

RE: B230098 Lot 98 RR MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

Site Information:

Customer: Project Name: B230098

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: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 77 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	158885167	A1	6/13/2023	21	158885187	D4	6/13/2023
2	158885168	A2	6/13/2023	22	I58885188	D5	6/13/2023
3	158885169	A3	6/13/2023	23	I58885189	D6	6/13/2023
4	158885170	A4	6/13/2023	24	158885190	D7	6/13/2023
5	158885171	A5	6/13/2023	25	I58885191	D8	6/13/2023
6	158885172	B1	6/13/2023	26	158885192	D9	6/13/2023
7	158885173	B2	6/13/2023	27	158885193	E1	6/13/2023
8	158885174	B3	6/13/2023	28	158885194	E2	6/13/2023
9	158885175	C1	6/13/2023	29	158885195	E3	6/13/2023
10	158885176	C2	6/13/2023	30	158885196	E4	6/13/2023
11	158885177	C3	6/13/2023	31	158885197	G1	6/13/2023
12	158885178	C4	6/13/2023	32	I58885198	G2	6/13/2023
13	158885179	C5	6/13/2023	33	I58885199	G3	6/13/2023
14	158885180	C6	6/13/2023	34	158885200	J1	6/13/2023
15	I58885181	C7	6/13/2023	35	158885201	J2	6/13/2023
16	158885182	C8	6/13/2023	36	158885202	J3	6/13/2023
17	158885183	C9	6/13/2023	37	158885203	J4	6/13/2023
18	158885184	D1	6/13/2023	38	158885204	J5	6/13/2023
19	I58885185	D2	6/13/2023	39	158885205	J6	6/13/2023
20	I58885186	D3	6/13/2023	40	158885206	J7	6/13/2023

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: Nathan Fox

My license renewal date for the state of Missouri is December 31, 2024.

Missouri COA: 001193

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





RE: B230098 - Lot 98 RR

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

Site Information:

Project Name: B230098

Project Customer: Lot/Block: Address: Subdivision:

City, County: State:

-	-		
No.	Seal#	Truss Name	Date
41	158885207	J8	6/13/2023
42	158885208	J9	6/13/2023
43	158885209	J10	6/13/2023
44	158885210	J11	6/13/2023
45	158885211	J12	6/13/2023
46	158885212	J13	6/13/2023
47	158885213	J14	6/13/2023
48	158885214	J15	6/13/2023
49	158885215	J16	6/13/2023
50	158885216	J17	6/13/2023
51	158885217	J18	6/13/2023
52	158885218	J19	6/13/2023
53	158885219	J20	6/13/2023
54	158885220	J21	6/13/2023
55	158885221	J22	6/13/2023
56	158885222	J23	6/13/2023
57	158885223	J24	6/13/2023
58	158885224	J25	6/13/2023
59	158885225	J26	6/13/2023
60	158885226	J27	6/13/2023
61	158885227	J28	6/13/2023
62	158885228	J29	6/13/2023
63	158885229	LAY1	6/13/2023
64	158885230	LAY2	6/13/2023
65	158885231	LAY3	6/13/2023
66	158885232	LAY4	6/13/2023
67	158885233	LAY5	6/13/2023
68	158885234	LAY6	6/13/2023
69	158885235	R1	6/13/2023
70	158885236	V1	6/13/2023
71	158885237	V2	6/13/2023
72	158885238	V3	6/13/2023
73	158885239	V4	6/13/2023
74	158885240	V5	6/13/2023
75	158885241	V6	6/13/2023
76	158885242	V7	6/13/2023
77	158885243	V8	6/13/2023

Job Truss Truss Type Qty Ply Lot 98 RR 158885167 B230098 A1 Hip Girder Job Reference (optional)

5-8-13

32-11-9

5-10-5

38-8-2

5-8-9

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

2-0-0 oc purlins (6-0-0 max.): 3-9.

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

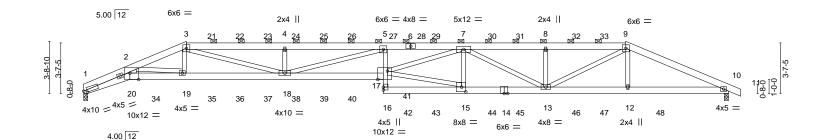
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:38 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

21-4-8

7-0-5

Scale = 1:82.2

46-0-0



3-3-8 3-3-8		14-4-3 7-0-5		4-8 0-5	27-1-5 5-8-13	-	32-11-9 5-10-5	' 	38-8-2 5-8-9	46-0-0 7-3-14	
Plate Offsets (X,Y)	[1:0-2-13,0-1-13], [15:0-3)-8-4,Edge],	[20:0-7-8,Edg	je]							
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/TI	2-0-0 1.15 1.15 NO	CSI. TC BC WB Matrix	0.35 0.77 0.93	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.58 -1.04 0.29 0.38	(loc) 17 17-18 10	l/defl >949 >528 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 1139 lb	GRIP 197/144 FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E

BOT CHORD 2x6 SP 2400F 2.0E *Except* 5-16: 2x4 SPF No.2

WEBS 2x4 SPF No.2 *Except*

2-20: 2x6 SPF No.2

REACTIONS. (size) 1=0-3-8, 10=0-3-8

Max Horz 1=-37(LC 11)

7-3-14

4-0-6

14-4-3

7-0-5

Max Uplift 1=-390(LC 5), 10=-407(LC 5) Max Grav 1=3969(LC 1), 10=4052(LC 1)

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

TOP CHORD 1-2=-17879/1837, 2-3=-12726/1287, 3-4=-18586/1826, 4-5=-18584/1825,

5-7=-23072/2271, 7-8=-11977/1195, 8-9=-11979/1196, 9-10=-8892/909

1-20=-1659/16368, 19-20=-1410/14056, 18-19=-1152/11906, 17-18=-2246/23584, BOT CHORD 16-17=0/262, 5-17=0/1021, 15-16=-169/1692, 13-15=-1339/14304, 12-13=-777/8020,

10-12=-780/8059

WEBS 2-20=-516/4833, 2-19=-2079/317, 3-19=-105/1578, 3-18=-632/7110, 4-18=-1108/318,

5-18=-5254/506, 15-17=-1199/12925, 7-17=-912/9260, 7-15=-2716/420, 7-13=-2688/243,

8-13=-788/240, 9-13=-403/4632, 9-12=-56/856

NOTES-

1) 4-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.

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

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

Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 390 lb uplift at joint 1 and 407 lb uplift at joint 10.



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 sand truss systems, see

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





16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 98 RR	
B230098	A1	Hip Girder	1			158885167
220000		The Grade	·	4	Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:38 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

NOTES-

- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 115 lb down and 76 lb up at 9-0-0, 115 lb down and 76 lb up at 11-0-0, 115 lb down and 76 lb up at 13-0-0, 115 lb down and 76 lb up at 15-0-0, 115 lb down and 76 lb up at 17-0-0, 115 lb down and 76 lb up at 19-0-0, 115 lb down and 76 lb up at 19-0-0, 115 lb down and 76 lb up at 15-0-0 and 76 lb up at 21-0-0, 114 lb down and 75 lb up at 23-0-0, 114 lb down and 75 lb up at 25-0-0, 114 lb down and 75 lb up at 27-0-0, 114 lb down and 75 lb up at 29-0-0 , 114 lb down and 75 lb up at 31-0-0, 114 lb down and 75 lb up at 33-0-0, and 114 lb down and 75 lb up at 35-0-0, and 114 lb down and 75 lb up at 37-0-0 on top chord, and 454 lb down and 143 lb up at 5-0-0, 230 lb down and 46 lb up at 7-0-0, 70 lb down at 11-0-0, 70 lb down at 13-0-0, 70 lb down at down at 17-0-0, 70 lb down at 19-0-0, 70 lb down at 21-0-0, 70 lb down at 23-0-0, 70 lb down at 25-0-0, 70 lb down at 27-0-0, 70 lb down at 29-0-0, 70 lb 31-0-0, 70 lb down at 33-0-0, 70 lb down at 35-0-0, 70 lb down at 37-0-0, and 232 lb down and 44 lb up at 39-0-0, and 463 lb down and 143 lb up at 41-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-3=-70, 3-9=-70, 9-11=-70, 1-20=-20, 17-20=-20, 10-16=-20

Concentrated Loads (lb)

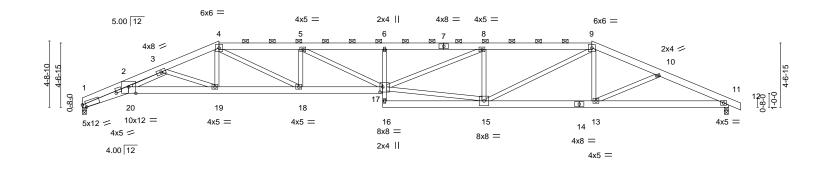
Vert: 19=-230(F) 15=-50(F) 7=-114(F) 8=-114(F) 13=-50(F) 12=-232(F) 21=-115(F) 22=-115(F) 23=-115(F) 24=-115(F) 25=-115(F) 26=-115(F) 27=-115(F) 28=-114(F) 39=-114(F) 31=-114(F) 31=-114(F) 32=-114(F) 33=-114(F) 34=-454(F) 35=-49(F) 36=-49(F) 37=-49(F) 38=-49(F) 39=-49(F) 41=-49(F) 42=-50(F) 43=-50(F) 44=-50(F) 45=-50(F) 46=-50(F) 47=-50(F) 48=-463(F)

Job Truss Truss Type Qty Ply Lot 98 RR 158885168 B230098 A2 HIP 2 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:40 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 5-9-12 15-6-10 28-7-2 40-11-10 46-0-0 2-6-4 3-10-15 5-9-14 13-0-9 7-3-10 4-8-5 5-0-6

Scale = 1:82.0



3-3-8 3-3-8	9-8-11 6-5-3	15-6-10 5-9-14	21-4-8 5-9-14	28-7-2 7-2-10	-	36-3-5 7-8-2	+	46-0-0 9-8-11	
Plate Offsets (X,Y)									
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/	2-0-0 1.15 1.15 YES TPI2014	CSI. TC 0.72 BC 0.91 WB 0.64 Matrix-S	Horz(CT) 0	in (loc) 41 17 74 17 28 11 31 17	l/defl >999 >738 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 486 lb	GRIP 197/144 FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No 2 WFBS

REACTIONS. (size) 1=0-3-8, 11=0-3-8

Max Horz 1=-79(LC 13)

Max Uplift 1=-273(LC 4), 11=-305(LC 5) Max Grav 1=2055(LC 1), 11=2128(LC 1)

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

TOP CHORD 1-2=-8828/1182, 2-3=-7598/1071, 3-4=-5449/836, 4-5=-6736/1127, 5-6=-7496/1278,

6-8=-7425/1272, 8-9=-5437/943, 9-10=-4127/640, 10-11=-4303/658 1-20=-1059/8034, 19-20=-886/6362, 18-19=-676/4969, 17-18=-1011/6733, 15-16=-40/290, BOT CHORD

13-15=-488/3781, 11-13=-541/3842

WEBS 6-17=-412/174, 2-20=-198/1843, 4-19=-21/774, 4-18=-394/2123, 5-18=-951/277,

 $5-17=-184/966,\ 15-17=-788/5194,\ 8-17=-366/2177,\ 9-15=-381/1989,\ 9-13=0/345,$

3-19=-1445/264, 3-20=-123/1049, 8-15=-1481/389

NOTES-

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

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

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

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

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

5) Provide adequate drainage to prevent water ponding.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 273 lb uplift at joint 1 and 305 lb uplift at
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-9-8 oc purlins, except

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

2-0-0 oc purlins (5-7-1 max.): 4-9.

2-2-0 oc bracing: 1-20.

June 13,2023

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017 Job Truss Truss Type Qty Ply Lot 98 RR 158885169 B230098 A3 Hip Job Reference (optional)

16-9-0

4-7-8

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:42 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 27-4-12 27-8-12 0-4-0 33-10-8 38-7-5 46-0-0 10-7-12 4-8-13

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

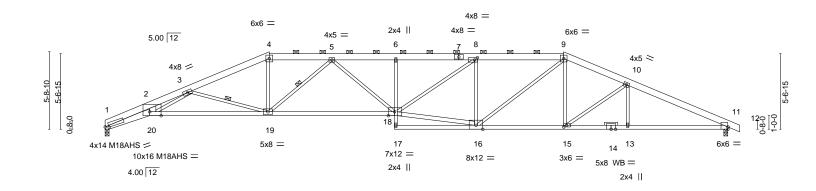
3-19, 5-19

2-0-0 oc purlins (2-10-6 max.): 4-9.

1 Row at midpt

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

Scale = 1:85.1



	3-3-8	12-1-8	21-4	1-8	27-4-12	1	33-	10-8	38-7-5	46-0-0	
	3-3-8 8-10-0			-0	6-0-4 6-5-12		4-8-13	7-4-11	<u> </u>		
Plate Offsets (X,	Y) [1:0-	-3-5,0-1-5], [8:0-2-8,0-2-0],	11:0-0-0,0-2-1], [15:0	0-2-8,0-1-8], [1	8:0-5-8,Edge], [2	20:0-10-2	2,Edge				
LOADING (psf) TCLL 25.0 TCDL 10.0		SPACING- 2-0 Plate Grip DOL 1.: Lumber DOL 1.:	TC	0.80 0.94	DEFL. Vert(LL) Vert(CT)	in -0.58 -1.16 1	(loc) 18	l/defl >939 >473	L/d 360 240	PLATES MT20 M18AHS	GRIP 197/144 142/136
BCLL 0.0 BCDL 10.0	*	Rep Stress Incr YE Code IRC2018/TPI2014	WB	0.88	Horz(CT) Wind(LL)	0.50 0.42	11 18	n/a	n/a 240	Weight: 212 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except* 1-4: 2x6 SP 2400F 2.0E

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

1-20: 2x6 SP 2400F 2.0E, 14-17: 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-20: 2x6 SPF No.2, 16-18: 2x4 SPF 2100F 1.8E

OTHERS 2x3 SPF No.2

REACTIONS. (size) 1=0-3-8, 11=0-3-8

Max Horz 1=-97(LC 9)

Max Uplift 1=-243(LC 4), 11=-275(LC 5) Max Grav 1=2055(LC 1), 11=2128(LC 1)

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

TOP CHORD 1-2=-9072/1061, 2-3=-7679/961, 3-4=-4780/664, 4-5=-4325/635, 5-6=-5564/894,

6-8=-5561/896, 8-9=-4404/727, 9-10=-3824/585, 10-11=-4266/557

BOT CHORD 1-20=-952/8272, 19-20=-755/5972, 18-19=-701/5146, 15-16=-400/3474, 13-15=-436/3803,

11-13=-436/3803

WEBS 6-18=-350/145, 2-20=-165/1897, 3-20=-136/1546, 3-19=-1683/377, 4-19=-131/1416,

5-19=-1234/294, 5-18=-81/676, 16-18=-581/4409, 8-18=-215/1434, 9-16=-232/1315,

9-15=-49/357, 10-15=-412/187, 10-13=0/252, 8-16=-1343/330

- 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 243 lb uplift at joint 1 and 275 lb uplift at ioint 11.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 13,2023

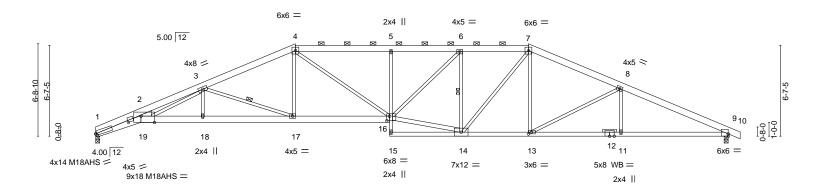


Job Truss Truss Type Qty Ply Lot 98 RR 158885170 B230098 A4 Hip Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:43 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 14<u>-6-5</u> 21-4-8 26-7-0 38-2-7 46-0-0 46-10-8 0-10-8 31-5-11 6-8-13 6-10-3 4-10-12 6-8-12

Scale = 1:83.8



	3-8 7-9-7 3-8 4-5-15	14-6-5 6-8-13	21-4-8 6-10-3	26-7-0 5-2-8	31-5-11 4-10-12	38-2-7 6-8-12	46-0-0 7-9-9	——
Plate Offsets (X,Y)	[1:0-1-1,0-1-9], [1:2-6	6-3,0-0-7], [9:0-0-0	9:0-11-12,Edge]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- Plate Grip DO Lumber DOL Rep Stress Ind	1.15	CSI. TC 0.75 BC 0.95 WB 0.92	DEFL. Vert(LL) Vert(CT) Horz(CT)	-0.46 16	l/defl L/d >999 360 >658 240 n/a n/a		GRIP 197/144 142/136
BCDL 10.0	Code IRC201	8/TPI2014	Matrix-S	Wind(LL)	0.32 16	>999 240	Weight: 240 lb	FT = 10%

BOT CHORD

WEBS

except

2-0-0 oc purlins (2-11-12 max.): 4-7.

2-2-0 oc bracing: 11-13.

