

08/14/2020

RE: 400423 Lot 44 HT 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 8.4

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

This package includes 71 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	142087951	A5	7/21/2020	27	142087977	E8	7/21/2020
2	142087952	A6	7/21/2020	28	142087978	E9	7/21/2020
3	142087953	A7	7/21/2020	29	142087979	E10	7/21/2020
4	142087954	A8	7/21/2020	30	142087980	E11	7/21/2020
5	142087955	A9	7/21/2020	31	I42087981	G1	7/21/2020
6	142087956	B1	7/21/2020	32	142087982	G2	7/21/2020
7	142087957	B2	7/21/2020	33	142087983	H1	7/21/2020
8	142087958	C1	7/21/2020	34	142087984	H2	7/21/2020
9	142087959	C2	7/21/2020	35	142087985	H3	7/21/2020
10	142087960	C3	7/21/2020	36	142087986	J1	7/21/2020
11	I42087961	C4	7/21/2020	37	142087987	J2	7/21/2020
12	142087962	C5	7/21/2020	38	142087988	J3	7/21/2020
13	142087963	C6	7/21/2020	39	142087989	J4	7/21/2020
14	142087964	C7	7/21/2020	40	142087990	J5	7/21/2020
15	142087965	C8	7/21/2020	41	I42087991	J6	7/21/2020
16	142087966	C9	7/21/2020	42	142087992	J7	7/21/2020
17	142087967	C10	7/21/2020	43	142087993	J8	7/21/2020
18	142087968	D1	7/21/2020	44	142087994	J9	7/21/2020
19	142087969	D2	7/21/2020	45	142087995	J10	7/21/2020
20	142087970	E1	7/21/2020	46	142087996	J11	7/21/2020
21	I42087971	E2	7/21/2020	47	142087997	J12	7/21/2020
22	142087972	E3	7/21/2020	48	142087998	J13	7/21/2020
23	142087973	E4	7/21/2020	49	142087999	J14	7/21/2020
24	142087974	E5	7/21/2020	50	142088000	J15	7/21/2020
25	142087975	E6	7/21/2020	51	142088001	J16	7/21/2020
26	142087976	E7	7/21/2020	52	142088002	J17	7/21/2020

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

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943

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





08/14/2020

RE: 400423 - Lot 44 HT

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

**Site Information:** 

Project Customer:

Project Name:

Lot/Block: Address: Subdivision:

City, County:

State:

No.	Seal#	Truss Name	Date
53	142088003	J18	7/21/2020
54	142088004	J19	7/21/2020
55	142088005	K1	7/21/2020
56	142088006	K2	7/21/2020
57	142088007	K3	7/21/2020
58	142088008	L1	7/21/2020
59	142088009	L2	7/21/2020
60	I42088010	L3	7/21/2020
61	I42088011	LAY1	7/21/2020
62	I42088012	LAY2	7/21/2020
63	I42088013	LAY3	7/21/2020
64	I42088014	V1	7/21/2020
65	I42088015	V3	7/21/2020
66	I42088016	V4	7/21/2020
67	I42088017	V5	7/21/2020
68	I42088018	V6	7/21/2020
69	I42088019	V7	7/21/2020
70	142088020	V8	7/21/2020
71	I42088021	V9	7/21/2020



08/14/2020

RE: 400423 Lot 44 HT 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 8.4

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

This package includes 71 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	142087951	A5	7/21/2020	27	142087977	E8	7/21/2020
2	142087952	A6	7/21/2020	28	142087978	E9	7/21/2020
3	142087953	A7	7/21/2020	29	142087979	E10	7/21/2020
4	142087954	A8	7/21/2020	30	142087980	E11	7/21/2020
5	142087955	A9	7/21/2020	31	142087981	G1	7/21/2020
6	142087956	B1	7/21/2020	32	142087982	G2	7/21/2020
7	142087957	B2	7/21/2020	33	142087983	H1	7/21/2020
8	142087958	C1	7/21/2020	34	142087984	H2	7/21/2020
9	142087959	C2	7/21/2020	35	142087985	H3	7/21/2020
10	142087960	C3	7/21/2020	36	142087986	J1	7/21/2020
11	142087961	C4	7/21/2020	37	142087987	J2	7/21/2020
12	142087962	C5	7/21/2020	38	142087988	J3	7/21/2020
13	142087963	C6	7/21/2020	39	142087989	J4	7/21/2020
14	142087964	C7	7/21/2020	40	142087990	J5	7/21/2020
15	142087965	C8	7/21/2020	41	142087991	J6	7/21/2020
16	142087966	C9	7/21/2020	42	142087992	J7	7/21/2020
17	142087967	C10	7/21/2020	43	142087993	J8	7/21/2020
18	142087968	D1	7/21/2020	44	142087994	J9	7/21/2020
19	142087969	D2	7/21/2020	45	142087995	J10	7/21/2020
20	142087970	E1	7/21/2020	46	142087996	J11	7/21/2020
21	142087971	E2	7/21/2020	47	142087997	J12	7/21/2020
22	142087972	E3	7/21/2020	48	142087998	J13	7/21/2020
23	142087973	E4	7/21/2020	49	142087999	J14	7/21/2020
24	142087974	E5	7/21/2020	50	142088000	J15	7/21/2020
25	142087975	E6	7/21/2020	51	142088001	J16	7/21/2020
26	142087976	E7	7/21/2020	52	142088002	J17	7/21/2020

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

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193

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





08/14/2020

RE: 400423 - Lot 44 HT

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

**Site Information:** 

Project Customer:

Project Name:

Lot/Block: Address: Subdivision:

City, County:

State:

No.	Seal#	Truss Name	Date
53	142088003	J18	7/21/2020
54	142088004	J19	7/21/2020
55	142088005	K1	7/21/2020
56	142088006	K2	7/21/2020
57	142088007	K3	7/21/2020
58	142088008	L1	7/21/2020
59	142088009	L2	7/21/2020
60	I42088010	L3	7/21/2020
61	I42088011	LAY1	7/21/2020
62	I42088012	LAY2	7/21/2020
63	I42088013	LAY3	7/21/2020
64	I42088014	V1	7/21/2020
65	I42088015	V3	7/21/2020
66	I42088016	V4	7/21/2020
67	I42088017	V5	7/21/2020
68	I42088018	V6	7/21/2020
69	I42088019	V7	7/21/2020
70	142088020	V8	7/21/2020
71	I42088021	V9	7/21/2020

**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087951 AS NOTED ON PLANS REVIE 400423 **A5** Hip Girder DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:03 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-mLZAZ7E2GupbQh6nMgbJVWTndfKYSrd47XS5v4ywC9w 7-0-0 3-0-0 10-0-0 12-0-0 14-0-0 08/14/2020 0-10-8 2-0-0 3-0-0 2-0-0 2-0-0 0-10-8

5x12 = 5x12 = 2x4 || 4.00 12 **\tag{15** 16 1-10-1 0-7-8 6x8 13 12 11 17 18 6x8 2x4 || 3x10 =2x4 | 14 10 3x6 2x4 -11 2x4 || 3x6 =

<u> </u>	2-0-0 2-0-0	4-0-0 2-0-0	7-0-0 3-0-0		10-0-0 3-0-0			12-0-0 2-0-0	14-0-0	——
Plate Offsets (X,Y)	[3:0-5-12,Edge], [7	0-5-12,Edge]								
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- Plate Grip D Lumber DOI Rep Stress I Code IRC20	1.15	CSI. TC 0.65 BC 0.53 WB 0.19 Matrix-S	Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.21 -0.38 0.24 0.17	(loc) 12 12 8 12	I/defI >786 >432 n/a >989	L/d 360 240 n/a 240	PLATES MT20 Weight: 55 lb	<b>GRIP</b> 197/144 FT = 10%

LUMBER-**BRACING-**

2x6 SP DSS \*Except\* Structural wood sheathing directly applied or 3-9-3 oc purlins, except TOP CHORD TOP CHORD

4-6: 2x4 SPF 2100F 1.8E 2-0-0 oc purlins (3-9-2 max.): 4-6.

**BOT CHORD** 2x4 SPF 2400F 2.0E **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing **WEBS** 2x3 SPF No.2 \*Except\*

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

Max Horz 2=28(LC 33)

3-14,7-10: 2x4 SPF No.2

Max Uplift 2=-217(LC 4), 8=-217(LC 5) Max Grav 2=1028(LC 1), 8=1028(LC 1)

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

TOP CHORD 2-3=-447/102, 3-4=-3431/606, 4-5=-3883/671, 5-6=-3883/671, 6-7=-3431/592,

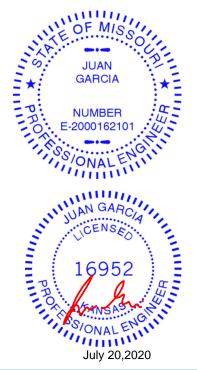
7-8=-447/99

**BOT CHORD** 3-13=-576/3427, 12-13=-572/3435, 11-12=-537/3435, 7-11=-541/3427

**WEBS** 4-12=-94/539, 6-12=-94/539

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 52 lb up at 4-0-0, 81 lb down and 52 lb up at 6-0-0, and 81 lb down and 52 lb up at 8-0-0, and 81 lb down and 52 lb up at 10-0-0 on top chord, and 231 lb down and 65 lb up at 4-0-0, 34 lb down at 6-0-0, and 34 lb down at 8-0-0, and 231 lb down and 65 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



Scale = 1:26.5

## Continued on page 2

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 400423 A5 Hip Girder

08/14/2020

142087951

AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

1

Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:03 2020 Page 2

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-mLZAZ7E2GupbQh6nMgbJVWTndfKYSrd47XS5v4ywC9w

LOAD CASE(S) Standard

Waverly, KS 66871

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

Uniform Loads (plf)

Wheeler Lumber,

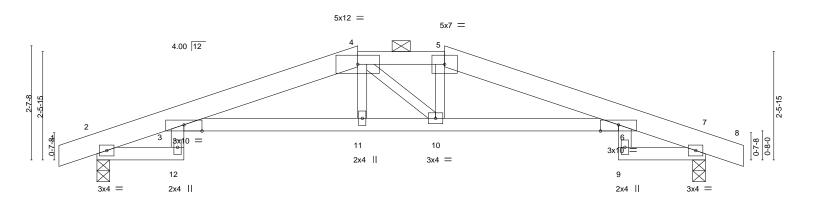
Vert: 1-4=-70, 4-6=-70, 6-9=-70, 2-14=-20, 3-7=-20, 8-10=-20

Concentrated Loads (lb)

Vert: 4=-37(F) 6=-37(F) 13=-231(F) 11=-231(F) 15=-37(F) 16=-37(F) 17=-34(F) 18=-34(F)



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087952 AS NOTED ON PLANS REVIE 400423 A6 Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 4.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:04 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-EY7YnTFg1CyS2rh\_wN6Y2k?xG3g3BK2EMBBeSWywC9v 14-10-8 14-0-0 **08<u>91949</u>2020** + 12-0-0 0-10-8 4-0-0 4-0-0 2-0-0 0-10-8



<u> </u>	2-0-0	6-0-0	+	8-0-0		12-0-0	14-0-0	
Dieta Offesta (V.V.)	2-0-0	4-0-0	<u> </u>	2-0-0		4-0-0	2-0-0	
Plate Offsets (X,Y)	[3:0-5-0,Edge], [6:0-5-0,E	ugej						
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 0.72	Vert(LL)	-0.15 6-10	>999 360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.28 3-11	>596 240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.23 7	n/a n/a		
BCDL 10.0	Code IRC2018/TP	PI2014	Matrix-S	Wind(LL)	0.11 3-11	>999 240	Weight: 50 lb	FT = 10%

LUMBER-**BRACING-**

TOP CHORD 2x6 SPF No.2 \*Except\* TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins,

4-5: 2x4 SPF No.2 2x4 SPF No.2

**BOT CHORD** 2-0-0 oc purlins (4-10-5 max.): 4-5. **WEBS** 2x3 SPF No.2 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing 3-12,6-9: 2x4 SPF No.2

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

Max Horz 2=-40(LC 13)

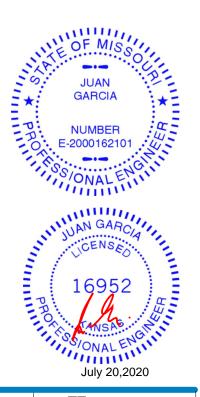
Max Uplift 2=-141(LC 4), 7=-141(LC 5) Max Grav 2=688(LC 1), 7=688(LC 1)

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

TOP CHORD 2-3=-284/69, 3-4=-1439/199, 4-5=-1387/198, 5-6=-1440/185, 6-7=-284/62

**BOT CHORD** 3-11=-156/1386, 10-11=-152/1387, 6-10=-124/1386

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

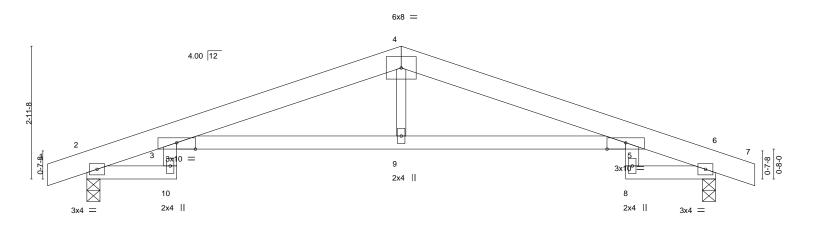


Scale = 1:26.5



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087953 AS NOTED ON PLANS REVIE 400423 A7 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:05 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-ikhw\_pGloW4Jg?GAT5dnaxY6iT0lwmzNbrxC\_zywC9u 14-10-8 12-0-0 14-0-0 08/14/2020 0-10-8 2-0-0 5-0-0 2-0-0 0-10-8



	2-0-0			5-0-0		+			:-0-0 -0-0		2-0-0	
Plate Offsets (2	X,Y) [3:0-5-0	,Edge], [5:0-5-0,E	dge]									
LOADING (ps	f) S	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.	Ó P	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.16	5-9	>999	360	MT20	197/144
CDL 10.	0 L	umber DOL	1.15	BC	0.57	Vert(CT)	-0.30	5-9	>544	240		
BCLL 0.	0 * R	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.24	6	n/a	n/a		
BCDL 10.	0 C	Code IRC2018/TP	PI2014	Matrix	k-S	Wind(LL)	0.12	3-9	>999	240	Weight: 49 lb	FT = 10%

**BRACING-**TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x4 SPF No.2 \*Except\*

4-9: 2x3 SPF No.2

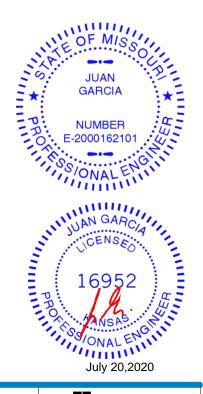
REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=-46(LC 13)

Max Uplift 2=-134(LC 4), 6=-134(LC 5) Max Grav 2=688(LC 1), 6=688(LC 1)

FORCES. (ib) - Max. Comp./Max. Ten. - All forces 250 (ib) or less except when shown. TOP CHORD 2-3=-284/70, 3-4=-1365/147, 4-5=-1365/161, 5-6=-284/59 BOT CHORD 3-9=-102/1304, 5-9=-102/1304

## 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) 2=134. 6=134.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

Scale = 1:25.7



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

Design valid for use only with MiTek® cannectors. 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

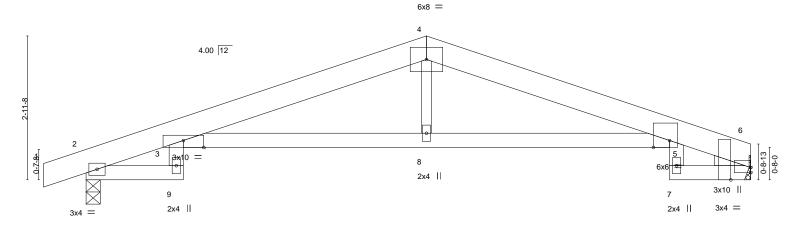
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



16023 Swingley Ridge Rd Chesterfield, MO 63017





2-0-0 [3:0-5-0,Edge], [5:0-4-0,E	Edge], [6:0-0-0	5-0-0 0-1-4] [6:0-3	4 5 1 1	I			5	5-0-0		1-8-0
[3:0-5-0,Edge], [5:0-4-0,E	dge], [6:0-0-0	0-1-41 [6:0-3	4 5 1 1							
		, <del>o i -j, [o.o c</del>	s-1,Eagej							
CDACING	200	CCI		DEEL	in	(100)	I/dofl	I /d	DIATES	GRIP
						'			1	
Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.15	3-8	>999	360	MT20	197/144
Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.28	3-8	>571	240		
Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.23	6	n/a	n/a		
Code IRC2018/TF	PI2014	Matrix	c-S	Wind(LL)	0.11	3-8	>999	240	Weight: 47 lb	FT = 10%
	Rep Stress Incr	Plate Grip DOL 1.15 Lumber DOL 1.15	Plate Grip DOL         1.15         TC           Lumber DOL         1.15         BC           Rep Stress Incr         YES         WB	Plate Grip DOL         1.15         TC         0.73           Lumber DOL         1.15         BC         0.56           Rep Stress Incr         YES         WB         0.07	Plate Grip DOL         1.15         TC         0.73         Vert(LL)           Lumber DOL         1.15         BC         0.56         Vert(CT)           Rep Stress Incr         YES         WB         0.07         Horz(CT)	Plate Grip DOL         1.15         TC         0.73         Vert(LL)         -0.15           Lumber DOL         1.15         BC         0.56         Vert(CT)         -0.28           Rep Stress Incr         YES         WB         0.07         Horz(CT)         0.23	Plate Grip DOL         1.15         TC         0.73         Vert(LL)         -0.15         3-8           Lumber DOL         1.15         BC         0.56         Vert(CT)         -0.28         3-8           Rep Stress Incr         YES         WB         0.07         Horz(CT)         0.23         6	Plate Grip DOL         1.15         TC         0.73         Vert(LL)         -0.15         3-8         >999           Lumber DOL         1.15         BC         0.56         Vert(CT)         -0.28         3-8         >571           Rep Stress Incr         YES         WB         0.07         Horz(CT)         0.23         6         n/a	Plate Grip DOL         1.15         TC         0.73         Vert(LL)         -0.15         3-8         >999         360           Lumber DOL         1.15         BC         0.56         Vert(CT)         -0.28         3-8         >571         240           Rep Stress Incr         YES         WB         0.07         Horz(CT)         0.23         6         n/a         n/a	Plate Grip DOL         1.15         TC         0.73         Vert(LL)         -0.15         3-8         >999         360         MT20           Lumber DOL         1.15         BC         0.56         Vert(CT)         -0.28         3-8         >571         240           Rep Stress Incr         YES         WB         0.07         Horz(CT)         0.23         6         n/a         n/a

**BRACING-**TOP CHORD

**BOT CHORD** 

12-0-0

Structural wood sheathing directly applied or 3-11-6 oc purlins.

