



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

Re: B220017 Lot 121 MN

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: I51909914 thru I51909959

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193



May 13,2022

Sevier, Scott

,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 Ply Lot 121 MN 151909914 B220017 A1 Hip Girder 2 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:15 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-IR3PWv3_Un7dt1BuEyXv_Ep1JsyRyAfptn52vKzHHvg

10-1-8

10-1-8

Scale = 1:26.5

14-10-8

0-10-8

14-0-0

2-0-0

1/1-0-0

12-0-0

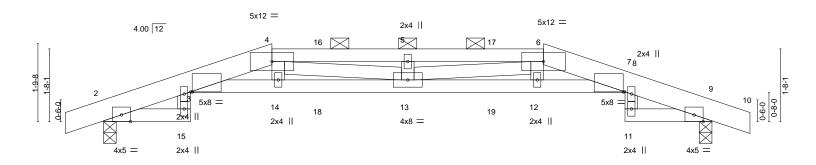
1-10-8

12-0-0

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

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

Structural wood sheathing directly applied or 5-9-0 oc purlins, except



	1	2-0-0	3-10-0 I		7-0-0	I	10-1-0		1	12-0-0	14-0-0	
		2-0-0	1-10-8	;	3-1-8		3-1-8			1-10-8	2-0-0	
Plate Offse	ets (X,Y)	[3:0-0-7,0-0-0], [7:0-0-6	,0-0-1]									
			•									
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	0.90	Vert(LL)	-0.20	13	>807	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.37	13	>449	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.20	9	n/a	n/a		
BCDL	10.0	Code IRC2018/7	ΓPI2014	Matri	x-S	Wind(LL)	0.18	13	>923	240	Weight: 100 lb	FT = 10%

BOT CHORD

7-0-0

LUMBER-BRACING-TOP CHORD

3-10-8

TOP CHORD 2x6 SPF No.2 *Except*

4-6: 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

-0-10-8 0-10-8

2-0-0 2-0-0

3-10-8 1-10-8

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

Max Horz 2=-27(LC 9)

2-0-0

Max Uplift 2=-267(LC 4), 9=-264(LC 5) Max Grav 2=1043(LC 1), 9=1048(LC 1)

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

TOP CHORD 2-3=-448/123. 3-4=-4144/953. 4-5=-4838/1096. 5-6=-4838/1096. 6-7=-4167/929.

7-8=-47/311 8-9=-400/113

BOT CHORD 3-14=-953/4276, 13-14=-931/4212, 12-13=-884/4202, 7-12=-875/4131**WEBS**

4-13=-163/721, 5-13=-277/122, 6-13=-174/734, 6-12=-43/351

NOTES-

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

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

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

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=267, 9=264,
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 97 lb down and 60 lb up at 3-10-8, 97 lb down and 60 lb up at 5-0-0, 97 lb down and 60 lb up at 5-0-0, and 97 lb down and 60 lb up at 9-0-0, and 97 lb down and 60 lb up at 10-1-8 on top chord, and 195 lb down and 68 lb up at 3-10-8, 12 lb down at 5-0-0, 12 lb down at 7-0-0, and 12 lb down at 9-0-0, and 195 lb down and 68 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is

OF MISS SCOTT M. SEVIER NUMBE PE-2001018807 SSIONAL May 13,2022

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 121 MN
B000047		LIF OF L			151909914
B220017	A1	Hip Girder	1	2	Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:15 2022 Page 2 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-IR3PWv3_Un7dt1BuEyXv_Ep1JsyRyAfptn52vKzHHvg

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-70, 4-6=-70, 6-10=-70, 2-15=-20, 3-7=-20, 9-11=-20

Concentrated Loads (lb)

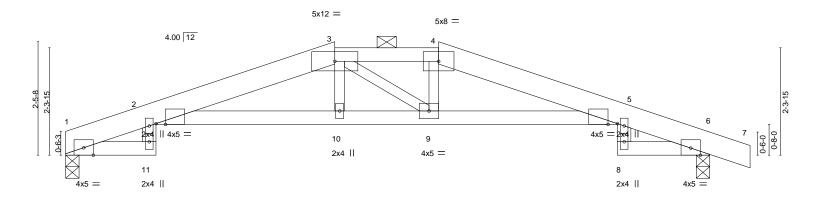
Vert: 4=-65(F) 6=-65(F) 14=-195(F) 13=-4(F) 5=-65(F) 12=-195(F) 16=-65(F) 17=-65(F) 18=-4(F) 19=-4(F)



Job Truss Truss Type Qty Ply Lot 121 MN 151909915 B220017 A2 Hip Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:16 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-DddnkF4dF4FUVAm4ng38XSMFkGK8heYz5RqbRnzHHvf 14-10-0 <u>5-10-</u>0 11-11-8 13-11-8 3-10-8 3-10-8 2-0-0 0-10-8

Scale = 1:25.0



	1-11-0	I	3-10-0			0-1-0			11-11-0		13-11-0	
Г	1-11-8	1	3-10-8		1	2-3-0			3-10-8		2-0-0	
Plate Of	fsets (X,Y)	[2:0-2-7,Edge], [5:0-2-7,E	dge]									
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.15	5-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.28	5-9	>584	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.20	6	n/a	n/a		
BCDI	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.11	2-10	>999	240	Weight: 47 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

11_11_8

2-0-0 oc purlins (4-7-14 max.): 3-4.

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

8-1-0

LUMBER-

2x6 SPF No.2 *Except* TOP CHORD

3-4: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

1_11_8

WEBS 2x3 SPF No.2 *Except*

2-11,5-8: 2x4 SPF No.2

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

Max Horz 1=-42(LC 9) Max Uplift 1=-97(LC 4), 6=-142(LC 5)

Max Grav 1=612(LC 1), 6=689(LC 1)

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

TOP CHORD 1-2=-253/70, 2-3=-1589/227, 3-4=-1534/215, 4-5=-1588/203

BOT CHORD 2-10=-184/1530, 9-10=-181/1535, 5-9=-145/1529

NOTES-

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

5-10-0

- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 6=142.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



13_11_8

Structural wood sheathing directly applied or 3-9-5 oc purlins, except

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Job Truss Truss Type Qty Ply Lot 121 MN 151909916 B220017 A3 Roof Special Job Reference (optional) Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:16 2022 Page 1 Wheeler Lumber, ID:pq50?Ycap6WpLXoTu4wfY2za1nE-DddnkF4dF4FUVAm4ng38XSMFOGKGhd4z5RqbRnzHHvf

11-11-8

5-0-0

14-10-0 0-10-8

Scale: 1/2"=1

13-11-8

2-0-0

4x5 =

Structural wood sheathing directly applied or 3-7-9 oc purlins.

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

5x8 = 3 4.00 12 2-10-0 II 4x5 = 8 2x4 || 9

	1-11-8	1	6-11-8	11-11-8	13-11-8
	1-11-8	ı	5-0-0	5-0-0	2-0-0
Plate	e Offsets (X,Y)	[2:0-2-7,Edge], [4:0-2-7,Edge]			

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			_
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 0.75	Vert(LL) -0.17 2-8 >991 360 MT20 197/144	
TCDL	10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.31 4-8 >533 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.22 5 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 2-8 >999 240 Weight: 47 lb FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SPF No.2 BOT CHORD 2x4 SPF No 2 2x4 SPF No.2 *Except* WFBS 3-8: 2x3 SPF No.2

1-11-8

1-11-8

REACTIONS. (size) 1=0-3-8, 5=0-3-8

Max Horz 1=-49(LC 9)

2x4 ||

Max Uplift 1=-89(LC 4), 5=-135(LC 5) Max Grav 1=612(LC 1), 5=689(LC 1)

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

1-2=-253/71, 2-3=-1458/159, 3-4=-1459/174 TOP CHORD

BOT CHORD 2-8=-114/1392, 4-8=-114/1392

WEBS 3-8=0/253

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

6-11-8

5-0-0

- 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 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.



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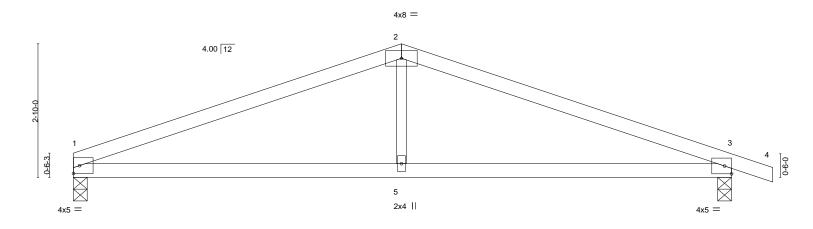
Job Truss Truss Type Qty Ply Lot 121 MN 151909917 B220017 A4 Common Job Reference (optional) Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:17 2022 Page 1 Wheeler Lumber, ID:pq50?Ycap6WpLXoTu4wfY2za1nE-iqB9xb5F0ONL6KLGLNaN3fvPKfiyQ4x6K5a8zDzHHve 14<u>-10-0</u> 6-11-8 6-11-8 13-11-8

7-0-0

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

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

0-10-8 Scale = 1:24.4



	6-11-8 6-11-8		13-11-8 7-0-0	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.80 BC 0.50 WB 0.10 Matrix-S	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.06 3-5 >999 360 MT20 197/144 Vert(CT) -0.14 3-5 >999 240 Horz(CT) 0.02 3 n/a n/a Wind(LL) 0.05 3-5 >999 240 Weight: 36 lb FT = 10%	0

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 1=-48(LC 13)

Max Uplift 1=-89(LC 4), 3=-135(LC 5) Max Grav 1=612(LC 1), 3=689(LC 1)

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

1-2=-1096/130, 2-3=-1097/134 TOP CHORD **BOT CHORD** 1-5=-76/955, 3-5=-76/955

WEBS 2-5=0/332

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) 1 except (jt=lb) 3=135.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job Truss Truss Type Qty Ply Lot 121 MN 151909918 B220017 В1 Monopitch Supported Gable Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

> -0-10-8 0-10-8

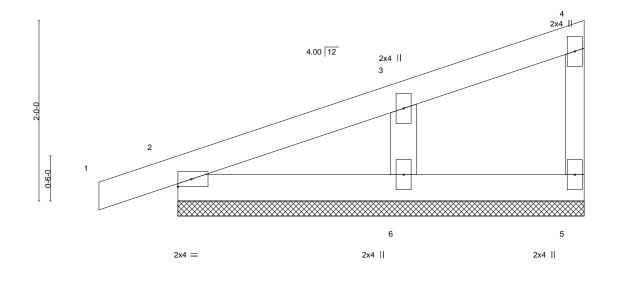
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:18 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-A0IX8x6tniVCkUvTv55cctRIU38M9YTGZIJiVfzHHvd

Structural wood sheathing directly applied or 4-6-0 oc purlins,

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

except end verticals

Scale = 1:12.8



SPACING-DEFL. GRIP LOADING (psf) 2-0-0 CSI. (loc) I/defl I/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) 0.00 n/r 120 MT20 197/144 TCDL Lumber DOL 1.15 вс 0.04 Vert(CT) 0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.02 Horz(CT) -0.00 5 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 14 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 WFBS 2x4 SPF No.2 **OTHERS**

REACTIONS. (size) 5=4-6-0, 2=4-6-0, 6=4-6-0

Max Horz 2=76(LC 5)

Max Uplift 5=-9(LC 5), 2=-49(LC 4), 6=-58(LC 8) Max Grav 5=59(LC 1), 2=165(LC 1), 6=233(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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 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.



