



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

07/10/2020

RE: 400370  
Lot 24 HT

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

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

Design Code: IRC2018/TPI2014  
Wind Code: N/A  
Roof Load: 45.0 psf

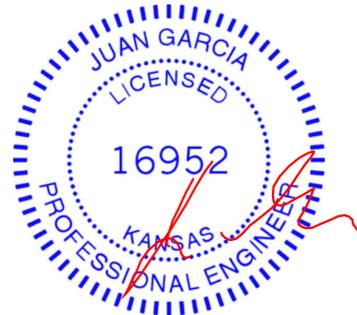
Design Program: MiTek 20/20 8.2  
Wind Speed: 115 mph  
Floor Load: N/A psf

This package includes 88 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I39252173	A1	6/25/2020	27	I39252199	H1	6/25/2020
2	I39252174	A2	6/25/2020	28	I39252200	H2	6/25/2020
3	I39252175	A3	6/25/2020	29	I39252201	H3	6/25/2020
4	I39252176	B1	6/25/2020	30	I39252202	J1	6/25/2020
5	I39252177	B2	6/25/2020	31	I39252203	J2	6/25/2020
6	I39252178	B3	6/25/2020	32	I39252204	J3	6/25/2020
7	I39252179	B4	6/25/2020	33	I39252205	J4	6/25/2020
8	I39252180	B5	6/25/2020	34	I39252206	J5	6/25/2020
9	I39252181	B6	6/25/2020	35	I39252207	J7	6/25/2020
10	I39252182	C1	6/25/2020	36	I39252208	J8	6/25/2020
11	I39252183	C2	6/25/2020	37	I39252209	J9	6/25/2020
12	I39252184	D1	6/25/2020	38	I39252210	J10	6/25/2020
13	I39252185	D2	6/25/2020	39	I39252211	J11	6/25/2020
14	I39252186	D3	6/25/2020	40	I39252212	J12	6/25/2020
15	I39252187	D4	6/25/2020	41	I39252213	J13	6/25/2020
16	I39252188	D5	6/25/2020	42	I39252214	J14	6/25/2020
17	I39252189	D6	6/25/2020	43	I39252215	J16	6/25/2020
18	I39252190	E1	6/25/2020	44	I39252216	J17	6/25/2020
19	I39252191	E2	6/25/2020	45	I39252217	J18	6/25/2020
20	I39252192	E3	6/25/2020	46	I39252218	J21	6/25/2020
21	I39252193	E4	6/25/2020	47	I39252219	J22	6/25/2020
22	I39252194	E5	6/25/2020	48	I39252220	J23	6/25/2020
23	I39252195	E6	6/25/2020	49	I39252221	J24	6/25/2020
24	I39252196	G1	6/25/2020	50	I39252222	J25	6/25/2020
25	I39252197	G2	6/25/2020	51	I39252223	J26	6/25/2020
26	I39252198	G3	6/25/2020	52	I39252224	J27	6/25/2020

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly. Truss Design Engineer's Name: Garcia, Juan My license renewal date for the state of Kansas is April 30, 2022. Kansas COA: E-943

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



June 25, 2020





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07/10/2020

RE: 400370  
Lot 24 HT

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

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

Design Code: IRC2018/TPI2014  
Wind Code: N/A  
Roof Load: 45.0 psf

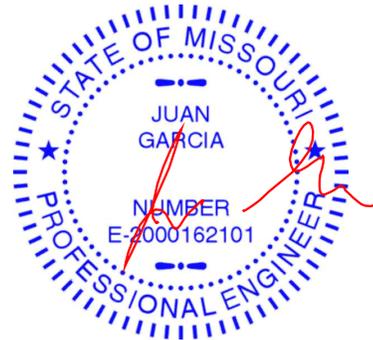
Design Program: MiTek 20/20 8.2  
Wind Speed: 115 mph  
Floor Load: N/A psf

This package includes 88 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I39252173	A1	6/25/2020	27	I39252199	H1	6/25/2020
2	I39252174	A2	6/25/2020	28	I39252200	H2	6/25/2020
3	I39252175	A3	6/25/2020	29	I39252201	H3	6/25/2020
4	I39252176	B1	6/25/2020	30	I39252202	J1	6/25/2020
5	I39252177	B2	6/25/2020	31	I39252203	J2	6/25/2020
6	I39252178	B3	6/25/2020	32	I39252204	J3	6/25/2020
7	I39252179	B4	6/25/2020	33	I39252205	J4	6/25/2020
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9	I39252181	B6	6/25/2020	35	I39252207	J7	6/25/2020
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14	I39252186	D3	6/25/2020	40	I39252212	J12	6/25/2020
15	I39252187	D4	6/25/2020	41	I39252213	J13	6/25/2020
16	I39252188	D5	6/25/2020	42	I39252214	J14	6/25/2020
17	I39252189	D6	6/25/2020	43	I39252215	J16	6/25/2020
18	I39252190	E1	6/25/2020	44	I39252216	J17	6/25/2020
19	I39252191	E2	6/25/2020	45	I39252217	J18	6/25/2020
20	I39252192	E3	6/25/2020	46	I39252218	J21	6/25/2020
21	I39252193	E4	6/25/2020	47	I39252219	J22	6/25/2020
22	I39252194	E5	6/25/2020	48	I39252220	J23	6/25/2020
23	I39252195	E6	6/25/2020	49	I39252221	J24	6/25/2020
24	I39252196	G1	6/25/2020	50	I39252222	J25	6/25/2020
25	I39252197	G2	6/25/2020	51	I39252223	J26	6/25/2020
26	I39252198	G3	6/25/2020	52	I39252224	J27	6/25/2020

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly. Truss Design Engineer's Name: Garcia, Juan My license renewal date for the state of Missouri is December 31, 2020. Missouri COA: 001193

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



June 25, 2020



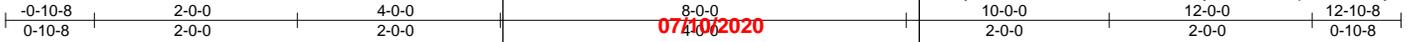
**RELEASE FOR  
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DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI**

Job 400370	Truss A1	Truss Type Hip Girder	Ply 1	Lot 24 HT	I39252173
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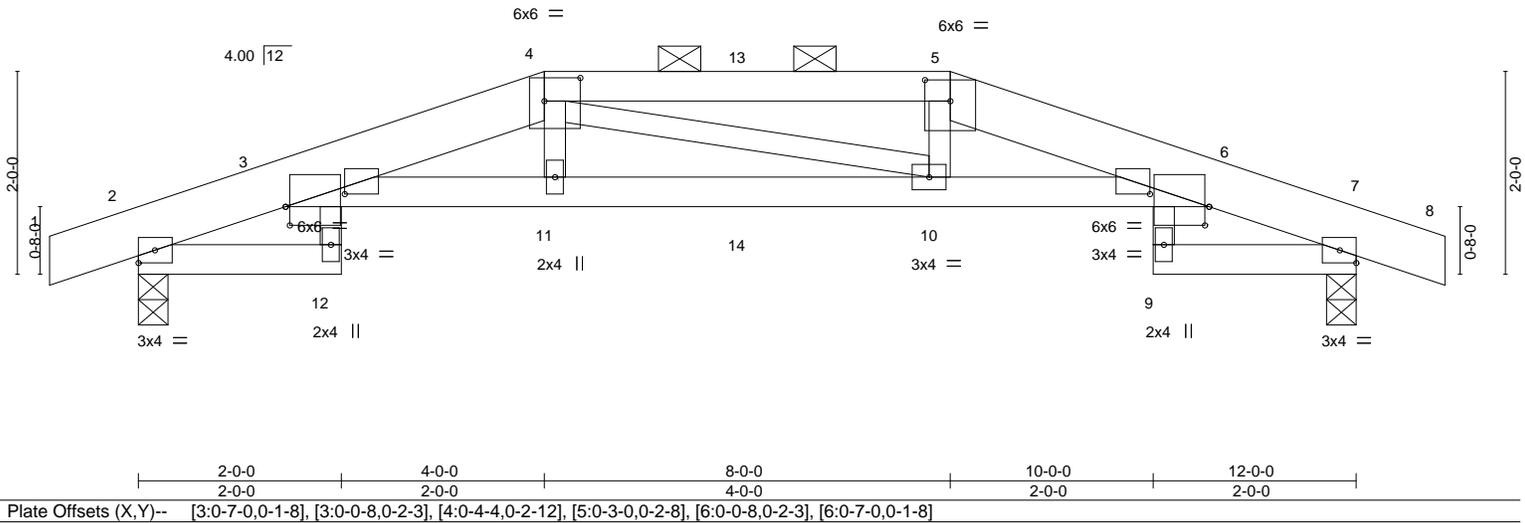
Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MiTek Industries, Inc. Tue Nov 12 14:06:59 2019 Page 1

ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-xBS8UvLaiou29Neiwy3s5hmNzvxpl3v0E0cXyJvCQ



Scale = 1:22.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0	TC 0.88	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(LL) -0.14 10-11 >999 360		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.11	Vert(CT) -0.25 10-11 >563 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.19 7 n/a n/a		
			Wind(LL) 0.12 10-11 >999 240	Weight: 43 lb	FT = 10%

- LUMBER-**  
 TOP CHORD 2x6 SPF No.2 \*Except\*  
 4-5: 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2 \*Except\*  
 3-12,6-9: 2x3 SPF No.2  
 WEBS 2x3 SPF No.2
- BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-0-12 oc purlins, except 2-0-0 oc purlins (3-3-0 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
- REACTIONS.** (lb/size) 2=916/0-3-8, 7=916/0-3-8  
 Max Horz 2=30(LC 29)  
 Max Uplift 2=-233(LC 4), 7=-233(LC 5)

- FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
- TOP CHORD 2-3=-419/120, 3-4=-2566/613, 4-13=-2612/623, 5-13=-2614/623, 5-6=-2659/619, 6-7=-419/117
- BOT CHORD 3-11=-565/2486, 11-14=-569/2517, 10-14=-569/2517, 6-10=-563/2584
- WEBS 4-11=-43/313, 5-10=-44/295

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 2 and 233 lb uplift at joint 7.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load top(s) 79 lb down and 48 lb up at 4-0-0, and 79 lb down and 48 lb up at 6-0-0, and 79 lb down and 48 lb up at 8-0-0 on top chord, and 240 lb down and 99 lb up at 4-0-0, and 44 lb down and 25 lb up at 6-0-0, and 240 lb down and 99 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



November 12, 2019

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400370	Truss A1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b> <b>07/10/2020</b>	Ply 1	Lot 24 HT Job Reference (optional)	I39252173
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Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MiTek Industries, Inc. Tue Nov 12 14:06:59 2019 Page 2  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-xBS8UbvLaiou29NeiwY3s5hmNzvxpL3v0E0cXyJvCQ

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 6-8=-70, 2-12=-20, 3-6=-20, 7-9=-20

Concentrated Loads (lb)

Vert: 4=-30(F) 5=-30(F) 11=-240(F) 10=-240(F) 13=-30(F) 14=-44(F)

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

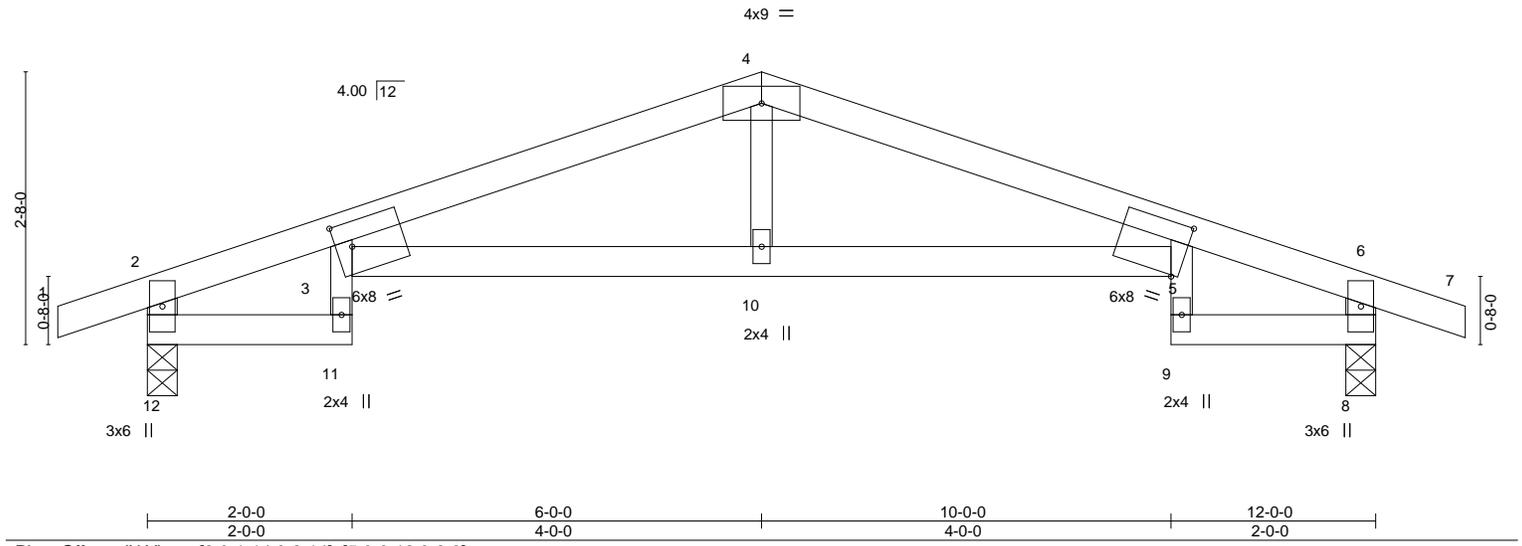
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss A2	Truss Type Roof Special	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>		Ply 1	Lot 24 HT 139252174
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)				
-0-10-8 0-10-8		2-0-0 2-0-0	6-0-0 4-0-0	10-0-0 4-0-0	12-0-0 2-0-0	12-10-8 0-10-8
07/19/2020						

Scale = 1:22.4



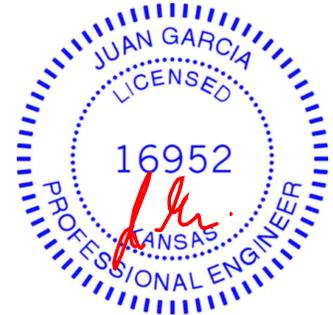
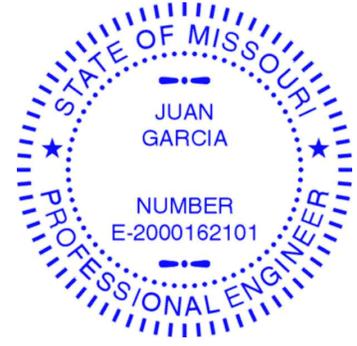
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.86	Vert(LL)	-0.25	3-10	>563	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.45	3-10	>310		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.47	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.18	3-10	>786	Weight: 33 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 3-11,5-9; 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 4-10: 2x3 SPF No.2	

**REACTIONS.** (lb/size) 12=598/0-3-8, 8=598/0-3-8  
 Max Horz 12=26(LC 12)  
 Max Uplift 12=-121(LC 4), 8=-121(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-1145/124, 4-5=-1145/135, 2-12=-640/140, 6-8=-640/136  
 BOT CHORD 3-10=-74/1093, 5-10=-75/1093

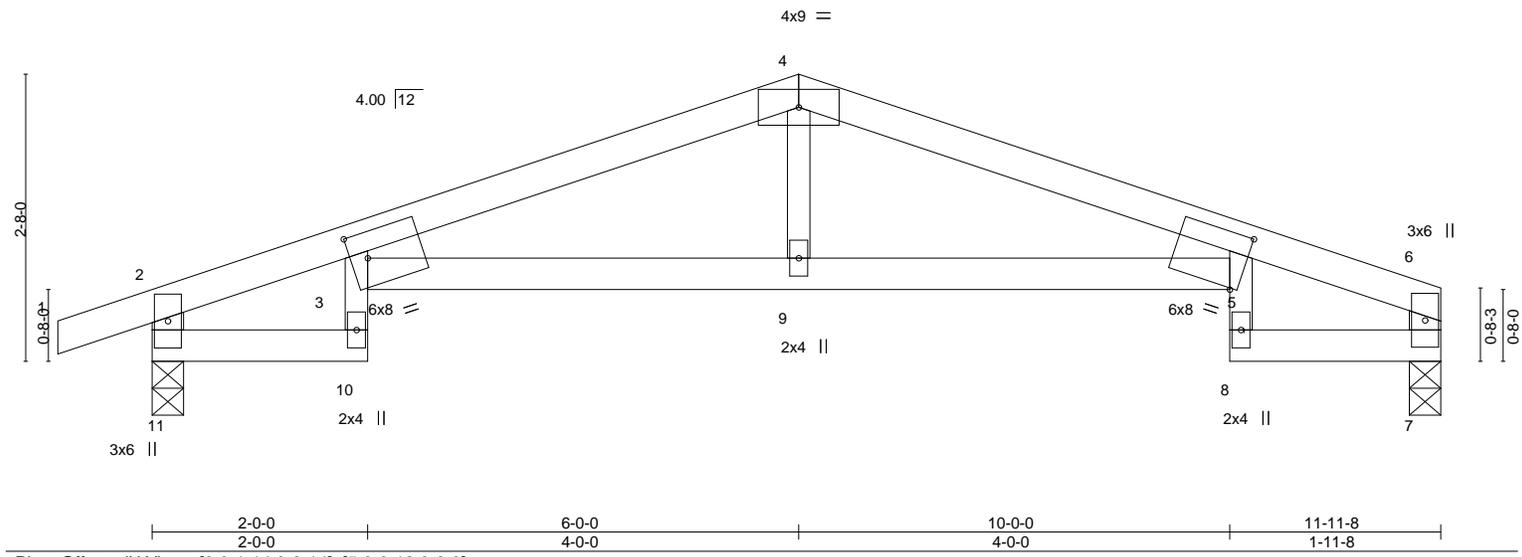
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=121, 8=121.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 12, 2019

Job 400370	Truss A3	Truss Type Roof Special	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252175
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:47 2019 Page 1  
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 07/10/2020  
 Scale = 1:21.3



<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	2-0-0	TC 0.87	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.25 5-9 >558 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.45 3-9 >309 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.48 7 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.18 3-9 >768 240	Weight: 32 lb	FT = 10%

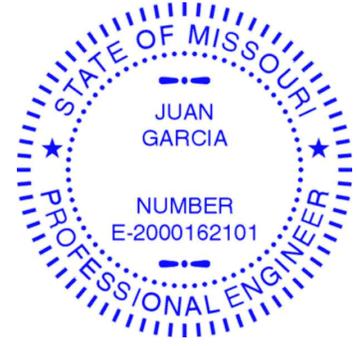
**LUMBER-**  
 TOP CHORD 2x4 SPF 2100F 1.8E  
 BOT CHORD 2x4 SPF No.2 \*Except\*  
 3-10,5-8: 2x3 SPF No.2  
 WEBS 2x4 SPF No.2 \*Except\*  
 4-9: 2x3 SPF No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 11=600/0-3-8, 7=522/0-3-8  
 Max Horz 11=32(LC 12)  
 Max Uplift 11=-121(LC 4), 7=-76(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-1151/140, 4-5=-1151/140, 2-11=-642/142, 6-7=-561/96  
 BOT CHORD 3-9=-87/1098, 5-9=-87/1098

