

RE: 210213 Lot 80 W0 MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

### **Site Information:**

Customer: Project Name: 210213

Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4

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

This package includes 75 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	144330838	A1	1/13/2021	21	144330858	D4	1/13/2021
2	144330839	A2	1/13/2021	22	144330859	D5	1/13/2021
3	144330840	A3	1/13/2021	23	144330860	D6	1/13/2021
4	144330841	A4	1/13/2021	24	I44330861	D7	1/13/2021
5	144330842	A5	1/13/2021	25	144330862	E1	1/13/2021
6	144330843	A6	1/13/2021	26	144330863	E2	1/13/2021
7	144330844	A7	1/13/2021	27	144330864	E3	1/13/2021
8	144330845	A8	1/13/2021	28	144330865	E4	1/13/2021
9	144330846	B1	1/13/2021	29	144330866	E5	1/13/2021
10	144330847	B2	1/13/2021	30	144330867	G1	1/13/2021
11	144330848	B3	1/13/2021	31	144330868	G2	1/13/2021
12	144330849	B4	1/13/2021	32	144330869	G3	1/13/2021
13	144330850	B5	1/13/2021	33	144330870	G4	1/13/2021
14	144330851	C1	1/13/2021	34	144330871	H1	1/13/2021
15	144330852	C2	1/13/2021	35	144330872	H2	1/13/2021
16	144330853	C3	1/13/2021	36	144330873	H3	1/13/2021
17	144330854	C4	1/13/2021	37	144330874	H4	1/13/2021
18	144330855	D1	1/13/2021	38	144330875	J1	1/13/2021
19	144330856	D2	1/13/2021	39	144330876	J2	1/13/2021
20	144330857	D3	1/13/2021	40	144330877	J3	1/13/2021

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

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943

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





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41	144330878	J4	1/13/2021
42	144330879	J5	1/13/2021
43	144330880	J7	1/13/2021
44	144330881	J8	1/13/2021
45	144330882	J9	1/13/2021
46	144330883	J10	1/13/2021
47	144330884	J11	1/13/2021
48	144330885	J12	1/13/2021
49	144330886	J13	1/13/2021
50	144330887	J14	1/13/2021
51	144330888	J15	1/13/2021
52	144330889	J16	1/13/2021
53	144330890	J17	1/13/2021
54	I44330891	J18	1/13/2021
55	144330892	J19	1/13/2021
56	144330893	J20	1/13/2021
57	144330894	J21	1/13/2021
58	144330895	LAY1	1/13/2021
59	144330896	LAY2	1/13/2021
60	144330897	LAY3	1/13/2021
61	144330898	LAY4	1/13/2021
62	144330899	LAY5	1/13/2021
63	144330900	LAY6	1/13/2021
64	I44330901	LAY7	1/13/2021
65	144330902	LAY8	1/13/2021
66	144330903	V1	1/13/2021
67	144330904	V2	1/13/2021
68	144330905	V3	1/13/2021
69	144330906	V4	1/13/2021
70	144330907	V5	1/13/2021
71	144330908	V6	1/13/2021
72	144330909	V7	1/13/2021
73	I44330910	V8	1/13/2021
74	I44330911	V9	1/13/2021
75	144330912	V10	1/13/2021



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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, 2022.

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.





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71	144330908	V6	1/13/2021
72	144330909	V7	1/13/2021
73	I44330910	V8	1/13/2021
74	I44330911	V9	1/13/2021
75	144330912	V10	1/13/2021

Job Truss Truss Type Qty Lot 80 W0 144330838 210213 A1 Hip Girder | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:06 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-nP6o2peJM?sb1sSHX0LIYF\_t9oOvlpJK8A9Cc9zw36F

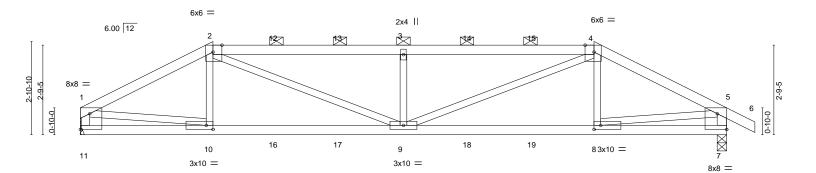
5-10-12

5-10-12

0-10-8 Scale = 1:35.7

20-0-0

4-1-4



H	4-1-4 4-1-4		10-0-0 5-10-12	-	15-10- 5-10-1			20-0-0 4-1-4	
Plate Offsets (2	X,Y) [1:Edge,0-5-13], [2:0-3-	5,Edge], [4:0-3-5	,Edge], [7:Edge,0-5-13], [8	3:0-2-8,0-1-8], [	10:0-2-8,0-1-8]				
LOADING (ps TCLL 25. TCDL 10. BCLL 0. BCDL 10.	Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO TPI2014	CSI. TC 0.50 BC 0.66 WB 0.59 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.12 9 -0.23 9-10 0.04 7 0.09 9	I/defI >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 70 lb	<b>GRIP</b> 197/144 FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

2x4 SPF No.2 \*Except\* TOP CHORD 2-4: 2x4 SPF 2100F 1.8E

2x4 SPF No.2

4-1-4

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

1-11,5-7: 2x4 SPF No.2

REACTIONS. (size) 11=Mechanical, 7=0-3-8

Max Horz 11=-57(LC 4)

Max Uplift 11=-191(LC 8), 7=-215(LC 9) Max Grav 11=1368(LC 1), 7=1443(LC 1)

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

TOP CHORD 1-2=-2182/334, 2-3=-2953/469, 3-4=-2953/469, 4-5=-2177/335, 1-11=-1329/203,

5-7=-1404/227

9-10=-292/1904, 8-9=-260/1893 **BOT CHORD** 

WEBS 2-9=-198/1187, 3-9=-701/257, 4-9=-199/1194, 1-10=-255/1712, 5-8=-256/1669

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 191 lb uplift at joint 11 and 215 lb uplift at joint 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) 82 lb down and 52 lb up at 4-1-4, 89 lb down and 52 lb up at 6-0-0, 89 lb down and 52 lb up at 8-0-0, 89 lb down and 52 lb up at 10-0-0, 89 lb down and 52 lb up at 12-0-0, and 89 lb down and 52 lb up at 14-0-0, and 82 lb down and 52 lb up at 15-10-12 on top chord, and 233 lb down and 78 lb up at 4-1-4, 35 lb down at 6-0-0, 35 lb down at 8-0-0, 35 lb down at 10-0-0, 35 lb down at 12-0-0, and 35 lb down at 14-0-0 , and 233 lb down and 78 lb up at 15-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# **GARCIA** NUMBER -2000162101 ONALE January 13,2021 January 13,2021

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

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

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

### COARIGASE(S)geStandard





Job	Truss	Truss Type	Qty	Ply	Lot 80 W0	٦
040040		I lin Cinder	_		144330838	
210213	A1	Hip Girder	1	1		
					Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:06 2021 Page 2 ID:hquPfxpp0CdNHWhMuPizeLzNEki-nP6o2peJM?sb1sSHX0LIYF\_t9oOvlpJK8A9Cc9zw36F

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-6=-70, 7-11=-20

Concentrated Loads (lb)

Vert: 2=-54(F) 4=-54(F) 10=-233(F) 9=-25(F) 3=-54(F) 8=-233(F) 12=-54(F) 13=-54(F) 14=-54(F) 15=-54(F) 16=-25(F) 17=-25(F) 18=-25(F) 19=-25(F) 19=



Job Truss Truss Type Qty Lot 80 W0 144330839 210213 A2 Roof Special Girder | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:07 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-FbgAG9fy7J\_Sf01T5kt\_4SWx?Ci01CyUNqum9czw36E 30-10-8 0-10-8 -0-10-8 0-10-8 23-10-12 30-0-0

2-0-0

7-9-8

5-0-0

Scale = 1:53.4

6-1-4

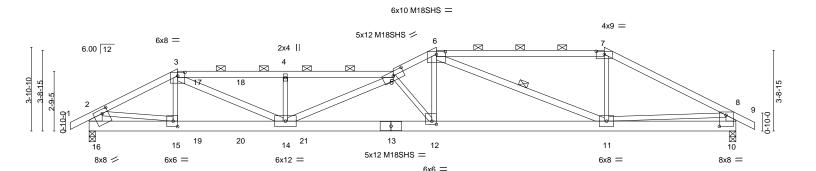
Structural wood sheathing directly applied or 1-11-7 oc purlins,

6-11

Rigid ceiling directly applied or 9-1-14 oc bracing

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (2-2-10 max.): 3-5, 6-7.



	-	4-1-4 4-1-4	9-1-4 5-0-0	_	4-1-4 5-0-0	16-1-4 2-0-0		23-10-12 7-9-8		30-0-0 6-1-4	
Plate Offset	ts (X,Y)	[3:0-4-0,0-1-15], [5:0-6-					[12:0-2-8,0-1		-2-8,0-3-0], [16		
LOADING TCLL	(psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI. TC	0.94	DEFL. Vert(LL)	in (loc)		L/d 360	PLATES MT20	<b>GRIP</b> 197/144
TCDL BCLL	10.0	Lumber DOL Rep Stress Incr	1.15 NO		0.80 0.88	Vert(CT) Horz(CT)	-0.67 12-14 0.09 10		240 n/a	M18SHS	197/144
BCDL	10.0	Code IRC2018/7	ΓPI2014	Matrix-	S	Wind(LL)	0.27 12-14	>999	240	Weight: 141 lb	FT = 10%

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-BRACING-

5-0-0

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

3-5: 2x4 SPF 2100F 1.8E, 6-7: 2x4 SPF 2400F 2.0E

**BOT CHORD** 2x6 SP DSS \*Except\*

4-1-4

10-13: 2x6 SPF 1650F 1.4E

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

3-14,5-14,6-11: 2x4 SPF No.2, 2-16: 2x8 SP DSS, 8-10: 2x6 SPF No.2

REACTIONS. (size) 16=0-3-8 (reg. 0-3-13), 10=0-3-8

Max Horz 16=-66(LC 27)

Max Uplift 16=-399(LC 8), 10=-200(LC 4) Max Grav 16=2412(LC 1), 10=1771(LC 1)

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

TOP CHORD 2-3=-3729/590, 3-4=-6385/1004, 4-5=-6384/1004, 5-6=-4937/717, 6-7=-2457/363,

7-8=-2860/379, 2-16=-2238/394, 8-10=-1681/222

**BOT CHORD** 15-16=-190/858, 14-15=-512/3297, 12-14=-850/6233, 11-12=-555/4361, 10-11=-167/770 3-14=-554/3434, 4-14=-618/217, 5-14=-544/616, 5-12=-2928/521, 6-12=-339/2573, WFBS

6-11=-2161/350, 7-11=-37/787, 2-15=-381/2461, 8-11=-208/1763

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 399 lb uplift at joint 16 and 200 lb uplift at joint 10.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 104 lb down and 52 lb up at 4-1-4, 104 lb down and 52 lb up at 5-0-0, and 104 lb down and 52 lb up at 7-0-0, and 104 lb down and 52 lb up at 9-0-0 on top chord, and 233 lb down and 78 lb up at 4-1-4, 35 lb down at 5-0-0, 35 lb down at 7-0-0, and 35 lb down at 9-0-0, and 848 lb down and 171 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

LOAD CASE(S) Standard



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

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

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



**GARCIA** 

NUMBER

ONAL

-2000162101

16952

PANSAS

STONAL

January 13,2021

Job	Truss	Truss Type	Qty	Ply	Lot 80 W0
					144330839
210213	A2	Roof Special Girder	1	1	
					Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:08 2021 Page 2

ID:hquPfxpp0CdNHWhMuPizeLzNEki-knEZTVfaud6JGAcfeRODdg36kb2FmfCdbUeJh2zw36D

### 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, 7-8=-70, 8-9=-70, 10-16=-20

Concentrated Loads (lb)

Vert: 3=-54(F) 15=-233(F) 14=-25(F) 4=-54(F) 17=-54(F) 18=-54(F) 19=-25(F) 20=-25(F) 21=-848(F)



Job	Truss	Truss Type		Qty	Ply	Lot 80 W0			
									144330840
210213	A3	Roof Special		1	1				
						Job Refere	nce (optional)		
Wheeler Lumber, W	averly, KS - 66871,			8.	430 s Nov	30 2020 Mi	Tek Industries, Inc. Tue Jan	12 15:26:09 20	)21 Page 1
			ID:ho	uPfxpp0Cd	NHWhMuF	PizeLzNEki-0	CzoxhrgCfwE9uJBsC8vS9tc	NI?MTV5inq8N	sDUzw36C
-0-10-8	6-1-4	11-0-0	16-1-4	18-1-4	21-	10-12	26-7-9	30-0-0	3ρ-10-β
0-10-8	6-1-4	4-10-12	5-1-4	2-0-0	3	-9-8	4-8-13	3-4-7	0-10-8

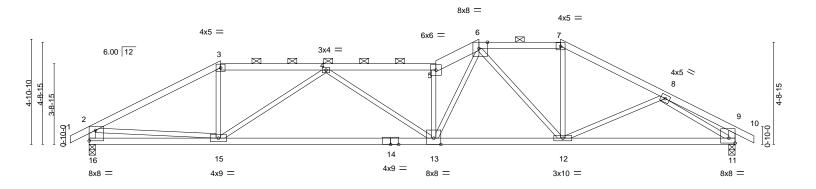
Structural wood sheathing directly applied or 3-4-15 oc purlins,

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

2-2-0 oc bracing: 13-15.

except end verticals, and 2-0-0 oc purlins (3-0-0 max.): 3-5, 6-7.

Scale = 1:53.5



1	6-1-4		16-1-4	18-1-4 21-10-12	30-0-0
	6-1-4	l	10-0-0	2-0-0 3-9-8	8-1-4
Plate Offsets (X,Y)	[6:0-4-10,Edge], [11:Edge	e,0-2-12], [16:E	dge,0-5-13]		
LOADING (psf)	SPACING-	2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL) -0.28 13-15 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT) -0.63 13-15 >566 240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT) 0.09 11 n/a n/a	
BCDL 10.0	Code IRC2018/TF	PI2014	Matrix-S	Wind(LL) 0.14 13-15 >999 240	Weight: 114 lb FT = 10%
				` '	

**BOT CHORD** 

LUMBER-BRACING-TOP CHORD

2x4 SPF No.2 \*Except\* TOP CHORD 5-6: 2x6 SPF No.2

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

2-16,9-11: 2x4 SPF No.2

REACTIONS. (size) 16=0-3-8, 11=0-3-8

Max Horz 16=81(LC 7)

Max Uplift 16=-227(LC 8), 11=-127(LC 9) Max Grav 16=1408(LC 1), 11=1408(LC 1)

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

TOP CHORD  $2-3=-2176/304,\ 3-4=-1843/313,\ 4-5=-2874/368,\ 5-6=-3290/453,\ 6-7=-1740/205,$ 

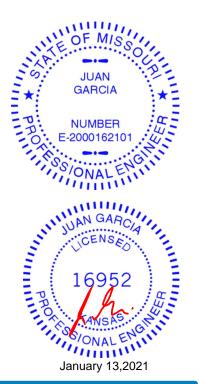
7-8=-2024/213, 8-9=-360/0, 2-16=-1364/247, 9-11=-328/48

**BOT CHORD** 15-16=-232/476, 13-15=-388/2668, 12-13=-185/2134, 11-12=-133/1712 WEBS 3-15=-11/606, 4-15=-1006/236, 4-13=0/361, 5-13=-1652/299, 6-13=-287/1851,

6-12=-682/139, 7-12=-42/567, 2-15=-108/1390, 8-11=-1752/218

### 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 16 and 127 lb uplift at joint 11.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







Job Truss Truss Type Qty Ply Lot 80 W0 144330841 210213 A4 Roof Special Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:10 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-gAMJuBhqQEM0WTm2msQhi58S3PjkEcjw3o7Qlwzw36B 20-0-0 30-10-8 0-10-8

4-10-12

18-1-4

5-1-4

1-10-12

Scale = 1:53.3

30-0-0

2-10-14

27-1-2

7-1-2

Structural wood sheathing directly applied, except end verticals, and

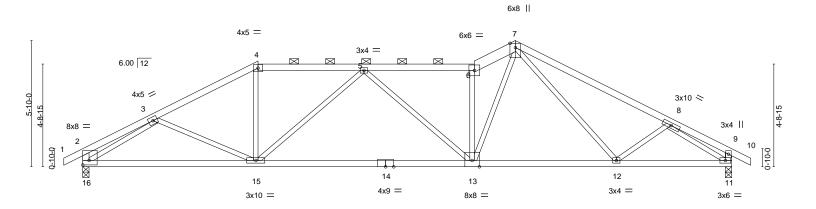


Plate Offsets (X,Y)	8-1-4 [2:Edge,0-2-8]	10-0-0	6-6-13	5-3-15
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	,	in (loc) I/defl L/d -0.23 13-15 >999 360 -0.51 13-15 >694 240 0.09 11 n/a n/a 0.11 13-15 >999 240	PLATES GRIP MT20 197/144  Weight: 116 lb FT = 10%

LUMBER-BRACING-

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

6-7: 2x6 SPF No.2 2-0-0 oc purlins (3-7-5 max.): 4-6. **BOT CHORD** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 9-7-15 oc bracing. 2x3 SPF No.2 \*Except\* **WEBS** 

REACTIONS. (size) 16=0-3-8, 11=0-3-8

-0-10-8 0-10-8

Max Horz 16=-94(LC 6)

2-16,9-11: 2x4 SPF No.2

Max Uplift 16=-236(LC 8), 11=-147(LC 9) Max Grav 16=1408(LC 1), 11=1408(LC 1)

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

4-8-13

TOP CHORD 2-3=-330/39, 3-4=-2043/330, 4-5=-1759/331, 5-6=-2155/322, 6-7=-2464/397,

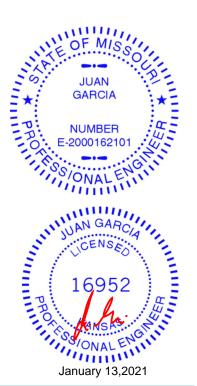
7-8=-2049/259, 2-16=-316/72

**BOT CHORD** 15-16=-356/1719, 13-15=-327/2196, 12-13=-145/1625, 11-12=-200/1766 WEBS 4-15=-13/561, 5-15=-589/168, 6-13=-1295/267, 7-13=-263/1613, 7-12=-71/250,

3-16=-1794/352, 8-11=-2008/317

### 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 16 and 147 lb uplift at joint 11.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





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

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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 80 W0 144330842 Hip 210213 A5 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:11 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-8Mwh6XiSBYUt7dLEKZxwFlhl9p6Oz5G3lSszlNzw36A 30-10-8 0-10-8 -0-10-8 0-10-8 15-0-0 19-10-12 24-6-6 30-0-0

4-10-12

4-7-10

4-10-12

Scale = 1:52.6

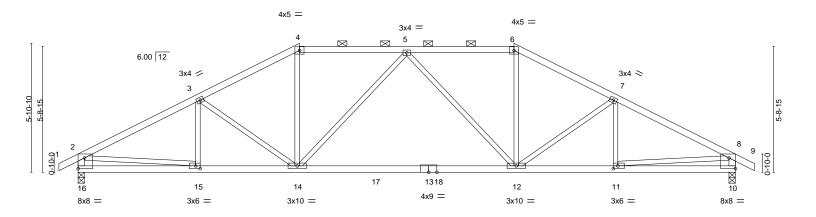
5-5-10

30-0-0

Structural wood sheathing directly applied or 3-8-4 oc purlins,

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

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



	-	5-5-10	4-7-10	-	9-9-8			4-7-10	5-5-10	
Plate Offs	sets (X,Y)	[10:Edge,0-5-13], [11:0-	2-8,0-1-8], [15:	0-2-8,0-1-8], [16:Edge,0	-5-13]					
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.29 12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.52 12-14	>686	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.05 10	n/a	n/a		
BCDL	10.0	Code IRC2018/7	PI2014	Matrix-S	Wind(LL)	0.06 12-14	>999	240	Weight: 116 lb	FT = 10%

TOP CHORD

**BOT CHORD** 

10-10-12

LUMBER-BRACING-

4-7-10

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

2-16,8-10: 2x4 SPF No.2

5-5-10

5-5-10

REACTIONS. (size) 16=0-3-8, 10=0-3-8 Max Horz 16=-93(LC 6)

Max Uplift 16=-149(LC 8), 10=-149(LC 9) Max Grav 16=1454(LC 2), 10=1454(LC 2)

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

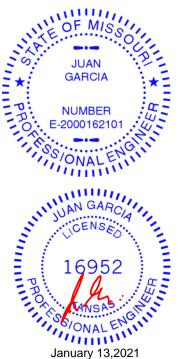
2-3=-2192/195, 3-4=-2007/165, 4-5=-1740/175, 5-6=-1740/175, 6-7=-2007/165, TOP CHORD

7-8=-2192/195, 2-16=-1338/181, 8-10=-1338/181

**BOT CHORD** 15-16=-152/480, 14-15=-175/1893, 12-14=-152/1899, 11-12=-99/1893, 10-11=-81/446 **WEBS** 4-14=0/620, 5-14=-400/152, 5-12=-400/152, 6-12=0/620, 2-15=-39/1456, 8-11=-39/1456

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 16 and 149 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 standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





Job Truss Truss Type Qty Lot 80 W0 144330843 210213 A6 Hip Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:12 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-cYU3Jsj4yrckInvQtHS9nWEshDRDiY2DW6cXqpzw369

17-10-12

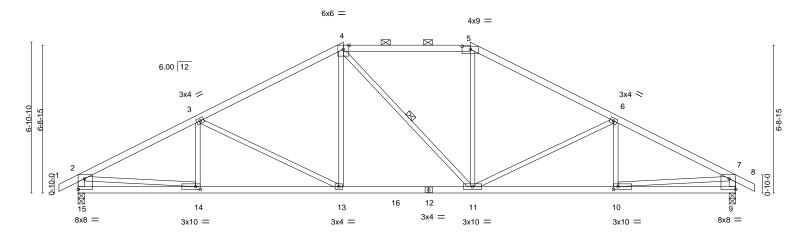
5-9-8

30-10-8 0-10-8 Scale = 1:52.6

30-0-0

5-5-10

6-7-11



		3-3-10	12-1	7		17-10-12		24-1	J-0	30-0-0	
	1	5-5-10	6-7-1	11	ı	5-9-8		6-7-	·11	5-5-10	l
Plate Offset	ts (X,Y)	[5:0-4-8,0-1-11], [9:Ed	dge,0-5-13], [10:0	-2-8,0-1-8], [14:0	-2-8,0-1-8],	[15:Edge,0-5-1	3]				
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOI	_ 1.15	TC 0.0	69	Vert(LL)	-0.12 13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.0	67	Vert(CT)	-0.23 13-14	>999	240		
BCLL	0.0 *	Rep Stress Inc	r YES	WB 0.	57	Horz(CT)	0.06 9	n/a	n/a		
BCDL	10.0	Code IRC2018	8/TPI2014	Matrix-S		Wind(LL)	0.06 13-14	>999	240	Weight: 117 lb	FT = 10%
						. ,				1	

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-BRACING-

6-7-11

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

2x4 SPF No.2

-0-10-8 0-10-8

5-5-10

2-15,7-9: 2x4 SPF No.2

Max Horz 15=106(LC 7)

5-5-10

(size) 9=0-3-8, 15=0-3-8

Max Uplift 9=-167(LC 9), 15=-167(LC 8) Max Grav 9=1449(LC 2), 15=1453(LC 2)

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

2-3=-2242/232, 3-4=-1851/188, 4-5=-1568/214, 5-6=-1842/188, 6-7=-2234/232, TOP CHORD

2-15=-1360/193, 7-9=-1356/193

**BOT CHORD** 14-15=-146/397, 13-14=-231/1946, 11-13=-55/1576, 10-11=-138/1939, 9-10=-59/346

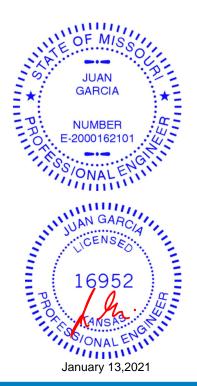
**WEBS** 3-13=-435/196, 4-13=-13/449, 5-11=-1/429, 6-11=-434/196, 2-14=-86/1609,

7-10=-80/1603

TOP CHORD

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 167 lb uplift at joint 9 and 167 lb uplift at
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 2-10-13 oc purlins,

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

4-11

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

1 Row at midpt

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Lot 80 W0 144330844 Hip 210213 Α7 | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:13 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:hquPfxpp0CdNHWhMuPizeLzNEki-4l2SWCjij9kbNxUdR\_zOKjm2TcpKRwFMllL4MFzw368

Structural wood sheathing directly applied or 3-4-13 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-10-1 max.): 4-5.