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Job Truss Truss Type Qty Ply Lot 121 MN 151909919 B220017 B2 Monopitch Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:19 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-eCJvMH6VY?e3MeUfTocr84_tfTSOu?3PoP3F25zHHvc 0-10-8 Scale = 1:12.8 2x4_H 4.00 12 2 0-9-0 2x4 = 2x4 || 4-6-0

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 0.30	Vert(LL)	-0.02	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.18	Vert(CT)	-0.04	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 13 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 2=76(LC 5)

Max Uplift 4=-40(LC 8), 2=-78(LC 4) Max Grav 4=183(LC 1), 2=271(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) 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 4-6-0 oc purlins,

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

except end verticals.



Job Truss Truss Type Qty Ply Lot 121 MN 151909920 B220017 ВЗ Monopitch Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

0-10-8

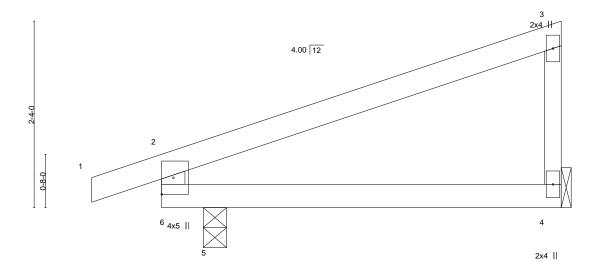
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:20 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-6PtlZc77JJmwzo3r0W74hIX39topdSIZ03opaYzHHvb

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

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

except end verticals.

Scale = 1:14.4



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

BRACING-

TOP CHORD

BOT CHORD

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 0.25	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.17	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	-0.00	4-5	>999	240	Weight: 14 lb	FT = 10%

LUMBER-

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

2x4 SPF No.2 *Except* **WEBS** 3-4: 2x3 SPF No.2

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

Max Horz 5=94(LC 5)

Max Uplift 4=-39(LC 8), 5=-100(LC 4) Max Grav 4=170(LC 1), 5=329(LC 1)

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

2-6=-267/120 TOP CHORD

NOTES-

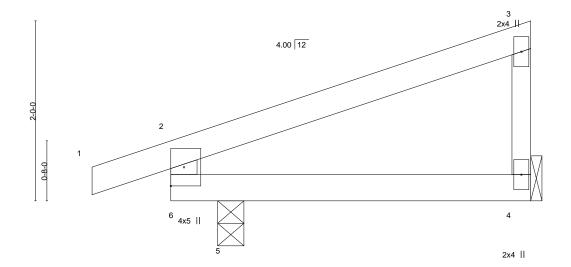
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom 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) 4 except (jt=lb) 5=100.
- 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.



May 13,2022



Job Truss Truss Type Qty Ply Lot 121 MN 151909921 B220017 В4 Monopitch Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:20 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-6PtlZc77JJmwzo3r0W74hIX4KtpjdSIZ03opaYzHHvb 4-0-0 0-10-8



SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.18 Vert(LL) 0.01 4-5 >999 360 MT20 197/144 TCDL Lumber DOL 1.15 вс 0.11 Vert(CT) -0.01 4-5 >999 240 WB 0.00 Horz(CT) **BCLL** 0.0 Rep Stress Incr YES -0.00 n/a n/a Code IRC2018/TPI2014 Wind(LL) BCDL 10.0 Matrix-R -0.00 4-5 >999 Weight: 12 lb FT = 10%

> BRACING-TOP CHORD

> **BOT CHORD**

4-0-0

3-4-0

except end verticals

LUMBER-

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

2x4 SPF No.2 *Except* 3-4: 2x3 SPF No.2

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

Max Horz 5=79(LC 5)

Max Uplift 4=-27(LC 8), 5=-96(LC 4) Max Grav 4=119(LC 1), 5=290(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

0-8-0

0-8-0

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



Structural wood sheathing directly applied or 4-0-0 oc purlins,

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

May 13,2022

Scale = 1:12.8







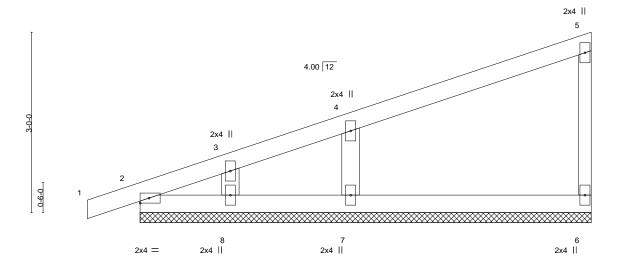
Job	Truss	Truss Type	Qty	Ply	Lot 121 MN
					I51909922
B220017	B5	GABLE	1	1	
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:21 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-abQgny8l4dunbye1aDeJDV3FyH99Mv_iFjYM6_zHHva 7-6-0

Scale = 1:19.2

-0-10-8 0-10-8 7-6-0



SPACING-CSI. DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 (loc) I/defl I/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.18 Vert(LL) 0.00 n/r 120 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 вс 0.10 Vert(CT) -0.00 n/r 120 WB 0.04 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) -0.00 6 n/a n/a Code IRC2018/TPI2014 Weight: 22 lb BCDL 10.0 Matrix-P FT = 10%

LUMBER-

OTHERS

BRACING-

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

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 7-6-0.

Max Horz 2=121(LC 5)

2x4 SPF No 2

Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8

Max Grav All reactions 250 lb or less at joint(s) 6, 2, 8 except 7=365(LC 1)

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

WEBS 4-7=-284/136

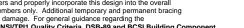
NOTES-

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



May 13,2022





16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909923 B220017 В6 Monopitch 4 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:21 2022 Page 1

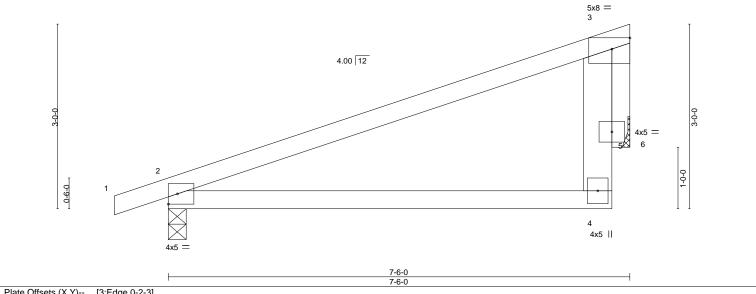
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-abQgny8l4dunbye1aDeJDV39wH52Mt3iFjYM6_zHHva

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 = 1:18.7



	10010 (71, 17	[0.24g0,0 2 0]		
LOADIN	IG (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.04 2-4 >999 360 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.10 2-4 >858 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.00 6 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.03 2-4 >999 240 Weight: 24 lb FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD 2x6 SPF No.2 WFBS

OTHERS 2x4 SPF No.2

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

Max Horz 2=90(LC 4)

Max Uplift 2=-91(LC 4), 6=-69(LC 8) Max Grav 2=403(LC 1), 6=283(LC 1)

-0-10-8 0-10-8

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

TOP CHORD 2-3=-331/25

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



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Job Truss Truss Type Qty Ply Lot 121 MN 151909924 B220017 В7 Monopitch 6 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

> -0-10-8 0-10-8

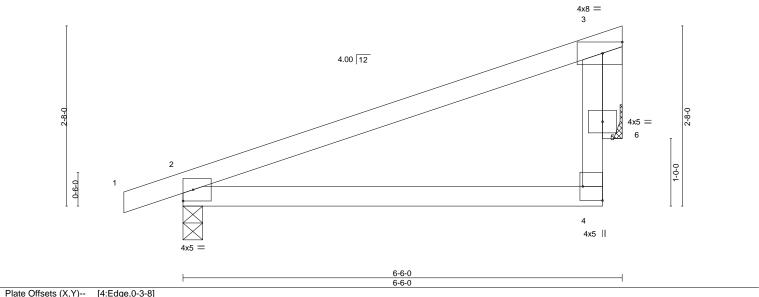
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:22 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-2n_2_I9Nrw0dD5DE8x9YmjcMOgT_5JvrUNHvfQzHHvZ

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 = 1:17.1



	0010 (71, 1)	[=ago,o o o]		
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 0.40	Vert(LL) -0.03 2-4 >999 360 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0.06 2-4 >999 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) -0.00 6 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02 2-4 >999 240 Weight: 20 lb FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

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

REACTIONS.

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

Max Horz 2=78(LC 5)

Max Uplift 2=-85(LC 4), 6=-60(LC 8) Max Grav 2=359(LC 1), 6=245(LC 1)

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

TOP CHORD 2-3=-271/20

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



May 13,2022





Job Truss Truss Type Qty Ply Lot 121 MN 151909925 B220017 В8 Monopitch Structural Gable Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:22 2022 Page 1

Wheeler Lumber, Waverly, KS - 66871,

> -0-10-8 0-10-8

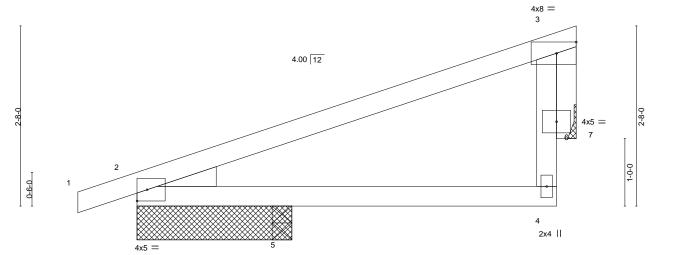
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-2n_2_I9Nrw0dD5DE8x9YmjcN?gRw5JyrUNHvfQzHHvZ

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 = 1:17.1



LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL)	-0.01 2-	5 >999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.32	Vert(CT)	-0.01 2-	5 >999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT)	0.01	7 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.01 2-	5 >999	240	Weight: 21 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE Left: 2x4 SP No.3

REACTIONS.

(size) 2=2-3-8, 5=0-3-8, 7=Mechanical

Max Horz 2=78(LC 5)

Max Uplift 2=-82(LC 4), 7=-62(LC 8)

Max Grav 2=252(LC 1), 5=167(LC 3), 7=202(LC 1)

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

TOP CHORD 3-6=-301/180

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

2-3-8 2-3-8

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



May 13,2022



Job Truss Truss Type Qty Ply Lot 121 MN 151909926 B220017 В9 Monopitch Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:23 2022 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-W_YQCe90cE8UqFoQiehnJw9bt4rfqoB?i11TBtzHHvY -0-10-8 4-6-0 0-10-8

Scale = 1:16.2

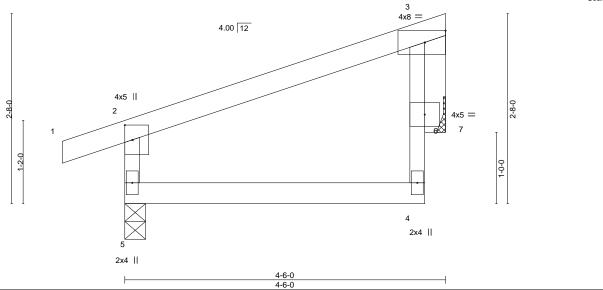


Plate Off	Plate Offsets (X,Y) [2:0-2-8,0-1-4]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	`4-Ś	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-R	Wind(LL)	-0.00	4-5	>999	240	Weight: 15 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 WFBS **OTHERS** 2x4 SPF No.2

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

Max Horz 5=78(LC 5) Max Uplift 5=-63(LC 4), 7=-47(LC 8)

Max Grav 5=270(LC 1), 7=158(LC 1)

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

NOTES-

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



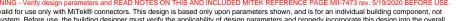
Structural wood sheathing directly applied or 4-6-0 oc purlins,

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

except end verticals.

