

RE: 400156 Lot 4 H3 MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.2

Wind Code: N/A Wind Speed: 115 mph Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 60 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	139353144	A1	4/30/2020	27	139353170	D5	4/30/2020
2	139353145	A2	4/30/2020	28	I39353171	D6	4/30/2020
3	139353146	A3	4/30/2020	29	139353172	D8	4/30/2020
4	139353147	A4	4/30/2020	30	139353173	E1	4/30/2020
5	139353148	A5	4/30/2020	31	139353174	E2	4/30/2020
6	139353149	B1	4/30/2020	32	139353175	E3	4/30/2020
7	139353150	B2	4/30/2020	33	139353176	J1	4/30/2020
8	I39353151	B3	4/30/2020	34	139353177	J2	4/30/2020
9	139353152	B4	4/30/2020	35	139353178	J3	4/30/2020
10	139353153	B5	4/30/2020	36	139353179	J4	4/30/2020
11	139353154	B6	4/30/2020	37	139353180	LAY1	4/30/2020
12	139353155	B7	4/30/2020	38	139353181	LAY2	4/30/2020
13	139353156	B8	4/30/2020	39	139353182	LAY3	4/30/2020
14	139353157	B9	4/30/2020	40	139353183	LAY4	4/30/2020
15	139353158	B10	4/30/2020	41	139353184	V1	4/30/2020
16	139353159	B11	4/30/2020	42	139353185	V2	4/30/2020
17	139353160	C1	4/30/2020	43	139353186	V3	4/30/2020
18	I39353161	C2	4/30/2020	44	139353187	V4	4/30/2020
19	139353162	C3	4/30/2020	45	139353188	V5	4/30/2020
20	139353163	C4	4/30/2020	46	139353189	V6	4/30/2020
21	139353164	C5	4/30/2020	47	139353190	V7	4/30/2020
22	139353165	C6	4/30/2020	48	139353191	V8	4/30/2020
23	139353166	D1	4/30/2020	49	139353192	V9	4/30/2020
24	139353167	D2	4/30/2020	50	139353193	V10	4/30/2020
25	139353168	D3	4/30/2020	51	139353194	V11	4/30/2020
26	139353169	D4	4/30/2020	52	139353195	V12	4/30/2020

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Kansas is April 30, 2022.

Kansas COA: E-943

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





RE: 400156 - Lot 4 H3

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

**Site Information:** 

Project Customer: Lot/Block: Address:

Project Name:

Subdivision:

City, County:

State:

No.	Seal#	Truss Name	Date
53 54	139353196 139353197	V13 V14	4/30/2020 4/30/2020
5 <del>4</del> 55	139353198	V14 V15	4/30/2020
56	139353199	V16	4/30/2020
57	139353200	V17	4/30/2020
58	139353201	V18	4/30/2020
59	139353202	V19	4/30/2020
60	139353203	V20	4/30/2020



RE: 400156 Lot 4 H3 MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

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This package includes 60 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	139353144	A1	4/30/2020	27	139353170	D5	4/30/2020
2	139353145	A2	4/30/2020	28	I39353171	D6	4/30/2020
3	139353146	A3	4/30/2020	29	139353172	D8	4/30/2020
4	139353147	A4	4/30/2020	30	139353173	E1	4/30/2020
5	139353148	A5	4/30/2020	31	139353174	E2	4/30/2020
6	139353149	B1	4/30/2020	32	139353175	E3	4/30/2020
7	139353150	B2	4/30/2020	33	139353176	J1	4/30/2020
8	I39353151	B3	4/30/2020	34	139353177	J2	4/30/2020
9	139353152	B4	4/30/2020	35	139353178	J3	4/30/2020
10	139353153	B5	4/30/2020	36	139353179	J4	4/30/2020
11	139353154	B6	4/30/2020	37	139353180	LAY1	4/30/2020
12	139353155	B7	4/30/2020	38	139353181	LAY2	4/30/2020
13	139353156	B8	4/30/2020	39	139353182	LAY3	4/30/2020
14	139353157	B9	4/30/2020	40	139353183	LAY4	4/30/2020
15	139353158	B10	4/30/2020	41	139353184	V1	4/30/2020
16	139353159	B11	4/30/2020	42	139353185	V2	4/30/2020
17	139353160	C1	4/30/2020	43	139353186	V3	4/30/2020
18	I39353161	C2	4/30/2020	44	139353187	V4	4/30/2020
19	139353162	C3	4/30/2020	45	139353188	V5	4/30/2020
20	139353163	C4	4/30/2020	46	139353189	V6	4/30/2020
21	139353164	C5	4/30/2020	47	139353190	V7	4/30/2020
22	139353165	C6	4/30/2020	48	I39353191	V8	4/30/2020
23	139353166	D1	4/30/2020	49	139353192	V9	4/30/2020
24	139353167	D2	4/30/2020	50	139353193	V10	4/30/2020
25	139353168	D3	4/30/2020	51	139353194	V11	4/30/2020
26	139353169	D4	4/30/2020	52	139353195	V12	4/30/2020

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2020.

Missouri COA: 001193

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





RE: 400156 - Lot 4 H3

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

**Site Information:** 

Project Customer: Lot/Block: Address:

Project Name:

Subdivision:

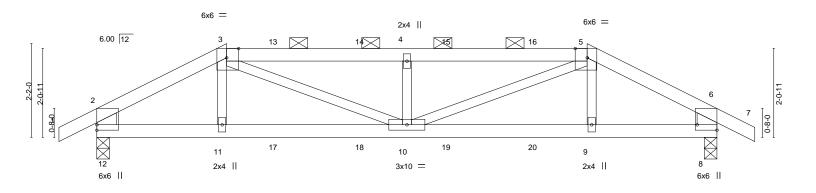
City, County:

State:

No.	Seal#	Truss Name	Date
53 54	139353196 139353197	V13 V14	4/30/2020 4/30/2020
5 <del>4</del> 55	139353198	V14 V15	4/30/2020
56	139353199	V16	4/30/2020
57	139353200	V17	4/30/2020
58	139353201	V18	4/30/2020
59	139353202	V19	4/30/2020
60	139353203	V20	4/30/2020

Job Truss Truss Type Qty Lot 4 H3 139353144 400156 A1 Hip Girder | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:16 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-V2S9xztPPfefaLZIHAcX2CHU8pdo8zbrXizcEkyHLuv 14-4-0 15-2-8 0-10-8 3-0-0 4-2-0 4-2-0 3-0-0 0-10-8

Scale = 1:26.6



	⊢	3-0-0	+	7-2-0				11-4-0			14-4-0	<del></del>
Plate Offse	te (V V)	3-0-0 [2:0-1-6,0-2-12], [3:0-3-5,E	Edgo] [5:0.2 F	4-2-0	1 6 0 2 12]	[0.Edgo 0.5.0] [0	0 0 0 0	4-2-0 2 121	[12:0 0 0	0 2 121	3-0-0	
riale Olise	is (A, I )	[2:0-1-0,0-2-12], [3:0-3-3,t	-ugej, [5.0-5-6	,Eugej, [6.0-	1-0,0-2-12],	[6.⊑uge,0-5-6], [6	.0-0-0,0	-2-12],	[12.0-0-0	,0-2-12]		
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
CLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.06	10	>999	360	MT20	197/144
rcdl .	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.12	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO		0.25	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	2014	Matrix	-S	Wind(LL)	0.07	10	>999	240	Weight: 48 lb	FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

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

2-12,6-8: 2x6 SPF No.2

(lb/size) 12=769/0-3-8, 8=769/0-3-8

Max Horz 12=42(LC 7)

Max Uplift 12=-212(LC 8), 8=-212(LC 9)

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

2-3=-997/301, 3-4=-1469/442, 4-5=-1469/442, 5-6=-997/301, 2-12=-668/203,

6-8=-668/203

BOT CHORD 11-12=-250/822, 10-11=-254/822, 9-10=-239/822, 8-9=-234/822

**WEBS** 3-10=-197/715, 4-10=-417/205, 5-10=-198/715

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 arip 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=212, 8=212.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 145 lb up at 3-0-0. 70 lb down and 53 lb up at 4-2-0, 70 lb down and 53 lb up at 6-2-0, 70 lb down and 53 lb up at 8-2-0, and 70 lb down and 53 lb up at 10-2-0, and 85 lb down and 145 lb up at 11-4-0 on top chord, and 30 lb down at 3-0-0, 18 lb down at 4-2-0, 18 lb down at 6-2-0, 18 lb down at 8-2-0, and 18 lb down at 10-2-0, and 30 lb down at 11-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) 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

# JUAN **GARCIA** NUMBER -2000162101 ONAL 16952 ANSAS November 20,2019

Structural wood sheathing directly applied or 4-10-12 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-6-13 max.): 3-5.

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

#### Continued on page 2

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 permanent. 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



November 20,2019

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A1	Hip Girder	1	1	139353144
400130		i iip Giraci			Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:16 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-V2S9xztPPfefaLZIHAcX2CHU8pdo8zbrXizcEkyHLuv

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-12=-20

Concentrated Loads (lb)

Vert: 3=-12(F) 5=-12(F) 11=-10(F) 9=-10(F) 13=-12(F) 14=-12(F) 15=-12(F) 16=-12(F) 17=-10(F) 18=-10(F) 19=-10(F) 20=-10(F)



Job Truss Truss Type Qty Lot 4 H3 139353145 Hip 400156 A2 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:17 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-zE0Y9Ju2AzmWCV8Uru7maQqh8D?8tSc?mMj9mByHLuu 5-0-0 5-0-0 9-4-0

4-4-0

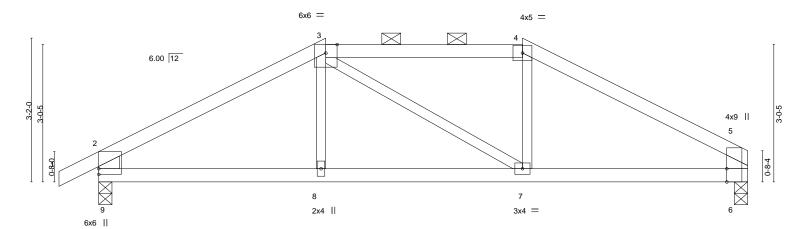
Scale = 1:25.4

4-11-8

Structural wood sheathing directly applied or 5-6-11 oc purlins,

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

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



	<u> </u>	5-0-0 5-0-0	+	9-4-0 4-4-0		<u> </u>	14-3-8 4-11-8	
Plate Offse	ets (X,Y)	[2:0-1-6,0-2-12], [5:0-3-8,Edge], [	:0-1-6,0-2-12], [6:0-0-0,0				4-11-6	
LOADING TCLL	(psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.49		( /	defl L/d 999 360	PLATES MT20	<b>GRIP</b> 197/144
TCDL BCLL	10.0 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.43 WB 0.07	Vert(CT) -0.11 Horz(CT) 0.02	7-8 >9	999 240 n/a n/a	WITZO	101/1144
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.03	7-8 >9	999 240	Weight: 45 lb	FT = 10%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

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

0-10-8

2-9,5-6: 2x6 SPF No.2

REACTIONS. (lb/size) 9=703/0-3-8, 6=619/0-3-8

Max Horz 9=59(LC 5)

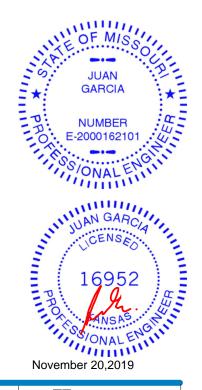
Max Uplift 9=-85(LC 8), 6=-59(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-880/67, 3-4=-699/95, 4-5=-866/65, 2-9=-637/119, 5-6=-537/90 TOP CHORD

**BOT CHORD** 8-9=-58/707, 7-8=-60/704, 6-7=-27/701

#### 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353146 400156 A3 Roof Special Girder 1 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:18 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-RQawMfugxGuNqfjgObf?7dNqYdHzcnO8??SjJdyHLut 26-10-8 0-10-8 -0-10-8 0-10-8 16-8-5 18-7-12 23-0-0 26-0-0 7-4-0 0-4-0

2-11-8

2-4-13

1-11-7

4-4-4

Structural wood sheathing directly applied or 4-2-1 oc purlins,

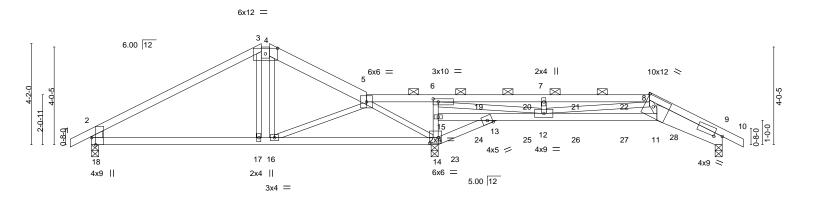
Rigid ceiling directly applied or 5-10-1 oc bracing.

except end verticals, and 2-0-0 oc purlins (5-10-2 max.): 3-4, 5-8.

4-0-0

Scale = 1:47.5

3-0-0



7-0-0	7 <sub>7</sub> 4-0	11-4-0	14-1-12 14-3-8	16-8-5 <sub>1</sub>	18-7-12 <sub>1</sub>	23-3-11	1 2	26-0-0
7-0-0	0-4-0	4-0-0	2-9-12 0-1-12	2-4-13	1-11-7	4-7-15	1	2-8-5
5,0-2-12], [3:0-6-0,0-2	2-12], [6:0-2-8,0-1-	8], [8:0-4-5,0-5-0], [9	9:0-3-15,0-1-8], [1	4:0-4-4,0-2-1	2], [18:0-0	-0,0-2-12], [18:0-3	3-8,Edge]	
SPACING- 2	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.11 11-12	>999	360	MT20	197/144
Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.21 11-12	>661	240		
Rep Stress Incr	NO	WB 0.55	Horz(CT)	0.07 9	n/a	n/a		
Code IRC2018/TPI2	014	Matrix-S	Wind(LL)	0.11 11-12	>999	240	Weight: 98 lb	FT = 10%
	7-0-0 5,0-2-12], [3:0-6-0,0-2 SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	7-0-0 0-4-b 6,0-2-12], [3:0-6-0,0-2-12], [6:0-2-8,0-1-  SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	7-0-0 0 0 4-0 4-0-0  6,0-2-12], [3:0-6-0,0-2-12], [6:0-2-8,0-1-8], [8:0-4-5,0-5-0], [8  SPACING- 2-0-0 CSI.  Plate Grip DOL 1.15 TC 0.58  Lumber DOL 1.15 BC 0.65  Rep Stress Incr NO WB 0.55	7-0-0 0 0 4-0 4-0-0 2-9-12 0-1 1 2 5 5 5 5 5 5 5 5 5 5 5 6 5 5 6 5 6 5 6	7-0-0 0-4-b 4-0-0 2-9-12 0-1-12 2-4-13  6,0-2-12], [3:0-6-0,0-2-12], [6:0-2-8,0-1-8], [8:0-4-5,0-5-0], [9:0-3-15,0-1-8], [14:0-4-4,0-2-1:0-4-4], [14:0	7-0-0 0-4-b 4-0-0 2-9-12 0-1-12 2-4-13 1-11-7  5,0-2-12], [3:0-6-0,0-2-12], [6:0-2-8,0-1-8], [8:0-4-5,0-5-0], [9:0-3-15,0-1-8], [14:0-4-4,0-2-12], [18:0-0  SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl  Plate Grip DOL 1.15 TC 0.58 Vert(LL) -0.11 11-12 >999  Lumber DOL 1.15 BC 0.65 Vert(CT) -0.21 11-12 >661  Rep Stress Incr NO WB 0.55 Horz(CT) 0.07 9 n/a	7-0-0 0-4-b 4-0-0 2-9-12 0-1-12 2-4-13 1-11-7 4-7-15 6,0-2-12], [3:0-6-0,0-2-12], [6:0-2-8,0-1-8], [8:0-4-5,0-5-0], [9:0-3-15,0-1-8], [14:0-4-4,0-2-12], [18:0-0-0,0-2-12], [18:0-5-0], [18:0-4-4,0-2-12],	7-0-0 0-4-b 4-0-0 2-9-12 0-1-12 2-4-13 1-1-1-7 4-7-15  6,0-2-12], [3:0-6-0,0-2-12], [6:0-2-8,0-1-8], [8:0-4-5,0-5-0], [9:0-3-15,0-1-8], [14:0-4-4,0-2-12], [18:0-0-0,0-2-12], [18:0-3-8,Edge]  SPACING- 2-0-0 CSI. DEFL. in (loc) l/defl L/d PLATES  Plate Grip DOL 1.15 TC 0.58 Vert(LL) -0.11 11-12 >999 360 MT20  Lumber DOL 1.15 BC 0.65 Vert(CT) -0.21 11-12 >661 240  Rep Stress Incr NO WB 0.55 Horz(CT) 0.07 9 n/a n/a

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SPF No.2 \*Except\* 3-4,4-5: 2x6 SPF No.2

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

9-11: 2x8 SP DSS **WEBS** 2x3 SPF No.2 \*Except\* 2-18: 2x6 SPF No.2

REACTIONS. (lb/size) 18=607/0-3-8, 14=1440/0-3-8, 9=520/0-3-8

Max Horz 18=-61(LC 6)

Max Uplift 18=-147(LC 29), 14=-277(LC 9), 9=-166(LC 9)

