

RE: 400155 Lot 3 H3 MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

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

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

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

This package includes 40 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	140734770	a1	3/24/2020	27	140734796	v1	3/24/2020
2	140734771	a2	3/24/2020	28	140734797	v2	3/24/2020
3	140734772	a3	3/24/2020	29	140734798	v3	3/24/2020
4	140734773	a4	3/24/2020	30	140734799	v4	3/24/2020
5	140734774	a5	3/24/2020	31	140734800	v 5	3/24/2020
6	140734775	a6	3/24/2020	32	140734801	v6	3/24/2020
7	140734776	b1	3/24/2020	33	140734802	v7	3/24/2020
8	140734777	b2	3/24/2020	34	140734803	v8	3/24/2020
9	140734778	b3	3/24/2020	35	140734804	v9	3/24/2020
10	140734779	b4	3/24/2020	36	140734805	v10	3/24/2020
11	140734780	b5	3/24/2020	37	140734806	v11	3/24/2020
12	140734781	b6	3/24/2020	38	140734807	v12	3/24/2020
13	140734782	c1	3/24/2020	39	140734808	v13	3/24/2020
14	140734783	c2	3/24/2020	40	140734809	v14	3/24/2020
15	140734784	c3	3/24/2020				
16	140734785	c4	3/24/2020				
17	140734786	c5	3/24/2020				
18	140734787	c6	3/24/2020				

3/24/2020 3/24/2020

3/24/2020

3/24/2020

3/24/2020

3/24/2020

3/24/2020

3/24/2020

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan My license renewal date for the state of Kansas is April 30, 2020.

c7

с8

с9

d1

d2

d3

p1

p2

Kansas COA: E-943

19

20

21

22

23

24

25

26

140734788

140734789

140734790

140734791

140734792

140734793

140734794

140734795

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.

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI



March 24, 2020



RE: 400155 Lot 3 H3 MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

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

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

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

This package includes 40 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	140734770	a1	3/24/2020	27	140734796	v1	3/24/2020
2	140734771	a2	3/24/2020	28	140734797	v2	3/24/2020
3	140734772	a3	3/24/2020	29	140734798	v3	3/24/2020
4	140734773	a4	3/24/2020	30	140734799	v4	3/24/2020
5	140734774	a5	3/24/2020	31	140734800	v5	3/24/2020
6	140734775	a6	3/24/2020	32	140734801	v6	3/24/2020
7	140734776	b1	3/24/2020	33	140734802	v7	3/24/2020
8	140734777	b2	3/24/2020	34	140734803	v8	3/24/2020
9	140734778	b3	3/24/2020	35	140734804	v9	3/24/2020
10	140734779	b4	3/24/2020	36	140734805	v10	3/24/2020
11	140734780	b5	3/24/2020	37	140734806	v11	3/24/2020
12	140734781	b6	3/24/2020	38	140734807	v12	3/24/2020
13	140734782	c1	3/24/2020	39	140734808	v13	3/24/2020
14	140734783	c2	3/24/2020	40	140734809	v14	3/24/2020
15	140734784	c3	3/24/2020	.0	110101000	V 1 1	0/2 1/2020
16	140734785	c4	3/24/2020				
17	140734786	c5	3/24/2020				
18	140734780	c6	3/24/2020				
19	140734788	c7	3/24/2020				
20	140734789	c8	3/24/2020				
21	140734769	c9	3/24/2020				
22	I40734791	d1	3/24/2020				

3/24/2020

3/24/2020

3/24/2020

3/24/2020

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

d2

d3

p1

p2

MiTek USA, Inc under my direct supervision

140734792

140734793

140734794

140734795

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193

23

24

25

26

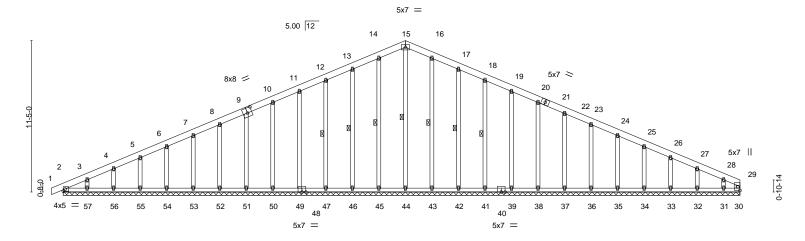
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.



March 24, 2020

Job Truss Truss Type Qty Lot 3 H3 140734770 400155 A1 Common Supported Gable Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:41 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-bqKqO7R_kD3x_0P0xLx8G1h1ESbMNZNMiPE6IAzXnBi -0₁10₁8 0-10-8

Scale = 1:86.9



51-0-5 Plate Offsets (X,Y)--[9:0-4-0,0-4-8], [29:0-0-12,0-1-12], [30:0-0-0,0-1-12], [48:0-0-0,0-1-12], [49:0-1-12,0-0-0] SPACING-GRIP LOADING (psf) DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) -0.00 120 MT20 197/144 n/r **TCDL** 10.0 Lumber DOL 1.15 ВС 0.05 Vert(CT) -0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.14 Horz(CT) 0.01 30 n/a n/a Code IRC2018/TPI2014 BCDL Matrix-S Weight: 316 lb FT = 10% 10.0

51-0-5

LUMBER-**BRACING-**

25-9-10

TOP CHORD 2x6 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, 2x4 SPF No.2 **BOT CHORD** except end verticals. **WEBS** 2x4 SPF No.2 **BOT CHORD OTHERS** 2x4 SPF No.2

Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS** 15-44, 14-45, 13-46, 12-47, 16-43, 17-42, 1 Row at midpt

25-2-11

18-41

REACTIONS. All bearings 51-0-5.

(lb) -Max Horz 2=199(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 42, 41,

39, 38, 37, 36, 35, 34, 33, 32 except 31=-116(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 30, 2, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31

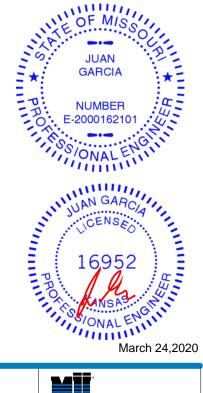
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-253/110, 11-12=-39/265, 12-13=-39/286, 13-14=-39/310, 14-15=-41/319,

15-16=-41/311, 16-17=-39/286

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 2, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32 except (jt=lb) 31=116.
- 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.





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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid for use only with release controlled in the controlle



Job Truss Truss Type Qty Lot 3 H3 140734771 400155 A2 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:43 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-XDSbpoSFGqJfEKYP2m_cLSm8YG6trGsf9jjCM2zXnBg

25-9-10 33-2-8 -0-10-8 0-10-8 6-11-7 8-5-9 3-6-7 6-10-2 1-8-6 5-8-8

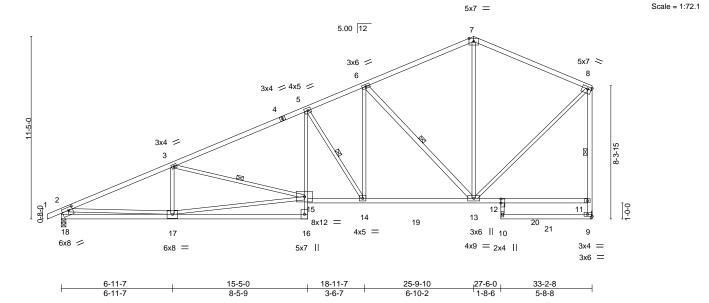


Plate Offsets (X,Y)	[8:0-3-0,0-1-12], [9:Edge,0-1-8], [12:0-3	-0,0-0-0], [18:0-3-0,0-2-4],	[18:0-2-9,0-1-1]			_
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.90 BC 0.75 WB 0.97 Matrix-S	Vert(LL) -0.26 Vert(CT) -0.50 Horz(CT) 0.12	5 16-17 >999 36 0 16-17 >781 24	40 OF MISSO	
1-4: 2x4	F No.2 *Except* 4 SPF 2100F 1.8E F No.2 *Except*		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood she Rigid ceiling directly 1 Row at midpt	athing directly applied, except end verticals. applied or 9-5-5 oc bracing. 3-15, 5-14, 6-13, 8-9	NATION AND ADDRESS OF THE PARTY

5-16,10-12: 2x3 SPF No.2 WFBS 2x3 SPF No.2 *Except* 6-13,8-9: 2x4 SPF No.2, 2-18: 2x6 SPF No.2

REACTIONS. 18=0-3-8, 9=Mechanical (size)

Max Horz 18=353(LC 5)

Max Uplift 18=-251(LC 8), 9=-198(LC 8) Max Grav 18=1614(LC 2), 9=1720(LC 2)

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

TOP CHORD 2-3=-2975/430, 3-5=-2604/425, 5-6=-1994/366, 6-7=-1090/231, 7-8=-1091/253,

2-18=-1504/281, 9-11=-1580/236, 8-11=-1481/244

17-18=-351/797, 5-15=-70/676, 14-15=-387/2317, 13-14=-246/1800, 11-12=-251/113 **BOT CHORD** WEBS 3-17=-302/196, 15-17=-548/2497, 3-15=-392/150, 5-14=-962/259, 6-14=-135/985,

6-13=-1270/326, 7-13=-38/444, 2-17=-184/1883, 8-13=-165/1277

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) 18=251, 9=198.
- 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.



NUMBER



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



Job Truss Truss Type Ply Lot 3 H3 140734772 400155 A3 Roof Special Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:44 2020 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-?P0z18Tt18RWrU7bcTVrugJKvfRqakqoONSmvUzXnBf

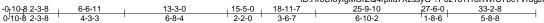
2-10-12

Rigid ceiling directly applied or 8-2-15 oc bracing.

1 Row at midpt
4-18-7-16-9-10
NUMBER

0

5x7 =



5.00 12 8 3x6 = 5x7 ≥ 9 6x8 = 3x4 = 6 5 5x7 / 9-0-13 21 18 17 16 22 24 25 26 4x9 = 3x6 || 14 197x12 = 4x5 =23 20 11 10 2x4 || 2x4 || _{2x4} || 2x4 Ш 2x4 || 4x9 = 3x4 ||3x4 =2x4 || 3x6 = 3x6 2x4 Ш Ш 18-11-7 27-6-0 30-3-12 6-6-11 13-3-0 15-5-0 25-9-10

6-10-2

except end verticals.

1 Brace at Jt(s): 13

TCLL 25.0 Plate Grip DOL 1.15 TC 0.86 Vert(LL) -0.31 21-22 >999 360 M° TCDL 10.0 Lumber DOL 1.15 BC 0.77 Vert(CT) -0.56 21-22 >711 240 BCLL 0.0 * Rep Stress Incr YES WB 0.93 Horz(CT) 0.28 10 n/a n/a	OF M/S
TCLL 25.0 Plate Grip DOL 1.15 TC 0.86 Vert(LL) -0.31 21-22 >999 360 M	11 11
	20 197/144
LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl L/d PL	ATES GRIP

BOT CHORD

WEBS

JOINTS

3-6-7

8-9: 2x4 SPF No.2, 1-5: 2x8 SP DSS

2x4 SPF No.2 *Except* BOT CHORD

3-18: 2x6 SPF 1650F 1.4E, 20-21,14-15: 2x3 SPF No.2

2x3 SPF No.2 *Except* WFBS

3-23,6-19,4-18,7-16,9-10: 2x4 SPF No.2

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

Max Horz 2=388(LC 8)

Max Uplift 2=-230(LC 8), 10=-218(LC 8) Max Grav 2=1629(LC 2), 10=1733(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-777/0, 3-4=-4382/700, 4-6=-2638/374, 6-7=-2043/335, 7-8=-1099/191,

8-9=-1097/212, 10-12=-1607/243, 9-12=-1499/253

BOT CHORD 3-22=-1008/4217, 21-22=-1006/4217, 18-21=-998/4192, 17-18=-510/2324,

16-17=-385/1851

WEBS 6-18=-43/605, 4-22=0/279, 4-18=-1933/511, 6-17=-860/228, 7-17=-135/1001,

7-16=-1324/340, 8-16=-7/456, 9-16=-202/1298

- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) 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) 2=230, 10=218,
- 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



E-2000162101

SO/ONAL

March 24,2020

Scale = 1:74.6



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



Job Truss Truss Type Qty Ply Lot 3 H3 140734773 400155 A4 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:45 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:Hr0UloyIgMOrZQ4rpild7XzssyG-TbaLEUUVoSZMTeioAA04QtrVk3oeJFMxd1CJRxzXnBe 25-9-10 -0₁10-8 2-3-8 0-10-8 2-3-8 33-2-8 4-7-14 6-3-10 5-8-7 6-10-3