May 13,2022







Job Truss Truss Type Qty Ply Lot 121 MN 151909927 B220017 B10 Monopitch 3 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:18 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-A0IX8x6tniVCkUvTv55cctRhc35X9VyGZIJiVfzHHvd

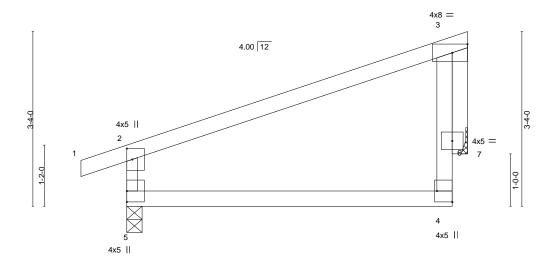
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

-0-10-8 0-10-8

Scale = 1:22.0



BRACING-TOP CHORD

BOT CHORD

Plate Offs	sets (X,Y)	[2:0-2-8,0-1-4], [4:Edge,0	0-3-8]										
LOADING	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	0.38	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.06	4-5	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	-0.01	7	n/a	n/a			
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-R	Wind(LL)	-0.01	4-5	>999	240	Weight: 22 lb	FT = 10%	

LUMBER-

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

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

2-5: 2x3 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS.

(size) 5=0-3-8, 7=Mechanical

Max Horz 5=96(LC 5)

Max Uplift 5=-74(LC 4), 7=-69(LC 8) Max Grav 5=358(LC 1), 7=247(LC 1)

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

TOP CHORD 2-5=-308/118

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) 5, 7.
- 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.



May 13,2022



Job Truss Truss Type Qty Ply Lot 121 MN 151909928 B220017 B11 Monopitch Supported Gable Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

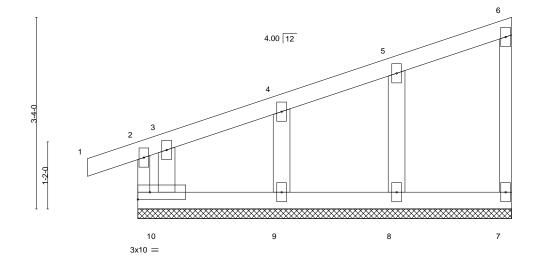
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:19 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-eCJvMH6VY?e3MeUfTocr84_wvTUou?iPoP3F25zHHvc 6-6-0

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 = 1:20.0



GRIP SPACING-DEFL. LOADING (psf) 2-0-0 CSI. (loc) I/defI I/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.09 Vert(LL) -0.00 1-2 n/r 120 MT20 197/144 TCDL Lumber DOL 1.15 вс 0.03 Vert(CT) -0.01 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.02 Horz(CT) -0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Weight: 24 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 WFBS

2x4 SPF No.2 OTHERS

REACTIONS. All bearings 6-6-0.

Max Horz 10=135(LC 5) Max Uplift All uplift 100 lb or less at joint(s) 10, 7, 8, 9 Max Grav All reactions 250 lb or less at joint(s) 10, 7, 8, 9

-0-10-8

0-10-8

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

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



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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

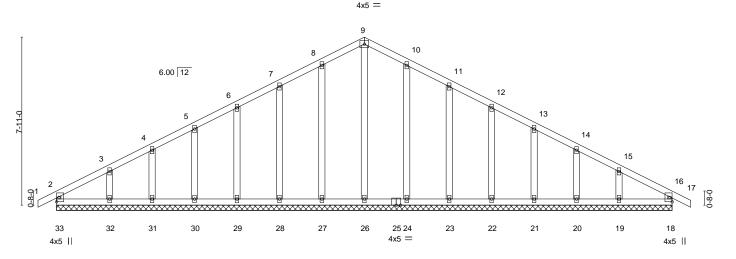
AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909929 B220017 C1 Common Supported Gable Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:24 2022 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-_A6oP_AeNYGLSPNcFLC0r8hnuUBkZEs8xhm0jJzHHvX -0-10-8 0-10-8 14-6-0 29-0-0 14-6-0 14-6-0

Scale = 1:54.3



29-0-0 SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL in (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.08 Vert(LL) -0.00 16 n/r 120 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 вс 0.04 Vert(CT) -0.00 17 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.16 Horz(CT) 0.00 18 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Weight: 134 lb FT = 10%

29-0-0

LUMBER-**BRACING-**

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

2x4 SPF No.2 OTHERS

REACTIONS. All bearings 29-0-0. Max Horz 33=122(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 33, 18, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19 All reactions 250 lb or less at joint(s) 33, 18, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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) 33, 18, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job Truss Truss Type Qty Ply Lot 121 MN 151909930 B220017 C2 6 Common Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:33 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-Ev9Cl3HHFJO41oZLHks8j1Z8064sA6lT0aS?XlzHHvO

6-8-7

14-6-0

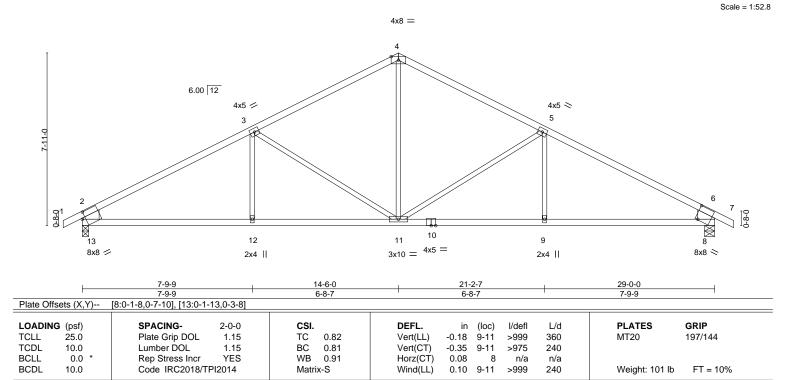
6-8-7

29-0-0

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

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

except end verticals.



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

-0-10-8 0-10-8

7-9-9

7-9-9

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

2x3 SPF No.2 *Except* WFBS 2-13,6-8: 2x10 SP DSS

REACTIONS. (size) 13=0-3-8, 8=0-5-8 Max Horz 13=-120(LC 6)

Max Uplift 13=-186(LC 8), 8=-186(LC 9)

Max Grav 13=1359(LC 1), 8=1359(LC 1)

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

TOP CHORD 2-3=-2002/246, 3-4=-1456/229, 4-5=-1456/229, 5-6=-2002/246, 2-13=-1252/230,

6-8=-1252/230

BOT CHORD 12-13=-232/1657, 11-12=-232/1657, 9-11=-116/1657, 8-9=-116/1657 WEBS 4-11=-63/735, 5-11=-586/227, 5-9=0/261, 3-11=-586/227, 3-12=0/261

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) 13=186. 8=186.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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Job Truss Truss Type Qty Ply Lot 121 MN 151909931 B220017 C3 Roof Special Job Reference (optional) Wheeler Lumber, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:34 2022 Page 1

1-3-12

5-0-3

4-3-1

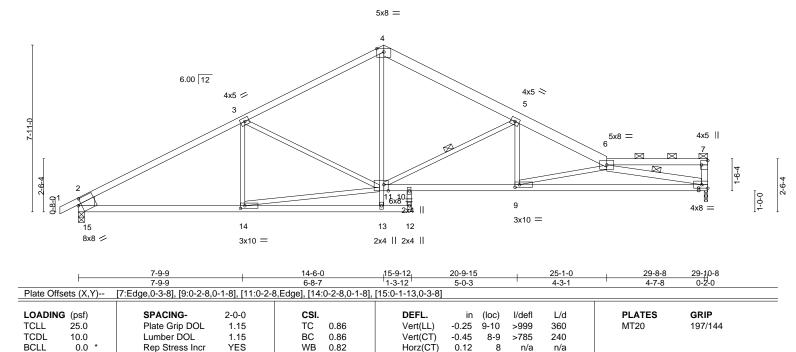
Waverly, KS - 66871, ID:pq50?Ycap6WpLXoTu4wfY2za1nE-i5jaVPIv0cXxfx8XrSNNFE6I7WPNvbvcEECY4kzHHvN -0-10-8 0-10-8 7-9-9 14-6-0 20-9-15 25-1-0 29-10-8 15-9-12

6-8-7

Matrix-S

Scale = 1:54.7

4-9-8



LUMBER-

10.0

BCDL

WEBS

TOP CHORD 2x4 SPF 2100F 1.8E *Except*

4-6: 2x6 SPF No.2, 6-7: 2x4 SPF No.2

Code IRC2018/TPI2014

7-9-9

BOT CHORD 2x4 SPF 2100F 1.8E *Except*

12-15: 2x4 SPF No.2 2x3 SPF No.2 *Except*

7-8,6-8: 2x4 SPF No.2, 2-15: 2x10 SP DSS

REACTIONS. (size) 8=0-2-0 (req. 0-2-1), 15=0-3-8

Max Horz 15=155(LC 5)

Max Uplift 8=-174(LC 9), 15=-189(LC 8)

Max Grav 8=1319(LC 1), 15=1411(LC 1)

Wind(LL) **BRACING-**TOP CHORD

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

Weight: 123 lb

FT = 10%

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

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

240

WEBS 1 Row at midpt 5-11, 6-8

>999

9-10

0.17

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

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

TOP CHORD 2-3=-2102/249, 3-4=-1783/241, 4-5=-1793/250, 5-6=-2833/322, 2-15=-1301/232

BOT CHORD 14-15=-271/1743, 10-11=-263/2507, 9-10=-263/2507, 8-9=-576/4057

WEBS 3-11=-380/193, 11-13=0/264, 4-11=-78/1049, 5-11=-1128/256, 6-9=-1613/326,

6-8=-4022/588, 11-14=-278/1726, 5-9=0/593

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) WARNING: Required bearing size at joint(s) 8 greater than input bearing size.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=174, 15=189.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022







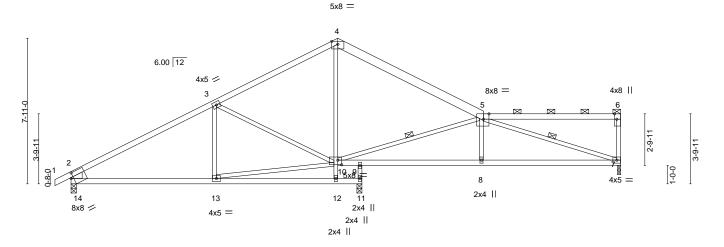
Job Truss Truss Type Qty Ply Lot 121 MN 151909932 B220017 C4 Roof Special Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:35 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-AHHzjIJXnwfnG5jkP9ucoSeTgwkqe?nmTux5cAzHHvM

14-6-0 29-10-8 6-8-7

Scale = 1:62.6



	7-9-9	14-6-0	15-9-12	22-5-0	29-	3-8 29-1,0-8	
	7-9-9	6-8-7	1-3-12	6-7-4	7-3	-8 0-2-0	
Plate Offsets (X,Y)	[5:0-3-10,Edge], [6:0-3-8,Edge], [10:	0-2-8,0-3-0], [14:0-1-10,0	-3-4]				

BRACING-

TOP CHORD

BOT CHORD

WEBS

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 0.87	Vert(LL) -0.19 12-13 >961 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.36 12-13 >512 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.98	Horz(CT) 0.06 7 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 12-13 >999 240	Weight: 118 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

7-10: 2x4 SPF 2400F 2.0E

WEBS 2x3 SPF No.2 *Except*

2-14: 2x8 SP DSS

REACTIONS. (size) 7=0-2-0, 14=0-3-8, 11=0-3-4

Max Horz 14=191(LC 5)

Max Uplift 7=-157(LC 9), 14=-182(LC 8), 11=-46(LC 9) Max Grav 7=889(LC 1), 14=1012(LC 1), 11=833(LC 1)

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

TOP CHORD $2\hbox{-}3\hbox{-}-1382/243,\ 3\hbox{-}4\hbox{-}-800/211,\ 4\hbox{-}5\hbox{-}-825/229,\ 2\hbox{-}14\hbox{-}-935/228$ BOT CHORD 13-14=-270/1119, 9-10=-298/1655, 8-9=-298/1655, 7-8=-303/1655

WEBS $9\text{-}11\text{=-}670/8,\ 3\text{-}10\text{=-}587/201,\ 5\text{-}10\text{=-}1098/255,\ 5\text{-}7\text{=-}1666/284,\ 10\text{-}13\text{=-}279/1133}$

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=157, 14=182.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

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

5-10, 5-7

6-0-0 oc bracing: 12-13.

