



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

10/26/2020

RE: 400692
Lot 33 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

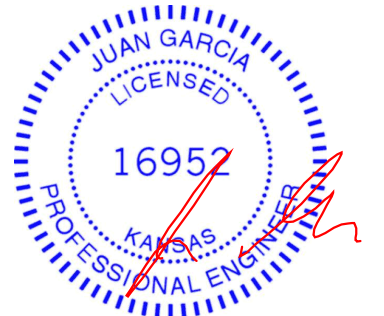
Roof Load: 45.0 psf

Floor Load: N/A psf

This package includes 38 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43094481	A1	10/6/2020	27	I43094507	R1	10/6/2020
2	I43094482	A2	10/6/2020	28	I43094508	R2	10/6/2020
3	I43094483	B1	10/6/2020	29	I43094509	V1	10/6/2020
4	I43094484	B2	10/6/2020	30	I43094510	V2	10/6/2020
5	I43094485	C1	10/6/2020	31	I43094511	V3	10/6/2020
6	I43094486	C2	10/6/2020	32	I43094512	V4	10/6/2020
7	I43094487	C3	10/6/2020	33	I43094513	V5	10/6/2020
8	I43094488	D1	10/6/2020	34	I43094514	V6	10/6/2020
9	I43094489	D2	10/6/2020	35	I43094515	V7	10/6/2020
10	I43094490	E1	10/6/2020	36	I43094516	V8	10/6/2020
11	I43094491	E2	10/6/2020	37	I43094517	V9	10/6/2020
12	I43094492	E3	10/6/2020	38	I43094518	V10	10/6/2020
13	I43094493	E4	10/6/2020				
14	I43094494	G1	10/6/2020				
15	I43094495	G2	10/6/2020				
16	I43094496	G3	10/6/2020				
17	I43094497	G4	10/6/2020				
18	I43094498	G5	10/6/2020				
19	I43094499	G6	10/6/2020				
20	I43094500	G7	10/6/2020				
21	I43094501	G8	10/6/2020				
22	I43094502	J1	10/6/2020				
23	I43094503	J2	10/6/2020				
24	I43094504	J3	10/6/2020				
25	I43094505	J8	10/6/2020				
26	I43094506	J9	10/6/2020				

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.



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RE: 400692
Lot 33 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

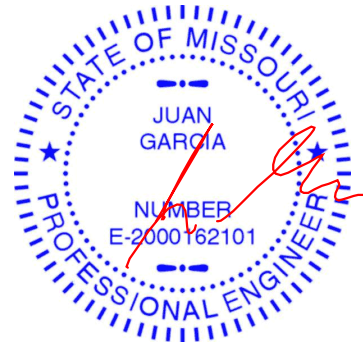
Floor Load: N/A psf

This package includes 38 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43094481	A1	10/6/2020	27	I43094507	R1	10/6/2020
2	I43094482	A2	10/6/2020	28	I43094508	R2	10/6/2020
3	I43094483	B1	10/6/2020	29	I43094509	V1	10/6/2020
4	I43094484	B2	10/6/2020	30	I43094510	V2	10/6/2020
5	I43094485	C1	10/6/2020	31	I43094511	V3	10/6/2020
6	I43094486	C2	10/6/2020	32	I43094512	V4	10/6/2020
7	I43094487	C3	10/6/2020	33	I43094513	V5	10/6/2020
8	I43094488	D1	10/6/2020	34	I43094514	V6	10/6/2020
9	I43094489	D2	10/6/2020	35	I43094515	V7	10/6/2020
10	I43094490	E1	10/6/2020	36	I43094516	V8	10/6/2020
11	I43094491	E2	10/6/2020	37	I43094517	V9	10/6/2020
12	I43094492	E3	10/6/2020	38	I43094518	V10	10/6/2020
13	I43094493	E4	10/6/2020				
14	I43094494	G1	10/6/2020				
15	I43094495	G2	10/6/2020				
16	I43094496	G3	10/6/2020				
17	I43094497	G4	10/6/2020				
18	I43094498	G5	10/6/2020				
19	I43094499	G6	10/6/2020				
20	I43094500	G7	10/6/2020				
21	I43094501	G8	10/6/2020				
22	I43094502	J1	10/6/2020				
23	I43094503	J2	10/6/2020				
24	I43094504	J3	10/6/2020				
25	I43094505	J8	10/6/2020				
26	I43094506	J9	10/6/2020				

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 06, 2020

Job 400692	Truss A1	Truss Type Hip Girder	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/26/2020	Qty 1	Lot 33 HT	I43094481
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:09 2020 Page 1 ID: 2ncXpIsxOfbJlB6i7Q?gPMzrYWU-TW38NeoVOYxoUj4cZ9EYZJU06TTP2Eg6EuULX_yW8ri				
-0-10-8 0-10-8		4-0-0 4-0-0		8-0-0 4-0-0		12-0-0 0-10-8

Scale = 1:22.4

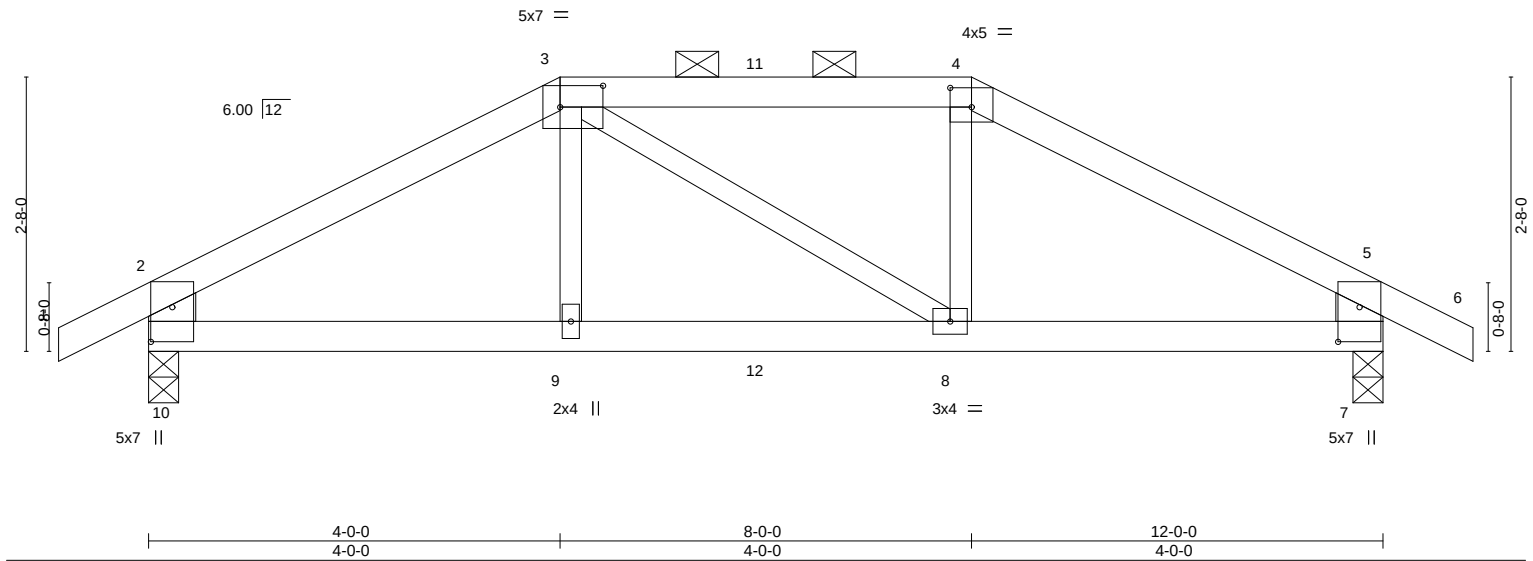


Plate Offsets (X,Y)--		[3:0-5-0,0-2-8], [4:0-2-8,0-2-4], [7:0-4-1,0-2-8], [10:0-4-1,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.07 8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.13 8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.02 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06 8-9	>999	240	Weight: 39 lb	FT = 10%

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

REACTIONS. (size) 10=0-3-8, 7=0-3-8
 Max Horz 10=-50(LC 27)
 Max Uplift 10=-201(LC 8), 7=-201(LC 9)
 Max Grav 10=899(LC 1), 7=899(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1231/277, 3-4=-1024/269, 4-5=-1232/276, 2-10=-806/214, 5-7=-806/213
 BOT CHORD 9-10=-219/1012, 8-9=-219/1023, 7-8=-196/1013
 WEBS 3-9=0/271, 4-8=-5/279

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=201, 7=201.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 74 lb up at 4-0-0, and 86 lb down and 74 lb up at 6-0-0, and 79 lb down and 74 lb up at 8-0-0 on top chord, and 220 lb down and 76 lb up at 4-0-0, and 31 lb down at 6-0-0, and 220 lb down and 76 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

Continued on page 2



October 6, 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		Ply	Lot 33 HT
400692	A1	Hip Girder			1	I43094481
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:09 2020 Page 2		
		ID:2ncXplsxOfbjlB6i7Q?gPMzrYWU-TW38NeoVOYxoUj4cZ9EYZJU06TTP2Eg6EuULX_yW8ri				
LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 3=-46(F) 4=-46(F) 9=-220(F) 8=-220(F) 11=-46(F) 12=-25(F)		10/26/2020				

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400692	Truss A2	Truss Type Common	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Lot 33 HT	I43094482
Wheeler Lumber, Waverly, KS 66871		8.420 s		Job Reference (optional)		
-0-10-8 0-10-8 6-0-0 6-0-0		12-0-0 6-0-0 12-10-8 0-10-8		10/26/2020 4x5		

Scale: 1/2"=1'

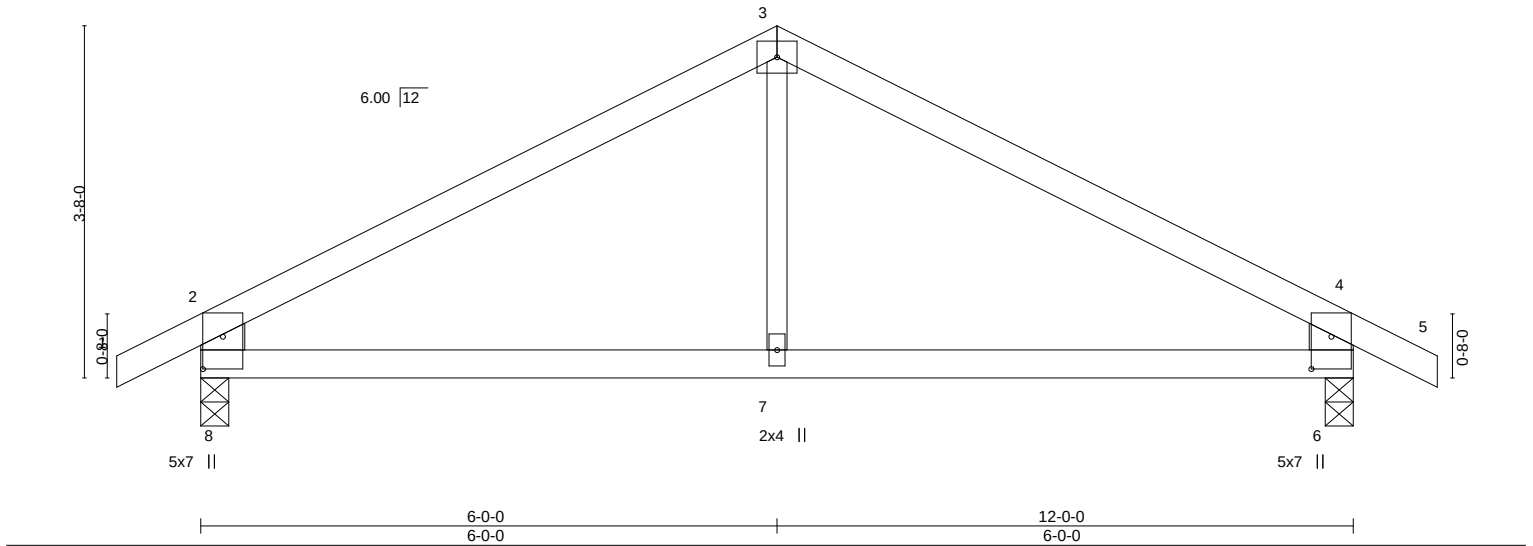


Plate Offsets (X,Y)--		[6-0-4-1,0-2-8], [8-0-4-1,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.42	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.27	Vert(LL) -0.02 7-8 >999 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) -0.05 7-8 >999 240
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.01 6 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) 0.01 7-8 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 35 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 2x6 SPF No.2 *Except* 3-7: 2x3 SPF No.2	

REACTIONS. (size) 8=0-3-8, 6=0-3-8
 Max Horz 8=-62(LC 6)
 Max Uplift 8=-90(LC 8), 6=-90(LC 9)
 Max Grav 8=597(LC 1), 6=597(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-638/89, 3-4=-638/89, 2-8=-544/131, 4-6=-544/131
 BOT CHORD 7-8=-14/480, 6-7=-14/480

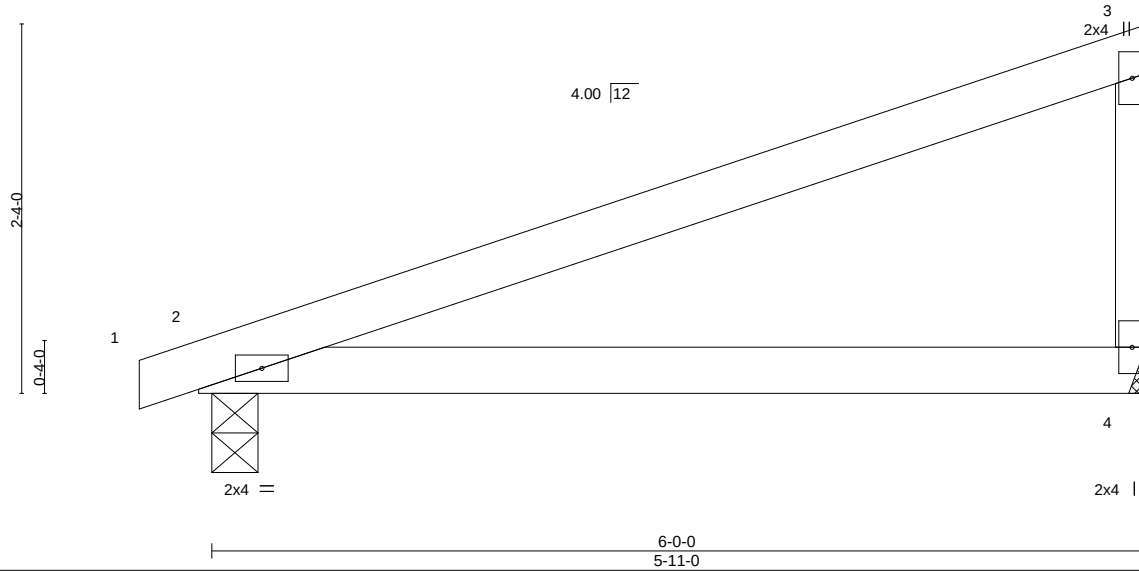
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed;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



October 6, 2020

Job 400692	Truss B1	Truss Type Monopitch	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/26/2020	Qty 1	Ply 1	Lot 33 HT	I43094483
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:11 2020 Page 1 ID:2ncXplsxOtojIB6I7Q?gPMzrYWU-PvBvoKqlw9BWk0E?haG0ekZOIGEqW9gPhCzSbsyW8rg					
-0-4-8 0-4-8		6-0-0 5-11-0					

Scale = 1:14.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.07	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.13				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00				

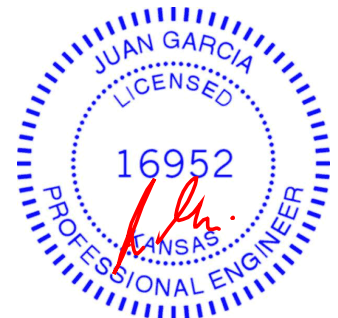
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2		

REACTIONS. (size) 4=Mechanical, 2=0-3-8
 Max Horz 2=91(LC 5)
 Max Uplift 4=-55(LC 8), 2=-65(LC 4)
 Max Grav 4=257(LC 1), 2=297(LC 1)

