

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

Re: 210411 Lot 108 H4

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: I45820283 thru I45820316

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193



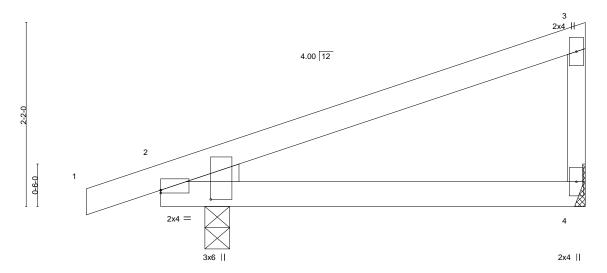
April 26,2021

Johnson, Andrew

,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 Truss Truss Type Qty Lot 108 H4 145820283 210411 В1 Monopitch 9 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:22:52 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-B71hhfPv5jl4UiaTex0O3RnbCBrMBX5LTiGAk3zMv9H 5-0-0 0-10-8



0-6-4 Plate Offsets (X Y)-- [2:0-0-0 0-0-6] [2:0-1-5 0-7-1]

	Trace Criscis (X,1) [2.0 0 0,0 0 0], [2.0 1 0,0 1 1]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.03	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	2-4	>933	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-P	Wind(LL)	0.00	2	****	240	Weight: 15 lb	FT = 10%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

WEBS 2x3 SPF No.2 WEDGE

Left: 2x3 SPF No.2

REACTIONS. (size) 4=Mechanical, 2=0-3-8

Max Horz 2=84(LC 7)

Max Uplift 4=-45(LC 8), 2=-81(LC 4) Max Grav 4=206(LC 1), 2=293(LC 1)

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

NOTES-

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



Structural wood sheathing directly applied or 5-0-0 oc purlins,

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

except end verticals.

April 26,2021

Scale = 1:13.6



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



Job Truss Truss Type Qty Lot 108 H4 145820284 210411 C₁ Monopitch Supported Gable Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:22:53 2021 Page 1

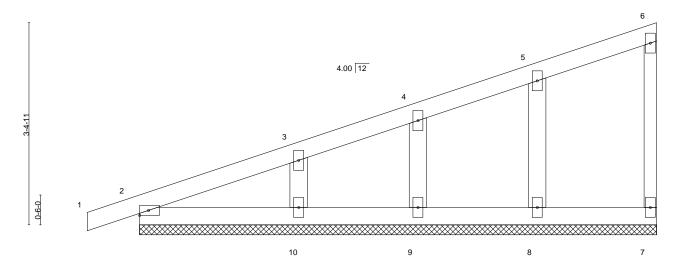
Wheeler Lumber, Waverly, KS - 66871,

0-10-8

ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-fJb3v?QXs1Qx6s8fCfXdceJrHaF3w_zUiM0jGVzMv9G

8-8-0

Scale = 1:19.3



LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.11	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 1 n/r 120	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.05 WB 0.02 Matrix-P	Vert(CT) 0.00 1 n/r 120 Horz(CT) -0.00 7 n/a n/a	Weight: 29 lb FT = 10%

LUMBER-BRACING-TOP CHORD

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

BOT CHORD

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

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

REACTIONS. All bearings 8-8-0. (lb) -Max Horz 2=138(LC 5)

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9, 10 Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8, 9, 10

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

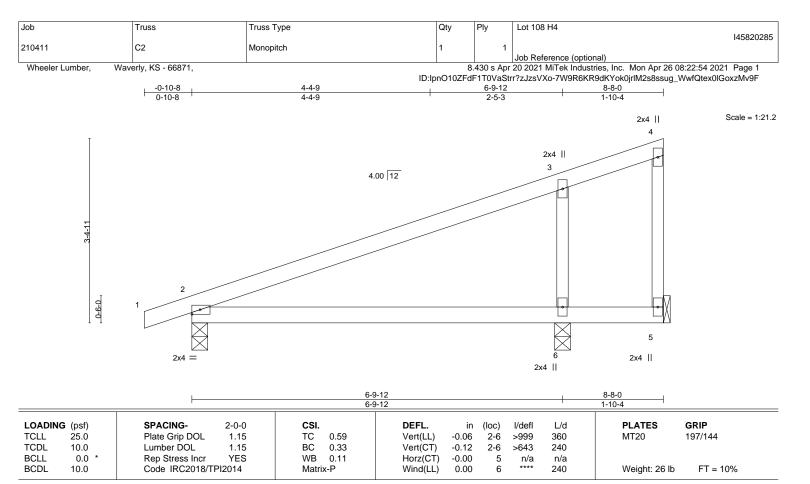
NOTES-

OTHERS

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







BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

BOT CHORD WEBS 2x3 SPF No.2

REACTIONS. 5=Mechanical, 2=0-3-8, 6=0-3-8 (size)

Max Horz 2=138(LC 5)

Max Uplift 5=-142(LC 1), 2=-74(LC 4), 6=-159(LC 8) Max Grav 5=45(LC 8), 2=319(LC 1), 6=652(LC 1)

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

WEBS 3-6=-503/248

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 except (jt=lb) 5=142, 6=159.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.



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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



ob	Truss	Truss Type	Qty	Ply		Lot 108 H4		145820286
10411	C3	Monopitch	8		1			145820286
		Monophon			.	Job Reference (option		
Wheeler Lumber, Wav	erly, KS - 66871,		•				es, Inc. Mon Apr 26 0	
	0.10.9		ID:IpnO102 6-8-0	ZFdF1T0Va	Strr	?zJzsVXo-bijpKgRnOe	gfL9I2J3Z5h3P0KOqE	Ourn9gVqKOzMv9E
	-0-10-8 0-10-8		6-8-0					
							2x4	Scale = 1:16.9
							3	
		4.	00 12					
			,			/		
				_	_			
-								
2-8-11								
	2							
Ţ								
0-9-0	1							
9								
							4	
							4	
							0.4.11	
	2x4 =						2x4	
			6-8-0					
			6-8-0					
LOADING (psf)	SPACING- 2-0-0		DEFL.	in (loc		I/defl L/d	PLATES	GRIP
TCLL 25.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15).10 2-4).20 2-4		>757 360 >379 240	MT20	197/144
BCLL 0.0 *	Rep Stress Incr YES				4	n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P			2	**** 240	Weight: 19 lb	FT = 10%
LIMPED			PRACING					

TOP CHORD

BOT CHORD

WEBS

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

REACTIONS.

4=Mechanical, 2=0-3-8 (size) Max Horz 2=108(LC 5) Max Uplift 4=-61(LC 8), 2=-92(LC 4) Max Grav 4=283(LC 1), 2=366(LC 1)

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

NOTES-

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





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

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

except end verticals.



Job Truss Truss Type Qty Lot 108 H4 145820287 210411 C4 Monopitch Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:22:55 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-bijpKgRnOegfL9l2J3Z5h3P?SOqXOurn9gVqKOzMv9E 7-8-0 0-10-8 6-11-8 0-8-8 Scale = 1:18.8 2x4 || 4.00 12 0-9-0 2x4 || 6-11-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/def 25.0 Plate Grip DOL 1.15 TC Vert(LL) -0.12 >663 360 197/144 **TCLL** 0.84 2-5 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.49 Vert(CT) -0.24 2-5 >331 240 0.0 Rep Stress Incr WB 0.00 -0.00

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

5

0.00

n/a ****

except end verticals.

n/a

240

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

Structural wood sheathing directly applied or 3-9-12 oc purlins,

Weight: 20 lb

FT = 10%

LUMBER-

BCLL

BCDL

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

10.0

REACTIONS.

