



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

10/12/2020

RE: 400675
Lot 19 HT

MiTek USA, Inc.

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

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

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

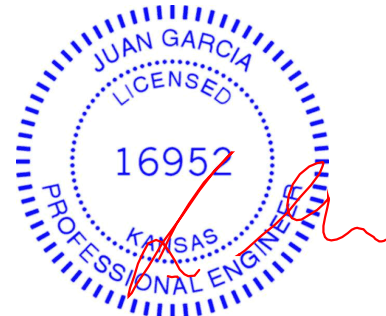
Floor Load: N/A psf

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

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

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Wheeler - Waverly.
Truss Design Engineer's Name: Garcia, Juan
My license renewal date for the state of Kansas is April 30, 2022.
Kansas COA: E-943

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



October 02, 2020



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

10/12/2020

RE: 400675 - Lot 19 HT

MiTek USA, Inc.

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

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

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



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

10/12/2020

RE: 400675
Lot 19 HT

MiTek USA, Inc.

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

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

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

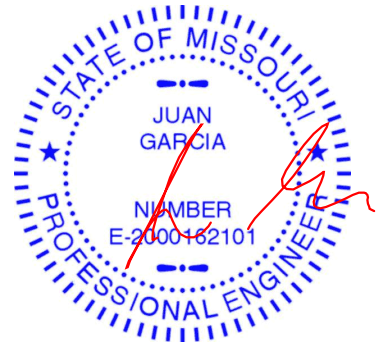
Floor Load: N/A psf

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

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

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



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

10/12/2020

RE: 400675 - Lot 19 HT

MiTek USA, Inc.

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

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

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

Job: 400675

Truss: A1

Truss Type: Hip Girder

Wheeler Lumber, Waverly, KS 66871

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/12/2020

Ply: 2

Lot 19 HT

Job Reference (optional)

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

ID:bWuMDBN0tjF5cDvSpwhH1zCzbQ-iXmf5?mjpoCXUEKBOJwjK2ucDsskOKnEPovJyuyXTfa

0-10-8 | 2-0-0 | 3-5-4

0-10-8 | 2-0-0 | 1-5-4

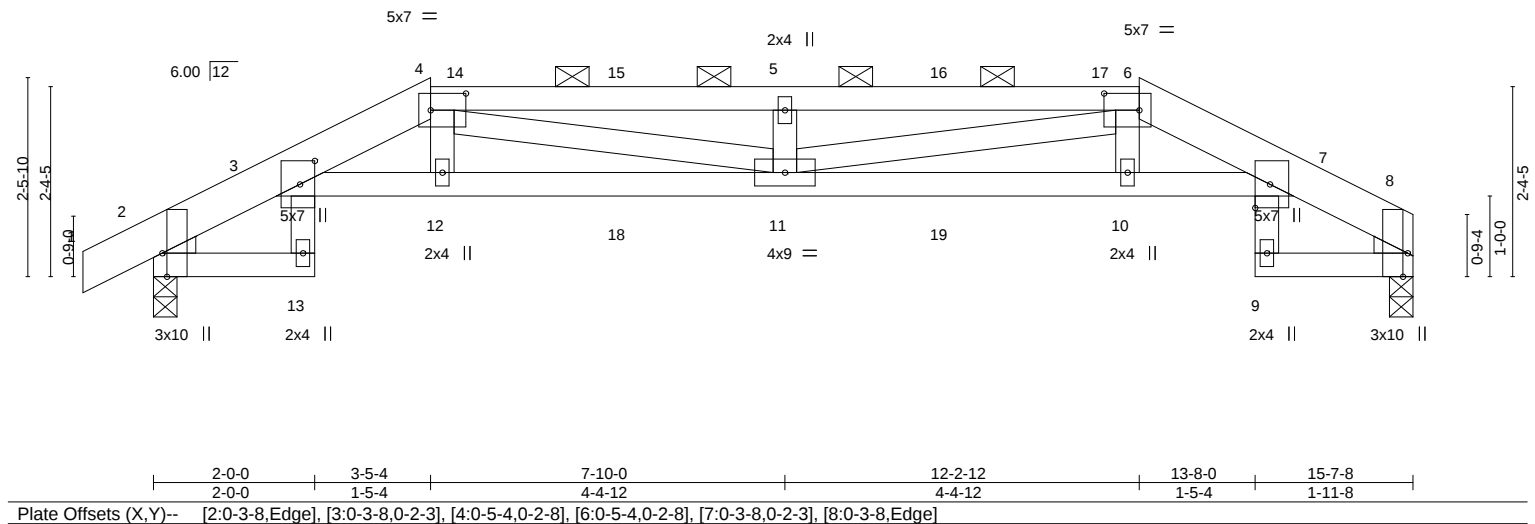
7-10-0 | 12-2-12

4-4-12 | 4-4-12

13-8-0 | 15-7-8

1-5-4 | 1-11-8

Scale = 1:28.6



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Lot 19 HT
400675	A1	Hip Girder	8.420 s	2	I43059520

Wheeler Lumber,
Waverly, KS 66871

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

NOTES-

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

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

Job 400675	Truss A2	Truss Type Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply 1 Lot 19 HT I43059521 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:26 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpHLCzbQ-DkK2ILmLa6KO6OvNy0SysGQ11GAW7nhNeSetUKyXTfZ
Wheeler Lumber, Waverly, KS 66871					

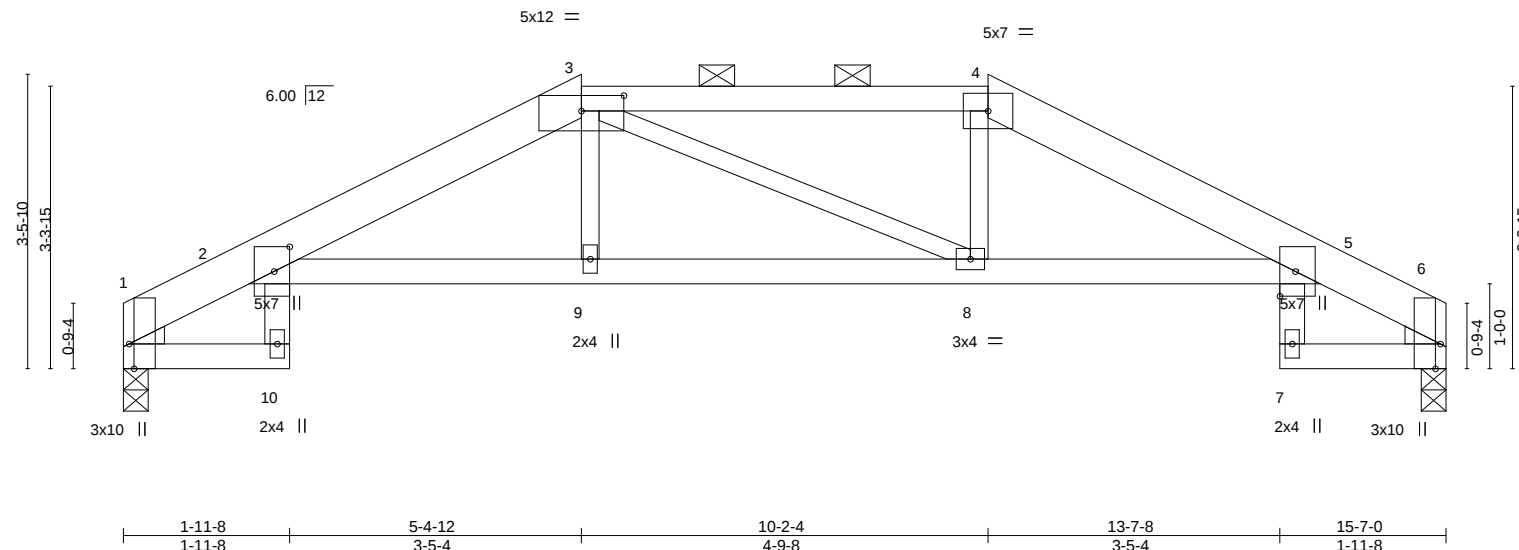


Plate Offsets (X, Y)--		[1:0-3-8,Edge], [2:0-3-8,0-2-3], [3:0-6-0,0-2-3], [5:0-3-8,0-2-3], [6:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65
TCDL 10.0	Lumber DOL	1.15	BC 0.57
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.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

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*

3-4: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-10,5-7: 2x4 SPF No.2

WEDGE

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

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

Max Horz 1=-54(LC 9)

Max Uplift 1=-60(LC 8), 6=-60(LC 9)

Max Grav 1=697(LC 1), 6=697(LC 1)

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

TOP CHORD 1-2=-441/66, 2-3=-1352/102, 3-4=-1239/90, 4-5=-1352/84, 5-6=-441/59

BOT CHORD 2-9=-78/1233, 8-9=-75/1239, 5-8=-37/1234

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



October 2,2020

Job: 400675

Truss: A3

Truss Type: Hip

Wheeler Lumber, Waverly, KS 66871

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/12/2020

Ply: 1

Lot 19 HT

Job Reference (optional)

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

ID: bWuMdbN0tjF5cDvSpwhpHlZCzbQ-DkK2ILmLa6KO6OvNy0SysGQkDG927nFNesetUKyXTfZ

1-11-8

1-11-8

7-4-12

5-5-4

13-7-8

5-5-4

15-7-0

1-11-8

Scale = 1:27.9

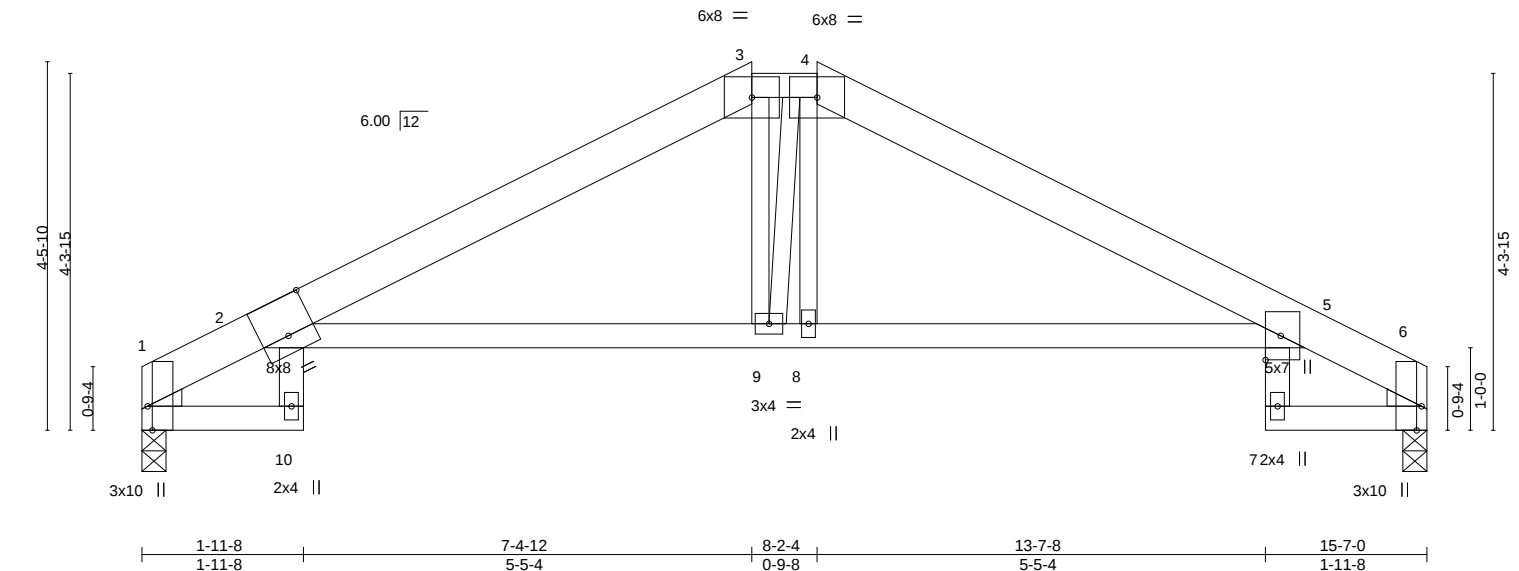


Plate Offsets (X,Y)--		[1:0-3-8,Edge], [2:0-4-0,0-5-7], [5:0-3-8,0-2-3], [6:0-3-8,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.17	7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.32	7	>571		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.33	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.12	7	>999	Weight: 59 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 3-4: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-11-6 oc purlins, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (5-1-1 max.): 3-4.
WEBS	2x3 SPF No.2 *Except* 2-10,5-7: 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-10.
WEDGE			
Left: 2x3 SPF No.2 , Right: 2x3 SPF No.2			

REACTIONS.	
(size)	1=0-3-8, 6=0-3-8
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
BOT CHORD	2-9=-49/975, 8-9=-21/983, 5-8=-22/979
WEBS	3-9=-106/311

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



October 2,2020

Job 400675	Truss A4	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Lot 19 HT Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:27 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-hwuQWhnzLPSFjYUaWjzBPTzvPgVVVsDbXs6OQ0myXTfY
Wheeler Lumber, Waverly, KS 66871			1-11-8 1-11-8 7-9-8 5-10-0 13-7-8 5-10-0 15-7-0 1-11-8		
			Scale = 1:28.7		

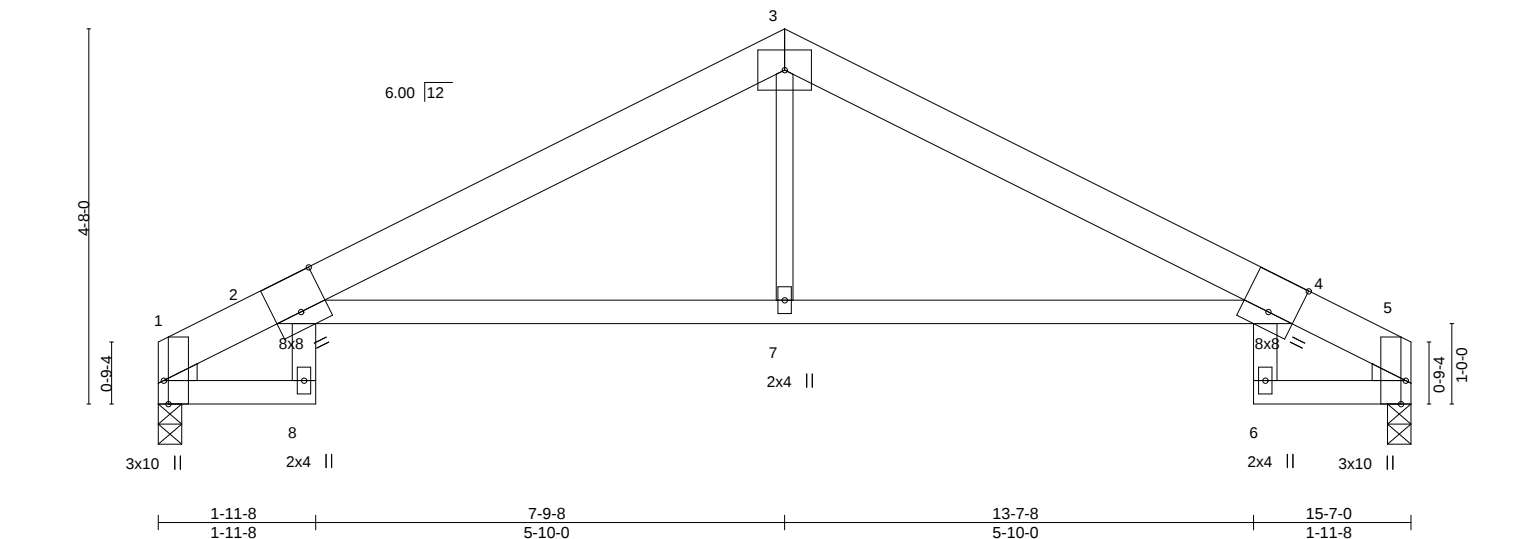


Plate Offsets (X,Y)--		[1:0-3-8,Edge], [2:0-4-0,0-5-7], [4:0-4-0,0-5-7], [5:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.73
TCDL 10.0	Lumber DOL	1.15	BC 0.59
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.15 4-7 >999 360
			Vert(CT) -0.29 4-7 >630 240
			Horz(CT) 0.34 5 n/a n/a
			Wind(LL) 0.13 2-7 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 56 lb FT = 10%

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

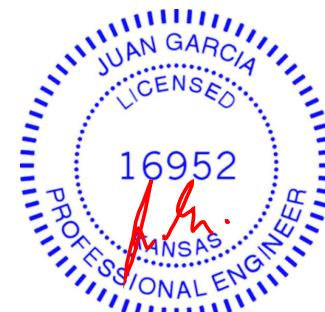
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-441/97, 2-3=-1093/103, 3-4=-1093/131, 4-5=-441/72
 BOT CHORD 2-7=-46/972, 4-7=-46/972
 WEBS 3-7=0/319

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



October 2,2020

Job 400675	Truss B1	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020	Ply 1	Lot 19 HT I43059524 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:29 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-dJ?AxNpDt1jzzseyd8?fUu2NLTJZK6EqKQtX5fyXTfW
Wheeler Lumber, Waverly, KS 66871					

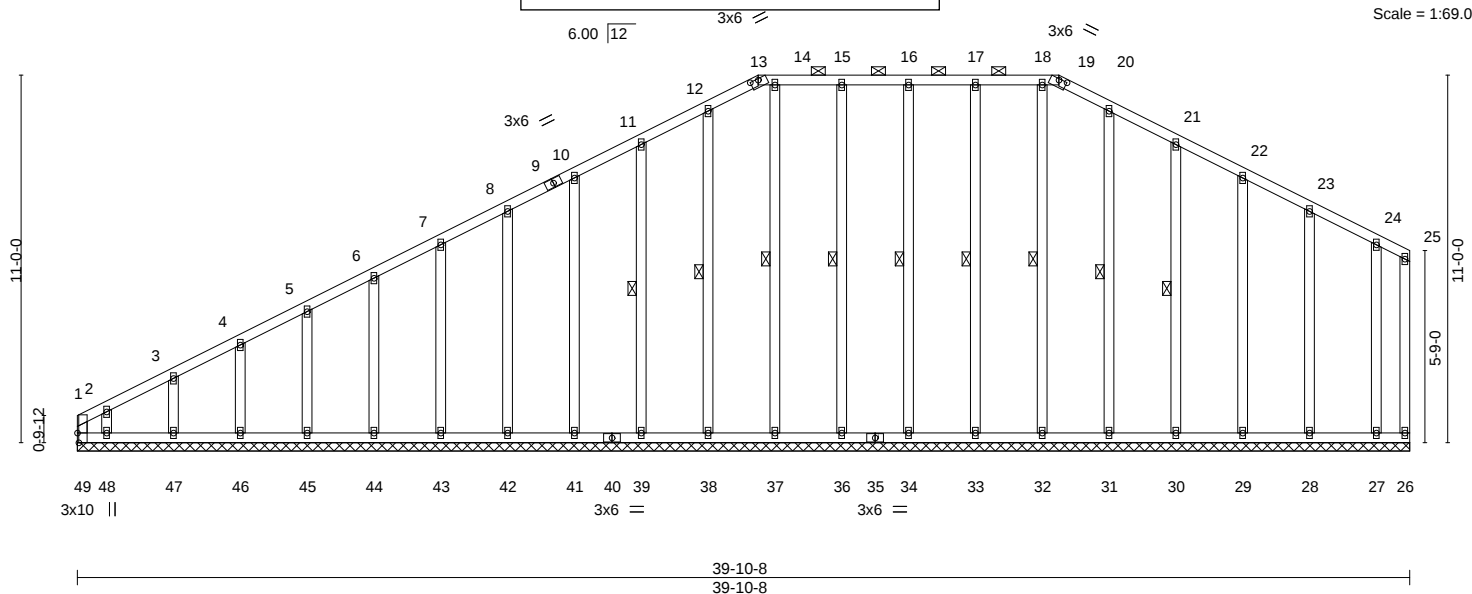


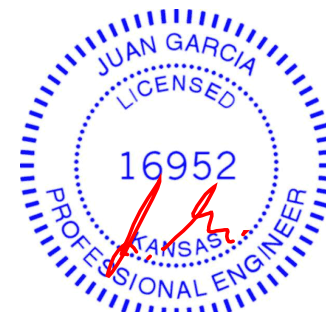
Plate Offsets (X,Y)--		[13:0-3-0,0-0-7], [19:0-3-0,0-0-7], [49:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13
TCDL 10.0	Lumber DOL	1.15	BC 0.10
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
		DEFL.	in (loc)
		Vert(LL)	n/a - n/a
		Vert(CT)	n/a - n/a
		Horz(CT)	-0.01 26 n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 265 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-19.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 11-39, 12-38, 14-37, 15-36, 16-34, 17-33, 18-32, 20-31, 21-30
OTHERS 2x4 SPF No.2	
REACTIONS.	
All bearings 39-10-8.	
(lb) - Max Horz 49=294(LC 5)	
Max Uplift All uplift 100 lb or less at joint(s) 26, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 except 49=133(LC 6), 48=263(LC 8)	
Max Grav All reactions 250 lb or less at joint(s) 26, 48, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 except 49=332(LC 5)	

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 47, 46, 45, 44, 43, 42, 41, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 except (jt=lb) 49=133, 48=263.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

400675

Truss

B2

Truss Type

PIGGYBACK

BASE GIRDE

Ply

2

Lot 19 HT

I43059525

Wheeler Lumber,

Waverly, KS 66871

8.420 s

Aug 25 2020

MiTek Industries, Inc.

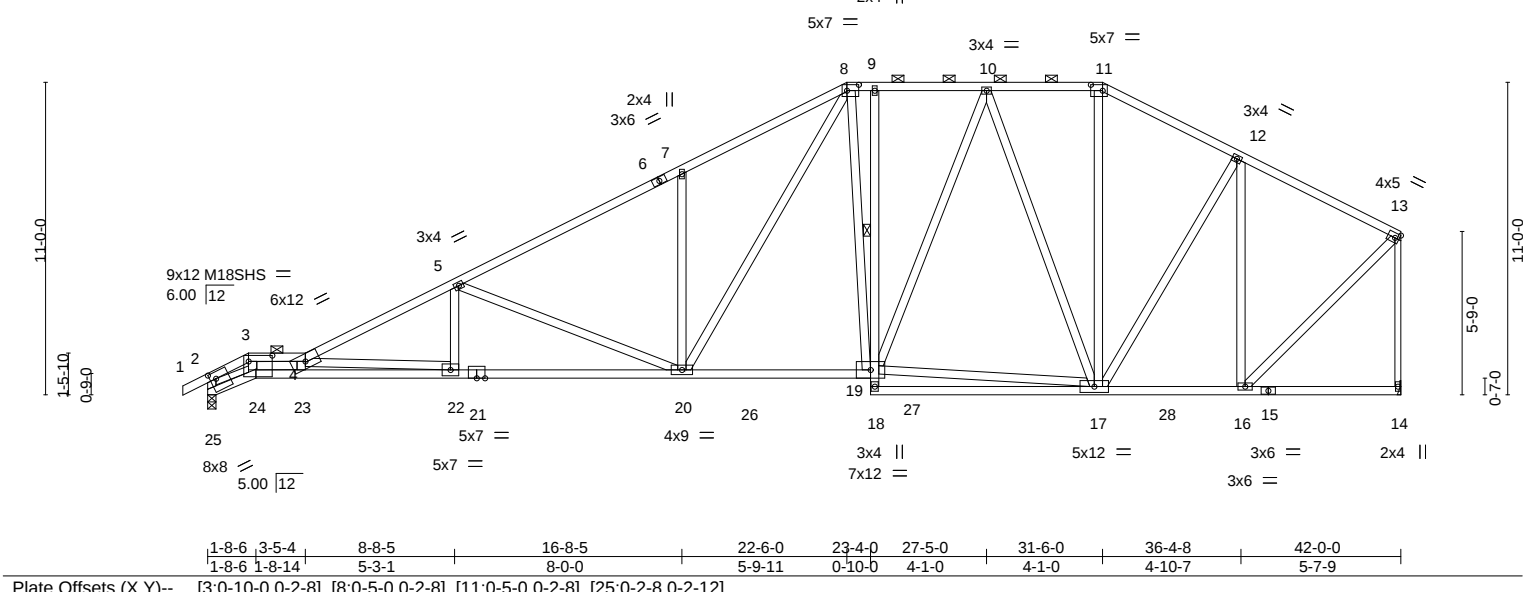
Fri Oct 2 11:00:31 2020

Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ah7xL2qTPezhC9oLIZ17ZJ8eGHpyovj6nkMe9XyXTfU

10/12/2020

Scale = 1:81.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.30	22-23	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.53	22-23	>951	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.60	Horz(CT)	0.19	14	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.21	22-23	>999		
								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, except end verticals, and 2-0-0 oc purlins (5-5-9 max.): 3-4, 8-11.
BOT CHORD 2x4 SPF No.2 *Except* 21-24: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 9-19
WEBS 2x4 SPF No.2 *Except* 2-24,13-14: 2x3 SPF No.2	

REACTIONS. (size) 25=0-3-8, 14=Mechanical
Max Horz 25=304(LC 5)
Max Uplift 25=-270(LC 8), 14=-139(LC 9)
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.
TOP CHORD 2-3=-4456/718, 3-4=-4770/771, 4-5=-4869/617, 5-7=-3255/404, 7-8=-3243/569, 8-9=-2039/333, 9-10=-2033/333, 10-11=-1490/232, 11-12=-1730/242, 12-13=-1379/168, 2-25=-2073/363, 13-14=-1907/163
BOT CHORD 24-25=-326/470, 23-24=-1369/8799, 22-23=-1395/8877, 20-22=-661/4349, 19-20=-208/2049, 16-17=-106/1193
WEBS 3-24=-323/2149, 4-24=-4256/467, 4-23=-360/110, 4-22=-4557/739, 5-22=-15/887, 5-20=-1650/374, 7-20=-529/297, 8-20=-388/1543, 17-19=-196/1591, 10-19=-121/686, 10-17=-955/175, 11-17=-58/519, 12-17=-81/609, 12-16=-1003/134, 2-24=-562/3512, 13-16=-92/1668

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 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.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify connection bearing surface.