1 Row at midpt

May 13,2022

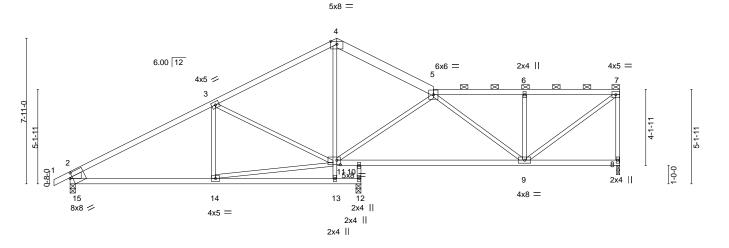




Wheeler Lumber, Waverly, KS - 66871,

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-eUqLw5K9YEneuFlwytQrKfBdlK7xNVzviYhf8czHHvL 14-6-0 15-8-0 1-2-0 24-8-8 29-10-8 6-8-7 5-2-0

Scale = 1:62.6



	7-9-9	14-6-0	15-9-12	19-9-0	24-8-8	29-10-8	- 1
	7-9-9	6-8-7	1-3-12	3-11-4	4-11-8	5-2-0	\neg
Plate Offsets (X,Y)	[11:0-2-4,0-3-0], [15:0-1-10,0-3-4]						

LOADING TCLL	(psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15		(/	I/defl L/d >916 360	PLATES GRIP MT20 197/144
TCDL	10.0	Lumber DOL 1.1			>525 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.79	Horz(CT) 0.05 8	n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 13-14 :	>999 240	Weight: 120 lb FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

8-11: 2x4 SPF 2100F 1.8E **WEBS** 2x3 SPF No.2 *Except* 2-15: 2x8 SP DSS

REACTIONS.

(size) 8=0-2-0, 15=0-3-8, 12=0-3-4

Max Horz 15=229(LC 5)

Max Uplift 8=-204(LC 9), 15=-208(LC 8)

Max Grav 8=972(LC 1), 15=1088(LC 1), 12=674(LC 1)

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

2-3=-1528/293, 3-4=-984/271, 4-5=-959/298, 5-6=-1017/182, 6-7=-1016/182, TOP CHORD

7-8=-909/213, 2-15=-1006/253

BOT CHORD 14-15=-318/1247, 10-11=-363/1375, 9-10=-363/1375

WEBS 10-12=-574/0, 3-11=-565/190, 4-11=-123/368, 5-11=-733/223, 5-9=-456/195,

6-9=-409/174, 7-9=-257/1258, 11-14=-328/1258

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=204, 15=208.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

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

May 13,2022





Job Truss Truss Type Qty Ply Lot 121 MN 151909934 B220017 C6 Roof Special Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 0-10-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:37 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-6gOj8QKoJXvVWPs6Wax4ttkoujRQ6yN3wCQCg3zHHvK 15-9-12 17-1-0 1-3-12 1-3-4

Structural wood sheathing directly applied or 1-7-8 oc purlins,

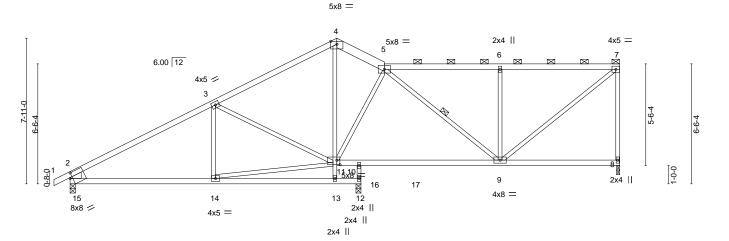
except end verticals, and 2-0-0 oc purlins (5-3-15 max.): 5-7.

5-9

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

1 Row at midpt

Scale = 1:62.6



	7-9-9 7-9-9	14-6-0 6-8-7	15-9-12 17-1-0 1-3-12 1-3-4	23-4-8 6-3-8		29-8-8 29-10-8 6-4-0 0-2-0	
Plate Offsets (X,Y)	[11:0-2-0,0-3-0], [15:0-1-10,0-3-4]						
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 0.95 BC 0.77 WB 0.78 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) l/defl -0.20 13-14 >931 -0.35 13-14 >523 0.05 8 n/a 0.11 13-14 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 123 lb	GRIP 197/144 FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

WEBS

TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

8-11: 2x4 SPF 2100F 1.8E 2x3 SPF No.2 *Except*

2-15: 2x8 SP DSS

REACTIONS. (size) 8=0-2-0, 15=0-3-8, 12=0-3-4

Max Horz 15=269(LC 5)

Max Uplift 8=-206(LC 9), 15=-196(LC 8)

Max Grav 8=985(LC 1), 15=1100(LC 1), 12=786(LC 2)

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

2-3=-1550/270, 3-4=-1013/245, 4-5=-944/278, 5-6=-903/159, 6-7=-903/159, TOP CHORD

7-8=-909/228, 2-15=-1016/242

BOT CHORD 14-15=-303/1267, 10-11=-291/1074, 9-10=-291/1074

WEBS 10-12=-673/0, 3-11=-573/193, 4-11=-114/493, 5-11=-613/172, 6-9=-520/220,

7-9=-248/1149, 11-14=-312/1276

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=206, 15=196.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022





Job Truss Truss Type Qty Ply Lot 121 MN 151909935 B220017 C7 Half Hip Job Reference (optional)

14-7-0

6-9-7

Wheeler Lumber, Waverly, KS - 66871,

7-9-10

7-9-10

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:38 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-asy5LmLQ4r1M8ZRJ4ISJQ4Gzl7oirQyC9sAmDVzHHvJ 22-1-8 29-8-8 7-7-0

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

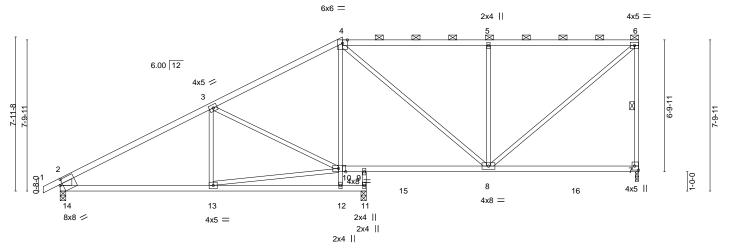
except end verticals, and 2-0-0 oc purlins (4-8-11 max.): 4-6.

6-7

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

1 Row at midpt

Scale = 1:59.5



	7-9-10	14-7-0	15-9-12	22-1-8	29-8-8	29-10-8
	7-9-10	6-9-7	1-2-12 ¹	6-3-12	7-7-0	0-2-0
Plate Offsets (X,Y)-	- [7:Edge,0-2-8], [10:0-4-8,Edge], [1	4:0-1-10,0-3-4]				

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 0.95	Vert(LL) -0.20 12-13 >934 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.35 12-13 >524 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT) 0.04 7 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.10 12-13 >999 240	Weight: 121 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2

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

7-10: 2x4 SPF 2100F 1.8E **WEBS**

2x3 SPF No.2 *Except*

2-14: 2x8 SP DSS

(size) 7=0-2-0, 14=0-3-8, 11=0-3-4

Max Horz 14=305(LC 5)

Max Uplift 7=-218(LC 5), 14=-183(LC 8), 11=-28(LC 5) Max Grav 7=1041(LC 2), 14=1101(LC 2), 11=782(LC 2)

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

TOP CHORD $2\hbox{-}3\hbox{-}1547/247, 3\hbox{-}4\hbox{-}997/214, 4\hbox{-}5\hbox{-}831/190, 5\hbox{-}6\hbox{-}829/188, 6\hbox{-}7\hbox{-}-894/247,}$

2-14=-1010/229

BOT CHORD 13-14=-288/1282, 9-10=-267/806, 8-9=-267/806

WEBS $9\text{-}11\text{=-}660/0,\ 3\text{-}10\text{=-}551/204,\ 5\text{-}8\text{=-}636/267,\ 6\text{-}8\text{=-}253/1069,\ 10\text{-}13\text{=-}297/1281}$

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=218, 14=183.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022





Job Truss Truss Type Qty Ply Lot 121 MN 151909936 B220017 C8 Half Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:38 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-asy5LmLQ4r1M8ZRJ4ISJQ4G127ryrMWC9sAmDVzHHvJ 15-9-12 17-3-0 1-5-4 <u>23</u>-4-11 29-8-8 29-8-14 0-0-6 8-0-3 6-1-11 6-3-13 Scale = 1:62.3 6x6 = 6.00 12 2x4 || 4x5 = 6 7 2x4 || Ø \bowtie 3x10 / 4x5 🖊 3 9-1-11 9-1-11 1-0-0 2x4 || 10 15 16 17 Ø 3x10 = 13 5x8 || 3x8 MT18HS || 4x5 = 6x12 = 7-9-9 15-9-12 17-3-0 29-8-8 7-9-9 8-0-3 6-1-11 6-3-13 Plate Offsets (X,Y)--[12:0-3-8,Edge], [14:0-5-1,0-2-8] (loc) LOADING (psf) SPACING-2-0-0 CSI. DEFL. in I/defI L/d **PLATES** GRIP

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

-0.14 10-11

-0.23 10-11

0.02 13-14

0.01

>999

>732

>999

1 Row at midpt

n/a

360

240

n/a

240

MT20

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

8-9, 3-11

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

Rigid ceiling directly applied or 3-6-10 oc bracing.

MT18HS

Weight: 130 lb

197/144

197/144

FT = 10%

LUMBER-

REACTIONS.