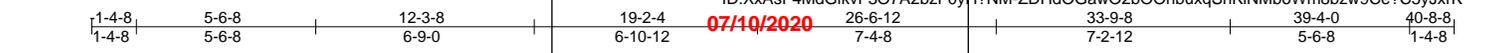
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 11=121.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



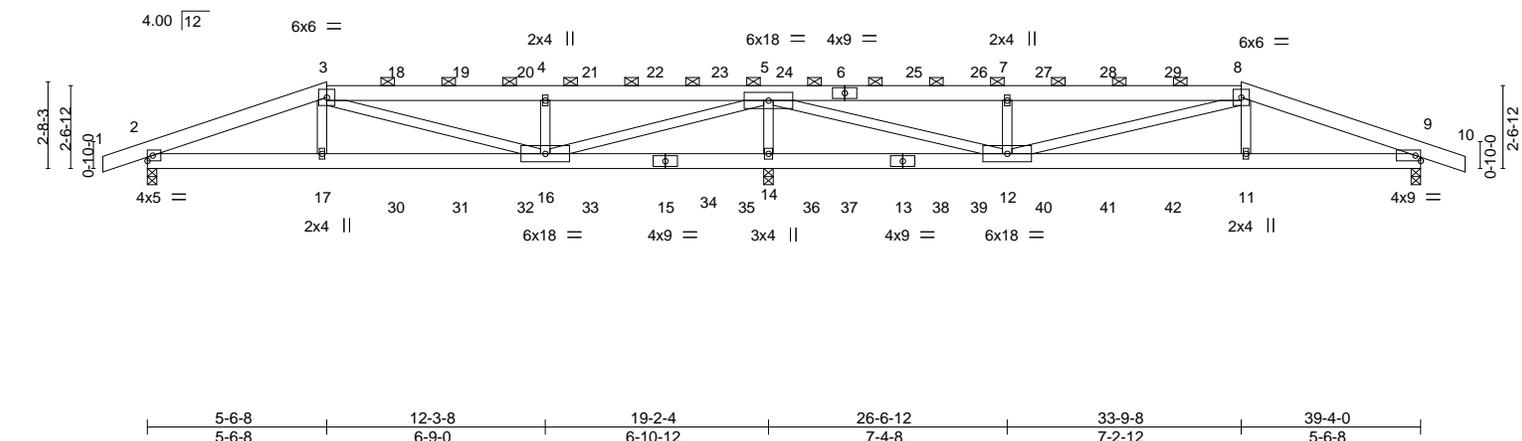
November 12, 2019

Job 400370	Truss B1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252176
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Wheeler Lumber, Waverly, KS 66871



Scale = 1:70.8



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 0.76	Vert(LL)	-0.14 11-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.28 11-12	>868	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.96	Horz(CT)	0.04 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10 11-12	>999	240		
								Weight: 193 lb	FT = 10%

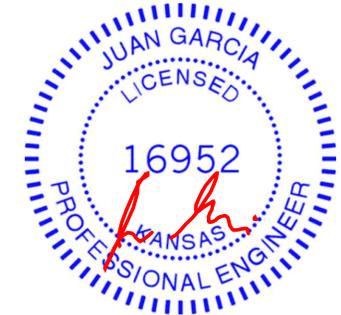
**LUMBER-**  
TOP CHORD 2x6 SPF No.2  
BOT CHORD 2x6 SPF No.2 \*Except\*  
13-15: 2x6 SP 2400F 2.0E  
WEBS 2x4 SPF No.2 \*Except\*  
5-12,8-12: 2x4 SPF 2100F 1.8E

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-2-5 oc purlins, except 2-0-0 oc purlins (3-10-3 max.): 3-8.  
BOT CHORD Rigid ceiling directly applied or 5-3-0 oc bracing.

**REACTIONS.** (lb/size) 2=1276/0-3-8, 14=3729/0-3-8, 9=1367/0-3-8  
Max Horz 2=40(LC 33)  
Max Uplift 2=-252(LC 4), 14=-411(LC 4), 9=-264(LC 5)  
Max Grav 2=1280(LC 21), 14=3729(LC 1), 9=1370(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2647/366, 3-4=-1820/256, 4-5=-1816/255, 5-7=-2236/309, 7-8=-2240/311, 8-9=-2904/397  
BOT CHORD 2-17=-309/2396, 16-17=-311/2360, 14-16=-1934/265, 12-14=-1934/265, 11-12=-310/2600, 9-11=-308/2636  
WEBS 3-17=0/579, 3-16=-585/137, 4-16=-791/266, 5-16=-465/3896, 5-14=-3275/545, 5-12=-502/4316, 7-12=-872/290, 8-12=-392/121, 8-11=0/597

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=252, 14=411, 9=264.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 120 lb down and 55 lb up at 5-6-8, 104 lb down and 55 lb up at 7-8-0, 104 lb down and 55 lb up at 9-8-0, 104 lb down and 55 lb up at 11-8-0, 104 lb down and 55 lb up at 13-8-0, 104 lb down and 55 lb up at 15-8-0, 104 lb down and 55 lb up at 17-8-0, 104 lb down and 55 lb up at 19-8-0, 104 lb down and 55 lb up at 21-8-0, 104 lb down and 55 lb up at 23-8-0, 104 lb down and 55 lb up at 25-8-0, 104 lb down and 55 lb up at 27-8-0, 104 lb down and 55 lb up at 29-8-0, and 104 lb down and 55 lb up at 31-8-0, and 120 lb down and 55 lb up at 33-9-8 on top chord, and 331 lb down and 87 lb up at 5-6-8, 62 lb down at 7-8-0, 62 lb down at 9-8-0, 62 lb down at 11-8-0, 62 lb down at 13-8-0, 62 lb down at 15-8-0, 62 lb down at 17-8-0, 62 lb down at 19-8-0, 62 lb down at 21-8-0, 62 lb down at 23-8-0, 62 lb down at 25-8-0, 62 lb down at 27-8-0, 62 lb down at 29-8-0, and 62 lb down at 31-8-0, and 331 lb down and 87 lb up at 33-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



November 12, 2019

Job 400370	Truss B1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 07/10/2020</b>	Ply 1	Lot 24 HT  Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871			8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:49 2019 Page 2 ID:XxAsF4MdGikvF3O7A2bzF0yH?NM-ZDHdOGawO2bOOnbuxqSnKINMboWm8bzw9Ce?C5yJxrK		

**NOTES-**

10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-8=-70, 8-10=-70, 2-9=-20

Concentrated Loads (lb)

Vert: 3=-97(B) 6=-97(B) 17=-331(B) 8=-97(B) 11=-331(B) 18=-97(B) 19=-97(B) 20=-97(B) 21=-97(B) 22=-97(B) 23=-97(B) 24=-97(B) 25=-97(B) 26=-97(B)

27=-97(B) 28=-97(B) 29=-97(B) 30=-41(B) 31=-41(B) 32=-41(B) 33=-41(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-41(B) 38=-41(B) 39=-41(B) 40=-41(B) 41=-41(B)

42=-41(B)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

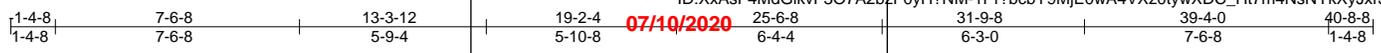


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

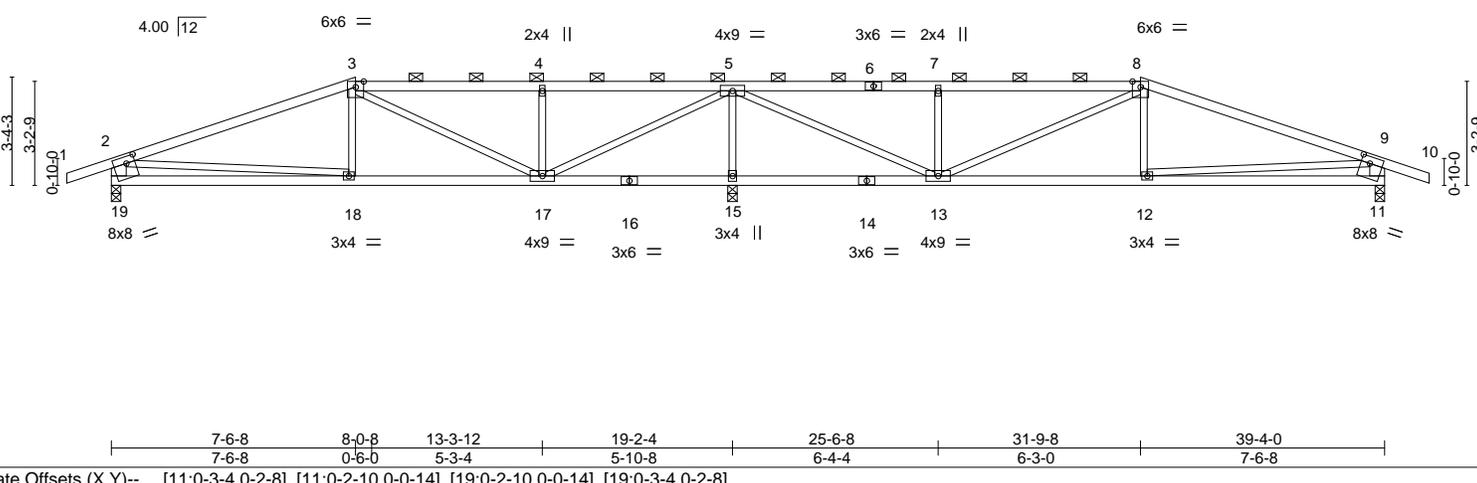
Job 400370	Truss B2	Truss Type Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252177
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:50 2019 Page 1