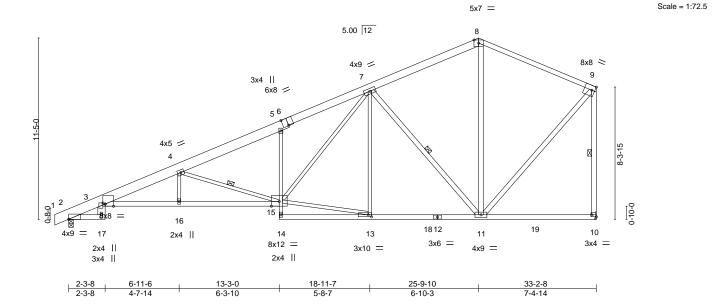


Plate Offsets (X,Y)	[2:0-0-0,0-0-2], [3:0-6-4,Edge], [3:0-0-14	1,0-1-11], [6:0-4-0,Edge], [9	9:0-2-5,Edge], [10:Edg	je,0-1-8], [13:0-2-8	3,0-1-8]	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.86 BC 0.73 WB 0.65 Matrix-S	Vert(LL) -0.3		L/d 360 240 n/a 240	PLATES GRIP MT20 OF M/S Weight 195 lb FT = 10%
	F No.2 *Except* 4 SPF No.2. 1-6: 2x8 SP DSS		BRACING- TOP CHORD	Structural wood		JUAN rective applied or 2-2-00 Furfins,
BOT CHORD 2x4 SF 3-17: 2 WEBS 2x3 SF	F No.2 *Except* x6 SPF No.2, 3-15: 2x4 SPF 2100F 1.8 F No.2 *Except* 11.9-10.9-11: 2x4 SPF No.2	E, 5-14: 2x3 SPF No.2	BOT CHORD WEBS		ectly applied o	or 10-00 oc bracing. -15-7-11, 9-10 NUMBER O E-2000162101

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

Max Horz 2=275(LC 5)

Max Uplift 2=-53(LC 8), 10=-27(LC 8) Max Grav 2=1606(LC 2), 10=1608(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-892/0, 3-4=-4038/151, 4-5=-2796/116, 5-7=-2735/187, 7-8=-978/106,

8-9=-975/119. 9-10=-1463/68

3-16=-228/3895, 15-16=-226/3891, 5-15=-339/113, 11-13=-62/1597 **BOT CHORD**

WEBS 4-15=-1479/131, 13-15=-53/1522, 7-15=-123/1458, 7-11=-1201/130, 8-11=-6/375,

9-11=-8/1231

NOTES-

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



March 24,2020

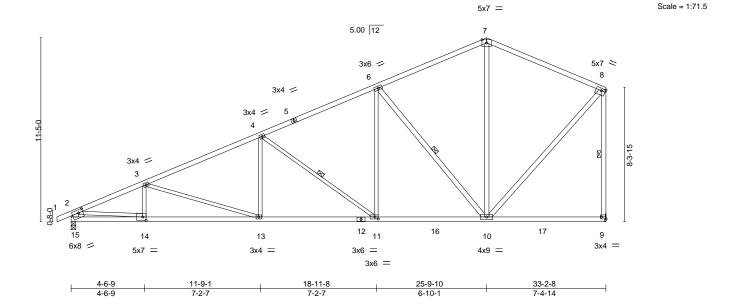


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Lot 3 H3 140734774 400155 **A5** Common Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:46 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-yo8jSqU7ZlhD5oH_kuXJz5OfiT5E2hH5rhxtzNzXnBd -0₋10-8 0-10-8 25-9-10 33-2-8

7-2-7



6-10-1

Plate Offsets (X,Y) [[8:0-3-0,0-1-12], [9:Edge,0-1-8], [1	1:0-2-8,0-1-8], [14:0-2-8,0-2-8],	[15:0-2-9,0-1-1], [15:0)-3-4,0-2-4]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.91	Vert(LL) -0.1	19 13-14 >999	360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(CT) -0.3	35 13-14 >999	240	OF MISSIL
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.0	08 9 n/a	n/a	1XE
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.0	08 13-14 >999	240	Weight: 154 lb FT = 10%
LUMBER-			BRACING-			JUAN .
OP CHORD 2x4 SPI	F No.2		TOP CHORD	Structural wood	sheathing d	lirectly applied, except end verticals. 🔸
BOT CHORD 2x4 SPI	· ····		BOT CHORD	Rigid ceiling dire	ectly applied	or 10-0-0 oc bracing.
	F No.2 *Except*		WEBS	1 Row at midpt		4-11, 6-10, 8-9

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

Max Horz 15=278(LC 5)

Max Uplift 15=-53(LC 8), 9=-27(LC 8) Max Grav 15=1607(LC 2), 9=1605(LC 2)

4-6-9

7-2-7

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-2911/89, 3-4=-2551/96, 4-6=-1789/105, 6-7=-985/108, 7-8=-982/120, TOP CHORD

6-10,7-10,8-9,8-10: 2x4 SPF No.2, 2-15: 2x6 SPF No.2

2-15=-1524/71, 8-9=-1455/70

14-15=-215/498, 13-14=-176/2640, 11-13=-105/2288, 10-11=-63/1577

3-13=-380/75, 4-13=0/382, 4-11=-880/97, 6-11=0/792, 6-10=-1178/130, 7-10=-7/381, WEBS

2-14=-49/2153, 8-10=-9/1219

NOTES-

BOT CHORD

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

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

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

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) 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) 15, 9.
- 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.



NUMBER

March 24,2020

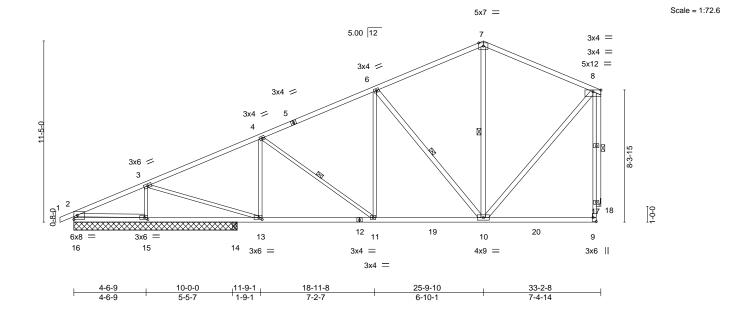


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Ply Lot 3 H3 140734775 400155 A6 Common Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:47 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-Q_i6fAVIK3p4ixsAHb2YWIxsXtWmnBAE4LhQVpzXnBc -0<u>-10-8</u> 0-10-8 25-9-10

7-2-7



6-10-1

7-4-14

Plate Offsets (X,Y)	[9:Edge,0-2-8], [13:0-2-8,0-1-8], [15:0-2	-8,0-1-8], [16:Edge,0-3-4],	[16:0-1-4,0-0-0]			
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.77 BC 0.63 WB 0.57 Matrix-S	DEFL. in Vert(LL) -0.12 1 Vert(CT) -0.23 1 Horz(CT) 0.04 Wind(LL) 0.05 1	1-13 >999 18 n/a	L/d 360 240 n/a 240	PLATES GRIP MT20 197/1144 OF M/S Weight: 159 lb FT = 10%
WEBS 2x3 SP	PF No.2 PF No.2 PF No.2 *Except* -10,8-10: 2x4 SPF No.2		e BOT CHORD R	except end vertic	als. ctly applied or	JUAN activ applied or 3-2-10-30 purlins, r 6-0-0, oc bracing. 11-6-40, 7-10, 8118 JMBER

REACTIONS. All bearings 10-3-8 except (jt=length) 14=0-3-8, 18=Mechanical.

Max Horz 16=245(LC 8) (lb) -

2x4 SPF No 2

Max Uplift All uplift 100 lb or less at joint(s) 18 except 15=-104(LC 8)

All reactions 250 lb or less at joint(s) 16 except 15=1419(LC 2), 14=258(LC Max Grav

2), 18=1313(LC 2)

4-6-9

7-2-7

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

TOP CHORD 3-4=-1372/24, 4-6=-1315/51, 6-7=-805/63, 7-8=-798/74

BOT CHORD 11-13=-151/1195, 10-11=-90/1141

WEBS 3-15=-1296/164, 3-13=-36/1265, 4-13=-409/86, 6-11=0/358, 6-10=-764/117,

8-10=-40/912, 8-18=-1315/35

NOTES-

OTHERS

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) 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) 18 except (jt=lb) 15=104.
- 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.



E-2000162101

SO/ONAL



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





ID:Hr0UloyIgMOrZQ4rpild7XzssyG-uAFUtWWN5NxxK5RNrJZn2WT?KHtDWcmOJ?Qz2GzXnBb 25-9-10 10-3-8 33-2-8 -0-10-8 0-10-8 4-6-12 5-8-13 8-8-0 6-10-2 7-4-14

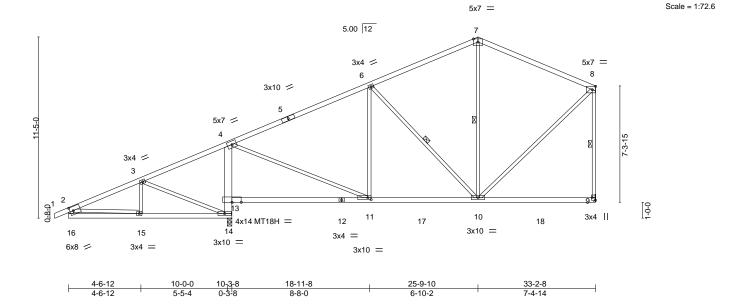


Plate Offsets (X,Y)	[9:Edge,0-2-8], [11:0-2-8,0-1-8], [16:0-1	-10,0-0-11], [16:0-2-9,0-3-0)]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. i	in (loc) I/defl	L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.90	Vert(LL) -0.1	5 11-13 >999	360	MT20 197/144,
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.2	9 11-13 >944	240	MT.18H OF M97/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) -0.0	9 9 n/a	n/a	11 E
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) -0.0	3 9-10 >999	240	Weight: 143 lb FT = 10%
LUMBER-			BRACING-			JUAN
TOP CHORD 2x4 SP	PF No.2 *Except*		TOP CHORD	Structural wood	sheathing di	rectly applied or 2-2-000 purlins,
	4 SPF 2100F 1.8E			except end verti		
BOT CHORD 2x4 SP	PF No.2 *Except*		BOT CHORD	Rigid ceiling dire	ctly applied	or 4-4-10 oc bracing.
4-14: 2	x6 SP DSS		WEBS	1 Row at midpt		6-10-7-10:8-9 NUMBER

REACTIONS. (size) 14=0-3-8 (req. 0-3-10), 9=Mechanical

Max Horz 14=264(LC 5)

2x3 SPF No.2 *Except*

2-16: 2x4 SPF No.2

Max Uplift 14=-187(LC 4), 9=-30(LC 9) Max Grav 14=2296(LC 2), 9=911(LC 2)

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

TOP CHORD 2-3=-113/558, 3-4=-222/1248, 4-6=-640/57, 6-7=-540/87, 7-8=-519/98, 8-9=-765/63 BOT CHORD 14-15=-456/123, 13-14=-1964/116, 4-13=-1849/165, 11-13=-1383/286, 10-11=-121/519

WEBS 3-15=-61/273, 3-14=-691/149, 4-11=-122/1889, 6-11=-519/150, 2-15=-490/116,

8-10=-29/569

NOTES-

WFBS

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb)
- 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.



