2 *Except*

-0₋10-8 0-10-8

6-17,12-14: 2x3 SPF No.2 2x3 SPF No.2 *Except*

WEBS 7-16,7-15,9-15,9-13: 2x4 SPF No.2, 2-20: 2x6 SPF No.2

> 20=0-3-8, 11=0-3-8 (size)

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**

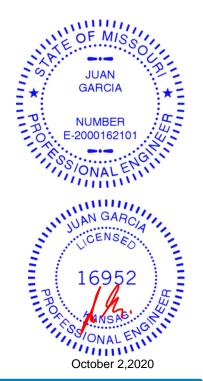
3-18=-543/193, 16-18=-251/1859, 7-16=-288/1184, 7-15=-596/192, 2-19=0/1350,

8-15=-357/151, 9-15=-154/1355, 9-13=-1457/239

NOTES-

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip 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) 20=219, 11=162.
- 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.



31-11-8

31-9-0 31-11-8

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.

10-11

7-15, 8-15, 9-13

Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 6-16

2-5-8

29-6-0

4-6-0



Job Truss Truss Type Qty Lot 19 HT 143059543 400675 D6 GABLE Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:52 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-SkutlE4eS5ciDOuNTUv2wlVFpl8jDWwCcVxFPqyXTf9 31-11-8 -0-10-8 0-10-8 20-6-0 9-0-0 2-5-8 3x4 = Scale = 1:65.6 3x4 =3x4 || 6.00 12 15 17 18 19 16 20 14 21 13 12 3x4 / 9 10 8 X X Ø 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 3x4 = 5x7 | 3x4 = Plate Offsets (X,Y)--[14:0-2-0,0-2-8], [20:0-2-0,0-2-8], [23:Edge,0-1-8] SPACING-GRIP LOADING (psf) DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.43 Vert(LL) -0.00 120 MT20 197/144 n/r **TCDL** 10.0 Lumber DOL 1.15 BC 0.18 Vert(CT) -0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.16 Horz(CT) -0.01 23 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-R Weight: 218 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 **BRACING-**

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

WEBS 1 Row at midpt

22-23, 12-31, 13-30, 15-29, 16-28, 17-27, 18-26, 19-25, 21-24

REACTIONS. All bearings 31-11-8.

Max Horz 41=420(LC 5) (lb) -

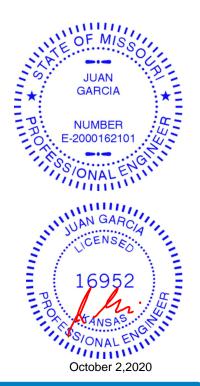
Max Uplift All uplift 100 lb or less at joint(s) 41, 23, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24 except 40=-249(LC 5)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) Provide adequate drainage to prevent water ponding
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) 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.
- 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.





MARNING - 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 Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property 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



Job Truss Truss Type Qty Lot 19 HT 143059544 E1 400675 Common Supported Gable Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:53 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-wwSFza5HDPkZrYTZ1BRHSy2VH8WDy?qMr9hoxGyXTf8 14-0-0 0-10-8 14-10-8 7-0-0 7-0-0 0-10-8 Scale = 1:30.8 4x5 = 6 7.00 12 5 4 10 20 19 18 17 16 15 14 13 12 3x10 || 3x10 || 14-0-0 14-0-0 Plate Offsets (X,Y)--[12:0-3-8,Edge] SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) -0.00 120 MT20 197/144 11 n/r **TCDL** 10.0 Lumber DOL 1.15 ВС 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 Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-R Weight: 57 lb

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

(lb) -

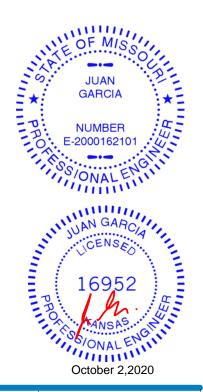
OTHERS 2x4 SPF No.2 REACTIONS.

All bearings 14-0-0. 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 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.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18,
- 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

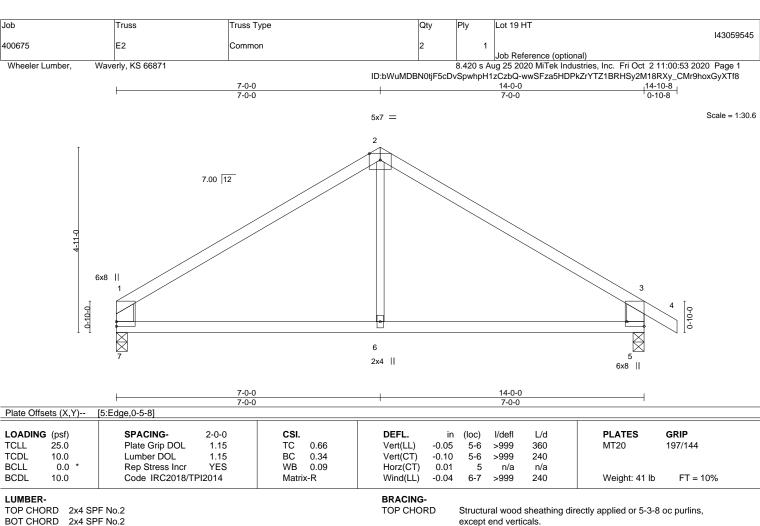
Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.









BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing

BOT CHORD 2x4 SPF No.2 WEBS 2x6 SPF No.2 *Except*

2-6: 2x3 SPF No.2

REACTIONS. (size) 7=0-3-8, 5=0-3-8

Max Horz 7=-139(LC 4)

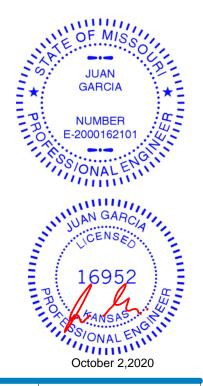
Max Uplift 7=-71(LC 8), 5=-97(LC 9) Max Grav 7=606(LC 1), 5=690(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 1-2=-693/108, 2-3=-699/109, 1-7=-534/120, 3-5=-625/148

6-7=-9/490, 5-6=-9/490 BOT CHORD

WEBS 2-6=0/283

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 7, 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.





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





Wheeler Lumber, Waverly, KS 66871

Structural wood sheathing directly applied or 6-0-0 oc purlins,

3-10

2-11, 4-10, 4-9

MIS

GARCIA

NUMBER

-2000162101

ONALE

16952

PROMOTE STATE OF THE STA

October 2,2020

Rigid ceiling directly applied or 4-4-7 oc bracing. Except:

except end verticals.

1 Row at midpt

1 Row at midpt



Scale = 1:67.9

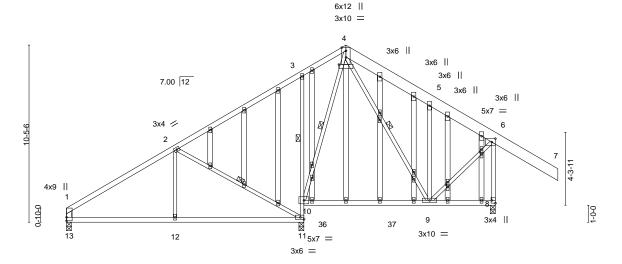


Plate Offsets (X,Y)	6-4-13 6-4-13	13-10-4 7-5-7 0-2-81 [32:0-1-8 0-1-0] [7	14-0-0 16-5-12 0-1-12 2-5-12	21-4-15 4-11-3	25-3-8 3-10-9	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	(/	I/defl L/d	PLATES GRIP
TCLL 25.0 TCDL 10.0 BCLL 0.0 *	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	TC 0.67 BC 0.64 WB 0.54	Vert(LL) Vert(CT) Horz(CT)		>895 360 >604 240 n/a n/a	MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.04 11-12	>999 240	Weight: 201 lb FT = 10%

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

2x4 SPF No.2 *Except* TOP CHORD 4-7: 2x8 SP DSS **BOT CHORD**

2x4 SPF No.2 *Except* 3-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 1-13: 2x4 SPF No.2 2x4 SPF No 2

OTHERS

REACTIONS. 13=0-3-8, 8=0-3-8, 11=0-3-8 (size)

Max Horz 13=318(LC 7)

Max Uplift 13=-100(LC 8), 11=-196(LC 8)

Max Grav 13=582(LC 16), 8=1118(LC 16), 11=1472(LC 15)

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

1-2=-719/138, 2-3=-182/372, 3-4=-126/255, 4-5=-176/377, 5-6=-352/125, 6-7=0/258, TOP CHORD

1-13=-470/131, 6-8=-1105/0

BOT CHORD 12-13=-189/603, 11-12=-189/603, 10-11=-965/122, 3-10=-478/258 WEBS 2-12=0/309, 2-11=-795/230, 4-10=-364/20, 4-9=-295/154, 5-9=0/449

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=100, 11=196,
- 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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:

Continued on page 2





ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-tJa?OG7XI0_H4rdy9cTIXN7iHy3IQngeITAv08yXTf6

```
Wheeler Lumber,
                      Waverly, KS 66871
LOAD CASE(S) Standard Except:
1) 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
2) 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
3) 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
4) 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
5) 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
6) 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
7) 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
8) 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
9) 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
10) 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
```

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

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

Continued on page 3

Uniform Loads (plf)

Drag: 6-8=0 Concentrated Loads (lb) Vert: 7=-250

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





Wheeler Lumber, V

Waverly, KS 66871

Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 3

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-tJa?OG7XI0_H4rdy9cTIXN7iHy3IQngeITAv08yXTf6
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
            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
400675	F3	GABLE	1	1	143059546
100010		O/ ISEE	ľ		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_H4rdy9cTlXN7iHy3lQngelTAv08yXTf6

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



Job Truss Truss Type Qty Lot 19 HT 143059547 400675 E4 Roof Special Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-tJa?OG7XI0_H4rdy9cTIXN7jky4RQnieITAv08yXTf6 21-4-15 25-3-0 16-5-12

2-5-12

4-11-3

7-7-3

Scale: 3/16"=1' 4x5 ||

3-10-1

25-3-0

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 4-1-14 oc bracing. Except:

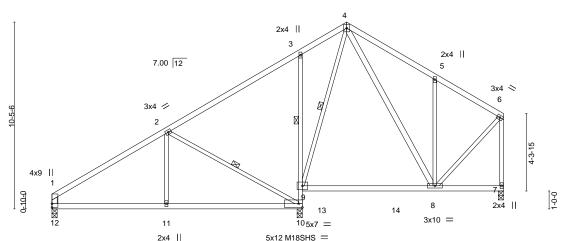
3-9

2-10, 4-9

except end verticals.