Scale = 1:70.8



<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSI</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.71	Vert(LL) -0.07	11-12	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT) -0.16	11-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.60	Horz(CT) 0.02	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL) 0.05	12-13	>999	Weight: 139 lb	FT = 10%

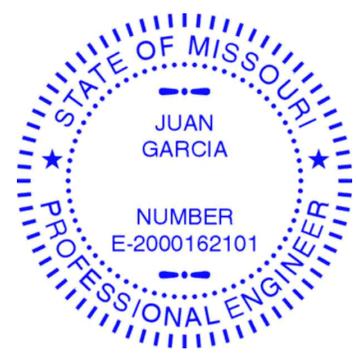
**LUMBER-**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-19,9-11: 2x6 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-2-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-3 max.): 3-8.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (lb/size) 19=824/0-3-8, 15=2025/0-3-8, 11=874/0-3-8  
Max Horz 19=31(LC 12)  
Max Uplift 19=-206(LC 4), 15=-350(LC 4), 11=-217(LC 5)  
Max Grav 19=830(LC 21), 15=2025(LC 1), 11=880(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1135/212, 3-4=-624/185, 4-5=-622/183, 5-7=-792/223, 7-8=-794/225,  
8-9=-1264/240, 2-19=-762/247, 9-11=-811/257  
BOT CHORD 18-19=-207/580, 17-18=-145/990, 15-17=-824/175, 13-15=-824/175, 12-13=-146/1113,  
11-12=-180/588  
WEBS 2-18=0/474, 3-18=0/254, 3-17=-430/56, 4-17=-431/175, 5-17=-287/1583,  
5-15=-1877/420, 5-13=-314/1749, 7-13=-478/194, 8-13=-370/48, 8-12=0/253,  
9-12=-5/586

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=206, 15=350, 11=217.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss B3	Truss Type Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252178
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Wheeler Lumber, Waverly, KS 66871

Job Reference (optional)



Scale = 1:70.6

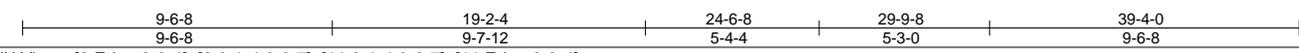
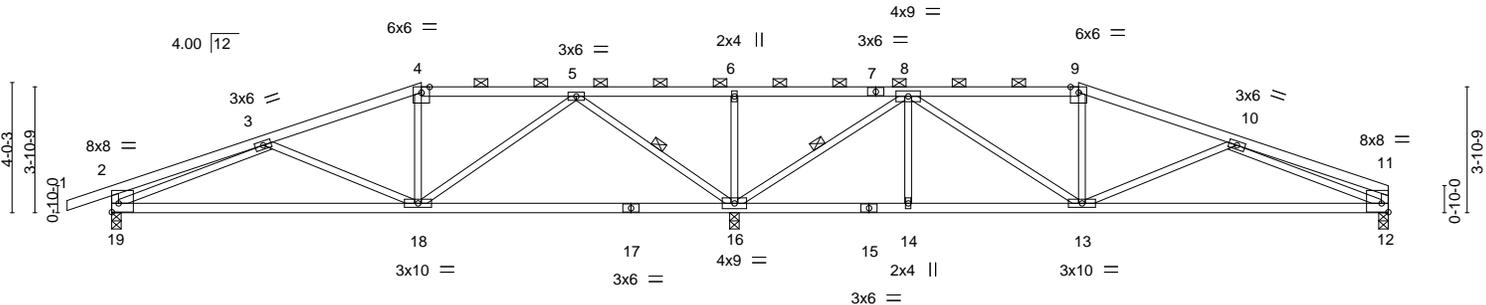


Plate Offsets (X,Y)-- [2:Edge,0-3-4], [2:0-1-4,0-0-7], [11:0-1-4,0-0-7], [11:Edge,0-3-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.20	12-13	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.41	12-13	>588		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.04	12	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.04	13	>999		
								Weight: 140 lb	FT = 10%

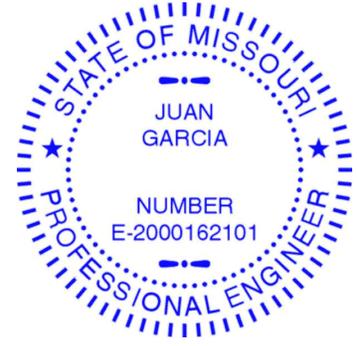
**LUMBER-**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-3 max.): 4-9.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 5-16, 8-16

**REACTIONS.** (lb/size) 16=2156/0-3-8, 19=762/0-3-8, 12=707/0-3-8  
Max Horz 19=52(LC 12)  
Max Uplift 16=-371(LC 4), 19=-186(LC 4), 12=-133(LC 5)  
Max Grav 16=2156(LC 1), 19=791(LC 21), 12=734(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-303/20, 3-4=-822/138, 4-5=-734/155, 5-6=-139/1001, 6-8=-139/1001, 8-9=-865/197, 9-10=-961/183, 10-11=-341/10, 2-19=-342/128  
BOT CHORD 18-19=-230/1028, 14-16=-14/346, 13-14=-14/346, 12-13=-259/1166  
WEBS 3-18=-339/210, 5-18=-60/733, 5-16=-1326/303, 6-16=-365/146, 8-16=-1490/310, 8-13=-81/671, 10-13=-344/212, 3-19=-873/253, 10-12=-976/304

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=371, 19=186, 12=133.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400370	Truss B4	Truss Type Half Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252179
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-zozm0ldohzzyFEKTCy?UyN?rN?ZGL?RNrAsfpQyJxrH  
 07/10/2020  
 8,240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:52 2019 Page 1

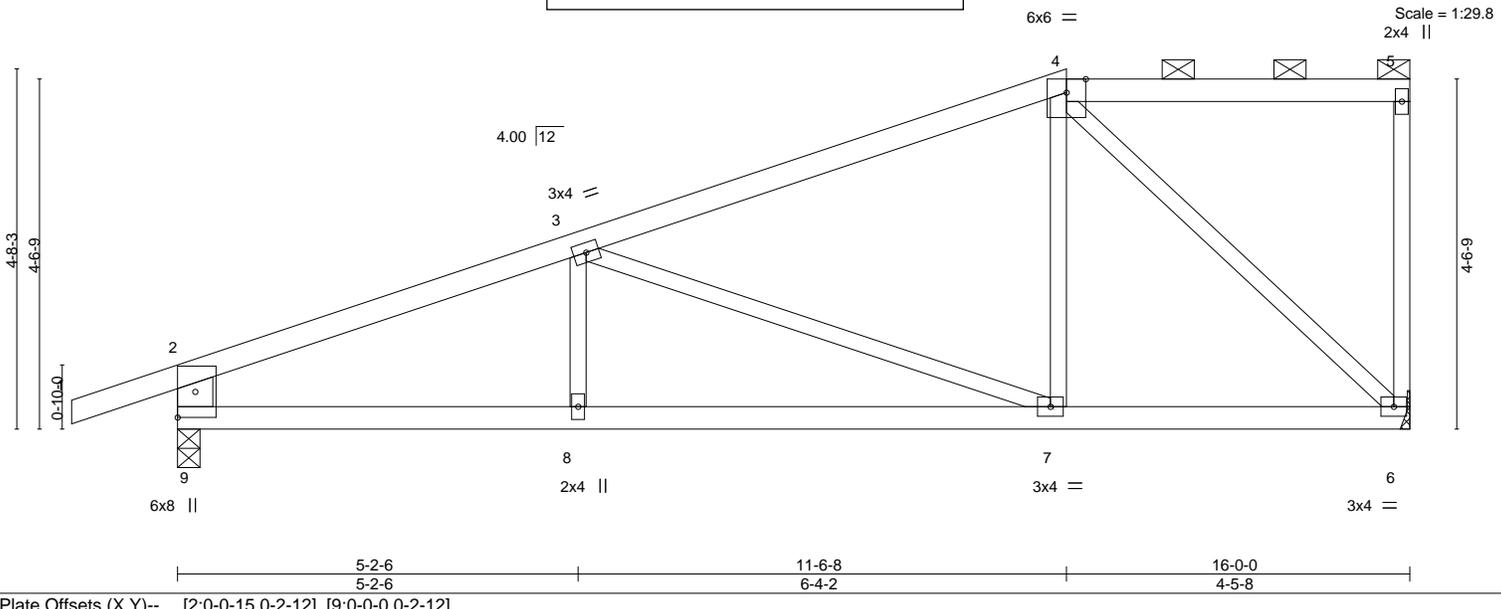


Plate Offsets (X,Y)--	[2:0-0-15,0-2-12], [9:0-0-0,0-2-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.86	Vert(LL) -0.12 7-8 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.79	Vert(CT) -0.22 7-8 >840 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.72	Horz(CT) 0.02 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.09 7-8 >999 240	Weight: 58 lb	FT = 10%

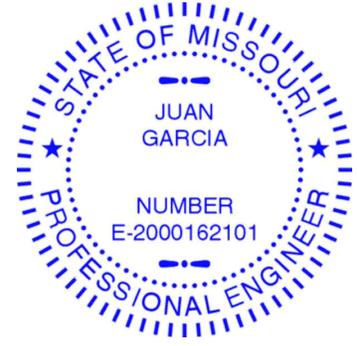
**LUMBER-**  
 TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 2-9: 2x6 SP DSS

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-0-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=699/Mechanical, 9=823/0-3-8  
 Max Horz 9=197(LC 5)  
 Max Uplift 6=-139(LC 4), 9=-192(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1179/202, 3-4=-661/136, 2-9=-713/205  
 BOT CHORD 8-9=-205/1043, 7-8=-205/1043, 6-7=-104/558  
 WEBS 3-7=-507/170, 4-7=0/371, 4-6=-778/153

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 6=139, 9=192.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

RELEASE FOR

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

Job 400370, Truss B5, Truss Type Roof Special Girder, Ply 1, Lot 24 HT, I39252180