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

LUMBER-

TOP CHORD 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x4 SPF No.2 \*Except\*

4-8: 2x3 SPF No.2

2-0-0

WEDGE

Right: 2x3 SPF No.2

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

Max Horz 2=47(LC 12)

Max Uplift 2=-134(LC 4), 6=-87(LC 5) Max Grav 2=680(LC 1), 6=603(LC 1)

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

TOP CHORD 2-3=-279/67, 3-4=-1325/148, 4-5=-1330/160, 5-6=-315/60

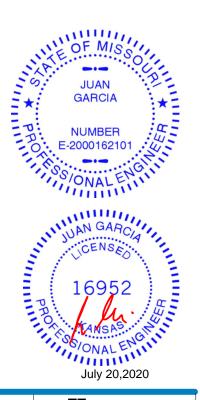
**BOT CHORD** 3-8=-101/1264, 5-8=-101/1264

## 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

7-0-0

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





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



			RELEASE FOR			
lob	Truss	Truss Type	CONSTRUCTION	Ply	Lot 44 HT	
100423	A9	Common	AS NOTED ON PLANS REVIE	W 1	1420879	155
100423	A3	Common	DEVELOPMENT SERVICES		Job Reference (optional)	
Wheeler Lumber, Wave	erly, KS 66871		LEE'S SUMMIT, MISSOUR	.410 s Ma	y 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:06 2020 Page 1	
			ID:Lek3CAANj_gYbł	<b>CVtCQHtm</b>	QzKvNM-AwFIC9GwZpC9H9rM1o80795KDtOcfDzXpVgIWPywC9t	
-0-10-8		7-0-0	08/14/2020		13-8-0	
0-10-8		7-0-0	00/11/2024		6-8-0	

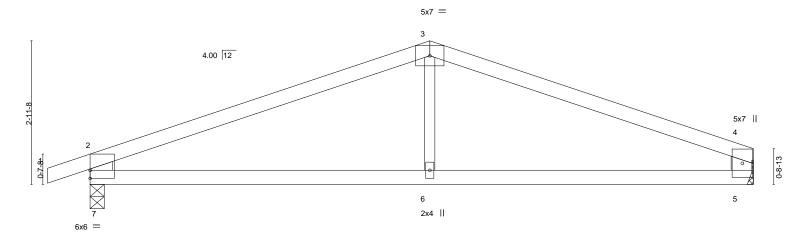


Plate Offsets (X,	) [7:0-0-0,0-2-0]	7-0-0						6-8	5-0	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.06	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.14	6-7	>999	240		
BCLL 0.0	<ul> <li>Rep Stress Incr</li> </ul>	YES	WB 0.08	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/	TPI2014	Matrix-R	Wind(LL)	0.04	6-7	>999	240	Weight: 36 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEBS 2x6 SPF No.2 \*Except\* 3-6: 2x3 SPF No.2

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

Max Horz 7=39(LC 12)

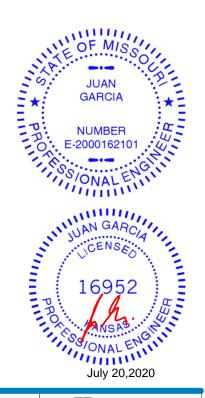
Max Uplift 7=-136(LC 4), 5=-85(LC 5) Max Grav 7=675(LC 1), 5=591(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-915/120, 3-4=-909/120, 2-7=-606/179, 4-5=-510/123

BOT CHORD 6-7=-62/788, 5-6=-62/788

WEBS 3-6=0/264

- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb)
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

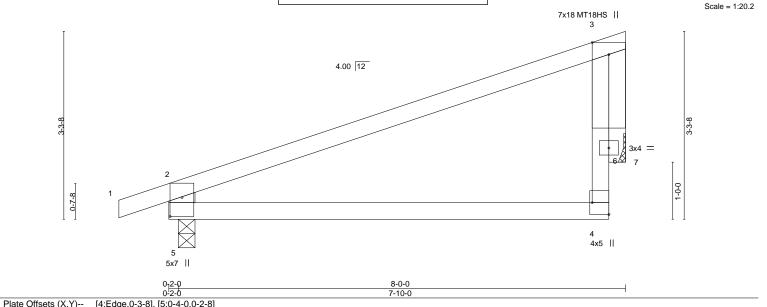
except end verticals.

Scale = 1:23.7



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087956 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES B1 400423 Monopitch DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:07 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQ2KvNM-e7pgPUHYK7K0vJQZbWgFgMdU3Gl0ObMg29QJ2rywC9s 08/14/<mark>20</mark>20 0-10-8



1 1010 01	10010 (71, 1)	[ 1.2 ago, 0 0 0], [0.0 1 0,0 2 0]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.62	Vert(LL) -0.06 4-5 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.13 4-5 >710 240	MT18HS 197/144
BCLL	0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.01 7 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.04 4-5 >999 240	Weight: 25 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

**WEBS** 2x4 SPF No.2 \*Except\* 2-5: 2x6 SPF No.2

**OTHERS** 2x4 SPF No.2

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

Max Horz 5=99(LC 5)

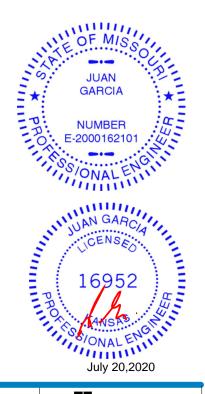
Max Uplift 5=-94(LC 4), 7=-77(LC 8) Max Grav 5=429(LC 1), 7=308(LC 1)

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

TOP CHORD 2-3=-306/27, 3-6=-295/241, 2-5=-385/152

## NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) All plates are MT20 plates unless otherwise indicated.
- 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.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087957 AS NOTED ON PLANS REVIE 400423 B2 Monopitch DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:08 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-6JM2dqlA5RStXT?l9DBUCaAiRg8\_77npHp9sblywC9r -0-10-8 6-1-8 **08/14/2020** 0-10-8 1-10-8 Scale = 1:19.2 5x7 =

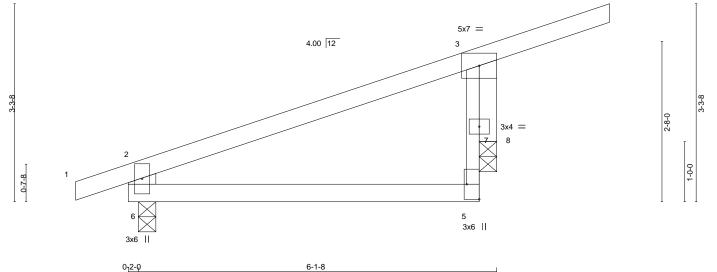


Plate Offsets (X,Y)	[5:Edge,0-2-8]								
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.39	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT)	-0.05	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT)	-0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.01	5-6	>999	240	Weight: 21 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2-6: 2x6 SPF No.2 **OTHERS** 2x4 SPF No.2

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

Max Horz 6=113(LC 5)

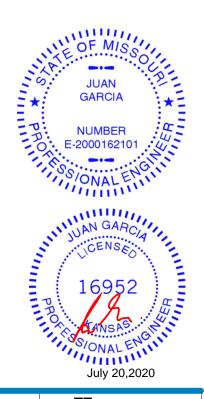
Max Uplift 6=-63(LC 4), 8=-130(LC 8) Max Grav 6=318(LC 1), 8=413(LC 1)

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

TOP CHORD 2-6=-278/108

## NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=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.

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



**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION 142087958 Roof Special Supported Gable DEVELOPMENT SERVICES C1 400423 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:09 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-aVwRqAJpskak8caxixijlnjy84VXsa6zWTvP7kywC9q

08/14/2020

Scale = 1:35.6 4x5 =

20-5-8

9-2-3

0-10-8

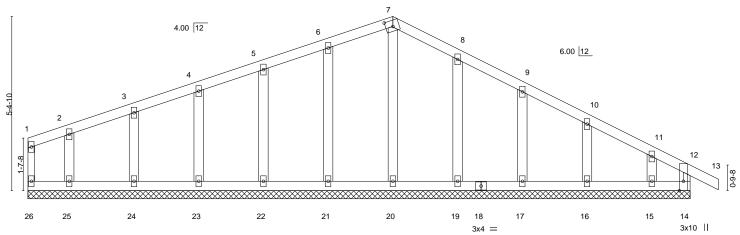


Plate Offsets (X,Y)--[7:0-2-11,0-2-4] GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) -0.00 120 MT20 197/144 13 n/r **TCDL** 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) -0.00 13 n/r 120

Horz(CT)

0.00

14

n/a

n/a

LUMBER-**BRACING-**

WB

Matrix-R

0.06

YES

11-3-5

11-3-5

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 6-0-0 oc bracing.

REACTIONS. All bearings 20-5-8.

0.0

10.0

Max Horz 26=84(LC 7) (lb) -

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 26, 14, 21, 22, 23, 24, 25, 19, 17, 16, 15 All reactions 250 lb or less at joint(s) 26, 14, 20, 21, 22, 23, 24, 25, 19, 17, 16, 15

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

**BCLL** 

**BCDL** 

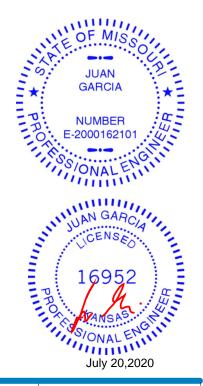
**OTHERS** 

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
- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 26, 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.



FT = 10%

Weight: 83 lb



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087959 AS NOTED ON PLANS REVIE 400423 C2 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-3iUp1WKRd2ibmm87GeDyH?FzjUiHbx76k7ezfAywC9p 21-4-0 0-10-8 16-9-15 20-5-8 08/14/2020 5-9-13 5-5-7 5-6-11 3-7-9

6x6 // 4.00 12 6.00 12 3x4 = 2 2x4 = 5x7 = 8 10 9 3x6 =3x6 =3x10 =3x4 II 10x12 > 5-9-13 Plate Offsets (X,Y)--[1:0-2-0,0-1-8], [3:0-2-8,Edge], [7:0-4-1,0-8-2], [10:0-2-8,0-1-8]

	<b>-</b> , ,	004000	0.00			555		(1 )	./		DI 4750	anın
LOADING	(pst)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.17	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.33	7-9	>721	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.05	9-10	>999	240	Weight: 73 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

3-6: 2x4 SPF 2100F 1.8E

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

**WEBS** 2x3 SPF No.2 \*Except\* 5-7: 2x8 SP DSS

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

Max Horz 11=86(LC 7)

Max Uplift 11=-130(LC 4), 7=-130(LC 9) Max Grav 11=900(LC 1), 7=987(LC 1)

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

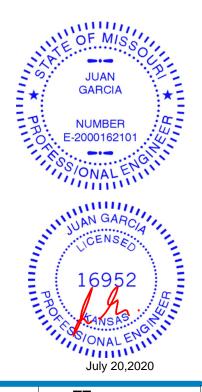
TOP CHORD 1-2=-1319/196, 2-3=-1034/150, 3-4=-1083/158, 4-5=-1296/210, 1-11=-841/160,

5-7=-889/178

**BOT CHORD** 9-10=-159/1198, 7-9=-128/1046

**WEBS** 2-9=-388/153, 3-9=-0/409, 1-10=-141/1142

- 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) 11=130, 7=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 4-7-1 oc purlins,

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

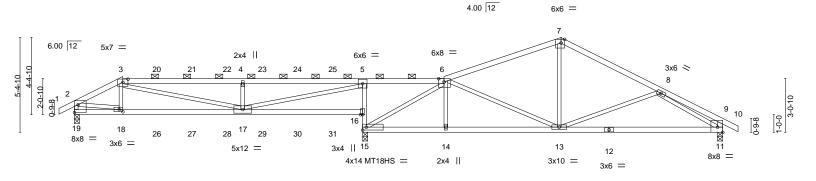
except end verticals.

Scale = 1:35.0



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





2-9-0		16-4-8 16-6-4	21-0-0 21-7-8	27-7-13	36-10-0
2-9-0	0-5-0 6-4-12	6-9-12 0-1-12	4-5-12 0 <sup>!</sup> 7-8	6-0-5	9-2-3
Plate Offsets (X,Y)	[3:0-3-8,0-2-3], [6:0-3-12,0-2-4], [7:0-2	-6,Edge], [11:Edge,0-3-8],	[18:0-2-8,0-1-8], [19:Ed	dge,0-5-5]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.1	8 11-13 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.3	36 11-13 >676 240	MT18HS 197/144
BCLL 0.0 *	Rep Stress Incr NO	WB 0.95	Horz(CT) -0.0	02 15 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.1	3 17-18 >999 240	Weight: 131 lb FT = 10%
			` ′		

TOP CHORD

**BOT CHORD** 

LUMBER- BRACING-

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

3-6: 2x4 SPF 2100F 1.8E BOT CHORD 2x4 SPF No.2 \*Except\* 5-15: 2x3 SPF No.2

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

**REACTIONS.** (size) 19=0-3-8, 15=0-3-8, 11=0-3-8

Max Horz 19=-93(LC 9)

Max Uplift 19=-264(LC 8), 15=-363(LC 8), 11=-151(LC 30) Max Grav 19=1129(LC 21), 15=2021(LC 1), 11=944(LC 1)

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

TOP CHORD 2-3=-1691/370, 3-4=-2431/562, 4-5=-2431/562, 6-7=-1003/180, 7-8=-1066/175,

8-9=-360/0, 2-19=-1132/258, 9-11=-287/38

BOT CHORD 17-18=-335/1507, 15-16=-1278/307, 5-16=-1169/350, 14-15=-194/966, 13-14=-191/970,

11-13=-180/1085

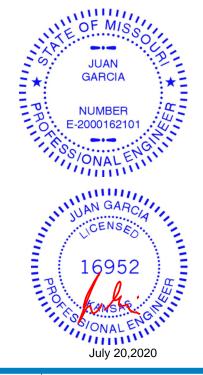
WEBS 3-17=-242/954, 4-17=-682/331, 5-17=-562/2657, 6-15=-1342/185, 7-13=-3/383,

 $8\text{-}13\text{=-}298/206,\ 2\text{-}18\text{=-}284/1472,\ 8\text{-}11\text{=-}1025/294}$ 

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=264, 15=363, 11=151.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 68 lb up at 4-8-2, 100 lb down and 68 lb up at 6-8-2, 100 lb down and 68 lb up at 8-8-2, 100 lb down and 68 lb up at 10-8-2, and 100 lb down and 68 lb up at 12-8-2, and 100 lb down and 68 lb up at 12-8-2, and 100 lb down and 68 lb up at 14-8-2 on top chord, and 217 lb down and 84 lb up at 2-9-0, 33 lb down at 4-8-2, 33 lb down at 6-8-2, 33 lb down at 10-8-2, and 33 lb down at 12-8-2, and 33 lb down at 14-8-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Odntinutes வெற்று ASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)



Structural wood sheathing directly applied or 3-8-2 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-0-10 max.): 3-6.

Rigid ceiling directly applied or 3-7-7 oc bracing.

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT Roof Special Girder

AS NOTED ON PLANS REVIEW 1
DEVELOPMENT SERVICES 1
Job Reference (optional)
LEE'S SUMMIT, MISSOURS.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:13 2020 Page 2
ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-THAxgYMJwz4AdEtixmnfvdtSKhi5oA6ZQ5tdGVywC9m 142087960 СЗ 400423

Waverly, KS 66871 Wheeler Lumber,

08/14/2020

LOAD CASE(S) Standard

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

Uniform Loads (plf)

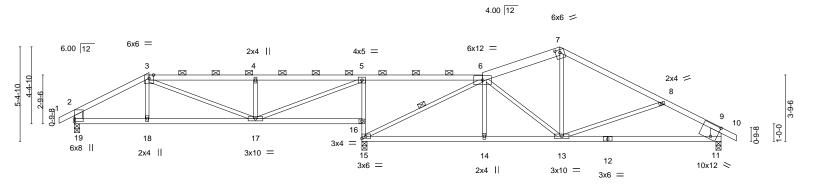
Vert: 1-2=-70, 2-3=-70, 3-6=-70, 6-7=-70, 7-9=-70, 9-10=-70, 16-19=-20, 11-15=-20

Concentrated Loads (lb)

Vert: 18=-217(B) 20=-50(B) 21=-50(B) 22=-50(B) 23=-50(B) 24=-50(B) 25=-50(B) 26=-24(B) 27=-24(B) 28=-24(B) 29=-24(B) 30=-24(B) 31=-24(B) 21=-24(B) 21=-24(B)

**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087961 AS NOTED ON PLANS REVIE 400423 C4 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:14 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-xTkKtuNxhHC1FOSvVUIuSrQfS55WXgeiflcAoxywC9I -0-10-8 0-10-8 27-7-13 36-10-0 16-4-8 6-0-12 08/14/<del>2</del>026 4-3-0 6-0-12 4-13 5-9-10 3-4-9 Scale = 1:65.6



4-3-0		16-4-8		23-3-0	27-7-13		36-10-0	
4-3-0	6-0-12	6-0-12	0-1-12	6-8-12	4-4-13	ı	9-2-3	
Plate Offsets (X,Y)	7:0-3-0,0-1-15], [11:0-4-1,0-8-							
LOADING (psf)	SPACING- 2-0	CSI		DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.	TC	0.67	Vert(LL)	-0.16 11-13 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.	BC BC	0.56	Vert(CT)	-0.32 11-13 >754	240		
BCLL 0.0 *	Rep Stress Incr YE	S WB	0.74	Horz(CT)	-0.04 15 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI201	Mat	rix-S	Wind(LL)	0.06 17-18 >999	240	Weight: 132 lb	FT = 10%

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-**BRACING-**

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

6-7: 2x6 SPF No.2, 7-10: 2x4 SPF 2100F 1.8E

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

5-15: 2x3 SPF No.2

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

2-19: 2x6 SPF No.2, 9-11: 2x8 SP DSS

(size) 19=0-3-8, 15=0-3-8, 11=0-3-8

Max Horz 19=-90(LC 9)

Max Uplift 19=-150(LC 8), 15=-285(LC 8), 11=-143(LC 9) Max Grav 19=764(LC 21), 15=1724(LC 1), 11=944(LC 1)

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

TOP CHORD 2-3=-975/180, 3-4=-1041/223, 4-5=-1039/221, 6-7=-942/168, 7-8=-1016/139,

8-9=-1225/233, 2-19=-676/164, 9-11=-848/191

**BOT CHORD** 18-19=-125/793, 17-18=-127/792, 15-16=-1053/257, 5-16=-988/287, 14-15=-94/1032,

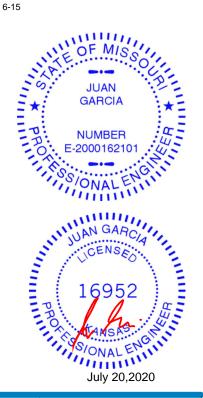
13-14=-92/1035, 11-13=-150/986

**WEBS** 3-17=-95/268, 4-17=-456/188, 5-17=-231/1305, 6-15=-1329/155, 6-13=-308/100,

7-13=0/387

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=150, 15=285, 11=143.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-9-10 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-9-13 max.): 3-6.

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

6-0-0 oc bracing: 16-17

4-0-1 oc bracing: 15-16.

1 Row at midpt

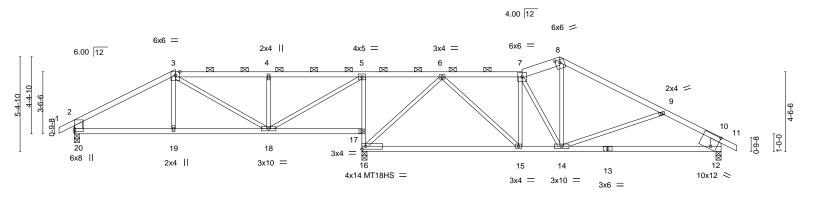


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087962 AS NOTED ON PLANS REVIE 400423 C5 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:15 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-PfHi5ENZRaKusX153Bp7\_2zq7VOZG4nruPMkLOywC9k **914/2020** 4-6-12 27-7-13 -0-10-8 0-10-8 25-6-0 33-5-7 36-10-0 37-8-8 5-9-0 5-3-12 5-3-12 4-6-12 2-1-13 5-9-10 3-4-9 0-10-8



		16-4-8	16-6-4					36-10-0	
9-0 ' 5-3	3-12 '	5-3-12	0-1-12	8-11-	12	' 2-1-	13 '	9-2-3	<u> </u>
8:0-3-0,0-1-15], [12:0-4-	1,0-8-2]								
SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.19 15-16	>999	360	MT20	197/144
Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.39 15-16	>614	240	MT18HS	197/144
Rep Stress Incr	YES	WB	0.94	Horz(CT)	-0.04 16	n/a	n/a		
Code IRC2018/TF	PI2014	Matrix	<-S	Wind(LL)	0.05 18-19	>999	240	Weight: 136 lb	FT = 10%
	9-0 5-3 3:0-3-0,0-1-15], [12:0-4- SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	9-0 5-3-12 3:0-3-0,0-1-15], [12:0-4-1,0-8-2] SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	SPACING-   2-0-0   CSI.	SPACING-   2-0-0   CSI.	SPACING-   2-0-0   CSI.   DEFL.	SPACING   CSI.   DEFL.   in (loc)	SPACING-   2-0-0   CSI.   DEFL.   in (loc)   l/defl	Policy   S-3-12   S	Policy   P

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-TOP CHORD

2x4 SPF No.2 \*Except\*

7-8: 2x6 SPF No.2, 8-11: 2x4 SPF 2100F 1.8E

**BOT CHORD** 2x4 SPF No.2 \*Except\* 5-16: 2x3 SPF No.2

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

2-20: 2x6 SPF No.2, 10-12: 2x8 SP DSS

REACTIONS. (size) 20=0-3-8, 16=0-3-8, 12=0-3-8

Max Horz 20=-90(LC 9)

Max Uplift 20=-154(LC 8), 16=-277(LC 8), 12=-147(LC 9) Max Grav 20=776(LC 21), 16=1706(LC 1), 12=953(LC 1)

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

TOP CHORD 2-3=-956/186, 3-4=-764/199, 4-5=-762/197, 6-7=-994/162, 7-8=-921/174, 8-9=-1032/147, 9-10=-1236/239, 2-20=-699/188, 10-12=-855/194

**BOT CHORD** 19-20=-111/760, 18-19=-113/758, 16-17=-941/211, 5-17=-878/236, 15-16=-73/608,

14-15=-55/998, 12-14=-155/996

**WEBS** 4-18=-411/173, 5-18=-182/1016, 6-16=-1000/175, 6-15=0/532, 7-14=-365/86,

8-14=-25/415

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=154, 16=277, 12=147.
- 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.



MIS

O

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

except end verticals, and 2-0-0 oc purlins (5-6-14 max.): 3-7.

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

6-0-0 oc bracing: 17-18

4-4-0 oc bracing: 16-17.