1 Row at midpt

1 Row at midpt



	6-4-13	7-7-3	2-5-12 4-11-3	3-10-1
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.58 BC 0.56 WB 0.54 Matrix-S	Vert(LL) -0.15 8-9 >891 36 Vert(CT) -0.23 8-9 >588 24	40 M18SHS 197/144 v/a

BRACING-

TOP CHORD

BOT CHORD

WEBS

16-5-12

14-0-0

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

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.

 $1\hbox{-}2\hbox{--}720/98,\ 2\hbox{-}3\hbox{--}179/340,\ 4\hbox{-}5\hbox{--}430/193,\ 5\hbox{-}6\hbox{--}353/82,\ 1\hbox{--}12\hbox{--}472/110,\ 6\hbox{-}7\hbox{--}488/83}$ TOP CHORD

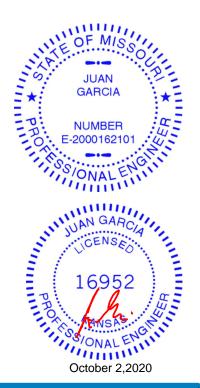
6-4-13

6-4-13

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

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





Job Truss Truss Type Qty Ply Lot 19 HT 143059548 400675 E5 MONOPITCH GIRDER

Wheeler Lumber, Waverly, KS 66871 | **Z** | Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:56 2020 Page 1

Structural wood sheathing directly applied or 4-11-3 oc purlins,

3-4, 2-4

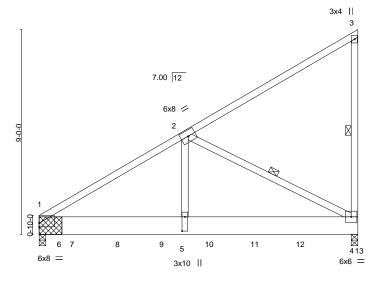
Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

1 Row at midpt

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LV8Nbb89WK68i?C8iJ__4bgqNMQj9C6oX7vSYbyXTf5 6-4-13

Scale = 1:50.6



6-4-13 7-7-3 Plate Offsets (X,Y)-- [1:0-0-0,0-1-15], [5:0-7-8,0-1-8]

LOADIN	G (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.84	DEFL. Vert(LL)	in -0.07	(loc) 1-5	l/defl >999	L/d 360	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	ВС	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/TP	PI2014	Matri	x-S	Wind(LL)	0.03	1-5	>999	240	Weight: 207 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

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 WFBS 2-5=0/4779. 2-4=-5051/143

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc. Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-5-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) 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.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=252.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 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

16952 PROMOTE NAME OF THE PROPERTY OF THE PRO

October 2,2020

MIS

GARCIA

NUMBER

E-2000162101

ONALE

Continued on page 2

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



Qty Ply Job Truss Truss Type Lot 19 HT 143059548 MONOPITCH GIRDER E5 400675

Wheeler Lumber,

Waverly, KS 66871

| 2 | Job Reference (optional) 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)



Job Truss Truss Type Qty Lot 19 HT 143059549 G1 400675 Common Supported Gable Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:57 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-phimpx8nHdE?K9nLG1VDdoCBwmuyuotxmnf041yXTf4 20-10-8 0-10-8 -0-10-8 0-10-8 20-0-0 10-0-0 Scale = 1:41.3 4x5 =

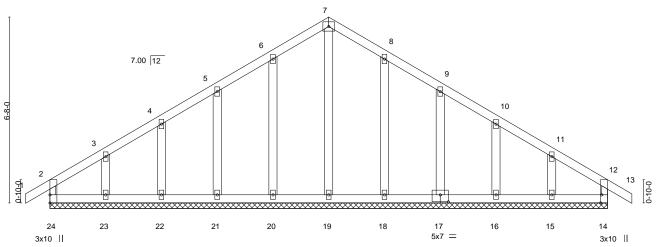


Plate Offsets (X,Y)--[14:0-3-8,Edge], [17:0-3-8,0-3-0] SPACING-GRIP LOADING (psf) CSI. DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.09 Vert(LL) -0.00 120 MT20 197/144 13 n/r **TCDL** 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) -0.00 13 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.11 Horz(CT) 0.00 14 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-R Weight: 89 lb

20-0-0

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SPF No.2 except end verticals. **WEBS** 2x3 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing **OTHERS** 2x4 SPF No.2

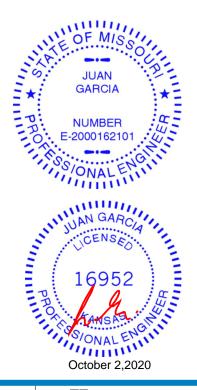
REACTIONS. All bearings 20-0-0.

Max Horz 24=-188(LC 6) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15 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.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21,
- 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.





Job Truss Truss Type Qty Lot 19 HT 143059550 400675 G2 Common Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:59 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-l4pWEdA1pFUiZTxjOSXhiDILaZOhMgGED5879wyXTf2 20-0-0 20-10-8 0-10-8 -0-10-8 0-10-8 15-2-15 4-9-0 5-2-15 5-3-0 4-9-1 Scale = 1:41.5 5x7 = 4 7.00 12 2x4 > 2x4 / 3 9 10 8 3x6 = 3x10 = 10x12 **** 10x12 🗸 10-0-0 20-0-0 Plate Offsets (X,Y)--[8:0-3-11,0-8-1], [11:0-2-9,0-4-7]

LOADIN	G (psf)	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 Y	'ES	WB	0.24	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	14	Matri	x-S	Wind(LL)	0.06	10	>999	240	Weight: 70 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 *Except* 2-11,6-8: 2x8 SP DSS

(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.

2-3=-1148/182, 3-4=-875/141, 4-5=-875/141, 5-6=-1148/183, 2-11=-852/178, TOP CHORD

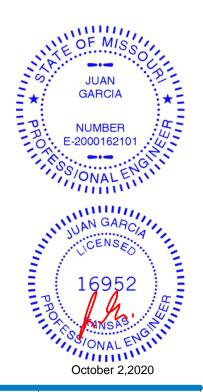
6-8=-852/178

BOT CHORD 10-11=-167/901, 8-10=-79/881

4-10=-6/460, 5-10=-255/206, 3-10=-254/206 WEBS

NOTES-

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



Structural wood sheathing directly applied or 3-1-0 oc purlins,

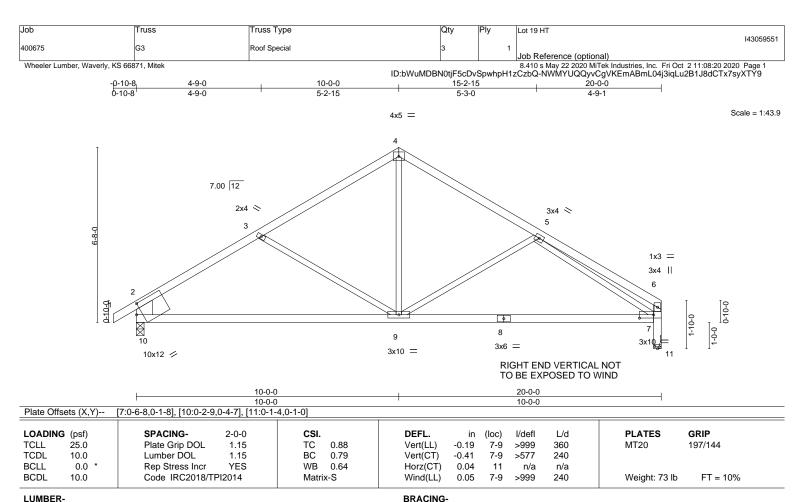
Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.