TCLL

TCDL

BCLL

BCDL

TOP CHORD 2x4 SPF No.2

25.0

10.0

0.0

10.0

BOT CHORD 2x4 SPF No.2 *Except* 5-12: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-14: 2x8 SP DSS

(size) 9=Mechanical, 14=0-3-8, 12=0-3-4

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 14=246(LC 8)

Max Uplift 9=-83(LC 5), 14=-28(LC 8)

Max Grav 9=604(LC 22), 14=672(LC 13), 12=1660(LC 2)

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

TOP CHORD 2-3=-722/37, 3-5=0/336, 6-7=-283/56, 7-8=-283/56, 8-9=-512/110, 2-14=-607/71 BOT CHORD 13-14=-204/574, 11-12=-1540/9, 5-11=-491/145

WEBS 3-13=0/308, 11-13=-203/586, 3-11=-840/89, 6-11=-619/0, 6-10=0/561, 7-10=-516/121,

1.15

1.15

YES

TC

BC

WB

Matrix-S

0.67

0.56

0.98

8-10=-89/445

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 14.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

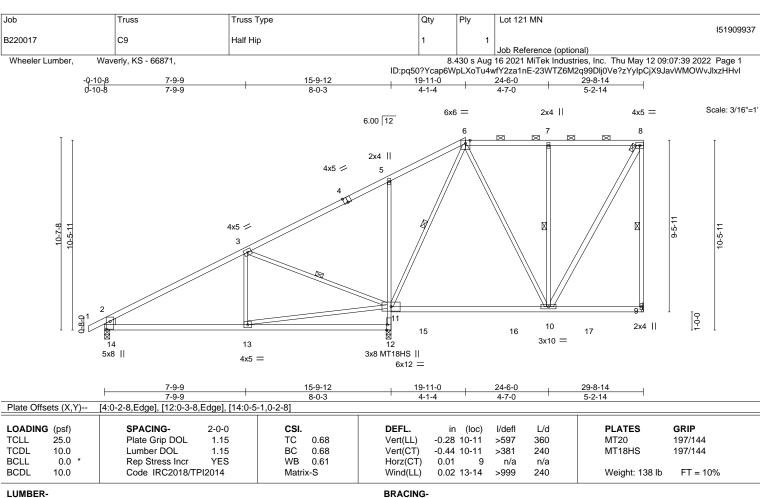


May 13,2022









TOP CHORD

BOT CHORD

WEBS

LUMBER-

WEBS

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 5-12: 2x3 SPF No.2

> 2x3 SPF No.2 *Except* 8-10: 2x4 SPF No.2, 2-14: 2x8 SP DSS

REACTIONS. (size) 9=Mechanical, 14=0-3-8, 12=0-3-4

Max Horz 14=285(LC 8)

Max Uplift 9=-88(LC 5), 14=-17(LC 8)

Max Grav 9=595(LC 22), 14=677(LC 1), 12=1655(LC 2)

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

TOP CHORD 2-3=-734/16, 3-5=0/319, 5-6=0/277, 8-9=-527/104, 2-14=-613/61

BOT CHORD 13-14=-224/586, 11-12=-1535/27, 5-11=-476/151

WEBS 3-13=0/303, 11-13=-212/640, 3-11=-835/90, 6-11=-637/0, 6-10=0/363, 8-10=-80/466,

7-10=-412/97

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 14.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

8-9, 3-11, 6-11, 7-10

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

Rigid ceiling directly applied or 3-3-11 oc bracing.

1 Row at midpt

May 13,2022



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909938 B220017 C10 Half Hip Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:25 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-TMgBcKBG7rOC4Zypp3jFOLEpPuPTIYmIALWZFIzHHvW

Structural wood sheathing directly applied or 5-11-14 oc purlins,

8-9, 3-14

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

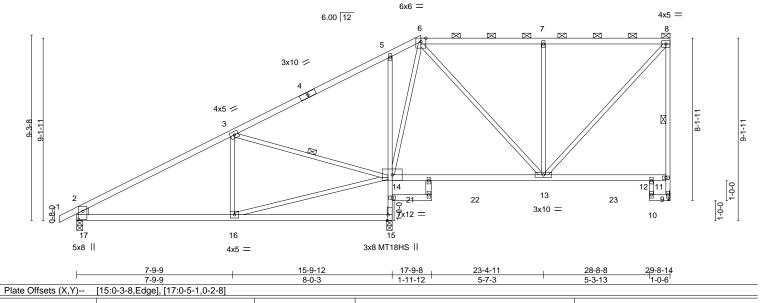
Rigid ceiling directly applied or 6-0-0 oc bracing. Except:

3-8-0 oc bracing: 14-15

1 Row at midpt

17-9-8 -0-10-8 0-10-8 7-9-9 15-9-12 28-8-8 8-0-3 1-5-4 0-6-8 5-3-13

Scale = 1:57.7



LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.67 Vert(LL) -0.14 13-14 >999 360 MT20 197/144 TCDL Lumber DOL Vert(CT) MT18HS 197/144 10.0 1.15 BC 0.52 -0.23 13-14 >725 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.75 Horz(CT) 0.05 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) -0.04 12-13 >999 240 Weight: 131 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 5-15: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

19-20: 2x4 SPF No.2, 2-17: 2x8 SP DSS

REACTIONS. (size) 9=Mechanical, 17=0-3-8, 15=0-3-4

Max Horz 17=285(LC 5)

Max Uplift 9=-92(LC 5), 17=-46(LC 8)

Max Grav 9=633(LC 22), 17=686(LC 1), 15=1619(LC 2)

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

TOP CHORD $2\text{-}3\text{=-}753/73,\ 3\text{-}5\text{=-}0/333,\ 6\text{-}7\text{=-}334/90,\ 7\text{-}8\text{=-}331/88,\ 9\text{-}11\text{=-}607/91,\ 8\text{-}11\text{=-}518/110,}$

2-17=-622/89

BOT CHORD 16-17=-167/628, 14-15=-1501/11, 5-14=-483/148

WEBS $3-16=0/263,\ 14-16=-175/652,\ 3-14=-826/88,\ 6-14=-608/10,\ 6-13=0/575,\ 7-13=-518/127,$

8-13=-100/476

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C: Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 17.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022





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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909939 B220017 C11 Half Hip Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

-0-10-8 0-10-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:26 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-xZEZqgCuu9W3hjX?NmEUwYnxXIgT11ORP?F7oBzHHvV

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

6-7, 4-11

except end verticals, and 2-0-0 oc purlins (3-4-9 max.): 4-6.

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

6-0-0 oc bracing: 14-15.

1 Row at midpt

29-8-14 7-9-10 14-7-0 15-9-12 17-9-8 1-2-12 1-11-12 22-0-11 28-8-8 29-6-6 0-9-14 7-9-10 6-9-7 0-2-8

Scale = 1:54.6

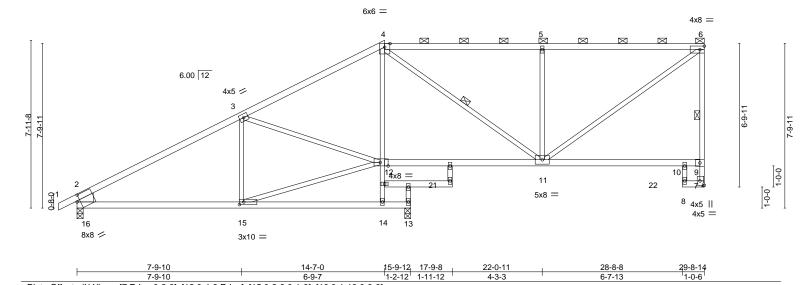


Plate Offsets (X,Y)--[7:Edge,0-2-8], [12:0-4-8,Edge], [15:0-2-8,0-1-8], [16:0-1-13,0-3-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.84 Vert(LL) -0.31 14-15 >589 360 MT20 197/144 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.86 -0.56 14-15 >328 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.60 Horz(CT) 0.14 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 0.11 14-15 >999 240 Weight: 125 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-TOP CHORD

2x4 SPF 2100F 1.8E *Except*

4-6: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-16: 2x10 SP DSS

REACTIONS. (size) 7=Mechanical, 16=0-3-8, 13=0-3-4

Max Horz 16=242(LC 5)

Max Uplift 7=-55(LC 5), 16=-16(LC 8), 13=-14(LC 5) Max Grav 7=1318(LC 2), 16=1347(LC 2), 13=263(LC 2)

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

TOP CHORD 2-3=-2007/14, 3-4=-1799/19, 4-5=-1364/24, 5-6=-1361/23, 7-9=-1283/58, 6-9=-1153/87,

2-16=-1208/61

BOT CHORD 15-16=-107/1678, 11-12=-111/1543

WEBS $3-15=-282/119,\ 4-12=0/543,\ 4-11=-281/48,\ 5-11=-628/149,\ 6-11=-67/1651,$

12-15=-115/1752

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C: Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 16, 13.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022

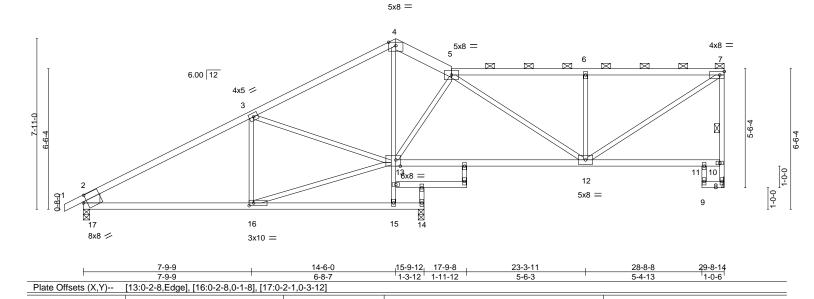


Job Truss Truss Type Qty Ply Lot 121 MN 151909940 B220017 C12 Roof Special Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:27 2022 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-Plox10DWfTewJt5BxUljTmJ7ah0tmShadf?gKezHHvU 15-8-0 17-1-0 17-9-8 1-2-0 1-5-0 0-8-8

Scale = 1:53.5



DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

(loc)

-0.27 15-16

-0.58 12-13

0.12 15-16

0.11

I/defI

>670

>290

>999

6-0-0 oc bracing: 15-16.

1 Row at midpt

n/a

L/d

360

240

n/a

240

PLATES

Weight: 126 lb

MT20

Structural wood sheathing directly applied or 4-0-3 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-1-7 max.): 5-7.

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

GRIP

197/144

FT = 10%

LUMBER-

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 4-5: 2x6 SPF No.2, 5-7: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

LOADING (psf)

25.0

10.0

0.0

10.0

TCLL

TCDL

BCLL

BCDL

-0-10-8 0-10-8

WEBS 2x3 SPF No.2 *Except*

2-17: 2x10 SP DSS

REACTIONS. (size) 8=Mechanical, 17=0-3-8, 14=0-3-4

Max Horz 17=215(LC 5)

Max Uplift 8=-30(LC 9), 17=-17(LC 8), 14=-9(LC 9) Max Grav 8=1188(LC 1), 17=1292(LC 1), 14=265(LC 1)

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

TOP CHORD 2-3=-1902/16, 3-4=-1672/18, 4-5=-1611/35, 5-6=-1452/5, 6-7=-1452/5, 8-10=-1171/35,

2-0-0

1.15

1.15

YES

CSI.

TC

BC

WB

Matrix-S

0.82

0.85

0.66

7-10=-1139/53, 2-17=-1205/62

BOT CHORD 16-17=-59/1568, 12-13=-58/1839

WEBS 3-16=-277/106, 3-13=-291/113, 4-13=0/1063, 5-13=-826/70, 5-12=-467/54,

6-12=-513/123, 7-12=-21/1722, 13-16=-64/1643

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C: Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 17, 14.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909941 B220017 C13 Roof Special Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:28 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-txMJFLD8Qmmnx0gOUBGy0zsI95QSVxcksJIEs4zHHvT

19-9-0

4-2-4

-0.44 13-14

0.02 19-20

10

0.11

>377

>999

n/a

10-0-0 oc bracing: 14-15

240

n/a

240

Structural wood sheathing directly applied or 5-6-13 oc purlins,

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

Rigid ceiling directly applied or 4-2-6 oc bracing. Except:

24-8-15

4-11-15

3-11-9

Weight: 129 lb

FT = 10%

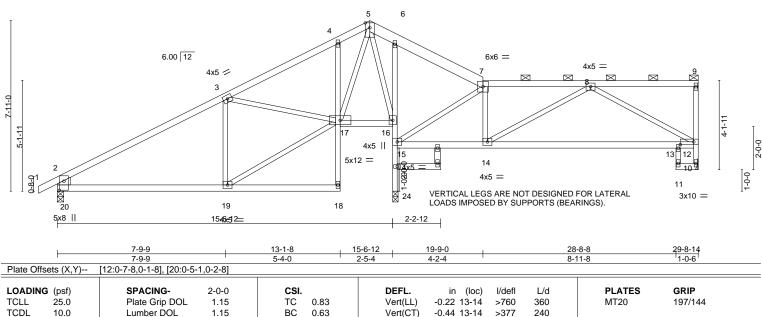
Scale = 1:53.5

5x8 ||

14-6-0 15-6-12 1-4-8 1-0-12

13-1-8

5-4-0



Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCLL

BCDL

10.0

0.0

10.0

-0-10-8 0-10-8

7-9-9

7-9-9

TOP CHORD 2x4 SPF No.2 *Except* 5-7: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