October 2,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020	Ply	Lot 19 HT
400675	B2	PIGGYBACK	BASE GIRDE	2	I43059525

Wheeler Lumber,

Waverly, KS 66871

8.420 s

Aug 25 2020

MiTek Industries, Inc.

Fri Oct 2 11:00:31 2020

Page 2

Job Reference (optional)

ID:bWuMDBN0tjF5cDvSpwphPH1zCzbQ-ah7xL2qTPezhC9oLIZ17ZJ8eGHpyovj6nkMe9XyXTfU

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

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

Job

400675

Truss

B3

Truss Type

PIGGYBACK

BASE

Ply

2

Lot 19 HT

I43059526

Wheeler Lumber,

Waverly, KS 66871

0-10-8

2-8-5

3-5-4

5-5-4

9-7-8

17-7-9

23-4-0

31-6-0

36-4-8

42-0-0

0-10-8

2-8-5

0-8-15

4-2-5

8-0-1

4-10-7

0-10-0

4-1-0

4-1-0

4-10-7

5-7-9

2-0-0

2x4 ||

5x7 =

3x4 =

5x7 =

3x4 =

4x5 =

3x6 =

2x4 ||

10/12/2020

8.420 s

Aug 25 2020

MiTek Industries, Inc.

Fri Oct 2 11:00:32 2020

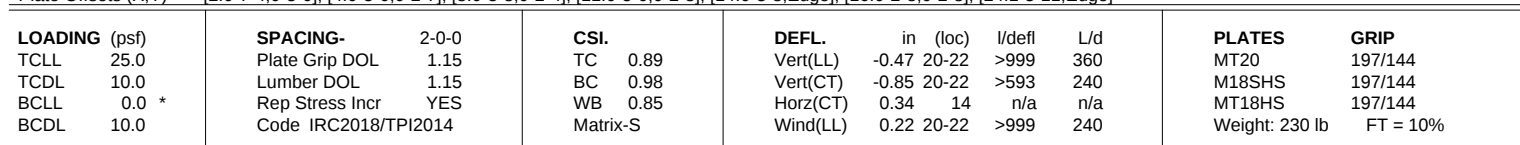
Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-2uhJZOr6Ay5YqJNXIHVM6Xgn1h6cXNHGO05Bi_yXTfT

Job Reference (optional)

Scale = 1:81.3

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT
400675		B3	PIGGYBACK	BASE		2	I43059526
Wheeler Lumber,		Waverly, KS 66871		8.420 s		2	Job Reference (optional)
				ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-2uhJZOr6Ay5YqJNXIHYM6Xgn1h6cXNHG0O5Bi_yXTfT		Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:32 2020 Page 2	
NOTES-							
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.							
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.							



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

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

TOP CHORD 2-3=-7310/242, 3-4=-4744/120, 4-5=-4351/122, 5-6=-3672/69, 6-8=-3693/198,
 8-9=-2136/95, 9-10=-2128/96, 10-11=-1495/71, 11-12=-1735/70, 12-13=-1384/41,
 13-14=-1913/0

BOT CHORD 2-24=-316/6442, 23-24=-278/5603, 22-23=-152/5533, 20-22=-157/5528, 19-20=-35/2147,
 16-17=0/1197

WEBS 3-24=-74/2348, 3-23=-1438/127, 4-23=-41/1887, 5-23=-1795/0, 5-20=-2402/137,
 6-20=-627/206, 8-20=-165/1846, 17-19=-37/1739, 10-19=-23/798, 10-17=-1057/80,
 11-17=-2/521, 12-17=-24/609, 12-16=-1000/35, 13-16=0/1673

-
- STATE OF MISSOURI
- JUAN GARCIA
- NUMBER E-2000162101
- PROFESSIONAL ENGINEER



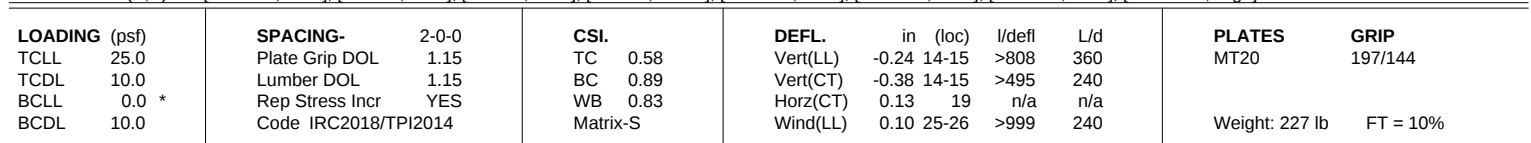
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

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

1 Ply
1
1
8.420 s A
ID: bWuMDbN0tjF5cDvSpwh
18/12/2020
1

7-9
4-5
22-6
4-10-7
27-0-0
4-6-0



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

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

TOP CHORD 2-3=-3541/265, 3-4=-1686/106, 4-5=-1144/99, 5-6=-973/102, 6-7=-497/90, 7-8=-63/367,
8-9=-25/281, 9-10=-49/260, 10-11=-70/298

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

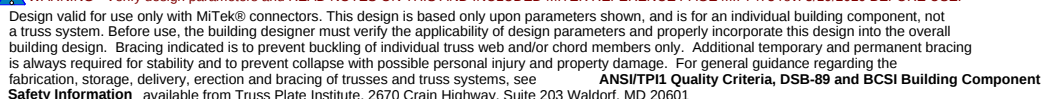
WEBS 3-26=-70/1264, 3-25=-1271/179, 4-25=0/371, 4-24=-689/94, 5-24=-1/349, 6-24=-29/308,
6-23=-761/95, 7-23=-2/841, 7-21=-1041/115, 8-21=-413/67, 9-21=-66/1427,
9-19=-2489/81, 9-17=-18/962, 10-17=-303/51, 11-17=-525/74, 12-14=-314/172



- 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; TCDF=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.



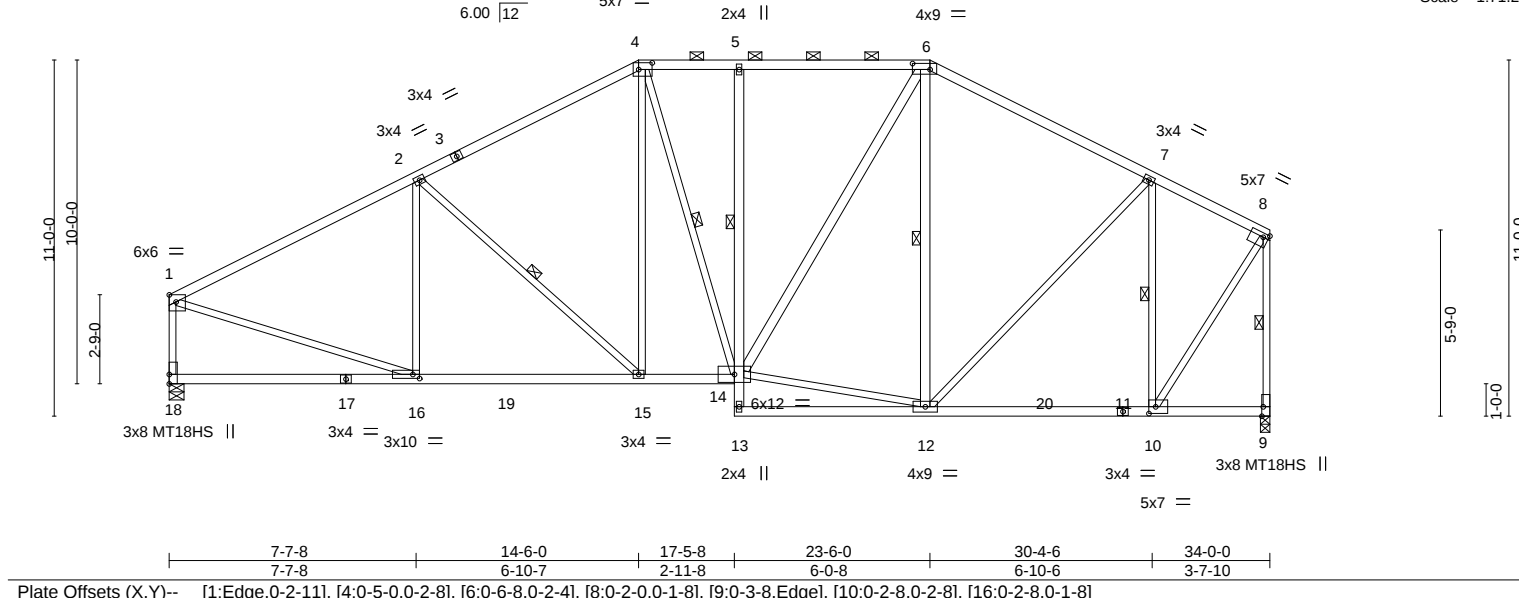
October 2, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT
400675	C4	Piggyback Base			1	I43059531
Wheeler Lumber, Waverly, KS 66871				8.420 s	Job Reference (optional) Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:40 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhbH1zCzbQ-pQAKE7x7HP5PnY_3myiERD?5tvvjP?IRse1c_WyXTfL	
7-7-8 7-7-8 14-6-0 6-10-7 17-5-8 2-11-8 23-6-0 6-0-8 30-4-6 6-10-6 34-0-0 3-7-10						

Scale = 1:71.2

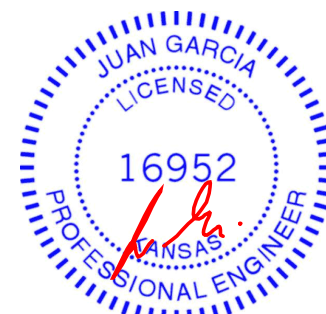


LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.12 15-16 >999 360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.21 15-16 >999 240	MT18HS		197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.05 9 n/a n/a	Weight: 181 lb FT = 10%			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06 15-16 >999 240				

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-1 max.): 4-6.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x3 SPF No.2 *Except* 6-14, 6-12: 2x4 SPF No.2	WEBS	1 Row at midpt 5-14 1 Row at midpt 2-15, 4-14, 6-12, 7-10, 8-9
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)			

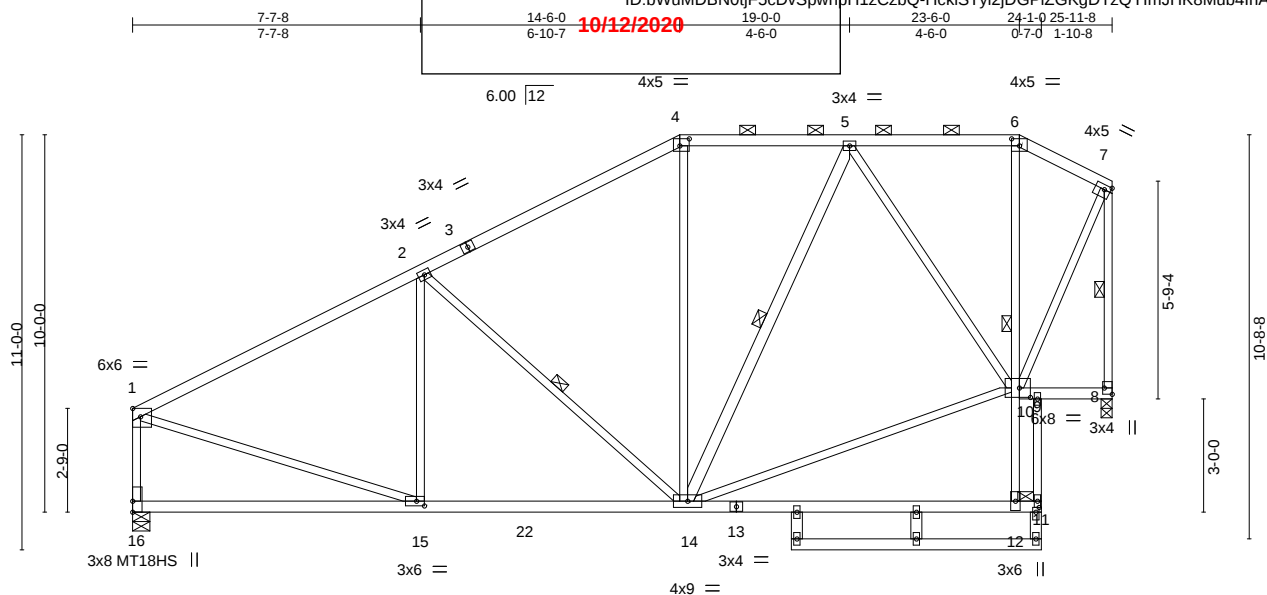
FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-1860/201, 2-4=-1649/227, 4-5=-1398/223, 5-6=-1399/224, 6-7=-1333/179, 7-8=-853/107, 1-18=-1487/201, 8-9=-1591/136
BOT CHORD	15-16=-233/1590, 14-15=-186/1385, 5-14=-354/154, 10-12=-104/753
WEBS	2-16=-321/133, 2-15=-329/191, 4-15=-61/438, 4-14=-134/254, 12-14=-127/1015, 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-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=165, 9=132.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2, 2020

Job 400675	Truss C5	Truss Type Piggyback Base	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply 1 Lot 19 HT 143059532
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:41 2020 Page 1 ID:bWuMDbN0tjF5cDvSpwhH1zCzbQ-HckiStyl2jDGPiZGKgDTzQYImJHK8Mub4InAWyyXTfK			



<									
--	--	--	--	--	--	--	--	--	--

LUMBER-

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

REACTIONS.

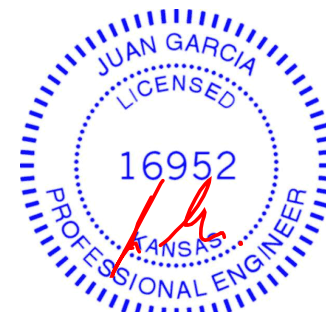
(size) 16=0-5-8, 8=0-3-8
 Max Horz 16=311(LC 5)
 Max Uplift 16=-139(LC 8), 8=-149(LC 5)
 Max Grav 16=1219(LC 2), 8=1212(LC 2)

FORCES.

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

NOTES-

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



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 10/12/2020

Job 400675	Truss C6	Truss Type Piggyback Base	Ply 1	Lot 19 HT	I43059533
Wheeler Lumber, Waverly, KS 66871			8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:42 2020 Page 1 ID: bWuMdBNOtjF5cDv\$pwHpH1zCzbQ-lp15fpzNp0L71s7SUNkiWe5TTjdeturkJyWj2PyXTfJ		

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: bWuMdbN0tjF5cDvSpvhpH1zCzbQ-9OzDhr?F6xkiuJs1ZVHP8GjxYwZX4AIA?viNfkyXTfG

Job 400675	Truss C9	Truss Type Piggyback Base	Ply 1	Lot 19 HT Job Reference (optional)
---------------	-------------	------------------------------	----------	---------------------------------------

Wheeler Lumber, Waverly, KS 66871

143059536

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

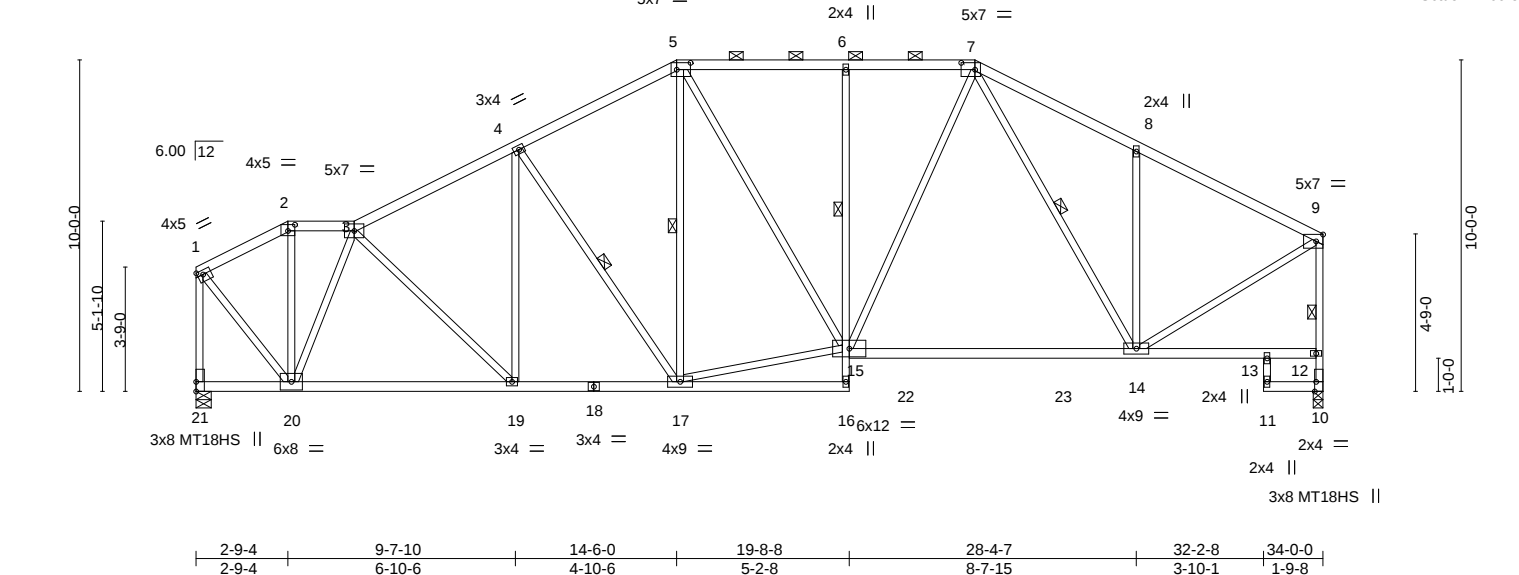


Plate Offsets (X,Y)--		[1:0-2-0,0-1-8], [2:0-2-8,0-2-4], [5:0-5-0,0-2-8], [7:0-5-0,0-2-8], [10:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88
TCDL 10.0	Lumber DOL	1.15	BC 0.92
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.85
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.31 14-15 >999 360
			Vert(CT) -0.52 14-15 >781 240
			Horz(CT) 0.08 10 n/a n/a
			Wind(LL) 0.05 14-15 >999 240
			PLATES GRIP
			MT20 197/144
			MT18HS 197/144
			Weight: 171 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-3 max.): 2-3, 5-7.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
6-16,11-13: 2x3 SPF No.2	1 Row at midpt 6-15
WEBS 2x3 SPF No.2	1 Row at midpt 4-17, 5-17, 7-14, 9-10

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.
TOP CHORD	1-2=-1001/95, 2-3=-873/107, 3-4=-1805/207, 4-5=-1633/227, 5-6=-1572/197, 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
WEBS	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-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=170, 10=132.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply	Lot 19 HT	I43059537
400675	C10	Piggyback Base	8.420 s			1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:39 2020 Page 1						
0-9-4 2-9-4 7-7-9 14-6-0		ID:bWUMDBN0tjF5cDvSpwhH1zCzbQ-LEcy1nwVW5zYAOPtDFA?u?TvlVXHgS7ld_13S4yXTfM						
0-9-4 2-0-0 4-10-5 6-10-6		10/12/2020 23-6-0 30-4-6 34-0-0						
5x7 =		Scale = 1:62.2						

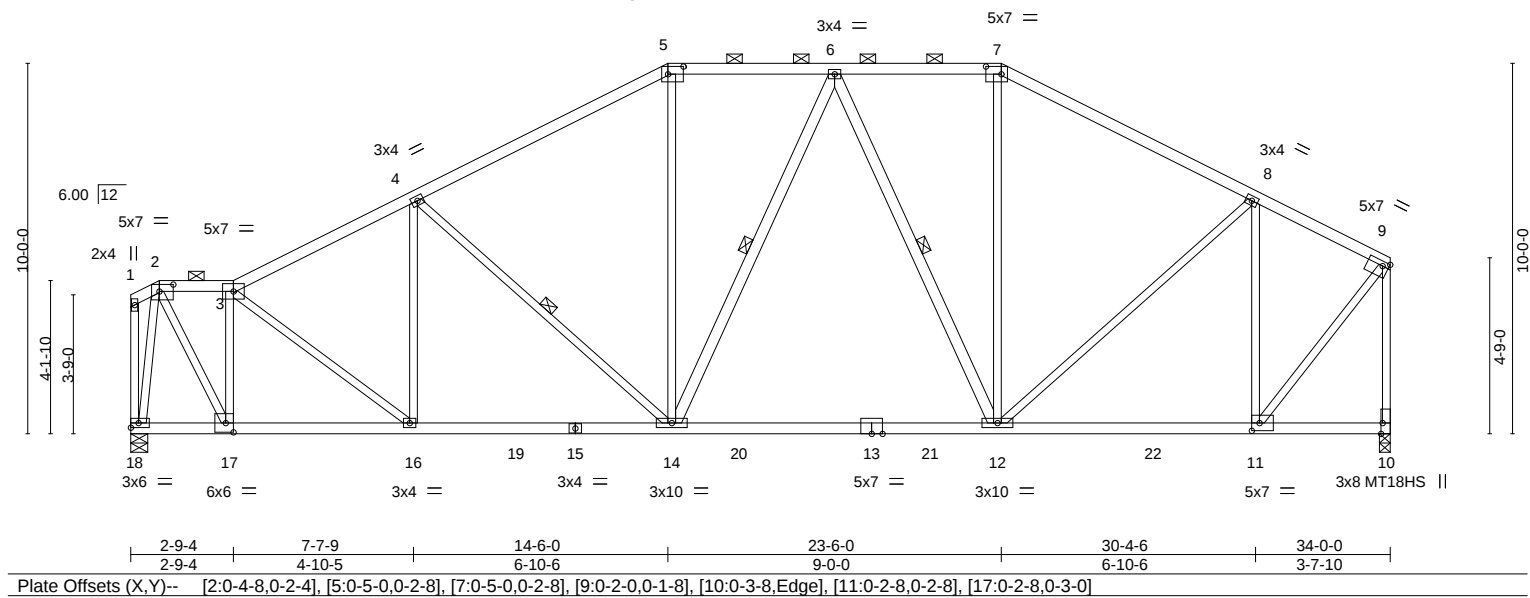


Plate Offsets (X,Y)--		[2:0-4-8,0-2-4], [5:0-5-0,0-2-8], [7:0-5-0,0-2-8], [9:0-2-0,0-1-8], [10:0-3-8,Edge], [11:0-2-8,0-2-8], [17:0-2-8,0-3-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.90	Vert(LL)	-0.26 12-14	>999	360
TCDL 10.0	Lumber DOL	1.15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