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





TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 *Except* **WEBS**

2-10: 2x8 SP DSS, 6-11: 2x4 SPF No.2

REACTIONS. (lb/size) 10=965/0-3-8, 11=877/Mechanical

Max Horz 10=175(LC 5)

Max Uplift 10=-130(LC 8), 11=-104(LC 9)

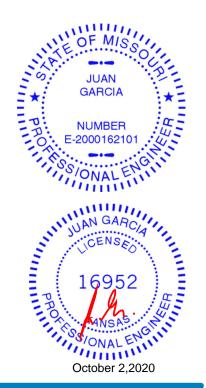
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1169/183, 3-4=-896/144, 4-5=-928/143, 5-6=-400/39, 2-10=-865/178,

7-11=-877/104, 6-7=-304/63

BOT CHORD 9-10=-191/901, 8-9=-104/954, 7-8=-104/954

4-9=-15/484, 5-9=-311/221, 3-9=-254/207, 5-7=-823/157 **WEBS**

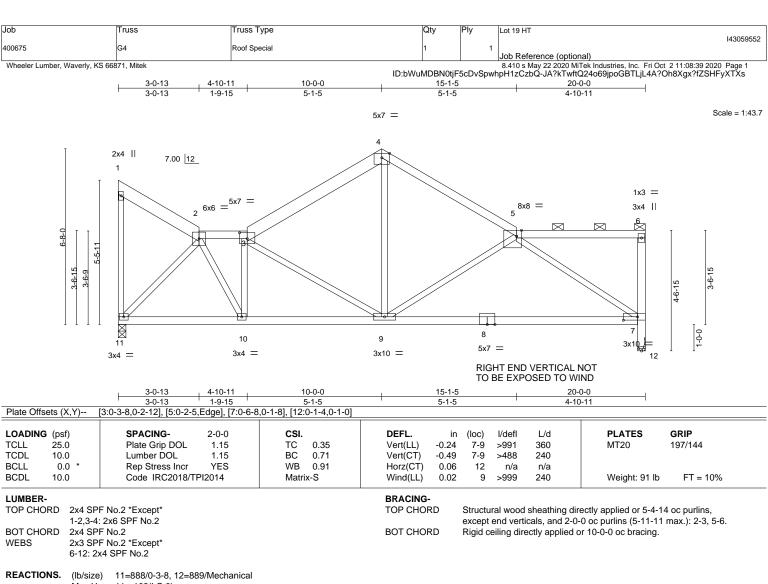
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 10 and 104 lb uplift at
- 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.



Structural wood sheathing directly applied or 2-2-0 oc purlins, except

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





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.

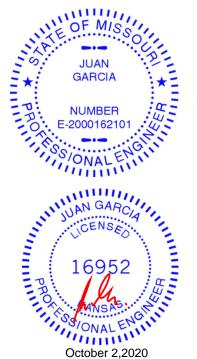
TOP CHORD 2-3=-981/0, 3-4=-916/32, 4-5=-944/16, 7-12=-889/13 **BOT CHORD** 10-11=-9/678, 9-10=0/997, 8-9=-36/952, 7-8=-36/952

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 ioint 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.



MARNING - 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



Job Truss Truss Type Qty Lot 19 HT 143059553 400675 G5 Roof Special Job Reference (optional) 8.410 s May 22 2020 MTek Industries, Inc. Fri Oct 2 11:08:55 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-rFznqOsvfz5X1dyukdTD?50ktRw6uvClg8SlrKyXTXc Wheeler Lumber, Waverly, KS 66871, Mitek 1-4-3 6-7-5 10-0-0 13-4-11 20-0-0 1-4-3 5-3-1 3-4-11 3-4-11 Scale = 1:43.7 5x7 = 7.00 12 2x4 || 1x3 = 6x6 = 6x6 = 6x6 = 3x10 = 6 ф 11 9 14 10 8 4x9 = 4x9 = 3x4 = RIGHT END VERTICAL NOT TO BE EXPOSED TO WIND 1-4-3 6-7-5 13-4-11 20-0-0 6-7-5 6-9-7 5-3-1 Plate Offsets (X,Y)--[12:0-1-4,0-1-0] LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defl L/d **PLATES** GRIP in (loc) Plate Grip DOL TC 197/144 TCLL 25.0 1 15 0.69 Vert(LL) -0 11 8-10 >999 360 MT20 Vert(CT) TCDL 10.0 Lumber DOL BC 0.48 240 1.15 -0.17>999 8-10 Rep Stress Incr Horz(CT) **BCLL** 0.0 YES WB 0.43 0.03 12 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-S Wind(LL) 0.03 8-10 >999 240 Weight: 96 lb FT = 10%LUMBER-**BRACING-**TOP CHORD 2x6 SPF No.2 *Except* TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-3,5-6: 2x4 SPF No.2 end verticals, and 2-0-0 oc purlins (4-4-1 max.): 2-3, 5-6. 2x4 SPF No.2 **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 2x3 SPF No.2 *Except* **WEBS** 6-12: 2x4 SPF No.2 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 Grav 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**

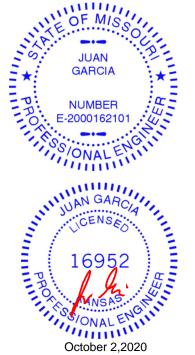
2-11=-910/54, 2-10=0/963, 3-10=-860/69, 4-10=0/593, 4-8=-28/607, 5-8=-933/111,

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 ioint 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.









Job Truss Truss Type Qty Lot 19 HT 143059554 400675 G6 Roof Special Job Reference (optional) 8.410 s May 22 2020 MTek Industries, Inc. Fri Oct 2 11:09:09 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Rxp3mA0iMGrYim0aZZjVZ2b6S5eLA56MuKr1LWyXTXO Wheeler Lumber, Waverly, KS 66871, Mitek 4-1-15 8-3-14 10-0-0 11-8-2 15-9-9 20-0-0 4-1-15 4-1-15 1-8-2 1-8-2 4-2-7 Scale = 1:43.7 5x7 = 7.00 12 1x3 = 6x6 = 2x4 || 2x4 || 6x6 = 3x4 =3x4 =M \boxtimes ∇ \boxtimes M ∇ ∇ \boxtimes 12 1-0-0 9 16 11 10 3x10 3x6 = 3x10 = 3x10 = 3x6 = 13 RIGHT END VERTICAL NOT TO BE EXPOSED TO WIND 8-3-14 10-0-0 11-8-2 15-9-9 20-0-0 1-8-2 4-2-7 8-3-14 1-8-2 4-1-7 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. L/d **PLATES** GRIP in (loc) I/defl 197/144 TCLL 25.0 Plate Grip DOL 1 15 TC 0.75 Vert(LL) -0 21 11-12 >999 360 MT20 -0.37 11-12 TCDL Lumber DOL BC 240 10.0 0.67 Vert(CT) >647 1.15 0.07 **BCLL** 0.0 Rep Stress Incr YES WB 0.98 Horz(CT) 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%**BRACING-**TOP CHORD 2x4 SPF No.2 *Except* TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 3-4,4-5: 2x6 SPF No.2 end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 5-7. 2x4 SPF No.2 **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 2x3 SPF No.2 *Except* **WEBS** 7-13: 2x4 SPF No.2

LUMBER-

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.

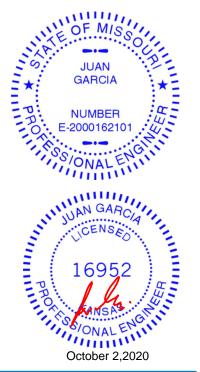
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60

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.

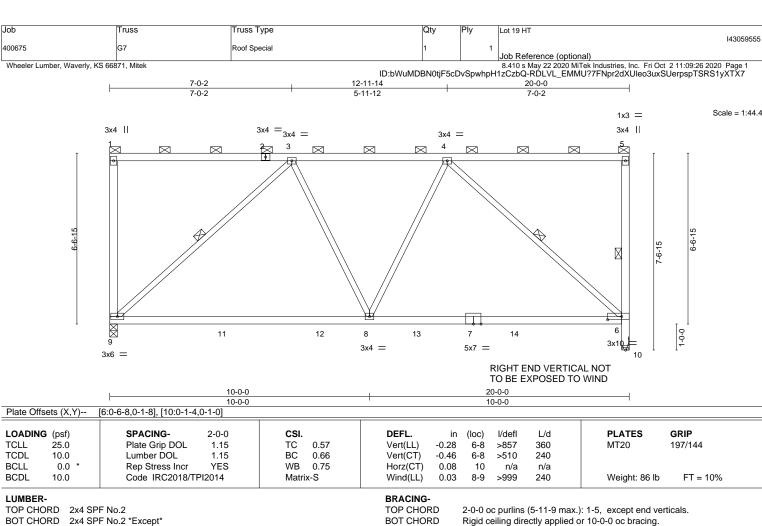
6) Refer to girder(s) for truss to truss connections.

- 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 ioint 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.



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





WEBS

1 Row at midpt

5-10, 3-9, 4-6

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

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.