SIONAL



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



Job Truss Truss Type Qty Ply Lot 3 H3 140734777 400155 B2 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:49 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:Hr0UloylgMOrZQ4rpild7XzssyG-MMps4sX?sg3oyF0ZP040bj09mgDDF3vXXfAXaizXnBa -0₋10-8 0-10-8 18-11-8 25-9-10 4-6-12 5-8-13 8-8-0 6-10-2 7-8-6

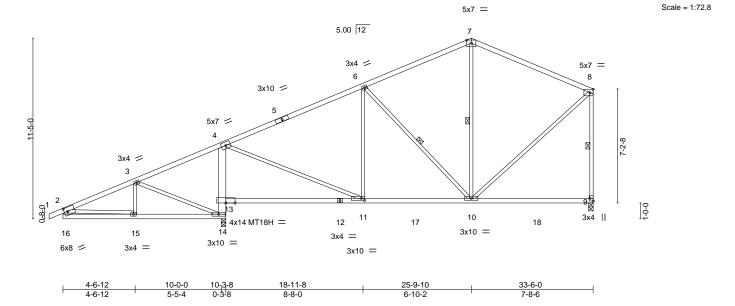


Plate Offsets (X,Y)	[9:Edge,0-2-8], [11:0-2-8,0-1-8], [16:0-1-	10,0-0-11], [16:0-2-9,0-3-	0]		
TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.98 BC 0.50 WB 0.68 Matrix-S	Vert(LL) -0.1 Vert(CT) -0.3 Horz(CT) -0.0	0 11-13 >947 240	PLATES GRIP MT20 197/144 MT.18H OF 197/144 Weight: 143 lb FT = 10%
1-5: 2x4	F No.2 *Except* 4 SPF 2100F 1.8E F No.2 *Except*		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing Rigid ceiling directly appli 1 Row at midpt	JUAN g directly applied, except end Verticals. ★ ied or 4-4-7 oc bracing. 6-10,7-40, 8-9

BOT CHORD 2x4 SPF No.2 *Except* 4-14: 2x6 SP DSS 2x3 SPF No.2 *Except* WFBS

2-16: 2x4 SPF No.2

REACTIONS. (size) 14=0-3-8 (req. 0-3-10), 9=0-3-8

Max Horz 14=330(LC 5)

Max Uplift 14=-390(LC 4), 9=-129(LC 9) Max Grav 14=2307(LC 2), 9=928(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-164/558, 3-4=-327/1248, 4-6=-629/118, 6-7=-560/156, 7-8=-538/172,

8-9=-776/162

14-15=-457/179, 13-14=-1975/329, 4-13=-1859/378, 11-13=-1367/369, 10-11=-187/500 **BOT CHORD**

WEBS 3-15=-69/273, 3-14=-691/222, 4-11=-255/1902, 6-11=-525/199, 2-15=-490/176,

8-10=-77/573

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) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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



NUMBER

6-10, 7-10, 8-9

March 24,2020



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



Job Truss Truss Type Qty Ply Lot 3 H3 140734778 400155 ВЗ Roof Special Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:50 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:Hr0UloyIgMOrZQ4rpild7XzssyG-qZNEHCYed_BfZPblzkcF7xZNh4Sj_VvgmJv468zXnBZ

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

5-15, 9-10, 7-14

0

-200016210

SIONAL

except end verticals.

Rigid ceiling directly applied or 272-0 oc bracing.

5 15-0-10-7-14 NUMBER

5x7 =

Scale = 1:72.0

3-3-8 25-9-10 27-4-8 33-6-0 3-7-15 4-9-11 7-2-5 6-10-4 ነ-6-14 6-1-8

5.00 12 3x6 = 5x7 > 3x6 = 6 3x6 = 3x4 = 6x8 = 12 2 19 17 15 14 18 16 20 21 22 _{5x7} = 4x5 = $_{8x12} = 7x18 \text{ MT18H} = 3x10 =$ 3x6 = 4x9 = 11 10 3x8 MT18H || 3x4 II 3x4 = 4.00 12 6-11-7 11-9-2 18-11-6 25-9-10 27-4-8 33-6-0

6-10-4

except end verticals.

1 Row at midpt

LUMBER-	0000 1102010/11/2011	Wattik C	BRACING-	, , , 000	210	JUAN JUAN
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.25 18-19	>999	240	Weight: 157 lb FT = 10%
BCLL 0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT) 0.28 1) n/a	n/a	1,45
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.58 15-17	⁷ >692	240	MT18H OF 197/444
TCLL 25.0	Plate Grip DOL 1.15	TC 0.78	Vert(LL) -0.33 18-19	>999	360	MT20 197/144,
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d	PLATES GRIP
Plate Offsets (X,Y)	[2:0-3-3,Edge], [9:0-3-0,0-1-12], [13:0-3	<u> </u>	j, [10.0-2-0,0-1-0]			

TOP CHORD

BOT CHORD

WEBS

7-2-5

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

6-8: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

2-19: 2x8 SP DSS, 16-19: 2x4 SPF 2100F 1.8E, 11-13: 2x3 SPF No.2

3-7-15

4-9-11

WFBS 2x3 SPF No.2 *Except*

3-19: 2x8 SP DSS, 9-10,7-14: 2x4 SPF No.2

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

Max Horz 2=341(LC 7)

Max Uplift 2=-253(LC 8), 10=-196(LC 8) Max Grav 2=1627(LC 2), 10=1744(LC 2)

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

TOP CHORD 2-3=-7119/1270, 3-4=-4154/675, 4-5=-3154/504, 5-7=-2095/350, 7-8=-1139/239,

8-9=-1138/257, 10-12=-1596/235, 9-12=-1495/243 2-19=-1362/6559, 18-19=-1161/5495, 17-18=-741/3836, 15-17=-509/2869,

BOT CHORD 14-15=-257/1864, 12-13=-261/104

3-19=-383/2147, 5-17=-30/661, 5-15=-1169/293, 7-15=-63/881, 9-14=-163/1296, 4-17=-1068/257, 4-18=-55/541, 3-18=-1712/433, 8-14=-50/486, 7-14=-1304/335

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 100 lb uplift at joint(s) except (jt=lb)

Confinition of the Confinition o



GIE

March 24,2020

169'

Job	Truss	Truss Type	Qty	Ply	Lot 3 H3
400455	B3	Poof Chariel			140734778
400155	B3	Roof Special	2	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:50 2020 Page 2 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-qZNEHCYed_BfZPblzkcF7xZNh4Sj_VvgmJv468zXnBZ

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

Job Truss Truss Type Qty Lot 3 H3 140734779 400155 B4 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:51 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloylgMOrZQ4rpild7XzssyG-llxcVXYGOIJWBZAxWR7Ug85YXUo5jxDq?zfdfbzXnBY

25-9-10 0-6-10 33-6-0 0-3-8 3-3-8 3-8-0 4-9-10 7-2-6 6-3-9 7-4-14 Scale = 1:73.3 5x7 =

25-3-0

0-6-10

except end verticals.

1 Row at midpt

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

5-14, 7-13, 9-10

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

33-2-8

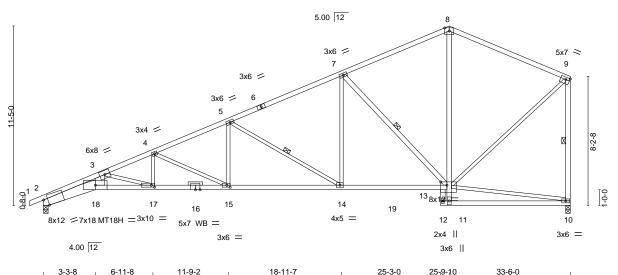


Plate Offs	ets (X,Y)	[2:0-3-3,Edge], [9:0-3-0,0-1-12], [1:	3:0-4-12,0-2-8], [15:0-2-8,0-1	8], [17:0-2-8,0-1-8]		
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.32 17-18 >999	360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.92	Vert(CT) -0.57 17-18 >704	240	MT18H 197/144
BCLL	0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT) 0.27 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.25 17-18 >999	240	Weight: 162 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

6-8: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except*

2-18: 2x8 SP DSS, 16-18,13-16: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*

3-18: 2x8 SP DSS, 7-13,8-11,9-10: 2x4 SPF No.2

OTHERS 2x3 SPF No 2

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

Max Horz 2=341(LC 7)

Max Uplift 2=-252(LC 8), 10=-195(LC 8) Max Grav 2=1614(LC 2), 10=1566(LC 2)

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

TOP CHORD 2-3=-7054/1270, 3-4=-4110/674, 4-5=-3114/504, 5-7=-2062/349, 7-8=-1131/249,

8-9=-1114/266, 9-10=-1431/237

2-18=-1362/6499, 17-18=-1161/5445, 15-17=-740/3796, 14-15=-508/2833, **BOT CHORD**

13-14=-256/1834, 12-13=-534/0

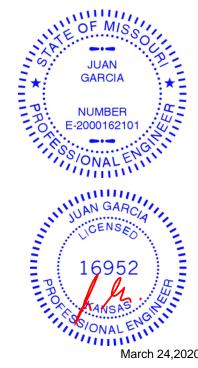
WEBS 3-18=-383/2128, 3-17=-1702/434, 4-17=-54/540, 4-15=-1064/256, 5-15=-31/654,

5-14=-1161/294, 7-14=-61/896, 7-13=-1306/329, 11-13=0/748, 8-13=-59/475,

10-13=-266/34, 9-13=-149/1246

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 100 lb uplift at joint(s) except (jt=lb) 2=252, 10=195.
- 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.



March 24,2020



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



Job Truss Truss Type Qty Lot 3 H3 140734780 400155 B5 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:52 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloylgMOrZQ4rpild7XzssyG-mxV?itZu9bRNpjk849ejCMekOu8USOjzEdOBB1zXnBX 27-8-8 Scale = 1:69.5 5x7 = 2x4 || 5.00 12 8 9 2x4 II 10

3x4 = 5x7 ≥ 11 3x6 = 3x4 = 6 5 3x4 = 5x7 / 5 5x12 3 20 18 16 19 5x12 = 7x18 MT18H = 3x10 =3x6 = 5x12 = 2x4 13 5x7 WB = 3x6 = 2x4 4.00 12

Plate Offsets (X,Y)		• .•	2-6	6-2-1	-8-2 1-10-14 '	5-9-8	
LOADING (psf)	SPACING- 2-0-0	CSI.		in (loc) I/defl	L/d	PLATES	GRIP
TCLL 25.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.77 BC 0.91	- ()	31 20-21 >999 56 20-21 >711	360 240	MT20 MT18H	197/144 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.74 Matrix-S	Horz(CT) 0.3		n/a 240	Weight: 177 lb	FT = 10%

WEBS

18-11-7

27-8-8

33-6-0

5-17, 7-15, 9-14, 11-12

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

8-15

25-9-10

1 Row at midpt

1 Row at midpt

LUMBER-**BRACING-**

11-9-1

6-11-7

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

1-6: 2x4 SPF 2100F 1.8E except end verticals. **BOT CHORD** 2x4 SPF No.2 *Except* **BOT CHORD** Rigid ceiling directly applied or 6-10-4 oc bracing. Except:

2-21: 2x8 SP DSS, 19-21,12-13: 2x4 SPF 2100F 1.8E 8-16: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

3-21: 2x6 SPF No.2, 11-12: 2x4 SPF No.2

OTHERS 2x3 SPF No.2

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

Max Horz 2=341(LC 7)

Max Uplift 2=-253(LC 8), 12=-196(LC 8) Max Grav 2=1567(LC 1), 12=1493(LC 1)

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

TOP CHORD 2-3=-6692/1259, 3-4=-3936/674, 4-5=-2989/505, 5-7=-1969/348, 7-8=-1399/275,

8-9=-1312/332, 9-10=-1094/252, 10-11=-1115/224, 11-12=-1440/196

2-21=-1351/6141, 20-21=-1181/5317, 18-20=-740/3634, 17-18=-511/2710, **BOT CHORD**

14-15=-178/1077, 10-14=-352/198

WEBS 3-21=-369/1918, 3-20=-1731/453, 4-20=-53/463, 4-18=-1021/253, 5-18=-29/548,

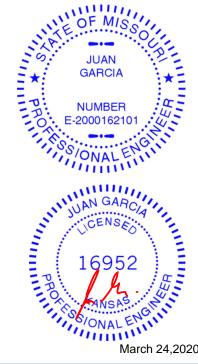
5-17=-1138/300, 7-17=0/310, 15-17=-267/1790, 7-15=-733/244, 9-15=-338/1289,

9-14=-560/111. 11-14=-154/1293

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) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 12=196.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 24,2020



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





ID:Hr0UloylgMOrZQ4rpild7XzssyG-jKdl7Zb8hDh520uWCZgBlnjBlh0FwRTGhxtlFvzXnBV

33-2-8 25-9-10

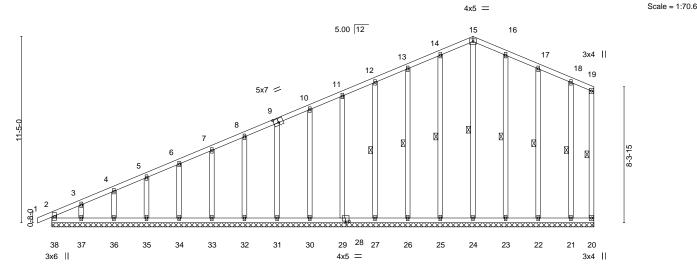


Plate Offsets (X,Y)	Plate Offsets (X,Y) [9:0-3-8,0-3-0], [28:0-2-8,0-1-4], [28:0-0-0,0-1-12], [29:0-1-12,0-0-0]										
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP							
TCLL 25.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.00 1 n/r 120	MT20 197/144							
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.00 1 n/r 120								
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) -0.01 20 n/a n/a								
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 208 lb FT = 10%							

LUMBER-

OTHERS

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

2x4 SPF No.2 2x4 SPF No.2 **BRACING-**

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

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. **WEBS** 1 Row at midpt

19-20, 15-24, 14-25, 13-26, 12-27, 16-23, 17-22, 18-21

REACTIONS. All bearings 33-2-8.