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-3-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 2-3, 5-7.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except*	WEBS	1 Row at midpt
	6-14,6-12: 2x4 SPF No.2		4-14, 6-14, 6-12

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

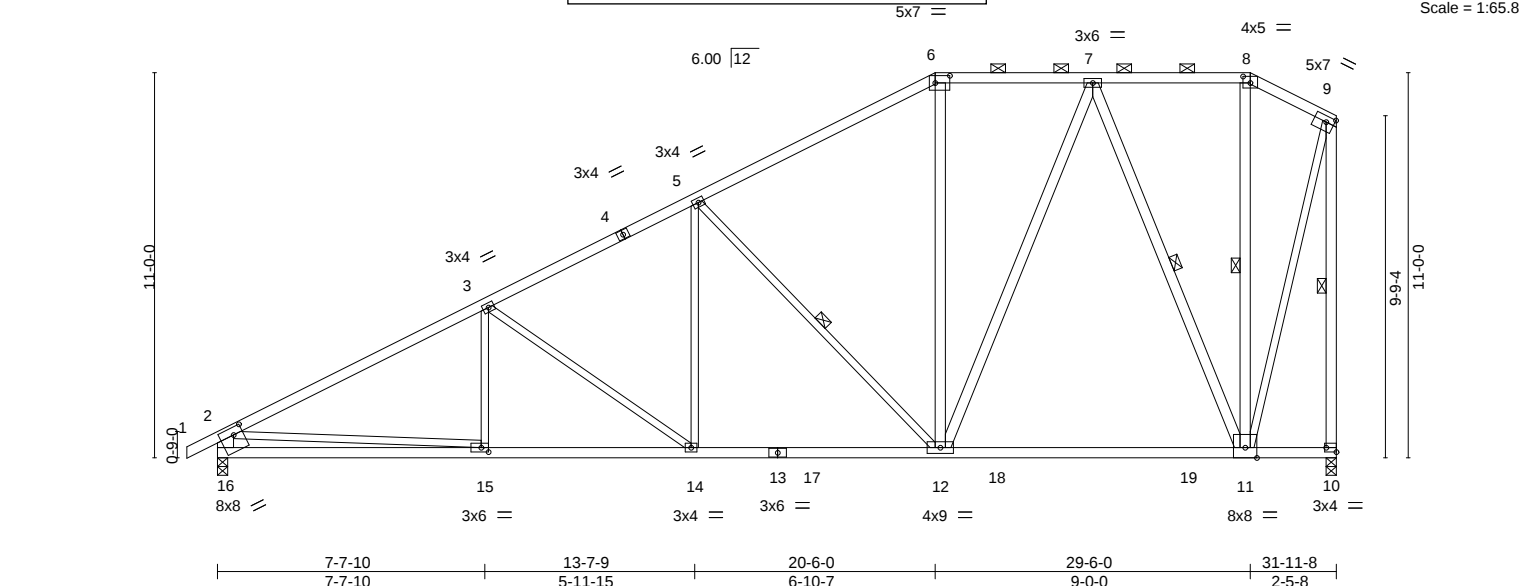
FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1021/88, 3-4=-1816/193, 4-5=-1715/209, 5-6=-1452/234, 6-7=-1276/187, 7-8=-1518/165, 8-9=-1003/98, 9-10=-1613/140
BOT CHORD	17-18=-205/362, 16-17=-220/1075, 14-16=-214/1598, 12-14=-171/1419, 11-12=-107/887
WEBS	2-17=-149/1686, 3-17=-1389/187, 3-16=-39/687, 4-16=-271/94, 4-14=-252/173, 5-14=0/421, 6-12=-473/144, 7-12=-0/374, 8-12=-71/546, 8-11=-931/168, 2-18=-1552/187, 9-11=-123/1432

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=170, 10=132.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

Job 400675	Truss D1	Truss Type Piggyback Base	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-daXbVB0utFsZVTRD7DpegUF5XKwZpeEKEZUxBayXTfF	Ply 1	Lot 19 HT I43059538
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:46 2020 Page 1			



Job
400675

Truss
D2

Truss Type
Piggyback Base

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

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-6m5_iW1WeZ_P7d0QhwKtDholakKmY5RTTDEUkcyXTfE

10/12/2020

Ply
1

Lot 19 HT

Job Reference (optional)

I43059539

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:47 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

0-10-8 2-3-8 7-7-9 14-2-8 20-6-0 25-0-0 29-6-0 31-11-8

0-10-8 2-3-8 5-4-1 6-6-15 6-3-8 4-6-0 4-6-0 2-5-8

6x6 =

2x4 ||

5x7 =

3x4 ||

6.00 | 12

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

Scale = 1:69.2

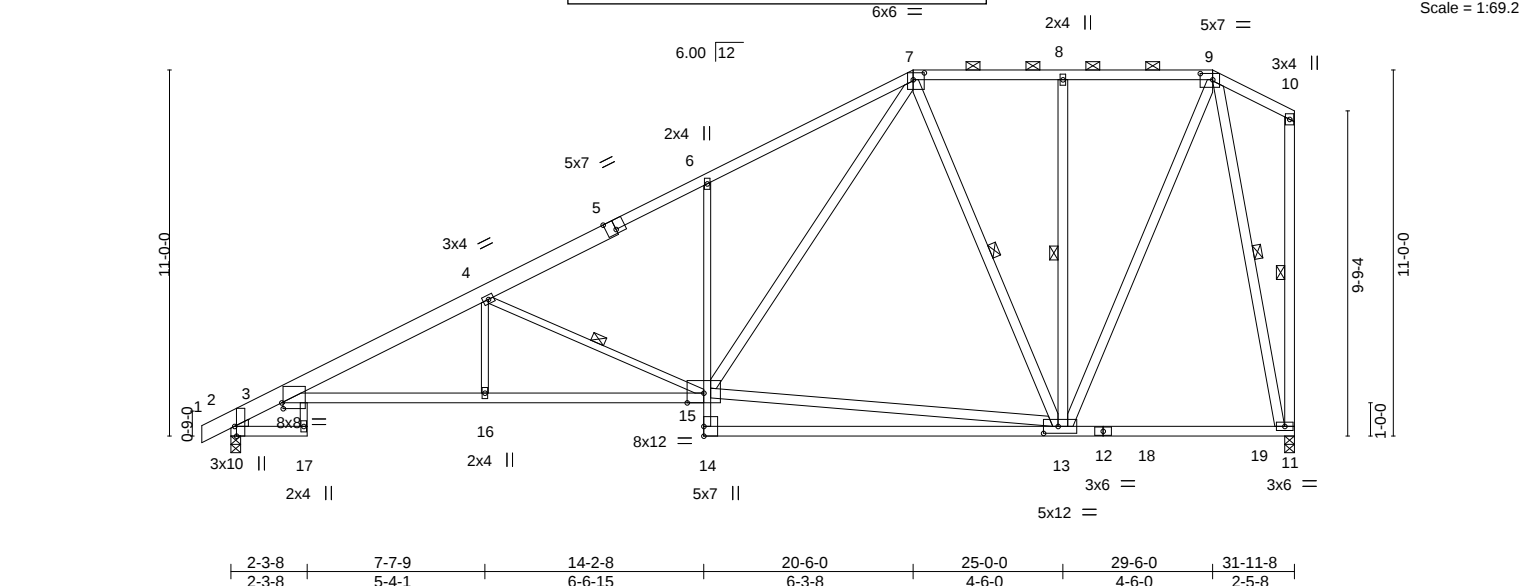


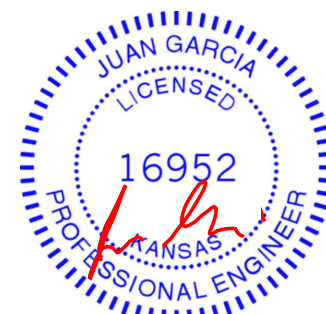
Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-0-8,0-2-2], [5:0-3-8,Edge], [7:0-4-0,0-2-8], [9:0-4-8,0-2-4], [13:0-5-4,0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.31	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	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		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	17	>999	240	Weight: 195 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-5: 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 2-8-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x4 SPF No.2 *Except* 3-17,6-14: 2x3 SPF No.2, 3-15,12-14: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.
WEBS 2x4 SPF No.2 *Except* 4-16,4-15: 2x3 SPF No.2	WEBS 1 Row at midpt 4-15, 10-11, 9-11, 8-13, 7-13
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
WEBS 4-16=0/316, 4-15=-1219/322, 13-15=-264/883, 7-15=-354/1378, 9-13=-137/1273, 9-11=-1384/263, 8-13=-357/154, 7-13=-673/221

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



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 10/12/2020

Job 400675	Truss D3	Truss Type Piggyback Base	Ply 1	Lot 19 HT Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:48 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-azfMws18Os6GInbcEer6vLT67bJHWpchtz1G2yXTfD		

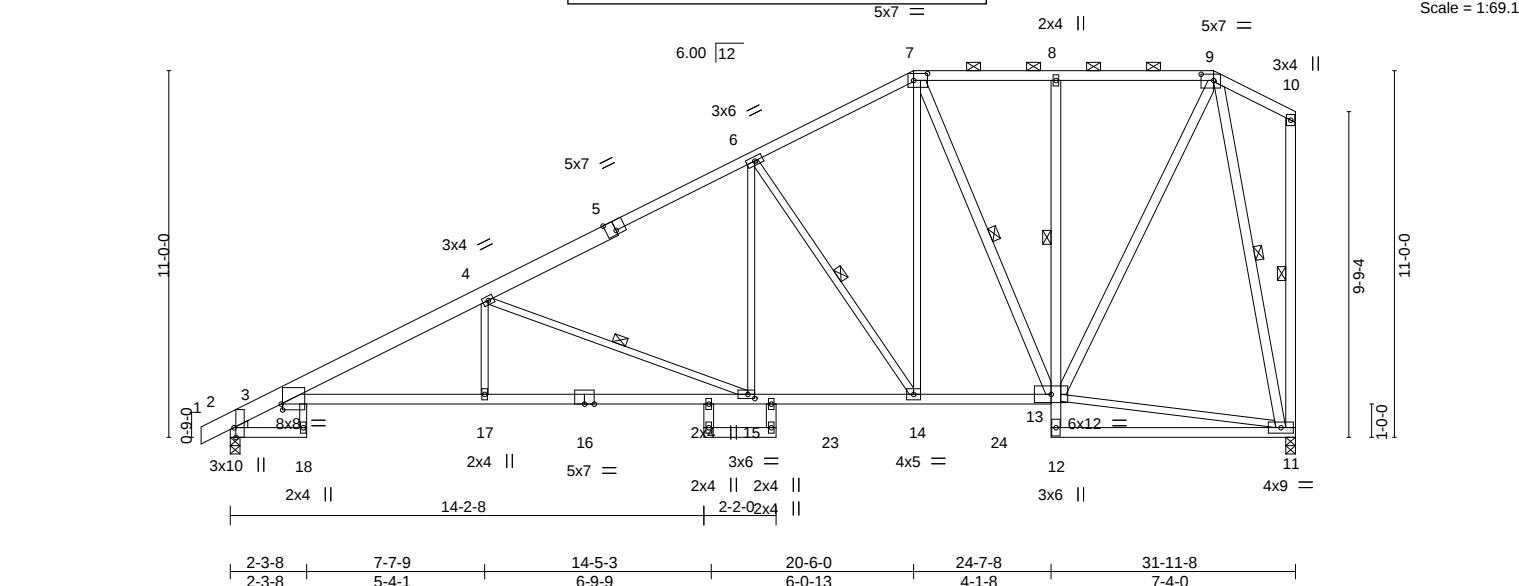
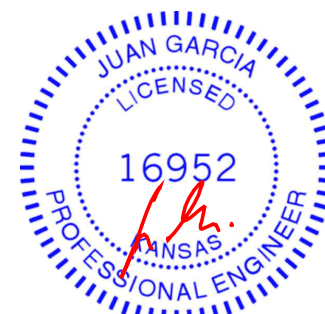


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [3:0-0-8,0-2-2], [5:0-3-8,Edge], [7:0-5-0,0-2-8], [9:0-4-8,0-2-4], [15:0-2-8,0-1-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.80	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(LL) -0.27 15-17 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Vert(CT) -0.51 15-17 >743 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.34 11 n/a n/a
			Wind(LL) 0.22 18 >999 240
			PLATES MT20 GRIP 197/144
			Weight: 193 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-5: 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 3-2-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x4 SPF No.2 *Except* 3-18: 2x3 SPF No.2, 3-16: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-18 2-2-0 oc bracing: 15-17.
WEBS 2x4 SPF No.2 *Except* 4-17,4-15,6-15,6-14,7-14,11-13: 2x3 SPF No.2	WEBS 1 Row at midpt 8-13 1 Row at midpt 4-15, 6-14, 7-13, 10-11, 9-11
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	
BOT CHORD 3-17=-565/2958, 15-17=-564/2957, 14-15=-293/1697, 13-14=-244/1158, 8-13=-361/154	
WEBS 4-17=0/330, 4-15=-1355/388, 6-15=-59/760, 6-14=-973/277, 7-14=-177/990, 7-13=-726/155, 9-13=-174/1304, 9-11=-1391/306	

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



October 2,2020

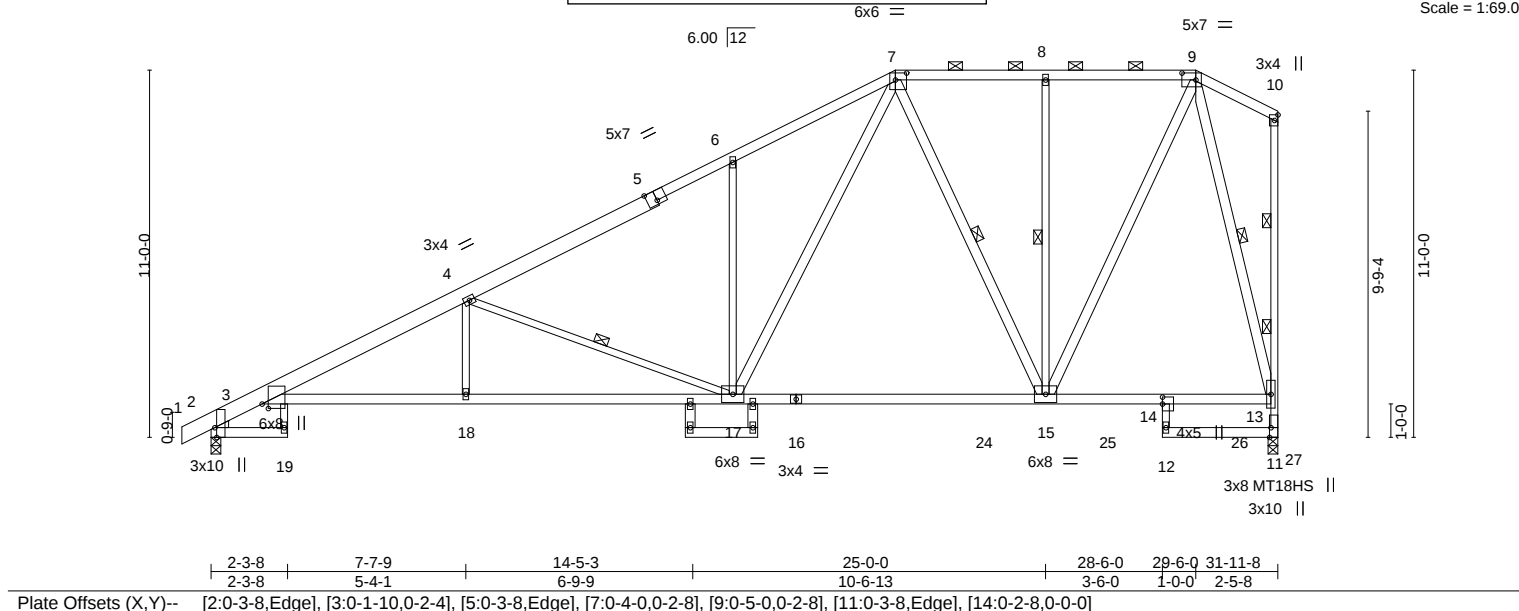
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-29Dk7C2m9AE7MwAoolMLI6teeXxI0zNmwxjboVyXTfC
 10/12/2020

Job 400675	Truss D4	Truss Type Piggyback Base	Ply 1	Lot 19 HT 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			ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-29Dk7C2m9AE7MwAoolMLI6teeXxI0zNmwxjboVyXTfC	

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

6x6 = 6.00 12' 5x7 = 3x4 = 3x10 = 3x8 MT18HS = 3x10 =

Scale = 1:69.0



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	D5	Piggyback Base			1	I43059542
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:50 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-WLn6LY3OwUM_4l_M3tarKQqsxHmlTgv9BS8KxyXTfB				
-0-10-8 7-7-9 13-7-9 16-4-8 25-0-0 29-6-0 31-11-8 0-10-8 7-7-9 6-0-0 2-8-15 4-1-8 4-6-0 4-6-0 2-5-8		Job Reference (optional) 10/12/2020				

Scale = 1:70.1

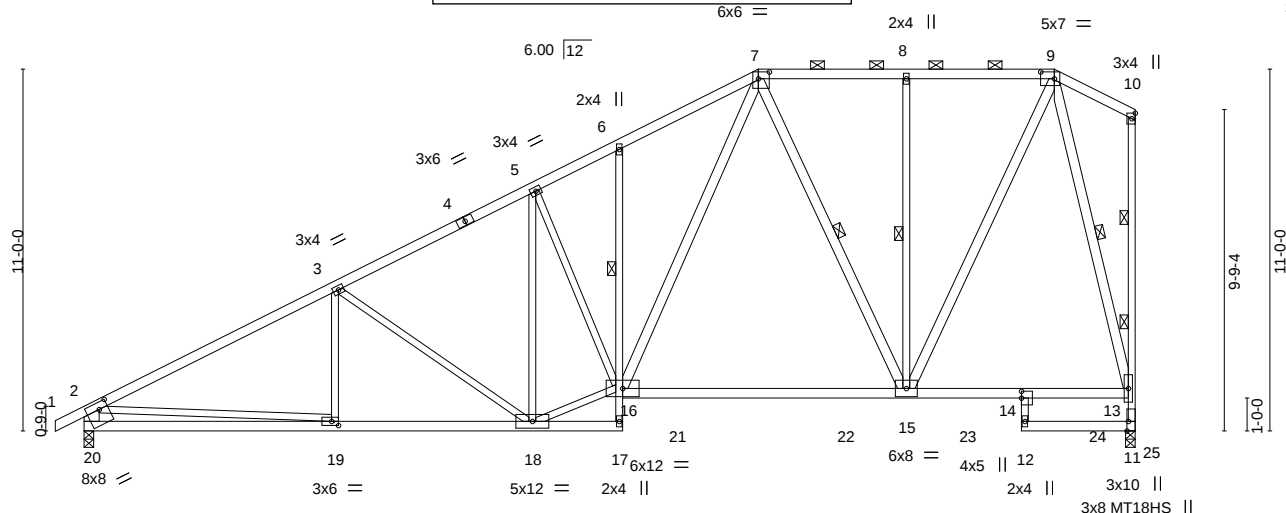


Plate Offsets (X,Y)--	[7:0-4-0,0-2-8], [9:0-5-0,0-2-8], [11:0-3-8,Edge], [14:0-2-8,0-0-0], [19:0-2-8,0-1-8], [20:0-3-4,0-2-8]
-----------------------	---

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.27 15-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.48 15-16	>795	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.10 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 18-19	>999	240	Weight: 179 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-5 max.): 7-9.
BOT CHORD 2x4 SPF No.2 *Except* 6-17,12-14: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
WEBS 2x3 SPF No.2 *Except* 7-16,7-15,9-15,9-13: 2x4 SPF No.2, 2-20: 2x6 SPF No.2	WEBS 1 Row at midpt 6-16 1 Row at midpt 7-15, 8-15, 9-13 2 Rows at 1/3 pts 10-11

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

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2435/312, 3-5=-1927/292, 5-6=-1860/321, 6-7=-1871/401, 7-8=-916/194, 8-9=-916/194, 2-20=-1437/261, 11-13=-1566/178
BOT CHORD	19-20=-441/803, 18-19=-383/2086, 15-16=-253/1153, 14-15=-151/356, 13-14=-238/304
WEBS	3-18=-543/193, 16-18=-251/1859, 7-16=-288/1184, 7-15=-596/192, 2-19=0/1350, 8-15=-357/151, 9-15=-154/1355, 9-13=-1457/239

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



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400675	Truss D6	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020	Ply 1	Lot 19 HT I43059543 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:52 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-SkutlE4eS5ciDouNTUv2wVFP18jDWwCcVxPpqyXTf9
Wheeler Lumber, Waverly, KS 66871					

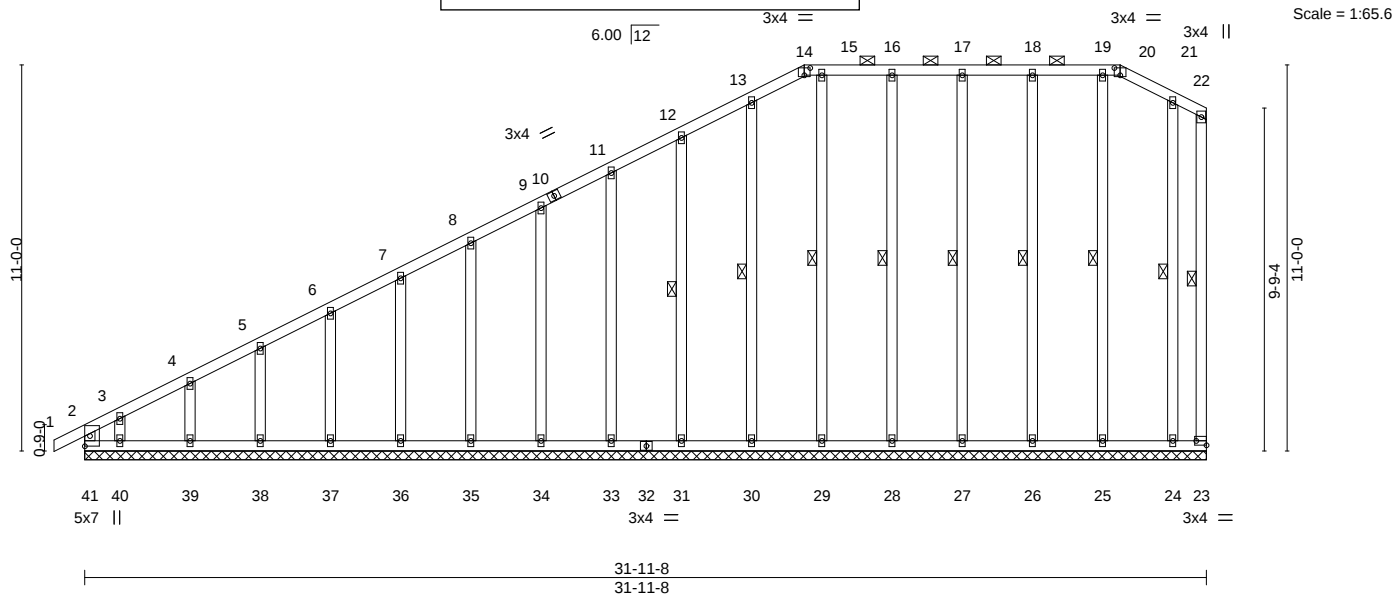


Plate Offsets (X,Y)--		[14:0-2-0,0-2-8], [20:0-2-0,0-2-8], [23:Edge,0-1-8]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.43	in (loc) l/defl L/d	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(LL) -0.00 1 n/r 120	GRIP 197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Vert(CT) -0.00 1 n/r 120	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Horz(CT) -0.01 23 n/a n/a	
		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.