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

TOP CHORD 2-3=-620/170, 3-4=-462/203, 4-5=-540/202, 5-6=-116/747, 6-7=-834/335, 7-8=-834/335,

8-9=-1896/583, 2-18=-554/192

**BOT CHORD** 17-18=-115/462, 16-17=-115/460, 14-16=-336/323, 13-14=-855/215, 12-13=-765/189,

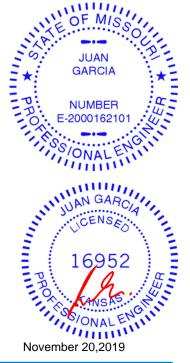
11-12=-425/1258, 9-11=-519/1714

**WEBS** 5-16=-61/407, 5-14=-995/141, 14-15=-553/207, 6-15=-615/222, 6-12=-456/1590,

8-12=-452/180, 8-11=-148/816, 7-12=-338/184

#### 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Bearing at joint(s) 9 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) except (jt=lb) 18=147, 14=277, 9=166,
- 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) 71 lb down and 54 lb up at 16-0-0, 71 lb down and 54 lb up at 18-0-0, 71 lb down and 54 lb up at 20-0-0, and 71 lb down and 54 lb up at 22-0-0, and 118 lb down and 146 lb up at 23-0-0 on top chord, and 18 lb down at 16-0-0, 18 lb down at 18-0-0, 18 lb down at 20-0-0, and 18 lb down at 22-0-0, and 30 lb down at 22-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of



Continuouson page 2

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A3	Roof Special Girder	1	1	139353146
400136	AS	Roof Special Gilder		'	Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:19 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-wd8la?vlia0ERolsyJAEfrv?I1dCLEeIDfCGr3yHLus

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-8=-70, 8-10=-70, 14-18=-20, 13-14=-20, 11-13=-20, 9-11=-20

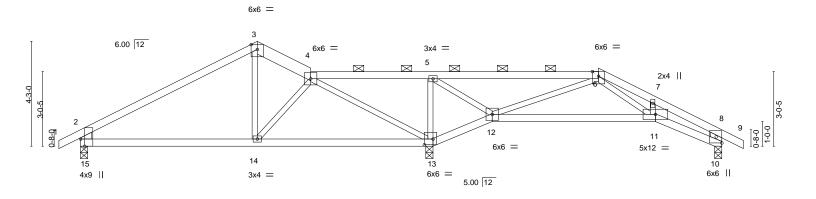
Concentrated Loads (lb)

Vert: 8=-13(F) 19=-13(F) 20=-13(F) 21=-13(F) 22=-13(F) 23=-10(F) 25=-10(F) 26=-10(F) 27=-10(F) 28=-10(F)



Job Truss Truss Type Qty Lot 4 H3 139353147 400156 Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:20 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OphgnLwwTu853yt3W0hTC2S9YR1C4eURSJxpNVyHLur 21-0-0 -0-10-8 0-10-8 26-0-0 26-10-8 0-10-8 16-8-5 23-3-11 7-2-0 2-2-0 4-11-8 2-4-13 4-3-11 2-3-11 2-8-5

Scale = 1:46.7



		7-2-0	9-4-0	14-1-12	2 14 <sub>7</sub> 3-8	16-8-5	21-0-0	23-3-11 2	26-0-0
	1	7-2-0	2-2-0	4-9-12	0-1'-12	2-4-13	4-3-11	2-3-11	2-8-5
Plate Offsets (X,Y) [2:0-1-6,0-2-12], [8:0-1-6,0-2-12], [10:0-1-2,0-2-12], [13:0-4-4,0-2-12], [15:0-0-0,0-2-12], [15:0-3-8,Edge]									
LOADING	(psf)	SPACING- 2-0	CSI.		DEFL.	in (loc)	I/defl L/d	PLATES	GRIP
TCLL :	25.0	Plate Grip DOL 1.1	5 TC	0.67	Vert(LL)	-0.08 11-12	>999 360	MT20	197/144
TCDL	10.0	Lumber DOL 1.	5 BC	0.41	Vert(CT)	-0.18 11-12	>754 240		
BCLL	0.0 *	Rep Stress Incr YE	S WB	0.76	Horz(CT)	0.05 10	n/a n/a		
BCDL	10.0	Code IRC2018/TPI201	Mati	rix-S	Wind(LL)	0.04 11-12	>999 240	Weight: 88 lb	FT = 10%

LUMBER-**BRACING-**TOP CHORD

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

3-4: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **BOT CHORD WEBS** 2x3 SPF No.2 \*Except\*

2-15,8-10: 2x6 SPF No.2

REACTIONS. (lb/size) 15=579/0-3-8, 13=1442/0-3-8, 10=433/0-3-8

Max Horz 15=-69(LC 6)

Max Uplift 15=-132(LC 8), 13=-193(LC 9), 10=-112(LC 9)

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

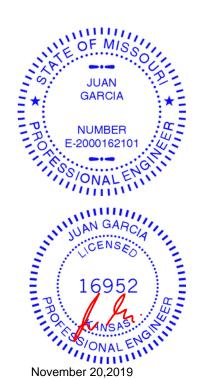
2-3=-559/135, 3-4=-456/167, 4-5=0/623, 5-6=0/435, 6-7=-631/185, 7-8=-789/152, TOP CHORD 2-15=-530/177 8-10=-620/145

**BOT CHORD** 14-15=-76/400, 13-14=-128/287, 12-13=-709/75, 11-12=-105/384, 10-11=-90/654

WEBS 4-13=-973/65, 5-13=-647/193, 5-12=0/277, 6-11=0/326, 6-12=-842/183

## 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Bearing at joint(s) 10 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) except (jt=lb) 15=132, 13=193, 10=112.
- 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 5-9-3 oc purlins,

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6.

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

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



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- Top chords connected as follows: 2x4 1 row at 0-4-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-2-0 oc, 2x8 - 4 rows staggered at 0-2-0 oc.

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

- 3) 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.
- 4) Unbalanced roof live loads have been considered for this design.
- 5) 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
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 11) Bearing at joint(s) 9, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=283, 4=401.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

OchtiGree/birabautia representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



16023 Swingley Ridge Rd Chesterfield, MO 63017

November 20,2019

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🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A5	Half Hip Girder	1		I39353148
					Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:21 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-s?F2\_hxYEBGyh6RF4jCilG\_luqK0p7PahzhNvyyHLuq

NOTES-

15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1218 lb down and 55 lb up at 2-0-0, 1269 lb down and 55 lb up at 4-0-0, 1270 lb down and 54 lb up at 6-0-0, and 1273 lb down and 204 lb up at 8-0-0, and 1254 lb down and 201 lb up at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

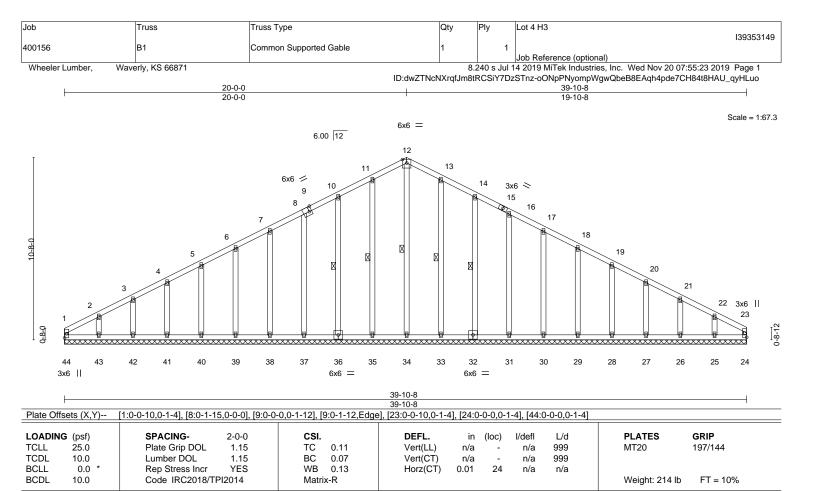
Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 7-9=-20, 5-7=-20, 4-5=-20

Concentrated Loads (lb)

Vert: 10=-1218(B) 12=-1217(B) 13=-1217(B) 14=-1219(B) 15=-1217(B)





LUMBER-

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

**BRACING-**

**WEBS** 

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

except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing. 12-34, 11-35, 10-36, 13-33, 14-32 1 Row at midpt

REACTIONS. All bearings 39-10-8.

(lb) -Max Horz 44=162(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 44, 35, 36, 37, 38, 39, 40, 41, 42, 33, 32, 31, 30, 29, 28, 27,

26 except 43=-121(LC 8), 25=-110(LC 9)

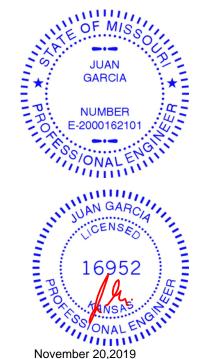
Max Grav All reactions 250 lb or less at joint(s) 44, 24, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 33, 32, 31,

30, 29, 28, 27, 26, 25

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

TOP CHORD 10-11=-46/265, 11-12=-49/286, 12-13=-49/278

- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 44, 35, 36, 37, 38, 39, 40, 41, 42, 33, 32, 31, 30, 29, 28, 27, 26 except (jt=lb) 43=121, 25=110.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353150 400156 B2 Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:27 2019 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-h9dKFk?Jp115P1vPQ\_J7\_XENxFNsDpvT3v8h7cyHLuk

1-11-4 20-0-0 7-3-4 5-4-0 7-1-4 5-7-9 7-8-14

> Scale: 3/16"=1' 6x8 =

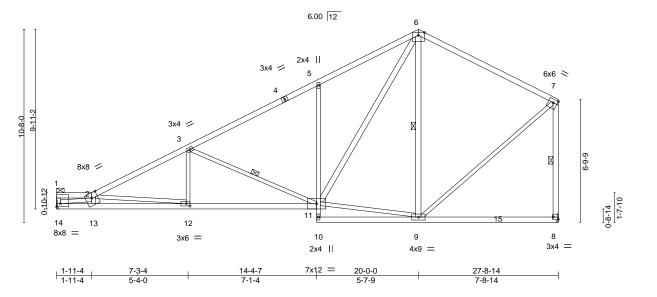


Plate Offsets (X,Y)	[1:0-1-4,0-0-0], [7:Edge,0-2-4], [8:Ed	ge,0-1-8], [12:0-2-8,0-1-8], [	13:0-1-2,0-0-9], [14:Edg	ge,0-2-0]	
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.60 BC 0.60 WB 0.72 Matrix-S	Vert(LL) -0.1 Vert(CT) -0.3 Horz(CT) 0.0	in (loc) l/defl L/. 7 11-12 >999 36. 2 11-12 >999 24. 7 8 n/a n/. 2 12-13 >999 24.	MT20 157/144/ OF M/S OF Weight; (81.15
6-7: 2>	PF No.2 *Except* 44 SPF 2100F 1.8E		BRACING- TOP CHORD	except end verticals,	JUAN thing directly applied of 3-1-5 of purifies, A and 2-0-0 oc purifies (6-0-0 max): 1-2.

WFBS

6-0-0 oc bracing: 9-10.

1 Row at midpt

3-11, 6-9, 7-8

0.4.01 [40.0.0.0.4.01 [40.0.4.0.0.0.01 [44.5.4

6-11,6-9,7-8: 2x4 SPF No.2 REACTIONS.

(lb/size) 14=1237/Mechanical, 8=1237/Mechanical Max Horz 14=310(LC 7)

2x3 SPF No.2 \*Except\*

Max Uplift 14=-181(LC 8), 8=-147(LC 8) Max Grav 14=1274(LC 2), 8=1316(LC 2)

11-14: 2x4 SPF 2100F 1.8E, 8-10: 2x4 SPF No.2

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 1-2=-273/35, 2-3=-2495/347, 3-5=-1563/254, 5-6=-1535/401, 6-7=-892 1-2=-273/35, 2-3=-2495/347, 3-5=-1563/254, 5-6=-1535/401, 6-7=-892/221,

0.0.41.50.5.1

7-8=-1167/190

**BOT CHORD** 13-14=-589/3197, 12-13=-575/3180, 11-12=-403/2222, 5-11=-474/265 WEBS 2-14=-3079/426, 2-12=-978/173, 3-12=0/424, 3-11=-981/249, 9-11=-41/726,

6-11=-345/1199, 6-9=-500/145, 7-9=-89/910

## NOTES-

WFBS

- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=181, 8=147.

#### Continued on page 2



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JUAN GARCIZ

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	
400156	B2	Roof Special	1	1	13935	3150
400130	D2	11001 Special	'	'	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:27 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-h9dKFk?Jp115P1vPQ\_J7\_XENxFNsDpvT3v8h7cyHLuk

#### NOTES-

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.



Job Truss Truss Type Qty Lot 4 H3 139353151 400156 ВЗ Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:28 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-9MAiT40xaL9y0BUb\_hqMXknSKfigyDmclZtEf2yHLuj 19-6-0 20<sub>0</sub>0<sub>1</sub>0 27-8-14 7-10-5 7-8-7 7-8-14 Scale = 1:67.6 4x9 = 6.00 12 6x6 = 3x6 🖊 3 10-8-0 6x12 = 3x4 | 6-6-9 1-6-4 9 13 12 11 10 8x12 = 3x10 =2x4 || 3x10 = 6 87 3x6 = 2x4 || 3x6 II 19-6-0 27-8-14 20-0-0 3-11-4 7-10-5 7-8-14 Plate Offsets (X,Y)--[2:0-6-0,0-2-8], [5:0-2-8,Edge], [9:0-4-4,0-2-8], [10:0-2-8,0-1-8] SPACING-DEFL. GRIP LOADING (psf) (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.94 Vert(LL) -0.24 10-11 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.62 Vert(CT) -0.44 10-11 >751 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.94 Horz(CT) 0.08 6 n/a n/a Code IRC2018/TPI2014 Wind(LL) 0.16 10-11 FT = 10% **BCDL** 10.0 Matrix-S >999 240 Weight: 124 lb

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

1-2: 2x4 SPF No.2 2x4 SPF 2100F 1.8E \*Except\*

**BOT CHORD** 8-9: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\* 3-9,4-7: 2x4 SPF No.2

REACTIONS. (lb/size) 12=1239/Mechanical, 6=1240/Mechanical

Max Horz 12=304(LC 7)

Max Uplift 12=-184(LC 8), 6=-143(LC 8) Max Grav 12=1293(LC 2), 6=1291(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2075/287, 3-4=-1036/198, 4-5=-975/227, 5-6=-1163/185

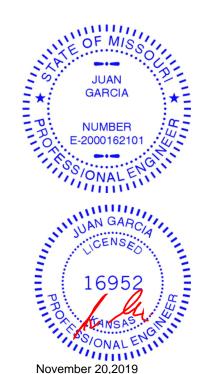
**BOT CHORD** 11-12=-557/3352, 10-11=-550/3364, 9-10=-278/1808, 8-9=-572/0

2-12=-3430/460, 2-10=-1587/275, 3-10=0/616, 3-9=-1181/319, 7-9=0/780, 4-9=-26/434,

## NOTES-

**WEBS** 

- 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=184, 6=143,
- 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 4-6-4 oc purlins,

2-12, 2-10, 3-9, 5-6

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

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

6-0-0 oc bracing: 8-9.

1 Row at midpt



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





Wheeler Lumber, Waverly, KS 66871 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:29 2019 Page 1

Structural wood sheathing directly applied or 4-11-7 oc purlins,

2-13, 3-9, 5-6

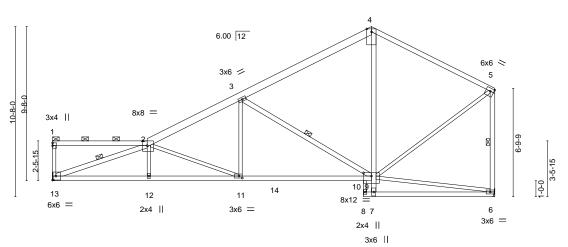
except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.

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

1 Row at midpt

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-dYk4gQ1ZLfHpeL3nYPLb3yKj6303hgOmXDdoBUyHLui 19-6-0 20<sub>F</sub>0<sub>F</sub>0 5-11-4 5-10-4 7-8-7 7-8-14

> Scale = 1:72.3 7x12 ||



	5-11-4 5-11-4	11-9-8 5-10-4	19-6-0 7-8-7	20 <sub>F</sub> 0 <sub>F</sub> 0 0-6-0	27-8-14 7-8-14	
Plate Offsets (X,Y) [2:0-3-6,Edge], [5:Edge,0-2-4], [9:0-6-0,0-2-8], [10:0-1-4,0-0-0], [11:0-2-8,0-1-8]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.56 BC 0.74 WB 0.91 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.14 11-12 -0.26 10-11 0.09 6 0.08 11-12	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES GRIP MT20 197/144  Weight: 139 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

2-4: 2x6 SPF No.2, 4-5: 2x4 SPF 2100F 1.8E

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

8-10: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\*

2-13,3-9,4-7,5-6: 2x4 SPF No.2

REACTIONS. (lb/size) 13=1237/Mechanical, 6=1237/Mechanical

Max Horz 13=244(LC 7)

Max Uplift 13=-34(LC 8), 6=-7(LC 8)

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

TOP CHORD 2-3=-1970/65, 3-4=-998/73, 4-5=-968/93, 5-6=-1173/41

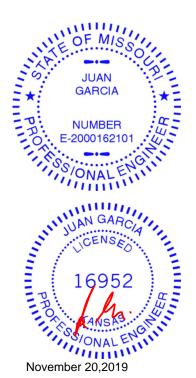
**BOT CHORD** 12-13=-81/2600, 11-12=-78/2605, 10-11=-43/1696, 9-10=-14/1736, 8-10=-496/0 WEBS

2-13=-2718/56, 2-11=-972/37, 3-11=0/522, 3-9=-1112/132, 7-9=0/700, 4-9=0/362,

5-9=0/923

#### 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 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) 13, 6.
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





Wheeler Lumber, Waverly, KS 66871

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

except end verticals, and 2-0-0 oc purlins (2-8-12 max.): 2-3.