4-18,6-24: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 *Except*

2-20: 2x8 SP DSS, 22-23: 2x4 SPF No.2

REACTIONS. (size) 10=Mechanical, 20=0-3-8, 24=0-3-0

Max Horz 20=185(LC 5)

Max Uplift 10=-34(LC 9), 20=-48(LC 8)

Rep Stress Incr

Code IRC2018/TPI2014

Max Grav 10=584(LC 20), 20=740(LC 19), 24=1421(LC 1)

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

TOP CHORD 2-3=-834/77, 3-4=-417/126, 4-5=-348/160, 7-8=-557/36, 10-12=-559/47, 2-20=-672/95 BOT CHORD

1.15

YES

BC

WB

Matrix-S

0.63

0.56

19-20=-92/638, 15-24=-1421/0, 15-16=-974/0, 6-16=-349/72, 14-15=-37/547, 13-14=-99/645, 12-13=-99/645

WEBS 17-19=-107/727, 3-17=-385/51, 5-17=-95/746, 7-15=-797/15, 7-14=0/339,

8-12=-686/116, 5-16=-584/22

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 24 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) 10, 20.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job Truss Truss Type Qty Ply Lot 121 MN 151909942 B220017 C14 Roof Special Job Reference (optional)

14-6-0

6-7-0

14-6-0

Wheeler Lumber, Waverly, KS - 66871,

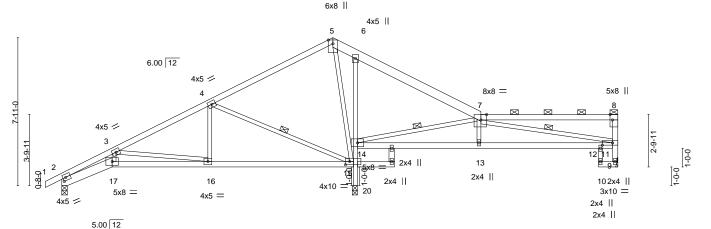
7-11-0

5-2-11

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:29 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-L8vhShEmB4ueYAFa2vnBYBPVsVhbENat5yUnOWzHHvS 17-9-8 28-8-8 22-5-0

4-7-8

Scale = 1:61.6



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS)

	2-8-5	5-2-11	6-7-0	1-3-12 1-11-12	4-7-8		6-3-8	1-0-6	
Plate Offsets (X,Y	[2:0-1-14,0-2-0], [7:0)-3-10,Edge], [8:0-	3-8,Edge], [11:0-6-8,0-1-8	3], [15:0-2-12,0-2-0]				
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DC	DL 1.15	TC 0.70	Vert(LL)	-0.12 15-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.27 15-16	>699	240		
BCLL 0.0	Rep Stress In	cr YES	WB 0.64	Horz(CT)	0.23 20	n/a	n/a		
BCDL 10.0	Code IRC20	18/TPI2014	Matrix-S	Wind(LL)	0.06 16-17	>999	240	Weight: 124 lb	FT = 10%

15-9-12 17-9-8

TOP CHORD

BOT CHORD

WEBS

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 *Except* 5-7: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

2-17: 2x6 SPF No.2, 6-20: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

8-9: 2x4 SPF No.2

REACTIONS. (size) 9=Mechanical, 2=0-3-8, 20=0-3-4

Max Horz 2=150(LC 5)

Max Uplift 9=-23(LC 9), 2=-33(LC 8), 20=-4(LC 9) Max Grav 9=500(LC 20), 2=687(LC 19), 20=1615(LC 1)

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

 $2\text{-}3\text{--}2175/215,\ 3\text{-}4\text{--}861/70,\ 4\text{-}5\text{--}32/368,\ 5\text{-}6\text{--}18/256,\ 6\text{-}7\text{--}31/489,\ 9\text{-}11\text{--}452/39,}$ TOP CHORD

8-11=-255/58

 $2-17 = -275/1906,\ 16-17 = -243/1667,\ 15-16 = -73/736,\ 15-20 = -1615/4,\ 14-15 = -929/127,$

6-14=-571/145, 13-14=-39/963, 12-13=-45/956, 11-12=-45/956

WEBS 3-17=-60/732, 3-16=-942/172, 4-16=0/414, 4-15=-943/107, 5-15=-342/66,

7-14=-1250/64, 7-13=0/275, 7-11=-767/40

NOTES-

BOT CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 2, 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2, 20.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



29-8-14

Structural wood sheathing directly applied or 3-10-4 oc purlins,

4-15, 7-14, 7-11

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.

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

3-11-2 oc bracing: 15-20.

3-2-0 oc bracing: 14-15

1 Row at midpt

May 13,2022



Job Truss Truss Type Qty Ply Lot 121 MN 151909943 B220017 C15 **ROOF SPECIAL** Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:30 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-pKT4g1FPyO0VAKqmccJQ5OxfQv56zp41JcEKxzzHHvR

21-2-6

6-8-6

25-1-0

3-10-10

Structural wood sheathing directly applied or 4-8-11 oc purlins,

4-13, 5-13

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.

Rigid ceiling directly applied or 3-5-8 oc bracing.

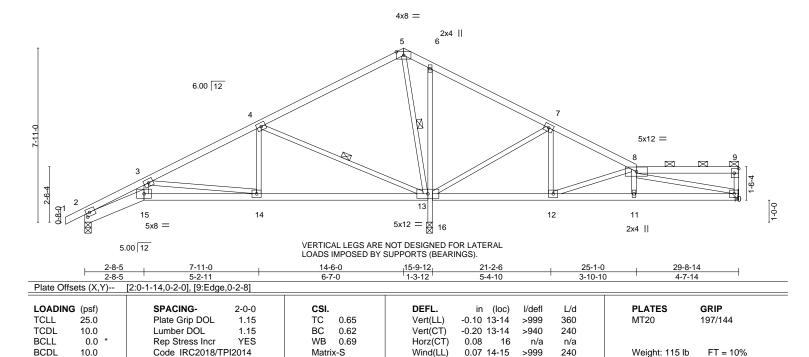
1 Row at midpt

14-6-0

6-7-0

Scale = 1:52.4

29-8-14



BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

2-15: 2x6 SPF No.2, 6-16: 2x3 SPF No.2

WFBS 2x3 SPF No.2

REACTIONS. (size) 10=Mechanical, 2=0-3-8, 16=0-3-4

Max Horz 2=164(LC 8)

Max Uplift 10=-74(LC 9), 2=-80(LC 8), 16=-224(LC 8) Max Grav 10=350(LC 22), 2=525(LC 21), 16=2047(LC 1)

7-11-0 5-2-11

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

TOP CHORD 2-3=-1499/370, 3-4=-430/204, 4-5=-80/843, 5-6=-47/937, 6-7=-89/1035, 7-8=-134/478 BOT CHORD

2-15=-463/1303, 14-15=-409/1135, 13-14=-156/349, 12-13=-406/155, 11-12=-271/581,

10-11=-279/575, 13-16=-2047/224, 6-13=-351/166

WEBS 3-15=-127/524, 3-14=-795/316, 4-14=0/373, 4-13=-894/260, 5-13=-967/162,

7-13=-684/195, 7-12=0/301, 8-12=-628/126, 8-10=-522/307

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 4x5 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 2, 16 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) 10, 2 except (it=lb) 16=224.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022

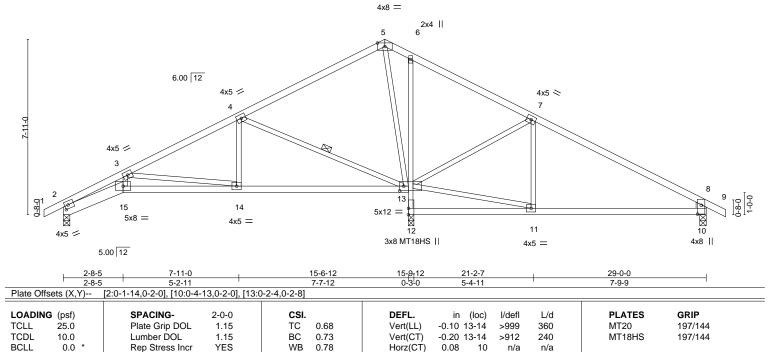




Job Truss Truss Type Qty Ply Lot 121 MN 151909944 B220017 C16 Roof Special Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:31 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-HW1StNG1jh8MoUPyAJqgdcUqhJPiiEwAYGzuTPzHHvQ 14-6-0 15-6-12 1-0-12 21-2-7 29-0-0 7-11-0 5-2-11 6-7-0 7-9-9

Scale = 1:52.0



Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

0.08 14-15

>999

except end verticals.

1 Row at midpt

240

Rigid ceiling directly applied or 3-8-5 oc bracing.

Structural wood sheathing directly applied or 4-4-0 oc purlins,

4-13

Weight: 112 lb

FT = 10%

LUMBER-

BCDL

TOP CHORD 2x4 SPF No.2

10.0

BOT CHORD 2x4 SPF No.2 *Except*

2-15: 2x6 SPF No.2, 6-12: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

8-10: 2x6 SPF No.2

REACTIONS. (size) 2=0-3-8, 12=0-3-0, 10=0-3-8

Max Horz 2=129(LC 12)

Max Uplift 2=-104(LC 8), 12=-174(LC 8), 10=-185(LC 9) Max Grav 2=587(LC 1), 12=1686(LC 1), 10=568(LC 22)

Code IRC2018/TPI2014

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

TOP CHORD 2-3=-1762/419, 3-4=-593/161, 4-5=-24/481, 5-6=0/563, 6-7=-20/574, 7-8=-515/250,

8-10=-510/233

BOT CHORD 2-15=-470/1538, 14-15=-416/1341, 13-14=-109/495, 12-13=-1655/200, 10-11=-141/360 **WEBS**

 $3-15=-130/608,\ 3-14=-855/309,\ 4-14=0/386,\ 4-13=-905/258,\ 5-13=-706/126,$

11-13=-100/396, 7-13=-713/195, 7-11=0/296

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

Matrix-S

- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=104, 12=174, 10=185.
- 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.



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Job Truss Truss Type Qty Ply Lot 121 MN 151909945 B220017 C17 **GABLE** Job Reference (optional)

Waverly, KS - 66871, Wheeler Lumber,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:32 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-libq5jGfU?GDPe_9j1LvAp002iqmRpFKnwjR?rzHHvP 29-0-0 21-2-7 5-6-11 7-9-9

7-9-9

Structural wood sheathing directly applied or 5-11-1 oc purlins,

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

10-0-0 oc bracing: 19-20,18-19,17-18.

Scale = 1:56.4

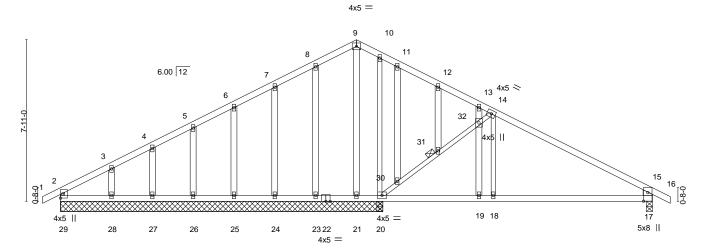


Plate Off	Plate Offsets (X,Y) [17:0-5-1,0-2-8]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.08 17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.17 17-18	>951	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01 17	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matrix	k-S	Wind(LL)	0.03 17-18	>999	240	Weight: 138 lb	FT = 10%

15₋9-8 0-1-12

BOT CHORD

JOINTS

5-4-15

except end verticals.