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:53 2019 Page 1 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-R\_W8EedQSH5ptOvfAgXjUby3APxi4PvW4qcDLsyJxrG

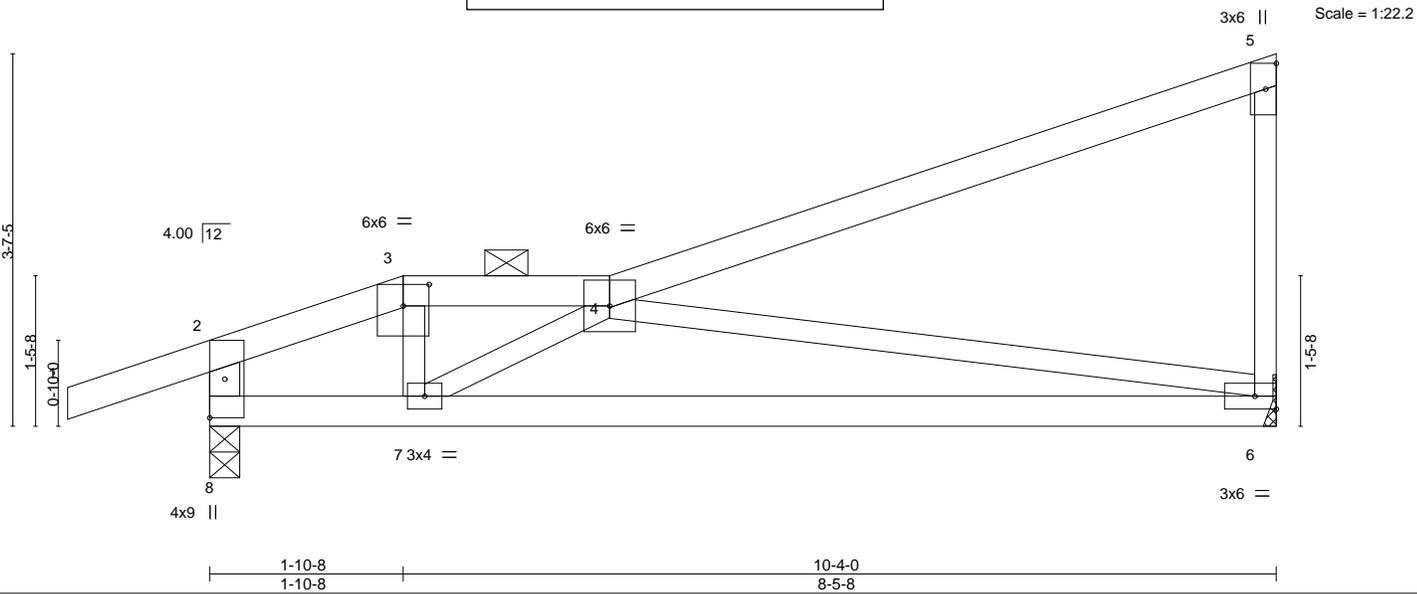


Plate Offsets (X,Y)-- [2:0-0-9,0-1-12], [3:0-3-0,0-2-8], [8:0-0-0,0-1-12]

Table with columns: LOADING (psf), SPACING, CSI, DEFL. (in, loc, l/defl, L/d), PLATES, GRIP. Includes values for TCELL, TCCL, BCLL, BCDL, Plate Grip DOL, Lumber DOL, Rep Stress Incr, Code, TC, BC, WB, Matrix-S, Vert(LL), Vert(CT), Horz(CT), Wind(LL), Weight, FT.

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

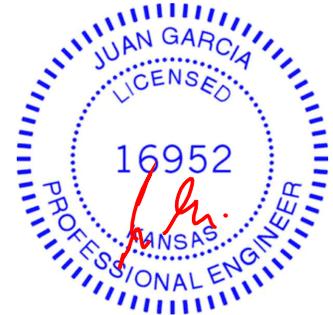
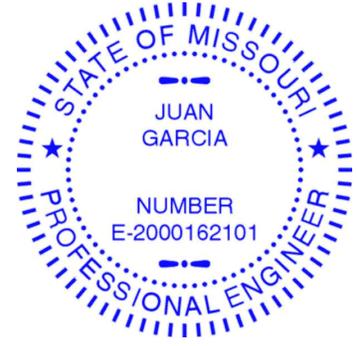
BRACING- TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=444/Mechanical, 8=561/0-3-8 Max Horz 8=153(LC 5) Max Uplift 6=-97(LC 8), 8=-161(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-585/44, 3-4=-509/45, 2-8=-513/118 BOT CHORD 7-8=-82/481, 6-7=-239/919 WEBS 3-7=-16/332, 4-7=-484/237, 4-6=-893/270

- NOTES- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 2) Provide adequate drainage to prevent water ponding. 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 5) Refer to girder(s) for truss to truss connections. 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=161. 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 109 lb down and 78 lb up at 1-10-8 on top chord, and 14 lb down and 9 lb up at 1-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20 Concentrated Loads (lb) Vert: 7=9(F)



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400370	Truss B6	Truss Type Roof Special	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252181
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Wheeler Lumber, Waverly, KS 66871  
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 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:53 2019 Page 1

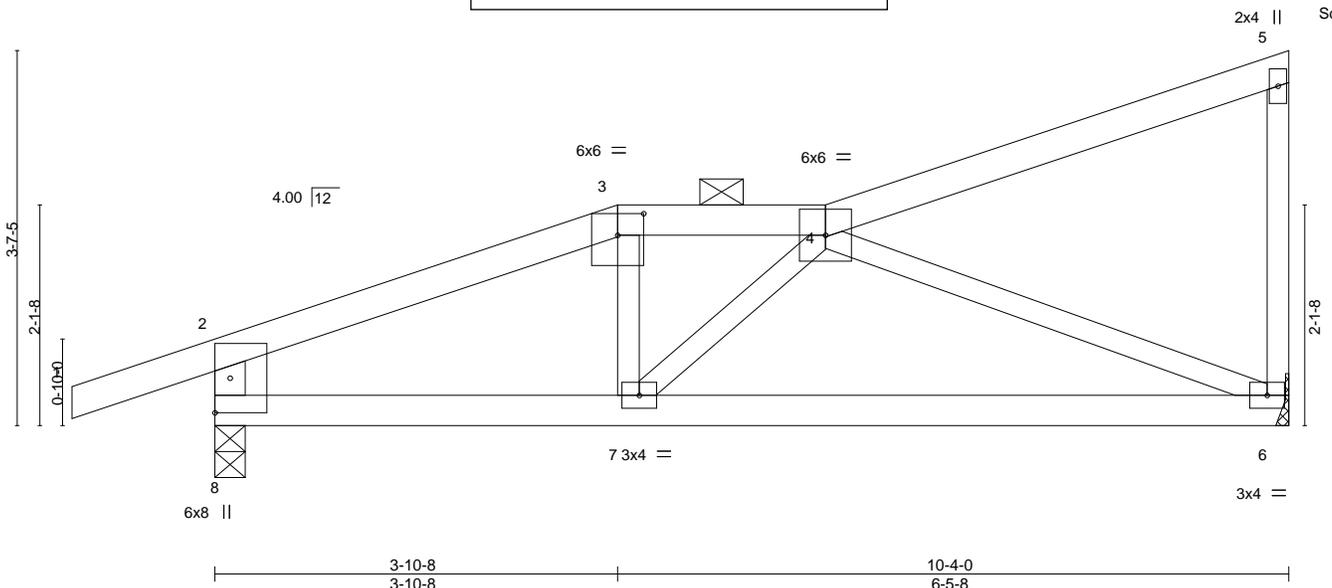
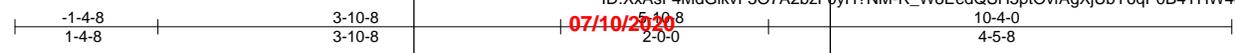


Plate Offsets (X,Y)--	[2:0-0-9,0-1-12], [3:0-3-0,0-2-8], [8:0-0-0,0-1-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.06	6-7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.13	6-7	>901		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.36	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	6-7	>999	Weight: 36 lb	FT = 10%

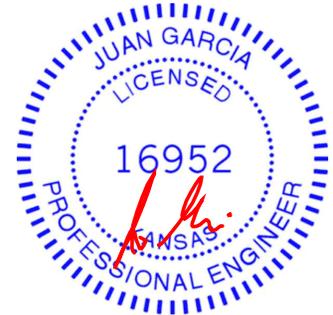
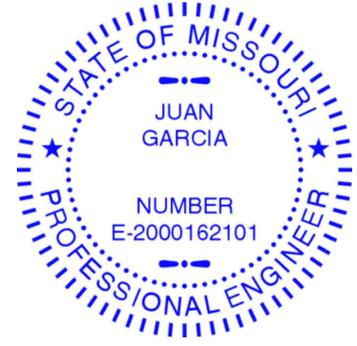
**LUMBER-**  
 TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 2-8: 2x4 SPF No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=446/Mechanical, 8=568/0-3-8  
 Max Horz 8=153(LC 5)  
 Max Uplift 6=93(LC 8), 8=-144(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-638/87, 3-4=-547/96, 2-8=-502/154  
 BOT CHORD 7-8=-92/541, 6-7=-127/590  
 WEBS 4-6=-620/171

- 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; MWFERS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=144.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

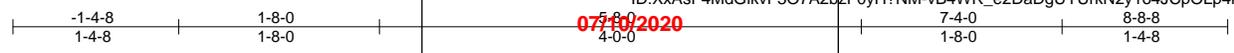
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss C1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252182
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Wheeler Lumber, Waverly, KS 66871  
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 07/09/2020



