

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

01/28/2021

RE: 210251 Lot 7 H3 MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

**Site Information:** 

Customer: Project Name: 210251

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

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

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

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

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	143924103	A1	1/22/2021	21	143924123	D1	1/22/2021
2	143924104	A2	1/22/2021	22	143924124	D2	1/22/2021
3	143924105	A3	1/22/2021	23	143924125	D3	1/22/2021
4	I43924106	A4	1/22/2021	24	143924126	P1	1/22/2021
5	143924107	A5	1/22/2021	25	143924127	P2	1/22/2021
6	143924108	A6	1/22/2021	26	143924128	V1	1/22/2021
7	I43924109	B1	1/22/2021	27	143924129	V2	1/22/2021
8	I43924110	B2	1/22/2021	28	143924130	V3	1/22/2021
9	143924111	B3	1/22/2021	29	143924131	V4	1/22/2021
10	143924112	B4	1/22/2021	30	143924132	V5	1/22/2021
11	143924113	B5	1/22/2021	31	143924133	V6	1/22/2021
12	143924114	C1	1/22/2021	32	143924134	V7	1/22/2021
13	I43924115	C2	1/22/2021	33	143924135	V8	1/22/2021
14	I43924116	C3	1/22/2021	34	143924136	V9	1/22/2021
15	143924117	C4	1/22/2021	35	143924137	V10	1/22/2021
16	I43924118	C5	1/22/2021	36	143924138	V11	1/22/2021
17	143924119	C6	1/22/2021	37	143924139	V12	1/22/2021
18	143924120	C7	1/22/2021	38	143924140	V13	1/22/2021
19	143924121	C8	1/22/2021	39	143924141	V14	1/22/2021
20	143924122	C9	1/22/2021	40	143924142	V15	1/22/2021

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

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943

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



1 of 1



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

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

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2	143924104	A2	1/22/2021	22	143924124	D2	1/22/2021
3	143924105	A3	1/22/2021	23	I43924125	D3	1/22/2021
4	143924106	A4	1/22/2021	24	I43924126	P1	1/22/2021
5	143924107	A5	1/22/2021	25	143924127	P2	1/22/2021
6	143924108	A6	1/22/2021	26	I43924128	V1	1/22/2021
7	143924109	B1	1/22/2021	27	I43924129	V2	1/22/2021
8	143924110	B2	1/22/2021	28	I43924130	V3	1/22/2021
9	143924111	B3	1/22/2021	29	I43924131	V4	1/22/2021
10	143924112	B4	1/22/2021	30	143924132	V5	1/22/2021
11	143924113	B5	1/22/2021	31	I43924133	V6	1/22/2021
12	143924114	C1	1/22/2021	32	143924134	V7	1/22/2021
13	143924115	C2	1/22/2021	33	I43924135	V8	1/22/2021
14	143924116	C3	1/22/2021	34	I43924136	V9	1/22/2021
15	143924117	C4	1/22/2021	35	143924137	V10	1/22/2021
16	143924118	C5	1/22/2021	36	I43924138	V11	1/22/2021
17	143924119	C6	1/22/2021	37	143924139	V12	1/22/2021
18	143924120	C7	1/22/2021	38	143924140	V13	1/22/2021
19	143924121	C8	1/22/2021	39	I43924141	V14	1/22/2021
20	143924122	C9	1/22/2021	40	143924142	V15	1/22/2021

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

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2022.

Missouri COA: 001193

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



**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924103 Common Supported Gas NOTED ON PLANS REVIE

DEVELOPMENT SERVICES 210251 A1 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:31 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-vi6rjmfU?\_qwzEou?u1rv29sRisPafOL6Za5soyAlks 01/28/2021 25-9-10 7-4-14

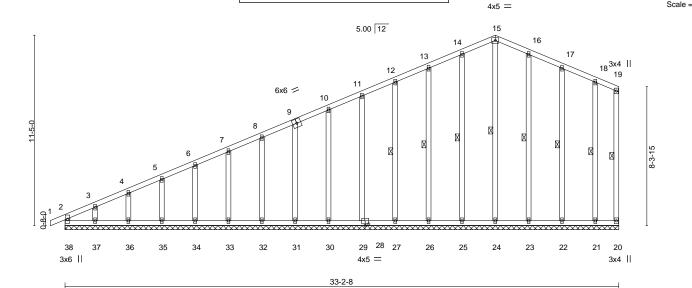


Plate Offsets (X,Y) [28:0-2-8,0-1-4]											
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.29	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) -0.00 1 n/r 120	<b>PLATES GRIP</b> MT20 197/144							
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.12 WB 0.15	Vert(CT) -0.00 1 n/r 120 Horz(CT) -0.01 20 n/a n/a	W1120 101/144							
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	,	Weight: 208 lb FT = 10%							

LUMBER-BRACING-

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

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

except end verticals.

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

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

Scale = 1:69.1

REACTIONS. All bearings 33-2-8.

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

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

except 37=-148(LC 8)

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

23, 22, 21

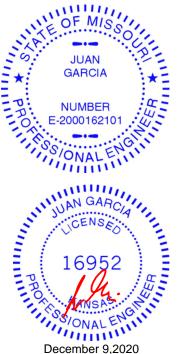
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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

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

referenced standard ANSI/TPI 1.

- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 24, 25, 26,
- 27, 29, 30, 31, 32, 33, 34, 35, 36, 23, 22, 21 except (jt=lb) 37=148. 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and



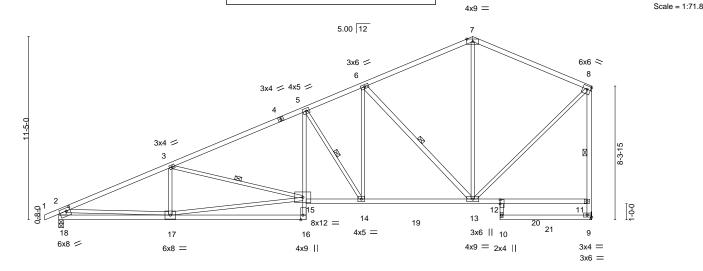
December 9,2020



**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924104 S NOTED ON PLANS REVIE DEVELOPMENT SERVICES **AS NOTED ON PLANS** 210251 A2 Roof Special DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:32 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:Hr0UloyIgMOrZQ4rpild7XzssyG-OvgDw6g6mHynbON4ZbY4SFhte62qJvIULDJfPEyAlkr 25-9-10 27-6-0 33-2-8 -0-10-8 0-10-8 6-11-7 8-5-9 6-10-2 1-8-6 5-8-8



		6-11-7	1 15-5	-0	18-11-7	25-9-10	27-	·b-U <sub>1</sub> 33-	2-8 <sub>1</sub>	
		6-11-7	8-5-	9	3-6-7	6-10-2	1-	8-6 5-8	3-8	
Plate Offs	ets (X,Y)	[8:Edge,0-2-8], [9:Edge,0-1-8	3], [12:0-3-0,0-0-0], [	6:0-3-8,Edge],	[18:0-3-0,0-2-4]					
LOADING	(psf)	SPACING- 2	-0-0 CS	l.	DEFL.	in (loc)	I/defl I	_/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15 TC	0.90	Vert(LL)	-0.26 16-17	>999 3	60	MT20	197/144
TCDL	10.0	Lumber DOL	1.15 BC	0.75	Vert(CT)	-0.50 16-17	>781 2	40		
BCLL	0.0 *	Rep Stress Incr	YES WE	3 0.97	Horz(CT)	0.12 9	n/a r	n/a		
BCDL	10.0	Code IRC2018/TPI20	14 Ma	trix-S	Wind(LL)	0.13 14-15	>999 2	40	Weight: 161 lb	FT = 10%

LUMBER-BRACING-

2x4 SPF No.2 \*Except\* TOP CHORD TOP CHORD Structural wood sheathing directly applied, except end verticals. **BOT CHORD** 1-4: 2x4 SPF 2100F 1.8E Rigid ceiling directly applied or 9-5-5 oc bracing. **WEBS** 1 Row at midpt 3-15, 5-14, 6-13, 8-9

**BOT CHORD** 2x4 SPF No.2 \*Except\* 5-16,10-12: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\*

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

Max Horz 18=353(LC 5)

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

6-13,8-9: 2x4 SPF No.2, 2-18: 2x6 SPF No.2

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

TOP CHORD  $2\text{-}3\text{--}2975/430,\ 3\text{-}5\text{--}2604/425,\ 5\text{-}6\text{--}1994/366,\ 6\text{-}7\text{--}1090/231,\ 7\text{-}8\text{--}1091/253,}$ 

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

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

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=251, 9=198.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1





**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 143924105 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 210251 **A3** Roof Special DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:33 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rpild7XzssyG-s5Eb8SgkXb4eDXyH6J3J\_TE3?WNo2Nidat3CxgyAlkq 15-5-0 **01/28/2021** 33-2-8 -0-10<sub>7</sub>8 2-3-8 0-10-8 2-3-8 25-9-10 27-6-0

6-10-2

25-9-10

except end verticals.

1 Brace at Jt(s): 13

1 Row at midpt

1-8-6

27-6-0

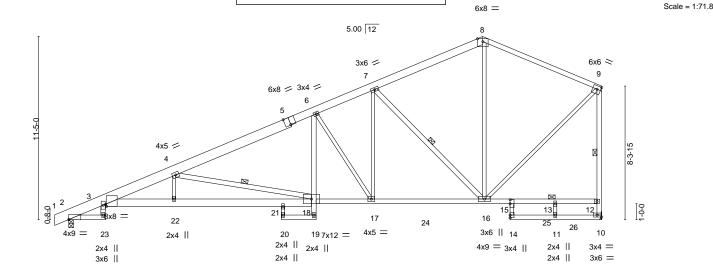
30-3-12

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

4-18, 7-16, 9-10

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

5-8-8



	2-3-0 4-3-3	0-0-4 2-2-0	3-0-7	-2 1-0-0	2-9-12 2-10-12
Plate Offsets (X,Y)	[2:0-0-0,0-0-2], [3:0-0-11,Edge], [5:0-4-	0,Edge], [9:Edge,0-2-8], [	10:Edge,0-1-8], [15:0-3-0,0-0-0	)]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (lo	c) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.86	Vert(LL) -0.31 21-2	2 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.56 21-2	2 >711 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Horz(CT) 0.28 1	0 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.24 21-2	2 >999 240	Weight: 204 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

**JOINTS** 

18-11-7

15-5-0

LUMBER-

2x6 SPF No.2 \*Except\* TOP CHORD

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

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

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

4-3-3

6-8-

13-3-0

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

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

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

Max Horz 2=388(LC 8)

Max Uplift 2=-230(LC 8), 10=-218(LC 8) Max Grav 2=1628(LC 2), 10=1735(LC 2)

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

TOP CHORD 2-3=-777/0, 3-4=-4381/700, 4-6=-2638/374, 6-7=-2042/335, 7-8=-1099/191,

8-9=-1098/212, 10-12=-1607/243, 9-12=-1499/253

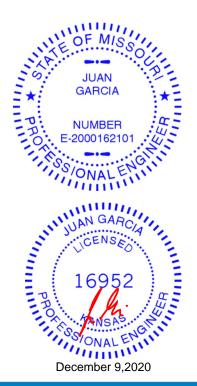
**BOT CHORD** 3-22=-1008/4216, 21-22=-1006/4216, 18-21=-998/4191, 17-18=-510/2324,

16-17=-385/1851

WEBS 6-18=-43/605, 4-22=0/279, 4-18=-1933/511, 6-17=-860/228, 7-17=-135/1000,

7-16=-1323/340, 8-16=-7/457, 9-16=-202/1298

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 10=218
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

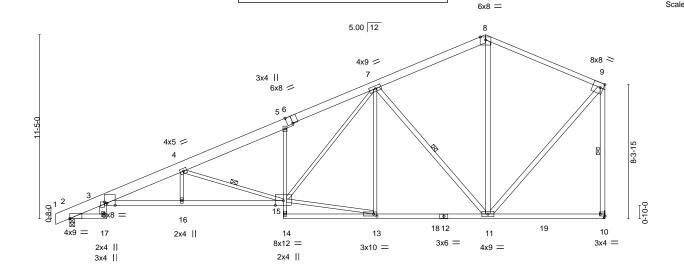
ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924106 AS NOTED ON PLANS REVIE 210251 A4 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:34 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-KHozLohNlvCVqhXTg0bYXgnEqvkcnuFnpXolT7yAlkp 25-9-10 -0-10-8 2-3-8 0-10-8 2-3-8 33-2-8 <del>ใ<u>0</u>1/28/2021</del> + 4-7-14 6-3-1 6-10-3 7-4-14



	2-3-8 4-7-14	6-3-10	5-8-7	6-10-3	7-4-14	
Plate Offsets (X,Y)	[2:0-0-0,0-0-2], [3:0-6-4,Edge], [3:0-0-1	4,0-1-11], [6:0-4-0,Edge]	], [9:0-2-5,Edge],	[10:Edge,0-1-8], [13:0-2-8,	0-1-8]	
LOADING (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 0.86	Vert(LL)	-0.30 15-16 >999	360 MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.73	Vert(CT		240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.65	Horz(C1	,	n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL	.) 0.15 16 >999	240 Weight: 19	5 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

18-11-7

25-9-10

except end verticals.