1 Brace at Jt(s): 31

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

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

15-17: 2x6 SPF No.2 2x4 SPF No.2

All bearings 15-9-8 except (jt=length) 17=0-3-8.

14-6-0

14-6-0

(lb) - Max Horz 29=121(LC 8) Max Uplift All uplift 100 lb or less at joint(s) 29, 21, 23, 24, 25, 26, 27, 28 except 20=-185(LC 9),

17=-172(LC 9) All reactions 250 lb or less at joint(s) 29, 21, 23, 24, 25, 26, 27, 28 except 20=725(LC 22), Max Grav

15-7-12

20=721(LC 1), 17=664(LC 1)

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

TOP CHORD 8-9=-35/250, 9-10=-43/259, 14-15=-703/226, 15-17=-600/220

BOT CHORD 19-20=-97/525, 18-19=-97/525, 17-18=-97/525 **WEBS** 20-30=-685/222, 30-31=-661/212, 31-32=-635/197, 14-32=-706/235, 14-18=0/325

NOTES-

OTHERS

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 21, 23, 24, 25, 26, 27, 28 except (jt=lb) 20=185, 17=172.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 13,2022



Job Truss Truss Type Qty Ply Lot 121 MN 151909946 B220017 D1 3 Common Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:40 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-WF4smSNgbSH4NsbhBiUnVVMP0xabJUrVdAfsHOzHHvH 14-6-8 -0-10-8 0-10-8 6-10-0 13-8-0 6-10-0 6-10-0 0-10-8 Scale = 1:26.8 4x8 = 6.00 12 7 2x4 || 6 5x8 II 5x8 || 6-10-0 13-8-0 6-10-0 6-10-0 Plate Offsets (X,Y)--[6:0-5-1,0-2-8], [8:0-5-1,0-2-8] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.51 Vert(LL) -0.04 6-7 >999 360 MT20 197/144 TCDL Lumber DOL 0.36 Vert(CT) 10.0 1.15 BC -0.08 6-7 >999 240 WB 0.09 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.01 6 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Wind(LL) 0.02 7-8 >999 240 Weight: 39 lb FT = 10% LUMBER-**BRACING-**TOP CHORD Structural wood sheathing directly applied or 5-11-9 oc purlins,

BOT CHORD

except end verticals.

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

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

2x6 SPF No.2 *Except* WFBS 3-7: 2x3 SPF No.2

REACTIONS.

(size) 8=0-5-8, 6=0-3-8 Max Horz 8=-68(LC 6) Max Uplift 8=-99(LC 8), 6=-99(LC 9)

Max Grav 8=672(LC 1), 6=672(LC 1)

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

2-3=-749/102, 3-4=-749/102, 2-8=-616/146, 4-6=-616/146 TOP CHORD

BOT CHORD 7-8=-19/568, 6-7=-19/568

WEBS 3-7=0/288

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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 13,2022







Job Truss Truss Type Qty Ply Lot 121 MN 151909947 B220017 D2 **GABLE** Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:41 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-?ReEzoNIMmPx?0AtlQ?01juhhL?22yzerqOQpqzHHvG 0-10-8 6-10-0 1<u>3-8-0</u> 14-6-8 6-10-0 6-10-0 0-10-8 Scale = 1:27.7 4x5 = 6 6.00 12 8 4-1-0 9 10 0-8-0 20 19 18 17 16 15 13 12 4x8 || 4x8 || 13-8-0 13-8-0 Plate Offsets (X,Y)--[12:0-3-8,Edge]

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

(loc)

11

11

12

-0.00

-0.00

0.00

I/defI

n/r

n/r

n/a

except end verticals.

L/d

120

120

n/a

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

PLATES

Weight: 50 lb

MT20

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

GRIP

197/144

FT = 10%

LUMBER-

TOP CHORD

REACTIONS.

LOADING (psf)

TCLL

TCDL

BCLL

BCDL

2x4 SPF No.2

All bearings 13-8-0.

BOT CHORD 2x4 SPF No 2 2x4 SPF No 2 WERS

(lb) -

25.0

10.0

0.0

10.0

OTHERS 2x4 SPF No.2

CSI.

TC

BC

WB

Matrix-R

0.07

0.02

0.03

Max Horz 20=66(LC 7) 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
- 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) 20, 12, 17, 18,
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 13,2022







Job Truss Truss Type Qty Ply Lot 121 MN 151909948 B220017 E1 **GABLE** Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:42 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-TeCcB8Ow74XocAl4J7WFawRslkLynPzo4U8zMGzHHvF -0-10-8 0-10-8 7-8-0 15-4-0 7-8-0 7-8-0

> Scale = 1:36.6 4x5 =

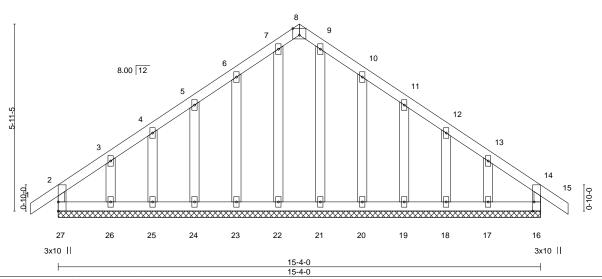


Plate Off	Plate Offsets (X,Y) [8:0-2-8,Edge], [16:0-3-8,Edge]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	15	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	15	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-R						Weight: 78 lb	FT = 10%

LUMBER-BRACING-TOP CHORD 2x4 SPF No 2

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

REACTIONS. All bearings 15-4-0.

(lb) -Max Horz 27=171(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 27, 16, 26, 25, 24, 23, 20, 19, 18, 17

Max Grav All reactions 250 lb or less at joint(s) 27, 16, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17

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
- 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 1-4-0 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) 27, 16, 26, 25, 24, 23, 20, 19, 18, 17.
- 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.



May 13,2022



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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 Ply Lot 121 MN 151909949 B220017 E2 **GABLE** 2 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:43 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-xqm_OUPYuNffEKKGtr2U78_w38ZsWgWxJ8tWuizHHvE

6-0-5 6-0-5 15-7-8 13-3-0 2-4-8

> Scale = 1:58.7 4x5 =

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

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

except end verticals.

1 Row at midpt

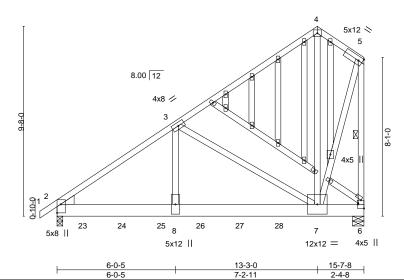


Plate Offsets (X,Y)-- [2:Edge,0-2-3], [6:Edge,0-3-8], [12:0-0-5,0-2-8]

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 0.53	Vert(LL) -0.08 7-8 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.15 7-8 >999 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.80	Horz(CT) 0.01 6 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.05 7-8 >999 240	Weight: 292 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No 2 BOT CHORD 2x8 SP DSS 2x4 SPF No.2 WFBS

OTHERS 2x4 SPF No.2

WEDGE Left: 2x6 SPF No.2

REACTIONS. (size) 2=0-3-8, 6=0-7-0

Max Horz 2=350(LC 26)

Max Uplift 2=-326(LC 8), 6=-485(LC 8) Max Grav 2=3159(LC 1), 6=3620(LC 1)

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

2-3=-4410/360, 3-4=-1190/165, 4-5=-1050/223, 5-6=-3563/453 TOP CHORD

BOT CHORD 2-8=-380/3456, 7-8=-380/3456

WEBS $3-8=-130/3051,\ 3-7=-3031/424,\ 4-7=-218/935,\ 5-7=-346/3089$

- 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.
 - Bottom chords connected as follows: 2x8 2 rows staggered at 0-7-0 oc.
 - Webs connected as follows: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 5) 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.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 1-4-0 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) except (jt=lb) 2=326, 6=485.
- 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.



May 13,2022

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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 121 MN
D000047	Γ0	CARLE	_		151909949
B220017	EZ	GABLE	1	2	Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:43 2022 Page 2 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-xqm_OUPYuNffEKKGtr2U78_w38ZsWgWxJ8tWuizHHvE

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 330 lb down and 94 lb up at 1-3-0, 480 lb down and 43 lb up at 3-3-0, 564 lb down and 54 lb up at 5-3-0, 1168 lb down and 50 lb up at 7-3-0, 1298 lb down and 75 lb up at 9-3-0, 613 lb down and 112 lb up at 11-3-0, and 575 lb down and 108 lb up at 13-3-0, and 591 lb down and 95 lb up at 15-6-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-5=-70, 2-6=-20

Concentrated Loads (lb)

Vert: 6=-548(F) 7=-515(F) 23=-330(F) 24=-480(F) 25=-564(F) 26=-1168(F) 27=-1174(F) 28=-549(F)



Job	Truss	Truss Type	Qty	Ply	Lot 121 MN
					l51909950
B220017	E3	GABLE	1	1	
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:44 2022 Page 1

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

11-12

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

except end verticals.

1 Row at midpt

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-P0JMcqQBfhnWsUvSQYZjfLWAAY?JFlp5Yod4Q9zHHvD 10-10-8

Scale = 1:44.2

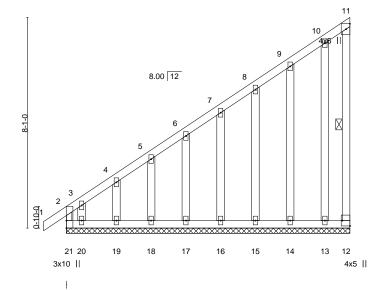


Plate Off	sets (X,Y)	[12:Edge,0-3-8]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.00	2	n/r	120	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.00	2	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	12	n/a	n/a			
BCDL	10.0	Code IRC2018/TI	PI2014	Matr	x-R						Weight: 72 lb	FT = 10%	

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

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

2x3 SPF No.2 *Except* WFBS

11-12: 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 10-10-8.

(lb) - Max Horz 21=316(LC 5) Max Uplift All uplift 100 lb or less at joint(s) 12, 19, 18, 17, 16, 15, 14, 13 except 21=-234(LC 6),

20=-325(LC 5)

Max Grav All reactions 250 lb or less at joint(s) 12, 20, 19, 18, 17, 16, 15, 14, 13 except 21=451(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-21=-280/129, 2-3=-347/209, 3-4=-257/164 TOP CHORD

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 19, 18, 17, 16, 15, 14, 13 except (jt=lb) 21=234, 20=325.
- 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.



May 13,2022



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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 Ply Lot 121 MN 151909951 B220017 J1 Diagonal Hip Girder 2 Job Reference (optional) Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:45 2022 Page 1 Wheeler Lumber, ID:pq50?Ycap6WpLXoTu4wfY2za1nE-tDtlp9RpQ?vNTeUf_G4yCZ3H2yI0_I7EmSMdzbzHHvC -1-2-14 1-2-14 Scale = 1:12.8 4x5 || 4 2.83 12 7 2 5 8 2x4 || ⁶ 2x4 || 4x5 = 2-8-7 2-7-13 Plate Offsets (X,Y)--[3:0-3-3,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.50 Vert(LL) -0.06 >944 360 MT20 197/144 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.28 -0.13 6 >475 240 WB **BCLL** 0.0 Rep Stress Incr NO 0.02 Horz(CT) 0.04 5 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 0.06 6 >999 240 Weight: 15 lb FT = 10% LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 5-4-4 oc purlins, BOT CHORD 2x4 SPF No 2 except end verticals.