Scale = 1:65.6

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087963 AS NOTED ON PLANS REVIE 400423 C6 Monopitch **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:15 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-PfHi5ENZRaKusX153Bp7\_2zsSVUuGD6ruPMkLOywC9k 708/14/2020 Scale = 1:26.7 2 6.00 12

> 3x4 = 6 5

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

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

3 4x5 ||

except end verticals.

7-4-0

Plate Off	fsets (X,Y)	[3:Edge,0-3-8]										
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.05	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.10	3-4	>822	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	014	Matri	k-R	Wind(LL)	0.04	3-4	>999	240	Weight: 26 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

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

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

Max Horz 4=113(LC 8)

Max Uplift 4=-18(LC 8), 6=-96(LC 8)

Max Grav 4=320(LC 1), 6=288(LC 1)

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

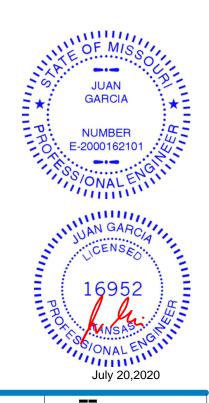
5x7 ||

0-9-8

TOP CHORD 1-4=-281/78

## NOTES-

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







**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION Roof Special Girder AS NOTED ON PLANS REVIE 142087964 C7 400423 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:16 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-trr4lZOCCuSlUhcHdvKMXGV4zvmU?h??735HtqywC9j -0-10-8 1-6-0 <sup>5-6-0</sup> 08/14/2020 0-10-8 1-6-0 4-0-0 3-10-0 Scale = 1:21.7 2x4 || 5 5x7 = 4x5 = 6.00 12 -5-2 0-9-8 7 3x4 = 6 3x6 = 5x7 II 4-0-0 3-10-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI Plate Grip DOL Vert(LL) -0.11 360 197/144

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

6-7

6-7

6-7

6

-0.23

0.01

0.02

>971

>467

>999

n/a

240

n/a

240

MT20

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

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

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

Weight: 36 lb

FT = 10%

LUMBER-

**TCLL** 

**TCDL** 

**BCLL** 

BCDL

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

25.0

10.0

0.0

10.0

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

2-8: 2x4 SPF No.2

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

Max Horz 8=133(LC 5)

Max Uplift 6=-85(LC 8), 8=-92(LC 8) Max Grav 6=405(LC 1), 8=483(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

2-3=-562/14, 3-4=-438/35, 2-8=-439/35 TOP CHORD

BOT CHORD 7-8=-60/449 6-7=-192/732

**WEBS** 3-7=0/286, 4-7=-306/180, 4-6=-748/236

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

1.15

1.15

NO

TC

BC

WB

Matrix-S

0.35

0.53

0.30

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 76 lb up at 1-6-0 on top chord, and 11 lb down and 1 lb up at 1-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

## LOAD CASE(S) Standard

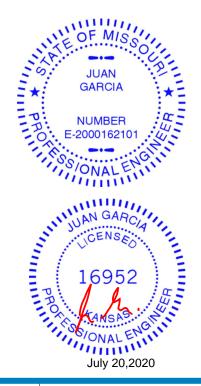
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20

Concentrated Loads (lb)

Vert: 7=1(F)







**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087965 AS NOTED ON PLANS REVIE 400423 C8 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:17 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-M2PSVvPqzCac6rBUAcrb3T2GIIAJkBl8LjrqPGywC9i -0-10-8 7-2-0 08/14/2020 3-2-0 0-10-8 4-0-0 2-2-0 Scale = 1:21.7 2x4 ||

	4x5 = 6x6 =	
	6.00 12	
3-5-8		
2-2-14	2	
8-6-0		
	7 3x4 =	6
	5x7	3x4 =

		· · · · · · · · · · · · · · · · · · ·	3-2-0		<u>'</u>		4-0-0			<u>'</u>	2-2-0	
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.05	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.11	6-7	>976	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.02	6-7	>999	240	Weight: 35 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

7-2-0

LUMBER-TOP CHORD

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

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

2-8: 2x4 SPF No.2

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

Max Horz 8=133(LC 5)

Max Uplift 6=-85(LC 8), 8=-91(LC 8) Max Grav 6=405(LC 1), 8=484(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-535/72, 3-4=-421/90, 2-8=-433/95

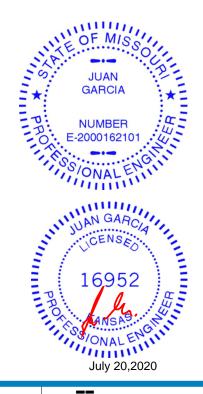
7-8=-68/420, 6-7=-72/329 BOT CHORD

**WEBS** 4-6=-441/143

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

3-2-0

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



9-4-0

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

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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087966 AS NOTED ON PLANS REVIE 400423 C9 Half Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:18 2020 Page 1

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-qEzqjFQSkViSj?mgkKMqchaKBiUXTZxlaNaOxiywC9h Wheeler Lumber, Waverly, KS 66871 -0-10-8 0-10-8 08/14/2020 7-1-0

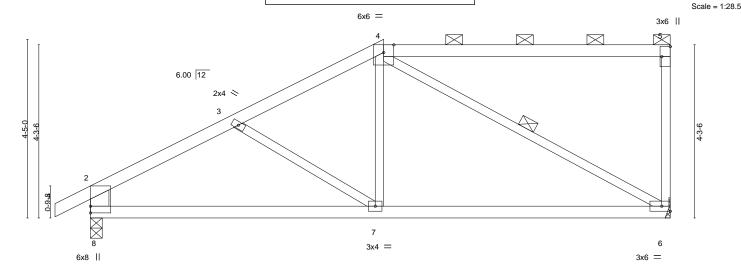


Plate Off	sets (X,Y)	[5:Edge,0-2-8]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.07	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	ВС	0.43	Vert(CT)	-0.15	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-S	Wind(LL)	0.03	6-7	>999	240	Weight: 51 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

REACTIONS.

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

2-8: 2x6 SPF No.2 (size) 6=Mechanical, 8=0-3-8

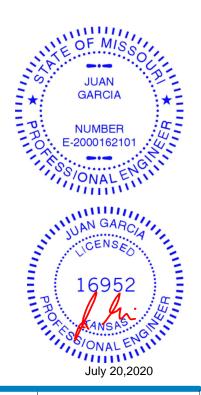
Max Uplift 6=-113(LC 5), 8=-101(LC 8) Max Grav 6=627(LC 1), 8=710(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-837/129, 3-4=-687/79, 2-8=-636/135

Max Horz 8=174(LC 5)

7-8=-164/656, 6-7=-127/596 BOT CHORD **WEBS** 4-7=0/306, 4-6=-654/100

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=113, 8=101.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

4-6

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

1 Row at midpt



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087967 AS NOTED ON PLANS REVIE 400423 C10 Half Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-3iUp1WKRd2ibmm87GeDyH?F0JUklbrg6k7ezfAywC9p <del>-0-10-8</del> <del>0-10-8</del> 4-2-0 4-2-0 **98/14/2020** 5-7-0 Scale: 3/8"=1 6x6 = 2x4 || 6.00 12 2x4 < 3 0-9-8 8 6x8 || 3x4 = 3x4 8-9-0 5-7-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI Plate Grip DOL Vert(LL) -0.12 360 197/144 **TCLL** 25.0 1.15 TC 0.56 7-8 >999 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.49 Vert(CT) -0.24 7-8 >707 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.81 Horz(CT) 0.01 6 n/a n/a

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.02

6-7

>999

240

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

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

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

Weight: 53 lb

FT = 10%

LUMBER-

BCDL

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

10.0

2-8: 2x6 SPF No.2

REACTIONS.

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

Max Horz 8=205(LC 5)

Max Uplift 6=-110(LC 5), 8=-108(LC 8) Max Grav 6=627(LC 1), 8=710(LC 1)

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

Code IRC2018/TPI2014

TOP CHORD 2-3=-842/157, 3-4=-584/80, 2-8=-621/153

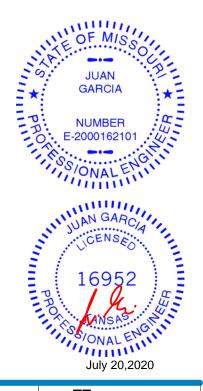
**BOT CHORD** 7-8=-178/670, 6-7=-107/475 WFBS 4-7=0/351, 4-6=-616/85

## NOTES-

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

Matrix-S

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=110, 8=108.
- 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.



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



**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION 142087968 Common Supported Gable DEVELOPMENT SERVICES D1 400423 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:19 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-IQXDwbR4VpqJL9KsI1t39u7fY6wuC5IRp1KxU9ywC9g 25-4-8 0-10-8 08/14/2020 12-3-0 12-3-0 Scale = 1:45.8 4x5 =

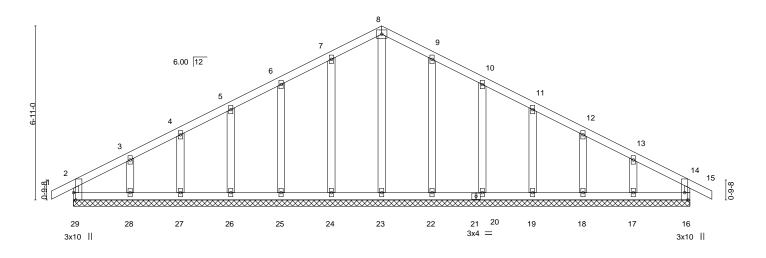


Plate Offsets (X,Y)--[29:0-3-8,Edge] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.08 Vert(LL) -0.00 120 MT20 197/144 15 n/r **TCDL** 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) -0.00 15 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.11 Horz(CT) 0.00 16 n/a n/a Code IRC2018/TPI2014 Weight: 108 lb FT = 10% **BCDL** 10.0 Matrix-R

24-6-0

LUMBER-**BRACING-**

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

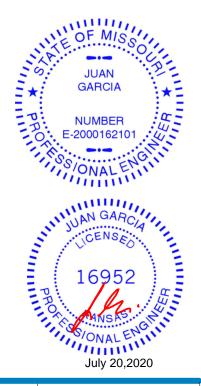
REACTIONS. All bearings 24-6-0.

Max Horz 29=105(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 29, 16, 24, 25, 26, 27, 28, 22, 20, 19, 18, 17 All reactions 250 lb or less at joint(s) 29, 16, 23, 24, 25, 26, 27, 28, 22, 20, 19, 18, 17

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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 29, 16, 24, 25,
- 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.





**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087969 AS NOTED ON PLANS REVIE D2 400423 Common DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:20 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-md5b8xRiG7zAzJv3skPlh6gg1W6SxTlb2h3V0bywC9f 16-11-8 25-4-8 0-10-8 -0-10-8 0-10-8 7-6-9 7-6-9 08/14/2020 4-8-8 4-8-7 7-6-8 Scale: 1/4"=1' 4x5 =

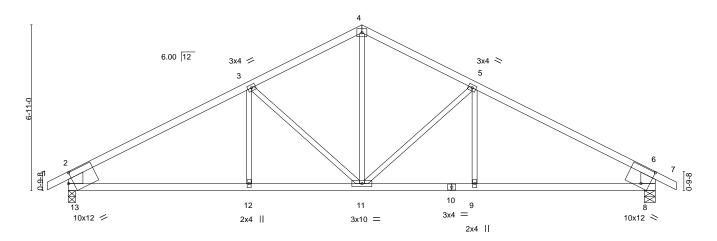


Plate Offs	sets (X,Y)	7-6-9 [8:0-4-1,0-8-2], [13:0-2-7	,0-4-14]		4-8-8		4-8-7		-		7-6-8	
OADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
ΓCLL	25.Ó	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.13	9-11	>999	360	MT20	197/144
CDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.24	9-11	>999	240		
3CLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.07	9-11	>999	240	Weight: 86 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x3 SPF No.2 \*Except\* 2-13,6-8: 2x8 SP DSS

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

Max Horz 13=109(LC 7)

Max Uplift 13=-160(LC 8), 8=-160(LC 9) Max Grav 13=1158(LC 1), 8=1158(LC 1)

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

2-3=-1586/195, 3-4=-1178/200, 4-5=-1178/200, 5-6=-1586/195, 2-13=-1056/206, TOP CHORD 6-8=-1056/206

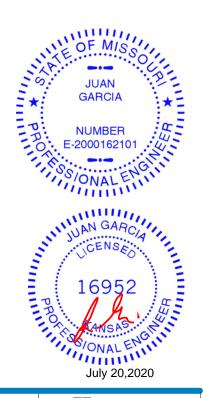
12-13=-168/1286, 11-12=-168/1286, 9-11=-74/1286, 8-9=-74/1286

WEBS 4-11=-100/662, 5-11=-455/187, 3-11=-455/186

## NOTES-

**BOT CHORD** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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 4-10-1 oc purlins,

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

except end verticals.



**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION 142087970 Common Structural Gable DEVELOPMENT SERVICES NOTED ON PLANS REVIE E1 400423 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:21 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-EpfzLHSK1Q51aSUFPSwXEJCsSwTRgw9kGLp2Y1ywC9e 21-11-8 -0-10-8 0-10-8 08/14/2020 7-6-9 7-2-8 7-2-8 7-5-0

5x7 =

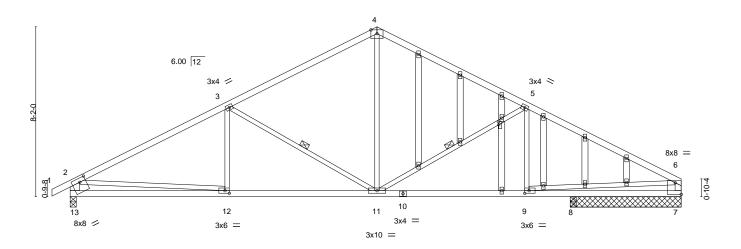


Plate Offsets (X,Y)	7-6-9 [6:Edge,0-6-12], [9:0-2-8,0-1-8], [12:0-2	7-2-8 -8,0-1-8], [13:0-3-8,0-2-4]	, [20:0-1-12,0-0-4]	7-2-8	2-4-8	5-0-8	<u> </u>
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/def		PLATES	GRIP
TCLL 25.0 TCDL 10.0 BCLL 0.0 *	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	TC 0.69 BC 0.61 WB 0.44	/	-0.12 9-11 >999 -0.26 9-11 >999 0.05 7 n/a	240	MT20	197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.08 9-11 >999		Weight: 134 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

21-11-8

except end verticals.

1 Row at midpt

14-9-0

LUMBER-

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

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

2-13: 2x6 SPF No.2, 6-7: 2x4 SPF No.2

**OTHERS** 2x4 SPF No.2

REACTIONS. (size) 7=5-4-0, 13=0-3-8, 8=0-3-8

Max Horz 13=127(LC 7)

Max Uplift 7=-174(LC 9), 13=-191(LC 8)

7-6-9

Max Grav 7=1135(LC 1), 13=1348(LC 1), 8=210(LC 3)

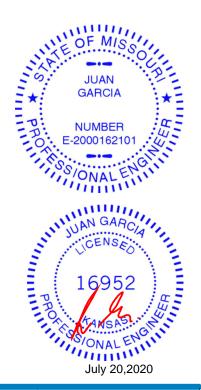
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2016/263, 3-4=-1433/240, 4-5=-1436/242, 5-6=-1847/272, 2-13=-1273/231,

6-7=-1117/208

**BOT CHORD** 12-13=-285/604, 11-12=-262/1700, 9-11=-168/1561, 8-9=-99/293, 7-8=-99/293 **WEBS** 3-11=-656/235, 4-11=-61/717, 5-11=-520/251, 2-12=-13/1100, 6-9=-78/1272

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=174, 13=191,
- 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.



Structural wood sheathing directly applied or 3-0-14 oc purlins,

3-11, 5-11

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

Scale = 1:55.4



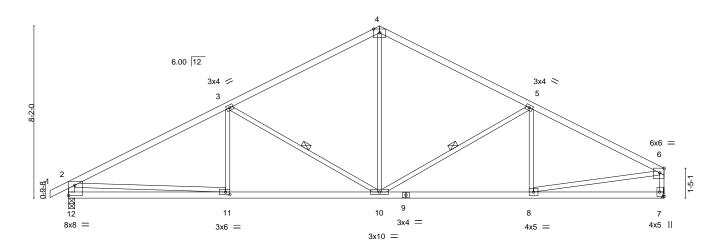
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087971 AS NOTED ON PLANS REVIE 400423 E2 Common DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:25 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-7auUBeVr5fbT34o0el\_TO9NYzXrNcjKKBynGhoywC9a 21-11-0-10-8 08/14/2020 7-6-9 7-2-8 7-2-6 6-3-8 Scale = 1:54.6

5x7 =



	7-6-9	7-2-8	7-2-6	6-3-8
Plate Offsets (X,Y)	[6:0-2-8,Edge], [7:Edge,0-2-8], [11:0-2	-8,0-1-8], [12:Edge,0-5-13]		
LOADING (psf)	SPACING- 2-0-0	CSI. DE	FL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0 TCDL 10.0 BCLL 0.0 *	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	BC 0.55 Ver	t(LL) -0.09 10-11 >999 360 t(CT) -0.18 10-11 >999 240 z(CT) 0.05 7 n/a n/a	MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014		nd(LL) 0.06 10-11 >999 240	Weight: 107 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

14-9-0

LUMBER-

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

2x3 SPF No.2 \*Except\*

2-12: 2x4 SPF 2100F 1.8E

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

Max Horz 12=142(LC 5)

Max Uplift 12=-183(LC 8), 7=-150(LC 9) Max Grav 12=1332(LC 1), 7=1258(LC 1)

7-6-9

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

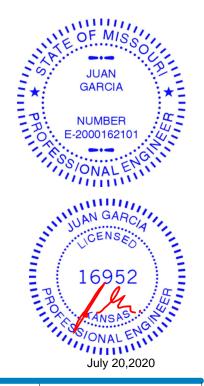
 $2\text{-}3\text{=-}2015/252,\ 3\text{-}4\text{=-}1409/221,\ 4\text{-}5\text{=-}1408/229,\ 5\text{-}6\text{=-}1771/217,\ 2\text{-}12\text{=-}1258/224,}$ TOP CHORD 6-7=-1199/179

**BOT CHORD** 11-12=-295/642, 10-11=-256/1700, 8-10=-143/1513

3-10=-677/238, 4-10=-49/689, 5-10=-492/207, 2-11=0/1060, 6-8=-112/1425 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) The Fabrication Tolerance at joint 2 = 2%
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 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.



Structural wood sheathing directly applied or 3-6-8 oc purlins,

3-10, 5-10

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

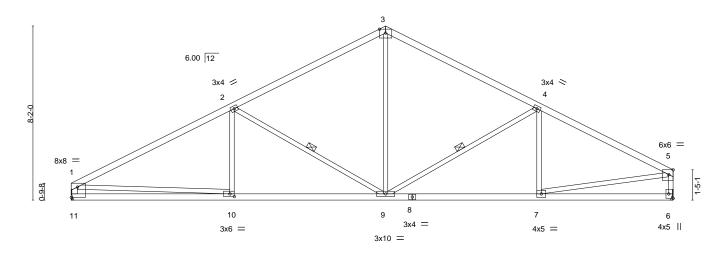
except end verticals.

1 Row at midpt



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087972 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400423 E3 Common DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:26 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-bnSsO\_WTsyjKhENCC?VixNwhPxBXL9ZTQcWpDFywC9Z 21-11-7 28-2-14 08/14/2020 7-6-9 7-2-8 7-2-6 6-3-8 5x7 = Scale = 1:54.1



DI / 0//	. ()()()	[4 = 1	E 1 1 10 E 1	0.0.01.040.0.0	7 2 0			, , ,			000	
Plate Offs	sets (X,Y)	[1:Edge,0-5-13], [5:0-2-8	<u>,Eage], [6:Eag</u>	e,0-2-8], [10:0-2	<u>2-8,0-1-8</u>							
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
	· ·				74			( /			_	
TCLL	25.0	Plate Grip DOL	1.15	TC 0	.74	Vert(LL)	-0.09	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0	.55	Vert(CT)	-0.19	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0	.49	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-S	;	Wind(LL)	0.05	9-10	>999	240	Weight: 106 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

21-11-7

except end verticals.

1 Row at midpt

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

2-9, 4-9

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

LUMBER-

REACTIONS.