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

30-10-8 0-10-8 -0-10-8 0-10-8 15-10-12 22-6-6 30-0-0 7-5-10 6-7-10 1-9-8 6-7-10 7-5-10

Scale = 1:52.6

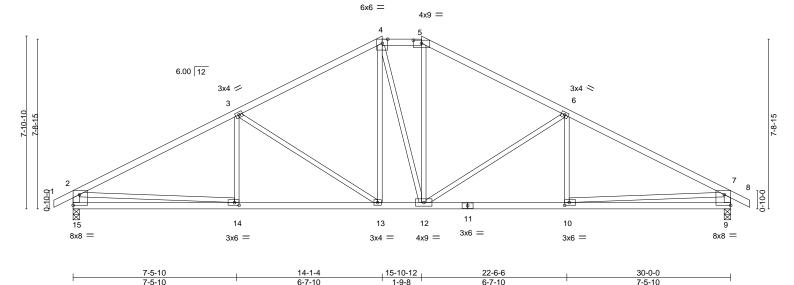


Plate Off	sets (X,Y)	[5:0-4-8,0-1-11], [9:Edge,	0-5-13], [10:0	)-2-8,0-1-8], [ <i>*</i>	14:0-2-8,0-1	-8], [15:Edge,0-5-1	3]			_	
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.10 13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.21 13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-S	Wind(LL)	0.07 13-14	>999	240	Weight: 124 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\*

2-15,7-9: 2x4 SPF 2100F 1.8E

REACTIONS. (size) 15=0-3-8, 9=0-3-8 Max Horz 15=-118(LC 6)

Max Uplift 15=-183(LC 8), 9=-183(LC 9) Max Grav 15=1408(LC 1), 9=1408(LC 1)

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

2-3=-2141/248, 3-4=-1604/216, 4-5=-1333/235, 5-6=-1606/216, 6-7=-2140/248, TOP CHORD

2-15=-1334/223, 7-9=-1334/223

**BOT CHORD** 14-15=-276/611, 13-14=-233/1812, 12-13=-53/1330, 10-12=-123/1811, 9-10=-173/613

**WEBS** 3-13=-598/214, 4-13=-69/398, 5-12=-64/397, 6-12=-595/214, 2-14=-1/1205,

7-10=-8/1202

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 15 and 183 lb uplift
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 13,2021



Job Truss Truss Type Qty Lot 80 W0 144330845 210213 **A8** Common 3 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:13 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-4l2SWCjij9kbNxUdR\_zOKjm3lcoqRvnMllL4MFzw368

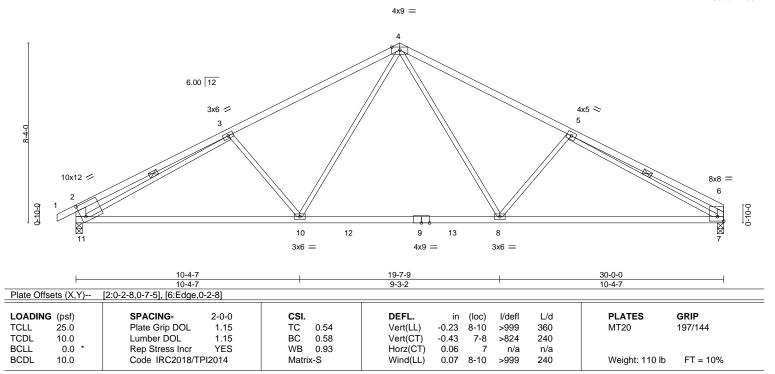
7-10-4

22-10-4

7-10-3

Scale = 1:53.4

30-0-0 7-1-12



LUMBER-

-0-10-8 0-10-8

7-1-13

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

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

2-11: 2x6 SPF No.2, 6-7: 2x4 SPF 2400F 2.0E

BRACING-

TOP CHORD

Structural wood sheathing directly applied or 4-6-15 oc purlins,

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 3-11, 5-7 **WEBS** 1 Row at midpt

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

Max Horz 11=129(LC 5)

Max Uplift 11=-190(LC 8), 7=-165(LC 9) Max Grav 11=1471(LC 2), 7=1405(LC 2)

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

2-3=-819/175, 3-4=-1987/281, 4-5=-2002/285, 5-6=-733/112, 2-11=-612/182, TOP CHORD

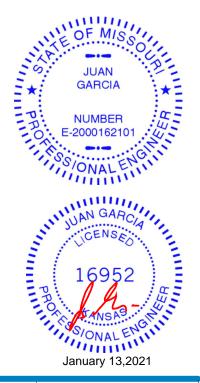
6-7=-474/122

10-11=-303/1869, 8-10=-65/1325, 7-8=-200/1896

**BOT CHORD WEBS** 4-8=-118/763, 5-8=-457/291, 4-10=-114/741, 3-10=-434/284, 3-11=-1413/126,

5-7=-1520/195

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 11 and 165 lb uplift
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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



Job Truss Truss Type Qty Ply Lot 80 W0 144330846 210213 В1 HALF HIP GIRDER 3 3 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:16 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

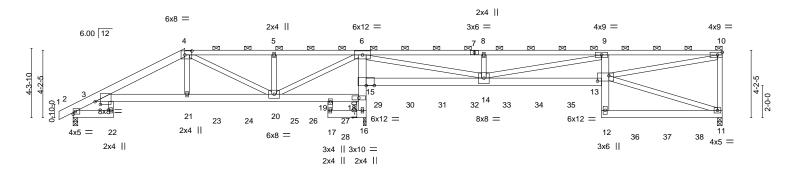
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

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

ID:hquPfxpp0CdNHWhMuPizeLzNEki-VKja9Emb046AEODC67X5yMOauqsQeKFpRjakzazw365 12-5-14 5-6-10 -0-10-8 2-6-0 0-10-8 2-6-0 25-6-4 7-3-12

Scale = 1:71.6



		18-2-8				
2-6-0	6-11-4 12-5-14	15-10-0 <sub> </sub> 18-1-8 <sub>  </sub>	25-6-4	32-10-0	40-4-0	
2-6-0	4-5-4 5-6-10	3-4-2 2-3-8 0-1-0	7-3-12	7-3-12	7-6-0	
Plate Offsets (X,Y)	[3:0-4-0,0-2-2], [4:0-5-4,0-3-0], [13:0-8	8,0-4-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in	(loc) I/defl L/d	PLATES GRIP	
TCLL 25.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.19 1	13-14 >999 360	MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.34	13-14 >787 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.69	Horz(CT) 0.12	11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.13	13-14 >999 240	Weight: 688 lb FT = 10%	6

**BOT CHORD** 

LUMBER-BRACING-TOP CHORD

2x4 SPF No.2 \*Except\* TOP CHORD 1-4: 2x6 SPF No.2

**BOT CHORD** 2x6 SP 2400F 2.0E \*Except\* 3-22,17-19: 2x4 SPF No.2

WEBS 2x4 SPF No.2

REACTIONS. 11=0-3-8, 2=0-3-8, 16=0-2-0 (req. 0-3-0) (size)

Max Horz 2=127(LC 5)

Max Uplift 11=-236(LC 4), 2=-181(LC 8), 16=-731(LC 5) Max Grav 11=2055(LC 1), 2=1305(LC 1), 16=5681(LC 1)

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

TOP CHORD 2-3=-769/114, 3-4=-2593/472, 4-5=-796/192, 5-6=-796/192, 6-8=-3723/470,

8-9=-3723/470, 9-10=-5159/635, 10-11=-1327/184

**BOT CHORD** 3-21=-478/2311, 20-21=-492/2385, 19-20=-3477/428, 18-19=-3703/455, 16-18=-5728/754,

15-18=-5439/729, 6-15=-4706/668, 14-15=-4448/545, 13-14=-778/6346, 12-13=-19/505,

9-13=-233/328, 11-12=-95/888

WEBS 4-21=-267/1428, 4-20=-1781/344, 5-20=-325/124, 6-20=-689/4803, 6-14=-1007/8405,

8-14=-479/142, 9-14=-2677/351, 11-13=-841/124, 10-13=-633/5186

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

4) Provide adequate drainage to prevent water ponding.

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

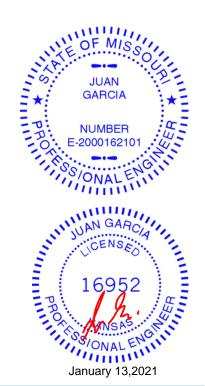
6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

7) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 11, 181 lb uplift at joint 2 and 731 lb uplift at joint 16.

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.



### Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Lot 80 W0	
040040	D4	LIALE LUD CIDDED				144330846
210213	B1	HALF HIP GIRDER	1	3	Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:16 2021 Page 2 ID:hquPfxpp0CdNHWhMuPizeLzNEki-VKja9Emb046AEODC67X5yMOauqsQeKFpRjakzazw365

### NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 929 lb down and 293 lb up at 6-11-4, 271 lb down and 50 lb up at 8-10-0, 271 lb down and 50 lb up at 10-10-0, 271 lb down and 50 lb up at 12-10-0, 271 lb down and 50 lb up at 14-10-0, 278 lb down and 49 lb up at 16-10-0, 278 lb down and 54 lb up at 18-10-0, 278 lb down and 54 lb up at 20-10-0, 278 lb down and 54 lb up at 22-10-0, 278 lb down and 54 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 lb up at 24-10-0, 278 lb down and 24 up at 26-10-0, 278 lb down and 54 lb up at 28-10-0, 278 lb down and 54 lb up at 30-10-0, 278 lb down and 54 lb up at 32-11-12, 278 lb down and 49 lb up at 34-10-0, and 278 lb down and 49 lb up at 36-10-0, and 278 lb down and 49 lb up at 38-10-0 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: 1-3=-70, 3-4=-70, 4-10=-70, 2-22=-20, 3-19=-20, 16-17=-20, 13-15=-20, 11-12=-20

Concentrated Loads (lb)

Vert: 21=-929(F) 13=-278(F) 23=-271(F) 24=-271(F) 25=-271(F) 26=-271(F) 27=-278(F) 29=-278(F) 30=-278(F) 31=-278(F) 32=-278(F) 32=-278(F) 34=-278(F) 34=-2 35=-278(F) 36=-278(F) 37=-278(F) 38=-278(F)

Job Truss Truss Type Qty Lot 80 W0 144330847 210213 B<sub>2</sub> HALF HIP | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:17 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

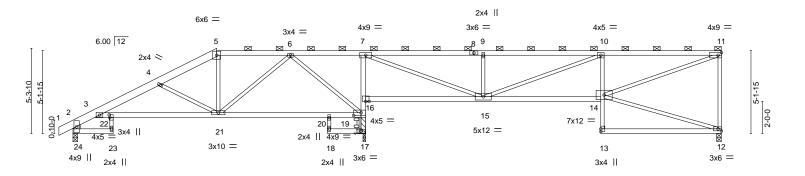
Structural wood sheathing directly applied or 4-10-3 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-11.

Rigid ceiling directly applied or 4-2-6 oc bracing

ID:hquPfxpp0CdNHWhMuPizeLzNEki-zWHyMamDnOE1rYoOgq2KUZxd5E8UNIGygNJHV0zw364 15-10-0 2-3-10 25-6-4 7-3-12 32-10-0 7-3-12 3-6-3

Scale = 1:71.7



			18-2-8	3			
2-6-0	8-11-4	15-10-	0 <sub> </sub> 18-1-8 <sub>  </sub>	25-6-4	32-10-0	40-4-0	
2-6-0	6-5-4	6-10-1	2 2-3-8 0-1-0	7-3-12	7-3-12	7-6-0	<u> </u>
Plate Offsets (X,Y)	[19:0-5-8,0-2-0], [22:0-2	-0,0-0-8]					
LOADING (psf) TCLL 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	<b>CSI.</b> TC 0.97	DEFL. Vert(LL)	( /		
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL Rep Stress Incr Code IRC2018/T	1.15 YES	BC 0.66 WB 0.83 Matrix-S	- ' '	-0.32 12-13 >839 2 0.17 17 n/a r	40 n/a	FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

2x4 SPF No.2 \*Except\* TOP CHORD 1-5: 2x6 SPF No.2

**BOT CHORD** 2x4 SPF No.2 \*Except\* 22-23,18-20,10-13: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\* 2-24: 2x6 SPF No.2

REACTIONS. (size) 12=0-3-8, 24=0-3-8, 17=(0-2-0 + bearing block) (req. 0-3-1)

Max Horz 24=211(LC 5)

Max Uplift 12=-181(LC 4), 24=-117(LC 8), 17=-395(LC 5) Max Grav 12=938(LC 22), 24=796(LC 1), 17=1953(LC 1)

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

TOP CHORD 2-3=-376/44, 3-4=-1360/214, 4-5=-939/112, 5-6=-780/123, 6-7=-198/325, 7-9=-1548/326, 9-10=-1548/326, 10-11=-1778/386, 11-12=-865/212, 2-24=-802/148

**BOT CHORD** 3-22=-167/1141, 21-22=-220/1234, 20-21=-72/396, 19-20=-34/361, 17-19=-1929/422,

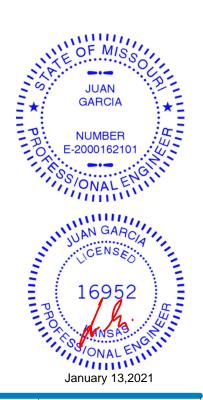
16-19=-1269/292, 7-16=-1189/328, 15-16=-386/119, 14-15=-380/1791, 10-14=-469/209

6-19=-948/248, 7-15=-405/2016, 9-15=-511/214, 10-15=-285/129, 11-14=-370/1873,

6-21=-58/507, 4-21=-518/214

WEBS

- 1) 2x4 SPF No.2 bearing block 12" long at jt. 17 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) 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) Bearing at joint(s) 17 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 181 lb uplift at joint 12, 117 lb uplift at joint 24 and 395 lb uplift at joint 17.
- 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 80 W0 144330848 210213 **B**3 HALF HIP | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:19 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-vvPjnGoTJ?VI5synoF4oZ\_0zN1oSrg\_F7hoOavzw362

26-10-0

8-7-8

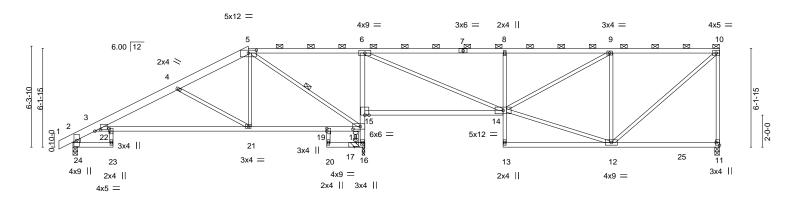
15-10-0 4-10-12

4-4-2

Scale = 1:71.9

40-4-0

6-9-0



		18-2-8			
2-6-0	10-11-4	15-10-0   18-1-8 <sub>  </sub>	26-10-0	33-7-0	40-4-0
2-6-0	8-5-4	4-10-12 2-3-8 0-1-0	8-7-8	6-9-0	6-9-0
Plate Offsets (X,Y)	[3:0-4-5,0-1-1], [5:0-6-0,0-2-3], [11:Edg	e,0-2-8], [18:0-5-8,0-2-0],	[19:0-2-0,0-0-0], [22:0-2-0,0-0-8	3]	
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc)	I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.98	Vert(LL) -0.25 21-22	>847 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.82	Vert(CT) -0.50 21-22	>425 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.75	Horz(CT) 0.20 16	s n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.14 21-22	>999 240	Weight: 170 lb FT = 10%

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-BRACING-

2x4 SPF No.2 \*Except\* TOP CHORD 1-5: 2x6 SPF No.2

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

22-23,19-20,8-13: 2x3 SPF No.2, 16-20: 2x4 SPF 2100F 1.8E

**WEBS** 2x3 SPF No.2 \*Except\* 2-24: 2x6 SPF No.2

REACTIONS. (size) 11=0-3-8, 24=0-3-8, 16=(0-2-0 + bearing block) (reg. 0-3-5)

Max Horz 24=253(LC 5)

Max Uplift 11=-197(LC 4), 24=-136(LC 8), 16=-380(LC 5) Max Grav 11=978(LC 24), 24=789(LC 2), 16=2093(LC 2)

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

TOP CHORD 2-3=-381/69, 3-4=-1141/254, 4-5=-686/139, 5-6=-122/368, 6-8=-1239/351, 8-9=-1212/351, 9-10=-797/232, 10-11=-870/233, 2-24=-767/173

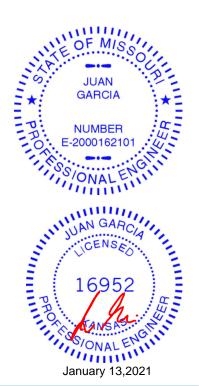
**BOT CHORD** 3-22=-177/1019, 21-22=-255/1033, 19-21=-102/550, 18-19=-90/479, 16-18=-2058/400,

15-18=-1389/332, 6-15=-1289/385, 14-15=-382/58, 8-14=-533/223

WEBS 4-21=-592/252, 5-21=-31/652, 5-18=-1101/154, 6-14=-327/1715, 12-14=-169/833,

9-14=-137/500, 10-12=-222/1047, 9-12=-749/265

- 1) 2x4 SPF 2100F 1.8E bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 11, 136 lb uplift at joint 24 and 380 lb uplift at joint 16.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-8-11 oc purlins,

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

5-18

Rigid ceiling directly applied or 4-0-0 oc bracing.

1 Row at midpt

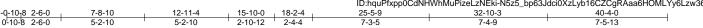






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Scale = 1:71.9



2x4 || 5x12 = 3x6 =3x6 =3x4 =4x5 = 5 9 10 6.00 12 4x5 / 7-1-15 9-18 20 19 2x4 24 25 13 26 23 2x4 || 3x4 =15 22 14 12 16 4x9 || 3x4 || 6x8 || 2x4 2x4 || 4x9 = 3x6 = 2x4 || 4x5 = 3x6 =

1 2-6-	7-8-10	12-11-4	15-10-0	18-2-4 <sub>1</sub>	25-5-9	1	32-10	)-3	40-4-0	1
2-6-	5-2-10	5-2-10	2-10-12	2-4-4	7-3-5		7-4-	.9	7-5-13	1
Plate Offsets (X,)	- [5:0-6-0,0-2-3], [6:0	-2-8,0-1-8], [11:Ed	lge,0-2-8], [12:0	)-2-8,0-1-8]						
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip D			0.75	Vert(LL)	-0.17 20-21	>999	360	MT20	197/144
					- ' '				IVITZU	197/144
TCDL 10.0	Lumber DOL		-	0.70	Vert(CT)	-0.31 20-21	>694	240		
BCLL 0.0	Rep Stress I	ncr YES	WB	0.81	Horz(CT)	0.08 11	n/a	n/a		
BCDL 10.0	Code IRC20	18/TPI2014	Matrix	-S	Wind(LL)	0.15 20-21	>999	240	Weight: 174 lb	FT = 10%

LUMBER-BRACING-

2x4 SPF No.2 \*Except\* TOP CHORD 1-5: 2x6 SPF No.2

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

2-23: 2x6 SPF No.2

TOP CHORD **BOT CHORD** 

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

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

**WEBS** 1 Row at midpt 10-11, 5-17, 6-15, 9-14

REACTIONS. (size) 11=0-3-8, 23=0-3-8, 15=0-3-8

Max Horz 23=294(LC 5)

Max Uplift 11=-205(LC 4), 23=-154(LC 8), 15=-373(LC 5) Max Grav 11=1064(LC 24), 23=861(LC 2), 15=2043(LC 2)

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

2-3=-473/58, 3-4=-1295/259, 4-5=-618/170, 6-8=-772/259, 8-9=-772/259, 9-10=-824/241, 10-11=-921/248, 2-23=-851/189

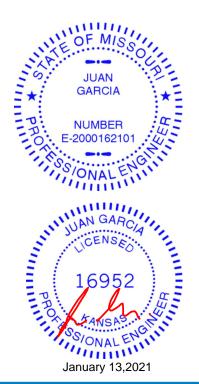
**BOT CHORD** 3-21=-270/1151, 20-21=-270/1151, 19-20=-270/1151, 18-19=-82/432, 17-18=-82/432,

12-14=-177/813

4-20=0/285, 4-19=-865/266, 5-19=-76/591, 5-17=-768/138, 15-17=-1741/444, 6-17=-1182/344, 6-14=-213/1089, 8-14=-502/211, 9-12=-523/243, 10-12=-225/1093

### 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 205 lb uplift at joint 11, 154 lb uplift at joint 23 and 373 lb uplift at joint 15.
- 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/TPL1
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





WEBS

NOTES-

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



Job Truss Truss Type Qty Lot 80 W0 144330850 210213 **B**5 Half Hip | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:21 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-rHWTCxpkqclSK969vg7GfP6N0rYGJZpYb?HVeozw360 32-10-3 40-4-0 -0-10-8 0-10-8

7-3-5

7-4-9

32-10-3

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

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-10.

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

1 Row at midpt

3-3-0

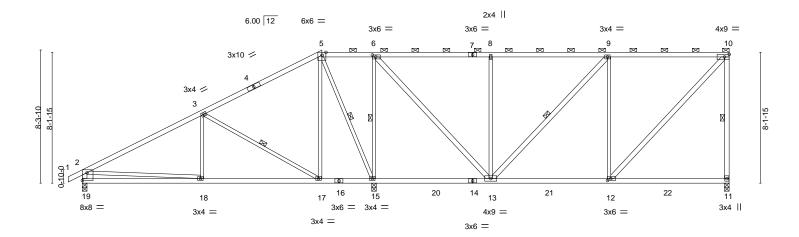
18-2-4

Scale = 1:71.8

7-5-13

40-4-0

10-11, 3-17, 5-15, 6-15, 9-13



		7-5-10	7-5-10	ı	3-3-0	7-3-5	l	7	'-4-9	7-5-13	ı
Plate Off	fsets (X,Y)	[6:0-2-8,0-1-8], [12:0-2-8	,0-1-8], [19:Ed	ge,0-5-13]							
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	0.71	Vert(LL)	-0.12 11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.20 11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.01 11	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-	·S	Wind(LL)	0.03 12-13	>999	240	Weight: 187 lb	FT = 10%
						` '					

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

REACTIONS.

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

10-11,6-13,9-13,10-12,2-19: 2x4 SPF No.2

(size) 11=0-3-8, 19=0-3-8, 15=0-3-8 (req. 0-3-9) Max Horz 19=334(LC 5)

7-5-10

7-5-10

7-5-10

14-11-4

Max Uplift 11=-186(LC 5), 19=-131(LC 8), 15=-309(LC 5) Max Grav 11=976(LC 24), 19=702(LC 1), 15=2287(LC 2)

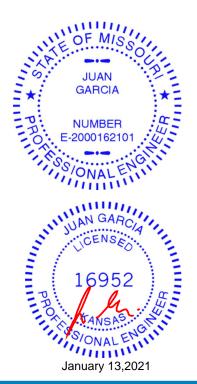
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-804/152, 5-6=-53/405, 6-8=-475/192, 8-9=-475/192, 9-10=-621/203, TOP CHORD

10-11=-827/220, 2-19=-636/170

**BOT CHORD** 18-19=-340/481, 17-18=-189/699, 13-15=-473/101, 12-13=-193/621 3-18=0/316, 3-17=-790/247, 5-17=-63/545, 5-15=-901/162, 6-15=-1206/310, **WEBS** 

6-13=-182/1215, 8-13=-518/215, 9-13=-253/16, 9-12=-437/238, 10-12=-182/885,

- 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) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 186 lb uplift at joint 11, 131 lb uplift at joint 19 and 309 lb uplift at joint 15.
- 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.