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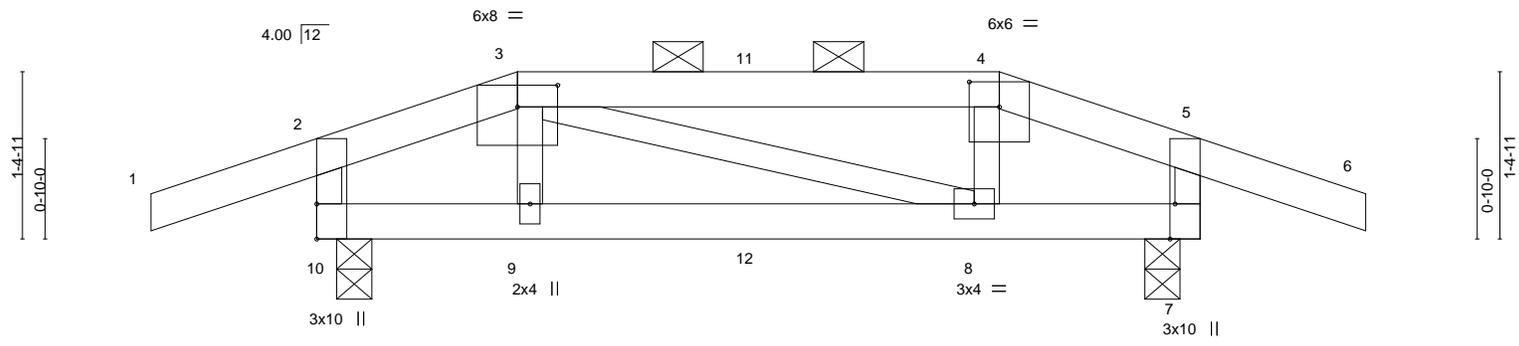


Plate Offsets (X, Y)--	[2:0-0-7,0-1-4], [3:0-4-0,0-2-3], [4:0-3-0,0-2-8], [5:0-0-7,0-1-4], [7:0-3-8,Edge], [7:0-0-0,0-1-4], [10:0-0-0,0-1-4]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	-0.03	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.05	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.03	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	8-9	>999	Weight: 25 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

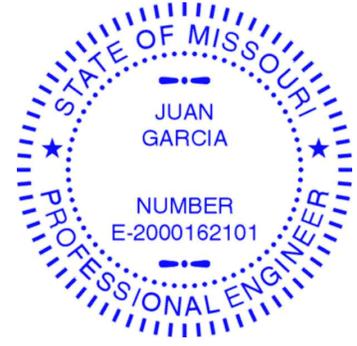
**REACTIONS.** (lb/size) 10=413/0-3-8, 7=413/0-3-8  
 Max Horz 10=11(LC 47)  
 Max Uplift 10=-142(LC 4), 7=-142(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-347/83, 3-4=-287/75, 4-5=-348/82, 2-10=-335/132, 5-7=-335/131  
 BOT CHORD 9-10=-42/302, 8-9=-37/302, 7-8=-43/302

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=142, 7=142.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 111 lb down and 54 lb up at 1-8-0, and 49 lb down and 12 lb up at 3-8-0, and 111 lb down and 54 lb up at 5-8-0 on top chord, and 11 lb down and 9 lb up at 1-8-0, and 3 lb down and 4 lb up at 3-8-0, and 11 lb down and 9 lb up at 5-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20
Concentrated Loads (lb)
Vert: 9=9(F) 8=9(F) 12=4(F)



November 12, 2019

Job 400370	Truss C2	Truss Type Common	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252183
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Wheeler Lumber, Waverly, KS 66871

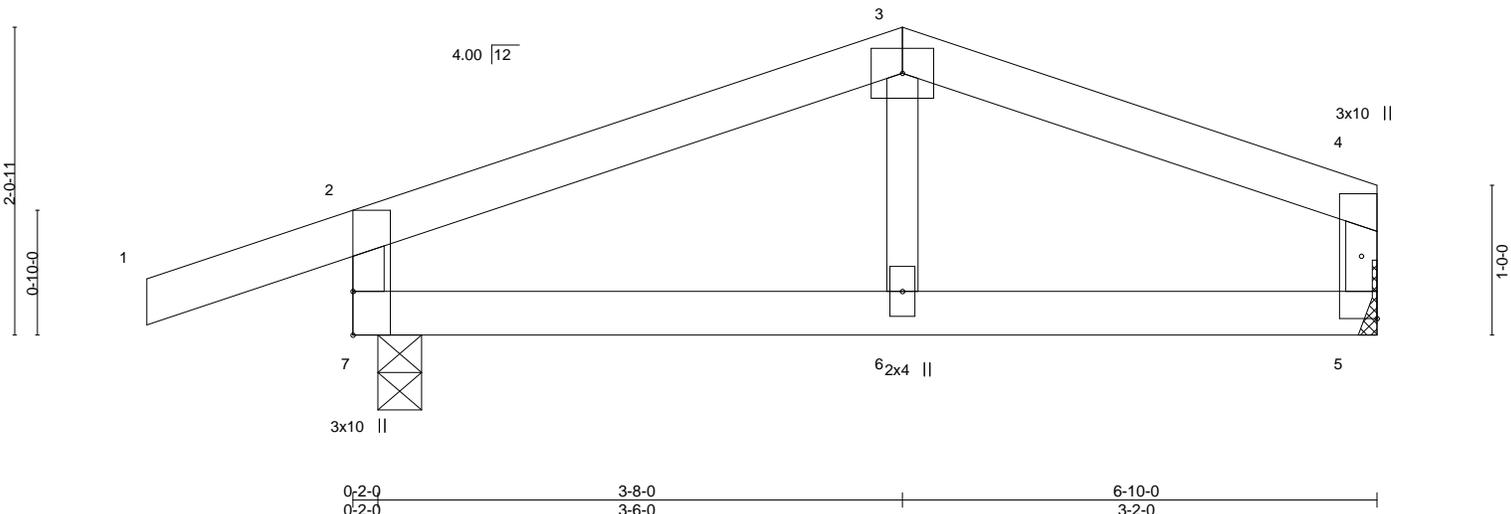
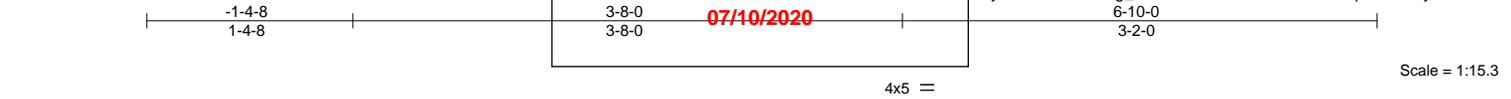


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [4:0-0-7,0-1-4], [5:0-0-0,0-1-4], [7:0-0-0,0-1-4]
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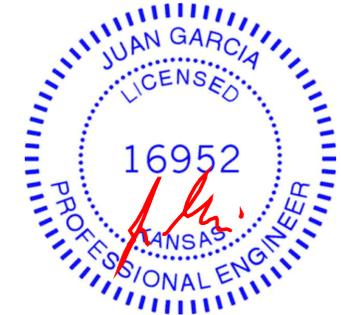
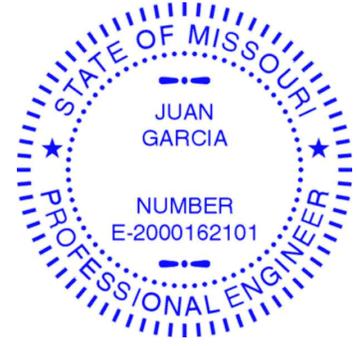
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(LL) -0.02 6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.04 6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.01 6 >999 240	Weight: 20 lb	FT = 10%

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

**REACTIONS.** (lb/size) 7=413/0-3-8, 5=287/Mechanical  
 Max Horz 7=27(LC 5)  
 Max Uplift 7=-113(LC 4), 5=-41(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-291/45, 3-4=-282/42, 2-7=-346/131

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=113.
  - 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.



November 12, 2019

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss D1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply <b>2</b>	Lot 24 HT 139252184
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Wheeler Lumber, Waverly, KS 66871

Job Reference (optional)

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:56 2019 Page 1

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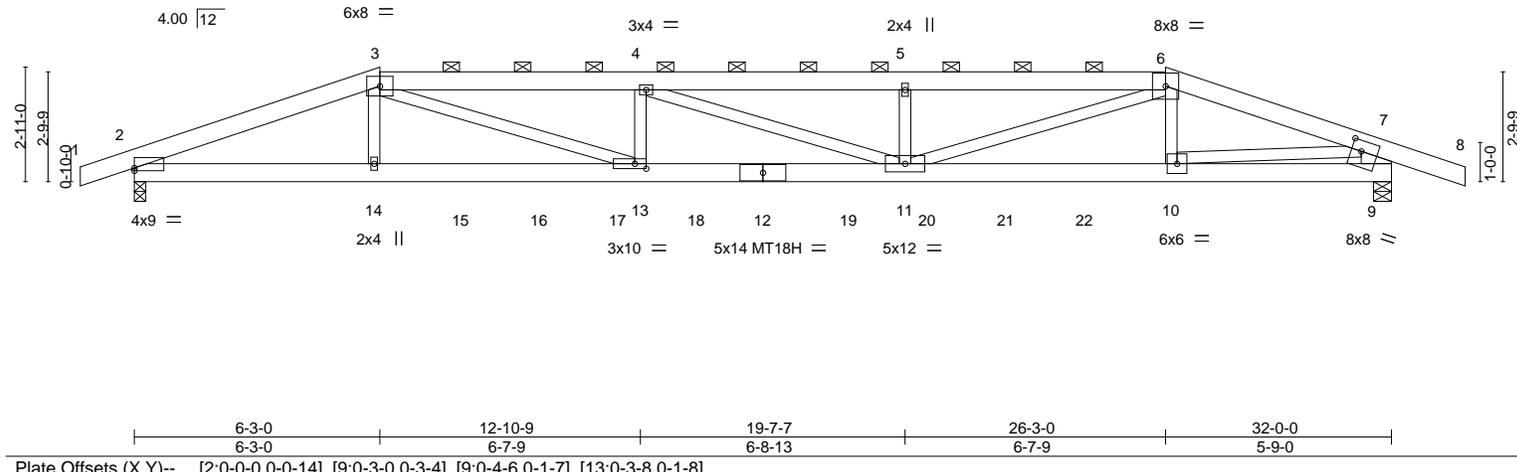