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

1-11: 2x4 SPF No.2

(size) 11=Mechanical, 6=Mechanical

Max Horz 11=113(LC 7)

Max Uplift 11=-17(LC 8), 6=-11(LC 9) Max Grav 11=1260(LC 1), 6=1260(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-2020/42, 2-3=-1413/69, 3-4=-1411/74, 4-5=-1774/35, 1-11=-1184/57, TOP CHORD

5-6=-1200/41

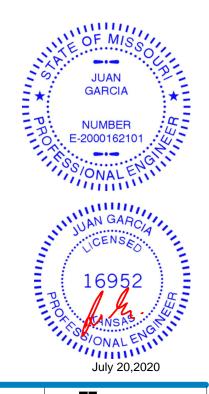
**BOT CHORD** 10-11=-96/480, 9-10=-42/1713, 7-9=0/1515

WEBS 2-9=-690/115, 3-9=0/698, 4-9=-492/108, 1-10=0/1239, 5-7=0/1428

## 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



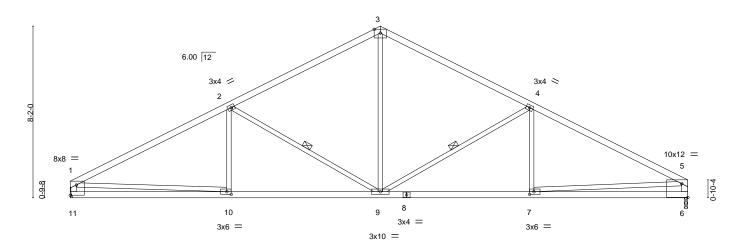
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087973 AS NOTED ON PLANS REVIE E4 400423 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:27 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-3z0EcKX5dGrBJNyPmj1xTaSrdKXW4c9cfGGMmhywC9Y 21-11-7 29-4-8 08/14/2020 7-6-10 7-2-6 7-2-7 Scale = 1:54.8

5x7 =



			7-2-7	·	7-5-1	
SPACING- 2-0-0	CSI.	DEFL.	in (loc)	I/defl L/d	PLATES	GRIP
Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.	.10 9-10	>999 360	MT20	197/144
Lumber DOL 1.15	BC 0.57	Vert(CT) -0.	.21 7-9	>999 240		
Rep Stress Incr YES	WB 0.47	Horz(CT) 0	.05 6	n/a n/a		
Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0	.07 9-10	>999 240	Weight: 109 lb	FT = 10%
	Edge,0-5-13], [5:Edge,0-7-13], [7:0-2       SPACING-     2-0-0       Plate Grip DOL     1.15       Lumber DOL     1.15       Rep Stress Incr     YES	SPACING-         2-0-0         CSI.           Plate Grip DOL         1.15         TC         0.77           Lumber DOL         1.15         BC         0.57           Rep Stress Incr         YES         WB         0.47	Edge,0-5-13], [5:Edge,0-7-13], [7:0-2-8,0-1-8]           SPACING-         2-0-0         CSI.         DEFL.           Plate Grip DOL         1.15         TC         0.77         Vert(LL)         -0           Lumber DOL         1.15         BC         0.57         Vert(CT)         -0           Rep Stress Incr         YES         WB         0.47         Horz(CT)         0	Edge,0-5-13], [5:Edge,0-7-13], [7:0-2-8,0-1-8], [10:0-2-8,0-1-8]           SPACING-         2-0-0         CSI.         DEFL.         in (loc)           Plate Grip DOL         1.15         TC 0.77         Vert(LL) -0.10 9-10           Lumber DOL         1.15         BC 0.57         Vert(CT) -0.21 7-9           Rep Stress Incr         YES         WB 0.47         Horz(CT) 0.05 6	Edge,0-5-13], [5:Edge,0-7-13], [7:0-2-8,0-1-8], [10:0-2-8,0-1-8]           SPACING-         2-0-0         CSI.         DEFL.         in (loc)         l/defl         L/d           Plate Grip DOL         1.15         TC         0.77         Vert(LL)         -0.10         9-10         >999         360           Lumber DOL         1.15         BC         0.57         Vert(CT)         -0.21         7-9         >999         240           Rep Stress Incr         YES         WB         0.47         Horz(CT)         0.05         6         n/a         n/a	Edge,0-5-13], [5:Edge,0-7-13], [7:0-2-8,0-1-8], [10:0-2-8,0-1-8]           SPACING-         2-0-0         CSI.         DEFL.         in (loc)         I/defl         L/d         PLATES           Plate Grip DOL         1.15         TC         0.77         Vert(LL)         -0.10         9-10         >999         360         MT20           Lumber DOL         1.15         BC         0.57         Vert(CT)         -0.21         7-9         >999         240           Rep Stress Incr         YES         WB         0.47         Horz(CT)         0.05         6         n/a         n/a

**BRACING-**TOP CHORD

**WEBS** 

**BOT CHORD** 

14-9-0

LUMBER-

REACTIONS.

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

1-11,5-6: 2x4 SPF No.2

(size) 11=Mechanical, 6=0-2-0 Max Horz 11=117(LC 7)

Max Uplift 11=-162(LC 8), 6=-161(LC 9) Max Grav 11=1309(LC 1), 6=1309(LC 1)

7-6-10

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

1-2=-2116/258, 2-3=-1515/236, 3-4=-1515/237, 4-5=-2090/255, 1-11=-1233/202, TOP CHORD

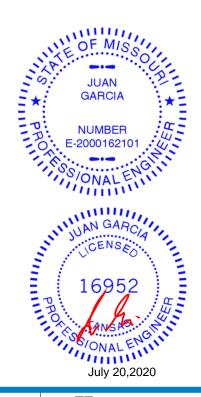
5-6=-1234/200

**BOT CHORD** 10-11=-209/487, 9-10=-263/1798, 7-9=-152/1778, 6-7=-93/419 2-9=-686/242, 3-9=-59/795, 4-9=-665/238, 1-10=-57/1315, 5-7=-68/1364

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) Bearing capacity is increased by the plate at joint(s) 6. Plate must be within 1/4 in of bearing surface.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=162, 6=161.
- 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.



29-4-8

Structural wood sheathing directly applied, except end verticals.

2-9, 4-9

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

1 Row at midpt

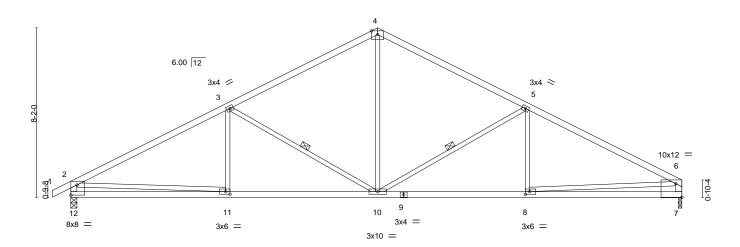
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087974 AS NOTED ON PLANS REVIE 400423 E5 Common DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:28 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-X9acpgXjOaz2wXWbKQYA0o?1Bkspp3Pmtw?wl7ywC9X 29-4-8 21-11-8 -0-10-8 0-10-8 08/14/2020 7-6-9 7-2-8 7-2-8 7-5-0

5x7 =



		7-6-9			7-2-8		7	-2-8		ı	7-5-0	<u> </u>
Plate Offse	ets (X,Y)	[6:Edge,0-7-13], [8:0-2-8	<u>,0-1-8], [11:0</u>	)-2-8,0-1-8], [12	2:Edge,0-5-1	[3]						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.10	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.21	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix	<-S	Wind(LL)	0.07	8-10	>999	240	Weight: 111 lb	FT = 10%

**BRACING-**TOP CHORD

**BOT CHORD** 

**WEBS** 

21-11-8

except end verticals.

1 Row at midpt

14-9-0

LUMBER-

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

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

2-12: 2x4 SPF 2400F 2.0E, 6-7: 2x4 SPF No.2

7-6-9

REACTIONS. (size) 12=0-3-8, 7=0-2-0

Max Horz 12=128(LC 12)

Max Uplift 12=-186(LC 8), 7=-161(LC 9) Max Grav 12=1381(LC 1), 7=1307(LC 1)

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

2-3=-2111/258, 3-4=-1511/235, 4-5=-1512/236, 5-6=-2088/255, 2-12=-1307/226, TOP CHORD

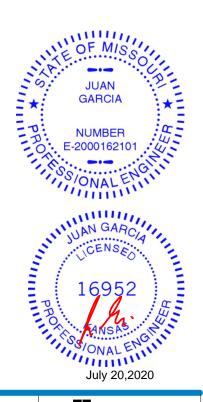
6-7=-1233/200

**BOT CHORD** 11-12=-295/656, 10-11=-259/1785, 8-10=-152/1775, 7-8=-93/419

WEBS 3-10=-673/237, 4-10=-57/786, 5-10=-665/238, 2-11=-6/1132, 6-8=-67/1362

## 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) The Fabrication Tolerance at joint 2 = 2%
- 4) Bearing capacity is increased by the plate at joint(s) 7. Plate must be within 1/4 in of bearing surface.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=186, 7=161.
- 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.



29-4-8

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

3-10, 5-10

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

Scale = 1:55.4

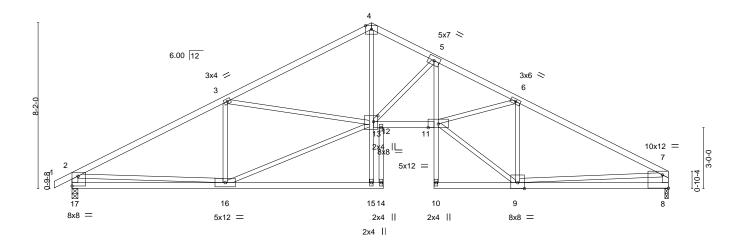
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



**RELEASE FOR** Job Truss Truss Type **CONSTRUCTION** Lot 44 HT 142087975 AS NOTED ON PLANS REVIE 400423 E6 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:29 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-?M8?10YL8t5vYh5nt73PZ?Y9d88tYSCv6alTqaywC9W 08/15/20207-10-0 0-7-0 2-6-0 21-11-7 14-9-0 -0-10-8 0-10-8 7-6-9 7-2-8 4-1 7-5-1

5x7 =



		7-6-9	7-2-8	0-7-0 2-6-0	4-1-7	7-5-1	1
Plate Off	fsets (X,Y)	[7:Edge,0-7-13], [13:0-2-8,0-3-8], [	17:Edge,0-5-13]				
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc) I/defl	L/d <b>PLATES</b>	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL) -0.21	10 >999	360 MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.37	10 >937	240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.75	Horz(CT) 0.22	8 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.13	11 >999	240 Weight: 128 II	b FT = 10%

15-4-0 17-10-0

**BRACING-**

TOP CHORD

**BOT CHORD** 

21-11-7

Structural wood sheathing directly applied, except end verticals.

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

14-9-0

LUMBER-

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

5-10: 2x3 SPF No.2

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

2-17: 2x4 SPF 2100F 1.8E, 7-8: 2x4 SPF No.2

REACTIONS. (size) 17=0-3-8, 8=0-2-0

Max Horz 17=128(LC 8)

Max Uplift 17=-186(LC 8), 8=-161(LC 9) Max Grav 17=1381(LC 1), 8=1307(LC 1)

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

2-3=-2114/257, 3-4=-2331/248, 4-5=-2264/282, 5-6=-3277/293, 6-7=-2066/246,

2-17=-1308/226, 7-8=-1230/201

BOT CHORD 16-17=-296/647, 12-13=-127/2844, 11-12=-128/2846, 5-11=-115/1173, 8-9=-111/461 **WEBS** 

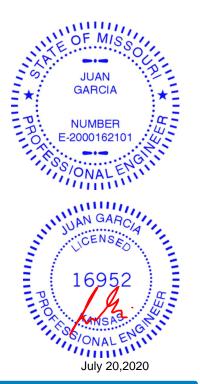
3-16=-665/201, 3-13=-48/318, 13-15=0/394, 4-13=-101/1605, 5-13=-1215/198,

9-11=-176/2189, 6-11=-46/1139, 6-9=-1336/196, 2-16=-11/1145, 7-9=-64/1294,

13-16=-283/1921

## 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) The Fabrication Tolerance at joint 2 = 2%
- 4) Bearing capacity is increased by the plate at joint(s) 8. Plate must be within 1/4 in of bearing surface.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=186 8=161
- 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.



Scale = 1:56.8



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 44 HT 142087976 AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 400423 E7 Roof Special Job Reference (optional) LEE'S SUMMIT, MISSOURI ID:Lek3CAANj\_gYbKvtCQI 8.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 15:57:22 2020 Page 1 mQzKvNM-IFNBFPHTyJtNoEm?q7znqoKSUe0xW0SRi8K9xJyw7LB Wheeler Lumber, Waverly, KS 66871, Mitek -0-10-8 2-9-8 7-6-9 12-10-0 14-9-0 **08/1/4/2020** 21-11-7 29-2-14

7-2-7

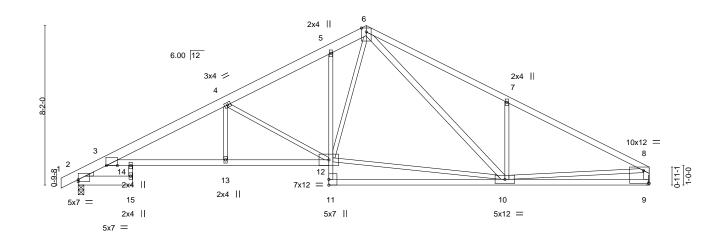
7-3-7

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

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

Scale = 1:59.0

5-3-7



	2-9-8 2-9-8	7-6-9 4-9-1	12-10-0 5-3-7	21-11-7 9-1-7	29-2-14 7-3-7	4
Plate Offsets (X,Y)		, [3:0-6-12,0-0-0], [8:Ed		5-1-7	1-0-1	
LOADING (psf)	SPACIN		CSI.	DEFL. in (loc) I/defl	L/d PLATES	GRIP
TCLL 25.0 TCDL 10.0	Plate G Lumber	DOL 1.15	TC 0.69 BC 0.67	Vert(LL) -0.22 13-14 >999 Vert(CT) -0.46 10-11 >758	360 MT20 240	197/144
BCLL 0.0 * BCDL 10.0		ess Incr YES RC2018/TPI2014	WB 1.00 Matrix-S	Horz(CT) 0.22 9 n/a Wind(LL) 0.12 13-14 >999	n/a 240 Weight: 143 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

6-8: 2x4 SPF No.2

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

0-10-8

2-9-8

4-9-1

2-15: 2x6 SPF No.2, 3-12: 2x4 SPF 2100F 1.8E, 5-11: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\*

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

WEDGE

Left: 2x3 SPF No.2

REACTIONS. (lb/size) 2=1375/0-3-8, 9=1301/Mechanical

Max Horz 2=105(LC 7)

Max Uplift 2=-27(LC 8), 9=-15(LC 9)

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

TOP CHORD 2-3=-824/41, 3-4=-2752/50, 4-5=-1882/54, 5-6=-1721/97, 6-7=-2051/146, 7-8=-2063/33,

8-9=-1233/50

**BOT CHORD** 3-14=-47/2473, 13-14=-47/2473, 12-13=-47/2473, 9-10=-36/351

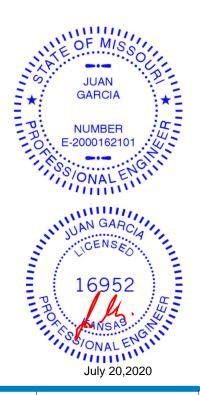
WFBS 4-13=0/325, 4-12=-1056/104, 10-12=0/1209, 6-12=-48/839, 6-10=-119/679,

7-10=-535/186. 8-10=0/1410

## 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.
- 5) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2 and 15 lb uplift at
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANS/TPI1 Qu
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



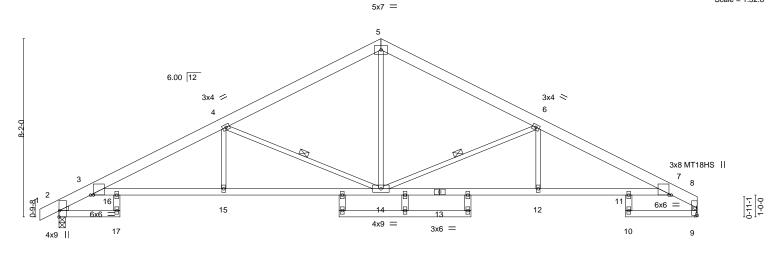
**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087977 AS NOTED ON PLANS REVIE 400423 E8 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:31 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-xkFlSiacgVLcn?FA?Y5teQda9ysq?N5CZuEavSywC9U 25-11-8 29-2-14 08/14/2020

7-2-7

4-0-1 Scale = 1:52.8

3-3-6



4-9-1		7-2-7			7-2-7		4-0	l-1 <sup>1</sup> 3-	3-6
2:Edge,0-0-5], [3:0-1-9,0	-0-1], [7:0-1-5	0-0-1]							
SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.24 15-16	>999	360	MT20	197/144
Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.45 15-16	>769	240	MT18HS	197/144
Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.42 9	n/a	n/a		
Code IRC2018/TP	12014	Matri	x-S	Wind(LL)	0.14 15-16	>999	240	Weight: 151	lb FT = 10%
	4-9-1 2:Edge,0-0-5], [3:0-1-9,0 SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	4-9-1 2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5, SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	4-9-1 7-2-7 2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5,0-0-1]  SPACING- 2-0-0 CSI. Plate Grip DOL 1.15 TC Lumber DOL 1.15 BC Rep Stress Incr YES WB	4-9-1 7-2-7 2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5,0-0-1]  SPACING- 2-0-0 CSI.  Plate Grip DOL 1.15 TC 0.61  Lumber DOL 1.15 BC 0.67  Rep Stress Incr YES WB 0.66	4-9-1 7-2-7 2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5,0-0-1]  SPACING- 2-0-0 CSI. DEFL. Plate Grip DOL 1.15 TC 0.61 Vert(LL) Lumber DOL 1.15 BC 0.67 Vert(CT) Rep Stress Incr YES WB 0.66 Horz(CT)	4-9-1         7-2-7         7-2-7           2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5,0-0-1]         SPACING-         2-0-0         CSI.         DEFL.         in (loc)           Plate Grip DOL         1.15         TC 0.61         Vert(LL) -0.24 15-16         Lumber DOL         1.15         BC 0.67         Vert(CT) -0.45 15-16         Rep Stress Incr         YES         WB 0.66         Horz(CT) 0.42 9         9	4-9-1 7-2-7 7-2-7 2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5,0-0-1]  SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl Plate Grip DOL 1.15 TC 0.61 Vert(LL) -0.24 15-16 >999 Lumber DOL 1.15 BC 0.67 Vert(CT) -0.45 15-16 >769 Rep Stress Incr YES WB 0.66 Horz(CT) 0.42 9 n/a	4-9-1 7-2-7 7-2-7 4-0 2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5,0-0-1]  SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl L/d Plate Grip DOL 1.15 TC 0.61 Vert(LL) -0.24 15-16 >999 360 Lumber DOL 1.15 BC 0.67 Vert(CT) -0.45 15-16 >769 240 Rep Stress Incr YES WB 0.66 Horz(CT) 0.42 9 n/a n/a	4-9-1 7-2-7 7-2-7 4-0-1 3- 2:Edge,0-0-5], [3:0-1-9,0-0-1], [7:0-1-5,0-0-1]  SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl L/d PLATES Plate Grip DOL 1.15 TC 0.61 Vert(LL) -0.24 15-16 >999 360 MT20 Lumber DOL 1.15 BC 0.67 Vert(CT) -0.45 15-16 >769 240 MT18HS Rep Stress Incr YES WB 0.66 Horz(CT) 0.42 9 n/a n/a

**BRACING-**LUMBER-

TOP CHORD TOP CHORD 2x6 SP DSS \*Except\* Structural wood sheathing directly applied or 3-8-11 oc purlins,

5-8: 2x6 SP 2400F 2.0E except end verticals.

