



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/15/2022 5:02:35

MiTek USA, Inc.

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

Re: B220008
Lot 150 HT

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

Pages or sheets covered by this seal: I49713815 thru I49713875

My license renewal date for the state of Missouri is December 31, 2022.

Missouri COA: Engineering 001193



January 15, 2022

Garcia, Juan ,Engineer

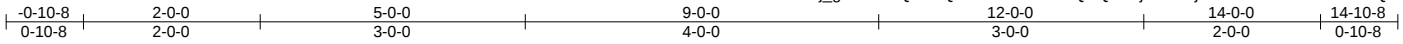
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO 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.

Job B220008	Truss A5	Truss Type Hip Girder	Qty 1	Ply 1	Lot 150 HT 149713815
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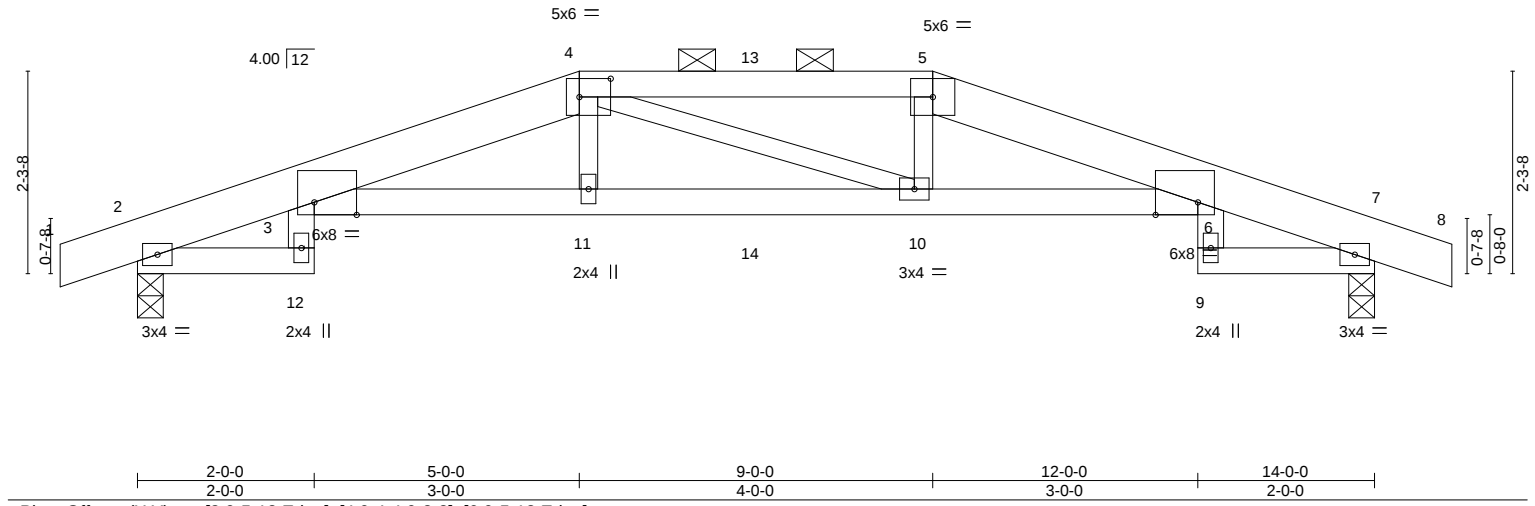
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:11 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-ivOmZoQSQGUfj82eXHjxl7CThFckGHtsdAN8WQzvTzc



Scale = 1:26.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.21 10-11 >791 360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.37 10-11 >441 240				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.29 7 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16 10-11 >999 240				
								Weight: 56 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP DSS *Except* 4-5: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-5-8 oc purlins, except 2-0-0 oc purlins (2-9-8 max.): 4-5.
BOT CHORD	2x4 SPF No.2 *Except* 3-6: 2x4 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 3-12,6-9: 2x4 SPF No.2		

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=35(LC 33)
Max Uplift 2=-238(LC 4), 7=-238(LC 5)
Max Grav 2=1141(LC 1), 7=1141(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-493/113, 3-4=-3349/600, 4-5=-3293/591, 5-6=-3336/584, 6-7=-493/108
BOT CHORD 3-11=-558/3284, 10-11=-554/3305, 6-10=-523/3272
WEBS 4-11=0/309, 5-10=0/335

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=238, 7=238.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 95 lb down and 67 lb up at 5-0-0, and 95 lb down and 67 lb up at 7-0-0, and 95 lb down and 67 lb up at 9-0-0 on top chord, and 277 lb down and 82 lb up at 5-0-0, and 277 lb down and 82 lb up at 9-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



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Continued on page 2

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT
B220008	A5	Hip Girder	1	1	I49713815
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:11 2022 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-70, 4-5=-70, 5-8=-70, 2-12=-20, 3-6=-20, 7-9=-20
- Concentrated Loads (lb)
 - Vert: 4=-69(F) 5=-69(F) 11=-325(F=-277) 10=-325(F=-277) 13=-69(F) 14=-48

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss A6	Truss Type Roof Special	Qty 2	Ply 1	Lot 150 HT Job Reference (optional)	I49713816
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:12 2022 Page 1

ID:Lek3CAAnj_gYbKvtCQHtmQzKvNM-A5y8m8Q4BacWLLdq4?EAIKlgxezf?je?sq7h2szvTzb

-0-10-8 0-10-8	2-0-0 2-0-0	7-0-0 5-0-0	12-0-0 5-0-0	14-0-0 2-0-0	14-10-8 0-10-8
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Scale = 1:25.7

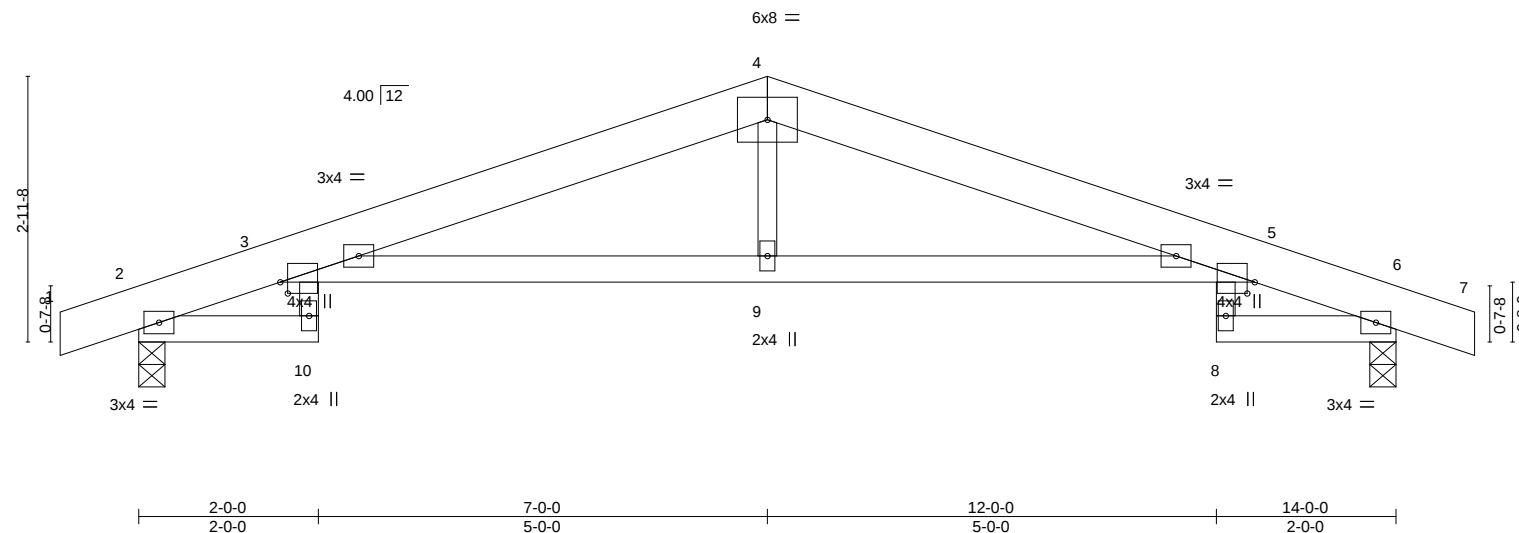


Plate Offsets (X,Y)-- [3:0-1-8,0-1-0], [5:0-1-8,0-1-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	-0.13	3-9	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.24	3-9	>673
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.20	6	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09	3-9	>999
						PLATES	GRIP
						MT20	197/144
						Weight: 49 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

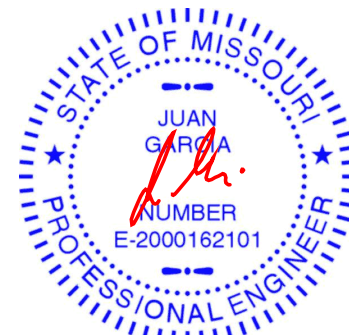
(size) 2=0-3-8, 6=0-3-8
Max Horz 2=-46(LC 13)
Max Uplift 2=-130(LC 4), 6=-130(LC 5)
Max Grav 2=696(LC 1), 6=696(LC 1)

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

TOP CHORD 2-3=-282/71, 3-4=-1368/140, 4-5=-1368/155, 5-6=-282/62
BOT CHORD 3-9=-94/1298, 5-9=-94/1298
WEBS 4-9=0/262

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 3 = 0%, joint 5 = 0%, joint 3 = 0%, joint 5 = 0%
- 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=130, 6=130.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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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 150 HT	149713817
B220008	A7	Roof Special	1	1	Job Reference (optional)	

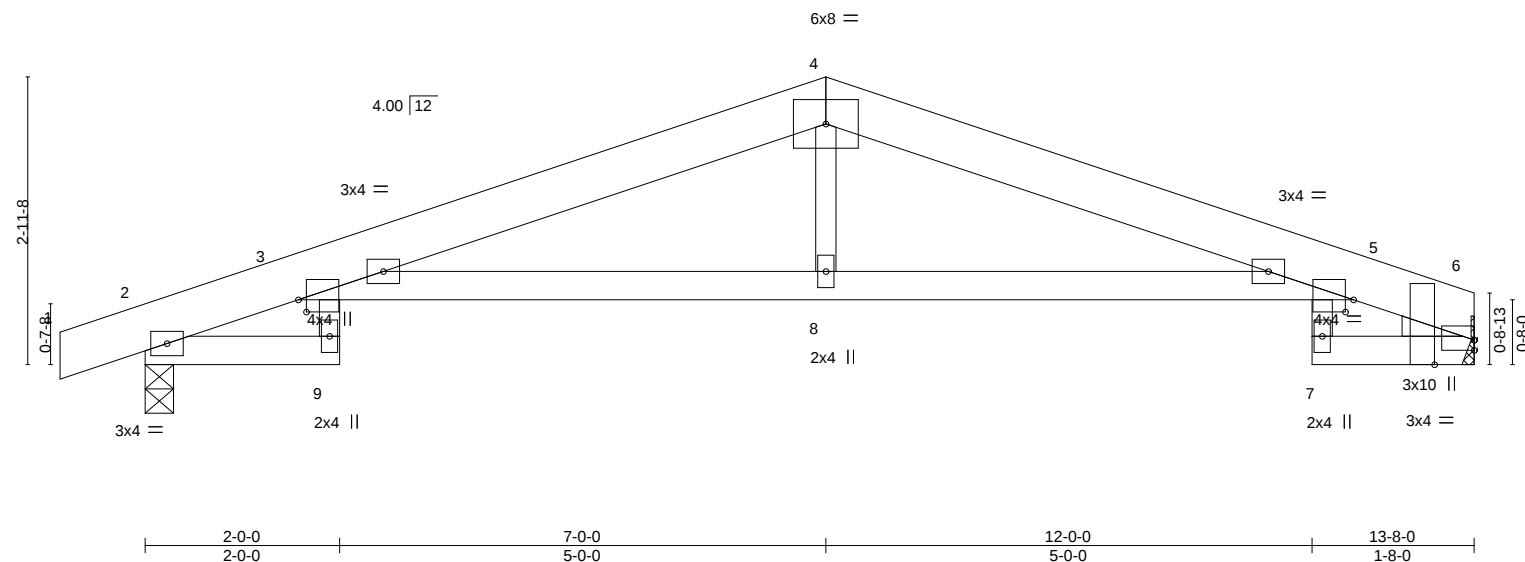
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:12 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-A5y8m8Q4BacWLIIdq4?EAIKlg4e_F?je?sq7h2szvTzb

-0-10-8	2-0-0	7-0-0	12-0-0	13-8-0
0-10-8	2-0-0	5-0-0	5-0-0	1-8-0

Scale = 1:23.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.63	Vert(LL)	-0.12	3-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.23	3-8	>704	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.18	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09	3-8	>999	240	Weight: 47 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
WEDGE
Right: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

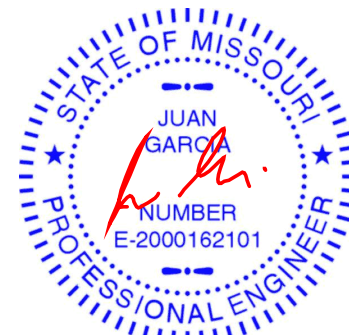
(size) 2=0-3-8, 6=Mechanical
Max Horz 2=47(LC 8)
Max Uplift 2=-129(LC 4), 6=-82(LC 5)
Max Grav 2=688(LC 1), 6=611(LC 1)

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

TOP CHORD 2-3=-278/69, 3-4=-1326/142, 4-5=-1329/153, 5-6=-322/62
BOT CHORD 3-8=-94/1258, 5-8=-94/1258
WEBS 4-8=0/260

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) The Fabrication Tolerance at joint 3 = 0%, joint 3 = 0%
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=129.
- 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.



January 15, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713818
B220008	A8	Common	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-eHWWW_TRIyukNyRC1eilPrYIst2MMjAt95UsFaJzvTza



Scale: 1/2"=1'

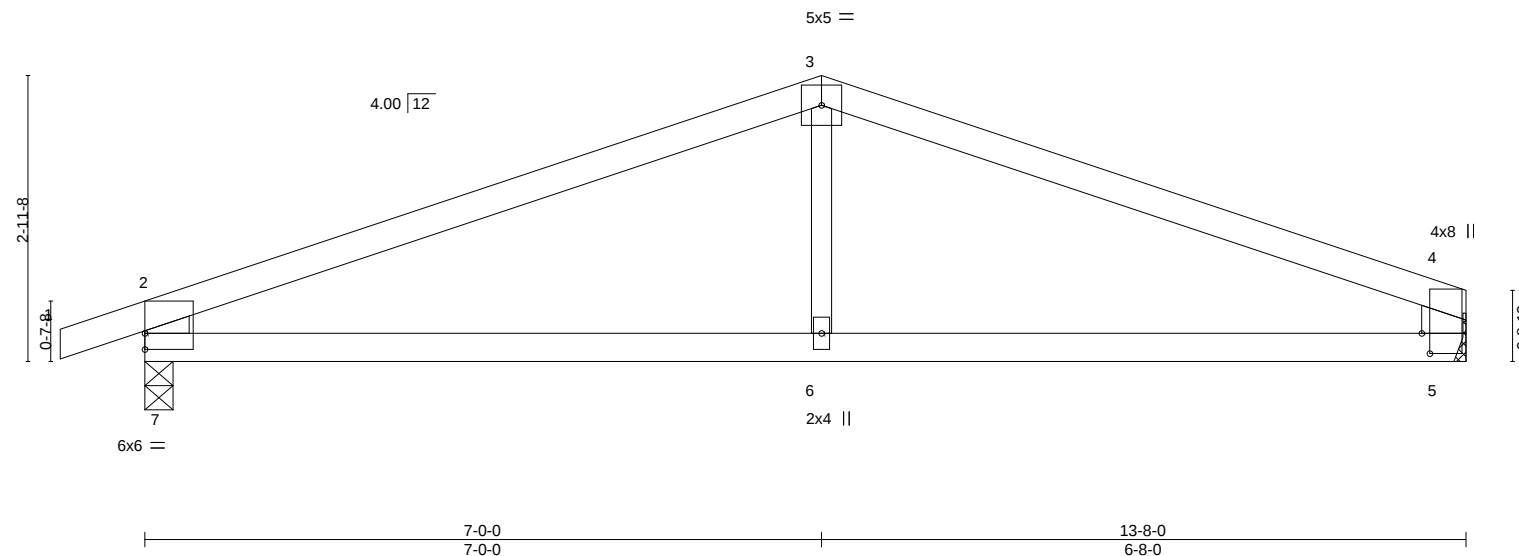


Plate Offsets (X,Y)--		[4:0-2-8,0-1-0], [7:0-0-0,0-2-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.56	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.06 6-7 >999 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) -0.14 6-7 >999 240
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.02 5 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) 0.04 6-7 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 36 lb FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-11 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-8, 5=Mechanical
 Max Horz 7=39(LC 8)
 Max Uplift 7=-136(LC 4), 5=-85(LC 5)
 Max Grav 7=675(LC 1), 5=591(LC 1)

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

TOP CHORD 2-3=-915/120, 3-4=-909/120, 2-7=-606/179, 4-5=-510/123
 BOT CHORD 6-7=-62/788, 5-6=-62/788
 WEBS 3-6=0/264

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=136.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job B220008	Truss B1	Truss Type Monopitch	Qty 5	Ply 1	Lot 150 HT Job Reference (optional)	I49713819
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Wheeler Lumber, Waverly, KS - 66871,

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-6U4vBpSKjBsEabnDCQGeNlq46SjlSZqlK8co7lvTzZ

0-10-8
0-10-8

8-0-0
8-0-0

5x14 MT18HS =

Scale = 1:19.6

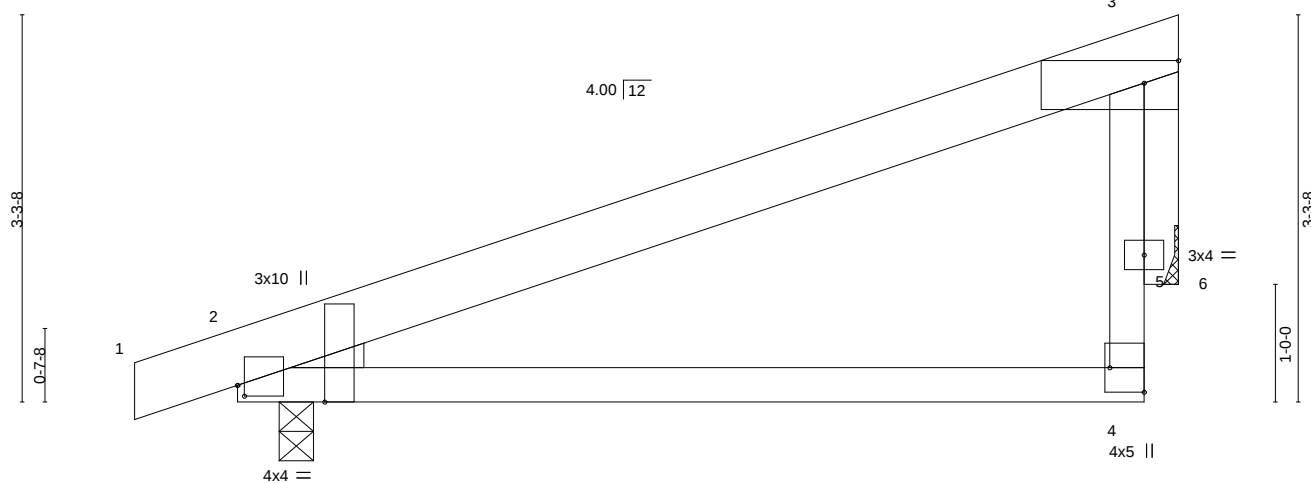


Plate Offsets (X,Y)--		[2:0-1-11,Edge], [2:0-0-11,0-1-2], [3:Edge,0-2-5], [4:Edge,0-3-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.34
TCDL 10.0	Lumber DOL	1.15	BC 0.33
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.36
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.06 2-4 >999 360
			Vert(CT) -0.12 2-4 >789 240
			Horz(CT) -0.01 6 n/a n/a
			Wind(LL) 0.02 2-4 >999 240
			PLATES
			MT20 197/144
			MT18HS 197/144
			Weight: 31 lb FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 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.

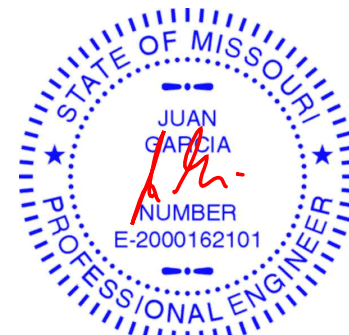
(size) 2=0-3-8, 6=Mechanical
Max Horz 2=97(LC 8)
Max Uplift 2=92(LC 4), 6=77(LC 8)
Max Grav 2=426(LC 1), 6=313(LC 1)

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

TOP CHORD 2-3=-278/6, 3-5=-305/220

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) All plates are MT20 plates unless otherwise indicated.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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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 150 HT	I49713820
B220008	B2	Monopitch	3	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:14 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-6U4vBpSKjBsEabnDCQGeNlq3MSmVSeRIK8co7IzvTzZ

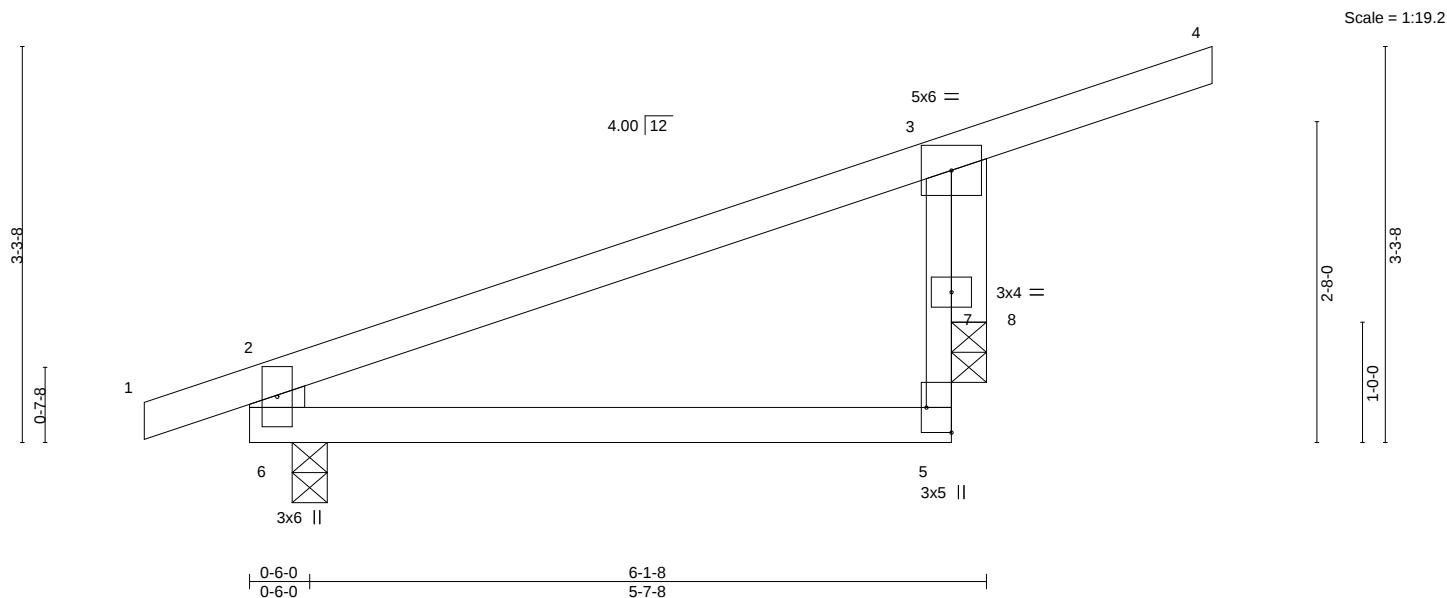
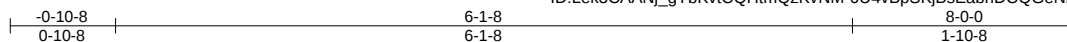


Plate Offsets (X,Y)-- [5:Edge,0-2-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.02	5-6	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.05	5-6	>999	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB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

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

TOP CHORD 2-6=278/108

NOTES-

- 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) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=130.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	149713821
B220008	C1	Roof Special Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:16 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-3sBfcVTaFp6ypvxbJql6SAwUoGTHwY1bnS5vBezvtzX