5=0-3-8, 2=0-3-8 (size) Max Horz 2=124(LC 5) Max Uplift 5=-88(LC 8), 2=-89(LC 4) Max Grav 5=357(LC 1), 2=375(LC 1)

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

Code IRC2018/TPI2014

3-5=-290/128

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

Matrix-P

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

YES

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





Job Truss Truss Type Qty Lot 108 H4 145820288 210411 C5 Monopitch Structural Gable Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:22:56 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-3uHBX0SQ9yoWzJtEtn5KDHxAMoF67L5wOKENtqzMv9D 7-8-0 6-11-8 0-10-8 6-11-8 0-8-8 Scale = 1:18.8 2x4 || 2x4 || 4.00 12 2x4 || 0-9-0 2x4 || 2x4 || 2x4 = 2x4 || 4-8-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defl 25.0 Plate Grip DOL TC Vert(LL) -0.02 360 197/144 **TCLL** 1.15 0.89 5-6 >999 MT20

LUMBER-

TCDL

BCLL

BCDL

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

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

10.0

0.0

10.0

Wind(LL) BRACING-

Vert(CT)

Horz(CT)

-0.03

-0.00

0.00

5-6

5

6

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

240

n/a

240

Weight: 23 lb

FT = 10%

except end verticals.

>999

n/a ****

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

REACTIONS. (size) 5=0-3-8, 2=2-3-8, 6=0-3-8

Max Horz 2=124(LC 5)

Max Uplift 5=-107(LC 8), 2=-124(LC 4)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Grav 5=334(LC 1), 2=304(LC 1), 6=194(LC 3)

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

TOP CHORD 3-5=-296/130

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

ВС

WB

Matrix-P

0.15

0.00

- 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 studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

YES

- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=107, 2=124,
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



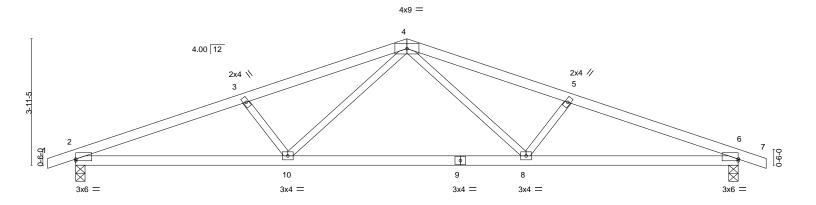






Job	Truss	Truss Type	Qty	Ply	Lot 108 H4		
							145820289
210411	D1	Common	5	1			
					Job Reference	e (optional)	
Wheeler Lumber, Way	verly, KS - 66871,		8	430 s Apr	20 2021 MiTek	Industries, Inc. Mon Apr 26 08:22:57 202	Page 1
		II	D:lpnO10ZFdF1T0	VaStrr?zJ:	zsVXo-X5ralM7	「2wFwNbTSQRUcZmUUToCURsl84d_xP	GzMv9C
_I -0-10-8 ₁	5-3-13	10-4-0	•	15-4-3	1	20-8-0	21-6-8
0-10-8	5-3-13	5-0-3		5-0-3		5-3-13	0-10-8

Scale = 1:35.9



		6-7-6	1	14-0-10	1	20-8-0		
		6-7-6	l	7-5-3		6-7-6		
Plate Offs	ets (X,Y)	[2:0-0-0,0-0-10], [6:Edge,0-0-10]						
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defI L/d	PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) -0.10 8-10	>999 360	MT20 197/144		
TCDL	10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.22 8-10	>999 240			
BCLL	0.0 *	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.05 6	n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 8-10	>999 240	Weight: 62 lb FT = 10%		

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=66(LC 12)

Max Uplift 2=-178(LC 4), 6=-178(LC 5) Max Grav 2=988(LC 1), 6=988(LC 1)

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

TOP CHORD 2-3=-2045/297, 3-4=-1836/268, 4-5=-1836/268, 5-6=-2045/297

BOT CHORD 2-10=-275/1859, 8-10=-118/1278, 6-8=-225/1859 4-8=-84/598, 5-8=-327/179, 4-10=-83/598, 3-10=-327/179 WFBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=178, 6=178.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-8-15 oc purlins.

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

April 26,2021



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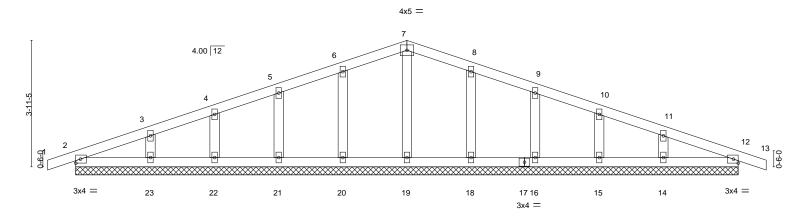
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



Job	Truss Type		Qty	Ply	Lot 108 H4	
						145820290
210411	D2	Common Supported Gable	1	1		
					Job Reference (optional)	
Wheeler Lumber, Wav	erly, KS - 66871,		8.	430 s Apr	20 2021 MiTek Industries, Inc. Mon Apr 26 08:22:58 2021	Page 1
			ID:IpnO10ZF	dF1T0VaS	Strr?zJzsVXo-?HPyyiUghZ2ECd1d_C7oli0j?byQbF6DsejU	kjzMv9B
₁ -0-10-8 ₁	10-4-0)			20-8-0	21-6-8
0-10-8	10-4-0)			10-4-0	0-10-8

0-10-8 Scale = 1:35.9



	-					20-8-0 20-8-0						
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	ВС	0.03	Vert(CT)	0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 70 lb	FT = 10%

LUMBER-BRACING-

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

REACTIONS. All bearings 20-8-0. Max Horz 2=66(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 18, 16, 15, 14, 12 Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 18, 16, 15, 14, 12

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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 2, 20, 21, 22, 23, 18, 16, 15, 14, 12.
- 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.





Job	Truss	Truss T	уре	C	ty	Ply	Lot 1	08 H4				145000004
210411	E1	Commo	on Supported Gable	1		1						I45820291
							Job R	eference (opt	onal)			
Wheeler Lumber,	Waverly, KS - 66871,			IDulas O40	75454	8.430 s Api	r 20 202	21 MiTek Indu -Qs44akWYz	stries, Inc.	Mon Apr 26 0	8:23:01 20:	21 Page 1
-0-10-8		17-6-0		ID.IpriO102	.rur i	TUVASIII?Z	JZSVAO	-QS44aKVV 12 34-10-8	окрэ4птед	rgvwreblp_	_noacg r cy	0122101090
-0-10-8 0-10-8		17-6-0						34-10-8 17-4-8				7
				4x5 =								Scale = 1:61.8
			6.00 12									
				11								
0-5-6 0-8-0	4 4 8 8	6	8 8 8		12	13	14	15		17		Mary 0 0 0 0 0 0 0 0 0
40 39 3x6	38 37	36 35	34 33 32	3x4 =		28	27	26 2	25 24	23	22	21
-				34-10-8 34-10-8								4
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.		in (loc)	l/defl	L/d	PI	_ATES	GRIP	

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

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

25.0

10.0

0.0

10.0

BRACING-

WEBS

Vert(LL)

Vert(CT)

Horz(CT)

-0.00

-0.00

0.01

21

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

120

120

n/a

MT20

Weight: 176 lb

197/144

FT = 10%

except end verticals.

n/r

n/r

n/a

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

1 Row at midpt 11-31

REACTIONS. All bearings 34-10-8.