7-2-7

**BOT CHORD** 2x4 SPF No.2 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 3-13,7-13: 2x4 SPF 2100F 1.8E 10-0-0 oc bracing: 12-14

2x3 SPF No.2 \*Except\* **WEBS** 1 Row at midpt

**WEBS** 4-14, 6-14 16-17,10-11,18-20,19-21,22-23: 2x4 SPF No.2

WEDGE Left: 2x3 SPF No.2

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

Max Horz 2=101(LC 7)

Max Uplift 2=-27(LC 8), 9=-15(LC 9) Max Grav 2=1377(LC 1), 9=1303(LC 1)

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

TOP CHORD 2-3=-817/42, 3-4=-2750/55, 4-5=-1730/48, 5-6=-1727/59, 6-7=-2701/31, 7-8=-474/14,

8-9=-1291/36

**BOT CHORD** 3-16=-54/2473, 15-16=-54/2473, 14-15=-54/2473, 12-14=0/2417, 11-12=0/2417,

7-11=0/2417

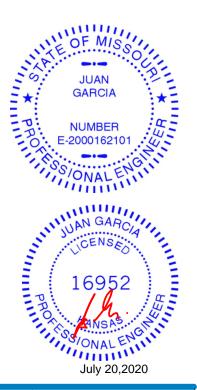
2-9-8

4-9-1

WEBS 4-15=0/328, 4-14=-1146/135, 5-14=0/1024, 6-14=-1084/118, 6-12=0/320

## 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) All plates are MT20 plates unless otherwise indicated.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

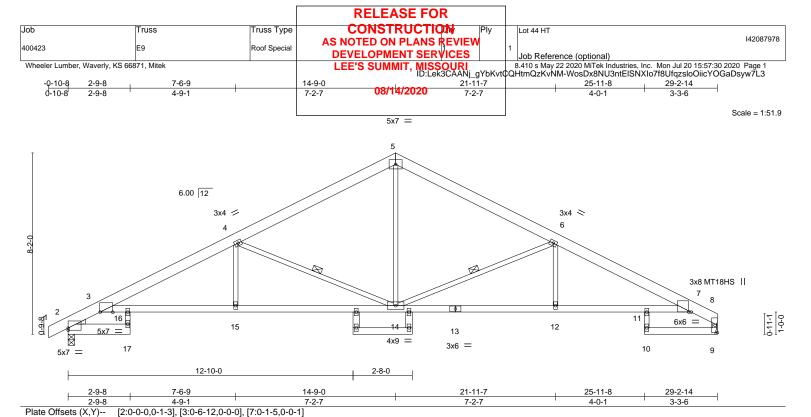


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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





LOADING (psf)         SPACING-         2-0-0           TCLL         25.0         Plate Grip DOL         1.15	CSI. DEFL. in (loc) I/defl L/d TC 0.60 Vert(LL) -0.24 15-16 >999 360	<b>PLATES GRIP</b> MT20 197/144
TCDL 10.0 Lumber DOL 1.15	BC 0.67 Vert(CT) -0.44 15-16 >793 240	MT18HS 197/144
BCLL 0.0 * Rep Stress Incr YES BCDL 10.0 Code IRC2018/TPI2014	WB 0.66 Horz(CT) 0.39 9 n/a n/a Matrix-S Wind(LL) 0.19 15-16 >999 240	Weight: 147 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E

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

2-17: 2x6 SPF No.2, 9-10,18-19: 2x4 SPF No.2

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

18-20,19-21: 2x4 SPF No.2

WEDGE

Left: 2x3 SPF No.2

REACTIONS. (lb/size) 2=1377/0-3-8, 9=1303/Mechanical

Max Horz 2=141(LC 12)

Max Uplift 2=-187(LC 8), 9=-161(LC 9)

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

TOP CHORD 2-3=-825/149, 3-4=-2750/354, 4-5=-1729/224, 5-6=-1727/242, 6-7=-2701/311,

7-8=-474/66, 8-9=-1290/185

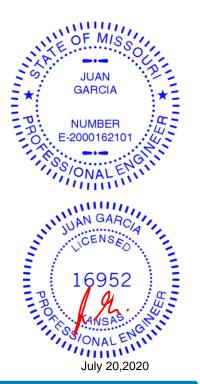
**BOT CHORD** 3-16=-360/2471, 15-16=-360/2471, 14-15=-360/2471, 13-14=-208/2417, 12-13=-208/2417,

11-12=-208/2417, 7-11=-208/2417

WEBS 4-15=0/332, 4-14=-1143/326, 5-14=-63/1022, 6-14=-1084/293, 6-12=0/320

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 2 and 161 lb uplift at joint 9.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

4-14, 6-14

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

1 Row at midpt



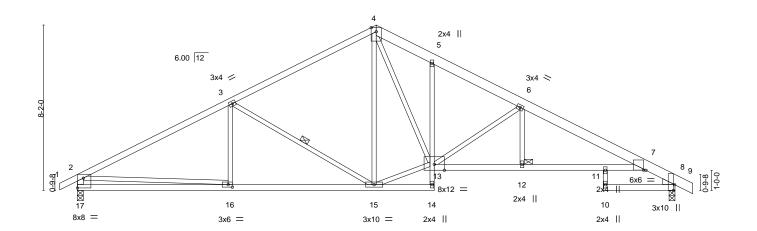
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087979 AS NOTED ON PLANS REVIE 400423 E10 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:22 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-i?DLZdTyokDuCc3Rz9RmmXl2BJnpPlytV\_Yb4UywC9d 25-11-8 30-4-8 0-10-8 08/14/2020-6 2-10-6 29-6-0 21-11-7 -0-10-8 0-10-8 7-6-9 7-2-8 4-4 4-0-1 3-6-8

6x8



		7-0-9	14-9-0	17-7-6	21-11-7	23-11-6	29-0-0	
		7-6-9	7-2-8	2-10-6	4-4-1	4-0-1	3-6-8	ı
Plate Offs	sets (X,Y)	[7:0-1-5,0-0-1], [8:0-3-8,Edge], [16:0	-2-8,0-1-8], [17:Edge,0-5-13]					
LOADING	c (nof)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
LUADIN	(psi)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/u	FLATES	GKIF
TCLL	25.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL)	-0.22 11-12 >999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.67	Vert(CT)	-0.42 11-12 >831	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.72	Horz(CT)	0.26 8 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.16 11-12 >999	240	Weight: 140 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

**JOINTS** 

14-0-0

LUMBER-
---------

TOP CHORD 2x4 SPF No.2 \*Except\* 4-9: 2x6 SP DSS

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

5-14: 2x3 SPF No.2, 7-13: 2x4 SPF 2100F 1.8E **WEBS** 2x3 SPF No.2 \*Except\*

2-17: 2x4 SPF 2400F 2.0E

WEDGE

Right: 2x4 SPF No.2

REACTIONS. (size) 17=0-3-8, 8=0-3-8 Max Horz 17=-132(LC 9)

> Max Uplift 17=-186(LC 8), 8=-186(LC 9) Max Grav 17=1386(LC 1), 8=1386(LC 1)

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

TOP CHORD 2-3=-2120/257, 3-4=-1526/236, 4-5=-1880/306, 5-6=-2016/245, 6-7=-2778/301,

7-8=-810/129, 2-17=-1312/227

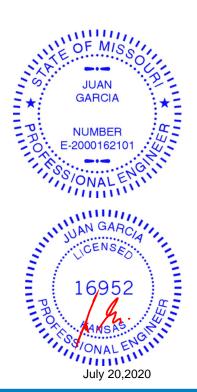
16-17=-297/655, 15-16=-254/1793, 12-13=-162/2500, 11-12=-162/2500, 7-11=-162/2500 **BOT CHORD** 

**WEBS** 3-15=-655/228, 13-15=-51/1272, 4-13=-177/1111, 6-13=-1006/223, 6-12=0/307,

2-16=-8/1142

## 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) The Fabrication Tolerance at joint 2 = 2%
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=186 8=186
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-5-2 oc purlins,

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

3-15

except end verticals.

1 Row at midpt

1 Brace at Jt(s): 12

10-0-0 oc bracing: 12-13, 11-12

Scale = 1:56.9



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



> 14-9-0 14-9-0

142087980

 DEVELOPMENT SERVICES
 Job Reference (optional)

 LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:24 2020 Page 1

 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-eOK6\_IUDKLTcSwDq5aTEsyqR87YqtF3Ayl1i9MywC9b

 08/14//2020
 21-11-7 / 7-6-9
 30-4-8 / 0-10-8 /

5x7 || Scale = 1:55.2

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

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

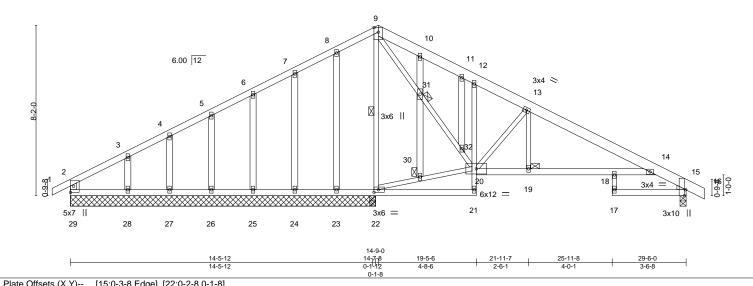
10-0-0 oc bracing: 21-22,20-21,15-17.

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

1 Brace at Jt(s): 19, 30, 31

except end verticals.

1 Row at midpt



Tiato Offooto (X,T)	[10.0 0 0,Eugo], [EE.0 E 0,0 1 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 0.40	Vert(LL) -0.08 18 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.18 18-19 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.08 15 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 18 >999 240	Weight: 154 lb FT = 10%

**BOT CHORD** 

**WEBS** 

JOINTS

 LUMBER BRACING 

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

9-16: 2x6 SPF No.2 2x4 SPF No.2 \*Except\* 12-21: 2x3 SPF No.2 2x3 SPF No.2 \*Except\*

WEBS 2x3 SPF No.2 \*Except\* 2-29: 2x4 SPF No.2

OTHERS 2x4 SPF No.2 WEDGE Right: 2x3 SPF No.2

**BOT CHORD** 

REACTIONS. All bearings 14-7-8 except (jt=length) 15=0-3-8.

(lb) - Max Horz 29=-132(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 26, 27 except 29=-292(LC 22), 15=-104(LC 9), 22=-131(LC 9), 28=-121(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 29, 23, 24, 25, 26, 27 except 15=488(LC 1), 22=1238(LC 1), 22=1238(LC 1), 28=395(LC 1)

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

TOP CHORD 2-3=-145/587, 3-4=-76/529, 4-5=-37/548, 5-6=-8/544, 6-7=0/543, 7-8=0/550,

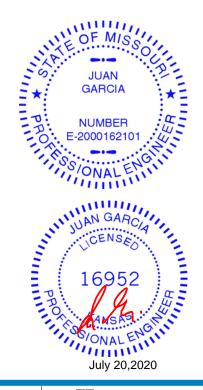
8-9=0/534, 13-14=-391/99, 2-29=-35/261

BOT CHORD 28-29-463/243, 27-28-463/243, 26-27-463/243, 25-26-463/243, 24-25-463/243, 23-24-463/243, 22-23-463/243, 19-20-14/321, 18-19-14/321, 14-18-14/321 WEBS 9-31-178/655, 31-32-166/613, 20-32-174/650, 22-30-500/240, 20-30-480/230,

13-20=-648/168, 13-19=0/256, 3-28=-268/127, 9-22=-966/106

## 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 studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 25, 26, 27 except (jt=lb) 29=292, 15=104, 22=131, 28=121.
- 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.



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



**RELEASE FOR** Job Truss Truss Type **CONSTRUCTION** Lot 44 HT 142087981 AS NOTED ON PLANS REVIE 400423 G1 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:33 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-u7NVsNbsC6bK1IPY6z7Ljriv4IYfTN7V1CjhzLywC9S 16-0-8 0-10-8 15-2-0 08/14/2020 5-4-8 2-2-8 4-0-8 3-6-8 Scale = 1:30.4 4x5 ||

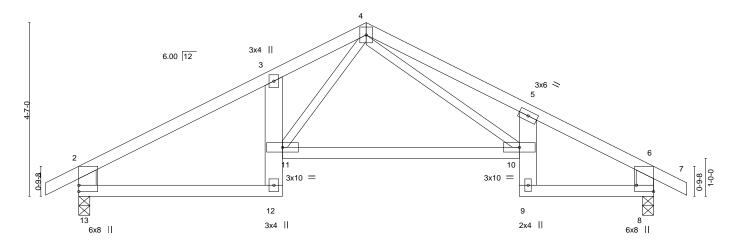


Plate Offsets (X,Y)	[8:Edge,0-5-8]		6-3-0	3-0-0	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.65 BC 0.65 WB 0.31 Matrix-S	DEFL.         in (loc)         l/defl           Vert(LL)         -0.11 10-11         >999           Vert(CT)         -0.25 10-11         >701           Horz(CT)         0.11         8         n/a           Wind(LL)         0.06 10-11         >999		<b>GRIP</b> 97/144 FT = 10%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

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

3-12,5-9: 2x6 SPF No.2 2x6 SPF No.2 \*Except\*

**WEBS** 4-11,4-10: 2x3 SPF No.2

> (size) 13=0-3-8, 8=0-3-8 Max Horz 13=-77(LC 6)

Max Uplift 13=-107(LC 8), 8=-107(LC 9) Max Grav 13=739(LC 1), 8=739(LC 1)

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

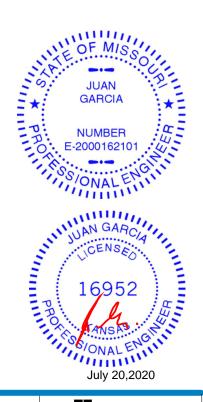
TOP CHORD 2-3=-883/117, 3-4=-1211/208, 4-5=-1675/258, 5-6=-845/113, 2-13=-674/141, 6-8=-667/122

**BOT CHORD** 12-13=-87/689, 3-11=-345/158, 10-11=-26/725, 5-10=-493/171, 8-9=-48/650

**WEBS** 4-11=-115/561, 4-10=-177/901

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=107, 8=107.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

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



**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION 142087982 Common Supported Gable 400423 G2 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:34 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-MJxu4jcUzQjBeS\_lghfaG3FDv91gCuXeGsSEWnywC9R <del>-0-10-8</del> 0-10-8 7-7-0 7-7-0 15-2-0 08/14/2020 0-10-8 Scale = 1:30.2 4x5 =

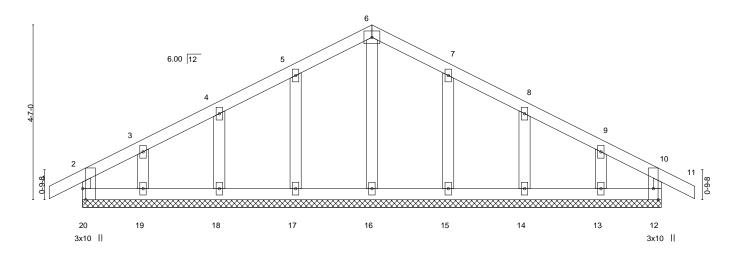


Plate Offsets (X,Y)--[20:0-3-8,Edge] SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) -0.00 120 MT20 197/144 11 n/r **TCDL** 10.0 Lumber DOL 1.15 ВС 0.02 Vert(CT) -0.00 11 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 12 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-R Weight: 58 lb

LUMBER-**BRACING-**

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

REACTIONS. All bearings 15-2-0.

Max Horz 20=-75(LC 6) (lb) -

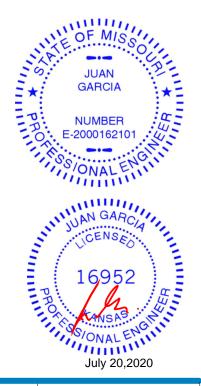
Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13 All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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.

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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and





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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



			RELEASE FUR				
Job		Truss Type	CONSTRUCTION PI	,	Lot 44 HT		
400423	 ⊔1	Common Sur	ported Gable DEVELOPMENT SERVICES	1			142087983
100423	111	Common Sup			Job Reference (optional)		
Wheeler Lumber, Wave	erly, KS 66871		LEE'S SUMMIT, MISSOUR\$.410	0 s May	22 2020 MiTek Industries, Inc. Mon Jul 20 10	0:28:35 2020	Page 1
			ID:Lek3CAANj_gYbKvtCQ	QHtmQzl	KvNM-qVVGH3d6kjr2GcZxEOApoGoOfZNvxl	∟?oUWCn2Dy	wC9Q
0-10-8		5-8-0	08/14/2020		11-4-0	12-2-8	
0-10-8		5-8-0	00/1-1/2020		5-8-0	0-10-8	
			1v5 —			Sc	cale = 1:23.7

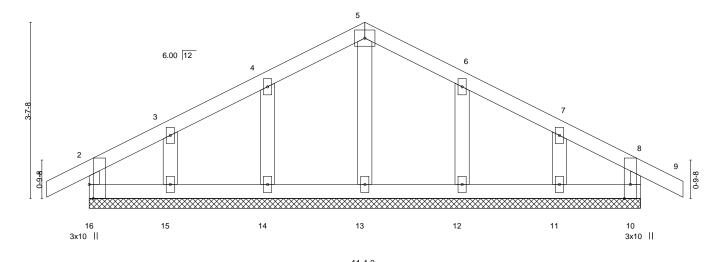


Plate Off	Plate Offsets (X,Y) [16:0-3-8,Edge]										
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP							
TCLL	25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00 9 n/r 120 MT20 197/144							
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00 9 n/r 120							
BCLL	0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 10 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Weight: 41 lb FT = 10%							

11-4-0

LUMBER-

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

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

REACTIONS. All bearings 11-4-0.

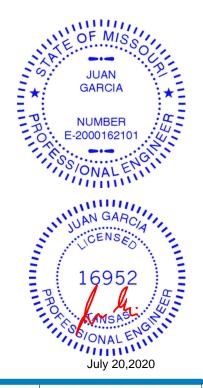
(lb) -Max Horz 16=-63(LC 6)

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

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 arip 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) 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 referenced standard ANSI/TPI 1.

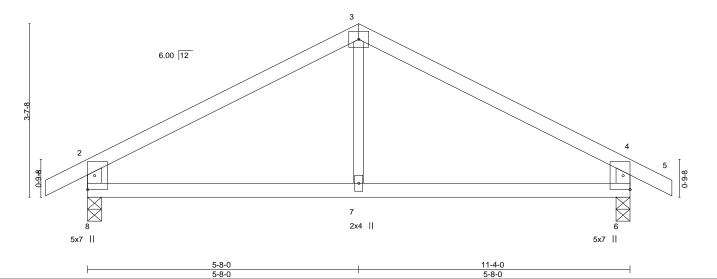




**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087984 AS NOTED ON PLANS REVIE 400423 H2 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:36 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-li3eVPekV1\_vum87o6h2LUKUBzgvgnZxjAxLagywC9P -0-10-8 0-10-8 11-4-0 12-2-8 08/14/2020 5-8-0 5-8-0 0-10-8 Scale: 1/2"=1'

4x5 =



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI **PLATES** GRIP (loc) L/d TCLL 25.0 Plate Grip DOL Vert(LL) -0.02 >999 197/144 1.15 TC 0.40 6-7 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.23 Vert(CT) -0.05 6-7 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.07 Horz(CT) 0.01 6 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Wind(LL) 0.01 7-8 >999 240 Weight: 33 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8 Max Horz 8=-63(LC 6)

Max Uplift 8=-84(LC 9), 6=-84(LC 9) Max Grav 8=568(LC 1), 6=568(LC 1)

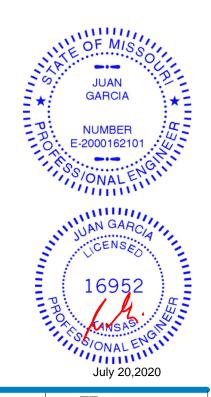
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-588/85, 3-4=-588/85, 2-8=-510/123, 4-6=-510/123 TOP CHORD

**BOT CHORD** 7-8=-12/438, 6-7=-12/438

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

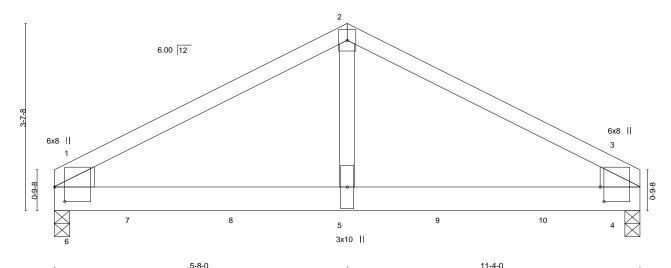


Structural wood sheathing directly applied or 6-0-0 oc purlins,

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



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142087985 AS NOTED ON PLANS, REVIE 400423 НЗ Common Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Z | | Job Reference (optional)
LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:37 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-mud0ileNGL6mVwiKLpCHthtgwMyAPA\_5yqhu66ywC9O 5-8-0 08/14/2020 5-8-0 5-8-0 Scale = 1:22.3 4x5



1 1010 01	10010 (71, 1)	[1.0 0 0,0 2 0], [0.0 0 0,0 0	' ',									
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	0.34	Vert(LL)	-0.06	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.10	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-R	Wind(LL)	0.03	5-6	>999	240	Weight: 95 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

Plate Offsets (X Y)--

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x10 SP DSS \*Except\*

2x10 SP DSS \*Except\* 2-5: 2x4 SPF No.2

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

Max Horz 6=-57(LC 25)

Max Uplift 6=-260(LC 8), 4=-145(LC 9) Max Grav 6=3667(LC 1), 4=3531(LC 1)

[1:0-3-6 0-2-6] [3:0-3-6 0-0-14]

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

TOP CHORD 1-2=-3884/198, 2-3=-3884/198, 1-6=-1917/149, 3-4=-1917/151

BOT CHORD 5-6=-123/3384, 4-5=-123/3384

WEBS 2-5=-52/3113

### NOTES

2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.