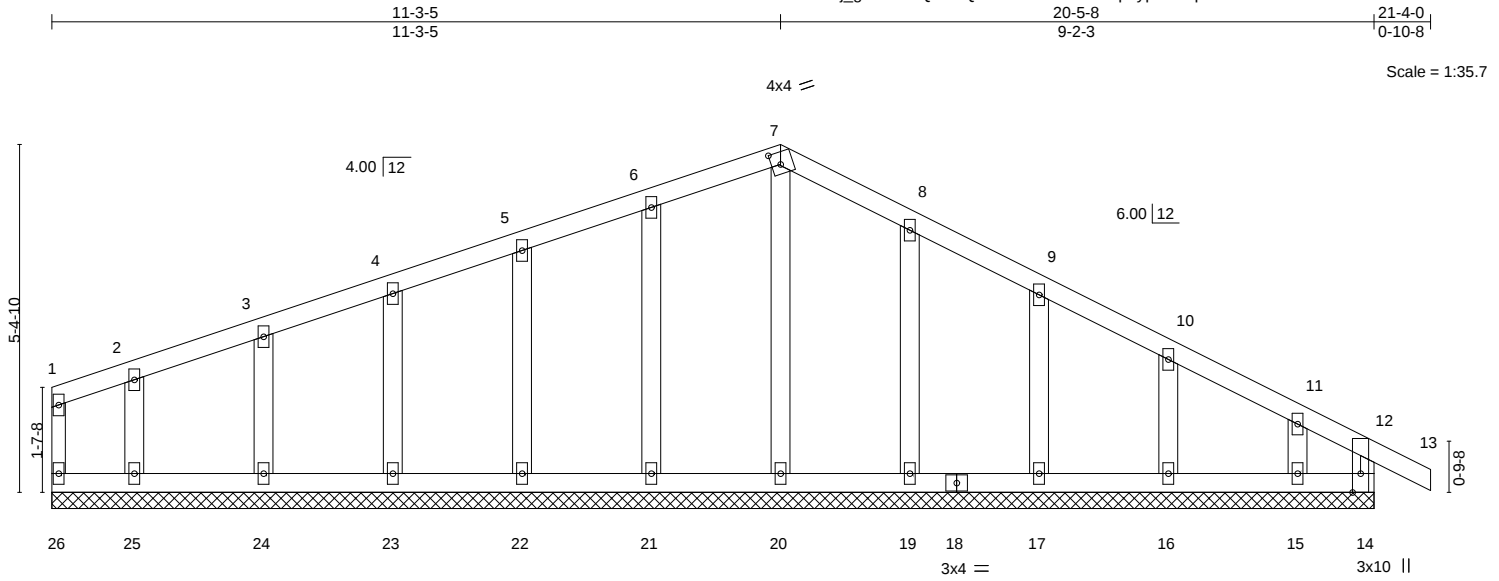


Plate Offsets (X,Y)--		[7:0-1-11,0-2-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.07	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) -0.00 13 n/r 120
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Vert(CT) -0.00 13 n/r 120
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) 0.00 14 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 83 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 14, 21, 22, 23, 24, 25, 19, 17, 16, 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	149713822
B220008	C2	Roof Special	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:17 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-X3l1prUC06EpR3VotYqL?OSVNfg1fv2k06qSj4zvTzW

Job Reference (optional)

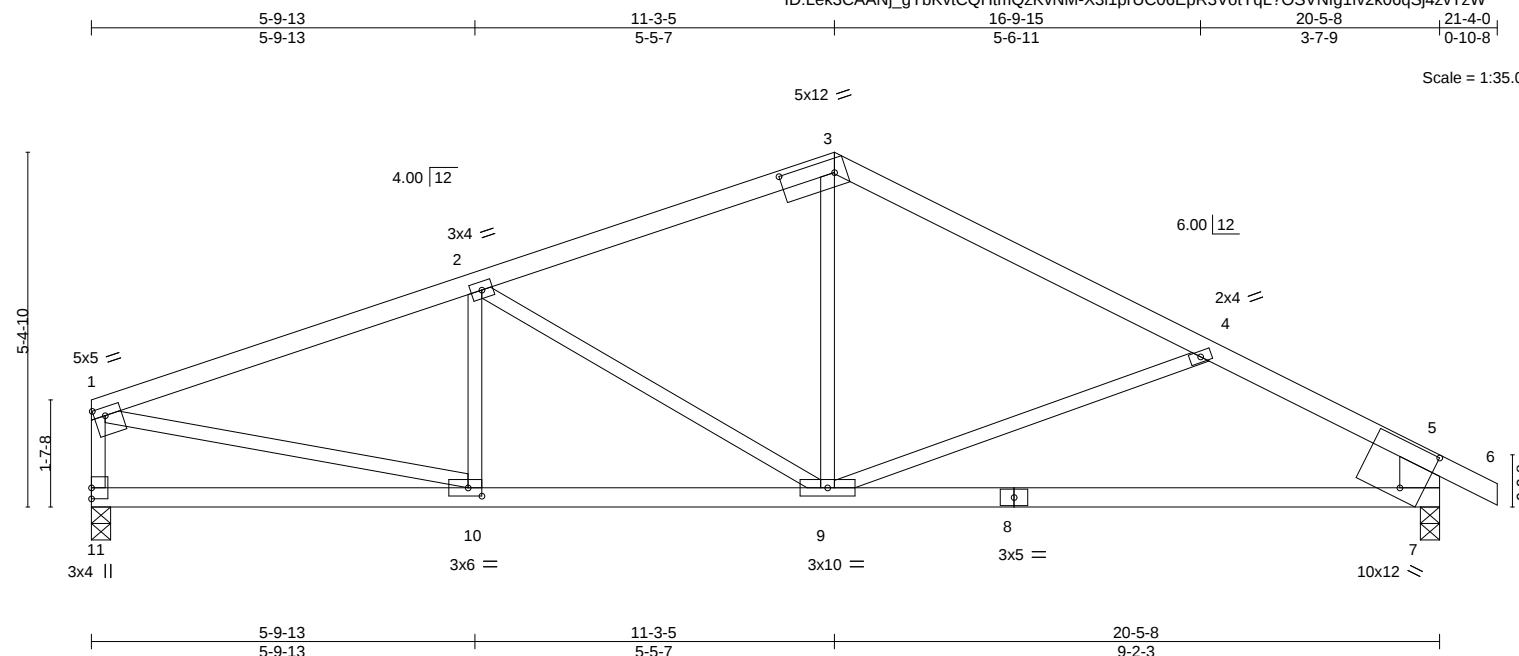


Plate Offsets (X,Y)-- [1:0-2,0-1-8], [3:0-9-13,0-2-8], [7:0-4-1,0-8-2], [10:0-2-8,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.17 7-9 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.33 7-9 >721 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05 9-10 >999 240	Weight: 73 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

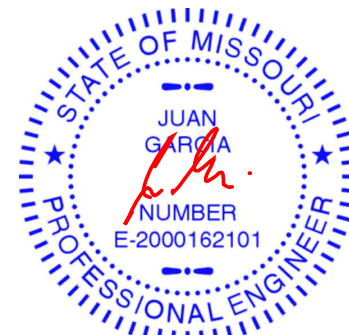
(size) 11=0-3-8, 7=0-3-8
Max Horz 11=86(LC 7)
Max Uplift 11=-130(LC 4), 7=-130(LC 9)
Max Grav 11=900(LC 1), 7=987(LC 1)

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

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

NOTES-

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



January 15, 2022

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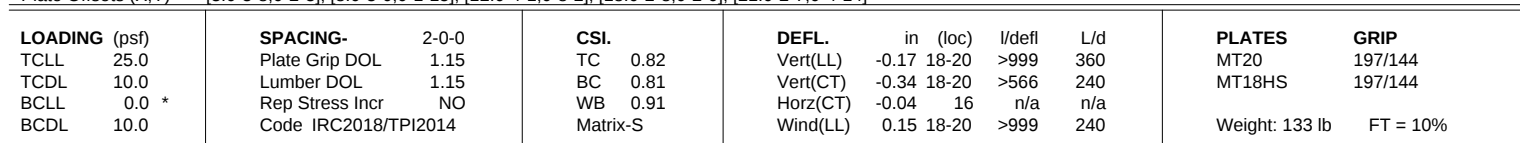
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:19 2022 Page 1
 ID:Lek3CAANj_gYbkvtCQHtmQzKvNM-TRtoEXWYkUXgMfA?zsp4pYqITJw7hN1TQJZoyzVtZU
 -0-10-8 2-9-0 9-6-12 16-4-8 21-0-0 33-5-7 36-10-0 37-8-8
 0-10-8 2-9-0 6-9-12 6-9-12 4-7-8 6-7-13 5-9-10 3-4-9 0-10-8
 Scale = 1:66.8



REACTIONS. (size) 16=0-3-8, 21=0-3-8, 12=0-3-8
 Max Horz 21=-90(LC 9)
 Max Uplift 16=-362(LC 8), 21=-267(LC 8), 12=-153(LC 30)
 Max Grav 16=2018(LC 1), 21=1131(LC 21), 12=940(LC 1)

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

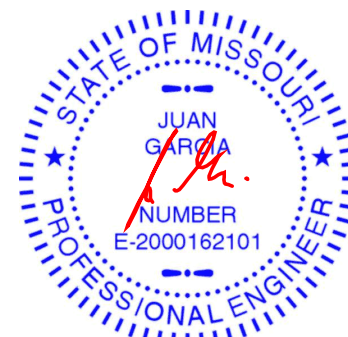
TOP CHORD 2-3=-1541/335, 3-4=-2359/549, 4-6=-2357/548, 6-7=-5/260, 7-8=-953/181,
 8-9=-1017/170, 9-10=-1216/249, 2-21=-962/220, 10-12=-847/199

BOT CHORD 20-21=-279/1287, 18-20=-282/1277, 16-17=-1293/312, 6-17=-1184/356, 15-16=-188/910,
 14-15=-191/905, 12-14=-163/978

WEBS 3-20=0/283, 3-18=-276/1117, 4-18=-715/337, 6-18=-560/2663, 7-16=-1347/168,
 8-14=0/349

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=362, 21=267, 12=153.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 68 lb up at 4-8-2, 100 lb down and 68 lb up at 6-8-2, 100 lb down and 68 lb up at 8-8-2, 100 lb down and 68 lb up at 10-8-2, and 100 lb down and 68 lb up at 12-8-2, and 100 lb down and 68 lb up at 14-8-2 on top chord, and 217 lb down and 84 lb up at 2-9-0, 33 lb down at 4-8-2, 33 lb down at 6-8-2, 33 lb down at 8-8-2, 33 lb down at 10-8-2, and 33 lb down at 12-8-2, and 33 lb down at 14-8-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continue on page 2
 C1) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



January 15, 2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT
B220008	C3	Roof Special Girder	1	1	I49713823
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:19 2022 Page 2
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-TRtoEXWTYkUXgMfA?zsp4pYqlTJw7hN1TQJZoyzvTzU

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, 3-7=-70, 7-8=-70, 8-10=-70, 10-11=-70, 17-21=-20, 12-16=-20

Concentrated Loads (lb)

Vert: 20=-217(B) 22=-50(B) 23=-50(B) 24=-50(B) 25=-50(B) 26=-50(B) 27=-50(B) 28=-24(B) 29=-24(B) 30=-24(B) 31=-24(B) 32=-24(B) 33=-24(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	149713824
B220008	C4	Roof Special	1	1		

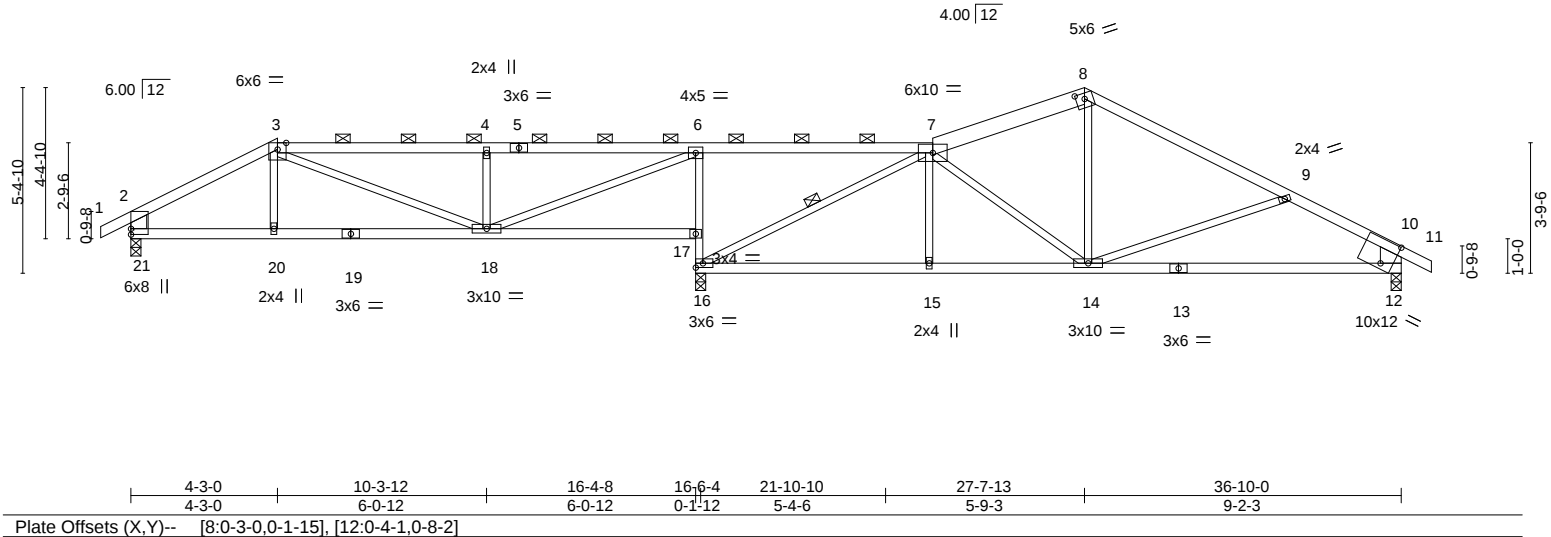
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:21 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Pq?YfCXj4LkEwgpZ6OuH9EdC6H3Hbe0KxkogsrvTzS

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

Scale = 1:66.8



Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	149713825
B220008	C5	Roof Special	1	1	Job Reference (optional)	

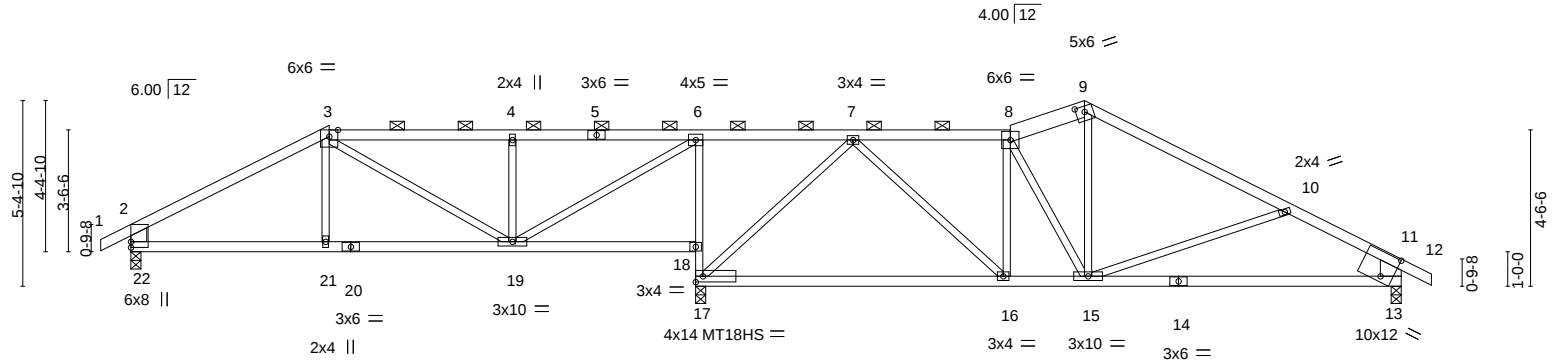
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:23 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-MD7I4uZzby?y9_zyEpxlFfiYX4iZ3VydO2HnxkzvTzQ

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

Scale = 1:66.8



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

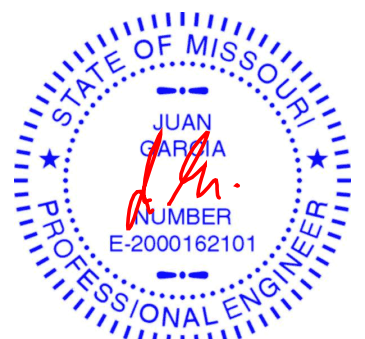
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.19 16-17	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.39 16-17	>614	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	-0.04 17	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05 19-21	>999	240	Weight: 136 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 4-11-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-14 max.): 3-8.
8-9: 2x6 SPF No.2, 9-12: 2x4 SPF 2100F 1.8E	
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-17: 2x3 SPF No.2	6-0-0 oc bracing: 18-19
WEBS 2x3 SPF No.2 *Except*	4-4-0 oc bracing: 17-18.
2-22: 2x6 SPF No.2, 11-13: 2x8 SP DSS	

REACTIONS.	(size) 17=0-3-8, 22=0-3-8, 13=0-3-8
	Max Horz 22=90(LC 9)
	Max Uplift 17=-277(LC 8), 22=-154(LC 8), 13=-147(LC 9)
	Max Grav 17=1706(LC 1), 22=776(LC 21), 13=953(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-956/186, 3-4=-764/199, 4-6=-762/197, 7-8=-994/162, 8-9=-921/174, 9-10=-1032/147, 10-11=-1236/239, 2-22=-699/188, 11-13=-855/194
BOT CHORD	21-22=-111/760, 19-21=-113/758, 17-18=-941/211, 6-18=-878/236, 16-17=-73/608, 15-16=-55/998, 13-15=-155/996
WEBS	4-19=-411/173, 6-19=-182/1016, 7-17=-1000/175, 7-16=0/532, 8-15=-365/86, 9-15=-25/415

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=277, 22=154, 13=147.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

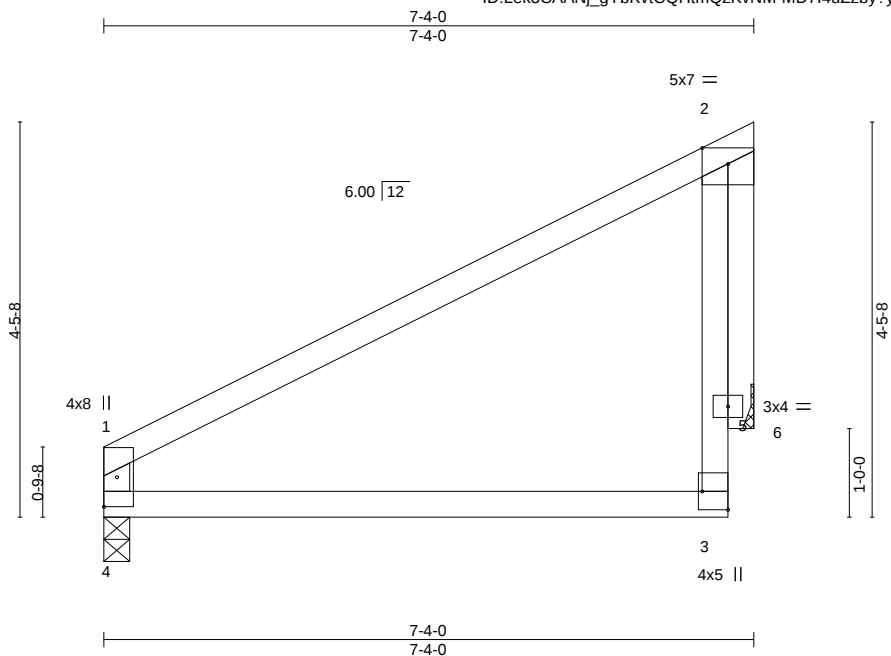


January 15, 2022

Job B220008	Truss C6	Truss Type Monopitch	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713826
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:23 2022 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-MD7I4uZzby?y9_zyEpxlFfias4ou3eHdO2HnxkvTzQ



Scale = 1:26.0

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

LUMBER-

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

BRACING-

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

REACTIONS.

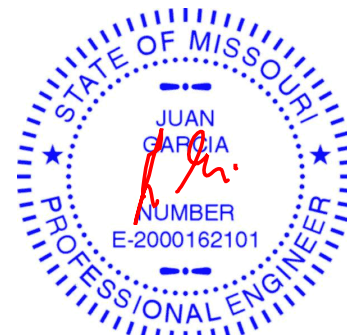
(size) 4=0-3-8, 6=Mechanical
Max Horz 4=113(LC 8)
Max Uplift 4=-18(LC 8), 6=-96(LC 8)
Max Grav 4=320(LC 1), 6=288(LC 1)

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

TOP CHORD 1-4=-281/78

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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



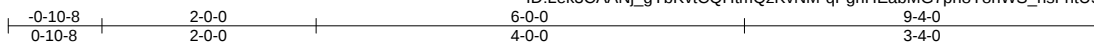
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	149713827
B220008	C7	Roof Special Girder	1	1	Job Reference (optional)	

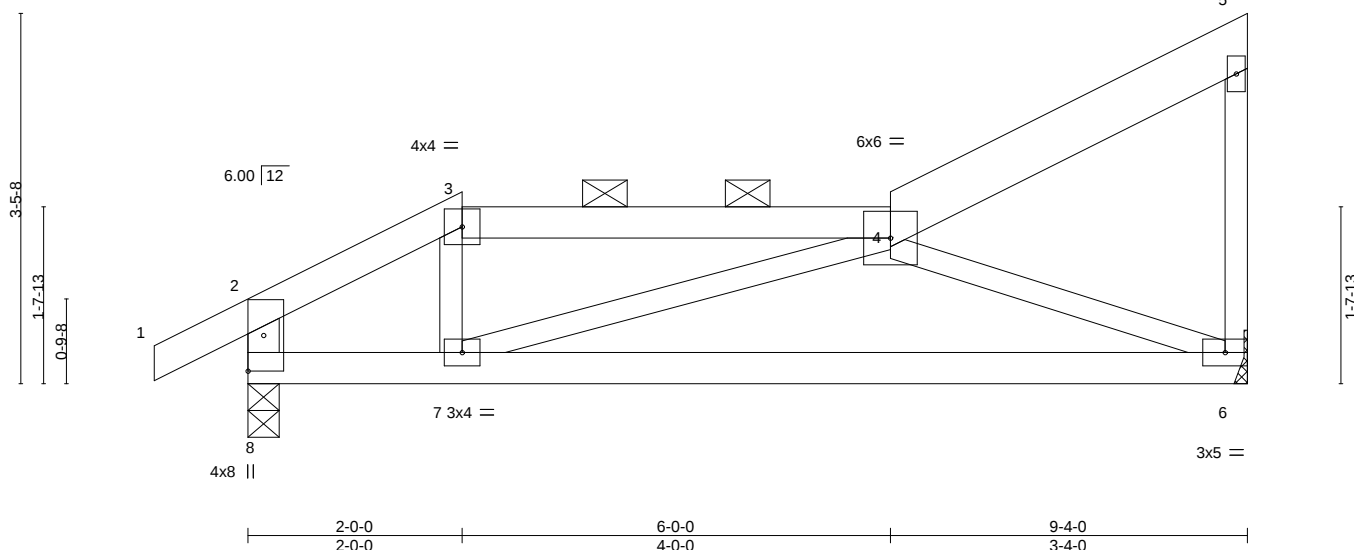
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:24 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-qPghHEabMG7pn8Y8nWS_nsFntU5Wo7dmd1KTAzvTzP



2x4 || 5 Scale = 1:21.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.09	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.19	6-7	>565	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.21	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	6-7	>999	240	Weight: 36 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 8=0-3-8
Max Horz 8=133(LC 5)
Max Uplift 6=-95(LC 8), 8=-129(LC 8)
Max Grav 6=404(LC 1), 8=482(LC 1)

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

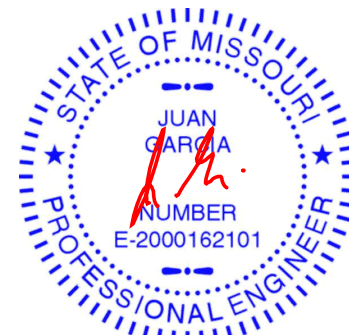
TOP CHORD 2-3=-560/94, 3-4=-442/103, 2-8=-434/91
BOT CHORD 7-8=-112/449, 6-7=-171/582
WEBS 4-6=-618/222

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=129.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 95 lb up at 2-0-0 on top chord, and 7 lb down and 5 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



January 15, 2022

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713827
B220008	C7	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:25 2022 Page 2
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-lbE3VaaE7aFgPH7KLDzDK4oyduRIXatwrMmt0czvTzO

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=3(F)

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713828
B220008	C8	Roof Special	1	1	Job Reference (optional)	