(lb) -Max Horz 40=157(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 40, 21, 32, 33, 34, 35, 36, 37, 38, 29, 28, 27, 26, 25, 24, 23

TC

вс

WB

Matrix-R

0.11

0.06

0.17

except 39=-111(LC 8), 22=-108(LC 9)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

1.15

1.15

YES

Max Grav All reactions 250 lb or less at joint(s) 40, 21, 31, 32, 33, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26,

25, 24, 23, 22

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) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 40, 21, 32, 33, 34, 35, 36, 37, 38, 29, 28, 27, 26, 25, 24, 23 except (it=lb) 39=111, 22=108.
- 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.



April 26,2021





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 chorembers 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, rerection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 108 H4 145820292 210411 E2 Common Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:02 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-u2eSo3XAkoZfhEKOD1CkTYBDKD5GXvDpmGhh4UzMv97 12-4-13 7-4-7 -0-10-8 0-10-8 22-7-3 29-11-11 34-10-8 5-0-5 5-1-3 5-1-3 7-4-7 4-10-13 Scale = 1:60.3 4x5 || 6.00 12 3x4 / 3x6 / 3x4 ≥ 5 3x10 / 3x10 ≥ 6x8 = 6x8 = 0-8-12 14 16 17 1218 19 11 13 3x4 =3x6 =3x4 =6x8 =

Plate Offsets (X,Y)	ate Offsets (X,Y) [2:Edge,0-2-4], [9:Edge,0-2-4]									
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP						
TCLL 25.0	Plate Grip DOL 1.15	TC 0.80	Vert(LL) -0.25 11-13 >999 360	MT20 197/144						
TCDL 10.0	Lumber DOL 1.15	BC 1.00	Vert(CT) -0.41 11-13 >999 240							
BCLL 0.0 *	Rep Stress Incr YES	WB 0.66	Horz(CT) 0.12 10 n/a n/a							
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.11 13-14 >999 240	Weight: 135 lb FT = 10%						

BRACING-

TOP CHORD

BOT CHORD

WEBS

25-9-1

8-3-1

except end verticals.

1 Row at midpt

17-6-0

LUMBER-

REACTIONS.

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

2x3 SPF No.2 *Except* 2-15,9-10: 2x6 SPF No.2

(size) 15=0-3-8, 10=0-2-0 (req. 0-2-9)

Max Horz 15=156(LC 8)

Max Uplift 15=-218(LC 8), 10=-192(LC 9) Max Grav 15=1706(LC 2), 10=1641(LC 2)

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

2-3=-785/66, 3-5=-2579/307, 5-6=-1874/287, 6-7=-1873/288, 7-8=-2562/306, TOP CHORD

8-9=-589/30, 2-15=-523/101, 9-10=-352/52 14-15=-427/2368, 13-14=-223/2016, 11-13=-101/2007, 10-11=-291/2331

BOT CHORD WEBS 3-14=-297/235, 5-14=-15/499, 5-13=-692/263, 6-13=-167/1385, 7-13=-681/261,

7-11=-14/483, 8-11=-280/233, 3-15=-2007/321, 8-10=-2172/356

- 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, with BCDL = 10.0psf.
- 5) WARNING: Required bearing size at joint(s) 10 greater than input bearing size.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=218, 10=192.
- 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.



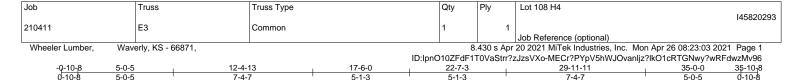
34-10-8

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

5-13, 7-13, 3-15, 8-10

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





5-1-3

7-4-7

5-1-3

0-10-8 Scale = 1:60.8

5-0-5

PLATES

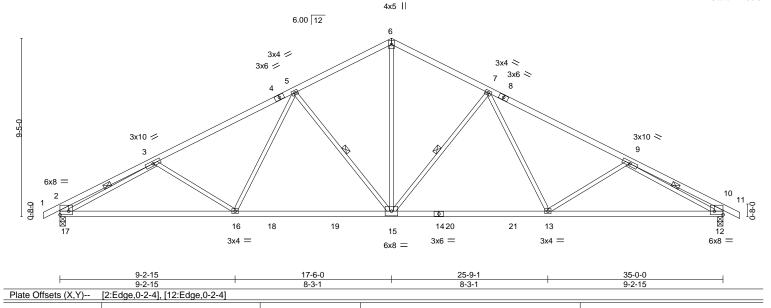
Weight: 136 lb

MT20

GRIP

197/144

FT = 10%



LUMBER-

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

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

25.0

10.0

10.0

0.0

2x3 SPF No.2 *Except*

2-17,10-12: 2x6 SPF No.2

Wind(LL) BRACING-

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

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

12

in (loc)

0.12

-0.25 13-15

-0.41 13-15

0.11 15-16

except end verticals.

I/def

>999

>999

>999

n/a

L/d

360

240

n/a

240

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. **WEBS** 7-15, 5-15, 3-17, 9-12 1 Row at midpt

REACTIONS. (size) 17=0-3-8, 12=0-3-8 Max Horz 17=146(LC 8)

Max Uplift 17=-219(LC 8), 12=-219(LC 9) Max Grav 17=1711(LC 2), 12=1711(LC 2)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

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

2-3=-787/67, 3-5=-2589/307, 5-6=-1884/288, 6-7=-1884/288, 7-9=-2589/308, TOP CHORD

9-10=-787/66, 2-17=-524/101, 10-12=-524/101

BOT CHORD 16-17=-418/2378, 15-16=-213/2025, 13-15=-92/2025, 12-13=-272/2376 **WEBS** 6-15=-167/1395, 7-15=-692/263, 7-13=-15/499, 9-13=-297/235, 5-15=-692/263,

5-16=-14/499, 3-16=-297/235, 3-17=-2015/322, 9-12=-2015/322

1.15

1.15

YES

7-4-7

- 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

CSI.

TC

ВС

WB

Matrix-S

0.80

1.00

0.63

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=219, 12=219.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 108 H4 145820294 210411 E4 Roof Special Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:04 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-qRmDDIYRGPpNwYUmLSECYzGZc0mK?mi6EaAo9MzMv95 35-10₋8 0-10-8 17-6-0 18-8-8 21-3-8 35-0-0 0-10-8 7-4-7 5-0-5 5-1-3 1-2-8 2-7-0 5-10-15 Scale = 1:65.7 4x5 || 6.00 12 6 3x4 🖊 4x9 < 3x4 // 3x6 > 5 3x6 > 3x10 // 3 16 12 = 2x4 || 6x8 =5x12 = 12 19 18 14 13 5x12 = 6x12 < 5x12 = 2x4 || 2x4 || 2x4 II 17-6-0 21-3-8 27-2-7 35-0-0 Plate Offsets (X,Y)--[2:Edge,0-2-4], [12:0-5-0,0-2-0], [17:0-6-0,0-2-12] SPACING-**PLATES** LOADING (psf) CSI. DEFL. in (loc) I/defI L/d GRIP TCLL 25.0 Plate Grip DOL 1.15 TC 0.81 Vert(LL) -0.27 14 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.96 Vert(CT) -0.50 19-20 >836 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.86 Horz(CT) 0.29 12 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Wind(LL) >999 240 Weight: 154 lb Matrix-S 0.17 15 LUMBER-BRACING-2x4 SPF No.2 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, 2x4 SPF No.2 *Except* except end verticals. 16-18,7-14: 2x3 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: **WEBS** 2x3 SPF No.2 *Except* 8-10-14 oc bracing: 20-21 6-0-0 oc bracing: 16-18.