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

NOTES-

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



October 6, 2020

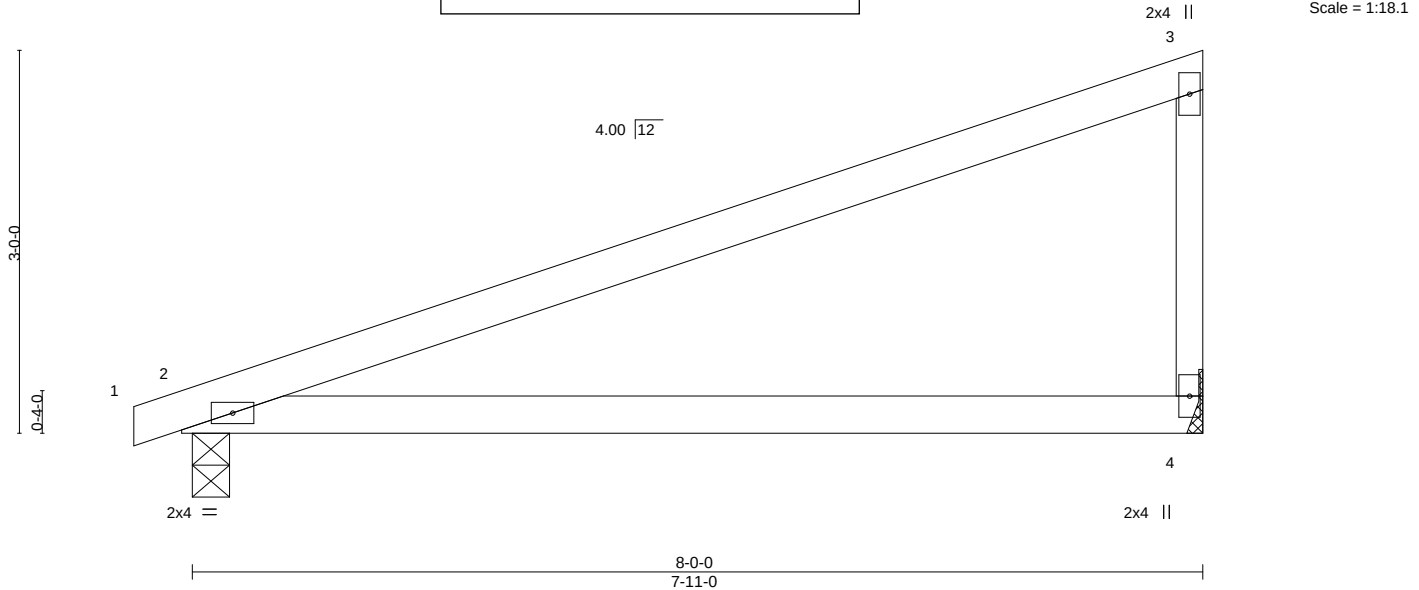
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 400692	Truss B2	Truss Type Monopitch	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/26/2020		Qty 1	Ply 8.420 s	Lot 33 HT	I43094484
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional) Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:11 2020 Page 1 ID:2ncXplsxOfbjlB6i7Q?gPMzrYWU-PvBvoKqlw9BWk0E?haG0ekZMkGDmW9gPhCzSbsyW8rg						



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.17	2-4	>553	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.42	Vert(CT) -0.34	2-4	>276	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240	Weight: 21 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
BOT CHORD 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=121(LC 7)
Max Uplift 4=-74(LC 8), 2=-79(LC 4)
Max Grav 4=348(LC 1), 2=386(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-270/121

- 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

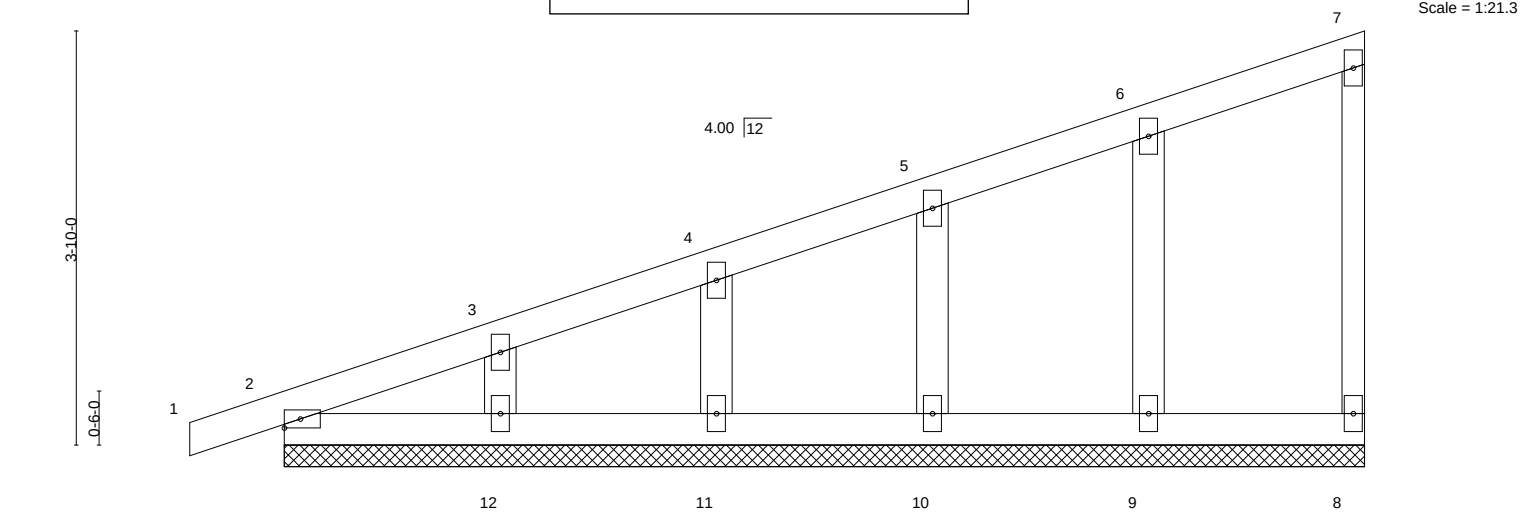


October 6, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT	I43094485
400692	C1	GABLE			1	
Wheeler Lumber,		Waverly, KS 66871		Job Reference (optional)		
				8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:12 2020 Page 1		
				ID:2ncXplsxOfbjlB6l7C?gPMzryWU-t5kH?grNhtJMMApBFHnFBy6h?geAFcVZwsj07JyW8rf		
				10-0-0		
				10-0-0		
				10-0-0		



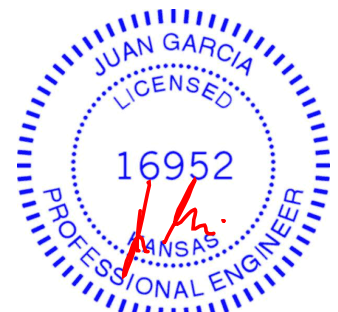
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 35 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 10-0-0.
 (lb) - Max Horz 2=158(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 12, 11, 10, 9
 Max Grav All reactions 250 lb or less at joint(s) 8, 2, 12, 11, 10, 9

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) Gable studs spaced at 2-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 12, 11, 10, 9.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 6, 2020

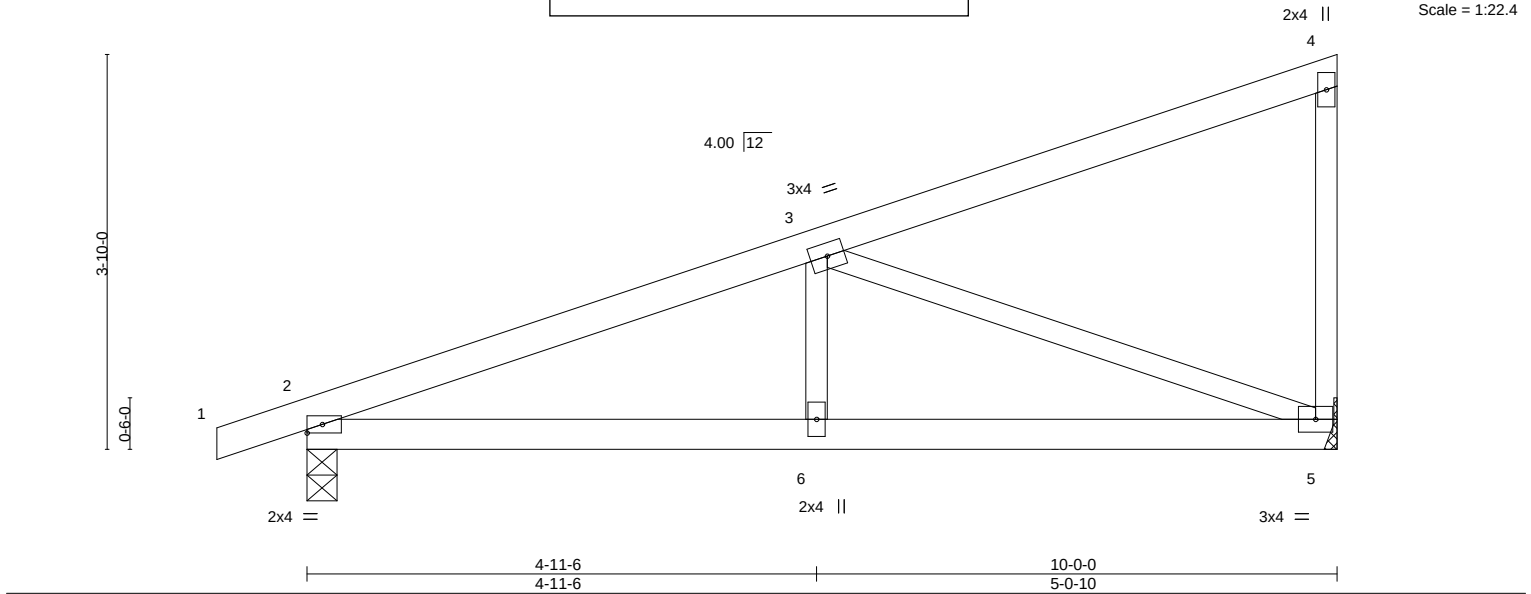
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT	I43094486
400692	C2	Monopitch			1	
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:12 2020 Page 1		
		ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-t5kH?grNhTJMMaPBFHnFBY6emgaTFVAZwsj07JyW8rf				
-0-10-8 0-10-8		4-11-6 4-11-6		10-0-0 5-0-10		
		10/26/2020				



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.02	2-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.26	Vert(CT) -0.04	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.02	2-6	>999	240	Weight: 33 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	

REACTIONS. (size) 5=Mechanical, 2=0-3-8
 Max Horz 2=158(LC 5)
 Max Uplift 5=-94(LC 8), 2=-115(LC 4)
 Max Grav 5=435(LC 1), 2=514(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-782/113
 BOT CHORD 2-6=-134/682, 5-6=-134/682
 WEBS 3-5=-714/178

- 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) 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 except (jt=lb) 2=115.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 6, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Lot	Ply	Lot 33 HT	
400692	C3	Monopitch Structural	1			I43094487
Wheeler Lumber, Waverly, KS 66871						
8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:13 2020 Page 1						
ID:2ncXplsxOfbjIB6i7Q?gPMzrYWU-LHfD0r0SmRDzKNNo?iUk9epg4ux_Yi9WSZglyW8re						

0-10-8	5-2-8	10-0-0
0-10-8	5-2-8	4-9-8
10/26/2020		

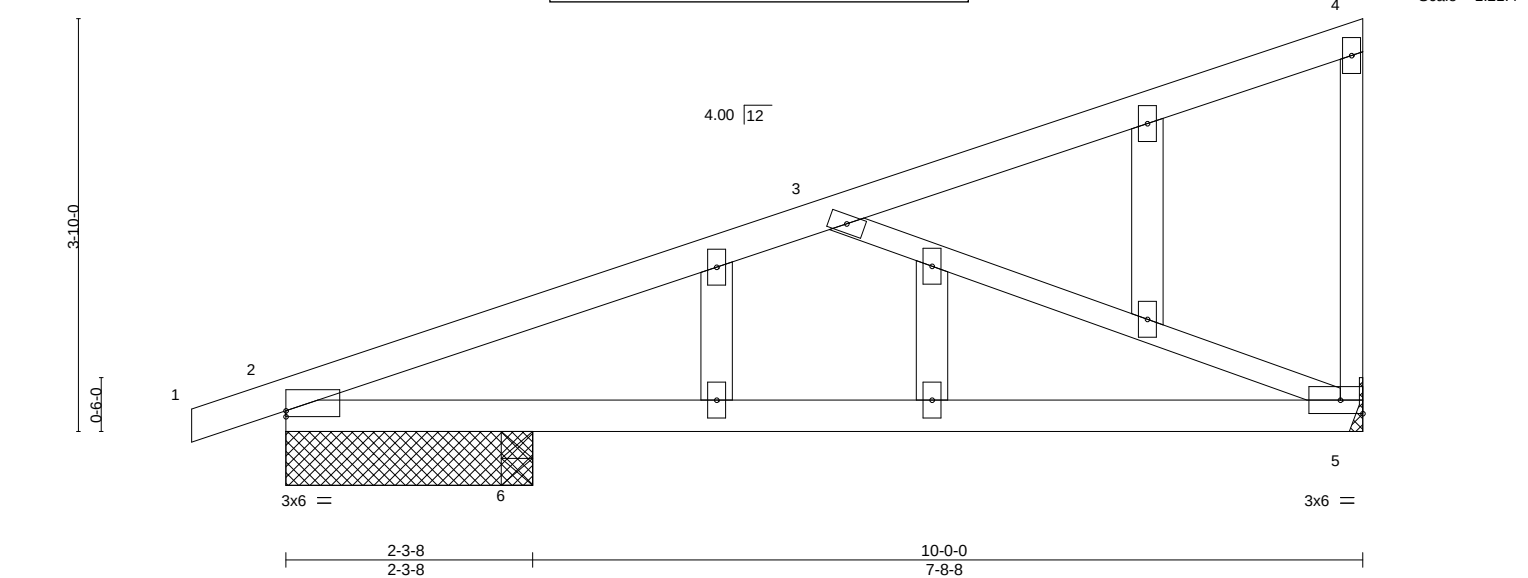


Plate Offsets (X,Y)--		[2-0-0-0,0-0-10]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.29	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.10 5-6 >935 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.36	Vert(CT) -0.20 5-6 >473 240
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 5 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) -0.01 5-6 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 36 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.	(size) 5=Mechanical, 2=2-3-8, 6=0-3-8
	Max Horz 2=158(LC 5)
	Max Uplift 5=-112(LC 8), 2=-172(LC 4)
	Max Grav 5=398(LC 1), 2=349(LC 1), 6=346(LC 3)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-619/203
BOT CHORD	2-6=-217/526, 5-6=-217/526
WEBS	3-5=-545/271

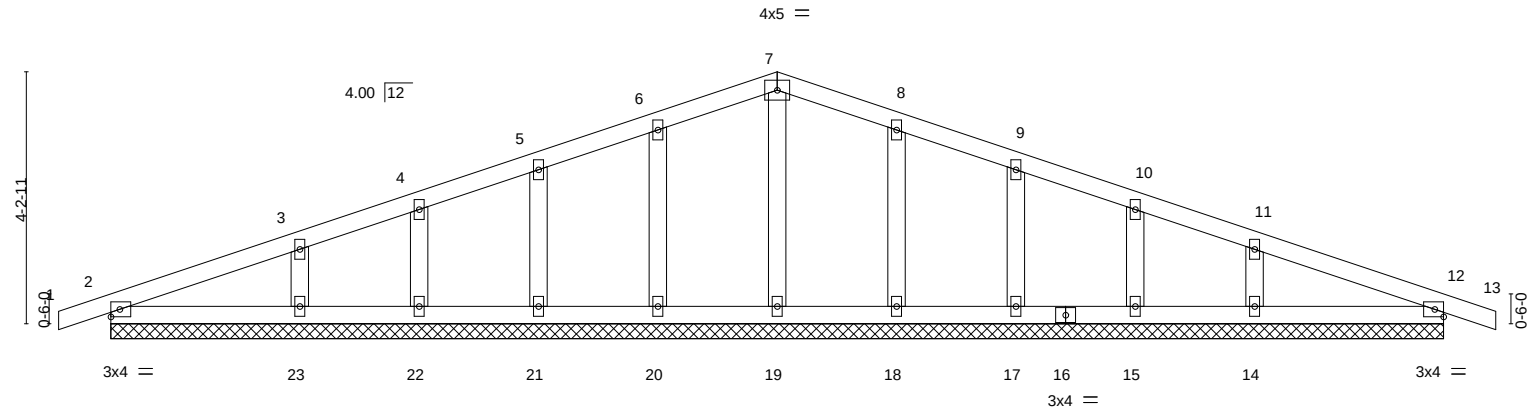
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable studs spaced at 2-0-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=112, 2=172.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 6, 2020

Job 400692	Truss D1	Truss Type Common Supported	City Lee's Summit, Missouri	Qty 1	Lot 33 HT	I43094488
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)				
0-10-8 0-10-8		11-2-0 11-2-0		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:14 2020 Page 1 ID:2ncxplsx0rjIB6I7Q?gPMzrYWU-pUs1QMseD4Z4bUyaMipjGNB1XUK8jVusNAC6CBYw8rd		
		10/26/2020		22-4-0 11-2-0		

Scale = 1:38.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	2.0-0	TC	0.09	in (loc)	l/def	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(LL)	0.00 13 n/r				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Vert(CT)	0.00 13 n/r				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Horz(CT)	0.00 12 n/a n/a				
								Weight: 77 lb		FT = 10%	

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

REACTIONS. All bearings 22-4-0.
 (lb) - Max Horz 2=71(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 18, 17, 15, 14, 12
 Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 18, 17, 15, 12 except 23=275(LC 21), 14=275(LC 22)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 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) 2, 20, 21, 22, 23, 18, 17, 15, 14, 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.