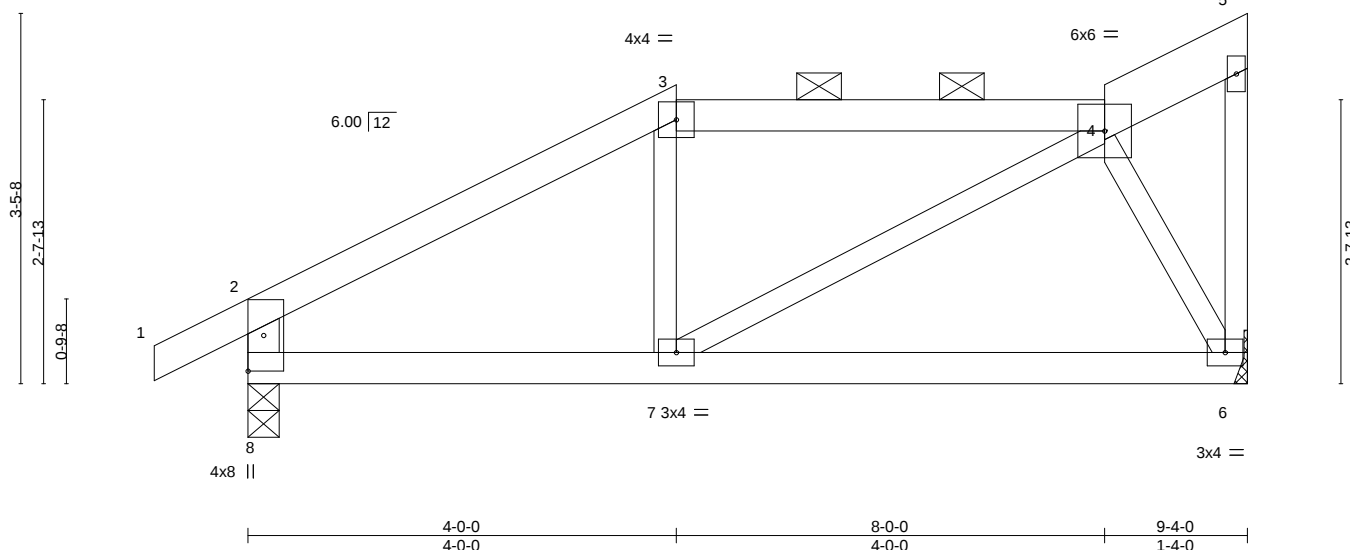
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:25 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-lbE3VaaE7aFgPH7KLDzDK4o_iuVeXciwrMmt0czvTzO

-0-10-8	4-0-0	8-0-0	9-4-0
0-10-8	4-0-0	4-0-0	1-4-0

2x4 || 5 Scale = 1:21.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	-0.03	6-7	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.07	6-7	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01	6-7	>999	240	
								Weight: 34 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

TOP CHORD 2-3=-506/78, 3-4=-391/102, 2-8=-433/110
BOT CHORD 7-8=-63/388
WEBS 4-6=-405/130

NOTES-

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



January 15, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss C9	Truss Type Half Hip	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713829
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:26 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-mnoRiwbstNX0RhXvxUSsHK0vIoAG_?34?WRY2zvTzN

-0-10-8 0-10-8	7-3-0 7-3-0	14-4-0 7-1-0
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6x6 =

Scale = 1:28.5

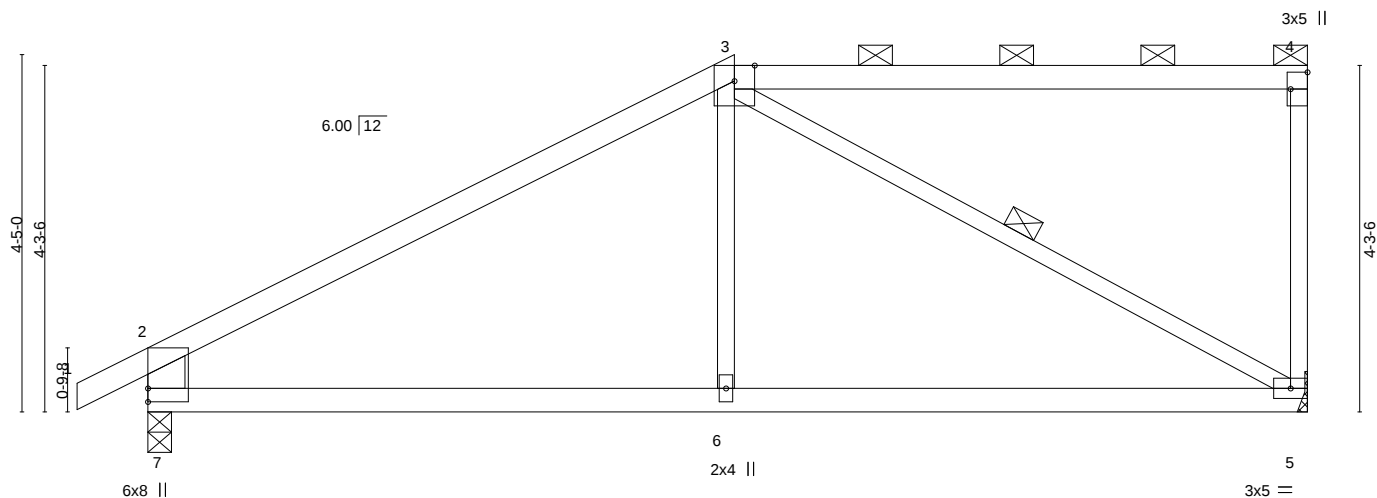


Plate Offsets (X,Y)--	[4:Edge,0-2-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.80	Vert(LL)	-0.08	5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.15	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	6-7	>999	240	Weight: 48 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 7=0-3-8
Max Horz 7=174(LC 5)
Max Uplift 5=113(LC 5), 7=101(LC 8)
Max Grav 5=627(LC 1), 7=710(LC 1)

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

TOP CHORD 2-3=-796/72, 2-7=-646/151
BOT CHORD 6-7=-130/607, 5-6=-133/603
WEBS 3-6=0/314, 3-5=-663/108

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=113, 7=101.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 15,2022

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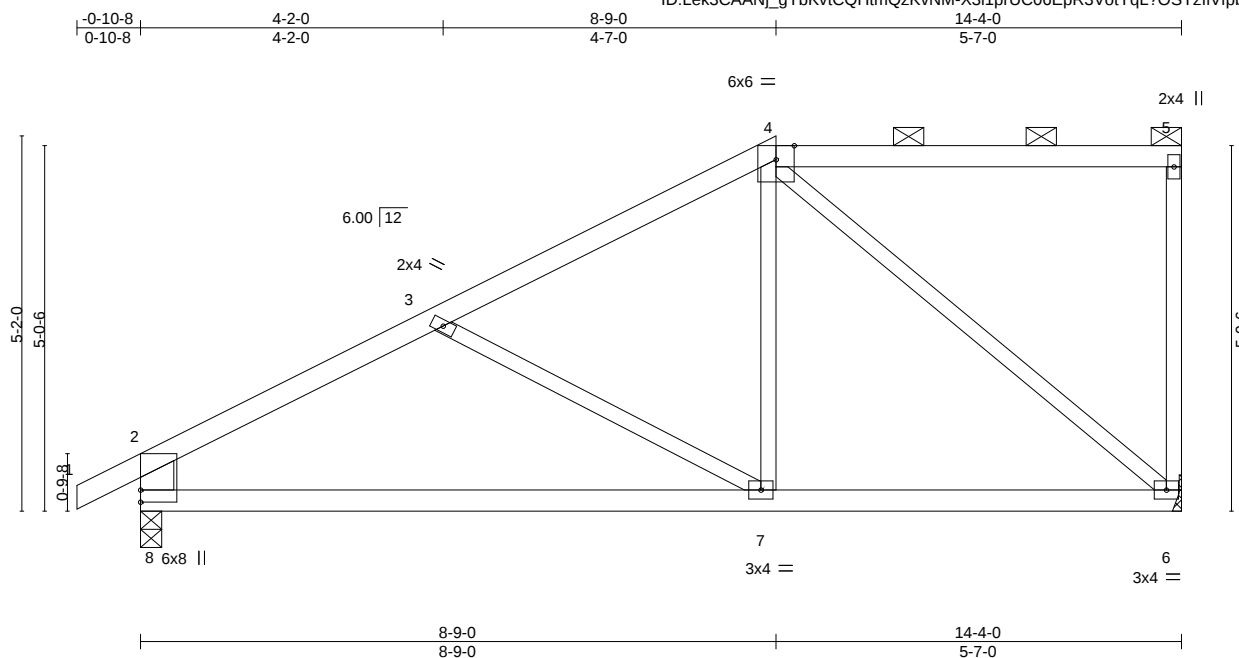
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss C10	Truss Type Half Hip	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713830
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:17 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-X3l1prUC06EpR3VotYqL?OSYzfVfpbk06qSj4zvTzW



Scale: 3/8"=1'

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.12	7-8	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.24	7-8	>707	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.01	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	6-7	>999	240	
									Weight: 53 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

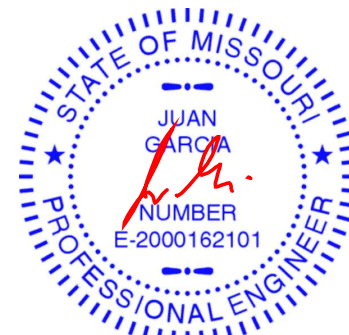
(size) 6=Mechanical, 8=0-3-8
Max Horz 8=205(LC 5)
Max Uplift 6=-110(LC 5), 8=-108(LC 8)
Max Grav 6=627(LC 1), 8=710(LC 1)

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

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=110, 8=108.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 15, 2022

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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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 B220008	Truss D1	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 150 HT I49713831
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:28 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-iAwB7cd6QVdFGlrV0MWwxiPXh5Z7kz9MYJ?YcxzvTzL

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

4x4 =

Scale = 1:45.8

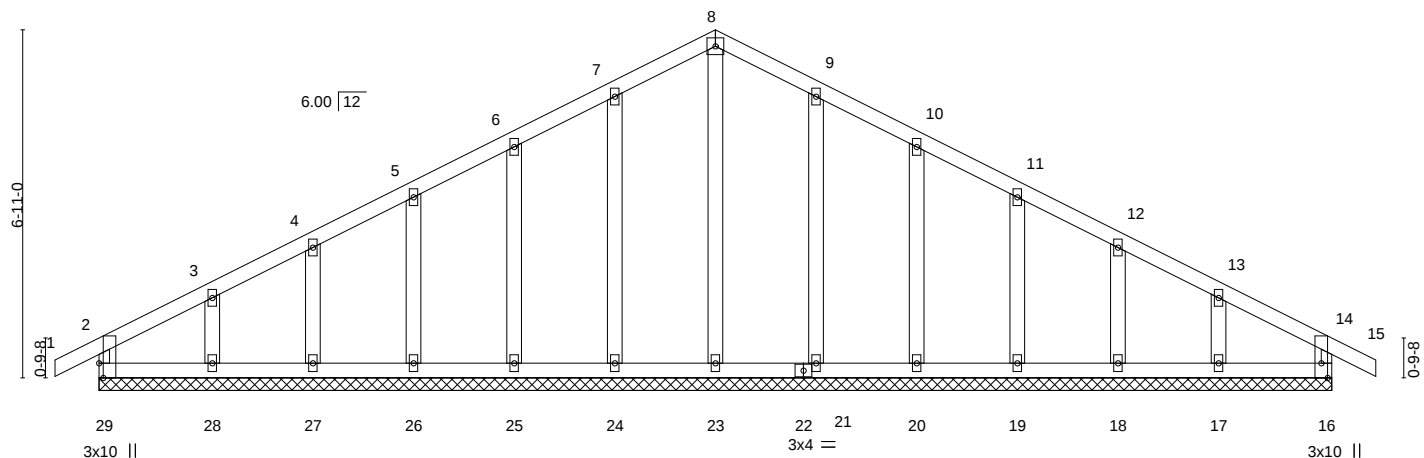


Plate Offsets (X,Y)-- [29:0-3-8,Edge]		24-6-0 24-6-0							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	15	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	15	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	16	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 108 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 24-6-0.

(lb) - Max Horz 29=105(LC 7)

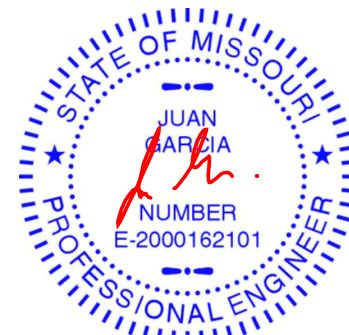
Max Uplift All uplift 100 lb or less at joint(s) 29, 16, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17

Max Grav All reactions 250 lb or less at joint(s) 29, 16, 23, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 16, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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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 B220008	Truss D2	Truss Type Common	Qty 7	Ply 1	Lot 150 HT 149713832
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:30 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-eZ2yYHeMy6tzV3?l8nZO17VjUv3WCqsf?dUehqzvTzJ

0-10-8 5-0-14 12-3-0 19-5-3 24-6-0 25-4-8
0-10-8 5-0-14 7-2-3 7-2-2 5-0-13 0-10-8

4x8 =

Scale = 1:46.6

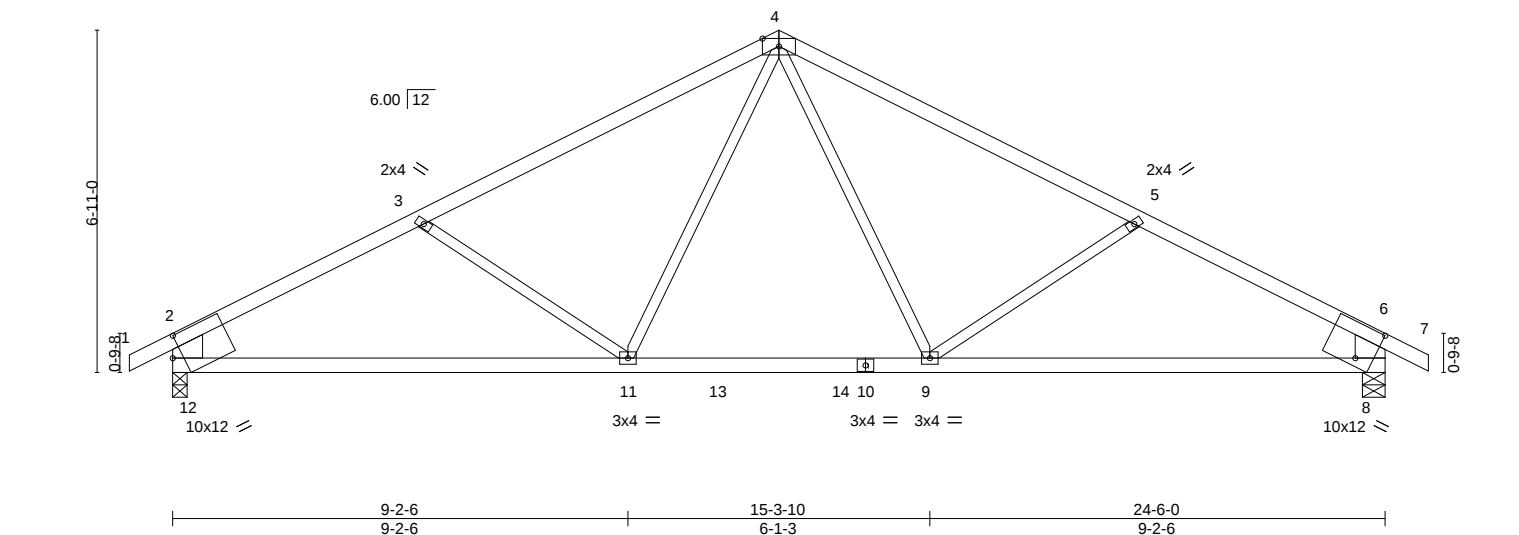


Plate Offsets (X,Y)--	[8:0-4-1,0-8-2], [12:0-2-7,0-4-14]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.19 9-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	-0.35 11-12	>825	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.12 9-11	>999	240	Weight: 84 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-8: 2x8 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 12=0-3-8, 8=0-5-8
Max Horz 12=109(LC 7)
Max Uplift 12=-160(LC 8), 8=-160(LC 9)
Max Grav 12=1191(LC 2), 8=1191(LC 2)

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

TOP CHORD 2-3=-1665/262, 3-4=-1432/184, 4-5=-1432/184, 5-6=-1665/262, 2-12=-1050/207,
6-8=-1050/207
BOT CHORD 11-12=-258/1398, 9-11=-39/1048, 8-9=-164/1384
WEBS 4-9=-45/443, 5-9=-332/243, 4-11=-45/443, 3-11=-332/243

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) 12=160, 8=160.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15,2022

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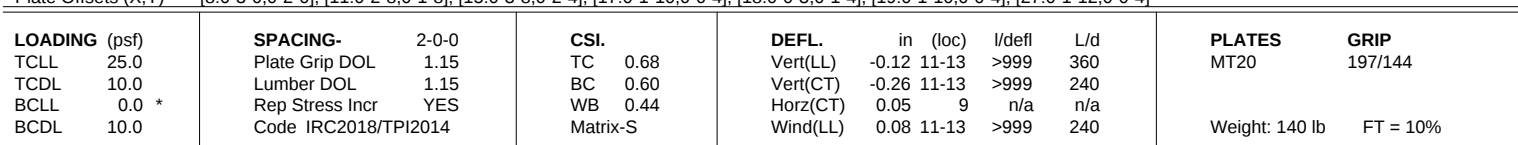
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:33 2022 Page 1
 ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-38j4AJhFF1FYMWktpv65em7F_68TP8G5hbil8zvTzG
 0-10-8 7-6-9 14-9-0 21-11-8 29-4-8
 0-10-8 7-6-9 7-2-8 7-5-0



REACTIONS. (size) 9=5-4-0, 15=0-3-8, 10=0-3-8
 Max Horz 15=129(LC 5)
 Max Uplift 9=-171(LC 9), 15=-190(LC 8)
 Max Grav 9=1132(LC 1), 15=1345(LC 1), 10=206(LC 3)

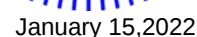
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=-2010/261, 3-5=-1427/238, 5-7=-1429/241, 7-8=-1828/267, 2-15=-1270/231, 8-9=-1116/206
BOT CHORD	14-15=-285/603, 13-14=-261/1695, 11-13=-165/1544, 10-11=-92/271, 9-10=-92/271
WEBS	3-13=-657/235, 5-13=-59/710, 7-13=-509/247, 2-14=-12/1095, 8-11=-79/1278

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2'-0" 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=171, 15=190.
- 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.





Job B220008	Truss E2	Truss Type Common	Qty 2	Ply 1	Lot 150 HT 149713834
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

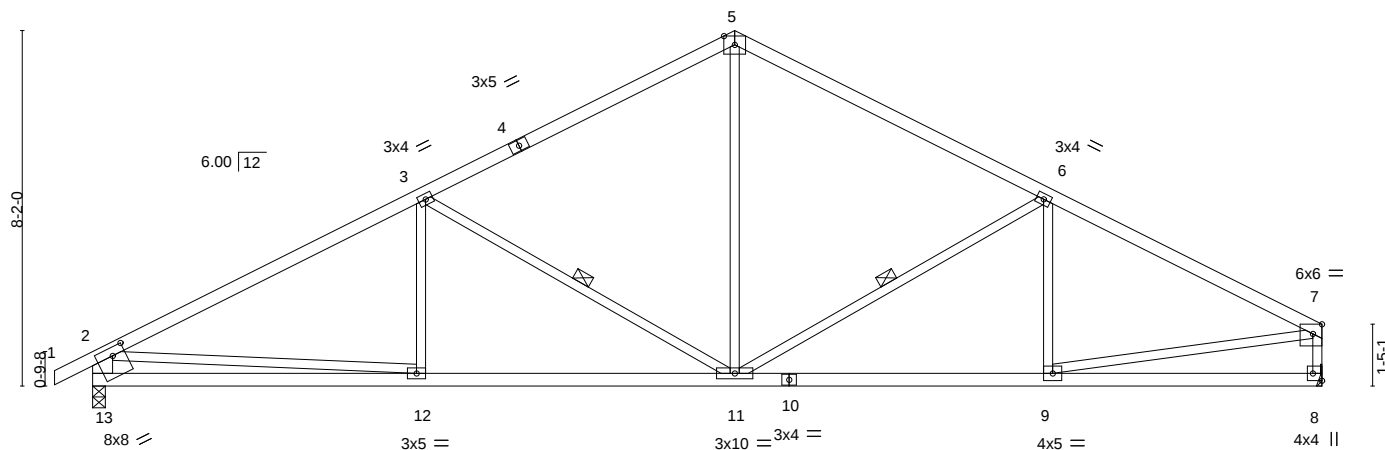
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:39 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-ul4MRMl0qt0h4RB0AADVu1NH_XCqpr?_3X9dVozvTzA

0-10-8 0-10-8	7-6-9 7-6-9	14-9-0 7-2-8	21-11-7 7-2-6	28-2-14 6-3-8
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5x6 =

Scale = 1:52.9



7-6-9 7-6-9	14-9-0 7-2-8	21-11-7 7-2-6	28-2-14 6-3-8
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Plate Offsets (X,Y)-- [7:0-2-8,Edge], [8:Edge,0-2-8], [13:0-3-8,0-2-4]

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 0.65	Vert(LL)	-0.09 11-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.18 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 11-12	>999	240	Weight: 108 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-11, 6-11

REACTIONS.

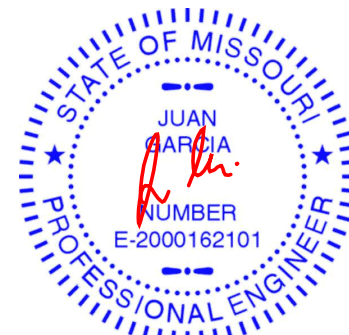
(size) 13=0-3-8, 8=Mechanical
Max Horz 13=143(LC 5)
Max Uplift 13=184(LC 8), 8=150(LC 9)
Max Grav 13=1335(LC 1), 8=1254(LC 1)

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

TOP CHORD 2-3=-1991/250, 3-5=-1401/220, 5-6=-1401/228, 6-7=-1765/217, 2-13=-1261/225, 7-8=-1195/179
BOT CHORD 12-13=-286/599, 11-12=-252/1678, 9-11=-143/1507
WEBS 3-11=-661/235, 5-11=-47/681, 6-11=-492/207, 2-12=-0/1083, 7-9=-112/1420

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) 13=184, 8=150.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss E3	Truss Type Common	Qty 4	Ply 1	Lot 150 HT I49713835
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:40 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-MUeKeimebB8YibmDjtkkREvS3xY_YIE7IBvA1EzvTz9

Job Reference (optional)

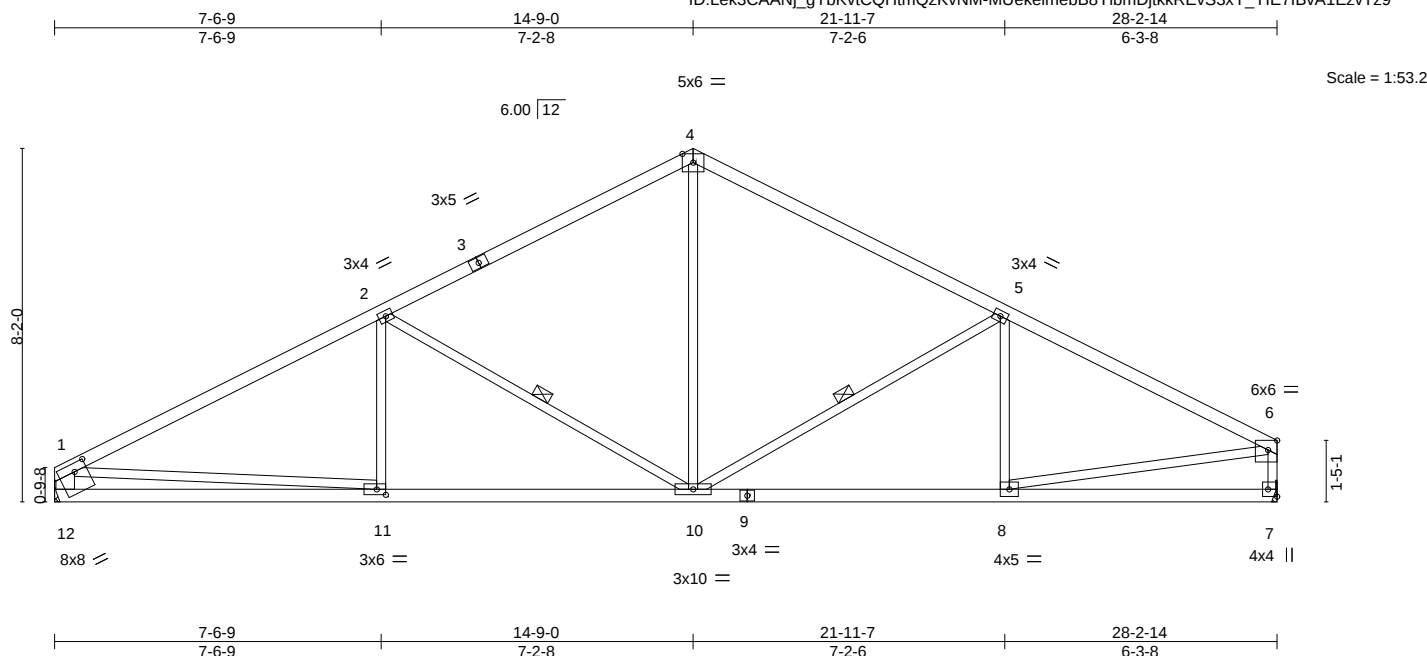


Plate Offsets (X,Y)-- [6:0-2-8,Edge], [7:Edge,0-2-8], [11:0-2-8,0-1-8], [12:0-3-8,0-2-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.09 10-11 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.19 10-11 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.04 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04 10-11 >999 240	Weight: 106 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-12: 2x6 SPF No.2

BRACING-

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

REACTIONS.