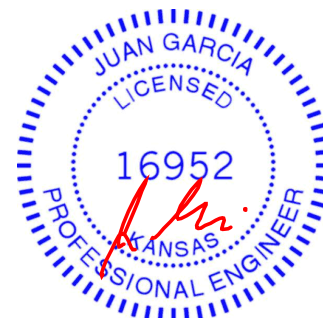
All bearings 31-11-8.
 (lb) - Max Horz 41=420(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 41, 23, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24 except 40=249(LC 5)
 Max Grav All reactions 250 lb or less at joint(s) 23, 40, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25,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

FORCES.

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 41, 23, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24 except (jt=lb) 40=249.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT	I43059544
400675	E1	Common Supported Gable			1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871				8.420 s		Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:53 2020 Page 1	
				ID:bWuMdBNOtjF5cDvSpwhpH1zCzbQ-wwSFza5HDPkZrYTZ1BRHSy2VH8WDy?qMr9hoxGyXTf8			
-0-10-8 0-10-8		7-0-0 7-0-0		14-0-0 7-0-0		14-10-8 0-10-8	
		4x5				Scale = 1:30.8	

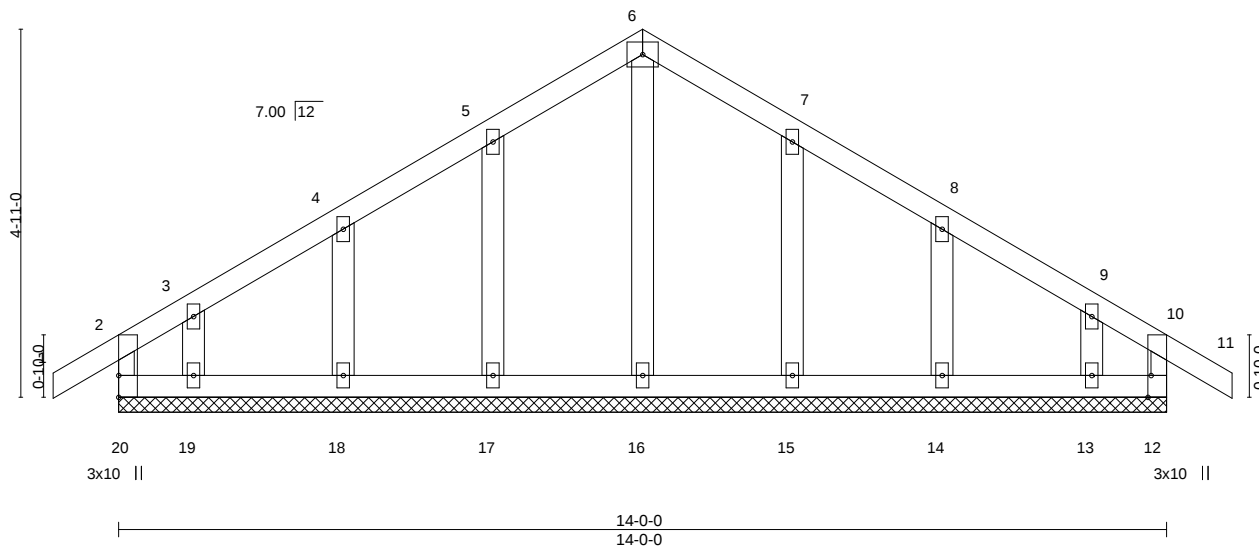


Plate Offsets (X,Y)--		[12:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.04
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.00 11 n/r 120
			Vert(CT) -0.00 11 n/r 120
			Horz(CT) 0.00 12 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 57 lb FT = 10%

LUMBER-

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

BRACING-

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

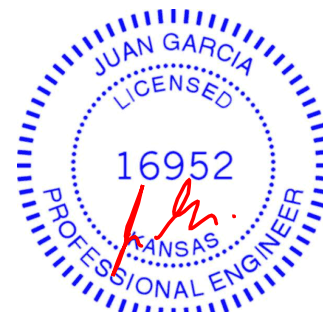
REACTIONS.

All bearings 14'-0".
 (lb) - Max Horz 20=-142(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13
 Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2'-0" oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 19, 15, 14, 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Lot 19 HT
400675	E2	Common			I43059545
Wheeler Lumber, Waverly, KS 66871			8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:53 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpHLzCzbQ-wwSFza5HDPkZrYTZ1BRHSy2M18RXy_CMr9hoxGyXTf8		
		7-0-0 7-0-0		14-0-0 7-0-0	14-10-8 0-10-8
		5x7 =	Scale = 1:30.6		

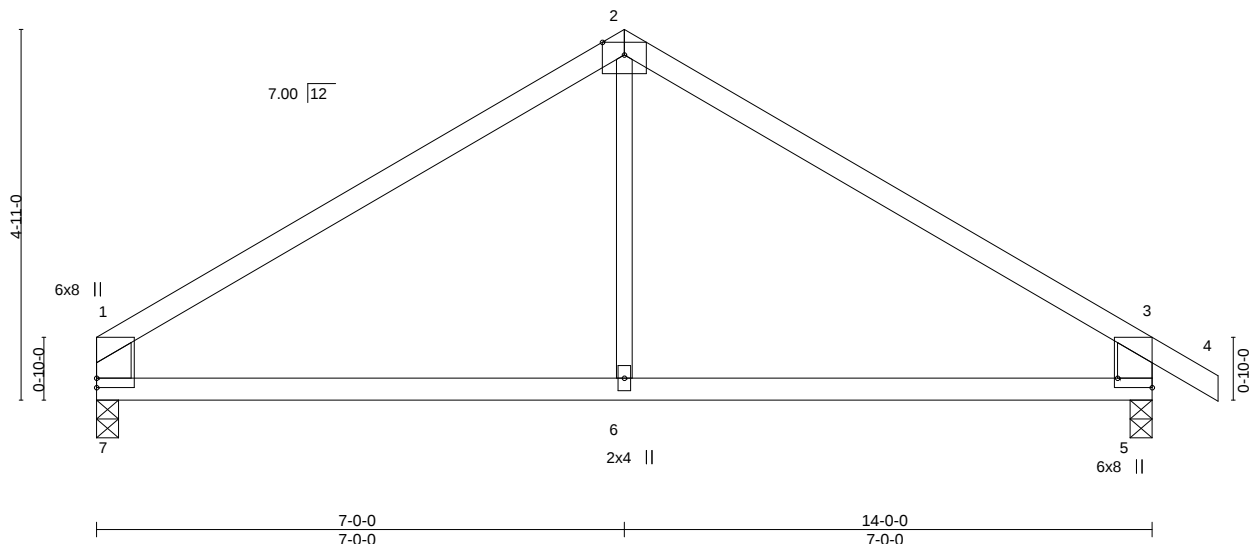


Plate Offsets (X,Y)-- [5:Edge,0-5-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.05 5-6 >999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.10 5-6 >999	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01 5 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.04 6-7 >999	240	Weight: 41 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

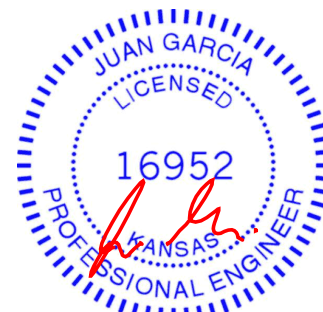
(size) 7=0-3-8, 5=0-3-8
Max Horz 7=-139(LC 4)
Max Uplift 7=-71(LC 8), 5=-97(LC 9)
Max Grav 7=606(LC 1), 5=690(LC 1)

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

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

NOTES-

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



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply	Lot 19 HT	I43059546
400675	E3	GABLE	1			Job Reference (optional)		
Wheeler Lumber,		Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 1 ID:bWuMDbN0tjF5cDvSwhpH1zCzbQ-tJa?OG7Xl0_H4rdy9cTIXN7iHy3lQngeITAv08yXTf6				
				10/12/2020 6-4-13 6-4-13 14-0-0 7-7-3 16-5-12 2-5-12 21-4-15 4-11-3 25-3-8 3-10-9 28-11-12 3-8-4				

Scale = 1:67.9

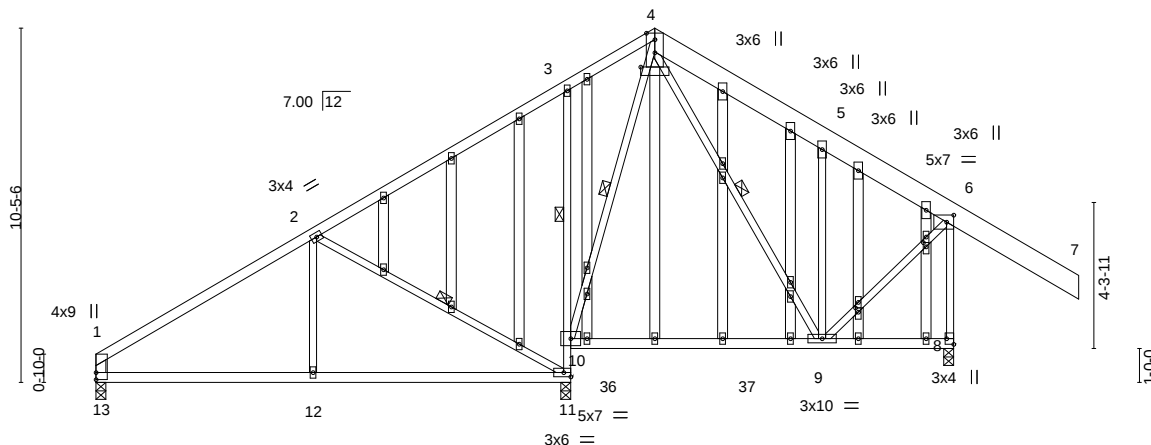


Plate Offsets (X,Y)--	[4:0-5-0,0-5-1], [6:0-2-8,0-2-8], [8:Edge,0-2-8], [32:0-1-8,0-1-0], [35:0-1-8,0-1-0]
-----------------------	--

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.15 9-10	>895	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.22 9-10	>604	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.54	Horz(CT)	-0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.04 11-12	>999	240	Weight: 201 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-7: 2x8 SP DSS	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 3-11: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 4-4-7 oc bracing. Except:
WEBS 2x3 SPF No.2 *Except* 1-13: 2x4 SPF No.2	WEBS 1 Row at midpt 3-10 1 Row at midpt 2-11, 4-10, 4-9
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 13=0-3-8, 8=0-3-8, 11=0-3-8
 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.
 TOP CHORD 1-2=-719/138, 2-3=-182/372, 3-4=-126/255, 4-5=-176/377, 5-6=-352/125, 6-7=0/258,
 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-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=100, 11=196.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - 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



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT
400675	E3	GABLE			1	I43059546
Wheeler Lumber, Waverly, KS 66871			8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 2 ID:bWuMDBN0tjF5cDvSbwhpH1zCzbQ-tJa?OG7Xl0_H4rdy9cTlXN7iHy3lQngeITAv08yXTf6			

- 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

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

Continued on page 3

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT
400675	E3	GABLE			1	I43059546
Wheeler Lumber, Waverly, KS 66871			8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 3 ID:bWuMDBN0tjF5cDvS swphP1zCzbQ-tJa?OG7Xl0_H4rdy9cTlXN7iHy3lQngeITAv08yXTf6			
			Job Reference (optional)			

LOAD CASE(S) Standard Except:

- Uniform Loads (plf)

Vert: 1-4=9, 4-6=-9, 6-7=-3, 11-13=-20, 8-10=-20

Horz: 1-4=-29, 4-6=11, 6-7=17, 1-13=26, 6-8=8

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

Vert: 7=-250
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=-9, 4-6=9, 6-7=15, 11-13=-20, 8-10=-20

Horz: 1-4=-11, 4-6=29, 6-7=35, 1-13=-8, 6-8=-26

Drag: 6-8=0

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-20, 4-6=-20, 6-7=-20, 11-13=-40, 10-36=-40, 36-37=-60, 8-37=-40

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-69, 4-6=-49, 6-7=-45, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35

Horz: 1-4=11, 4-6=9, 6-7=13, 1-13=21, 6-8=7

Drag: 6-8=0

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-49, 4-6=-69, 6-7=-64, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35

Horz: 1-4=-9, 4-6=-11, 6-7=-7, 1-13=-7, 6-8=-21

Drag: 6-8=0

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-36, 4-6=-49, 6-7=-45, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35

Horz: 1-4=-22, 4-6=9, 6-7=13, 1-13=19, 6-8=6

Drag: 6-8=0

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-49, 4-6=-36, 6-7=-31, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35

Horz: 1-4=-9, 4-6=22, 6-7=26, 1-13=-6, 6-8=-19

Drag: 6-8=0

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-16, 4-6=-12, 6-7=-12, 11-13=-12, 8-10=-12

Horz: 1-4=4, 1-13=16

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-12, 4-6=-16, 6-7=-12, 11-13=-12, 8-10=-12

Horz: 4-6=-4, 6-8=-16

Drag: 6-8=0

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-6=-20, 6-7=-20, 11-13=-20, 8-10=-20

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-20, 4-6=-70, 6-7=-70, 11-13=-20, 8-10=-20

Concentrated Loads (lb)

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

Uniform Loads (plf)

Vert: 1-4=-58, 4-6=-20, 6-7=-20, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35

Concentrated Loads (lb)

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

Continued on page 4

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Lot 19 HT
400675		E3	GABLE		1	I43059546
Wheeler Lumber, Waverly, KS 66871				8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 4 ID:bWuMDBN0tjF5cDvSbwhpH1zCzbQ-tJa?OG7XI0_H4rdy9cTIXN7iHy3lQngeITAv08yXTf6		
LOAD CASE(S) Standard Except: Uniform Loads (plf) Vert: 1-4=-20, 4-6=-58, 6-7=-57, 11-13=-35, 10-36=-35, 36-37=-50, 8-37=-35 Concentrated Loads (lb) Vert: 7=-250 25) User defined: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-70(F), 4-6=-70(F), 6-7=-70(F), 11-13=-20(F), 8-10=-20(F) Concentrated Loads (lb) Vert: 7=-250						

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	E4	Roof Special			1	I43059547
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:55 2020 Page 1 ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-tJa?OG7XIO_H4rdy9cTIXN7jky4RQnieITAv0ByXTf6				

6-4-13
6-4-13

14-0-0
7-7-3

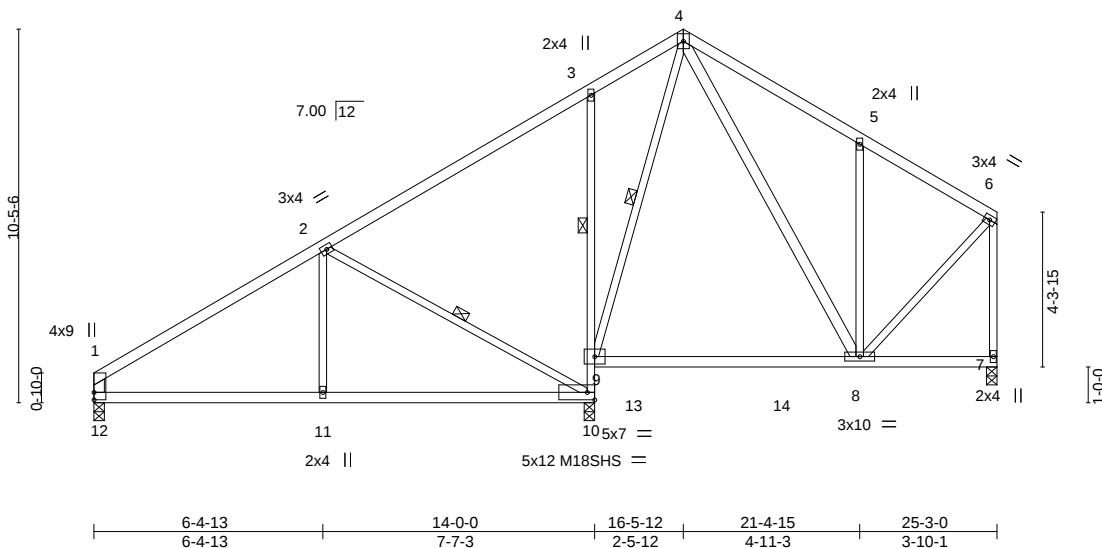
16-5-12
2-5-12

21-4-15
4-11-3

25-3-0
3-10-1

4x5 ||

Scale: 3/16"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.15 8-9 >891 360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.23 8-9 >588 240	M18SHS		197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	-0.05 7 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 10-11 >999 240				
								Weight: 111 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2 *Except* 3-10: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 4-1-14 oc bracing. Except:
WEBS	2x3 SPF No.2 *Except* 4-8,1-12: 2x4 SPF No.2	WEBS	1 Row at midpt 3-9 1 Row at midpt 2-10, 4-9

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

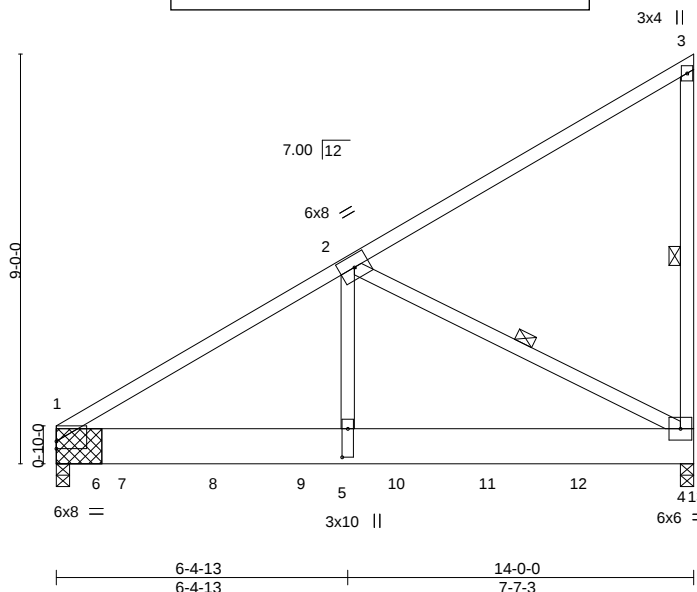
FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-720/98, 2-3=-179/340, 4-5=-430/193, 5-6=-353/82, 1-12=-472/110, 6-7=-488/83
BOT CHORD	11-12=-196/601, 10-11=-196/601, 9-10=-1045/77, 3-9=-454/255
WEBS	2-11=0/308, 2-10=-792/236, 4-9=-467/3, 4-8=-119/468, 5-8=-369/225, 6-8=-40/324

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



October 2,2020

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675		E5	MONOPITCH GIRDER	1		2	I43059548
Wheeler Lumber,		Waverly, KS 66871		Job Reference (optional)			
				8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:56 2020 Page 1			
				ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LV8Nbb89WK68i?C8iJ__4bgqNMQj9C6oX7vSYbyXTf5			
		6-4-13		10/12/2020		14-0-0	
		6-4-13				7-7-3	



Scale = 1:50.6

Plate Offsets (X,Y)--		[1:0-0-0,0-1-15], [5:0-7-8,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0		Plate Grip DOL 1.15		TC 0.84		Vert(LL) -0.07	1-5	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.56		Vert(CT) -0.12	1-5	>999	240		
BCLL 0.0 *		Rep Stress Incr NO		WB 0.65		Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL) 0.03	1-5	>999	240	Weight: 207 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

FORCES.

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

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 2x10 SP DSS bearing block 12" long at jt. 1 attached to each face with 5 rows of 10d (0.131"x3") nails spaced 3" o.c. 20 Total fasteners per block. Bearing is assumed to be SPF No.2.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=252.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1972 lb down and 159 lb up at 1-6-13, 1961 lb down and 158 lb up at 3-6-13, 1977 lb down at 5-6-0, 454 lb down and 87 lb up at 7-6-0, 462 lb down and 86 lb up at 9-6-0, and 470 lb down and 86 lb up at 11-6-0, and 706 lb down and 67 lb up at 13-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020			Ply	Lot 19 HT
400675	E5	MONOPITCH GIRDER				2	I43059548
Wheeler Lumber, Waverly, KS 66871			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)

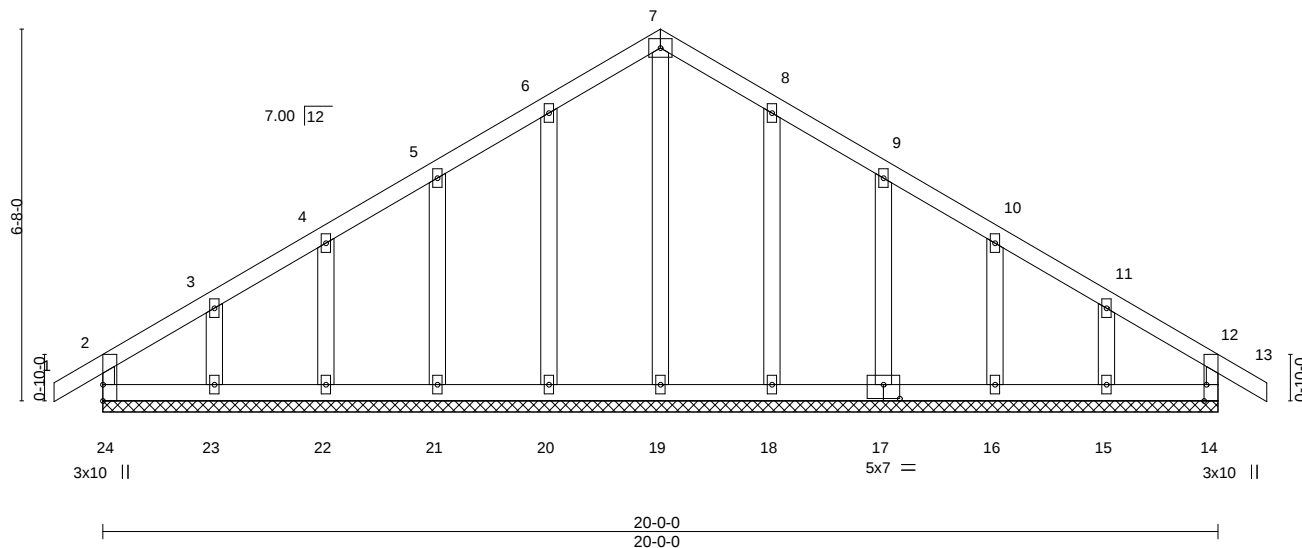
Vert: 1-3=-70, 1-4=-20

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 400675	Truss G1	Truss Type Common Supported Gable	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020	Ply 1	Lot 19 HT	I43059549
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)				
0-10-8 0-10-8		10-0-0 10-0-0		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:00:57 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-phimpX8nHdE?K9nLG1VDdoCBwmuyuyotxmfn041yXTf4		
		4x5 =		20-0-0 10-0-0		

Scale = 1:41.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	13	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 89 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 20-0-0.
(lb) - Max Horz 24=-188(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMdBNOtjF5cDvSpwphH1zCzbQ-NWMyUQQyVcgvKEmABmL04j3iqLu2B1J8dCTx7syXTY9		Lot 19 HT	I43059551
400675	G3	Roof Special	1		Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871, Mitek			8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:08:20 2020 Page 1			
0-10-8 0-10-8		4-9-0 4-9-0	10-0-0 5-2-15	15-2-15 5-3-0	20-0-0 4-9-1	
		10/12/2020				
		4x5 =				

Scale = 1:43.9

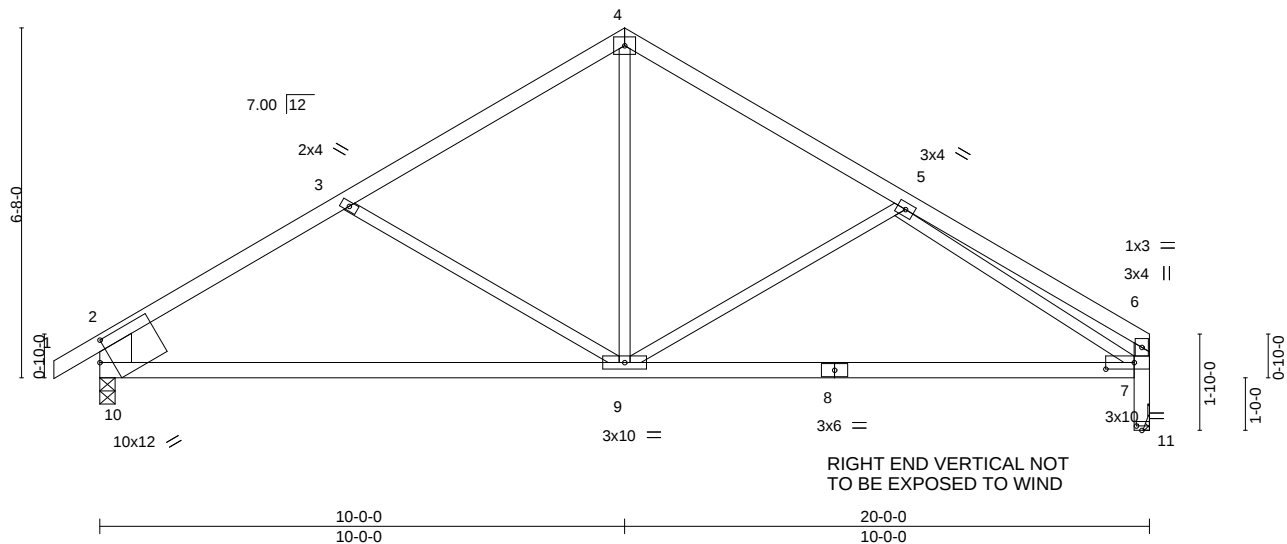


Plate Offsets (X,Y)--		[7:0-6-8,0-1-8], [10:0-2-9,0-4-7], [11:0-1-4,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88
TCDL 10.0	Lumber DOL	1.15	BC 0.79
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.19 7-9	>999	360
Vert(CT)	-0.41 7-9	>577	240
Horz(CT)	0.04 11	n/a	n/a
Wind(LL)	0.05 7-9	>999	240
PLATES	GRIP		
MT20	197/144		
Weight: 73 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-10: 2x8 SP DSS, 6-11: 2x4 SPF No.2

BRACING-

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

REACTIONS.