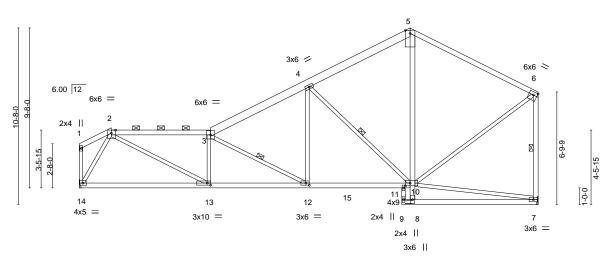
3-12, 4-10, 6-7

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

1 Row at midpt

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-5klStm2B6yPgGVd\_56sqc9sqMTLWQAsvltMLkwyHLuh 20<sub>-</sub>0<sub>-</sub>0 0-6-0 1-11-4 1-11-4 19-6-0 27-8-14 6-0-0 5-10-5 5-8-7 7-8-14

> Scale = 1:69.6 7x12 ||



	1-11-4	7-11-4	13-9-9	19-6-0	20 <sub>0</sub> 0 <sub>1</sub> 0	27-8-14	1
	1-11-4	6-0-0	5-10-5	5-8-7	0-6-0	7-8-14	1
Plate Offsets (X,Y)	[6:Edge.0-2-4], [10:0-3	-8,0-2-0], [12:0-2-8,0-	1-8]. [13:0-2-8.0-1-8]				

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

Tidle Checke (71)	[0.2490,0 2 .], [.0.0 0 .	3,0 = 0], [ · = · 0 =	0,0 . 0], [ . 0.0 = 0,0 .	<u> </u>
				$\overline{}$
LOADING (psf)	SPACING-	2-0-0	CSI.	
LUADING (pai)	OI ACING-	2-0-0	COI.	
TOL	DI + O : DOI	4.45	TO 0.70	

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.78	Vert(LL)	-0.15 13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.79	Vert(CT)	-0.29 13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.71	Horz(CT)	0.06 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.06 12-13	>999	240	Weight: 138 lb	FT = 10%

LUMBER-

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

3-5: 2x6 SPF No.2, 5-6: 2x4 SPF 2100F 1.8E

**BOT CHORD** 2x4 SPF No.2 \*Except\* 9-11: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\* 5-8,6-7: 2x4 SPF No.2

REACTIONS. (lb/size) 7=1237/Mechanical, 14=1237/Mechanical

Max Horz 14=244(LC 7)

Max Uplift 7=-7(LC 8), 14=-35(LC 8) Max Grav 7=1295(LC 2), 14=1289(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD  $2-3=-2306/47,\ 3-4=-1748/67,\ 4-5=-984/84,\ 5-6=-991/95,\ 6-7=-1177/44$ 

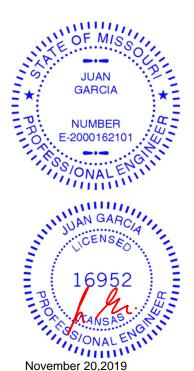
**BOT CHORD** 13-14=-159/713, 12-13=-54/2325, 11-12=-26/1524, 10-11=-25/1543, 9-11=-420/0

**WEBS** 2-13=0/1864, 3-13=-696/92, 3-12=-941/47, 4-12=0/674, 4-10=-995/113, 8-10=0/620,

5-10=0/472, 2-14=-1313/92, 6-10=0/979

## 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 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, 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.





M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353154 400156 B6 Roof Special 1

Wheeler Lumber, Waverly, KS 66871 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:31 2019 Page 1

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-Zwsq562qtGXXteCAfqN39NP\_Nsej9dr3\_X6vGNyHLug 20<sub>7</sub>0<sub>7</sub>0 0-6-0 3-11-4 3-11-4 19-6-0 6-0-0 9-6-12 7-8-14

> Scale = 1:67.6 8x8 //

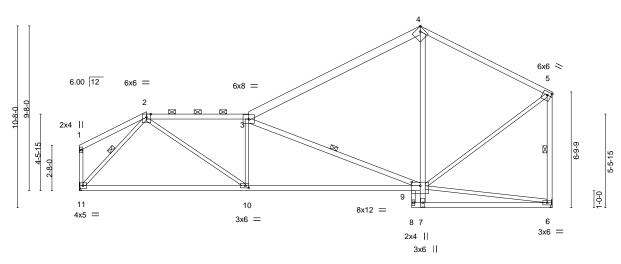
Structural wood sheathing directly applied, except end verticals, and

3-9, 2-11, 5-6

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

1 Row at midpt

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



3-11-4 3-11-4 19-6-0 27-8-14 6-0-0 0-6-0 Plate Offsets (X,Y)-- [4:0-2-11,Edge], [5:Edge,0-2-4], [9:0-6-0,0-2-8], [10:0-2-8,0-1-8]

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 0.89	Vert(LL) -0.21 10-11 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.46 9-10 >725 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.72	Horz(CT) 0.06 6 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.05 9-10 >999 240	Weight: 135 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

2x4 SPF No.2 \*Except\* TOP CHORD 3-4: 2x6 SPF No.2

**BOT CHORD** 2x4 SPF No.2 \*Except\* 8-9: 2x3 SPF No.2 2x3 SPF No.2 \*Except\*

**WEBS** 3-9,4-7,5-6: 2x4 SPF No.2

REACTIONS. (lb/size) 6=1239/Mechanical, 11=1238/Mechanical

Max Horz 11=244(LC 7)

Max Uplift 6=-5(LC 8), 11=-35(LC 8)

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

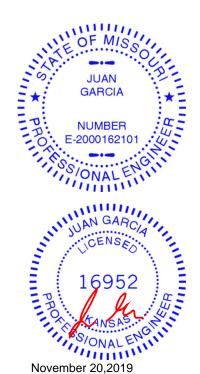
TOP CHORD 2-3=-1938/53, 3-4=-1039/62, 4-5=-981/98, 5-6=-1167/45 **BOT CHORD** 10-11=-125/952, 9-10=-31/1949, 8-9=-405/0

WEBS 2-10=0/1215, 3-10=-491/116, 3-9=-1270/105, 7-9=0/600, 4-9=0/340, 2-11=-1367/71,

5-9=0/930

#### 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 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) 6, 11.
- 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.



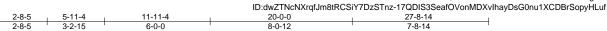


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353155 В7 400156 Roof Special

Wheeler Lumber, Waverly, KS 66871 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:32 2019 Page 1



Scale = 1:65.4 6x6 =

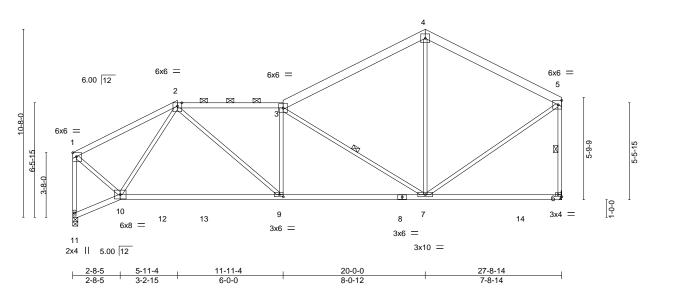


Plate Offsets (X,Y)	[1:Edge,0-2-11], [6:Edge,0-1-8], [9:0-2-	8,0-1-8]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc) l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.29	9 9-10 >999	360	MT20	1197/144/ / / ,
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.5	0 9-10 >654	240	111	OF MISSIL
BCLL 0.0 *	Rep Stress Incr YES	WB 0.95	Horz(CT) 0.0	6 6 n/a	n/a	N'KE.	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.0	4 9 >999	240	Weight: 126 lb	<b>FT≔1</b> 0%
LUMBER-			BRACING-			- o:	JUAN
	PF No.2 *Except*		TOP CHORD	Structural wood s	sheathing dir	ectly applied of 4-9-6 o	GARCIA .
	: 2x6 SPF No.2					-0 oc purlins (3-8-6 max	
BOT CHORD 2x4 SP	F No.2		BOT CHORD			or 10-0-0 oc bracing.	and the second second
====						0 •	NIIIMDED .

**WEBS** 

1 Row at midpt

3-7, 5-6

REACTIONS. (lb/size) 11=1239/0-3-8, 6=1239/Mechanical

Max Horz 11=236(LC 5)

Max Uplift 11=-35(LC 8), 6=-7(LC 8) Max Grav 11=1302(LC 2), 6=1314(LC 2)

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

1-2=-992/42, 2-3=-1741/71, 3-4=-1009/72, 4-5=-978/96, 1-11=-1309/48, 5-6=-1174/48 TOP CHORD

9-10=-119/1146, 7-9=-34/1744 BOT CHORD WFBS

2-10=-641/69, 2-9=0/835, 3-9=-316/84, 3-7=-1113/98, 4-7=0/392, 1-10=0/1103,

5-7=0/983

2x3 SPF No.2

## NOTES-

WEBS

- 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, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 6.
- 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.



NUMBER

ONAL

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353156 400156 B8 Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:33 2019 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-VJ\_bWn44PtnF7yMZnFQXEoUIOgLBdX3MRrb?LFyHLue

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

3-7 5-6

2-2-0 oc bracing: 7-9.

1 Row at midpt

20-0-0 27-8-14 6-0-0 10-0-12 7-8-14

> Scale = 1:65.4 8x8 //

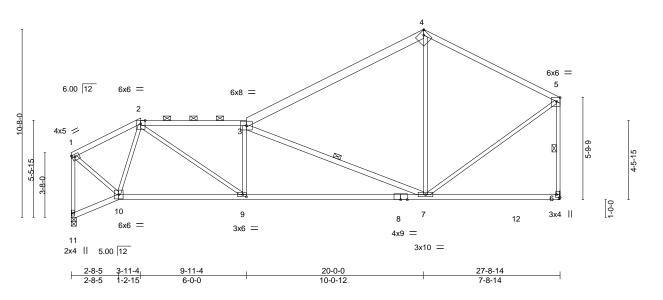


Plate Offsets (X,Y)	[1:0-2-0,0-1-8], [4:0-2-11,0-2-9], [5:0-2-	8,Edge], [6:Edge,0-2-8], [9	:0-2-8,0-1-8]	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.99 BC 0.92 WB 0.74 Matrix-S	DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         -0.22         7-9         >999         360         MT20         1197/1441           Vert(CT)         -0.47         7-9         >710         240         CF         MS           Horz(CT)         0.07         6         n/a         n/a         Weight; 124 lb         FT ■ 10%	
	PF No.2 *Except* 6 SPF No.2		BRACING- TOP CHORD Structural wood sheathing directly applied, except end verticals, as 2-0-0 oc purlins (3-7-7 max.): 2-3.	nd

BOT CHORD

WFBS

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

6-8: 2x4 SPF 2100F 1.8E 2x3 SPF No.2 \*Except\*

3-7: 2x4 SPF No.2

REACTIONS. (lb/size) 11=1239/0-3-8, 6=1239/Mechanical

Max Horz 11=238(LC 5)

Max Uplift 11=-34(LC 8), 6=-7(LC 8) Max Grav 11=1275(LC 2), 6=1308(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-953/43, 2-3=-1998/66, 3-4=-1036/59, 4-5=-995/91, 1-11=-1245/56, 5-6=-1183/42

BOT CHORD 9-10=-149/1034, 7-9=-60/2007

**WEBS** 2-10=-662/58, 2-9=0/1237, 3-9=-502/109, 3-7=-1301/122, 4-7=0/349, 1-10=-21/1110,

5-7=0/994

### NOTES-

WFBS

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, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuierencestagianzdard ANSI/TPI 1.



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JUAN GARCIA

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M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	  B8	Roof Special	1	1	l39353156
400100		Trool opeoidi	ľ		Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:33 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-VJ\_bWn44PtnF7yMZnFQXEoUIOgLBdX3MRrb?LFyHLue

#### NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job Truss Truss Type Qty Lot 4 H3 139353157 400156 B9 Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:34 2019 Page 1

Wheeler Lumber, Waverly, KS 66871 ID: dwZTNcNXrqfJm8tRCSiY7DzSTnz-zVYzj75iABv6k6xlKyxmm?1XB4kwMxoVgVKZtiyHLud

1-11-4 20-0-0 6-0-0 3-10-5 8-2-8 7-8-14

> Scale = 1:65.1 6x6 //

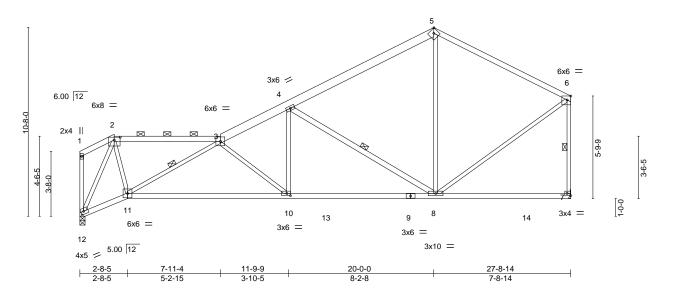


Plate Offsets (X,Y)	[2:0-4-0,0-1-15], [5:0-2-12,0-2-10], [6:0-2	2-8,Edge], [7:Edge,0-1-8],	[10:0-2-8,0-1-8], [12:0	-1-14,0-2-0]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.1	8 10-11 >999 360	MT20 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.3	8 10-11 >873 240	OF MISSIL
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Horz(CT) 0.0	18 7 n/a n/a	1X
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.0	5 10 >999 240	Weight: 127 lb FT → 10%
LUMBER-			BRACING-		JUAN
TOP CHORD 2x4 SP	F No.2 *Except*		TOP CHORD	Structural wood sheathing di	rectly apptied of 4-11-11 of pullins,
3-5: 2x6	6 SPF No.2, 5-6: 2x4 SPF 2100F 1.8E			except end verticals, and 2-0	0-0 oc purlins (4-10-14 max.): 2-3.
BOT CHORD 2x4 SP	F No.2 *Except*		BOT CHORD	Rigid ceiling directly applied	or 10-0-0 oc bracing.

**WEBS** 

1 Row at midpt

9-11: 2x4 SPF 2100F 1.8E

2x3 SPF No.2 \*Except\* WFBS 4-8: 2x4 SPF No.2

REACTIONS. (lb/size) 12=1239/0-3-8, 7=1239/Mechanical

Max Horz 12=238(LC 5)

Max Uplift 12=-34(LC 8), 7=-7(LC 8) Max Grav 12=1275(LC 2), 7=1308(LC 2)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-936/33, 3-4=-1996/63, 4-5=-999/75, 5-6=-959/95, 6-7=-1174/47

BOT CHORD 11-12=-200/799. 10-11=-108/2183. 8-10=-50/1787

2-11=0/1289, 3-11=-1473/66, 4-8=-1150/119, 5-8=0/399, 2-12=-1646/65, 6-8=0/978, **WEBS** 

3-10=-584/76, 4-10=0/680

### 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 12 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) 12, 7.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuiere one share not an ANSI/TPI 1.



3-11, 4-8, <del>6</del>-7

NUMBER

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November 20,2019

November 20,2019

JUAN GARCIA

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\Lambda WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B9	Roof Special	1	1	139353157
400100		Troof openial	ľ		Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:34 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-zVYzj75iABv6k6xlKyxmm?1XB4kwMxoVgVKZtiyHLud

#### NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job Truss Truss Type Qty Lot 4 H3 139353158 400156 B10 Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:25 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-knVZq2\_3IQnO9jl0JZHfv69\_9Sgzlr4Acbfa2jyHLum 20-0-0 6-0-1 6-2-6 7-7-8

Scale = 1:64.8

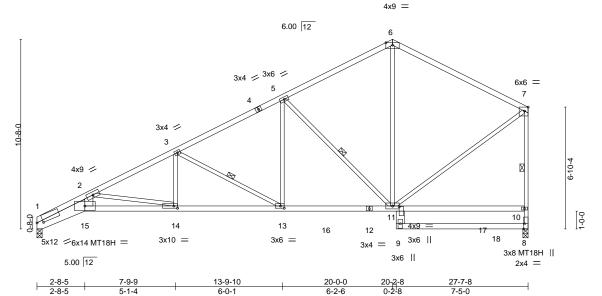


Plate Offsets (X,Y)	[1:0-4-3,0-1-5], [7:0-2-8,Edge], [8:0-3-8	,Edge], [11:0-0-8,0-4-8], [	3:0-2-8,0-1-8], [14:0-2-8,0-1-8]
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.81	Vert(LL) -0.25 14-15 >999 360 MT20 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
TCDL 10.0	Lumber DOL 1.15	BC 0.69	Vert(CT) -0.44 14-15 >747 240 MT18H \\ (197/144/\)
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Horz(CT) 0.22 8 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.19 14-15 >999 240 Weight; 127 lb FT = 10%
LUMBER-			BRACING- JUAN
	PF No.2 *Except* x4 SPF 2100F 1.8E		TOP CHORD Structural wood sheathing directly applied of 2-1-10 of purifies. A except end verticals.

BOT CHORD 2x4 SPF No.2 \*Except\* Rigid ceiling directly applied or 8-3-6 oc bracing BOT CHORD

1-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E, 9-11: 2x6 SPF No.2 **WEBS** 1 Row at midpt 3-13, 5-11, 7-8

WFBS 2x3 SPF No.2 \*Except\* 2-15: 2x6 SPF No.2

REACTIONS. (lb/size) 1=1232/0-3-8, 8=1232/0-3-8

Max Horz 1=321(LC 7)

Max Uplift 1=-176(LC 8), 8=-152(LC 8) Max Grav 1=1300(LC 2), 8=1449(LC 2)

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

TOP CHORD 1-2=-5408/987, 2-3=-2615/399, 3-5=-1760/281, 5-6=-957/199, 6-7=-968/220,

8-10=-1299/193, 7-10=-1224/195  $1\text{-}15\text{=-}1066/4952,\ 14\text{-}15\text{=-}898/4059,\ 13\text{-}14\text{=-}433/2357,\ 11\text{-}13\text{=-}208/1539}$ **BOT CHORD** 

WEBS 2-15=-337/1923, 2-14=-1725/471, 3-14=-8/478, 3-13=-930/255, 5-13=-40/690,

5-11=-1003/282, 7-11=-107/1005, 6-11=-47/459

## 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) 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, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Bearing at joint(s) 1 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) except (jt=lb)

Continued on 1550 e 2



#### M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd Chesterfield, MO 63017

16952 ANSAS November 20,2019

November 20,2019

NUMBER

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JUAN GARCIZ

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ŀ	Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
	400156	B10	Roof Special	3	1	139353158
	100100		Tool Opecial	٥		Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:25 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-knVZq2\_3IQnO9jl0JZHfv69\_9Sgzlr4Acbfa2jyHLum

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.