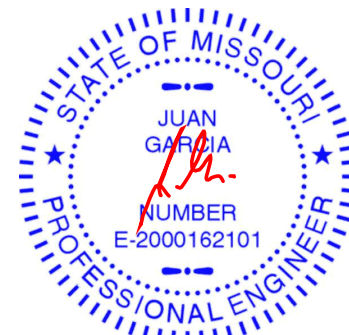
(size) 12=Mechanical, 7=Mechanical
Max Horz 12=113(LC 5)
Max Uplift 12=-16(LC 8), 7=-11(LC 9)
Max Grav 12=1256(LC 1), 7=1256(LC 1)

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

TOP CHORD 1-2=-1997/42, 2-4=-1406/69, 4-5=-1403/74, 5-6=-1768/35, 1-12=-1181/57, 6-7=-1196/41
BOT CHORD 11-12=-93/455, 10-11=-41/1694, 8-10=0/1510
WEBS 2-10=-676/115, 4-10=0/690, 5-10=-493/108, 1-11=0/1250, 6-8=0/1422

NOTES-

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



January 15, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss E4	Truss Type Common	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713836
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:41 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHmQzKvNM-qgC6s2nGMUGPJILPHaFzzSScRLt_HI_HXrekahzvTz8

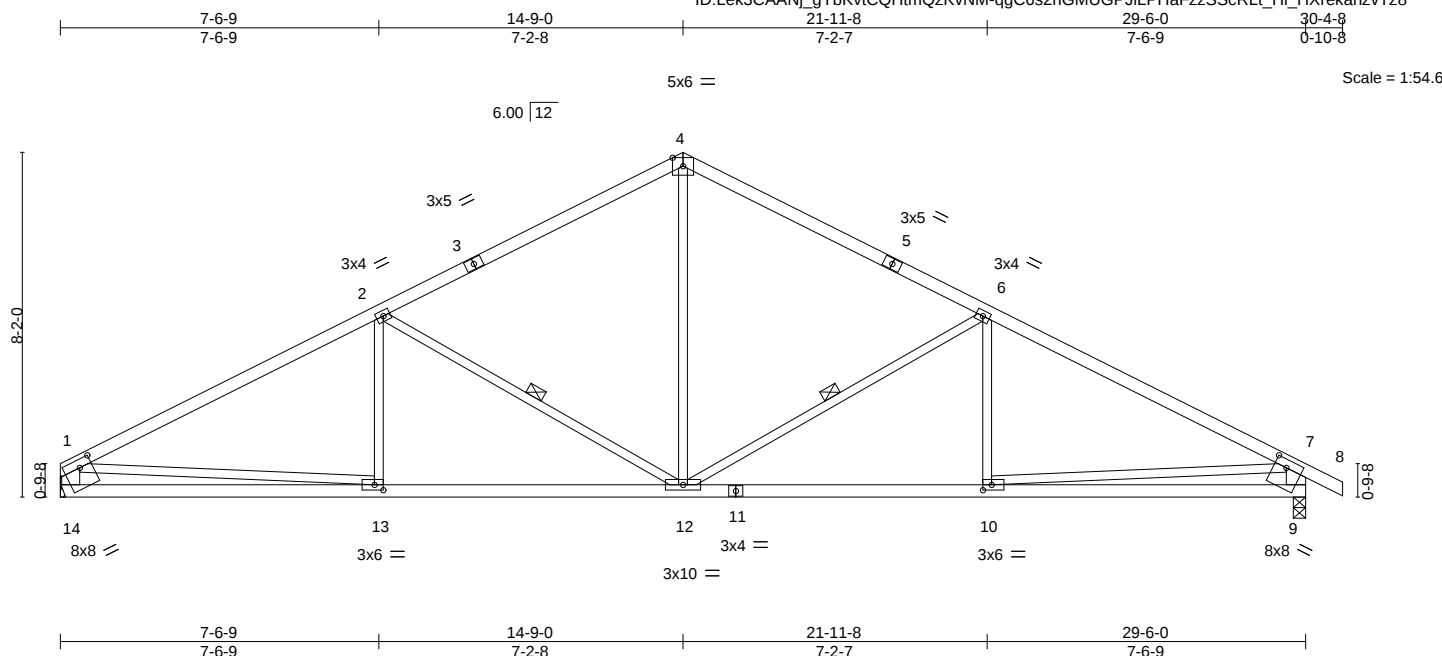


Plate Offsets (X,Y)--	[9:0-3-8,0-2-4], [10:0-2-8,0-1-8], [13:0-2-8,0-1-8], [14:0-3-8,0-2-4]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.71	Vert(LL)	-0.10 12-13	>999	360	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.21 12-13	>999	240			
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.46	Horz(CT)	0.05 9	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05 12-13	>999	240			
								Weight: 111 lb	FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-14,7-9: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-12, 2-12

REACTIONS.

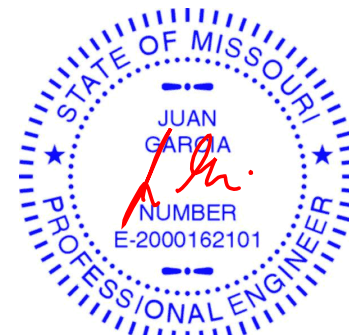
(size) 14=Mechanical, 9=0-3-8
Max Horz 14=-109(LC 4)
Max Uplift 14=-15(LC 8), 9=-27(LC 9)
Max Grav 14=1305(LC 1), 9=1386(LC 1)

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

TOP CHORD 1-2=-2092/40, 2-4=-1508/71, 4-6=-1506/71, 6-7=-2089/40, 1-14=-1230/55, 7-9=-1312/67
BOT CHORD 13-14=-86/468, 12-13=-31/1778, 10-12=0/1766, 9-10=-73/609
WEBS 4-12=0/781, 6-12=-657/112, 2-12=-671/115, 1-13=0/1327, 7-10=0/1161

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 9.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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 B220008	Truss E5	Truss Type Common	Qty 1	Ply 1	Lot 150 HT I49713837
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:42 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQZKvNM-lsmU3Oou7oOGxvwbrlmCWf?nDkDI0DfQmVOH67zvTz7

Job Reference (optional)

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

5x6 =

Scale = 1:55.1

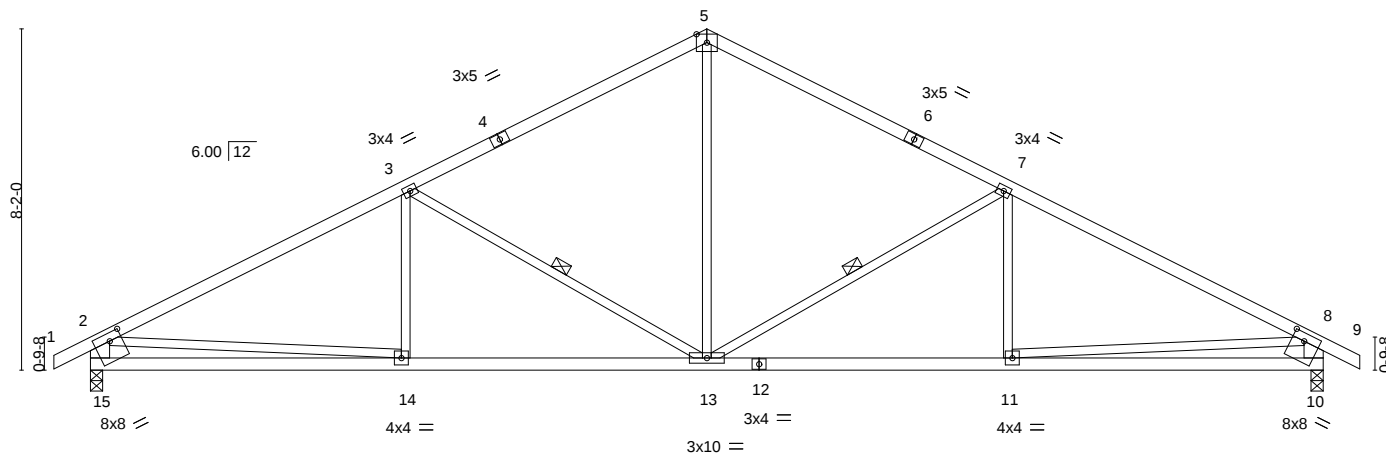


Plate Offsets (X,Y)--	[10:0-3-8,0-2-4], [15:0-3-8,0-2-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.10 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.20 13-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.06 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 13-14	>999	240	Weight: 112 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-15,8-10: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-13, 3-13

REACTIONS.

(size) 15=0-3-8, 10=0-3-8
Max Horz 15=123(LC 7)
Max Uplift 15=-187(LC 8), 10=-187(LC 9)
Max Grav 15=1384(LC 1), 10=1384(LC 1)

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

TOP CHORD 2-3=-2086/255, 3-5=-1503/235, 5-7=-1503/235, 7-8=-2086/255, 2-15=-1310/227, 8-10=-1310/227
BOT CHORD 14-15=-276/609, 13-14=-246/1763, 11-13=-128/1763, 10-11=-167/609
WEBS 5-13=-53/772, 7-13=-657/234, 3-13=-657/234, 2-14=-7/1158, 8-11=-16/1158

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) 15=187, 10=187.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15,2022

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



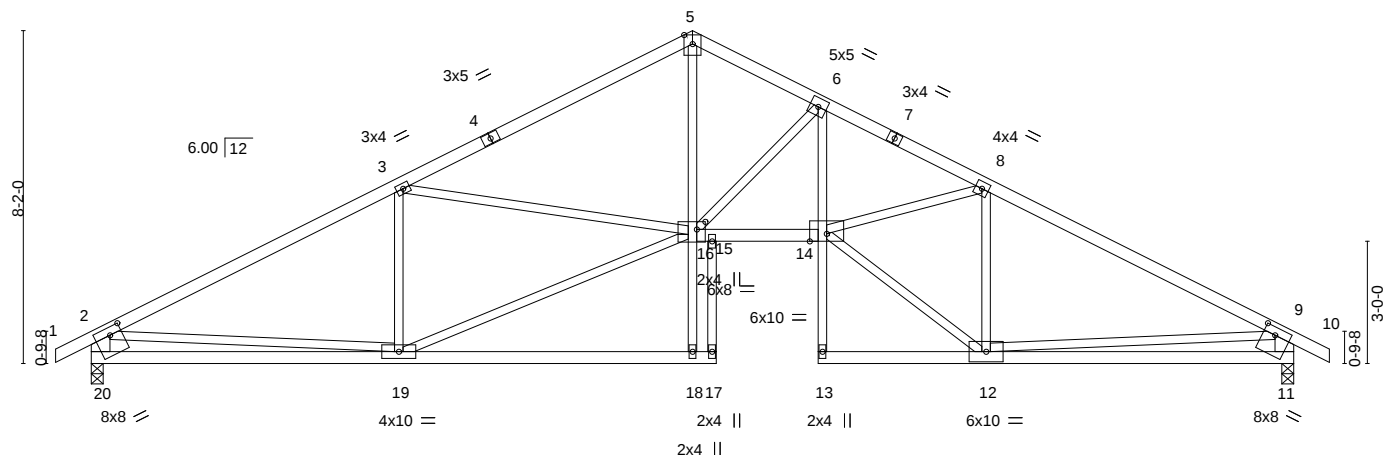
16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:43 2022 Page 1

-0-10-8	7-6-9	14-9-0	15-4-0	17-10-0	21-11-7	29-6-0	30-4-8
0-10-8	7-6-9	7-2-8	0-7-0	2-6-0	4-1-7	7-6-9	0-10-8

5x6 ||

Scale = 1:56.5



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.94	Vert(LL) -0.20 13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.37 13	>952	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.22 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 14	>999	240	Weight: 129 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	6-13: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	2-20.9-11: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 20=0-3-8, 11=0-3-8
 Max Horz 20=123(LC 7)
 Max Uplift 20=-187(LC 8), 11=-187(LC 9)
 Max Grav 20=1384(LC 1), 11=1384(LC 1)

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

TOP CHORD 2-3=-2090/254, 3-5=-2319/240, 5-6=-2255/275, 6-8=-3262/281, 8-9=-2063/246,
2-20=-1312/227, 9-11=-1308/229

BOT CHORD 19-20=-278/603, 15-16=-107/2836, 14-15=-108/2838, 6-14=-96/1155, 11-12=-208/690

WEBS 3-19=-667/195, 3-16=-37/324, 16-18=0/398, 5-16=-93/1598, 6-16=-1218/190,
12-14=-144/2168, 8-14=-39/1149, 8-12=-1295/163, 2-19=-12/1168, 9-12=-6/1047,
16-19=-269/1897

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=187, 11=187.
- 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.



January 15, 2022



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/25/2020) 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 B220008	Truss E8	Truss Type Roof Special	Qty 1	Ply 1	Lot 150 HT 149713840
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Ae0?vmrPB1uhQW48r8gV9TzMZ2yzb0g7MVfuzvTz3

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

Scale = 1:51.6

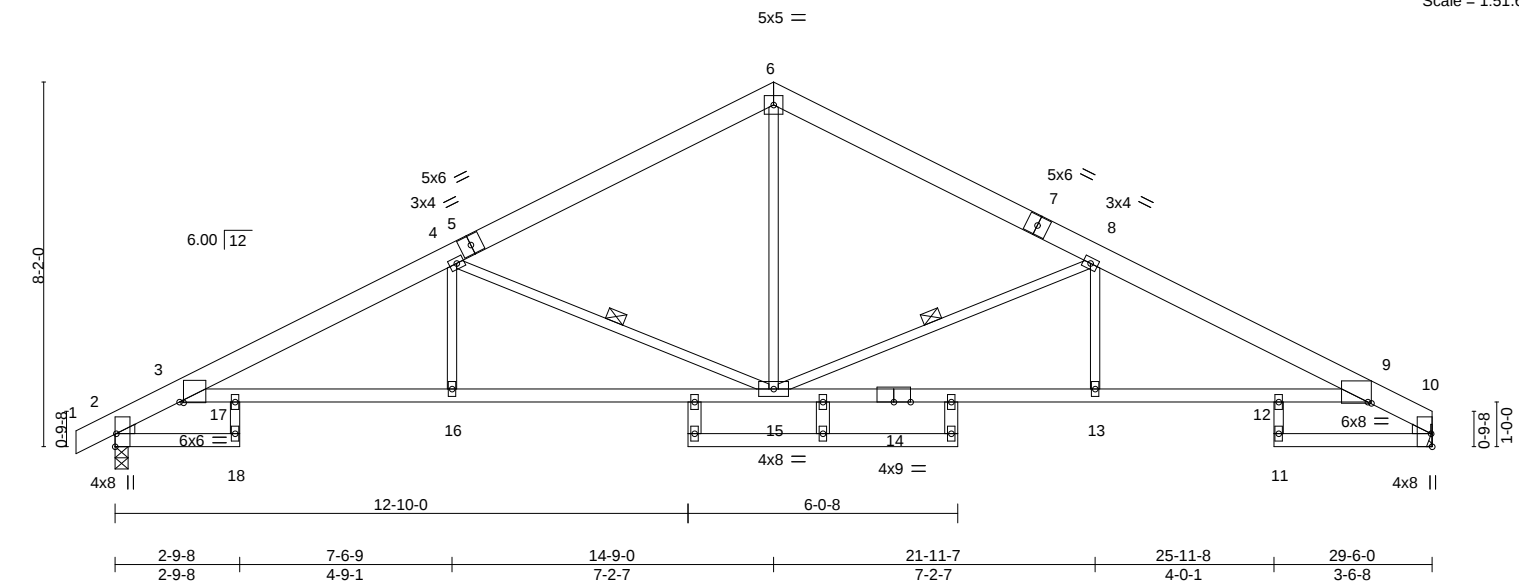


Plate Offsets (X,Y)--		[2:Edge,0-0-5], [3:0-1-1,0-0-3], [9:0-0-15,0-0-5], [10:Edge,0-0-5]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.66
TCDL 10.0	Lumber DOL	1.15	BC 0.70
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.27 12-13	>999	360
Vert(CT)	-0.51 12-13	>693	240
Horz(CT)	0.48 10	n/a	n/a
Wind(LL)	0.14 16-17	>999	240
PLATES	GRIP		
MT20	197/144		
Weight: 143 lb		FT = 10%	

LUMBER-

TOP CHORD 2x6 SP DSS *Except*
5-6,6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-14,9-14: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
19-21,20-22,23-24: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
10-0-0 oc bracing: 13-15
WEBS 1 Row at midpt 4-15, 8-15

REACTIONS.

(size) 2=0-3-8, 10=Mechanical
Max Horz 2=89(LC 5)
Max Uplift 2=-26(LC 8), 10=-16(LC 9)
Max Grav 2=1391(LC 1), 10=1317(LC 1)

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

TOP CHORD 2-3=-825/58, 3-4=-2784/55, 4-6=-1759/45, 6-8=-1761/58, 8-9=-2813/29, 9-10=-780/33
BOT CHORD 3-17=-52/2504, 16-17=-52/2504, 15-16=-52/2504, 13-15=0/2539, 12-13=0/2539,
9-12=0/2539
WEBS 4-16=0/330, 4-15=-1151/136, 6-15=0/1063, 8-15=-1189/119, 8-13=0/337

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 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.
- 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) 2, 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15,2022

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	
B220008	E9	Roof Special	1	1		I49713841

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:47 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-fqZN65r1yK0Y1goZerMNDjieJluHhQq9vn52nLzvTz2

Job Reference (optional)

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

Scale = 1:51.6

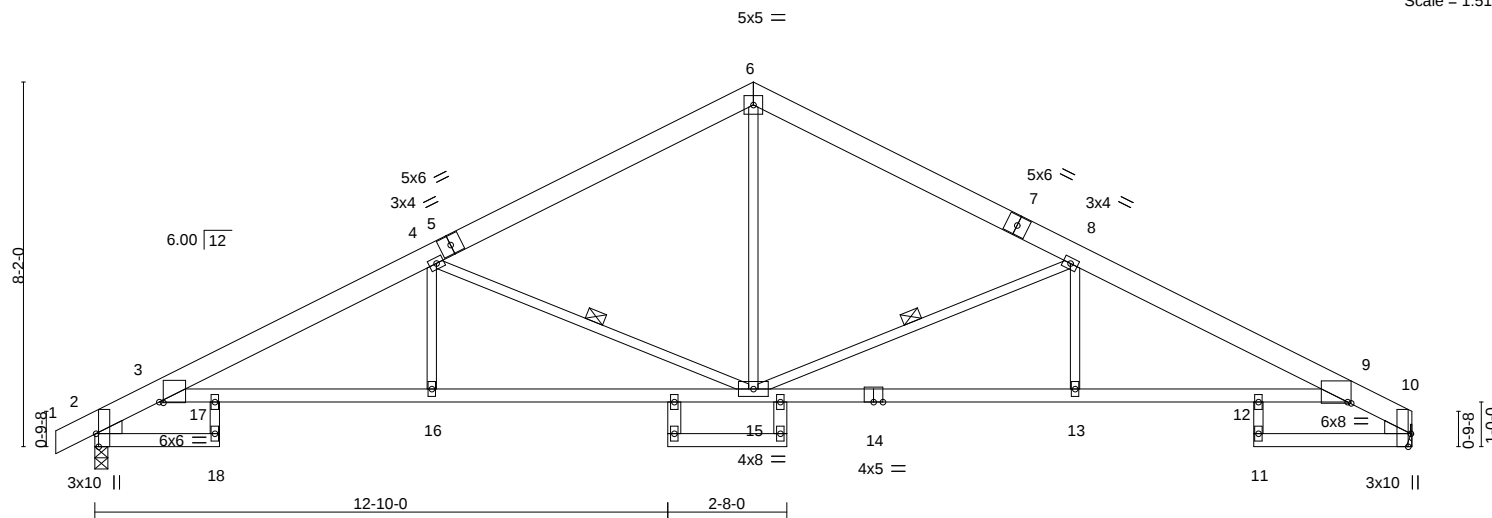


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-1-1,0-0-3], [9:0-0-15,0-0-5], [10:0-3-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.27 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.51 12-13	>693	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.48 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14 16-17	>999	240	Weight: 139 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP DSS *Except*
5-6,6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-14,9-14: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
19-21,20-22: 2x4 SPF No.2

WEDGE

Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

REACTIONS.

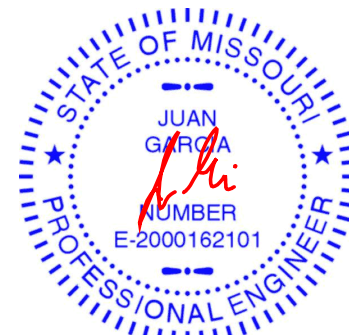
(size) 2=0-3-8, 10=Mechanical
Max Horz 2=89(LC 5)
Max Uplift 2=-26(LC 8), 10=-16(LC 9)
Max Grav 2=1391(LC 1), 10=1317(LC 1)

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

TOP CHORD 2-3=-825/58, 3-4=-2784/55, 4-6=-1759/45, 6-8=-1762/58, 8-9=-2814/29, 9-10=-780/33
BOT CHORD 3-17=-52/2504, 16-17=-52/2504, 15-16=-52/2504, 13-15=0/2540, 12-13=0/2540,
9-12=0/2540
WEBS 4-16=0/330, 4-15=-1151/137, 6-15=0/1062, 8-15=-1190/119, 8-13=0/337

NOTES-

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



January 15,2022

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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 B220008	Truss E10	Truss Type Roof Special	Qty 1	Ply 1	Lot 150 HT I49713842
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:35 2022 Page 1

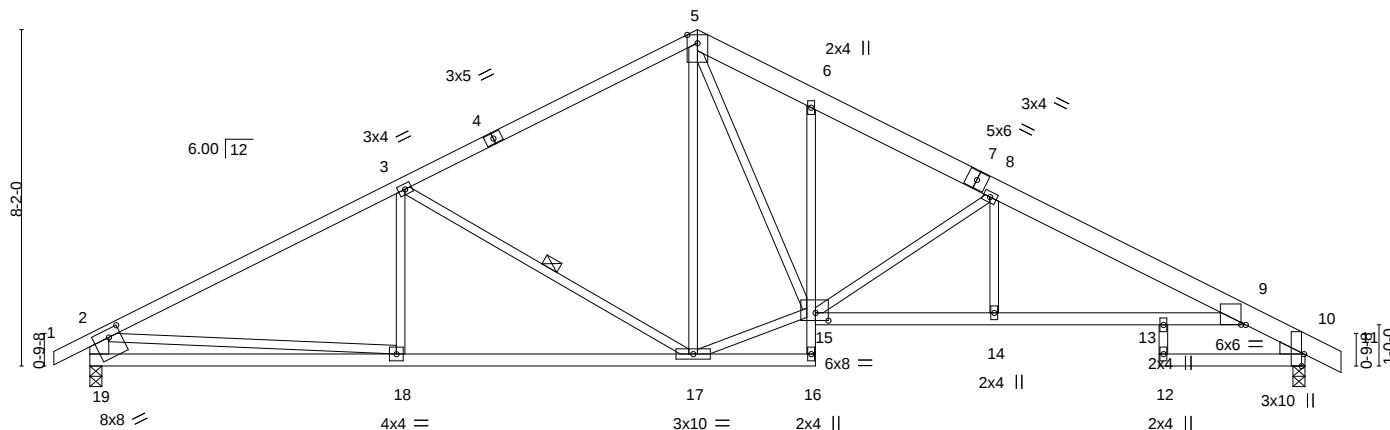
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-?Wrrb?iVneVFbquFxK8ZkBCcCwoztzYO9vBPM1zvTzE

Job Reference (optional)

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

6x8 ||

Scale = 1:55.9



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

Plate Offsets (X,Y)-- [9:0-1-5,0-0-1], [10:0-3-8,Edge], [15:0-3-12,0-2-4], [19:0-3-8,0-2-4]

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 0.63	Vert(LL)	-0.22 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.42 13-14	>825	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.26 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16 13-14	>999	240	Weight: 136 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-11: 2x6 SP DSS, 5-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-16: 2x3 SPF No.2, 9-15: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-19: 2x6 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 13-14
WEBS 1 Row at midpt 3-17

REACTIONS.