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



Job Truss Truss Type Qty Lot 80 W0 144330851 210213 C<sub>1</sub> Hip | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:22 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

-0-10<sub>7</sub>8 0-10-8

ID:hquPfxpp0CdNHWhMuPizeLzNEki-JU4rPHqMbwtJyJgLTNeVBdecUFwr2?xhpf12BEzw36? 28-8-12 40-4-0 5-10-12 5-10-12 5-5-11 6-1-8

Structural wood sheathing directly applied or 5-9-2 oc purlins,

6-16, 7-15, 8-15, 9-13

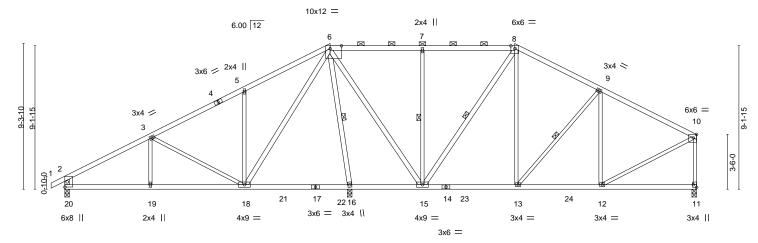
except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.

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

6-0-0 oc bracing: 16-18,15-16.

1 Row at midpt

Scale = 1:73.6



l	5-5-9	11-4-3	10-2-4	22-10-0	20-0-12	34-2-0	1 40-4-0	
	5-5-9	5-10-12	6-9-15	4-7-12	5-10-12	5-5-11	6-1-8	1
Plate Offsets (X,	Y) [6:0-8-10,Edg	je], [10:0-2-8,Edge], [11:	dge,0-2-8]					
LOADING (psf)	SPAC	ING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES G	RIP
TCLL 25.0	Plate 0	Grip DOL 1.15	TC 0.48	Vert(LL)	-0.08 16-18 >999	360	MT20 1	97/144
TCDL 10.0	Lumbe	r DOL 1.15	BC 0.40	Vert(CT)	-0.13 16-18 >999	240		
BCLL 0.0	* Rep S	tress Incr YES	WB 0.80	Horz(CT)	0.01 11 n/a	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S	Wind(LL)	0.04 18-19 >999	240	Weight: 188 lb	FT = 10%
				` ′				

22-10-0

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

6-18,6-16,6-15,8-15: 2x4 SPF No.2, 2-20: 2x4 SPF 2100F 1.8E

6-0-0

5-5-11

REACTIONS. (size) 20=0-3-8, 16=0-3-8 (req. 0-3-13), 11=0-3-8

Max Horz 20=217(LC 5)

Max Uplift 20=-124(LC 8), 16=-182(LC 8), 11=-132(LC 9) Max Grav 20=637(LC 21), 16=2441(LC 2), 11=919(LC 24)

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

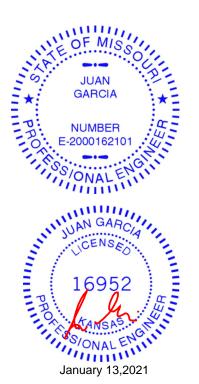
2-3=-732/147, 8-9=-651/200, 9-10=-811/136, 2-20=-566/153, 10-11=-834/160 19-20=-210/628, 18-19=-210/628, 16-18=-441/88, 15-16=-707/124, 13-15=-59/503, TOP CHORD **BOT CHORD** 

12-13=-99/666

3-18=-500/173, 5-18=-433/236, 6-18=-278/1005, 6-16=-2207/250, 6-15=-130/1330, WFBS

7-15=-476/200, 8-15=-665/68, 8-13=-38/492, 9-13=-315/138, 10-12=-78/728

- 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.
- \* 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) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 20, 182 lb uplift at joint 16 and 132 lb uplift at joint 11.
- 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.





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





Wheeler Lumber, Waverly, KS - 66871,

Structural wood sheathing directly applied, except end verticals, and

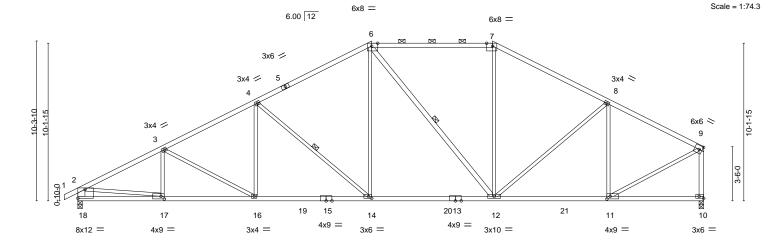
4-14, 6-12

2-0-0 oc purlins (4-4-14 max.): 6-7.

1 Row at midpt

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

ID:hquPfxpp0CdNHWhMuPizeLzNEki-ngeEddr\_ME?AZTFY159kkqBgMe6ynSUq2Jmcjgzw36\_ 40-4-0 -0-10<sub>7</sub>8 0-10-8 26-8-12 34-2-7 6-0-0 7-5-11 7-9-8 7-5-11 6-1-9



	5-5-9	12-8-5	18-11-4	26-8-12	34-2-7	40-4-0	
	5-5-9	7-2-13	6-2-15	7-9-8	7-5-11	6-1-9	
Plate Offsets (X	,Y) [6:0-4-10,Edge	e], [7:0-4-10,Edge], [10:Ed	lge,0-1-8], [11:0-2-8,0-2-0]	, [14:0-2-8,0-1-8], [17:0-2-8,0-2-	·0], [18:Edge,0-6-13]		
LOADING (psf	SPACII	<b>IG-</b> 2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP	
TCLL 25.0	Plate G	rip DOL 1.15	TC 0.92	Vert(LL) -0.25 12-14	>999 360	MT20 197/144	
TCDL 10.0	Lumber	DOL 1.15	BC 0.98	Vert(CT) -0.41 12-14	>999 240		
BCLL 0.0	* Rep Str	ess Incr YES	WB 0.78	Horz(CT) 0.11 10	n/a n/a		
BCDL 10.0	Code II	RC2018/TPI2014	Matrix-S	Wind(LL) 0.11 16	>999 240	Weight: 174 lb FT = 10%	

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-BRACING-

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

6-7: 2x4 SPF 2100F 1.8E

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

6-12,9-10: 2x4 SPF No.2, 2-18: 2x6 SPF No.2

REACTIONS. (size) 18=0-3-8, 10=0-3-8

Max Horz 18=230(LC 5)

Max Uplift 18=-240(LC 8), 10=-166(LC 9) Max Grav 18=1985(LC 2), 10=1936(LC 2)

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

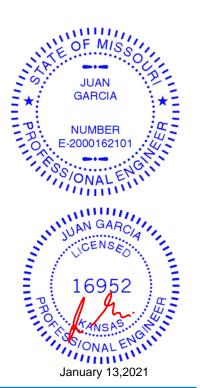
TOP CHORD 2-3=-3131/345, 3-4=-2943/345, 4-6=-2337/290, 6-7=-1788/248, 7-8=-2098/231,

8-9=-1909/176, 2-18=-1882/267, 9-10=-1847/194

**BOT CHORD** 17-18=-259/537, 16-17=-402/2729, 14-16=-293/2574, 12-14=-128/1998, 11-12=-139/1652 WEBS 4-16=0/367, 4-14=-761/264, 6-14=-76/834, 6-12=-458/130, 7-12=-18/475, 8-12=-69/319,

8-11=-680/147, 2-17=-143/2282, 9-11=-125/1844

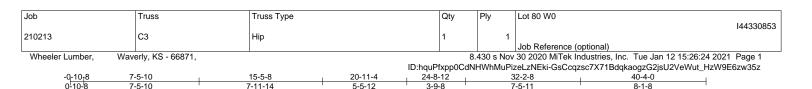
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 18 and 166 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 standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





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





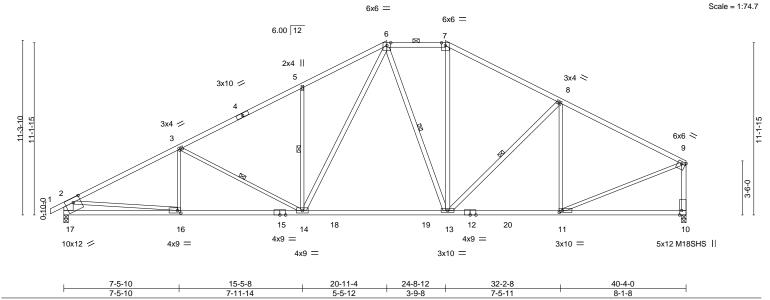


Plate Offsets (X,Y)	[9:Edge,0-1-12], [10:0-3-8,Edge], [11:0-	2-8,0-1-8], [16:0-2-8,0-2-0	0], [17:0-5-12,0-3-4]	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         YES	CSI. TC 0.89 BC 0.82 WB 0.84	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.34 13-14         >999         360           Vert(CT)         -0.55 13-14         >863         240           Horz(CT)         0.08         10         n/a         n/a	PLATES         GRIP           MT20         197/144           M18SHS         197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 14-16 >999 240	Weight: 188 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

7-9: 2x4 SPF 2100F 1.8E **BOT CHORD** 2x4 SPF No.2 \*Except\* 12-15: 2x4 SPF 2100F 1.8E

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

6-14,6-13,7-13,8-13,9-10: 2x4 SPF No.2, 2-17: 2x8 SP DSS

REACTIONS. (size) 17=0-3-8, 10=0-3-8

Max Horz 17=243(LC 5)

Max Uplift 17=-254(LC 8), 10=-184(LC 9) Max Grav 17=1970(LC 2), 10=1929(LC 2)

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

TOP CHORD 2-3=-3139/376, 3-5=-2640/334, 5-6=-2613/488, 6-7=-1720/276, 7-8=-2035/285,

8-9=-2091/213, 2-17=-1842/293, 9-10=-1799/225

**BOT CHORD** 16-17=-328/680, 14-16=-425/2722, 13-14=-86/1762, 11-13=-146/1790 WFBS

3-14=-553/225, 5-14=-497/283, 6-14=-312/1145, 6-13=-353/158, 7-13=-63/548,

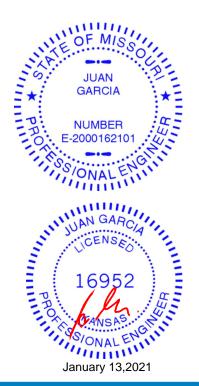
8-11=-497/142, 2-16=-97/2137, 9-11=-116/1861

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated

referenced standard ANSI/TPI 1.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 17 and 184 lb uplift at joint 10. 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

3-14, 5-14, 6-13, 8-13

2-0-0 oc purlins (4-4-6 max.): 6-7.

1 Row at midpt

Rigid ceiling directly applied or 9-0-2 oc bracing.



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



Job Truss Truss Type Qty Ply Lot 80 W0 144330854 210213 C4 Common 2 | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:25 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

-0<sub>-</sub>10<sub>-</sub>8 0-10-8

Structural wood sheathing directly applied, except end verticals.

3-16, 5-14, 7-14, 7-12

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

ID:hquPfxpp0CdNHWhMuPizeLzNEki-k2m\_2JtEurFupnPw8WBCpFG2YSoaFNm7WdFjmZzw35y 30-2-8 38-2-7 40-4-0 8-0-0 7-4-8 7-4-8 8-0-0 2-1-9

7-4-8

1 Row at midpt

Scale = 1:81.5

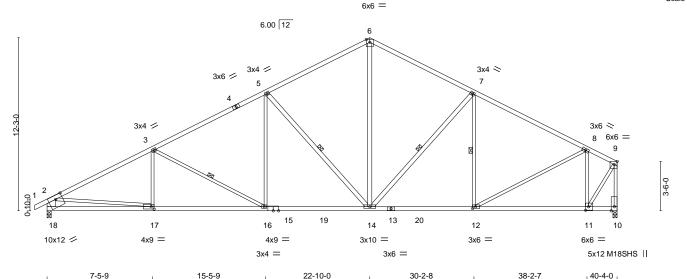


Plate Offsets (X,Y)	[9:0-2-8,Edge], [11:0-2-8,0-3-0], [12:0-2	-8,0-1-8], [17:0-2-8,0-2-0]	, [18:0-5-12,0-3-4]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.81	Vert(LL) -0.23 14-16 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.40 16-17 >999 240	M18SHS 197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.73	Horz(CT) 0.10 10 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 16-17 >999 240	Weight: 183 lb FT = 10%

BRACING-

**WEBS** 

TOP CHORD

**BOT CHORD** 

LUMBER-

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

5-14,6-14,7-14: 2x4 SPF No.2, 2-18: 2x8 SP DSS

REACTIONS. (size) 18=0-3-8, 10=0-3-8 Max Horz 18=256(LC 7)

Max Uplift 18=-264(LC 8), 10=-199(LC 9)

Max Grav 18=1968(LC 2), 10=1913(LC 2)

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

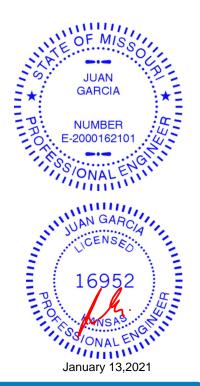
 $2\text{-}3\text{--}3137/391,\ 3\text{-}5\text{--}2624/361,\ 5\text{-}6\text{--}1912/318,\ 6\text{-}7\text{--}1912/347,\ 7\text{-}8\text{--}2137/255,}$ TOP CHORD 8-9=-1034/102, 2-18=-1844/302, 9-10=-1941/179

17-18=-357/696, 16-17=-455/2731, 14-16=-272/2264, 12-14=-134/1824, 11-12=-134/952

**BOT CHORD WEBS** 3-16=-548/207, 5-16=-5/576, 5-14=-986/307, 6-14=-153/1243, 7-14=-422/219,

7-12=-265/123, 8-12=-59/988, 8-11=-1299/271, 2-17=-98/2132, 9-11=-212/1792

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 264 lb uplift at joint 18 and 199 lb uplift
- 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 80 W0 144330855 210213 D1 Roof Special 2 Job Reference (optional)

5-6-11

Wheeler Lumber, Waverly, KS - 66871,

7-5-9

6-8-8

3-1-5

-0-10-8 0-10-8

2-11-11

5-6-11

31-4-6

1 Row at midpt

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:26 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-CFKMFftsf9NlQx\_7iDiRMTpBZsCg\_oQHkH?GJ?zw35x 28-4-11 31-4-6 40-4-0 22-10-0 36-2-7 4-10-0

35-8-15

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

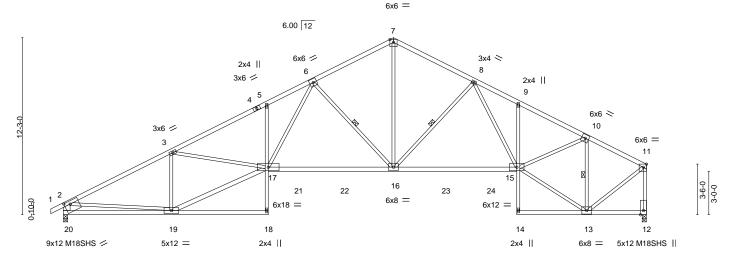
Structural wood sheathing directly applied, except end verticals.

6-16, 8-16, 10-13

4-1-9

40-4-0

Scale = 1:79.7



7-5-9 6-8-8 8-6-6 4-4-9 4-7-1 Plate Offsets (X,Y)--[11:0-2-8,Edge], [20:0-4-12,0-2-8] **PLATES GRIP** LOADING (psf) SPACING-CSI DEFL. in (loc) I/def L/d 197/144 TCLL 25.0 Plate Grip DOL 1.15 TC 0.92 Vert(LL) -0.45 16-17 >999 360 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.72 Vert(CT) -0.79 16-17 >605 240 M18SHS 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.83 Horz(CT) 0.35 12 n/a n/a Code IRC2018/TPI2014 Wind(LL) **BCDL** 10.0 0.22 16-17 >999 240 Weight: 183 lb FT = 10% Matrix-S

BRACING-

**WEBS** 

TOP CHORD

**BOT CHORD** 

22-10-0

LUMBER-

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

5-18,9-14: 2x3 SPF No.2, 15-17: 2x4 SPF 2100F 1.8E

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

17-19: 2x4 SPF No.2, 2-20: 2x6 SPF No.2

REACTIONS. (size) 20=0-3-8, 12=0-3-8

Max Horz 20=255(LC 5)

Max Uplift 20=-263(LC 8), 12=-199(LC 9) Max Grav 20=1956(LC 2), 12=1902(LC 2)

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

TOP CHORD 2-3=-3146/393, 3-5=-4364/596, 5-6=-4318/682, 6-7=-2489/346, 7-8=-2489/369,

8-9=-3226/421, 9-10=-3254/355, 10-11=-1549/167, 2-20=-1831/302, 11-12=-1844/214

**BOT CHORD** 19-20=-379/755, 5-17=-316/170, 16-17=-332/3033, 15-16=-154/2587

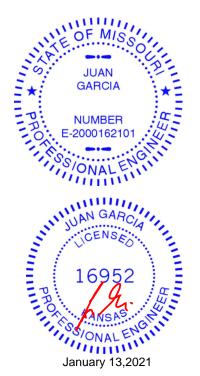
WEBS 3-19=-1193/309, 17-19=-496/2997, 3-17=-37/1116, 6-17=-330/1733, 6-16=-1297/371,

7-16=-198/1846, 8-16=-666/264, 8-15=-131/620, 13-15=-174/1599, 10-15=-79/1664,

10-13=-1755/264, 2-19=-77/2073, 11-13=-162/1715

### 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 263 lb uplift at joint 20 and 199 lb uplift at joint 12.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1





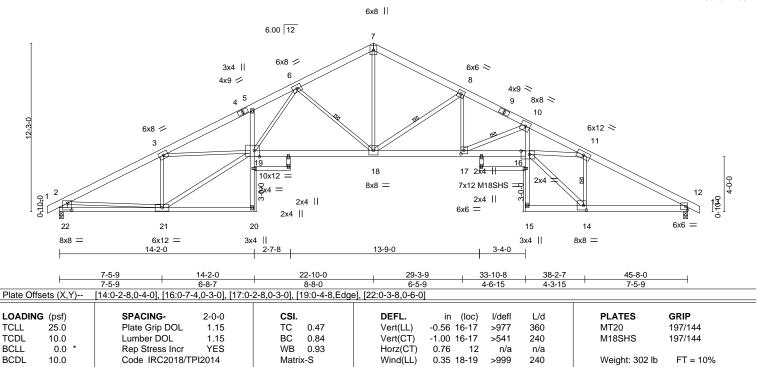
M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Lot 80 W0 144330856 210213 D2 Roof Special 3 1 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:27 2021 Page 1

ID:hquPfxpp0CdNHWhMuPizeLzNEki-gRukS?uVQSVc24ZJGwEgugLTNGW5jE8QzxkprRzw35w 33-10-8 45-8-0 46-6<sub>7</sub>8 0-10-8 22-10-0 29-3-9 38-2-7 -0<sub>-</sub>10<sub>-</sub>8 0-10-8 7-5-9 6-8-7 3-1-5 5-6-11 6-5-9 4-6-15 4-3-15 7-5-9

Scale = 1:83.7



BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

TOP CHORD 2x6 SP DSS

**BOT CHORD** 2x4 SPF No.2 \*Except\* 16-19: 2x6 SP 2400F 2.0E, 12-15: 2x6 SPF No.2

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

19-21,8-18,24-25,26-28,10-17: 2x4 SPF No.2

14-16,11-16: 2x4 SPF 2100F 1.8E, 2-22: 2x8 SP DSS

REACTIONS. (size) 22=0-3-8, 12=0-3-8

Max Horz 22=-201(LC 13)

Max Uplift 22=-280(LC 8), 12=-277(LC 9) Max Grav 22=2118(LC 1), 12=2106(LC 1)

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

TOP CHORD 2-3=-3490/424, 3-5=-6508/828, 5-6=-6384/900, 6-7=-3441/405, 7-8=-3465/426, 8-10=-5271/459, 10-11=-9182/787, 11-12=-3690/443, 2-22=-2044/318

21-22=-345/1103, 18-19=-442/4307, 17-18=-223/4714, 16-17=-465/8081,

10-16=-242/3203, 12-14=-285/3123

**WEBS** 3-21=-1857/401, 19-21=-556/3484, 3-19=-214/2714, 6-19=-429/2558, 6-18=-1750/421,

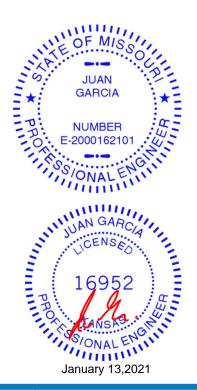
7-18=-245/2583, 8-18=-2089/363, 14-16=-391/4279, 11-16=-237/4973, 11-14=-2863/348,

2-21=-131/1901, 10-17=-3703/391, 8-17=-94/1522

### NOTES-

**BOT CHORD** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 280 lb uplift at joint 22 and 277 lb uplift at joint 12.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

6-18, 8-18, 11-14, 10-17

Rigid ceiling directly applied or 9-11-7 oc bracing

except end verticals.

1 Row at midpt

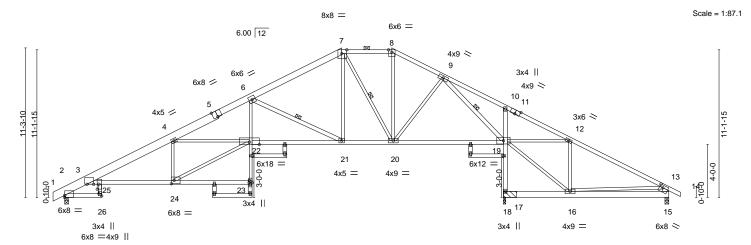
\Lambda WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Lot 80 W0 144330857 HIP 210213 D3 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:28 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:hquPfxpp0CdNHWhMuPizeLzNEki-8dS7gLv7BmdTgE8VpelvRuuaOfrwSgYaCbUNNuzw35v 46-6<sub>7</sub>8 0-10-8 -0<sub>7</sub>10<sub>7</sub>8 2-9-8 0-10-8 2-9-8 24-8-12 28-7-5 33-2-0 38-2-7 45-8-0 5-4-8 6-0-0 6-9-4 3-9-8 3-10-9 4-6-11 5-0-7 7-5-9



	200	, , ,		1720		20 11 -	2-7 0 12		00 2 0	I	00 2 1		10 0 0	
l	2-9-8	5-4-8	-	6-0-0	- 1	6-9-4	3-9-8	1	8-5-4	ı	5-0-7	1	7-5-9	
Plate Offsets (X,Y)	[2	2:0-0-0,0-1-14]	, [3:0-6-0,0	0-0-0], [5:0-4	4-0,Edge]	, [7:0-4-10,Edg	e], [11:0-4-8,E	Edge],	[15:0-3-0,0-2-4],	[23:0-1-8,0	-1-0], [23:E	dge,0-2-8],	[24:0-2-8,0-	3-0],
	[2	25:0-4-8,0-1-8]	, [26:Edge	,0-2-8]										

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	0.70	Vert(LL)	-0.28	23	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.54 2	21-22	>734	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.31	15	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-S	Wind(LL)	0.22	23	>999	240	Weight: 259 lb	FT = 10%	

**BOT CHORD** 

**WEBS** 

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

5-7: 2x6 SPF No.2, 1-5: 2x8 SP DSS

2x4 SPF No.2 \*Except\* **BOT CHORD** 25-26,6-23: 2x3 SPF No.2, 3-23: 2x4 SPF 2100F 1.8E

15-18: 2x6 SP DSS

WEBS 2x3 SPF No.2 \*Except\* 6-21,9-19,27-29,23-28,31-32,33-35: 2x4 SPF No.2

13-15: 2x6 SPF No.2

REACTIONS. (size) 2=0-3-8, 18=(0-2-0 + bearing block) (req. 0-3-13), 15=0-3-8

Max Horz 2=189(LC 8)

Max Uplift 2=-221(LC 8), 18=-162(LC 8), 15=-166(LC 9) Max Grav 2=1460(LC 1), 18=2425(LC 1), 15=459(LC 22)

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

TOP CHORD 2-3=-917/199, 3-4=-2844/425, 4-6=-3731/584, 6-7=-1642/244, 7-8=-1009/175,

8-9=-1187/184, 9-10=-163/1396, 10-12=-212/1428, 12-13=-300/307, 13-15=-399/208 3-25=-408/2382, 24-25=-468/2559, 6-22=-185/1492, 21-22=-444/3228, 20-21=-10/1388,

19-20=0/602, 18-19=-2395/182, 10-19=-345/165, 15-16=-195/459

4-24=-1152/313, 22-24=-521/2873, 4-22=0/661, 6-21=-2068/486, 7-21=-147/959, **WEBS** 

7-20=-830/191, 8-20=-48/270, 9-20=-44/744, 9-19=-2630/314, 16-19=-294/222,

12-19=-1179/213, 12-16=-11/369, 13-16=-446/129

### NOTES-

**BOT CHORD** 

- 1) 2x6 SP DSS bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 2, 162 lb uplift at joint 18 and 166 lb uplift at joint 15.
- 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



1111111

OF MIS

**GARCIA** 

Structural wood sheathing directly applied or 3-9-13 oc purlins,

except end verticals, and 2-0-0 oc purlins (5-8-15 max.): 7-8.