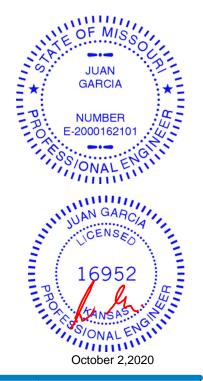
TOP CHORD 3-4=-839/140, 6-10=-968/187

BOT CHORD 9-11=-182/722, 11-12=-182/722, 8-12=-182/722, 8-13=-163/723, 7-13=-163/723,

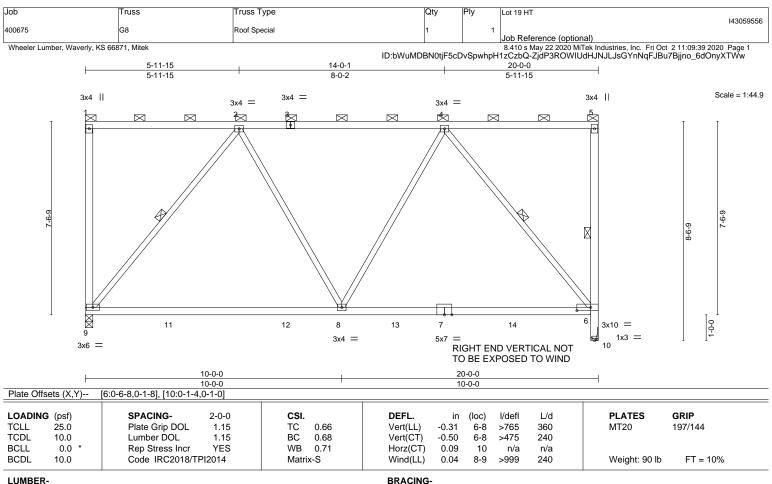
7-14=-163/723, 6-14=-163/723

WEBS 3-9=-940/213, 3-8=0/322, 4-8=0/318, 4-6=-934/221

- 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 ioint 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.







TOP CHORD

BOT CHORD

WEBS

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

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

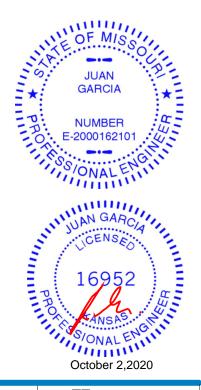
BOT CHORD 9-11=-173/575, 11-12=-173/575, 8-12=-173/575, 8-13=-144/576, 7-13=-144/576,

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 ioint 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.



2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.

5-10, 2-9, 4-6

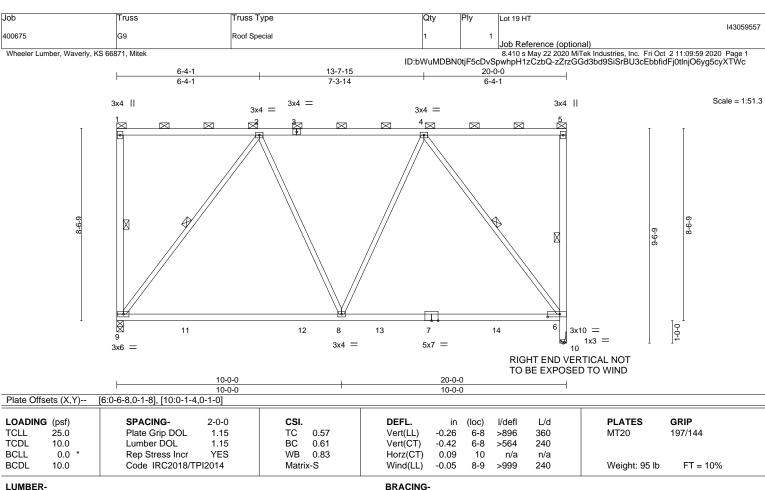
Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt



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





TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF 2400F 2.0E *Except* 6-7: 2x4 SPF 2100F 1.8E

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

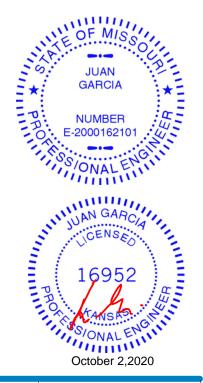
BOT CHORD 9-11=-164/526, 11-12=-164/526, 8-12=-164/526, 8-13=-135/528, 7-13=-135/528,

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 ioint 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.



2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.

1-9, 5-10, 2-9, 4-6

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

1 Row at midpt



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



Job Truss Truss Type Qty Lot 19 HT 143059558 400675 G10 Roof Special Job Reference (optional) 8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:10:12 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-537u?jnDXdncmSKhIILHcLiwfU9sQiNeOdbs3MyXTWP Wheeler Lumber, Waverly, KS 66871, Mitek 6-8-1 13-3-15 20-0-0 6-8-1 6-7-14 6-8-1 Scale = 1:59.7 3x4 = 3x4 || 3x4 || 3x6 = 3x4 =4 6 0-0-1 12 8 13 7 14 3x10 = 1x3 = 3x4 =5x7 = 10 3x6 = RIGHT END VERTICAL NOT TO BE EXPOSED TO WIND 10-0-0 20-0-0 10-0-0 10-0-0 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. I/defl L/d **PLATES** GRIP in (loc) Plate Grip DOL TC TCLL 25.0 1 15 0.55 Vert(LL) -0.27 6-8 >873 360 MT20 197/144 TCDL 10.0 Lumber DOL BC 0.62 Vert(CT) 240 1.15 -0.436-8 >556 Horz(CT) **BCLL** 0.0 Rep Stress Incr YES WB 0.49 0.10 10 n/a n/a Code IRC2018/TPI2014 Weight: 108 lb **BCDL** 10.0 Matrix-S Wind(LL) -0.07 8-9 >999 240 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, 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

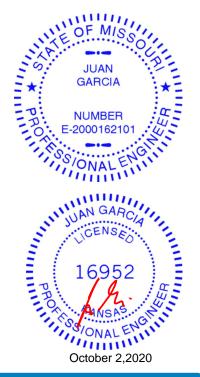
BOT CHORD 9-11=-158/488, 11-12=-158/488, 8-12=-158/488, 8-13=-129/489, 7-13=-129/489,

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-

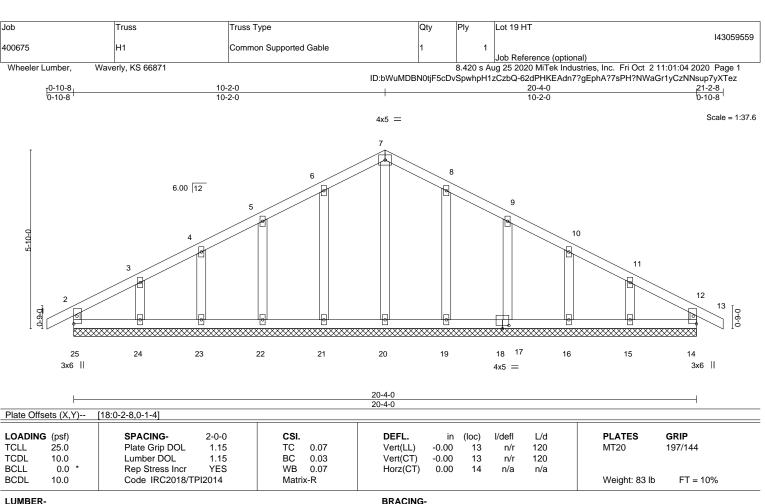
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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 ioint 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.





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





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

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

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

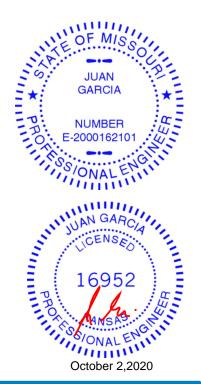
REACTIONS. All bearings 20-4-0.

Max Horz 25=90(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15 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.

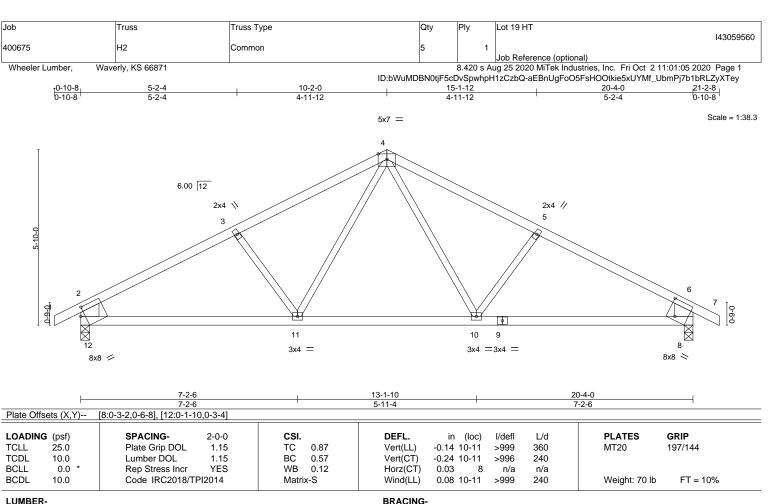
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 21, 22,
- 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.





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





TOP CHORD

BOT CHORD

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

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.

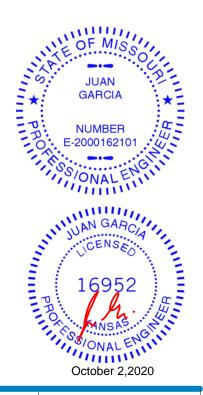
2-3=-1302/183, 3-4=-1106/183, 4-5=-1106/183, 5-6=-1302/183, 2-12=-877/173, TOP CHORD 6-8=-877/173

BOT CHORD 11-12=-167/1059, 10-11=-28/794, 8-10=-90/1059

WEBS 4-10=-75/346, 4-11=-75/346

NOTES-

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



Structural wood sheathing directly applied or 2-2-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.