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Lot 4 H3 139353159 400156 B11 Roof Special 1

Wheeler Lumber, Waverly, KS 66871 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:26 2019 Page 1

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

3-14, 7-8

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

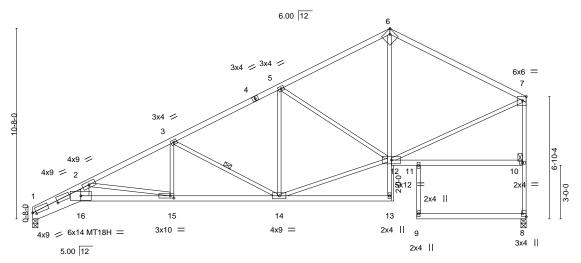
except end verticals.

1 Row at midpt

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-Cz3x2O?h2kvEntKDsHouSJi9Cr0bUlvKqFO8b9yHLul 27<sub>7</sub>-8 0-2-8 20-0-0 21-6-0 6-0-1 6-2-6 1-6-0 5-11-0

8x8 //

Scale: 3/16"=1'



14-2-12 27-7-8 5-10-4 -81 fe·0

riale Olisels (A, I)	[1.1-0-2,0-0-0], [1.0-2-3,0-1-0], [0.0-2-12	<u> </u>	.Euge,0-2-6], [15.0-2-6,0-1-6]	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
	Plate Grip DOL 1.15	TC 0.79	Vert(LL) -0.22 15-16 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.66	Vert(CT) -0.22 15-16 >999 360 Vert(CT) -0.41 15-16 >805 240	MT18H 197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.96	Horz(CT) 0.22 8 n/a n/a	Weight: 130 lb FT = 10%
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.19 15-16 >999 240	

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

6-7: 2x4 SPF 2100F 1.8E **BOT CHORD** 2x4 SPF No.2 \*Except\*

1-16: 2x8 SP DSS, 13-16: 2x4 SPF 2100F 1.8E

6-13,9-11: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\*

2-16: 2x6 SPF No.2

REACTIONS. (lb/size) 1=1232/0-3-8, 8=1232/0-3-8

Max Horz 1=321(LC 7)

Max Uplift 1=-176(LC 8), 8=-152(LC 8)

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

TOP CHORD 1-2=-5119/986, 2-3=-2469/399, 3-5=-1649/280, 5-6=-1150/214, 6-7=-1167/230,

8-10=-1171/183, 7-10=-1153/186

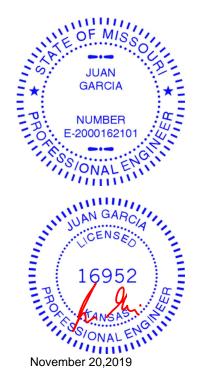
**BOT CHORD** 1-16=-1065/4588, 15-16=-898/3783, 14-15=-433/2179, 6-12=-56/512 WEBS

2-16=-337/1733, 2-15=-1625/471, 3-15=-9/398, 3-14=-896/256, 12-14=-209/1447,

5-12=-597/232, 7-12=-124/1003

## 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Bearing at joint(s) 1 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) except (jt=lb) 1=176, 8=152,
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353160 C1 400156 Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:35 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-Si5LxT6KxV1zMGWxugS?JDaiCU7M5Rlev946P8yHLuc -0-10-8 0-10-8 20-0-0 21-6-0 27-7-8 7-9-9 6-0-0 6-2-8 1-6-0 6-1-8

> Scale = 1:67.3 6x10 M18SHS ||

Structural wood sheathing directly applied or 3-5-1 oc purlins,

Rigid ceiling directly applied or 9-0-13 oc bracing

except end verticals.

1 Row at midpt

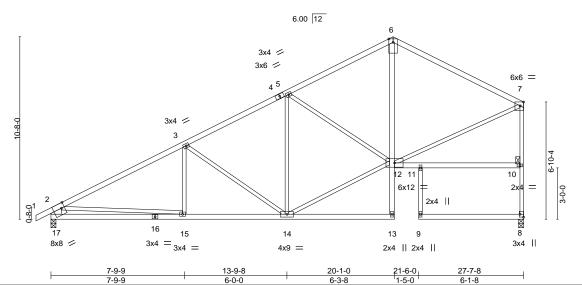


Plate Off	sets (X,Y)								
LOADIN	G (psf)	SPACING- 2-0	0   <b>CSI.</b>	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	5 TC 0.71	Vert(LL)	-0.09 15-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	5 BC 0.49	Vert(CT)	-0.19 15-17	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr YE	S WB 0.73	Horz(CT)	-0.10 8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.05 14-15	>999	240	Weight: 133 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

6-7: 2x4 SPF 2100F 1.8E **BOT CHORD** 2x4 SPF No.2 \*Except\*

9-11: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\* 2-17: 2x8 SP DSS

REACTIONS. (lb/size) 17=1309/0-3-8, 8=1223/0-3-8

Max Horz 17=332(LC 5)

Max Uplift 17=-201(LC 8), 8=-151(LC 8)

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

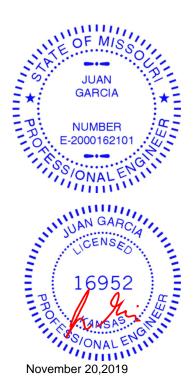
TOP CHORD 2-3=-1946/273, 3-5=-1420/251, 5-6=-1143/213, 6-7=-1162/229, 2-17=-1234/245,

8-10=-1162/183, 7-10=-1146/184

**BOT CHORD** 15-17=-414/786, 14-15=-332/1629, 6-12=-53/506

**WEBS** 3-14=-548/189, 12-14=-193/1302, 5-12=-367/195, 7-12=-123/998, 2-15=0/844

- 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=201, 8=151.
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

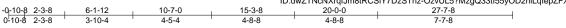


Job Truss Truss Type Qty Lot 4 H3 139353161 400156 Roof Special Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MTek Industries, Inc. Wed Nov 20 10:42:02 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OzvUL5?MzgQ33tl55yOD2niLqlepZFXePRo5RnyHJSZ

Scale = 1:65.2



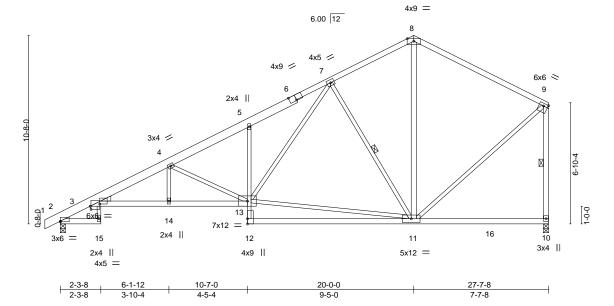


Plate Offsets (X,Y)	[2:0-0-0,0-0-7], [3:0-0-8,0-2-2], [3:0	0-6-8,0-1-8], [6:0-4-8,Edge], [9:	Edge,0-1-12]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in	( )	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.97	1 , ,	5 11-12 >999 360	MT20 1197/144/
TCDL 10.0	Lumber DOL 1.15	BC 0.62	- (- /	3 11-12 >623 240	OF MISSIL
BCLL 0.0 *	Rep Stress Incr YES	WB 0.70	Horz(CT) 0.25	5 10 n/a n/a	146
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.18	3 15 >999 240	Weight: 147 lbFT = 10%
LUMBER-	·		BRACING-		JUAN :
TOP CHORD 2x4	SPF No.2 *Except*		TOP CHORD	Structural wood sheathing	directly applied, except end vertibals.
1-6:	2x6 SP DSS		BOT CHORD		d or 10-0-0 oc bracing, Except:
BOT CHORD 2x4	SPF No.2 *Except*			6-0-0 oc bracing: 2-15.	= _1
3-15	5,5-12: 2x3 SPF No.2, 3-13: 2x4 SPF	2100F 1.8E	WEBS	1 Row at midpt	7-11, 9-10 NUMBER
WEBS 2x3	SPF No.2 *Except*			•	E-2000162101
8-11	,9-10: 2x4 SPF No.2				D. L-2000102101

WEDGE

Left: 2x4 SPF No.2

REACTIONS. (lb/size) 2=1314/0-3-8, 10=1229/0-3-8

Max Horz 2=327(LC 5)

Max Uplift 2=-192(LC 8), 10=-152(LC 8) Max Grav 2=1346(LC 2), 10=1309(LC 2)

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

TOP CHORD 2-3=-872/30, 3-4=-2944/461, 4-5=-2075/341, 5-6=-2016/422, 6-7=-1959/437,

7-8=-853/209, 8-9=-890/220, 9-10=-1169/189

**BOT CHORD** 3-14=-558/2797, 13-14=-558/2797

**WEBS** 4-13=-1119/283, 11-13=-177/970, 7-13=-270/1162, 7-11=-848/306, 8-11=-72/428,

9-11=-88/923

#### 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, with BCDL = 10.0psf.
- 5) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2 and 152 lb uplift at joint 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced

#### M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



SIONAL



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	_
400156	C3	Roof Special	1	1	139353161	
400130	02	1000 Special		'	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871





Job Truss Truss Type Qty Lot 4 H3 139353162 400156 C3 Roof Special Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MiTek Industries, Inc. Wed Nov 20 10:42:19 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OERvvvC0zuZfbU5Mb1CCEMvG99Td2y28KaQUXIyHJSI 18-0-0 27-7-8

-0-10-8 2-3-8 0-10-8 2-3-8 7-9-10 13-9-9 20-0-0 5-6-2 6-0-0 4-2-7 2-0-0 7-7-8

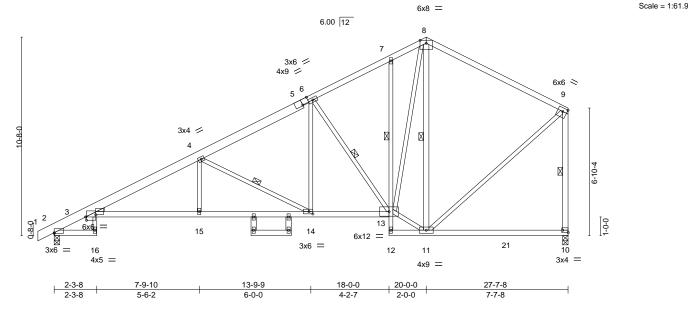


Plate Offsets (X,Y)	[2:0-0-0,0-0-7], [3:0-0-8,0	-2-2], [3:0-6-8,0-1-8], [5	5:0-4-5,Edge], [9:Edge	,0-2-4], [10:Ed	ge,0-1-8	3], [14:0	-2-8,0-1	-8]		
LOADING (psf) TCLL 25.0	SPACING- Plate Grip DOL		SI. C 0.93	DEFL. Vert(LL)		( /	l/defl >999	L/d 360	PLATES GRIP MT20 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
TCDL 10.0 BCLL 0.0 *	Lumber DOL Rep Stress Incr	-	C 0.57 VB 0.62	` '	-0.48 0.31	3-15 10	>681 n/a	240 n/a	OF MISS !!	
BCDL 10.0	Code IRC2018/TF	-	fatrix-S	Wind(LL)	0.22		>999	240	Weight: 154 lbFT = 10%	1
									JUAN rectly applied, except end vettibals. or 6-0-0 or bracing. Except:	*
BOT CHORD 2x4	4 SPF No.2 *Except* 6,7-12: 2x3 SPF No.2, 3-13: 2	2x4 SPF 2100F 1.8E		BOT CHORE	1	Row at	t midpt	7	7-13 - 1-14 6-13 R-11 9-10 NU IMBER	E.
	3 SPF No.2 *Except* 1,9-10,17-19,18-20: 2x4 SPF	No.2							O. E-2000162101	7

WEDGE

Left: 2x3 SPF No.2

REACTIONS. (lb/size) 2=1314/0-3-8, 10=1229/0-3-8

Max Horz 2=327(LC 5)

Max Uplift 2=-192(LC 8), 10=-152(LC 8) Max Grav 2=1346(LC 2), 10=1309(LC 2)

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

TOP CHORD 2-3=-872/30, 3-4=-2641/402, 4-5=-1699/281, 5-6=-1542/285, 6-7=-1105/240,

7-8=-1024/295, 8-9=-881/224, 9-10=-1164/196 3-15=-478/2466, 14-15=-477/2466, 13-14=-198/1445

**BOT CHORD WEBS** 4-15=0/285, 4-14=-1155/316, 6-14=-80/721, 6-13=-839/234, 11-13=-63/811,

8-13=-292/1170. 8-11=-750/158. 9-11=-94/914

#### 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2 and 152 lb uplift at joint 10.

#### nued on page

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters and ropoerly incorporate this design indicated is to prevent buckling of individual truss western. 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



JUAN GARCIA



Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	C3	Roof Special	1	1	139353162
		·			Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MiTek Industries, Inc. Wed Nov 20 10:42:19 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OERvvvC0zuZfbU5Mb1CCEMvG99Td2y28KaQUXIyHJSI

#### NOTES-

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

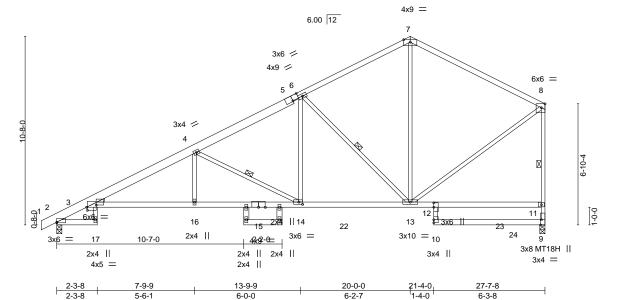
Job Truss Truss Type Qty Lot 4 H3 139353163 400156 Roof Special Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MiTek Industries, Inc. Wed Nov 20 10:42:36 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSjY7DzSTnz-OWzLUjPhy6iE86ud55?BQx6DP?CEXd8fEj1uepyHJS1

Scale = 1:65.2

-0-10-8 2-3-8 0-10-8 2-3-8 7-9-9 13-9-9 20-0-0 21-4-0 27-7-8 5-6-1 6-0-0 6-2-7 1-4-0 6-3-8



Tidle Offices	(71, 1)	2.0 0 0,0 0 7], [0.0 0 0,0	7 Z Z], [0.0 0 0,	0 1 0], [0.0 4	+,Lugoj, [c	5.0 2 0,Eugej, [5.0 c	, o, Lug	cj, [12.0	7 0 0,0 0	0], [14.0 2 0	5,0 1 0]		
TCDL 10 BCLL 0	osf) 5.0 0.0 0.0 * 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	2-0-0 1.15 1.15 YES PI2014	CSI. TC BC WB Matrix	0.76 0.79 0.69	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.28 -0.49 0.30 0.22	(loc) 3-16 3-16 9 17	l/defl >999 >668 n/a >999	L/d 360 240 n/a 240	PLATES MT20 MT18H Weight:14	GRIP 1197/144 197/144 0 lb _FT = 10%	
LUMBER-	2x4 SP	F No.2 *Except*				BRACING- TOP CHOR		Structu	ıral wood	I sheathing o	directly applied or 2-	JUAN	. 2
BOT CHORD	7-8: 2x4	1 SPF 2100F 1.8E, 1-5: 2 F No.2 *Except*	2x6 SP DSS			BOT CHOP		except	end vert	icals.	d or 10-0-0 oc bracir		,
WEBS	2x3 SP	-12: 2x3 SPF No.2, 3-15 F No.2 *Except* 9-21: 2x4 SPF No.2	: 2x4 SPF 2100	0F 1.8E		WEBS		8-7-0 o	oc bracino oc bracino	g: 14-16	4-14, 6-13, 8-9	NUMBER E-2000162101	FE.
WEDGE Left: 2x3 SPF	,	9-21: 2x4 SPF N0.2				WEBS		IROW	at midpt		4-14, 6-13, 6-9	SOME EN	OK!
REACTIONS.	. (lb/size	) 2=1316/0-3-8, 9=123	31/0-3-8								• /	THE THINK	

Plate Offcets (X V)... [2:0-0-0 0-0-7] [3:0-0-8 0-2-2] [3:0-6-8 0-1-8] [5:0-4-4 Edge] [8:0-2-8 Edge] [9:0-3-8 Edge] [12:0-3-0 0-0-0] [14:0-2-8 0-1-8]

**REACTIONS.** (lb/size) 2=1316/0-3-8, 9=1231/0-3-8

Max Horz 2=326(LC 5)

Max Uplift 2=-192(LC 8), 9=-152(LC 8) Max Grav 2=1376(LC 2), 9=1438(LC 2)

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

TOP CHORD 2-3=-889/30, 3-4=-2713/399, 4-5=-1780/286, 5-6=-1623/290, 6-7=-992/207,

7-8=-986/226, 9-11=-1297/190, 8-11=-1208/197

**BOT CHORD** 3-16=-474/2532, 15-16=-473/2531, 14-15=-473/2531, 14-22=-207/1523, 13-22=-207/1523

**WEBS** 4-16=0/280, 4-14=-1140/301, 6-14=-65/750, 6-13=-963/279, 7-13=-50/476,

8-13=-110/1005

#### 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) 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, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2 and 152 lb uplift at joint 9.