WEBS

JOINTS

1 Row at midpt

1 Brace at Jt(s): 17

7-17, 3-21

REACTIONS.

BOT CHORD

2-21,10-12: 2x6 SP DSS

(size) 12=0-3-8, 21=0-3-8

Max Horz 21=-146(LC 9)

Max Uplift 12=-219(LC 9), 21=-219(LC 8) Max Grav 12=1632(LC 1), 21=1632(LC 1)

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

TOP CHORD 2-3=-692/66, 3-5=-2403/305, 5-6=-2538/299, 6-7=-2544/321, 7-9=-3637/329,

9-10=-2613/312, 2-21=-511/101, 10-12=-1554/262

BOT CHORD 20-21=-418/2270, 16-17=-134/3136, 15-16=-137/3161, 7-15=-80/1180, 12-13=-259/943 3-20=-301/236, 5-20=-547/93, 5-17=-273/218, 17-19=0/283, 6-17=-195/1941, WFBS

7-17=-1399/250, 13-15=-194/2495, 9-15=-42/957, 9-13=-1124/179, 3-21=-1999/323,

10-13=-9/1283, 17-20=-274/2390

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=219, 21=219.
- 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.



April 26,2021





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Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chorembers 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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 108 H4 145820295 210411 G1 Common Supported Gable Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:05 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-ldKbQ5Z31jxEYi3zvAlR5ApwKQLBkQnFTEwMhpzMv94 7-3-0 7-3-0 7-3-0 Scale = 1:27.3 4x5 = 5 6.00 12 6 3 3x6 || 0-8-0 0-8-0 XXXXX XXXX 18 16 12 10 17 15 14 13 11 3x6 || 14-6-0 LOADING (psf) SPACING-CSI. DEFL. I/defI L/d **PLATES** GRIP 2-0-0 (loc) 25.0 Plate Grip DOL TC Vert(LL) 999 197/144 **TCLL** 1.15 0.05 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.02 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.03 Horz(CT) 0.00 10 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Weight: 52 lb FT = 10%

LUMBER-

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

BOT CHORD WEBS 2x3 SPF No.2 **OTHERS** 2x4 SPF No.2 BRACING-

BOT CHORD

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

except end verticals.

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

REACTIONS. All bearings 14-6-0.

(lb) -Max Horz 18=-62(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 18, 10, 15, 16, 17, 13, 12, 11 Max Grav All reactions 250 lb or less at joint(s) 18, 10, 14, 15, 16, 17, 13, 12, 11

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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 10, 15, 16, 17, 13, 12, 11,
- 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.



April 26,2021





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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 108 H4 145820296 COMMON SUPPORTED GAB 210411 G2 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:07 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-F0RLrnbJZKByn?DL0bnvAbuEWE1XCJ8YwYPSmhzMv92 0-10-8 16-8-0 8-4-0 8-4-0 0-10-8 Scale: 3/8"=1 4x5 = 6 5 6.00 12 8 9 10 11 20 19 18 17 16 15 14 13 12 3x6 || 3x6 II 16-8-0 16-8-0

LUMBER-

LOADING (psf)

TCLL

TCDL

BCLL

BCDL

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

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

25.0

10.0

0.0

10.0

BRACING-

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

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

L/d

120

120

n/a

PLATES

Weight: 64 lb

MT20

GRIP

197/144

FT = 10%

except end verticals.

I/def

n/r

n/r

n/a

(loc)

11

11

12

-0.00

-0.00

0.00

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

REACTIONS. All bearings 16-8-0.

(lb) -Max Horz 20=-75(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13 Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

2-0-0

1.15

1.15

YES

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.

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

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

CSI.

TC

ВС

WB

Matrix-R

0.07

0.03

0.04

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 19, 15, 14, 13,
- 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.



April 26,2021





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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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 108 H4 145820297 210411 G3 COMMON Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:08 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-jC?k27cxKeJpP9oYall8ipRH5dFxxkWi9C80l8zMv91 -0-10-8 0-10-8 12-11-10 16-8-0 17-6-8 3-8-6 4-7-10 4-7-10 3-8-6 0-10-8 Scale: 3/8"=1 4x9 = 6.00 12 2x4 > 2x4 = 5 3 6 \mathbb{X} 9 10 8 3x10 = 6x6 || 6x6 || 16-8-0 8-4-0

Plate Off	ate Offsets (X,Y) [8:Edge,0-5-8]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.09	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.18	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.04	9	>999	240	Weight: 56 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2 *Except* 2-10,6-8: 2x6 SP DSS

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

Max Horz 10=77(LC 7)

Max Uplift 10=-116(LC 8), 8=-116(LC 9) Max Grav 10=807(LC 1), 8=807(LC 1)

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

2-3=-1065/176, 3-4=-820/109, 4-5=-820/109, 5-6=-1065/176, 2-10=-721/155, TOP CHORD 6-8=-721/155

BOT CHORD 9-10=-165/869, 8-9=-100/869

WEBS 4-9=0/381

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=116, 8=116.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-7-5 oc purlins,

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

except end verticals.



Job Truss Truss Type Qty Lot 108 H4 145820298 210411 G4 **ROOF SPECIAL** Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

3-9-4

8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:10 2021 Page 1 ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-fb7UTpdCsFZXeTywhjLcoEWdgRwbPdd_cWd7M0zMv9? 14-4-8 16-8-0 17-6-8 12-1-4 0-10-8 3-9-4 2-3-4 2-3-8

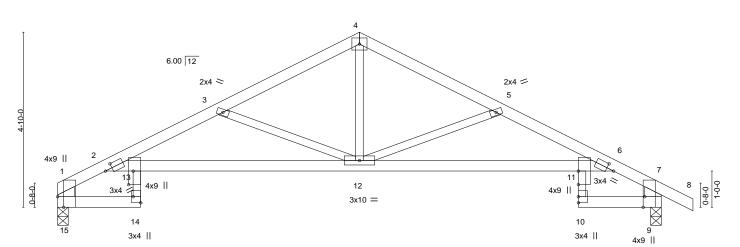
Scale: 3/8"=1 4x5 =

Structural wood sheathing directly applied or 4-10-14 oc purlins,

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

except end verticals.

10-0-0 oc bracing: 11-12



	2-3-8	8-4-0			14-4-8					
	2-3-8		6-0-8	'		6-0-	8		2-3-8	
Plate Offsets (X,Y)	[1:0-3-8,Edge], [2:0-2	-7,0-1-8], [6:0-2-7	,0-1-8], [9:0-3-8,Edge], [1 ⁻	1:0-4-8,0-0-	0], [13:0-4	l-8,0-1-8], [1	4:Edge,0)-2-8]		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Inc	1.15	CSI. TC 0.58 BC 0.59 WB 0.25	DEF Vert(Vert(Horz	LL) -0 CT) -0	in (loc) 0.16 12-13 0.32 12-13 0.29 9	l/defl >999 >606 n/a	L/d 360 240 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018	3/TPI2014	Matrix-S	Wind	I(LL) 0	.12 12-13	>999	240	Weight: 55 lb	FT = 10%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

4-6-12

2-3-4

2-3-8

2x4 SPF 2100F 1.8E TOP CHORD 2x4 SPF No.2 *Except* **BOT CHORD**

13-14,10-11: 2x3 SPF No.2, 2-6: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*

1-15,7-9: 2x6 SPF No.2

REACTIONS. (size) 15=0-3-8, 9=0-3-8 Max Horz 15=-81(LC 4)