1 Row at midpt

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

4-15, 7-11, 9-10

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

LUMBER-

TOP CHORD 2x6 SPF No.2 \*Except\*

8-9: 2x4 SPF No.2, 1-6: 2x8 SP DSS

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

3-17: 2x6 SPF No.2, 3-15: 2x4 SPF 2100F 1.8E, 5-14: 2x3 SPF No.2

6-11-6

**WEBS** 2x3 SPF No.2 \*Except\* 7-11,8-11,9-10,9-11: 2x4 SPF No.2

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

Max Horz 2=275(LC 5)

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

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

TOP CHORD 2-3=-892/0, 3-4=-4038/151, 4-5=-2796/116, 5-7=-2735/187, 7-8=-978/106,

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

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

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

9-11=-8/1231

### NOTES-

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

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

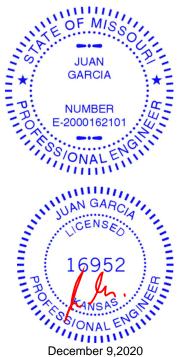
13-3-0

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

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

5) Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Scale = 1:71.5



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924107 S NOTED ON PLANS REVIED DEVELOPMENT SERVICES **AS NOTED ON PLANS** 210251 **A5** Common DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:35 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-oUMMZ8i?3CKMSr6fEj6n4uJOoJ0CWKAw1BYJ?ZyAlko -0-10<sub>7</sub>8 0-10-8 25-9-33-2-8 <sup>18</sup>01/28/2021 4-6-9 7-2-7 6-10-7-4-14 Scale = 1:71.5

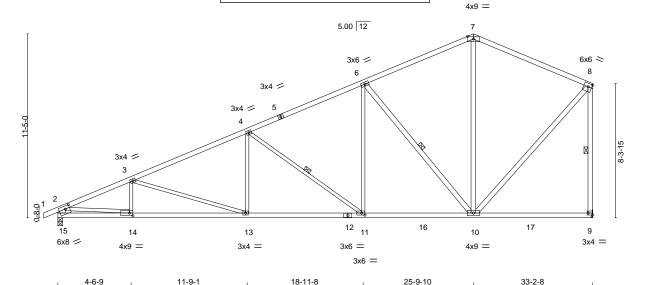


Plate Offsets (X,Y)--[8:Edge,0-2-8], [9:Edge,0-1-8], [11:0-2-8,0-1-8], [14:0-2-8,0-2-0], [15:0-3-4,0-2-4] SPACING-**PLATES GRIP** LOADING (psf) CSI. in (loc) I/def L/d TC 197/144 TCLL 25.0 Plate Grip DOL 1.15 0.91 Vert(LL) -0.19 13-14 >999 360 MT20 -0.35 13-14 TCDL 10.0 Lumber DOL 1.15 ВС 0.90 Vert(CT) >999 240 BCLL 0.0 Rep Stress Incr YES WB 0.74 Horz(CT) 0.08 C n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S 0.08 13-14 >999 240 Weight: 154 lb

BRACING-

**WEBS** 

TOP CHORD

BOT CHORD

6-10-1

1 Row at midpt

7-4-14

Structural wood sheathing directly applied, except end verticals.

4-11, 6-10, 8-9

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

LUMBER-

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

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

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

Max Horz 15=278(LC 5)

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

4-6-9

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

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

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

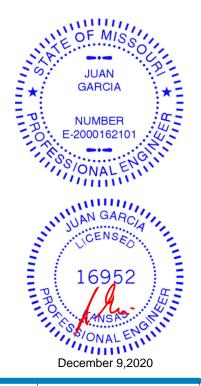
**WEBS** 3-13=-380/75, 4-13=0/382, 4-11=-880/97, 6-11=0/792, 6-10=-1178/130, 7-10=-7/381,

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

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

7-2-7

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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924108 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 210251 A6 Roof Special DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:36 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rpild7XzssyG-GgwkmUjdqWSD4?hsoRd0c5scCjRjFr14GrHsY?yAlkn 25-9-10 -0-10-8 0-10-8 18-11<mark>0</mark>1/28/2021 33-2-8 4-6-9 7-2-7 6-10-1 7-4-14

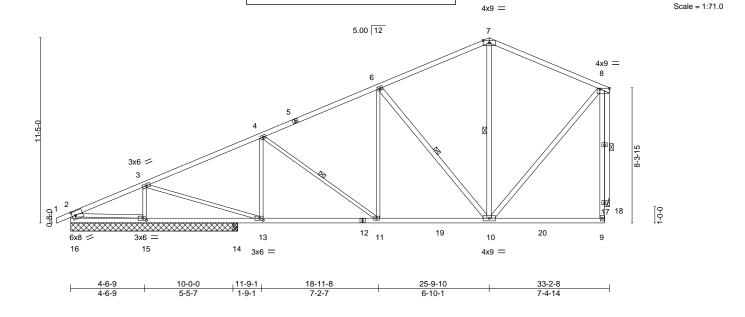


Plate Offsets (2	X,Y)	[8:Edge,0-0-8], [13:0-2-8,	0-1-8], [15:0-	2-8,0-1-8], [16	:0-2-9,0-3-0]					
LOADING (ps	sf)	SPACING-	2-0-0	CSI.		DEFL.	in (lo	c) I/defl	L/d	PLATES GRIP
TCLL 25.	.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.12 11-1	3 >999	360	MT20 197/144
TCDL 10.	.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.23 11-1	3 >999	240	OF MISSIL
BCLL 0.	.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.04 1	8 n/a	n/a	176
BCDL 10.	.0	Code IRC2018/TF	PI2014	Matrix	c-S	Wind(LL)	0.07 11-1	3 >999	240	Weight: 162 lb FT = 10%
LUMBER-				•		BRACING-				JUAN
TOP CHORD BOT CHORD	2x4 SP 2x4 SP					TOP CHOP		ctural wood		directly applied or 3-9-12 or parlins,
WEBS		F No.2 *Except*				BOT CHOP	3		rectly applie	ed or 6-0-0 oc bracing.
OTHERS	6-10,7-	10,2-16,8-9,8-10: 2x4 SP	F No.2			WEBS	1 R	ow at midpt		4-11, 6-10, 7-10, 8 N MBER

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

Max Horz 16=361(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 14 except 15=-305(LC 8), 18=-177(LC

2x4 SPF No 2

Max Grav All reactions 250 lb or less at joint(s) 16 except 15=1415(LC 2), 14=259(LC

2), 18=1313(LC 2)

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

TOP CHORD 3-4=-1369/158, 4-6=-1313/188, 6-7=-801/151, 7-8=-795/170

**BOT CHORD** 15-16=-292/61, 11-13=-347/1192, 10-11=-252/1138

**WEBS** 3-15=-1293/364, 3-13=-187/1262, 4-13=-408/152, 6-11=0/360, 6-10=-765/249,

8-10=-156/906, 8-18=-1314/177

### NOTES-

OTHERS

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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 3x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) 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) 14 except (jt=lb) 15=305, 18=177.
- 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.



: E-2000162101

SO/ONAL

December 9,2020







**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 143924109 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 210251 **B1** Roof Special DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:37 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rdild7XzssyG-ksT6zqjFbqa4h9G2L88F9JPkl7oX\_GaDVV1Q4RyAlkm 18-11-8 **01/28/2021** + 25-9-10 -0-10<sub>7</sub>8 0-10-8 33-2-8 4-6-12 5-4-12 9-0-0 6-10-2 7-4-14

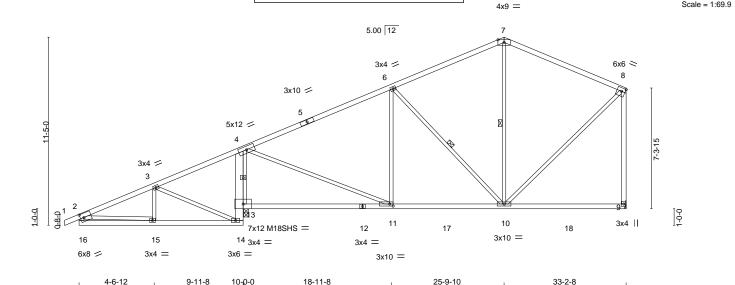


Plate Offsets (X,)	Plate Offsets (X,Y) [8:Edge,0-2-8], [11:0-2-8,0-1-8], [16:0-2-9,0-3-0]										
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP							
TCLL 25.0	Plate Grip DOL 1.15	TC 0.91	Vert(LL) -0.18 11-13 >999 360	MT20 197/144							
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT) -0.35 11-13 >807 240	M18SHS 197/144							
BCLL 0.0	Rep Stress Incr YES	WB 0.62	Horz(CT) -0.01 9 n/a n/a								
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) -0.02 9-10 >999 240	Weight: 147 lb FT = 10%							

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

8-11-8

6-10-2

except end verticals.

1 Row at midpt

7-4-14

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

6-10, 7-10

Rigid ceiling directly applied or 4-6-1 oc bracing.

LUMBER-

**WEBS** 

REACTIONS.

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

4-14: 2x6 SP DSS 2x3 SPF No.2 \*Except\* 2-16,8-9: 2x4 SPF No.2

(size) 13=0-3-8 (req. 0-3-9), 9=Mechanical

Max Horz 13=265(LC 5)

Max Uplift 13=-180(LC 4), 9=-20(LC 9) Max Grav 13=2262(LC 2), 9=942(LC 2)

4-6-12

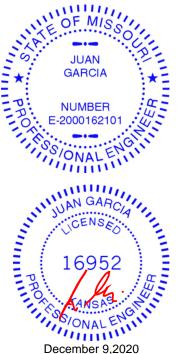
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD  $2-3=-113/556,\ 3-4=-217/1226,\ 4-6=-704/45,\ 6-7=-561/84,\ 7-8=-554/94,\ 8-9=-791/56$ **BOT CHORD** 14-15=-454/123, 13-14=-72/339, 4-13=-1796/154, 11-13=-1193/285, 10-11=-96/577 **WEBS** 3-15=-59/263, 3-14=-680/147, 4-11=-120/1794, 6-11=-461/150, 2-15=-498/118,

5-4-12

8-10=-17/581

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) WARNING: Required bearing size at joint(s) 13 greater than input bearing size.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 13=180.
- 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 = 1:69.9



**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924110 AS NOTED ON PLANS REVIED DEVELOPMENT SERVICES 210251 B2 Roof Special DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:38 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-C31UB9ktM7ixJJrEvsfUhWxuqX8djjlMk9mzcuyAlkl 18-11-8 **01/28/2021** + <u>25-9-10</u> 33-6-0 4-6-12 5-4-12 9-0-0 6-10-2 7-8-6

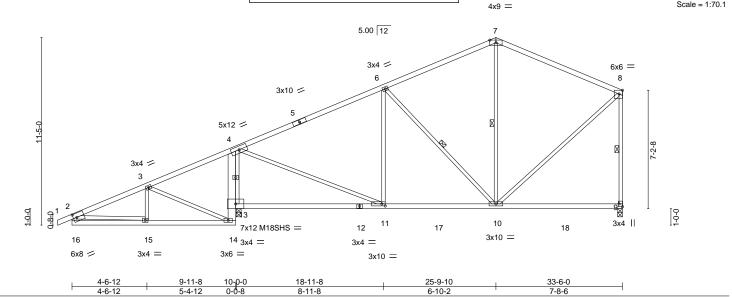


Plate Offset	IS (X,Y)	[8:0-2-8,Eage], [9:Eage,0-2	2-8 <u>], [11:0-2-</u> 8	3,0-1-8], [16:	0-2-9,0-3-0]						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.18 11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.35 11-13	>807	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	-0.01 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-S	Wind(LL)	-0.04 9-10	>999	240	Weight: 146 lb	FT = 10%

BRACING-

**WEBS** 

TOP CHORD

**BOT CHORD** 

LUMBER-

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

4-14: 2x6 SP DSS 2x3 SPF No.2 \*Except\* WEBS 2-16: 2x4 SPF No.2

REACTIONS. (size) 13=0-3-8 (req. 0-3-9), 9=0-3-8

Max Horz 13=330(LC 5)

Max Uplift 13=-382(LC 4), 9=-119(LC 9) Max Grav 13=2275(LC 2), 9=961(LC 2)

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

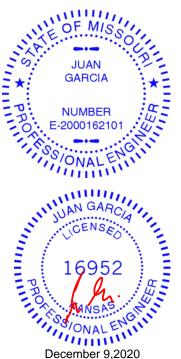
TOP CHORD 2-3=-163/556, 3-4=-321/1226, 4-6=-704/107, 6-7=-586/152, 7-8=-564/168,

8-9=-808/152

**BOT CHORD** 14-15=-454/178, 13-14=-99/339, 4-13=-1808/378, 11-13=-1170/367, 10-11=-160/559 WEBS

3-15=-68/263, 3-14=-680/220, 4-11=-254/1808, 6-11=-468/199, 2-15=-498/178,

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) WARNING: Required bearing size at joint(s) 13 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) 13=382, 9=119.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1



Structural wood sheathing directly applied, except end verticals.