Plate Offsets (X,Y)-- [2:0-0,0,0-14], [9:0-3,0,0-3-4], [9:0-4-6,0-1-7], [13:0-3-8,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88	Vert(LL)	-0.37 11-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.64 11-13	>591	240	MT18H	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.60	Horz(CT)	0.08 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.23 11-13	>999	240		Weight: 357 lb FT = 10%

**LUMBER-**  
TOP CHORD 2x6 SPF No.2  
BOT CHORD 2x6 SP 2400F 2.0E  
WEBS 2x4 SPF No.2 \*Except\*  
7-9: 2x10 SP DSS

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-5-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-7 max.): 3-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=3156/0-3-8, 9=3241/0-5-8  
Max Horz 2=-21(LC 24)  
Max Uplift 2=-373(LC 4), 9=-393(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-7795/859, 3-4=-11035/1173, 4-5=-10731/1123, 5-6=-10733/1124, 6-7=-6748/718, 7-9=-3131/411  
BOT CHORD 2-14=-759/7183, 13-14=-754/7119, 11-13=-1113/11033, 10-11=-624/6315, 9-10=-138/1451  
WEBS 3-14=-93/1045, 3-13=-401/4267, 4-13=-479/132, 4-11=-374/52, 5-11=-556/123, 6-11=-468/4754, 6-10=-149/321, 7-10=-528/4917

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=373, 9=393.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

Continued on page 2

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

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss D1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply <b>2</b>	Lot 24 HT  Job Reference (optional)
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Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:56 2019 Page 2  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-sZCGsggJICUOkrdEro4Q6DAX?d??HqCymoqtyByJxrD

**NOTES-**  
 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 610 lb down and 155 lb up at 6-3-0, 239 lb down and 38 lb up at 8-3-12, 239 lb down and 38 lb up at 10-3-12, 239 lb down and 38 lb up at 12-3-12, 239 lb down and 38 lb up at 14-3-12, 239 lb down and 38 lb up at 16-3-0, 239 lb down and 38 lb up at 18-2-4, 239 lb down and 38 lb up at 20-2-4, 239 lb down and 38 lb up at 22-2-4, and 239 lb down and 38 lb up at 24-2-4, and 537 lb down and 132 lb up at 26-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-70, 3-6=-70, 6-7=-70, 7-8=-70, 2-9=-20  
 Concentrated Loads (lb)  
 Vert: 12=-239(F) 14=-610(F) 10=-537(F) 15=-239(F) 16=-239(F) 17=-239(F) 18=-239(F) 19=-239(F) 20=-239(F) 21=-239(F) 22=-239(F)

Job 400370	Truss D2	Truss Type Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252185
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Wheeler Lumber, Waverly, KS 66871

Job Reference (optional)  
8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:06:57 2019 Page 1  
ID: XxAsF4MdGikvF3O7A2bzFDyH?NM-Kmmf4?hxWVcFL?CQPvbfRiha0HMOGy6\_RaQUdyJxrC



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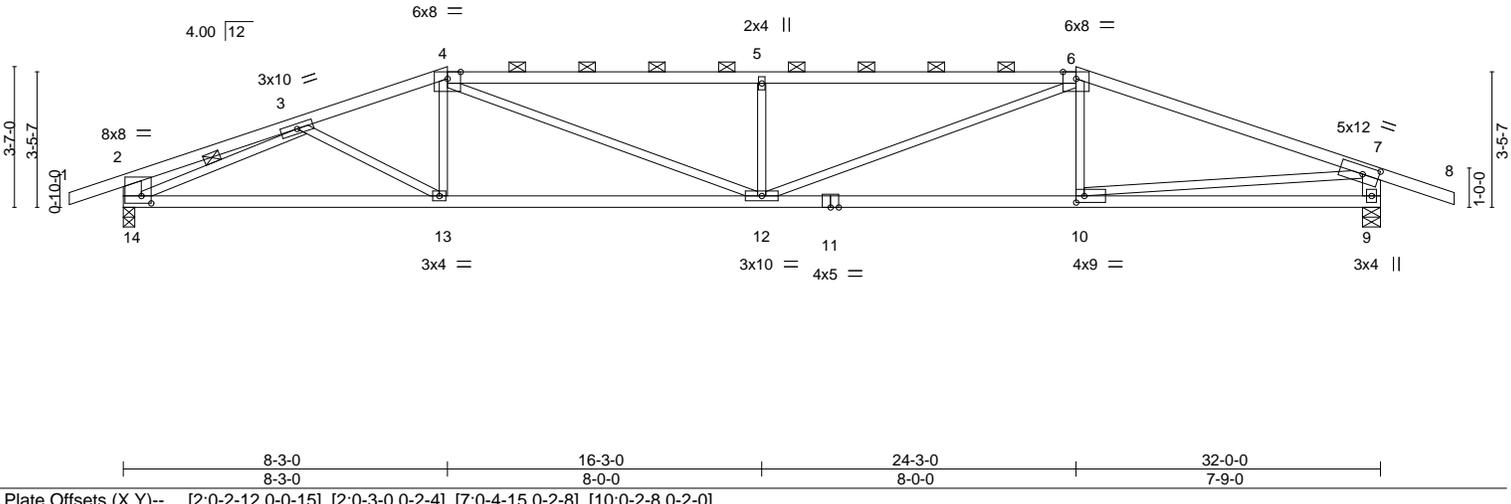


Plate Offsets (X,Y)--	[2:0-2-12,0-0-15], [2:0-3-0,0-2-4], [7:0-4-15,0-2-8], [10:0-2-8,0-2-0]
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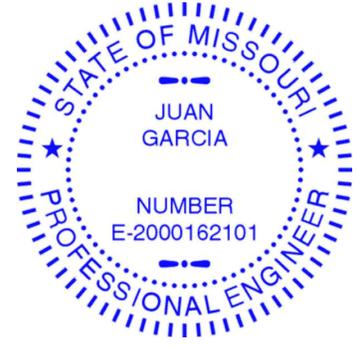
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.95	Vert(LL)	-0.27	12	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.51	10-12	>744		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.11	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.21	12	>999	Weight: 113 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 8-8-11 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-14,7-9: 2x6 SPF No.2	WEBS 1 Row at midpt 3-14

REACTIONS.	(lb/size)
14=1530/0-3-8, 9=1569/0-5-8	
Max Horz 14=32(LC 8)	
Max Uplift 14=320(LC 4), 9=341(LC 5)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-564/75, 3-4=-2829/506, 4-5=-3671/685, 5-6=-3671/685, 6-7=-2778/468, 2-14=-491/164, 7-9=-1494/379
BOT CHORD	13-14=-445/2470, 12-13=-406/2677, 10-12=-356/2554, 9-10=-133/527
WEBS	3-13=-6/407, 4-12=-260/1199, 5-12=-697/274, 6-12=-282/1332, 3-14=-2221/456, 7-10=-256/2037

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=320, 9=341.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

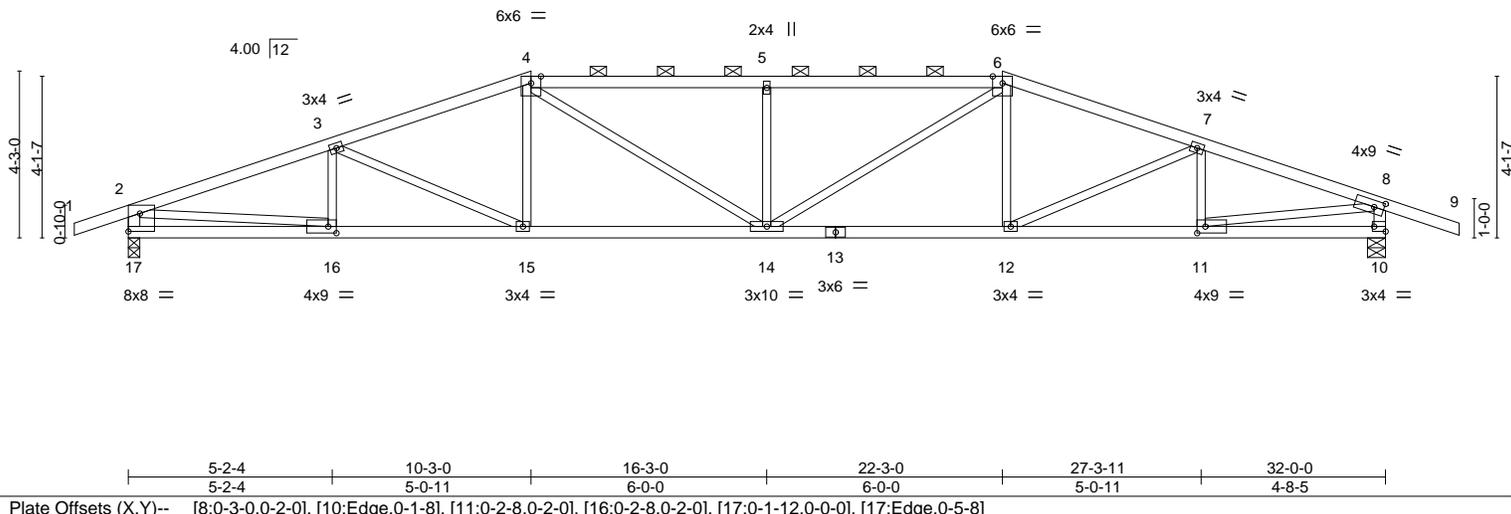
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss D3	Truss Type Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252186
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Wheeler Lumber, Waverly, KS 66871



Scale = 1:58.4



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.23	14	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.42	14-15	>906		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.78	Horz(CT)	0.10	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.18	14	>999		
								Weight: 118 lb	FT = 10%

**LUMBER-**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-17,8-10: 2x4 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-3 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 8-10-12 oc bracing.