Max Uplift 15=-90(LC 8), 9=-116(LC 9)

Max Grav 15=727(LC 1), 9=809(LC 1)

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

TOP CHORD 1-2=-528/91, 2-3=-1569/235, 3-4=-1095/114, 4-5=-1095/128, 5-6=-1560/193,

6-7=-524/87, 1-15=-770/120, 7-9=-856/135

BOT CHORD 2-13=-162/1224, 12-13=-214/1438, 11-12=-106/1425, 6-11=-81/1220

WEBS 4-12=-25/697, 3-12=-565/213, 5-12=-552/191

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





Job Truss Truss Type Qty Ply Lot 108 H4 145820299 210411 G5 **ROOF SPECIAL** Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:13 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-3Apd5qf48Ax6VwgVNruJPs88xeyXc_MRITsnyLzMv8y 14-4-8 12-1-4 16-6-8 2-3-8 2-3-4 3-9-4 3-9-4 2-3-4 2-2-0 Scale = 1:30.2 4x5 = 6.00 12 2x4 > 2x4 = 3 4-10-0 6 3x10 || 4x9 || 10 Вх4 1-0-0 4x9 | 11 0-8-0 4x9 || 3x10 =13 9 3x4 II 3x4 || 16-6-8 8-4-0 6-0-8 Plate Offsets (X,Y)--[1:0-3-8,Edge], [2:0-3-7,0-1-2], [6:0-3-7,0-1-2], [7:0-3-8,Edge], [10:0-4-8,0-0-0], [12:0-4-8,0-1-8], [13:Edge,0-2-8] LOADING (psf) SPACING-CSI. (loc) L/d **PLATES** GRIP -0.15 11-12 TCLL 25.0 Plate Grip DOL 1.15 TC 0.58 Vert(LL) >999 360 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.57 Vert(CT) -0.32 11-12 >612 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.25 Horz(CT) 0.28 8 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Wind(LL) >999 240 Weight: 54 lb FT = 10% Matrix-S 0.13 11-12 BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E BOT CHORD 2x4 SPF No.2 *Except*

12-13,9-10: 2x3 SPF No.2, 2-6: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*

1-14,7-8: 2x6 SPF No.2

REACTIONS. (size) 14=0-3-8, 8=0-2-0

Max Horz 14=72(LC 7) Max Uplift 14=-89(LC 8), 8=-88(LC 9)

Max Grav 14=724(LC 1), 8=724(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $1\hbox{-}2\hbox{--}525/80,\ 2\hbox{-}3\hbox{--}1560/240,\ 3\hbox{-}4\hbox{--}1086/117,\ 4\hbox{-}5\hbox{--}1085/131,\ 5\hbox{-}6\hbox{--}1542/205,}$

6-7=-495/74, 1-14=-767/122, 7-8=-763/110

BOT CHORD 2-12=-173/1217, 11-12=-229/1429, 10-11=-141/1405, 6-10=-110/1223

WEBS 4-11=-28/687, 3-11=-564/215, 5-11=-538/197

- 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 at joint(s) 8.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 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.



Structural wood sheathing directly applied or 4-11-2 oc purlins,

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

except end verticals.

10-0-0 oc bracing: 10-11

April 26,2021



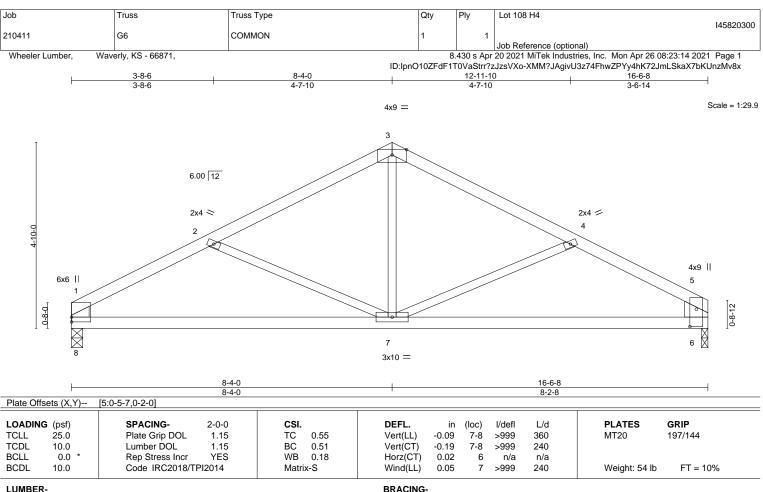


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2 *Except*

1-8: 2x6 SP DSS, 5-6: 2x8 SP DSS

REACTIONS. (size) 8=0-3-8, 6=0-2-0 Max Horz 8=73(LC 5)

Max Uplift 8=-89(LC 8), 6=-88(LC 9)

Max Grav 8=720(LC 1), 6=720(LC 1)

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

 $1\hbox{-}2\hbox{--}1067/179, 2\hbox{-}3\hbox{--}805/107, 3\hbox{-}4\hbox{--}803/109, 4\hbox{-}5\hbox{--}1027/171, 1\hbox{-}8\hbox{--}626/127,}$ TOP CHORD 5-6=-627/124

BOT CHORD 7-8=-179/880, 6-7=-119/835 **WEBS** 2-7=-268/182, 3-7=0/366

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 at joint(s) 6.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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.



Structural wood sheathing directly applied or 4-9-10 oc purlins,

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

except end verticals.

April 26,2021



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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 108 H4 145820301 210411 H1 Roof Special 2 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:15 2021 Page 1

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

5-12

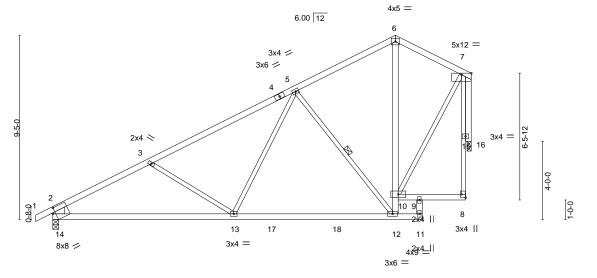
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

1 Row at midpt

ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-0YwNWWhKgnCplEquUGwnVHEQ_Sbb4oujmnLt1EzMv8w 18-10-8 21-4-8 17-6-0 -0-10-8 0-10-8 7-4-7 5-1-3 1-4-8 2-6-0

Scale = 1:58.9



18-10-8₁ 17-6-0 21-4-8

Plate	Offsets	(X,Y)	[8:Edge,0-2-8], [14:0-1-10,0-3-4]

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 0.87	Vert(LL) -0.23 12-13 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.72	Vert(CT) -0.38 12-13 >671 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.27 16 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06 12-13 >999 240	Weight: 97 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

9-11: 2x4 SPF No.2, 6-12: 2x4 SPF 2100F 1.8E, 2-14: 2x8 SP DSS

OTHERS 2x4 SPF No.2

REACTIONS. (size) 14=0-3-8, 16=0-2-8

Max Horz 14=213(LC 5)

Max Uplift 14=-17(LC 8), 16=-50(LC 8) Max Grav 14=1067(LC 13), 16=990(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1514/58, 3-5=-1256/19, 5-6=-497/50, 6-7=-489/59, 2-14=-928/64

BOT CHORD 13-14=-180/1311, 12-13=-67/845

WEBS 3-13=-341/154, 5-13=0/542, 5-12=-753/131, 10-12=-17/904, 7-10=-34/772,

7-16=-993/51

- 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, with BCDL = 10.0psf.
- 5) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 16.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 16.
- 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.