6-10, 7-10, 8-9

Rigid ceiling directly applied or 4-5-11 oc bracing.

1 Row at midpt

Scale = 1:70.1

December 9,2020



**RELEASE FOR** Job Truss Truss Type 210251 **B**3 Roof Special

3-7-15

11-9-2

4-9-11

Waverly, KS - 66871,

3-3-8

CONSTRUCTION AS NOTED ON PLANS REVIE **DEVELOPMENT SERVICES**  Lot 7 H3

143924111

1-6-14

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:39 2020 Page 1 XzssyG-gFbsOVIV7RqoxSPQTZAjEkU6nwOhS8pWypWW8KyAlkk ID:Hr0UloyIgMOrZQ4rpild7 33-6-0

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

5-15, 9-10, 7-14

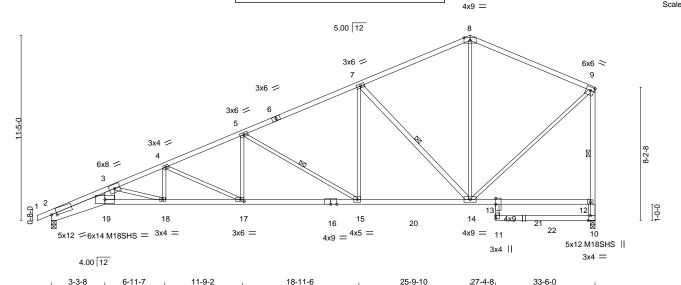
Rigid ceiling directly applied or 2-2-0 oc bracing.

except end verticals.

1 Row at midpt

18-11-6<mark>01/28/2021</mark> 25-9-10 7-2-5 6-10-4

Scale = 1:71.0



3-7-15 4-9-11 6-10-4 1-6-14 Plate Offsets (X,Y)--[2:0-3-15,0-1-6], [9:Edge,0-2-8], [10:0-3-8,Edge], [13:0-4-8,0-0-0], [17:0-2-8,0-1-8] **PLATES GRIP** LOADING (psf) SPACING-2-0-0 in (loc) I/def L/d 197/144 TCLL 25.0 Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.33 18-19 >999 360 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.93 Vert(CT) -0.58 15-17 >692 240 M18SHS 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.76 Horz(CT) 0.28 10 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Wind(LL) 0.25 18-19 >999 240 Weight: 157 lb FT = 10% Matrix-S

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

Wheeler Lumber,

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

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

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

**WEBS** 2x3 SPF No.2 \*Except\* 3-19: 2x8 SP DSS, 9-10,7-14: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=341(LC 7)

Max Uplift 2=-253(LC 8), 10=-196(LC 8) Max Grav 2=1628(LC 2), 10=1743(LC 2)

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

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

8-9=-1138/257, 10-12=-1595/235, 9-12=-1495/243

**BOT CHORD** 2-19=-1362/6559, 18-19=-1161/5495, 17-18=-741/3836, 15-17=-509/2870,

14-15=-257/1864, 12-13=-260/104

3-19=-383/2147, 5-17=-30/660, 5-15=-1168/293, 7-15=-63/882, 9-14=-163/1296, WEBS 4-17=-1068/257, 4-18=-55/541, 3-18=-1712/433, 8-14=-50/486, 7-14=-1304/335

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253 10=196
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Job Truss Truss Type 210251 B4 Roof Special Wheeler Lumber, Waverly, KS - 66871,

3-8-0

4-9-10

3-3-8

**RELEASE FOR** CONSTRUCTION AS NOTED ON PLANS REVIE
DEVELOPMENT SERVICES

Lot 7 H3

143924112

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:40 2020 Page 1 ID:Hr0UloylgMOrZQ4rpild7XzssyG-9R9Fcrm7ulyfYc\_d1Hiynx1GdKk2Bb6fBTF4hmyAlkj 25<sub>7</sub>9<sub>7</sub>10 0-6-10 33-6-0 0-3-8 33-2-8

7-4-14

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

5-14, 7-13, 9-10

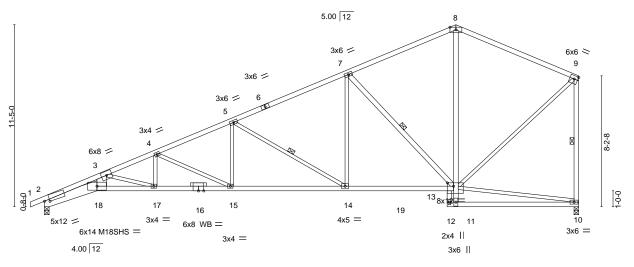
Rigid ceiling directly applied or 2-2-0 oc bracing.

except end verticals.

1 Row at midpt

<del>18-1<mark>0</mark>1/28/2021</del>+ 6-3-9

Scale = 1:72.2 4x9 =



6-11-8 11-9-2 18-11-7 33-6-0 3-8-0 4-9-10 0-6-10 Plate Offsets (X,Y)-- [2:0-3-15,0-1-6], [9:Edge,0-2-8], [13:0-4-12,0-2-8]

		[=: :-;- : -], [-::3-;- = -],	· · · · · · · · · · · · · · · · · · ·		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.32 17-18 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.92	Vert(CT) -0.57 17-18 >704 240	M18SHS 197/144
BCLL	0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT) 0.27 10 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.25 17-18 >999 240	Weight: 162 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

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

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

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

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

**OTHERS** 2x3 SPF No 2

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

Max Horz 2=341(LC 7)

Max Uplift 2=-252(LC 8), 10=-195(LC 8) Max Grav 2=1615(LC 2), 10=1567(LC 2)

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

TOP CHORD 2-3=-7056/1270, 3-4=-4112/674, 4-5=-3115/504, 5-7=-2063/349, 7-8=-1132/249,

8-9=-1115/266, 9-10=-1432/237

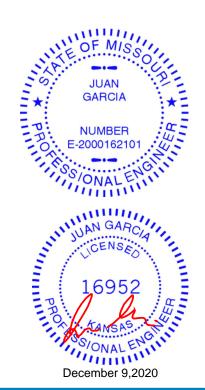
**BOT CHORD** 2-18=-1362/6501, 17-18=-1161/5446, 15-17=-740/3797, 14-15=-508/2834, 13-14=-256/1835, 12-13=-534/0

**WEBS** 3-18=-383/2128, 3-17=-1702/434, 4-17=-54/540, 4-15=-1064/256, 5-15=-31/654, 5-14=-1161/294, 7-14=-61/897, 7-13=-1307/329, 11-13=0/748, 8-13=-59/475,

10-13=-265/34, 9-13=-149/1247

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=252, 10=195
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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

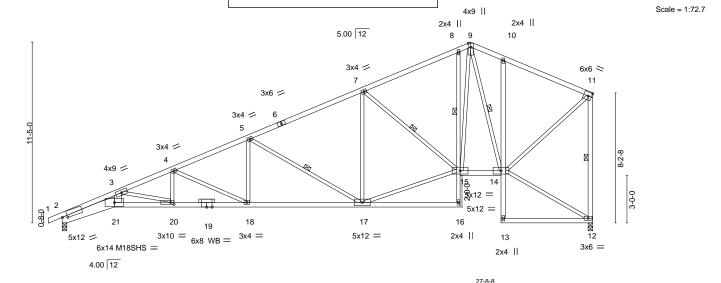
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd Chesterfield, MO 63017

**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924113 S NOTED ON PLANS REVIED DEVELOPMENT SERVICES **AS NOTED ON PLANS** 210251 **B**5 Roof Special DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:41 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpilld7XzssyG-ddjdpBnmf24WAmZpa\_DBJ9ZSUk3Sw2cpQ6?dDDyAlki <sub>18-1</sub>0<mark>1/28/2021</mark> 7-2-6 27-8-8 25-9-10 0-8-2 1-10-14 -Q-10-8 3-3-8



Tiate Offices (A, I)	[2.0 0 10,0 1 0], [20.0 2 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 0.77	Vert(LL) -0.31 20-21 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.56 20-21 >711 240	M18SHS 197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.32 12 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.26 20-21 >999 240	Weight: 177 lb FT = 10%

**BOT CHORD** 

**WEBS** 

LUMBER-BRACING-TOP CHORD

2x4 SPF No.2 \*Except\* TOP CHORD 1-6: 2x4 SPF 2100F 1.8E

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

Plate Offsets (X V)-- [2:0-3-15 0-1-6] [20:0-2-8 0-1-8]

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

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

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

**OTHERS** 2x3 SPF No.2

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

Max Horz 2=341(LC 7)

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

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

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

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

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

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

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

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

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 12=196.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

Rigid ceiling directly applied or 6-10-4 oc bracing. Except:

8-15

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

except end verticals.

1 Row at midpt

1 Row at midpt



**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924114 REVIE **AS NOTED ON PLANS** 210251 C<sub>1</sub> **GABLE DEVELOPMENT SER** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:43 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, rpild7XzssyG-Z0rNEto0BgKDP4jCiPFfOafyYYzPO5d6tQUkH5yAlkg ID:Hr0UloyIgMOrZQ4 20-10-8 0-10-8 20-0-0 01/28/2021 10-0-0 10-0-0

3x4 =

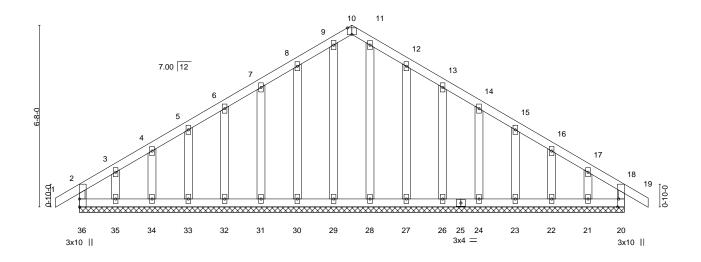


Plate Offs	ets (X,Y)	[10:0-2-0,Edge], [20:0-3-8,Edge									
LOADING	\(\frac{1}{2}\)	SPACING- 2-0-			DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1		0.09	Vert(LL)	-0.00	19	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL 1.1		0.05	Vert(CT)	-0.00	19	n/r	120		
BCLL	0.0 *	Rep Stress Incr YE	WB	0.07	Horz(CT)	0.00	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Mati	ix-R						Weight: 107 lb	FT = 10%

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD 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 20-0-0.