#### nued on page 2

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16952 November 20,2019

November 20,2019

JUAN GARCIZ

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400456	64	Roof Special	2	_	I39353163
400156	C4	Rooi Speciai	2	'	Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s.Jul 27 2019 MiTek Industries, Inc. Wed Nov 20 10:42:36 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OWzLUjPhy6iE86ud55?BQx6DP?CEXd8fEj1uepyHJS1

NOTES-

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



Job Truss Truss Type Qty Lot 4 H3 139353164 400156 C5 Roof Special 1 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:40 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-ofvE\_B9TI1fFT1OvhD2A0GHZKVmDmfxN2Rnt4LyHLuX 20-0-0 7-3-0 -0-10-8 0-10-8 7-9-9 7-9-9 21-4-0 27-7-8 4-11-8 1-4-0 6-3-8

> Scale = 1:67.4 4x9 =

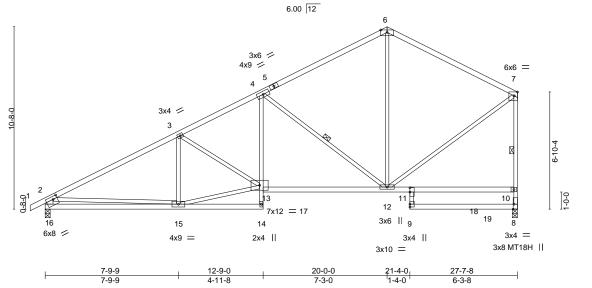


Plate Offsets (X,Y)	[7:0-2-8,Edge], [8:0-3-8,Edge], [11:0-3-	0,0-0-0], [16:0-3-0,0-2-0],	[16:0-2-7,0-1-4]			
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.75 BC 0.77 WB 0.86 Matrix-S	Vert(LL) -0.1		L/d 360 240 n/a 240	PLATES GRIP MT20 M97/1441 MT18H CD€7/1441/S Weight; 126 Ib   □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
6-7: 2x BOT CHORD 2x4 SP	PF No.2 *Except* 4 SPF 2100F 1.8E PF No.2 *Except* -11: 2x3 SPF No.2		BRACING- TOP CHORD BOT CHORD	except end vert	icals. ectly applied (	or 10-0-0 oc bracing, Except:

**WEBS** 

8-8-9 oc bracing: 15-16

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

4-12, 7-8

1 Row at midpt

REACTIONS. (lb/size) 16=1307/0-3-8, 8=1227/0-3-8

4-14,9-11: 2x3 SPF No.2

2x3 SPF No.2 \*Except\*

2-16: 2x6 SP DSS

Max Horz 16=332(LC 5)

Max Uplift 16=-200(LC 8), 8=-152(LC 8) Max Grav 16=1359(LC 2), 8=1431(LC 2)

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

TOP CHORD 2-3=-2057/270, 3-4=-1909/320, 4-6=-1013/197, 6-7=-987/225, 2-16=-1232/244, 8-10=-1292/190, 7-10=-1207/195

**BOT CHORD** 15-16=-451/948, 4-13=-65/716, 12-13=-262/1708

WEBS 3-15=-298/150, 13-15=-304/1813, 4-12=-1078/316, 6-12=-26/447, 2-15=0/867,

7-12=-111/1008

## NOTES-

WFBS

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) 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, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=200. 8=152.
- 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



ONAL

November 20,2019



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353165 400156 C6 Common Supported Gable | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:41 2019 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-GsTcBXA5WKo64Bz5FwZPZUpsZuGBVHXXH5XQdoyHLuW

-0-10-8 0-10-8 20-0-0

4x5 = 6.00 12 13 12 15 3x4 🖊 16 10 9 17 X X 6-10-4

26

LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d (loc) I/defl Plate Grip DOL -0.00 **TCLL** 25.0 1.15 TC 0.21 Vert(LL) n/r 120 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.08 Vert(CT) -0.00 120 n/r **BCLL** 0.0 Rep Stress Incr YES WB 0.13 Horz(CT) -0.00 18 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R

28

27

197/144 MT20

Weight: 167 lb FT = 10%

GRIP

Scale = 1:64.9

LUMBER-

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

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

BRACING-

BOT CHORD

 $_{25}$ 6x6  $=_{24}$ 

23

22

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

21

20

19 18

**PLATES** 

except end verticals.

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

WEBS 1 Row at midpt 13-22, 12-23, 11-24, 14-21, 15-20

REACTIONS. All bearings 27-7-8.

(lb) -Max Horz 32=332(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 32, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 21, 20, 19 except

31=-140(LC 8)

32

31

30

29

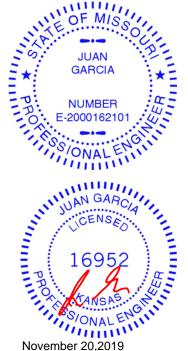
Max Grav All reactions 250 lb or less at joint(s) 32, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 21, 20, 19

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

TOP CHORD 2-3=-299/102

#### 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.
- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 21, 20, 19 except (jt=lb) 31=140.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1

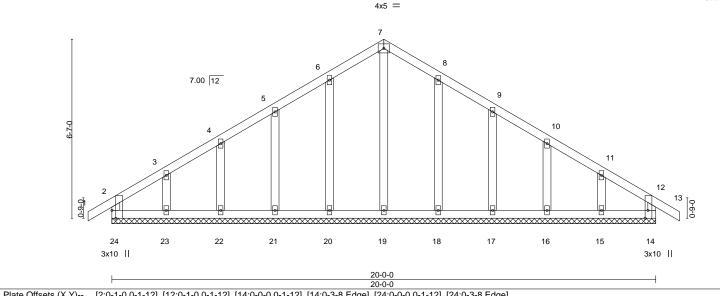


November 20,2019



Job Truss Truss Type Qty Lot 4 H3 139353166 D1 400156 Common Supported Gable | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:43 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-DEaNcCCL2y2qKV7UMLbtevvE8izJzCVqlO0XhgyHLuU 20-10-8 0-10-8 -0-10-8 0-10-8 20-0-0

Scale = 1:42.4



Titate Office(s (A, 1)=												
LOADING	(psf)	SPACING- 2-0-	CSI.	<b>DEFL</b> . in	(loc)	l/defl	L/d	PLATES	GRIP			
TCLL	25.0	Plate Grip DOL 1.1	TC 0.07	Vert(LL) -0.00	13	n/r	120	MT20	197/144			
TCDL	10.0	Lumber DOL 1.1	BC 0.04	Vert(CT) -0.00	13	n/r	120					
BCLL	0.0 *	Rep Stress Incr YE	WB 0.10	Horz(CT) 0.00	14	n/a	n/a					
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R					Weight: 88 lb	FT = 10%			

LUMBER-

**OTHERS** 

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

**BOT CHORD** 

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

except end verticals.

10-0-0

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

REACTIONS. All bearings 20-0-0.

Max Horz 24=-186(LC 6) (lb) -

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15 All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

10-0-0

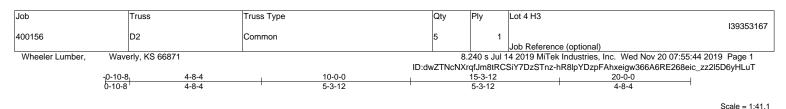
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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).
- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 20,2019





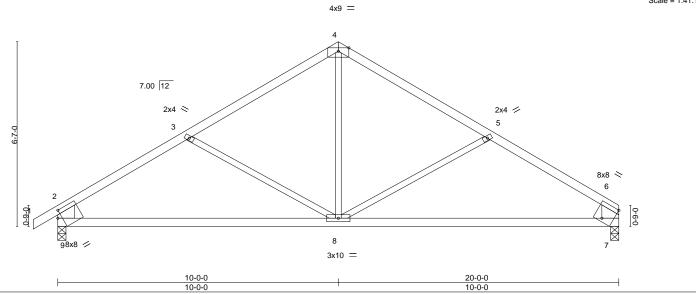


Plate Offsets (X,Y)	Plate Offsets (X,Y) [2:0-4-3,0-0-0], [6:Edge,0-6-10], [6:0-4-3,0-0-0], [7:0-3-2,0-1-13], [9:0-3-2,0-1-13], [9:0-1-11,0-2-15]											
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d	PLATES GRIP						
TCLL 25.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0	.17 8-9	>999 360	MT20 197/144						
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(CT) -0	.36 8-9	>649 240							
BCLL 0.0 *	Rep Stress Incr YES	WB 0.28	Horz(CT) 0	.03 7	n/a n/a							
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0	.07 8	>999 240	Weight: 68 lb FT = 10%						

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

**WEBS** 2x3 SPF No.2 \*Except\* 2-9,6-7: 2x8 SP DSS

REACTIONS. (lb/size) 9=958/0-3-8, 7=870/0-3-8

Max Horz 9=183(LC 5)

Max Uplift 9=-130(LC 8), 7=-103(LC 9)

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

2-3=-1177/186, 3-4=-911/140, 4-5=-911/140, 5-6=-1188/189, 2-9=-854/178,

6-7=-762/149

8-9=-185/920, 7-8=-111/931 BOT CHORD

WEBS 4-8=-4/472, 5-8=-292/215, 3-8=-273/210

- 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.
- \* 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=130, 7=103.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-7-5 oc purlins,

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

except end verticals.



Job Truss Truss Type Qty Lot 4 H3 139353168 400156 D3 Common Supported Gable | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:45 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-9di71uDcaZIYZoHsUmeLjK\_ZeWfxR767CiVemZyHLuS 12-10-8 6-0-0 6-0-0 0-10-8 Scale = 1:26.8 4x5 = 4 7.00 12 5 3 6 0-6-0 15 14 13 12 11 10 9 3x6 II 3x10 II 12-0-0 12-0-0 Plate Offsets (X,Y)--[1:0-0-12,0-1-4], [7:0-1-0,0-1-12], [9:0-0-0,0-1-12], [9:0-3-8,Edge], [15:0-0-0,0-1-4] SPACING-GRIP LOADING (psf) DEFL. in (loc) I/defl L/d **PLATES** Plate Grip DOL **TCLL** 25.0 1.15 TC 0.07 Vert(LL) -0.00 120 MT20 197/144 8 n/r **TCDL** 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) -0.00 8 n/r 120

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.00

9

n/a

except end verticals

n/a

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

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

LUMBER-

**BCLL** 

**BCDL** 

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

0.0

10.0

7-9: 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 12-0-0. Max Horz 15=-119(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 15, 9, 13, 14, 11, 10 Max Grav All reactions 250 lb or less at joint(s) 15, 9, 12, 13, 14, 11, 10

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.

Rep Stress Incr

Code IRC2018/TPI2014

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

WB

Matrix-R

0.03

- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9, 13, 14, 11, 10.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



FT = 10%

Weight: 45 lb



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

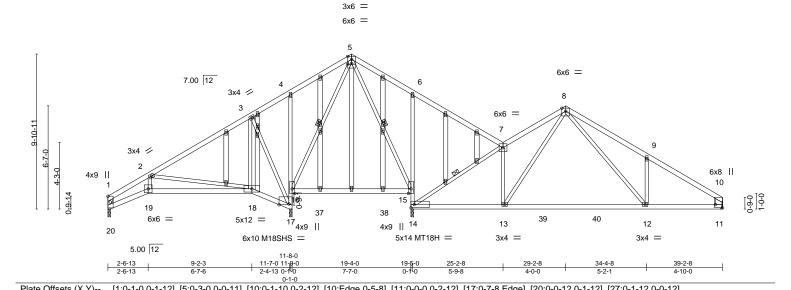


Job Truss Truss Type Qty Lot 4 H3 139353169 D4 400156 **GABLE** | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:47 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-5?qtSaFs6AYGo6RFbBgpol3oEJ88vp3Pf0\_lqRyHLuQ

25-2-8 5-10-8 39-2-8 4-10-0 3-9-8 4-0-0

Scale = 1:73.5



Flate Offsets (A, I)	[1.0-1-0,0-1-12], [3.0-3-0,0-0-11], [10.0-	1-10,0-2-12], [10.Euge,0-	5-6], [11.0-0-0,0-2-12], [11.0-1-6,Euge], [20.0-0-12,0-1-1	2], [21.0-1-12,0-0-12]
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 0.51	Vert(LL) -0.29 12-13 >817 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.82	Vert(CT) -0.50 12-13 >469 240	MT18H 197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Horz(CT) -0.08 14 n/a n/a	M18SHS 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.09 12-13 >999 240	Weight: 206 lb FT = 10%

LUMBER-

Plata Offcate (V V)

TOP CHORD 2x4 SPF No.2

**BOT CHORD** 2x4 SPF No.2 \*Except\* 4-17,6-14: 2x3 SPF No.2

2x3 SPF No.2 \*Except\*

**WEBS** 1-20: 2x4 SPF 2100F 1.8E, 10-11: 2x6 SP DSS

2x4 SPF No.2 **OTHERS** 

**BRACING-**TOP CHORD

Structural wood sheathing directly applied or 4-7-10 oc purlins,

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 3-10-5 oc bracing. 5-16, 5-15, 7-14

**WEBS** 1 Row at midpt

REACTIONS.

All bearings 0-2-0 except (jt=length) 14=0-2-8 (input: 0-2-0), 17=0-2-2 (input:

0-2-0), 11=Mechanical.

(lb) - Max Horz 20=-257(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) except 20=-117(LC 9), 14=-213(LC 9),

11=-186(LC 9), 17=-234(LC 8)

Max Grav All reactions 250 lb or less at joint(s) except 20=386(LC 16), 14=1594(LC

16), 11=924(LC 16), 17=1359(LC 15)

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

TOP CHORD 1-2=-798/262, 2-3=-167/357, 3-4=-88/535, 4-5=-48/576, 5-6=0/511, 6-7=0/477, 7-8=-996/437, 8-9=-1310/409, 9-10=-1296/265, 1-20=-496/154, 10-11=-816/188

**BOT CHORD** 19-20=-356/865, 18-19=-338/777, 16-17=-749/66, 14-15=-822/80, 6-15=-417/240,

13-14=-190/751, 12-13=-79/586, 11-12=-173/1012

2-19=-35/395, 2-18=-862/308, 3-18=-25/372, 3-17=-686/226, 5-16=-439/61, WEBS

5-15=-310/0, 7-14=-1309/287, 7-13=-1/294, 8-13=-205/305, 8-12=-147/668,

9-12=-302/224

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) WARNING: Required bearing size at joint(s) 14, 17 greater than input bearing size
- 11) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.

Cantificated ton girder (2) for truss to truss connections



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 permanent. 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

JUAN

**GARCIA** 

NUMBER

ONALE ONALE JUAN GARCIA JUAN GARCIA

November 20,2019

ONAL

2000162101

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D4	GABLE	1	1	139353169
100.00	<u> </u>	07.522	ľ		Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

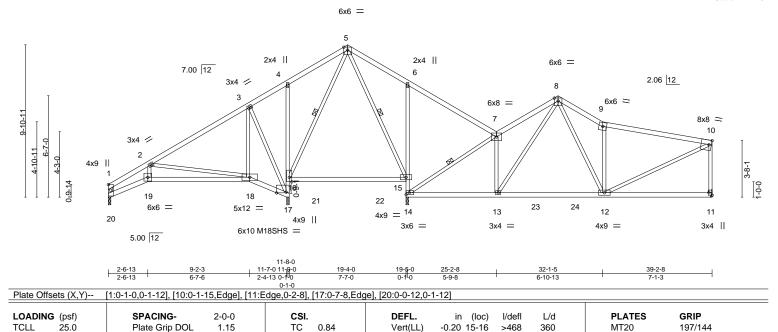
8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:47 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-5?qtSaFs6AYGo6RFbBgpol3oEJ88vp3Pf0\_lqRyHLuQ

- 13) Bearing at joint(s) 20, 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 14) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 20, 213 lb uplift at joint 14, 186 lb uplift at joint 11 and 234 lb uplift at joint 17.
- 16) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Job Truss Truss Type Qty Lot 4 H3 139353170 400156 D5 Roof Special Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:48 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-ZCOGfwGUtUg7QG0R9uB2LycuujUseGKZugjlMuyHLuP

Scale = 1:74.8



LUMBER-

**TCDL** 

**BCLL** 

**BCDL** 

TOP CHORD 2x4 SPF No.2

10.0

10.0

0.0

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

4-17,6-14: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\* 1-20: 2x4 SPF 2100F 1.8E

Wind(LL) **BRACING-**

**BOT CHORD** 

**WEBS** 

Vert(CT)

Horz(CT)

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

0.08

-0.29 15-16

0.09 18-19

17

except end verticals.

>324

>999

n/a

Rigid ceiling directly applied or 4-3-12 oc bracing.

5-16, 5-15, 7-14 1 Row at midpt

240

n/a

240

M18SHS

Weight: 170 lb

32-1-5 2-10-13

29-2-8

REACTIONS. All bearings 0-2-0 except (jt=length) 14=0-2-4 (input: 0-2-0), 17=0-2-4 (input: 0-2-0), 11=Mechanical.

2-6-13

Max Horz 20=-255(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 20 except 14=-237(LC 9), 11=-156(LC 9), 17=-232(LC 8) Max Grav All reactions 250 lb or less at joint(s) except 20=385(LC 16), 14=1431(LC 16), 11=844(LC 24), 17=1421(LC 15)

ВС

WB

Matrix-S

0.78

0.90

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

TOP CHORD 1-2=-809/257, 2-3=-160/346, 3-4=-78/524, 4-5=-40/551, 5-6=-43/352, 6-7=-6/366, 7-8=-1021/235, 8-9=-1057/260, 9-10=-912/155, 1-20=-502/152, 10-11=-758/188

**BOT CHORD** 19-20=-362/872, 18-19=-343/783, 16-17=-810/64, 14-15=-679/143, 6-15=-415/240,

1.15

YES

13-14=-167/776, 12-13=-129/599

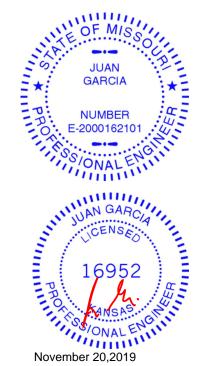
Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

**WEBS** 2-19=-36/397, 2-18=-861/313, 3-18=-26/373, 3-17=-687/227, 5-16=-503/23, 7-14=-1213/223, 8-13=-121/344, 8-12=-108/620, 9-12=-732/260, 10-12=-152/909

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) WARNING: Required bearing size at joint(s) 14, 17 greater than input bearing size.
- 8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Bearing at joint(s) 20, 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20 except (jt=lb) 14=237, 11=156, 17=232.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



197/144

FT = 10%

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Ply Lot 4 H3 139353171 400156 D6 Roof Special Girder 2 Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:50 2019 Page 1

Wheeler Lumber, Waverly, KS 66871

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

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

except end verticals.