(lb) -Max Horz 38=353(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 20, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 23, 22, 21

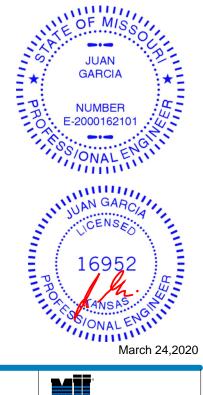
except 37=-148(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 38, 20, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 23, 22, 21

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

TOP CHORD 2-3=-318/41, 3-4=-262/37

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 24, 25, 26,
- 27, 29, 30, 31, 32, 33, 34, 35, 36, 23, 22, 21 except (jt=lb) 37=148. 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.





Job Truss Truss Type Qty Lot 3 H3 140734782 C1 400155 Common Supported Gable Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:55 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-BWB7LvbmRWqygATjlHBQq_GPD5NffvLQwbdroMzXnBU 20-10-8 0-10-8 -0-10-8 0-10-8 20-0-0 10-0-0 10-0-0

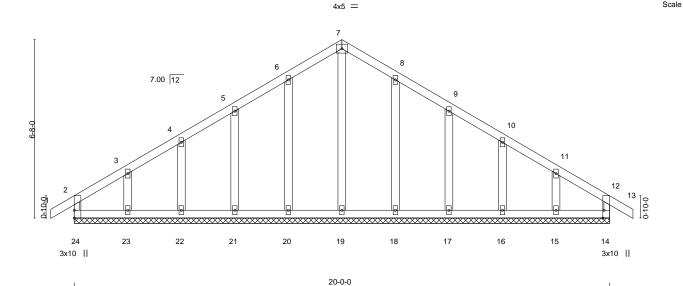


Plate Off	sets (X,Y)	[2:0-0-12,0-1-4], [12:0-0-	12,0-1-4], [14:0)-0-0,0-1-4 <u>],</u>	[14:0-3-8,Ed	ge], [24:0-0-0,0-1-	4]					
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-R						Weight: 89 lb	FT = 10%

LUMBER-

OTHERS

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

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

except end verticals.

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

REACTIONS. All bearings 20-0-0.

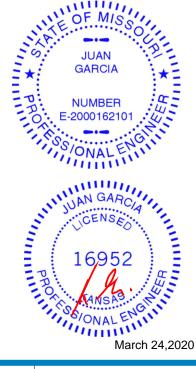
(lb) -Max Horz 24=-188(LC 6)

2x4 SPF No.2

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

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21,
- 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.



March 24,2020

Scale = 1:43.0



Job Truss Truss Type Qty Lot 3 H3 140734783 400155 C2 Common Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:56 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-fjkVYFcOCqypIK2vJ_ifNCpO8VY9OKUZ9FMOKozXnBT 20-0-0 20-10-8 0-10-8 0-10-8 4-9-0 5-2-15 5-3-0 4-9-1

5x7 =

7.00 12 2x4 < 2x4 / 5 3 10 3x10 = 10x12 > 10x12 /

	10-0-0			-0	10-0-0							
Plate Off	sets (X,Y)	[2:0-4-3,0-0-0], [6:0-4-3,0	0-0-0], [8:0-3-1	1,0-8-1], [8:0	3-2,0-1-13],	[10:0-3-2,0-1-13],	[10:0-2-	9,0-4-7]			
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	0.85	Vert(LL)	-0.17	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.35	8-9	>667	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	k-S	Wind(LL)	0.06	9	>999	240	Weight: 70 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

20-0-0

except end verticals.

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

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

LUMBER-

REACTIONS.

WEBS

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

2x3 SPF No.2 *Except* 2-10,6-8: 2x8 SP DSS

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

Max Horz 10=-192(LC 6) Max Uplift 10=-130(LC 8), 8=-130(LC 9)

Max Grav 10=955(LC 1), 8=955(LC 1)

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

2-3=-1148/182, 3-4=-875/141, 4-5=-875/141, 5-6=-1148/183, 2-10=-852/178, TOP CHORD

6-8=-852/178

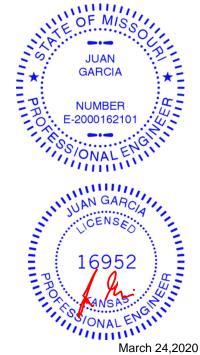
BOT CHORD 9-10=-167/901, 8-9=-79/881

WEBS 4-9=-6/460, 5-9=-255/206, 3-9=-254/206

NOTES-

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

10-0-0

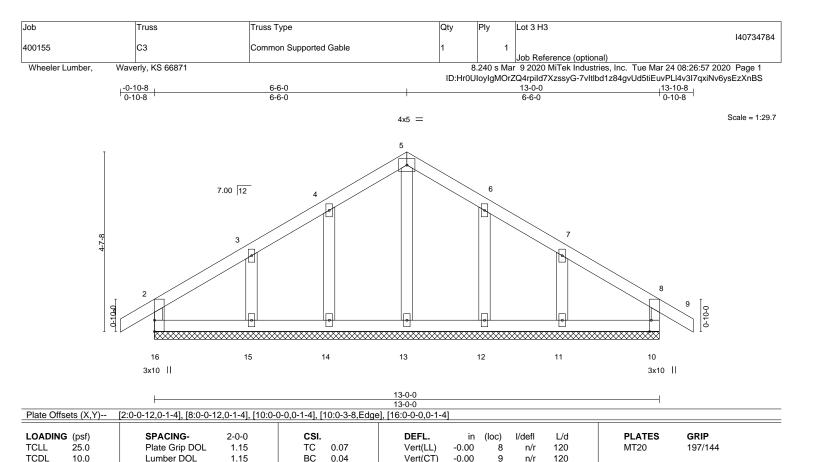


Scale = 1:42.4



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





LUMBER-

BCLL

BCDL

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

0.0

10.0

BRACING-

Horz(CT)

0.00

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

10

except end verticals

n/a

n/a

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

REACTIONS. All bearings 13-0-0.

Max Horz 16=-134(LC 6) (lb) -

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

YES

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.

Rep Stress Incr

Code IRC2018/TPI2014

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

WB

Matrix-R

0.04

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.

referenced standard ANSI/TPI 1.

- 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) 16, 10, 14, 15, 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and



FT = 10%

MIS

JUAN

O

Weight: 50 lb

March 24,2020



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid for use only with release controlled in the controlle



Job Truss Truss Type Qty Lot 3 H3 140734785 400155 C4 GABLE COMMON Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:59 2020 Page 1 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-3IQeAHeHVIKN9nnU_7GM?qQwlictbZ3?rDb3x7zXnBQ

Structural wood sheathing directly applied or 5-7-1 oc purlins,

23-5-2 6-10-5 5-10-6 5-0-6 4-5-3

10x12 M18SHS /

Scale = 1:77.5

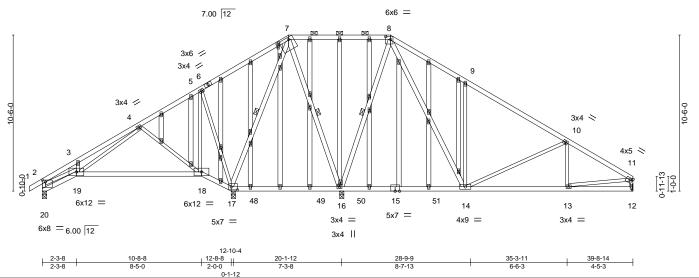


Plate Offsets (X,Y)--[7:0-8-4,0-1-12], [8:0-4-0,0-2-4], [11:Edge,0-1-8], [15:0-0-0,0-1-12], [16:0-1-4,0-1-8], [17:0-5-0,0-2-8], [20:0-2-8,0-1-8], [20:0-1-4,0-0-10], [32:0-1-12], [10:0-1-4,0-1-8], [10:0-1-4,0-1-,0-0-12], [41:0-1-12,0-0-0]

LOADING	(I -)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.18 18-19 >839 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.37 18-19 >411 240	M18SHS 197/144
BCLL	0.0 *	Rep Stress Incr YES	WB 0.77	Horz(CT) 0.03 17 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.03 13-14 >999 240	Weight: 283 lb FT = 10%

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

BOT CHORD 2x4 SPF No.2 except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 7-8. 2x3 SPF No.2 *Except* **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS **WEBS** 7-17, 7-16, 8-16 1 Row at midpt

7-17,7-16,8-16,8-14: 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 0-3-8 except (jt=length) 12=Mechanical.

(lb) -Max Horz 20=287(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 20 except 17=-329(LC 8), 16=-146(LC

9), 12=-138(LC 9)

Max Grav All reactions 250 lb or less at joint(s) except 20=344(LC 21), 17=1391(LC

15), 16=1753(LC 2), 12=740(LC 16)

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

TOP CHORD 2-3=-649/66, 3-4=-699/183, 4-5=-133/710, 5-7=-80/880, 7-8=0/578, 8-9=-516/358,

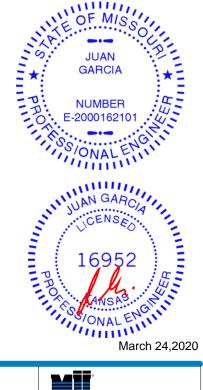
9-10=-510/187, 10-11=-948/204, 2-20=-362/74, 11-12=-674/155

BOT CHORD 19-20=-304/322, 18-19=-255/132, 17-18=-517/196, 16-17=-476/198, 13-14=-136/756 **WEBS** 4-19=-248/1032, 4-18=-430/187, 5-18=-18/262, 5-17=-590/193, 7-17=-559/171, 7-16=-387/72, 8-16=-1108/194, 8-14=-294/1125, 9-14=-465/279, 10-14=-544/184,

2-19=-17/515, 11-13=-116/687

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 11) 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20 except (jt=lb) Contilh Tre 3/29 n 10 Seg 12-426, 12=138.





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



Job	Truss	Truss Type	Qty	Ply	Lot 3 H3
400155	C4	GABLE COMMON	1	1	14073478
400100	04	CABLE OCIVINOIN			Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:26:59 2020 Page 2 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-3IQeAHeHVIKN9nnU_7GM?qQwlictbZ3?rDb3x7zXnBQ

- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job Truss Truss Type Qty Lot 3 H3 140734786 400155 C5 Piggyback Base Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:00 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

ID:Hr0UloyIgMOrZQ4rpild7XzssyG-XU_0OcfvG3SEmxMgYqnbX2z5W6x6K0K93sKcTZzXnBP 28-4-0 5-0-6 16-5-6 5-10-6

> Scale = 1:73.7 10x12 M18SHS /

6x6 = 6 2x4 || 7.00 12 3x4 / 3x4 / 3 3x4 < 2x4 || 4x5 💸 6x8 = 9 0-11-13 1-0-0

₩ 14 19 20 21 13 22 6x12 = 6x12 = 15 12 10 18 3x4 = 3x6 =4x9 = 3x4 = 2x4 5x7 = 6.00 12 12-8-12 12-7-0 2-0-0 0-1-12 Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-8-4,0-1-12], [6:0-4-0,0-2-4], [9:Edge,0-1-8], [15:0-5-0,0-2-8], [18:0-1-4,0-0-10]

LOADING (ps	f)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.	0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.18 16-17	>835	360	MT20	197/144
TCDL 10.	0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.37 16-17	>408	240	M18SHS	197/144
BCLL 0.	0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.03 15	n/a	n/a		
BCDL 10.	0	Code IRC2018/TPI2	2014	Matri	x-S	Wind(LL)	0.03 11-12	>999	240	Weight: 185 lb	FT = 10%

LUMBER-**BRACING-**

16

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

5-15,5-14,6-14,6-12: 2x4 SPF No.2

TOP CHORD **BOT CHORD**

WEBS

Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6. Rigid ceiling directly applied or 6-0-0 oc bracing. 5-15, 5-14, 6-14 1 Row at midpt

REACTIONS. All bearings 0-3-8 except (jt=length) 18=0-2-0, 10=Mechanical.