2x4 SPF No.2

Max Horz 36=-188(LC 6) (lb) -

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

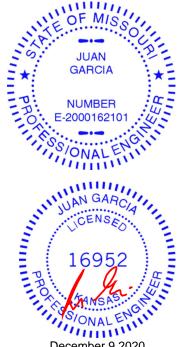
35=-101(LC 8)

All reactions 250 lb or less at joint(s) 36, 20, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24, 23, 22, Max Grav

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

**OTHERS** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 36, 20, 34, 33, 32, 31, 30, 27, 26, 24, 23, 22, 21 except (jt=lb) 35=101.
- 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 = 1:42.3

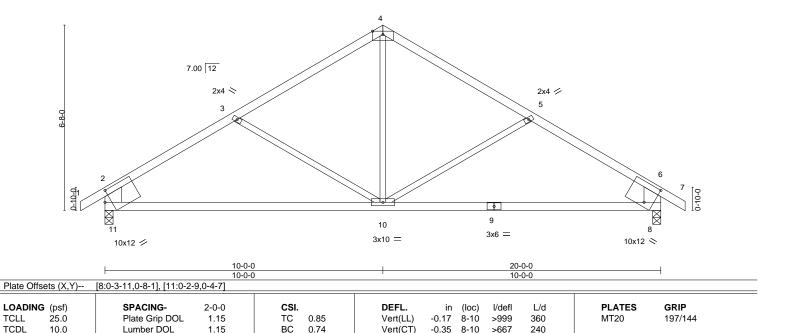
December 9.2020



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924115 REVIE **AS NOTED ON PLANS** 210251 C2 Common **DEVELOPMENT SER** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:43 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rpild7XzssyG-Z0rNEto0BgKDP4jCiPFfOafmlYofO3t6tQUkH5yAlkg 15-2-15 20-0-0 20-10-8 0-10-8 0-10-8 0-10-8 01/28/2021 4-9-0 5-2-15 5-3-0 4-9-1 Scale = 1:41.5

4x9 =



Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

0.03

0.06

8

10 >999

n/a

except end verticals.

n/a

240

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

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

LUMBER-

BCLL

**BCDL** 

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

0.0

10.0

WEBS 2x3 SPF No.2 \*Except\* 2-11,6-8: 2x8 SP DSS

REACTIONS. (size) 8=0-3-8, 11=0-3-8 Max Horz 11=-192(LC 6)

Max Uplift 8=-130(LC 9), 11=-130(LC 8) Max Grav 8=955(LC 1), 11=955(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1148/182, 3-4=-875/141, 4-5=-875/141, 5-6=-1148/183, 2-11=-852/178, TOP CHORD

YES

WB

Matrix-S

0.24

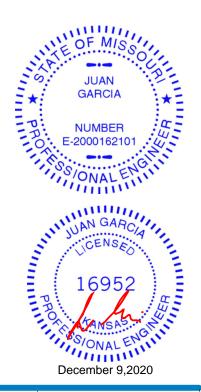
6-8=-852/178

**BOT CHORD** 10-11=-167/901, 8-10=-79/881

**WEBS** 4-10=-6/460, 5-10=-255/206, 3-10=-254/206

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=130, 11=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.



FT = 10%

Weight: 70 lb



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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

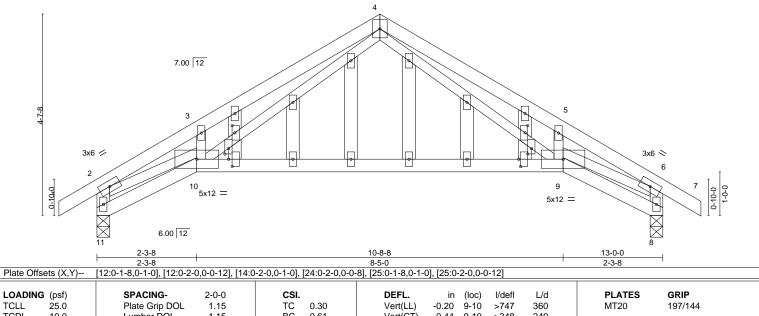


16023 Swingley Ridge Rd Chesterfield, MO 63017

**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 143924116 210251 C3 GABLE Job Reference (optional) LEE'S SUMMIT, MISSOURI

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 14:50:58 2020 Page 1
iD:Hr0UloyigMOrZQ4rpild7XzssyG-Gu87kr?W5M\_mvSOBNmd?4kruKOCrPiPawrBIFZyAfxB Wheeler Lumber, Waverly, KS 66871, Mitek

13-10-8 -0-10-8 6-6-0 10-8-8 13-0-0 01/28/2021 0-10-8 2-3-8 4-2-8 4-2-8 0-10-8 Scale = 1:26.5



LOADING (psf) TCLL BC TCDL Lumber DOL 0.61 Vert(CT) 10.0 1.15 -0.449-10 >348 240 Rep Stress Incr Horz(CT) **BCLL** 0.0 YES WB 0.39 0.10 8 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-S Wind(LL) 0.05 9-10 >999 240 Weight: 61 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SPF No.2

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

2-11,6-8: 2x4 SPF No.2

**OTHERS** 2x4 SPF No.2

REACTIONS. (lb/size) 11=643/0-3-8, 8=643/0-3-8

Max Horz 11=-138(LC 6)

Max Uplift 11=-90(LC 8), 8=-90(LC 9)

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

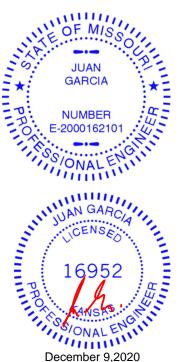
TOP CHORD 2-3=-1422/165, 3-4=-1433/288, 4-5=-1433/221, 5-6=-1422/96, 2-11=-669/108,

**BOT CHORD** 9-10=-23/526

**WEBS** 4-9=-143/857, 4-10=-196/945, 2-10=-100/1125, 6-9=-43/1125

### 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 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) Bearing at joint(s) 11, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 11 and 90 lb uplift at joint 8.
- 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 4-6-0 oc purlins, except

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





**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION REVIE VICES **AS NOTED ON PLANS** 210251 C4 **GABLE DEVELOPMENT SER** Job Reference (optional) Wheeler Lumber,

LEE'S SUMMIT, MISSOURI 430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:48 2020 Page 1 Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4pild7XzssyG-w\_eGHas9?CzWWrc9Vyrq5dMfrZXu3Cyr1iCVzJyAlkb 28-5-8 39-8-14 <del>1/28/2021</del>

Scale = 1:76.9

4-5-3

143924117

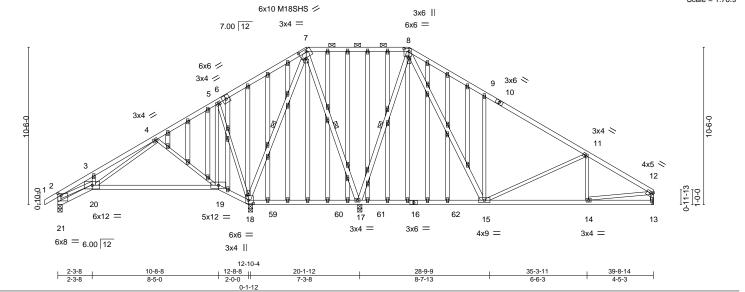


Plate Offsets (X,Y)--[7:0-6-4,0-1-12], [7:0-2-0,0-0-11], [8:0-4-0,0-2-4], [8:0-1-13,0-1-8], [12:Edge,0-1-8], [18:0-0-14,0-1-8], [18:0-4-0,0-2-8], [21:0-2-8,0-1-8] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl **PLATES** GRIP TCLL 25.0 Plate Grip DOL 1.15 TC 0.76 Vert(LL) -0.18 19-20 >839 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.60 Vert(CT) -0.37 19-20 >411 240 M18SHS 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.77 Horz(CT) 0.03 n/a 18 n/a Code IRC2018/TPI2014 **BCDL** 10.0 Wind(LL) 0.03 14-15 >999 240 Weight: 325 lb FT = 10% Matrix-S

TOP CHORD

LUMBER-BRACING-

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

2x3 SPF No.2 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. 7-18,7-17,8-17,8-15: 2x4 SPF No.2 **WEBS** 7-18, 7-17, 8-17 1 Row at midpt

**OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.

Max Horz 21=287(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 21 except 18=-329(LC 8), 17=-146(LC 9), 13=-138(LC 9) Max Grav All reactions 250 lb or less at joint(s) except 21=344(LC 21), 18=1391(LC 15), 17=1750(LC 2), 13=739(LC 16)

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

TOP CHORD 2-3=-650/66, 3-4=-699/183, 4-5=-133/710, 5-7=-80/880, 7-8=0/578, 8-9=-516/358,

9-11=-510/187, 11-12=-948/204, 2-21=-362/74, 12-13=-674/155

**BOT CHORD** 20-21=-304/322, 19-20=-255/132, 18-19=-517/196, 17-18=-476/198, 14-15=-136/755 4-20=-248/1032, 4-19=-430/187, 5-19=-18/262, 5-18=-590/193, 7-18=-559/171, WFBS 7-17=-387/72, 8-17=-1108/194, 8-15=-294/1125, 9-15=-465/279, 11-15=-544/184,

2-20=-17/515, 12-14=-116/687

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 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, with BCDL = 10.0psf.
- 10) Refer to girder(s) for truss to truss connections.
- 11) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21 except (jt=lb) 18=329, 17=146, 13=138.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuierenneshaterzdard ANSI/TPI 1.



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

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 7-8.

December 9.2020

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

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

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



**RELEASE FOR** Truss Type Job Truss CONSTRUCTION Lot 7 H3 143924117 AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

1

Job Reference (optional)

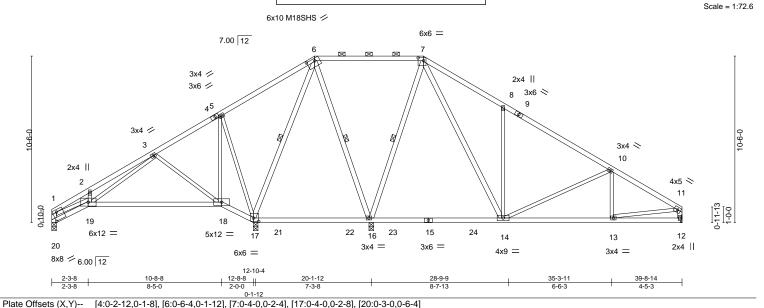
LEE'S SUMMIT, MISSOUR! 430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:48 2020 Page 2 C4 210251 **GABLE** 

Wheeler Lumber, Waverly, KS - 66871,

NOTES-

ID:Hr0UloyIgMOrZQ4Ipild7XzssyG-w\_eGHas9?CzWWrc9Vyrq5dMfrZXu3Cyr1iCVzJyAlkb

NOTES01/28/2021
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Tidle Cilecte (X, T)	[1.0 2 12,0 1 0], [0.0 0 1,0 1 12], [1.0 1	0,0 2 :], [:::0 : 0,0 2 0]	( <u>  = 0:0 0 0;0 0 1</u>	
LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.18 18-19 >839 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.37 18-19 >410 240	M18SHS 197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT) 0.03 17 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.03 13-14 >999 240	Weight: 185 lb FT = 10%

TOP CHORD

LUMBER-BRACING-

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

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 6-7. **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. 6-17,6-16,7-16,7-14,1-20,11-12: 2x4 SPF No.2 WEBS 6-17, 6-16, 7-16 1 Row at midpt

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

Max Horz 20=277(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 20 except 17=-327(LC 8), 16=-144(LC 9), 12=-138(LC 9) Max Grav All reactions 250 lb or less at joint(s) except 20=288(LC 16), 17=1390(LC 15), 16=1743(LC 2), 12=741(LC 16)

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

TOP CHORD 1-2=-676/67, 2-3=-726/183, 3-5=-132/700, 5-6=-78/871, 6-7=0/570, 7-8=-522/358,

8-10=-514/187, 10-11=-945/202, 1-20=-309/48, 11-12=-675/155

**BOT CHORD** 19-20=-299/326, 17-18=-510/195, 16-17=-470/197, 13-14=-136/753 WEBS

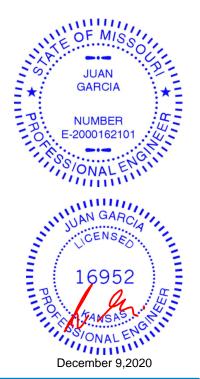
3-19=-243/1039, 3-18=-438/189, 5-18=-18/265, 5-17=-597/195, 6-17=-557/168,

6-16=-382/70, 7-16=-1103/193, 7-14=-294/1122, 8-14=-466/279, 10-14=-535/183,

1-19=-25/524, 11-13=-115/677

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20 except (jt=lb) 17=327, 16=144, 12=138.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

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

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



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924119 AS NOTED ON PLANS REVIE 210251 C6 Piggyback Base **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:51 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-KZKPvcu1I7L5NIKkA5OXjG\_8gmWzGWRHjgQ9adyAlkY 20-0-0**01/28/2024** 39-8-14 28-5-8 35-3-11 5-9-14 8-5-7 5-0-6 6-10-4 4-5-3

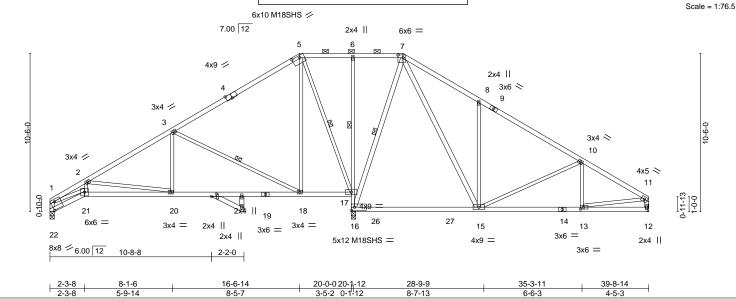


Plate Offsets (X,Y)	Plate Offsets (X,Y) [4:0-4-8,Edge], [5:0-6-4,0-1-12], [7:0-4-0,0-2-4], [13:0-2-8,0-1-8], [22:0-3-0,0-6-4], [23:0-2-0,0-3-15]									
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP						
TCLL 25.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.27 15-16 >879 360	MT20 197/144						
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.42 15-16 >557 240	M18SHS 197/144						
BCLL 0.0 *	Rep Stress Incr YES	WB 0.91	Horz(CT) 0.02 12 n/a n/a							
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.05 20-21 >999 240	Weight: 185 lb FT = 10%						