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



Job Truss Truss Type Qty Lot 19 HT 143059561 400675 J1 Diagonal Hip Girder Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:06 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-2Ql9i0FQ9ONjvYz3lQ9KUi4hKOuhVtpGqgL_u0yXTex 2-9-3 2-9-3 4-8-13 1-2-14 1-11-10 Scale = 1:14.9 4.24 12 3x4 3x4 || 11 5 1-0-0 0-6-0 10 7_{2x4} || 3x6 4-8-13 1-11-10 Plate Offsets (X,Y)--[6:0-2-0,0-0-8] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. in (loc) I/defl L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.24 Vert(LL) -0.02 6 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 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 Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-R 0.02 >999 240 Weight: 15 lb 6 LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins,

BOT CHORD

except end verticals

Rigid ceiling directly applied or 10-0-0 oc bracing

BOT CHORD 2x4 SPF No.2 *Except*

6-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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
- 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.
- 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

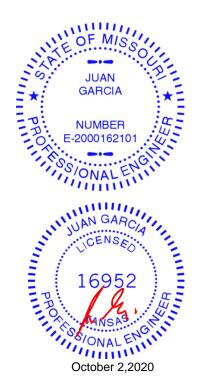
1) Dead + Roof Live (balanced): Lumber Increase=1.15. Plate Increase=1.15

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)





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



Job Truss Truss Type Qty Lot 19 HT 143059562 400675 J2 Jack-Open Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:07 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-WdIYvMG3wiVaXiYGs7hZ1vduAoHDEK3P3K4YQSyXTew 2-0-0 0-10-8 1-5-4 Scale = 1:15.3 6.00 12 1-5-10 3 2-0-15 6 2x4 = 2x4 || 5 1-0-0 0-6-0 ⁷2x4 || 3x6 2-0-0 1-5-4 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defl TCLL 25.0 Plate Grip DOL Vert(LL) -0.01 >999 197/144 1.15 TC 0.10 3 360 MT20

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

-0.01

0.01

0.01

6 >999

5

3 >999

n/a

except end verticals.

240

n/a

240

Rigid ceiling directly applied or 10-0-0 oc bracing

Structural wood sheathing directly applied or 3-5-4 oc purlins,

Weight: 11 lb

FT = 10%

LUMBER-

TCDL

BCLL

BCDL

TOP CHORD 2x4 SPF No.2

10.0

0.0

10.0

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

WEBS 2x3 SPF No.2

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical

Code IRC2018/TPI2014

Lumber DOL

Rep Stress Incr

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

ВС

WB

Matrix-R

0.12

0.00

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

1.15

YES

- 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.





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



Job Truss Truss Type Qty Lot 19 HT 143059563 400675 J3 Jack-Open Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:07 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

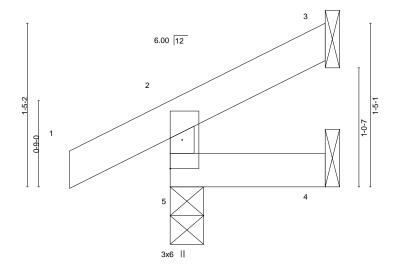
Structural wood sheathing directly applied or 1-4-3 oc purlins,

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

except end verticals.

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-WdIYvMG3wiVaXiYGs7hZ1vduloItEK3P3K4YQSyXTew 0-10-8 1-4-3

Scale = 1:10.0



1-4-3

BRACING-

TOP CHORD

BOT CHORD

LOADING	(psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.07	DEFL. Vert(LL)	in -0.00	(loc)	l/defl >999	L/d 360	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240	W1120	1077111
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TPI	YES 2014	WB Matri	0.00 x-R	Horz(CT) Wind(LL)	-0.00 0.00	3 5	n/a >999	n/a 240	Weight: 5 lb	FT = 10%

LUMBER-

REACTIONS.

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

5=0-3-8, 3=Mechanical, 4=Mechanical (size)

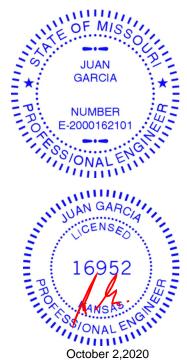
Max Horz 5=35(LC 5)

Max Uplift 5=-23(LC 8), 3=-20(LC 8)

Max Grav 5=151(LC 1), 3=20(LC 1), 4=22(LC 3)

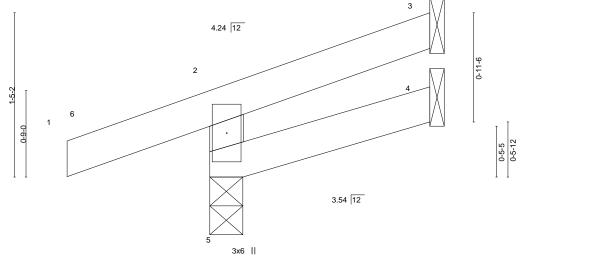
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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.





Job Truss Truss Type Qty Lot 19 HT 143059564 400675 J4 Jack-Open Girder Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:08 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-_psw6iHhh0dR8r7SPrCoZ7A3BBe_znIZI_q5yuyXTev 1-10-14 1-2-14 1-10-14 Scale = 1:10.0



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 0.09	Vert(LL) -0.00	5 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	5 >999 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00	3 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00	5 >999 240	Weight: 7 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

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-

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

LOAD CASE(S) Standard

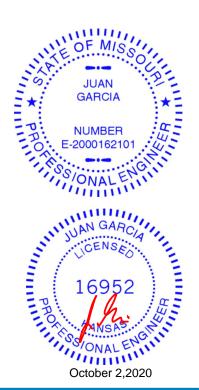
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Concentrated Loads (lb)

Vert: 1=-8(F=-4, B=-4)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-6=-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)



Structural wood sheathing directly applied or 1-10-14 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.







Job Truss Truss Type Qty Ply Lot 19 HT 143059565 400675 LAY1 GABLE Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:08 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-_psw6iHhh0dR8r7SPrCoZ7A3VBepznmZI_q5yuyXTev 4-3-12 4-3-12 Scale: 3/8"=1' 4x5 = 3 13.42 12 2x4 || 2x4 | 0-0-4 0-0-4 2x4 / 8 6 2x4 \ 2x4 || 2x4 || 2x4 || 8-7-7 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 25.0 Plate Grip DOL 1.15 Vert(LL) 197/144 TC 0.07 n/a n/a 999 MT20

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

0.00

999

n/a

Rigid ceiling directly applied or 10-0-0 oc bracing

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Weight: 33 lb

FT = 10%

n/a

n/a

5

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

OTHERS 2x4 SPF No.2

REACTIONS. All bearings 8-7-7.

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-

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

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

ВС

WB

Matrix-P

0.03

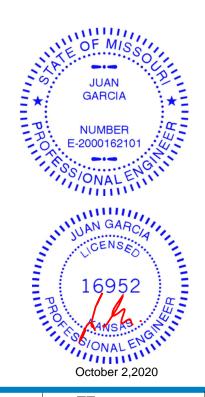
0.03

- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

YES

- 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) 1, 5 except (jt=lb) 8=169, 6=169,
- 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.





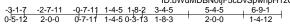
Job Truss Truss Type Qty Lot 19 HT 143059566 400675 LAY2 LAY-IN GABLE

Wheeler Lumber, Waverly, KS 66871

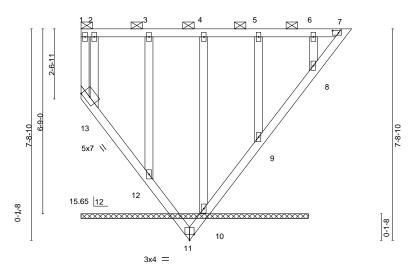
| Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:09 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-S?QIK2IJSJIIm?iezYj16KiBFbzbiCPiWeZeUKyXTeu

2-0-0 oc purlins: 1-7, except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing.



Scale = 1:42.1



1	-3-1-7	6-9-1
Г	3-1-7	6-9-1

Plate Off	sets (X,Y)	[7:0-2-11,0-1-0], [11:Edg	e,0-2-10]									
LOADIN	\(\(\)	SPACING-	2-0-0	CSI.	0.00	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 BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/Ti	YES PI2014	WB Matri	0.14 x-S	Horz(CT)	-0.00	9	n/a	n/a	Weight: 54 lb	FT = 10%
		0000 11102010/11		1110411	. •						110.g 0 1	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. All bearings 8-3-9.

Max Horz 13=28(LC 5) (lb) -

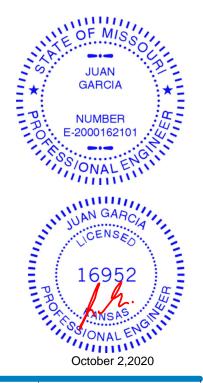
Max Uplift All uplift 100 lb or less at joint(s) 13, 11, 10 except 9=-115(LC 5), 12=-118(LC 5) Max Grav All reactions 250 lb or less at joint(s) 13, 11, 10 except 9=369(LC 1), 12=352(LC 1)

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

- 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; 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.