BOT CHORD

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

2x3 SPF No 2 WFBS

REACTIONS. (size) 5=Mechanical, 2=0-4-9

Max Horz 2=52(LC 5)

Max Uplift 5=-40(LC 8), 2=-102(LC 4) Max Grav 5=219(LC 1), 2=349(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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=102.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 31 lb up at 2-7-6, and 67 lb down and 31 lb up at 2-7-6 on top chord, and 0 lb down at 2-7-3, and 0 lb down at 2-7-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-4=-70, 2-6=-20, 3-5=-20



May 13,2022



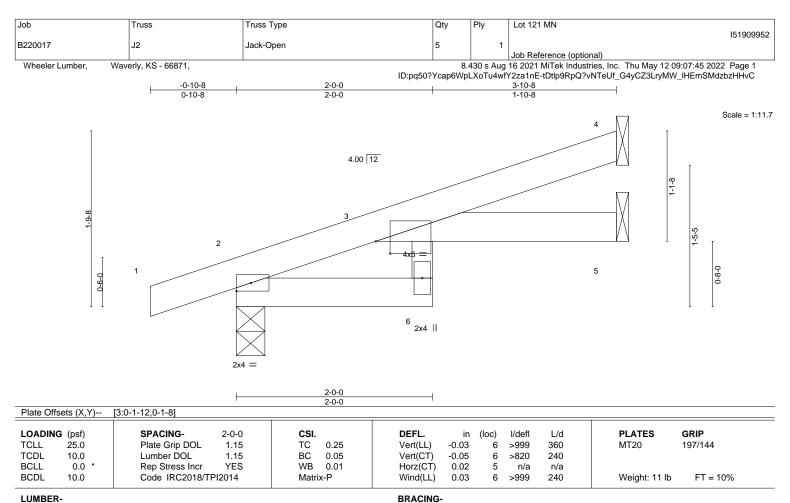


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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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 2x3 SPF No 2 WFBS

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=65(LC 4)

Max Uplift 4=-52(LC 8), 2=-65(LC 4)

Max Grav 4=135(LC 1), 2=252(LC 1), 5=48(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 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 3-10-8 oc purlins.

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

May 13,2022





Job Truss Truss Type Qty Ply Lot 121 MN 151909953 B220017 J3 Jack-Open Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:46 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-LPR71VRRBI1E5n2rYzbBkmcYkMi9jCkN?66BV1zHHvB -0-10-8 0-10-8 Scale = 1:8.3 4.00 12 2 0-8-15

1-9-7

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 0.05	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 5 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

2x4 =

LUMBER-

REACTIONS.

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

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

Max Horz 2=37(LC 4) Max Uplift 3=-27(LC 8), 2=-56(LC 4)

0-9-0

Max Grav 3=45(LC 1), 2=158(LC 1), 4=35(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 1-9-7 oc purlins.

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

May 13,2022





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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909954 B220017 J4 JACK-CLOSED SUPPORTE 2 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:46 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-LPR71VRRBI1E5n2rYzbBkmcY7MiJjCkN?66BV1zHHvB

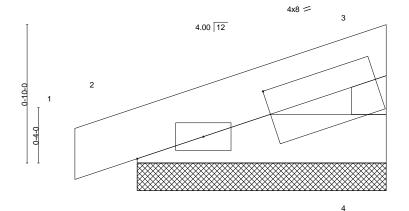
Structural wood sheathing directly applied or 1-6-0 oc purlins,

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

except end verticals.

-0-4-8 0-4-8

Scale = 1:6.9



2x4 =

Plate Off	sets (X,Y)	[3:0-10-2,0-1-12]										
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P						Weight: 4 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 WFBS

REACTIONS. (size) 4=1-6-0, 2=1-6-0 Max Horz 2=24(LC 5)

Max Uplift 4=-12(LC 8), 2=-28(LC 4)

Max Grav 4=59(LC 1), 2=93(LC 1)

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

- 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 8) 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.



May 13,2022



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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909955 B220017 J5 JACK-CLOSED 2 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

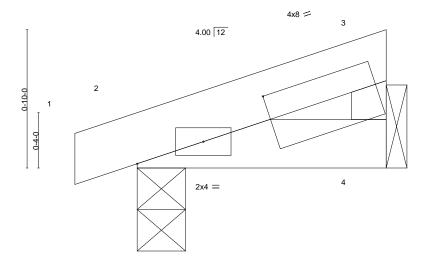
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:47 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-pb?VErS3yc94jxd16h6QH_8jvl2ZSf_XEmrk1UzHHvA 1-6-0

Structural wood sheathing directly applied or 1-6-0 oc purlins,

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

except end verticals.

Scale = 1:6.9



1-6-0

BRACING-TOP CHORD

BOT CHORD

Plate Offsets ((X,Y)	[3:0-10-2,0-1-12]

LOADING (p	' '	SPACING-	2-0-0	CSI.	0.00	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
	25.0 10.0	Plate Grip DOL Lumber DOL	1.15 1.15	TC BC	0.02 0.02	Vert(LL) Vert(CT)	-0.00 -0.00	2	>999 >999	360 240	MT20	197/144
	0.0 *	Rep Stress Incr Code IRC2018/TP	YES PI2014	WB Matri	0.00 x-P	Horz(CT) Wind(LL)	-0.00 0.00	4 2	n/a ****	n/a 240	Weight: 4 lb	FT = 10%

LUMBER-

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

2x3 SPF No.2 WFBS

REACTIONS.

(size) 4=Mechanical, 2=0-3-8 Max Horz 2=24(LC 5)

Max Uplift 4=-12(LC 8), 2=-30(LC 4) Max Grav 4=57(LC 1), 2=94(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

-0-4-8

0-4-8

- 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.



May 13,2022



Job Truss Truss Type Qty Ply Lot 121 MN 151909956 B220017 LAY1 **GABLE** Job Reference (optional)

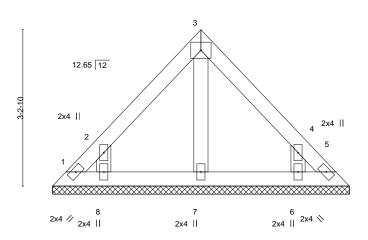
Waverly, KS - 66871, Wheeler Lumber,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:47 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-pb?VErS3yc94jxd16h6QH_8jVl2OSfaXEmrk1UzHHvA

3-0-11 3-0-11

4x5 =

Scale = 1:23.7



6-1-6 6-1-6

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P						Weight: 20 lb	FT = 10%

LUMBER-

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

BRACING-

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

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

REACTIONS. All bearings 6-1-6.

Max Horz 1=-76(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-132(LC 8), 6=-131(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=132, 6=131,
- 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.



May 13,2022

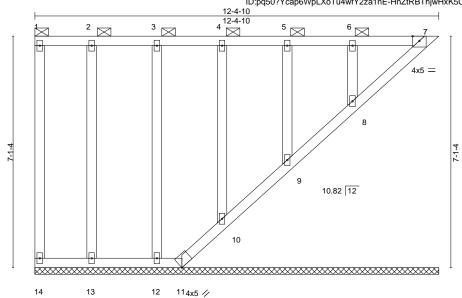


Job Truss Truss Type Qty Ply Lot 121 MN 151909957 B220017 LAY2 **GABLE** 2 Job Reference (optional)

Waverly, KS - 66871, Wheeler Lumber,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:48 2022 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-HnZtRBThjwHxK5CEfOdfqBhrk9NSB5QgSQbHZwzHHv9

Scale = 1:35.3



GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.21 Vert(LL) n/a n/a 999 MT20 197/144 TCDL Lumber DOL 1.15 вс 0.10 Vert(CT) n/a n/a 999 WB **BCLL** 0.0 Rep Stress Incr YES 0.12 Horz(CT) 0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-S Weight: 66 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

12-4-10

7-10-9

LUMBER-

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

REACTIONS. All bearings 12-4-10.

(lb) -Max Horz 14=-193(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 14, 7, 11, 13, 12, 10, 9, 8 Max Grav All reactions 250 lb or less at joint(s) 14, 7, 11, 13, 12, 10, 9, 8

4-6-2

4-6-2

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.

6-0-0 oc bracing: 7-8.

2-0-0 oc purlins (6-0-0 max.): 1-7, except end verticals.

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

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 7, 11, 13, 12, 10, 9, 8
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 10, 9, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 121 MN 151909958 B220017 LAY3 **GABLE** 2 Job Reference (optional) Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:49 2022 Page 1 Wheeler Lumber, ID:pq50?Ycap6WpLXoTu4wfY2za1nE-m_7FfXUJUDPoyFnQD58uMPE0OZjWwYaqh4Kr6MzHHv8 9-8-9 9-8-9 Scale = 1:40.0 6x6 📏 10.82 | 12 4x5 10 10.82 12 18 17 16 15 14 13 12 11 4x5 // 12-6-2 15-1-2 2-7-0 12-6-2

		1202			210	
Plate Offsets (X,Y)	[6:Edge,0-2-10], [9:0-3-0,Edge]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.22 BC 0.11 WB 0.12	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl n/a - n/a n/a - n/a 0.00 9 n/a	L/d 999 999 n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S				Weight: 90 lb $FT = 10\%$

BRACING-TOP CHORD

LUMBER-TOP CHORD 2x4 SPF No 2

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

BOT CHORD 2x4 SPF No.2

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

> 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

All bearings 15-1-2. REACTIONS. (lb) -Max Horz 18=-250(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 18, 17, 16, 15, 14, 13, 10 except 9=-159(LC 7), 11=-146(LC 4), QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1. 12=-119(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 18, 11, 17, 16, 15, 14, 13, 12, 10 except 9=295(LC 4)

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
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 17, 16, 15, 14, 13, 10 except (jt=lb) 9=159, 11=146, 12=119.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 10.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 13,2022





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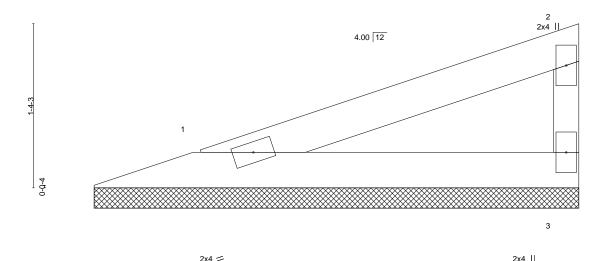
AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 121 MN 151909959 B220017 V1 Valley Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu May 12 09:07:49 2022 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-m_7FfXUJUDPoyFnQD58uMPE1IZjwwZUqh4Kr6MzHHv8

Scale = 1:9.5



SPACING-DEFL. PLATES GRIP LOADING (psf) 2-0-0 CSI. in (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.16 Vert(LL) n/a n/a 999 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 вс 0.09 Vert(CT) n/a n/a 999 YES WB 0.00 Horz(CT) **BCLL** 0.0 Rep Stress Incr -0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 9 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

(size) 1=3-11-12, 3=3-11-12

Max Horz 1=45(LC 5)

Max Uplift 1=-22(LC 4), 3=-29(LC 8) Max Grav 1=135(LC 1), 3=135(LC 1)

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

NOTES-

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



May 13,2022





Structural wood sheathing directly applied or 4-0-8 oc purlins,

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

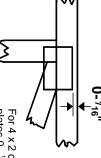
except end verticals

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE



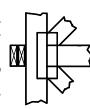
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

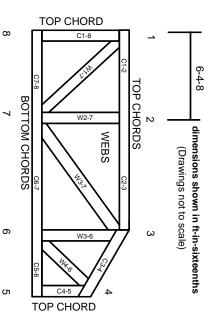
Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- 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.
- 15. 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.