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

2-2-0 oc bracing: 21-22

3-8-1 oc bracing: 18-19

6-0-0 oc bracing: 16-18.

1 Row at midpt



16023 Swingley Ridge Rd Chesterfield, MO 63017

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

Job Truss Truss Type Qty Lot 80 W0 144330858 210213 D4 HIP | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:30 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:hquPfxpp0CdNHWhMuPizeLzNEki-40Zt50wNjNtBvYlux3nNWJzxDTb1weZsfvzUSmzw35t

Structural wood sheathing directly applied or 3-7-10 oc purlins,

6-20, 7-19

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

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

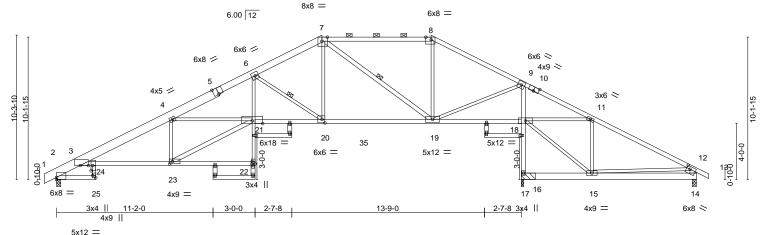
6-0-0 oc bracing: 18-19,15-17

3-8-11 oc bracing: 17-18.

1 Row at midpt

46-6<sub>7</sub>8 0-10-8 -0<sub>7</sub>10<sub>7</sub>8 2-9-8 0-10-8 2-9-8 14-2-0 33-2-0 38-2-7 45-8-0 5-4-8 6-0-0 4-9-4 7-9-8 6-5-4 5-0-7 7-5-9

Scale = 1:82.2



5-4-8 6-0-0 4-9-4 7-9-8 6-5-4 5-0-7 Plate Offsets (X,Y)-[2:0-0-0,0-1-14], [3:0-7-0,0-0-0], [5:0-4-0,Edge], [7:0-4-10,Edge], [8:0-4-10,Edge], [10:0-4-8,Edge], [14:0-3-0,0-2-4], [20:0-2-8,0-3-0], [22:0-1-8,0-1-0], [22:Edge,0-2-8], [23:0-2-8,0-2-0], [24:0-4-8,0-1-8], [25:Edge,0-2-8]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.28	22	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.49	22	>805	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.28	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-S	Wind(LL)	0.20	21	>999	240	Weight: 251 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WFBS

26-8-12

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

5-7: 2x6 SPF No.2, 7-8: 2x4 SPF 2100F 1.8E, 1-5: 2x8 SP DSS 2x4 SPF No.2 \*Except\*

**BOT CHORD** 24-25,6-22: 2x3 SPF No.2, 3-22,18-21: 2x4 SPF 2100F 1.8E

14-17: 2x6 SP DSS 2x3 SPF No.2 \*Except\*

2-9-8

WEBS 21-23,7-19,26-28,22-27,30-31,32-34: 2x4 SPF No.2

12-14: 2x6 SPF No.2

REACTIONS. (size) 2=0-3-8, 17=(0-2-0 + bearing block) (req. 0-3-13), 14=0-3-8

Max Horz 2=172(LC 8)

Max Uplift 2=-218(LC 8), 17=-114(LC 8), 14=-169(LC 9) Max Grav 2=1541(LC 2), 17=2428(LC 2), 14=496(LC 22)

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

TOP CHORD 2-3=-947/178, 3-4=-3046/421, 4-6=-3959/534, 6-7=-2203/283, 7-8=-1060/153,

8-9=-1271/124, 9-11=-143/1183, 11-12=-367/210, 12-14=-434/212

**BOT CHORD** 3-24=-391/2600, 23-24=-447/2772, 6-21=-199/1652, 20-21=-376/3413, 19-20=-80/1974,

18-19=-964/245, 17-18=-2371/134, 9-18=-2199/229, 14-15=-201/482 4-23=-1197/304, 21-23=-503/3105, 4-21=-8/678, 6-20=-1776/389, 7-20=-128/1215,

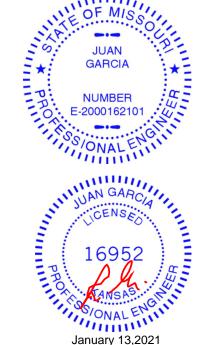
7-19=-1184/201, 9-19=-152/2186, 15-18=-169/292, 11-18=-1079/181, 11-15=-22/343,

12-15=-369/119

### NOTES-

WEBS

- 1) 2x6 SP DSS bearing block 12" long at jt. 17 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 218 lb uplift at joint 2, 114 lb uplift at joint 17 and 169 lb uplift at joint 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



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



Job Truss Truss Type Qty Lot 80 W0 144330859 210213 D5 HIP | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:32 2021 Page 1

6-0-0

Wheeler Lumber, Waverly, KS - 66871,

ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-1PhdWiydF?7v9sRG2Uprbk3F1HDVOUa97DSaWfzw35r 30-6-8 33-2-0 1-9-12 2-7-8 28-8-12

Structural wood sheathing directly applied or 3-7-0 oc purlins,

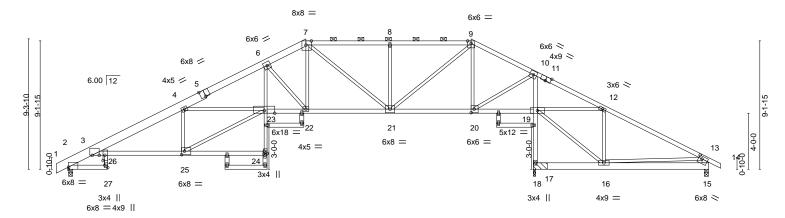
except end verticals, and 2-0-0 oc purlins (3-11-10 max.): 7-9.

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

3-8-6 oc bracing: 18-19

6-0-0 oc bracing: 16-18.

Scale = 1:82.2



22-11-4 6-0-0 14-2-0 6-0-0 2-7-8 0-1-12 Plate Offsets (X,Y)-[2:0-0-0,0-1-14], [3:0-6-0,0-0-0], [5:0-4-0,Edge], [7:0-4-10,Edge], [11:0-4-8,Edge], [15:0-3-0,0-2-4], [20:0-2-8,0-3-0], [24:0-1-8,0-1-0], [24:Edge,0-2-8], [25:0-2-8,0-3-0], [26:0-4-8,0-1-8], [27:Edge,0-2-8]

16-11-4

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.:	28 23	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.89	Vert(CT) -0.	51 24	>785	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.98	Horz(CT) 0.	28 15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.	20 23	>999	240	Weight: 245 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

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

1-5: 2x8 SP DSS, 5-7: 2x6 SPF No.2

2x4 SPF No.2 \*Except\*

**BOT CHORD** 26-27,6-24: 2x3 SPF No.2, 3-24: 2x4 SPF 2100F 1.8E

15-18: 2x6 SP DSS

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

29-30,31-32,34-36,24-35: 2x4 SPF No.2, 13-15: 2x6 SPF No.2

REACTIONS. (size) 2=0-3-8, 18=(0-2-0 + bearing block) (req. 0-3-13), 15=0-3-8

Max Horz 2=154(LC 8)

Max Uplift 2=-207(LC 8), 18=-88(LC 8), 15=-177(LC 9) Max Grav 2=1460(LC 1), 18=2427(LC 1), 15=431(LC 22)

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

2-3=-916/159, 3-4=-2844/388, 4-6=-3666/452, 6-7=-2430/307, 7-8=-1750/262, TOP CHORD 8-9=-1752/263, 9-10=-735/176, 10-12=-137/1519, 12-13=-245/331, 13-15=-371/219

3-26=-345/2383, 25-26=-398/2560, 6-23=-189/1512, 22-23=-284/3134, 21-22=-165/2201,

**BOT CHORD** 20-21=-7/607, 19-20=-1287/247, 18-19=-2396/109, 10-19=-2391/192, 15-16=-200/446

4-25=-1149/280, 23-25=-448/2863, 6-22=-1460/306, 7-21=-597/148, 8-21=-492/199,

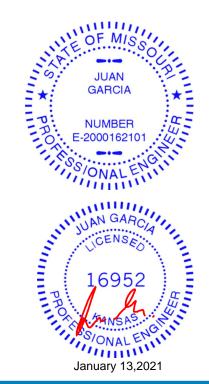
9-21=-199/1523, 9-20=-985/153, 10-20=-179/2185, 16-19=-330/157, 12-19=-1256/175,

12-16=-3/396, 13-16=-448/107, 7-22=-160/1076, 4-23=-39/583

### NOTES-

WEBS

- 1) 2x6 SP DSS bearing block 12" long at jt. 18 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 2, 88 lb uplift at joint 18 and 177 lb uplift at joint 15.
- 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.



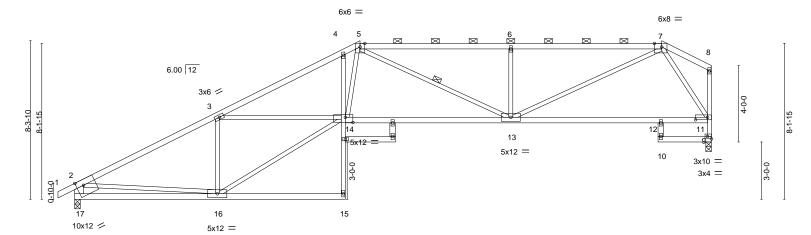
M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Lot 80 W0 144330860 210213 D6 Hip Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:33 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-VbF0j2zF0IFlm?0TcBK48xbPhgdG7zkJLtB825zw35q 33-4-0 2-7-4 14-2-0 6-8-7 22-10-0 1-10-4 6-0-8

Scale = 1:60.3



		7-5-9	14	4-2-0	16-9-8		-10-0	1	30-6-8	30-8 <sub>Γ</sub> 12 33-	
	I .	7-5-9	6	5-8-7	2-7-8	ا 6	-0-8	1	7-8-8	0-2-4 2-7	7-4
Plate Offs	ets (X,Y)	[7:0-4-10,Edge], [9:Edge	,0-1-8], [11:0-7	'-8,0-1-8], [14:0-4	-12,0-3-4], [	17:0-4-6,Edge	]				
			•								
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 0.8	80	Vert(LL)	-0.27 13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.6	60	Vert(CT)	-0.55 13-14	>716	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.8	6	Horz(CT)	0.28 9	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-S		Wind(LL)	0.20 13-14	>999	240	Weight: 141 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

**BOT CHORD** 2x4 SPF No.2 \*Except\* 4-15: 2x3 SPF No.2, 11-14: 2x4 SPF 2100F 1.8E

**WEBS** 2x3 SPF No.2 \*Except\* 19-20,10-12: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

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

Max Horz 17=255(LC 5)

Max Uplift 17=-192(LC 8), 9=-186(LC 5) Max Grav 17=1564(LC 1), 9=1484(LC 1)

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

TOP CHORD 2-3=-2404/257, 3-4=-3900/530, 4-5=-3615/519, 5-6=-2890/448, 6-7=-2892/450,

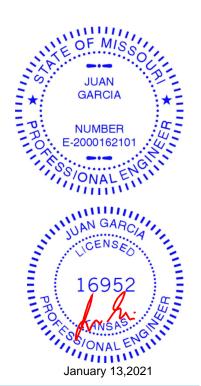
2-17=-1491/231, 9-11=-1451/205

**BOT CHORD** 16-17=-369/614, 4-14=-72/416, 13-14=-534/3152, 12-13=-201/887, 11-12=-201/887 3-16=-1213/295, 14-16=-388/2378, 3-14=-255/1346, 5-14=-279/1097, 5-13=-338/197, WFBS

6-13=-651/265, 7-13=-332/2250, 2-16=0/1436, 7-11=-1566/337

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 17 and 186 lb uplift at joint 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

except end verticals, and 2-0-0 oc purlins (3-8-5 max.): 5-7.

5-13

Rigid ceiling directly applied or 9-7-8 oc bracing.

1 Row at midpt

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



Job Truss Truss Type Qty Lot 80 W0 144330861 210213 D7 Roof Special | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:34 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

Structural wood sheathing directly applied or 3-2-3 oc purlins,

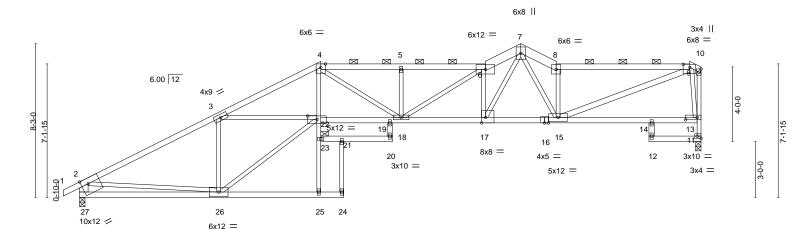
Rigid ceiling directly applied or 9-0-9 oc bracing.

1 Brace at Jt(s): 23

except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-6, 8-9.

ID:hquPfxpp0CdNHWhMuPizeLzNEki-znpOxO\_umcNcO9bfAusJg98aJ4y5sPwSaXxhbXzw35p 16-9-8 17-3<sub>7</sub>0 2-7-8 0-5-8 23-8-0 25-6-12 1-10-12 1-10-12 30-6-8 32-8-12 33-4-0 2-2-4 0-7-4 21-9-4 -0-10-8 0-10-8 7-5-9 5-5-11 1-2-12 4-6-4 4-11-12

Scale = 1:61.8



	1	7-5-9	5-5	5-11	1-2-12	2-7-8	0-5-8 4-	6-4	1	3-9-8	1	4-11-12	2-9-8	1
Plate Offse	ets (X,Y)	[9:0-4-4,0-2-0], [11:Edge,0	0-1-8], [13:0-7	7-8,0-1-8], [1 <sup>-</sup>	7:0-2-8,	Edge], [2	2:0-6-0,0-2-4],	[27:0-4	6,Edge	]				
LOADING	(psf)	SPACING-	2-0-0	CSI.			DEFL.	in	(loc)	l/defl	L/d	PLATES	3	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80		Vert(LL)	-0.41	18	>959	360	MT20		197/144
ΓCDL	10.0	Lumber DOL	1.15	BC	0.69		Vert(CT)	-0.74	17-18	>532	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.93		Horz(CT)	0.40	11	n/a	n/a			
BCDL	10.0	Code IRC2018/TP	I2014	Matri	x-S		Wind(LL)	0.32	18	>999	240	Weight:	155 lb	FT = 10%
												_		

BRACING-

TOP CHORD

**BOT CHORD** 

**JOINTS** 

16-9-8 17-3-0

LUMBER-

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

4-6,9-10: 2x4 SPF No.2, 6-7,7-8: 2x6 SPF No.2

**BOT CHORD** 2x4 SPF No.2 \*Except\* 16-22: 2x4 SPF 2100F 1.8E

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

19-20,12-14,9-15: 2x4 SPF No.2, 2-27: 2x6 SPF No.2

REACTIONS. (size) 27=0-3-8, 11=0-3-8

Max Horz 27=256(LC 5)

Max Uplift 27=-257(LC 8), 11=-154(LC 8) Max Grav 27=1564(LC 1), 11=1484(LC 1)

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

TOP CHORD 2-3=-2396/382, 3-4=-4787/889, 4-5=-4284/781, 5-6=-4281/780, 6-7=-4373/741,

7-8=-3485/498, 8-9=-3051/425, 2-27=-1490/299, 11-13=-1452/170, 10-13=-166/253

**BOT CHORD** 26-27=-380/654, 19-22=-760/4160, 18-19=-759/4157, 17-18=-564/3845, 15-17=-340/2681,

14-15=-86/318, 13-14=-86/318

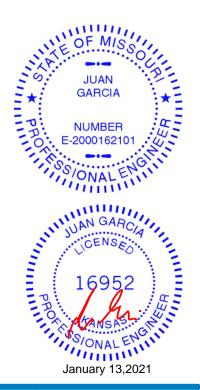
WEBS 3-26=-1543/428, 3-22=-325/2180, 4-22=-305/1744, 6-18=-184/643, 6-17=-2316/500,

7-17=-525/2706, 7-15=-141/939, 8-15=-1868/289, 9-15=-396/2963, 2-26=-64/1384,

9-13=-1670/348, 5-18=-430/156, 22-26=-559/2560

### 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 257 lb uplift at joint 27 and 154 lb uplift at joint 11.
- 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.



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



Job Truss Truss Type Qty Ply Lot 80 W0 144330862 210213 E1 Roof Special | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:35 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-R\_Nm8k\_WXwWT0JArkcNYDMhmVUKzbwAbpBgE7\_zw35o

13-10-4

4-0-4

16-8-8

2-10-4

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

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

6-0-0 oc bracing: 14-15,6-7.

except end verticals, and 2-0-0 oc purlins (3-0-14 max.): 1-2, 4-5.

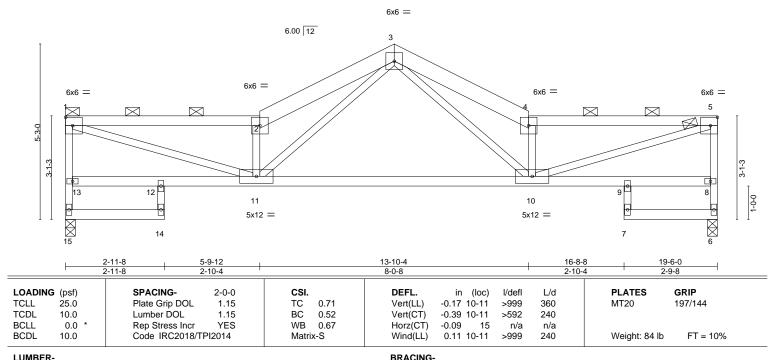
9-10-0

4-0-4

Scale = 1:34.5

19-6-0

2-9-8



TOP CHORD

BOT CHORD

LUMBER-

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

2-11-8

2-10-4

2x4 SPF No.2 \*Except\* **BOT CHORD** 12-14,7-9: 2x3 SPF No.2

2x3 SPF No.2

WEBS

REACTIONS. (size) 15=0-3-8, 6=0-3-8

Max Horz 6=133(LC 5)

Max Uplift 15=-120(LC 8), 6=-119(LC 9) Max Grav 15=868(LC 1), 6=868(LC 1)

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

13-15=-835/137, 1-13=-812/140, 1-2=-1954/200, 2-3=-2332/302, 3-4=-2289/254, TOP CHORD

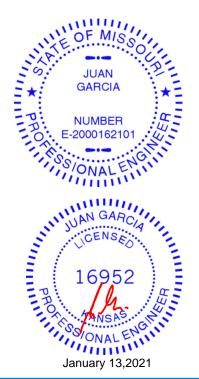
4-5=-1918/159, 6-8=-837/126, 5-8=-814/128

**BOT CHORD** 10-11=-128/1088

1-11=-196/1961, 2-11=-1345/278, 3-11=-174/1289, 3-10=-141/1237, 4-10=-1318/255, **WEBS** 

5-10=-164/1933

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 15 and 119 lb uplift at joint 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.





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



Job Truss Truss Type Qty Ply Lot 80 W0 144330863 210213 E2 Roof Special | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:36 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-vAw8L4?8IDeKdTl2HJunlaDz7uZoKlSl1qQofQzw35n

Structural wood sheathing directly applied or 5-7-6 oc purlins,

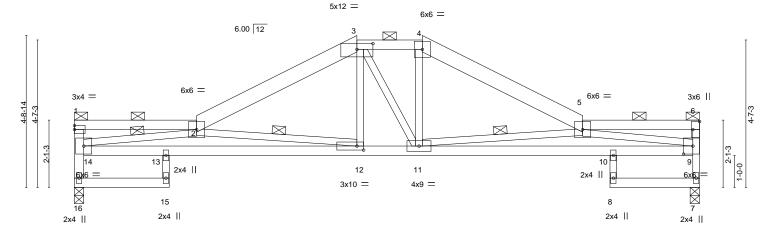
Rigid ceiling directly applied or 2-2-0 oc bracing.

except end verticals, and 2-0-0 oc purlins (5-0-15 max.): 1-2, 3-4,

2-14, 2-12, 5-11

19-6-0 10-10-4 15-10-4 16-8-8 2-11-8 0-10-4 5-0-0 2-0-8 5-0-0 0-10-4 2-9-8

Scale = 1:35.9



		2-11-8	8-9-12	10-10-4	16-8-8	19-6-0
		2-11-8	5-10-4	2-0-8	5-10-4	2-9-8
Plate Offs	sets (X,Y)	[3:0-6-0,0-2-3], [6:Edge,0-2-8],	[9:0-3-8,0-3-0], [12:0-2-8,0-1-8]			
LOADING	G (psf)	SPACING- 2-0	-0 <b>CSI</b> .	<b>DEFL.</b> i	n (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.1	15 TC 0.59	Vert(LL) -0.2	1 12 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.1	15 BC 0.93	Vert(CT) -0.4	1 12-13 >570 240	
BCLL	0.0 *	Rep Stress Incr YE	S WB 0.99	Horz(CT) -0.25	5 16 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	4 Matrix-S	Wind(LL) 0.14	4 12 >999 240	Weight: 86 lb FT = 10%

**BOT CHORD** 

**WEBS** 

5-6.

1 Row at midpt

LUMBER-BRACING-

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

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

13-15,8-10: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\* 1-16: 2x4 SPF No.2

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

Max Horz 7=101(LC 7)

Max Uplift 16=-106(LC 8), 7=-105(LC 9) Max Grav 16=866(LC 1), 7=866(LC 1)

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

TOP CHORD 14-16=-826/135, 1-2=-393/0, 2-3=-1470/113, 3-4=-1283/130, 4-5=-1471/106,

5-6=-300/0, 7-9=-832/125

**BOT CHORD** 13-14=-380/2898, 12-13=-416/2915, 11-12=-65/1282, 10-11=-386/2838, 9-10=-373/2819 WFBS

2-14=-2712/485, 2-12=-1665/356, 3-12=0/359, 4-11=-10/359, 5-11=-1586/352,

5-9=-2700/462

### 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 16 and 105 lb uplift at joint 7.
- 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/TPL1
- 8) 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 80 W0 144330864 210213 E3 Hip | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:36 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871,

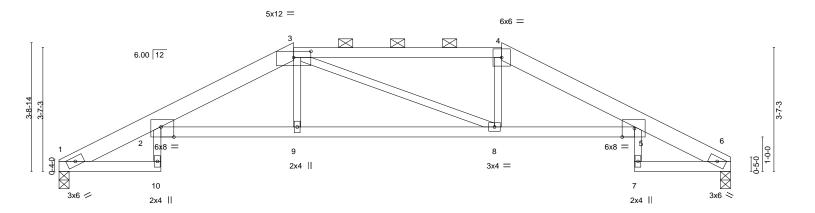
ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-vAw8L4?8IDeKdTl2HJunlaDwVuaxKV6l1qQofQzw35n 16-8-8 19-6-0 6-0-8 3-10-4 2-9-8

Structural wood sheathing directly applied or 2-11-15 oc purlins,

2-0-0 oc purlins (3-11-5 max.): 3-4.