Job Truss Truss Type Qty Lot 19 HT 143059567 400675 LAY3 GABLE Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:10 2020 Page 1

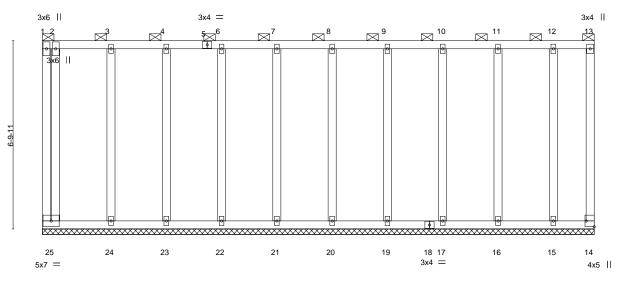
Wheeler Lumber, Waverly, KS 66871 $ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-xC_gXOIxDdt9O9GqXFEGeYFF6?GqRUIsIIJC1nyXTet$

2-0-0 oc purlins (6-0-0 max.): 1-13, except end verticals.

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

19-11-8

Scale = 1:41.7



19-11-8

- 1010 01	10010 (71, 17	[11:Eugo,0 0 0]							
LOADIN	IG (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) n/s	a -	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) n/s	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%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

Plate Offsets (X Y)-- [14:Fdge 0-3-8]

1-5: 2x4 SPF 2400F 2.0E

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

REACTIONS. All bearings 19-11-8.

Max Horz 25=-249(LC 4) (lb) -

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

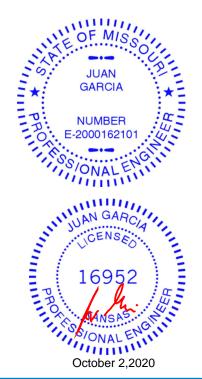
15), 15=299(LC 16)

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

- 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.
- 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) 22, 21, 20, 19, 17, 16 except (it=lb) 25=338, 14=244, 24=429, 23=126, 15=293.
- 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.





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



Job Truss Truss Type Qty Lot 19 HT 143059568 400675 LAY4 GABLE Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-xC_qXOIxDdt9O9GqXFEGeYFOG?INRgCsllJC1nyXTet 9-10-8 9-10-8 Scale = 1:35.1 4 ⁵ 🔀 3 \bowtie 0-0-7 8-1-9 15.65 12 12 10 93x4 // 11 4-9-9 9-10-8 4-9-9 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI 25.0 Plate Grip DOL Vert(LL) n/a 197/144 **TCLL** 1.15 TC 0.18 n/a 999 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.10 Horz(CT) 0.00 6 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-S Weight: 55 lb FT = 10% LUMBER-BRACING-

TOP CHORD

BOT CHORD

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

WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 9-10-8.

(lb) -Max Horz 12=-180(LC 6)

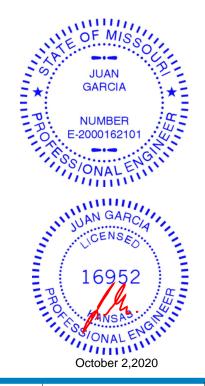
Max Uplift All uplift 100 lb or less at joint(s) 12, 11, 10, 8, 7 except 6=-103(LC 5), 9=-112(LC 6)

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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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 (it=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.



2-0-0 oc purlins (6-0-0 max.): 1-6, except end verticals.

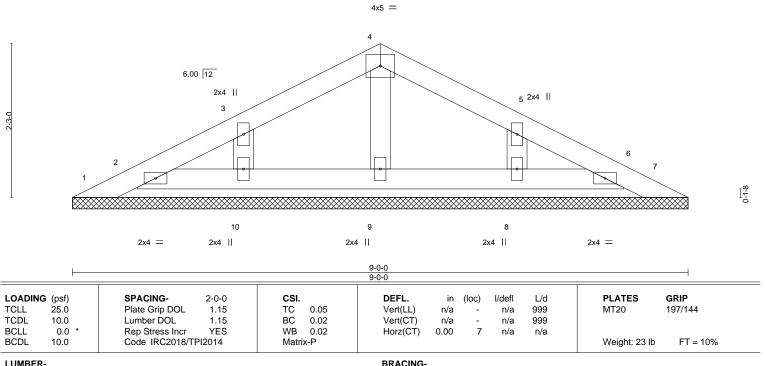
6-0-0 oc bracing: 6-7.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:



Job Truss Truss Type Qty Lot 19 HT 143059569 400675 Piggyback Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:11 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-POY2lkJZ_x?0?Jr15zlVBlob2PfcA8m?_y2lZDyXTes 4-6-0 4-6-0

Scale = 1:16.8



TOP CHORD

BOT CHORD

LUMBER-

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

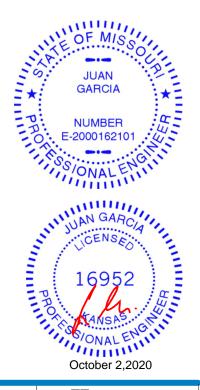
REACTIONS. All bearings 9-0-0. Max Horz 1=-37(LC 13)

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-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) 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.
- 8) 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.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



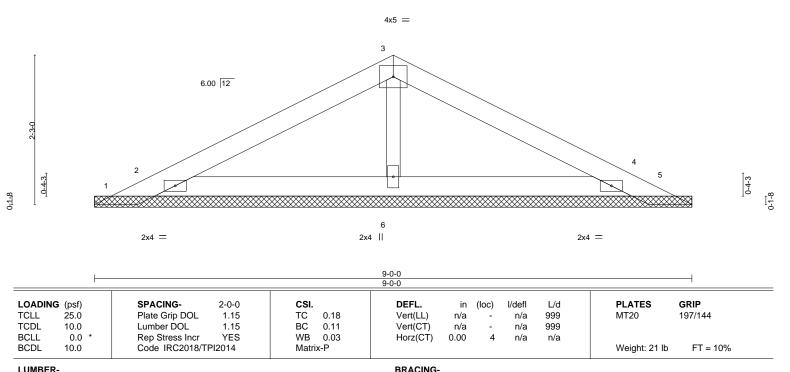
Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing



Job Truss Truss Type Qty Lot 19 HT 143059570 400675 P2 Piggyback 22 Job Reference (optional)
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:12 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ta6Ry4KBlE7sdTQDegGkkzKkfp_Yvbn9CcoJ5fyXTer 4-6-0 4-6-0

Scale = 1:17.4



LUMBER-TOP CHORD

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

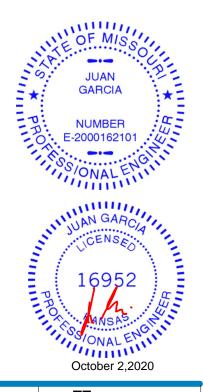
TOP CHORD 2x4 SPF No.2 BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. All bearings 9-0-0.

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) 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.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) Gable requires continuous bottom chord bearing.
- 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 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.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building





Job Truss Truss Type Qty Ply Lot 19 HT 143059571 R1 400675 Common Girder | **Z** | Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:13 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LmgpAPLqWYFjFd?PCOozGAtsWCCFexKIRGXsd6yXTeq 20-4-0 4-11-12 4-11-12 5-2-4 Scale = 1:34.9 5x7 || 3 6.00 12 2 0-6-0 15 16 17 8 19 7 20 6 22 23 3x10 3x10 = 8x8 = 5x7 = 8x8 = 6-10-3 13-5-13 20-4-0 6-7-11 6-10-3 Plate Offsets (X,Y)--[1:0-10-0,0-0-13], [5:0-10-0,0-0-13], [6:0-4-0,0-4-12], [8:0-4-0,0-4-12] DEFL. GRIP LOADING (psf) SPACING-(loc) I/defl L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.37 Vert(LL) -0.11 5-6 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.59 Vert(CT) -0.19 5-6 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.46 Horz(CT) 0.04 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S >999 240 Weight: 251 lb 0.07 5-6

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SPF No.2 BOT CHORD 2x6 SP 2400F 2.0E WEBS 2x4 SPF No.2

REACTIONS.

(size) 1=0-3-8 (req. 0-4-5), 5=0-3-8 (req. 0-3-13)

Max Horz 1=-61(LC 4)

Max Uplift 1=-329(LC 8), 5=-410(LC 9) Max Grav 1=5465(LC 1), 5=4831(LC 1)

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

TOP CHORD 1-2=-7571/534, 2-3=-7408/554, 3-4=-7527/625, 4-5=-7675/605

BOT CHORD 1-8=-471/6550, 6-8=-295/4691, 5-6=-481/6645

WEBS 3-6=-406/3772, 4-6=-192/273, 3-8=-240/3599, 2-8=-198/281

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. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 329 lb uplift at joint 1 and 410 lb uplift at joint 5.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 924 lb down and 160 lb up at 8-4-12, 912 lb down and 42 lb up at 10-4-12, 869 lb down and 35 lb up at 12-4-12, 854 lb down and 122 lb up at 14-4-12, 854 lb down and 122 lb up at 16-4-12, 854 lb down and 122 lb up at 18-4-12, 817 lb down and 40 lb up at 2-4-12, 817 lb down and 40 lb up at 4-4-12, and 817 lb down and 40 lb up at 6-4-12, and 874 lb down and 43 lb up at 0-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

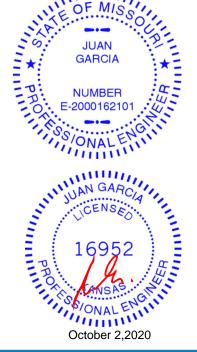
LOAD CASE(S) Standard

Continued on page 2

MARNING - 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

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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Structural wood sheathing directly applied or 5-3-8 oc purlins.