October 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400692	Truss D2	Truss Type Common	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Qty 1	Lot 33 HT	I43094489
Wheeler Lumber, Waverly, KS 66871			8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:14 2020 Page 1 ID:2ncXplsxOrbjiB6l7Q?gPMzrYWU-pUs1QMseD4Z4bUyaMipjGNBxdUACjTXsNAC6CBYw8rd				
0-10-8 0-10-8	5-3-15 5-3-15	11-2-0 5-10-1	10/26/2020	17-0-1 5-10-1	22-4-0 5-3-15	23-2-8 0-10-8	

Scale = 1:38.6

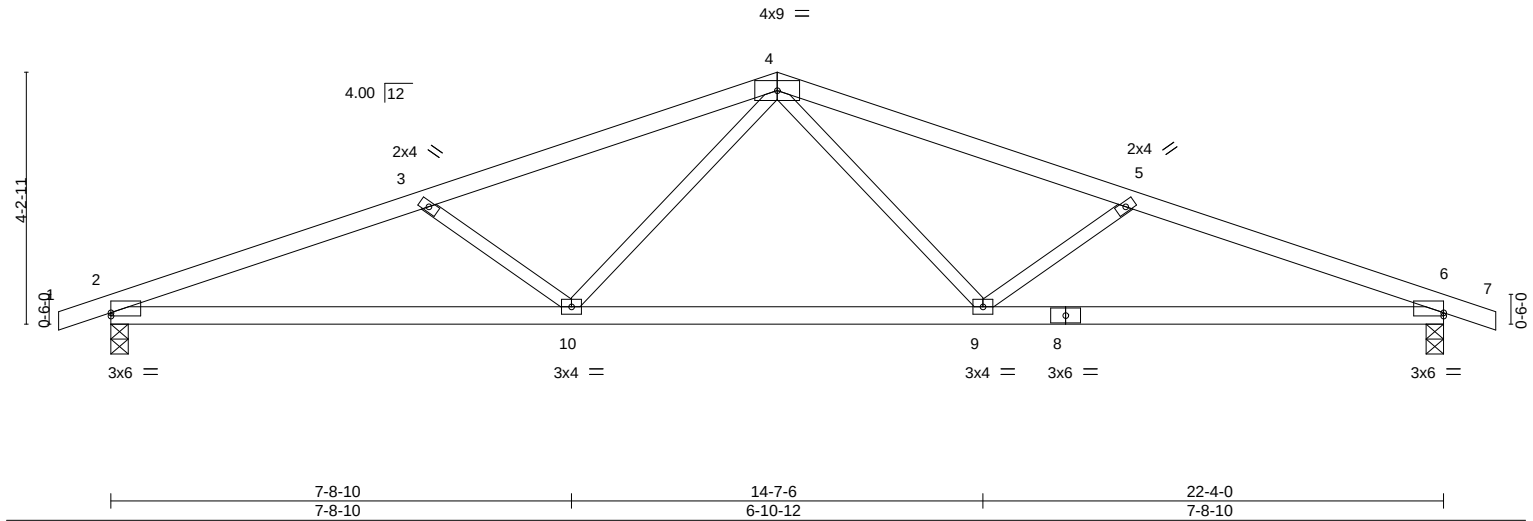


Plate Offsets (X,Y)--		[2:0-0-0,0-0-10], [6:0-0-0,0-0-10]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.12	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.25	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	9-10	>999	240	Weight: 68 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-7-2 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2		

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=71(LC 8)
 Max Uplift 2=-189(LC 4), 6=-189(LC 5)
 Max Grav 2=1063(LC 1), 6=1063(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2232/355, 3-4=-1909/259, 4-5=-1909/260, 5-6=-2232/355
 BOT CHORD 2-10=-333/2049, 9-10=-127/1406, 6-9=-280/2049
 WEBS 4-9=-59/541, 5-9=-418/221, 4-10=-58/541, 3-10=-418/221

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 6=189.
 - This truss 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 6, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:15 2020 Page 1

LEE'S SUMMIT, MISSOURI

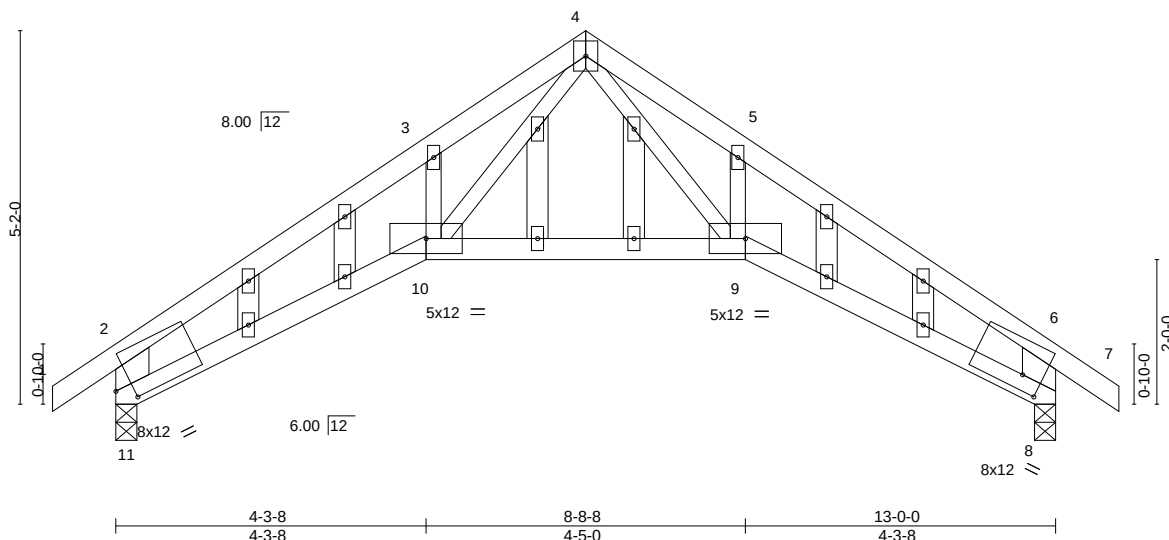
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0-10-8 4-3-8 6-6-0 8-8-8 13-0-0 13-10-8

0-10-8 4-3-8 2-2-8 10/26/2020 2-2-8 4-3-8 0-10-8

4x5 11

Scale: 3/8"=1'



NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 11, 8, 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) 11, 8.
- 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.



October 6.2020

Job 400692	Truss E2	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Lot 33 HT	I43094491
Wheeler Lumber, Waverly, KS 66871		8.420 s		Job Reference (optional)		
		ID: 2ncXplsxOfbjIB6l7Q?gPMzrYWU-ms_or1uulhpqo6yU7sBL0GEpHBBN18rUhdH4yW8rb		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:16 2020 Page 1		
		10/26/2020				
		4x5				

Scale = 1:28.9

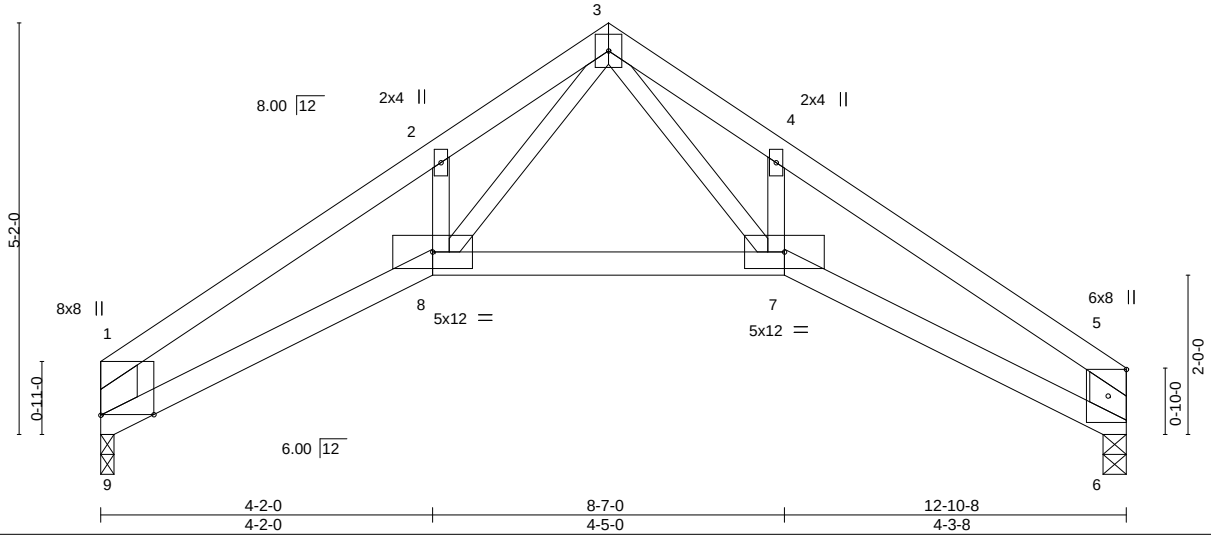


Plate Offsets (X,Y)--		[1:0-0-1,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.62
TCDL 10.0	Lumber DOL	1.15	BC 0.85
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.24 7-8 >610 360
			Vert(CT) -0.45 7-8 >331 240
			Horz(CT) 0.40 6 n/a n/a
			Wind(LL) 0.14 7-8 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 44 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-2-13 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*	
1-9,5-6: 2x6 SP DSS	

REACTIONS. (size) 9=0-2-0, 6=0-3-8
 Max Horz 9=-135(LC 4)
 Max Uplift 9=-61(LC 8), 6=-62(LC 9)
 Max Grav 9=559(LC 1), 6=559(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1235/160, 2-3=-1049/277, 3-4=-1082/227, 4-5=-1263/97, 1-9=-874/141, 5-6=-889/100
 BOT CHORD 8-9=-143/1032, 7-8=-1/594, 6-7=-38/1012
 WEBS 3-8=-218/570, 3-7=-197/548

- 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.
 - Bearing at joint(s) 9, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 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 6, 2020

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

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400692	Truss E3	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/26/2020	Qty 1	Ply	Lot 33 HT	I43094492
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:17 2020 Page 1			
-0-10-8 0-10-8		10-0-0 10-0-0		PMzrYWU-E2YA3NvWW?xfSyh91qNQu?pX_hMpwriI48QnpWyW8ra		20-0-0 10-0-0	
						20-10-8 0-10-8	

Scale = 1:45.2

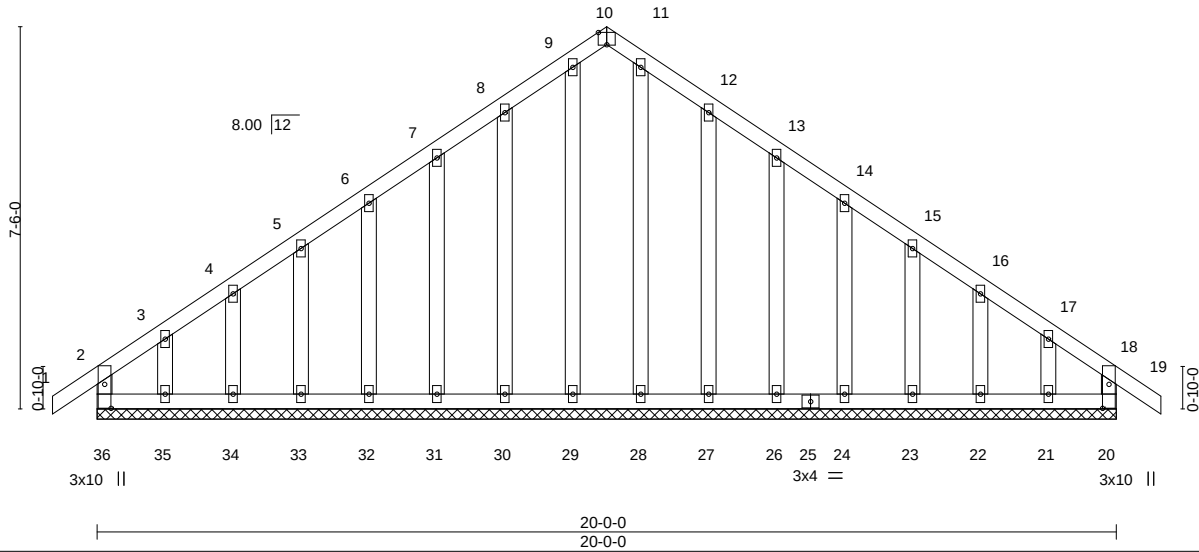


Plate Offsets (X,Y)-- [10:0-2-0,Edge], [20:0-5-10,0-1-8], [36:0-5-10,0-1-8]

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 0.08	Vert(LL)	-0.00	19	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	19	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	20	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 115 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 20-0-0.
(lb) - Max Horz 36=-213(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 36, 20, 34, 33, 32, 31, 30, 27, 26, 24, 23, 22 except 35=-133(LC 8), 21=-120(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 36, 20, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24, 23, 22, 21

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 on one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 36, 20, 34, 33, 32, 31, 30, 27, 26, 24, 23, 22 except (jt=lb) 35=133, 21=120.
- This truss 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400692	Truss E4	Truss Type COMMON GIRDER	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Qty 3	Ply	Lot 33 HT	I43094493
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:18 2020 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-iF6YGjv8HJ3W45GLbYufRDMci5cgfAtRloAKLyyW8rZ					
0-10-8 0-10-8'		5-9-13 5-9-13	10-0-0 4-2-2	14-2-2 4-2-3	20-0-0 5-9-14		
		5x7					

Scale = 1:45.0

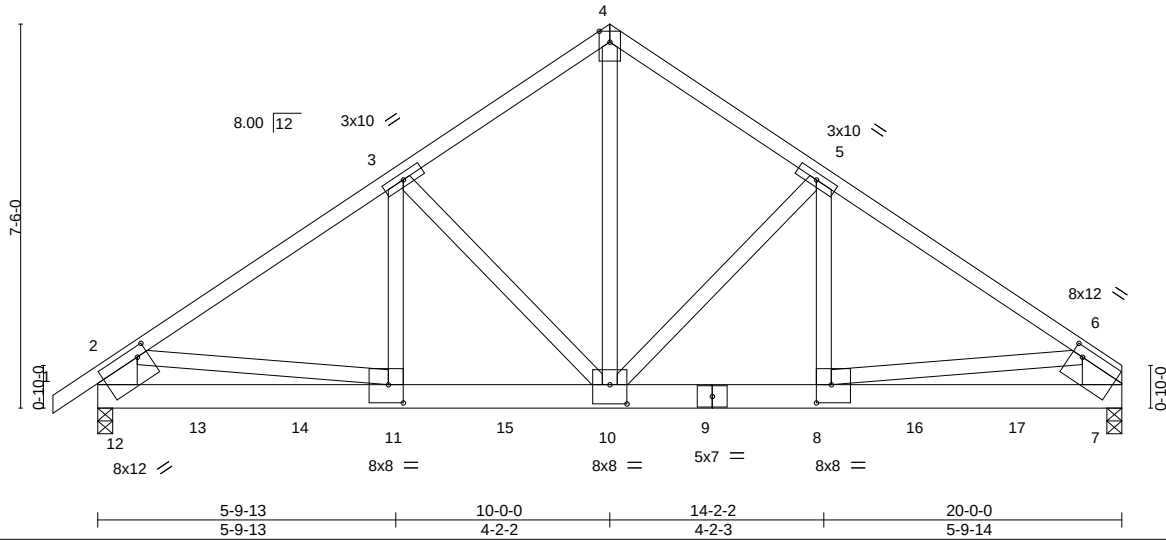


Plate Offsets (X,Y)-- [6:0-2-8,0-2-4], [8:0-3-8,0-4-4], [10:0-4-0,0-4-8], [11:0-3-8,0-4-4], [12:0-2-8,0-2-4]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.07 10-11	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.13 10-11	>999	240	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.02 7	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04 10-11	>999	240	Weight: 362 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-6: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 2-12,6-7: 2x10 SP DSS	