LUMBER-BRACING-TOP CHORD

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

6-16: 2x3 SPF No.2 2x3 SPF No.2 \*Except\*

7-16,7-15,1-22,11-12,24-25: 2x4 SPF No.2

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 3-8-2 oc bracing: 16-17

8-7-13

6-0-0 oc bracing: 15-16. 1 Row at midpt WFBS 1 Row at midpt

REACTIONS. (size) 22=0-3-8, 16=0-3-8, 12=Mechanical

Max Horz 22=221(LC 5)

Max Uplift 22=-28(LC 8), 12=-75(LC 9)

Max Grav 22=881(LC 13), 16=2051(LC 13), 12=962(LC 14)

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

TOP CHORD 1-2=-2415/188, 2-3=-1278/94, 3-5=-437/163, 7-8=-936/283, 8-10=-900/166,

10-11=-1273/133, 1-22=-953/82, 11-12=-886/95

**BOT CHORD** 21-22=-234/342, 20-21=-229/2127, 18-20=-84/1207, 16-17=-1160/87, 6-17=-264/71,

13-15=-81/1038

WEBS 2-21=-57/558, 2-20=-932/147, 3-20=0/449, 3-18=-1094/154, 5-18=0/688, 5-17=-1045/42,

7-16=-832/19, 7-15=-119/1136, 8-15=-464/172, 10-15=-445/86, 1-21=-136/1913,

11-13=-72/943

### NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) The Fabrication Tolerance at joint 5 = 0%
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 12.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



4-5-3

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

6-17

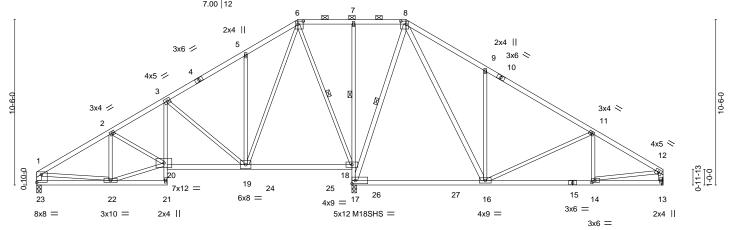
3-18, 5-17, 7-16

December 9.2020



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924120 **AS NOTED ON PLANS** REVIE 210251 C7 Piggyback Base **DEVELOPMENT SER** VICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:52 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4ipild7XzssyG-oltn7yvf3RTy?SvwkovmGTWPQAt1??8QyKAi64yAlkX 20-0-0<mark>01/28/205</mark> 39-8-14 28-5-8 8-3-6 3-7-2 4-8-4 4-11-12 3-3-12 6-10-4 4-5-3 Scale = 1:73.1 6x6 = 2x4 || 6x6 = 7.00 12 2x4 || 2x4 II 3x6 //



	4-0	-4 3-1-2	4-1-12	7-0-14	0-1-12	0-7-13		0-0-3	4-5-5	
Plate Offsets (X,	′)	[6:0-4-0,0-2-4], [8:0-4-0,0	)-2-4], [14:0-2-8	3,0-1-8], [23:Edge,0-6-0]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	*	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES Pl2014	CSI. TC 0.46 BC 0.72 WB 0.82 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.26 16-17 -0.41 16-17 -0.03 17 0.03 19-20	I/defI >886 >568 n/a >999	L/d 360 240 n/a 240	PLATES MT20 M18SHS Weight: 190 lb	<b>GRIP</b> 197/144 197/144 FT = 10%
DODL 10.0		Code 11(C2016/11	12014	Wiatrix-5	VVIIIG(LL)	0.03 13-20	/333	240	Weight. 130 lb	1 1 = 1076

**BOT CHORD** 

**WEBS** 

28-9-9

20-0-0

LUMBER-BRACING-TOP CHORD

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

3-21,7-17: 2x3 SPF No.2 2x3 SPF No.2 \*Except\*

8-17,8-16,1-23,12-13: 2x4 SPF No.2

REACTIONS. (size) 23=0-3-8, 17=0-3-8, 13=Mechanical

Max Horz 23=220(LC 5)

Max Uplift 23=-45(LC 8), 13=-85(LC 9)

Max Grav 23=910(LC 13), 17=2061(LC 13), 13=969(LC 14)

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

TOP CHORD 1-2=-1211/82, 2-3=-1266/144, 3-5=-721/145, 5-6=-687/215, 8-9=-948/300, 9-11=-912/182, 11-12=-1284/147, 1-23=-829/70, 12-13=-894/104

22-23=-198/378, 3-20=-11/499, 19-20=-106/1181, 17-18=-1196/77, 7-18=-287/67, **BOT CHORD** 

14-16=-93/1048

2-22=-325/94, 20-22=-113/1153, 3-19=-746/113, 5-19=-323/122, 6-19=-112/1098,

6-18=-926/52, 8-17=-817/6, 8-16=-118/1133, 9-16=-464/172, 11-16=-444/83,

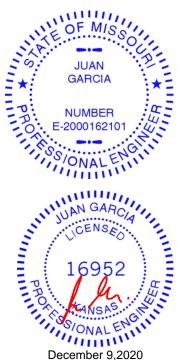
1-22=-6/788, 12-14=-84/953

### NOTES-

WFBS

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 13.
- 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.



39-8-14

Structural wood sheathing directly applied or 4-11-1 oc purlins,

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 6-8.

7-18

6-18, 8-17

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

3-7-0 oc bracing: 17-18.

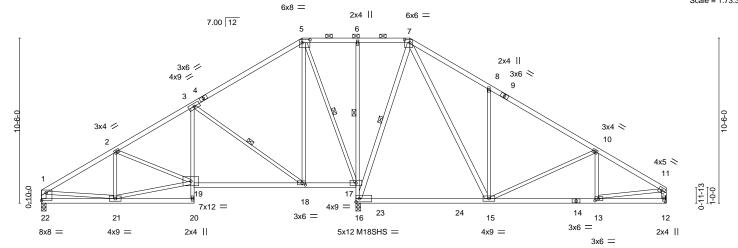
1 Row at midpt

1 Row at midpt



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 143924121 S NOTED ON PLANS REVIE DEVELOPMENT SERVICES **AS NOTED ON PLANS** 210251 C8 Piggyback Base DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:53 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild1XzssyG-GxR9KIwHqkbpccU7HVQ?oh3ZlaDAkRmaA\_vGeWyAlkW 20-0-0 **01/28/205** 28-5-8 35-3-11 39-8-14 4-8-4 5-0-5 6-10-6 5-0-6 6-10-4 4-5-3 Scale = 1:73.3



		4-8-4 5	-0-5	6-10-6	3-5-2 0-1 <sup>!</sup> -12	8-3-12	ı	6-10-4	4-5-3	
Plate Off	sets (X,Y)-	- [5:0-6-0,0-2-4], [7	:0-4-0,0-2-4], [13:0-2	2-8,0-1-8], [18:0-2-8	3,0-1-8], [22:Edge,0-6-0]					
LOADIN	G (psf)	SPACING	- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d <b>i</b>	PLATES	GRIP
TCLL	25.0	Plate Grip	DOL 1.15	TC 0.50	6 Vert(LL)	-0.26 15-16	>886	360	MT20	197/144
TCDL	10.0	Lumber D	OL 1.15	BC 0.72	2 Vert(CT)	-0.41 15-16	>569 2	240	M18SHS	197/144
BCLL	0.0 *	Rep Stres	s Incr YES	WB 0.80	6 Horz(CT)	-0.03 16	n/a	n/a		
BCDL	10.0	Code IRC	2018/TPI2014	Matrix-S	Wind(LL)	0.03 18-19	>999 2	240 \	Weight: 189 lb	FT = 10%

**BOT CHORD** 

28-5-8

20-0-0 20-1-12

LUMBER-BRACING-TOP CHORD

16-6-14

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

4-8-4

3-20,6-16: 2x3 SPF No.2 2x3 SPF No.2 \*Except\*

7-16,7-15,1-22,11-12: 2x4 SPF No.2

6-0-0 oc bracing: 20-21 4-0-8 oc bracing: 16-17. 1 Row at midpt 6-17 WEBS 1 Row at midpt 3-18, 5-17, 7-16

35-3-11

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

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

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

39-8-14

REACTIONS. (size) 22=0-3-8, 16=0-3-8, 12=Mechanical

Max Horz 22=220(LC 5)

Max Uplift 22=-35(LC 8), 12=-73(LC 9)

Max Grav 22=924(LC 13), 16=1966(LC 13), 12=991(LC 14)

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

TOP CHORD 1-2=-1244/63, 2-3=-1148/115, 3-5=-461/162, 7-8=-988/279, 8-10=-952/162,

10-11=-1319/129, 1-22=-848/57, 11-12=-916/92

9-8-8

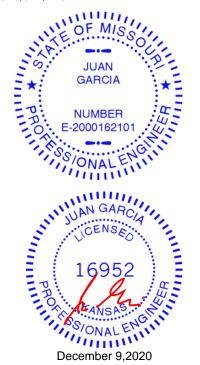
**BOT CHORD** 21-22=-200/367, 3-19=0/536, 18-19=-70/1075, 17-18=-10/302, 16-17=-1118/82,

6-17=-269/68, 13-15=-78/1078

WEBS 19-21=-84/1178, 3-18=-962/140, 5-18=0/737, 5-17=-985/38, 7-16=-798/20, 7-15=-120/1130, 8-15=-464/172, 10-15=-438/86, 1-21=0/825, 11-13=-69/982

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 12.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



**RELEASE FOR** Job Truss Truss Type Ply Lot 7 H3 CONSTRUCTION Piggyback Base Girder \_\_\_\_\_ 143924122 REVIE 210251 C9 **DEVELOPMENT SER** VICES DEVELOPMENT SERVICES Job Reference (optional)

LEE'S SUMMIT, MISSOUR! 430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:54 2020 Page 1 Waverly, KS - 66871, Wheeler Lumber, ID:Hr0UloylgMOrZQ4rpild7XzssyG-k8?XYexvb2jgEm3JrDyELucfjzUlTxYjPefpAyyAlkV 6-7-12 6-7-12 13-**6**-8/28/2021 6-9-12 16-6-14 20-3-8 3-1-6 3-8-10 10x12 = Scale = 1:61.9 2x4 ||

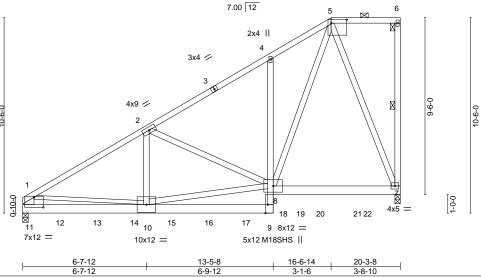


Plate Offsets (X,Y)	[5:0-10-0,0-2-4], [9:0-5-8,Edge], [11:0-6-0,0-6-7]	
		Ξ

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.86	Vert(LL) -0.1	, ,	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.2		>819	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr NO	WB 0.70	Horz(CT) -0.2		n/a	n/a	WITOSITIS	131/144
				- (- ,				M-1-b+ 400 lb	ET 400/
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.0	8 9-10	>999	240	Weight: 420 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

2x4 SPF No.2 TOP CHORD

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

4-9: 2x4 SPF No.2

2x4 SPF No.2 \*Except\* WEBS

1-11: 2x8 SP DSS, 1-10: 2x3 SPF No.2

REACTIONS. (size) 7=0-3-8 (req. 0-3-15), 11=0-3-8 (req. 0-4-5)

Max Horz 11=314(LC 20)

Max Uplift 7=-463(LC 5), 11=-681(LC 8) Max Grav 7=7484(LC 2), 11=8193(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-10775/759, 2-4=-5811/407, 4-5=-5816/497, 1-11=-6087/433

**BOT CHORD** 10-11=-671/3878, 9-10=-36/1028, 8-9=0/2143, 4-8=-400/144, 7-8=-216/2101 **WEBS** 

2-10=-366/4263, 8-10=-724/8288, 2-8=-4791/468, 5-8=-660/8515, 5-7=-5667/428,

1-10=-161/5371

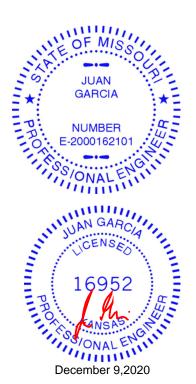
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x3 - 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.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) WARNING: Required bearing size at joint(s) 7, 11 greater than input bearing size.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=463, 11=681,
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