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



Qty Ply Job Truss Truss Type Lot 19 HT 143059571 R1 400675 Common Girder | **Z** | Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:13 2020 Page 2

Wheeler Lumber,

Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LmgpAPLqWYFjFd?PCOozGAtsWCCFexKIRGXsd6yXTeq

LOAD CASE(S) Standard

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

Uniform Loads (plf)

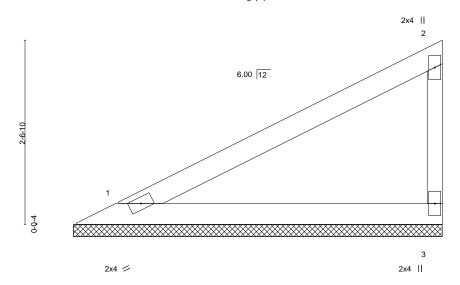
Vert: 1-3=-70, 3-5=-70, 1-5=-20

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)



Job Truss Truss Type Qty Lot 19 HT 143059572 Valley 400675 V1 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:14 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-pzDBNlLSHsNasmacm5JCpOQ1McedNVnRgwHPAYyXTep 5-1-4 5-1-4



LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.36 BC 0.20	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-P	Horz(CT) -0.00 3 n/a n/a	Weight: 13 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2

1=5-1-4, 3=5-1-4 (size) 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.



Structural wood sheathing directly applied or 5-1-4 oc purlins,

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

except end verticals.

Scale: 3/4"=1"



Job Truss Truss Type Qty Lot 19 HT 143059573 Valley 400675 V2

Wheeler Lumber, Waverly, KS 66871

Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:16 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ILLxoRNioTdl64k_tWLgupVQ?QNLrPHk7EmWERyXTen

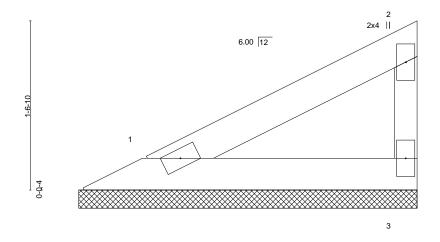
Structural wood sheathing directly applied or 3-1-4 oc purlins,

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

except end verticals.

3-1-4

Scale = 1:10.6



2x4 / 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

LOADIN	\(\(\)		-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	/ES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	14	Matri	x-P						Weight: 7 lb	FT = 10%

LUMBER-

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

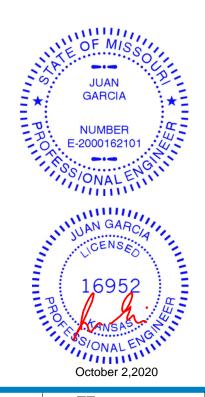
WEBS 2x3 SPF No.2

REACTIONS. 1=3-1-4, 3=3-1-4 (size) 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.

- 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.





Job Truss Truss Type Lot 19 HT 143059574 400675 V3 GABLE

Wheeler Lumber, Waverly, KS 66871 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:17 2020 Page 1

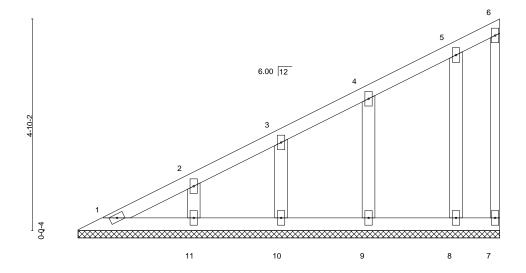
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-DYvJ?nOKZnm9jEJBREsvR01bWqixasAuMuV4ntyXTem 9-8-4 9-8-4

Scale = 1:26.4



LOADIN TCLL	G (psf) 25.0	SPACING- 1-5-4 Plate Grip DOL 1.15	CSI. TC 0.11	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999	WIZO	1077111
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.02 Matrix-S	Horz(CT)	-0.00	7	n/a	n/a	Weight: 36 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

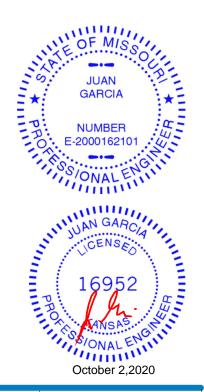
(lb) -

All bearings 9-7-12.

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.

- 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) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 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) 7, 11, 10, 9, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 19 HT 143059575 Valley 400675 V4 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:17 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-DYvJ?nOKZnm9jEJBREsvR01ZrghdasbuMuV4ntyXTem 8-0-2 8-0-2

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

Scale: 1/2"=1'

2x4 || 3 6.00 12 2x4 || 9-0-0

LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.22 BC 0.11	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.06 Matrix-P	Horz(CT) -0.00 4 n/a n/a	Weight: 22 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

2x4 ||

LUMBER-

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

OTHERS 2x3 SPF No.2

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.

2-5=-319/178 **WEBS**

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.

2x4 /

- 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) 4 except (jt=lb) 5=123
- 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.





Job Truss Truss Type Qty Lot 19 HT 143059576 Valley 400675 V5

Wheeler Lumber, Waverly, KS 66871

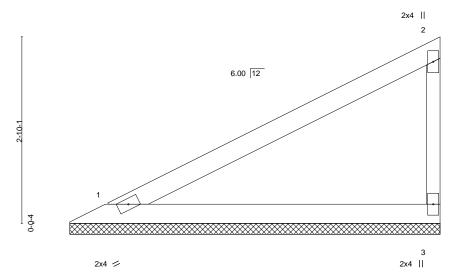
Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:18 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ikTiD7PyK4u0LOuN?xN8zEagcD?eJJn1bYFdJJyXTel

Structural wood sheathing directly applied or 5-8-2 oc purlins,

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

except end verticals.

Scale = 1:17.5



LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	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/TP	12014	Matri	x-P						Weight: 15 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

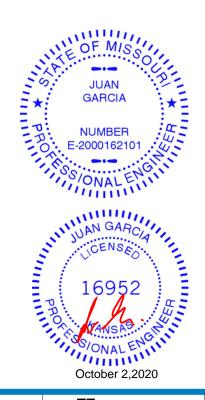
TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

> 1=5-7-10, 3=5-7-10 (size) 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.

- 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.





Job Truss Truss Type Qty Lot 19 HT 143059577 Valley 400675 V6 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:18 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

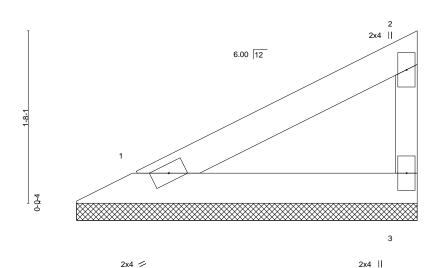
Structural wood sheathing directly applied or 3-4-2 oc purlins,

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

except end verticals.

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Scale = 1:11.2



LOADIN TCLL	G (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.12	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-P						Weight: 8 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

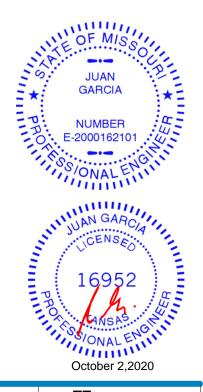
WEBS 2x3 SPF No.2

> 1=3-3-10, 3=3-3-10 (size) Max Horz 1=55(LC 5)

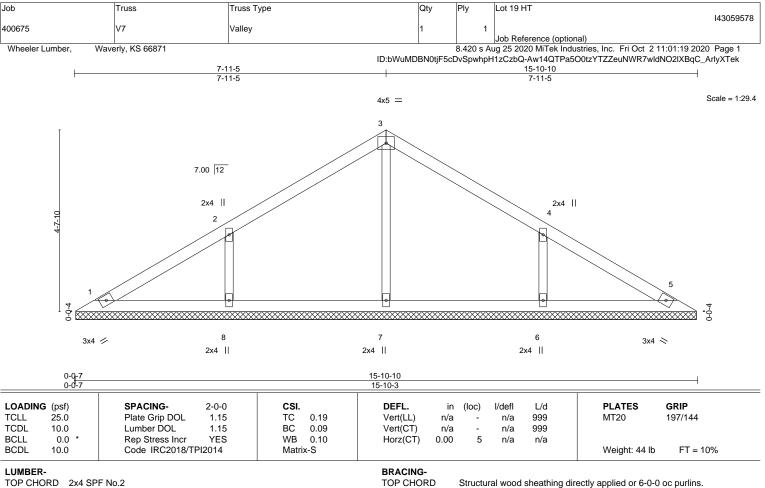
Max Uplift 1=-15(LC 8), 3=-29(LC 8) Max Grav 1=117(LC 1), 3=117(LC 1)

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

- 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.







BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing

2x4 SPF No.2 2x4 SPF No.2

BOT CHORD OTHERS 2x3 SPF No.2

All bearings 15-9-13. REACTIONS.