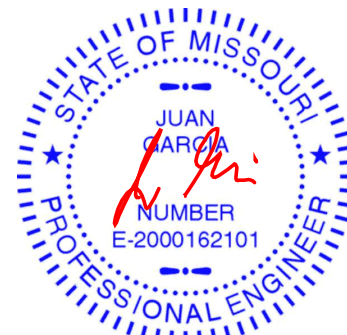
(size) 19=0-3-8, 10=0-3-8
Max Horz 19=-132(LC 13)
Max Uplift 19=-188(LC 8), 10=-186(LC 9)
Max Grav 19=1388(LC 1), 10=1382(LC 1)

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

TOP CHORD 2-3=-2094/254, 3-5=-1518/236, 5-6=-1880/308, 6-8=-2006/245, 8-9=-2761/299,
9-10=-808/129, 2-19=-1315/227
BOT CHORD 18-19=-287/612, 17-18=-250/1769, 14-15=-159/2481, 13-14=-159/2481, 9-13=-159/2481
WEBS 3-17=-639/226, 15-17=-49/1262, 5-15=-179/1121, 8-15=-989/220, 8-14=0/307,
2-18=-10/1161

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) 19=188, 10=186.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	149713843
B220008	E11	Roof Special Structural Gable	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:38 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-P5XzD1kO3ZuqSHcqcSiGLpqA17vD4NiqrtQ3zMzvTzB

Job Reference (optional)

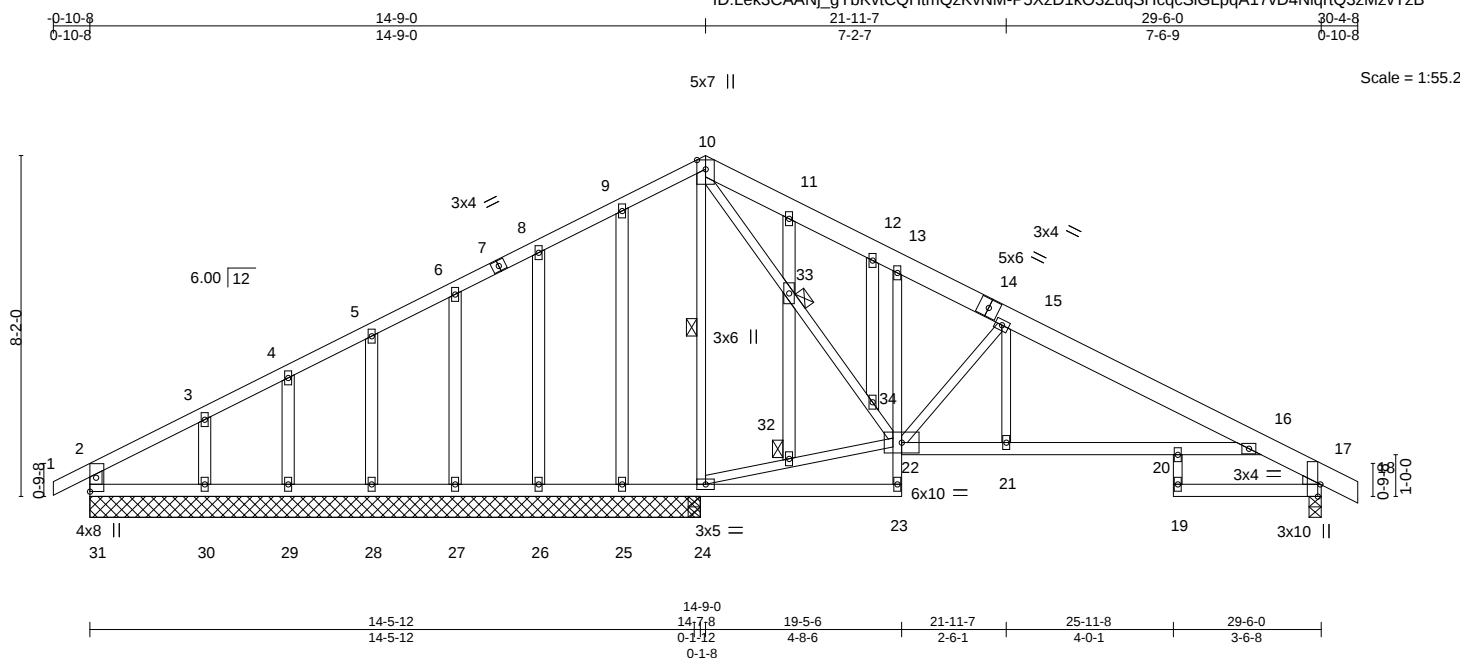


Plate Offsets (X, Y)--		[17:0-3-8, Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.40
TCDL 10.0	Lumber DOL	1.15	BC 0.37
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.08 20 >999 360
			Vert(CT) -0.18 20-21 >999 240
			Horz(CT) 0.08 17 n/a n/a
			Wind(LL) 0.07 20 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 154 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
14-18,10-14: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
13-23: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-31: 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Right: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
10-0-0 oc bracing: 20-21
1 Row at midpt 10-24
JOINTS 1 Brace at Jt(s): 32, 33

REACTIONS.

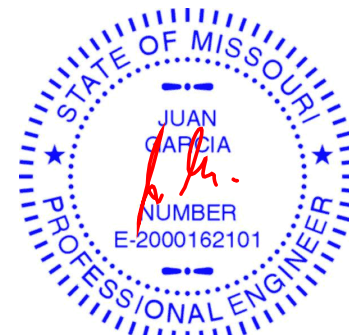
All bearings 14-7-8 except (jt=length) 17=0-3-8.
(lb) - Max Horz 31=-132(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 25, 26, 27, 28, 29 except
31=-292(LC 22), 17=-104(LC 9), 24=-131(LC 9), 30=-121(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 31, 25, 26, 27, 28, 29 except
17=488(LC 1), 24=1238(LC 1), 24=1238(LC 1), 30=395(LC 1)

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

TOP CHORD 2-3=-145/587, 3-4=-76/529, 4-5=-37/548, 5-6=-8/544, 6-8=0/543, 8-9=0/550,
9-10=0/534, 15-16=-391/99, 2-31=-35/261
BOT CHORD 30-31=-463/243, 29-30=-463/243, 28-29=-463/243, 27-28=-463/243, 26-27=-463/243,
25-26=-463/243, 24-25=-463/243, 21-22=-14/321, 20-21=-14/321, 16-20=-14/321
WEBS 10-33=-178/655, 33-34=-166/613, 22-34=-174/650, 24-32=-500/240, 22-32=-480/230,
15-22=-648/168, 15-21=0/256, 3-30=-268/127, 10-24=-966/106

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 26, 27, 28, 29 except (jt=lb) 31=292, 17=104, 24=131, 30=121.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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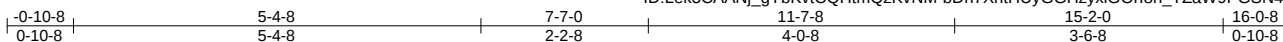
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss G1	Truss Type Roof Special	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713844
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:49 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-bDh7XntHUYGGHzyxlGOrl8n_TZaW9PGSN4a9sDzvTz0



4x5 ||

Scale = 1:30.4

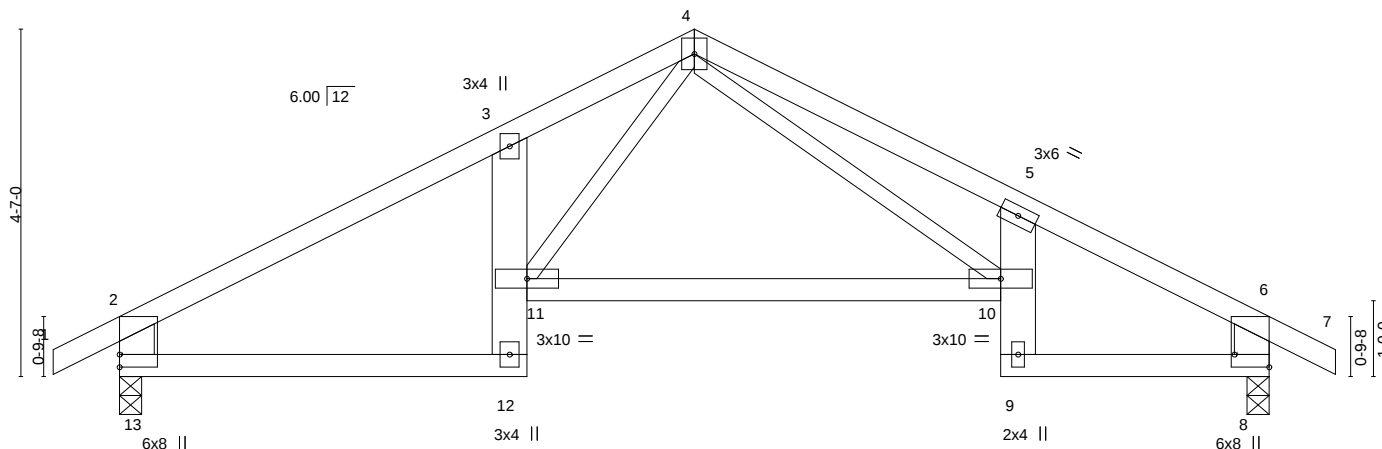


Plate Offsets (X,Y)--	[8:Edge,0-5-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.11 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.25 10-11	>701	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.11 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 10-11	>999	240	Weight: 56 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

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

NOTES-

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



January 15,2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

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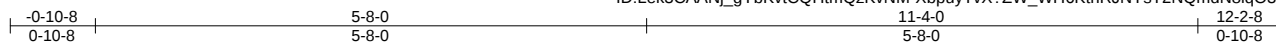


Job B220008	Truss H1	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 150 HT I49713846
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:51 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-XbpuyTvX?ZW_WH6KthRJNYS72NQmdN8lqO3Fw6zvTz_



4x4 =

Scale = 1:23.7

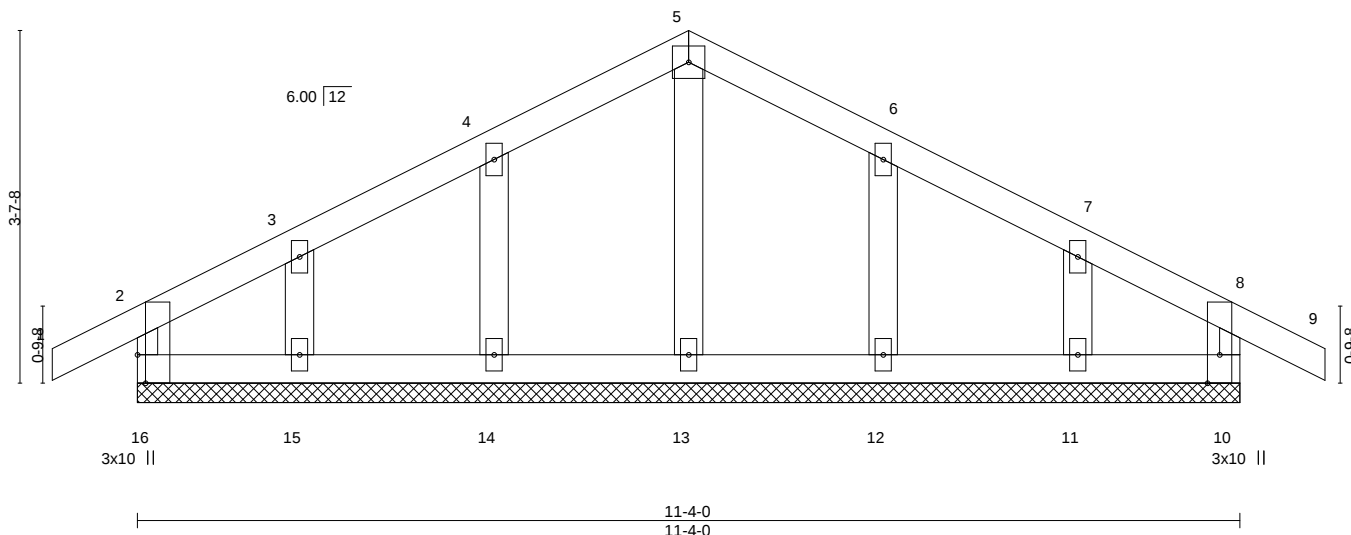


Plate Offsets (X,Y)-- [16:0-3-8,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	9	n/r 120
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	9	n/r 120
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	10	n/a n/a
BCDL 10.0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

LUMBER-

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

BRACING-

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

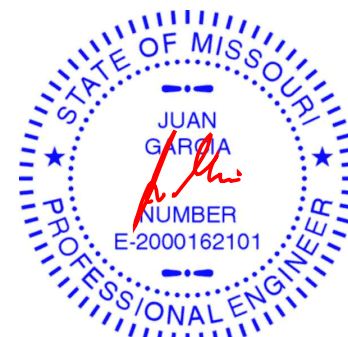
REACTIONS.

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

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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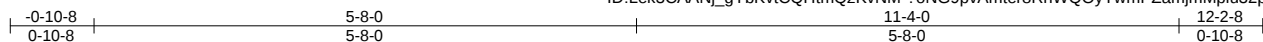
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713847
B220008	H2	Common	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

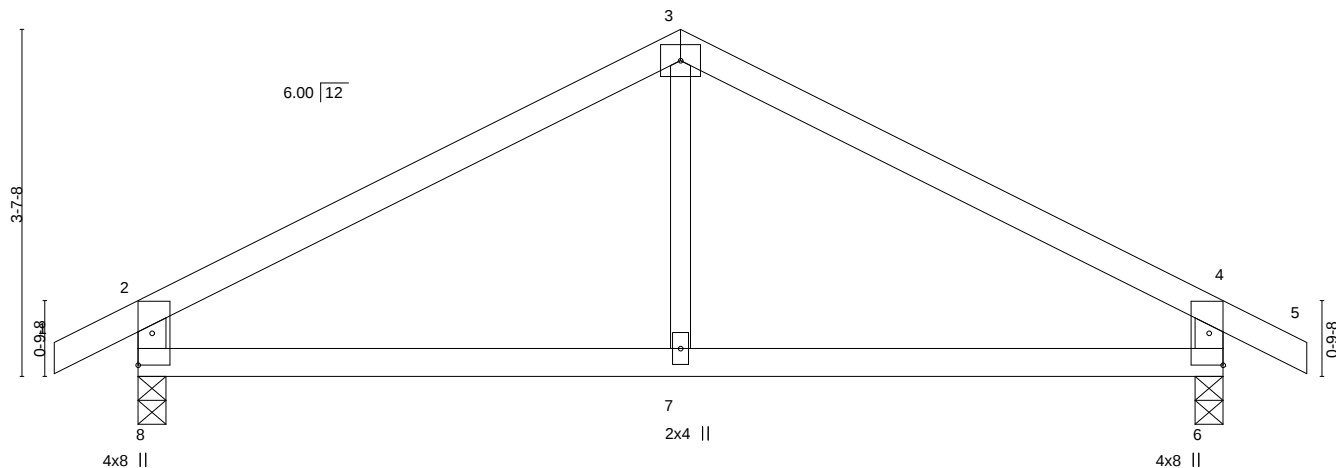
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:52 2022 Page 1

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4x5 =

Scale: 1/2"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.02	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.05				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01				
								Weight: 33 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
 Max Horz 8=-63(LC 6)
 Max Uplift 8=-84(LC 8), 6=-84(LC 9)
 Max Grav 8=568(LC 1), 6=568(LC 1)

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

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

NOTES-

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



January 15, 2022

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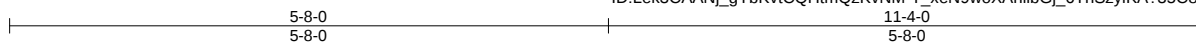
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job B220008	Truss H3	Truss Type Common Girder	Qty 1	Ply 2	Lot 150 HT 149713848
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:53 2022 Page 1

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4x4 ||

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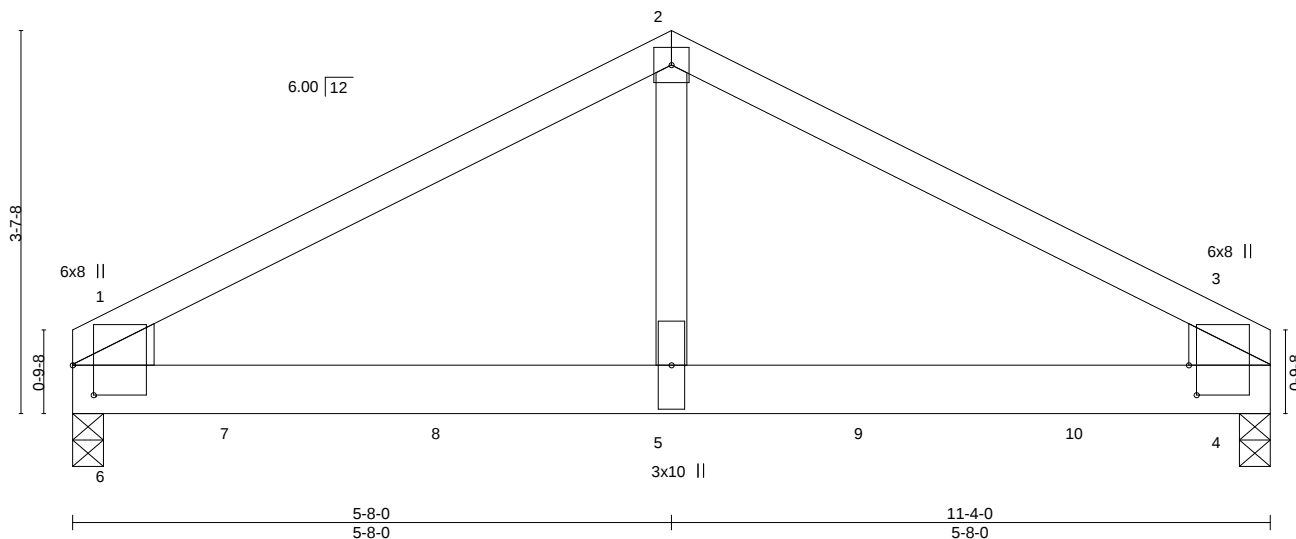


Plate Offsets (X,Y)--		[1:0-3-6,0-2-6], [3:0-3-6,0-0-14]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.34	Vert(LL)	-0.06	4-5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.48	Vert(CT)	-0.10	4-5	>999	240	
BCLL	0.0 *	Rep Stress Incr NO		WB	0.38	Horz(CT)	0.01	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 95 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x10 SP DSS *Except*
2-5: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 6=0-3-8, 4=0-3-8
Max Horz 6=57(LC 26)
Max Uplift 6=-129(LC 8), 4=-127(LC 9)
Max Grav 6=3657(LC 1), 4=3522(LC 1)

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

TOP CHORD 1-2=-3874/157, 2-3=-3874/157, 1-6=-1912/132, 3-4=-1912/132
BOT CHORD 5-6=-87/3375, 4-5=-87/3375
WEBS 2-5=-16/3104

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, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=129, 4=127.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1285 lb down and 35 lb up at 1-6-12, 1236 lb down and 36 lb up at 3-6-12, 1236 lb down and 36 lb up at 5-6-12, and 1236 lb down and 36 lb up at 7-6-12, and 1236 lb down and 36 lb up at 9-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



January 15, 2022

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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 150 HT
B220008	H3	Common Girder	1	2	I49713848
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:53 2022 Page 2
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-T_xeN9woXAnilbGj_6TnSzyIKA?35C82HiYM__zvTyy

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 4-6=-20
- Concentrated Loads (lb)
 - Vert: 5=-1236(B) 7=-1285(B) 8=-1236(B) 9=-1236(B) 10=-1236(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J4	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Lot 150 HT 149713849
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:01 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-EWQg2u0pfenZjptFSnclnfH11Ph_zv3D7yUnGXzvTyq

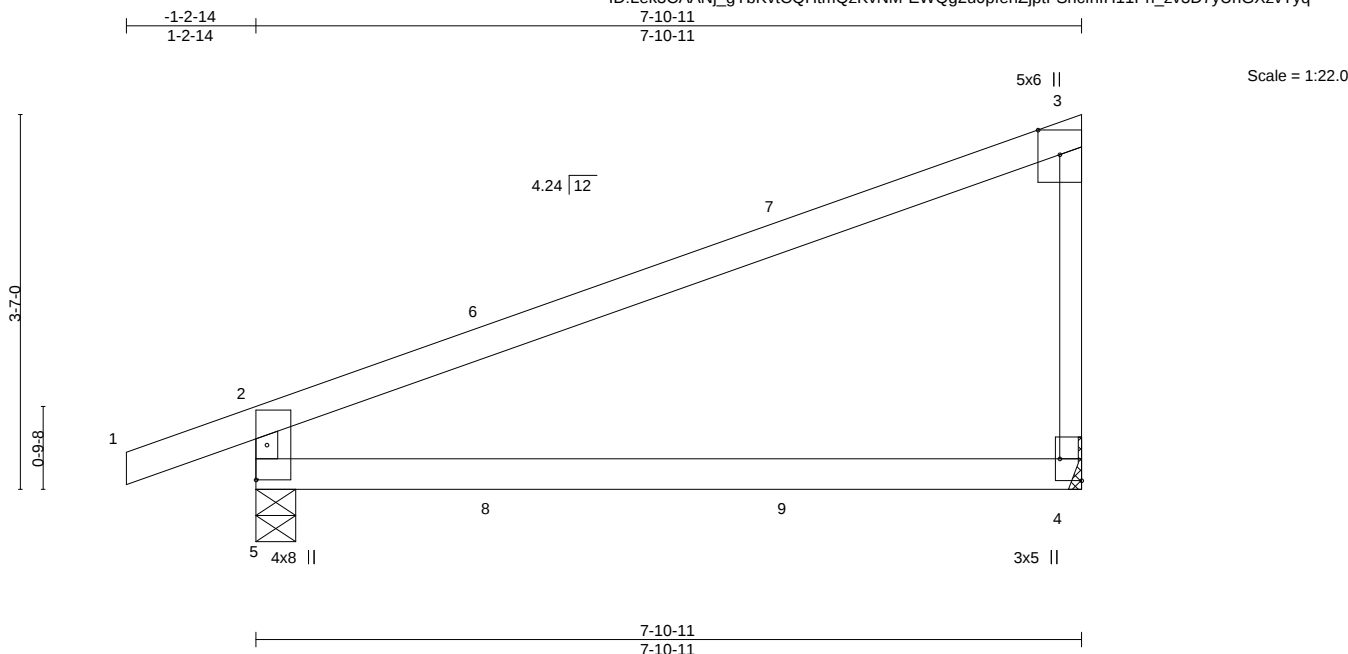


Plate Offsets (X,Y)--		[4:Edge,0-2-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.15 4-5 >610 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.32 4-5 >288 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.06 4-5 >999 240	Weight: 23 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 5=0-4-9, 4=Mechanical
Max Horz 5=153(LC 5)
Max Uplift 5=-126(LC 4), 4=-101(LC 8)
Max Grav 5=457(LC 1), 4=358(LC 1)

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

TOP CHORD 2-5=-392/186, 3-4=-252/139

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) except (jt=lb) 5=126, 4=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) 68 lb down and 30 lb up at 2-3-13, 68 lb down and 30 lb up at 2-3-13, and 93 lb down and 71 lb up at 5-1-13, and 93 lb down and 71 lb up at 5-1-13 on top chord, and 3 lb down and 1 lb up at 2-3-13, 3 lb down and 1 lb up at 2-3-13, and 20 lb down at 5-1-13, and 20 lb down at 5-1-13 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=-13(F=-7, B=-7) 8=3(F=1, B=1) 9=-20(F=-10, B=-10)



January 15, 2022

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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



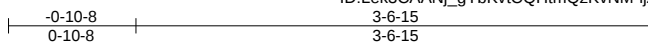
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J5	Truss Type Jack-Open	Qty 2	Ply 1	Lot 150 HT I49713850
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:02 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-ijz2GE1RQxvQLzSR0V7uKtqKio94iMIMMcELozzvTyp