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

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to
  ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=260, 4=145.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1289 lb down and 182 lb up at 1-6-12, 1240 lb down and 37 lb up at 3-6-12, 1240 lb down and 37 lb up at 5-6-12, and 1240 lb down and 37 lb up at 7-6-12, and 1240 lb down and 37 lb up at 9-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

### Continued on page 2

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

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

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



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

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



Job Truss Truss Type НЗ 400423 Common Girder

Waverly, KS 66871

**RELEASE FOR** CONSTRUCTION

08/14/2020

Lot 44 HT

142087985

AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 2 Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:37 2020 Page 2

ID:Lek3CAANj\_gYbKvtCQHtm QzKvNM-mud0ileNGL6mVwiKLpCHthtgwMyAPA\_5yqhu66ywC90

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Wheeler Lumber,

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

Concentrated Loads (lb)

Vert: 5=-1240(B) 7=-1289(B) 8=-1240(B) 9=-1240(B) 10=-1240(B)



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT Diagonal Hip Girder AS NOTED ON PLANS REVIE 142087986 400423 J1 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:38 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_qYbKvtCQHtmQzKvNM-E4AOw5f?1eEd74HWvWjWQuQrxmLn8iBEAUQSfYywC9N 2-9-3 2-9-3 08/14/2020 1-2-14 Scale = 1:13.8 3x4 || 4 2.83 12 6x8 = 1-3-2 5 2x4 || <sup>6</sup> 2x4 || 3x6

Plate Offs	sets (X,Y)	[3:0-6-11,0-1-14], [7:0-3-0	0,0-0-12]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.06	` <i>6</i>	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.14	6	>433	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.07	6	>891	240	Weight: 17 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SPF No.2

**BOT CHORD** 2x4 SPF No.2 \*Except\* 3-6: 2x3 SPF No.2

**WEBS** 2x6 SPF No.2 \*Except\* 4-5: 2x3 SPF No.2

REACTIONS. (size) 7=0-4-9, 5=Mechanical

Max Horz 7=63(LC 5)

Max Uplift 7=-99(LC 4), 5=-40(LC 8) Max Grav 7=364(LC 1), 5=225(LC 1)

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

TOP CHORD 2-7=-342/112

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 27 lb up at 2-9-8, and 66 lb down and 27 lb up at 2-9-8 on top chord, and 4 lb down and 3 lb up at 2-7-15, and 4 lb down and 3 lb up at 2-7-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

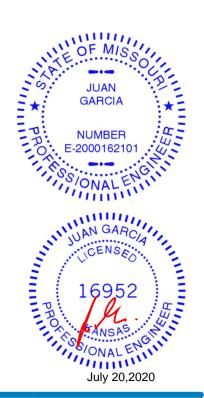
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 6-7=-20, 3-5=-20

Concentrated Loads (lb)

Vert: 6=6(F=3, B=3)



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

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

except end verticals.



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

Design valid for use only with MiTek® cannectors. 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087987 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400423 J2 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:45 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANi\_gYbKvtCQHtmQzlkvNM-XR52OUIONo6dT8KspVL9CNC4cbmEHswGn3dJOeywC9G 08/14/2020 0-10-8 2-0-0 2-0-0 Scale = 1:12.6 4.00 12 2 0-7-8 0-8-0 <sup>6</sup> 2x4 || 3x6 II 4-0-0 Plate Offsets (X,Y)--[3:0-10-4,0-3-0] SPACING-CSI. **PLATES** GRIP LOADING (psf) 2-0-0 DEFL. in (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.16 Vert(LL) -0.01 6 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.15 Vert(CT) -0.03 6 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.01 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-R 0.02 >999 240 Weight: 12 lb 6 **BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SPF No.2

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

3-6: 2x3 SPF No.2

**WEBS** 2x6 SPF No.2

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 7=64(LC 4)

Max Uplift 7=-63(LC 4), 4=-44(LC 8)

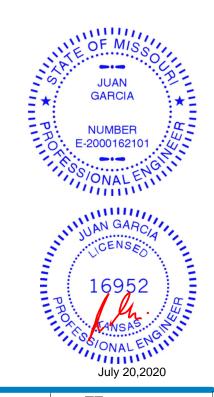
Max Grav 7=267(LC 1), 4=107(LC 1), 5=71(LC 3)

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

TOP CHORD 2-7=-252/75

### NOTES-

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



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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087988 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400423 J3 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:45 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANi\_gYbKvtCQHtmQzlkvNM-XR52OUIONo6dT8KspVL9CNC5wboGHswGn3dJOeywC9G 08/14/2020 1-10-15 1-10-15 0-10-8 Scale = 1:9.1 4.00 12 2 0-10-15 0-7-8 3x6 || 1-10-15

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

1-10-15

LUMBER-

REACTIONS.

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

**WEBS** 2x6 SPF No.2

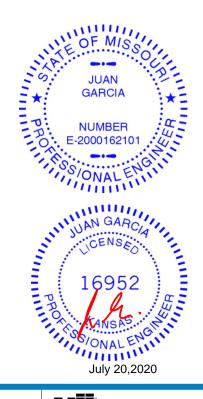
> 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=36(LC 4)

Max Uplift 5=-65(LC 4), 3=-22(LC 8) Max Grav 5=178(LC 1), 3=40(LC 1), 4=28(LC 3)

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

### NOTES-

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



Structural wood sheathing directly applied or 1-10-15 oc purlins,

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087989 AS NOTED ON PLANS REVIE 400423 J4 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:46 2020 Page 1

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-?dfQbql086EU4lv2NCsOlalGX?8v0JAP0jMtx5ywC9F Wheeler Lumber, Waverly, KS 66871

**08/14/2020**2-9-11 0-10-8

Scale = 1:13.9

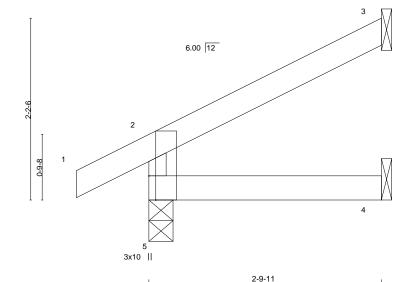


Plate Offse	Plate Offsets (X,Y) [5:0-3-8,Edge]											
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP								
TCLL	25.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL) -0.00 4-5 >999 360 MT20 197/144								
TCDL	10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) -0.01 4-5 >999 240								
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a								
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00 4-5 >999 240 Weight: 8 lb FT = 10%								

2-9-11

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

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

WEBS 2x3 SPF No.2

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

Max Horz 5=63(LC 8)

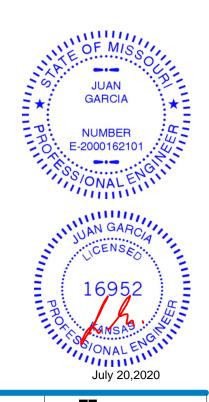
Max Uplift 5=-23(LC 8), 3=-49(LC 8)

Max Grav 5=200(LC 1), 3=78(LC 1), 4=50(LC 3)

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

### NOTES-

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



Structural wood sheathing directly applied or 2-9-11 oc purlins,

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087990 AS NOTED ON PLANS REVIE 400423 J5 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

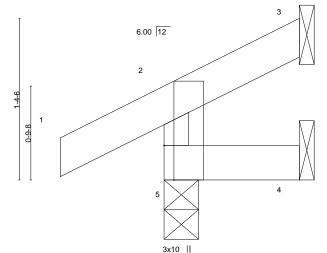
LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:47 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:Lek3CAANj\_gYbKvtCQHtmQzkvNM-TpDooAmevPMLiSTFxvOdHoHRdOTwlmPZFN6QTXywC9E 08/14/2020 0-10-8 1-1-11

Scale = 1:9.7

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

except end verticals.



1-1-11

Plate Off	sets (X,Y)	[5:0-3-8,Edge]									
LOADIN	G (psf)	SPACING- 2-0-0	csi.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL 1.15	TC TC	0.07	Vert(LL)	-0.00	` ź	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	5 BC	0.01	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	S WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix	k-R	Wind(LL)	0.00	5	>999	240	Weight: 4 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** Rigid ceiling directly applied or 10-0-0 oc bracing.

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

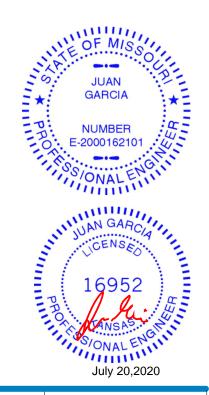
Max Horz 5=34(LC 5)

Max Uplift 5=-23(LC 8), 3=-16(LC 8), 4=-1(LC 5) Max Grav 5=147(LC 1), 3=9(LC 15), 4=18(LC 3)

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

### NOTES-

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





**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION Roof Special Girder AS NOTED ON PLANS REVIE 142087991 400423 J6 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:48 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-x?nA0WnGgjUCKc2RUdvsq?qSxojSUDfiU1rz?zywC9D 08/14/2020 6-11-14 6-11-14 1-4-6 Scale = 1:18.5 3x6 || 3

	3.84 12 8	
3-0-6	6 7	
	9 10 11 5x7    3x4	4

Plate Off	fsets (X,Y)	[4:Edge,0-2-8]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.09	4-5	>937	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.18	4-5	>446	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.04	4-5	>999	240	Weight: 20 lb	FT = 10%

6-11-7

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

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

**WEBS** 2x3 SPF No.2

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

Max Horz 5=126(LC 5)

Max Uplift 4=-79(LC 8), 5=-128(LC 4) Max Grav 4=299(LC 1), 5=419(LC 1)

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

TOP CHORD 2-5=-367/174

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=128
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 15 lb up at 1-4-1, 63 lb down and 16 lb up at 1-10-6, and 95 lb down and 67 lb up at 4-5-8, and 77 lb down and 57 lb up at 4-5-10 on top chord , and 2 lb down and 3 lb up at 1-4-1, 3 lb down and 6 lb up at 1-10-6, and 17 lb down at 4-5-8, and 13 lb down at 4-5-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

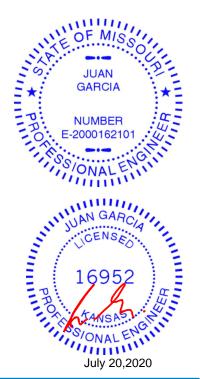
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 8=-1(B) 9=3(B) 10=2(F) 11=-9(F=-2, B=-7)



Structural wood sheathing directly applied or 6-0-0 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. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087992 AS NOTED ON PLANS REVIE 400423 J7 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:48 2020 Page 1

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-x?nA0WnGgjUCKc2RUdvsq?qcOop8UDfiU1rz?zywC9D Wheeler Lumber, Waverly, KS 66871 +08/14/2020 1-2-0 0-10-8 1-2-0 Scale = 1:8.8 5.00 12 2 1-2-6 0-9-15 8-8-0 5

1-2-0

LOADING TCLL	<b>G</b> (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.06	DEFL. Vert(LL)	in -0.00	(loc)	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240	111120	1077111
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 4 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

3x6 ||

LUMBER-

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

**WEBS** 2x3 SPF No.2

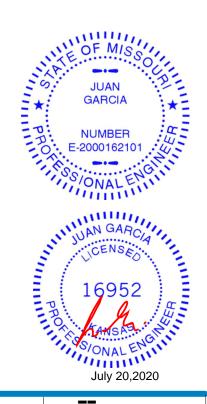
REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=30(LC 5) Max Uplift 5=-37(LC 4), 3=-13(LC 8)

Max Grav 5=148(LC 1), 3=10(LC 1), 4=19(LC 3)

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

### NOTES-

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



Structural wood sheathing directly applied or 1-2-0 oc purlins,

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087993 AS NOTED ON PLANS REVIE 400423 J8 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:49 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzlkvNM-QCLYDsouR1c3xmdd2KQ5MDNmcC8wDgvsihbXXPywC9C -0-10-8 08/14/2020 13 3-6-13 0-10-8 Scale = 1:13.8 5.00 12 1-9-15 2 8-8-0

	3-0-13										
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP						
TCLL	25.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.01 4-5 >999 360	MT20 197/144						
TCDL	10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01 4-5 >999 240							
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 3 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.01 4-5 >999 240	Weight: 10 lb FT = 10%						

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

**WEBS** 2x3 SPF No.2

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

Max Horz 5=66(LC 8)

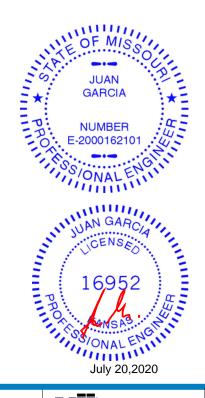
Max Uplift 5=-34(LC 8), 3=-56(LC 8)

Max Grav 5=232(LC 1), 3=105(LC 1), 4=65(LC 3)

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

### NOTES-

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



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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087994 AS NOTED ON PLANS REVIE 400423 J9 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:49 2020 Page 1

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-QCLYDsouR1c3xmdd2KQ5MDNieC6aDgvsihbXXPywC9C Wheeler Lumber, Waverly, KS 66871 -0-10-8 08/14/2020 5-8-0 0-10-8 Scale = 1:19.8 3x4 || 3 5.00 12 0-8-8 2x4 ||

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	0.42	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.08	4-5	>831	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.02	4-5	>999	240	Weight: 17 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

**WEBS** 2x3 SPF No.2

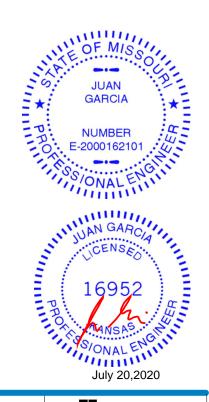
> 5=0-3-8, 4=Mechanical (size) Max Horz 5=125(LC 5) Max Uplift 5=-57(LC 8), 4=-58(LC 8) Max Grav 5=320(LC 1), 4=239(LC 1)

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

TOP CHORD 2-5=-279/98

### NOTES-

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



Structural wood sheathing directly applied or 5-8-0 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. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® cannectors. 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087995 AS NOTED ON PLANS REVIE 400423 J10 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:38 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-E4AOw5f?1eEd74HWvWjWQuQqmmMT8iBEAUQSfYywC9N <del>08/<u>1</u>4/2</del>020 Scale = 1:19.8 3x4 || 5.00 12 0-10-3 3 2x4 || 3x10 ||

5-4-0

TOP CHORD

**BOT CHORD** 

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEF	L.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert	(LL) -0.	03 3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert	(CT) -0.	06 3-4	>988	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Hor	z(CT) -0.	00 3	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-R	Win	d(LL) 0.	01 3-4	>999	240	Weight: 15 lb	FT = 1

LUMBER-BRACING-

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

> 4=Mechanical, 3=Mechanical (size) Max Horz 4=116(LC 5)

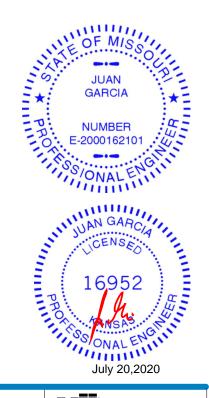
Max Uplift 4=-30(LC 8), 3=-56(LC 8) Max Grav 4=231(LC 1), 3=231(LC 1)

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

### NOTES-

REACTIONS.

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

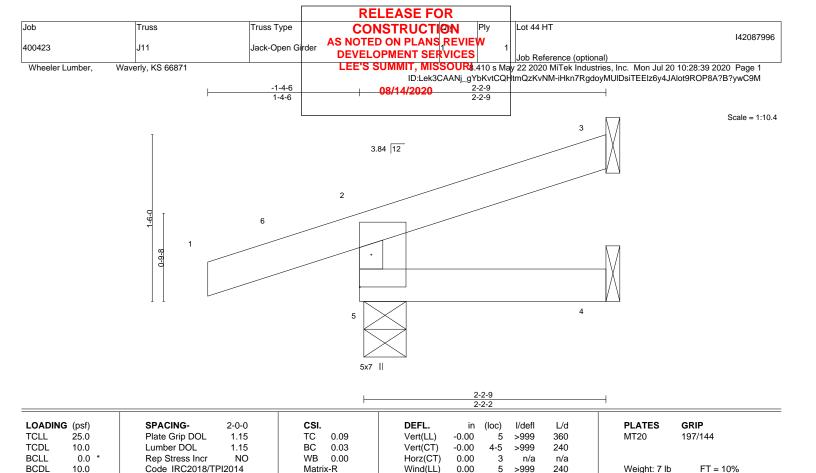


FT = 10%

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

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





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x3 SPF No.2

5=0-4-9, 3=Mechanical, 4=Mechanical REACTIONS. (size) Max Horz 5=51(LC 7)

Max Uplift 5=-115(LC 6), 3=-25(LC 12) Max Grav 5=78(LC 1), 3=24(LC 1), 4=29(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (|t=|b|) 5=115.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 12 lb down and 4 lb up at -1-4-6 , and 12 lb down and 4 lb up at -1-4-6 on top chord. The design/selection of such connection device(s) is the responsibility of
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

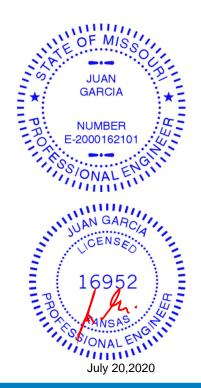
### LOAD CASE(S) Standard

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

Concentrated Loads (lb) Vert: 1=-19(F=-10, B=-10)

Trapezoidal Loads (plf)

Vert: 1=-0(F=35, B=35)-to-6=-13(F=28, B=28), 6=0(F=35, B=35)-to-2=-13(F=29, B=29), 2=-13(F=29, B=29)-to-3=-49(F=10, B=10), 5=-4(F=8, B=8)-to-4=-14(F=3, B=3)



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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142087997 AS NOTED ON PLANS REVIE 400423 J12 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:40 2020 Page 1

ID:Lek3CAANj\_gYbKvtCQHtm\( \frac{1}{2}\) ZKvNM-ATI9KnhFZGULMNRv0xm\_VJVFPa5?cchXeovYjRywC9L Wheeler Lumber, Waverly, KS 66871 08/14/2020<sup>2-0-0</sup>2-0-0 -0-10-8 0-10-8 Scale = 1:10.6 5.00 12 2 8-8-0 3x6 || 2-0-0

LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	12014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

2-0-0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x3 SPF No.2

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

Max Horz 5=40(LC 8)

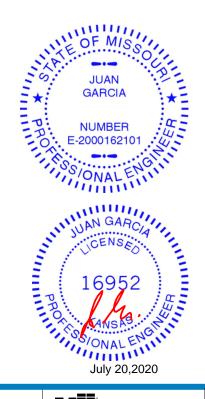
Max Uplift 5=-32(LC 4), 3=-31(LC 8)

Max Grav 5=171(LC 1), 3=50(LC 1), 4=35(LC 3)

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

### NOTES-

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



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

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



**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION 142087998 AS NOTED ON PLANS REVIE

Jack-Closed Supported Gable

DEVELOPMENT SERVICES TED ON PLANS REVIE 400423 J13 Wheeler Lumber,

Waverly, KS 66871

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:40 2020 Page 1

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-ATI9KnhFZGULMNRv0xm\_VJVG?a5AcchXeovYjRywC9L

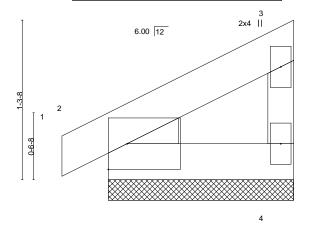
Structural wood sheathing directly applied or 1-6-0 oc purlins,

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

except end verticals.

<mark>08/14/202</mark>ზე 0-4-8

Scale = 1:9.3



5x7 = 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI 25.0 Plate Grip DOL Vert(LL) -0.00 120 197/144 **TCLL** 1.15 TC 0.03 n/r MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.02 Vert(CT) 0.00 120 n/r **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-P Weight: 5 lb FT = 10%

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2

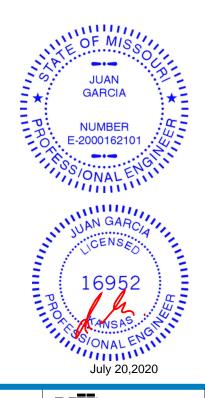
REACTIONS. (size) 4=1-6-0, 2=1-6-0

Max Horz 2=38(LC 5)

Max Uplift 4=-17(LC 8), 2=-15(LC 8) Max Grav 4=59(LC 1), 2=93(LC 1)

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

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





**RELEASE FOR** Job Truss Truss Type CONSTRUCTION AS NOTED ON PLANS REVIE 400423 J14 Jack-Closed DEVELOPMENT SERVICES

Lot 44 HT

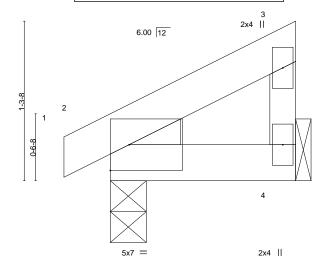
142087999

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:41 2020 Page 1 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-ffsXY7itKZcC\_X05afHD2X1Rn\_QBL3wgtSf6FtywC9K

-0-4-8 0-4-8 08/14/20200

Scale = 1:9.3



1-6-0

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P	Wind(LL)	0.00	2	****	240	Weight: 5 lb	FT = 10%

LUMBER-

Wheeler Lumber,

Waverly, KS 66871

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

WEDGE

Left: 2x3 SPF No.2

BRACING-

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

except end verticals.