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)

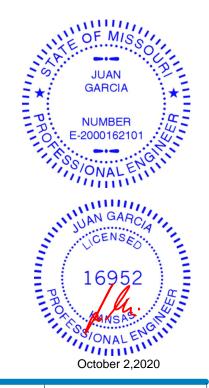
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 1), 8=402(LC 15), 6=402(LC 16)

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

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

NOTES-

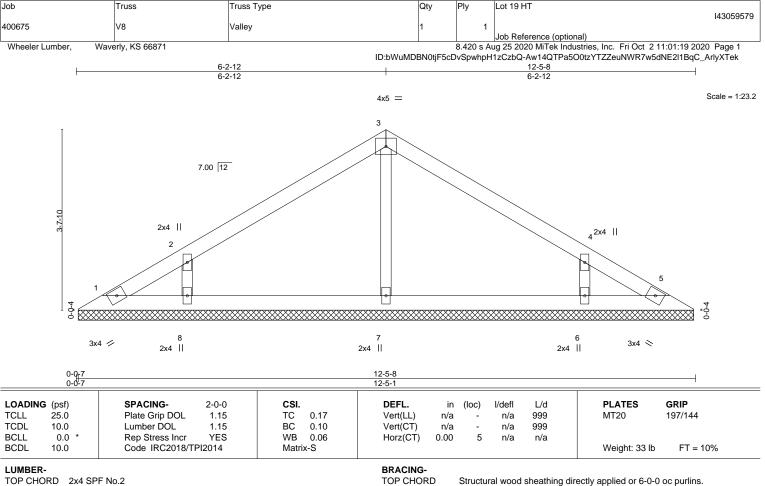
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 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) 1 except (jt=lb) 8=140 6=140
- 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.





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





BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing

2x4 SPF No.2 2x4 SPF No.2

BOT CHORD **OTHERS** 2x3 SPF No.2

REACTIONS. All bearings 12-4-10.

Max Horz 1=-87(LC 4)

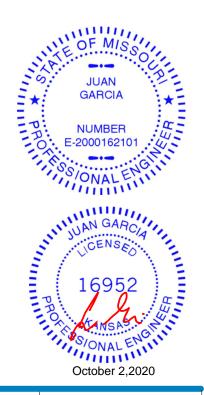
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-122(LC 8), 6=-122(LC 9)

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)

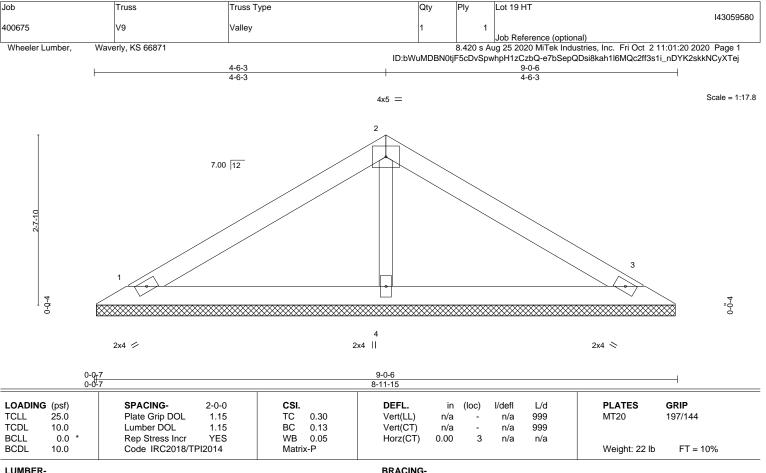
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-8=-276/165, 4-6=-275/164 **WEBS**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 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) 1, 5 except (jt=lb) 8=122 6=122
- 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.







TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x3 SPF No.2

REACTIONS.

1=8-11-8, 3=8-11-8, 4=8-11-8 (size) 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-

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



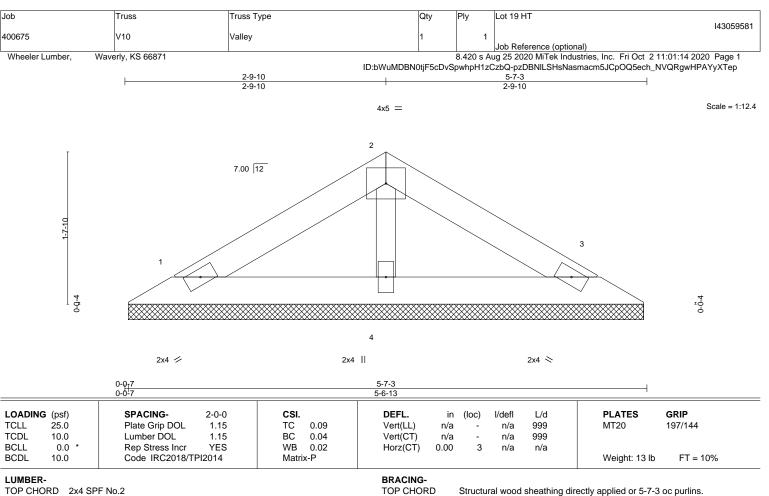
Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing



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





BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS.

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

OTHERS

1=5-6-6, 3=5-6-6, 4=5-6-6 (size) 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.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) 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.
- 6) 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.
- 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.





Job Truss Truss Type Qty Lot 19 HT 143059582 V11 Valley 400675 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:15 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

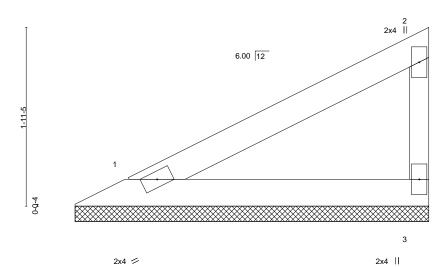
Structural wood sheathing directly applied or 3-10-10 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-H9nZa5M419VRUw9oKpqRLbyFz00P6y1bva0zi_yXTeo 3-10-10 3-10-10

Scale = 1:12.5



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

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

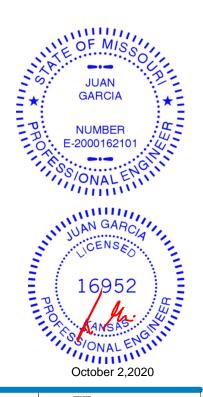
2x4 SPF No.2 TOP CHORD BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

> 1=3-10-2, 3=3-10-2 (size) 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.

- 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.





Job Truss Truss Type Qty Lot 19 HT 143059583 Valley 400675 V12

Wheeler Lumber, Waverly, KS 66871

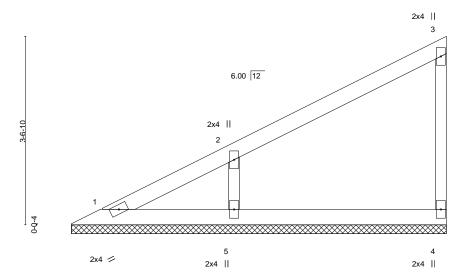
Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:15 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-H9nZa5M419VRUw9oKpqRLbyFp00L6yDbva0zi_yXTeo

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

Scale = 1:21.7



LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.19 BC 0.10 WB 0.05	DEFL. in (loc) l/defl Vert(LL) n/a - n/a Vert(CT) n/a - n/a Horz(CT) -0.00 4 n/a	L/d PLATES GRIP 999 MT20 197/144 999 n/a
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	1.012(0.1) 0.00 1 1.40	Weight: 20 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 **WEBS OTHERS** 2x3 SPF No.2

REACTIONS.

(size) 1=7-0-12, 4=7-0-12, 5=7-0-12 Max Horz 1=133(LC 5)

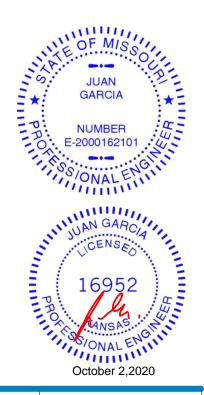
Max Uplift 4=-27(LC 8), 5=-112(LC 8)

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.

2-5=-290/162 **WEBS**

- 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 ioint 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.





Job Truss Truss Type Qty Lot 19 HT 143059584 Valley 400675 V13 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:16 2020 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ILLxoRNioTdl64k_tWLgupVMsQK5rPHk7EmWERyXTen

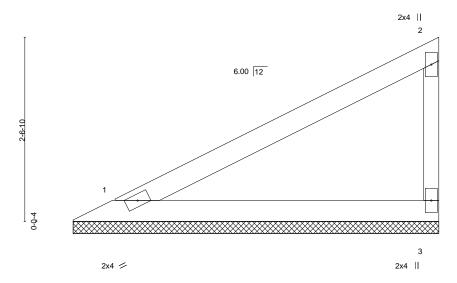
Structural wood sheathing directly applied or 5-1-4 oc purlins,

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

except end verticals.

5-1-4

Scale: 3/4"=1"



LOADIN	G (psf)	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 YE	ES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI201	4	Matri	x-P						Weight: 13 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

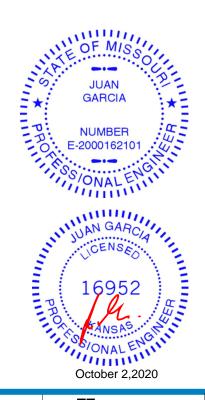
WEBS 2x3 SPF No.2

> 1=5-0-12, 3=5-0-12 (size) 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.

- 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.



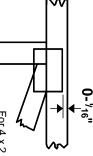


Symbols

PLATE LOCATION AND ORIENTATION



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



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

?

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

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

PLATE SIZE



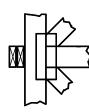
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



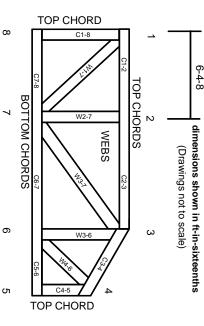
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

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/TPI 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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

9

Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

4

- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 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/TPI 1 Quality Criteria.
- 21.The design does not take into account any dynamic or other loads other than those expressly stated.