Job Truss Truss Type Qty Lot 108 H4 145820302 210411 H2 Roof Special 3 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:16 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-UkUlksiyR5KgMOP42_S01VmblsxxpHit?R4RZgzMv8v 21-4-8 17-6-0 7-4-7 5-1-3 3-10-8 Scale = 1:55.3 4x5 = 6.00 12 5x12 = 3x4 / 3x6 / 3x4 = 2x4 > 7-5-12

> 8x8 / 4x9 2x4 || 17-6-0 3-10-8

10

3x4 =

11

3x4 =

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

LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.20	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.32	9-10	>797	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.21	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.05	9-10	>999	240	Weight: 93 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

15

16

9

except end verticals.

1 Row at midpt

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

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

LUMBER-

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

2-12: 2x8 SP DSS

OTHERS 2x4 SPF No.2

REACTIONS. (size) 12=0-3-8, 14=0-2-8

Max Horz 12=226(LC 5)

Max Uplift 12=-17(LC 8), 14=-50(LC 8) Max Grav 12=1064(LC 13), 14=974(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1508/58, 3-5=-1249/20, 5-6=-494/48, 6-7=-431/64, 2-12=-928/64 **BOT CHORD** 10-12=-166/1311, 9-10=-56/844 **WEBS** 3-10=-342/154, 5-10=0/540, 5-9=-746/131, 7-9=-30/786, 7-14=-977/51

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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 14.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 14.
- 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.





Job Truss Truss Type Qty Lot 108 H4 145820303 210411 **H3** Roof Special 3 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:17 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-yx27xCibCPSX_Y_GchzFaiJn8GJSYgY0D5q_56zMv8u 17-6-0 5-9-10 4-0-6 7-8-0 3-10-8 Scale = 1:55.3 4x9 = 6.00 12 6 5x12 = 3x4 / 4x9 / 6-5-12 3x4 / 3x4 = 1-0-0 10 7x12 = 4x9 = 2x4 || 12 8x8 / 3x6 = 2x4 || 9-10-0 5-9-10 17-6-0 5-9-10 7-8-0 3-10-8 4-0-6 Plate Offsets (X,Y)--[12:0-2-8,0-1-8], [13:0-1-10,0-3-4] **PLATES** LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/def L/d GRIP TCLL 25.0 Plate Grip DOL 1.15 TC 0.82 Vert(LL) -0.12 9-10 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.57 Vert(CT) -0.28 9-10 >912 240

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

0.15

0.06

15

11

n/a

>999

except end verticals.

1 Row at midpt

6-0-0 oc bracing: 11-12.

n/a

240

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

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

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SPF No.2

0.0

10.0

BOT CHORD 2x4 SPF No.2 *Except*

4-11: 2x3 SPF No.2 2x3 SPF No.2 *Except*

WEBS 2-13: 2x8 SP DSS

2x4 SPF No.2 **OTHERS**

REACTIONS. (size) 13=0-3-8, 15=0-2-8

Max Horz 13=267(LC 8)

Max Uplift 13=-140(LC 8), 15=-173(LC 8) Max Grav 13=1028(LC 1), 15=915(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD $2-3=-1409/159,\ 3-4=-1438/243,\ 4-6=-568/85,\ 6-7=-454/123,\ 2-13=-936/175$

BOT CHORD 12-13=-325/1149, 4-10=-35/441, 9-10=-330/1299

WEBS 3-12=-292/148, 10-12=-299/1168, 4-9=-1033/336, 7-9=-148/724, 7-15=-918/174

YES

WB

Matrix-S

0.75

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=140, 15=173,
- 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.



FT = 10%

Weight: 95 lb







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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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



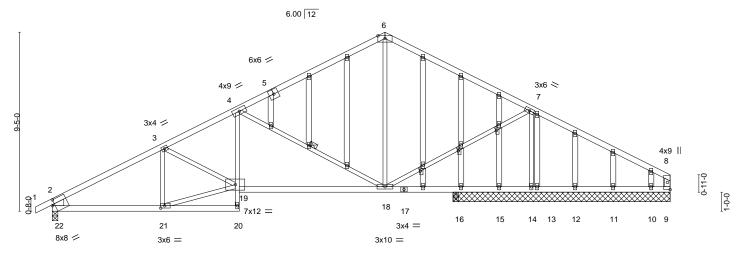
Job Truss Truss Type Qty Lot 108 H4 145820304 210411 H4 **GABLE** Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:19 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-uJAuMtkrk0iFDr8fj6?jf7O5g3zB0ZkJhPJ5A?zMv8s 9-10-0 -0-10-8 0-10-8 5-9-10 4-0-6 7-8-0 7-8-7 7-3-9

> Scale = 1:60.6 4x9 =

> > Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing, Except:



5-9-10 4-0-6 3-10-8 Plate Offsets (X,Y)--[21:0-2-8,0-1-8], [22:0-1-10,0-3-4], [30:0-1-11,0-0-4], [32:0-1-11,0-0-4], [34:0-1-11,0-0-4] SPACING-LOADING (psf) (loc) I/defl L/d **PLATES** GRIP TCLL 25.0 Plate Grip DOL 1.15 TC 0.95 Vert(LL) -0.14 18-19 >999 360 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.68 Vert(CT) -0.32 18-19 >785 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.77 Horz(CT) 0.05 n/a 16 n/a Code IRC2018/TPI2014 **BCDL** 10.0 Wind(LL) 0.09 18-19 >999 240 Weight: 162 lb FT = 10% Matrix-S

21-4-8

17-6-0

LUMBER-BRACING-TOP CHORD

9-10-0

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

4-20: 2x3 SPF No.2 10-0-0 oc bracing: 21-22,19-20,18-19. WEBS 2x3 SPF No.2 *Except* **WEBS** 1 Row at midpt

2-22: 2x8 SP DSS, 8-9: 2x4 SPF No.2

2x4 SPF No.2 **OTHERS**

REACTIONS. All bearings 11-5-0 except (jt=length) 22=0-3-8.

Max Horz 22=179(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 15, 13, 10 except 8=-133(LC 9), 22=-191(LC 8), 14=-208(LC 8), 9=-240(LC 1)

All reactions 250 lb or less at joint(s) 8, 9, 16, 16, 15, 13, 12, 11 Max Grav

except 22=1150(LC 1), 14=1479(LC 1), 10=295(LC 1)

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

TOP CHORD 2-3=-1632/252, 3-4=-1753/347, 4-6=-856/197, 6-7=-860/225, 7-8=-90/277,

2-22=-1048/222

BOT CHORD 21-22=-317/1342, 4-19=-30/455, 18-19=-336/1583

WEBS 3-21=-365/152, 19-21=-292/1366, 4-18=-1061/334, 6-18=-26/269, 7-18=-68/890,

7-14=-1416/199

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 13, 10 except (jt=lb) 8=133, 22=191, 14=208, 9=240.
- 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.