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

1 Row at midpt





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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Ply Lot 7 H3 143924122 Piggyback Base Girder DEVELOPMENT SERVICES 210251 C9

Wheeler Lumber, Waverly, KS - 66871,

DEVELOPMENT SERVICES | 3 | Job Reference (optional)

LEE'S SUMMIT, MISSOUR! 430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:54 2020 Page 2 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-k8?XYexvb2jgEm3JrDyELucfjzUITxYjPefpAyyAlkV

NOTES
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1684 lb down and 218 lb up at 1-11-4, 1698 lb down and 238 lb up at 3-11-4, 1698 lb down and 238 lb up at 5-11-4, 1575 lb down and 47 lb up at 7-11-4, 1575 lb down and 47 lb up at 13-11-4, 1571 lb down and 47 lb up at 13-11-4, and 896 lb down and 40 lb up at 17-11-4, and 921 lb down and 32 lb up at 20-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

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

Vert: 1-5=-70, 5-6=-70, 9-11=-20, 7-8=-20

Concentrated Loads (lb)

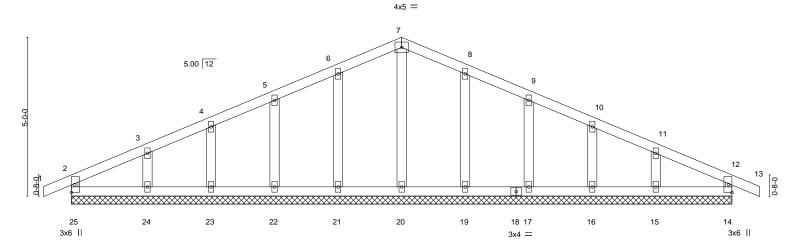
Vert: 7=-830(B) 12=-1456(B) 13=-1460(B) 14=-1460(B) 15=-1460(B) 16=-1460(B) 17=-1456(B) 18=-1185(B) 20=-822(B) 21=-822(B)

**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924123 Common Supported Gable VILLOPMENT SER REVIE 210251 D1 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:55 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:Hr0UloylgMOrZQ4rpild7XzssyG-CKZwl\_xYMMrXsweVPwTTt68?wN3QCYxteIOMjPyAlkU 21-8-0 0-10-8 20-9-8 01/28/2021 10-4-12

Scale = 1:36.3



	20-9-8									
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 0.06	Vert(LL) -0	0.00 13	n/r 120	MT20 197/144				
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0	0.00 13	n/r 120					
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0	0.00 14	n/a n/a					
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R				Weight: 79 lb FT = 10%				

20-9-8

LUMBER-BRACING-

10-4-12

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

**OTHERS** 2x4 SPF No.2

0-10-8

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

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

REACTIONS. All bearings 20-9-8.

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

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

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 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.



December 9.2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 143924124 AS NOTED ON PLANS REVIED DEVELOPMENT SERVICES 210251 D2 Common DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:14:56 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-hW7IzJyA7fzNT4Dize\_iQJhzOnGExzO0sy8wFryAlkT 0-10-8 15-5-14 21-8-0 0-10-8 20-9-8 01/28/2021 5-3-10 5-1-2 5-1-2 5-3-10

4x9 =5.00 12 2x4 \\ 2x4 // Ф 11 10 9 12 8 3x4 =3x4 =8x8 >

14-5-13 20-9-8 6-3-12 Plate Offsets (X,Y)--[8:0-2-13,0-6-6], [12:0-1-8,0-3-9] SPACING-**PLATES** GRIP LOADING (psf) CSI. DEFL. in (loc) I/def L/d -0.17 TCLL 25.0 Plate Grip DOL 1.15 TC 0.91 Vert(LL) 9-11 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 BC 0.64 Vert(CT) -0.39 9-11 >621 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.16 Horz(CT) 0.04 8 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Wind(LL) 0.10 9-11 >999 240 Weight: 68 lb Matrix-S

TOP CHORD

**BOT CHORD** 

3x4 =

except end verticals.

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

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

LUMBER-BRACING-

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

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

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

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

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

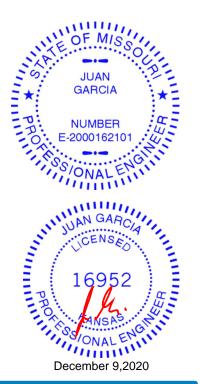
2-3=-1541/197, 3-4=-1394/220, 4-5=-1394/220, 5-6=-1541/197, 2-12=-907/170,TOP CHORD

6-8=-907/170

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=143, 8=143.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Scale = 1:36.1



	<sub>1</sub> 1-0-0 <sub>1</sub> 2-9-	-10   8-8-6	13-0	-12   14-	·7-3 <sub>1</sub> 1	9-0-12	20-9-8	
	1-0-0 1-9-	-10 5-10-13	4-4	-6 1-6	6-7 <sup>1</sup>	4-5-9	1-8-12	
Plate Offsets (X,	<ul> <li>[2:0-6-0,Edge], [17:0-4-0,0</li> </ul>	0-4-8], [18:0-5-11,0-4-0], [	[24:0-6-0,0-4-0], [33:0-3-8	3,0-3-0], [34:0-2	-14,0-4-8], [38	:0-2-4,0-1-0], [3	9:0-2-0,0-0-12], [40:0-2	2-0,0-0-9]
								-
LOADING (psf)	SPACING-	2-0-0 CSI	. DE	FL. in	(loc) I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15 TC	0.51 Ver	t(LL) -0.10 2	26-28 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15 BC	0.39 Ver	t(CT) -0.20 2	26-28 >999	240		
BCLL 0.0	Rep Stress Incr	NO WB	0.81 Hor	z(CT) 0.04	7 n/a	n/a		
BCDL 10.0	Code IRC2018/TP	I2014 Mat	rix-S Wir	id(LL) 0.09 2	26-28 >999	240	Weight: 365 lb	FT = 10%

TOP CHORD

**BOT CHORD** 

WEBS

**JOINTS** 

LUMBER-**BRACING-**

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

2-4: 2x4 SPF 2100F 1.8E

2x6 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 \*Except **WEBS** 1-33: 2x4 SPF 2100F 1.8E

**OTHERS** 2x4 SPF No.2

REACTIONS. (lb/size) 36=4616/0-3-8 (req. 0-3-11), 7=4768/0-3-8 (req. 0-3-13)

Max Horz 36=380(LC 5)

Max Uplift 36=-681(LC 8), 7=-780(LC 8) Max Grav 36=4684(LC 15), 7=4851(LC 15)

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

TOP CHORD 1-36=-2284/341, 1-2=-5126/706, 2-3=-6843/973, 3-4=-3838/549, 4-5=-3721/573 **BOT CHORD** 35-36=-362/319, 33-35=-360/1208, 31-33=-1197/7830, 29-31=-1197/7830,

27-29=-1197/7830, 25-27=-1197/7830, 23-25=-1135/7472, 21-23=-1135/7472,

19-21=-1135/7472, 17-19=-1132/7441, 16-17=-1132/7441, 14-16=-586/4068,

12-14=-586/4068, 8-12=-586/4068, 8-50=-586/4068, 7-50=-586/4068, 32-34=-2646/359,

 $30-32=-1565/229,\ 28-30=-1565/229,\ 26-28=-1565/229,\ 24-26=-1565/229,\ 22-24=-1212/167,$ 

20-22=-1212/167, 18-20=-1212/167, 15-18=-562/106, 13-15=-566/104, 11-13=-566/104,

10-11=-566/104, 9-10=-566/104

**WEBS** 1-34=-735/5263, 33-34=-1091/7939, 32-33=-2135/330, 2-32=-2996/501, 24-25=-149/1369,

 $3-24 = -270/2622, \ 3-18 = -3270/563, \ 16-18 = -4172/666, \ 15-16 = -373/2726, \ 5-15 = -627/4750, \ 16-18 = -4172/666, \ 16-18 = -4$ 

5-9=-4978/837, 7-9=-6109/1024, 30-31=-1114/185, 28-29=-307/54, 26-27=-312/52,

22-23=-409/79, 20-21=-595/96, 13-14=-52/388, 11-12=-755/130, 8-10=-77/299,

34-35=-3560/507

### NOTES-

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

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

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

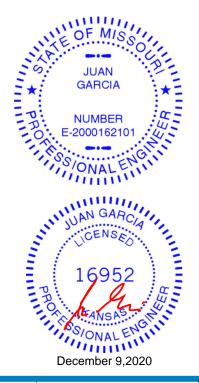
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 33-2 2x4 - 1 row at 0-4-0 oc, member 7-5 2x4 - 1 row at 0-4-0 oc, member 35-34 2x4 - 1 row at 0-7-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate 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) Provide adequate drainage to prevent water ponding.

🗥 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 5-11-0 oc purlins,

6-7, 5-7

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

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

1 Brace at Jt(s): 1, 30, 28, 26, 22, 20, 13, 11, 10

1 Row at midpt



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Type Truss 210251 D3 Roof Special Girder

### **RELEASE FOR** CONSTRUCTION

AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:Hr0UloylgMOrZQ4

Lot 7 H3

Ply

Job Reference (optional)

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 14:51:24 2020 Page 2 pild7XzssyG-VuiyCkJqzMG41SNBvE567DvHTt7JVNFPvuUg92yAfwn

143924125

Wheeler Lumber, Waverly, KS 66871, Mitek

NOTES-

7) Gable studs spaced at 2-0-0 oc.

01/28/2021

- 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
- 10) WARNING: Required bearing size at joint(s) 36, 7 greater than input bearing size.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 681 lb uplift at joint 36 and 780 lb uplift at joint 7.

  12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.
- 15) Studding applied to ply: 1(Front)

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-6=-70, 7-36=-20, 9-34=-20

Concentrated Loads (lb)

Vert: 18=-816(B) 30=-623(B) 28=-623(B) 26=-623(B) 22=-777(B) 20=-777(B) 13=-769(B) 11=-769(B) 10=-769(B) 34=-625(B)

**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 143924126 AS NOTED ON PLANS REVIED DEVELOPMENT SERVICES P1 210251 **GABLE** Job Reference (optional) 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:00 2020 Page 1 LEE'S SUMMIT, MISSOURI 430 s Nov Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpIld7XzssyG-ZHMpoh?gAuUpyhWTCT2ea9st?Omltohcna67OcyAlkP 6-10-5 3-5-2 3-5-2 01/28/2021 3-5-2 Scale = 1:14.9

3x4 =

2x4 || 5 2x4 II 7.00 12 6 0-0-11 9 8 2x4 = 2x4 = 2x4 || 2x4 || 6-10-5

Plate Offsets	(X,Y)	[4:0-2-0,Edge], [5:0-0-0,0	··0-0]										
LOADING (p TCLL 29 TCDL 10 BCLL		SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES	CSI. TC BC WB Matri	0.04 0.02 0.01	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 17 lb	<b>GRIP</b> 197/144 FT = 10%	
BCDL II	0.0	Code IRC2018/1F	212014	iviatri	X-P						vveignt: 17 ib	F1 = 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 6-0-0 oc purlins.

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

REACTIONS. All bearings 6-9-3.