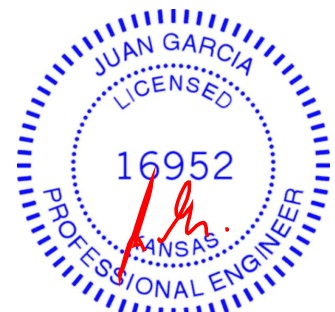
(lb/size) 10=965/0-3-8, 11=877/Mechanical
 Max Horz 10=175(LC 5)
 Max Uplift 10=-130(LC 8), 11=-104(LC 9)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 10 and 104 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT	I43059552
400675	G4	Roof Special			1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871, Mitek			8.410 s May 22 2020 Mitek Industries, Inc. Fri Oct 2 11:08:39 2020 Page 1 ID: bWuMDBN0tF5cDvSpwhpH1zCzbQ-JA?kTwftQ24o69jpoGBTLjL4A?Oh8Xgx?fZSHFYXTXs				
3-0-13 3-0-13 4-10-11 1-9-15 10-0-0 5-1-5 15-1-5 5-1-5 20-0-0 4-10-11			10/12/2020				
			5x7 =				

Scale = 1:43.7

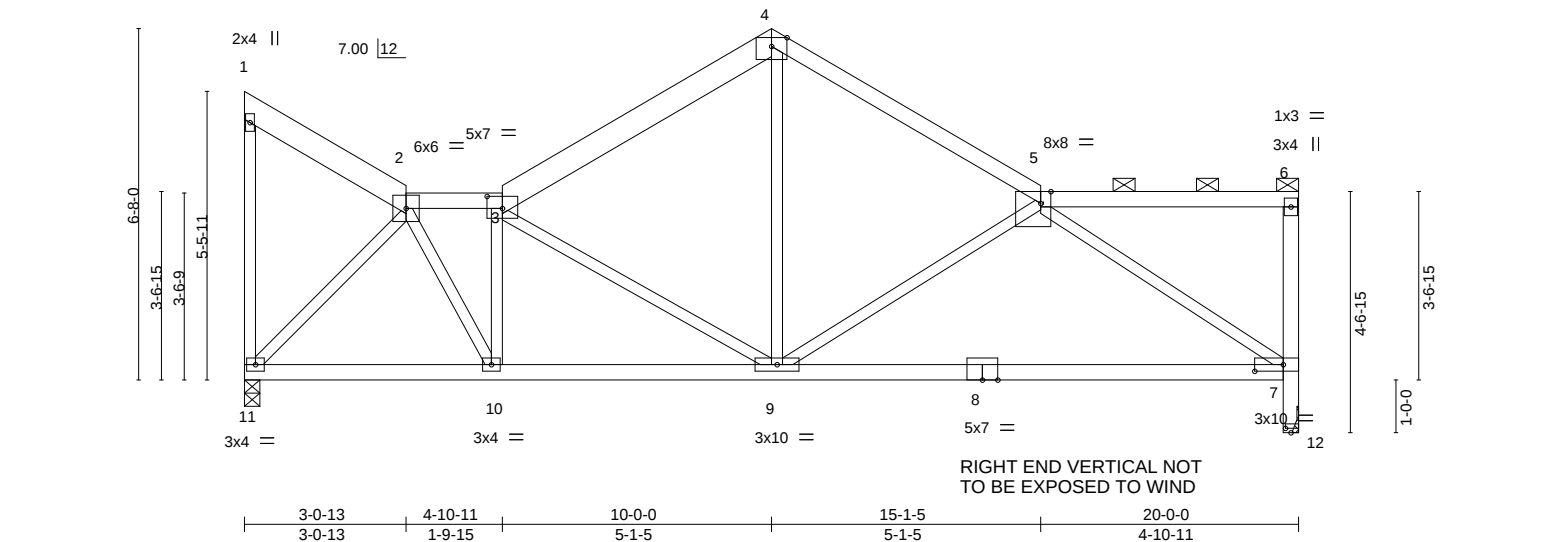


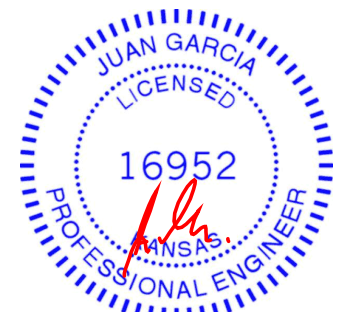
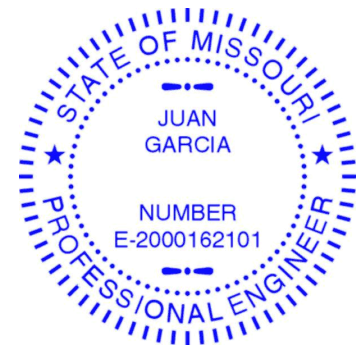
Plate Offsets (X,Y)-- [3:0-3-8,0-2-12], [5:0-2-5,Edge], [7:0-6-8,0-1-8], [12:0-1-4,0-1-0]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.24 7-9	>991	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.49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

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-2,3-4: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-11 max.): 2-3, 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 6-12: 2x4 SPF No.2	

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

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 11 and 13 lb uplift at joint 12.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMDBN0tjF5cDv		Ply	Lot 19 HT	I43059553
400675	G5	Roof Special			1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871, Mitek			8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:08:55 2020 Page 1				
			ID: bWuMDBN0tjF5cDv SpwhpH1zCzbQ-rFznqQsvfz5X1dyukdT750ktRw6uvC1g8S1rKyXTXc				
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 6-7-5			10/12/2020 5x7 =				

Scale = 1:43.7

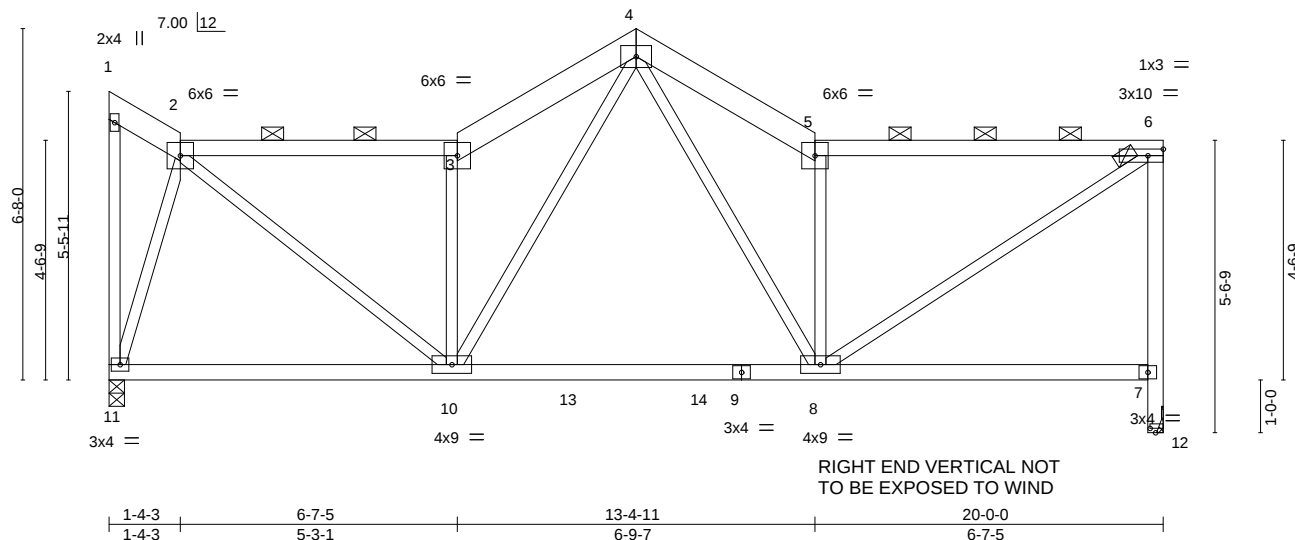


Plate Offsets (X,Y)-- [12:0-1-4,0-1-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.11 8-10 >999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.17 8-10 >999	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.03 12 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 8-10 >999	240	Weight: 96 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 11 and 19 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400675	Truss G6	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Lot 19 HT 1	I43059554
Wheeler Lumber, Waverly, KS 66871, Mitek			Job Reference (optional) 8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:09:09 2020 Page 1 ID: bWuMDBN0qF5cDvSpwhPH1zCzbQ-Rxp3mA0iMGrYim0aZzJVZ2b6S5eLA56MuKr1LWYXTXO			

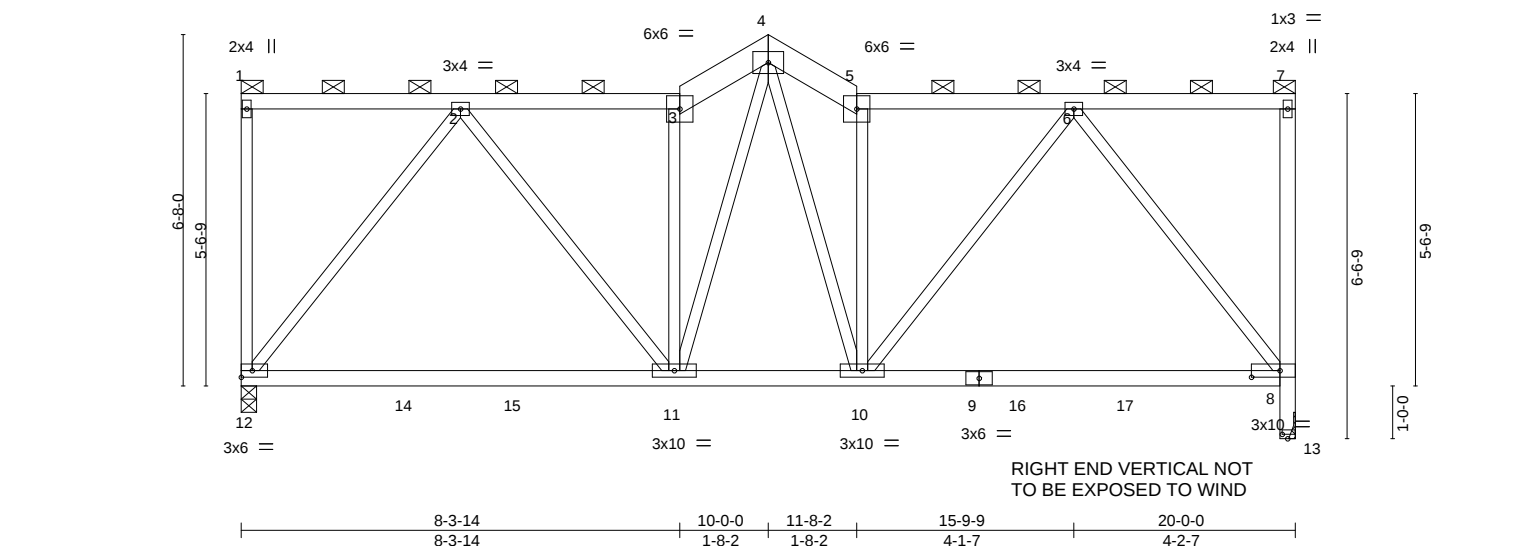


Plate Offsets (X, Y)--		[8:0-6-8,0-1-8], [13:0-1-4,0-1-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.21 11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.37 11-12	>647	240		
BCLL	0.0 *	Rep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

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

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

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 12 and 131 lb uplift at joint 13.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMDBN0jF5cDvSpwh		Lot 19 HT	I43059555
400675	G7	Roof Special			1	Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871, Mitek

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

12-11-14 3-17-2020 20-0-0 7-0-2

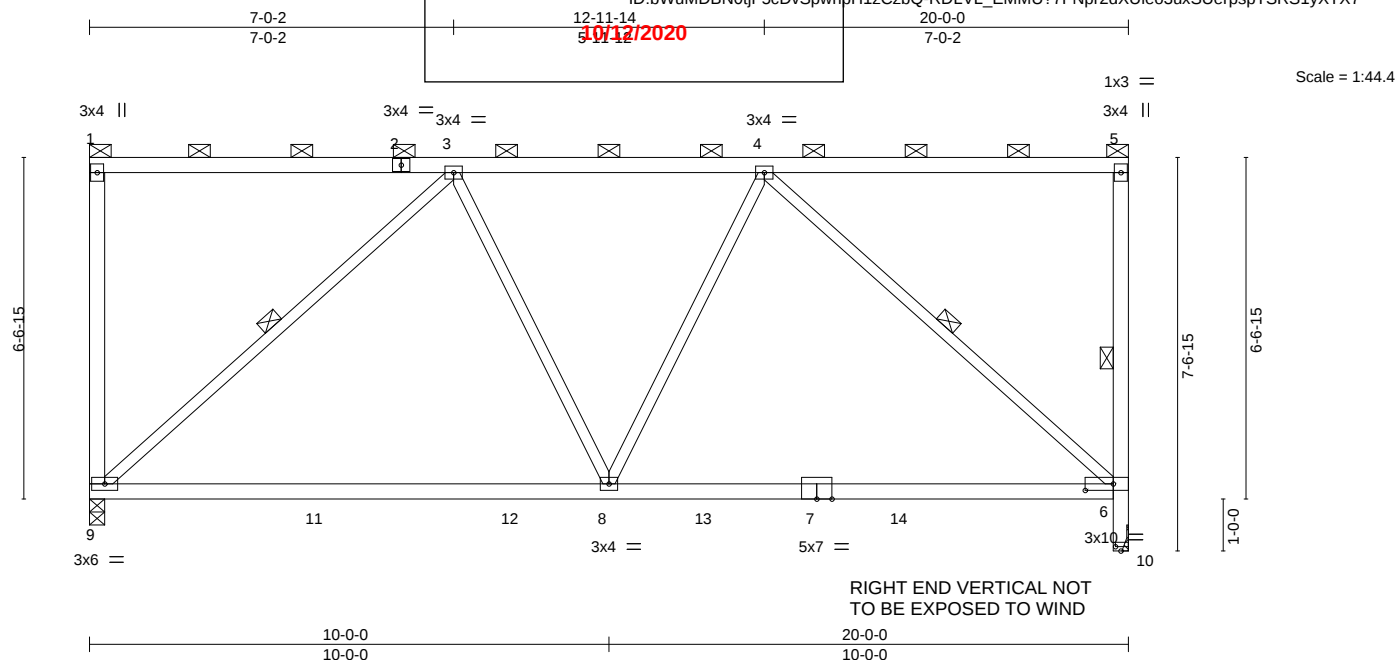


Plate Offsets (X,Y)-- [6:0-6-8,0-1-8], [10:0-1-4,0-1-0]

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

LUMBER-

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

BRACING-

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

REACTIONS.

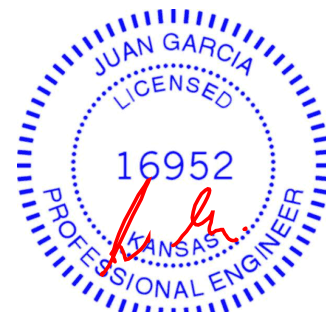
(lb/size) 9=887/0-3-8, 10=887/Mechanical
 Max Horz 9=-178(LC 6)
 Max Uplift 9=-182(LC 4), 10=-187(LC 5)
 Max Grav 9=968(LC 2), 10=968(LC 2)

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=-163/723, 7-13=-163/723,
 7-14=-163/723, 6-14=-163/723
 WEBS 3-9=-940/213, 3-8=0/322, 4-8=0/318, 4-6=-934/221

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 9 and 187 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



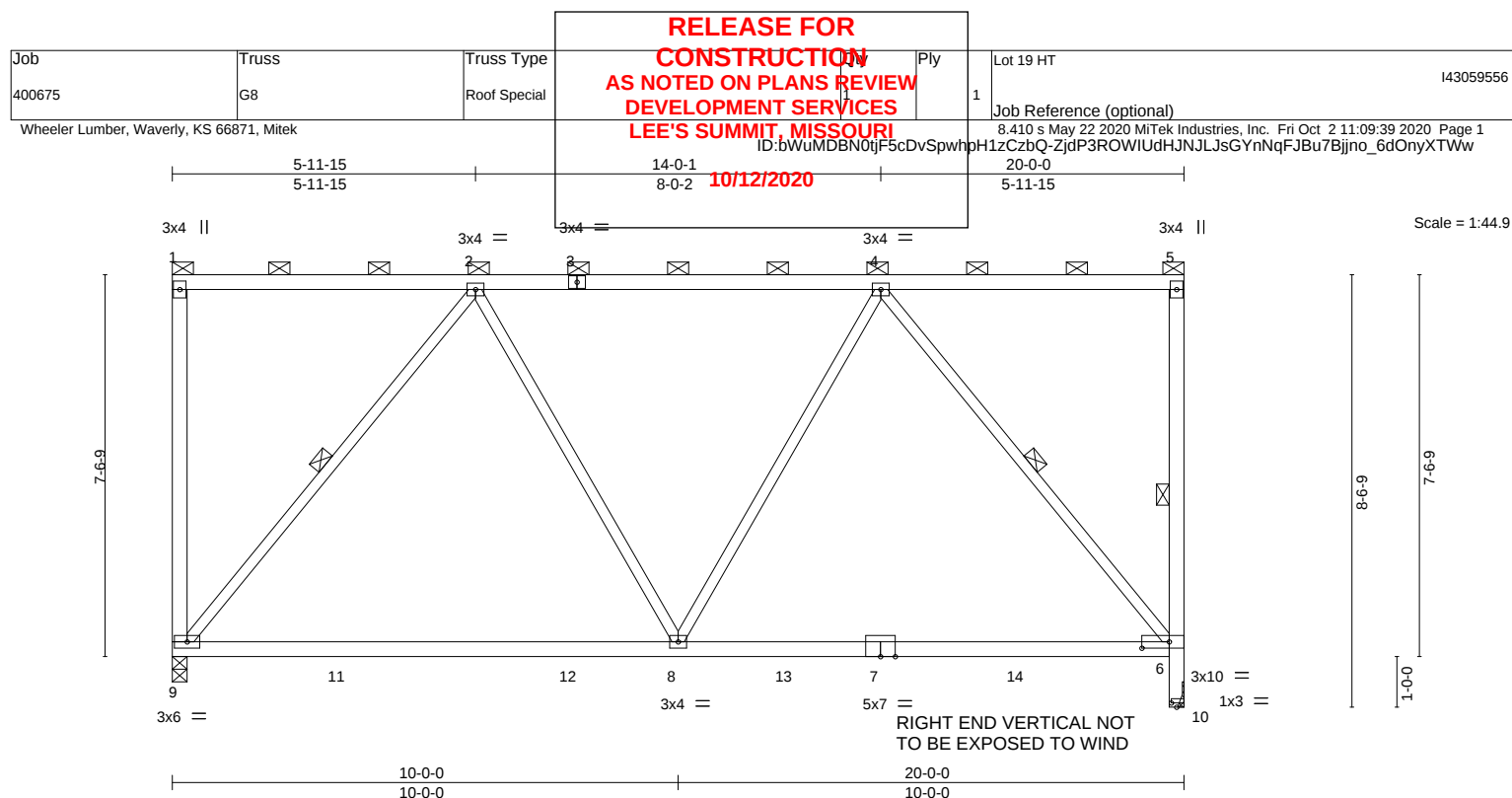
October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017



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

LUMBER-

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

BRACING-

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

REACTIONS.