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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 108 H4 145820305 210411 **H5** Common Supported Gable Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:21 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-qiHenZm5GdyzT9H2rX1BkYTe_tpgUe9c8joCEtzMv8q 22-3-0 0-10-8 0-10-8 0-10-8 10-8-4 10-8-4 Scale = 1:40.0 4x5 = 8 6.00 12 5 10 11 12 13 **** XXXX 25 24 23 22 21 20 19 18 17 16 15 3x6 II 3x6 | 3x4 =

	21-4-8 21-4-8										
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.07 BC 0.04 WB 0.07 Matrix-R	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 12 n/r 120 Vert(CT) -0.00 12 n/r 120 Horz(CT) 0.00 14 n/a n/a	PLATES GRIP MT20 197/144 Weight: 88 lb FT = 10%							

LUMBER-BRACING-

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

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 21-4-8. Max Horz 25=90(LC 7) (lb) -

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15 Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 17, 16, 15

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

NOTES-

OTHERS

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



April 26,2021





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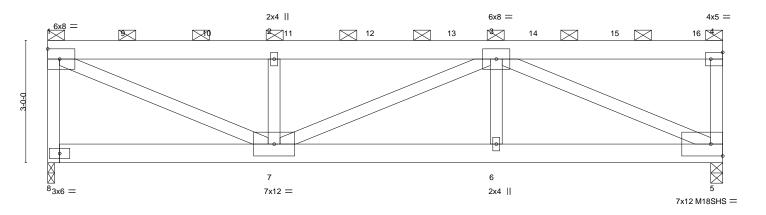
AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 108 H4 145820306 Flat Girder 210411 R1 Z Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:22 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-Iur0_vmj1x4q5JsEOEYQHm0fEH_ADuzINNXInKzMv8p 10-11-15 16-6-8

5-5-5

Scale = 1:28.2



	5-6-9 5-6-9		11-15 5-5		16-6-8 5-6-9	——
Plate Offsets (X,Y) [4:Edge,0-2-0]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.74 BC 0.73 WB 0.93 Matrix-S	DEFL. in (low low low low low low low low low low	-7 >999 360 -7 >999 240 5 n/a n/a	PLATES MT20 M18SHS Weight: 175 lb	GRIP 197/144 197/144 FT = 10%

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

REACTIONS. (size) 5=0-3-8 (req. 0-3-9), 8=0-2-0 (req. 0-3-0)

Max Horz 8=-77(LC 4)

Max Uplift 5=-280(LC 5), 8=-448(LC 4) Max Grav 5=4508(LC 2), 8=3827(LC 1)

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

1-8=-3709/464, 1-2=-6263/650, 2-3=-6263/650, 4-5=-1508/96 TOP CHORD

BOT CHORD 6-7=-470/6319, 5-6=-470/6319

WFBS 1-7=-690/6717, 2-7=-2798/468, 3-7=-486/0, 3-5=-6770/490

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 - Top chords connected as follows: 2x4 1 row at 0-9-0 oc, 2x6 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) WARNING: Required bearing size at joint(s) 5, 8 greater than input bearing size.
- 9) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=280, 8=448,
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 845 lb down and 177 lb up at 1-11-8, 845 lb down and 177 lb up at 3-11-8, 845 lb down and 177 lb up at 5-11-8, 913 lb down and 53 lb up at 7-11-8, 913 lb down and 53 lb up at 9-11-8, 913 lb down and 53 lb up at 11-11-8, and 929 lb down and 54 lb up at 13-11-8, and 945 lb down and 53 lb up at 15-11-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.



2-0-0 oc purlins (4-8-15 max.): 1-4, except end verticals.

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

April 26,2021

OF MISSOL

ANDREW

THOMAS

JOHNSON

Continued on page 2 LOAD CASE(S) Standard

AWARNING - 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



Job Truss Truss Type Qty Ply Lot 108 H4 145820306 Flat Girder R1 210411

Wheeler Lumber,

Waverly, KS - 66871,

| Z Job Reference (optional)

8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:22 2021 Page 2
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-lur0_vmj1x4q5JsEOEYQHm0fEH_ADuzlNNXInKzMv8p

LOAD CASE(S) Standard

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

Concentrated Loads (lb)

Vert: 9=-845 10=-845 11=-845 12=-845 13=-845 14=-845 15=-845 16=-865



Truss Type Qty 145820307 Valley 210411 V1 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:23 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-n5PPCFnLoFChiTRQyy4fpzZw8gT8yZrvc1HJJmzMv8o 5-1-8 5-1-8 Scale = 1:17.8 4x9 = 2 6.00 12 3x4 🖊 3x4 < 2x4 || 10-3-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 **TCLL** 0.28 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.17 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-S Weight: 25 lb FT = 10% LUMBER-**BRACING-**

TOP CHORD

BOT CHORD

Lot 108 H4

Job

Truss

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

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

REACTIONS. 1=10-2-0, 3=10-2-0, 4=10-2-0 (size) Max Horz 1=40(LC 8)

Max Uplift 1=-39(LC 8), 3=-46(LC 9), 4=-24(LC 8) Max Grav 1=191(LC 21), 3=191(LC 22), 4=429(LC 1)

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

2-4=-293/77 WEBS

NOTES-

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



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

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



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Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chorembers 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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 108 H4 145820308 Valley 210411 V2 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:24 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-FHznPbo_ZYKYKd0cWfbuMB58Z4qBh0b2qh0srCzMv8n 3-1-8 3-1-8 3-1-8 Scale = 1:12.4 4x5 = 2 6.00 12 4-0-0 0-0-4 4 2x4 / 2x4 || 2x4 > LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 **TCLL** 0.11 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.03 Horz(CT) 0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 14 lb FT = 10% LUMBER-**BRACING-**

TOP CHORD

BOT CHORD

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

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

REACTIONS. (size)

Max Horz 1=-22(LC 13)

Max Uplift 1=-27(LC 8), 3=-31(LC 9), 4=-3(LC 8) Max Grav 1=117(LC 1), 3=117(LC 1), 4=215(LC 1)

1=6-2-0, 3=6-2-0, 4=6-2-0

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

NOTES-

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



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

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



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 chorembers 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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



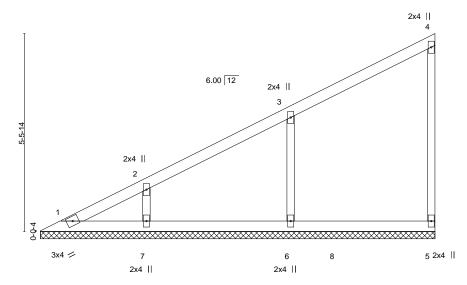
Job Truss Truss Type Qty Lot 108 H4 145820309 210411 V3 Valley

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:25 2021 Page 1 ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-jTX9dxpcKsSPynbp4N67vOeHQU88QRtC3LmPNezMv8m

10-11-12 10-11-12

Scale: 3/8"=1"



LOADIN	G (psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.23	DEFL. Vert(LL) n	in (loc) n/a -	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.14	1	n/a -	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) -0.0	00 5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 33 lb	FT = 10%

LUMBER-BRACING-

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

OTHERS 2x3 SPF No.2 TOP CHORD

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

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

REACTIONS. All bearings 10-11-4. (lb) -

Max Horz 1=213(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 5, 7 except 6=-121(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=433(LC 2), 7=314(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 3-6=-314/166 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7 except (jt=lb) 6=121
- 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.



April 26,2021



Job Truss Truss Type Qty Lot 108 H4 145820310 210411 V4 Valley

Wheeler Lumber, Waverly, KS - 66871, Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:26 2021 Page 1

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

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

except end verticals.

Scale = 1:26.9

ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-Bg5XqHpE5AaGZwA?d4dMRcBRPuUF9uNLI?Vzw5zMv8I

8-11-12

2x4 | 3 6.00 12 2x4 || 4-0-0 2x4 /

LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.28	DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.14 WB 0.07 Matrix-P	Vert(CT) n/a - n/a 999 Horz(CT) -0.00 4 n/a n/a	Weight: 26 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

2x4 ||

LUMBER-

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

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

REACTIONS. (size) 1=8-11-4, 4=8-11-4, 5=8-11-4

Max Horz 1=172(LC 5)

Max Uplift 4=-27(LC 5), 5=-139(LC 8)

Max Grav 1=152(LC 16), 4=126(LC 1), 5=464(LC 1)

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

2-5=-361/201 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=139
- 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.