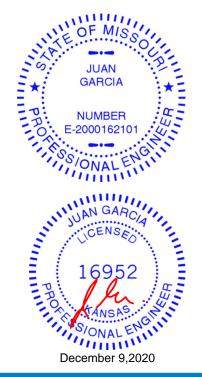
(lb) -Max Horz 1=-48(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 9, 8 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 8

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 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) 1, 7, 2, 6, 9, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



14



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

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

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

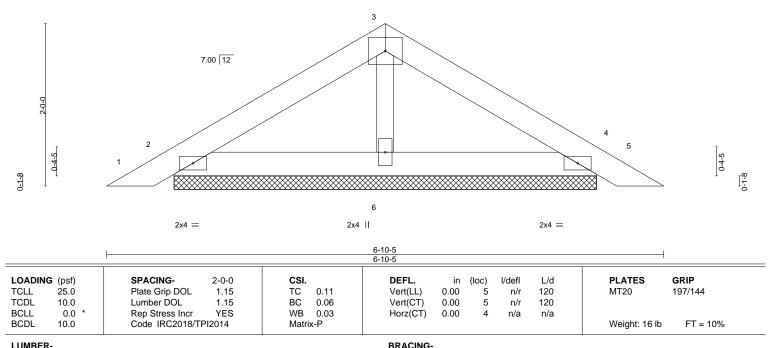


**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924127 AS NOTED ON PLANS REVIE
DEVELOPMENT SERVICES 210251 P2 Piggyback DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:01 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-1UwB010IxCcgar5flBat7NO1jo6RcFll0Erhw2yAlkO 6-10-5 01/28/2021 3-5-2

4x5 =

Scale = 1:14.2



TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

**OTHERS** 2x3 SPF No.2

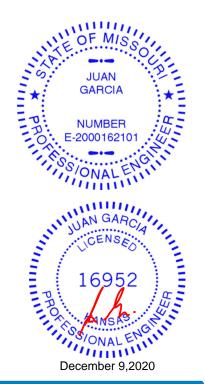
> 2=5-2-6, 4=5-2-6, 6=5-2-6 (size) Max Horz 2=-48(LC 6)

Max Uplift 2=-43(LC 8), 4=-49(LC 9) Max Grav 2=168(LC 1), 4=168(LC 1), 6=207(LC 1)

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

### NOTES-

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



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

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



Job Truss Truss Type 210251 V1 **GABLE** 

Waverly, KS - 66871,

**RELEASE FOR** CONSTRUCTION REVIE **AS NOTED ON PLANS** 

Lot 7 H3

143924128

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:01 2020 Page 1 ID:Hr0UloylgMOrZQ4rpild7XzssyG-1UwB010IxCcgar5flBat7NO?mo5\_cEfl0Erhw2yAlkO

**DEVELOPMENT SER** 

Scale = 1:38.8

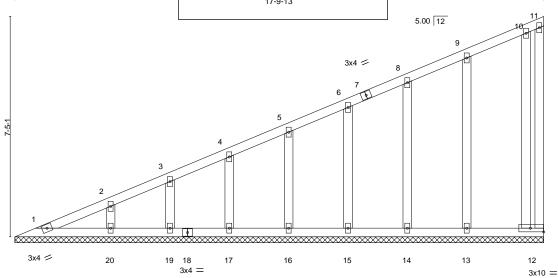


Plate Off	fsets (X,Y)	[12:Edge,0-1-8]										
LOADIN	\(\frac{1}{2}\)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	x-S						Weight: 83 lb	FT = 10%

LUMBER-

Wheeler 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.

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

REACTIONS. All bearings 17-9-13.

Max Horz 1=308(LC 5) (lb) -

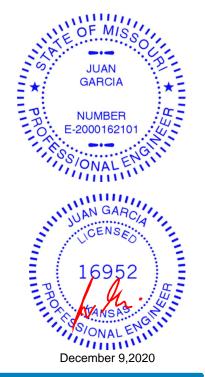
Max Uplift All uplift 100 lb or less at joint(s) 12, 20, 19, 17, 16, 15, 14, 13 Max Grav All reactions 250 lb or less at joint(s) 12, 1, 20, 19, 17, 16, 15, 14, 13

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

TOP CHORD 1-2=-258/35

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 20, 19, 17, 16,
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 S NOTED ON PLANS REVIED DEVELOPMENT SERVICES **AS NOTED ON PLANS** 210251 V2 Valley DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:07 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpiId7XzssyG-seHSG453X2MqImYp6ShHNee0\_D7V?xMeO9I?8iyAlkI

> 5.00 12 \$ 3x4 = 9 8 7 6

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) 1/0	defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL) n/a -	n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a -	n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) -0.00 6	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S			Weight: 46 lb FT = 10%

LUMBER-BRACING-

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

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

except end verticals.

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

REACTIONS. All bearings 15-1-11.

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

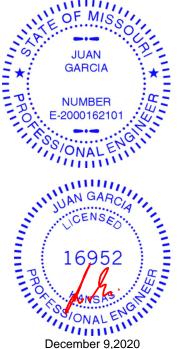
Max Uplift All uplift 100 lb or less at joint(s) 6, 8, 9 except 7=-104(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=440(LC 2), 8=364(LC 2), 9=336(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 4-7=-306/143, 3-8=-280/147, 2-9=-251/128 WEBS

### 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) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8, 9 except (it=lb) 7=104.
- 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.



143924129

Scale = 1:31.6



Job Truss Truss Type 210251 V3 Valley

Waverly, KS - 66871,

Wheeler Lumber,

**RELEASE FOR** CONSTRUCTION REVIE **AS NOTED ON PLANS DEVELOPMENT SER** 

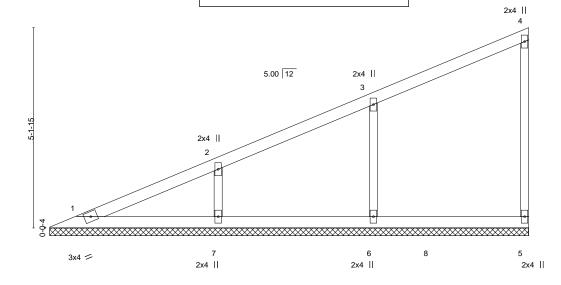
Lot 7 H3

143924130

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:07 2020 Page 1 ID:Hr0UloylgMOrZQ4rpild7XzssyG-seHSG453X2MqImYp6ShHNee1ID7i?yleO9I?8iyAlkI

Scale = 1:29.7



LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.20 BC 0.13	DEFL. in (loc Vert(LL) n/a Vert(CT) n/a	oc) I/defl L/d - n/a 999 - n/a 999	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.09 Matrix-S	Horz(CT) -0.00	5 n/a n/a	Weight: 36 lb FT = 10%

LUMBER-

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

BRACING-TOP CHORD

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

BOT CHORD

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

REACTIONS. All bearings 12-4-2. (lb) -

2x3 SPF No.2

Max Horz 1=210(LC 5)

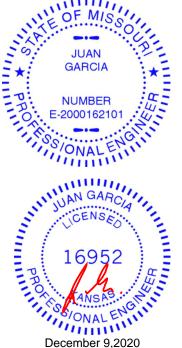
Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-103(LC 8), 7=-101(LC 8) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=415(LC 2), 7=384(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 3-6=-304/148, 2-7=-287/147 WEBS

### NOTES-

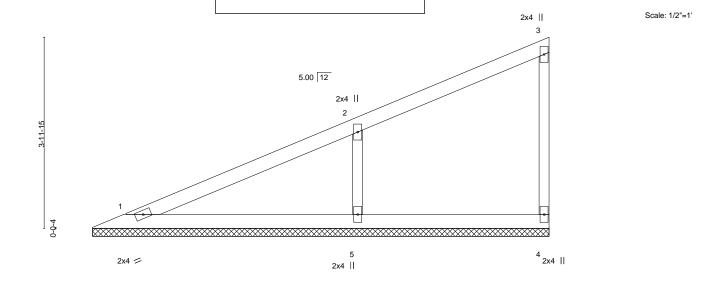
**OTHERS** 

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=103 7=101
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924131 S NOTED ON PLANS REVIED DEVELOPMENT SERVICES **AS NOTED ON PLANS** 210251 V4 Valley DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:08 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rpild7XzssyG-KqrqUQ6hlLUgvw7?g9CWvrBB0dTVkPlndp2Yg8yAlkH



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	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-S						Weight: 26 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

**OTHERS** 2x3 SPF No.2

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

Max Horz 1=159(LC 5)

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

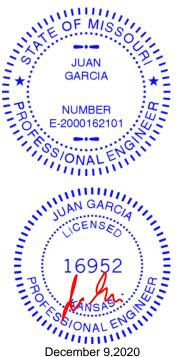
Max Grav 1=174(LC 1), 4=121(LC 1), 5=491(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-5=-372/183

WEBS

### NOTES-

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



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

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

except end verticals.



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 143924132 S NOTED ON PLANS REVIED DEVELOPMENT SERVICES **AS NOTED ON PLANS** Valley 210251 V5 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:08 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rqild7XzssyG-KqrqUQ6hlLUgvw7?g9CWvrB5ldQ4kQundp2Yg8yAlkH Scale = 1:17.7 2x4 || 2 5.00 12

LOADIN	VI /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI:	2014	Matri	x-P						Weight: 17 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-TOP CHORD BOT CHORD

2x4 SPF No 2 2x4 SPF No.2

0-0-4

WEBS 2x3 SPF No.2

REACTIONS.

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

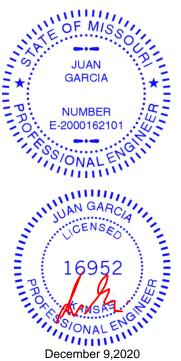
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

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

2x4 =

- 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.



3

2x4 ||

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

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

except end verticals.



**RELEASE FOR** Job Truss Truss Type 210251 V6 Valley **DEVELOPMENT SER** 

Waverly, KS - 66871,

CONSTRUCTION REVIE **AS NOTED ON PLANS** 

Lot 7 H3

143924133

2x4 ||

except end verticals.

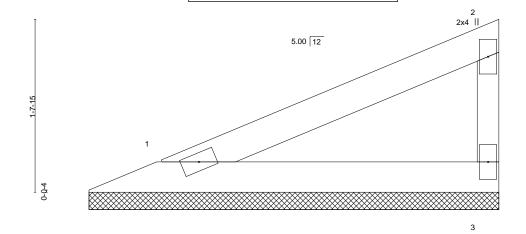
Structural wood sheathing directly applied or 3-11-14 oc purlins,

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

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:09 2020 Page 1 ID:Hr0UloylgMOrZQ4rpild7XzssyG-o0PChm6K3fcXX4iBDsjlS3jOg0qlTt7wsTn6CbyAlkG

Scale = 1:11.1



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 **TCLL** 0.17 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 9 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

1=3-11-5, 3=3-11-5 (size) Max Horz 1=57(LC 5)

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

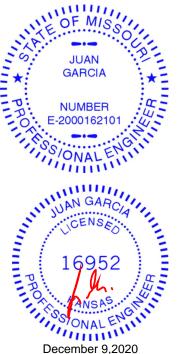
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

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

2x4 /

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





Job Truss Truss Type 210251 V7 Valley

Waverly, KS - 66871,

**RELEASE FOR** CONSTRUCTION AS NOTED ON PLANS REVIED DEVELOPMENT SERVICES

Lot 7 H3

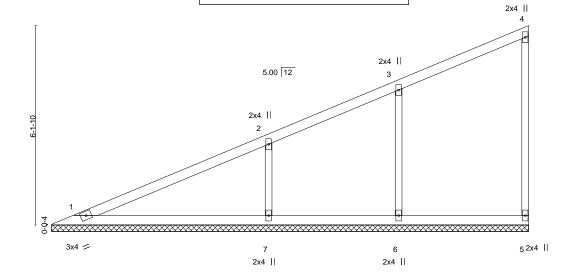
143924134

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:10 2020 Page 1 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-GDzav67yqzkO9DHOnaE\_\_GGVBQ7ECJb447Xfl1yAlkF

<del>01/28/2021</del>

Scale = 1:35.4



LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	PI2014	Matri	x-S						Weight: 44 lb	FT = 10%

LUMBER-TOP CHORD

Wheeler Lumber,

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

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

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

except end verticals. **BOT CHORD** 

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

REACTIONS. All bearings 14-8-2.

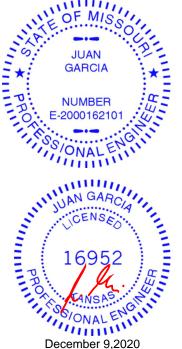
Max Horz 1=253(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-146(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=371(LC 2), 7=557(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 3-6=-260/123, 2-7=-410/207 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=146
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type 210251 V8 Valley

Waverly, KS - 66871,

Wheeler Lumber,

**RELEASE FOR** CONSTRUCTION S NOTED ON PLANS REVIED DEVELOPMENT SERVICES **AS NOTED ON PLANS** 

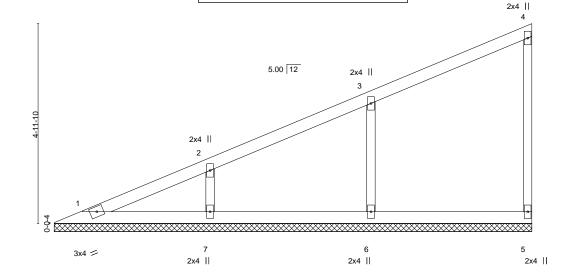
Lot 7 H3

143924135

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:10 2020 Page 1 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-GDzav67yqzkO9DHOnaE\_\_GGY7QAnCJ6447Xfl1yAlkF

Scale = 1:28.6



LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.19		defl L/d n/a 999	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.11		n/a 999	25
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.08 Matrix-S	Horz(CT) -0.00 5 r	n/a n/a	Weight: 34 lb FT = 10%

LUMBER-

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

2x3 SPF No.2 WEBS **OTHERS** 2x3 SPF No.2 BRACING-TOP CHORD

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

except end verticals.