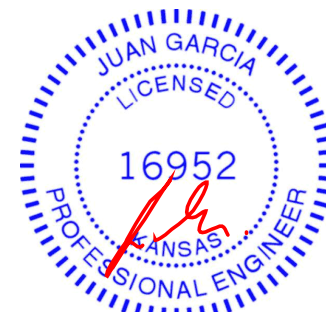
(lb/size) 9=887/0-3-8, 10=887/Mechanical
 Max Horz 9=-206(LC 6)
 Max Uplift 9=-188(LC 4), 10=-194(LC 5)
 Max Grav 9=980(LC 2), 10=980(LC 2)

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

TOP CHORD 2-3=-713/121, 3-4=-713/121, 6-10=-980/194
 BOT CHORD 9-11=-173/575, 11-12=-173/575, 8-12=-173/575, 8-13=-144/576, 7-13=-144/576,
 7-14=-144/576, 6-14=-144/576
 WEBS 2-9=-886/226, 2-8=0/340, 4-8=0/336, 4-6=-880/234

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 9 and 194 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

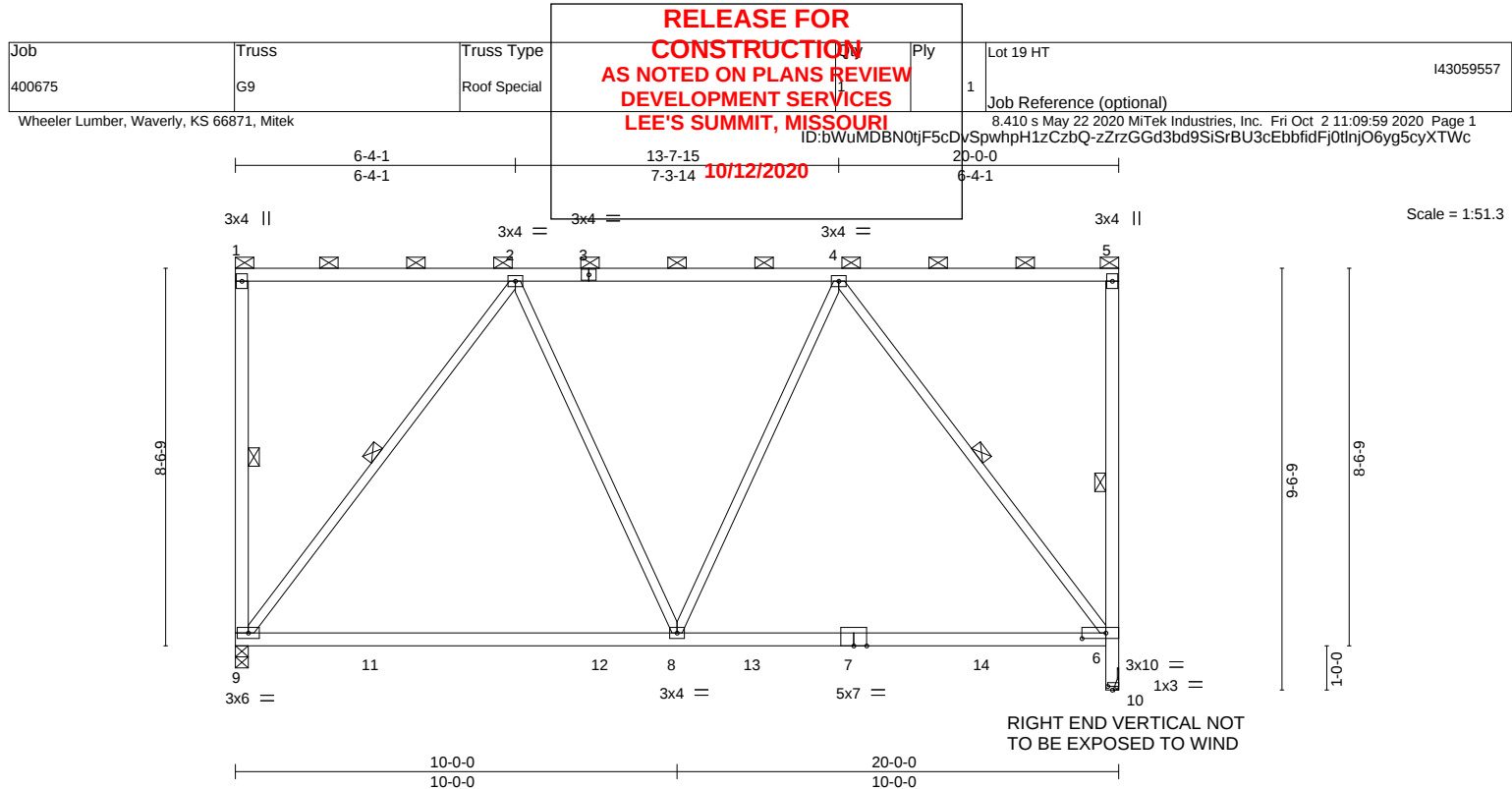


Plate Offsets (X,Y)-- [6:0-6-8,0-1-8], [10:0-1-4,0-1-0]

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

LUMBER-

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

BRACING-

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

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-

- Wind: ASCE 7-16; Vult=115mph (3-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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 194 lb uplift at joint 9 and 203 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

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

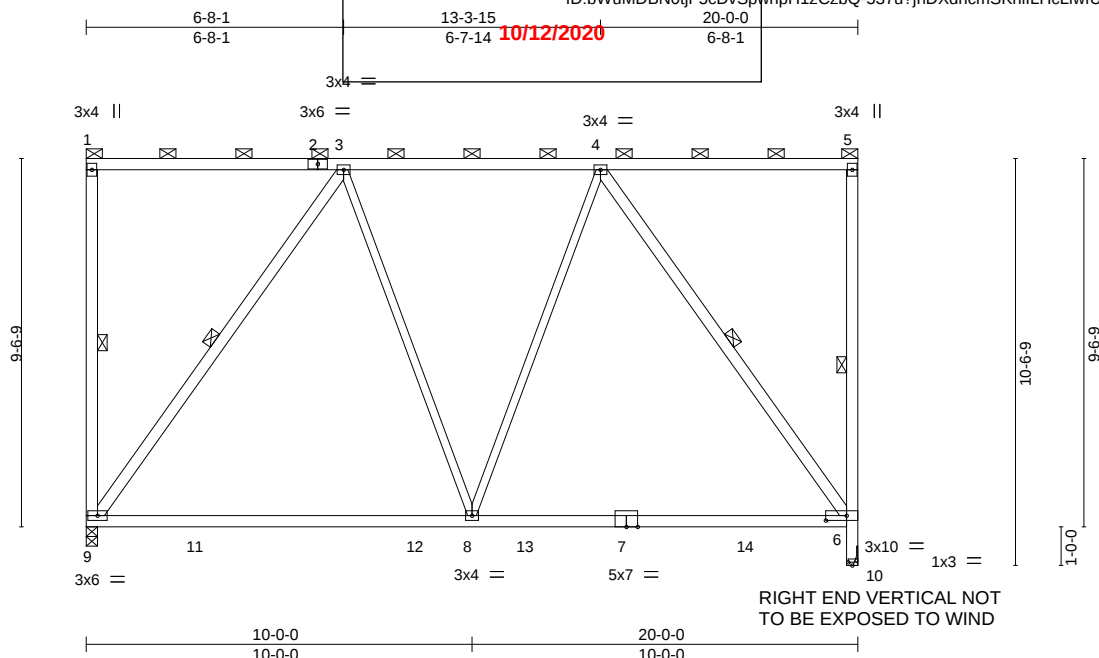


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMDbN0tjF5cDvSpwhpH1zCzbQ-537u?jNDXdncmSKhILHcLiwfU9sQiNeOds3MyXTWP		Lot 19 HT	I43059558
400675	G10	Roof Special			1	Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871, Mitek

8.410 s May 22 2020 MiTek Industries, Inc. Fri Oct 2 11:10:12 2020 Page 1
H1zCzbQ-537u?jNDXdncmSKhILHcLiwfU9sQiNeOds3MyXTWP



Scale = 1:59.7

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.55	Vert(LL)	-0.27	6-8	>873	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.43	6-8	>556	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.10	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	-0.07	8-9	>999	240		
									Weight: 108 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2400F 2.0E *Except*
6-7: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
3-8,4-8: 2x3 SPF No.2

BRACING-

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

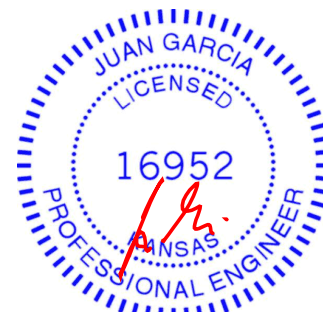
REACTIONS. (lb/size) 9=887/0-3-8, 10=887/Mechanical
Max Horz 9=-263(LC 6)
Max Uplift 9=-202(LC 4), 10=-212(LC 5)
Max Grav 9=997(LC 2), 10=997(LC 2)

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

TOP CHORD 3-4=-584/120, 6-10=-997/212
BOT CHORD 9-11=-158/488, 11-12=-158/488, 8-12=-158/488, 8-13=-129/489, 7-13=-129/489,
7-14=-129/489, 6-14=-129/489
WEBS 3-9=-821/212, 3-8=0/335, 4-8=0/332, 4-6=-815/226

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 9 and 212 lb uplift at joint 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/12/2020

Job 400675	Truss H1	Truss Type Common Supported Gable	Ply 1	Lot 19 HT Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:04 2020 Page 1 ID: bWuMdBNOtjF5cDvSpwhpHLzCzbQ-62dPHKEAdn7?gEphA?7sPH?NWaGr1yCzNNsup7yXTez		

0-10-8
0-10-8

10-2-0
10-2-0

20-4-0
10-2-0

21-2-8
0-10-8

Scale = 1:37.6

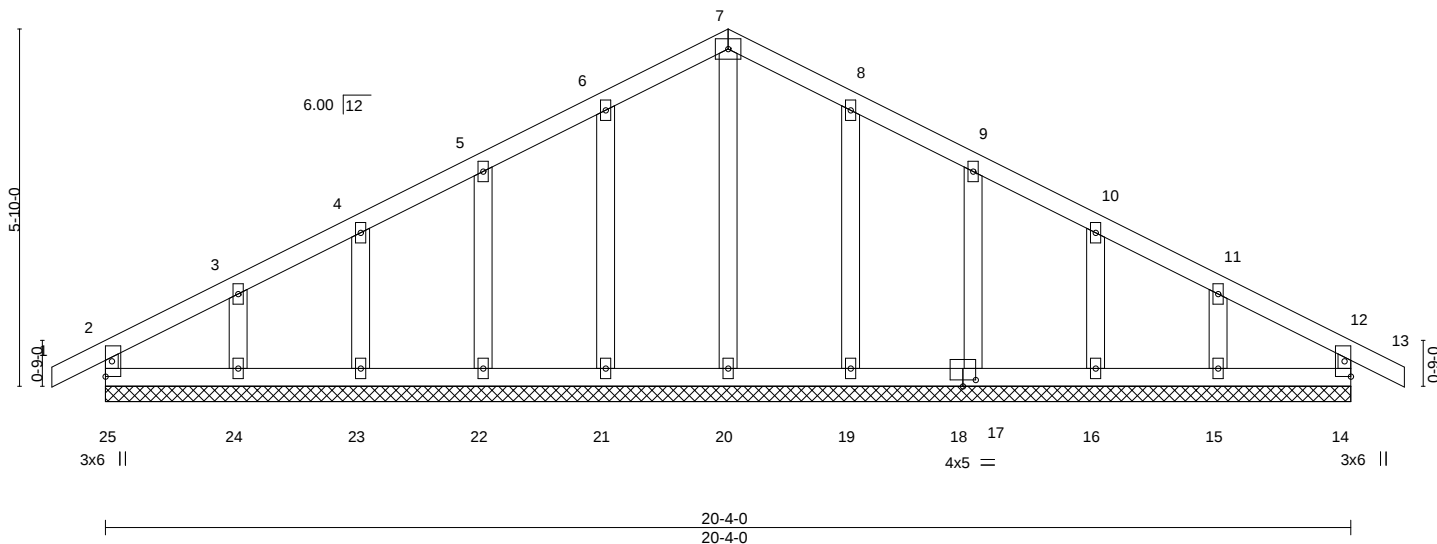


Plate Offsets (X,Y)--		[18:0-2-8,0-1-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.00 13 n/r 120
			Vert(CT) -0.00 13 n/r 120
			Horz(CT) 0.00 14 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 83 lb FT = 10%

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

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

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

Job 400675	Truss H2	Truss Type Common	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-aEBnUgFoO5FsHOotkie5xUYMf_UbmPj7b1bRLZyXTey 10/12/2020		Lot 19 HT 143059560 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:05 2020 Page 1 15-1-12 4-11-12 20-4-0 5-2-4 21-2-8 0-10-8
Wheeler Lumber, Waverly, KS 66871			5x7 =		

Scale = 1:38.3

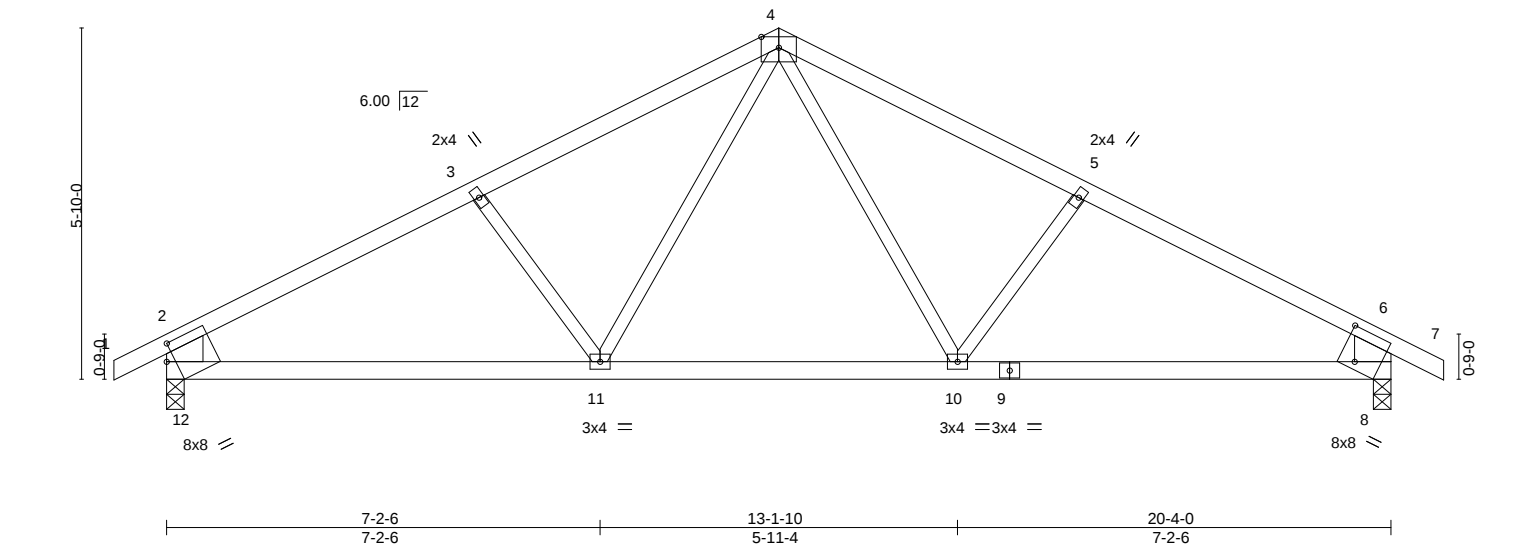


Plate Offsets (X, Y)--		[8:0-3-2,0-6-8], [12:0-1-10,0-3-4]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	25.0	2-0-0	Plate Grip DOL	1.15	TC	0.87	in (loc)	L/d	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(LL)	-0.14 10-11	>999	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Vert(CT)	-0.24 10-11	>996	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Horz(CT)	0.03 8	n/a	
						Wind(LL)	0.08 10-11	>999	
									Weight: 70 lb FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except*		
	2-12,6-8: 2x8 SP 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.	
TOP CHORD	2-3=-1302/183, 3-4=-1106/183, 4-5=-1106/183, 5-6=-1302/183, 2-12=-877/173, 6-8=-877/173
BOT CHORD	11-12=-167/1059, 10-11=-28/794, 8-10=-90/1059
WEBS	4-10=-75/346, 4-11=-75/346

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



October 2,2020

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

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



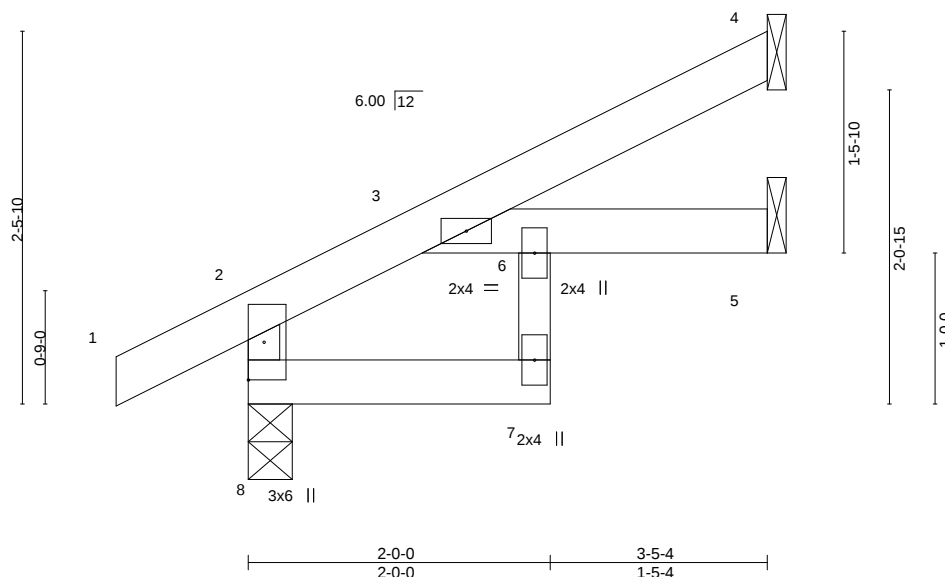
16023 Swingley Ridge Rd
Chesterfield, MO 63017



October 2, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply	Lot 19 HT	I43059562
400675	J2	Jack-Open				1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:07 2020 Page 1						
		ID:bWuMDBNOtjF5cDvSpwH1zCzbQ-WdIYvMG3wiVaXiYGs7hZ1vduAoHDEK3P3K4YQSyXTew						
		-0-10-8 0-10-8		2-0-0 2-0-0		3-5-4 1-5-4		

Scale = 1:15.3



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

LUMBER-

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

BRACING-

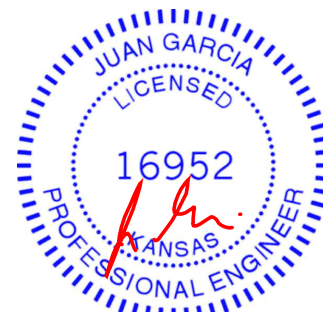
TOP CHORD Structural wood sheathing directly applied or 3-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-

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



October 2, 2020

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

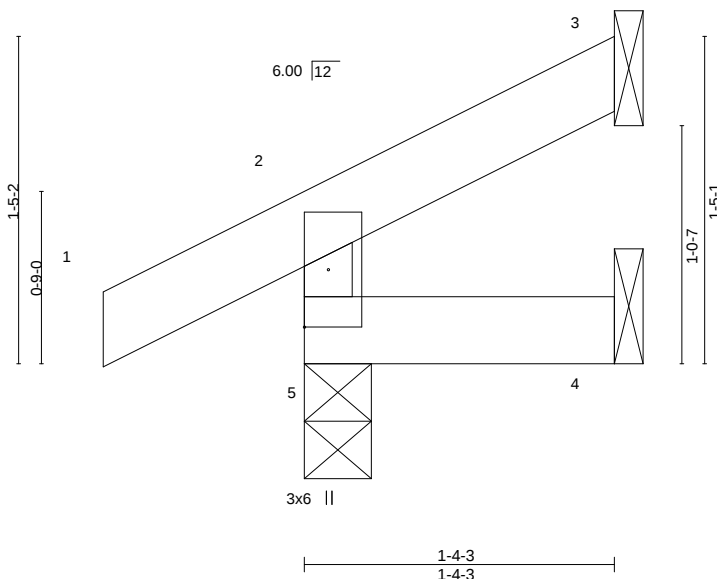
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI					
Job	Truss	Truss Type	On Ply	Lot 19 HT	I43059563			
400675	J3	Jack-Open	1	Job Reference (optional)				
Wheeler Lumber, Waverly, KS 66871			8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:07 2020 Page 1					
			ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-WdIYvMG3wiVaXiYGs7hZ1vduloItEK3P3K4YQSyXTew					
			-0-10-8 1-4-3					
			0-10-8 1-4-3					

Scale = 1:10.0



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

LUMBER-

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

BRACING-

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

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

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

NOTES-

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



October 2,2020

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

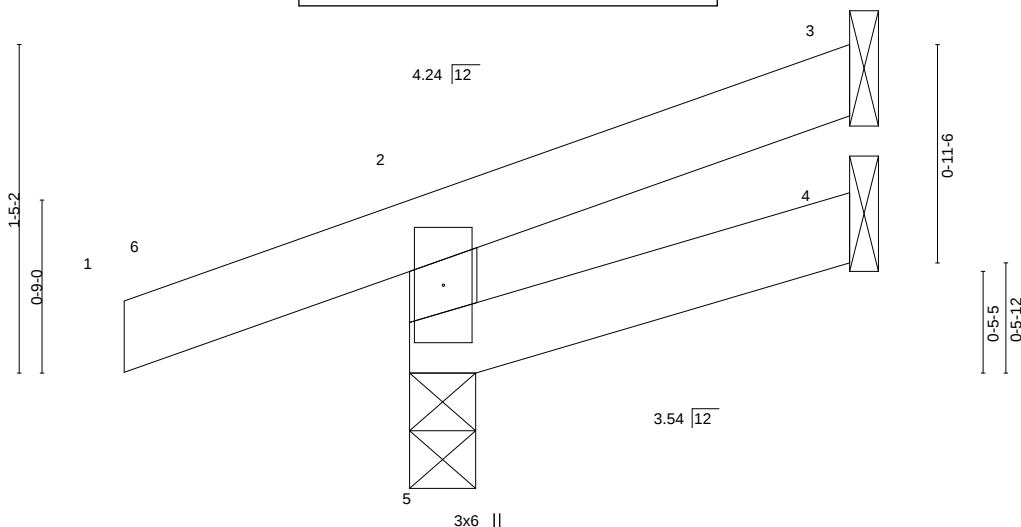
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply	Lot 19 HT	I43059564
400675	J4	Jack-Open Girder				1		
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:08 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-psw6iHh0dR8r7SPrCoZ7A3BBE_znIZl_q5yuyXTev						
			-1-2-14 1-2-14	10/12/2020		1-10-14 1-10-14		

Scale = 1:10.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	
								Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

FORCES.