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

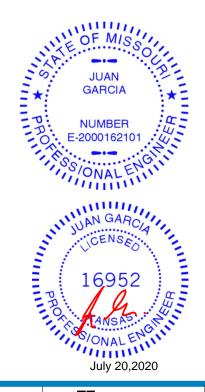
REACTIONS. (size) 4=Mechanical, 2=0-3-8

Max Horz 2=38(LC 5)

Max Uplift 4=-17(LC 8), 2=-16(LC 8) Max Grav 4=57(LC 1), 2=94(LC 1)

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

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





**RELEASE FOR** Job Truss Truss Type 400423 J15 Jack-Open

Waverly, KS 66871

CONSTRUCTION AS NOTED ON PLANS REVIE **DEVELOPMENT SERVICES**  Lot 44 HT

142088000

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:41 2020 Page 1 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-ffsXY7itKZcC\_X05afHD2X1Q8\_QVL3wgtSf6FtywC9K

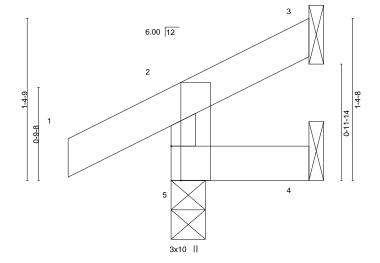
Structural wood sheathing directly applied or 1-2-1 oc purlins,

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

except end verticals.

08/14/2020 1-2-1 1-2-1 0-10-8

Scale = 1:9.8



1-2-1

Plate Offsets (	<,Y) [5	5:0-3-8,Edge]											
LOADING (ps	,	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.	0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144	
TCDL 10.	0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240			
BCLL 0.	0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a			
BCDL 10.	0	Code IRC2018/TP	12014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 4 lb	FT = 10%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

Wheeler Lumber,

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

**WEBS** 2x3 SPF No.2

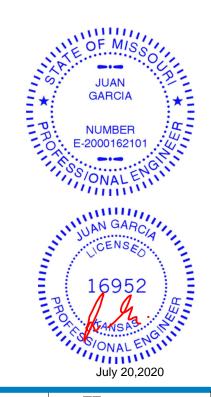
> (size) 5=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 5=34(LC 5)

Max Uplift 5=-23(LC 8), 3=-17(LC 8), 4=-1(LC 5) Max Grav 5=148(LC 1), 3=11(LC 15), 4=19(LC 3)

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

### NOTES-

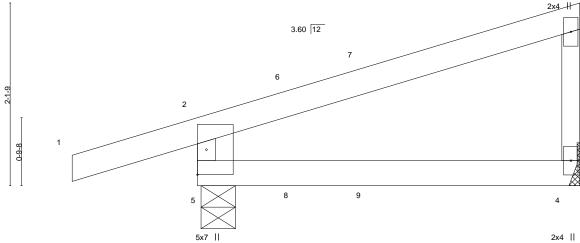
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom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





**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 142088001 400423 J16 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:42 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-7sQvlSiV5tk3chbH8MoSakaYPNkT4WAq56OfoJywC9J 08/14/2020 1-5-8 4-5-7 Scale = 1:13.4 3 2x4



LOADING	(psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	k-R	Wind(LL)	0.00	4-5	>999	240	Weight: 14 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

REACTIONS. 5=0-4-13, 4=Mechanical (size)

Max Horz 5=86(LC 5) Max Uplift 5=-110(LC 4), 4=-59(LC 8)

Max Grav 5=317(LC 1), 4=242(LC 1)

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

TOP CHORD 2-5=-282/136

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=110.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 15 lb up at 1-2-4, and 61 lb down and 17 lb up at 2-0-6, and 75 lb down and 63 lb up at 4-4-3 on top chord, and 2 lb down and 2 lb up at 1-2-4, and 3 lb down and 6 lb up at 2-0-6, and 33 lb down at 4-4-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

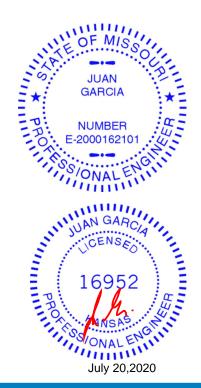
### LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb) Vert: 3=-50(B) 4=-23(B) 8=2(B) 9=2(F)



Structural wood sheathing directly applied or 4-5-7 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. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® cannectors. 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088002 AS NOTED ON PLANS REVIE 400423 J17 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:43 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

08/14/2020

1-2-12

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-b2\_Hzoj7rBsvDrATi4Jh7y7mgn6zpzQzKm8DKmywC9I

Structural wood sheathing directly applied or 1-2-12 oc purlins,

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

except end verticals

Scale = 1:8.5

3 4.50 12 1-1-9 0-8-0

0-10-8

4 5 3x6 ||

1-2-12 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI TCLL 25.0 Plate Grip DOL TC Vert(LL) -0.00 >999 197/144 1.15 0.06 5 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.01 Vert(CT) -0.00 5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Wind(LL) 0.00 5 >999 240 Weight: 4 lb FT = 10%

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=29(LC 5)

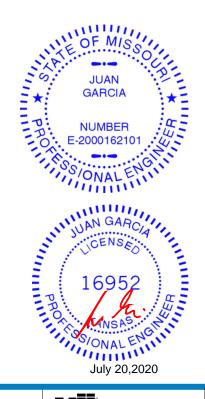
Max Uplift 5=-53(LC 4), 3=-13(LC 8)

Max Grav 5=149(LC 1), 3=14(LC 1), 4=20(LC 3)

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

### NOTES-

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





**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088003 AS NOTED ON PLANS REVIE 400423 J18 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:44 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtrhQzKvNM-3EYfA8kmcU\_mr?lgFnqwf9fvcBRdYPg7ZQtmsCywC9H 08/14/20208-9 3-8-9 -0-10-8 0-10-8 Scale = 1:13.1 4.50 12 1-8-7

BRACING-

TOP CHORD

BOT CHORD

LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	ВС	0.11	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	12014	Matri	x-R	Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

REACTIONS.

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

**WEBS** 2x3 SPF No.2

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

Max Horz 5=63(LC 4) Max Uplift 5=-54(LC 4), 3=-55(LC 8)

0-8-0

Max Grav 5=238(LC 1), 3=110(LC 1), 4=67(LC 3)

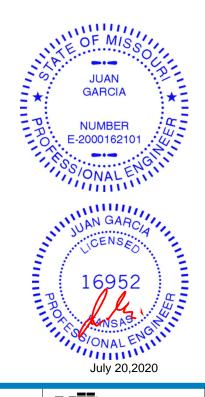
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

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

3x6

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



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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088004 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400423 J19 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:44 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-3EYfA8kmcU\_mr?lgFnqwf9fu3BQIYPg7ZQtmsCywC9H 08/14/2020-0 4-0-0 -0-10-8 0-10-8 Scale = 1:13.7 4.50 12 1-6-11 2 3x6 4-0-0 4-0-0

LOADING	i (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

**WEBS** 2x3 SPF No.2

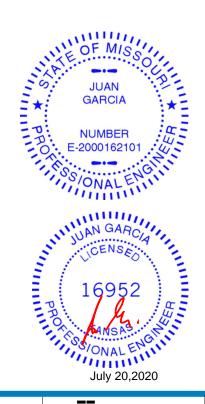
> 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=68(LC 4)

Max Uplift 5=-55(LC 4), 3=-60(LC 8) Max Grav 5=250(LC 1), 3=120(LC 1), 4=73(LC 3)

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

### NOTES-

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



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

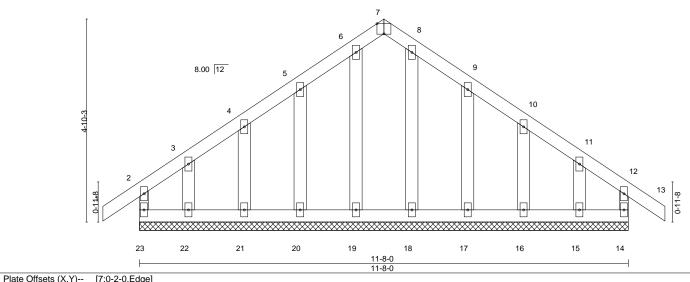
Rigid ceiling directly applied or 10-0-0 oc bracing.



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142088005 AS NOTED ON PLANS REVIE 400423 K1 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:51 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-MaTJeXp9zetnB4n0AlSZSeS7Y0rMhay9A?4eclywC9A 12-6-8 <del>-0-10-8</del> <del>0-10-8</del> 08/14/2020 5-10-0 5-10-0 0-10-8

3x4 =



	0010 (71,1)	[1.0 Z 0, Z ugo]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00 13 n/r 120	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 13 n/r 120	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 14 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 56 lb FT = 10%

LUMBER-

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

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

REACTIONS. All bearings 11-8-0.

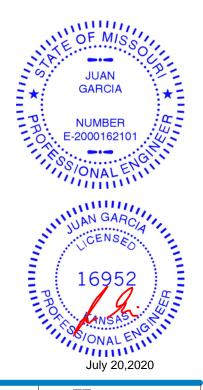
Max Horz 23=-144(LC 6) (lb) -

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

All reactions 250 lb or less at joint(s) 23, 14, 22, 21, 20, 19, 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).
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 14, 22, 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.



Scale = 1:27.5

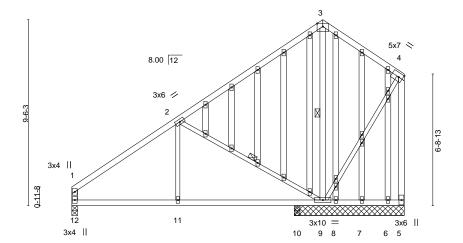


**RELEASE FOR** Job Truss Truss Type Lot 44 HT CONSTRUCTION 142088006 AS NOTED ON PLANS REVIE 400423 K2 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:52 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQ\ftmQzKvNM-qn1hstqnky?eoDMCjTzo\_r?93P8RQtXIOfpB8kywC99 17-0-0 08/14/<mark>202</mark>0 4-2-0

5x7

12-10-0



		<u> </u>	5-5-1	6-2-15 1-2-0 4-2-0	
LOADING (	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 2	25.0	Plate Grip DOL 1.15	TC 0.66	Vert(LL) -0.03 10-11 >999 360	MT20 197/144
TCDL 1	10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.06 10-11 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.01 5 n/a n/a	
BCDL 1	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.01 11 >999 240	Weight: 131 lb FT = 10%

LUMBER-BRACING-

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

2x4 SPF No.2 \*Except\* **WEBS** BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

2-11,2-9,4-9: 2x3 SPF No.2 WEBS 1 Row at midpt 2-9, 3-9 **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 5-7-8 except (jt=length) 12=0-3-8, 10=0-3-8.

Max Horz 12=328(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 12, 6 except 5=-466(LC 21), 9=-240(LC 8)

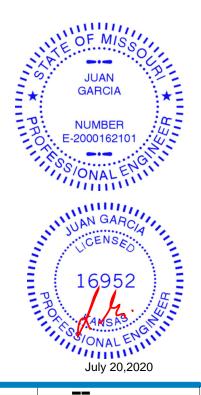
Max Grav All reactions 250 lb or less at joint(s) 5, 8, 7, 6 except 12=397(LC 1), 9=1173(LC 1), 10=274(LC 3)

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

1-2=-411/78, 2-3=-38/377, 3-4=0/339, 1-12=-329/82, 4-5=0/460 TOP CHORD **BOT CHORD** 

11-12=-244/397, 10-11=-244/397, 9-10=-244/397 **WEBS** 2-9=-588/263, 3-9=-681/60, 4-9=-457/63

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 1-4-0 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) 12, 6 except (jt=lb) 5=466, 9=240.
- 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.



Scale = 1:58.9



RELEASE FOR

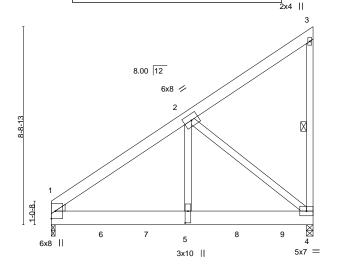
Job Truss Type CONSTRUCTION Ply

400423 K3 MONOPITCH GIRDER NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 2 Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 LEE'S SUMMIT, MISSOUR 4.10 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:53 2020 Page 1

ID:Lek3CAANi, qYbkvtCQHtmQzkvNM-iza33DrPVF7VQNxOHAU1X3XLepR69k0RdJZkqBywC98

Scale = 1:50.8



6-0-5 11-6-8 6-0-5 5-6-3

Plate Off	rsets (X,Y)	[5:0-6-4,0-1-8]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.04	1-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.08	1-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-S	Wind(LL)	0.03	1-5	>999	240	Weight: 164 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 BOT CHORD 2x8 SP DSS WEBS 2x4 SPF No.2

WEDGE

Left: 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 10-0-0 oc bracing

WEBS 1 Row at midpt 3-4

**REACTIONS.** (size) 4=0-3-8, 1=0-2-0 (req. 0-3-9)

Max Horz 1=321(LC 22)

Max Uplift 4=-245(LC 8), 1=-356(LC 8) Max Grav 4=3890(LC 1), 1=4571(LC 1)

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

TOP CHORD 1-2=-3816/143

BOT CHORD 1-5=-220/2995, 4-5=-220/2995 WEBS 2-5=-96/4248, 2-4=-3885/344

### NOTES-

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

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.

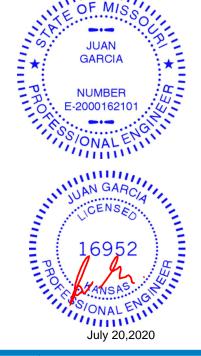
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=245, 1=356.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1246 lb down and 162 lb up at 0-1-0, 1238 lb down and 170 lb up at 2-3-12, 1240 lb down and 31 lb up at 4-3-12, 1240 lb down and 31 lb up at 6-3-12, and 1240 lb down and 31 lb up at 8-3-12, and 1240 lb down and 31 lb up at 10-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

Continued on page 2







16023 Swingley Ridge Rd Chesterfield, MO 63017

**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088007 MONOPITCH GIRDER DEVELOPMENT SERVICES 2 Job Reference (optional)

LEE'S SUMMIT, MISSOUR&.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:53 2020 Page 2

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-Iza33DrPVF7VQNxOHAU1X3XLepR69K0RdJZkgBywC98 400423 КЗ

Waverly, KS 66871 Wheeler Lumber,

08/14/2020

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

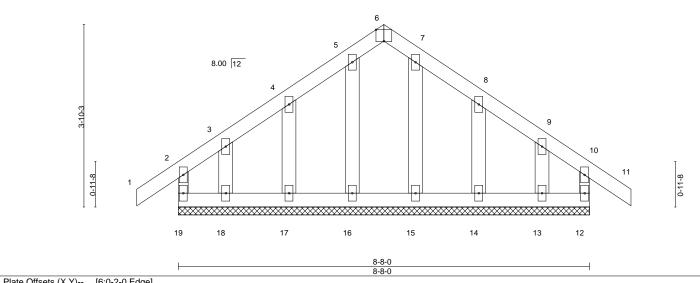
Concentrated Loads (lb)

Vert: 5=-1240(B) 1=-1246(B) 6=-1238(B) 7=-1240(B) 8=-1240(B) 9=-1240(B)



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142088008 AS NOTED ON PLANS REVIE 400423 L1 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:54 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-m98RGZs1GZFM2XWbrt0G3G4erDsBuxsbszIIDdywC97 8-8-0 9-6-8 08/14/2020 4-4-0 0-10-8 0-10-8 Scale = 1:24.3 3x4 =



1 late Oil	13013 (A, 1)	[0.0-2-0,Luge]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00 11 n/r 120	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 11 n/r 120	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.00 12 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 39 lb FT = 10%

LUMBER-

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

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

REACTIONS. All bearings 8-8-0.

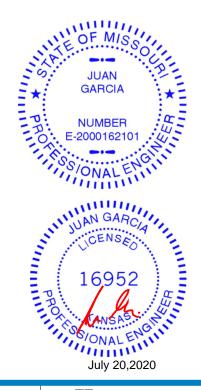
Max Horz 19=118(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 19, 12, 18, 17, 14, 13

All reactions 250 lb or less at joint(s) 19, 12, 18, 17, 16, 15, 14, 13

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12, 18, 17,
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088009 AS NOTED ON PLANS REVIED DEVELOPMENT SERVICES 400423 L2 Common DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:55 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQlfttmQzKvNM-EMiqUvsf1tNDgh5nPbXVcUdlkdAVdObk5d2rl3ywC96 <del>-0-10-8</del> <del>0-10-8</del> 8-8-0 9-6-8 08/14/2020 -4-n 0-10-8 Scale = 1:25.4 4x5 = 3 8.00 12 0-11-8 0-11-8

	l-	4-4-0 4-4-0	8-8-0 4-4-0	1
TCLL 25.0 Plate TCDL 10.0 Lum BCLL 0.0 * Rep	CING- 2-0-0 e Grip DOL 1.15 sher DOL 1.15 Stress Incr YES e IRC2018/TPI2014	CSI. TC 0.38 BC 0.16 WB 0.05 Matrix-R	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.01         7 >999         360           Vert(CT)         -0.03         7 >999         240           Horz(CT)         0.00         6 n/a n/a         n/a           Wind(LL)         0.01         7-8 >999         240	PLATES         GRIP           MT20         197/144           Weight: 28 lb         FT = 10%

BRACING-

TOP CHORD

BOT CHORD

7 2x4 ||

LUMBER-

REACTIONS.

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

8=0-3-8, 6=0-3-8 (size) Max Horz 8=118(LC 7) Max Uplift 8=-64(LC 8), 6=-64(LC 9) Max Grav 8=449(LC 1), 6=449(LC 1)

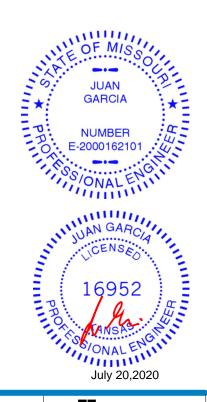
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

3x10 ||

2-3=-371/72, 3-4=-371/72, 2-8=-392/96, 4-6=-392/96 TOP CHORD

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



3x10 ||

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

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



 Job
 Truss
 Truss Type

 400423
 L3
 GABLE

Waverly, KS 66871

RELEASE FOR
CONSTRUCTION
PI
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

Lot 44 HT

142088010

Job Reference (optional)

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

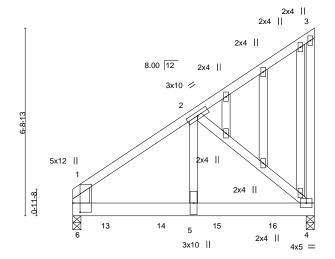
Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:56 2020 Page 1
ID:Lek3CAANj\_gYbKvtCQHtrnQzKvNM-iYGChFtHoAV3Hrtzyl2k9h9y51TXMmOuJHnPHVywC95

4-4-0 **08/14/2020** 8-8-0 4-4-0 4-4-0

Scale = 1:41.3



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

**BRACING-**

TOP CHORD

**BOT CHORD** 

Plate Offsets (X,Y)	[1:0-3-15,0-3-2]			
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.21	DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         -0.03         4-5         >999         360         MT20         197/144	
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.36 WB 0.34	Vert(CT) -0.06 4-5 >999 240 Horz(CT) 0.01 4 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.02 4-5 >999 240 Weight: 124 lb FT = 10%	

LUMBER-

Wheeler Lumber,

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

WEBS 2x4 SPF No.2 \*Excep 1-6: 2x8 SP DSS OTHERS 2x4 SPF No.2

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

Max Horz 6=247(LC 5)

Max Uplift 4=-184(LC 8), 6=-207(LC 8) Max Grav 4=2820(LC 1), 6=3049(LC 1)

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

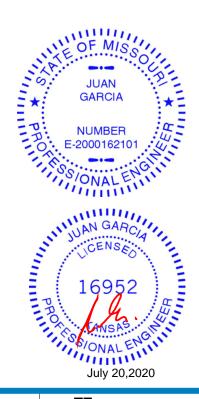
TOP CHORD 1-2=-2546/108, 1-6=-1534/100 BOT CHORD 5-6=-177/2037, 4-5=-177/2037 WEBS 2-5=-68/2746, 2-4=-2607/248

### NOTES-

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

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) 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.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=184, 6=207.
- This truss 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1283 lb down and 181 lb up at 1-2-12, 1283 lb down and 35 lb up at 3-2-12, and 1281 lb down and 35 lb up at 5-2-12, and 1281 lb down and 35 lb up at 7-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



### CAAQGASE(S)geStandard

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

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

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



Job Truss Truss Type L3 GABLE 400423

**RELEASE FOR** 

08/14/2020

I42088010

CONSTRUCTION Ply
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES 2

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:56 2020 Page 2
ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-iYGChFthoAV3Hrfzyl2k9h9y51TXMmOuJHnPHVywC95

Waverly, KS 66871

LOAD CASE(S) Standard

Wheeler Lumber,

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

Uniform Loads (plf)

Vert: 1-3=-70, 4-6=-20 Concentrated Loads (lb)

Vert: 13=-1283(F) 14=-1283(F) 15=-1281(F) 16=-1281(F)



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088011 AS NOTED ON PLANS REVIE 400423 LAY1 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:57 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-BkqavbuvYUdwv?EAW0ZzhviAfQu25la1YxXyqyywC94 5-9-10 08/14/2020 2-10-13 2-10-13

3x4 =

3 212.65 12 2x4 0-0-4 0-0-4 6 2x4 / 2x4 \ 2x4 II 2x4 -11 5-9-10

T late Offst	Cl3 (A, 1)	[3.Luge,0-3-0], [4.0-0-0,0-0-	<u> </u>									
LOADING	i (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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-P						Weight: 19 lb	FT = 10%

LUMBER-

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

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 5-9-10 oc purlins.