REACTIONS.	(size) 7=0-3-8 (req. 0-4-3), 12=0-3-8 (req. 0-4-4)
	Max Horz 12=208(LC 26)
	Max Uplift 7=-401(LC 9), 12=-281(LC 8)
	Max Grav 7=7989(LC 1), 12=8075(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-9669/321, 3-4=-7079/323, 4-5=-7097/323, 5-6=-9688/369, 2-12=-6264/280, 6-7=-6182/268
BOT CHORD	11-12=-253/2865, 10-11=-276/7932, 8-10=-232/7959, 7-8=-219/2759
WEBS	4-10=-268/7463, 5-10=-3109/283, 5-8=-102/3457, 3-10=-3021/217, 3-11=-34/3313, 2-11=-86/5119, 6-8=-63/5275

- NOTES-**
- 3-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, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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) 7, 12 greater than input bearing size.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=401, 12=281.
 - This truss 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 6, 2020

Continued on page 2

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MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT
400692	E4	COMMON GIRDER	8.420 s	3	I43094493

Wheeler Lumber, Waverly, KS 66871

NOTES-

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1659 lb down and 39 lb up at 2-0-0, 1659 lb down and 39 lb up at 4-0-0, 1583 lb down and 39 lb up at 6-0-0, 1583 lb down and 39 lb up at 8-0-0, 1668 lb down and 39 lb up at 10-0-0, 1665 lb down and 39 lb up at 12-0-0, 1665 lb down and 39 lb up at 14-0-0, and 1665 lb down and 39 lb up at 16-0-0, and 1578 lb down and 219 lb up at 18-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 7-12=-20

Concentrated Loads (lb)

Vert: 9=-1587(B) 10=-1583(B) 8=-1587(B) 11=-1583(B) 13=-1578(B) 14=-1578(B) 15=-1583(B) 16=-1587(B) 17=-1578(B)

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400692	Truss G1	Truss Type Common Supported	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/26/2020	Qty 1	Ply 1	Lot 33 HT	I43094494
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:20 2020 Page 1 ID: 2ncXplsx0fj1B67Q?gPMzrYWU-edDIhPxPowJEJPQkzw7WeR2MuNU7Brkm6fRQryW8rX					
-0-10-8 0-10-8		18-0-0 18-0-0		36-0-0 18-0-0			

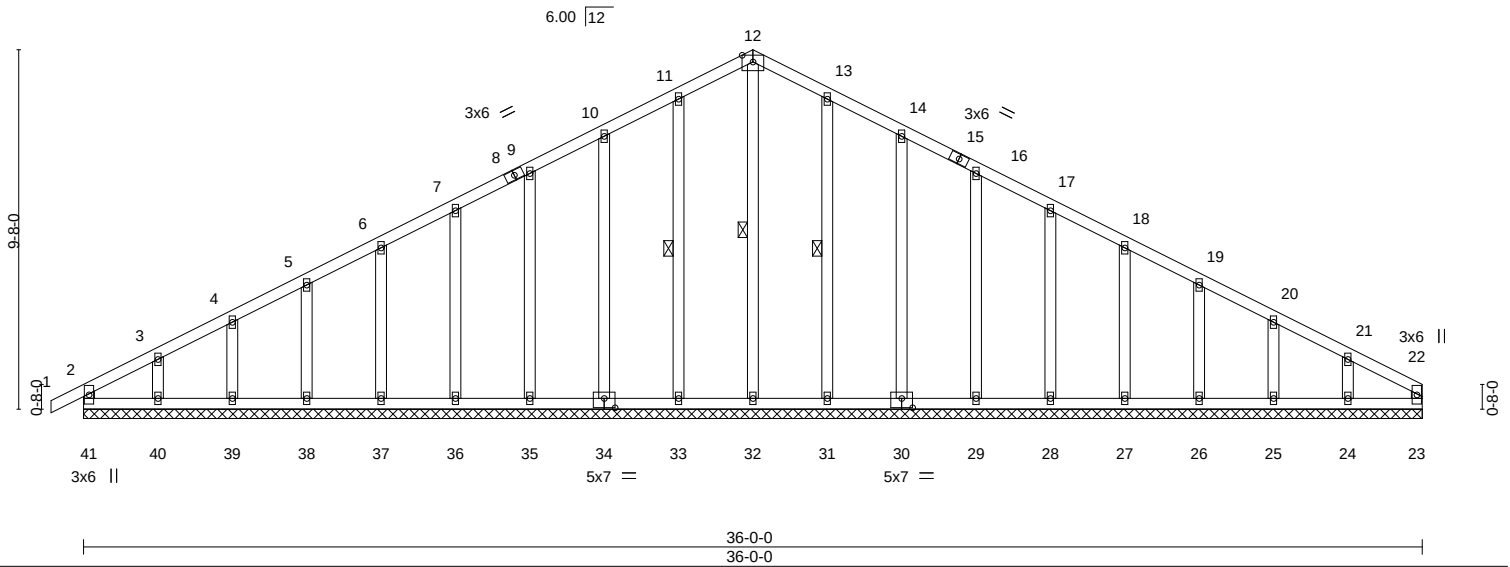


Plate Offsets (X,Y)--		[30:0-3-8,0-3-0], [34:0-3-8,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.07	in (loc)
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	l/defl
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	L/d
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.01 23 n/a n/a
		Weight: 183 lb FT = 10%	

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 2x4 SPF No.2	WEBS 1 Row at midpt 12-32, 11-33, 13-31
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 36-0-0.
 (lb) - Max Horz 41=161(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 41, 33, 34, 35, 36, 37, 38, 39, 31, 30, 29, 28, 27, 26, 25 except 40=112(LC 8), 24=103(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 41, 23, 32, 33, 34, 35, 36, 37, 38, 39, 40, 31, 30, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 11-12=-46/254

- 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) 41, 33, 34, 35, 36, 37, 38, 39, 31, 30, 29, 28, 27, 26, 25 except (jt=lb) 40=112, 24=103.
 - This truss 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 6, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Lot	Ply	Lot 33 HT
400692	G2	Roof Special	1		I43094495
Wheeler Lumber, Waverly, KS 66871			Job Reference (optional)		
-0-10-8 0-10-8			8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:21 2020 Page 1		
5-9-10 5-9-10			ID:2ncXplsxOibjB6i7Q?gPMzrYWU-6qnhuly1ZER5xz?wGgRM2rz4WIIWBSVhu_mO_yHyW8rW		
13-9-10 8-0-0			10/26/2020		
18-0-0 4-2-6			22-2-6 4-2-6		
26-0-0 3-9-10					

Scale = 1:57.2

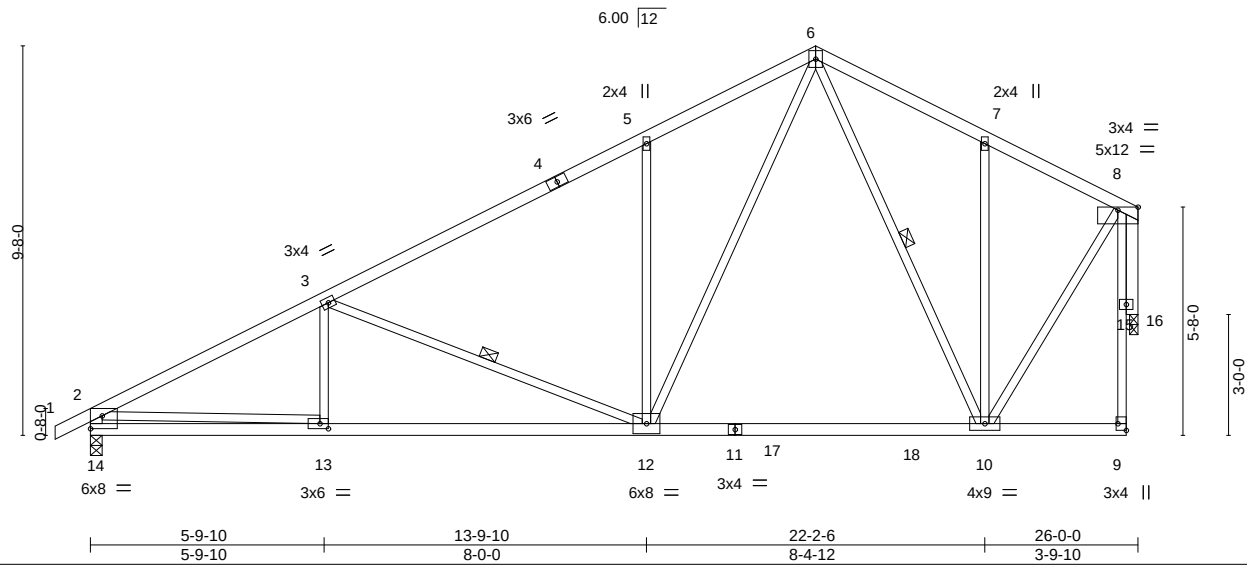


Plate Offsets (X,Y)-- [9:Edge,0-2-8], [13:0-2-8,0-1-8], [14:Edge,0-3-13]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.21 10-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.33 10-12	>923	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.18 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 12-13	>999	240		
								Weight: 118 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-14: 2x4 SPF No.2
 OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-12 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 9-3-13 oc bracing.
 WEBS 1 Row at midpt 3-12, 6-10

REACTIONS.

(size) 14=0-3-8, 16=0-2-8
 Max Horz 14=243(LC 5)
 Max Uplift 14=-178(LC 8), 16=-139(LC 8)
 Max Grav 14=1273(LC 2), 16=1213(LC 2)

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

TOP CHORD 2-3=-2023/262, 3-5=-1401/193, 5-6=-1376/338, 6-7=-718/167, 7-8=-668/113, 2-14=-1178/205
 BOT CHORD 13-14=-287/524, 12-13=-392/1763, 10-12=-59/727
 WEBS 3-12=-647/234, 5-12=-497/274, 6-12=-283/1095, 6-10=-381/102, 7-10=-342/183, 2-13=-106/1277, 8-10=-99/1005, 8-16=-1219/140

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- The Fabrication Tolerance at joint 2 = 2%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 16 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 at joint(s) 16.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=178, 16=139.
- This truss 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 6, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400692	Truss G3	Truss Type Common	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/26/2020		Lot 33 HT	I43094496
Wheeler Lumber, Waverly, KS 66871			8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:22 2020 Page 1 ID: 2ncXplsxOfbjIB6l7Q?gPMzrYWU-a0L365yfKXZyYjZ6qOybb3WBcixibys1DQ8XUkyW8rV			
-0-10-8 0-10-8	5-9-10 5-9-10	13-9-10 8-0-0	18-0-0 4-2-6	22-2-6 4-2-6	30-2-6 8-0-0	36-0-0 5-9-10
			5x7 =			

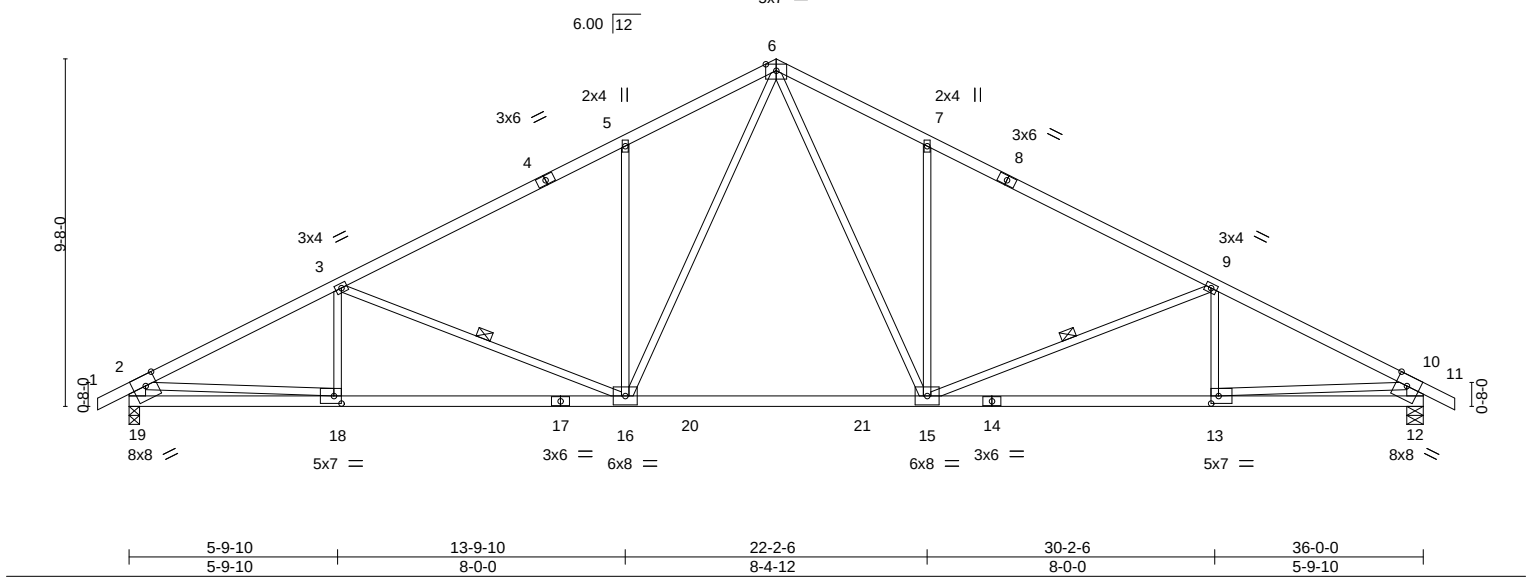


Plate Offsets (X,Y)--		[12:0-3-12,Edge], [13:0-2-8,0-2-8], [18:0-2-8,0-2-8], [19:0-3-12,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.92
TCDL 10.0	Lumber DOL	1.15	BC 0.53
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.26 15-16 >999 360
			Vert(CT) -0.43 15-16 >996 240
			Horz(CT) 0.08 12 n/a n/a
			Wind(LL) 0.11 16-18 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 145 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 9-15, 3-16
2-19,10-12: 2x6 SPF No.2	

REACTIONS.	(size) 19=0-3-8, 12=0-5-8
	Max Horz 19=-150(LC 9)
	Max Uplift 19=-224(LC 8), 12=-224(LC 9)
	Max Grav 19=1743(LC 2), 12=1743(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-2882/343, 3-5=-2373/287, 5-6=-2351/431, 6-7=-2351/431, 7-9=-2373/287, 9-10=-2882/344, 2-19=-1638/249, 10-12=-1638/248	
BOT CHORD 18-19=-226/675, 16-18=-383/2516, 15-16=-63/1605, 13-15=-233/2516, 12-13=-89/598	
WEBS 6-15=-284/1056, 7-15=-500/276, 9-15=-572/220, 6-16=-284/1056, 5-16=-500/276, 3-16=-572/220, 2-18=-157/1925, 10-13=-144/1925	

- 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, 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) 19=224, 12=224.
 - This truss 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 6, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT	
400692	G4	Common		1		I43094497