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=119.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5 lb down and 2 lb up at -1-2-14, and 5 lb down and 2 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



October 2,2020

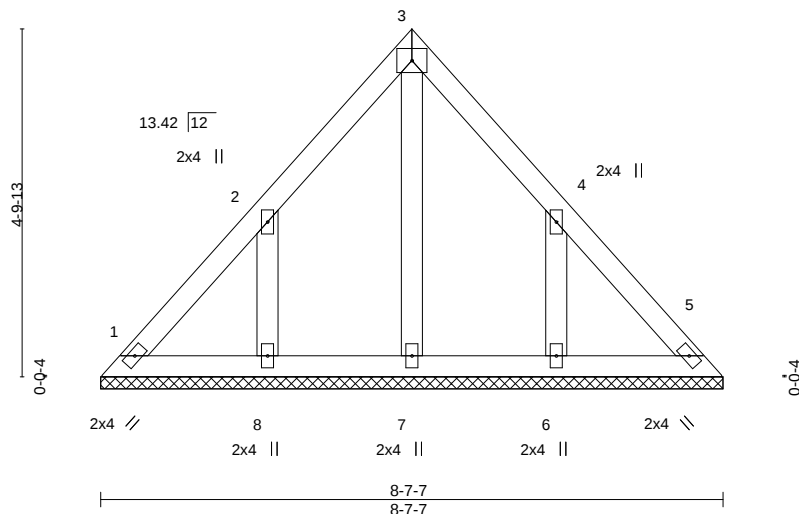
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400675	Truss LAY1	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMDbN0tjF5cDvSpwlpH1zCzbQ-_psw6iHh0dR8r7SPrCoZ7A3VBepznmZl_q5yuyXTev 10/12/2020		Lot 19 HT I43059565 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					



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 33 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



October 2, 2020

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Lot 19 HT
400675	LAY2	LAY-IN GABLE	I43059566
Wheeler Lumber, Waverly, KS 66871		8.420 s	Job Reference (optional)

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

Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:09 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-S?QIK2IJSJlm?iezYj16KiBFzbzbiCPIWeZeUKyXTeu

Scale = 1:42.1

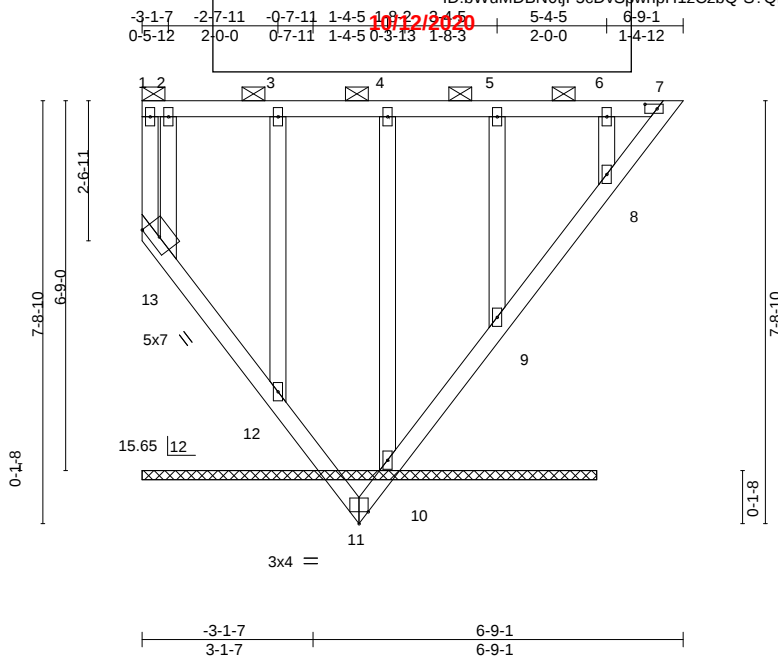


Plate Offsets (X,Y)-- [7:0-2-11,0-1-0], [11:Edge,0-2-10]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a - n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a - n/a	999		
BCLL	0.0 *	Rep Stress Incr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

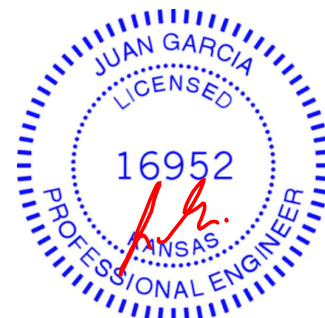
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD 2-0-0 oc purlins: 1-7, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

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

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=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
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 11, 10 except (jt=lb) 9=115, 12=118.
 - Non Standard bearing condition. Review required.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 13, 11, 10, 9, 12.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400675	Truss LAY3	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	Lot 19 HT I43059567
Wheeler Lumber, Waverly, KS 66871			8.420 s	Aug 25 2020	MiTek Industries, Inc. Fri Oct 2 11:01:10 2020 Page 1
			ID:bWuMdBNOtjF5cDvSpwH1zCzbQ-xC_gXOlxDdt9O9GqXFEGeYFF6?GqRUIslJC1nyXTet		

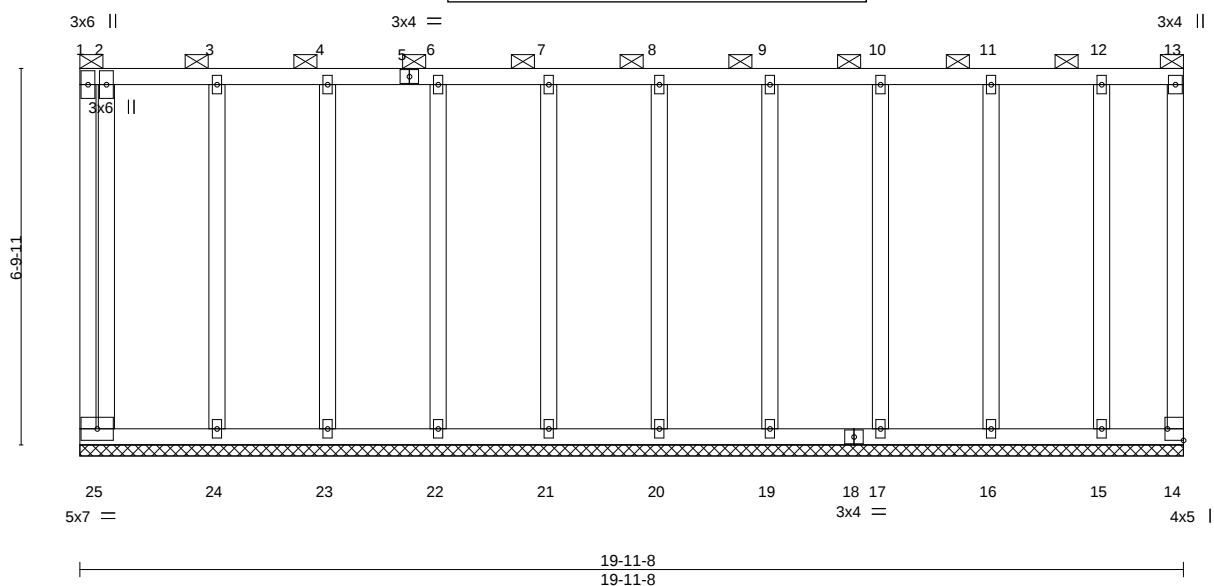


Plate Offsets (X,Y)-- [14:Edge,0-3-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84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

LUMBER-

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

BRACING-

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

REACTIONS.

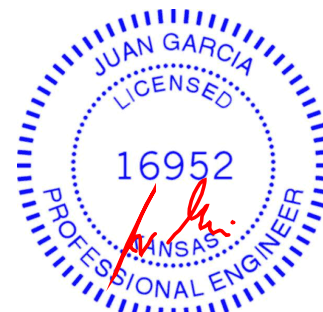
All bearings 19-11-8.
(lb) - Max Horz 25=-249(LC 4), 14=-244(LC 5),
Max Uplift All uplift 100 lb or less at joint(s) 22, 21, 20, 19, 17, 16 except 25=-338(LC 4), 14=-244(LC 5),
24=-429(LC 5), 23=-126(LC 4), 15=-293(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 14, 23, 22, 21, 20, 19, 17, 16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

FORCES.

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 21, 20, 19, 17, 16 except (jt=lb) 25=338, 14=244, 24=429, 23=126, 15=293.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 2,2020

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

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

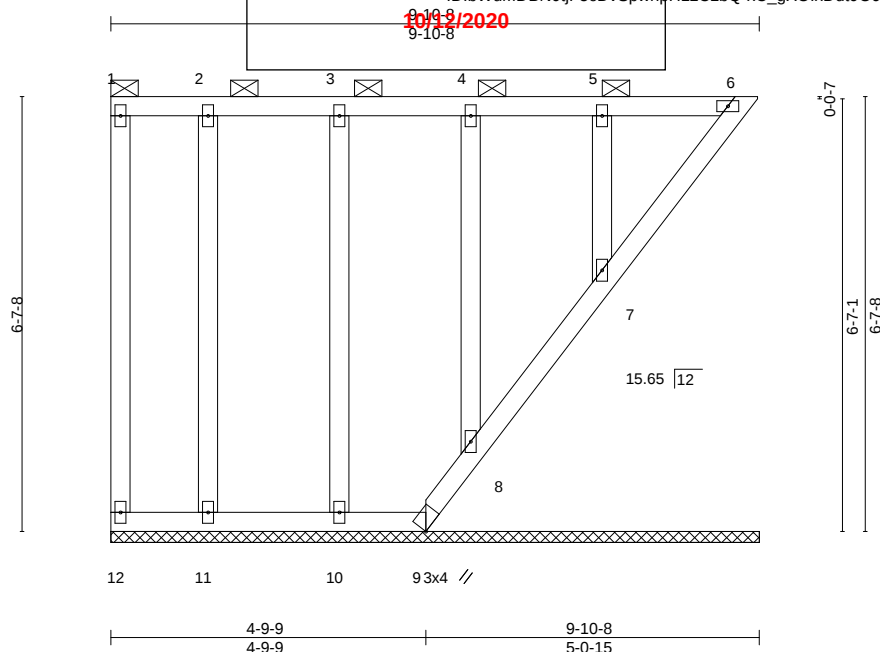


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply	Lot 19 HT
400675	LAY4	GABLE		1	I43059568

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:10 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhH1zCzbQ-xC_gXOIxDdt9O9GqXFEgeYFOG?INRgCsIIJC1nyXTet



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 55 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 6-7.

REACTIONS.

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

FORCES.

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

NOTES-

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



October 2,2020

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

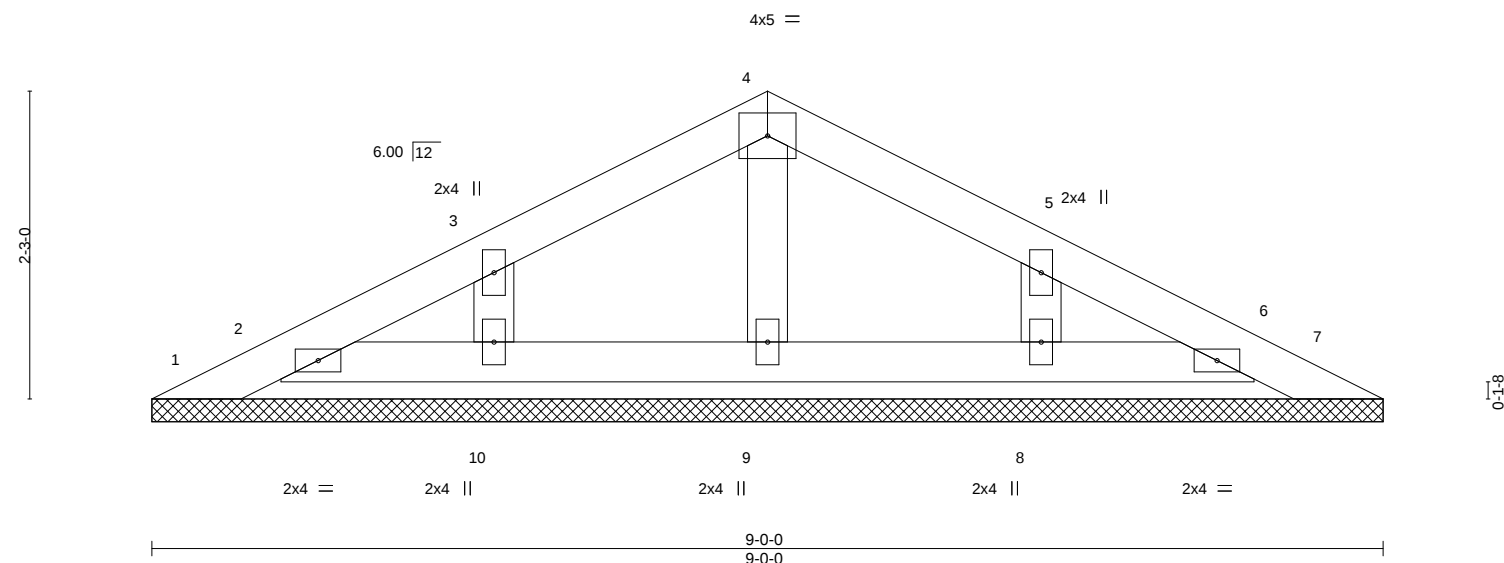
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT	I43059569
400675	P1	Piggyback			1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871				8.420 s		Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:11 2020 Page 1	
				ID: bWuMdbN0tjF5cDvSpwhpH1zCzbQ-POY2lkJZ_x?0?Jr15zIVBlob2PfcA8m?_y2IZDyXTes			
		4-6-0 4-6-0				9-0-0 4-6-0	

Scale = 1:16.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 23 lb	FT = 10%

LUMBER-

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

BRACING-

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

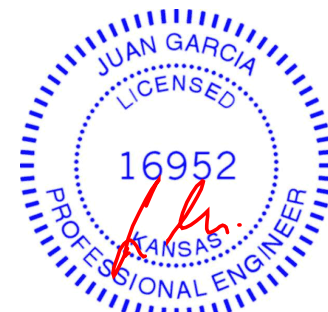
REACTIONS.

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

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 10, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

400675

Truss

P2

Truss Type

Piggyback

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/12/2020

1

8.420 s

Aug 25 2020

8.420 s

Lot 19 HT

I43059570

Wheeler Lumber,

Waverly, KS 66871

Job Reference (optional)

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

4-6-0

4-6-0

9-0-0

4-6-0

ID:bWuMDBN0tjF5cDvSpwH1zCzbQ-ta6Ry4KBIE7sdTQDegGkkzKkfp_Yvbn9CcoJ5fyXTer

Scale = 1:17.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 21 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 9-0-0.
(lb) - Max Horz 1=37(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-126(LC 1), 5=-126(LC 1), 2=-157(LC 8), 4=-148(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=371(LC 1), 4=371(LC 1), 6=264(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 1, 126 lb uplift at joint 5, 157 lb uplift at joint 2 and 148 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

October 2,2020

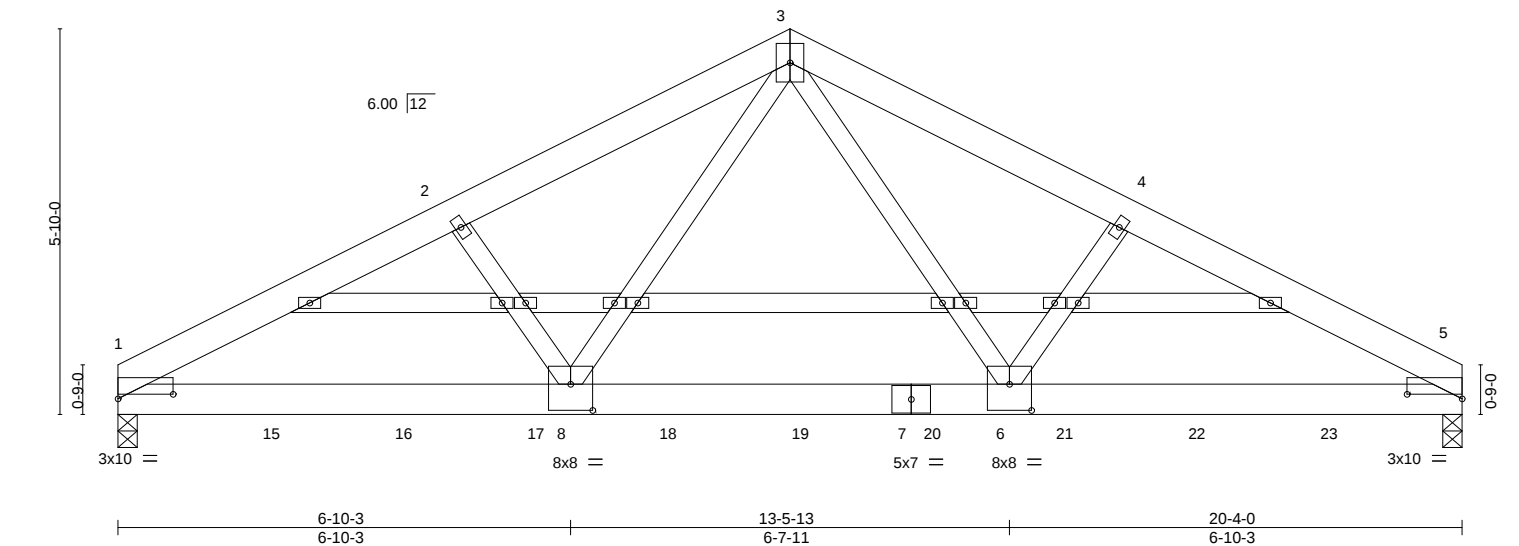
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400675	Truss R1	Truss Type Common Girder	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMdbN0tjF5cDvSpwH1zCzbQ-LmgpAPLqWYfJFd?PCOozGAtsWCCFexKIRGXsd6yXTeq 10/12/2020	Ply 2	Lot 19 HT 143059571 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:13 2020 Page 1 ID: bWuMdbN0tjF5cDvSpwH1zCzbQ-LmgpAPLqWYfJFd?PCOozGAtsWCCFexKIRGXsd6yXTeq
Wheeler Lumber, Waverly, KS 66871					
5-2-4 5-2-4		10-2-0 4-11-12		15-1-12 4-11-12	
		5x7		20-4-0 5-2-4	

Scale = 1:34.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.11	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.19				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.04				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07				
								Weight: 251 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-3-8 oc purlins.
BOT CHORD	2x6 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 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.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
 - 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.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 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



October 2,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

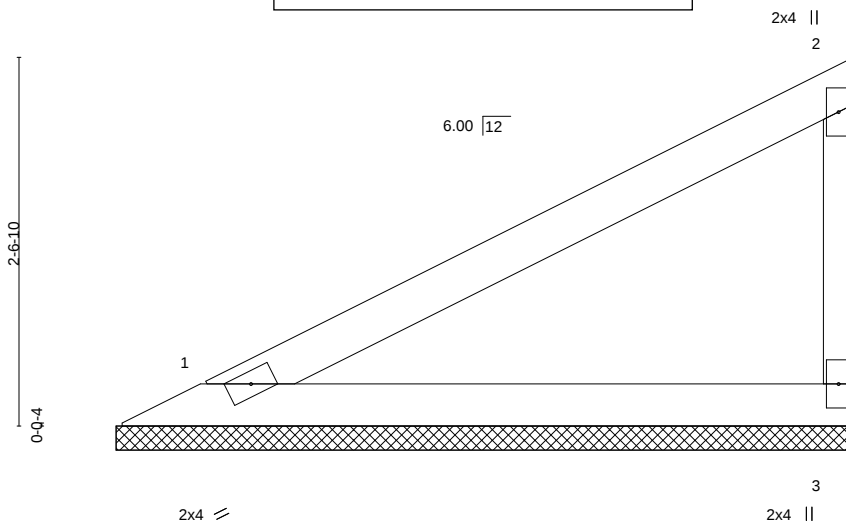
Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT
400675	R1	Common Girder			2	I43059571
Wheeler Lumber, Waverly, KS 66871				8.420 s	Job Reference (optional) Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:13 2020 Page 2 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-LmgaPLqWYFjFd?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	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-pzDBNLSHsNasmacm5JCpOQ1McedNVnRgWHPAYyXTep 10/12/2020		Lot 19 HT
400675	V1	Valley	8.420 s		143059572
Wheeler Lumber,		Waverly, KS 66871		Job Reference (optional)	



Scale: 3/4"=1'

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

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=5-1-4, 3=5-1-4
 Max Horz 1=91(LC 5)
 Max Uplift 1=-25(LC 8), 3=-48(LC 8)
 Max Grav 1=197(LC 1), 3=197(LC 1)

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

NOTES-

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



October 2,2020

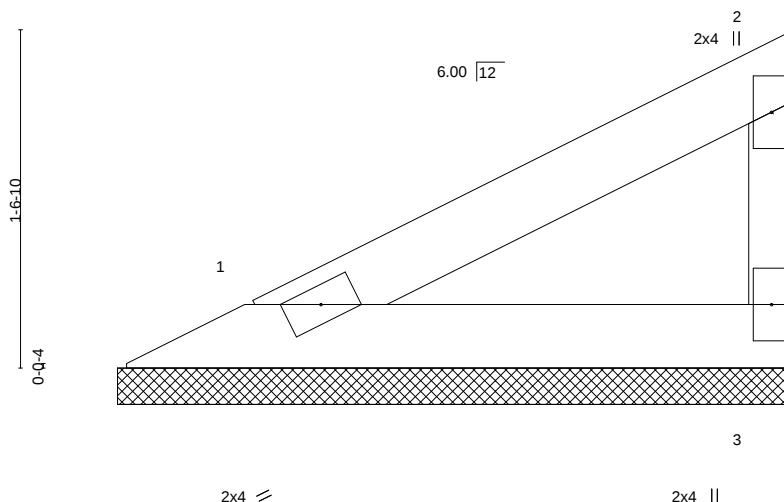
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMDbN0tjF5cDvSpwphH1zCzbQ-ILLxoRNioTdl64k_tWlgupVQ?QNLrPHk7EmWERyXTen 10/12/2020		Ply	Lot 19 HT
400675	V2	Valley			1	I43059573
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 1zCzbQ-ILLxoRNioTdl64k_tWlgupVQ?QNLrPHk7EmWERyXTen				



Scale = 1:10.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=3-1-4, 3=3-1-4
 Max Horz 1=50(LC 5)
 Max Uplift 1=-14(LC 8), 3=-26(LC 8)
 Max Grav 1=107(LC 1), 3=107(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 26 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

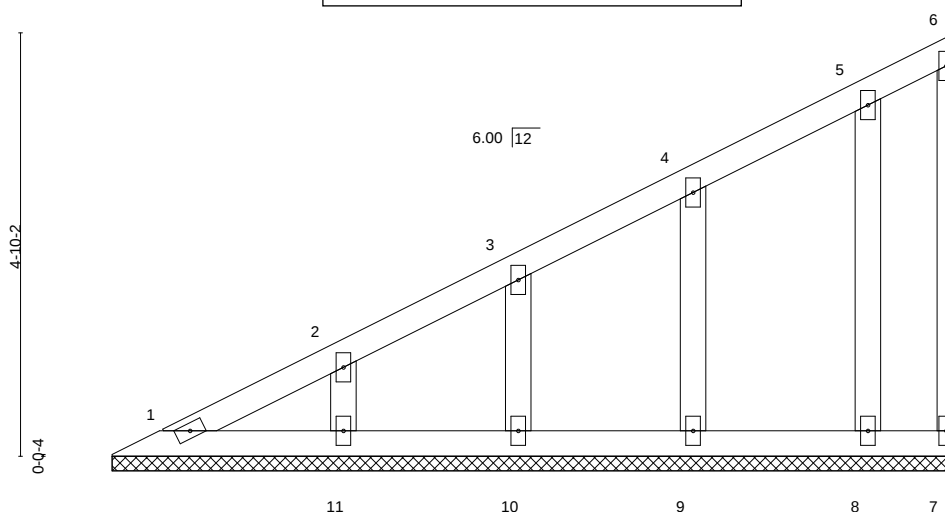
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Lot 19 HT	I43059574
400675	V3	GABLE	1	Ply	1	Job Reference (optional)	
Wheeler Lumber,		Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:17 2020 Page 1			
ID:bWuMDBN0tjF5cDvSpwph1zCzbQ-DYvJ?nOKZnm9JEJBREsvR01bWqixasAuMuV4ntyXTem							
10/12/2020							



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

LUMBER-

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

BRACING-

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

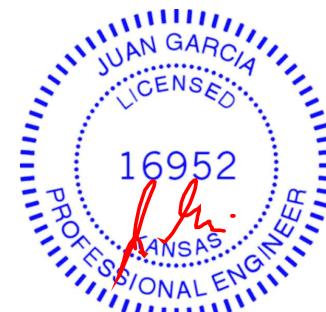
REACTIONS.

All bearings 9-7-12.
(lb) - Max Horz 1=134(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 7, 11, 10, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 10, 9, 8

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

NOTES-

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



October 2,2020

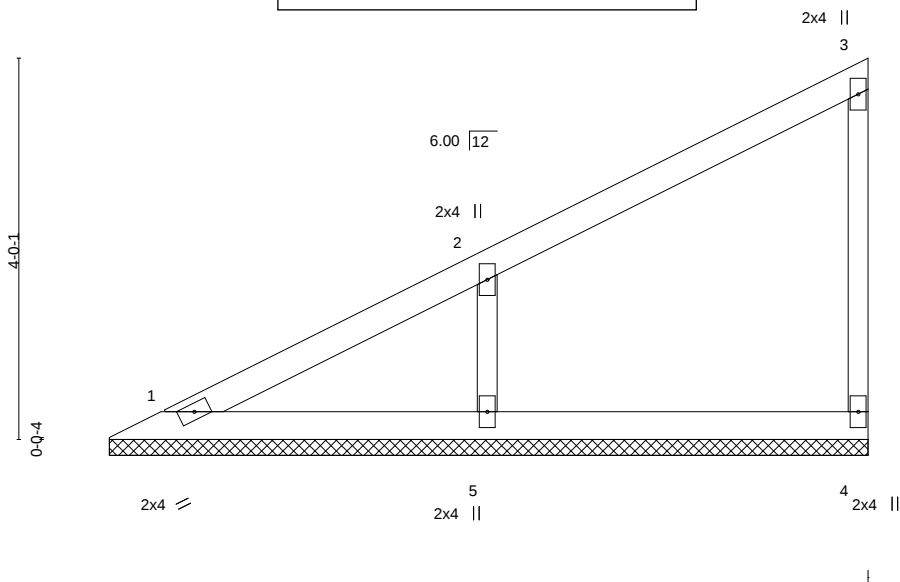
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	V4	Valley	10/12/2020		1	I43059575
Wheeler Lumber, Waverly, KS 66871		ID: bWuMDbN0tjF5cDvSpwphH1zCzbQ-DYvJ?nOKZnm9jEJBREsvR01ZrqhdasbuMuV4ntyXTem 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:17 2020 Page 1				



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

LUMBER-

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

BRACING-

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

REACTIONS.

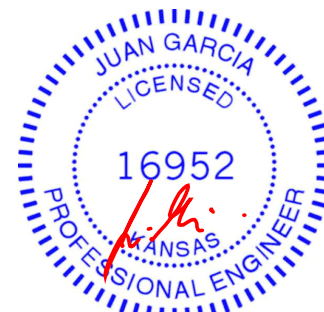
(size) 1=7-11-10, 4=7-11-10, 5=7-11-10
 Max Horz 1=152(LC 5)
 Max Uplift 4=-26(LC 5), 5=-123(LC 8)
 Max Grav 1=115(LC 16), 4=137(LC 1), 5=411(LC 1)

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

WEBS 2-5=-319/178

NOTES-

- 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) 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.