1 Row at midpt

Structural wood sheathing directly applied or 2-3-11 oc purlins,

3-17, 6-14

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

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x6 SPF No 2 *Except* 1-4: 2x6 SP 2400F 2.0E

BOT CHORD 2x6 SP 2400F 2.0E *Except*

12-15: 2x4 SPF No.2, 9-12: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*

2-19: 2x10 SP 2400F 2.0E, 14-16: 2x4 SPF No.2

OTHERS 2x3 SPF No.2

REACTIONS. (size) 1=0-3-8, 9=0-3-8

Max Horz 1=-115(LC 9)

Max Uplift 1=-214(LC 4), 9=-246(LC 5) Max Grav 1=2055(LC 1), 9=2128(LC 1)

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

TOP CHORD 1-2=-8561/885, 2-3=-7102/820, 3-4=-4382/581, 4-5=-4565/687, 5-6=-4567/689,

6-7=-3696/573, 7-8=-3619/510, 8-9=-4277/490

BOT CHORD 1-19=-789/7793, 18-19=-577/5567, 17-18=-577/5567, 16-17=-391/3945, 13-14=-306/3250,

11-13=-375/3817, 9-11=-375/3817

WEBS 5-16=-480/192, 2-19=-105/1706, 3-19=-238/1239, 3-18=0/356, 3-17=-1712/352,

4-17=-26/742, 4-16=-178/971, 14-16=-403/3738, 6-16=-173/1245, 6-14=-1246/265,

7-14=-146/876, 7-13=-45/419, 8-13=-653/234, 8-11=0/314

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) The Fabrication Tolerance at joint 19 = 6%, joint 19 = 6%
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 214 lb uplift at joint 1 and 246 lb uplift at
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885171 B230098 A5 Hip Job Reference (optional)

Waverly, KS - 66871, Wheeler Lumber,

7-10-1

4-6-9

12-4-9

4-6-9

16-11-2

4-6-9

16-11-2

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:45 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 34-7-7 40-1-15 46-0-0

5-6-9

5-6-9

36-9-0

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

1 Row at midpt

Scale = 1:85.2

5-10-1

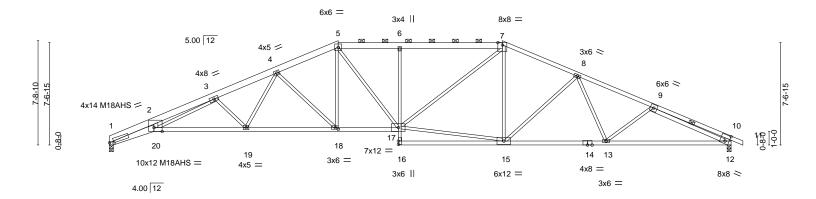
46-0-0

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

except end verticals, and 2-0-0 oc purlins (3-1-9 max.): 5-7.

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

9-12



		3-3-8 6-9-13	6	i-9-13	4-5-6	7-8-	6	7-	-8-2	9-3-0	1
Plate Offs	sets (X,Y)	[1:0-3-13,0-1-5], [12:0-3-9	<u>,0-5-11], [18:0</u>)-2-8,0-1-8], [20:0-7-4,Edge]						
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	0.81	Vert(LL)	-0.47 17-18	>999	360	MT20	197/144
CDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.85 19-20) >641	240	M18AHS	142/136
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.47 1:	2 n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matrix	:-S	Wind(LL)	0.31 19-20	>999	240	Weight: 217 lb	FT = 10%

29-0-14

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-TOP CHORD 2x6 SP 2400F 2 0F *Except*

5-7: 2x6 SPF No.2. 7-11: 2x4 SPF No.2

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

3-3-8

1-20: 2x6 SP 2400F 2.0E, 6-16: 2x3 SPF No.2, 14-16: 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-20,9-12: 2x4 SPF No.2, 10-12: 2x6 SP 2400F 2.0E

REACTIONS. (size) 1=0-3-8, 12=0-3-8

Max Horz 1=-121(LC 9)

Max Uplift 1=-212(LC 8), 12=-237(LC 9) Max Grav 1=2052(LC 1), 12=2131(LC 1)

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

TOP CHORD $1-2 = -8701/927, \ 2-3 = -7673/913, \ 3-4 = -5104/531, \ 4-5 = -3821/478, \ 5-6 = -3787/524, \ 3-787/524, \ 3-787/524,$

6-7=-3783/526, 7-8=-3312/431, 8-9=-3875/407, 9-10=-1047/162, 10-12=-675/163

BOT CHORD 1-20=-931/7900, 19-20=-578/5401, 18-19=-340/4138, 17-18=-256/3496, 6-17=-585/224,

13-15=-270/3417, 12-13=-329/3604

WEBS 5-18=-97/763, 5-17=-131/683, 7-15=-50/307, 8-15=-584/218, 8-13=-6/328,

7-17=-154/1129, 15-17=-219/2829, 4-18=-888/242, 4-19=-120/1052, 3-19=-1109/273,

3-20=-336/2047, 2-20=-59/1525, 9-12=-3040/342

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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 1 and 237 lb uplift at ioint 12.
- 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.



June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885172 B230098 В1 Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:47 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-1-10

26-8-2

31-10-2

5-2-0

31-10-2

5-2-0

Structural wood sheathing directly applied or 2-8-9 oc purlins,

6-15, 7-13

except end verticals, and 2-0-0 oc purlins (4-3-4 max.): 7-8.

Rigid ceiling directly applied or 9-2-1 oc bracing.

1 Row at midpt

Scale = 1:69.7

38-0-0

38-0-0

6-1-14

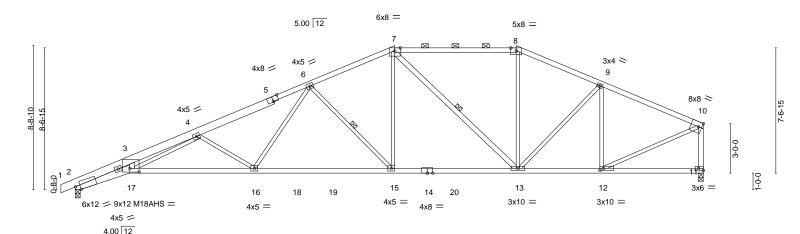


Plate Off	Plate Offsets (X,Y) [2:0-3-9,Edge], [5:0-4-0,Edge], [10:0-2-5,Edge], [11:Edge,0-1-8], [12:0-2-8,0-1-8], [17:0-6-12,0-2-12]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.40 16-17	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.73 16-17	>623	240	M18AHS	142/136	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.30 11	n/a	n/a			
BCDL	10.0	Code IRC2018/TP	12014	Matrix	k-S	Wind(LL)	0.26 16-17	>999	240	Weight: 171 lb	FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

WEBS

19-3-14

8-6-0

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

7-8: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 *Except*

2-17: 2x6 SP 2400F 2.0E, 14-17: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*

3-17,7-13,10-11: 2x4 SPF No.2

3-3-8

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

Max Horz 2=182(LC 8)

Max Uplift 2=-243(LC 8), 11=-147(LC 5) Max Grav 2=1848(LC 2), 11=1786(LC 2)

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

2-3=-7514/1015, 3-4=-6575/961, 4-6=-4041/492, 6-7=-2630/315, 7-8=-1956/276, TOP CHORD

8-9=-2175/278, 9-10=-1977/206, 10-11=-1682/178

BOT CHORD 2-17=-1068/6829, 16-17=-734/4624, 15-16=-353/3023, 13-15=-197/2376,

12-13=-172/1768

WEBS 3-17=-120/1409, 4-17=-292/1792, 4-16=-1219/376, 6-16=-119/1125, 6-15=-917/282,

7-15=-103/1011, 7-13=-681/138, 8-13=-16/442, 9-13=-12/390, 9-12=-641/136,

14-2-4

6-8-15

10-12=-157/1884

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, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 243 lb uplift at joint 2 and 147 lb uplift at ioint 11. 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 13,2023

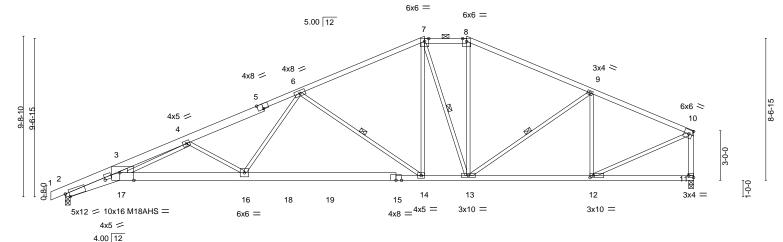


Job Truss Truss Type Qty Ply Lot 98 RR 158885173 B230098 B2 Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:49 2023 Page 1

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

14-2-4 21-8-11 24-3-5 2-6-10 31-10-1 38-0-0 6-8-15 7-6-7 7-6-13

Scale = 1:69.7



	3-3-0	1-3-3	10-3-13	17-2-7	1-0-11	27-3-3	31-10-1	30-0-0	1					
	3-3-8	4-1-13	3-4-10	3-4-5	7-6-7	2-6-10	7-6-13	6-1-15	1					
Plate Offsets (X,Y) [2:2-6-9,0-0-7], [2:0-2-13,0-2-13], [5:0-4-0,Edge], [11:Edge,0-1-8], [12:0-2-8,0-1-8], [17:0-10-2,Edge]														
LOADING (psi	f)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl L/d	PLATES GRI	P					
TCII 25	ó	Plate Grin DOI	1 15	TC 0.94	Vert(LL)	-0.35 14-16	>999 360	MT20 197	/144					

BRACING-

TOP CHORD

BOT CHORD

WEBS

24-3-5

31_10_1

2-0-0 oc purlins (4-0-10 max.): 7-8.

1 Row at midpt

Rigid ceiling directly applied or 8-9-11 oc bracing.

LOAI TCLL TCDL вс Vert(CT) M18AHS 142/136 10.0 Lumber DOL 1.15 0.88 -0.62 14-16 >729 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.98 Horz(CT) 0.26 11 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 0.25 16-17 >999 240 Weight: 191 lb FT = 10%

21_8_11

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

5-7: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SP 2400F 2.0E

2x6 SP 2400F 2.0E *Except* **BOT CHORD**

11-15: 2x4 SPF No.2

3-3-8

WEBS 2x3 SPF No.2 *Except*

3-17: 2x6 SPF No.2, 10-11: 2x4 SPF No.2

7-5-5

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

Max Horz 2=200(LC 8)

Max Uplift 2=-259(LC 8), 11=-170(LC 9) Max Grav 2=1827(LC 2), 11=1758(LC 2)

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

2-3=-7277/1102, 3-4=-6199/1022, 4-6=-4119/541, 6-7=-2237/314, 7-8=-1861/287, TOP CHORD

10-0-15

1/1-2-/

8-9=-2107/292, 9-10=-1973/196, 10-11=-1669/197

BOT CHORD 2-17=-1164/6614, 16-17=-793/4619, 14-16=-438/3015, 13-14=-146/1978,

12-13=-165/1773

WEBS 3-17=-139/1424, 4-16=-1115/360, 6-14=-1254/356, 7-14=-122/910, 7-13=-527/143,

8-13=-69/536, 9-13=-84/278, 9-12=-626/157, 10-12=-151/1906, 6-16=-87/1284,

4-17=-308/1386

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, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 259 lb uplift at joint 2 and 170 lb uplift at ioint 11.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



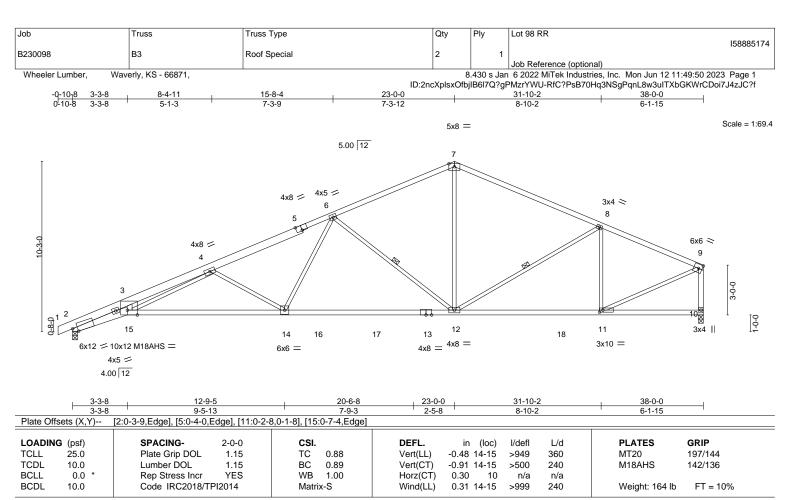
38-0-0

Structural wood sheathing directly applied, except end verticals, and

6-14, 7-13, 9-13

June 13,2023





BRACING-

TOP CHORD

BOT CHORD

WFBS

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

7-9: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SP 2400F 2.0E

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

2-15: 2x6 SP 2400F 2.0E **WEBS** 2x3 SPF No.2 *Except* 3-15,9-10: 2x4 SPF No.2

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

Max Horz 2=210(LC 8)

Max Uplift 2=-265(LC 8), 10=-182(LC 9) Max Grav 2=1840(LC 2), 10=1796(LC 2)

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

2-3=-7492/1135, 3-4=-6598/1094, 4-6=-3691/501, 6-7=-2102/307, 7-8=-2126/328, TOP CHORD

8-9=-2035/216, 9-10=-1712/207

BOT CHORD $2\text{-}15\text{=-}1206/6807, \ 14\text{-}15\text{=-}779/4315, \ 12\text{-}14\text{=-}399/2812, \ 11\text{-}12\text{=-}188/1835}$

WEBS 3-15=-103/1330, 4-15=-393/2110, 4-14=-1217/397, 6-14=-81/1115, 6-12=-1220/349,

8-11=-628/172, 9-11=-181/1983, 7-12=-87/1110

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 265 lb uplift at joint 2 and 182 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 referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied, except end verticals.

6-12 8-12

Rigid ceiling directly applied or 8-10-3 oc bracing.

1 Row at midpt

June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885175 B230098 C1 **ROOF SPECIAL** Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:52 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-1-12 15-2-12 <u>21-1-8</u> 23-0-0 28-4-0 5-10-12 6-10-4 5-1-0 Scale = 1:60.6 4x8 || 5.00 12 2x4 || 3x4 II 4x8 = 4x5 = 4x8 =

> ₩ 10 5x14 M18AHS | 12 4.00 | 12 6x14 M18AHS = 6x6 =11 4x8 = 3x6 II 21-1-8 2-0-0 9-3-15 8-6-2 7-2-8

15

16

13

12

6x12 =

Plate Offs	Plate Offsets (X,Y) [2:0-3-5,0-1-12], [5:0-4-0,Edge], [14:0-7-0,0-2-8]													
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	0.60	Vert(LL)	-0.40 13-14	>851	360	MT20	197/144			
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.76 13-14	>446	240	M18AHS	142/136			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.26 10	n/a	n/a					
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	x-S	Wind(LL)	0.27 13-14	>999	240	Weight: 150 lb	FT = 10%			

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2 *Except* TOP CHORD Structural wood sheathing directly applied or 3-7-2 oc purlins, 1-5: 2x6 SP 2400F 2.0E except end verticals.

BOT CHORD BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2x4 SPF No.2 *Except*

2-14: 2x6 SPF No.2, 12-14: 2x4 SPF 2100F 1.8E, 7-11: 2x3 SPF No.2 7-5-0 oc bracing: 2-14.

2x3 SPF No.2 *Except* 1 Row at midpt 7-12 3-14,8-10: 2x4 SPF No.2 **WEBS** 1 Row at midpt 6-12, 9-10, 8-10

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

Max Horz 2=336(LC 7)

Max Uplift 2=-217(LC 8), 10=-186(LC 8) Max Grav 2=1377(LC 2), 10=1321(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-5243/903, 3-4=-4680/936, 4-6=-2392/402, 6-7=-1012/214, 7-8=-964/290 TOP CHORD BOT CHORD 2-14=-988/4744, 13-14=-511/2592, 12-13=-266/1642, 7-12=-337/179

WEBS $3-14=0/777,\ 4-14=-485/1953,\ 4-13=-840/309,\ 6-13=-138/1134,\ 6-12=-1059/283,$

8-12=-299/1359, 10-12=-143/569, 8-10=-1292/171

NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 2 and 186 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 referenced standard ANSI/TPI 1.



June 13,2023

9-0-







Job Truss Truss Type Qty Ply Lot 98 RR 158885176 B230098 C2 HIP Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:53 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-1-12 15-2-12 21-1-8 21-8-11 24-3-5 0-7-3 2-6-10 28-4-0 5-1-0 6-10-4 5-10-12 4-0-11 Scale = 1:59.8 6x6 = 2x4 || 4x5 =5.00 12 7 8 5x8 > 10 4x8 = 4x5 = 4x8 = 9-8-10 9 14 0-8-0 17 15 18 5x14 M18AHS = 6x6 = 13 12 6x14 M18AHS = 3x4 II 2x4 || 7x12 = 4.00 12 3-3-8 12-7-6 21-1-8 3-3-8 9-3-15 3-1-13 4-0-11 8-6-2 Plate Offsets (X,Y)--[2:0-3-5,0-1-12], [5:0-4-0,Edge], [11:Edge,0-2-8], [12:0-6-0,0-2-8], [16:0-7-0,0-2-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.80 Vert(LL) -0.40 15-16 >837 360 MT20 197/144 TCDL Vert(CT) M18AHS 142/136 10.0 Lumber DOL 1.15 BC 0.89 -0.77 15-16 >439 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.99 Horz(CT) 0.27 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 0.29 15-16 >999 240 Weight: 156 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

1 Row at midpt

1 Row at midpt

LUMBER-TOP CHORD 2x4 SPF No.2 *Except* 1-5: 2x6 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except*

2-16: 2x6 SPF No.2, 14-16: 2x4 SPF 2100F 1.8E, 7-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 3-16: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 11=0-3-8 Max Horz 2=349(LC 8)

Max Uplift 2=-194(LC 8), 11=-186(LC 8)

Max Grav 2=1377(LC 2), 11=1321(LC 2)

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

 $2\text{-}3\text{--}5244/976, \ 3\text{-}4\text{--}4682/991, \ 4\text{-}6\text{--}2392/370, \ 6\text{-}7\text{--}1011/168, \ 7\text{-}8\text{--}901/231, }$

8-9=-500/115, 9-10=-568/111, 10-11=-1263/206 2-16=-1202/4745, 15-16=-635/2590, 14-15=-376/1644

WEBS 3-16=-21/776, 4-16=-568/1956, 4-15=-836/323, 6-15=-151/1130, 6-14=-1069/295,

10-12=-167/1078, 12-14=-104/865, 8-14=-342/1260, 8-12=-1145/251

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 194 lb uplift at joint 2 and 186 lb uplift at ioint 11. 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1. 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-6-13 oc purlins,

6-14, 9-12, 10-11, 8-12

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

Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 7-14

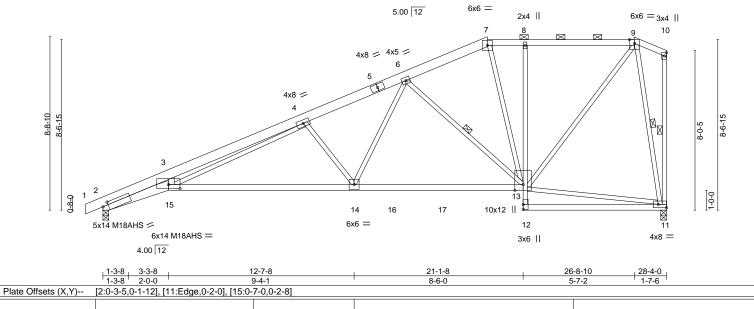
June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885177 B230098 C3 HIP Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:55 2023 Page 1

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-2-0 15-2-12 21-1-8 26-8-10 19-3-14 6-10-8 5-0-12 1-9-10

Scale = 1:57.9



LOADING (psf) SPACING-2-0-0

DEFL. in (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.60 Vert(LL) -0.39 14-15 >859 360 MT20 197/144 TCDL Vert(CT) >449 M18AHS 142/136 10.0 Lumber DOL 1.15 BC 0.89 -0.75 14-15 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.82 Horz(CT) 0.25 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 0.25 14-15 >999 240 Weight: 152 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

5-7: 2x6 SPF No.2, 1-5: 2x6 SP 2400F 2.0E

BOT CHORD 2x6 SPF No.2 *Except*

13-15: 2x4 SPF 2100F 1.8E, 8-12: 2x3 SPF No.2

11-12: 2x4 SPF No.2 2x3 SPF No.2 *Except*

WEBS 3-15: 2x4 SPF No.2

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

Max Horz 2=341(LC 7)

Max Uplift 2=-210(LC 8), 11=-175(LC 5) Max Grav 2=1375(LC 2), 11=1319(LC 2)

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

TOP CHORD 2-3=-5223/832, 3-4=-4651/873, 4-6=-2399/374, 6-7=-1025/186, 7-8=-983/198,

8-9=-983/201

BOT CHORD 2-15=-895/4724, 14-15=-458/2605, 13-14=-277/1643, 8-13=-363/149 **WEBS**

3-15=0/792, 4-15=-447/1913, 4-14=-852/311, 6-14=-140/1143, 6-13=-992/249,

9-11=-1237/300, 9-13=-159/1268

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, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 210 lb uplift at joint 2 and 175 lb uplift at ioint 11.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

except end verticals, and 2-0-0 oc purlins (5-3-11 max.): 7-9.