Max Horz 18=276(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 18 except 15=-325(LC 8), 14=-146(LC 9), 10=-137(LC 9) All reactions 250 lb or less at joint(s) except 18=285(LC 16), 15=1372(LC 15), 14=1754(LC 2), Max Grav 10=742(LC 16)

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

TOP CHORD 1-2=-671/66, 2-3=-729/185, 3-4=-128/686, 4-5=-75/859, 5-6=0/568, 6-7=-521/357,

7-8=-512/186, 8-9=-952/202, 1-18=-307/44, 9-10=-677/155

BOT CHORD 17-18=-296/321, 15-16=-505/200, 14-15=-470/200, 11-12=-135/759

WEBS 3-17=-246/1038, 3-16=-430/187, 4-16=-20/272, 4-15=-600/195, 5-15=-545/168,

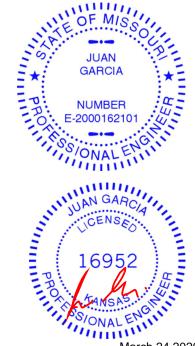
5-14=-389/69, 6-14=-1106/195, 6-12=-294/1125, 7-12=-465/279, 8-12=-543/184,

1-17=-30/532, 9-11=-115/690

NOTES-

0-10-14

- 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) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 18 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 at joint(s) 18.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 15=325, 14=146, 10=137.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 24,2020



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid for use only with release controlled in the controlle



Job Truss Truss Type Qty Lot 3 H3 140734787 400155 C6 Piggyback Base Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:01 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-?gYObygX1Ma5O5ws6YIq4FWHVWEA3ReIIW49??zXnBO 28-4-0 19-10-8 23-3-10 35-2-3 39-7-6 7-6-8 6-8-13 3-5-2 3-5-2 5-0-6 6-10-4 4-5-3 5x7 = Scale = 1:73.0 2x4 || 6x6 = 6 2x4 | 7.00 12 3x4 / 3 3x4 < 8 3x4 / 4x5 < 6x8 П 9 0-10-14 16 15 17 П 5x7 = 22 23 3x6 =3x4 13 10 12 2x4 || 22x40 || 10-7-0 3x8 MT18H = 2x4 || 4x9 = 3x6 =6.00 12 2-2-0 2-2-0 19-10-8 20-0-4 35-2-3 39-7-6 16-5-6 6-8-13 3-5-2 0-1-12 8-7-13 6-6-3 Plate Offsets (X,Y)--[1:Edge,0-2-8], [4:0-5-0,0-2-4], [6:0-4-0,0-2-4], [11:0-2-8,0-1-8], [16:0-2-8,0-1-8], [18:0-0-10,0-1-4], [19:0-2-0,0-3-15] SPACING-LOADING (psf) (loc) L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.68 Vert(LL) -0.25 12-13 >938 360 MT20 197/144 -0.39 12-13 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.81 Vert(CT) >595 240 MT18H 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.89 Horz(CT) 0.04 10 n/a n/a Code IRC2018/TPI2014 **BCDL** Wind(LL) 0.06 16-17 >999 240 Weight: 189 lb FT = 10% 10.0 Matrix-S **BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 3-7-11 oc purlins, **BOT CHORD** 2x4 SPF No.2 except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6. **BOT CHORD**

WFBS

LUMBER-

WEBS 2x3 SPF No.2 *Except*

6-13,6-12,9-10,20-21: 2x4 SPF No.2

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

2-16, 3-15, 4-14, 6-13

4-6-15 oc bracing: 13-14 6-0-0 oc bracing: 12-13.

1 Row at midpt

1 Row at midpt

REACTIONS.

(size) 18=0-2-0, 13=0-3-8, 10=Mechanical

Max Horz 18=221(LC 5)

Max Uplift 18=-23(LC 8), 10=-73(LC 9)

Max Grav 18=828(LC 13), 13=2150(LC 13), 10=912(LC 14)

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

TOP CHORD 1-2=-2414/208, 2-3=-1004/75, 3-4=-299/166, 4-5=-39/305, 5-6=-46/290, 6-7=-846/280,

7-8=-810/162, 8-9=-1198/129, 1-18=-885/59, 9-10=-838/92

BOT CHORD 17-18=-226/271, 16-17=-264/2168, 15-16=-41/884, 13-14=-1218/85, 5-14=-277/64,

11-12=-78/974

WEBS 2-17=-36/577, 2-16=-1293/225, 3-16=0/462, 3-15=-966/132, 4-15=-7/703,

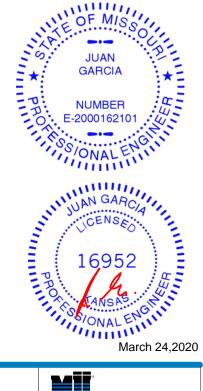
4-14=-1020/42, 6-13=-868/20, 6-12=-121/1137, 7-12=-465/172, 8-12=-459/86,

1-17=-183/2047, 9-11=-69/882

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 18 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 at joint(s) 18.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 10.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





Job Truss Truss Type Qty Lot 3 H3 140734788 C7 400155 Piggyback Base Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:02 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

Structural wood sheathing directly applied or 4-10-15 oc purlins,

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

6-15

5-15, 7-14

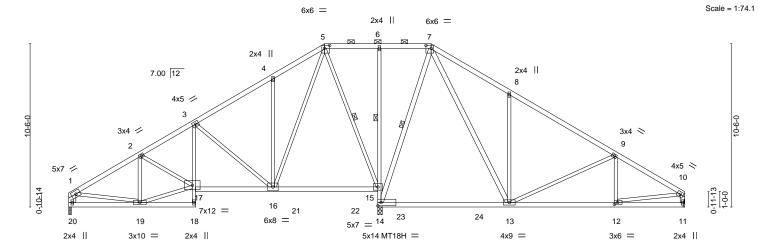
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

3-7-7 oc bracing: 14-15.

1 Row at midpt

1 Row at midpt





		4-6-13 8-1-14	12-3-10	19-10-8	20-0-4	28-8-1	35-2-3	39-7-6	
	۷ .	4-6-13 3-7-1	4-1-12	7-6-14	0-1 ⁻¹ 12	8-7-13	6-6-3	4-5-3	
Plate Offse	ets (X,Y)	[5:0-4-0,0-2-4], [7:0-4-0,	0-2-4], [12:0-2-8	,0-1-8]					
LOADING	(m of)	CDACING	2.0.0	COL	DEEL	in (los) I/ds	51 I/J	DLATES	CDID
LOADING	4 /	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/de		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.46	Vert(LL)	-0.26 13-14 >88	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.41 13-14 >56	9 240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	-0.03 14 n/	a n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-S	Wind(LL)	0.03 16-17 >99	9 240	Weight: 190 lb	FT = 10%

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

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

3-18,6-14: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

7-14,7-13,10-11: 2x4 SPF No.2, 1-20: 2x6 SPF No.2

REACTIONS. 20=0-2-0, 14=0-3-8, 11=Mechanical (size)

Max Horz 20=220(LC 5)

Max Uplift 20=-45(LC 8), 11=-85(LC 9)

Max Grav 20=901(LC 13), 14=2045(LC 13), 11=972(LC 14)

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

1-2=-1158/80, 2-3=-1240/142, 3-4=-717/145, 4-5=-683/215, 7-8=-953/300, 8-9=-917/182, 9-10=-1289/147, 1-20=-823/69, 10-11=-897/104

BOT CHORD 19-20=-201/335, 3-17=-8/471, 16-17=-105/1160, 14-15=-1183/78, 6-15=-286/67,

12-13=-93/1052

WEBS 2-19=-340/92, 17-19=-110/1107, 3-16=-722/112, 4-16=-323/122, 5-16=-111/1083,

5-15=-913/53, 7-14=-814/6, 7-13=-118/1132, 8-13=-464/172, 9-13=-443/83,

1-19=-9/791, 10-12=-84/957

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 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.



March 24,2020





Waverly, KS 6687

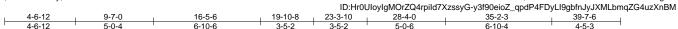
Structural wood sheathing directly applied or 4-4-14 oc purlins,

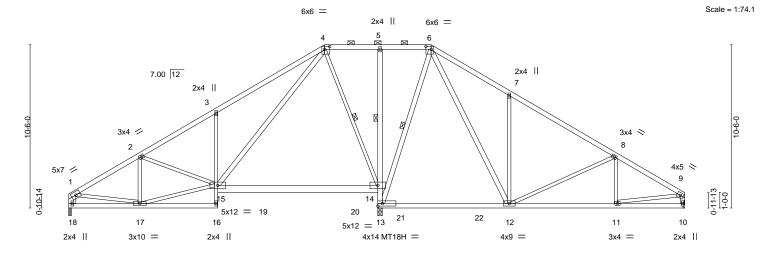
except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6.

5-14

4-14, 6-13

Rigid ceiling directly applied or 3-10-9 oc bracing. Except:





	4	-6-12 ₁ 9-7-0	i i	16-5-6	19-10)-8 20-Q-4	28-8-1		35-2-3	39-7-6	
	4	-6-12 5-0-4		6-10-6	3-5-	2 0-1-12	8-7-13	- 1	6-6-3	4-5-3	
Plate Offse	ets (X,Y)	[4:0-4-0,0-2-4], [6:0-4-0,	0-2-4]								
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	0.56	Vert(LL)	-0.24 12-13	>965	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.38 12-13	>621	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	-0.03 13	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix	r-S	Wind(LL)	0.03 3	>999	240	Weight: 197 lb	FT = 10%

BOT CHORD

WEBS

1 Row at midpt

1 Row at midpt

BRACING-LUMBER-TOP CHORD

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

3-16: 2x3 SPF No.2, 14-15: 2x6 SPF No.2

WEBS 2x3 SPF No.2 *Except*

4-15,6-13,6-12,9-10: 2x4 SPF No.2, 1-18: 2x6 SPF No.2

REACTIONS. 18=0-2-0, 13=0-3-8, 10=Mechanical (size)

Max Horz 18=220(LC 5)

Max Uplift 18=-53(LC 8), 10=-91(LC 9)

Max Grav 18=829(LC 13), 13=2238(LC 13), 10=878(LC 14)

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

TOP CHORD 1-2=-1060/90, 2-3=-941/147, 3-4=-1056/278, 4-5=-2/329, 5-6=-4/329, 6-7=-785/311,

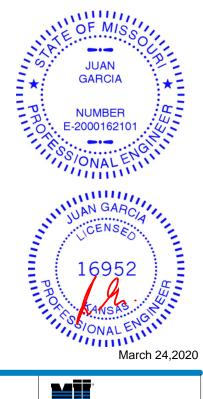
7-8=-749/194, 8-9=-1148/156, 1-18=-759/74, 9-10=-805/110

BOT CHORD 17-18=-205/314, 3-15=-483/176, 13-14=-1283/58, 5-14=-270/69, 11-12=-101/931 **WEBS** 15-17=-77/1076, 4-15=-146/1321, 4-14=-948/70, 6-13=-908/1, 6-12=-119/1135,

7-12=-464/172, 8-12=-470/81, 1-17=-16/721, 9-11=-91/842

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 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.