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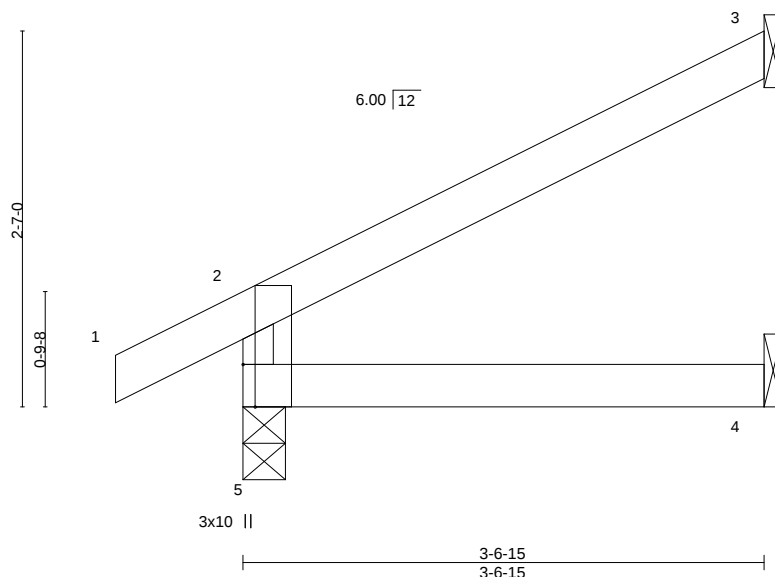


Plate Offsets (X,Y)--		[5:0-3-8,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.17		Vert(LL)	-0.01 4-5	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.10		Vert(CT)	-0.01 4-5	>999	240		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	-0.01 3	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01 4-5	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

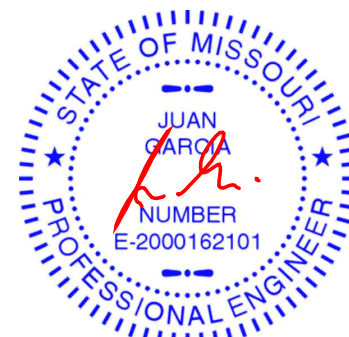
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=79(LC 8)
Max Uplift 5=-25(LC 8), 3=-63(LC 8)
Max Grav 5=232(LC 1), 3=106(LC 1), 4=65(LC 3)

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

NOTES-

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



January 15, 2022

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



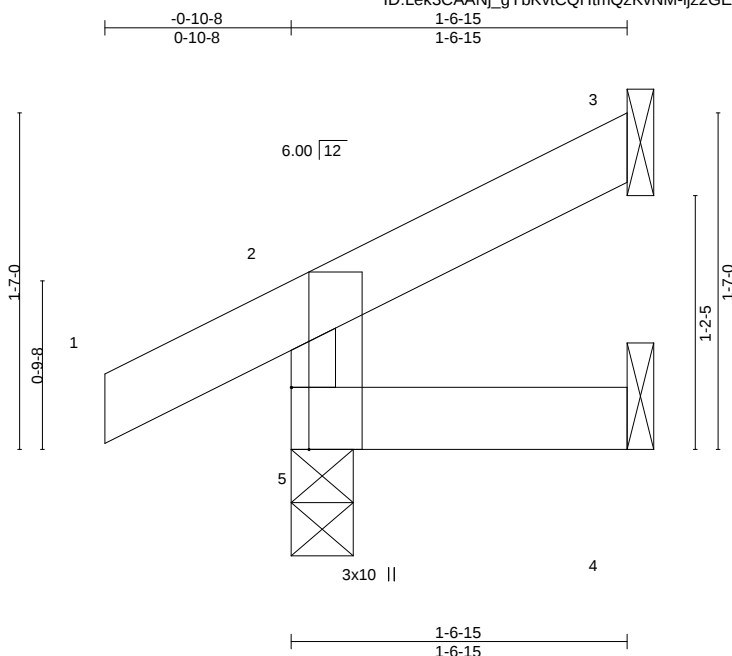
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J6	Truss Type Jack-Open	Qty 2	Ply 1	Lot 150 HT I49713851
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:02 2022 Page 1

ID:Lek3CAAnj_gYbKvtCQHtmQzKvNM-ijz2GE1RQxvQLzSR0V7uKtqLGoASiMIMMcELozzvTyp



Scale = 1:10.8

Plate Offsets (X,Y)--		[5:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.02
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 5 >999 360
			Vert(CT) -0.00 5 >999 240
			Horz(CT) -0.00 3 n/a n/a
			Wind(LL) 0.00 5 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 5 lb FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-6-15 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=39(LC 8)
Max Uplift 5=-22(LC 8), 3=-26(LC 8)
Max Grav 5=157(LC 1), 3=31(LC 1), 4=27(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.



January 15, 2022

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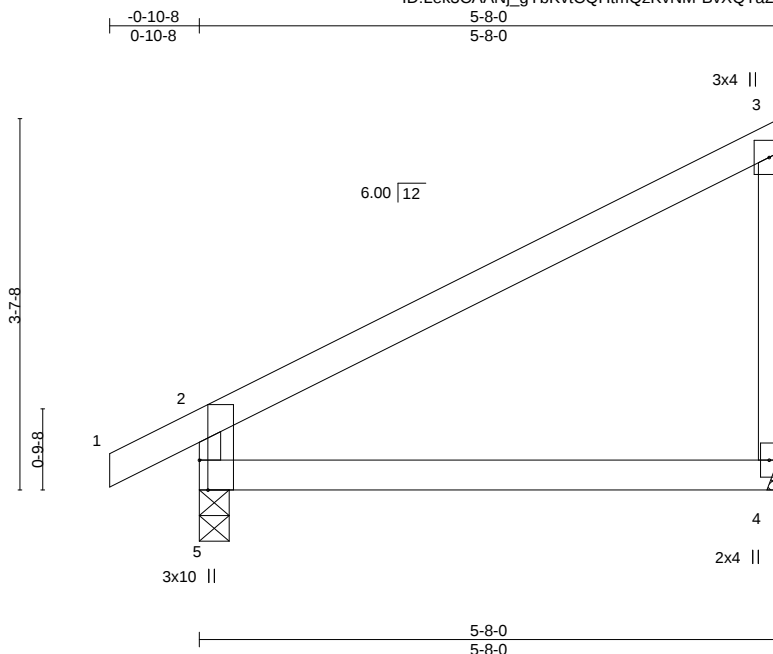
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713852
B220008	J7	Jack-Closed	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:03 2022 Page 1

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Scale = 1:22.5

Plate Offsets (X,Y)--		[5:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.43
TCDL 10.0	Lumber DOL	1.15	BC 0.26
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.04 4-5 >999 360
			Vert(CT) -0.08 4-5 >809 240
			Horz(CT) -0.00 4 n/a n/a
			Wind(LL) 0.02 4-5 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 18 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

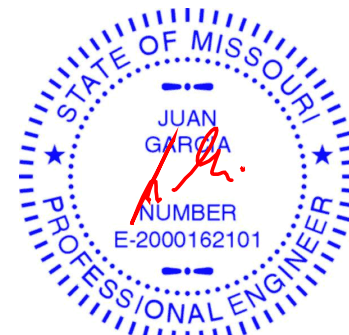
(size) 5=0-3-8, 4=Mechanical
Max Horz 5=143(LC 5)
Max Uplift 5=-50(LC 8), 4=-64(LC 8)
Max Grav 5=320(LC 1), 4=239(LC 1)

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

TOP CHORD 2-5=-278/94

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



January 15, 2022

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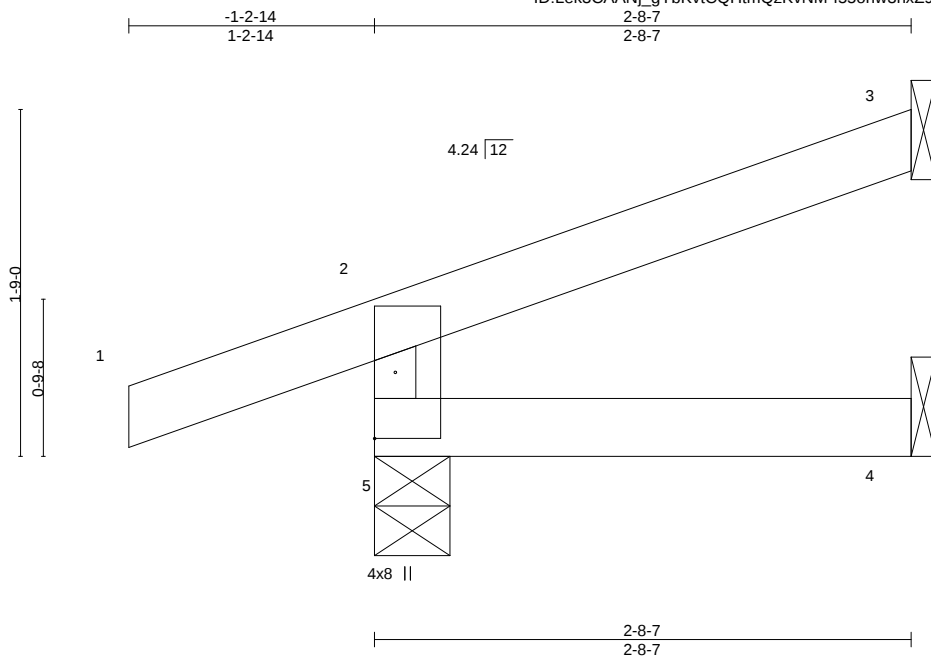


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J8	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713853
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:04 2022 Page 1
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Scale = 1:11.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.00	4-5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	
								Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=60(LC 7)
Max Uplift 5=-78(LC 6), 3=-68(LC 12), 4=-3(LC 19)
Max Grav 5=113(LC 1), 3=40(LC 26), 4=36(LC 3)

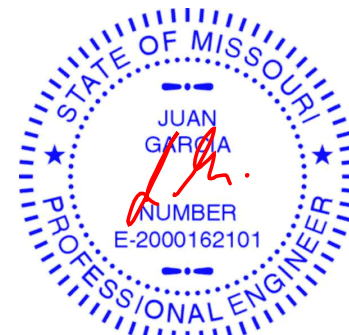
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb down and 9 lb up at -1-2-14, and 24 lb down and 9 lb up at -1-2-14, and 44 lb down and 33 lb up at 2-7-11 on top chord, and 10 lb down at 2-7-11 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
Concentrated Loads (lb)
Vert: 1=-36(F=-18, B=-18) 4=-0(F)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-34(F=18, B=18), 2=-4(F=33, B=33)-to-3=-49(F=10, B=10), 5=-0(F=10, B=10)-to-4=-14(F=3, B=3)



January 15, 2022

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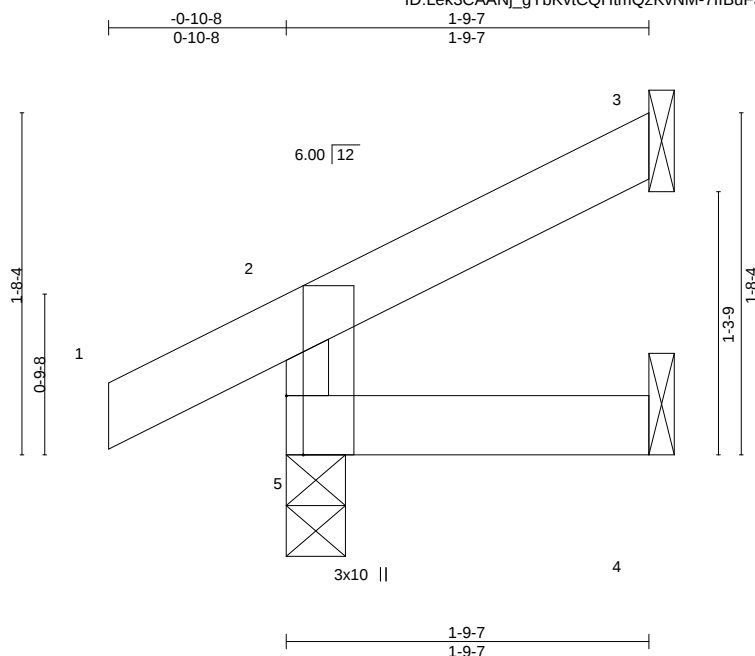
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J9	Truss Type Jack-Open	Qty 1	Ply 1	Lot 150 HT I49713854
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:05 2022 Page 1

ID:Lek3CAANj_gYbKvQCQHtmQzKvNM-7IfBuF3JisH?CRA0hdhbxVSsW0C3vj2p2aS?PlzvTym



Scale = 1:11.4

Plate Offsets (X,Y)-- [5:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	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 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

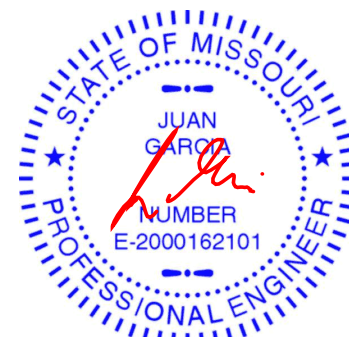
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=44(LC 8)
Max Uplift 5=-22(LC 8), 3=-31(LC 8)
Max Grav 5=164(LC 1), 3=41(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.



January 15, 2022

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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



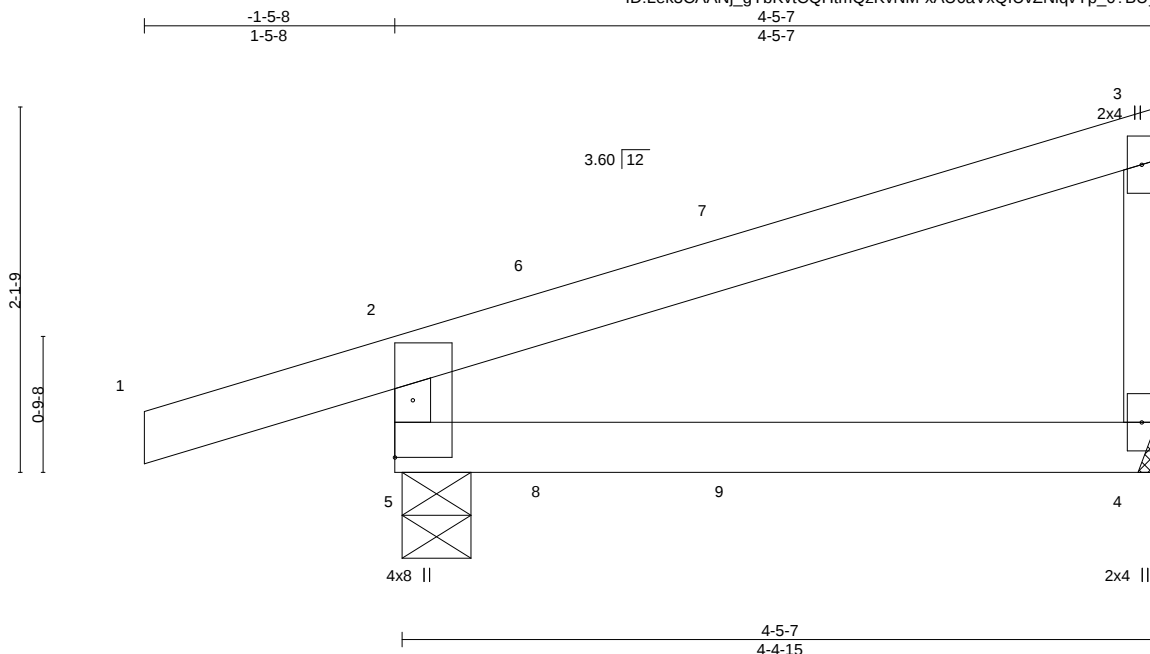
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713855
B220008	J10	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:54 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-xAU0aVxQIUvZNIqvYp_0?BUyoaPOqkKBWMIwWRzvTyx



Scale = 1:13.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.01	4-5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.03	4-5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	
									Weight: 14 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-13, 4=Mechanical
Max Horz 5=86(LC 24)
Max Uplift 5=-110(LC 4), 4=-59(LC 8)
Max Grav 5=317(LC 1), 4=242(LC 1)

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

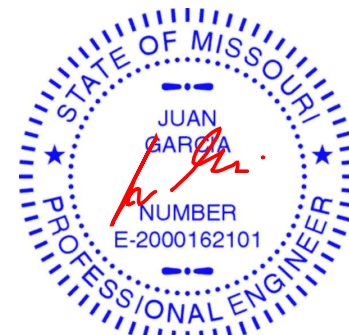
TOP CHORD 2-5=-282/136

NOTES-

- 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=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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 11 lb up at 0-11-9, and 61 lb down and 17 lb up at 2-0-6, and 75 lb down and 63 lb up at 4-4-3 on top chord, and 2 lb down and 3 lb up at 0-11-9, and 3 lb down and 6 lb up at 2-0-6, and 33 lb down at 4-4-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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: 3=-50(B) 4=-23(B) 8=3(B) 9=2(F)



January 15, 2022

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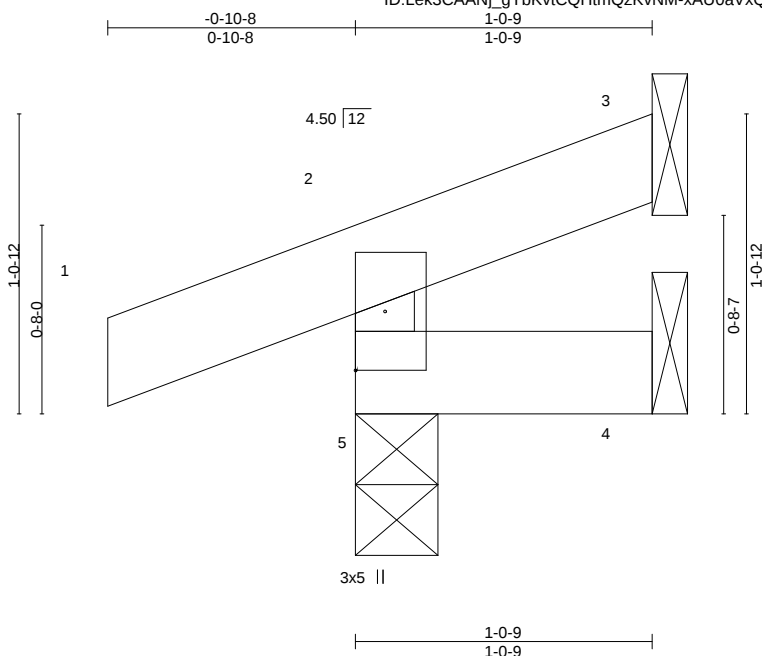
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J11	Truss Type Jack-Open	Qty 1	Ply 1	Lot 150 HT I49713856
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:54 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-xAU0aVxQIUvZNIqvYp_0?BU?JaRfqkKBWMIwWRzvTyx



Scale = 1:8.1

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

LUMBER-

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

BRACING-

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

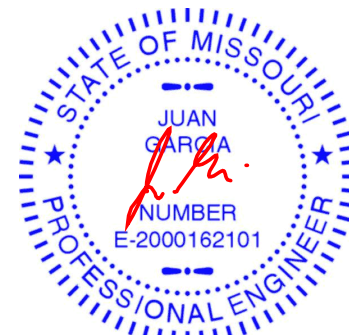
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=27(LC 5)
Max Uplift 5=55(LC 4), 3=9(LC 8)
Max Grav 5=146(LC 1), 3=3(LC 19), 4=16(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.



January 15, 2022

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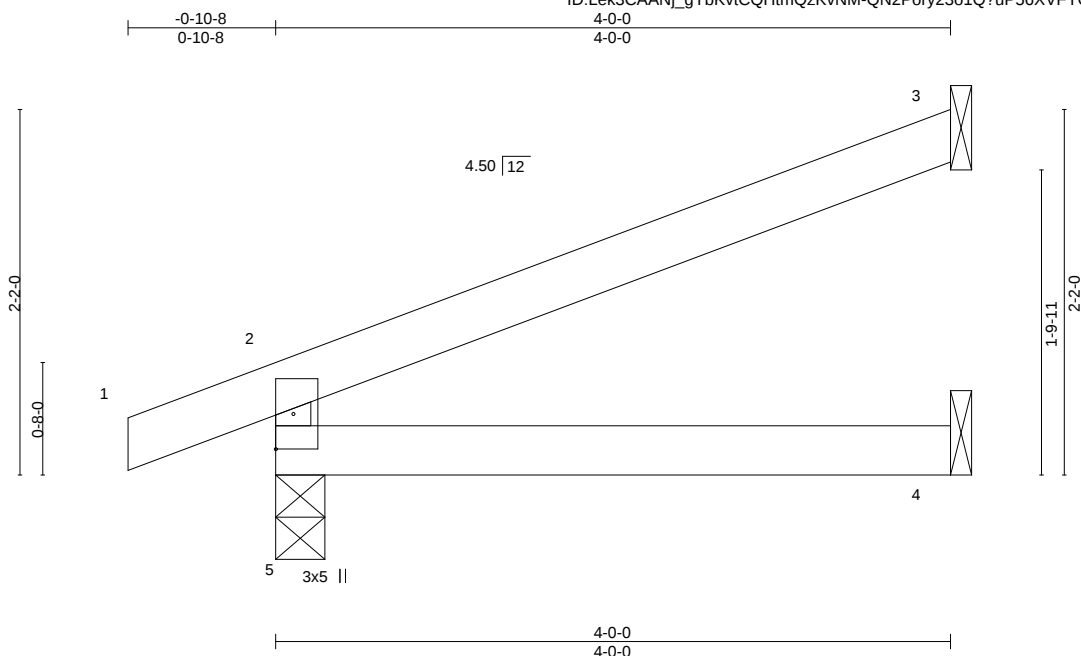
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16023 Swingley Ridge Rd
Chesterfield, MO 63017



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

LUMBER-

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

BRACING-

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

REACTIONS.

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

FORCES.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=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.



January 15, 2022



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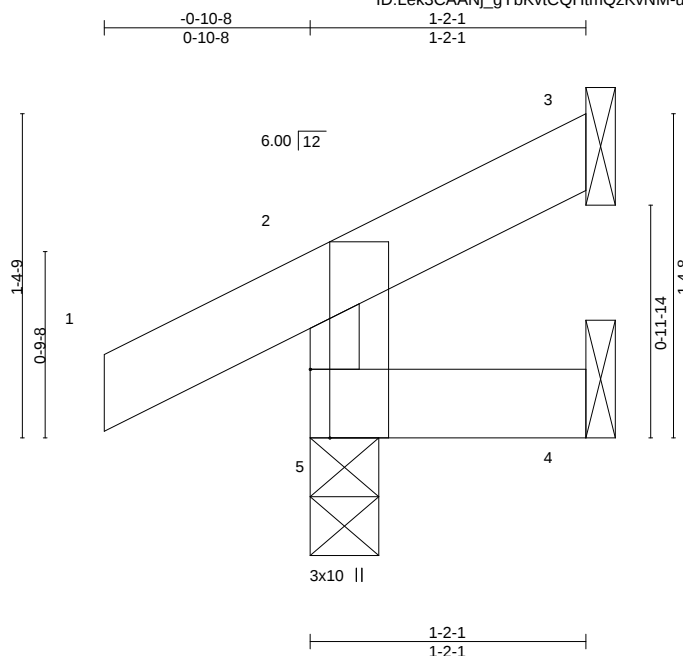
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J13	Truss Type Jack-Open	Qty 1	Ply 1	Lot 150 HT I49713858
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:56 2022 Page 1

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Scale = 1:9.8

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

LUMBER-

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

BRACING-

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

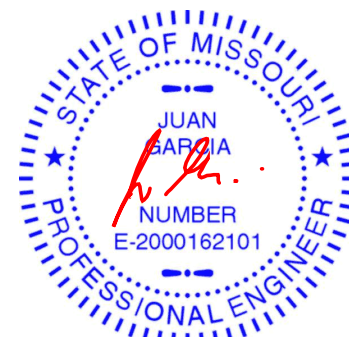
REACTIONS.