6-13, 10-11, 9-11

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

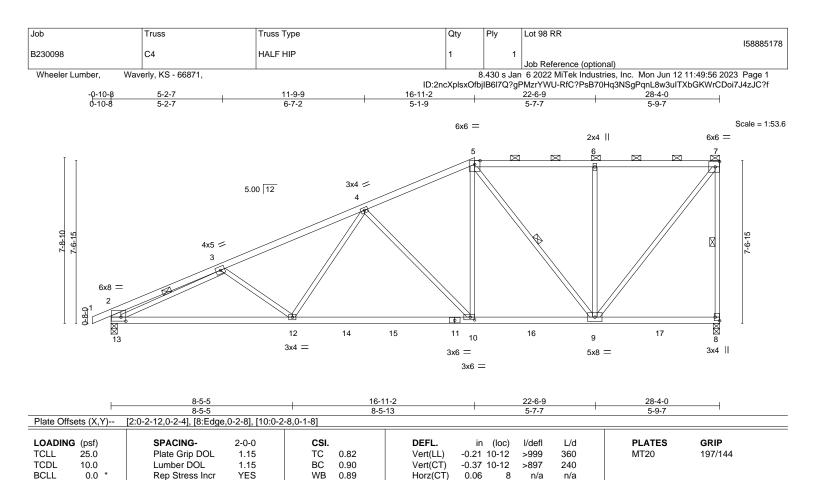
7-9-6 oc bracing: 2-15.

1 Row at midpt

June 13,2023







LUMBER-

BCDL

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

10.0

WFBS 2-13: 2x6 SPF No.2

Matrix-S

2x3 SPF No.2 *Except*

Code IRC2018/TPI2014

BRACING-TOP CHORD

Wind(LL)

0.09 10-12

Structural wood sheathing directly applied or 3-3-1 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-4 max.): 5-7.

Weight: 118 lb

FT = 10%

BOT CHORD Rigid ceiling directly applied or 8-0-8 oc bracing. **WEBS** 1 Row at midpt 7-8, 5-9, 3-13

240

>999

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

Max Horz 13=289(LC 8)

Max Uplift 8=-205(LC 4), 13=-182(LC 8) Max Grav 8=1372(LC 2), 13=1395(LC 2)

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

2-3=-735/100, 3-4=-2263/248, 4-5=-1453/171, 5-6=-887/134, 6-7=-885/132, TOP CHORD

7-8=-1256/233 2-13=-488/121

12-13=-526/2165, 10-12=-348/1751, 9-10=-180/1275 BOT CHORD

WEBS 3-12=-262/210, 4-12=-15/510, 4-10=-677/242, 5-10=-92/787, 5-9=-644/146,

6-9=-478/195, 7-9=-213/1426, 3-13=-1731/227

- 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 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 205 lb uplift at joint 8 and 182 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.



June 13,2023







Job Truss Truss Type Qty Ply Lot 98 RR 158885179 B230098 C5 Half Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:49:58 2023 Page 1

14-<u>6-5</u>

3-8-5

10-10-0

3-4-10

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

20-4-6 5-10-2 28-4-0 2-1-8 5-10-2

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

except end verticals, and 2-0-0 oc purlins (4-11-6 max.): 6-9.

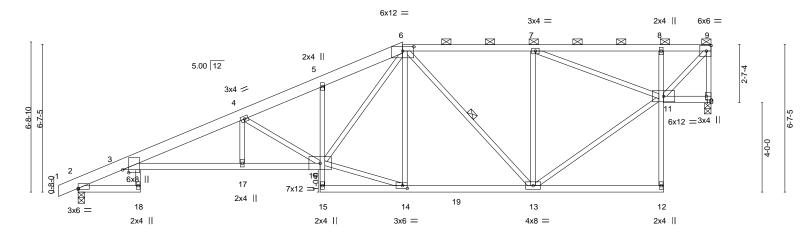
6-13

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

6-0-0 oc bracing: 2-18.

1 Row at midpt

Scale = 1:51.6



	2-9-8	1 7-5-7	10-10-0	14-6-5	20-4-6	26-2-8	₁ 28-4-0 ₁	
	2-9-8	4-7-15	3-4-10	3-8-5	5-10-2	5-10-2	2-1-8	
ate Offsets	(X,Y) [2:0	0-0-0,0-0-8], [3:0-1-9,0-3-3],	[6:0-6-0,0-2-5], [10	8,0-1-8]				

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL)	-0.34	18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.67	Vert(CT)	-0.59	18	>570	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.58	Horz(CT)	0.25	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.27	18	>999	240	Weight: 141 lb	FT = 10%

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

2x6 SP 2400F 2.0E *Except* TOP CHORD 6-9: 2x4 SPF No.2

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

3-16: 2x4 SPF 2100F 1.8E, 5-15,8-12: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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

Max Horz 2=215(LC 8)

Max Uplift 10=-211(LC 5), 2=-172(LC 8) Max Grav 10=1319(LC 2), 2=1399(LC 2)

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

TOP CHORD $2\hbox{-}3\hbox{-}666/0, \, 3\hbox{-}4\hbox{-}-3491/447, \, 4\hbox{-}5\hbox{-}-2557/322, \, 5\hbox{-}6\hbox{-}-2437/367, \, 6\hbox{-}7\hbox{-}-1238/221, \, 3\hbox{-}666/0, \, 3\hbox{-}4\hbox{-}-3491/447, \, 4\hbox{-}5\hbox{-}-2557/322, \, 5\hbox{-}6\hbox{-}-2437/367, \, 6\hbox{-}7\hbox{-}-1238/221, \, 3\hbox{-}666/0, \, 3\hbox{-}4\hbox{-}-3491/447, \, 4\hbox{-}5\hbox{-}-2557/322, \, 5\hbox{-}6\hbox{-}-2437/367, \, 6\hbox{-}7\hbox{-}-1238/221, \, 3\hbox{-}666/0, \, 3\hbox{-}4\hbox{-}-3491/447, \, 4\hbox{-}5\hbox{-}-2557/322, \, 5\hbox{-}6\hbox{-}-2437/367, \, 6\hbox{-}7\hbox{-}-1238/221, \, 3\hbox{-}666/0, \, 3\hbox{-}4\hbox{-}-3491/447, \, 4\hbox{-}5\hbox{-}-2557/322, \, 5\hbox{-}6\hbox{-}-2437/367, \, 6\hbox{-}7\hbox{-}-1238/221, \, 3\hbox{-}666/0, \, 3\hbox{-}666/0,$

7-8=-1149/218, 8-9=-1135/212, 9-10=-1256/217

BOT CHORD $3-17=-557/3332,\ 16-17=-557/3332,\ 13-14=-216/1508,\ 8-11=-298/129$

WEBS 4-16=-1287/285, 14-16=-215/1477, 6-16=-279/1313, 6-14=-270/116, 6-13=-398/110,

7-13=-446/193, 11-13=-239/1494, 9-11=-283/1660

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 211 lb uplift at joint 10 and 172 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.



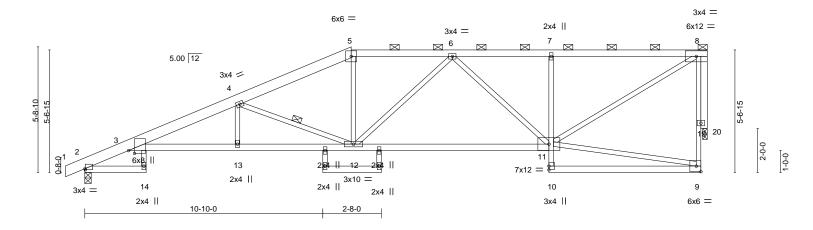
June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885180 B230098 C6 Half Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:00 2023 Page 1

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 16-8-12 21-1-8 28-4-0 12-1-8 4-1-15

Scale = 1:52.4



2-3-0	4-1-19	J-Z-Z	3-0-0		1-2-0
Plate Offsets (X,Y)	[2:0-0-4,0-0-8], [3:0-1-9,0-3-3]				
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 0.86	Vert(LL) -0.31 14	>999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.65	Vert(CT) -0.56 14	>604 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.39 20	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.24 14	>999 240	Weight: 132 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-TOP CHORD

2x6 SP 2400F 2.0E *Except* 5-8: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

3-11: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2

6-11-7

WEBS 2x3 SPF No.2

OTHERS 2x4 SPF No.2

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

Max Horz 2=182(LC 8)

Max Uplift 2=-151(LC 8), 20=-214(LC 4) Max Grav 2=1351(LC 1), 20=1238(LC 1)

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

 $2\hbox{-}3\hbox{-}625/0,\,3\hbox{-}4\hbox{-}-3385/392,\,4\hbox{-}5\hbox{-}-2310/307,\,5\hbox{-}6\hbox{-}-2061/301,\,6\hbox{-}7\hbox{-}-1615/273,}$ TOP CHORD

7-8=-1615/279

BOT CHORD $3-13=-472/3222,\ 12-13=-472/3222,\ 11-12=-371/1997,\ 7-11=-448/186$

WEBS 4-12=-1271/324, 5-12=-16/589, 6-11=-527/112, 8-11=-309/1797, 8-20=-1244/215

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

12-1-8

- 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) Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 151 lb uplift at joint 2 and 214 lb uplift at ioint 20.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

except end verticals, and 2-0-0 oc purlins (3-2-6 max.): 5-8.

4-12

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

1 Row at midpt

June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885181 B230098 C7 Half Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:02 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

15-6-6

5-9-10

9-8-11

3-7-8

3-3-12

Scale = 1:52.4

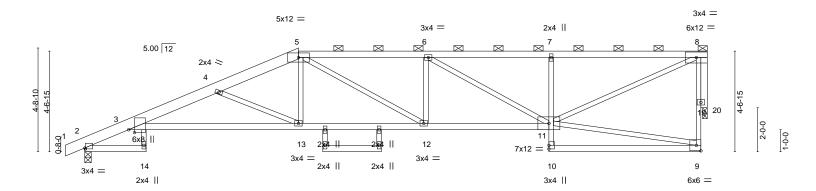
28-4-0

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

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

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

6-0-0 oc bracing: 2-14.



2-9-8 2-9-8	9-8-11 6-11-3	15-6-6 5-9-10	21-1-8 5-7-2	28-4-0 7-2-8	—
Plate Offsets (X,Y)	[2:0-0-4,0-0-8], [3:0-1-9,0-3-3]				
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	TC 0.89 Ve BC 0.59 Ve WB 0.78 Ho	FL. in (loc) I/defl rt(LL) -0.29 3-13 >999 rt(CT) -0.60 3-13 >557 rz(CT) 0.38 20 n/a nd(LL) 0.23 3-13 >999	L/d PLATES 360 MT20 240 n/a 240 Weight: 125 lb	GRIP 197/144 FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x6 SP 2400F 2.0E *Except*

5-8: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

3-11: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2

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

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

Max Horz 2=148(LC 5)

Max Uplift 2=-160(LC 4), 20=-219(LC 4) Max Grav 2=1351(LC 1), 20=1238(LC 1)

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

2-3=-625/21, 3-4=-3629/511, 4-5=-2735/395, 5-6=-2737/467, 6-7=-2096/377, TOP CHORD

7-8=-2095/383

BOT CHORD $3-13=-580/3504,\ 12-13=-402/2483,\ 11-12=-492/2736,\ 7-11=-474/196$

WEBS 4-13=-1135/290, 5-13=-27/608, 5-12=-104/458, 6-11=-739/103, 8-11=-406/2194,

8-20=-1251/223

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) Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 160 lb uplift at joint 2 and 219 lb uplift at joint 20.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 13,2023



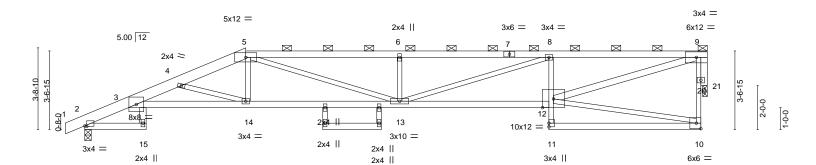


Job Truss Truss Type Qty Ply Lot 98 RR 158885182 B230098 C8 Half Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:04 2023 Page 1

7-0-1

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 14-3-15 28-4-0

Scale = 1:52.4



Ŀ	2-9-8	7-3-14	14-3-15	21-1-8	28-4-0	
	2-9-8	4-6-6	7-0-1	6-9-9	7-2-8	1
Plate Offsets ((X,Y) [2:	0-1-0,0-0-4]				
LOADING (ps	sf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d PLATES	GRIP
TCLL 25	5.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.38 13 >892	360 MT20	197/144
TCDL 10	0.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.68 12-13 >493	240	
BCLL 0	0.0 *	Rep Stress Incr YES	WB 0.79	Horz(CT) 0.35 21 n/a	n/a	
BCDL 10	0.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.30 13 >999	240 Weight: 120 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

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

7-3-14

4-6-6

1-5: 2x6 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 *Except*

3-12: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 3-15,9-12: 2x4 SPF No.2

OTHERS 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 21=0-2-8

Max Horz 2=121(LC 5)

Max Uplift 2=-184(LC 4), 21=-224(LC 5) Max Grav 2=1350(LC 1), 21=1237(LC 1)

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

TOP CHORD 2-3=-626/58, 3-4=-4258/644, 4-5=-3264/509, 5-6=-4008/704, 6-8=-4007/704,

8-9=-3230/613

BOT CHORD 3-14=-710/4178, 13-14=-522/3041, 12-13=-639/3265, 8-12=-761/244

WEBS 5-14=0/484, 5-13=-224/1163, 6-13=-507/210, 8-13=-107/784, 9-12=-624/3227,

4-14=-1210/229, 9-21=-1274/233

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) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 2 and 224 lb uplift at ioint 21.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

except end verticals, and 2-0-0 oc purlins (3-1-8 max.): 5-9.

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

June 13,2023

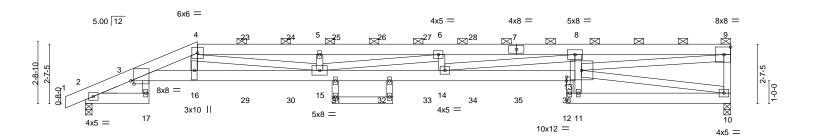




Job Truss Truss Type Qty Ply Lot 98 RR 158885183 B230098 C9 Half Hip Girder 2 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:06 2023 Page 1

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 4-11-2 15-7-11 <u>21-1-</u>8 28-4-0 10-3-6 5-5-13

Scale = 1:50.6



	2-9-8	4-11-2	10-3-6	15-7-11	21-1-8	21 ₁ -6 ₁ 0	28-4-0	
Г	2-9-8	2-1-10	5-4-5	5-4-5	5-5-13	0-4-8	6-10-0	1

Plate Offs	sets (X,Y)	[3:0-1-10,0-1-10], [22:0-2-0,0	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	0.71	Vert(LL)	-0.48 14-15	>701	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.87 14-15	>386	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.31 10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20)14	Matri	x-S	Wind(LL)	0.44 14-15	>769	240	Weight: 369 lb	FT = 10%

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x6 SP 2400F 2.0E BOT CHORD 2x6 SP 2400F 2.0E *Except*

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9. 8-11,18-19: 2x4 SPF No.2 **BOT CHORD WEBS**

Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2x4 SPF No.2 6-0-0 oc bracing: 2-17

10-0-0 oc bracing: 11-13

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

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

Max Horz 2=98(LC 7)

Max Uplift 10=-398(LC 5), 2=-387(LC 4) Max Grav 10=1751(LC 1), 2=1958(LC 1)

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

TOP CHORD 2-3=-864/180, 3-4=-7592/1597, 4-5=-10130/2272, 5-6=-10130/2272, 6-8=-10794/2516,

8-9=-7288/1750, 9-10=-1583/414

BOT CHORD 3-16=-1591/7301, 15-16=-1578/7178, 14-15=-2552/10794, 13-14=-1993/8216, 8-13=-902/310, 10-11=-172/792

3-17=-37/276, 4-16=-104/977, 4-15=-758/3115, 5-15=-393/228, 6-15=-748/263,

6-14=-359/220, 8-14=-569/2625, 10-13=-620/151, 9-13=-1757/7219

NOTES-

WEBS

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

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

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

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

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

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

5) Provide adequate drainage to prevent water ponding.