6-0-0 oc bracing: 8-9.

1 Row at midpt

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-VaV04bHkP5wqfZ9qGJDWQNhG8XB86AssM\_CPRmyHLuN 15-6-8 19-6-0 6-5-0 6-5-0 5-2-0 3-11-8 3-11-8

> Scale = 1:59.3 6x8 =

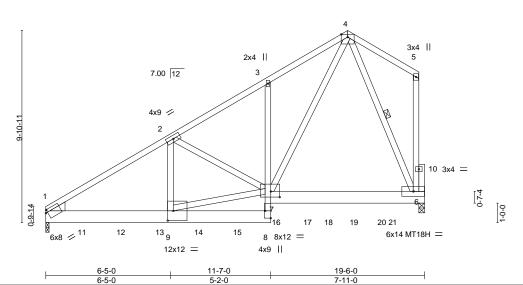


Plate Offsets (X,Y)-- [1:0-1-3,0-1-11], [7:0-5-8,0-3-8], [8:Edge,0-3-8], [9:0-3-8,0-6-0]

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	0.73	Vert(LL)	-0.20	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.35	6-7	>663	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	x-S	Wind(LL)	0.10	6-7	>999	240	Weight: 279 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

4-5: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 \*Except\*

1-8: 2x8 SP DSS, 6-7: 2x8 SP 2400F 2.0E

**WEBS** 2x4 SPF No.2

**OTHERS** 2x4 SPF No.2

WEDGE

Left: 2x6 SP No.2

REACTIONS. (lb/size) 1=6211/0-2-0 (req. 0-5-0), 6=6466/0-3-8 (req. 0-5-4)

Max Horz 1=330(LC 5)

Max Uplift 1=-427(LC 8), 6=-276(LC 8) Max Grav 1=6350(LC 2), 6=6657(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-8979/451, 2-3=-6193/305, 3-4=-6201/425, 4-5=-287/109, 5-6=-265/76

BOT CHORD 1-9=-494/7489, 7-8=0/984, 3-7=-318/192, 6-7=-135/1896

2-9=-185/2801, 7-9=-449/7703, 2-7=-2612/315, 4-7=-454/7819, 4-6=-4418/244 **WEBS** 

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x4 1 row at 0-7-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc, 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) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) WARNING: Required bearing size at joint(s) 1, 6 greater than input bearing size.
- 9) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=427, 6=276.
- 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.

### Continued on page 2

### MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.







Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D6	Roof Special Girder	1	2	139353171
					Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:50 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-VaV04bHkP5wqfZ9qGJDWQNhG8XB86AssM\_CPRmyHLuN

### NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1281 lb down and 167 lb up at 1-10-8, 1256 lb down and 163 lb up at 3-10-8, 1255 lb down and 27 lb up at 5-10-8, 1260 lb down and 27 lb up at 15-10-8, and 1258 lb down and 27 lb up at 13-10-8, and 1258 lb down and 27 lb up at 13-10-8, and 1258 lb down and 27 lb up at 15-10-8, and 1284 lb down and 27 lb up at 17-10-8 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, 1-8=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 11=-1217(B) 12=-1220(B) 13=-1217(B) 14=-1217(B) 15=-1219(B) 16=-1219(B) 18=-1219(B) 19=-1219(B) 21=-1219(B)



Job Truss Truss Type Qty Lot 4 H3 139353172 D8 400156 Roof Special | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:51 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-\_n3OHxIMAP2hHjk0q1klybEPmwb2rjU?aeyyzCyHLuM 12-10-5 19-11-8 4-0-0 2-10-13 7-1-3 Scale = 1:45.9 3x4 = 4x9 4x5 || 7.00 12 3 2.06 12 6x6 = 6x6 = 8x8 = 6-7-9 8-7-8-11 5 4-10-11 3-8-1 12 13 9 8 7 6 3x4 II 6x6 = 3x4 =4x9 = 12-10-5 19-11-8 5-11-8 6-10-13 Plate Offsets (X,Y)-- [1:0-5-8,Edge], [5:0-1-15,Edge], [6:Edge,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 0.86	Vert(LL)	-0.12	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.50	Vert(CT)	-0.19	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT)	0.41	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.04	7-8	>999	240	Weight: 90 lb	FT = 10%

LUMBER-

**OTHERS** 

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

**BRACING-**

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

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing **WEBS** 1 Row at midpt 2-9

REACTIONS. 6=888/Mechanical, 11=864/0-3-0

(lb/size) Max Horz 11=-210(LC 4)

Max Uplift 6=-140(LC 9), 11=-187(LC 9) Max Grav 6=931(LC 2), 11=969(LC 16)

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

9-10=-90/818, 1-10=-90/818, 2-3=-1350/172, 3-4=-1211/232, 4-5=-1037/130, TOP CHORD

5-6=-830/171

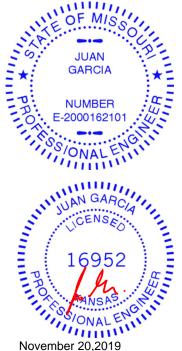
2x4 SPF No.2

**BOT CHORD** 8-9=-113/1060, 7-8=-104/735

2-9=-1285/216, 2-8=-300/83, 3-8=-19/635, 3-7=-108/614, 4-7=-774/251, 5-7=-124/1054, **WEBS** 

1-11=-972/188

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 11 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) except (jt=lb) 6=140, 11=187,
- 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.



November 20,2019

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353173 E1 400156 Common Supported Gable | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:52 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-SzdmVHJ?xjAYvtJCOkG\_VonnBK2Xalf9plhWWfyHLuL 21-6-8 0-10-8 0-10-8 0-10-8 20-8-0 10-4-0

Scale = 1:36.2

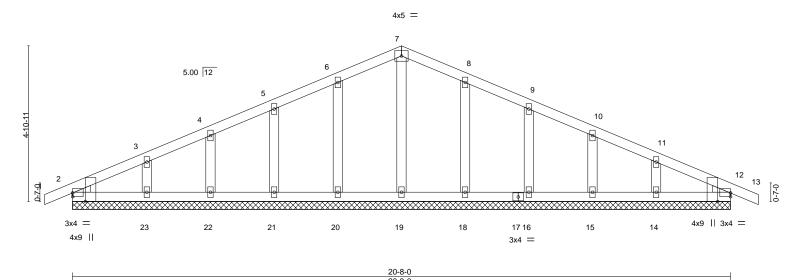


Plate Off	Plate Offsets (X,Y) [2:Edge,0-1-6], [2:0-3-3,Edge], [12:Edge,0-1-6], [12:0-3-3,Edge]												
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	12	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	12	n/a	n/a			
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 78 lb	FT = 10%	

**BRACING-**TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

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

REACTIONS. All bearings 20-8-0.

Max Horz 2=-82(LC 13) (lb) -

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

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 23, 18, 16, 15, 14, 12.
- 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.



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

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

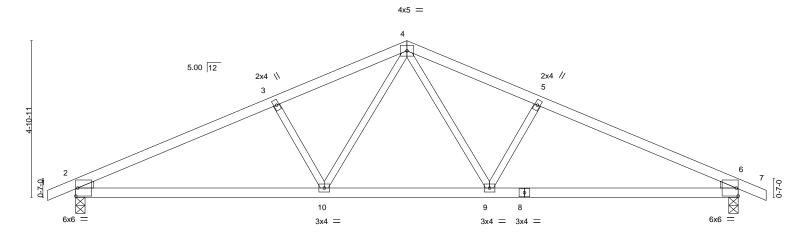


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	
						139353174
400156	E2	Common	4	1		
					Job Reference (optional)	
Wheeler Lumber, Wave	erly, KS 66871		8	.240 s Jul 1	14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:54 201	19 Page 1
			ID:dwZTNcNXrqfJm	8tRCSiY7E	DzSTnz-OMIXwzKFSKQG8BTbV9ISaDs?O8a7296RHcA	daXyHLuJ
[0-10-8	6-3-3	10-4-0	14-4	-13	20-8-0	21-6-8
0-10-8	6-3-3	4-0-13	4-0-	13	6-3-3	0-10-8

Scale = 1:35.9



I	<b>—</b>	7-9-1	5-1-14					7-9-1				
Plate Offsets	s (X,Y)	[2:0-0-6,0-0-2], [2:0-4-11,	-4-11,0-0-5]									
LOADING (	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.11	6-9	>999	360	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.25	6-9	>977	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.04	6	n/a	n/a		
BCDL 1	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.06	2-10	>999	240	Weight: 65 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

12-10-15

LUMBER-

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

WEDGE

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

REACTIONS. (lb/size) 2=988/0-3-8, 6=988/0-3-8

Max Horz 2=-82(LC 9)

Max Uplift 2=-141(LC 8), 6=-141(LC 9)

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

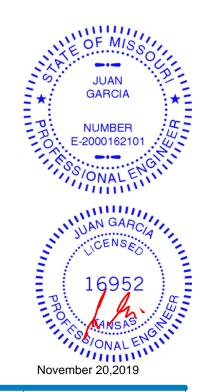
2-3=-1643/210, 3-4=-1437/214, 4-5=-1437/214, 5-6=-1643/211 TOP CHORD

**BOT CHORD** 2-10=-199/1413, 9-10=-56/1021, 6-9=-117/1413

WEBS 4-9=-107/507, 5-9=-339/190, 4-10=-107/507, 3-10=-339/190

### 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-8-13 oc purlins.

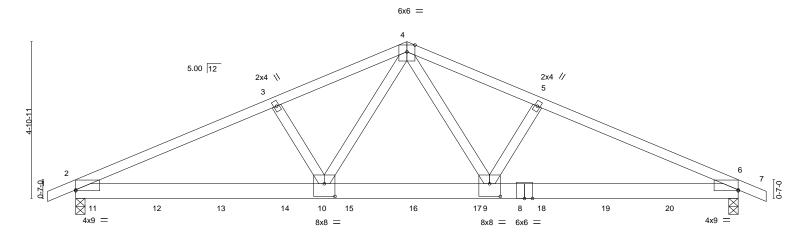
Rigid ceiling directly applied or 10-0-0 oc bracing.

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Ply Lot 4 H3 139353175 400156 E3 Common Girder | **Z** | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:59 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-IJYQzgOOHs3ZEyLYIiudHHZsQ9EbjMBAQuuNFlyHLuE 21-6-8 0-10-8 0-10-8 0-10-8 20-8-0 6-3-3 6-3-3 4-0-13 4-0-13

Scale = 1:35.9



	7-9-1 7-9-1	12-10-15 5-1-14									
Plate Offsets (X,Y) [2	2:0-0-0,0-0-6], [6:Edge,0	,0-4-12], [10:	0-4-0,0-4-12						7-9-1		
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	0.56	Vert(LL)	-0.20	`6-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.36	6-9	>688	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.05	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TP	PI2014	Matrix	<-S	Wind(LL)	0.15	2-10	>999	240	Weight: 188 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E **BOT CHORD** 2x6 SP 2400F 2.0E **WEBS** 2x4 SPF No.2

REACTIONS. (lb/size) 2=5382/0-3-8 (req. 0-4-4), 6=4842/0-3-8 (req. 0-3-13)

Max Horz 2=49(LC 29)

Max Uplift 2=-868(LC 8), 6=-657(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-8360/1350, 3-4=-8188/1361, 4-5=-8270/1243, 5-6=-8442/1231 TOP CHORD

**BOT CHORD** 2-10=-1223/7564. 9-10=-839/5787. 6-9=-1065/7638

WEBS 4-9=-475/3599, 4-10=-694/3552

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x4 1 row at 0-7-0 oc.
  - Bottom chords connected as follows: 2x6 2 rows staggered at 0-6-0 oc.
  - Webs connected as follows: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) WARNING: Required bearing size at joint(s) 2, 6 greater than input bearing size.
- 8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=868, 6=657.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 916 lb down and 154 lb up at 0-7-4, 824 lb down and 176 lb up at 2-7-4, 824 lb down and 176 lb up at 4-7-4, 824 lb down and 176 lb up at 6-7-4, 824 lb down and 176 lb up at 8-7-4, 795 lb down and 206 lb up at 10-7-4, 850 lb down and 123 lb up at 12-7-4, 850 lb down and 123 lb up at 14-7-4, and 850 lb down and 123 lb up at 16-7-4, and 850 lb down and 123 lb up at 18-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

### Continued on page 2



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 permanent. 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



JUAN

**GARCIA** 

NUMBER

-2000162101



Structural wood sheathing directly applied or 4-11-11 oc purlins.

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

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	
400156	E3	Common Girder	1	2	I3935317	5

Wheeler Lumber,

Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:59 2019 Page 2 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-IJYQzgOOHs3ZEyLYIiudHHZsQ9EbjMBAQuuNFlyHLuE

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 11=-873(F) 12=-801(F) 13=-801(F) 14=-801(F) 15=-801(F) 16=-771(F) 17=-850(F) 18=-850(F) 19=-850(F) 20=-850(F)



Job Truss Truss Type Qty Lot 4 H3 139353176 400156 J1 Diagonal Hip Girder | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:00 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-DW6oA0P02ABQs6wlsQPsqU66eZlHSvJKfYdxoByHLuD 1-2-14 4-1-7 Scale = 1:13.4 4.24 12 3x6 4-1-7 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP (loc) L/d Plate Grip DOL Vert(LL) -0.01 197/144 **TCLL** 25.0 1.15 TC 0.15 4-5 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.10 Vert(CT) -0.02 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) -0.01 3 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Wind(LL) 0.01 4-5 >999 240 Weight: 11 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

**WEBS** 2x4 SPF No.2

> 5=144/0-4-9, 3=80/Mechanical, 4=24/Mechanical (lb/size)

Max Horz 5=81(LC 12)

Max Uplift 5=-91(LC 6), 3=-51(LC 12)

Max Grav 5=144(LC 1), 3=80(LC 1), 4=60(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 30 lb down and 11 lb up at -1-2-14, and 30 lb down and 11 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Concentrated Loads (lb)

Vert: 1=-46(F=-23, B=-23) Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=34, B=34)-to-3=-72(F=-1, B=-1), 5=0(F=10, B=10)-to-4=-21(F=-0, B = -0



Structural wood sheathing directly applied or 4-1-7 oc purlins,

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

except end verticals.

November 20,2019



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353177 400156 J2 Jack-Open | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:01 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-higAOMQepUJHUGVxQ7w5MieICy69BMZTuCNUKdyHLuC

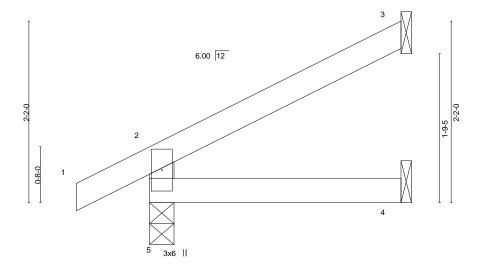
Structural wood sheathing directly applied or 3-0-0 oc purlins,

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

except end verticals

3-0-0 3-0-0 0-10-8

Scale = 1:13.7



				-		3-0-0 3-0-0				—		
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-R	Wind(LL)	0.00	4-5	>999	240	Weight: 9 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

**WEBS** 2x4 SPF No.2

> 5=210/0-3-8, 3=82/Mechanical, 4=30/Mechanical (lb/size)

Max Horz 5=69(LC 8)

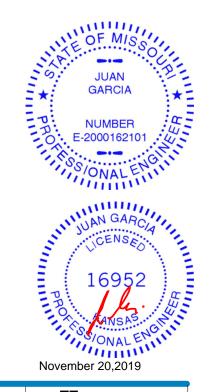
Max Uplift 5=-27(LC 8), 3=-49(LC 8)

Max Grav 5=210(LC 1), 3=82(LC 1), 4=52(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353178 400156 J3 Jack-Open Girder | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:02 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-9uEYbiQGanR85P47zqRKvvBS7MRnwppd6s62s4yHLuB 1-2-14 4-1-7 Scale = 1:13.4 0-4-4 4.24 12 1-1-8 1-9-4 2 0-8-0 3.54 12 3x6 || 3-8-3 LOADING (psf) SPACING-2-0-0 DEFL. L/d **PLATES** GRIP CSI. (loc) I/defI Plate Grip DOL Vert(LL) -0.01 197/144 **TCLL** 25.0 1.15 TC 0.15 5-6 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 BC 0.10 Vert(CT) -0.02 >999 240 5-6 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) -0.01 3 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Wind(LL) 0.01 5-6 >999 240 Weight: 12 lb FT = 10% BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x4 SPF No.2

REACTIONS. 6=144/0-3-7, 3=80/Mechanical, 4=24/Mechanical (lb/size)

Max Horz 6=80(LC 12)

Max Uplift 6=-90(LC 6), 3=-51(LC 12)

Max Grav 6=144(LC 1), 3=80(LC 1), 4=60(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 6 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) 6, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 30 lb down and 11 lb up at -1-2-14, and 30 lb down and 11 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

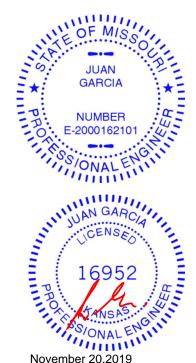
1) Dead + Roof Live (balanced): Lumber Increase=1.15. Plate Increase=1.15

Concentrated Loads (lb)

Vert: 1=-46(F=-23, B=-23)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=34, B=34)-to-3=-72(F=-1, B=-1), 6=0(F=10, B=10)-to-5=-19(F=1, B=1), 5=-19(F=1, B=1)-to-4=-21(F=-0, B=-0)



Structural wood sheathing directly applied or 4-1-7 oc purlins,

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

except end verticals.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353179 400156 J4 Jack-Open | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:03 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-d4oxp2RuL5Z\_iZfKXYyZS7kegmoefG3mLWsbOWyHLuA 3-0-0 3-0-0 -0-10-8 0-10-8 Scale = 1:13.7 6.00 12 1-2-0 -9-2 2 1-0-0 3x4 =0-8-0 5.00 12 3x6 П LOADING (psf)

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

I/defI

>999

>999

>999

except end verticals

n/a

L/d

360

240

n/a

240

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

(loc)

5-6

5-6

5-6

3

-0.00

-0.01

-0.00

0.00

**PLATES** 

Weight: 9 lb

MT20

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

GRIP

197/144

FT = 10%

LUMBER-

REACTIONS.