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

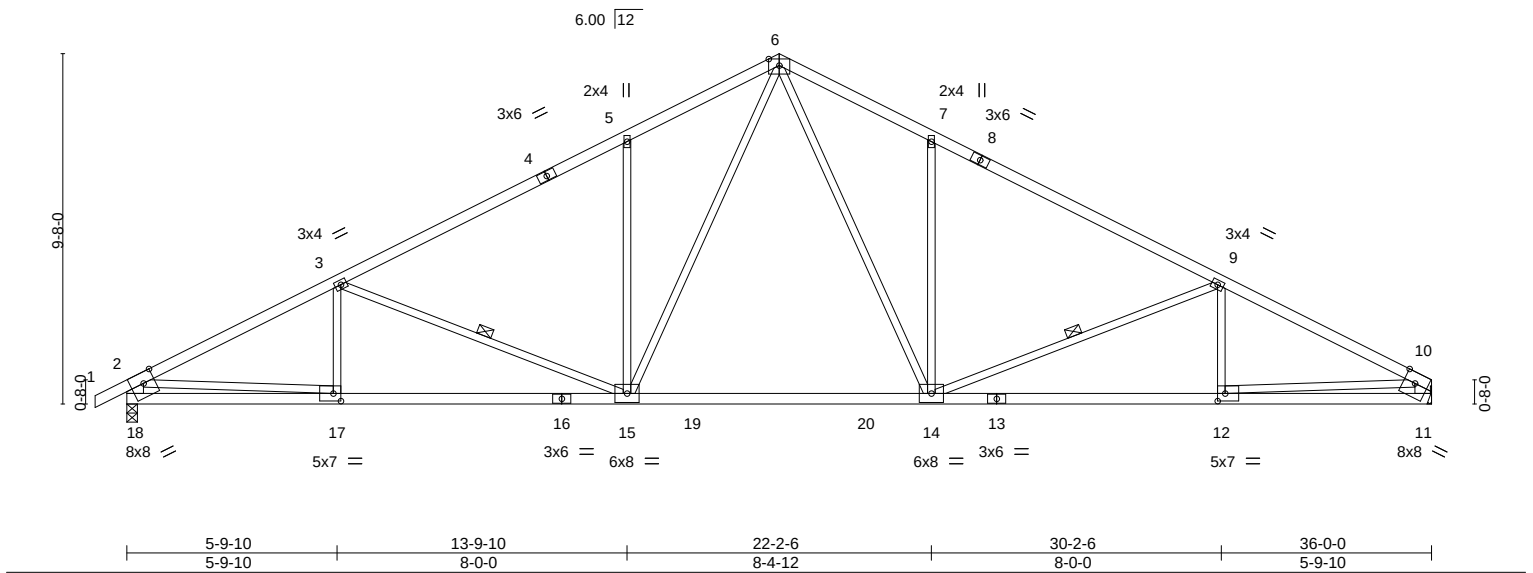
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:23 2020 Page 1
ID:2ncXpIsxOfbJlB6I7Q?gPMzrYWU-2CvRJRzH5rhpA18IO5Uq8G3MK6HvKQnAS4t50AyW8rU

0-10-8 5-9-10 13-9-10 18-0-0 22-2-6 30-2-6 36-0-0
0-10-8 5-9-10 8-0-0 4-2-6 4-2-6 8-0-0 5-9-10

10/26/2020

Scale: 3/16"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.27 14-15 >999 360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.43 14-15 >994 240				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.08 11 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08 15-17 >999 240				

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except*	WEBS	1 Row at midpt 9-14, 3-15
	2-18,10-11: 2x6 SPF No.2		

REACTIONS. (size) 18=0-3-8, 11=Mechanical
Max Horz 18=123(LC 5)
Max Uplift 18=-31(LC 8), 11=-19(LC 9)
Max Grav 18=1744(LC 2), 11=1679(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2884/46, 3-5=-2375/55, 5-6=-2353/150, 6-7=-2353/150, 7-9=-2377/55,
9-10=-2890/47, 2-18=-1639/57, 10-11=-1572/45
BOT CHORD 17-18=-107/674, 15-17=-80/2566, 14-15=0/1618, 12-14=0/2530, 11-12=-15/514
WEBS 6-14=-117/1074, 7-14=-495/166, 9-14=-586/111, 6-15=-117/1073, 5-15=-500/166,
3-15=-572/109, 2-17=0/1927, 10-12=0/2024

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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 100 lb uplift at joint(s) 18, 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 6, 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 400692	Truss G6	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Qty 1	Ply	Lot 33 HT	I43094499
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:25 2020 Page 1			
-0-10-8 2-3-8 5-9-9 13-9-9 18-0-0 23-11-0 30-2-8 36-0-0		0-10-8 2-3-8 3-6-1 8-0-1 4-2-7 5-11-0 6-3-8 5-9-9		ID:2ncXplsxOfbjlB6i7Q?gPMzryWU-?b1Bk6?XdSyWPAIhVWWJDh8k0vrNoFdTvOMC53yW8rS			
		10/26/2020					

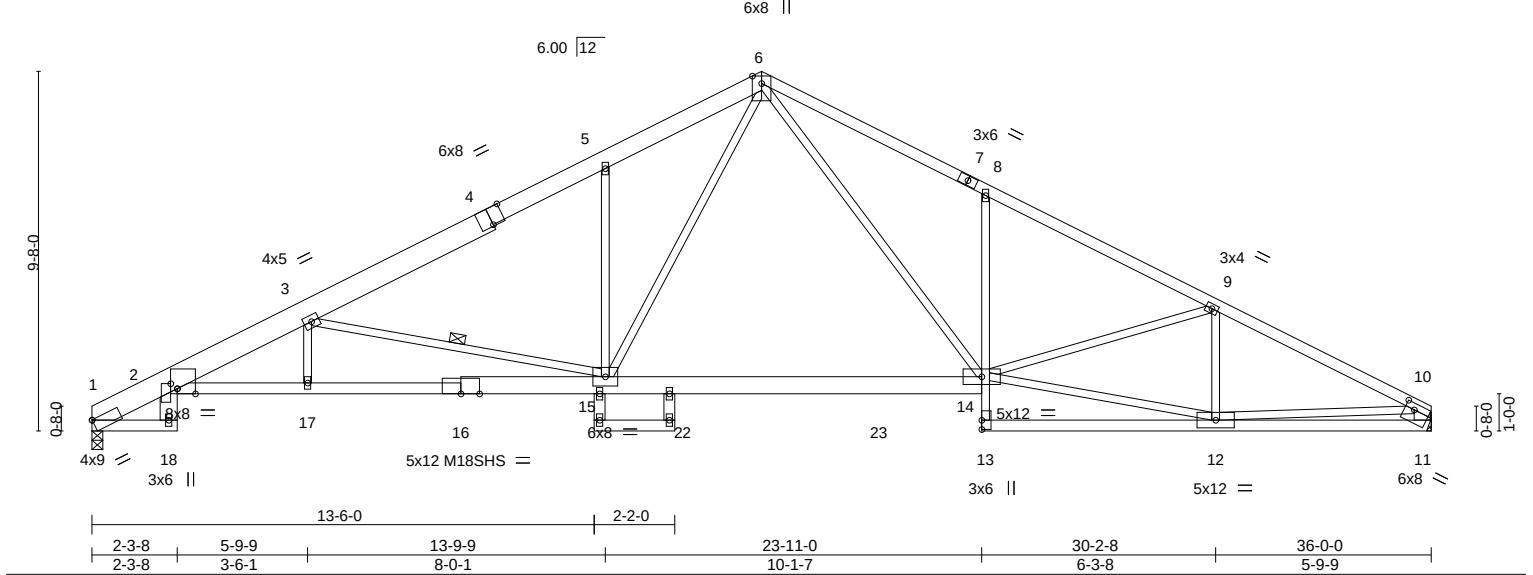


Plate Offsets (X,Y)--		[1:Edge,0-0-1], [2:0-5-14,Edge], [2:0-1-10,0-2-2], [4:0-4-0,Edge], [11:0-3-0,0-2-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.78	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.98	Vert(LL) -0.40 14-15 >999 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.99	Vert(CT) -0.68 14-15 >626 240
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.33 11 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) 0.14 17 >999 240
			PLATES
			MT20 197/144
			M18SHS 197/144
			Weight: 180 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-6: 2x6 SPF No.2, 1-4: 2x8 SP DSS	TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 2-16: 2x4 SPF 2100F 1.8E, 8-13: 2x3 SPF No.2, 14-16: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 15-17.
WEBS 2x3 SPF No.2 *Except* 2-18,10-11: 2x6 SPF No.2, 15-19,20-21: 2x4 SPF No.2	WEBS 1 Row at midpt 3-15

REACTIONS.	(size) 1=0-3-8, 11=Mechanical
	Max Horz 1=116(LC 5)
	Max Uplift 1=-19(LC 8), 11=-19(LC 9)
	Max Grav 1=1686(LC 2), 11=1688(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-933/60, 2-3=-4112/96, 3-5=-2863/39, 5-6=-2813/133, 6-8=-2991/142, 8-9=-2973/44, 9-10=-2882/40, 10-11=-1584/47
BOT CHORD	2-17=-143/4048, 15-17=-140/4043, 14-15=0/1838, 8-14=-455/151, 11-12=-29/525
WEBS	3-15=-1608/179, 5-15=-460/157, 6-15=-82/1401, 6-14=-112/1343, 12-14=0/2484, 9-12=-458/74, 10-12=0/1996

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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 6,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400692	Truss G7	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Qty 1	Lot 33 HT	I43094500
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:26 2020 Page 1 ID: 2ncXplsxOfbjlB6I7Q?gPMzrYVWU-TnbaxS09Om4N1Ktt3D1Ylvhw8JFPXkjd826idVyW8rR				
0-10-8 2-3-8 5-9-9 13-9-9 18-0-0 22-2-7 30-7-0 33-2-7 36-0-0 0-10-8 2-3-8 3-6-1 8-0-1 4-2-7 4-2-7 8-4-9 2-7-6 2-9-10		10/26/2020				
6x8		Scale = 1:61.9				

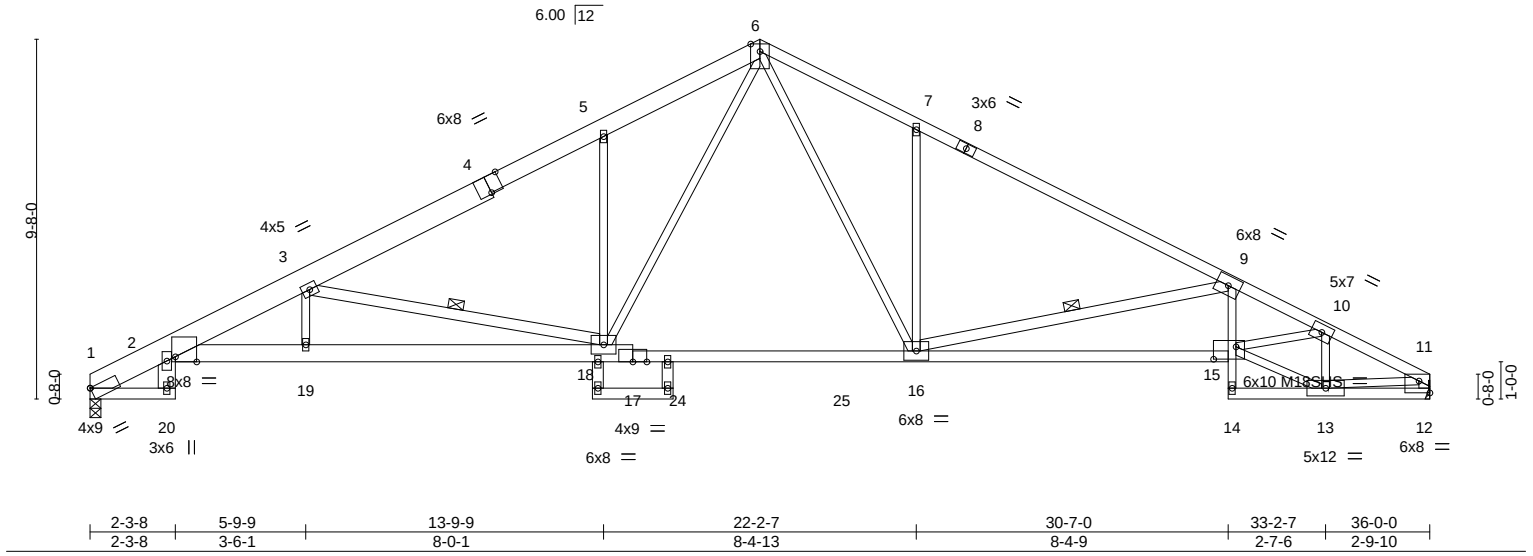


Plate Offsets (X,Y)--		[1:Edge,0-0-1], [2:0-6-14,Edge], [4:0-4-0,Edge], [12:Edge,0-3-13], [15:0-7-4,0-4-0]																		
LOADING (psf)		SPACING-			2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL			1.15		TC	0.76	Vert(LL)	-0.35	16-18	>999	360	MT20	197/144					
TCDL	10.0	Lumber DOL			1.15		BC	0.73	Vert(CT)	-0.63	15-16	>676	240	M18SHS	197/144					
BCLL	0.0 **	Rep Stress Incr			YES		WB	0.84	Horz(CT)	0.40	12	n/a	n/a							
BCDL	10.0	Code IRC2018/TPI2014					Matrix-S		Wind(LL)	0.15	18-19	>999	240	Weight: 183 lb	FT = 10%					

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 6-8: 2x4 SPF No.2, 1-4: 2x8 SP DSS, 8-11: 2x4 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied or 2-10-2 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2 *Except* 2-17: 2x6 SPF 1650F 1.4E, 9-14: 2x3 SPF No.2 15-17: 2x4 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 2-20: 2x6 SPF No.2, 3-18,9-16,11-12,18-21,22-23: 2x4 SPF No.2	WEBS	1 Row at midpt 3-18, 9-16

REACTIONS.	
(size)	1=0-3-8, 12=Mechanical
Max Horz	1=115(LC 5)
Max Uplift	1=-19(LC 8), 12=-19(LC 9)
Max Grav	1=1685(LC 2), 12=1685(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-932/61, 2-3=-4358/97, 3-5=-2824/48, 5-6=-2783/140, 6-7=-2725/129, 7-9=-2770/34, 9-10=-4642/68, 10-11=-2625/25, 11-12=-1592/33
BOT CHORD	2-19=-142/4224, 18-19=-140/4227, 16-18=0/1849, 15-16=-30/4263, 9-15=0/912, 12-13=-18/451
WEBS	3-18=-1836/171, 5-18=-462/158, 6-18=-112/1324, 6-16=-108/1243, 7-16=-490/168, 9-16=-1946/155, 13-15=0/2436, 10-15=-24/1927, 10-13=-1327/22, 11-13=0/1860

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



October 6, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT	I43094501
400692	G8	Roof Special	1			

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

Wheeler Lumber, Waverly, KS 66871 8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:27 2020 Page 1
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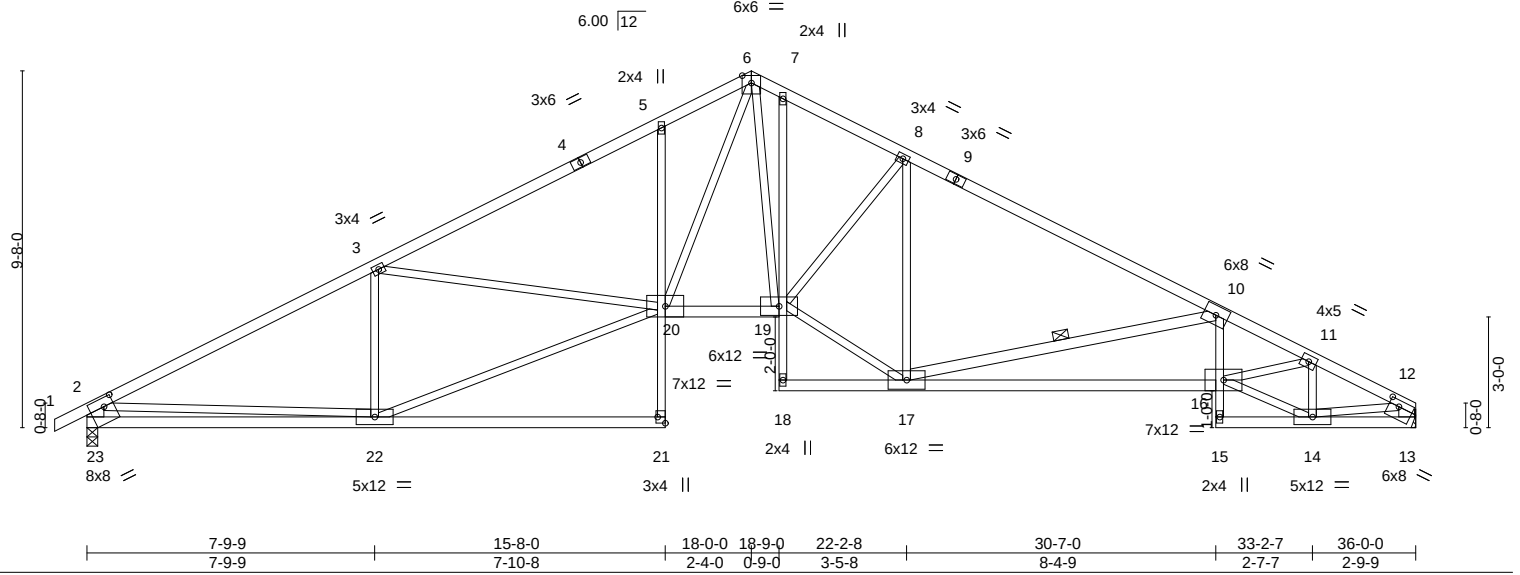
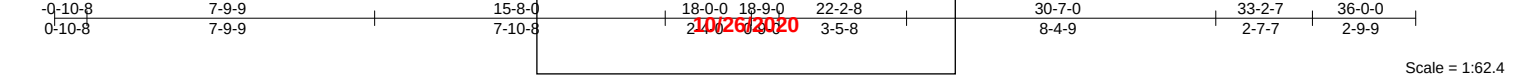