Job Truss Truss Type Qty Ply Lot 3 H3 140734790 400155 C9 PIGGYBACK BASE GIRDE 3 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:05 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-uRnvRKj25b4XtiEeLNNnE5g3c7ig?HbuD82N8nzXnBK 16-5-6 20-2-0 6-6-5 6-9-11 3-1-6 3-8-10 Scale = 1:60.5 10x12 = 2x4 || 5 2x4 || 3 7.00 12 5x7 / 0-9-0 2 9-0-0-₂₀ 6x6 = 16 17 19 18 12 9 11 15 10 13 14 8 6x8 10x12 = 3x10 II 13-4-0 20-2-0 6-6-5 Plate Offsets (X,Y)-- [4:0-9-8,0-4-0], [8:0-6-8,0-1-8], [9:0-3-8,0-7-4]

LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.29 BC 0.39	DEFL. Vert(LL) -0.1 Vert(CT) -0.1		l/defl >999 >999	L/d 360 240	PLATES MT20	GRIP 197/144
BCLL 0.0 *	Rep Stress Incr NO	WB 0.76	Horz(CT) 0.0		n/a	n/a	Majaht, 500 lb	FT 400/
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.0)5 8-9	>999	240	Weight: 533 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

TOP CHORD 2x6 SPF No.2 2x10 SP DSS **BOT CHORD** WEBS 2x4 SPF No.2

(size) 1=0-2-0 (req. 0-4-4), 6=0-3-8 (req. 0-3-14)

Max Horz 1=307(LC 5)

Max Uplift 1=-609(LC 8), 6=-381(LC 5) Max Grav 1=8152(LC 2), 6=7432(LC 2)

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

1-2=-11532/696, 2-3=-5827/313, 3-4=-5758/400 TOP CHORD BOT CHORD 1-9=-680/9707, 8-9=-11/461, 6-7=-184/2159

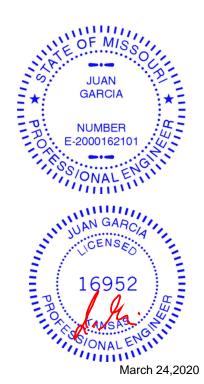
7-8=-2/2120, 3-7=-360/169, 2-9=-372/4939, 7-9=-677/9345, 2-7=-5230/484, WFBS

4-7=-515/8439, 4-6=-5738/342

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-4-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated. 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) WARNING: Required bearing size at joint(s) 1, 6 greater than input bearing size.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=609, 6=381.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1684 lb down and 218 lb up at 1-9-12, 1698 lb down and 218 lb up at 3-9-12, 1698 lb down and 218 lb up at 5-9-12, 1575 lb down and 47 lb up at 7-9-12, 1575 lb down and 47 lb up at 9-9-12, 1571 lb down and 47 lb up at 11-9-12, 1280 lb down and 55 lb up at 13-9-12, 862 lb down and 50 lb up at 15-9-12, and 866 lb down and 50 lb up at 17-9-12, and 884 lb down and 42 lb up at 20-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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

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

5-6

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

1 Row at midpt

CAARIGASE(S)geStandard

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



Job	Truss	Truss Type	Qty	Ply	Lot 3 H3	٦
400455		DIO OVERA OK DA OF OUDDE			140734790	
400155	C9	PIGGYBACK BASE GIRDE	1	3	Job Reference (optional)	

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:05 2020 Page 2 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-uRnvRKj25b4XtiEeLNNnE5g3c7ig?HbuD82N8nzXnBK

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 6=-800(B) 10=-1456(B) 11=-1460(B) 12=-1460(B) 13=-1460(B) 15=-1456(B) 16=-1186(B) 18=-792(B) 19=-792(B)



Job Truss Truss Type Qty Lot 3 H3 140734791 D1 400155 Common Supported Gable Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:06 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-MeLHegkgsvCOUspqv5u0nJDHqX8Skv21SonwgDzXnBJ 21-8-0 0-10-8 20-9-8

10-4-12

Scale = 1:36.3

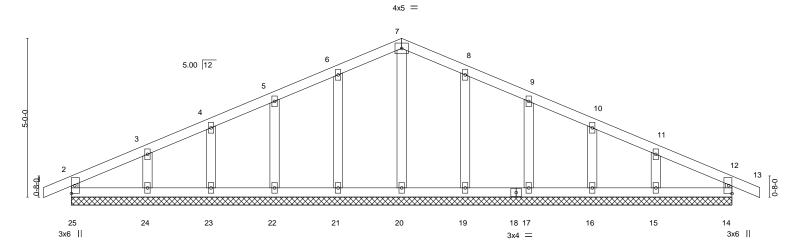


Plate Offsets (X,Y)	[2:0-0-8,0-1-4], [12:0-0-8,0-1-4], [14:0-0	-0,0-1-4], [25:0-0-0,0-1-4]							
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.06 BC 0.03 WB 0.05 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 0.00	(loc) 13 13 14	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 79 lb	GRIP 197/144 FT = 10%

20-9-8

LUMBER-**BRACING-**

10-4-12

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. **WEBS** 2x3 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing **OTHERS** 2x4 SPF No.2

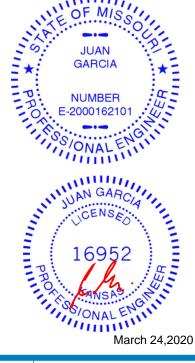
REACTIONS. All bearings 20-9-8.

(lb) -Max Horz 25=69(LC 12)

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

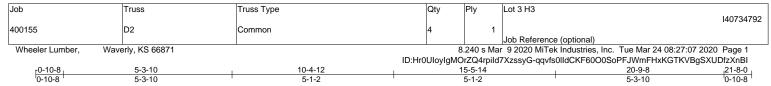
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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

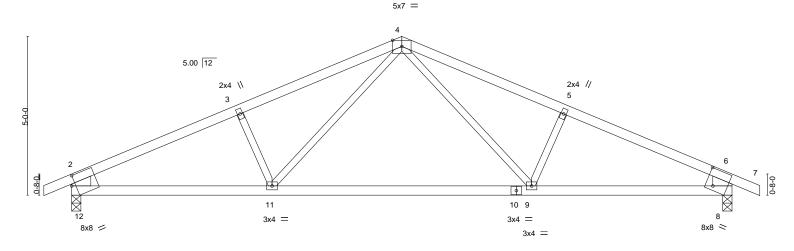


March 24,2020









		0-0-12			17-3-13					20-3-0	
		6-3-12			8-2-1					1	
Plate Offsets (X,Y) [2:0-3-15,0-0-0], [6:0-3-15,0-0-0], [8:0-3-6,0-1-6], [8:0-2-13,0-6-6], [12:0-3-6,0-1-6], [12:0-1-8,0-3-9]											
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	0.91	Vert(LL)	-0.17	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.64	Vert(CT)	-0.39	9-11	>621	240		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.16	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Mat	rix-S	Wind(LL)	0.10	9-11	>999	240	Weight: 68 lb	FT = 10%
					\ /						

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

2x3 SPF No.2 *Except* 2-12,6-8: 2x8 SP DSS

REACTIONS. (size) 12=0-3-8, 8=0-3-8 Max Horz 12=-66(LC 13)

Max Uplift 12=-143(LC 8), 8=-143(LC 9) Max Grav 12=991(LC 1), 8=991(LC 1)

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

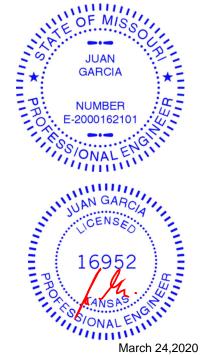
2-3=-1541/197, 3-4=-1394/220, 4-5=-1394/220, 5-6=-1541/197, 2-12=-907/170, TOP CHORD

6-8=-907/170

BOT CHORD 11-12=-185/1326, 9-11=-59/968, 8-9=-119/1326 4-9=-89/469, 5-9=-251/176, 4-11=-88/469, 3-11=-251/176

WEBS NOTES-

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



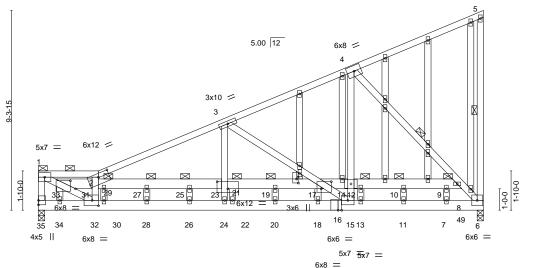
Structural wood sheathing directly applied or 2-2-0 oc purlins,

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

except end verticals.

March 24,2020





11-0-1	0 2-9-10	0-0-0	13-0-12	14-7-3	19-0-12	1 20-9-0	
1-0-	0 1-9-10	5-10-13	4-4-6	1-6-7	4-5-9	1-8-12	
[2:0 6 0 0 2 0] [16:0	0 1 15 0	0.01 [17:0.5 11.0.4.0] [21:0.1.12	0.0.01 [33:0.6.0.0.4.0]	[22·0 1	12 0 2 121 [21:0 2 11 0	1 1 1 1 1 2 2 -	02002

Plate Offsets (X,Y)-- [2:0-6-0,0-2-0], [16:0-1-15,0-0-0], [17:0-5-11,0-4-0], [21:0-1-12,0-0-0], [23:0-6-0,0-4-0], [23:0-1-12,0-2-12], [31:0-2-11,0-1-14], [32:0-3-8,0-3-0], [33:0-2-14,0-1-14], [32:0-3-8,0-3-0], [33:0-2-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14,0-1-12], [32:0-3-14] ,0-4-8], [37:0-2-4,0-1-0], [38:0-2-0,0-0-12]

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 0.51	Vert(LL) -0	0.10 25-27	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0	0.20 25-27	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB 0.81	Horz(CT) (0.04 6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) (0.09 25-27	>999	240	Weight: 365 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

JOINTS

LUMBER-

BOT CHORD

TOP CHORD 2x4 SPF No.2 *Except*

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

WEBS 2x4 SPF No.2 *Except*

1-32: 2x4 SPF 2100F 1.8E

OTHERS 2x4 SPF No.2

REACTIONS.

(lb/size) 35=4616/0-3-8 (req. 0-3-11), 6=4768/0-3-8 (req. 0-3-13)

Max Horz 35=380(LC 5)

Max Uplift 35=-681(LC 8), 6=-780(LC 8) Max Grav 35=4684(LC 15), 6=4851(LC 15)

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

1-35=-2284/341, 1-2=-5127/706, 2-3=-6844/973, 3-4=-3839/574 TOP CHORD **BOT CHORD**

34-35=-362/319, 32-34=-360/1208, 30-32=-1197/7828, 28-30=-1197/7828,

26-28=-1197/7828, 24-26=-1197/7828, 22-24=-1134/7470, 20-22=-1134/7470, 18-20=-1134/7470, 16-18=-1132/7440, 15-16=-1132/7440, 13-15=-586/4067.

11-13=-586/4067, 7-11=-586/4067, 7-49=-586/4067, 6-49=-586/4067, 31-33=-2644/359, 29-31=-1563/229, 27-29=-1563/229, 25-27=-1563/229, 23-25=-1563/229, 21-23=-1210/167, 19-21=-1210/167, 17-19=-1210/167, 14-17=-560/106, 12-14=-565/104, 10-12=-565/104,

9-10=-565/104, 8-9=-565/104

WEBS $1-33 = -735/5263,\ 32-33 = -1091/7938,\ 31-32 = -2135/330,\ 2-31 = -2996/501,\ 23-24 = -149/1370,$

3-23=-270/2621, 3-17=-3269/563, 15-17=-4171/666, 14-15=-373/2726, 4-14=-627/4752, 4-8=-4980/837, 6-8=-6110/1024, 29-30=-1113/185, 27-28=-307/54, 25-26=-312/52,

21-22=-409/79, 19-20=-596/96, 12-13=-51/387, 10-11=-754/129, 7-9=-76/296,

33-34=-3559/507

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

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 32-2 2x4 - 1 row at 0-4-0 oc, member 6-4 2x4 - 1 row at 0-4-0 oc, member 34-33 2x4 - 1 row at 0-7-0 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) 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.



OF MIS

JUAN

GARCIA

NUMBER

E-2000162101

CIE

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Structural wood sheathing directly applied or 5-11-0 oc purlins,

5-6, 4-6

except end verticals, and 2-0-0 oc purlins (5-6-9 max.): 1-2.

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

1 Brace at Jt(s): 1, 29, 27, 25, 21, 19, 12, 10, 9

1 Row at midpt

Job	Truss	Truss Type	Qty	Ply	Lot 3 H3	
400155	D3	Roof Special Girder	1	2	Job Reference (optional)	140734793

Wheeler Lumber, Waverly, KS 66871

B.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 09:01:39 2020 Page 2 ID:Hr0UloylgMOrZQ4rpild7XzssyG-a2W208qZegZuS_8l8nNJECaSiAYpxGL98pS6wZzXmgw

NOTES-

- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) WARNING: Required bearing size at joint(s) 35, 6 greater than input bearing size.

 11) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 681 lb uplift at joint 35 and 780 lb uplift at joint 6.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.
- 16) Studding applied to ply: 1(Front)

LOAD CASE(S) Standard

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

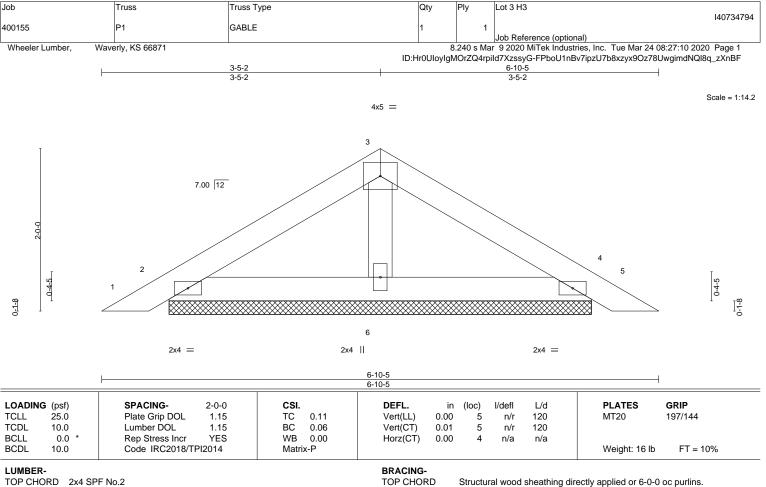
Uniform Loads (plf)

Vert: 1-2=-70, 2-5=-70, 6-35=-20, 8-33=-20

Concentrated Loads (lb)

Vert: 17=-816(B) 29=-623(B) 27=-623(B) 25=-623(B) 21=-777(B) 19=-777(B) 12=-769(B) 10=-769(B) 9=-769(B) 33=-625(B)





BOT CHORD

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

TOP CHORD

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

BOT CHORD OTHERS 2x4 SPF No.2

REACTIONS.