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

Scale = 1:33.5



H	2-11-		3-9-12 3-10-4	-		6-0-8		-+		3-10-4	2-9	6-0
Plate Off		[2:0-4-8,Edge], [3:0-6-0,0		1.Edgel		0-0-8				3-10-4	2-3	5-0
- 1010 011	(71,17	[2.0 : 0,2 ago], [0.0 0 0,0	, <u> </u>	,,_ugoj								
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	0.82	Vert(LL)	-0.37	2-9	>623	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.67	2-9	>346	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.61	1	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	<-S	Wind(LL)	0.22	5-8	>999	240	Weight: 74 lb	FT = 10%

**BOT CHORD** 

LUMBER-BRACING-

3-10-4

2x6 SP DSS \*Except\* TOP CHORD TOP CHORD

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

2-11-8

2-10,5-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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

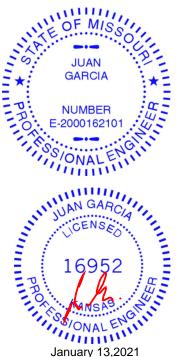
Max Horz 6=59(LC 12)

Max Uplift 1=-84(LC 8), 6=-82(LC 9) Max Grav 1=864(LC 1), 6=864(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-397/61, 2-3=-1769/126, 3-4=-1706/152, 4-5=-1755/139, 5-6=-417/80

**BOT CHORD** 2-9=-69/1731, 8-9=-62/1728, 5-8=-119/1710

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 1 and 82 lb uplift at
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



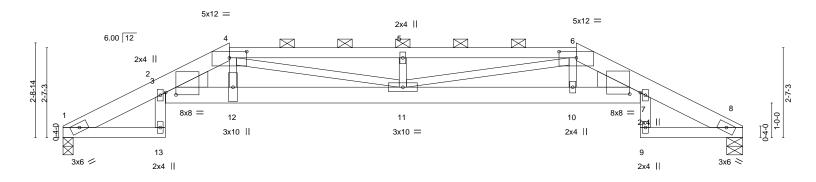


Job Truss Truss Type Qty Lot 80 W0 144330865 210213 E4 Hip Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 13 09:00:57 2021 Page 1 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-TV7D6g3qC?6GI?1w5SglnYombnWN\_S0DtV8oWDzvpfK Wheeler Lumber, Waverly, KS 66871, Mitek

2-11-8 4-9-12 9-10-0 14-10-4 16-8-8 19-8-0 2-11-8 1-10-4 5-0-4 5-0-4 1-10-4 2-11-8

0-10-8 Scale = 1:33.3

20-6-8



2-11-i 2-11-i		9-10-0 5-0-4	+	14-10-4 5-0-4		16-8-8 1-10-4	19-8-0 2-11-8	
Plate Offsets (X,Y)	[3:0-3-9,0-0-13], [4:0-6-0,0-	2-3], [6:0-6-0,0-2-3], [7:0-3-10	0-0-9]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI2	2-0-0 CSI. 1.15 TC 0.8 1.15 BC 0.6 YES WB 0.2 2014 Matrix-S	Vert(CT)	in (loc) -0.40 11 -0.72 11 -0.51 1 0.27 11	I/defl L/d >572 360 >319 240 n/a n/a >849 240	M	<b>LATES GRIP</b> 197/144 //eight: 83 lb FT = 10%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP DSS \*Except\*

4-6: 2x4 SPF No.2

2x4 SPF No.2 \*Except\* BOT CHORD 3-7: 2x6 SPF 1650F 1.4E

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

2-13,7-9: 2x4 SPF No.2

WEDGE

Left: 2x6 SPF No.2 , Right: 2x6 SPF No.2

REACTIONS. (lb/size) 1=865/0-3-8, 8=865/0-5-8

Max Horz 8=-41(LC 9)

Max Uplift 1=-82(LC 5), 8=-82(LC 4)

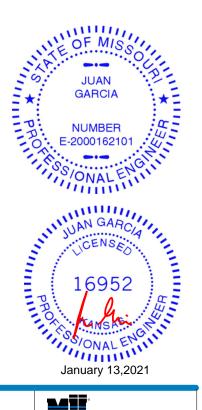
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-384/61, 2-3=-54/532, 3-4=-2770/331, 4-5=-3255/446, 5-6=-3255/446,

6-7=-2649/343, 7-8=-401/68

**BOT CHORD** 3-12=-272/2657, 11-12=-273/2705, 10-11=-326/2684, 7-10=-329/2650 WFBS 4-12=-12/568, 4-11=-165/697, 5-11=-351/156, 6-11=-168/715

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 1 and 82 lb uplift at joint 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 2-8-10 oc purlins, except

2-0-0 oc purlins (2-8-9 max.): 4-6.

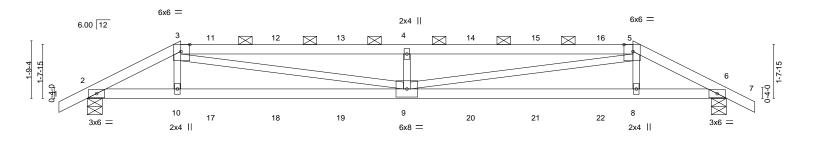
Rigid ceiling directly applied or 10-0-0 oc bracing.





Job	Truss	Truss Type	Qty	Ply	Lot 80 W0		
							I44330866
210213	E5	Hip Girder	1	1			
					Job Reference (optional)		
Wheeler Lumber, Wav	erly, KS - 66871,		8.	430 s Nov	30 2020 MiTek Industries, Inc.	Tue Jan 12 15:26:39 20	)21 Page 1
		ID	D:S4Lb8sMbVpj5	5wlhAHAV	VMgzIIWk-JlcH_510b80vUwUdz	SRUNCrOA5exXjqBkoe	eSGlzw35k
<sub>[</sub> -0-10-8] 2-1	0-8	9-10-0		16	6-9-8	19-8-0	20-6-8
0-10-8 2-1	0-8	6-11-8		6-	11-8	2-10-8	0-10-8

Scale = 1:35.5



<del> </del>	2-10-8 2-10-8	9-10-0 6-11-8	16-9-8 6-11-8	19-8-0 2-10-8
Plate Offsets (X,Y)	[3:0-3-5,Edge], [5:0-3-5,Edge]		33	2.00
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.99 BC 0.71 WB 0.76 Matrix-S	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.28         9 >825         360           Vert(CT)         -0.51         9 >454         240           Horz(CT)         0.06         6 n/a n/a         n/a           Wind(LL)         0.28         9 >833         240	PLATES         GRIP           MT20         197/144           Weight: 62 lb         FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER- BRACING-

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

3-5: 2x4 SPF 2100F 1.8E

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

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

Max Horz 2=-31(LC 9) Max Uplift 2=-272(LC 8), 6=-272(LC 9)

Max Grav 2=1080(LC 1), 6=1080(LC 1)

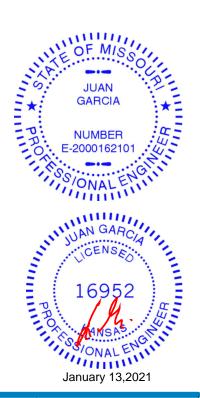
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2113/579, 3-4=-3976/1113, 4-5=-3976/1113, 5-6=-2113/579
BOT CHORD 2-10=-508/1854, 9-10=-513/1842, 8-9=-500/1842, 6-8=-494/1854
WEBS 3-10=0/299, 3-9=-596/2194, 4-9=-712/340, 5-9=-596/2194, 5-8=0/299

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 272 lb uplift at joint 2 and 272 lb uplift at joint 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 76 lb down and 137 lb up at 2-10-8, 66 lb down and 49 lb up at 3-10-0, 66 lb down and 49 lb up at 5-10-0, 98 lb down and 72 lb up at 7-10-0, 98 lb down and 72 lb up at 9-10-0, 98 lb down and 72 lb up at 11-10-0, 66 lb down and 49 lb up at 13-10-0, and 66 lb down and 49 lb up at 15-10-0, and 76 lb down and 137 lb up at 16-9-8 on top chord, and 21 lb down at 2-10-8, 14 lb down at 3-10-0, 14 lb down at 5-10-0, 13 lb down at 19-10-0, 13 lb down at 11-10-0, 14 lb down at 13-10-0, and 14 lb down at 15-10-0, and 16-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



Structural wood sheathing directly applied or 3-9-13 oc purlins,

2-0-0 oc purlins (2-8-14 max.): 3-5.

Rigid ceiling directly applied or 8-1-2 oc bracing.

Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	Lot 80 W0
210213	   E	Hip Girder	1	1	144330866
210213	[23	Inp Girder	'	'	Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:39 2021 Page 2 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-JlcH\_510b80vUwUdzSRUNCrOA5exXjqBkoeSGlzw35k

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 3=-4(B) 5=-4(B) 10=-6(B) 9=-5(B) 4=-68(B) 8=-6(B) 11=-4(B) 12=-4(B) 13=-68(B) 14=-68(B) 15=-4(B) 15=-4(B) 17=-6(B) 18=-6(B) 19=-5(B) 20=-5(B) 21=-6(B)

22=-6(B)



Job Truss Truss Type Qty Lot 80 W0 144330867 210213 G1 Half Hip | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:39 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-JlcH\_510b80vUwUdzSRUNCrQQ5hnXltBkoeSGlzw35k <del>-0-10-8</del> <del>0-10-8</del> 3-5-3 3-5-3 7-6-1 Scale = 1:36.9 6x6 = 2x4 || 4 5 6.00 12 6-1-15 6-1-15 2x4 > 3 7 9 10 10x12 🖊 6 3x4 =3x6 = 6-10-4 6-10-4 Plate Offsets (X,Y)--[8:0-2-7,0-4-14] SPACING-LOADING (psf) 2-0-0 CSI. in (loc) I/defI L/d **PLATES** GRIP TCLL 25.0 Plate Grip DOL 1.15 TC 0.85 Vert(LL) -0.15 6-7 >999 360 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.53 Vert(CT) -0.25 6-7 >665 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.63 Horz(CT) 0.01 6 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Wind(LL) 6-7 >999 240 Weight: 55 lb Matrix-S 0.06 BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

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

Max Horz 8=252(LC 5)

Max Uplift 6=-103(LC 5), 8=-111(LC 8) Max Grav 6=671(LC 2), 8=721(LC 2)

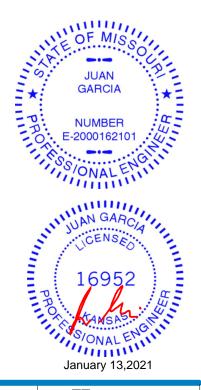
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-943/200, 3-4=-724/105, 2-8=-628/137 TOP CHORD

**BOT CHORD** 7-8=-247/796, 6-7=-108/288

**WEBS** 3-7=-340/253, 4-7=-35/503, 4-6=-566/146

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 6 and 111 lb uplift at
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

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



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

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



Job Truss Truss Type Qty Lot 80 W0 144330868 210213 G2 Half Hip | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:40 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-oxAfBR2eMS8m642pW9yjwQOdHV\_mGA3LySO?oBzw35j <del>-0-10-8</del> <del>0-10-8</del> 5-3-3 3-3-3 8-11-4 12-1-8 14-3-8 2-0-0 3-8-1 3-2-4 2-2-0 Scale: 3/8"=1 6x6 = 2x4 || 6.00 12 2x4 < 4 5-1-15 5-1-15 10 12 3x6 || 11 2x4 || 3x4 =13 8 7 2x4 || 2x4 || 2x4 || 3x10 || 2-0-0 12-1-8 14-3-8 2-0-0 Plate Offsets (X,Y)--[12:0-3-0,0-0-8] GRIP LOADING (psf) SPACING-2-0-0 CSI DEFL. in (loc) I/defI L/d **PLATES** TCLL 25.0 Plate Grip DOL 1.15 TC 0.71 Vert(LL) -0.16 11-12 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.73 Vert(CT) -0.37 11-12 >455 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.76 Horz(CT) 0.17 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Wind(LL) 0.17 11-12 >999 240 Weight: 55 lb Matrix-S BRACING-TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins,

**BOT CHORD** 

LUMBER-

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

12-13,8-10: 2x3 SPF No.2

WEBS 2x3 SPF No.2

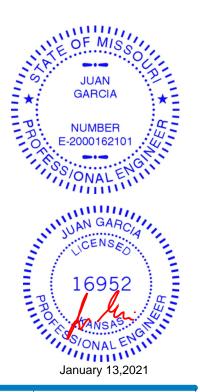
REACTIONS. (size) 7=0-5-8, 14=0-3-8 Max Horz 14=209(LC 5)

Max Uplift 7=-109(LC 5), 14=-107(LC 8) Max Grav 7=631(LC 1), 14=705(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-404/47, 3-4=-1103/199, 4-5=-733/105, 7-9=-610/121, 2-14=-707/138 TOP CHORD 3-12=-133/843, 11-12=-228/985, 10-11=-139/585, 9-10=-151/584 **BOT CHORD** 

**WEBS** 5-11=-28/443, 5-9=-714/103, 4-11=-445/201

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 7 and 107 lb uplift at
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

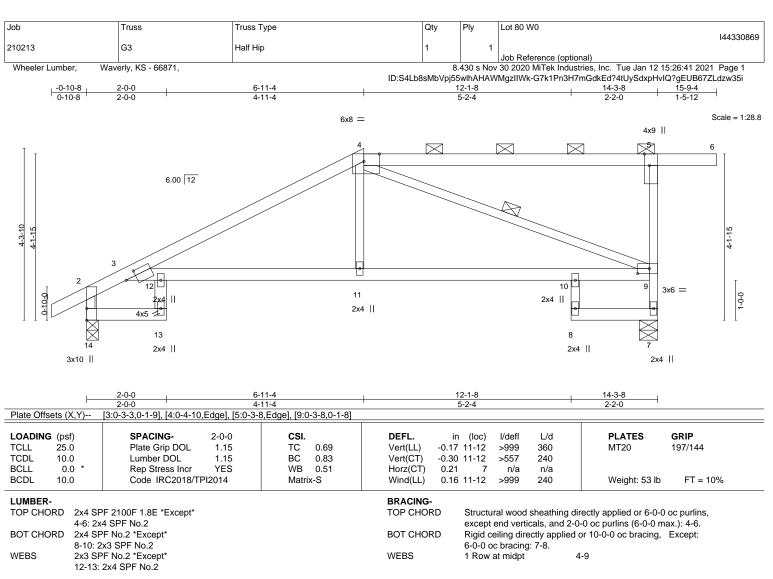


\Lambda WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

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

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





REACTIONS. (size) 7=0-5-8, 14=0-3-8

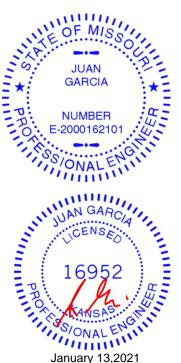
Max Horz 14=168(LC 5)

Max Uplift 7=-185(LC 5), 14=-97(LC 8) Max Grav 7=748(LC 1), 14=703(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD  $2-3=-303/36,\ 3-4=-1023/93,\ 7-9=-722/199,\ 5-9=-372/172,\ 2-14=-714/126$ 3-12=-176/879, 11-12=-176/879, 10-11=-179/871, 9-10=-183/882 **BOT CHORD** 

WEBS 4-11=0/348, 4-9=-866/140

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 7 and 97 lb uplift at
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





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

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



Job Truss Truss Type Qty Ply Lot 80 W0 144330870 210213 G4 Half Hip Girder | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:42 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-kKIPc74vu3OULOCBea?B?rTyXJibk7ddQmt6t4zw35h 14-3-8

4-7-10

2-6-10

Structural wood sheathing directly applied or 4-8-9 oc purlins,

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

5-9

O

**GARCIA** 

NUMBER

E-2000162101

ONALE

January 13,2021

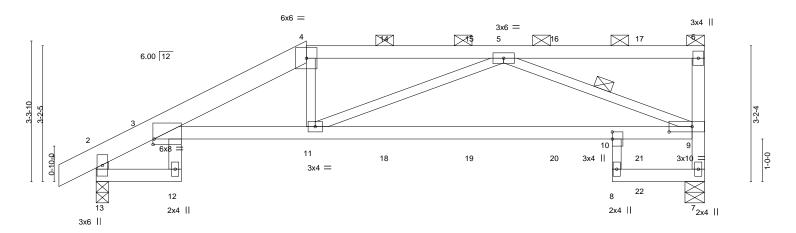
January 13,2021

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

1 Row at midpt

Scale = 1:27.1

2-2-0



L	2-0-0 4-11-4		12-1-8	14-3-8
	2-0-0 2-11-4	l	7-2-4	2-2-0
Plate Offsets (X,Y)-	[3:0-0-5,0-1-8], [9:0-6-8,0-1-8], [10:0-2-	0,0-0-0]		
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 0.79	Vert(LL) -0.17 10-11 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.37 10-11 >450 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.50	Horz(CT) 0.19 7 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.08 12 >999 240	Weight: 59 lb FT = 10%
			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	· ·

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

TOP CHORD 2x6 SP DSS \*Except\* 4-6: 2x4 SPF No.2

0-10-8

2-0-0

2-11-4

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

3-9: 2x4 SPF 2100F 1.8E, 8-10: 2x3 SPF No.2 2x4 SPF No.2 \*Except\*

**WEBS** 4-11,5-9,5-11: 2x3 SPF No.2

REACTIONS. (size) 7=0-5-8, 13=0-3-8

Max Horz 13=129(LC 5)

Max Uplift 7=-158(LC 5), 13=-173(LC 8) Max Grav 7=1095(LC 1), 13=1123(LC 1)

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

TOP CHORD 2-3=-450/81, 3-4=-2424/318, 4-5=-2250/324, 7-9=-1035/186, 2-13=-1116/189

**BOT CHORD** 3-11=-375/2225, 10-11=-399/1869, 9-10=-363/1949

4-11=0/473, 5-9=-1794/450, 5-11=-4/463 **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 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 158 lb uplift at joint 7 and 173 lb uplift at
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 95 lb down and 49 lb up at 4-11-4, 103 lb down and 49 lb up at 6-10-0, 103 lb down and 49 lb up at 8-10-0, and 103 lb down and 49 lb up at 10-10-0, and 102 lb down and 61 lb up at 12-10-0 on top chord, and 332 lb down and 117 lb up at 4-11-4, 46 lb down at 6-10-0, 46 lb down at 8-10-0, and 46 lb down at 10-10-0, and 51 lb down at 12-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

# Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Lot 80 W0	٦
					144330870	)
210213	G4	Half Hip Girder	1	1		
					Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:42 2021 Page 2 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-kKIPc74vu3OULOCBea?B?rTyXJibk7ddQmt6t4zw35h

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

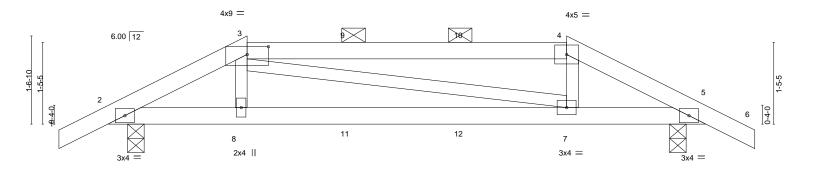
Vert: 1-2=-70, 2-4=-70, 4-6=-70, 12-13=-20, 3-10=-20, 7-8=-20

Concentrated Loads (lb)

Vert: 4=-72(B) 11=-332(B) 14=-72(B) 15=-72(B) 16=-72(B) 17=-81(B) 18=-46(B) 19=-46(B) 20=-46(B) 21=-36(B)

Job	Truss	Truss Type	Qty	Ply	Lot 80 W0			
							144330871	1
210213	H1	Hip Girder	1	1				
					Job Reference	e (optional)		
Wheeler Lumber, Wa	averly, KS - 66871,		8.	430 s Nov	30 2020 MiTe	k Industries, Inc. Tue Jan 12 15:26:4	l3 2021 Page 1	
		ID:hquPfxpp	0CdNHWI	nMuPizeLz	NEki-CWsnpT	5XfNWLzYnOCHWQY20Bxi5eTgbne	eQcgPWzw35g	
ı -0-10-8 ı	2-5-4	8-0-12				10-6-0	11-4-8	
0-10-8	2-5-4	5-7-8				2-5-4	0-10-8	

Scale = 1:20.3



0-4 0-4			8-0-12 5-7-8			-	10-2-0 2-1-4	10-6-0 0-4-0
	[3:0-4-8,0-1-11]		<u> </u>					
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.56 BC 0.34 WB 0.07 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.04 7-8 -0.08 7-8 0.01 5 0.02 7-8	l/defl >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 33 lb	<b>GRIP</b> 197/144 FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8 Max Horz 2=-28(LC 13)

Max Uplift 2=-139(LC 8), 5=-139(LC 9) Max Grav 2=535(LC 1), 5=535(LC 1)

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

2-3=-912/232, 3-4=-760/224, 4-5=-890/226 TOP CHORD **BOT CHORD** 2-8=-202/794, 7-8=-208/786, 5-7=-185/768

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 139 lb uplift at joint 2 and 139 lb uplift at joint 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 111 lb down and 121 lb up at 2-5-4, 60 lb down and 41 lb up at 4-3-0, and 60 lb down and 41 lb up at 6-3-0, and 111 lb down and 121 lb up at 8-0-12 on top chord, and 10 lb down at 2-5-4, 10 lb down at 4-3-0, and 10 lb down at 6-3-0, and 10 lb down at 8-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

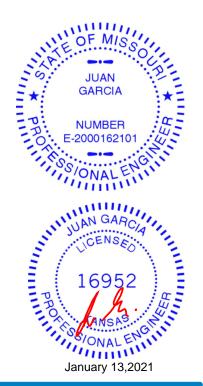
### LOAD CASE(S) Standard

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

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

Concentrated Loads (lb)

Vert: 8=-2(B) 7=-2(B) 11=-2(B) 12=-2(B)





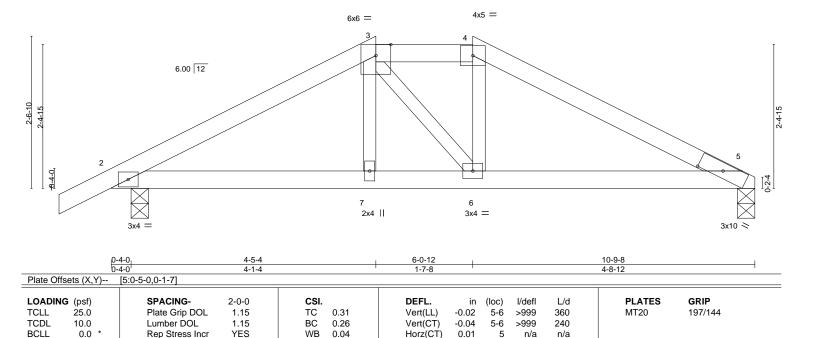
Structural wood sheathing directly applied or 6-0-0 oc purlins, except

2-0-0 oc purlins (5-7-3 max.): 3-4.