Plate Offsets (X,Y)--		[13:0-3-4,0-2-0], [21:Edge,0-2-8], [23:0-3-4,0-2-12]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.97	Vert(LL)	-0.26 19-20 >999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.51 16-17 >830 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.29 13 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.17 5-20 >999 240
				PLATES	GRIP
				MT20	197/144
				Weight: 166 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-4: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 5-21,7-18,10-15: 2x3 SPF No.2, 16-18: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-7-12 oc bracing: 22-23 6-0-0 oc bracing: 18-19,17-18.
WEBS 2x3 SPF No.2 *Except* 10-17: 2x4 SPF No.2, 2-23,12-13: 2x6 SP DSS	WEBS 1 Row at midpt 10-17

REACTIONS.	(size) 23=0-3-8, 13=Mechanical
	Max Horz 23=160(LC 8)
	Max Uplift 23=-224(LC 8), 13=-199(LC 9)
	Max Grav 23=1678(LC 1), 13=1598(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2729/328, 3-5=-3198/383, 5-6=-3131/498, 6-7=-2568/347, 7-8=-2760/348, 8-10=-2614/297, 10-11=-3944/497, 11-12=-2415/287, 2-23=-1604/264, 12-13=-1523/207
BOT CHORD	22-23=-364/893, 5-20=-415/238, 19-20=-101/2233, 16-17=-419/3632, 10-16=0/497, 13-14=-68/379
WEBS	3-22=-818/241, 20-22=-377/2472, 3-20=0/447, 6-20=-356/1416, 6-19=-158/988, 17-19=-114/2569, 8-19=-10/344, 8-17=-815/134, 10-17=-1450/368, 2-22=-8/1443, 12-14=-160/1746, 11-16=-179/1513, 14-16=-184/2128, 11-14=-1137/144

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=224, 13=199.
 - This truss 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 6, 2020

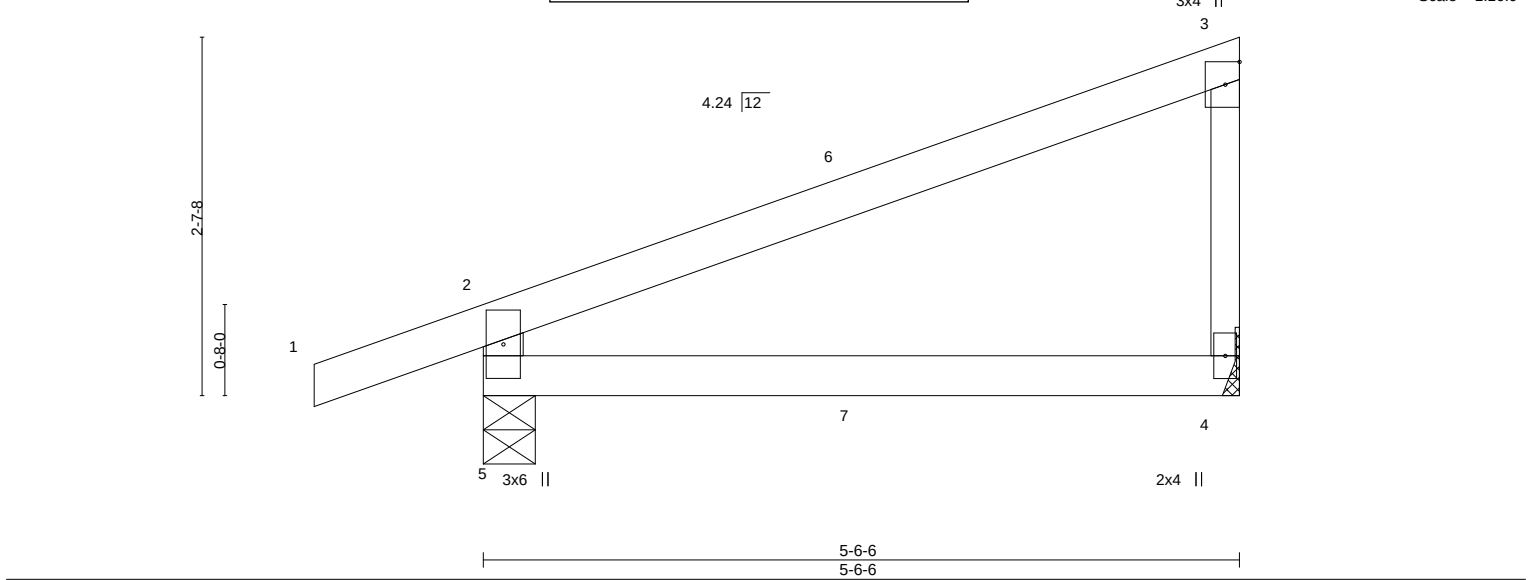
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Quantity	Ply	Lot 33 HT	
400692	J1	Diagonal Hip Girder	1			I43094502
Wheeler Lumber, Waverly, KS 66871						
RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI						
8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:28 2020 Page 1 ID:2ncXplsxOfbjlB6i7Q?g PMzrYWU-PAiKM81QwNK5Ge1GBe30rKmL573R?ruvbmbsiNyW8rP						
-1-2-14 10/26/2020 5-6-6						



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) -0.03	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0.07	4-5	>967	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

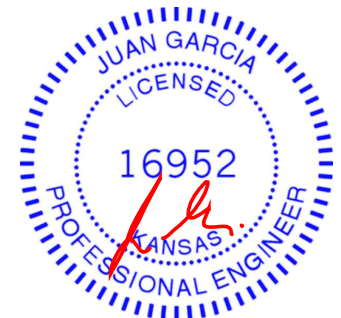
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 3-4: 2x3 SPF No.2	

REACTIONS.	(size) 5=0-4-9, 4=Mechanical
	Max Horz 5=111(LC 7)
	Max Uplift 5=-101(LC 4), 4=-50(LC 8)
	Max Grav 5=346(LC 1), 4=224(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-5=-306/140

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=101.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 36 lb up at 2-9-8, and 69 lb down and 36 lb up at 2-9-8 on top chord, and 3 lb down and 1 lb up at 2-9-8, and 3 lb down and 1 lb up at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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



October 6,2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT	I43094503
400692	J2	Jack-Open			1	

Wheeler Lumber, Waverly, KS 66871

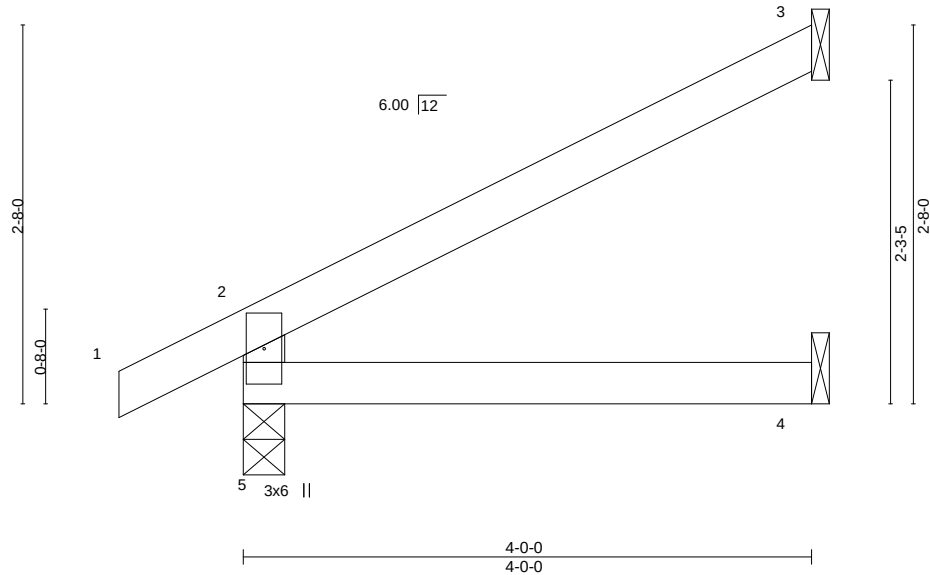
**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI**

8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:28 2020 Page 1
ID:2ncXplsxOibjIB6i7Q?gPMzrYWU-PAiKM81QwNK5Ge1GBE30rKmOG75M?ruvbmbsiNyW8rP

-0-10-8
0-10-8

10/26/2020

Scale = 1:16.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

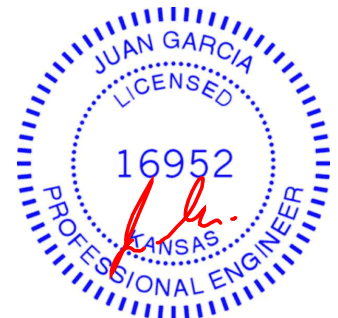
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=89(LC 8)
Max Uplift 5=-30(LC 8), 3=-66(LC 8)
Max Grav 5=252(LC 1), 3=116(LC 1), 4=71(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 6, 2020

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

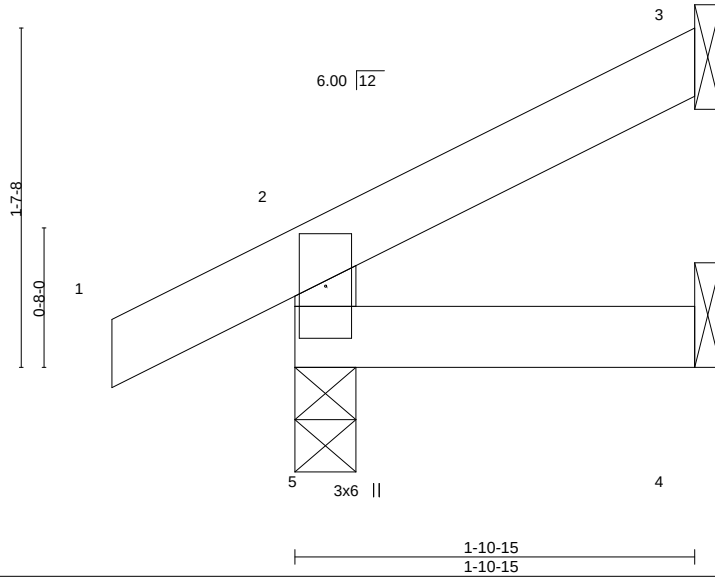
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT
400692	J3	Jack-Open		1	
Wheeler Lumber, Waverly, KS 66871			Job Reference (optional)		
			8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:29 2020 Page 1		
			ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-tMGiaU22hhSyuocSkMbFNXJb5XSEki73q?KPEqyW8rO		
			10-10-8 10-10-8 10-10-15 10-10-15		
			10/26/2020		

Scale = 1:11.0



LOADING (psf)	SPACING-	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 0.02	Vert(CT) -0.00	5	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00	5	>999	240		Weight: 6 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=48(LC 8)
Max Uplift 5=-26(LC 8), 3=-30(LC 8)
Max Grav 5=171(LC 1), 3=44(LC 1), 4=31(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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:29 2020 Page 1
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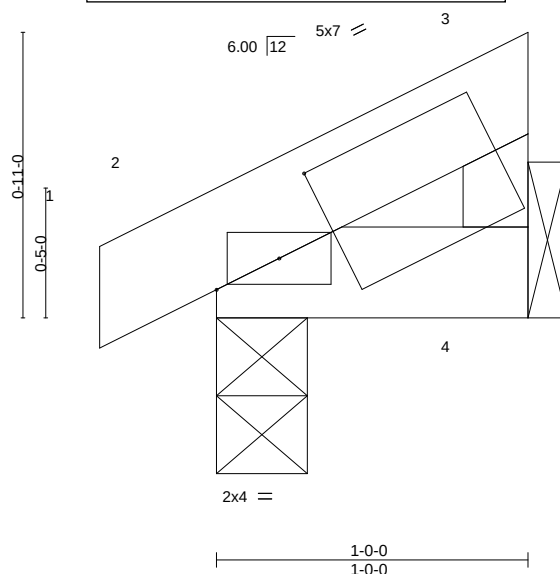
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCS Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.

Wheeler Lumber, Waverly, KS 66871 8,420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:30 2020 Page 1
ID:2ncXplsxOfbjlB6f7C?gPMzrYWU-LZg4nq3gS?apWxBf136UwlrnlwoiINCf34zmGyW8rN

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

10/26/2020

Scale = 1:7.4



October 6, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT
400692	R1	Common Girder	8.420 s	2	I43094507

Wheeler Lumber, Waverly, KS 66871

0-10-8 5-9-10 13-9-10 18-0-0 22-2-6 25-10-8 30-2-6 36-0-0
0-10-8 5-9-10 8-0-0 4-2-6 4-2-6 3-8-2 4-3-14 5-9-10

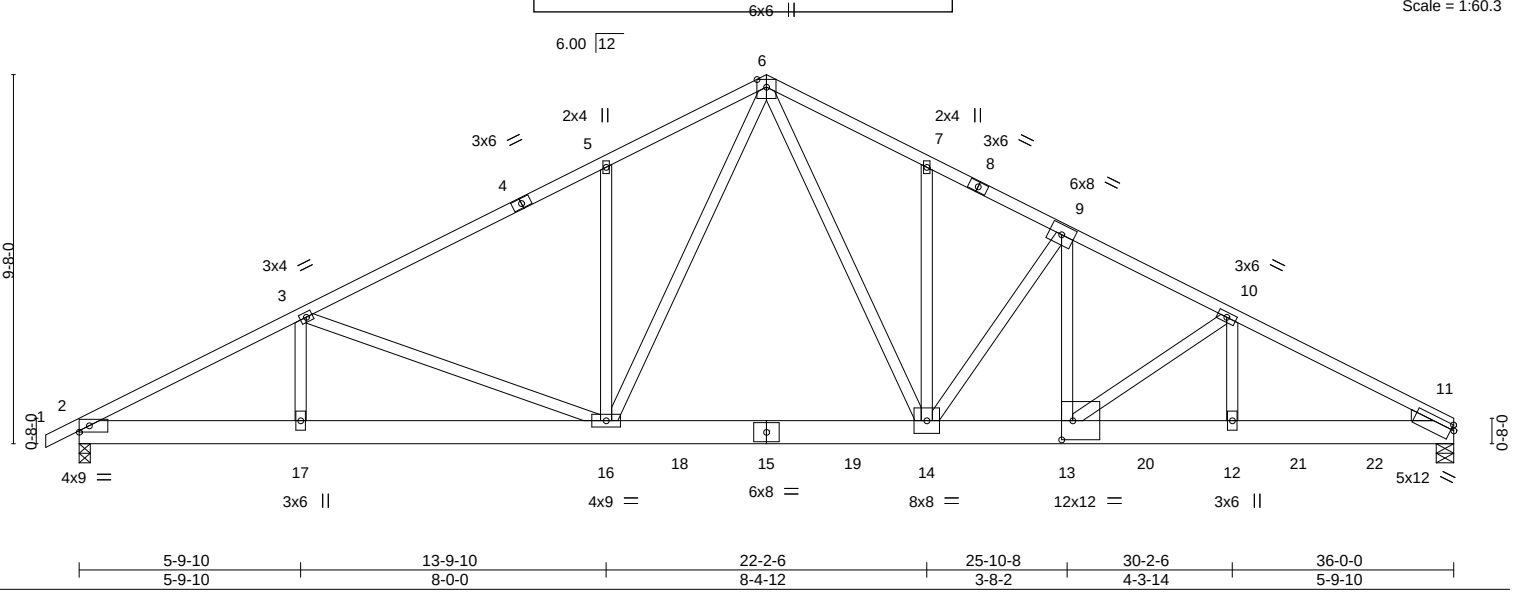


Plate Offsets (X,Y)-- [11:0-0-15,0-1-10], [13:0-3-8,0-6-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.19 13 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.34 13 >999 240	Weight: 459 lb	FT = 10%
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.07 11 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12 13 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-4-8-11: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 4-3-12 oc purlins.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
WEDGE	
Right: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 11=0-5-8
Max Horz 2=108(LC 24)
Max Uplift 2=-193(LC 8), 11=-594(LC 9)
Max Grav 2=3144(LC 2), 11=6326(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5931/375, 3-5=-5449/400, 5-6=-5412/494, 6-7=-7210/696, 7-9=-7209/630,
9-10=-10168/935, 10-11=-11530/1079
BOT CHORD 2-17=-372/5146, 16-17=-372/5146, 14-16=-248/4365, 13-14=-704/9043,
12-13=-886/10008, 11-12=-886/10008
WEBS 6-14=-548/4919, 7-14=-272/114, 10-13=-1422/224, 10-12=-146/1587, 6-16=-146/1101,
5-16=-472/166, 3-16=-637/228, 9-14=-4622/567, 9-13=-544/4883

- NOTES-**
- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - 3) Unbalanced roof live loads have been considered for this design.
 - 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=193, 11=594.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4163 lb down and 450 lb up at 25-10-7, 539 lb down and 82 lb up at 27-11-4, 539 lb down and 82 lb up at 29-11-4, and 539 lb down and 82 lb up at 31-11-4, and 539 lb down and 82 lb up at 33-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of the fabricator.