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

REACTIONS. All bearings 11-10-8.

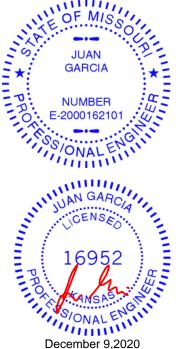
Max Horz 1=202(LC 5) (lb) -

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 3-6=-309/151, 2-7=-267/138 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7 except (jt=lb) 6=104
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type 210251 V9 Valley

Waverly, KS - 66871,

**RELEASE FOR** CONSTRUCTION S NOTED ON PLANS REVIED DEVELOPMENT SERVICES **AS NOTED ON PLANS** 

Lot 7 H3

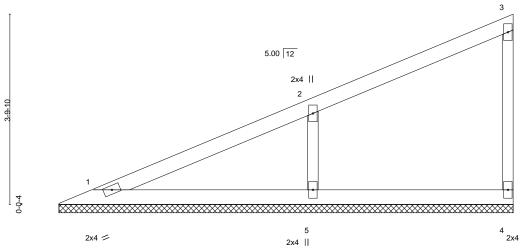
143924136

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR! 430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:11 2020 Page 1 ID:Hr0UloyIgMOrZQ4rpild7XzssyG-kPXz6S8aaGsFmNsaLHIDXUphqqVWxmaDJnGDHTyAlkE

01/28/2021

Scale = 1:23.0 2x4 || 3



LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.26	<b>DEFL.</b> in Vert(LL) n/a	(loc) I/d	efl L/d n/a 999	PLATES MT20	<b>GRIP</b> 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a		n/a 999 n/a 999	IVITZU	197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.07 Matrix-S	Horz(CT) -0.00	4 r	n/a n/a	Weight: 25 lb	FT = 10%

LUMBER-TOP CHORD

Wheeler Lumber,

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

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

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

except end verticals.

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

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

Max Horz 1=151(LC 5)

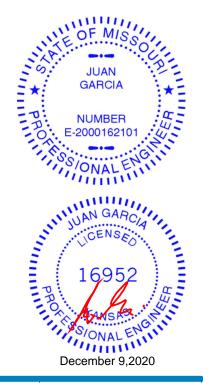
Max Uplift 4=-23(LC 5), 5=-122(LC 8)

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

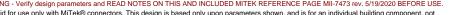
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-5=-350/173 WEBS

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



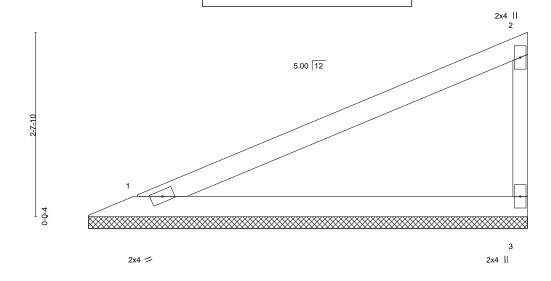






**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 143924137 AS NOTED ON PLANS REVIED DEVELOPMENT SERVICES Valley 210251 V10 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:02 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-VgUZDN1xiVkXB?grJu56gax41COeLiPvFubESVyAlkN



LOADING (psf)	SPACING- 2-0-0	<b>CSI.</b>	DEFL. in (loc) I/defl L/d	<b>PLATES GRIP</b> MT20 197/144
TCLL 25.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) n/a - n/a 999	
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.32 WB 0.00 Matrix-P	Vert(CT) n/a - n/a 999 Horz(CT) -0.00 3 n/a n/a	Weight: 16 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

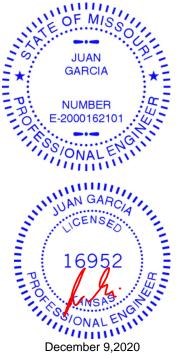
REACTIONS. 1=6-3-5, 3=6-3-5 (size) Max Horz 1=100(LC 5)

Max Uplift 1=-36(LC 8), 3=-56(LC 8) Max Grav 1=246(LC 1), 3=246(LC 1)

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

### NOTES-

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



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

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

except end verticals.

Scale = 1:16.5



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 7 H3 REVIE VICES **AS NOTED ON PLANS** 210251 V11 Valley

**DEVELOPMENT SER** 

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:03 2020 Page 1 ID:Hr0UloyIgMOrZQ4ipild7XzssyG-zs2xRj2ZTpsOp9F2tccLCoUN\_cnn39e2TYKo?xyAlkM

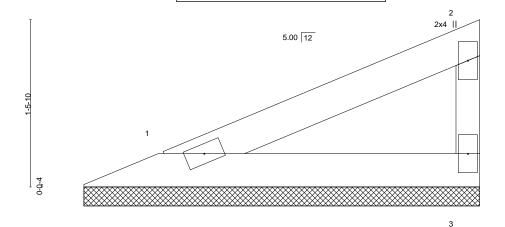
Structural wood sheathing directly applied or 3-6-5 oc purlins,

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

except end verticals.

Scale = 1:10.1

143924138



2x4 = 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

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

LUMBER-

REACTIONS.

Wheeler Lumber,

Waverly, KS - 66871,

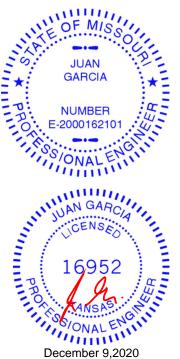
TOP CHORD 2x4 SPF No 2 BOT CHORD 2x4 SPF No.2 WEBS 2x3 SPF No.2

(size)

1=3-5-11, 3=3-5-11 Max Horz 1=49(LC 5) Max Uplift 1=-17(LC 8), 3=-27(LC 8) Max Grav 1=120(LC 1), 3=120(LC 1)

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

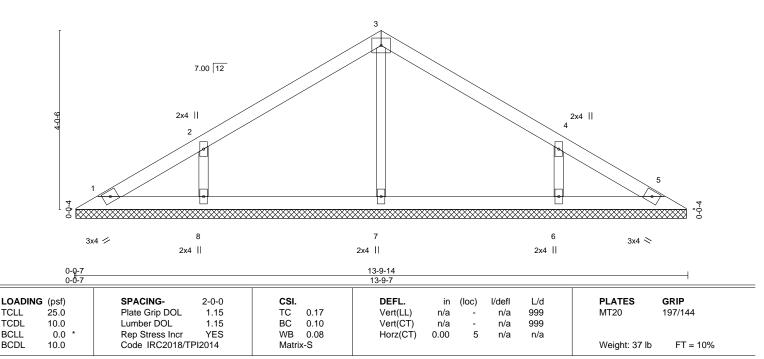
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom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



**RELEASE FOR** Job Truss Truss Type Lot 7 H3 CONSTRUCTION 143924139 REVIE **AS NOTED ON PLANS** 210251 V12 Valley **DEVELOPMENT SER** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:03 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rpild7XzssyG-zs2xRj2ZTpsOp9F2tccLCoUMFcnE38S2TYKo?xyAlkM 01/28/2021 6-10-15 6-10-15

4x5 =



BOT CHORD

LUMBER-BRACING-TOP CHORD

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

REACTIONS. All bearings 13-9-0. Max Horz 1=-97(LC 4)

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

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

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

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=126 6=125
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

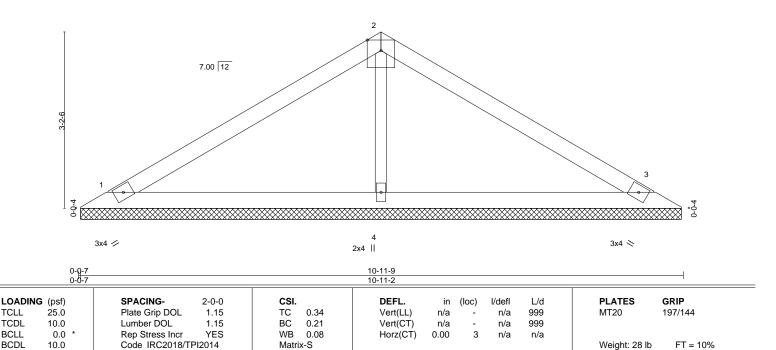
Rigid ceiling directly applied or 10-0-0 oc bracing.

Scale = 1:25.9



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924140 REVIE **AS NOTED ON PLANS** 210251 V13 Valley **DEVELOPMENT SER** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:04 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rpild7XzssyG-S3cJe22BE7\_FRIqERJ7al?0UJ?5robjBiC4LXNyAlkL 10-11-9 5-5-13 5-5-13 01/28/2021 5-5-13 Scale = 1:20.9 6x6 =



**BRACING-**TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. 1=10-10-11, 3=10-10-11, 4=10-10-11 (size)

Max Horz 1=75(LC 5)

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

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

2-4=-302/78 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
- Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924141 AS NOTED ON PLANS REVIED DEVELOPMENT SERVICES 210251 V14 Valley DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:05 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloyIgMOrZQ4rpild7XzssyG-wFAhrO3p?Q662SPQ\_1epHDZhsPTeX3WLxrpu3qyAlkK 8-1-5 01/28/2021 4-0-10 4-0-10 Scale = 1:16.5

4x5 =

2 7.00 12 0-0-4 0-0-4 2x4 || 2x4 / 2x4 < 8-1-5 8-0-14

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

**BRACING-**

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

**PLATES** 

Weight: 20 lb

MT20

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

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

GRIP

197/144

FT = 10%

LUMBER-

REACTIONS.

**TCLL** 

**TCDL** 

**BCLL** 

BCDL

LOADING (psf)

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

25.0

10.0

0.0

10.0

**OTHERS** 2x3 SPF No.2

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Grav 1=171(LC 1), 3=171(LC 1), 4=290(LC 1)

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

### NOTES-

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

CSI.

TC

ВС

WB

Matrix-P

0.23

0.11

0.04

- 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.

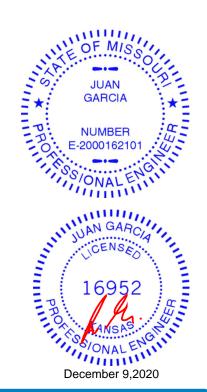
2-0-0

1.15

1.15

YES

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



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



**RELEASE FOR** CONSTRUCTION Job Truss Truss Type Lot 7 H3 143924142 S NOTED ON PLANS REVIE DEVELOPMENT SERVICES **AS NOTED ON PLANS** 210251 V15 Valley DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR!.430 s Nov 30 2020 MiTek Industries, Inc. Wed Dec 9 08:15:05 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:Hr0UloylgMOrZQ4rpild7XzssyG-wFAhrO3p?Q662SPQ\_1epHDZkQPS8X38Lxrpu3qyAlkK 5-3-0 01*/2*8/2021 1-6-7 1-6-7 Scale = 1:9.9

3x4 = 3x4 = 7.00 12 2 0-0-4

Plate Offs	sets (X,Y)	[2:0-2-0,0-2-5], [3:0-2-0,0	)-2-5]									
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
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						Weight: 11 lb	FT = 10%

TOP CHORD

**BOT CHORD** 

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

LUMBER-BRACING-

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

REACTIONS.

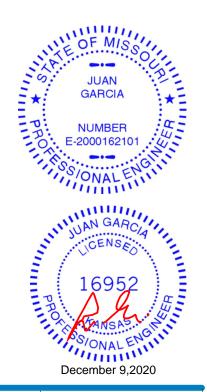
0-0-7

1=5-2-2, 4=5-2-2 (size) Max Horz 1=-16(LC 4) Max Uplift 1=-13(LC 5), 4=-13(LC 4) Max Grav 1=188(LC 1), 4=188(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-261/54, 3-4=-261/54 TOP CHORD

3x4 /

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



3x4 <

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

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

0-10-12

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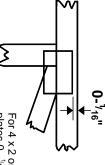


### Symbols

# 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

RELEASE FOR CONSTRUCTION

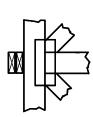
## REVIEUS Plate location details available in MiTek 20/20 NOTED ON PLANE SIZE NOTED ON PLANE SIZE The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots. width measured perpendicular

The first dimension is the plate

# 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



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

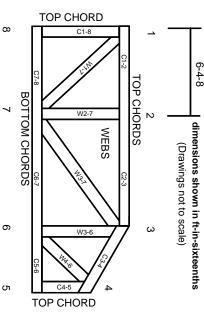
### Industry Standards:

National Design Specification for Metal

DSB-89: ANSI/TPI1:

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

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 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
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

ω

- 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.

Ģ

- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber

9

- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- 19. 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.