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

Job Truss Truss Type Qty Lot 80 W0 144330872 Hip 210213 H2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:44 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-giPA1p59QheCbiMal?1f4GYQY6S4C8Dwt4MDxyzw35f 6-0-12 10-9-8 0-10-8 4-5-4 1-7-8 4-8-12

Scale = 1:19.3



Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

0.01

>999

5-6

240

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

2-0-0 oc purlins (6-0-0 max.): 3-4.

LUMBER-

**BCDL** 

2x4 SPF No.2 TOP CHORD

10.0

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

REACTIONS. (size) 5=0-3-8, 2=0-3-8 Max Horz 2=53(LC 8)

Max Uplift 5=-54(LC 9), 2=-77(LC 8) Max Grav 5=469(LC 1), 2=547(LC 1)

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

Code IRC2018/TPI2014

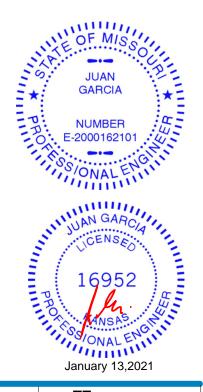
2-3=-716/54, 3-4=-599/91, 4-5=-732/60 TOP CHORD **BOT CHORD** 2-7=-30/576, 6-7=-31/573, 5-6=-5/601

#### NOTES-

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

Matrix-S

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 5 and 77 lb uplift at joint 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



FT = 10%

Weight: 32 lb

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

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

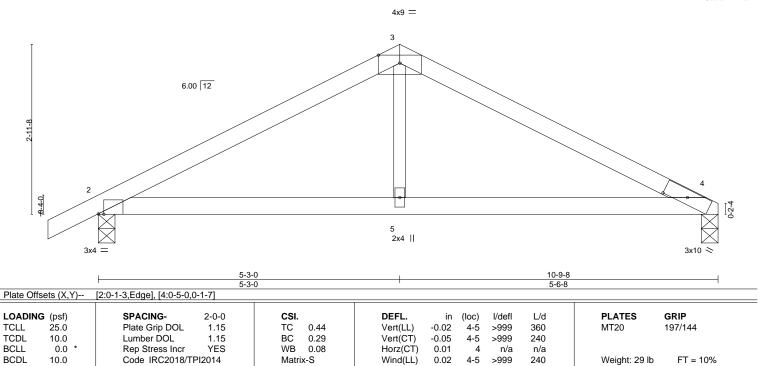
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 80 W0 144330873 210213 **H3** Common 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:44 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-giPA1p59QheCbiMal?1f4GYOT6SgC7fwt4MDxyzw35f 5-3-0 5-3-0 0-10-8 5-6-8

Scale = 1:20.1



BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEBS 2x3 SPF No.2

REACTIONS. (size) 4=0-3-8, 2=0-3-8 Max Horz 2=61(LC 8)

Max Uplift 4=-60(LC 9), 2=-83(LC 8) Max Grav 4=469(LC 1), 2=547(LC 1)

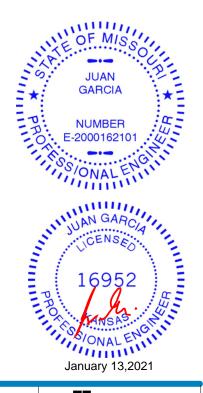
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-682/81, 3-4=-674/74 TOP CHORD **BOT CHORD** 2-5=-25/535, 4-5=-25/535

WFBS 3-5=0/255

#### 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 4 and 83 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



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

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



Job Truss Truss Type Qty Lot 80 W0 144330874 210213 H4 Roof Special Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Jan 13 09:01:12 2021 Page 1 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-XOXuFoEEgc?8clhpU5SGuiwlcqeO?FqQKKG5Yrzvpf5 Wheeler Lumber, Waverly, KS 66871, Mitek -0-10-8 2-3-8 5-3-0 8-6-0 10-9-8 0-10-8 2-3-8 2-11-8 3-3-0 2-3-8 Scale = 1:19.5 4x9 = 6.00 12 5 4x9 🗢 6x6 = 2x4 || 2x4 || £-4-0 2x4 || 2x4 || 3x10 > 2-3-8 5-3-0 8-6-0 10-9-8 3-3-0 2-3-8 2-3-8 2-11-8 [2:0-2-15,0-1-8], [3:0-1-2,0-1-8], [5:0-3-12,0-2-0], [6:0-5-0,0-1-7] Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP in (loc) I/defl

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

-0.25

-0.44

0.43

0.16

5-8

5-8

3-8

6

>501

>284

>772

n/a

360

240

n/a

240

Structural wood sheathing directly applied.

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

LUMBER-

TCLL

TCDL

**BCLL** 

**BCDL** 

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

4-6: 2x4 SPF 2400F 2.0E

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

3-9,5-7: 2x3 SPF No.2, 3-5: 2x6 SPF No.2

**WEBS** 2x3 SPF No.2

25.0

10.0

10.0

0.0

REACTIONS. (lb/size) 6=462/0-3-8, 2=542/0-3-8

Max Horz 2=61(LC 12)

Max Uplift 6=-64(LC 9), 2=-86(LC 8)

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

TOP CHORD 2-3=-281/72, 3-4=-1075/103, 4-5=-1075/118, 5-6=-260/49

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

**BOT CHORD** 3-8=-57/961, 5-8=-58/966

**WEBS** 4-8=-18/512

- 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

TC

BC

WB

Matrix-S

0.97

0.67

0.18

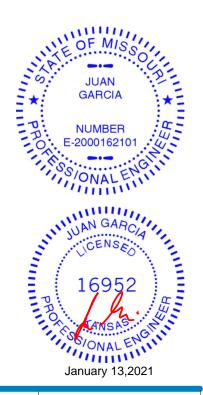
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1 15

1.15

YES

- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 6 and 86 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



197/144

FT = 10%

MT20

Weight: 33 lb

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

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Job Truss Truss Type Qty Ply Lot 80 W0 144330875 210213 J1 Diagonal Hip Girder Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:46 2021 Page 1

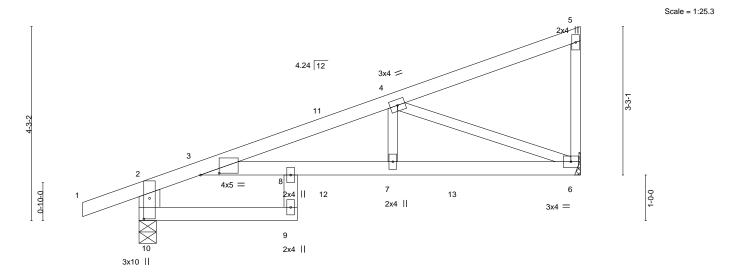
Wheeler Lumber, Waverly, KS - 66871,

Structural wood sheathing directly applied or 4-0-10 oc purlins,

Rigid ceiling directly applied or 8-11-3 oc bracing.

except end verticals.

ID:hquPfxpp0CdNHWhMuPizeLzNEki-c5XwSU7Pyluvq?WztQ379hedQw00gvcDLOrK0rzw35d 5-6-13 9-8-4 3-5-11 1-2-14 4-1-6



	· · · · · · · · · · · · · · · · · · ·	3-5-11	2-1-2 4-1-6	·
Plate Offsets (X,Y)	[3:0-4-15,0-0-8], [10:0-5-7,0-1-8]			
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 0.80	Vert(LL) -0.10 3-8 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.19 3-8 >605 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.63	Horz(CT) 0.13 6 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 3-8 >962 240	Weight: 35 lb FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

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

2-10: 2x6 SPF No.2, 8-9: 2x4 SPF No.2

REACTIONS. (size) 10=0-4-9, 6=Mechanical

Max Horz 10=167(LC 5)

Max Uplift 10=-192(LC 4), 6=-215(LC 8) Max Grav 10=664(LC 1), 6=687(LC 1)

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

2-10=-672/231, 2-3=-253/12, 3-4=-1367/398 TOP CHORD **BOT CHORD** 3-8=-407/1277, 7-8=-407/1277, 6-7=-407/1277

**WEBS** 4-6=-1342/459, 4-7=-129/515

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 10 and 215 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 44 lb up at 4-1-7, and 74 lb down and 44 lb up at 4-1-7 on top chord, and 37 lb down and 29 lb up at 4-1-7, 37 lb down and 29 lb up at 4-1-7, and 173 lb down and 85 lb up at 6-11-6, and 173 lb down and 85 lb up at 6-11-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

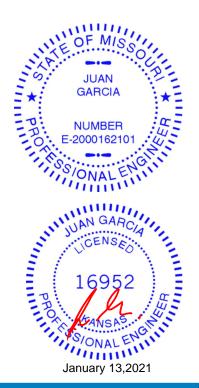
### LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-5=-70, 9-10=-20, 6-8=-20

Concentrated Loads (lb)

Vert: 12=-60(F=-30, B=-30) 13=-347(F=-173, B=-173)





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

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

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

Job Truss Truss Type Qty Ply Lot 80 W0 144330876 210213 J2 Jack-Closed 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:53 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-vRSZwuColSnwA4YJnOhmy9QzwkXepD8Fy\_1Bmxzw35W

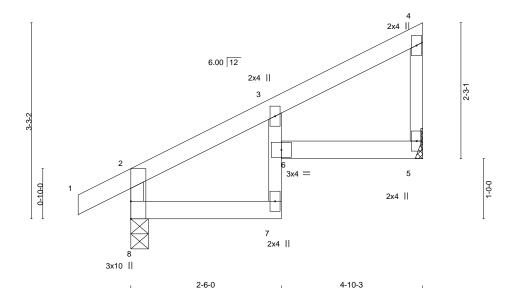
Structural wood sheathing directly applied or 4-10-3 oc purlins,

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

except end verticals.

4-10-3 0-10-8 2-6-0 2-4-3

Scale = 1:19.1



		2-6-0	<b>'</b>	2-4-3	"	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.20	DEFL. in Vert(LL) -0.03	(loc) I/defl 6 >999	L/d 360	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(CT) -0.05	7 >999	240	W120 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-R	Horz(CT) 0.03 Wind(LL) 0.03	5 n/a 6 >999	n/a 240	Weight: 16 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2

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

WEBS 2x3 SPF No.2

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

Max Horz 8=111(LC 5)

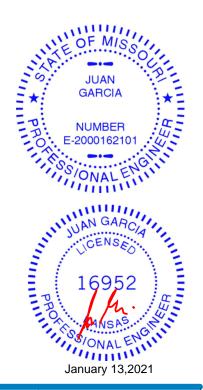
Max Uplift 8=-44(LC 8), 5=-57(LC 8) Max Grav 8=285(LC 1), 5=202(LC 1)

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

TOP CHORD 2-8=-262/67

### 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 8 and 57 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

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



Job Truss Truss Type Qty Lot 80 W0 144330877 210213 J3 Jack-Open 2

Wheeler Lumber, Waverly, KS - 66871, | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:54 2021 Page 1

Structural wood sheathing directly applied or 2-10-3 oc purlins,

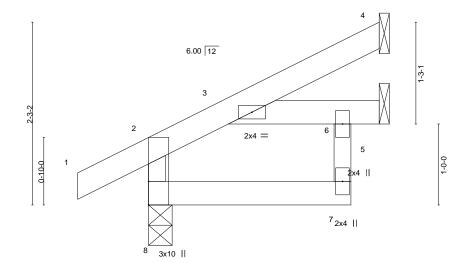
Rigid ceiling directly applied or 10-0-0 oc bracing.

ID:hquPfxpp0CdNHWhMuPizeLzNEki-Ne0y7EDQ3lvnnE7VL5D?UNzAf8wQYgOOAenIINzw35V -0-10-8 2-6-0 2-10-3 0-10-8 2-6-0 0-4-3

2-10-3

except end verticals.

Scale = 1:14.2



			2-6-0 0-4-3	
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 0.08	Vert(LL) -0.00 3 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) -0.00 3 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 5 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00 3 >999 240	Weight: 11 lb FT = 10%

2-6-0

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

6-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

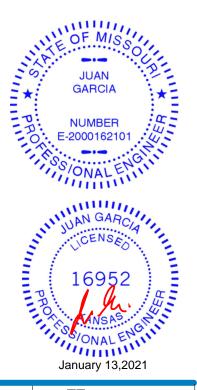
REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 8=64(LC 8)

Max Uplift 8=-15(LC 8), 4=-34(LC 8), 5=-2(LC 8) Max Grav 8=213(LC 1), 4=67(LC 1), 5=84(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 8, 34 lb uplift at joint 4 and 2 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Ply Lot 80 W0 144330878 210213 J4 Jack-Closed 5 | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:55 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-rqaKLZE3q31ePOihvpkE1aWEGY9mH7eYPIWIqpzw35U

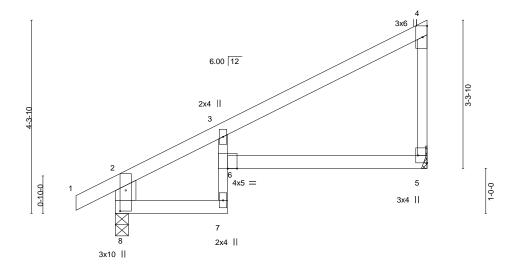
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

-0-10-8 6-11-4 0-10-8 2-6-0 4-5-4

Scale = 1:25.6



4-5-4

Plate Of	fsets (X,Y)	[5:Edge,0-2-8], [8:0-5-9,0	0-1-8]									
LOADIN	IC (nef)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.12	5-6	>683	360	MT20	197/144
				_		- ' '					IVITZU	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.21	5-6	>377	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.10	5	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-R	Wind(LL)	0.09	5-6	>881	240	Weight: 22 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

2x4 SPF No.2 TOP CHORD

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

**WEBS** 2x6 SPF No.2 \*Except\*

4-5: 2x3 SPF No.2

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

Max Horz 8=124(LC 5)

Max Uplift 8=-11(LC 8), 5=-30(LC 8) Max Grav 8=381(LC 1), 5=291(LC 1)

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

TOP CHORD 2-8=-365/32, 2-3=-281/7

- 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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 8 and 30 lb uplift at ioint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job	Truss	Truss Type	Qty	Ply	Lot 80 W0
210213	15	Jack-Closed	,	1	144330879
210213	35	Jack-Closed	4	'	Job Reference (optional)

Waverly, KS - 66871, Wheeler Lumber,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:55 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-rqaKLZE3q31ePOihvpkE1aWCwYARH7eYPIWIqpzw35U

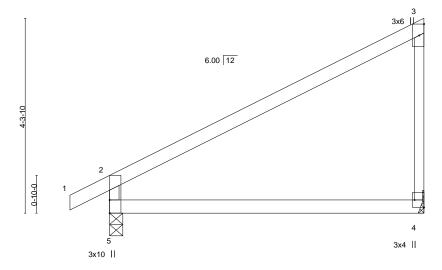
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0-10-8 6-11-4

Scale = 1:25.4



6-11-4

Plate Off	sets (X,Y)	[4:Edge,0-2-8]											
LOADING	VI /	SPACING-	2-0-0	CSI.		DEFL.		(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.09	4-5	>914	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.19	4-5	>431	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a			
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.03	4-5	>999	240	Weight: 21 lb	FT = 10%	

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

2x4 SPF No.2 TOP CHORD

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

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

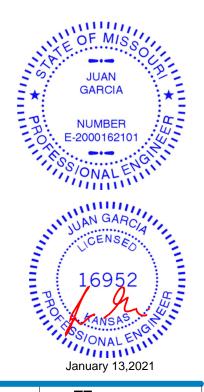
Max Horz 5=135(LC 5)

Max Uplift 5=-11(LC 8), 4=-29(LC 8) Max Grav 5=376(LC 1), 4=298(LC 1)

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

TOP CHORD 2-5=-326/59

- 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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 5 and 29 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 80 W0 144330880 210213 J7 Jack-Closed 8

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:56 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-K08iYvFhbN9V1YHuSWFTZo2OhyXF0atheyGsMGzw35T

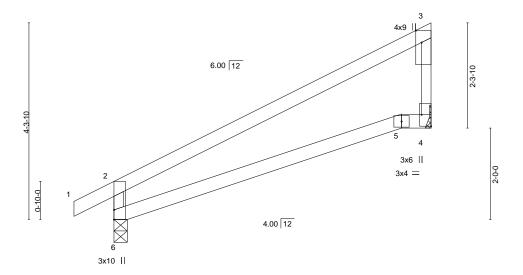
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

-0-10-8 0-10-8 6-11-4

Scale = 1:25.2



0-7-12

Plate Oil	sels (X,Y)	[3:0-3-3,Edge], [4:Edge,0-2	<u>2-8], [6:0-2-8,</u>	Eagej								
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	0.62	Vert(LL)	-0.08	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.17	5-6	>487	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-R	Wind(LL)	0.02	5-6	>999	240	Weight: 20 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. (size) 6=0-3-8, 4=Mechanical

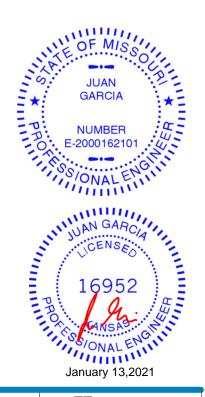
Max Horz 6=111(LC 5)

Max Uplift 6=-6(LC 8), 4=-34(LC 8) Max Grav 6=376(LC 1), 4=298(LC 1)

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

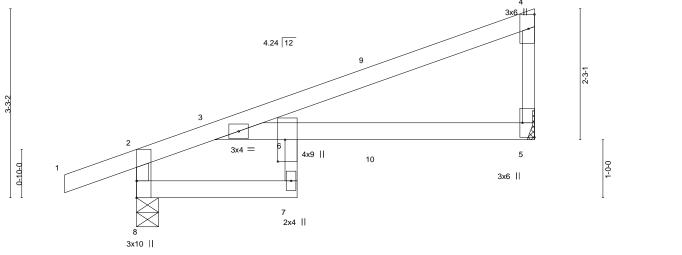
TOP CHORD 2-6=-363/58

- 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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 6 and 34 lb uplift at ioint 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.





Job Truss Truss Type Qty Ply Lot 80 W0 144330881 210213 J8 Diagonal Hip Girder Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:57 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-oCi4lFFJMgHMfhs40Emi6?bZxMpel17rsc?Pvizw35S 2-9-3 2-9-3 1-2-14 Scale = 1:19.9



6-10-5 4-1-1

except end verticals.

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

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

Plate Offsets (X,Y)	[5:Edge,0-2-8], [6:0-4-8,0-1-8]			
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 0.59	Vert(LL) -0.11 5-6 >757 360 MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.21 5-6 >387 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.08 5 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.13 5-6 >631 240 Weight: 22 lb FT = 10%	

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

6-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. (size) 8=0-4-9, 5=Mechanical

Max Horz 8=121(LC 5)

Max Uplift 8=-123(LC 4), 5=-95(LC 8)

Max Grav 8=419(LC 1), 5=314(LC 1)

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

TOP CHORD 2-8=-399/147

# NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 8 and 95 lb uplift at ioint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 76 lb down and 45 lb up at 4-1-7, and 76 lb down and 45 lb up at 4-1-7 on top chord, and 27 lb down and 27 lb up at 4-1-7, and 27 lb down and 27 lb up at 4-1-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

## LOAD CASE(S) Standard

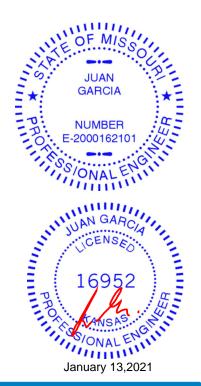
1) Dead + Roof Live (balanced): Lumber Increase=1.15. Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20

Concentrated Loads (lb)

Vert: 10=-41(F=-20, B=-20)





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

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



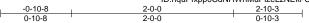
Job Truss Truss Type Qty Ply Lot 80 W0 144330882 210213 J9 Jack-Open 2

Wheeler Lumber, Waverly, KS - 66871,

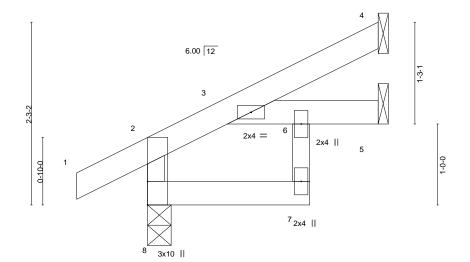
Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:58 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-GPGSzbGx7\_PCGrRGaxHxfD8silHLUUN\_5GlyR8zw35R

Structural wood sheathing directly applied or 2-10-3 oc purlins,

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



Scale = 1:14.2



				<u>'</u>		2-0-0	'	0-1	10-3	1		
LOADING (ps	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25	.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	3	>999	360	MT20	197/144
TCDL 10	.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	3	>999	240		
BCLL 0	.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10	.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.00	3	>999	240	Weight: 10 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

2-0-0

2-10-3

except end verticals.

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2 \*Except\* **BOT CHORD** 6-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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

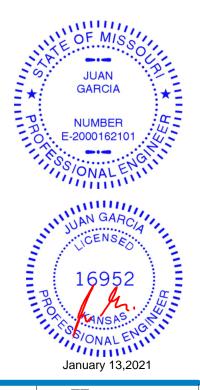
Max Horz 8=64(LC 8)

Max Uplift 8=-17(LC 8), 4=-34(LC 8), 5=-6(LC 8) Max Grav 8=211(LC 1), 4=69(LC 1), 5=65(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 8, 34 lb uplift at joint 4 and 6 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



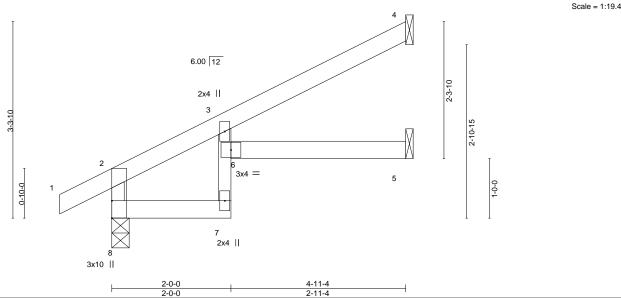
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

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Job Truss Truss Type Qty Ply Lot 80 W0 144330883 210213 J10 Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:46 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-c5XwSU7Pyluvq?WztQ379helJw83g2PDLOrK0rzw35d 0-10-8 2-0-0 2-11-4



I/defI

>999

n/a

>999

except end verticals.

(loc)

6

6 >814

5

6

-0.04

-0.07

0.04

0.03

L/d

360

240

n/a

240

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

**PLATES** 

Weight: 14 lb

MT20

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

GRIP

197/144

FT = 10%

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

**TCLL** 

TCDL

**BCLL** 

BCDL

LOADING (psf)

2x4 SPF No.2 TOP CHORD

25.0

10.0

0.0

10.0

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

WEBS 2x3 SPF No.2

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 8=75(LC 8) Max Uplift 4=-41(LC 8)

Max Grav 8=290(LC 1), 4=142(LC 1), 5=79(LC 3)

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

TOP CHORD 2-8=-271/19

### 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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

CSI.