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

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

NOTES-

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



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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT
B220008	J14A	Jack-Closed Supported Gable	2	1	I49713859
Job Reference (optional)					

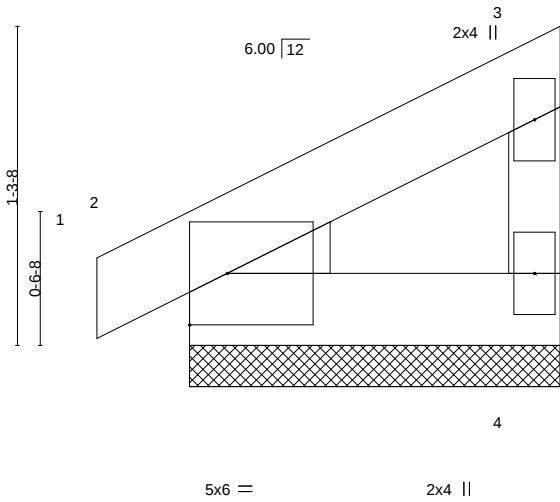
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:56 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-uZcn?Aygq59Hd2_lfE0U4caLOO71lepU_gn0bJzvTyv



Scale = 1:9.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=1-6-0, 2=1-6-0
 Max Horz 2=38(LC 5)
 Max Uplift 4=-17(LC 8), 2=-15(LC 8)
 Max Grav 4=59(LC 1), 2=93(LC 1)

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

NOTES-

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



January 15, 2022

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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



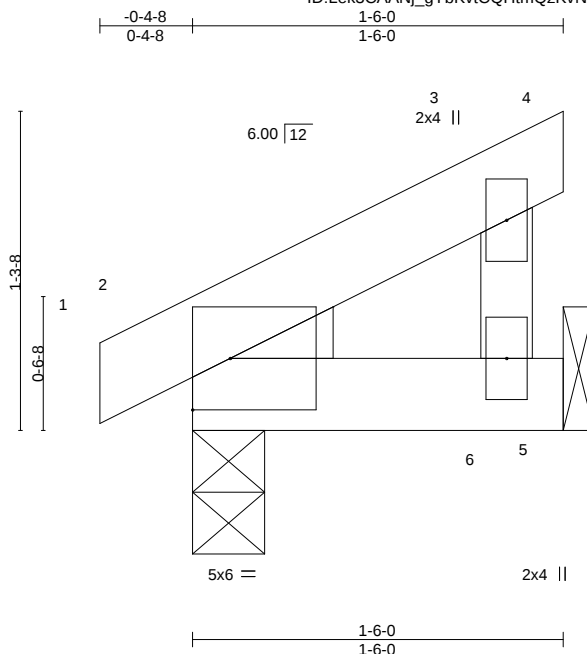
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT
B220008	J15A	Jack-Closed	2	1	149713860
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:57 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-MIA9DWzlbPH8ECZUDyYjdp6WGnT5153dCKWa7lvTyu



Scale = 1:9.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	-0.00	2	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	2	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	>999	240	
								Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-3-8, 5=Mechanical
Max Horz 2=37(LC 5)
Max Uplift 2=-15(LC 8), 5=-18(LC 8)
Max Grav 2=97(LC 1), 5=52(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) 2, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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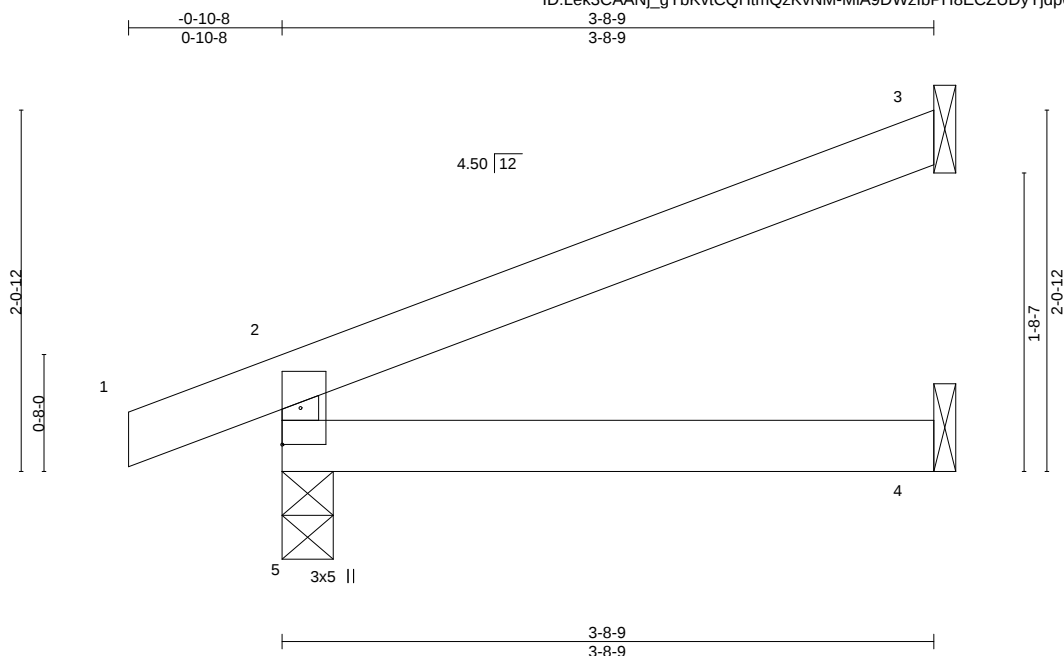
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J16	Truss Type Jack-Open	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713861
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:57 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-MIA9DWzlbPH8ECZUDyYjdp6UlnSn153dCKWa7lvTyu



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

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

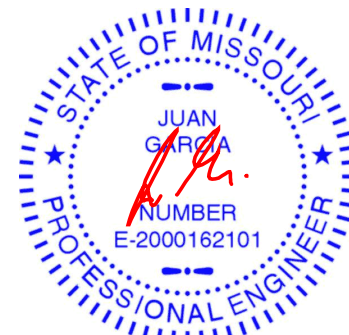
REACTIONS.

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

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

NOTES-

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



January 15, 2022

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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



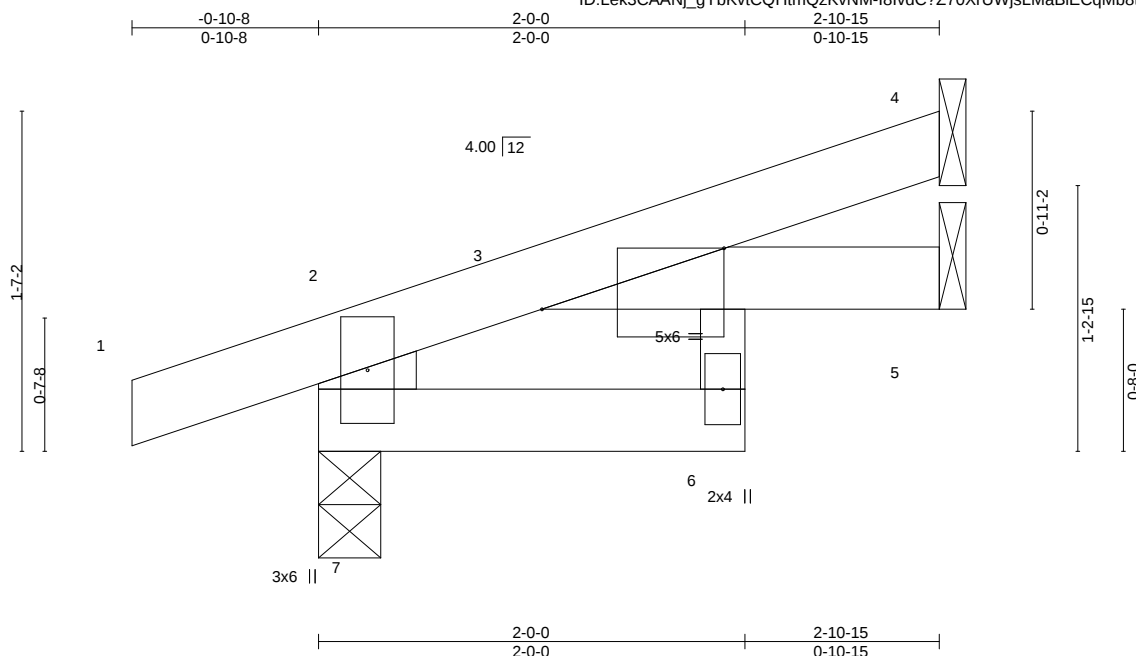
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J18	Truss Type Jack-Open	Qty 4	Ply 1	Lot 150 HT I49713863
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:41:59 2022 Page 1

ID:Lek3CAANj_gYbKvCQHtmQzKvNM-I8lvdC?Z70XrUWjsLMABiECqMb8tV?lwge?hBezvTys



Scale = 1:10.8

Plate Offsets (X,Y)--		[3:0-10-4,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.01	6	>999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	6	>999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.01	5	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.01	6	>999	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=49(LC 4)
Max Uplift 7=-61(LC 4), 4=-27(LC 8)
Max Grav 7=221(LC 1), 4=71(LC 1), 5=53(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) 7, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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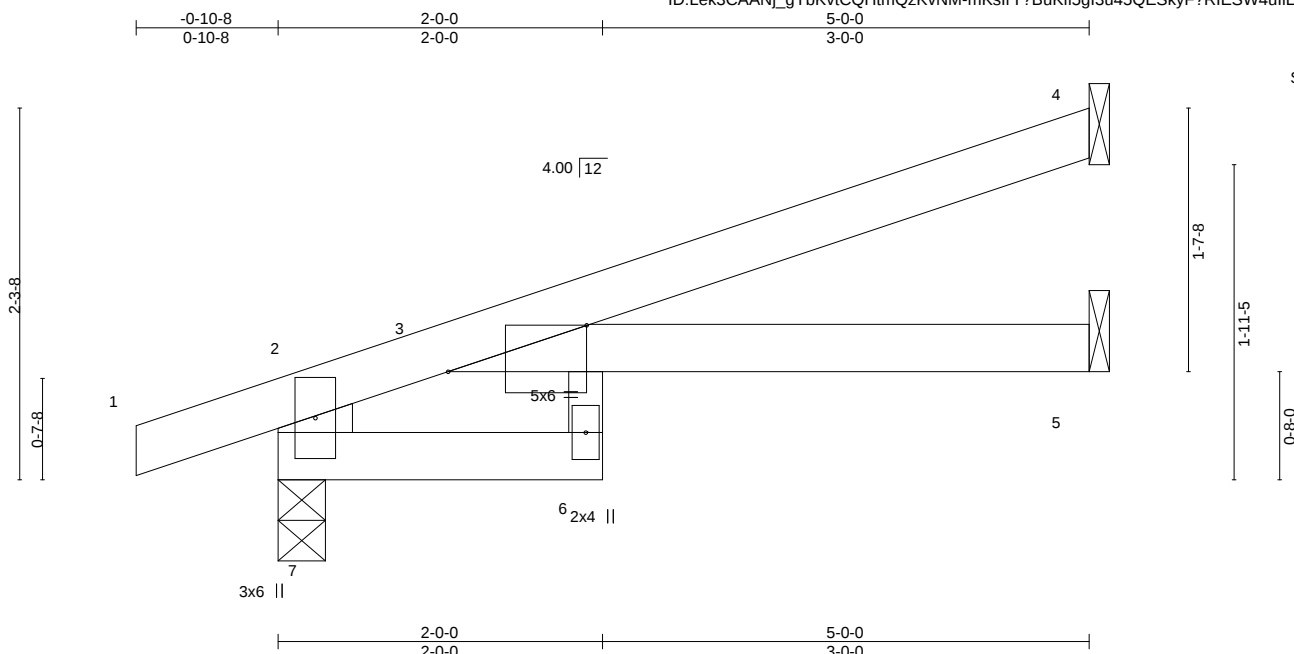


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss J19	Truss Type Jack-Open	Qty 3	Ply 1	Lot 150 HT I49713864
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:00 2022 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-mKslrY?BuKfi5gl3u45QESkyF?RIESW4ullEk4zvTyr



Scale = 1:14.2

Plate Offsets (X,Y)--		[3:0-10-4,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.29		Vert(LL)	-0.04	6	>999	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.25		Vert(CT)	-0.07	6	>763		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.02		Horz(CT)	0.03	5	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.04	6	>999	Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

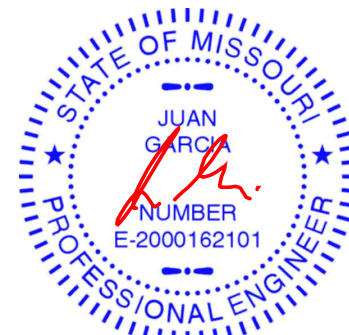
(size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=77(LC 4)
Max Uplift 7=67(LC 4), 4=58(LC 8)
Max Grav 7=311(LC 1), 4=139(LC 1), 5=89(LC 3)

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

TOP CHORD 2-7=-296/82

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) 7, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 15, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss K1	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 150 HT I49713865
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:06 2022 Page 1

ID: Lek3CAANj_gYbKvtCQHtmQzKvNM-bUDZ5b4yTAPspblDFLCqUj_1GQXGe9syHECYxkzvTyl

-0-10-8 5-10-0 11-8-0 12-6-8
0-10-8 5-10-0 5-10-0 0-10-8

4x4 =

Scale: 1/2"=1'

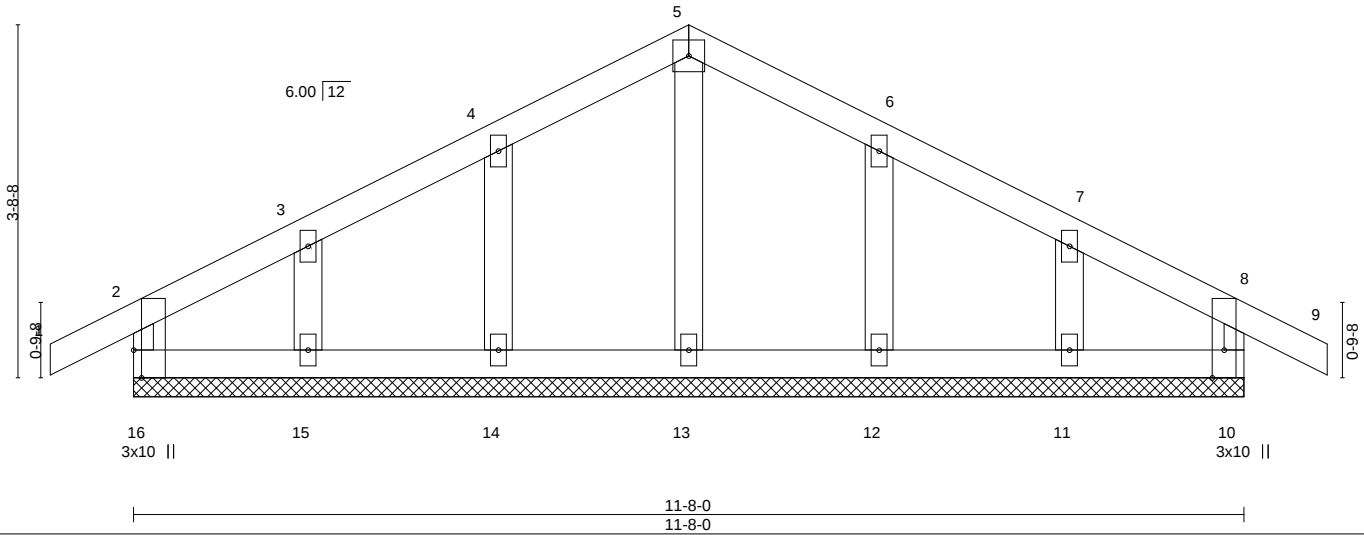


Plate Offsets (X,Y)-- [16:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	9	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 42 lb	FT = 10%

LUMBER-

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

BRACING-

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

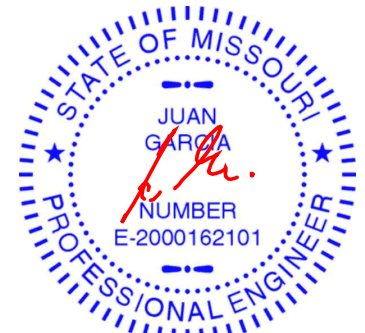
REACTIONS.

All bearings 11-8-0.
(lb) - Max Horz 16=-64(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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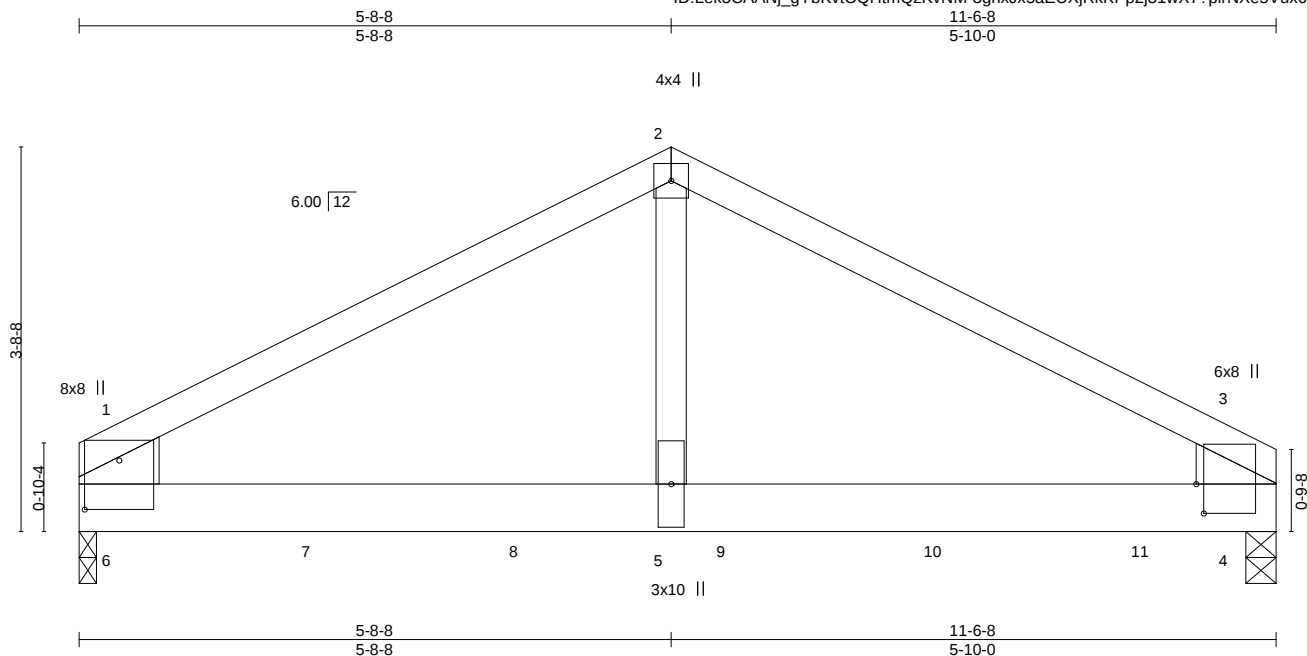
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713866
B220008	K2	Common Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:07 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-3gnxJx5aEUXjRkKpP2j31wX7?plrNXe5Vux6UAzvTyk



Scale = 1:22.2

Plate Offsets (X,Y)--	[1:0-5-11,0-4-0], [3:0-3-6,0-0-14]	
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	NO
BCDL 10.0	Code IRC2018/TPI2014	
	CSI.	
	TC 0.39	
	BC 0.51	
	WB 0.38	
	Matrix-R	
	DEFL.	
	in (loc)	l/defl L/d
	Vert(LL) -0.07 4-5	>999 360
	Vert(CT) -0.12 4-5	>999 240
	Horz(CT) 0.01 4	n/a n/a
	Wind(LL) 0.03 5-6	>999 240
	PLATES	GRIP
	MT20	197/144
	Weight: 97 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x10 SP DSS *Except*
2-5: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 6=0-2-0, 4=0-3-8
Max Horz 6=-59(LC 27)
Max Uplift 6=-381(LC 8), 4=-148(LC 9)
Max Grav 6=4504(LC 1), 4=3884(LC 1)

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

TOP CHORD 1-2=-3852/203, 2-3=-3849/202, 1-6=-1911/152, 3-4=-1904/156
BOT CHORD 5-6=-125/3352, 4-5=-125/3352
WEBS 2-5=-54/3081

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, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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 at joint(s) 6.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=381, 4=148.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1242 lb down and 162 lb up at 0-1-4, 1234 lb down and 170 lb up at 2-3-12, 1236 lb down and 31 lb up at 4-3-12, 1236 lb down and 31 lb up at 6-3-12, and 1236 lb down and 31 lb up at 8-3-12, and 1236 lb down and 31 lb up at 10-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



January 15, 2022

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 150 HT
B220008	K2	Common Girder	1	2	I49713866
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:07 2022 Page 2
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-3gnxJx5aEUXjRkKPP2j31wX7?plrNXe5Vux6UAzvTyk

LOAD CASE(S) Standard

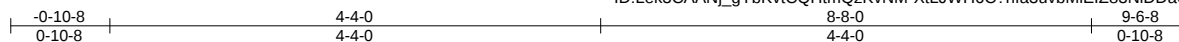
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 4-6=-20
- Concentrated Loads (lb)
 - Vert: 6=-1242(B) 7=-1234(B) 8=-1236(B) 9=-1236(B) 10=-1236(B) 11=-1236(B)

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713867
B220008	L1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:08 2022 Page 1

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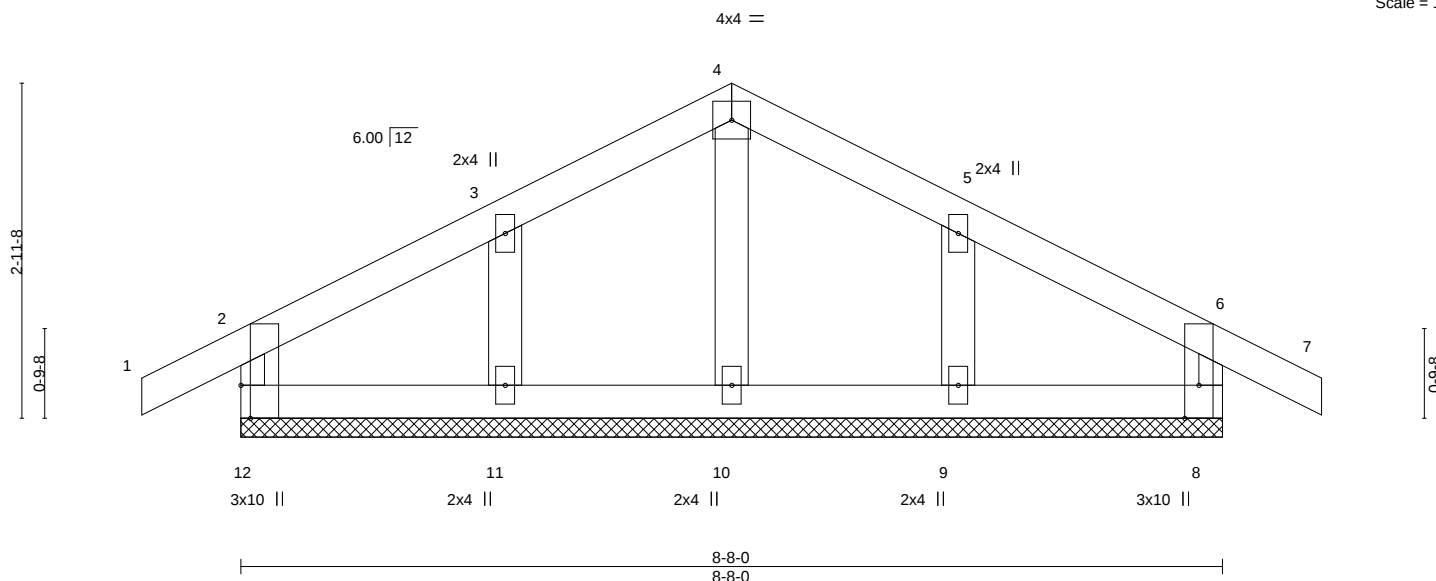


Plate Offsets (X,Y)--		[12:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	n/r	120	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	7	n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 30 lb FT = 10%

LUMBER-

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

BRACING-

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

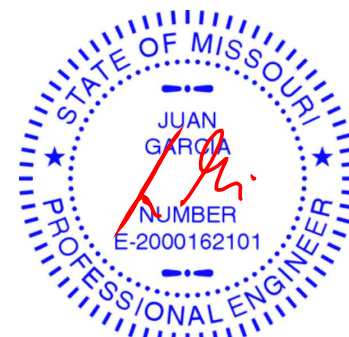
REACTIONS.