6) All plates are 2x4 MT20 unless otherwise indicated.

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



June 13,2023



Job	Truss	Truss Type	Qty	Ply	Lot 98 RR	
B230098	C9	Half Hip Girder	1	2	lab Deference (actional)	I58885183
				_	Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:06 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

NOTES-

- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 398 lb uplift at joint 10 and 387 lb uplift at joint 2.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 63 lb up at 4-11-2, 86 lb down and 63 lb up at 7-0-0, 86 lb down and 63 lb up at 9-0-0, 86 lb down and 77 lb up at 11-0-0, 86 lb down and 77 lb up at 15-0-0, and 87 lb down and 78 lb up at 15-0-0, and 87 lb down and 78 lb up at 17-0-0, and 87 lb down and 78 lb up at 19-0-0 on top chord, and 263 lb down and 77 lb up at 4-11-2, 51 lb down at 7-0-0, 51 lb down at 9-0-0, 32 lb down at 11-0-0, 32 lb down at 13-0-0, 32 lb down at 15-0-0, 32 lb down at 17-0-0, and 32 lb down at 19-0-0, and 262 lb down and 101 lb up at 21-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-4=-70, 4-9=-70, 2-17=-20, 3-13=-20, 11-12=-20, 10-11=-20

Concentrated Loads (lb)

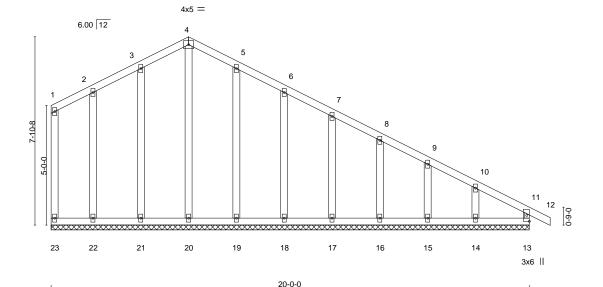
Vert: 4=-39(B) 7=-48(B) 16=-263(B) 23=-39(B) 24=-39(B) 25=-48(B) 26=-48(B) 27=-48(B) 28=-48(B) 29=-46(B) 30=-46(B) 31=-23(B) 32=-23(B) 33=-22(B) 34=-22(B) 35=-22(B) 36=-262(B)

Job Truss Truss Type Qty Ply Lot 98 RR 158885184 B230098 D1 Common Supported Gable Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:08 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Scale: 1/4"=1



GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defI I/d PLATES **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.13 Vert(LL) -0.00 12 n/r 120 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 вс 0.09 Vert(CT) -0.00 12 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.13 Horz(CT) 0.01 13 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Weight: 103 lb FT = 10%

20-0-0

LUMBER-**BRACING-**

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

BOT CHORD 2x4 SPF No.2 except end verticals

2x4 SPF No.2 *Except* BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS

OTHERS 2x4 SPF No.2

REACTIONS. All bearings 20-0-0. (lb) -Max Horz 23=-242(LC 6)

11-13: 2x3 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 23, 13, 21, 22, 19, 18, 17, 16, 15 except 14=-123(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 23, 13, 20, 21, 22, 19, 18, 17, 16, 15, 14

NOTES-

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

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 13, 21, 22, 19, 18, 17, 16, 15 except (jt=lb) 14=123.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885185 B230098 D2 Common Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:09 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 12-4-6 20-0-0 7-7-10 6-7-6 Scale = 1:45.6 4x8 = 6.00 12 2 5x8 / 3x4 ≥ Z-10-8 8 7 8x8 ≥ 6 92x4 || 3x10 = 2x4 || 5-9-0 12-4-6 20-0-0 5-9-0 6-7-6 7-7-10 Plate Offsets (X,Y)--[1:0-2-0,0-1-8], [6:0-3-2,0-6-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

(loc)

7-8

7-8

6

>999

>999

>999

except end verticals.

n/a

360

240

n/a

240

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

MT20

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

Weight: 76 lb

197/144

FT = 10%

-0.07

-0.14

0.02

0.03

BCDL 10.0

TCLL

TCDL

BCLL

LUMBER-TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No 2 WFBS

25.0

10.0

0.0

2x3 SPF No.2 *Except* 4-6: 2x8 SP 2400F 2.0E

REACTIONS. (size) 9=0-3-8, 6=0-3-8 Max Horz 9=-243(LC 4)

Max Uplift 9=-106(LC 9), 6=-151(LC 9) Max Grav 9=879(LC 1), 6=967(LC 1)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-617/161, 2-3=-665/137, 3-4=-1258/182, 1-9=-833/137, 4-6=-877/197

BOT CHORD 7-8=-63/1010, 6-7=-63/1010

WEBS 3-8=-631/232, 3-7=0/273, 1-8=-67/632

NOTES-

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

1.15

1.15

YES

TC

BC

WB

Matrix-S

0.87

0.51

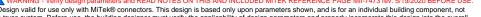
0.96

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=106, 6=151.
- 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.



June 13,2023







Job Truss Truss Type Qty Ply Lot 98 RR 158885186 B230098 D3 2 Common Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:10 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 5-9-0 5-9-0 12-4-7 19-10-8 6-7-7 7-6-1 Scale = 1:45.6 4x8 = 6.00 12 2 5x8 / 3x4 ≥ 3 7-10-8 5-0-0 5x8 || 0-9-12 7 6 5 82x4 || 3x10 = 2x4 || 5-9-0 19-10-8 5-9-0 6-7-7 7-6-1 Plate Offsets (X,Y)--[1:0-2-0,0-1-8], [4:0-4-3,0-2-8]

DEFL.

BRACING-

TOP CHORD

LOADING (psf) SPACING-2-0-0

CSI. **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.64 TCDL Lumber DOL 10.0 1.15 BC 0.71 WB 0.95 **BCLL** 0.0 Rep Stress Incr YES BCDL 10.0 Code IRC2018/TPI2014 Matrix-S

Vert(LL) -0.12 6-7 >999 360 Vert(CT) -0.22 6-7 >999 240 Horz(CT) 0.02 5 n/a n/a Wind(LL) 0.06 6-7 >999 240

(loc)

Weight: 74 lb

PLATES

MT20

FT = 10%

GRIP

197/144

Structural wood sheathing directly applied or 4-5-7 oc purlins, except end verticals.

I/defI

L/d

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

LUMBER-

REACTIONS.

WFBS

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

2x3 SPF No.2 *Except* 4-5: 2x6 SP 2400F 2.0E

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

Max Horz 8=-232(LC 4)

Max Uplift 8=-106(LC 9), 5=-123(LC 9) Max Grav 8=879(LC 1), 5=879(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-619/162, 2-3=-668/137, 3-4=-1242/180, 1-8=-836/137, 4-5=-769/163

BOT CHORD 6-7=-84/1004, 5-6=-84/1004 **WEBS** 3-7=-624/230, 3-6=0/256, 1-7=-68/634

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=106, 5=123,
- 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.



June 13,2023







Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:12 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

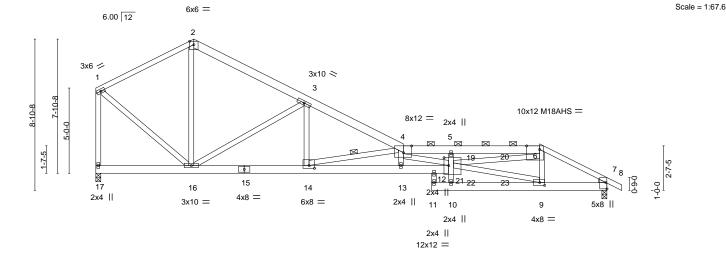
Structural wood sheathing directly applied or 5-11-3 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-3-1 max.): 4-6.

4-14

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

1 Row at midpt



	1 5-9-0	12-4-7	18-0-10	19-8-8 20-8-8	¥ 26-0-10	1 30-0-0	ı
	5-9-0	6-7-7	5-8-3	1-7-14 1-0-0	5-4-2	3-11-6	<u> </u>
-5-1	12.Edge], [6:0-9-4.Edge],	[7:Edge.0-0-13], [9:0-3-8.0-2	2-0], [12:0-3-4.0-5-8], [14	4:0-3-12.0-2	2-01		

Plate Offsets (X,Y)	Plate Offsets (X,Y) [4:0-5-12,Edge], [6:0-9-4,Edge], [7:Edge,0-0-13], [9:0-3-8,0-2-0], [12:0-3-4,0-5-8], [14:0-3-12,0-2-0]									
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES	GRIP						
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.55 11 >649 360 MT20	197/144						
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.98 11 >363 240 M18AHS	142/136						
BCLL 0.0 *	Rep Stress Incr NO	WB 0.86	Horz(CT) 0.16 7 n/a n/a							
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.44 11 >802 240 Weight: 37	2 lb FT = 10%						

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

2-4.4-6: 2x6 SPF No.2

BOT CHORD 2x6 SP 2400F 2.0E **WEBS** 2x4 SPF No.2 *Except*

6-12: 2x4 SPF 2100F 1.8E

WEDGE

Right: 2x3 SPF No.2

REACTIONS. (size) 17=0-3-8, 7=0-3-8

Max Horz 17=-257(LC 4)

Max Uplift 17=-262(LC 9), 7=-494(LC 9) Max Grav 17=1729(LC 1), 7=2458(LC 1)

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

TOP CHORD 1-2=-1319/284, 2-3=-1352/257, 3-4=-4193/728, 4-5=-13044/2468, 5-6=-12389/2363,

6-7=-4371/844, 1-17=-1664/288 **BOT CHORD** 14-16=-500/3717, 13-14=-2251/12943, 12-13=-2265/12986, 9-10=-148/850,

7-9=-660/3678

10-12=0/276, 5-12=-402/214, 2-16=-117/767, 3-16=-3059/671, 3-14=-336/2336, 4-14=-9414/1786, 4-13=-341/116, 4-12=-613/496, 9-12=-526/2880, 6-12=-1649/8950,

1-16=-215/1432

NOTES-

WEBS

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

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

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

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

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=262, 7=494.

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 sand truss systems, see

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





16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 98 RR	150005407
B230098	D4	Roof Special Girder	1	_		158885187
					Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:12 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

NOTES-

- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 127 lb down and 83 lb up at 21-11-4, and 127 lb down and 83 lb up at 23-11-4, and 127 lb down and 83 lb up at 23-11-4, and 127 lb down and 83 lb up at 23-11-4, and 262 lb down and 72 lb up at 25-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 6-8=-70, 12-17=-20, 7-11=-20

Concentrated Loads (lb)

Vert: 6=-77(F) 9=-262(F) 19=-77(F) 20=-77(F) 21=-852(F) 22=-38(F) 23=-38(F)

Job Truss Truss Type Qty Ply Lot 98 RR 158885188 B230098 D5 Roof Special Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:13 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 16-4-10 19-8-8 24-4-10 30-0-0 30-10-8 0-10-8 6-7-7 4-0-3 4-8-2 Scale = 1:57.9 6x6 = 6.00 12 6x6 / 4x8 < 3 -10-8 8-10-8 6x8 = 2x4 || 6x6 =1 2-5-1 \mathbb{A} 12 14 13 7x12 3x4 || 4x8 = 6x6 =11 10 8x8 = 2x4 || 4x10 = 10-8-12 19-8-8 23-6-0 30-0-0 5-9-0 4-11-12 8-11-12 0-10-10 5-7-6 Plate Offsets (X,Y)--[1:0-2-0,0-1-8], [6:0-4-12,Edge], [9:Edge,0-5-13], [13:0-2-8,0-3-0]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL) -0.31 12-13 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.61 12-13 >581 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.85	Horz(CT) 0.14 9 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.24 12-13 >999 240	Weight: 131 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

BOT CHORD 2x4 SPF No.2 *Except*

12-15: 2x4 SPF 2100F 1.8E, 5-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 3-14,7-9: 2x4 SPF No.2

REACTIONS.

(size) 15=0-3-8, 9=0-3-8 Max Horz 15=-266(LC 4)

Max Uplift 15=-177(LC 9), 9=-247(LC 9) Max Grav 15=1338(LC 1), 9=1411(LC 1)

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

1-2=-990/219, 2-3=-1038/190, 3-4=-2695/419, 4-5=-4198/689, 5-6=-4150/691, TOP CHORD

6-7=-2206/365, 1-15=-1290/208, 7-9=-1350/274 13-14=-220/2388, 12-13=-624/4529, 5-12=-378/138, 9-10=-158/532

BOT CHORD WEBS 2-14=-51/463, 3-14=-1836/402, 3-13=-123/1301, 4-13=-2426/458, 4-12=-391/62,

10-12=-220/1797, 6-12=-357/2484, 6-10=-418/127, 1-14=-136/1080, 7-10=-88/1369

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=177, 9=247.
- 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 3-6-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-2-15 max.): 4-6.

3-14, 4-13

Rigid ceiling directly applied or 9-11-5 oc bracing.

1 Row at midpt

June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885189 B230098 D6 2 Roof Special Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:15 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 14-8-10 22-8-10 30-0-0 30-10-8 0-10-8 19-8-8 8-11-10 4-11-14 3-0-2 7-3-6 Scale = 1:57.9 5x8 = 6.00 12 2 6x6 / 2x4 || 6x6 = 6x12 =-10-8 8-10-8 3-3-1 A 13 12 7x12 2x4 || 4x8 = 2x4 || 10 9 8x8 < 2x4 || 4x10 =14-8-10 19-8-8 22-8-10 30-0-0 5-9-0 8-11-10 4-11-14 7-3-6 Plate Offsets (X,Y)--[1:0-2-0,0-1-8], [8:0-3-4,0-2-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.90 Vert(LL) -0.23 11-12 >999 360 MT20 197/144 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.50 -0.45 12-13 >786 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.89 Horz(CT) 0.11 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 0.17 11-12 >999 240 Weight: 130 lb FT = 10% **BRACING-**

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

BOT CHORD 2x4 SPF No.2 *Except*

11-14: 2x4 SPF 2100F 1.8E, 4-10: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

3-13: 2x4 SPF No.2, 6-8: 2x6 SPF No.2

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

Max Horz 14=-267(LC 4)

Max Uplift 14=-176(LC 9), 8=-248(LC 9) Max Grav 14=1334(LC 1), 8=1414(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-1000/216, 2-3=-1084/164, 3-4=-2990/526, 4-5=-2969/522, 5-6=-2148/358,

1-14=-1299/201, 6-8=-1342/288 12-13=-394/3391, 11-12=-391/3397, 4-11=-319/141, 8-9=-254/764

WEBS 2-13=0/415, 3-13=-2682/541, 3-12=0/323, 3-11=-471/18, 9-11=-211/1828,

5-11=-218/1642, 5-9=-554/141, 1-13=-137/1102, 6-9=-42/1053

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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=176, 8=248.
- 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 (3-0-3 max.): 3-5.

3-13

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

2 Rows at 1/3 pts

June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885190 B230098 D7 2 Roof Special Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:16 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 13-0-10 19-8-8 21-0-10 24-4-7 30-0-0 5-9-0 7-3-10 3-3-13 Scale = 1:66.1 6x6 = 6.00 12 2 6x6 / 6x8 = 6x6 =8-10-8 3x4 < 5 4-1-1 13 12 14 17 16 15 2×4 II 3x4 II 3x6 =5x8 = 3x4 =11 10 9 8x8 = 2x4 || 4x10 =4x8 = 2x4 ||

	₁ 5-9-0	13-0-10	19-8-8	21-0-10	24-4-7	30-0-0
	5-9-0	7-3-10	6-7-14	1-4-2	3-3-13	5-7-9
Plate Offsets (X,Y)	[1:0-2-0,0-1-8], [8:Edge,0-5-13]	, [12:0-5-0,0-2-8]				

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.99	Vert(LL) -0.16 15 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.75	Vert(CT) -0.34 13-15 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.10 8 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.12 15 >999 240	Weight: 131 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

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

2-3: 2x6 SPF No.2, 3-4: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

3-16: 2x4 SPF No.2, 6-8: 2x4 SPF 2100F 1.8E

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

Max Horz 17=-266(LC 4)

Max Uplift 17=-177(LC 9), 8=-247(LC 9) Max Grav 17=1338(LC 1), 8=1411(LC 1)

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

TOP CHORD 1-2=-993/218, 2-3=-1053/181, 3-4=-2647/445, 4-5=-2503/438, 5-6=-2172/372,

1-17=-1294/206, 6-8=-1345/278

BOT CHORD 15-16=-260/2647, 13-15=-232/2214, 12-13=-232/2215, 8-9=-144/559 **WEBS** $2\text{-}16\text{=-}29/436,\ 3\text{-}16\text{=-}2041/429,\ 4\text{-}15\text{=-}28/479,\ 5\text{-}12\text{=-}53/449,\ 5\text{-}9\text{=-}645/134,}$

1-16=-137/1085, 4-12=-19/462, 6-9=-107/1299, 9-12=-260/1923

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) The Fabrication Tolerance at joint 6 = 6%
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=177, 8=247.
- 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 3-4-10 oc purlins,

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

3-16

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

1 Row at midpt

June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885191 B230098 D8 2 Roof Special Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:18 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 11-4-10 19-4-10 19-8-8 0-3-14 24-4-8 30-0-0 30-10-8 0-10-8 5-9-0 5-9-0 5-7-10 8-0-0 Scale = 1:57.9 6x6 = 6.00 12 2 7x12 M18AHS = 5x8 / 6x6 = 7-10-8 3x4 ≥ 12 15 14 13 --5x12 3x4 II 4x8 = 3x4 =10 11 8x8 = 2x4 || 4x10 = 11-4-10 19-4-10 30-0-0 8-0-0 5-7-8 5-9-0 5-7-10 4-7-15 Plate Offsets (X,Y)--[1:0-2-0,0-1-8], [3:0-1-12,0-3-12], [4:0-6-0,0-0-15], [9:Edge,0-5-13] LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.94 Vert(LL) -0.19 12-13 >999 360 MT20 197/144

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

-0.43 12-13

0.10 12-13

0.08

>821

>999

6-0-0 oc bracing: 10-11.