0.29

0.29

0.00

TC

ВС

WB

Matrix-R

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

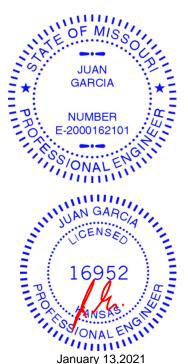
2-0-0

1.15

1.15

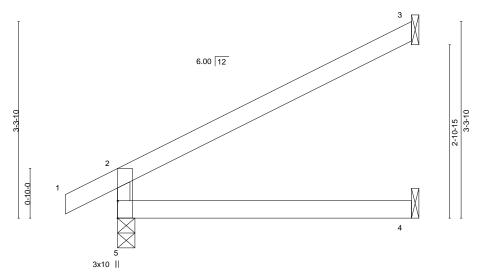
YES

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 80 W0 144330884 210213 J11 Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:47 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-4H5lfq81jc0mS959R7aMiuAv?KVVPVfNZ2atYHzw35c 0-10-8 4-11-4



			4-11-4		T
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.36	<b>DEFL.</b> in Vert(LL) -0.03	(loc) I/defl L/d 4-5 >999 360	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.22 WB 0.00	Vert(CT) -0.06 Horz(CT) 0.02	4-5 >999 240 3 n/a n/a	107711
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02	4-5 >999 240	Weight: 13 lb FT = 10%

4-11-4

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

2x3 SPF No.2

(size)

Max Horz 5=75(LC 8) Max Uplift 3=-52(LC 8)

Max Grav 5=290(LC 1), 3=151(LC 1), 4=91(LC 3)

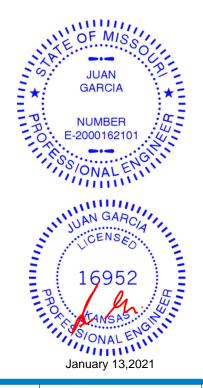
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD

5=0-3-8, 3=Mechanical, 4=Mechanical

2-5=-251/36

#### 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); 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

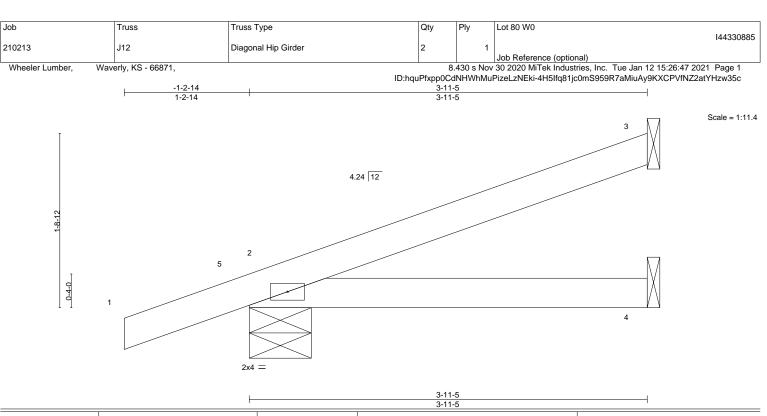
Scale = 1:19.4

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

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LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES** GRIP 2-0-0 (loc) I/defl 25.0 Plate Grip DOL Vert(LL) -0.01 197/144 **TCLL** 1.15 TC 0.16 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.11 Vert(CT) -0.01 2-4 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) -0.00 3 n/a \*\*\*\* n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Wind(LL) 0.00 240 Weight: 11 lb FT = 10%

> BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

2x4 SPF No 2

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

> 3=Mechanical, 2=0-7-6, 4=Mechanical Max Horz 2=88(LC 6)

Max Uplift 3=-53(LC 6), 2=-107(LC 6)

Max Grav 3=64(LC 1), 2=141(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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 3 and 107 lb uplift at ioint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 11 lb up at -1-2-14, and 29 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.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

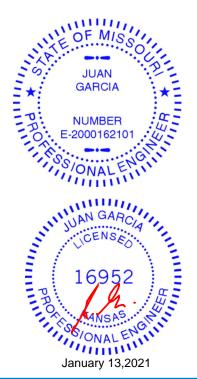
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Concentrated Loads (lb)

Vert: 1=-44(F=-22, B=-22)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-5=-22(F=24, B=24), 5=0(F=35, B=35)-to-3=-69(F=1, B=1), 2=-2(F=9, B=9)-to-4=-20(F=0, B=0)



Structural wood sheathing directly applied or 3-11-5 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. 5/19/2020 BEFORE USE

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Job Truss Truss Type Qty Ply Lot 80 W0 144330886 210213 J13 Jack-Open 6 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:48 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-ZUfgtA8gTv8d3JgL\_r6bF6j85ju78yvWoiKQ4jzw35b -0-10-8 2-10-8 2-10-8 0-10-8 Scale = 1:11.7 6.00 12 0-4-0 4

		ı	2-10-8	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.08	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) -0.00 2-4 >999 360	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.06 WB 0.00	Vert(CT) -0.00 2-4 >999 240 Horz(CT) -0.00 3 n/a n/a	1917144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	Wind(LL) 0.00 2 **** 240	Weight: 8 lb FT = 10%

2-10-8

**BRACING-**TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

2x4 SPF No 2

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

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

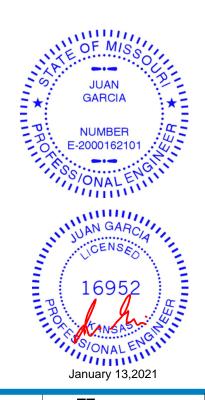
Max Horz 2=73(LC 8) Max Uplift 3=-47(LC 8), 2=-37(LC 8)

Max Grav 3=74(LC 1), 2=210(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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 3 and 37 lb uplift at ioint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 2-10-8 oc purlins.

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



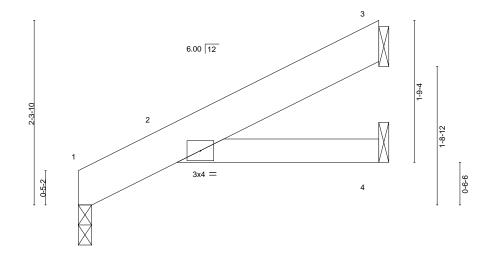
Job Truss Truss Type Qty Lot 80 W0 144330887 210213 J14 Jack-Open 3 | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:49 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:hquPfxpp0CdNHWhMuPizeLzNEki-1gD34W9IEDGUhTFYYYdqnJGJH7DMtP9f1M3\_dAzw35a

3-9-0 1-2-12 2-6-4

Scale = 1:14.4



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 0.12	Vert(LL)	-0.01	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.06	Vert(CT)	-0.01	2	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	Wind(LL)	0.01	2	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-9-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 1=0-2-0, 3=Mechanical, 4=Mechanical

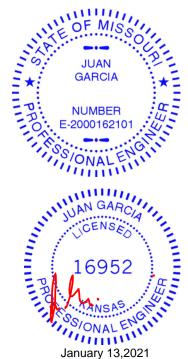
Max Horz 1=74(LC 8)

Max Uplift 1=-11(LC 8), 3=-63(LC 8)

Max Grav 1=164(LC 1), 3=138(LC 1), 4=49(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 1 and 63 lb uplift at joint 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 Lot 80 W0 144330888 210213 J15 Diagonal Hip Girder 3 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:50 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:hquPfxpp0CdNHWhMuPizeLzNEki-VsnRHsAw?XPLJdpk6G83KXoOmXVHcsOpF0pX9czw35Z

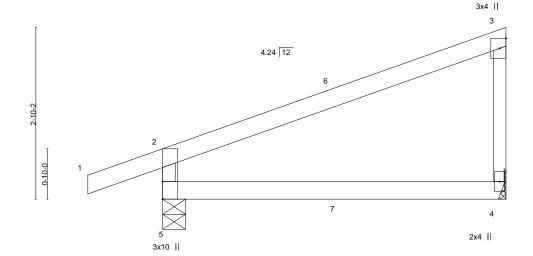
Structural wood sheathing directly applied or 5-8-2 oc purlins,

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

except end verticals.

-1-2-14 5-8-2 1-2-14 5-8-2

Scale = 1:19.1



LOADIN	G (psf)	SPACING- 2-0-	0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	5	TC	0.45	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	5	BC	0.27	Vert(CT)	-0.08	4-5	>847	240		
BCLL	0.0 *	Rep Stress Incr No	0	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matri	x-R	Wind(LL)	0.01	4-5	>999	240	Weight: 17 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-4-9, 4=Mechanical (size) Max Horz 5=119(LC 22) Max Uplift 5=-99(LC 4), 4=-54(LC 8) Max Grav 5=353(LC 1), 4=236(LC 1)

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

TOP CHORD 2-5=-307/139

# NOTES-

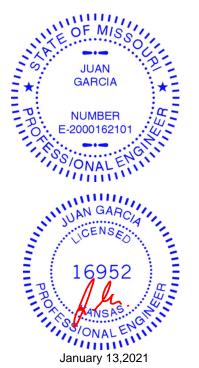
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 5 and 54 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 46 lb up at 2-11-4, and 70 lb down and 40 lb up at 2-11-4 on top chord, and 5 lb down at 2-11-4, and 4 lb down and 0 lb up at 2-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 4-5=-20 Concentrated Loads (lb)

Vert: 7=-2(F=0, B=-3)





Job Truss Truss Type Qty Lot 80 W0 144330889 210213 J16 Jack-Open 11 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:50 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-VsnRHsAw?XPLJdpk6G83KXoSEXXLcsOpF0pX9czw35Z -0-10-8 0-10-8 4-1-4 Scale = 1:17.3 3

6.00 12 2-5-15 2 0-10-0 3x10 ||

4-1-4 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 Vert(LL) -0.01 360 197/144 **TCLL** TC 0.23 4-5 >999 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.14 Vert(CT) -0.03 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.01 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Wind(LL) 0.01 4-5 >999 240 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. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical

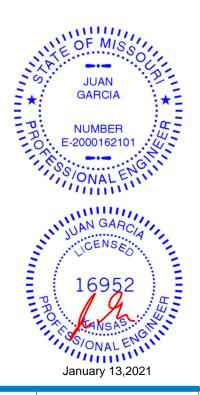
Max Horz 5=63(LC 8) Max Uplift 3=-44(LC 8)

Max Grav 5=254(LC 1), 3=124(LC 1), 4=75(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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



Job	Truss	Truss Type	Qty	Ply	Lot 80 W0	
		l <b>.</b>	_		144330890	)
210213	J17	Jack-Open	5	1		
					Job Reference (optional)	

0-10-8

Waverly, KS - 66871, Wheeler Lumber,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:51 2021 Page 1

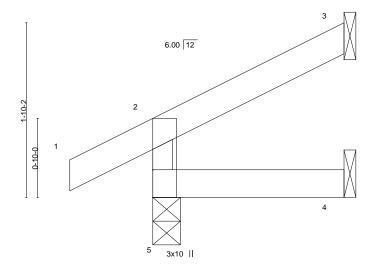
Structural wood sheathing directly applied or 2-0-3 oc purlins,

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

except end verticals.

ID:hquPfxpp0CdNHWhMuPizeLzNEki-z3KpVCBYmqXCwmOwgzflskLfaxvOLJeyUgY5h2zw35Y 2-0-3 2-0-3

Scale = 1:12.1



2-0-3 2-0-3

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00 5	>999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 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/TPI2014	Matrix-R	Wind(LL) 0.00 5	>999 240	Weight: 6 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=47(LC 8)

Max Uplift 5=-21(LC 8), 3=-35(LC 8) Max Grav 5=170(LC 1), 3=48(LC 1), 4=35(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 5 and 35 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





I	Job	Truss	Truss Type	Qty	Ply	Lot 80 W0	٦
						144330891	
	210213	J18	Jack-Open	1	1		
-						Job Reference (optional)	- 1

Waverly, KS - 66871, Wheeler Lumber,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:51 2021 Page 1

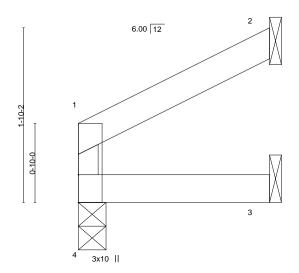
Structural wood sheathing directly applied or 2-0-3 oc purlins,

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

except end verticals.

ID:hquPfxpp0CdNHWhMuPizeLzNEki-z3KpVCBYmqXCwmOwgzflskLgoxvMLJeyUgY5h2zw35Y 2-0-3

Scale = 1:12.1



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 0.05	Vert(LL) -0.00 4	1 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 3-4	>999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 2	2 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00 4	1 >999 240	Weight: 5 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

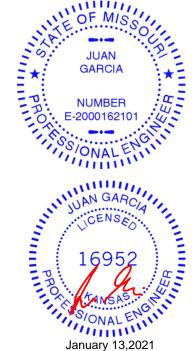
WEBS 2x3 SPF No.2

> 4=0-3-8, 2=Mechanical, 3=Mechanical (size) Max Horz 4=36(LC 5) Max Uplift 2=-39(LC 8)

Max Grav 4=83(LC 1), 2=62(LC 1), 3=36(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 80 W0 144330892 210213 J19 Jack-Closed Girder

Wheeler Lumber, Waverly, KS - 66871,

| Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:52 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-RFuBiYBAX8f3Ywz6DgAXPyumlL604mu6jKleDVzw35X

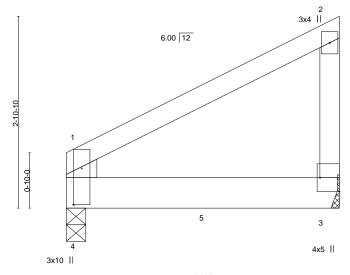
Structural wood sheathing directly applied or 4-1-4 oc purlins,

Rigid ceiling directly applied or 9-4-10 oc bracing.

except end verticals.

4-1-4

Scale = 1:17.3



4-1-4

Plate Off	sets (X,Y)	[3:Edge,0-3-8], [4:0-6-9,0	)-1-8]									
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	0.36	Vert(LL)	-0.03	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.06	3-4	>787	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.02	3-4	>999	240	Weight: 18 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

2x6 SPF No.2 \*Except\*

2-3: 2x4 SPF No.2

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

Max Horz 4=99(LC 24)

Max Uplift 4=-115(LC 8), 3=-151(LC 8) Max Grav 4=815(LC 1), 3=868(LC 1)

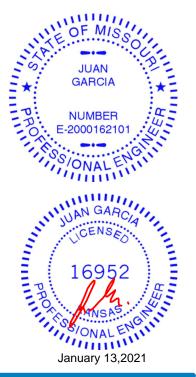
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 4 and 151 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1348 lb down and 211 lb up at 2-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

Vert: 1-2=-70. 3-4=-20 Concentrated Loads (lb) Vert: 5=-1348(F)



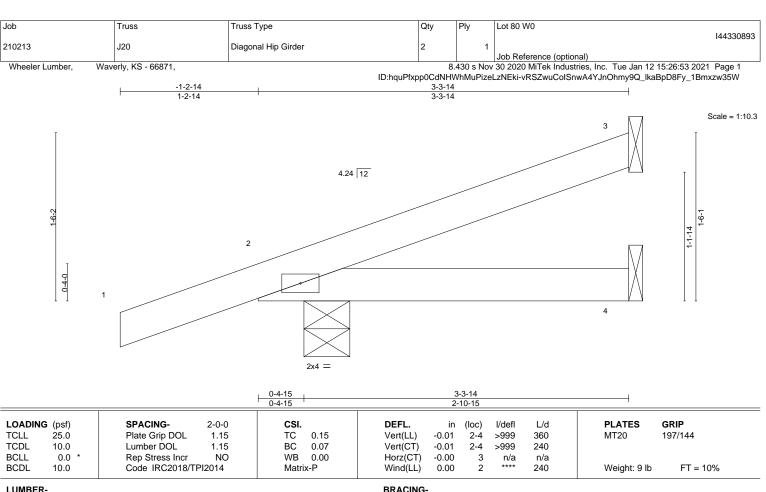


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

2x4 SPF No 2

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

3=Mechanical, 2=0-4-15, 4=Mechanical

Max Horz 2=81(LC 6)

Max Uplift 3=-52(LC 6), 2=-106(LC 6)

Max Grav 3=41(LC 1), 2=118(LC 1), 4=47(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 3 and 106 lb uplift at ioint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb down and 9 lb up at -1-2-14, and 24 lb down and 9 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# LOAD CASE(S) Standard

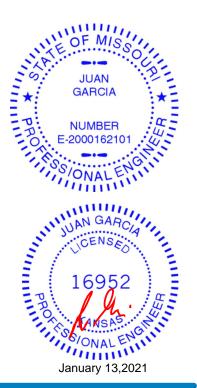
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Concentrated Loads (lb)

Vert: 1=-37(F=-19, B=-19)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-2=-25(F=22, B=22), 2=-4(F=33, B=33)-to-3=-58(F=6, B=6), 2=0(F=10, B=10)-to-4=-17(F=2, B=2)



Structural wood sheathing directly applied or 3-3-14 oc purlins.

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



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Job Truss Truss Type Qty Lot 80 W0 144330894 210213 J21 Jack-Open | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:26:54 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-Ne0y7EDQ3lvnnE7VL5D?UNzAl8xoYgOOAenllNzw35V 2-5-4 2-5-4 0-10-8 Scale = 1:10.6 6.00 12 ψ̈́ 1-1-15 2 0-4-0 0-4-0

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) -0.00 >999 360 197/144 **TCLL** 0.07 2-4 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) -0.00 2-4 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a \*\*\*\* n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Wind(LL) 0.00 240 Weight: 7 lb FT = 10%

> BRACING-TOP CHORD

BOT CHORD

2-1-4

LUMBER-

2x4 SPF No 2 TOP CHORD

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

REACTIONS. 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=64(LC 8)

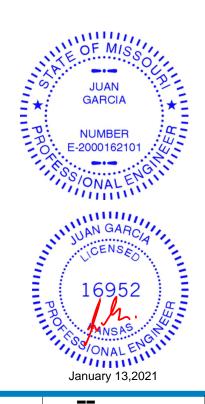
Max Uplift 3=-39(LC 8), 2=-35(LC 8)

Max Grav 3=62(LC 1), 2=188(LC 1), 4=45(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 3 and 35 lb uplift at ioint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 2-5-4 oc purlins.

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



Job	Truss	Truss Type	Qty	Ply	Lot 80 W0	
						144330895
210213	LAY1	GABLE	1	1		
					Job Reference (optional)	
Wheeler Lumber Way	orly KS - 66871		8	430 s Nov	30 2020 MiTek Industries Inc. Tue Ian 12 15:26:59 2021	Page 1

ID:hquPfxpp0CdNHWhMuPizeLzNEki-kbprAxHZuIX3u??T8eoABQgzU9cXDvm8KwUWzbzw35Q 7-11-1 25-4-6

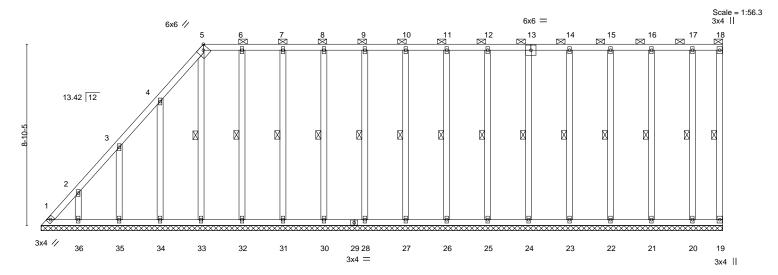


Plate Ons	sets (X,Y)	[5:0-2-10,Eage]										
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-S						Weight: 225 lb	FT = 10%

LUMBER-BRACING-2x4 SPF No.2

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

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-18. **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 23-24,22-23,21-22,20-21,19-20.

**WEBS** 1 Row at midpt

18-19, 5-33, 6-32, 7-31, 8-30, 9-28, 10-27, 11-26, 12-25, 13-24, 14-23, 15-22, 16-21,

REACTIONS. All bearings 33-3-8.

Max Horz 1=341(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 19, 32, 31, 30, 28, 27, 26, 25, 24, 23, 22, 21, 20 except 1=-156(LC 6), 36=-132(LC 8), 35=-134(LC 8),

34=-152(LC 8), 33=-119(LC 5)

Max Grav All reactions 250 lb or less at joint(s) 19, 36, 35, 34, 33, 32, 31, 30, 28, 27, 26, 25, 24, 23, 22, 21, 20 except 1=289(LC 5)

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

TOP CHORD 1-2=-389/261, 2-3=-321/213, 3-4=-263/168

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 32, 31, 30, 28, 27, 26, 25, 24, 23, 22, 21, 20 except (jt=lb) 1=156, 36=132, 35=134, 34=152, 33=119.
- 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.



Job Truss Truss Type Qty Ply Lot 80 W0 144330896 210213 LAY2 **GABLE** 

4x5 =

Wheeler Lumber, Waverly, KS - 66871, | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:01 2021 Page 1

 $ID: hquPfxpp0CdNHWhMuPizeLzNEki-g\_xbbdlpQvnn7J9rF3reGrmOCzKWhpLQnDzd2Tzw35Outheads and the control of the con$ 7-9-12 7-9-12

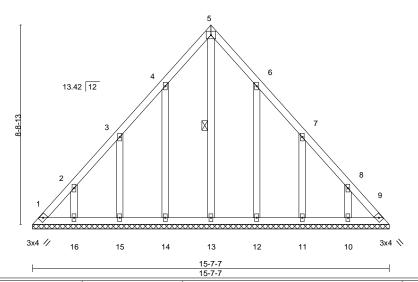
Scale = 1:50.5

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

5-13

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

1 Row at midpt



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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 78 lb	FT = 10%

BRACING-

**WEBS** 

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x4 SPF No.2

REACTIONS. All bearings 15-7-7 Max Horz 1=-226(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 9 except 1=-107(LC 6), 14=-138(LC 8), 15=-139(LC 8),

16=-130(LC 8), 12=-136(LC 9), 11=-139(LC 9), 10=-130(LC 9)

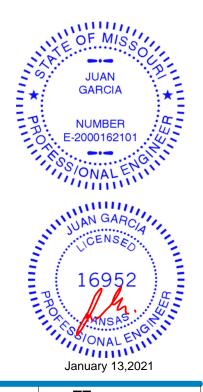
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

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

TOP CHORD 1-2=-309/196, 8-9=-278/148

## 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 1=107, 14=138, 15=139, 16=130, 12=136, 11=139, 10=130.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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



Job Truss Truss Type Qty Ply Lot 80 W0 144330897 210213 LAY3 **GABLE** 

4x5 =

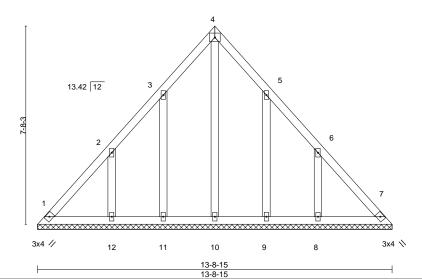
Wheeler Lumber, Waverly, KS - 66871, | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:01 2021 Page 1

ID:hquPfxpp0CdNHWhMuPizeLzNEki-g\_xbbdlpQvnn7J9rF3reGrmNnzKLho5QnDzd2Tzw35O 6-10-8 13-8-15 6-10-8 6-10-8

Scale = 1:44.7

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

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



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL TC Vert(LL) 999 197/144 **TCLL** 1.15 0.08 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.13 Horz(CT) 0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-S Weight: 63 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

REACTIONS. All bearings 13-8-15 Max Horz 1=-197(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-126(LC 8), 12=-182(LC 8), 9=-125(LC 9),

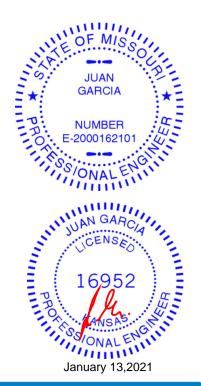
8=-183(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 9 except 12=277(LC 15), 8=278(LC 16)

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
- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=126, 12=182, 9=125, 8=183,
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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



Job Truss Truss Type Qty Ply Lot 80 W0 144330898 210213 LAY4 **GABLE** 

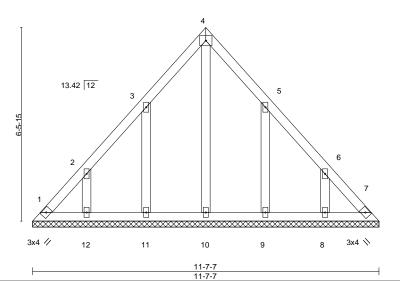
Wheeler Lumber, Waverly, KS - 66871, | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:02 2021 Page 1

ID:hquPfxpp0CdNHWhMuPizeLzNEki-8AVzpzJSADvelTk2pnMtp3IY?NfvQGEa0tjAavzw35N 5-9-12 5-9-12

> Scale = 1:38.7 4x5 =

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

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



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)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 51 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

REACTIONS. All bearings 11-7-7 Max Horz 1=-165(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-143(LC 8), 12=-131(LC 8), 9=-142(LC 9),

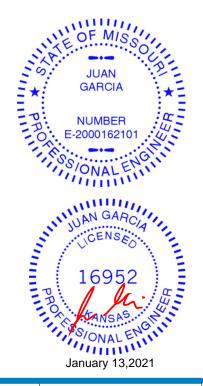
8=-131(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 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
- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=143, 12=131, 9=142, 8=131,
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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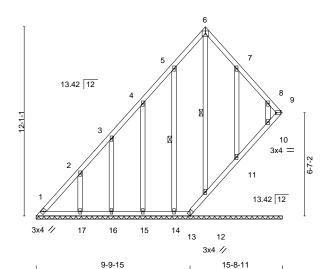
Job Truss Truss Type Qty Ply Lot 80 W0 144330899 210213 LAY5 **GABLE** 

Wheeler Lumber, Waverly, KS - 66871,

| Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:03 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-cM3L0JK4xW1VNcJENUt6LGriBm?\_9iDjFXSj6Mzw35M

10-9-12 15-8-11 10-9-12 4-11-0

> Scale = 1:73.6 4x5 =



5-10-12 Plate Offsets (X,Y)--[9:Edge,0-1-8] SPACING-**PLATES** LOADING (psf) 2-0-0 CSI DEFL. in (loc) I/defl L/d GRIP Plate Grip DOL TCLL 25.0 1.15 TC 0.09 Vert(LL) n/a 999 MT20 197/144 n/a TCDL 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.15 Horz(CT) 0.00 9 n/a n/a

BRACING-LUMBER-

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

6-0-0 oc bracing: 9-10. WEBS 1 Row at midpt

REACTIONS. All bearings 15-8-11.