TCLL

**TCDL** 

**BCLL** 

BCDL

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

25.0

10.0

0.0

10.0

**WEBS** 2x4 SPF No.2

> 6=210/0-3-8, 3=83/Mechanical, 4=30/Mechanical (lb/size)

Max Horz 6=68(LC 8)

Max Uplift 6=-26(LC 8), 3=-50(LC 8)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Grav 6=210(LC 1), 3=83(LC 1), 4=52(LC 3)

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

### NOTES-

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

CSI.

TC

ВС

WB

Matrix-R

0.10

0.06

0.00

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

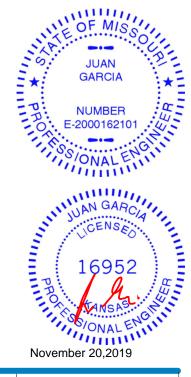
2-0-0

1.15

1.15

YES

- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 6 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) 6, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Ply Lot 4 H3 139353180 400156 LAY1 GABLE

Wheeler Lumber, Waverly, KS 66871

| Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:05 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-ZTvhEkT8tipiytpifz?1XYp?0aUd7A93opLiTPyHLu8

4-1-0 4-1-0

3x4 =

Scale = 1:30.1

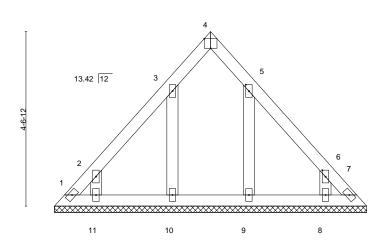


Plate Offsets (X,Y)-- [4:Edge,0-3-0], [5:0-2-1,0-1-0], [6:0-2-1,0-1-0]

LOADING TCLL	<b>G</b> (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.04	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TPI	YES	WB Matri	0.03 v-P	Horz(CT)	0.00	7	n/a	n/a	Weight: 30 lb	FT = 10%
DODL	10.0	3000 INO2010/11 I	2017	Ivialii	^ 1						Weight. 30 ib	1 1 - 1070

LUMBER-

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD OTHERS** 2x4 SPF No.2 **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 8-1-15.

(lb) -Max Horz 1=113(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-127(LC 8), 10=-105(LC 8), 9=-103(LC 9),

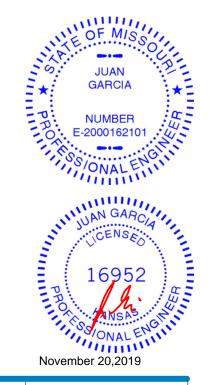
8=-128(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 10, 9, 8

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

### NOTES-

- 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) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=127, 10=105, 9=103, 8=128.
- 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.





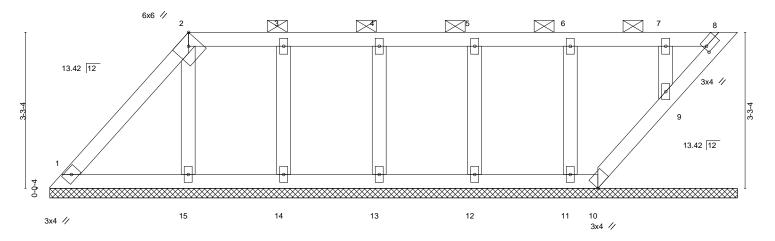
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353181 400156 LAY2 GABLE | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:07 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-Ws1ReQUPOK3QCBy5mO1VczuKvN9tb4cMG7qpXHyHLu6 2-11-1 11-5-15

Scale: 1/2"=1'



0-0-4		11-5-15		14-5-0
0-ď-4		11-5-12		2-11-1
Plate Offsets (X,Y)	[2:0-2-10,Edge], [8:0-0-11,0-1-8]			
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.08 BC 0.04 WB 0.03 Matrix-S	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999           Horz(CT)         -0.00         8         n/a         n/a	PLATES GRIP MT20 197/144  Weight: 52 lb FT = 10%

BRACING-LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 2-8. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-4-12.

(lb) -Max Horz 1=121(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 8, 10, 15, 14, 13, 12, 11, 9 Max Grav All reactions 250 lb or less at joint(s) 1, 8, 10, 15, 14, 13, 12, 11, 9

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- \* 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10, 15, 14, 13, 12. 11. 9.
- 9) Non Standard bearing condition. Review required.
- 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.





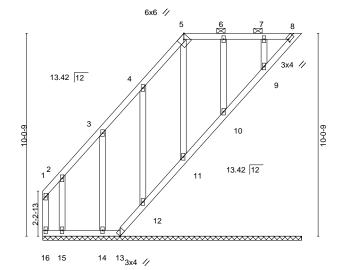
Job Truss Truss Type Qty Lot 4 H3 139353182 400156 LAY3 GABLE

Wheeler Lumber, Waverly, KS 66871

| Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:08 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-\_2bqslV19dBHqKXHK5Yk9ARVfnVzKWOVVnZM4jyHLu5

12-9-13 6-11-14 5-9-15

Scale = 1:57.1



1	3-10-0	12-9-13
ſ	3-10-0	8-11-13

Plate Offs	ets (X,Y)	[5:0-2-10,Edge], [8:0-0-1	0,0-1-8]									
LOADING TCLL TCDL BCLL	(psf) 25.0 10.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.08 0.05 0.12	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.01	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 197/144
BCDL	10.0	Code IRC2018/TF	712014	Matri	x-S						Weight: 69 lb	FT = 10%

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

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

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-9-13.

(lb) -Max Horz 16=286(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 16, 11, 10, 9 except 8=-297(LC 8), 13=-140(LC 6), 15=-205(LC 8),

14=-133(LC 8), 12=-161(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 16, 8, 15, 14, 12, 11, 10, 9 except 13=314(LC 8)

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

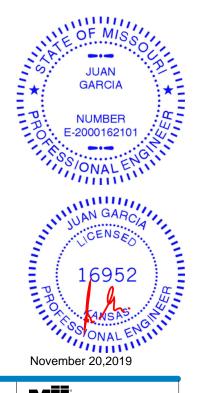
TOP CHORD 4-5=-190/346, 5-6=-131/267, 6-7=-130/267, 7-8=-130/267

**BOT CHORD** 15-16=-268/130, 14-15=-268/130, 13-14=-268/130, 12-13=-415/213, 11-12=-411/211,

10-11=-410/210, 9-10=-410/210, 8-9=-408/201

### 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 arip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 11, 10, 9 except (jt=lb) 8=297, 13=140, 15=205, 14=133, 12=161.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 12, 11, 10, 9.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353183 GABLE 400156 LAY4 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:10 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-wRjaHRXHhFR?3ehgRWaCEbWr7bBVoR4oy52T8cyHLu3 4-11-13 Scale = 1:32.7 6x6 // 2x4 || 2x4 || **▽**f 3x4 13.42 12<sub>2X4</sub> 2x4 || 13.42 12 <sup>8</sup> 2x4 || 0-0-4 3x4 // 10 9 3x4 // 11 2x4 || 2x4 || 0-0<u>-4</u> 0-0-4 10-9-12 4-11-13 Plate Offsets (X,Y)--[3:0-2-10,Edge], [6:0-0-11,0-1-8] SPACING-CSI. DEFL. **PLATES** GRIP LOADING (psf) in (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.08 Vert(LL) n/a n/a 999 MT20 197/144

Vert(CT)

Horz(CT)

n/a

-0.00

n/a

n/a

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

6

999

n/a

2-0-0 oc purlins (6-0-0 max.): 3-6.

**BCLL** 0.0 Rep Stress Incr Code IRC2018/TPI2014 **BCDL** 10.0

10.0

LUMBER-**BRACING-**TOP CHORD

1.15

YES

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

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

REACTIONS. All bearings 10-9-8. (lb) -Max Horz 1=215(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 6, 9, 10, 8, 7 except 11=-199(LC 8) Max Grav All reactions 250 lb or less at joint(s) 1, 6, 9, 10, 8, 7 except 11=303(LC 15)

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

### NOTES-

**TCDL** 

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

Lumber DOL

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

ВС

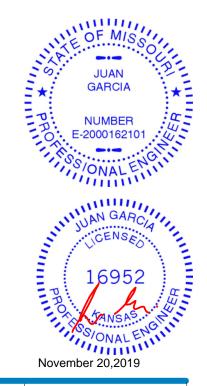
WB

Matrix-S

0.05

0.05

- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9, 10, 8, 7 except (it=lb) 11=199.
- 8) Non Standard bearing condition. Review required.
- 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.



FT = 10%

Weight: 44 lb

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

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



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 4 H3 139353184 Valley 400156 V1 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:11 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

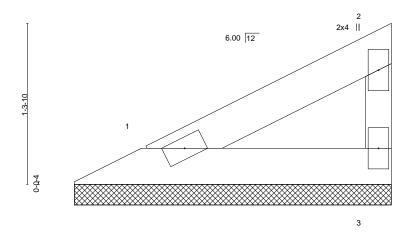
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OdHyUnXvSYZshoGs?D5Rmp31I\_X0Xu2xBlo0g2yHLu2 2-7-4

Structural wood sheathing directly applied or 2-7-4 oc purlins,

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

except end verticals.

Scale = 1:9.3



2x4 / 2x4 ||

TOP CHORD

BOT CHORD

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 MT20 197/144 0.06 n/a n/a **TCDL** 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 6 lb FT = 10%

LUMBER-BRACING-

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

REACTIONS. 1=84/2-6-12, 3=84/2-6-12 (lb/size)

Max Horz 1=39(LC 5)

Max Uplift 1=-11(LC 8), 3=-21(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 4 H3 139353185 Valley 400156 V2 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:21 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-5YtkaCfB5dqRtK1nbKHnAwUci0uQtPkQUJDY0TyHLtu 6-9-12 6-0-8 0-9-4 Scale = 1:20.3 4x5 = 2x4 || 3 6.00 12 0-0-4 5 4 2x4 / 2x4 || 2x4 ||

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	0.57	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P						Weight: 19 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

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

(lb/size) 1=231/6-9-4, 4=-68/6-9-4, 5=384/6-9-4

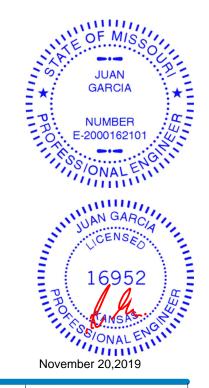
Max Horz 1=103(LC 5)

Max Uplift 1=-41(LC 8), 4=-176(LC 3) Max Grav 1=231(LC 1), 5=402(LC 3)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)
- 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.



Structural wood sheathing directly applied or 6-9-12 oc purlins,

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

except end verticals.



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353186 Valley 400156 V3 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:22 2019 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-akR6oYgpsxyIVUcz81o0j70rYQFScsmZjzy5YvyHLtt

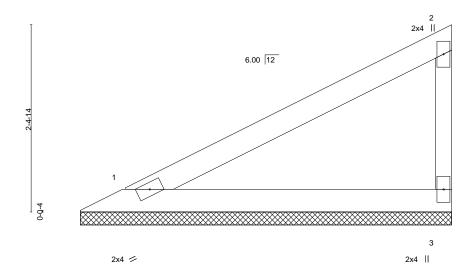
Structural wood sheathing directly applied or 4-9-12 oc purlins,

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

except end verticals.

4-9-12

Scale = 1:14.8



LOADIN TCLL	25.Ó	Plate Grip DOL 1.	0-0 .15	CSI.	0.31	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 197/144
TCDL	10.0	Lumber DOL 1.	.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YI Code IRC2018/TPI201	ES 14	WB Matri	0.00 x-P	Horz(CT)	-0.00	3	n/a	n/a	Weight: 12 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

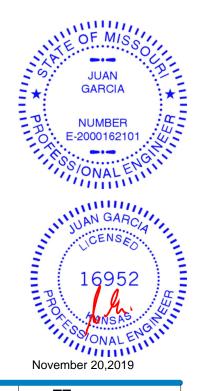
**WEBS** 2x3 SPF No.2

REACTIONS. 1=184/4-9-4, 3=184/4-9-4 (lb/size) Max Horz 1=85(LC 5) Max Uplift 1=-24(LC 8), 3=-45(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353187 Valley 400156 V4 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:23 2019 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-2x?U?uhRdE497eBAilJFGLZ31qdiLJ0jxdif5MyHLts

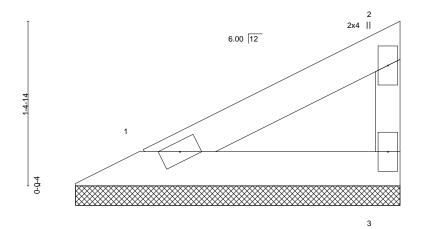
Structural wood sheathing directly applied or 2-9-12 oc purlins,

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

except end verticals.

2-9-12

Scale = 1:9.8



2x4 / 2x4 |

BRACING-

TOP CHORD

BOT CHORD

LOADIN TCLL	<b>G</b> (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.07	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	25	
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TP	YES 912014	WB Matri	0.00 x-P	Horz(CT)	-0.00	3	n/a	n/a	Weight: 7 lb	FT = 10%

LUMBER-

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

**WEBS** 2x3 SPF No.2

> (lb/size) 1=94/2-9-4, 3=94/2-9-4 Max Horz 1=44(LC 5)

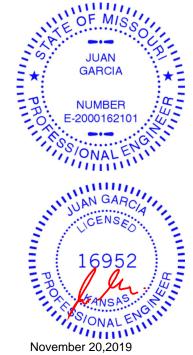
Max Uplift 1=-12(LC 8), 3=-23(LC 8)

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

### NOTES-

REACTIONS.

- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Lot 4 H3 139353188 Valley 400156 V5

Wheeler Lumber, Waverly, KS 66871

| Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:24 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-W7ZtDEi3OYC0komMGSqUoY5ApExr4lxsAHRCdoyHLtr

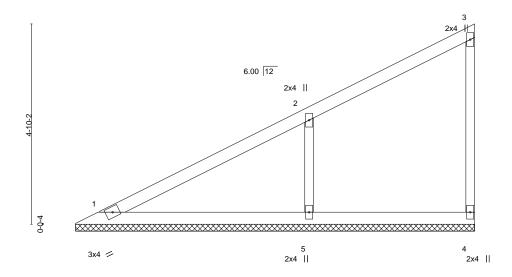
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

9-8-4

Scale = 1:27.9



LOADIN	<b>G</b> (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.33	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 197/144
TCDL	10.0	Lumber DOL	1.15	ВС	0.17	Vert(CT)	n/a	-	n/a	999	WIIZO	197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TPI2	YES 2014	WB Matri	0.09 x-S	Horz(CT)	-0.00	4	n/a	n/a	Weight: 28 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

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

REACTIONS. (lb/size) 1=183/9-7-12, 4=117/9-7-12, 5=506/9-7-12

Max Horz 1=187(LC 5)

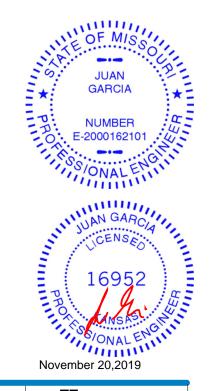
Max Uplift 4=-28(LC 5), 5=-152(LC 8)

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

**WEBS** 2-5=-383/203

### 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) 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.
- \* 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb)
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353189 Valley 400156 V6

Wheeler Lumber, Waverly, KS 66871

| Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:25 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-\_J7FQZih9sKtMyLYqALjLmeNdelBpDq?PxBm9EyHLtq

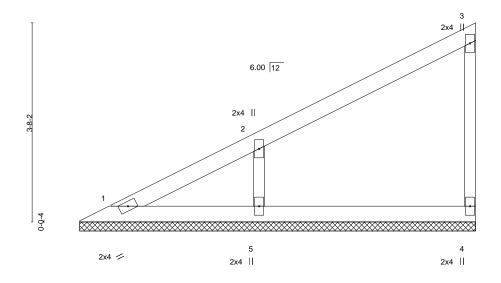
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

7-4-4

Scale = 1:21.3



LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.19 BC 0.10	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999	<b>PLATES GRIP</b> MT20 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.05 Matrix-P	Horz(CT) -0.00 4 n/a n/a	Weight: 20 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (lb/size) 1=73/7-3-12, 4=141/7-3-12, 5=382/7-3-12

Max Horz 1=138(LC 5)

Max Uplift 4=-26(LC 8), 5=-115(LC 8)

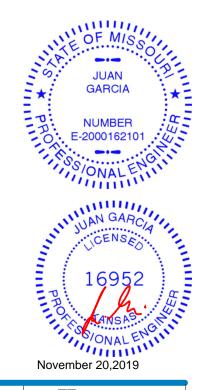
Max Grav 1=87(LC 16), 4=141(LC 1), 5=382(LC 1)

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

2-5=-297/165 WEBS

### 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb)
- 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.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353190 Valley 400156 V7

Wheeler Lumber, Waverly, KS 66871

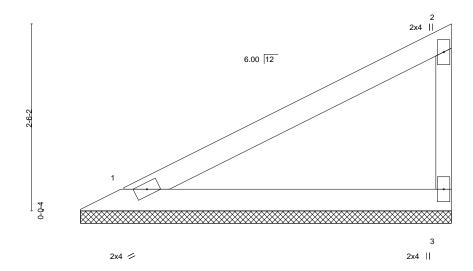
| Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:25 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-\_J7FQZih9sKtMyLYqALjLmeLFeHrpDV?PxBm9EyHLtq

Structural wood sheathing directly applied or 5-0-4 oc purlins,

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

except end verticals.