1 Row at midpt

n/a

240

n/a

240

LUMBER-

TCDL

BCLL

BCDL

2x4 SPF No.2 *Except* TOP CHORD 2-3.3-4: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

10.0

0.0

10.0

5-11: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 *Except* 7-9: 2x4 SPF No.2

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

Max Horz 15=-266(LC 4) Max Uplift 15=-177(LC 9), 9=-247(LC 9) Max Grav 15=1338(LC 1), 9=1411(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

1-2=-986/220, 2-3=-1019/196, 3-4=-2097/371, 4-5=-2076/407, 5-6=-2287/409, TOP CHORD

1.15

YES

BC

WB

Matrix-S

0.72

0.82

6-7=-2188/372, 1-15=-1286/210, 7-9=-1346/274 13-14=-147/2094, 12-13=-179/1957, 9-10=-132/508

BOT CHORD WEBS

2-14=-66/495, 3-14=-1628/344, 3-13=0/256, 4-12=-11/380, 10-12=-222/1888,

6-10=-447/134, 1-14=-138/1073, 7-10=-121/1371

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=177, 9=247.
- 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.



M18AHS

Structural wood sheathing directly applied or 3-6-10 oc purlins,

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

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

Weight: 137 lb

142/136

FT = 10%

June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885192 B230098 D9 Roof Special Job Reference (optional) Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:19 2023 Page 1 Wheeler Lumber, ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 9-8-10 17-8-10 22-4-8 26-4-8 30-0-0 5-9-0 5-9-0 3-11-10 8-0-0 4-0-0 Scale = 1:62.8 6x6 = 6.00 12 6x12 = 4x8 = 5x8 / 3x4 ≥ Z-10-8 5 3-10-8

	OX-4	4x8 =	2x4	OAO	3x10 = 12	11	10	9
					2x4	2x4	4x10 = 8x	8 =
	5-9-0	9-8-10	17-8-10		19-8-8 22-4-8	26-4-8	30-0-0	_
	5-9-0	3-11-10	8-0-0		1-11-14 2-7-15	4-0-0	3-7-8	<u>' </u>
Plate Offsets (X,Y)	[1:0-2-0,0-1-8], [4:0-4-0,0	0-1-15], [9:Edge,0-	5-13], [13:0-5-0,0-2-8]					
LOADING (not)	CDACING	200	CCI	DEEL	:- (los) I/d	- £1 / al	DLATES	CDID
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/de		PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.94	Vert(LL)	-0.20 15-17 >99	99 360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.39 15-17 >92	26 240		

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

16

3x6 =

15

0.10

0.09

9

15

1 Row at midpt

n/a

>999

n/a

240

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

except end verticals, and 2-0-0 oc purlins (3-9-8 max.): 3-4.

3-18

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

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

YES

18

17

WB

Matrix-S

0.68

2-3: 2x6 SPF No.2, 3-4: 2x4 SPF 2100F 1.8E 2x4 SPF No.2

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

0.0

10.0

7-9: 2x4 SPF No.2

REACTIONS. (size) 9=0-3-8, 19=0-3-8 Max Horz 19=-266(LC 4)

19

3x4 =

Max Uplift 9=-247(LC 9), 19=-177(LC 9)

Rep Stress Incr

Code IRC2018/TPI2014

Max Grav 9=1476(LC 2), 19=1409(LC 2)

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

 $1\hbox{-}2\hbox{--}1043/220,\ 2\hbox{-}3\hbox{--}1036/213,\ 3\hbox{-}4\hbox{--}1910/380,\ 4\hbox{-}5\hbox{--}2186/382,\ 5\hbox{-}6\hbox{--}2822/458,}$ TOP CHORD

6-7=-2231/357, 1-19=-1319/211, 7-9=-1400/260

BOT CHORD 17-18=-61/1751, 15-17=-60/1756, 14-15=-281/2492, 13-14=-281/2492, 9-10=-59/326 **WEBS** 2-18=-108/664, 3-18=-1481/308, 3-17=0/307, 10-13=-268/1973, 6-13=-16/564,

6-10=-625/152, 1-18=-137/1135, 7-10=-207/1634, 5-13=-24/472, 5-15=-704/192,

4-15=0/569

BCLL

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) 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 100 lb uplift at joint(s) except (jt=lb) 9=247, 19=177.
- 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.



3x4 >

Weight: 135 lb

13

4x8

6-9

FT = 10%

June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885193 B230098 E1 **ROOF SPECIAL** Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:20 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 3-9-10 3-9-10 Scale = 1:20.3 2x4 || 5.00 12 3 6x6 = 2x4 || 3-1-10 1-8-10

7-2-8

LOADING	G (psf)	SPACING- 2-0-		CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	5 7	С	0.26	Vert(LL)	-0.14	4-5	>583	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	5 E	3C	0.56	Vert(CT)	-0.29	4-5	>292	240		
BCLL	0.0 *	Rep Stress Incr YE	S \	٧B	0.14	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	l l	/latrix	c-P	Wind(LL)	0.00	5	****	240	Weight: 26 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 5=114(LC 5)

Max Uplift 5=-55(LC 8), 4=-62(LC 8) Max Grav 5=315(LC 1), 4=315(LC 1)

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

5

BOT CHORD 4-5=-104/301

WEBS 2-5=-322/122. 2-4=-327/144

NOTES-

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



3x4 =

Structural wood sheathing directly applied or 7-2-8 oc purlins,

except end verticals, and 2-0-0 oc purlins: 1-2.

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

June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885194 B230098 E2 2 Monopitch Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:22 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 0-10-8 2-8-5 2-8-5 Scale = 1:24.7 3x6 II 5.00 12 6 6x8 = 9 0-8-0 3x6 = 5.00 12 2-8-5 5-7-11 2-8-5 Plate Offsets (X,Y)-- [6:0-4-4,0-2-8]

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.11	5-6	>883	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.21	5-6	>467	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.10	5-6	>951	240	Weight: 29 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD 2x3 SPF No.2 *Except* WFBS

2-7: 2x6 SP 2400F 2.0E

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

Max Horz 7=157(LC 5)

Max Uplift 7=-74(LC 8), 5=-85(LC 8) Max Grav 7=443(LC 1), 5=355(LC 1)

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

TOP CHORD 2-7=-697/170, 2-3=-1114/258 **BOT CHORD** 6-7=-302/992, 5-6=-282/881 **WEBS** 3-6=-26/364, 3-5=-841/301

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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

June 13,2023







Job Truss Truss Type Qty Ply Lot 98 RR 158885195 B230098 E3 Half Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:23 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 2-8-5 2-8-5 7-3-14 8-4-0 0-10-8 2-9-11 1-9-14 1-0-2 Scale = 1:22.8 6x6 = 2x4 || 6 5 2x4 < 5.00 12 1-0-0 0-8-0 4x8 = 4x8 = 5.00 12 6x6 || 2-8-5 7-3-14 4-7-10 1-0-2 Plate Offsets (X,Y)--[5:0-3-0,0-2-4], [8:0-3-11,0-2-4] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 25.0 Plate Grip DOL 1.15 TC 0.52 Vert(LL) -0.11 7-8 >899 360 MT20 197/144 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.53 -0.26 7-8 >379 240 WB 0.13 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.09 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 7-8 >883 240 Weight: 29 lb FT = 10%

0.11

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

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

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

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 *Except* WFBS 2-9: 2x4 SPF No.2

REACTIONS. (size) 9=0-3-8, 7=0-3-8 Max Horz 9=141(LC 5)

Max Uplift 9=-75(LC 8), 7=-68(LC 8)

Max Grav 9=440(LC 1), 7=359(LC 1)

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

TOP CHORD 2-9=-518/147. 2-3=-479/145. 3-4=-462/114

BOT CHORD 8-9=-188/359, 7-8=-120/426 **WEBS** 4-7=-462/164

NOTES-

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



June 13,2023





Job Truss Truss Type Qty Ply Lot 98 RR 158885196 B230098 E4 Half Hip Girder Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:24 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 4-11-2 8-4-0 0-10-8 2-2-13 Scale = 1:19.1 4x8 = 2x4 || 4 5.00 12 1-8-10 11 2x4 || 0-8-0 3x4 5.00 12 6x6 || 2-8-5 2-2-13 2-8-5 3-4-14 Plate Offsets (X,Y)--[4:0-5-0,0-2-4], [8:0-3-15,0-2-4] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 25.0 Plate Grip DOL 1.15 TC 0.55 Vert(LL) -0.07 7-8 >999 360 MT20 197/144 TCDL Lumber DOL Vert(CT) 10.0 1.15 BC 0.83 -0.13 7-8 >721 240 WB **BCLL** 0.0 Rep Stress Incr NO 0.35 Horz(CT) 0.07 6 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Wind(LL) 0.07 7-8 >999 240 Weight: 27 lb FT = 10%

> **BRACING-**TOP CHORD

> BOT CHORD

LUMBER-

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

BOT CHORD 2x3 SPF No.2 *Except* WFBS

2-9: 2x6 SPF No.2

REACTIONS.

(size) 9=0-3-8, 6=0-3-8 Max Horz 9=97(LC 22)

Max Uplift 9=-128(LC 8), 6=-156(LC 5) Max Grav 9=569(LC 1), 6=587(LC 1)

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

TOP CHORD 2-9=-725/211, 2-3=-790/221, 3-4=-1081/274

BOT CHORD 8-9=-224/622, 3-8=-92/395, 7-8=-273/984, 6-7=-277/1018

WEBS 4-7=-62/471, 4-6=-1073/286

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 arip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=128, 6=156.
- 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) 82 lb down and 78 lb up at 4-11-2, and 87 lb down and 78 lb up at 7-0-0 on top chord, and 239 lb down and 85 lb up at 4-11-2, and 32 lb down at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-4=-70, 4-5=-70, 8-9=-20, 6-8=-20



Structural wood sheathing directly applied or 4-11-13 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.

June 13,2023



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-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/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	Ply	Lot 98 RR	
	l					I58885196
B230098	E4	Half Hip Girder	1	1		
					Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:24 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

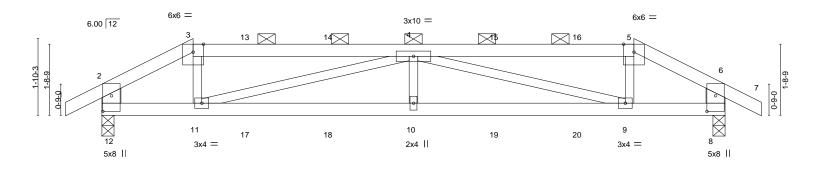
LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 7=-239(B) 4=-48(B) 10=-48(B) 11=-22(B)



Job		Truss	Truss Type	Qty	Ply	L01 98 KK		
								158885197
B230098		G1	Hip Girder	1	1			
						Job Reference (optional)		
Wheeler Lumber	, Wav	erly, KS - 66871,			8.430 s Jai	n 6 2022 MiTek Industries, Inc.	Mon Jun 12 11:50:26 2	2023 Page 1
		-		ID:2ncXplsxC	bjlB6l7Q?g	PMzrYWU-RfC?PsB70Hq3NSg	PqnL8w3uITXbGKWrC	:Doi7J4zJC?f
₁ -0-10-8	. 2	-2-5	7-6-0	1	12	-9-11	15-0-0	15-10-8
0.10.0	7	2.5	5-2-11		5-	2-11	2.2.5	0.10.9

Scale = 1:27.7



\vdash	2-2-5 2-2-5		7-6-0 5-3-11			2-9-11 5-3-11		2-2-5	
Plate Offsets (X,Y)-	[8:0-4-9,0-2-8], [12:0-4-9,0-2-8]							
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING Plate Grip Lumber D Rep Stres	DOL 1.15	CSI. TC 0.68 BC 0.66 WB 0.85 Matrix-S	1 ,	in (loc) -0.11 10 -0.20 10 0.04 8 0.10 10	l/defl >999 >870 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 50 lb	GRIP 197/144 FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 *Except* WFBS 2-12,6-8: 2x6 SPF No.2

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

Max Horz 12=40(LC 28)

Max Uplift 12=-141(LC 8), 8=-141(LC 9) Max Grav 12=779(LC 1), 8=779(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-979/209, 3-4=-829/189, 4-5=-829/189, 5-6=-979/209, 2-12=-664/127,

6-8=-664/127

BOT CHORD 11-12=-175/806, 10-11=-441/1955, 9-10=-441/1955, 8-9=-158/806 **WEBS** 3-11=0/318, 4-11=-1172/294, 4-10=0/256, 4-9=-1172/293, 5-9=0/318

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 100 lb uplift at joint(s) except (jt=lb) 12=141, 8=141.
- 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) 68 lb down and 52 lb up at 2-2-5, 67 lb down and 47 lb up at 3-6-0, 67 lb down and 47 lb up at 5-6-0, 67 lb down and 47 lb up at 7-6-0, up at 9-6-0, and 67 lb down and 47 lb up at 11-6-0, and 68 lb down and 52 lb up at 12-9-11 on top chord, and 17 lb down at 2-2-5, 16 lb down at 3-6-0, 16 lb down at 5-6-0, 16 lb down at 7-6-0, 16 lb down at 9-6-0, and 16 lb down at 11-6-0, and 17 lb down at 12-9-11 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 4-9-2 oc purlins,

except end verticals, and 2-0-0 oc purlins (5-9-11 max.): 3-5.

Rigid ceiling directly applied or 8-10-6 oc bracing.

June 13,2023

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 dange. For general guidance regarding the fabrication, storage, delivery, rerection and bracing of trusses and truss systems, see

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



Job	Truss	Truss Type	Qty	Ply	Lot 98 RR	
				.	I5888519)7
B230098	G1	Hip Girder	1	1	lab Defenses (autional)	
					Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:26 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-12=-20

Concentrated Loads (lb)

Vert: 3=-0(F) 5=-0(F) 11=-3(F) 10=-8(F) 9=-3(F) 4=-9(F) 13=-9(F) 14=-9(F) 15=-9(F) 16=-9(F) 17=-8(F) 18=-8(F) 19=-8(F) 20=-8(F) 18=-8(F) 19=-8(F) 1

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 98 RR 158885198 B230098 G2 Hip Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:28 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 0-10-8 3-10-5 15-0-0 15-10-8

Scale = 1:27.7

0-10-8

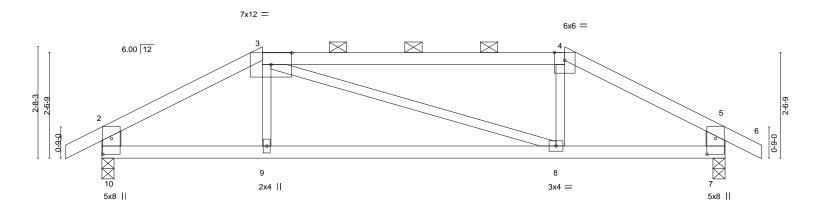
3-10-5

15-0-0

Structural wood sheathing directly applied or 4-10-5 oc purlins,

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

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



	3-10-5	7	7-3-5	3-10-5	
Plate Offsets (X,Y	[3:0-6-0,0-3-6], [7:0-4-9,0-2-8], [10):0-4-9,0-2-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d PLATES G	RIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.10 8-9 >999	360 MT20 19	97/144
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.22 8-9 >781	240	
BCLL 0.0	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.02 7 n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 8-9 >999	240 Weight: 48 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

11-1-11

LUMBER-TOP CHORD

2x4 SPF No.2 *Except* 3-4: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-10,5-7: 2x6 SPF No.2

REACTIONS. (size) 10=0-3-8, 7=0-3-8

Max Horz 10=51(LC 7)

Max Uplift 10=-73(LC 8), 7=-73(LC 9) Max Grav 10=732(LC 1), 7=732(LC 1)

3-10-5

3-10-5

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-978/114, 3-4=-811/116, 4-5=-979/114, 2-10=-653/89, 5-7=-654/89

BOT CHORD

9-10=-94/807, 8-9=-90/810, 7-8=-62/808

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 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/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 98 RR 158885199 B230098 G3 qiH Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:29 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

9-5-11 3-11-5

Scale = 1:27.2

15-10-8

0-10-8

15-0-0

Structural wood sheathing directly applied or 5-4-1 oc purlins,

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

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

5-6-5

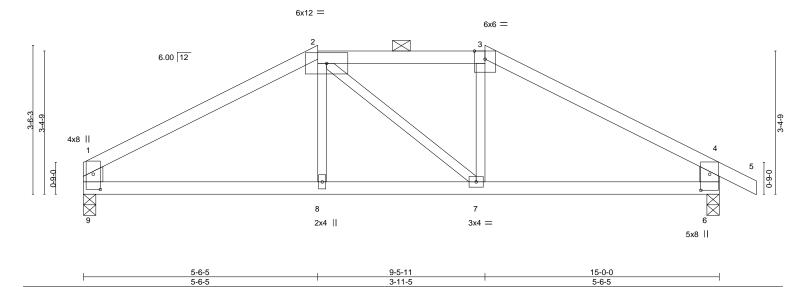


Plate Offsets (>	Y) [1:0-4-5,0-2-0], [6:0-4-9,0	-2-8]									
LOADING (psf	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.06	7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.11	7-8	>999	240		
BCLL 0.0	 Rep Stress Incr 	YES	WB	0.06	Horz(CT)	0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.04	7-8	>999	240	Weight: 47 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 *Except* 1-9,4-6: 2x6 SPF No.2

REACTIONS. (size) 9=0-3-8, 6=0-3-8 Max Horz 9=-65(LC 4)

Max Uplift 9=-65(LC 8), 6=-91(LC 9) Max Grav 9=651(LC 1), 6=735(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-881/73, 2-3=-709/103, 3-4=-892/74, 1-9=-563/102, 4-6=-662/131 TOP CHORD

5-6-5

BOT CHORD 8-9=-38/705, 7-8=-36/707, 6-7=-6/707

NOTES-

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





Job Truss Truss Type Qty Ply Lot 98 RR 158885200 B230098 J1 Diagonal Hip Girder Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:30 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 6-0-7 Scale = 1:17.6 3x6 || 3 3.84 12 0-6-0 3x6 II 2x4 || 6-0-7 6-0-7 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d PLATES **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.51 Vert(LL) -0.05 4-5 >999 360 MT20 197/144 TCDL Lumber DOL 1.15 вс 0.31 Vert(CT) -0.10 4-5 >713 240

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

-0.00

0.01

4-5

n/a

>999

except end verticals

n/a

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

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

Weight: 18 lb

FT = 10%

LUMBER-

REACTIONS.