All bearings 8-8-0.
(lb) - Max Horz 12=-54(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9
Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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

NOTES-

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



January 15, 2022

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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



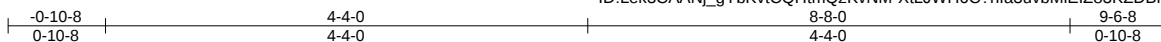
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss L2	Truss Type Common	Qty 3	Ply 1	Lot 150 HT I49713868
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:08 2022 Page 1

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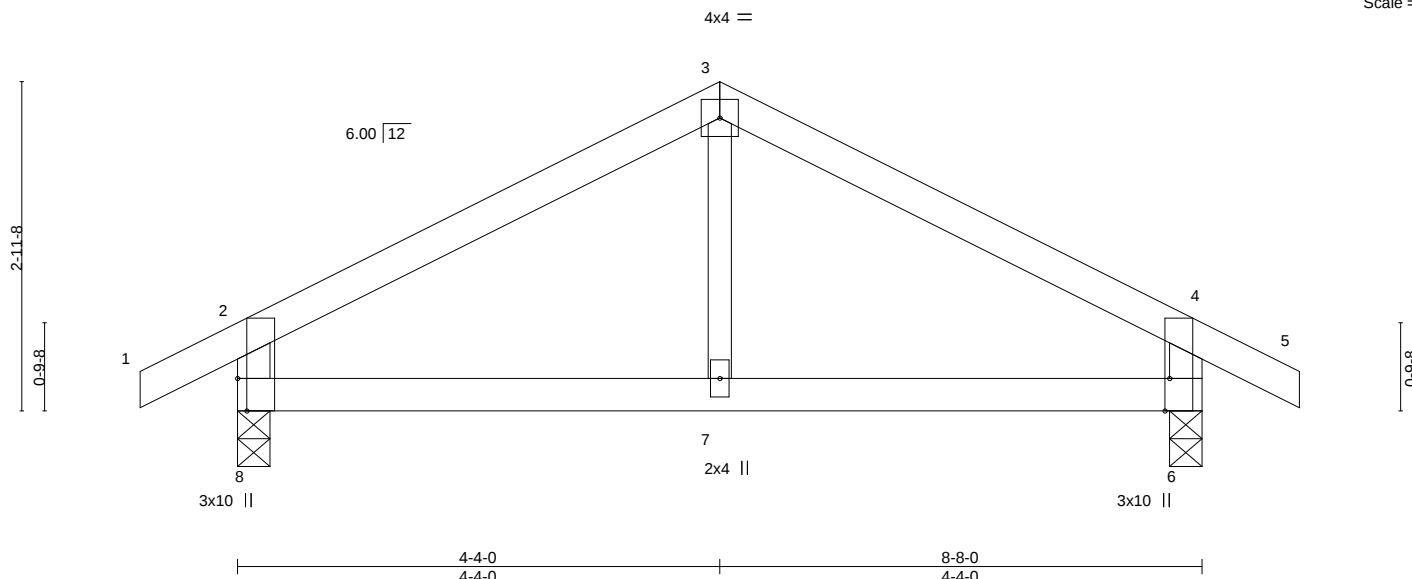


Plate Offsets (X,Y)--		[6:0-3-8,Edge], [8:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27
TCDL 10.0	Lumber DOL	1.15	BC 0.15
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.01 7 >999 360
			Vert(CT) -0.02 7-8 >999 240
			Horz(CT) 0.00 6 n/a n/a
			Wind(LL) 0.00 7-8 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 26 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

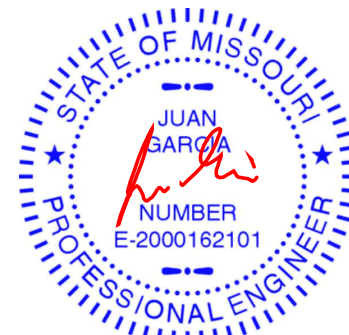
(size) 8=0-3-8, 6=0-3-8
Max Horz 8=-55(LC 6)
Max Uplift 8=-70(LC 8), 6=-70(LC 9)
Max Grav 8=448(LC 1), 6=448(LC 1)

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

TOP CHORD 2-3=-412/64, 3-4=-412/64, 2-8=-396/99, 4-6=-396/99
BOT CHORD 7-8=-4/299, 6-7=-4/299

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.



January 15, 2022

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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



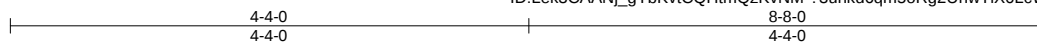
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss L3	Truss Type Common Girder	Qty 1	Ply 2	Lot 150 HT I49713869
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:09 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-?3uhkd6qm5oRg2UnwTIX6LcWQdU2rSaOzCQCZY3zvTyi



4x4 =

Scale = 1:19.3

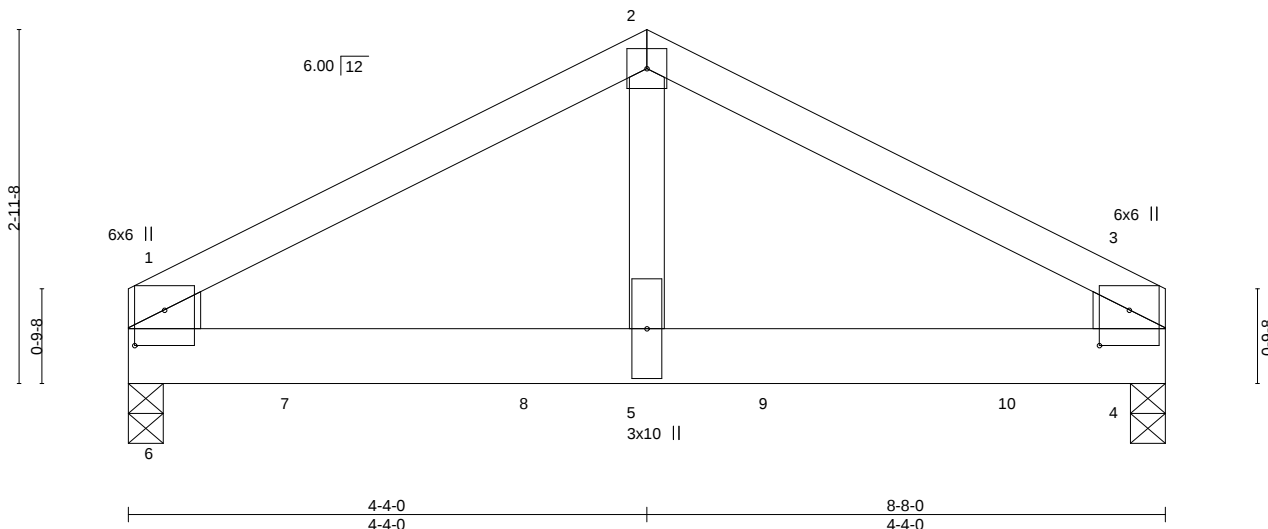


Plate Offsets (X,Y)--		[1:0-3-9,0-3-0], [3:0-3-9,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.20	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.03 5 >999 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.29	Vert(CT) -0.05 5 >999 240
BCDL 10.0	Rep Stress Incr NO	Matrix-R	Horz(CT) 0.01 4 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) 0.01 5 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 72 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x8 SP DSS *Except*
2-5: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 6=0-3-8, 4=0-3-8
Max Horz 6=-47(LC 25)
Max Uplift 6=-97(LC 8), 4=-100(LC 9)
Max Grav 6=2879(LC 1), 4=3019(LC 1)

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

TOP CHORD 1-2=-2883/115, 2-3=-2883/114, 1-6=-1435/98, 3-4=-1435/98
BOT CHORD 5-6=-59/2506, 4-5=-59/2506
WEBS 2-5=-10/2325

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, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 4=100.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1289 lb down and 35 lb up at 1-5-4, 1289 lb down and 35 lb up at 3-5-4, and 1297 lb down and 36 lb up at 5-5-4, and 1297 lb down and 36 lb up at 7-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



January 15,2022

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT
B220008	L3	Common Girder	1	2	I49713869
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:10 2022 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 4-6=-20
- Concentrated Loads (lb)
 - Vert: 7=-1289(B) 8=-1289(B) 9=-1297(B) 10=-1297(B)

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



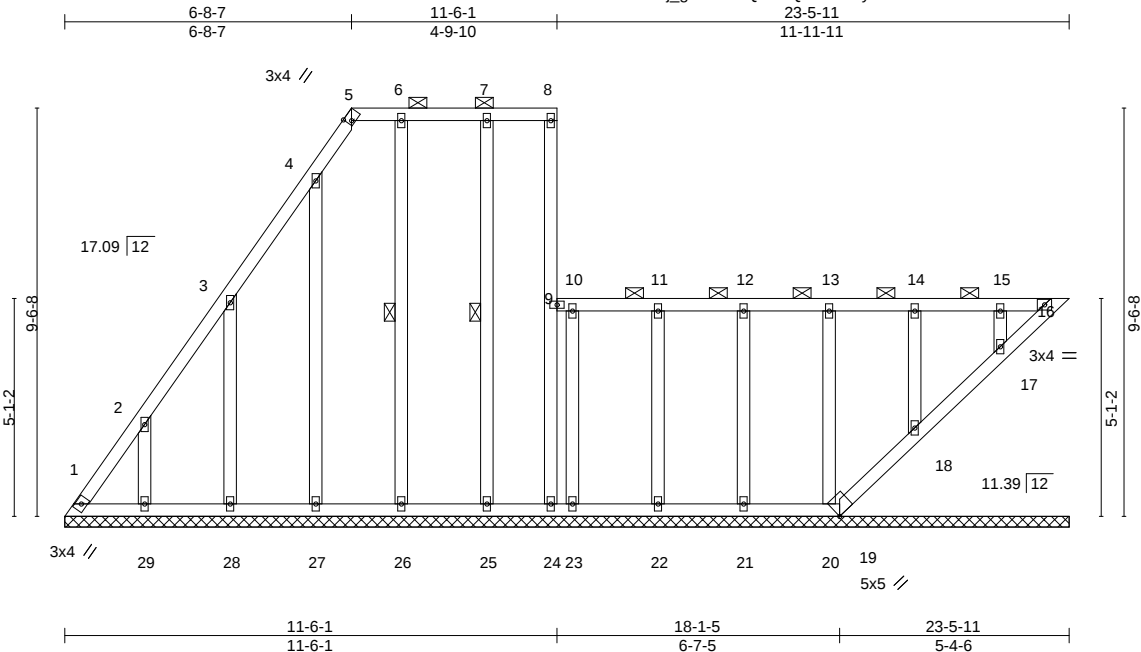
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713870
B220008	LAY2	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:11 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-yS0S9J84li28wMeA2uo?BmhuPRFKJNxbhQWvJdxzvTyg



Scale = 1:53.9

Plate Offsets (X,Y)--		[5:0-1-2,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.01	16	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 133 lb	FT = 10%

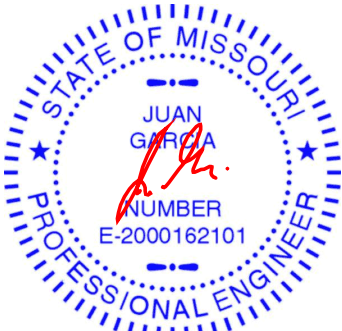
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

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

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 19, 26, 25, 23, 22, 21, 20, 18, 17 except (jt=lb) 1=256, 16=104, 29=200, 28=190, 27=243.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16, 18, 17.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



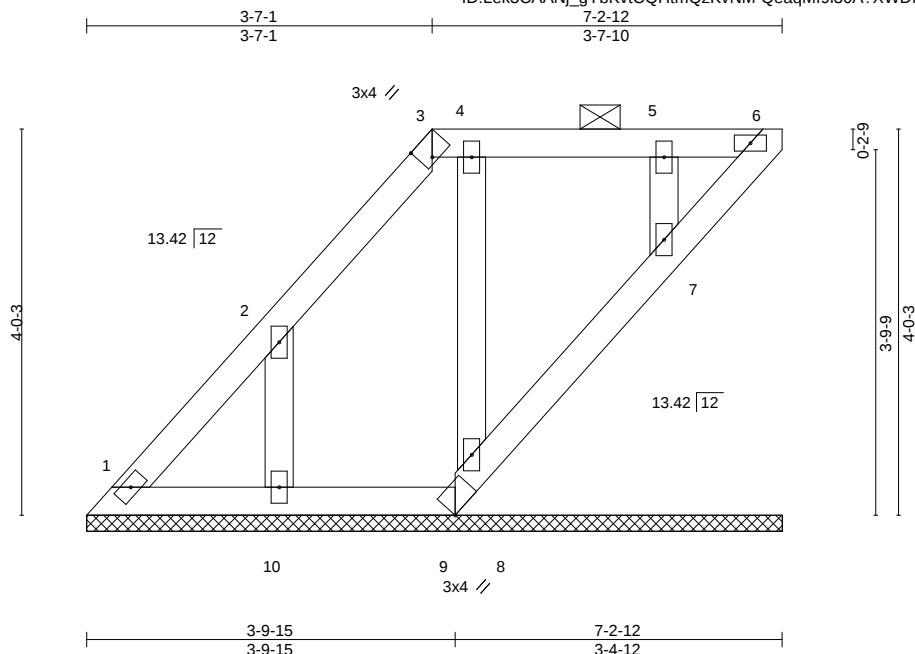
January 15,2022

Job B220008	Truss LAY3	Truss Type GABLE	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713871
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:12 2022 Page 1

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Scale: 1/2"=1'

Plate Offsets (X,Y)--		[3:0-1-6,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	6	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 27 lb	FT = 10%		

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 8-9.

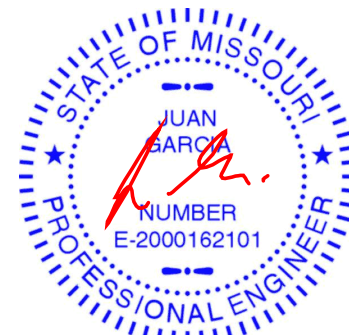
REACTIONS.

All bearings 7-2-12.
(lb) - Max Horz 1=152(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 6, 9, 8, 7 except 10=137(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 9, 10, 8, 7

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9, 8, 7 except (jt=lb) 10=137.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 8, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 15,2022

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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 B220008	Truss V1	Truss Type Valley	Qty 1	Ply 1	Lot 150 HT Job Reference (optional)	I49713872
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Wheeler Lumber, Waverly, KS - 66871,

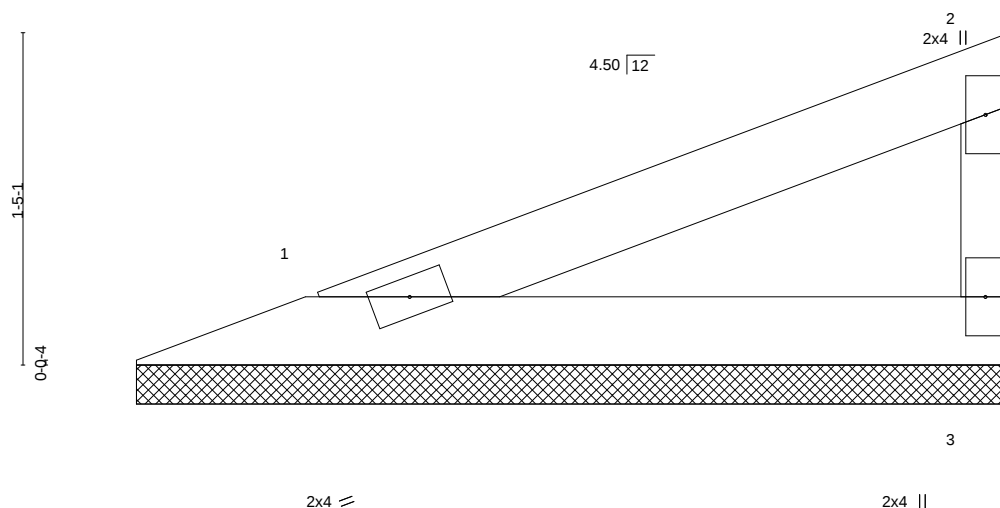
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:13 2022 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-ug8Ca_ALqKIs9fnZ9JqTGBnDJEv2nK1_upOQhqzvTye

3-9-7

3-9-7

Scale = 1:9.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 9 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=3-8-13, 3=3-8-13
Max Horz 1=48(LC 5)
Max Uplift 1=20(LC 8), 3=28(LC 8)
Max Grav 1=128(LC 1), 3=128(LC 1)

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

NOTES-

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



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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



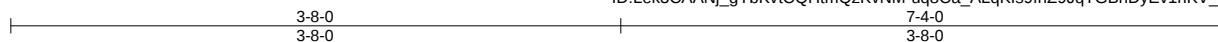
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713873
B220008	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

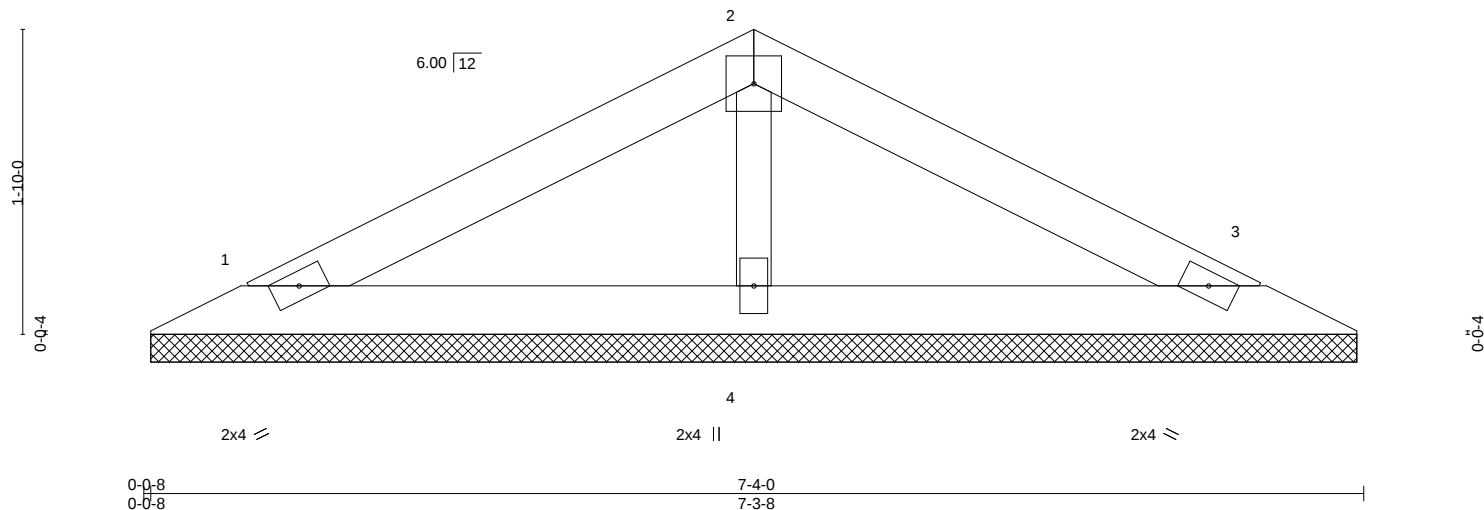
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:13 2022 Page 1

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4x4 =

Scale = 1:13.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



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



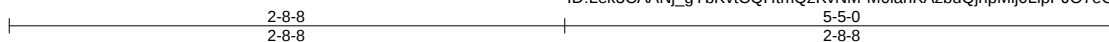
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 150 HT	I49713874
B220008	V3	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

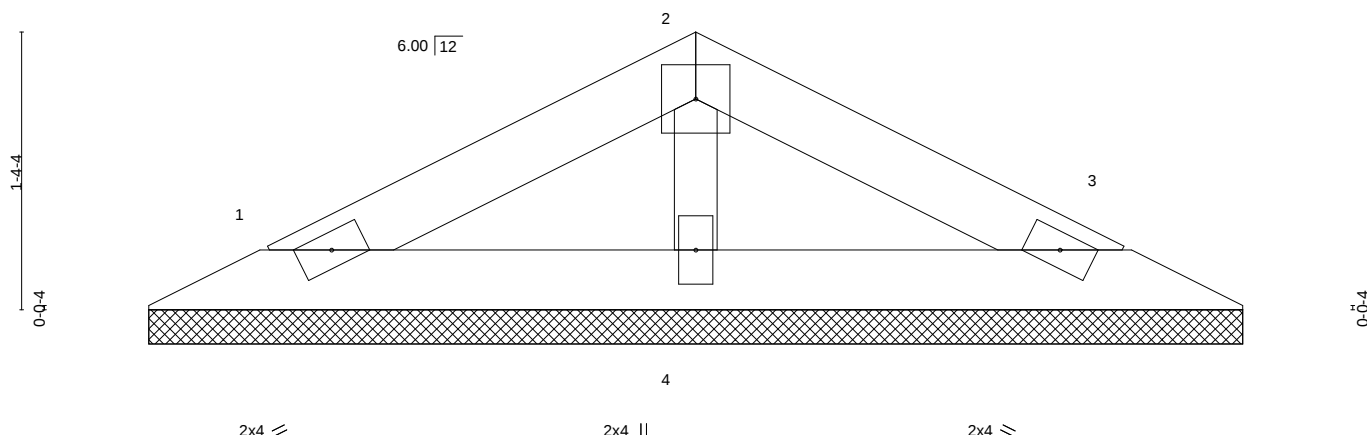
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:14 2022 Page 1

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4x4 =

Scale = 1:11.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

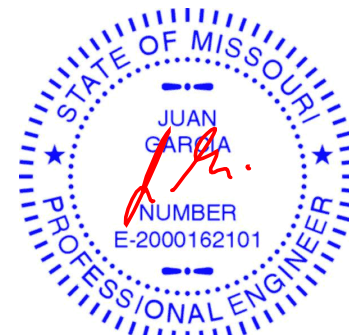
REACTIONS.

(size) 1=5-4-0, 3=5-4-0, 4=5-4-0
Max Horz 1=-18(LC 13)
Max Uplift 1=-22(LC 8), 3=-26(LC 9), 4=-2(LC 8)
Max Grav 1=98(LC 1), 3=98(LC 1), 4=179(LC 1)

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

NOTES-

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



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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



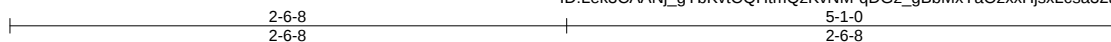
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B220008	Truss V4	Truss Type Valley	Qty 1	Ply 1	Lot 150 HT I49713875
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Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jan 14 09:42:15 2022 Page 1

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3x4 =

Scale = 1:10.5

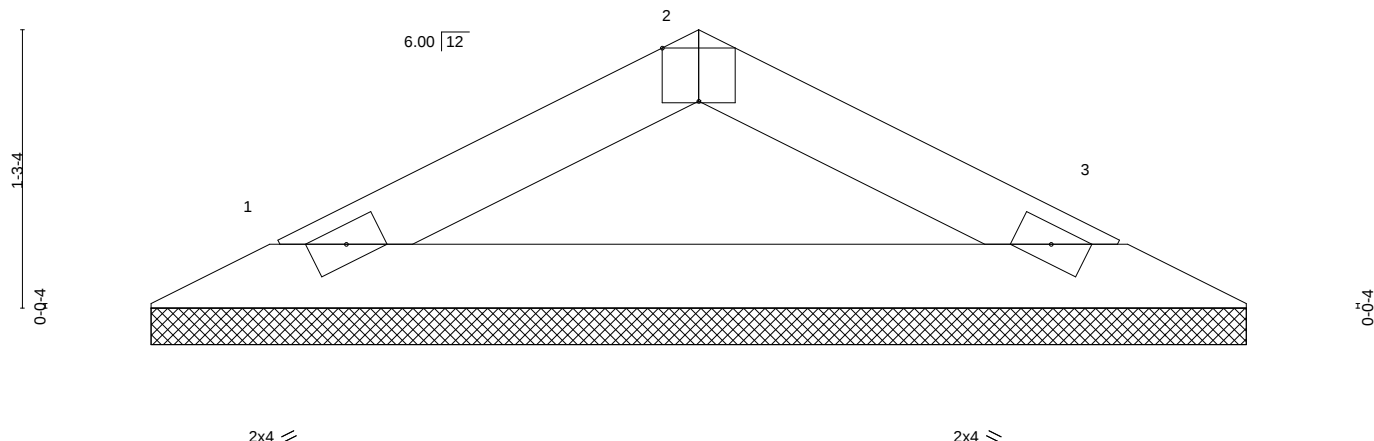


Plate Offsets (X,Y)--	[2:0-2-0,Edge]	5-0-8	5-1-0
		5-0-8	0-0-8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	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

BRACING-

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

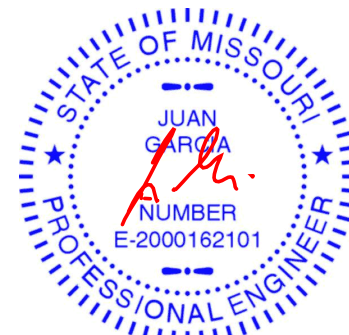
REACTIONS.

(size) 1=5-0-0, 3=5-0-0
Max Horz 1=17(LC 8)
Max Uplift 1=22(LC 8), 3=22(LC 9)
Max Grav 1=172(LC 1), 3=172(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.



January 15, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

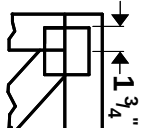
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



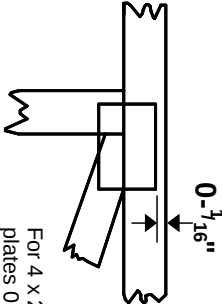
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 X 4

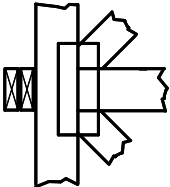
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



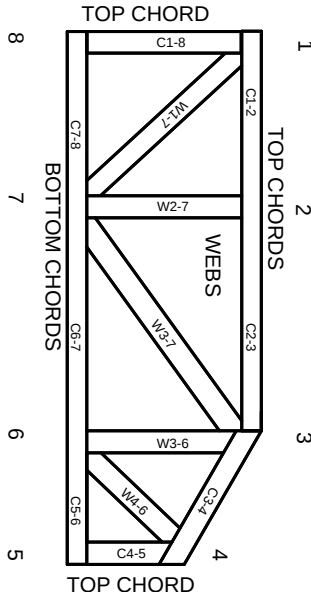
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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