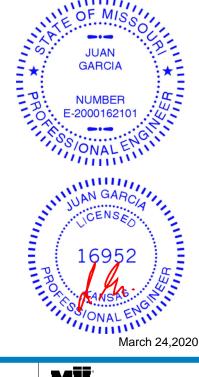
2=5-2-6, 4=5-2-6, 6=5-2-6 (size) Max Horz 2=-48(LC 6) Max Uplift 2=-61(LC 8), 4=-61(LC 9)

Max Grav 2=239(LC 1), 4=239(LC 1), 6=130(LC 3)

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

NOTES-

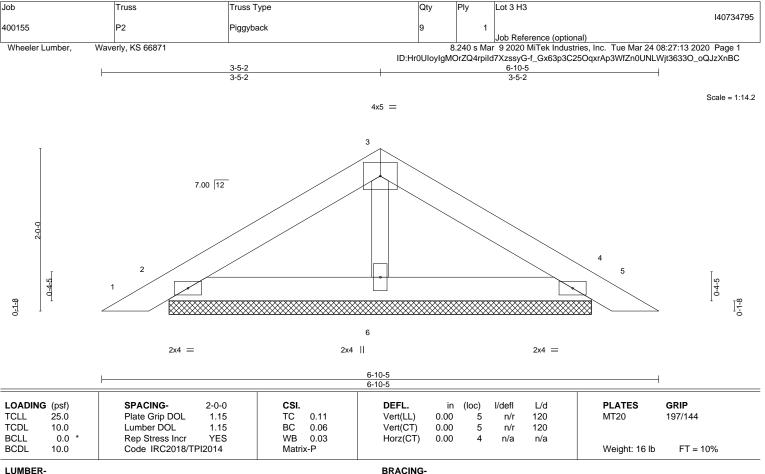
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber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





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





TOP CHORD

BOT CHORD

TOP CHORD **BOT CHORD**

REACTIONS.

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

OTHERS 2x3 SPF No.2

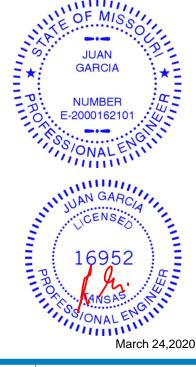
> 2=5-2-6, 4=5-2-6, 6=5-2-6 (size) Max Horz 2=-48(LC 6) Max Uplift 2=-43(LC 8), 4=-49(LC 9)

Max Grav 2=168(LC 1), 4=168(LC 1), 6=207(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) 2, 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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



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



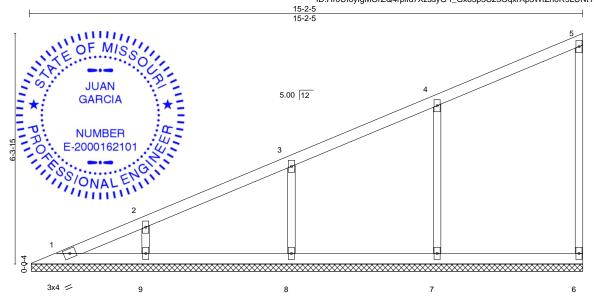
Job Truss Truss Type Qty Lot 3 H3 140734796 V1 Valley 400155 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:13 2020 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloylgMOrZQ4rpild7XzssyG-f_Gx63p3C25OqxrAp3WfZn0R9LUNt1E33O_oQJzXnBC

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

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

except end verticals.



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 0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 46 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

2x3 SPF No.2 OTHERS

REACTIONS. All bearings 15-1-11.

(lb) -Max Horz 1=261(LC 5)

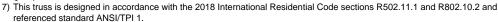
Max Uplift All uplift 100 lb or less at joint(s) 6, 8, 9 except 7=-104(LC 8) Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=440(LC 2),

8=364(LC 2), 9=336(LC 2)

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

4-7=-306/143, 3-8=-280/147, 2-9=-251/128 **WEBS**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8, 9 except (it=lb) 7=104.





March 24,2020

Scale = 1:31.6



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



Job Truss Truss Type Qty Lot 3 H3 140734797 Valley 400155 V2 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:20 2020 Page 1

Wheeler Lumber, Waverly, KS 66871

ID:Hr0UloyIgMOrZQ4rpild7XzssyG-yKBaaSvSZCzPA0tWj18ILGoe8AtD0Du5g_AgAPzXnB5

Structural wood sheathing directly applied or 6-0-9 0 Apyrlins,

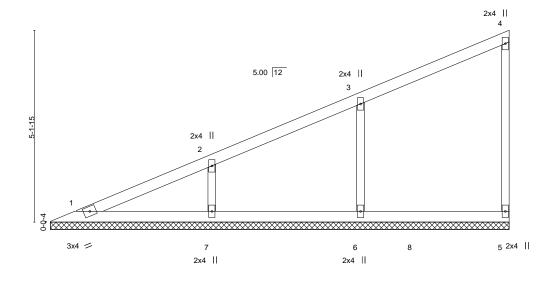
O

Rigid ceiling directly applied or 10-040 bc bracing ARCIA

except end verticals.

12-4-11

Scale = 1:31.0



LOADING (ps	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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10	0.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	5	n/a	n/a	111	111111,
BCDL 10	0.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 36(I	F MATGE 10%,

BRACING-

TOP CHORD

BOT CHORD

TOP CHORD 2x4 SPF No.2

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

2x3 SPF No.2 OTHERS

REACTIONS. All bearings 12-4-2.

(lb) -Max Horz 1=210(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-103(LC 8), 7=-101(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=415(LC 2),

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

WEBS 3-6=-304/148, 2-7=-287/147

LUMBER-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=103, 7=101.
- 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.



NUMBER

ONAL

March 24,2020



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



Job Truss Truss Type Qty Lot 3 H3 140734798 Valley 400155 V3 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:20 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloylgMOrZQ4rpild7XzssyG-yKBaaSvSZCzPA0tWj18ILGodfAtn0D55g_AgAPzXnB5 9-7-2 Scale = 1:24.9 2x4 || 3 5.00 12 2x4 || 4 2x4 || 2x4 = 2x4 ||

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.30 BC 0.16 WB 0.07 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) -0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 26 lb FT = 10%
LUMBER-			BRACING-	

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 1=9-6-8, 4=9-6-8, 5=9-6-8

Max Horz 1=159(LC 5)

Max Uplift 4=-23(LC 5), 5=-130(LC 8)

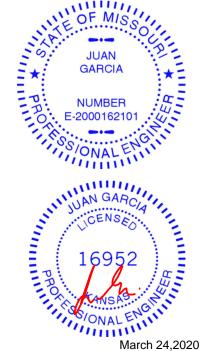
Max Grav 1=174(LC 1), 4=121(LC 1), 5=491(LC 1)

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

2-5=-372/183 **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=130
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

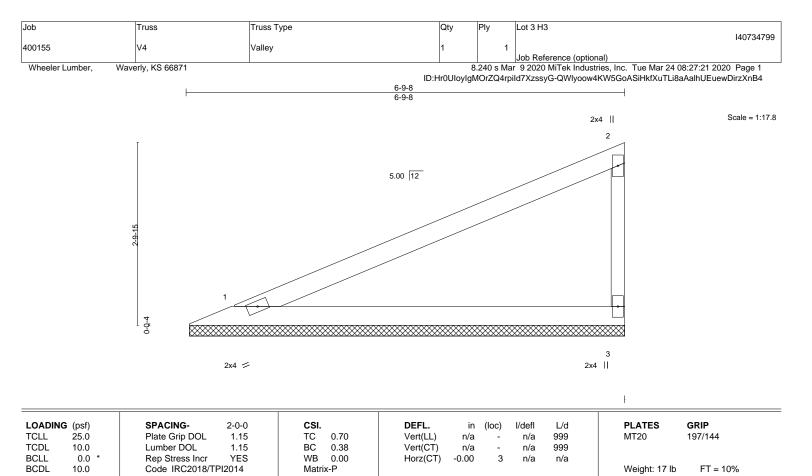
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



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





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

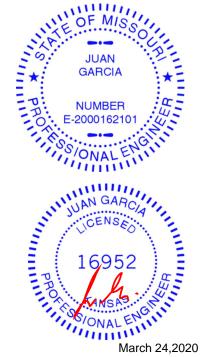
REACTIONS.

1=6-8-14, 3=6-8-14 (size) Max Horz 1=108(LC 5) Max Uplift 1=-39(LC 8), 3=-61(LC 8) Max Grav 1=267(LC 1), 3=267(LC 1)

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

NOTES-

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



Structural wood sheathing directly applied or 6-9-8 oc purlins,

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

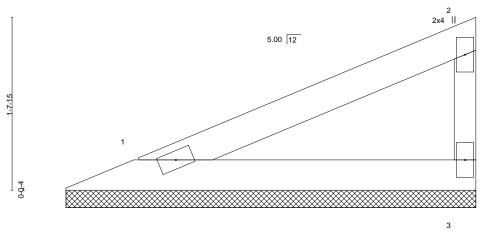
except end verticals.



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



Job Truss Truss Type Qty Lot 3 H3 140734800 Valley 400155 V5 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:22 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-ujJK?8wi5pD6PK1vrSAmQht?3_aFU8kO7lfmFlzXnB3 3-11-14 Scale = 1:11.1



LOADING	C (nof)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
	\(\(\)			(/	
TCLL	25.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.09	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: 9 lb $FT = 10\%$

BRACING-

TOP CHORD

BOT CHORD

2x4 ||

except end verticals.

Structural wood sheathing directly applied or 3-11-14 oc purlins,

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

LUMBER-

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

WEBS 2x3 SPF No.2

REACTIONS. 1=3-11-5, 3=3-11-5 (size)

Max Horz 1=57(LC 5) Max Uplift 1=-21(LC 8), 3=-32(LC 8) Max Grav 1=141(LC 1), 3=141(LC 1)

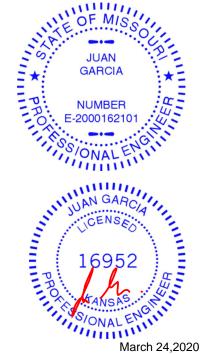
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

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

2x4 /

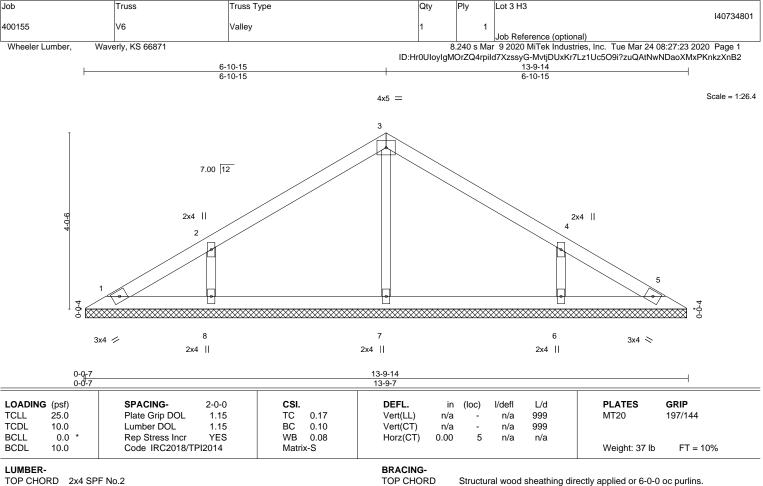
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 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.











BOT CHORD

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

2x4 SPF No.2

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

REACTIONS. All bearings 13-9-0.