BCLL

BCDL

WFBS

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

0.0

10.0

2x3 SPF No.2

Rep Stress Incr

Code IRC2018/TPI2014

(size) 5=0-4-9, 4=Mechanical Max Horz 5=111(LC 5)

Max Uplift 5=-110(LC 4), 4=-54(LC 8) Max Grav 5=379(LC 1), 4=250(LC 1)

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

TOP CHORD 2-5=-332/152

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

WB

Matrix-R

0.00

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

NO

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=110.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 46 lb up at 3-0-14, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-0-14, and 6 lb down at 3-6-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 8=-1(F) 9=-0(B)



Job Truss Truss Type Qty Ply Lot 98 RR 158885201 B230098 J2 Jack-Open Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:42 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

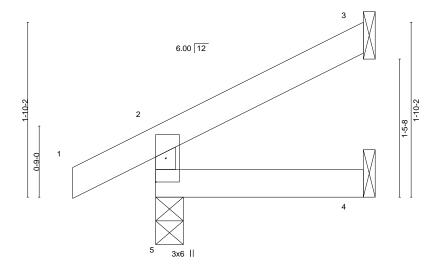
Structural wood sheathing directly applied or 2-2-5 oc purlins,

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

except end verticals.

-0-10-8 0-10-8

Scale = 1:12.2



2-2-5

BRACING-TOP CHORD

BOT CHORD

LOADIN	G (psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1	.15	TC	0.07	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 Y	′ES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	14	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 5=51(LC 8)

Max Uplift 5=-23(LC 8), 3=-37(LC 8)

Max Grav 5=176(LC 1), 3=55(LC 1), 4=38(LC 3)

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

NOTES-

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









Job Truss Truss Type Qty Ply Lot 98 RR 158885202 B230098 J3 Jack-Closed Girder Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:55 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 5-11-4 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4.

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

-0-10-8 0-10-8 <u>3-11-</u>6 3-11-6

Scale = 1:18.7

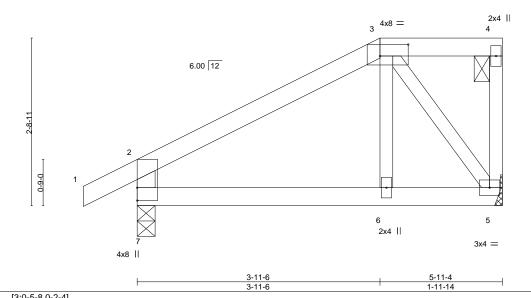


Plate Of	15612 (7,1)	[3.0-3-6,0-2-4]							
LOADIN	IG (psf)	SPACING- 2-0-0	CSI.	DEFL. ii	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.0	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.02	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB 0.13	Horz(CT) 0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.0	6	>999	240	Weight: 21 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 *Except* WFBS 2-7: 2x4 SPF No.2

REACTIONS.

(size) 7=0-3-8, 5=Mechanical Max Horz 7=109(LC 24) Max Uplift 7=-93(LC 8), 5=-123(LC 5) Max Grav 7=442(LC 1), 5=483(LC 1)

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

TOP CHORD 2-7=-388/118. 2-3=-411/89 **BOT CHORD** 6-7=-101/301, 5-6=-101/313 **WEBS** 3-6=-16/294, 3-5=-502/137

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=123.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 85 lb up at 3-11-6 on top chord, and 261 lb down and 72 lb up at 3-11-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-7=-20



June 13,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-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/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 98 RR
B220000	12	look Closed Cirder	_		158885202
B230098	J3	Jack-Closed Girder	1	1	Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:55 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 6=-261(F) 3=-81(F)

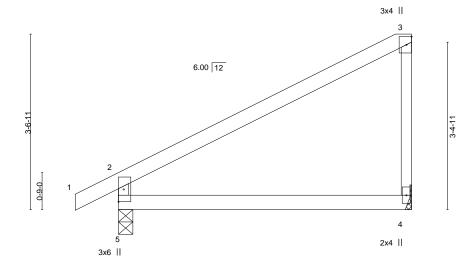
Job	Truss	Truss Type	Qty	Ply	Lot 98 RR
D000000	14	last Olssel	_		158885203
B230098	J4	Jack-Closed	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:56 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

-0-10-8 0-10-8

Scale = 1:23.3



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 0.47	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.10	4-5	>700	240			
PCII 00	Pon Stroce Incr	VEC	WB 0.00	Horz(CT)	0.00	1	n/a	n/a			

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

0.02

5-11-4

2-11-10

4-5

>999

except end verticals

240

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

Structural wood sheathing directly applied or 5-11-4 oc purlins,

Weight: 18 lb

FT = 10%

2-11-10

2-11-10

Matrix-R

LUMBER-

REACTIONS.

BCDL

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

10.0

WFBS 2x3 SPF No.2

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

Max Horz 5=116(LC 7)

Max Uplift 5=-11(LC 8), 4=-24(LC 8) Max Grav 5=332(LC 1), 4=252(LC 1)

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

Code IRC2018/TPI2014

TOP CHORD 2-5=-289/52

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 100 lb uplift at joint(s) 5, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Ply Lot 98 RR 158885204 B230098 J5 8 Jack-Open Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:57 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

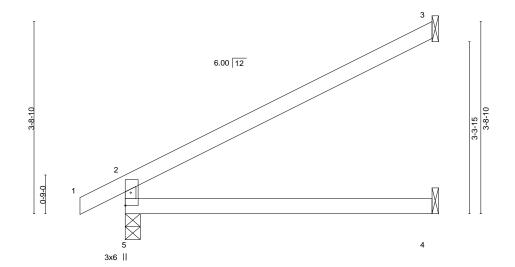
Structural wood sheathing directly applied or 5-11-4 oc purlins,

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

except end verticals.

-0-10-8 0-10-8

Scale = 1:22.3



5-11-4

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (l	loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.55	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.32	Vert(CT)	-0.12	4-5	>583	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.04	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.04	4-5	>999	240	Weight: 16 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 5=89(LC 8) Max Uplift 3=-61(LC 8)

Max Grav 5=334(LC 1), 3=184(LC 1), 4=110(LC 3)

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

TOP CHORD 2-5=-289/44

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 100 lb uplift at joint(s) 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 98 RR 158885205 B230098 J6 Jack-Open Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:58 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 5-11-4 oc purlins,

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

Scale = 1:22.7

-0-10-8 0-10-8 2-8-5

6.00 12 2-8-10 3x6 = 0-6-0 5.00 12

<u> </u>	2-8-5 2-8-5	-	5-11-4 3-2-15			
2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP

except end verticals

SPACING-LOADING (psf) **TCLL** 25.0 Plate Grip DOL 1.15 0.55 Vert(LL) -0.05>999 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 вс 0.29 Vert(CT) -0.12 4-5 >569 240 WB Horz(CT) **BCLL** 0.0 Rep Stress Incr YES 0.00 0.05 4 n/a n/a Code IRC2018/TPI2014 Wind(LL) BCDL 10.0 Matrix-R 0.04 5 >999 Weight: 16 lb FT = 10%

> BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

(size) 6=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 6=89(LC 8) Max Uplift 3=-62(LC 8)

Max Grav 6=334(LC 1), 3=185(LC 1), 4=110(LC 3)

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

TOP CHORD 2-6=-288/43

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) 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 100 lb uplift at joint(s) 3.

4x8 ||

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.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885206 B230098 J7 Jack-Closed Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:59 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

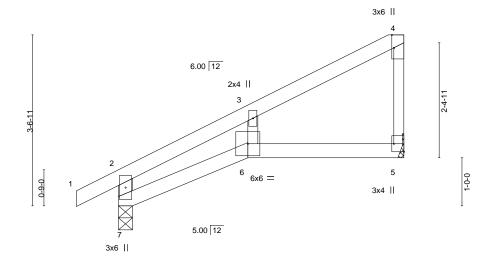
Structural wood sheathing directly applied or 5-11-4 oc purlins,

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

except end verticals.

-0-10-8 0-10-8 2-8-5

Scale: 1/2"=1'



- 1	2-8-5	5-11-4
Г	2-8-5	3-2-15

BRACING-

TOP CHORD

BOT CHORD

					200		0 2	. 10					
Plate Offse	ets (X,Y)	[4:0-3-4,Edge], [5:Edge,0)-2-8]										
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	0.37	Vert(LL)	-0.08	6	>866	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.14	6	>487	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.06	5	n/a	n/a			
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.06	6	>999	240	Weight: 18 lb	FT = 10%	

LUMBER-

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

2x3 SPF No.2 *Except* **WEBS** 2-7: 2x4 SPF No.2

REACTIONS. (size) 7=0-3-8, 5=Mechanical Max Horz 7=105(LC 5)

Max Uplift 7=-10(LC 8), 5=-26(LC 8) Max Grav 7=334(LC 1), 5=250(LC 1)

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

TOP CHORD 2-7=-282/17

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) Bearing at joint(s) 7 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 100 lb uplift at joint(s) 7, 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.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885207 B230098 J8 Jack-Closed Girder Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:01 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 0-10-8 3-11-6 2-8-5 1-3-1 1-11-14 Scale = 1:19.0 6x6 = 4 2x4 || 6.00 12 3 6 5x8 = 9-0-0-6-0 3x6 =

> 2-8-5 2-8-5 1-11-14

> > BOT CHORD

Plate Offset	is (X,Y) [<u>[4:0-4-8,0-2-12], [8:0-4-0,</u>										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.04	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.07	6-7	>970	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.03	6-7	>999	240	Weight: 21 lb	FT = 10%

5.00 12

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

4x8 ||

BOT CHORD 2x4 SPF No 2

2x3 SPF No.2 *Except* WFBS 2-8: 2x6 SPF No.2

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

Max Horz 8=94(LC 5)

Max Uplift 8=-96(LC 8), 6=-123(LC 5) Max Grav 8=453(LC 1), 6=474(LC 1)

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

2-8=-619/171, 2-3=-754/186, 3-4=-558/202 TOP CHORD

BOT CHORD 7-8=-191/611. 6-7=-137/389

WEBS 4-6=-434/148

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb)
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) 93 lb down and 87 lb up at 3-11-6 on top chord, and 260 lb down and 74 lb up at 3-11-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



Structural wood sheathing directly applied or 5-9-6 oc purlins,

except end verticals, and 2-0-0 oc purlins: 4-5.

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

June 13,2023

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 sand truss systems, see

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



Job	Truss	Truss Type	Qty	Ply	Lot 98 RR
Baaaaaa	10	last Olass d Ciadas	_		I58885201
B230098	J8	Jack-Closed Girder	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:01 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard

Uniform Loads (plf)

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

Concentrated Loads (lb) Vert: 4=-86(B) 9=-260(B)

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply Lot 98 RR 158885208 B230098 J9 Diagonal Hip Girder Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:02 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 4-0-10 6-0-7 1-11-13 1-4-6 4-0-10 Scale = 1:17.9 2x4 || 4 5 3x4 = 3.84 12 3 1-8-3 10 7

4-0-10	6-0-7
4-0-10	1-11-13

BRACING-

TOP CHORD

BOT CHORD

6x6 =

except end verticals

3x4 =

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)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.02	8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	k-S	Wind(LL)	0.01	8	>999	240	Weight: 19 lb	FT = 10%

3.20 12

LUMBER-

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

0-6-0

2x3 SPF No.2 *Except* 2-9: 2x6 SPF No.2

REACTIONS. (size) 9=0-3-11, 7=Mechanical

Max Horz 9=95(LC 5)

Max Uplift 9=-112(LC 4), 7=-57(LC 8) Max Grav 9=381(LC 1), 7=247(LC 1)

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

TOP CHORD 2-9=-400/150. 2-3=-380/75

BOT CHORD 8-9=-109/320, 7-8=-101/294

WFBS 3-7=-309/111

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.

4x8

- 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) 9 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 100 lb uplift at joint(s) 7 except (jt=lb) 9=112 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1. 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 51 lb up at 3-0-13, and 68 lb down and 44 lb up at 3-6-3 on top chord, and 7 lb down at 3-0-13, and 7 lb down at 3-6-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-4=-70, 4-5=-20, 8-9=-20, 6-8=-20

Concentrated Loads (lb)

Vert: 12=-4(B) 13=-0(F)



June 13,2023



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	Ply	Lot 98 RR	7
D000000	140	last Ones		,	158885209	
B230098	J10	Jack-Open	1	1		
					Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:31 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

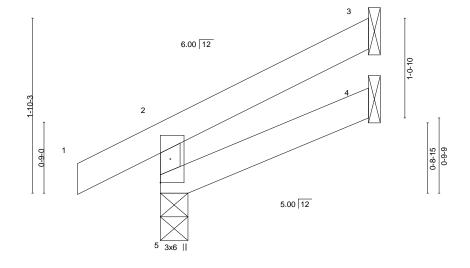
Structural wood sheathing directly applied or 2-2-6 oc purlins,

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

except end verticals.

-0-10-8 2-2-6 2-2-6 0-10-8

Scale = 1:12.2



LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.07	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	4-5	>999	240	Weight: 7 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 5=51(LC 8)

Max Uplift 5=-22(LC 8), 3=-38(LC 8)

Max Grav 5=177(LC 1), 3=56(LC 1), 4=38(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) Bearing at joint(s) 5 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 100 lb uplift at joint(s) 5, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 13,2023





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 98 RR
	1				I58885210
B230098	J11	Jack-Open	1	1	
					Llob Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:32 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

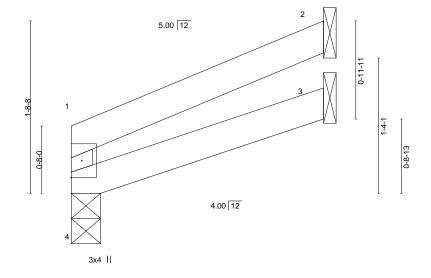
Structural wood sheathing directly applied or 2-6-0 oc purlins,

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

except end verticals

2-6-0 2-6-0

Scale = 1:11.4



LOADING	G (psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1	1.15	TC	0.08	Vert(LL)	-0.00	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1	1.15	BC	0.05	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr Y	/ES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	14	Matri	ix-R	Wind(LL)	0.00	3-4	>999	240	Weight: 6 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WFBS 2x3 SPF No.2

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

Max Horz 4=36(LC 5)

Max Uplift 4=-4(LC 8), 2=-42(LC 8)

Max Grav 4=105(LC 1), 2=77(LC 1), 3=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) Bearing at joint(s) 4 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 100 lb uplift at joint(s) 4, 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.



June 13,2023





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 98 RR 158885211 B230098 J12 Jack-Open Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:33 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 3-3-8 3-3-8 4-11-4 Scale = 1:16.4 5.00 12 1-8-11 3x4 = 0-0-1 0-8-0 4.00 12 3x6 || 3-3-8 3-3-8 1-7-12 SPACING-CSI. DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 (loc) I/defI L/d

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

-0.03

-0.06

0.02

0.02

4-5

4-5

4-5

2

>999

>985

>999

except end verticals

n/a

360

240

n/a

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

240

MT20

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

Weight: 12 lb

197/144

FT = 10%

LUMBER-

REACTIONS.

TCLL

TCDL

BCLL

BCDL

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

25.0

10.0

0.0

10.0

2x3 SPF No.2 WFBS

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

Code IRC2018/TPI2014

Max Horz 5=75(LC 8)

Max Uplift 5=-16(LC 8), 2=-79(LC 8)

Plate Grip DOL

Rep Stress Incr

Lumber DOL

Max Grav 5=215(LC 1), 2=156(LC 1), 3=91(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

TC

вС

WB

Matrix-R

0.38

0.20

0.00

2) 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

- 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) 5 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 100 lb uplift at joint(s) 5, 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.







Job Truss Truss Type Qty Ply Lot 98 RR 158885212 B230098 J13 2 Jack-Open Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

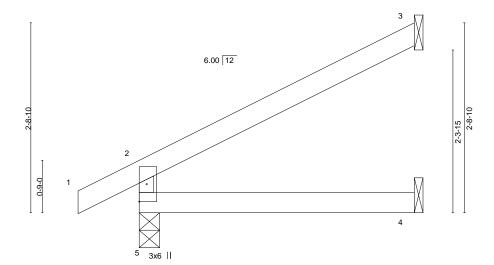
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:34 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 3-11-4 oc purlins,

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

except end verticals.

Scale = 1:16.5



3-11-4

BRACING-

TOP CHORD

BOT CHORD

LOADING	(psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1	1.15	TC	0.21	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20)14	Matri	x-R	Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

REACTIONS.

WFBS

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

2x3 SPF No.2

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

Max Horz 5=87(LC 8)

Max Uplift 5=-27(LC 8), 3=-68(LC 8)

Max Grav 5=247(LC 1), 3=118(LC 1), 4=72(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.

-0-10-8 0-10-8

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



Job Truss Truss Type Qty Ply Lot 98 RR 158885213 B230098 J14 Jack-Closed Girder Job Reference (optional)

Waverly, KS - 66871, Wheeler Lumber,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:35 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 3-11-4 oc purlins,

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

except end verticals.

Scale = 1:16.5

3x10 =3 6.00 12 3x4 II

3-11-4

BRACING-TOP CHORD

BOT CHORD

Plate Offsets (X,Y)-- [2:0-5-8,Edge], [3:0-6-8,Edge], [4:Edge,0-2-8]

LOADING	G (psf)		2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.01	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	014	Matrix	k-R	Wind(LL)	0.01	2-4	>999	240	Weight: 16 lb	FT = 10%

LUMBER-

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

2x3 SPF No.2 WFBS 2x4 SPF No.2

OTHERS WEDGE

Left: 2x3 SPF No.2

REACTIONS.