Scale = 1:15.5



	osf) 5.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.35	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 197/144
TCDL 10	0.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL (	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10	0.0	Code IRC2018/TPI	12014	Matri	x-P						Weight: 13 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

**WEBS** 2x3 SPF No.2

REACTIONS. 1=193/4-11-12, 3=193/4-11-12 (lb/size)

Max Hórz 1=89(LC 7) Max Uplift 1=-25(LC 8), 3=-47(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 4 H3 139353191 Valley 400156 V8 Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:26 2019 Page 1

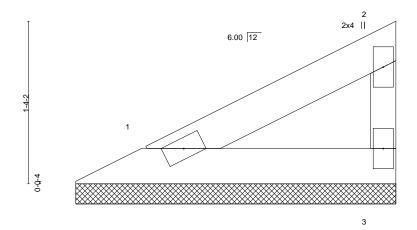
Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-SWhdevjKw9Sk\_5vlNttytzBbQ1eTYgl9dbwJhhyHLtp

Structural wood sheathing directly applied or 2-8-4 oc purlins,

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

except end verticals.

Scale = 1:9.5



2x4 / 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

LOADIN	G (psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr Y	/ES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	14	Matri	x-P	, ,					Weight: 6 lb	FT = 10%

LUMBER-

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

**WEBS** 2x3 SPF No.2

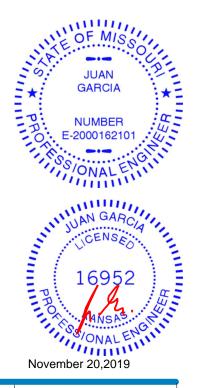
REACTIONS. 1=88/2-7-12, 3=88/2-7-12 (lb/size) Max Horz 1=41(LC 5)

Max Uplift 1=-11(LC 8), 3=-22(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Truss Type Qty 139353192 Valley 400156 V9 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:27 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-wiF?rFkyhTaabFUxxbOBQBjkLRzvH7TlsFgsE7yHLto 3-8-7 3-8-7 3-8-7 Scale = 1:15.6 4x5 = 2 7.00 12 0-0-4 0-0-4 2x4 || 2x4 / 2x4 > 7-4-7 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 MT20 197/144 0.18 n/a n/a **TCDL** 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.03 Horz(CT) 0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 18 lb FT = 10% LUMBER-BRACING-

TOP CHORD

BOT CHORD

Lot 4 H3

Job

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

**OTHERS** 2x3 SPF No.2

REACTIONS. 1=154/7-4-0, 3=154/7-4-0, 4=261/7-4-0 (lb/size)

Max Horz 1=-48(LC 6)

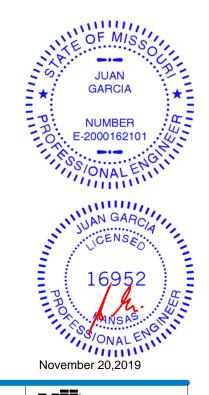
Truss

Max Uplift 1=-35(LC 8), 3=-41(LC 9)

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



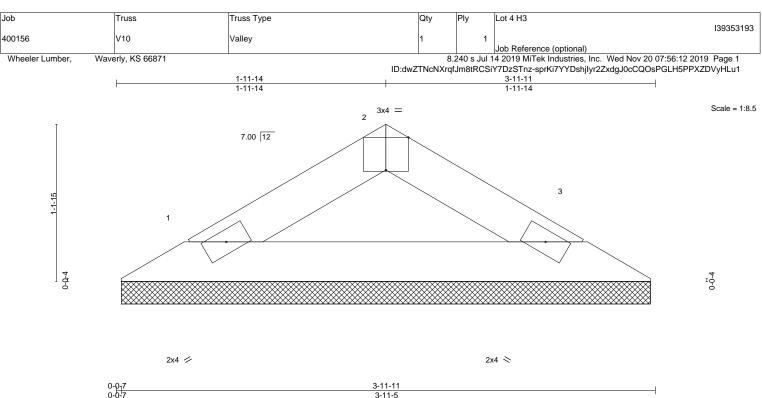
Structural wood sheathing directly applied or 6-0-0 oc purlins.

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



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





	0-0-7		3-11-5	<u>'</u>
Plate Offsets (X,Y)	[2:0-2-0,Edge]			
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 0.03	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a	M : 1 ( 0 II
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 8 lb FT = 10%
LUMBER-			BRACING-	

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

2x4 SPF No.2

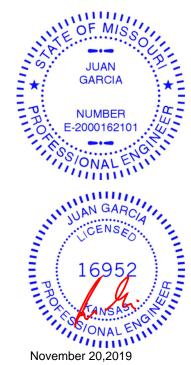
1=130/3-10-14, 3=130/3-10-14 (lb/size) Max Horz 1=-22(LC 4)

Max Uplift 1=-16(LC 8), 3=-16(LC 9)

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



Structural wood sheathing directly applied or 3-11-11 oc purlins.

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



Job Truss Truss Type Qty Lot 4 H3 139353194 Valley 400156 V11 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:13 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-K0OjvTZA\_Aqaw6QF7e8vsE8Fao8??nXEe3H7lxyHLu0 7-7-2 0-6-8 7-0-10 Scale = 1:14.1 6.00 12 4x9 || 3x4 = 2 2.59 12 3x4 =3x4 II Plate Offsets (X,Y)--[3:0-3-3,Edge], [4:Edge,0-2-8] SPACING-**PLATES** GRIP LOADING (psf) CSI. DEFL. in (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.52 Vert(LL) n/a n/a 999 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.32 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL 10.0 Matrix-R Weight: 17 lb 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.

**BOT CHORD** 

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

**WEBS** 2x3 SPF No.2

REACTIONS. (lb/size) 1=272/7-6-0, 4=272/7-6-0

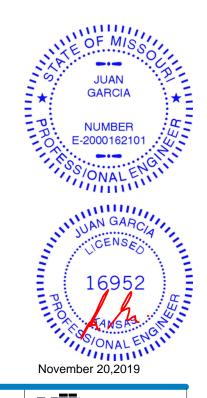
Max Horz 1=60(LC 5)

Max Uplift 1=-48(LC 4), 4=-54(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353195 Valley 400156 V12 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:14 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-oCy56paolTyRYF?RgMf8ORhK1CQakEnOtj0gHNyHLu? 9-4-13 8-10-5 0-6-8 Scale = 1:17.3 6.00 12 4x14 MT18H 3x4 =2 2.59 12 3x6 =4x5 ||

9-4-13 [3:0-3-3 Edge] [4:Edge 0-2-8] Plate Offsets (X V)--

Tidle Offsets (A, 1)	late Official (X, 1) [0.0 5 0, Edge], [4. Edge; 0 2 0]										
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.92	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) n/a - n/a 999	<b>PLATES GRIP</b> MT20 197/144							
TCDL 10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) n/a - n/a 999	MT18H 197/144							
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-R	Horz(CT) 0.00 4 n/a n/a	Weight: 21 lb FT = 10%							
2022 10.0	0000 11102010/11 12011	man, it		g 2.1.0 1.1.1070							

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

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

**WEBS** 2x3 SPF No.2

REACTIONS. (lb/size) 1=353/9-3-10, 4=353/9-3-10 Max Horz 1=77(LC 5) Max Uplift 1=-63(LC 4), 4=-70(LC 8)

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

TOP CHORD 3-4=-251/109

### 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) All plates are MT20 plates unless otherwise indicated.
- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 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.



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

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

except end verticals.



Job Truss Truss Type Qty Lot 4 H3 139353196 Valley 400156 V13 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:15 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-HOWTK9bQWn4H9PadE3ANxfEizcugTh1X6NmEqpyHLu\_ 3-11-13 3-5-5 3-5-5 0-6-8 6.00 12 Scale = 1:7.7 3x4 2x4 || 2 2.59 12 0-8-14 3x4 =2x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defl TCLL 25.0 Plate Grip DOL Vert(LL) 999 197/144 1.15 TC 0.08 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Weight: 8 lb FT = 10% BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD BOT CHORD

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

**WEBS** 2x3 SPF No.2

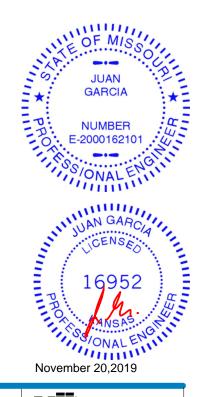
REACTIONS. 1=109/3-10-10, 4=109/3-10-10 (lb/size) Max Horz 1=27(LC 5)

Max Uplift 1=-19(LC 4), 4=-22(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-11-13 oc purlins,

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

except end verticals.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353197 Valley 400156 V14 Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:15 2019 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-HOWTK9bQWn4H9PadE3ANxfEhyctETh1X6NmEqpyHLu\_

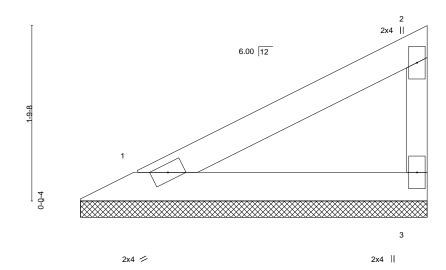
Structural wood sheathing directly applied or 3-6-15 oc purlins,

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

except end verticals.

3-6-15 3-6-15

Scale = 1:11.8



LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a		n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P						Weight: 9 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x3 SPF No.2

REACTIONS. 1=128/3-6-7, 3=128/3-6-7 (lb/size)

Max Horz 1=59(LC 5)

Max Uplift 1=-16(LC 8), 3=-31(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Lot 4 H3 139353198 Valley 400156 V15

Wheeler Lumber, Waverly, KS 66871

| Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:16 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-lb4rXUb2H5C8nZ9qonhcTsmpp?CRC8HhK1VnLGyHLtz

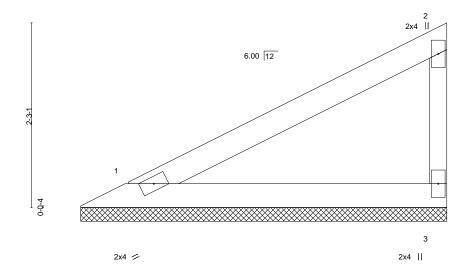
Structural wood sheathing directly applied or 4-6-2 oc purlins,

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

except end verticals.

4-6-2

Scale = 1:14.1



LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.26 BC 0.14	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999	<b>PLATES GRIP</b> MT20 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-P	Horz(CT) -0.00 3 n/a n/a	Weight: 11 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x3 SPF No.2

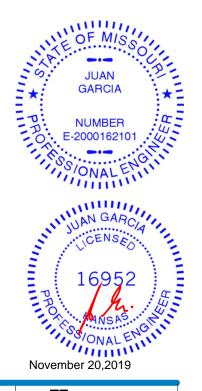
REACTIONS. 1=170/4-5-10, 3=170/4-5-10 (lb/size) Max Horz 1=79(LC 5)

Max Uplift 1=-22(LC 8), 3=-42(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353199 Valley 400156 V16 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:17 2019 Page 1

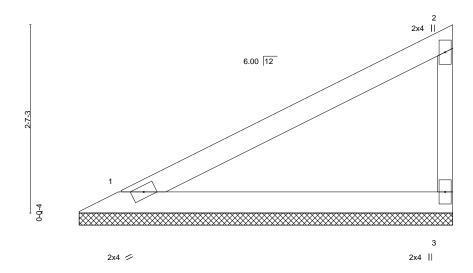
Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-DneDlqcg2OK?Pjj0MUCr04JzmPXixbXqZhFKtiyHLty

Structural wood sheathing directly applied or 5-2-6 oc purlins,

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

except end verticals.

Scale: 3/4"=1"



LOADIN	G (psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-P						Weight: 13 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x3 SPF No.2

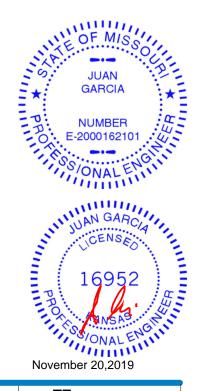
REACTIONS. 1=201/5-1-14, 3=201/5-1-14 (lb/size) Max Horz 1=93(LC 5)

Max Uplift 1=-26(LC 8), 3=-49(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353200 Valley V17 400156

Wheeler Lumber, Waverly, KS 66871

Job Reference (optional)
8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:19 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-99m\_AWexa0aje1tOTvFJ5VOG6DB0PV070?kRybyHLtw

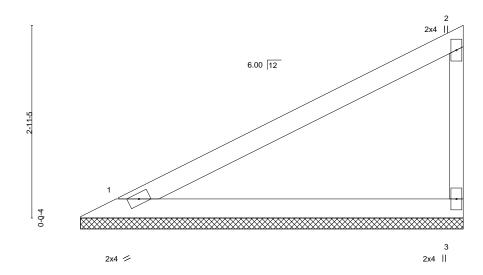
Structural wood sheathing directly applied or 5-10-10 oc purlins,

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

except end verticals.

5-10-10

Scale = 1:17.6



LOADIN	G (psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-P	, ,					Weight: 15 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x3 SPF No.2

REACTIONS. 1=232/5-10-2, 3=232/5-10-2 (lb/size)

Max Horz 1=107(LC 5)

Max Uplift 1=-30(LC 8), 3=-57(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 4 H3 139353201 GABLE 400156 V18

Wheeler Lumber, Waverly, KS 66871

| Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:20 2019 Page 1 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-dMJMNseZLJiaGASb1cmYeixXedaU8ymGFfT?U1yHLtv

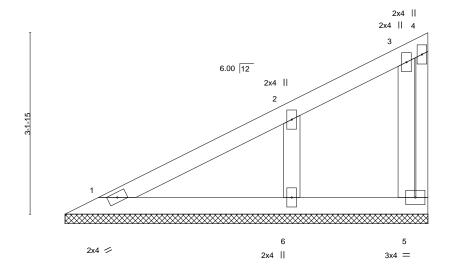
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

6-3-14

Scale = 1:20.1



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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	ВС	0.07	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: 21 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (lb/size) 1=122/6-3-14, 5=62/6-3-14, 6=316/6-3-14

Max Horz 1=117(LC 5)

Max Uplift 5=-23(LC 5), 6=-94(LC 8)

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) 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.
- \* 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Lot 4 H3 139353202 Valley 400156 V19 Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:20 2019 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-dMJMNseZLJiaGASb1cmYeixX1da18yTGFfT?U1yHLtv 7-1-10 Scale = 1:18.3 2x4 || 3 5.00 12 2x4 || 4-0-0 2x4 = 2x4 || 2x4 ||

LOADING	VI /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL TCDL	25.0 10.0	Plate Grip DOL Lumber DOL	1.15 1.15	TC BC	0.19 0.10	Vert(LL) Vert(CT)	n/a n/a	-	n/a n/a	999 999	MT20	197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TF	YES Pl2014	WB Matri	0.05 x-P	Horz(CT)	-0.00	4	n/a	n/a	Weight: 18 lb	FT = 10%

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

(lb/size) 1=53/7-1-0, 4=142/7-1-0, 5=370/7-1-0

Max Horz 1=115(LC 5)

2x3 SPF No.2

Max Uplift 4=-27(LC 8), 5=-98(LC 8)

Max Grav 1=62(LC 16), 4=142(LC 1), 5=370(LC 1)

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

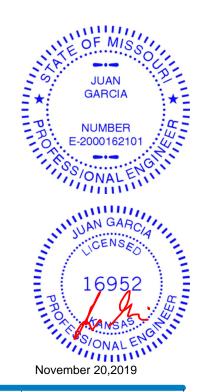
2-5=-288/148 WEBS

### NOTES-

**OTHERS** 

REACTIONS.

- 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Lot 4 H3 139353203 Valley 400156 V20 | Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:22 2019 Page 1 Wheeler Lumber, Waverly, KS 66871

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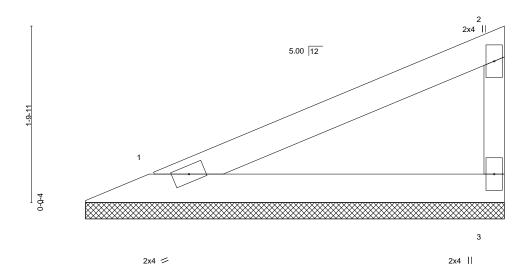
Structural wood sheathing directly applied or 4-4-0 oc purlins,

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

except end verticals.

4-4-0

Scale = 1:11.8



LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.22 BC 0.12	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-P	Horz(CT) -0.00 3 n/a n/a	Weight: 10 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

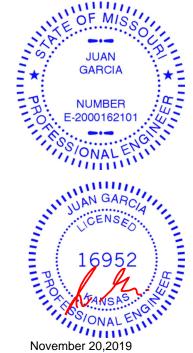
**WEBS** 2x3 SPF No.2

REACTIONS. (lb/size) 1=156/4-3-6, 3=156/4-3-6 Max Hórz 1=64(LC 5) Max Uplift 1=-23(LC 8), 3=-36(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.





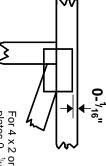


## **Symbols**

# PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE



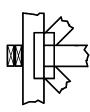
to slots. Second dimension is width measured perpendicular the length parallel to slots. The first dimension is the plate

## LATERAL BRACING LOCATION



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

### **BEARING**



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

## Industry Standards:

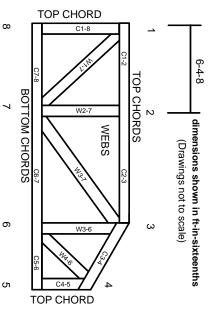
Guide to Good Practice for Handling **Building Component Safety Information** Design Standard for Bracing. Connected Wood Trusses. Installing & Bracing of Metal Plate

## ANSI/TPI1:

National Design Specification for Metal Plate Connected Wood Truss Construction.

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

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

# General Safety Notes

## Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building
- 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.
- 7. 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.
- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others.
- 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 project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.