Continued on page 2



October 6, 2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	City	Ply	Lot 33 HT
400692	R1	Common Girder		2	I43094507

Wheeler Lumber, Waverly, KS 66871

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/26/2020**

8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:31 2020 Page 2
ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-plOT?A3lDlig75mrsmdjSyOopK2MC1RMIJpWliyW8rM

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-6=-70, 6-11=-70, 2-11=-20

Concentrated Loads (lb)

Vert: 13=-3956(F) 12=-539(F) 20=-539(F) 21=-539(F) 22=-539(F)

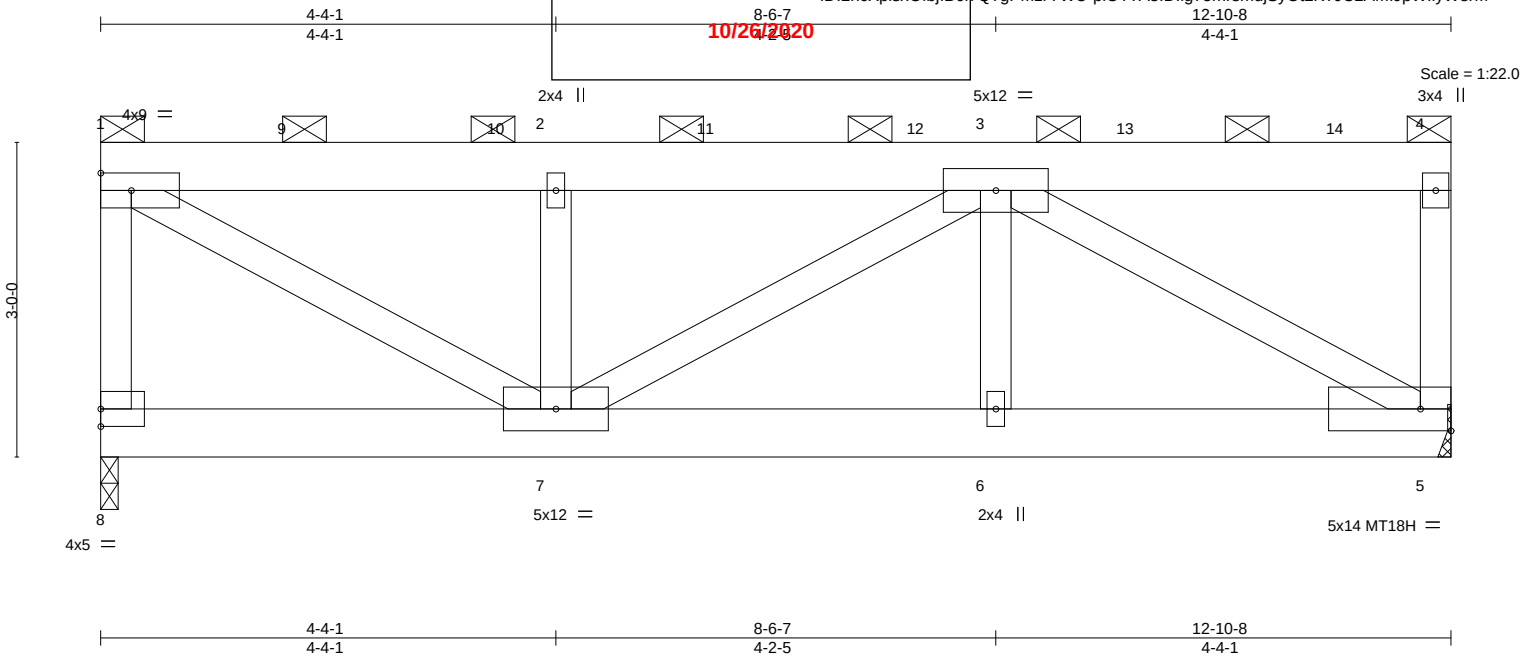
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Lot	Ply	Lot 33 HT	I43094508
400692	R2	Flat Girder	8.420 s	2	Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:31 2020 Page 1	
Wheeler Lumber, Waverly, KS 66871						
Job Reference (optional)						
ID:2ncXplsXOfbjIB6l7Q?gPMzrYWU-plOT?A3lDlIg75mrsmdjSyOt2K?JC2AMlJpWllyW8rM						



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.30	in (loc) l/def L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.56	Vert(LL) -0.05 6-7 >999 360	MT18H	197/144
BCLL 0.0 *	Lumber DOL 1.15	WB 0.67	Vert(CT) -0.09 6-7 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.02 5 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.03 6-7 >999 240		
				Weight: 156 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS	TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-4, except end verticals.
BOT CHORD 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 8=0-2-0 (req. 0-2-15), 5=Mechanical
Max Horz 8=-77(LC 4)
Max Uplift 8=-378(LC 4), 5=-430(LC 5)
Max Grav 8=3713(LC 2), 5=4198(LC 2)

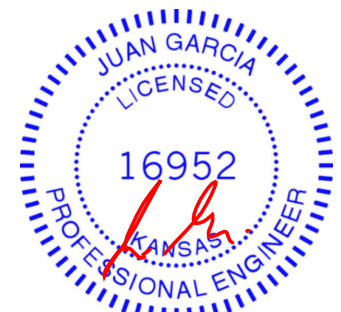
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-3608/390, 1-2=-4787/489, 2-3=-4787/489, 4-5=-1234/150
BOT CHORD 6-7=-514/4839, 5-6=-514/4839
WEBS 1-7=-561/5455, 2-7=-2772/342, 3-5=-5514/569

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 0-9-0 oc, 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.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 8 greater than input bearing size.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=378, 5=430.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1155 lb down and 142 lb up at 1-10-8, 1155 lb down and 142 lb up at 3-10-8, 1155 lb down and 142 lb up at 5-10-8, 1155 lb down and 142 lb up at 7-10-8, and 1155 lb down and 142 lb up at 9-10-8, and 1159 lb down and 142 lb up at 11-10-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



October 6, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	City	Ply	Lot 33 HT
400692	R2	Flat Girder		2	I43094508
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			
		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:31 2020 Page 2			
		ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-plOT?A3lDlIg75mrsmdjSyOt2K?JC2AMlJpWliyW8rM			

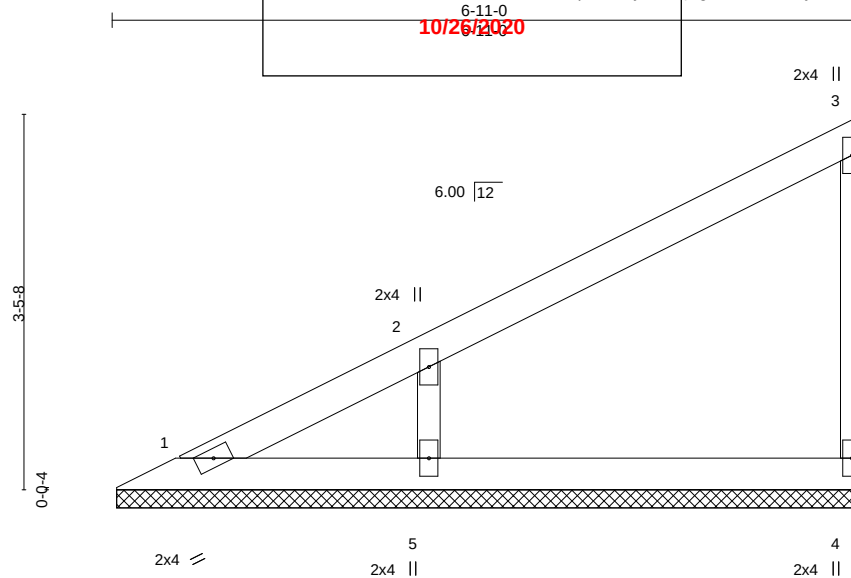
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/26/2020

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 9=-1061 10=-1061 11=-1061 12=-1061 13=-1061 14=-1066

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT
400692	V1	Valley		1	
Wheeler Lumber, Waverly, KS 66871					
Job Reference (optional)					

**RELEASE FOR
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DEVELOPMENT SERVICES
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8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:32 2020 Page 1
ID: 2ncXplsxOfbjIB617Q?gPMzrYVWU-lxycV4w_cqXIFK1QU8y?9x4WkSixe4VWzZ3r9yW8rL



Scale = 1:21.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 19 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=6-10-8, 4=6-10-8, 5=6-10-8
Max Horz 1=129(LC 5)
Max Uplift 4=-27(LC 8), 5=-110(LC 8)
Max Grav 1=66(LC 16), 4=142(LC 1), 5=368(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-286/159

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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=110.
- 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT	I43094510
400692	V2	Valley		1		

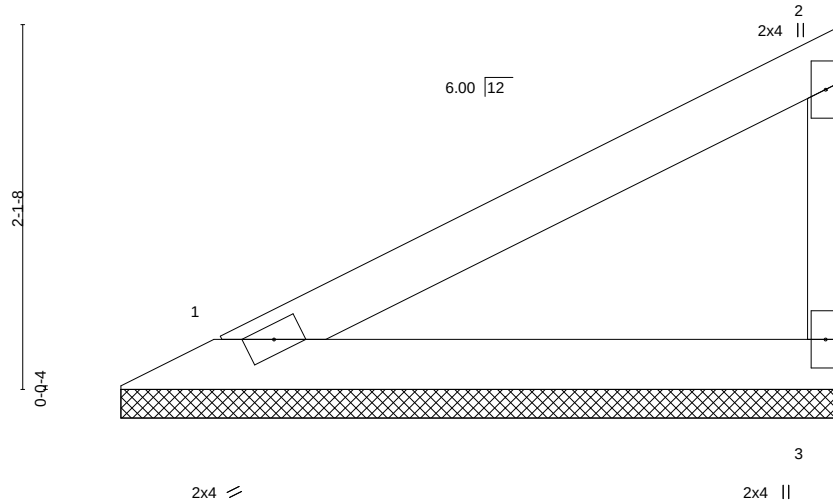
**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI**

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:33 2020 Page 1
ID:2ncXplsxOfbjlB6I7QpgPMzrYWU-m7WDP5YkwyONPvDzBfBYNTEf8ocg57fdldNbyW8rk

4-3-0
10/26/2020

Scale = 1:13.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	L/def	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.12	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: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-2-8, 3=4-2-8
Max Horz 1=73(LC 5)
Max Uplift 1=-20(LC 8), 3=-39(LC 8)
Max Grav 1=158(LC 1), 3=158(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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

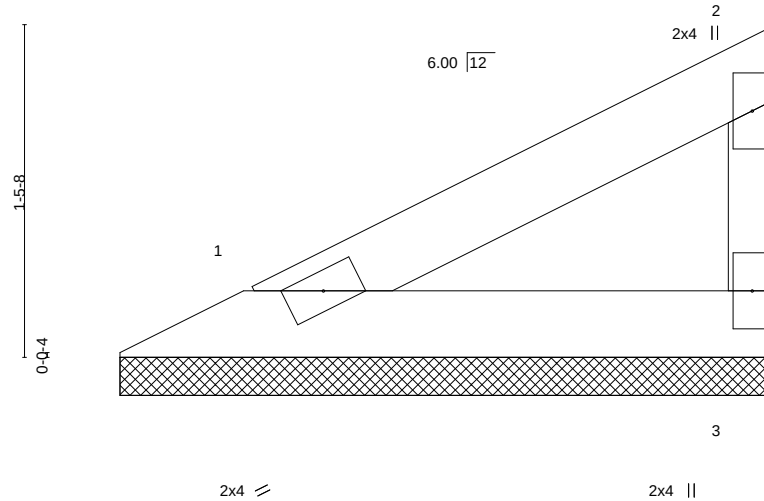
Job	Truss	Truss Type	Qty	Ply	Lot 33 HT
400692	V3	Valley		1	
Wheeler Lumber, Waverly, KS 66871					
Job Reference (optional)					

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LEE'S SUMMIT, MISSOURI**

8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:33 2020 Page 1
ID: 2ncXplsxOfbJlB6I7Q?gPMzryWU-m7WDPPr5YkwyONPvDzBfBYNTGw8pqg57fdldNbyW8rk

2-11-0
10/25/20

Scale = 1:10.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	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: 7 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=2-10-8, 3=2-10-8
Max Horz 1=46(LC 5)
Max Uplift 1=-13(LC 8), 3=-24(LC 8)
Max Grav 1=98(LC 1), 3=98(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; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 6, 2020

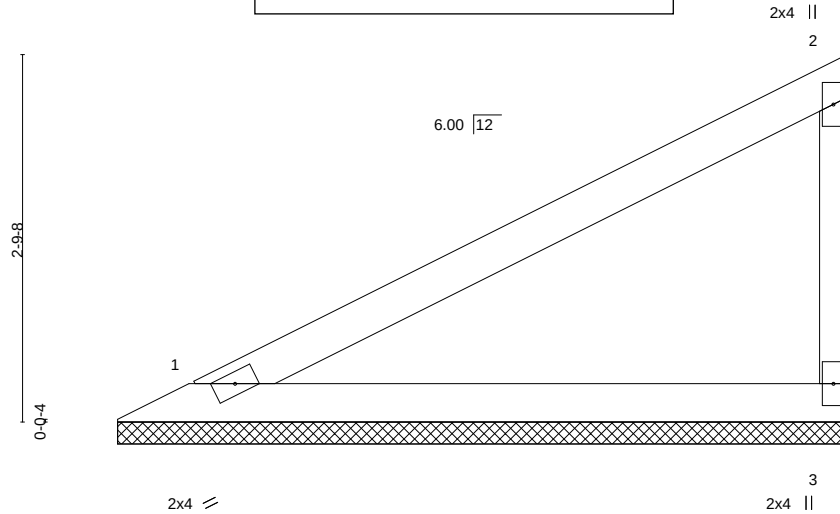
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 33 HT
400692	V4	Valley		1	
Wheeler Lumber, Waverly, KS 66871			Job Reference (optional)		
			8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:34 2020 Page 1		
			ID:2ncXpIsx0rjIB6i7Q?gPMzryWU-EK4bdB6BVD4F_ZUQXvAQ4a0LsY6wPYNo_H2Av1yW8rJ		
			5-7-0		
			10/26/2020		



Scale = 1:17.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) n/a	-	n/a	999		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.24	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: 14 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=5-6-8, 3=5-6-8
Max Horz 1=101(LC 5)
Max Uplift 1=-28(LC 8), 3=-53(LC 8)
Max Grav 1=218(LC 1), 3=218(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 6, 2020

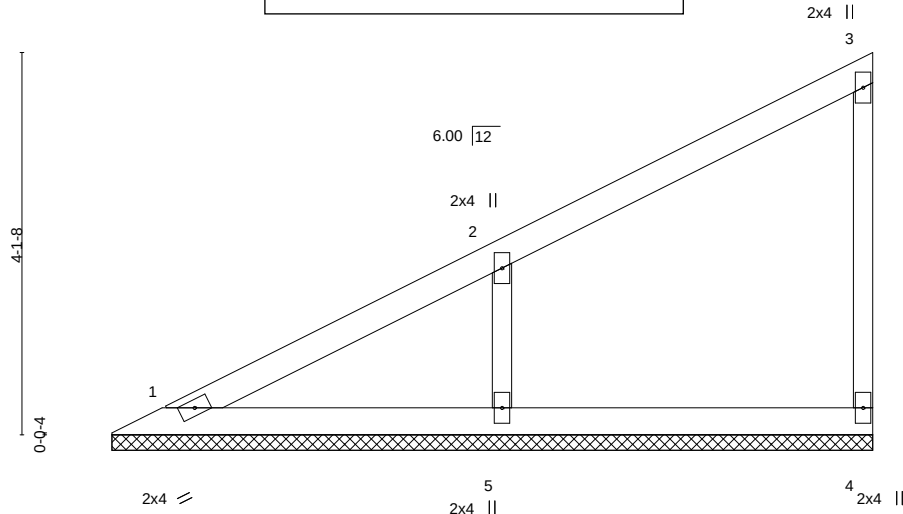
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400692	Truss V5	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/26/2020		Qty 1	Ply	Lot 33 HT	I43094513
Wheeler Lumber, Waverly, KS 66871		8.420 s Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:34 2020 Page 1 ID:2ncXp1sxOfb1B6i7Q?gPMzrYWU-EK4bdB6BVD4F_ZUQXvAQ4a0PKY8uPYP0_H2Av1yW8rJ						