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

Max Horz 2=74(LC 8)

Max Uplift 2=-66(LC 8), 6=-81(LC 8) Max Grav 2=390(LC 1), 6=282(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

3x10 ||

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

-0-10-8 0-10-8

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 295 lb down and 75 lb up at 2-0-0 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: 1-3=-70, 2-4=-20 Concentrated Loads (lb) Vert: 7=-295(B)



June 13,2023



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

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

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



Job Truss Truss Type Qty Ply Lot 98 RR 158885214 B230098 J15 DIAGONAL HIP GIRDER Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:36 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -1-4-6 6-0-0 1-4-6 2-6-13 Scale = 1:17.8 2x4 || 4 3.84 12 φ 8 6 5 8x8 = 3x4 = 3.84 12 4x8 3-5-3 2-6-13 Plate Offsets (X,Y)-- [6:0-3-4,0-3-4]

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 0.45	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.25	Vert(CT)	-0.07	6	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB 0.07	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.03	6	>999	240	Weight: 19 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD 2x3 SPF No 2 WFBS

REACTIONS. (size) 7=0-3-11, 5=Mechanical

Max Horz 7=95(LC 5)

Max Uplift 7=-107(LC 4), 5=-56(LC 8) Max Grav 7=377(LC 1), 5=248(LC 1)

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

TOP CHORD 2-7=-415/149 2-3=-438/94

BOT CHORD 6-7=-122/375, 5-6=-115/342

WFBS 3-5=-321/122

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) Bearing at joint(s) 7 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 100 lb uplift at joint(s) 5 except (jt=lb) 7=107.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 77 lb down and 45 lb up at 2-11-11, and 68 lb down and 44 lb up at 3-6-3 on top chord, and 5 lb down at 2-11-11, and 7 lb down at 3-5-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 6=-0(B) 9=-1(F)



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

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

except end verticals.

June 13,2023

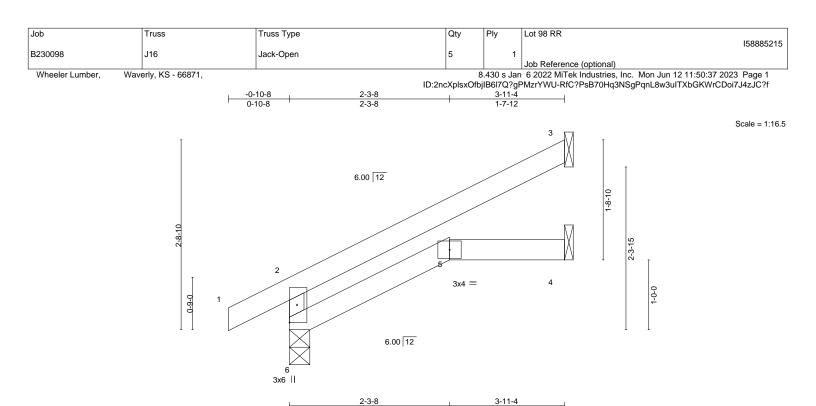


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

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





LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.12	Vert(CT)	-0.02	5	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.01	5-6	>999	240	Weight: 11 lb	FT = 10%

2-3-8

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins,

except end verticals.

1-7-12

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 6=86(LC 8)

Max Uplift 6=-25(LC 8), 3=-70(LC 8)

Max Grav 6=247(LC 1), 3=118(LC 1), 4=72(LC 3)

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

NOTES-

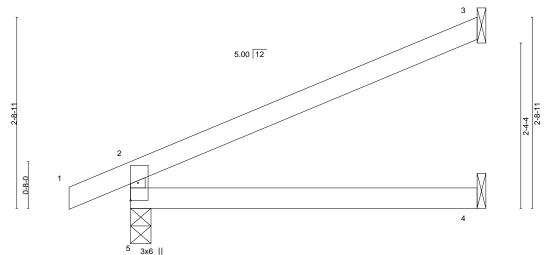
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for 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) 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 100 lb uplift at joint(s) 6, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Job Truss Truss Type Qty Ply Lot 98 RR 158885216 B230098 J17 Jack-Open Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:39 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 0-10-8 Scale = 1:16.4



SPACING-DEFL. GRIP LOADING (psf) 2-0-0 CSI. (loc) I/defl L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.35 Vert(LL) -0.02 4-5 >999 360 MT20 197/144 TCDL Lumber DOL 1.15 вс 0.21 Vert(CT) -0.05 4-5 >999 240 WB 0.00 Horz(CT) **BCLL** 0.0 Rep Stress Incr YES 0.02 3 n/a n/a Code IRC2018/TPI2014 Wind(LL) 4-5 Weight: 13 lb BCDL 10.0 Matrix-R 0.02 >999 240 FT = 10%

4-11-4

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

> (size) 5=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 5=90(LC 8)

Max Uplift 5=-41(LC 8), 3=-77(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 2-5=-252/83

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



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

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

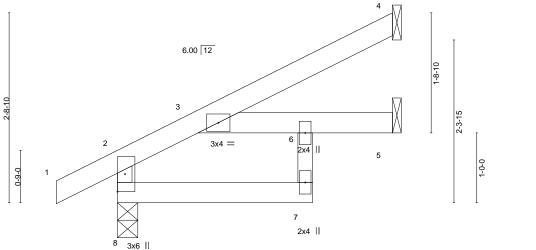
except end verticals







Job Truss Truss Type Qty Ply Lot 98 RR 158885217 B230098 J18 3 Jack-Open Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:40 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 2-9-8 2-9-8 3-11-4 0-10-8 Scale = 1:16.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DC	L 1.15	TC 0.17	Vert(LL)	-0.01	3-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.03	3-6	>999	240		
BCLL 0.0	Rep Stress In	cr YES	WB 0.02	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC201	18/TPI2014	Matrix-S	Wind(LL)	0.02	3-6	>999	240	Weight: 13 lb	FT = 10%

2-9-8 2-9-8

LUMBER-

WFBS

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 2x3 SPF No.2 **BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins,

except end verticals.

1-1-12

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

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

Max Horz 8=87(LC 8)

Max Uplift 8=-18(LC 8), 4=-54(LC 8)

Max Grav 8=263(LC 1), 4=109(LC 1), 5=91(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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	Ply	Lot 98 RR
B230098	J19	JACK-OPEN	2	1	I58885218
B230030	010	SACIO EIV	_		Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:41 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

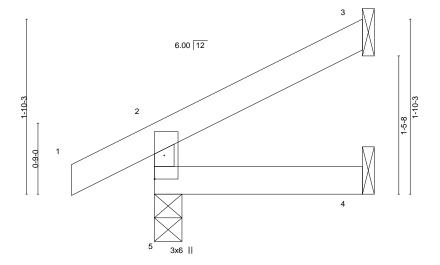
Structural wood sheathing directly applied or 2-2-6 oc purlins,

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

except end verticals.

-0-10-8 0-10-8

Scale = 1:12.2



2-2-6 2-2-6

BRACING-

TOP CHORD

BOT CHORD

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 0.07	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: 7 lb	FT = 10%

LUMBER-

REACTIONS.

WFBS

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

2x3 SPF No.2

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

Max Horz 5=52(LC 8)

Max Uplift 5=-23(LC 8), 3=-37(LC 8)

Max Grav 5=176(LC 1), 3=56(LC 1), 4=38(LC 3)

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

NOTES-

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





Job Truss Truss Type Qty Ply Lot 98 RR 158885219 B230098 J20 JACK-OPEN 3 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:43 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

-0-10-8 2-6-0 2-6-0 0-10-8 Scale = 1:11.4 5.00 12

2 3x6 ||

2-6-0

BRACING-

TOP CHORD

BOT CHORD

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in ((loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.04	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	4-5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

REACTIONS.

WFBS

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

2x3 SPF No.2

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 5=48(LC 8)

Max Uplift 5=-31(LC 4), 3=-38(LC 8)

Max Grav 5=188(LC 1), 3=67(LC 1), 4=44(LC 3)

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

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



June 13,2023





Structural wood sheathing directly applied or 2-6-0 oc purlins,

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

except end verticals.

Job Truss Truss Type Qty Ply Lot 98 RR 158885220 B230098 J21 Diagonal Hip Girder Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:44 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 4-2-8 4-2-8 1-9-8 Scale = 1:16.9 3x4 || 3.84 12 10 슏 3x6 = 5 2x4 13 14 0-6-0 2x4 || 11 12 7 2x4 || 3x6 II 4-2-8 6-0-0 4-2-1 1-9-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP in **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.41 Vert(LL) -0.06 3-6 >999 360 MT20 197/144 TCDL Lumber DOL 1.15 вс 0.33 Vert(CT) -0.11 3-6 >628 240 WB **BCLL** 0.0 Rep Stress Incr NO 0.03 Horz(CT) 0.06 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) BCDL 10.0 Matrix-R 0.06 3-6 >999 240 Weight: 20 lb FT = 10%

LUMBER-

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

BRACING-

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

except end verticals

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

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

Max Horz 8=94(LC 5)

Max Uplift 8=-108(LC 4), 5=-56(LC 8) Max Grav 8=377(LC 1), 5=248(LC 1)

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

TOP CHORD 2-8=-345/139

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 100 lb uplift at joint(s) 5 except (jt=lb) 8=108.
- 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) 78 lb down and 46 lb up at 3-0-14, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-0-14, and 6 lb down at 3-6-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

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

Concentrated Loads (lb) Vert: 11=-1(F) 12=-0(B)



June 13,2023



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

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

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



Job Truss Truss Type Qty Ply Lot 98 RR 158885221 B230098 J22 JACK-OPEN 3 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:45 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 0-10-8 Scale = 1:16.4 5.00 12

4-11-4

BRACING-

TOP CHORD

BOT CHORD

LOADIN	G (psf)	SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC	0.34	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.20	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matri	x-R	Wind(LL)	0.02	4-5	>999	240	Weight: 13 lb	FT = 10%

LUMBER-

REACTIONS.

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

2x4 SPF No.2 WFBS

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

Max Horz 5=89(LC 8)

0-8-0

Max Uplift 5=-41(LC 8), 3=-74(LC 8)

Max Grav 5=292(LC 1), 3=147(LC 1), 4=89(LC 3)

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

TOP CHORD 2-5=-255/85

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

3x6 ||

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



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

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

except end verticals.



Job Truss Truss Type Qty Ply Lot 98 RR 158885222 B230098 J23 Jack-Closed Girder Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:46 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 2-3-14 5.00 12 Scale = 1:16.4 4x8 =10x16 / 3x6 = 3x6 = 0 - 11 - 12

2-3-14 Plate Offsets (X,Y)-- [2:1-2-8,0-6-0], [3:0-3-0,0-3-0], [4:Edge,0-1-15]

3x6 =

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.05	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-P	Wind(LL)	0.00	5	>999	240	Weight: 33 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

5 3x4 =

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

except end verticals, and 2-0-0 oc purlins: 1-3.

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

2-4-1

LUMBER-TOP CHORD 2x10 SP 2400F 2.0E *Except*

2-4: 2x4 SPF No.2

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

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

Max Horz 6=76(LC 5) Max Uplift 6=-224(LC 4), 7=-173(LC 8)

Max Grav 6=1279(LC 15), 7=875(LC 15)

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

1-6=-940/196, 3-5=-83/547, 3-4=-156/956 TOP CHORD

BOT CHORD 5-6=-139/702

WEBS 2-6=-754/146, 2-5=-812/178, 4-7=-895/177

NOTES-

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

2-3-14

- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=224, 7=173.
- 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) 945 lb down and 161 lb up at 1-0-0, and 943 lb down and 160 lb up at 2-11-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

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



June 13,2023

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 propetly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



Job	Truss	Truss Type	Qty	Ply	Lot 98 RR
B230098	J23	Jack-Closed Girder	1	1	158885222
B230090	1323	Jack-Closed Girder		'	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:47 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 2=-859(B) 8=-860(B)

Job	Truss	Truss Type	Qty	Ply	Lot 98 RR
B230098	J24	JACK-OPEN	1	1	158885223
B230096	324	JACK-OFEN	!	'	Job Reference (optional)

Waverly, KS - 66871, Wheeler Lumber,

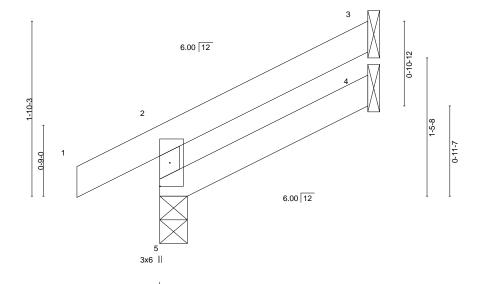
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:48 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

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

except end verticals.

Scale = 1:12.2



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 0.07	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	4-5	>999	240	Weight: 7 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 5=51(LC 8)

Max Uplift 5=-21(LC 8), 3=-39(LC 8)

Max Grav 5=176(LC 1), 3=56(LC 1), 4=38(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

-0-10-8 0-10-8

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







Job Truss Truss Type Qty Ply Lot 98 RR 158885224 B230098 J25 Jack-Open Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:49 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

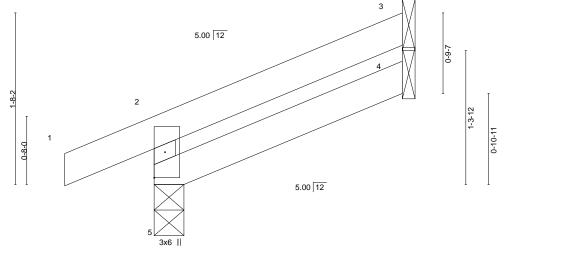
Structural wood sheathing directly applied or 2-5-2 oc purlins,

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

except end verticals.

-0-10-8 0-10-8

Scale = 1:11.3



LOADING	VI /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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/TP	12014	Matri	x-R	Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 5=46(LC 8)

Max Uplift 5=-30(LC 4), 3=-38(LC 8)

Max Grav 5=185(LC 1), 3=65(LC 1), 4=42(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) Bearing at joint(s) 5 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 100 lb uplift at joint(s) 5, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885225 B230098 J26 Diagonal Hip Girder 2 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:50 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -1-4-6 Scale = 1:11.9 3.84 12 6 2 -5-8 3x6 || 3-3-3

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	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/TP	12014	Matri	x-R	Wind(LL)	0.00	4-5	>999	240	Weight: 10 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WFBS

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

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical

Max Horz 5=58(LC 4)

Max Uplift 5=-89(LC 4), 3=-44(LC 8)

Max Grav 5=268(LC 1), 3=87(LC 1), 4=58(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 32 lb up at 2-2-6 on top chord, and 2 lb down and 1 lb up at 2-2-6 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, 2-3=-70, 4-5=-20 Concentrated Loads (lb)

Vert: 7=1(F)



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

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

except end verticals







Job Truss Truss Type Qty Ply Lot 98 RR 158885226 B230098 J27 2 Jack-Open Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:51 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

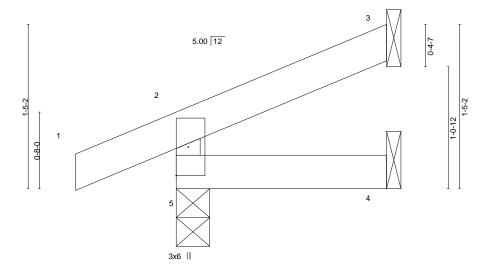
Structural wood sheathing directly applied or 1-9-15 oc purlins,

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

except end verticals.

-0-10-8 0-10-8

Scale = 1:10.0



1-9-15 1-9-15

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (l	loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

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

Max Horz 5=38(LC 8) Max Uplift 5=-33(LC 4), 3=-27(LC 8)

Max Grav 5=165(LC 1), 3=43(LC 1), 4=32(LC 3)

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

NOTES-

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





Job Truss Truss Type Qty Ply Lot 98 RR 158885227 B230098 J28 5 Jack-Open Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:52 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

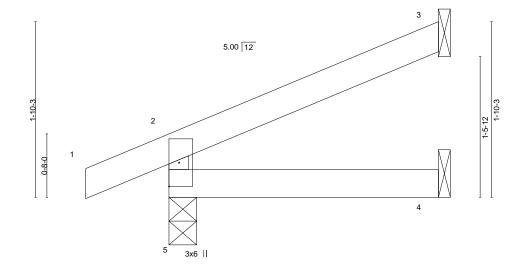
Structural wood sheathing directly applied or 2-10-0 oc purlins,

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

except end verticals.

-0-10-8 2-10-0 2-10-0 0-10-8

Scale: 1"=1'



2-10-0 2-10-0

BRACING-

TOP CHORD

BOT CHORD

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.06	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

REACTIONS.

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

2x3 SPF No.2 WFBS

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

Max Horz 5=54(LC 8)

Max Uplift 5=-32(LC 8), 3=-43(LC 8)

Max Grav 5=201(LC 1), 3=79(LC 1), 4=50(LC 3)

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

NOTES-

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





Job Truss Truss Type Qty Ply Lot 98 RR 158885228 B230098 J29 Diagonal Hip Girder Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:50:53 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 6-0-7 Scale = 1:17.6 3x6 || 3 3.84 12 0-6-0 3x6 II 2x4 || 6-0-7 6-0-7 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d PLATES **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.51 Vert(LL) -0.05 4-5 >999 360 MT20 197/144

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

-0.10

-0.00

0.01

4-5

4-5

>713

>999

except end verticals

n/a

240

n/a

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

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

Weight: 18 lb

FT = 10%

LUMBER-

TCDL

BCLL

BCDL

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

0.0

10.0

2x3 SPF No.2 WFBS

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

Max Horz 5=111(LC 5)

Max Uplift 5=-110(LC 4), 4=-54(LC 8) Max Grav 5=379(LC 1), 4=250(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-332/152

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

вс

WB

Matrix-R

0.31

0.00

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

1.15

NO

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=110.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 46 lb up at 3-0-14, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-0-14, and 6 lb down at 3-6-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 8=-1(B) 9=-0(F)









Job Truss Truss Type Qty Ply Lot 98 RR 158885229 B230098 LAY1 **GABLE** Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:04 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

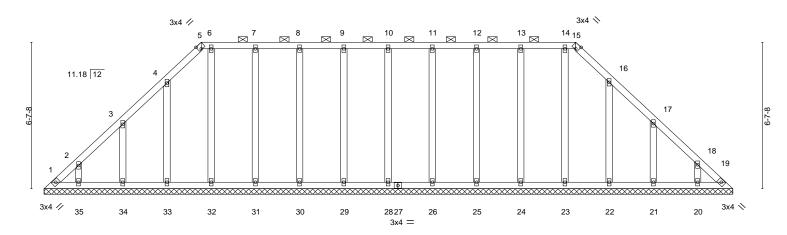
24-0-8

16-11-4

Scale = 1:52.1

31-1-13

7-1-5



31-1-13 [5:0-1-10 Edge] [15:0-1-10 Edge]

Plate Offsets	(A,Y)	[5:0-1-10,Eage], [15:0-1-	ru,⊑agej									
LOADING (p	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25	5.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10	0.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL (0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	19	n/a	n/a		
BCDL 10	0.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 157 lb	FT = 10%

TOP CHORD 2x4 SPF No 2

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

BRACING-

BOT CHORD

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

2-0-0 oc purlins (6-0-0 max.): 5-15.