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

REACTIONS. All bearings 5-9-6. (lb) -Max Horz 1=-72(LC 4)

Plate Offsets (X V)-- [3:Edge 0-3-0] [4:0-0-0 0-0-0]

Max Uplift All uplift 100 lb or less at joint(s) 7, 6 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

### 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) 7, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Scale = 1:21.1



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142088012 AS NOTED ON PLANS REVIE 400423 LAY2 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:58 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-fxOy6xvYJolnX8pM4j4CE6FJGqEAqiYBnbGVMOywC93 23-5-11 11-11-11 6-8-7 08/14/2020 6-8-7 4-9-10 3x4 // Scale = 1:56.0 6 17.09 12 13 Ø 3x4 = 17 5-1-2 11.39 12 3x4 / 27 25 20 5x7 // 23-5-11 5-4-6

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	· -	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.01	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-S	, ,					Weight: 133 lb	FT = 10%

LUMBER-

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

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

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8, 9-24,

9-16.

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

6-0-0 oc bracing: 17-18,16-17. **WEBS** 1 Row at midpt

REACTIONS. All bearings 23-5-11.

Max Horz 1=559(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 24, 19, 26, 25, 23, 22, 21, 20, 18, 17 except 1=-256(LC 6),

16=-104(LC 8), 29=-200(LC 8), 28=-190(LC 8), 27=-243(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 24, 16, 19, 29, 28, 26, 25, 23, 22, 21, 20, 18, 17 except

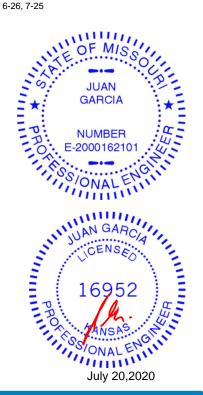
1=588(LC 8), 27=253(LC 15)

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

TOP CHORD 1-2=-729/366, 2-3=-539/283, 3-4=-342/198

**WEBS** 4-27=-213/266

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 19, 26, 25, 23, 22, 21, 20, 18, 17 except (jt=lb) 1=256, 16=104, 29=200, 28=190, 27=243.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16, 18, 17.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





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

Design valid for use only with MiTek® cannectors. 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142088013 AS NOTED ON PLANS REVIE 400423 LAY3 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:28:59 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-77yKKGvA45te8IOYeRbRmKnUMEZgZCoK?F03uqywC92 6-10-6 3-0-0 3-0-0 08/14/2020 Scale = 1:24.4 2x4 3x4 // 15.60 12 2x4 || 2x4 = 2 3-10-12 3-10-1215.60 12 0-0-4 2x4 // 6x8 // 2x4 || 3-10-6 6-10-6 3-0-0

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

in (loc)

n/a

n/a

-0.00

I/defI

n/a

n/a

n/a

5

L/d

999

999

n/a

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

2-0-0 oc purlins (6-0-0 max.): 3-5.

LUMBER-

**TCLL** 

**TCDL** 

**BCLL** 

**BCDL** 

Plate Offsets (X,Y)--

25.0

10.0

0.0

10.0

LOADING (psf)

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

**OTHERS** 2x4 SPF No.2 REACTIONS.

All bearings 6-10-6. (lb) -Max Horz 1=147(LC 8)

[3:0-1-4,Edge]

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=-143(LC 8)

2-0-0

1.15

1.15

YES

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

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

CSI.

0.08

0.08

0.04

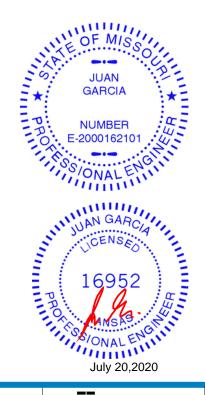
TC

ВС

WB

Matrix-P

- 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, 5, 6 except (jt=lb) 7=143.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5.
- 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.



**PLATES** 

Weight: 25 lb

MT20

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

GRIP

197/144

FT = 10%



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088014 AS NOTED ON PLANS REVIE 400423 V1 VALLEY **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:00 2020 Page 1

ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-bJWjXcworP?VmSzlB86gJXKe8euulfdTEvlcQHywC91 Wheeler Lumber, Waverly, KS 66871

0<u>8/14/2020</u>

2 2x4 || 4.50 12 0-0-4 3

> 2x4 = 2x4 II

> > TOP CHORD

BOT CHORD

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 25.0 Plate Grip DOL TC Vert(LL) 999 197/144 1.15 0.14 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.08 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: 9 lb FT = 10%

LUMBER-BRACING-

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

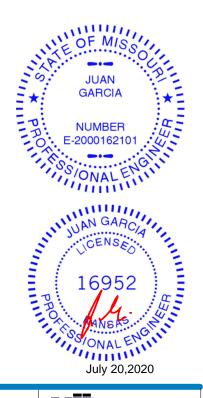
REACTIONS. 1=3-10-5, 3=3-10-5 (size)

Max Horz 1=48(LC 5) Max Uplift 1=-20(LC 8), 3=-28(LC 8) Max Grav 1=128(LC 1), 3=128(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 3-9-7 oc purlins,

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

except end verticals.

Scale = 1:9.8



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088015 AS NOTED ON PLANS REVIE Valley 400423 V3 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:00 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQlftmQzKvNM-bJWjXcworP?VmSzlB86gJXKeoeutlf5TEvlcQHywC91 08/14/2020 3-8-0 3-8-0 Scale = 1:13.9

4x5 =

2 6.00 12 4 2x4 || 2x4 / 2x4 <

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

TOP CHORD

BOT CHORD

I/defI

n/a

n/a

n/a

(loc)

3

n/a

n/a

0.00

L/d

999

999

n/a

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

**PLATES** 

Weight: 17 lb

MT20

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

GRIP

197/144

FT = 10%

LUMBER-BRACING-

2-0-0

1.15

1.15

YES

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

LOADING (psf)

25.0

10.0

0.0

10.0

TCLL

**TCDL** 

**BCLL** 

BCDL

**OTHERS** 2x3 SPF No.2

REACTIONS. 1=7-3-0, 3=7-3-0, 4=7-3-0 (size)

Max Horz 1=27(LC 12)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Uplift 1=-33(LC 8), 3=-37(LC 9), 4=-3(LC 8) Max Grav 1=143(LC 1), 3=143(LC 1), 4=261(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

CSI.

TC

ВС

WB

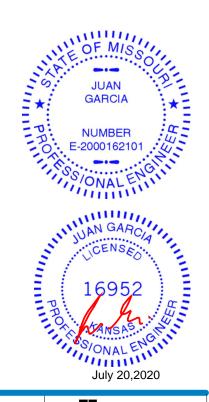
Matrix-P

0.16

0.08

0.03

- 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, 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.

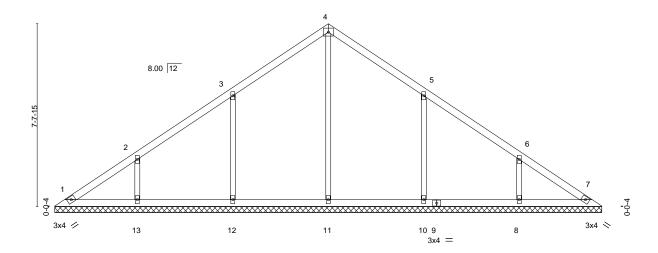




**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088016 AS NOTED ON PLANS REVIE 400423 V4 Valley **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:01 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-3W35lyxQcj7MOcYxlsevslso62D113wdTZV9zjywC90 22-11-12 08/14/2020 11-5-14 11-5-14 Scale: 1/4"=1'

4x5 =



0-	0-6		22-11-6	
LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/c	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) n/a - n/a 999	)
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) 0.00 7 n/a n/a	a l
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	, ,	Weight: 72 lb FT = 10%

22-11-12

LUMBER-BRACING-

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

REACTIONS. All bearings 22-11-0.

Max Horz 1=192(LC 5) (lb) -

0-9-6

Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=-155(LC 8), 13=-132(LC 8), 10=-154(LC 9),

8=-133(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=400(LC 18), 12=489(LC 15), 13=412(LC 15),

10=488(LC 16), 8=412(LC 16)

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

**WEBS** 3-12=-319/204, 2-13=-275/174, 5-10=-319/204, 6-8=-276/174

### NOTES-

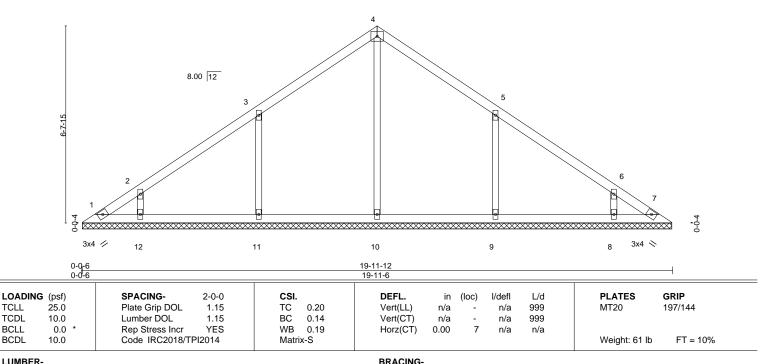
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=155, 13=132, 10=154, 8=133.
- 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.





**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142088017 AS NOTED ON PLANS REVIE 400423 V5 Valley **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:02 2020 Page 1
ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-XidTyly2N0FD?m77JZ98OyPzIRZJmXDmiDEjV9ywC9? Wheeler Lumber, Waverly, KS 66871 08/14/2020 9-11-14 9-11-14

4x5 =



TOP CHORD

BOT CHORD

LUMBER-

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

**OTHERS** 2x3 SPF No.2

REACTIONS. All bearings 19-11-0.

Max Horz 1=166(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-158(LC 8), 12=-111(LC 8), 9=-158(LC 9),

8=-111(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=384(LC 18), 11=499(LC 15), 12=347(LC 15),

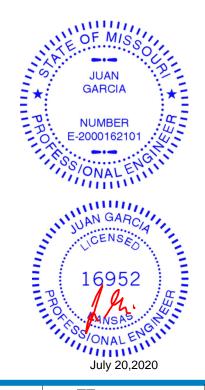
9=499(LC 16), 8=347(LC 16)

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

WEBS 3-11=-325/208, 5-9=-325/208

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=158, 12=111, 9=158, 8=111.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



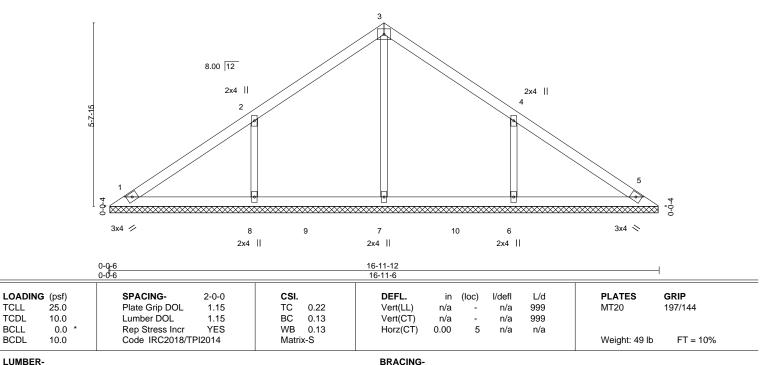
Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

Scale = 1:38.9



			RELEASE FOR			
Job	Truss	Truss Type	CONSTRUCTION Ply	/	Lot 44 HT	
400423	V6	Valley	AS NOTED ON PLANS REVIEW	1	142088	3018
400423	Vo	valley	DEVELOPMENT SERVICES		Job Reference (optional)	
Wheeler Lumber, Wave	erly, KS 66871	•	LEE'S SUMMIT, MISSOUR \$.410	s May	22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:03 2020 Page 1	1
			ID:Lek3CAANj_gYbKv	rtCQHtn	nQzKvNM-?uBr9ezg8KN4dwiJtGgNxAy89rvnVzNwwt_G1bywC9_	_
L		8-5-14	08/14/2020		16-11-12	
ı		8-5-14	00/1/42020		8-5-14	
			4x5 =		Scale = 1	:35.5



TOP CHORD

**BOT CHORD** 

LUMBER-TOP CHORD

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

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

REACTIONS. All bearings 16-11-0.

(lb) - Max Horz 1=-139(LC 4)

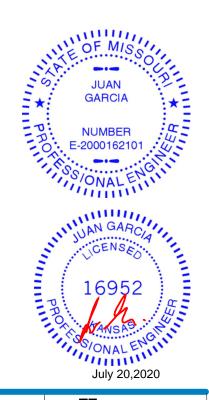
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-172(LC 8), 6=-171(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=353(LC 15), 8=521(LC 15), 6=521(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-8=-347/218, 4-6=-347/217 **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, with BCDL = 10.0psf.
- 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=172, 6=171,
- 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.



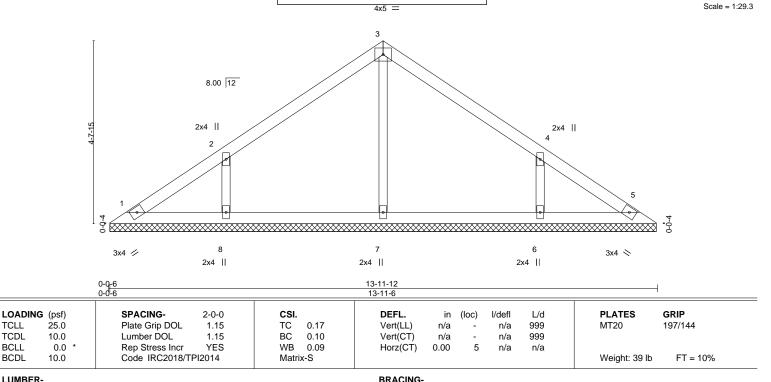
Structural wood sheathing directly applied or 6-0-0 oc purlins.

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088019 AS NOTED ON PLANS REVIE Valley 400423 V7 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:04 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANi\_qYbKvtCQHtmQzKvNM-T4IDN\_zJveVxF3HWQ\_BcTNUKgFGTERA39XjqY2ywC8z 13-11-12 08/14/2020 6-11-14 6-11-14



TOP CHORD

BOT CHORD

LUMBER-

TCLL

**TCDL** 

**BCLL** 

BCDL

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

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

REACTIONS. All bearings 13-11-0. (lb) - Max Horz 1=-113(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-144(LC 8), 6=-143(LC 9)

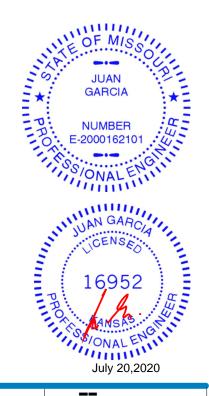
All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 1), 8=363(LC 15), 6=363(LC 16)

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

2-8=-290/185, 4-6=-290/185 **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=144 6=143
- 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.



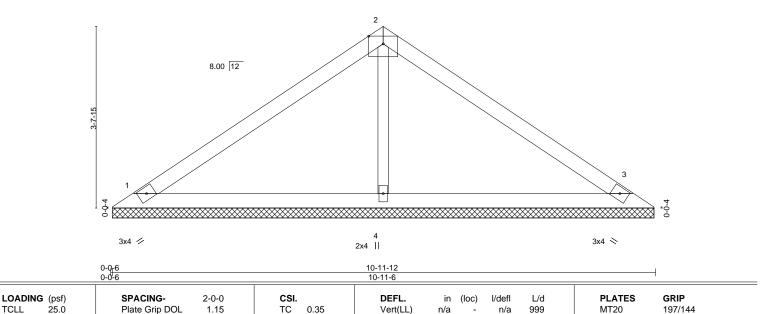
Structural wood sheathing directly applied or 6-0-0 oc purlins.

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 44 HT 142088020 AS NOTED ON PLANS REVIE Valley 400423 V8 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:05 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtmQzKvNM-yHJcaK\_xgxdosDri\_hir0b1SbfazzuXCOBTN5UywC8y 10-11-12 08/14/2020 5-5-14 5-5-14 Scale = 1:23.2 5x7 =



Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

0.00

999

n/a

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

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

Weight: 29 lb

FT = 10%

n/a

n/a

3

LUMBER-

TCLL

**TCDL** 

**BCLL** 

BCDL

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

10.0

0.0

10.0

REACTIONS.

1=10-11-0, 3=10-11-0, 4=10-11-0 (size)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Horz 1=87(LC 5)

Max Uplift 1=-44(LC 8), 3=-55(LC 9), 4=-17(LC 8) Max Grav 1=232(LC 1), 3=232(LC 1), 4=438(LC 1)

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

**WEBS** 2-4=-285/73

### 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

ВС

WB

Matrix-S

0.21

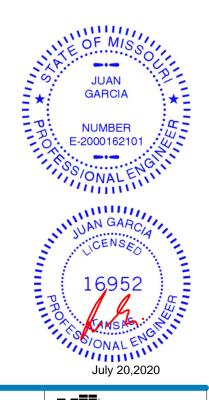
0.09

- 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.

1.15

YES

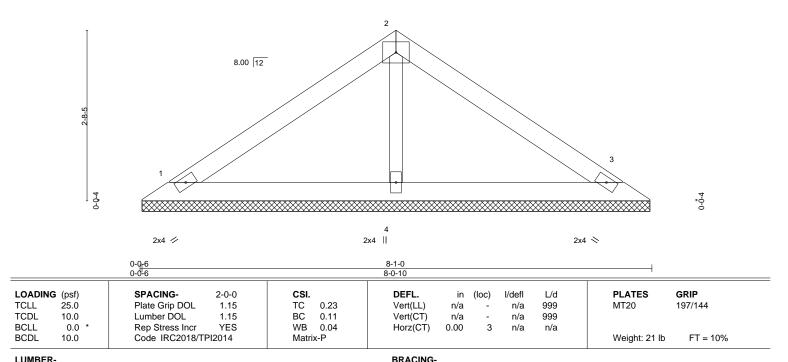
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb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





**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 44 HT 142088021 AS NOTED ON PLANS REVIE Valley 400423 V9 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR\$.410 s May 22 2020 MiTek Industries, Inc. Mon Jul 20 10:29:06 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Lek3CAANj\_gYbKvtCQHtrnQzKvNM-QTt\_og?ZRFlfUNQuYPD4ZoafB3xpiMVMcrCwdwywC8x 4-0-8 4-0-8 8-1-0 08/14/2020 4-0-8 Scale = 1:18.2 4x5 =



TOP CHORD

BOT CHORD

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

REACTIONS.

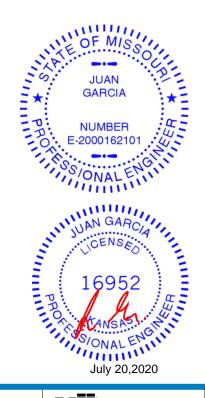
1=8-0-4, 3=8-0-4, 4=8-0-4 (size) Max Horz 1=-62(LC 4) Max Uplift 1=-40(LC 8), 3=-48(LC 9)

Max Grav 1=180(LC 1), 3=180(LC 1), 4=280(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
- 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

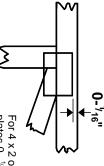


### Symbols

# PLATE LOCATION AND ORIENTATION



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



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

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

REVIEUS Plate location details available in MiTek 20/20

NOTED ON PLANE SIZE

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

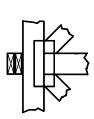
RELEASE FOR CONSTRUCTION

## LATERAL BRACING LOCATION



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

### **BEARING**



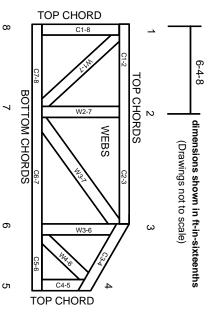
Min size shown is for crushing only reaction section indicates joint Indicates location where bearings number where bearings occur. (supports) occur. Icons vary but

### Industry Standards:

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

DSB-89: ANSI/TPI1:

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MiTek® All Rights Reserved



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

# **General Safety Notes**

## Damage or Personal Injury Failure to Follow Could Cause Property

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

Ņ

Never exceed the design loading shown and never stack materials on inadequately braced trusses.

ω

4

- Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and
- Cut members to bear tightly against each other.
- 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.

ტ Ģ

- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- 10. 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.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.