Max Horz 1=-97(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-126(LC 8), 6=-125(LC 9)

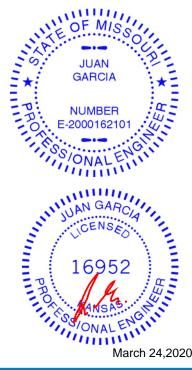
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=298(LC 1), 8=353(LC 15), 6=353(LC 16)

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

2-8=-282/167, 4-6=-282/167 **WEBS**

NOTES-

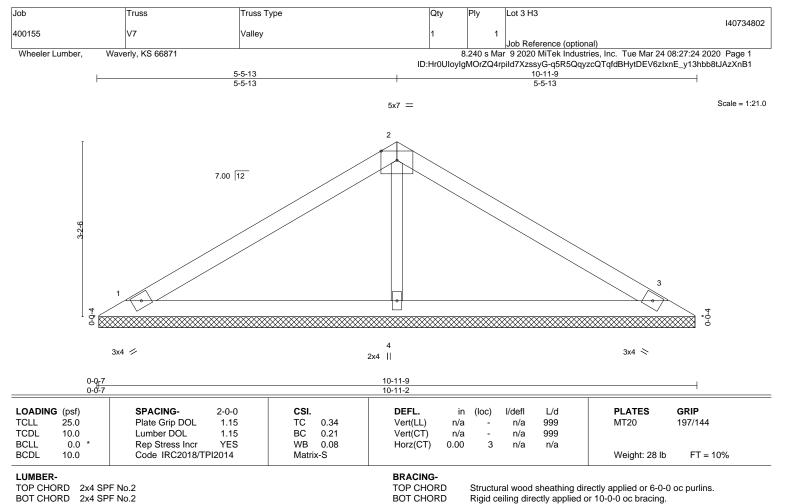
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 except (jt=lb) 8=126 6=125
- 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.





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





OTHERS REACTIONS.

2x3 SPF No.2

(size)

Max Horz 1=75(LC 5)

Max Uplift 1=-43(LC 8), 3=-53(LC 9), 4=-21(LC 8) Max Grav 1=218(LC 1), 3=218(LC 1), 4=452(LC 1)

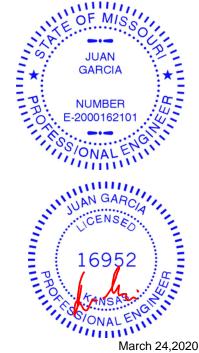
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

1=10-10-11, 3=10-10-11, 4=10-10-11

WEBS 2-4=-302/78

NOTES-

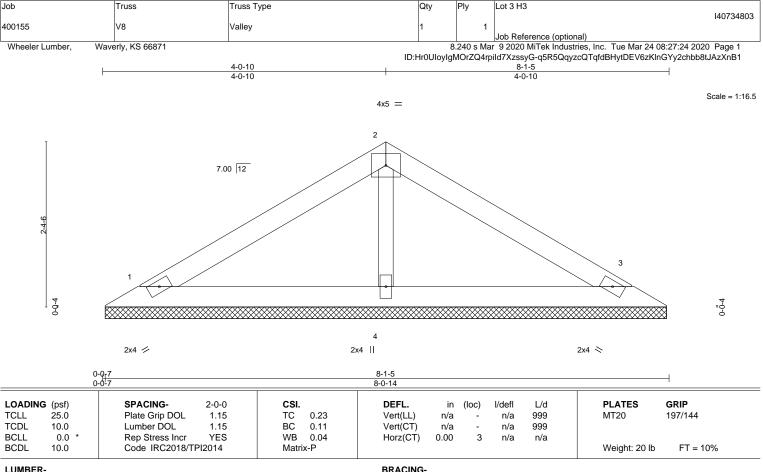
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber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





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





TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD OTHERS 2x3 SPF No.2

REACTIONS.

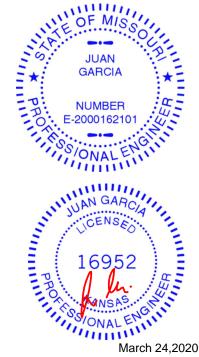
1=8-0-7, 3=8-0-7, 4=8-0-7 (size) Max Horz 1=-54(LC 4) Max Uplift 1=-39(LC 8), 3=-45(LC 9)

Max Grav 1=171(LC 1), 3=171(LC 1), 4=290(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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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.
- 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



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



Job Truss Truss Type Qty Lot 3 H3 140734804 Valley 400155 V9 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:25 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-II?TeAzbNkbhGnmUWakT2JVY3BbHhVUqpFuRrczXnB0 5-3-0

Scale = 1:9.9

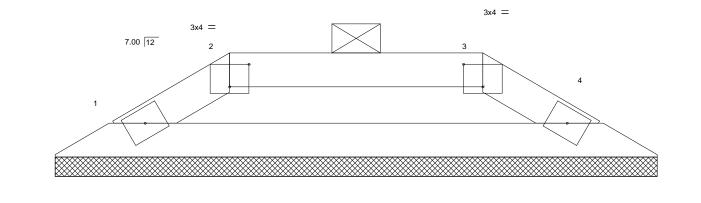
0-10-12

0-0-4

1-6-7

Structural wood sheathing directly applied or 5-3-0 oc purlins, except

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



3x4 / 3x4 <

in (loc) I/defl L/d PLATES GRIP
n/a - n/a 999 MT20 197/144
n/a - n/a 999
0.00 4 n/a n/a
Weight: 11 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

2-0-0 oc purlins: 2-3.

5.3.0

LUMBER-

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

0.0.7

REACTIONS. 1=5-2-2, 4=5-2-2 (size)

Max Horz 1=-16(LC 4) Max Uplift 1=-13(LC 5), 4=-13(LC 4) Max Grav 1=188(LC 1), 4=188(LC 1)

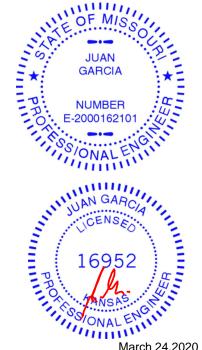
1-6-7

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

TOP CHORD 1-2=-261/54, 3-4=-261/54

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) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 24,2020



Job Truss Truss Type Qty Lot 3 H3 140734805 Valley 400155 V10 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:15 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-bNOhXlrJkgL63F?ZwUY7eC5pd9B3Lz?MWiTvVBzXnBA

> 2 2x4 5.00 12 0-0-4

> > 2x4 || 2x4 /

> > > BRACING-

TOP CHORD

BOT CHORD

3

Structural wood sheathing directly applied or 3-6-5 oc purlins,

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

except end verticals.

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 0.12 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.07 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 8 lb FT = 10%

LUMBER-

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

WEBS 2x3 SPF No.2

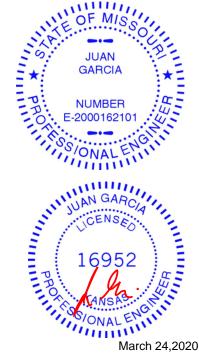
REACTIONS. 1=3-5-11, 3=3-5-11 (size) Max Horz 1=49(LC 5)

Max Uplift 1=-17(LC 8), 3=-27(LC 8) Max Grav 1=120(LC 1), 3=120(LC 1)

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

NOTES-

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



Scale = 1:10.1



Job Truss Truss Type Qty Lot 3 H3 140734806 V11 Valley 400155 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:16 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-3Zy3l5sxVzTzhPalUB3MBQesAZUO4QFVIMCS1ezXnB9 6-3-14 Scale = 1:16.6 2x4 || 2 5.00 12 0-0-4 3 2x4 = 2x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc)

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

n/a

-0.00

999

999

n/a

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

n/a

n/a

n/a

except end verticals.

3

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

WEBS 2x3 SPF No.2

25.0

10.0

0.0

10.0

REACTIONS.

1=6-3-5, 3=6-3-5 (size) Max Horz 1=100(LC 5) Max Uplift 1=-36(LC 8), 3=-56(LC 8) Max Grav 1=246(LC 1), 3=246(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.

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-P

0.58

0.32

0.00

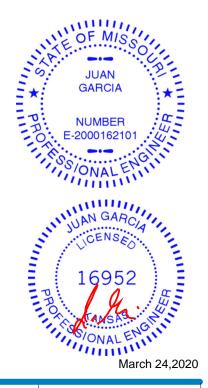
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

1.15

YES

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



197/144

FT = 10%

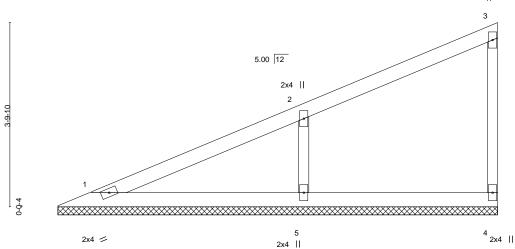
MT20

Structural wood sheathing directly applied or 6-3-14 oc purlins,

Weight: 16 lb



Job Truss Truss Type Qty Lot 3 H3 140734807 Valley 400155 V12 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:17 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloylgMOrZQ4rpild7XzssyG-XlWRyQsaGHbqJY9x2vbbjdA6_zsOpsSf_0y0Z4zXnB8 9-1-8 Scale: 1/2"=1 2x4 ||



LOADIN	G (psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-S						Weight: 25 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

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

REACTIONS.

(size) 1=9-0-14, 4=9-0-14, 5=9-0-14

Max Horz 1=151(LC 5)

Max Uplift 4=-23(LC 5), 5=-122(LC 8)

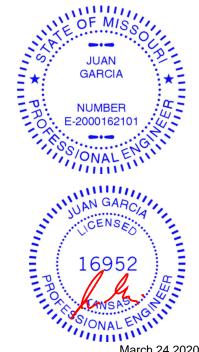
Max Grav 1=155(LC 1), 4=129(LC 1), 5=460(LC 1)

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

2-5=-350/173 **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=122
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

March 24,2020



Job Truss Truss Type Qty Lot 3 H3 140734808 Valley 400155 V13 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:18 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-0y3q9mtC1bjhwik8cc6qGrjInMD7YJUoCghZ6WzXnB7 11-11-2 Scale = 1:29.9 2x4 ||

0.5454	1	2x4 2	00 12 2x4 3	4
	3x4 =	7 2x4	6 2x4	5 2x4

LOADING TCLL TCDL BCLL	(psf) 25.0 10.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.19 0.11 0.08	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 5	I/defI n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL	10.0	Code IRC2018/TF		Matri		H0IZ(CT)	-0.00	5	II/a	II/a	Weight: 34 lb	FT = 10%

TOP CHORD

LUMBER-BRACING-

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

2x3 SPF No.2 BOT CHORD 2x3 SPF No.2

REACTIONS. All bearings 11-10-8. Max Horz 1=202(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 7 except 6=-104(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=395(LC 1), 7=350(LC 1)

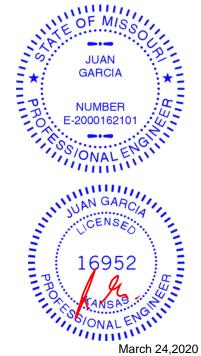
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

3-6=-309/151, 2-7=-267/138 **WEBS**

NOTES-

OTHERS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) 5, 7 except (jt=lb) 6=104
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.



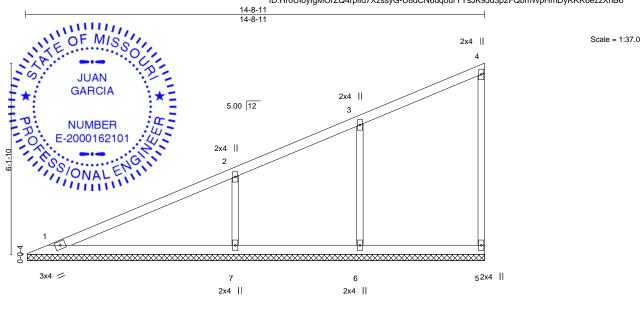
Job Truss Truss Type Qty Lot 3 H3 140734809 Valley 400155 V14 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Mar 24 08:27:19 2020 Page 1

Wheeler Lumber, Waverly, KS 66871 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-U8dCN6uqourYYsJK9Jd3p2FQbmWpHmDyRKR6ezzXnB6

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

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

except end verticals.



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 0.45	Vert(LL)	n/a -	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.27	Vert(CT)	n/a -	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) -	-0.00 5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 44 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

2x3 SPF No.2 OTHERS

REACTIONS. All bearings 14-8-2.

(lb) -Max Horz 1=253(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-146(LC 8) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=371(LC 2),

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

WEBS 3-6=-260/123, 2-7=-410/207

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=146.
- 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.



March 24,2020







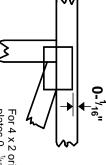


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 × 4

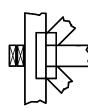
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



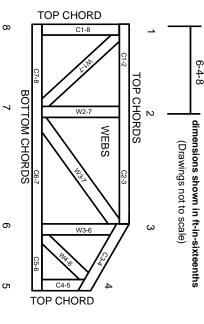
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MiTek® All Rights Reserved



MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

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
- 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.
- 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

7.

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