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

REACTIONS. All bearings 31-1-13.

Max Horz 1=-165(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 1, 19, 35, 33, 32, 31, 30, 29, 28, 26, 25, 24, 22, 20 except 34=-112(LC 8), 21=-114(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 19, 35, 34, 33, 32, 31, 30, 29, 28, 26, 25, 24, 23, 22,

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

NOTES-

LUMBER-

- 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 19, 35, 33, 32, 31, 30, 29, 28, 26, 25, 24, 22, 20 except (jt=lb) 34=112, 21=114.
- 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.



June 13,2023





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

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

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



Job Truss Truss Type Qty Ply Lot 98 RR 158885230 B230098 LAY2 GABLE Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:06 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 8-4-8 8-4-8 Scale = 1:45.6 4x5 = 5 11.18 12

> 3x4 // 3x4 📏 15 13 12 10 16-9-0 16-9-0

LOADING	G (psf)	SPACING- 2-	0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1	.15	TC	0.06	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 Y	'ES	WB	0.15	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI201	14	Matri	x-S						Weight: 76 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD BOT CHORD

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

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

REACTIONS. All bearings 16-9-0.

Max Horz 1=-195(LC 6) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-107(LC 8), 15=-102(LC 8), 16=-118(LC 8),

12=-106(LC 9), 11=-103(LC 9), 10=-118(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.

- 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) 1, 9 except (jt=lb) 14=107, 15=102, 16=118, 12=106, 11=103, 10=118.
- 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.



June 13,2023







Job Truss Truss Type Qty Ply Lot 98 RR 158885231 B230098 LAY3 **GABLE** Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:07 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 13-9-6 Scale = 1:53.5 3x4 // 3x4 || 10 12 13 6 5 11.18 12 X M M Ø X M 1-0-2 16 6x6 18 12 3x4 || 25 28 27 26 24 23 22 21 20 19 18 17 3x4 22-2-7 23-3-7 Plate Offsets (X,Y)--[6:0-1-10,Edge], [25:0-1-12,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.25 Vert(LL) n/a n/a 999 MT20 197/144 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.11 n/a n/a 999 WB **BCLL** 0.0 Rep Stress Incr YES 0.14 Horz(CT) -0.00 15 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 150 lb FT = 10% LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SPF No 2 except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-14. 2x4 SPF No 2 **BOT CHORD** WERS Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

WEBS

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

1 Row at midpt

All bearings 23-3-7. Max Horz 1=326(LC 5) (lb) -

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 24, 23, 22, 21, 20, 19, 18 except

1=-112(LC 6), 15=-137(LC 7), 16=-233(LC 4), 28=-105(LC 8), 27=-104(LC 8),

26=-109(LC 8), 17=-133(LC 7)

Max Grav All reactions 250 lb or less at joint(s) 1, 15, 28, 27, 26, 24, 23, 22, 21,

20, 19, 18, 17 except 16=291(LC 7)

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

TOP CHORD 1-2=-344/224, 2-3=-290/188

OTHERS

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 23, 22, 21, 20, 19, 18 except (jt=lb) 1=112, 15=137, 16=233, 28=105, 27=104, 26=109, 17=133.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 15.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



14-15, 7-23, 8-22, 9-21, 10-20, 11-19,

12-18, 13-17

June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885232 B230098 LAY4 GABLE Job Reference (optional)

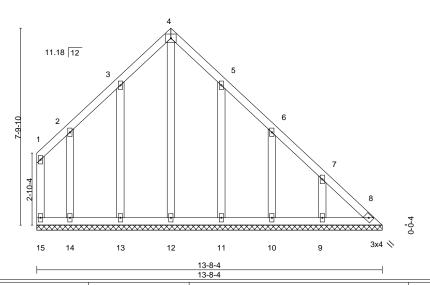
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:09 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-3-12 5-3-12 13-8-4

4x5 =

Scale = 1:45.6



LOADING	(psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-S						Weight: 70 lb	FT = 10%

LUMBER-

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

2x4 SPF No 2 WFBS 2x4 SPF No.2 OTHERS

BRACING-

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

except end verticals

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

REACTIONS. All bearings 13-8-4.

(lb) -Max Horz 15=-231(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 15, 12 except 8=-119(LC 5), 13=-104(LC 8), 14=-110(LC 8),

11=-106(LC 9), 10=-103(LC 9), 9=-118(LC 9)

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

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

TOP CHORD 7-8=-257/232

- 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) 15, 12 except (jt=lb) 8=119, 13=104, 14=110, 11=106, 10=103, 9=118.
- 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.



June 13,2023



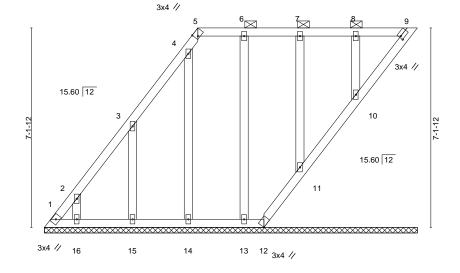
Job Truss Truss Type Qty Ply Lot 98 RR 158885233 B230098 LAY5 **GABLE** Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:10 2023 Page 1 ID:2ncXplsxOfbjlB6I7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-6-0 5-6-0 7-10-6

Scale = 1:41.3



7-10-6 5-6-0 Plate Offsets (X,Y)--[5:0-1-4,Edge], [9:0-0-12,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.06 197/144

7-10-6

TCDL 10.0 Lumber DOL 1.15 BC 0.03 WB **BCLL** 0.0 Rep Stress Incr YES 0.12 BCDL 10.0 Code IRC2018/TPI2014 Matrix-S

Vert(LL) n/a n/a 999 Vert(CT) n/a n/a 999 Horz(CT) -0.00 n/a n/a

13-4-6

MT20

Weight: 65 lb FT = 10%

LUMBER-TOP CHORD

BOT CHORD

OTHERS

2x4 SPF No.2 2x4 SPF No 2 2x4 SPF No 2 **BRACING-**

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

2-0-0 oc purlins (6-0-0 max.): 5-9.

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

REACTIONS. All bearings 13-4-6.

(lb) -Max Horz 1=280(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 9, 12, 14, 13, 11, 10 except 1=-119(LC 6), 16=-139(LC 8),

15=-193(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 9, 12, 16, 15, 14, 13, 11, 10 except 1=296(LC 8)

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

TOP CHORD 1-2=-376/171

- 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 12, 14, 13, 11, 10 except (jt=lb) 1=119, 16=139, 15=193.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885234 B230098 LAY6 **GABLE** Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:12 2023 Page 1

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 8-3-15 8-3-15

Scale = 1:62.3

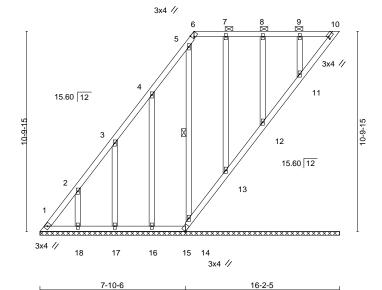


Plate Offsets (X,Y)-- [6:0-1-4,Edge], [10:0-0-12,0-1-8]

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 0.07	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 0.19	Horz(CT) -0.01 10 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 92 lb FT = 10%

LUMBER-

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

OTHERS

BOT CHORD 2x4 SPF No 2 BRACING-

8-3-15

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

2-0-0 oc purlins (6-0-0 max.): 6-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS** 1 Row at midpt 5-14

REACTIONS. All bearings 16-2-5

(lb) -Max Horz 1=430(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 10, 15, 14, 13, 12, 11 except 1=-136(LC 6), 18=-180(LC 8),

7-10-6

17=-168(LC 8), 16=-188(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 10, 15, 18, 17, 16, 14, 13, 12, 11 except 1=404(LC 8)

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

TOP CHORD 1-2=-525/234, 2-3=-353/161

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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 15, 14, 13, 12, 11 except (jt=lb) 1=136, 18=180, 17=168, 16=188.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 14, 13, 12, 11.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 13,2023





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

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

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



Job Truss Truss Type Qty Ply Lot 98 RR 158885235 B230098 R1 Flat Girder 2 Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:13 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Scale = 1:14.1

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	0.80	Vert(LL)	-0.01	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.02	3-4	>999	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/TPI	2014	Matri	x-P	Wind(LL)	0.00	4	****	240	Weight: 68 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E BOT CHORD 2x6 SPF No.2 2x4 SPF No.2 WFBS

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

Max Horz 4=-59(LC 4)

Max Uplift 4=-379(LC 4), 3=-308(LC 5) Max Grav 4=2214(LC 1), 3=1828(LC 1)

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

TOP CHORD 1-4=-2155/414, 2-3=-1769/336

NOTES-

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

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

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=379, 3=308.
- 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) 1181 lb down and 214 lb up at 0-9-0, and 1168 lb down and 210 lb up at 2-9-0, and 1168 lb down and 205 lb up at 4-9-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

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



4x5

2-0-0 oc purlins: 1-2, except end verticals.

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

June 13,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-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/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 98 RR
B230098	R1	Flat Girder	1	_	158885235
D230090	IXI	i lat Gildei	'	2	Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:13 2023 Page 2 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 5=-1181 6=-1168 7=-1168



Job Truss Truss Type Qty Ply Lot 98 RR 158885236 B230098 V1 Valley Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:14 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

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

except end verticals.

Scale = 1:18.7

2x4 || 3 5.00 12 2x4 || 0-0-4 2x4 || 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 0.19 BC 0.10	DEFL. Vert(LL) Vert(CT)	in (loc) n/a - n/a -	l/defl n/a n/a	L/d 999 999	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.05 Matrix-P	Horz(CT) -	-0.00 4	n/a	n/a	Weight: 18 lb FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WFBS 2x3 SPF No 2 OTHERS

REACTIONS. (size) 1=7-0-14, 4=7-0-14, 5=7-0-14

Max Horz 1=115(LC 5)

Max Uplift 4=-27(LC 8), 5=-98(LC 8)

Max Grav 1=61(LC 16), 4=142(LC 1), 5=370(LC 1)

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

WEBS 2-5=-288/148

- 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, 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.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885237 B230098 V2 Valley Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:15 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

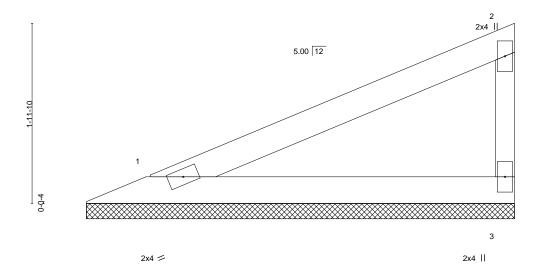
Structural wood sheathing directly applied or 4-8-11 oc purlins,

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

except end verticals

4-8-11

Scale = 1:12.6



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 0.28	Vert(LL)	n/a	-	n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 11 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=4-8-2, 3=4-8-2

Max Horz 1=71(LC 5) Max Uplift 1=-25(LC 8), 3=-40(LC 8)

Max Grav 1=174(LC 1), 3=174(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.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885238 B230098 V3 Valley Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

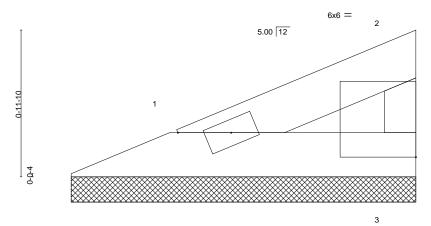
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:16 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 2-3-14 oc purlins,

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

except end verticals.

Scale = 1:7.6



2x4 /

Plate Off	sets (X,Y)	[2:Edge,0-1-15]										
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	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	(-P						Weight: 5 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 WFBS

REACTIONS. (size) 1=2-3-5, 3=2-3-5 Max Horz 1=27(LC 5)

Max Uplift 1=-10(LC 8), 3=-15(LC 8)

Max Grav 1=66(LC 1), 3=66(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.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885239 B230098 V4 Valley Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:17 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

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

except end verticals.

Scale = 1:18.7

2x4 | 3 5.00 12 2x4 || 4-0-0 2x4 || 2x4 || 2x4 =

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 0.19	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/TPI2014	Matrix-P						Weight: 18 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 WFBS 2x3 SPF No 2 OTHERS

REACTIONS. (size) 1=7-0-13, 4=7-0-13, 5=7-0-13

Max Horz 1=114(LC 5)

Max Uplift 4=-27(LC 8), 5=-98(LC 8)

Max Grav 1=61(LC 16), 4=142(LC 1), 5=370(LC 1)

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

WEBS 2-5=-287/148

- 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, 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.



June 13,2023







Job Truss Truss Type Qty Ply Lot 98 RR 158885240 B230098 V5 Valley Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:18 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

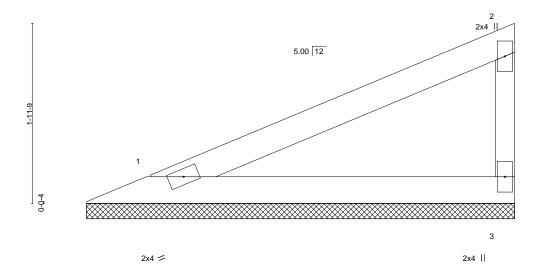
Structural wood sheathing directly applied or 4-8-10 oc purlins,

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

except end verticals

4-8-10

Scale = 1:12.6



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 0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 11 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WFBS 2x3 SPF No.2

REACTIONS. (size) 1=4-8-0, 3=4-8-0 Max Horz 1=71(LC 5)

Max Uplift 1=-25(LC 8), 3=-40(LC 8)

Max Grav 1=174(LC 1), 3=174(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 98 RR 158885241 B230098 V6 Valley Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

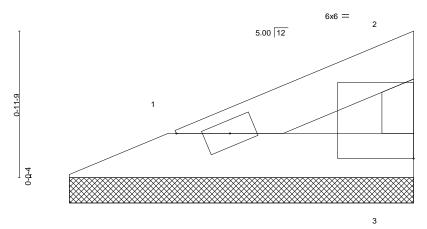
8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:19 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 2-3-13 oc purlins,

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

except end verticals.

Scale = 1:7.6



2x4 /

Plate Off	sets (X,Y)	[2:Edge,0-2-0]										
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	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	PI2014	Matri	x-P						Weight: 5 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 WFBS

REACTIONS. (size) 1=2-3-3, 3=2-3-3 Max Horz 1=27(LC 5)

Max Uplift 1=-10(LC 8), 3=-15(LC 8)

Max Grav 1=66(LC 1), 3=66(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.



June 13,2023



Job Truss Truss Type Qty Ply Lot 98 RR 158885242 B230098 V7 Valley Job Reference (optional) Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:20 2023 Page 1 Wheeler Lumber, ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 5-8-12 5-8-12 12-0-13 0-7-5 5-8-12 Scale = 1:21.1 2x4 || 3x4 = 6.00 12 2-10-6 2-8-10 2x4 || 6^{2x4} || 2 10 9 3x4 / 3x4 > 2x4 || 2x4 || 2x4 || 0-0-8 0-0-8 12-0-13 12-0-5 Plate Offsets (X,Y)--[2:0-0-0,0-0-0], [3:0-2-0,Edge], [5:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 25.0 Plate Grip DOL 1.15 TC 0.16 Vert(LL) n/a n/a 999 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 BC 0.11 Vert(CT) n/a n/a 999 WB 0.05 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 30 lb FT = 10% LUMBER-**BRACING-**Structural wood sheathing directly applied or 6-0-0 oc purlins, except TOP CHORD 2x4 SPF No.2 TOP CHORD BOT CHORD 2x4 SPF No.2 2-0-0 oc purlins (6-0-0 max.): 3-5. 2x3 SPF No 2 BOT CHORD **OTHERS** Rigid ceiling directly applied or 10-0-0 oc bracing. REACTIONS. All bearings 11-11-13.

Max Horz 1=-44(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 8=-102(LC 9), 10=-103(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=318(LC 1), 8=330(LC 22), 10=330(LC 21)

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

WEBS 6-8=-269/146, 2-10=-270/147

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) Provide adequate drainage to prevent water ponding.
- 4) 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) 1, 7 except (jt=lb) 8=102, 10=103.
- 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.



June 13,2023



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

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

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



Job Truss Truss Type Qty Ply Lot 98 RR 158885243 B230098 V8 Valley Job Reference (optional) Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jun 12 11:51:21 2023 Page 1 ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 4-4-7 8-8-13 Scale: 3/4"=1" 4x5 = 2 6.00 12 2x4 || 2x4 / 2x4 > 8-8-13 8-8-13 LOADING (psf) SPACING-GRIP 2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.26 Vert(LL) n/a n/a 999 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 вс 0.12 Vert(CT) n/a n/a 999 YES WB 0.04 **BCLL** 0.0 Rep Stress Incr Horz(CT) 0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 21 lb FT = 10% LUMBER-BRACING-

TOP CHORD

BOT CHORD

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

REACTIONS.

(size) 1=8-8-13, 3=8-8-13, 4=8-8-13

Max Horz 1=33(LC 12)

Max Uplift 1=-40(LC 8), 3=-46(LC 9), 4=-4(LC 8) Max Grav 1=176(LC 1), 3=176(LC 1), 4=322(LC 1)

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

NOTES-

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



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

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

June 13,2023





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

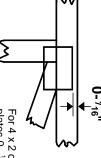


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE



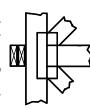
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

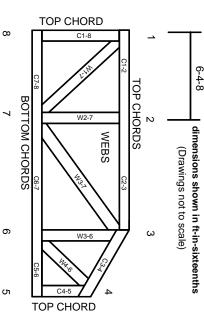
Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MiTek® All Rights Reserved



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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

ω

- 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.

Ģ

- 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.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber

9

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