Max Horz 1=356(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 1=-111(LC 6), 9=-153(LC 7), 13=-108(LC 9), 14=-138(LC 8),

Matrix-S

15=-141(LC 8), 16=-122(LC 8), 17=-178(LC 8), 11=-138(LC 9), 10=-118(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 9, 13, 12, 14, 15, 16, 11, 10 except 1=332(LC 8), 17=274(LC

10.0

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

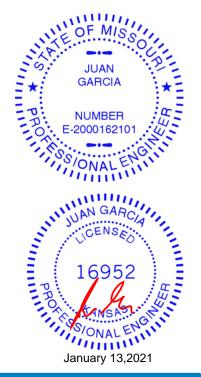
Code IRC2018/TPI2014

TOP CHORD 1-2=-471/243, 2-3=-302/169

#### NOTES-

**BCDL** 

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 1, 153 lb uplift at joint 9, 108 lb uplift at joint 13, 138 lb uplift at joint 14, 141 lb uplift at joint 15, 122 lb uplift at joint 16, 178 lb uplift at joint 17, 138 lb uplift at joint 11 and 118 lb uplift at joint 10.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 12, 11, 10.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



FT = 10%

Weight: 95 lb

6-12, 5-14



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Job Truss Truss Type Qty Ply Lot 80 W0 144330900 210213 LAY6 **GABLE** 

Wheeler Lumber, Waverly, KS - 66871, | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:04 2021 Page 1

ID:hquPfxpp0CdNHWhMuPizeLzNEki-5ZdkDeLiiq9M\_muQwCOLuUOuvALWuBYtUBCHfozw35L 2-8-12 2-8-12

3x4 =

Scale = 1:21.7

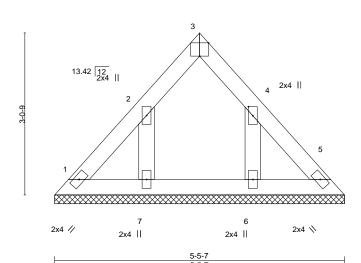


Plate Off	sets (X,Y)	[3:Edge,0-3-0], [4:0-2-1,0	-1-0]									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P						Weight: 18 lb	FT = 10%

LUMBER-

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

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 5-5-7 oc purlins.

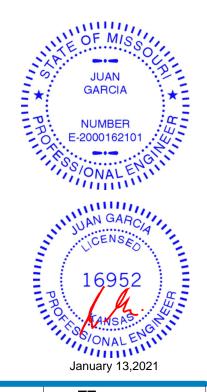
Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-5-7. Max Horz 1=72(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 7, 6 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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



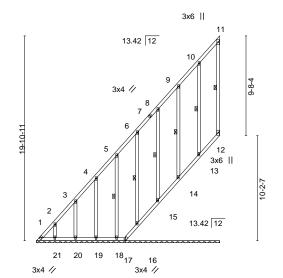
Job Truss Truss Type Qty Lot 80 W0 144330901 210213 LAY7 **GABLE** | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:05 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:hquPfxpp0CdNHWhMuPizeLzNEki-ZIB6R\_MKT8HDcwTcUvvaRhwzsafUddS0irxqBEzw35K

17-9-8

Scale = 1:111.9



8-7-15	17-9-8
8-7-15	9-1-8

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	0.40	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.	15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YE	ES	WB	0.11	Horz(CT)	-0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI201	4	Matri	x-S						Weight: 130 lb	FT = 10%

LUMBER-BRACING-

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

2x4 SPF No.2

TOP CHORD Structural wood sheathing directly applied or 5-11-1 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 14-15,12-13.

**WEBS** 11-12, 10-13, 9-14, 8-15, 6-16, 5-18

REACTIONS. All bearings 17-9-8.

Max Horz 1=606(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 12=-286(LC 7), 1=-349(LC 6), 17=-111(LC 4), 13=-139(LC 8), 14=-133(LC 8), 15=-137(LC 8), 16=-133(LC 8), 18=-140(LC 8), 19=-135(LC 8), 20=-137(LC 8), 21=-130(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 12, 17, 13, 14, 15, 16, 18, 19, 20, 21 except 1=743(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-1009/519, 2-3=-888/473, 3-4=-748/419, 4-5=-612/367, 5-6=-475/314,

6-8=-389/262, 8-9=-310/209, 9-10=-277/185

**BOT CHORD** 12-13=-270/199

## 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
- All plates are 2x4 MT20 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 286 lb uplift at joint 12, 349 lb uplift at joint 1, 111 lb uplift at joint 17, 139 lb uplift at joint 13, 133 lb uplift at joint 14, 137 lb uplift at joint 15, 133 lb uplift at joint 16, 140 lb uplift at joint 18, 135 lb uplift at joint 19, 137 lb uplift at joint 20 and 130 lb uplift at joint 21.
- 7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12, 13, 14, 15, 16.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 13,2021



Job Truss Truss Type Qty Lot 80 W0 144330902 210213 LAY8 **GABLE** | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:06 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:hquPfxpp0CdNHWhMuPizeLzNEki-1xkUeKMyERQ4E42p2dQpzvTDW\_1gM2OAxVhNjhzw35J

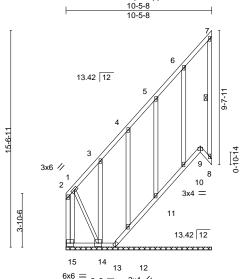
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

1 Row at midpt

Scale = 1:82.7



9-7-12 10-5<sub>1</sub>8 0-9-12

BOT CHORD

**WEBS** 

3x4 //

LOADING (psf)	SPACING- 2-0-0	CSI.	` '	I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) n/a -	n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a -	n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) -0.00 9	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S			Weight: 88 lb FT = 10%

6x6 =

LUMBER-BRACING-2x4 SPF No 2 TOP CHORD

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

2x4 SPF No.2 \*Except\*

2-14: 2x3 SPF No.2

**OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 10-5-8. (lb) -

Max Horz 15=464(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 8 except 15=-434(LC 6), 10=-144(LC 8), 11=-132(LC 8), 12=-152(LC

8). 14=-966(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 8, 13, 9, 10, 11, 12 except 15=1259(LC 8), 14=480(LC 6)

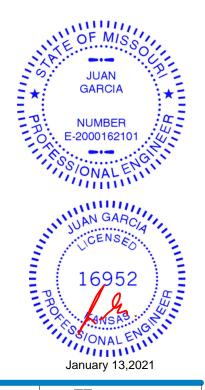
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-15=-301/120, 2-3=-592/240, 3-4=-483/196, 4-5=-337/141

**BOT CHORD** 14-15=-426/166

**WEBS** 2-15=-935/329, 2-14=-371/951

- 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; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 15=434, 10=144, 11=132, 12=152, 14=966.
- 7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 9, 10, 11, 12.
- 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 80 W0 144330903 210213 V1 Valley

Wheeler Lumber, Waverly, KS - 66871,

| Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:07 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-V8IssgNa?IYxrEd?cKx2W6?M7OMn5YgJA9QxF7zw35I

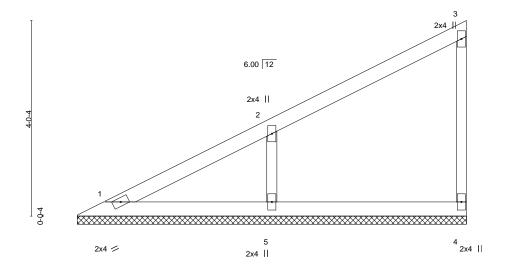
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

8-0-8

Scale = 1:23.7



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) n/	a -	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/	a -	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.0	0 4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 23 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

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

(size) 1=8-0-0, 4=8-0-0, 5=8-0-0

Max Horz 1=152(LC 5)

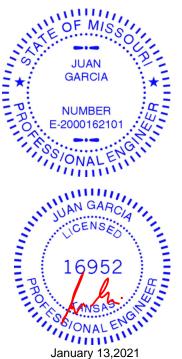
Max Uplift 4=-26(LC 5), 5=-124(LC 8)

Max Grav 1=117(LC 16), 4=136(LC 1), 5=412(LC 1)

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

2-5=-320/179 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=124
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

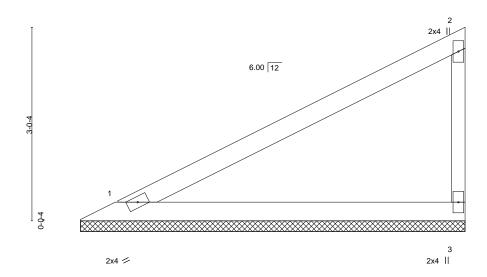




Job Truss Truss Type Qty Lot 80 W0 144330904 210213 V2 Valley | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:08 2021 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-zKsE30OCm3goTOBB91TH2KYSine7q?sSOpAUoZzw35H 6-0-8

6-0-8

Scale = 1:18.0



LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.55	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) n/a - n/a 999	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 16 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

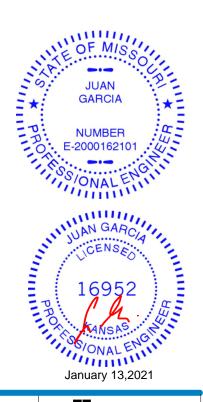
> 1=6-0-0, 3=6-0-0 (size) Max Horz 1=111(LC 5) Max Uplift 1=-31(LC 8), 3=-59(LC 8)

Max Grav 1=239(LC 1), 3=239(LC 1)

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

## NOTES-

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



Structural wood sheathing directly applied or 6-0-8 oc purlins,

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

except end verticals.



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

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

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



Job Truss Truss Type Qty Lot 80 W0 144330905 Valley 210213 V3 | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:08 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871, ID:hquPfxpp0CdNHWhMuPizeLzNEki-zKsE30OCm3goTOBB91TH2KYXDnh6q?sSOpAUoZzw35H

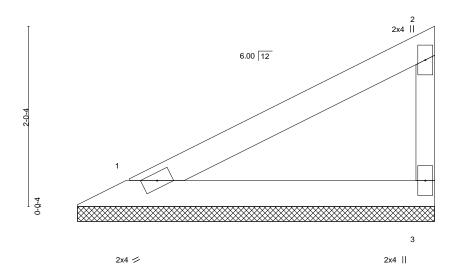
Structural wood sheathing directly applied or 4-0-8 oc purlins,

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

except end verticals.

4-0-8 4-0-8

Scale = 1:12.9



LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.20	<b>DEFL.</b> i Vert(LL) n/:	n (loc)	l/defl n/a	L/d 999		<b>RIP</b> 97/144
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/s		n/a	999	WIIZO	97/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-P	Horz(CT) -0.00	0 3	n/a	n/a	Weight: 10 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

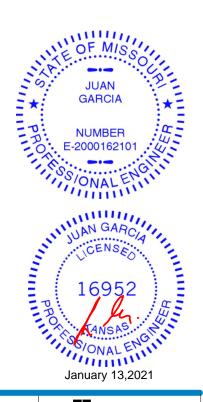
2x4 SPF No.2 TOP CHORD BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

> 1=4-0-0, 3=4-0-0 (size) Max Horz 1=69(LC 5) Max Uplift 1=-19(LC 8), 3=-36(LC 8) Max Grav 1=149(LC 1), 3=149(LC 1)

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

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





Job Truss Truss Type Qty Ply Lot 80 W0 144330906 Valley 210213 V4 | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:09 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

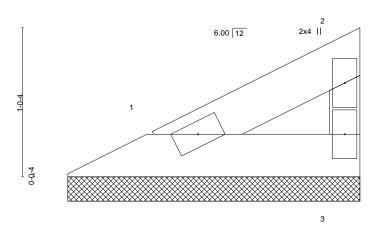
ID:hquPfxpp0CdNHWhMuPizeLzNEki-RWQdHMPrXMof5YmOjl\_WbX5leB2nZS5cdTv2K0zw35G 2-0-8

Structural wood sheathing directly applied or 2-0-8 oc purlins,

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

except end verticals.

Scale = 1:7.9



2x4 / 2x4 |

LOADIN TCLL	<b>G</b> (psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.03	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 0.01	Vert(CT)	n/a	-	n/a	999	WITZO	131/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-P	Horz(CT)	-0.00	3	n/a	n/a	Weight: 4 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

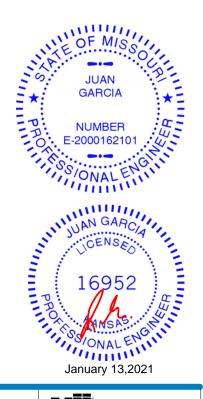
2x4 SPF No.2 TOP CHORD BOT CHORD 2x4 SPF No.2 WEBS 2x3 SPF No.2

1=2-0-0, 3=2-0-0 (size) Max Horz 1=27(LC 5) Max Uplift 1=-8(LC 8), 3=-14(LC 8)

Max Grav 1=59(LC 1), 3=59(LC 1)

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

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





Job Truss Truss Type Qty Lot 80 W0 144330907 Valley 210213 V5 | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:09 2021 Page 1

Wheeler Lumber, Waverly, KS - 66871,

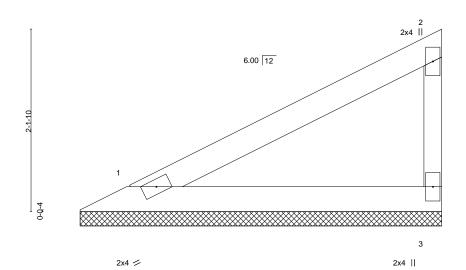
Structural wood sheathing directly applied or 4-3-4 oc purlins,

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

except end verticals.

ID:hquPfxpp0CdNHWhMuPizeLzNEki-RWQdHMPrXMof5YmOjl\_WbX5iUB14ZS5cdTv2K0zw35G 4-3-4

Scale = 1:13.5



LOADIN TCLL	<b>G</b> (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.23	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	0.12	Vert(CT)	n/a	-	n/a	999	WITZO	1377144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TF	YES PI2014	WB Matri	0.00 x-P	Horz(CT)	-0.00	3	n/a	n/a	Weight: 11 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

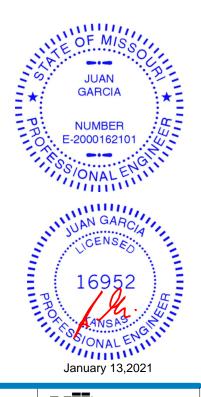
BOT CHORD WEBS 2x3 SPF No.2

REACTIONS. 1=4-2-12, 3=4-2-12 (size) Max Horz 1=74(LC 5)

Max Uplift 1=-20(LC 8), 3=-39(LC 8) Max Grav 1=159(LC 1), 3=159(LC 1)

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

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





Job Truss Truss Type Qty Ply Lot 80 W0 144330908 Valley 210213 V6

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:10 2021 Page 1 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-vj\_?UiPTIgwVihLaHSVl8ldwDbOwlvLls7fbsSzw35F

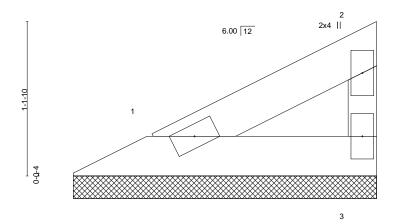
Structural wood sheathing directly applied or 2-3-4 oc purlins,

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

except end verticals.

2-3-4

Scale = 1:8.5



2x4 / 2x4 ||

LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.04 BC 0.02	DEFL. in (loc Vert(LL) n/a Vert(CT) n/a	c) I/defl L/d - n/a 999 - 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: 5 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

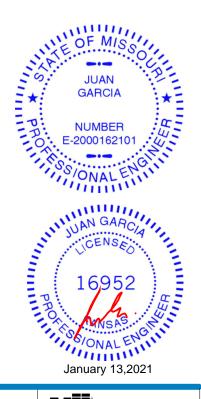
2x4 SPF No.2 TOP CHORD BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

> 1=2-2-12, 3=2-2-12 (size) Max Horz 1=32(LC 5) Max Uplift 1=-9(LC 8), 3=-17(LC 8) Max Grav 1=69(LC 1), 3=69(LC 1)

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

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





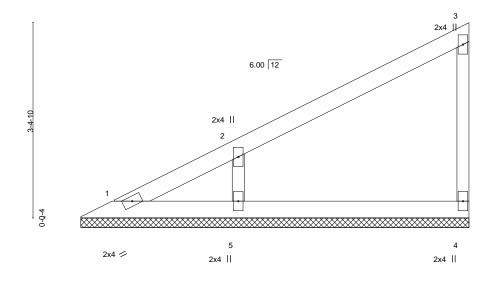
Job Truss Truss Type Qty Lot 80 W0 144330909 V7 210213 Valley

Wheeler Lumber, Waverly, KS - 66871,

| Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:11 2021 Page 1 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-NvYNh2Q53\_2MKrwmrA0\_gyA3e?jv1Mpv5nO8Ouzw35E

6-9-4 6-9-4

Scale = 1:20.0



LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	PI2014	Matri	x-P						Weight: 18 lb	FT = 10%

LUMBER-

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

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

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

except end verticals.

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

REACTIONS. (size) 1=6-8-12, 4=6-8-12, 5=6-8-12

Max Horz 1=126(LC 5)

Max Uplift 4=-28(LC 8), 5=-109(LC 8)

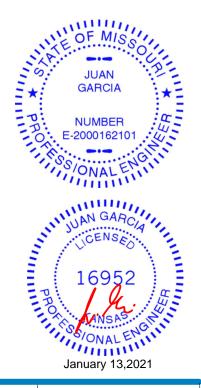
Max Grav 1=58(LC 16), 4=143(LC 1), 5=364(LC 1)

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

2-5=-283/158 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=109
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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

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

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



Job Truss Truss Type Qty Lot 80 W0 144330910 210213 V8 Valley

Wheeler Lumber, Waverly, KS - 66871, | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:11 2021 Page 1

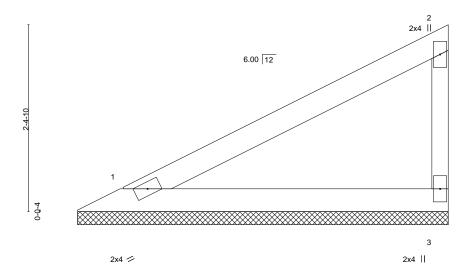
Structural wood sheathing directly applied or 4-9-4 oc purlins,

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

except end verticals.

ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-NvYNh2Q53\_2MKrwmrA0\_gyA1o?iv1Mbv5nO8Ouzw35E 4-9-4

Scale = 1:14.7



LOADIN TCLL TCDL	<b>G</b> (psf) 25.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.30 0.16	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	<b>GRIP</b> 197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TP	YES 12014	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-

REACTIONS.

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

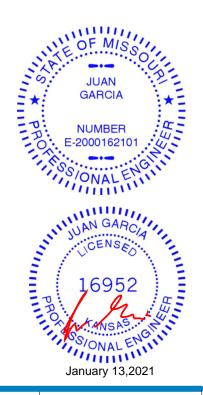
WEBS 2x3 SPF No.2

> 1=4-8-12, 3=4-8-12 (size) Max Horz 1=84(LC 5) Max Uplift 1=-23(LC 8), 3=-45(LC 8) Max Grav 1=182(LC 1), 3=182(LC 1)

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

## NOTES-

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





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

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Job Truss Truss Type Qty Lot 80 W0 144330911 210213 V9 Valley

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:12 2021 Page 1 ID:hquPfxpp0CdNHWhMuPizeLzNEki-s56lvNRjqHADy?VzOtXDDAjFqP4wmpr2JR8ixKzw35D

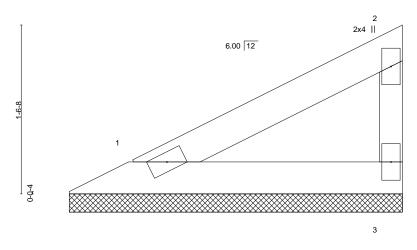
Structural wood sheathing directly applied or 3-1-0 oc purlins,

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

except end verticals.

3-1-0

Scale = 1:10.5



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	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	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/TPI	I2014	Matri	x-P	, ,					Weight: 7 lb	FT = 10%

LUMBER-

REACTIONS.

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

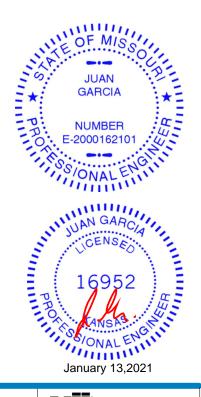
WEBS 2x3 SPF No.2

> 1=3-0-8, 3=3-0-8 (size) Max Horz 1=49(LC 5)

Max Uplift 1=-14(LC 8), 3=-26(LC 8) Max Grav 1=106(LC 1), 3=106(LC 1)

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

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



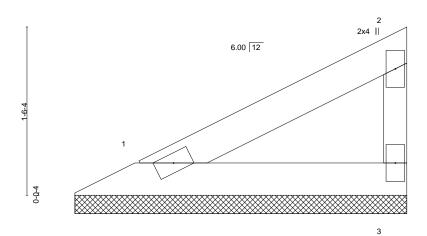


Job Truss Truss Type Qty Lot 80 W0 144330912 210213 V10 Valley

Wheeler Lumber, Waverly, KS - 66871, | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 12 15:27:07 2021 Page 1

ID:hquPfxpp0CdNHWhMuPizeLzNEki-V8IssgNa?IYxrEd?cKx2W6?O8ONn5YcJA9QxF7zw35I 3-0-8

Scale = 1:10.4



2x4 /

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) n/a 999 **TCLL** 0.09 n/a **TCDL** 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P

**PLATES** GRIP 197/144 MT20

Weight: 7 lb FT = 10%

LUMBER-

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

BRACING-TOP CHORD

Structural wood sheathing directly applied or 3-0-8 oc purlins, except end verticals.

BOT CHORD

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

2x4 ||

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

Max Horz 1=48(LC 5) Max Uplift 1=-13(LC 8), 3=-25(LC 8) Max Grav 1=104(LC 1), 3=104(LC 1)

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

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

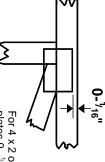


## Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$  from outside edge of truss.

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

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

## PLATE SIZE

4 × 4

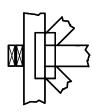
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



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

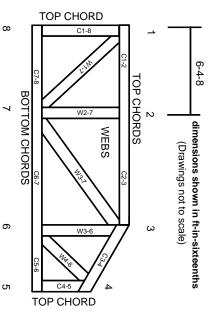
Min size shown is for crushing only

## Industry Standards:

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

ANSI/TPI1: DSB-89:

## **Numbering System**



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

# **General Safety Notes**

# Failure to Follow Could Cause Property Damage or Personal Injury

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

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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

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

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