April 26,2021



Job Truss Truss Type Qty Lot 108 H4 145820311 210411 V5 Valley

Wheeler Lumber, Waverly, KS - 66871, Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:26 2021 Page 1

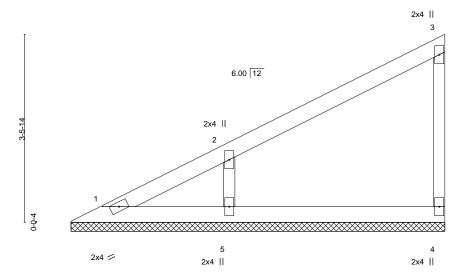
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-Bg5XqHpE5AaGZwA?d4dMRcBTquVw9vjLI?Vzw5zMv8I 6-11-12

Scale = 1:21.4



LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	I2014	Matri	x-P						Weight: 19 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

REACTIONS.

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

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

(size) 1=6-11-4, 4=6-11-4, 5=6-11-4

Max Horz 1=130(LC 5) Max Uplift 4=-27(LC 8), 5=-111(LC 8)

Max Grav 1=69(LC 16), 4=142(LC 1), 5=369(LC 1)

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

2-5=-287/160 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=111
- 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.



April 26,2021



Job Truss Truss Type Qty Lot 108 H4 145820312 Valley 210411 V6 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:27 2021 Page 1

Wheeler Lumber,

Waverly, KS - 66871,

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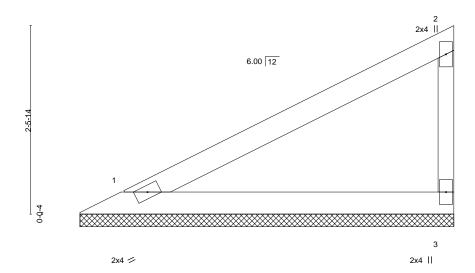
Structural wood sheathing directly applied or 4-11-12 oc purlins,

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

except end verticals.

4-11-12

Scale = 1:15.2



LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	` -	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-P	` '					Weight: 13 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

1=4-11-4, 3=4-11-4 (size) Max Horz 1=89(LC 5) Max Uplift 1=-25(LC 8), 3=-47(LC 8) Max Grav 1=191(LC 1), 3=191(LC 1)

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

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





Job Truss Truss Type Qty Lot 108 H4 145820313 V7 Valley 210411 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:28 2021 Page 1

Wheeler Lumber,

Waverly, KS - 66871,

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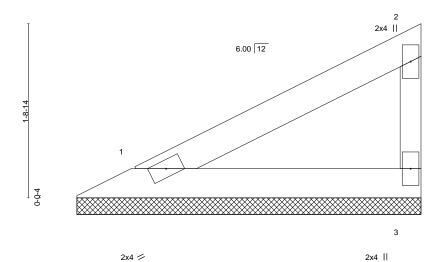
Structural wood sheathing directly applied or 3-5-12 oc purlins,

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

except end verticals.

3-5-12

Scale = 1:11.5



LOADIN TCLL TCDL	25.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.13 0.07	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/Ti	YES PI2014	WB Matri	0.00 x-P	Horz(CT)	-0.00	3	n/a	n/a	Weight: 8 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

1=3-5-4, 3=3-5-4 (size) Max Horz 1=57(LC 5) Max Uplift 1=-16(LC 8), 3=-30(LC 8) Max Grav 1=124(LC 1), 3=124(LC 1)

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

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





Job Truss Truss Type Qty Lot 108 H4 145820314 Valley 210411 V8

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:28 2021 Page 1 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-72DIFyrUcnqzpEKOIVfqW1GIUh9Jdp0elJ_3_zzMv8j

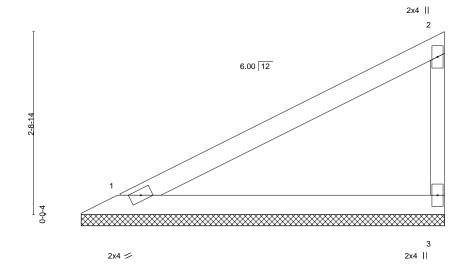
Structural wood sheathing directly applied or 5-5-12 oc purlins,

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

except end verticals.

5-5-12 5-5-12

Scale = 1:17.2



LOADIN TCLL TCDL	IG (psf) 25.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.43 0.23	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc) -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TF	YES PI2014	WB Matri	0.00 x-P	Horz(CT)	-0.00	3	n/a	n/a	Weight: 14 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 1=5-5-4, 3=5-5-4 (size) Max Horz 1=99(LC 5) Max Uplift 1=-27(LC 8), 3=-52(LC 8) Max Grav 1=214(LC 1), 3=214(LC 1)

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

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





Job Truss Truss Type Qty Lot 108 H4 145820315 210411 V9 Valley

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:29 2021 Page 1 ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-bFmgSls6N5yqQOvaJCB33Epzu5XcMGQn_zkdWQzMv8i

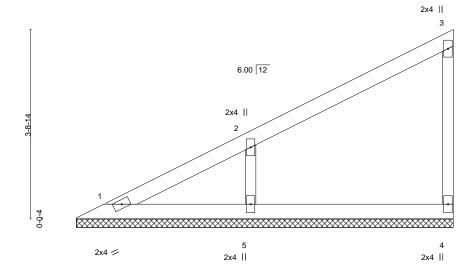
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

7-5-12

Scale = 1:22.7



LOADING TCLL TCDL	G (psf) 25.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.20 0.10	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc)	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TF	YES	WB Matri	0.05	Horz(CT)	-0.00	4	n/a	n/a	Weight: 21 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 1=7-5-4, 4=7-5-4, 5=7-5-4

Max Horz 1=141(LC 5)

Max Uplift 4=-25(LC 8), 5=-116(LC 8)

Max Grav 1=93(LC 16), 4=140(LC 1), 5=386(LC 1)

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

2-5=-300/168 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=116
- 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.



April 26,2021



Job Truss Truss Type Qty Lot 108 H4 145820316 210411 V10 Valley

Wheeler Lumber, Waverly, KS - 66871, Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:23:24 2021 Page 1

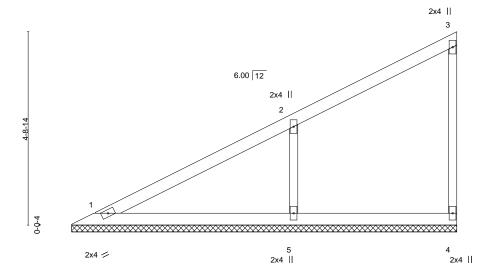
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

ID:IpnO10ZFdF1T0VaStrr?zJzsVXo-FHznPbo_ZYKYKd0cWfbuMB55X4oWh?m2qh0srCzMv8n 9-5-12

Scale = 1:28.2



LOADIN TCLL	IG (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.30	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-S						Weight: 27 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 1=9-5-4, 4=9-5-4, 5=9-5-4

Max Horz 1=182(LC 5)

Max Uplift 4=-28(LC 5), 5=-148(LC 8)

Max Grav 1=174(LC 1), 4=121(LC 1), 5=492(LC 1)

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

WEBS 2-5=-373/198

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=148
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 × 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:

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

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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