Scale = 1:24.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	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 0.06	Horz(CT)	-0.00	4	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
 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=8-2-8, 4=8-2-8, 5=8-2-8
 Max Horz 1=157(LC 5)
 Max Uplift 4=-26(LC 5), 5=-127(LC 8)
 Max Grav 1=125(LC 16), 4=135(LC 1), 5=423(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-5=-329/183

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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=127.
- 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 6, 2020

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

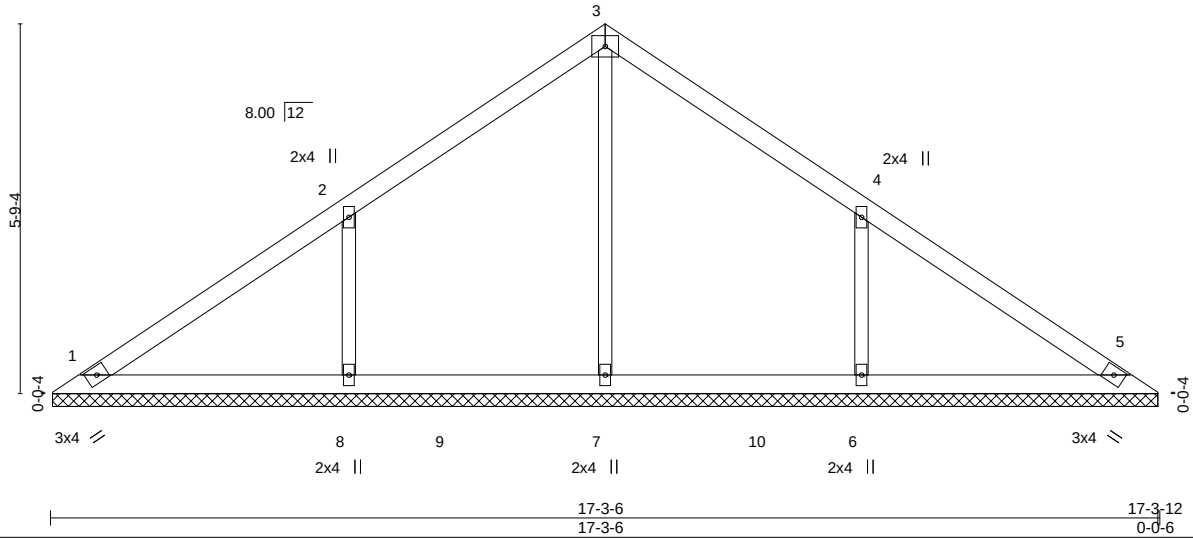
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 Chesterfield, MO 63017

Job 400692	Truss V6	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Qty 1	Ply	Lot 33 HT	I43094514
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:35 2020 Page 1			
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		10/26/2020					
		4x5					

Scale = 1:36.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) n/a	-	n/a	999		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a	-	n/a	999			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00	5	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S							
								Weight: 50 lb	FT = 10%

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

REACTIONS. All bearings 17-3-0.
 (lb) - Max Horz 1=142(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-176(LC 8), 6=-175(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=350(LC 15), 8=535(LC 15), 6=535(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-355/222, 4-6=-355/222

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=176, 6=175.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



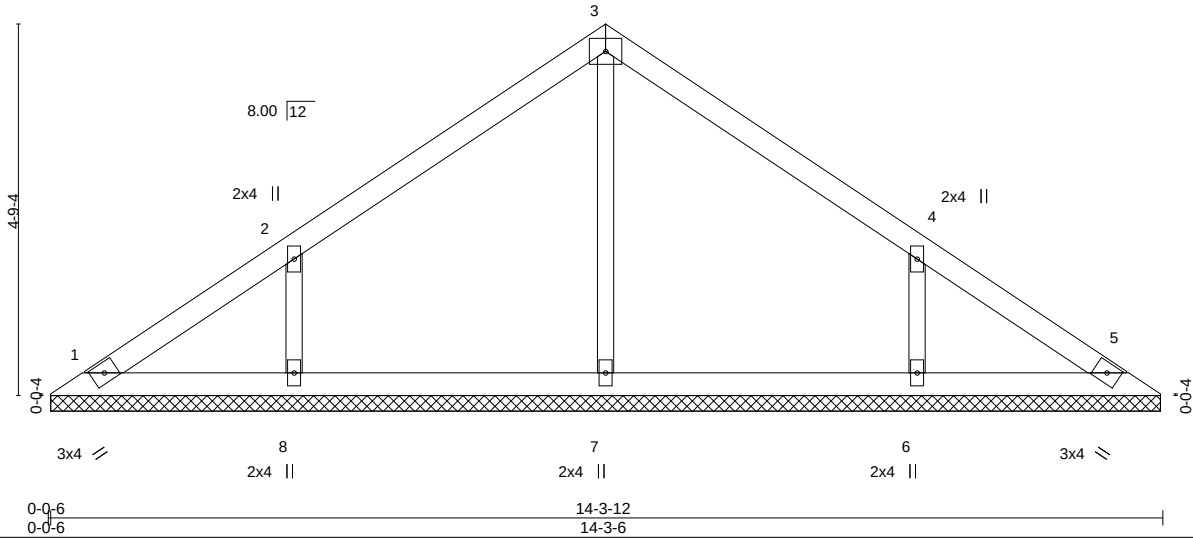
October 6, 2020

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 400692	Truss V7	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Qty 1	Ply	Lot 33 HT	I43094515
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020		MiTek Industries, Inc. Tue Oct 6 11:30:36 2020 Page 1	
		ID:2ncXplsxOfbjIB617Q?gPMzrYWU-AiBM2t7R1rKzEseofKDu9?5mjLqftRL5RbXH_wyW8rH					
		7-1-14		14-3-12			
		7-1-14		7-1-14			
		10/26/2020					
		4x6					

Scale = 1:29.6



LOADING (psf)	SPACING-	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 0.10	Horz(CT) 0.00	5	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 40 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6'-0"-0" oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10'-0"-0" oc bracing.
OTHERS 2x3 SPF No.2	

REACTIONS. All bearings 14-3-0.
 (lb) - Max Horz 1=-116(LC 4)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-146(LC 8), 6=-146(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=280(LC 1), 8=370(LC 15), 6=370(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-294/187, 4-6=-294/187

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=146, 6=146.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 6, 2020

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

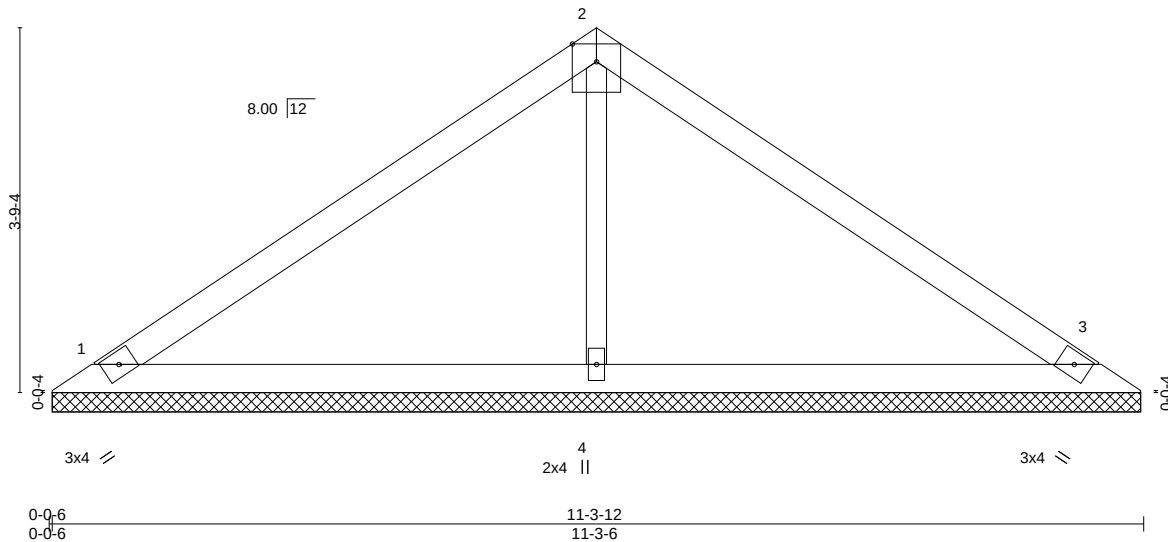
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 400692	Truss V8	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Qty 1	Ply	Lot 33 HT	I43094516
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:36 2020 Page 1			
5-7-14		5-7-14		11-3-12		5-7-14	
10/26/2020							

Scale: 1/2"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.38	Vert(LL) n/a	-	n/a	999		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(CT) n/a	-	n/a	999			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 30 lb	FT = 10%

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

REACTIONS. (size) 1=11-3-0, 3=11-3-0, 4=11-3-0
 Max Horz 1=-90(LC 4)
 Max Uplift 1=-45(LC 8), 3=-57(LC 9), 4=-18(LC 8)
 Max Grav 1=239(LC 1), 3=239(LC 1), 4=453(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-295/75

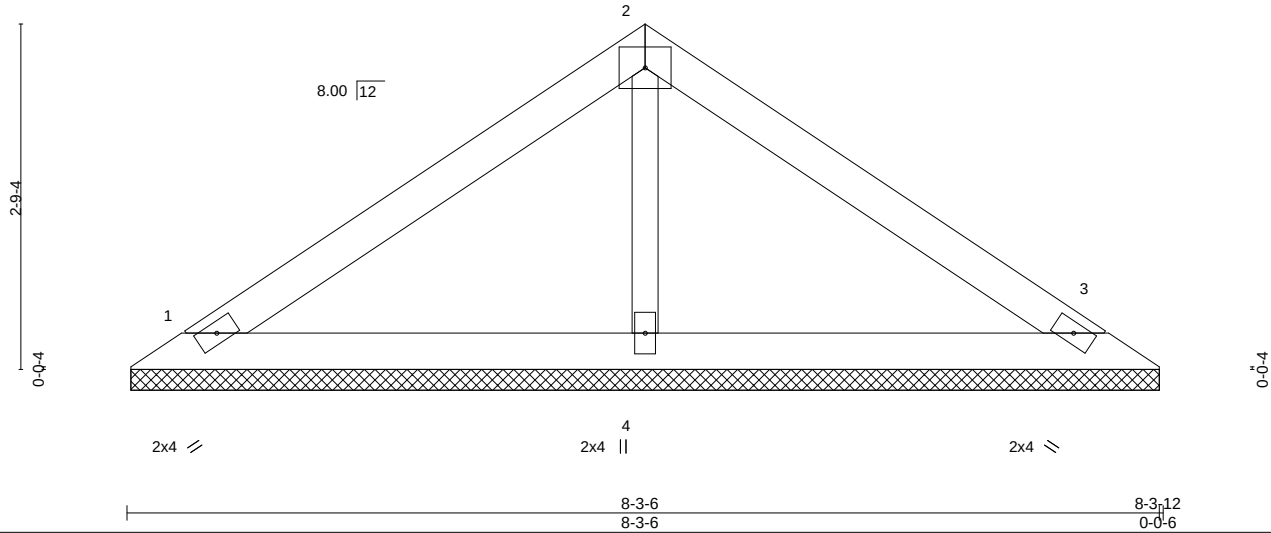
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed;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



October 6, 2020

Job 400692	Truss V9	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Lot 33 HT 1	Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		4-1-14 4-1-14		8-420 s ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-evlkFD83o8Spr0D?C1k7iDewEI9ecvSEgFGqWMYw8rG	Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:37 2020 Page 1	
		10/26/2020		8-3-12 4-1-14		

Scale = 1:18.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							
								Weight: 21 lb		FT = 10%	

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

REACTIONS. (size) 1=8-3-0, 3=8-3-0, 4=8-3-0
 Max Horz 1=-64(LC 4)
 Max Uplift 1=-41(LC 8), 3=-49(LC 9)
 Max Grav 1=186(LC 1), 3=186(LC 1), 4=289(LC 1)

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

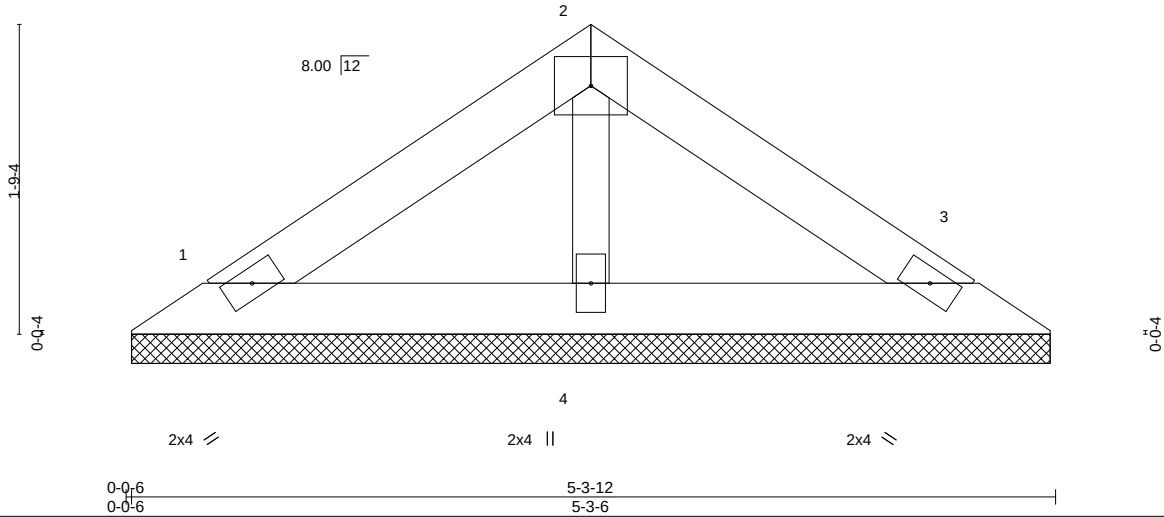
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; 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 6, 2020

Job 400692	Truss V10	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Lot 33 HT 1	Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		8.420 s		Aug 25 2020 MiTek Industries, Inc. Tue Oct 6 11:30:32 2020 Page 1		
		2-7-14 2-7-14		5-3-12 2-7-14		
		10/26/2020				
		4x5				

Scale = 1:13.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							
								Weight: 13 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-3-12 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x3 SPF No.2		

REACTIONS. (size) 1=5-3-0, 3=5-3-0, 4=5-3-0
 Max Horz 1=-38(LC 4)
 Max Uplift 1=-24(LC 8), 3=-29(LC 9)
 Max Grav 1=110(LC 1), 3=110(LC 1), 4=171(LC 1)

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

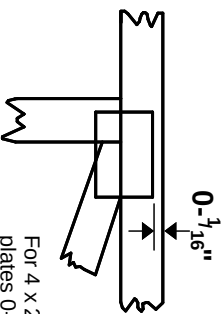
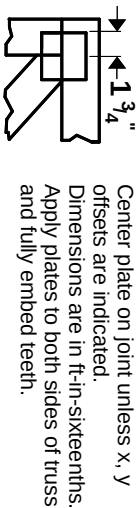
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; 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 6, 2020

Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- $\frac{3}{16}$ " from outside edge of truss.

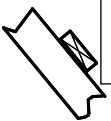
This symbol indicates the required direction of slots in connector plates.

Plate location details available in **MiTek 2020** software or upon request.

PLATE SIZE

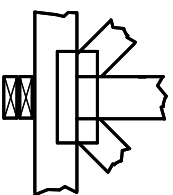
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

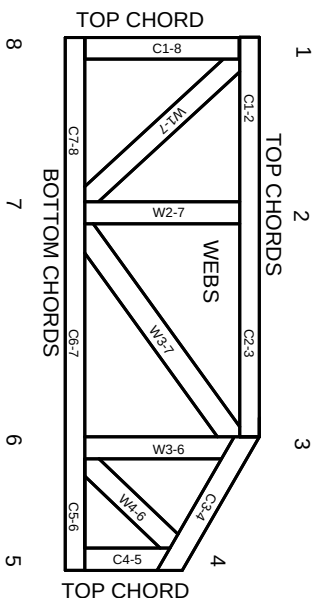
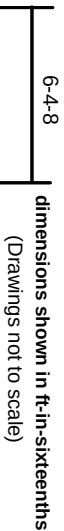


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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