October 2,2020

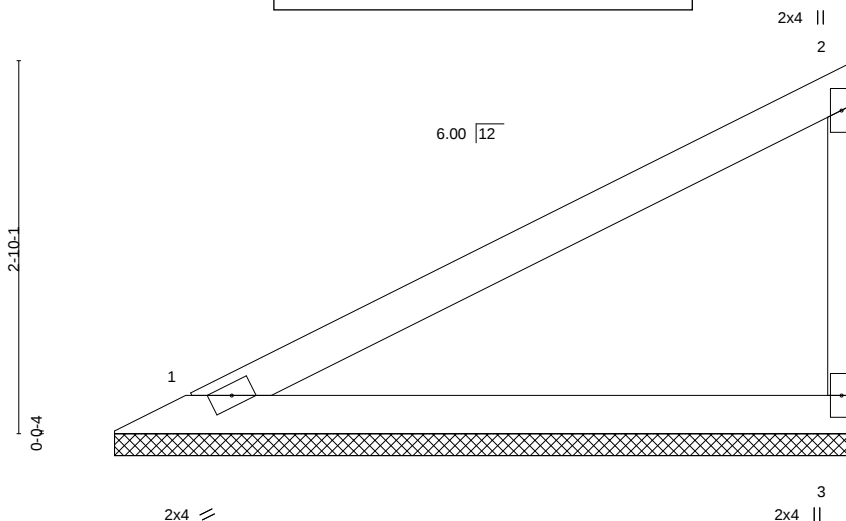
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	V5	Valley	10/12/2020 5-8-2		1	I43059576
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				



Scale = 1:17.5

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

LUMBER-

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

BRACING-

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

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

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

NOTES-

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



October 2,2020

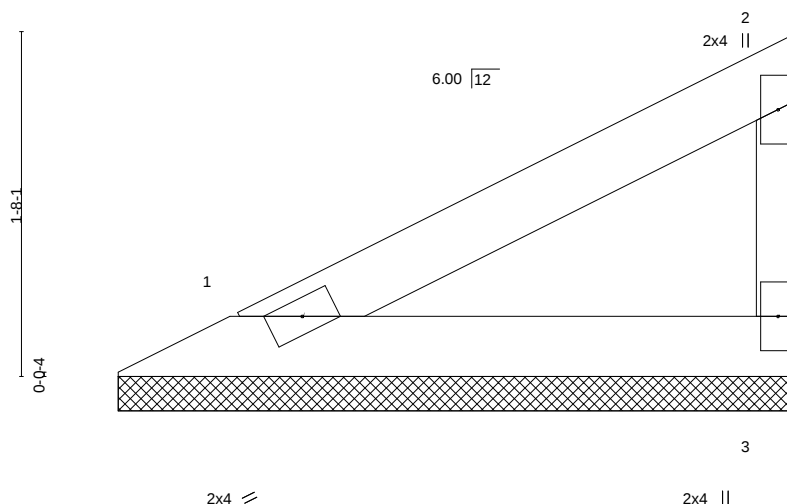
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	V6	Valley	10/31/2020 3-4-2		1	I43059577
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: bWuMDBN0tjF5cDvSpwH1zCzbQ-ikTiD7PyK4u0LOuN?xN8zEam8D2dJJn1bYFdJJyXTel				



Scale = 1:11.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

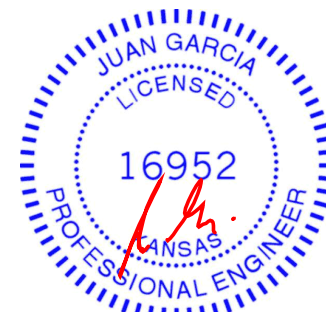
TOP CHORD Structural wood sheathing directly applied or 3-4-2 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-3-10, 3=3-3-10
 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.

NOTES-

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



October 2,2020

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

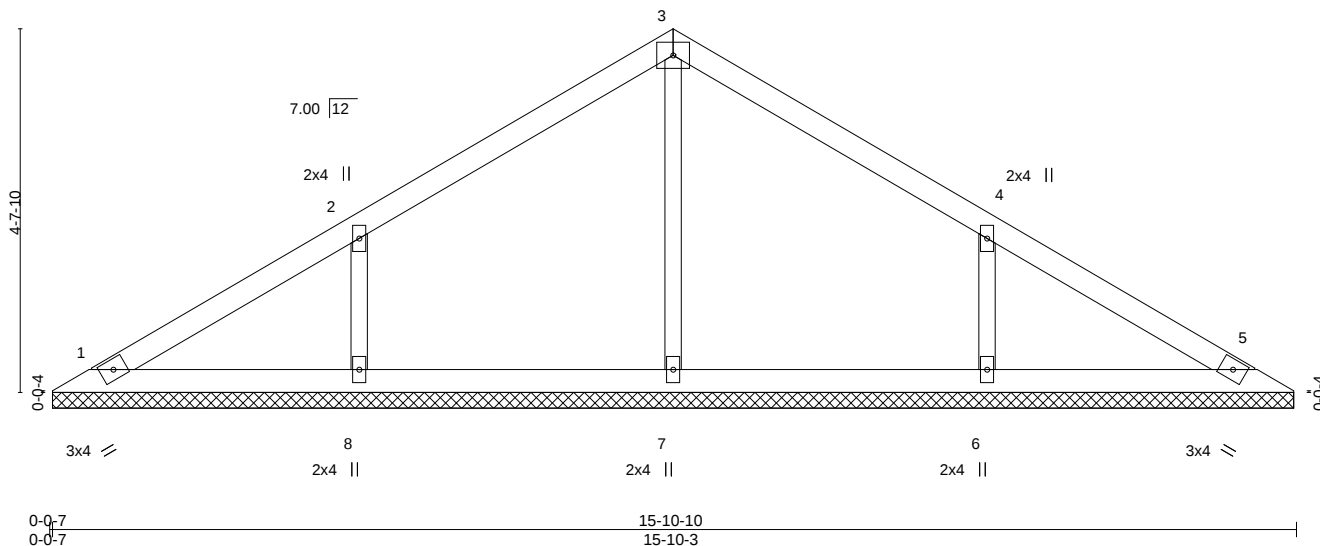
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400675	Truss V7	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Lot 19 HT Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:19 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-Aw14QTPa5O0tzYTZZeuNWR7wldNO2IXBqC_ArlyXTek
Wheeler Lumber, Waverly, KS 66871		7-11-5 7-11-5 15-10-10 7-11-5 4x5 =			

Scale = 1:29.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 44 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15-9-13.
 (lb) - Max Horz 1=-113(LC 4)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-140(LC 8), 6=-140(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 1), 8=402(LC 15), 6=402(LC 16)

FORCES.

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

WEBS

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=140, 6=140.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

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

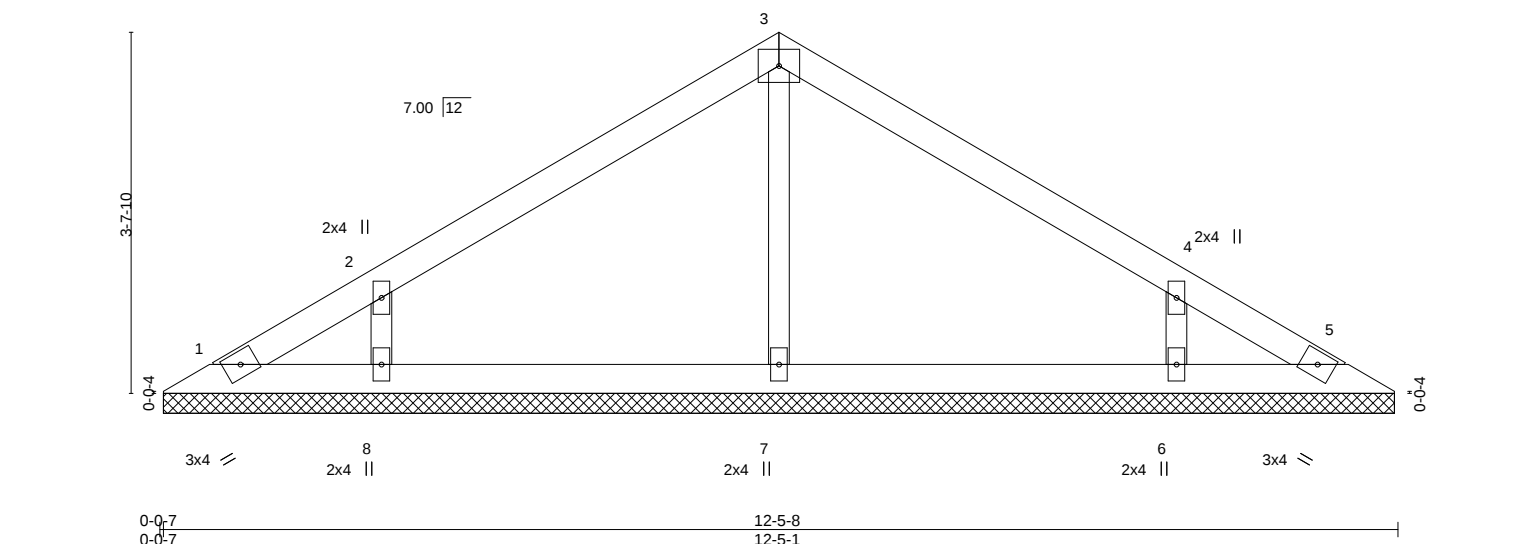
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Ply	Lot 19 HT
400675	V8	Valley			1	I43059579
Wheeler Lumber, Waverly, KS 66871				Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:19 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-Aw14QTPa5O0tzYTZZeuNWR7w5dNE2l1BqC_ArlyXTek 12-5-8 6-2-12		

Scale = 1:23.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 33 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

FORCES.

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

NOTES-

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



October 2,2020

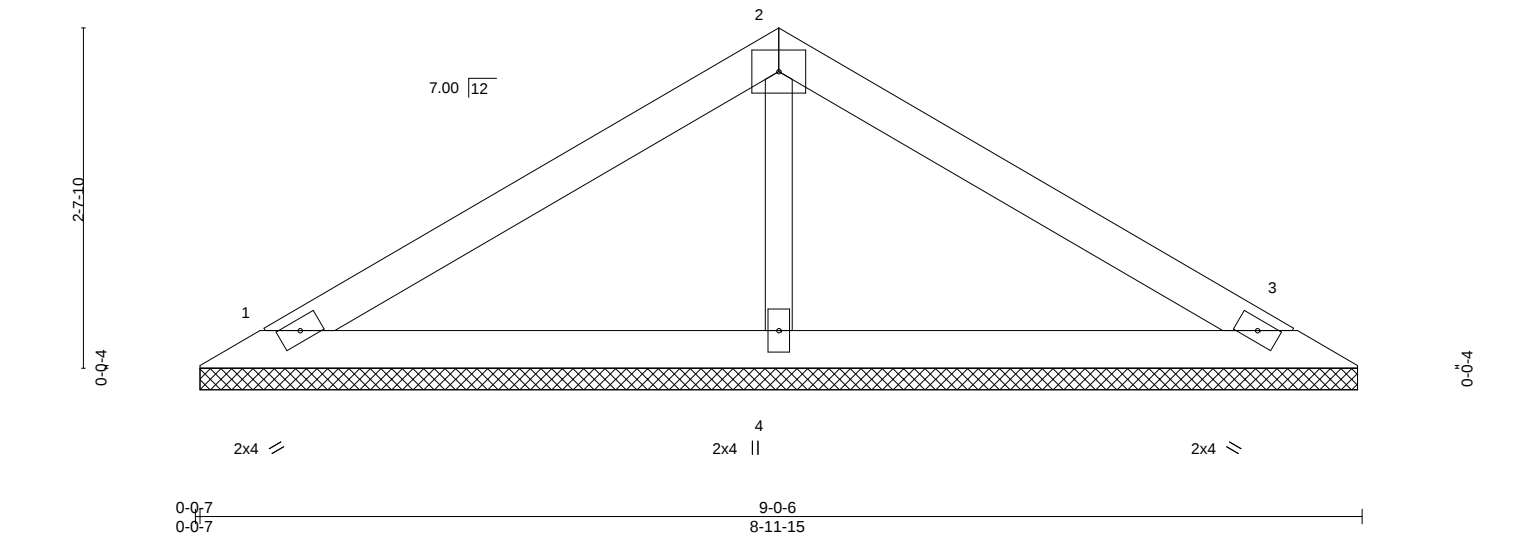
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400675	Truss V9	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/12/2020		Lot 19 HT Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:20 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-e7bSepQDsi8kah1I6MQc2ff3s1i_nDYK2skkNCyXTej
Wheeler Lumber, Waverly, KS 66871		4-6-3 4-6-3 4x5 =		9-0-6 4-6-3 Scale = 1:17.8	



0-0-7 0-0-7		9-0-6 8-11-15					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	n/a -	n/a	999
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a -	n/a	999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00 3	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P				
				PLATES		GRIP	
				MT20		197/144	
				Weight: 22 lb		FT = 10%	

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

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

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

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

NOTES-

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



October 2,2020

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

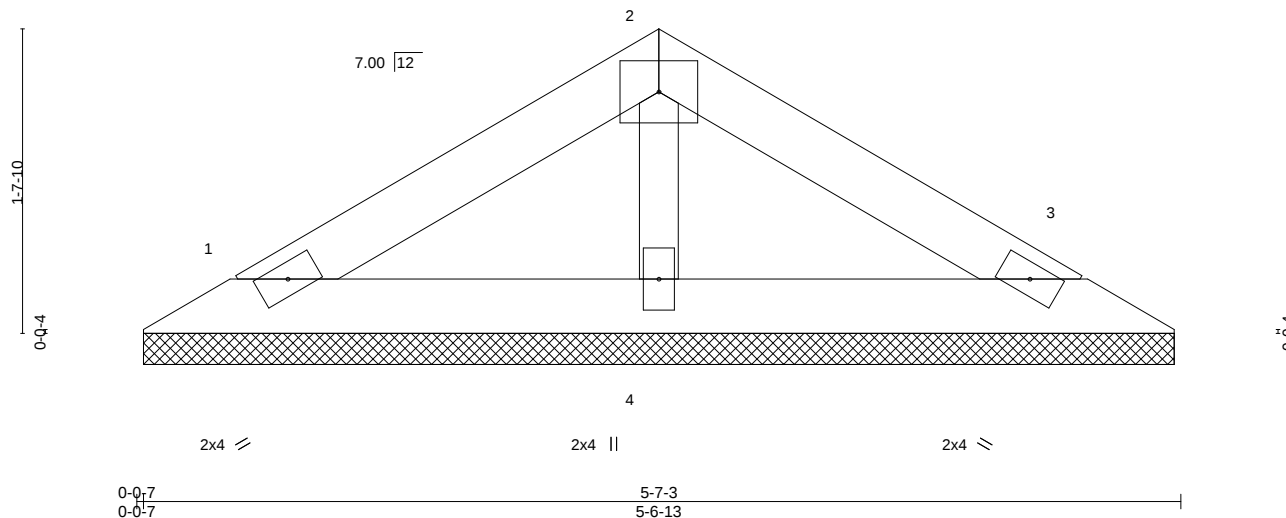
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400675	Truss V10	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: bWuMdbN0tjF5cDvSpwhpH1zCzbQ-pzDBNLSHsNasmcm5JcPQQ5ech_NVQRgwhPAYyXTep 10/12/2020		Lot 19 HT I43059581 Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:14 2020 Page 1 5-7-3 2-9-10
Wheeler Lumber, Waverly, KS 66871					

Scale = 1:12.4



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

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=5-6-6, 3=5-6-6, 4=5-6-6
 Max Horz 1=34(LC 5)
 Max Uplift 1=-25(LC 8), 3=-29(LC 9)
 Max Grav 1=110(LC 1), 3=110(LC 1), 4=186(LC 1)

FORCES.

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1 and 29 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

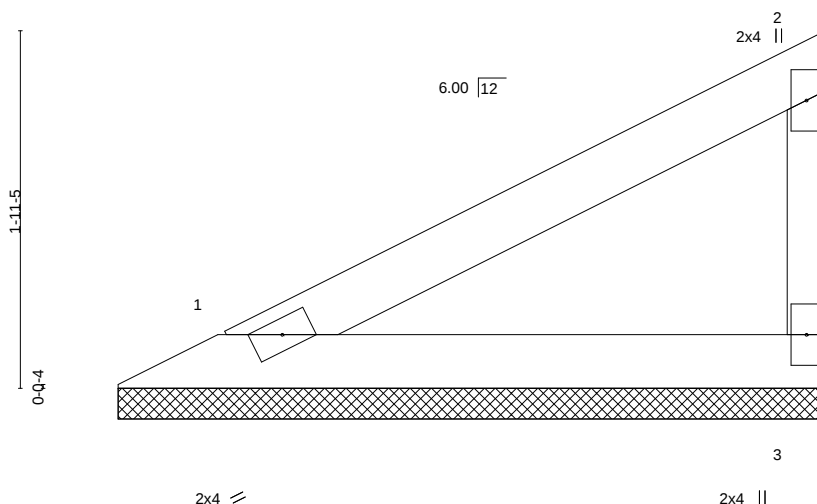
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	V11	Valley	10/12/2020 3-10-10		1	I43059582
Wheeler Lumber,		Waverly, KS 66871	ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-H9nZa5M419VRUw9oKpqRLbyFz00P6y1bva0zi_yXTeo 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:15 2020 Page 1			



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

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=3-10-2, 3=3-10-2
 Max Horz 1=66(LC 5)
 Max Uplift 1=-18(LC 8), 3=-35(LC 8)
 Max Grav 1=142(LC 1), 3=142(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1 and 35 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

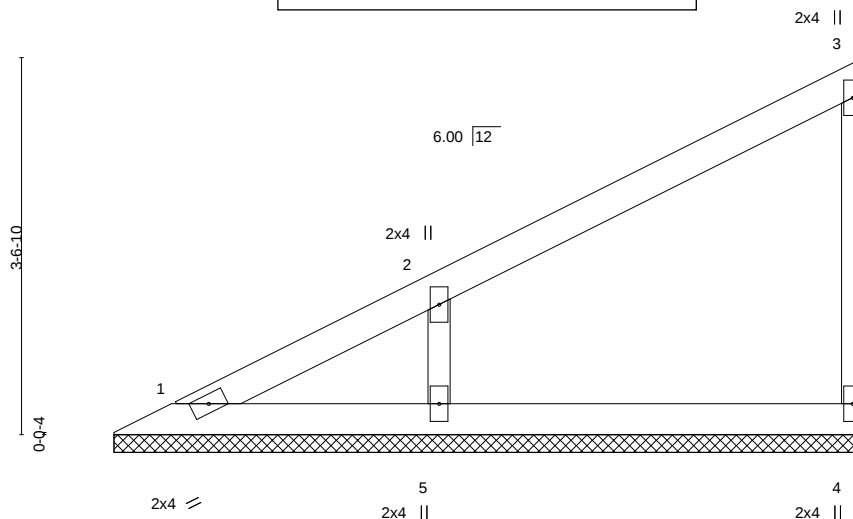
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	V12	Valley	10/12/2020		1	I43059583
Wheeler Lumber,		Waverly, KS 66871		ID: bWuMdbN0tjF5cDvSpwhpH1zCzbQ-H9nZa5M419VRUw9oKpQRLbyFp00L6yDbva0zi_yXTeo 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:15 2020 Page 1		



Scale = 1:21.7

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

LUMBER-

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

BRACING-

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

REACTIONS.

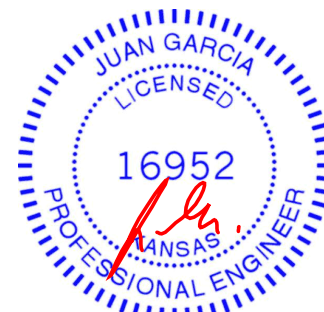
(size) 1=7-0-12, 4=7-0-12, 5=7-0-12
 Max Horz 1=133(LC 5)
 Max Uplift 4=-27(LC 8), 5=-112(LC 8)
 Max Grav 1=75(LC 16), 4=142(LC 1), 5=373(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-5=-290/162

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 4 and 112 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 2,2020

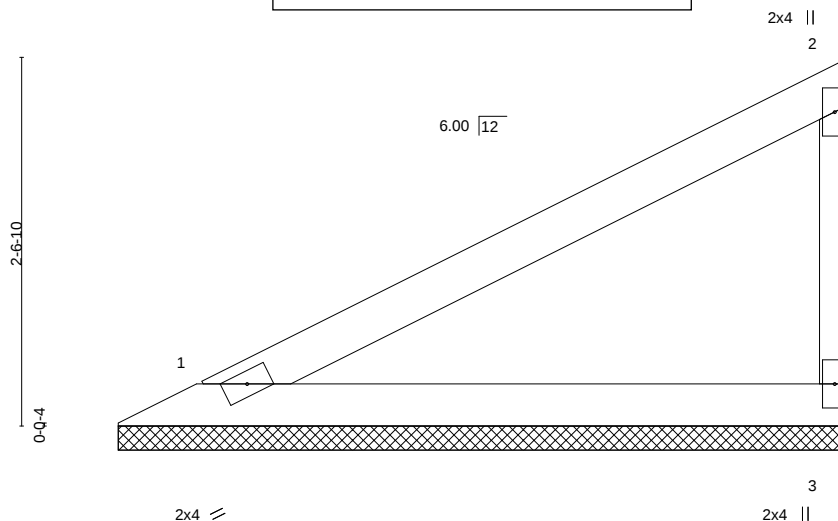
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Lot 19 HT
400675	V13	Valley	10/12/2020		1	I43059584
Wheeler Lumber, Waverly, KS 66871		ID: bWuMdBNOtjF5cDvSpwH1zCzbQ-ILLxORNioTd164k_tWLGupVMsQK5rPHk7EmWERyXTen 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Oct 2 11:01:16 2020 Page 1				



Scale: 3/4"=1'

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

LUMBER-

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

BRACING-

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

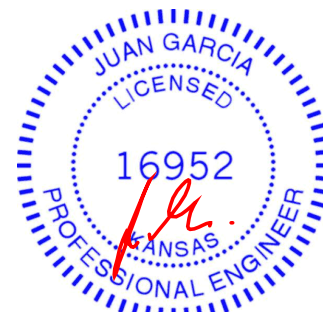
REACTIONS.

(size) 1=5-0-12, 3=5-0-12
 Max Horz 1=91(LC 5)
 Max Uplift 1=-25(LC 8), 3=-48(LC 8)
 Max Grav 1=197(LC 1), 3=197(LC 1)

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

NOTES-

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



October 2,2020

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

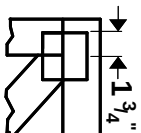
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



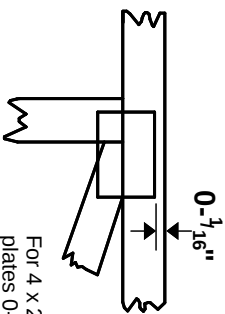
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

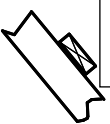
This symbol indicates the required direction of slots in connector plates.

Plate location details available in **MiTek 20120** software or upon request.

PLATE SIZE

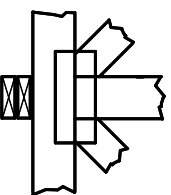
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



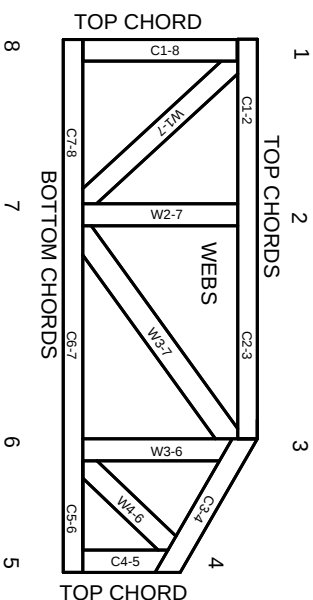
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MiTek® All Rights Reserved



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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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