**REACTIONS.** (lb/size) 17=1531/0-3-8, 10=1570/0-5-8  
Max Horz 17=45(LC 12)  
Max Uplift 17=310(LC 4), 10=331(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2877/491, 3-4=-2727/488, 4-5=-3001/546, 5-6=-3001/546, 6-7=-2645/465,  
7-8=-2618/436, 2-17=-1458/333, 8-10=-1505/351  
BOT CHORD 16-17=-90/436, 15-16=-438/2667, 14-15=-370/2540, 12-14=-315/2465, 11-12=-349/2428  
WEBS 4-15=0/266, 4-14=-150/698, 5-14=-530/206, 6-14=-165/772, 7-11=-310/126,  
2-16=-359/2246, 8-11=-377/2275

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=310, 10=331.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

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

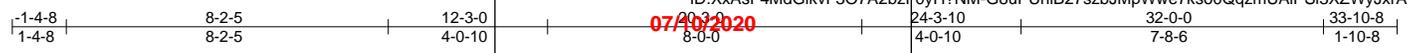
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



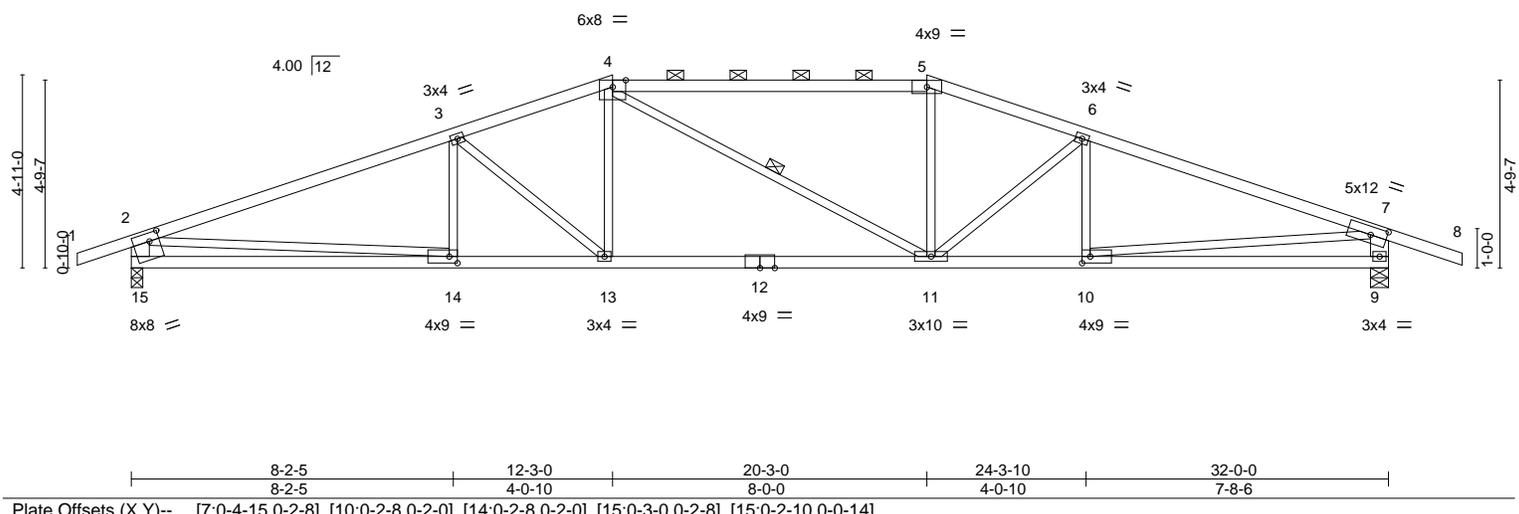
Job 400370	Truss D4	Truss Type Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252187
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Wheeler Lumber, Waverly, KS 66871

Job Reference (optional)



Scale = 1:58.4



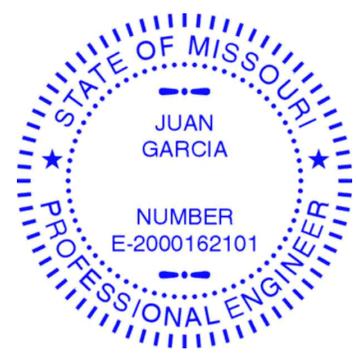
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 1.00	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.73	Vert(LL) -0.18 13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.44 11-13 >863 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.08 9 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.14 13 >999 240	Weight: 119 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 9-3-2 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-15,7-9: 2x6 SPF No.2	WEBS 1 Row at midpt 4-11

**REACTIONS.** (lb/size) 15=1530/0-3-8, 9=1569/0-5-8  
 Max Horz 15=56(LC 12)  
 Max Uplift 15=-303(LC 4), 9=-323(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2868/465, 3-4=-2514/443, 4-5=-2304/424, 5-6=-2468/426, 6-7=-2720/432,  
 2-15=-1440/348, 7-9=-1483/365  
 BOT CHORD 14-15=-238/855, 13-14=-393/2626, 11-13=-301/2345, 10-11=-317/2490, 9-10=-104/523  
 WEBS 3-13=-384/161, 4-13=-30/396, 4-11=-255/182, 5-11=0/370, 6-11=-272/144,  
 2-14=-175/1775, 7-10=-245/1978

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=303, 9=323.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

Job 400370	Truss D5	Truss Type HIP	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252188
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Wheeler Lumber, Waverly, KS 66871

Job Reference (optional)  
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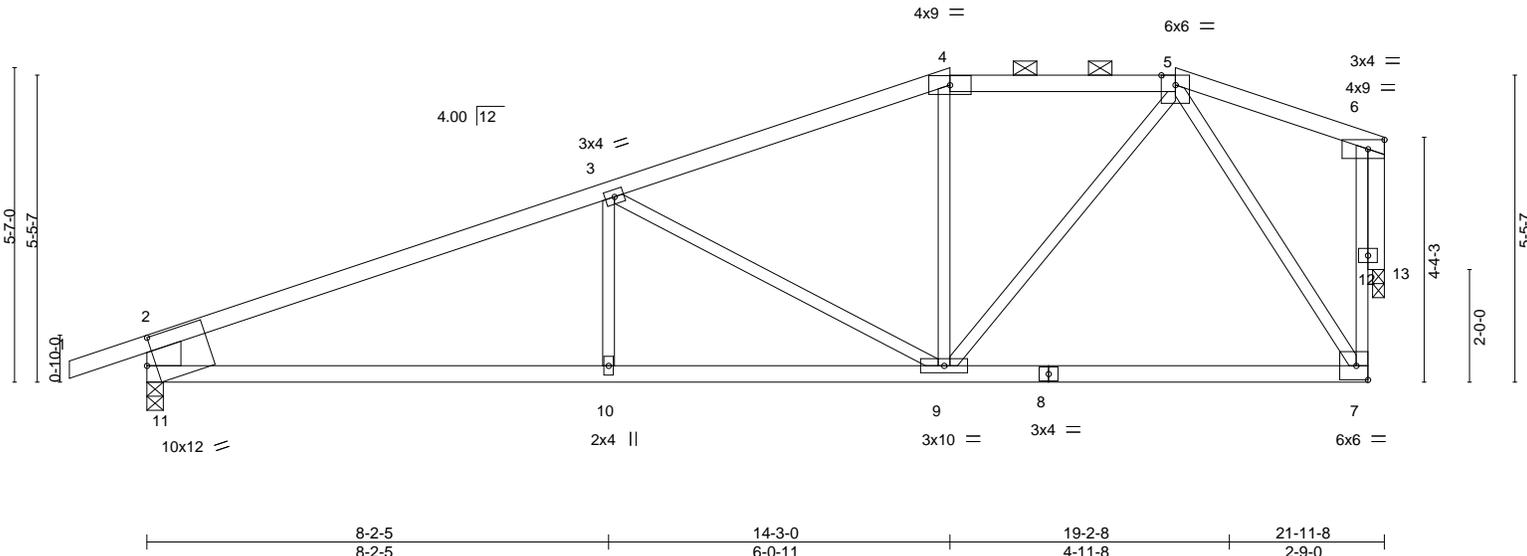


Plate Offsets (X,Y)--	[2:0-3-13,0-0-0], [11:0-1-14,0-5-11], [11:0-3-7,0-1-2]
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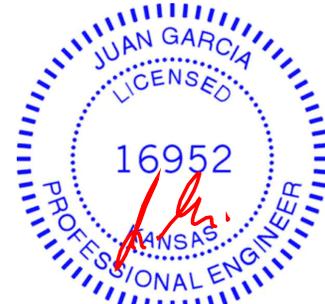
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.89	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.16 9-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.84	Vert(CT) -0.29 9-10 >905 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 13 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.08 9-10 >999 240	Weight: 81 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-4: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-6 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-11: 2x8 SP 2400F 2.0E	
OTHERS 2x4 SPF No.2	

**REACTIONS.** (lb/size) 11=1092/0-3-8, 13=939/0-2-8  
Max Horz 11=110(LC 5)  
Max Uplift 11=-86(LC 4), 13=-34(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1700/71, 3-4=-1069/62, 4-5=-954/74, 2-11=-979/132, 7-12=-16/815, 6-12=-16/815  
BOT CHORD 10-11=-91/1504, 9-10=-91/1504, 7-9=-39/552  
WEBS 3-9=-635/98, 5-9=-17/678, 5-7=-882/66, 6-13=-947/35

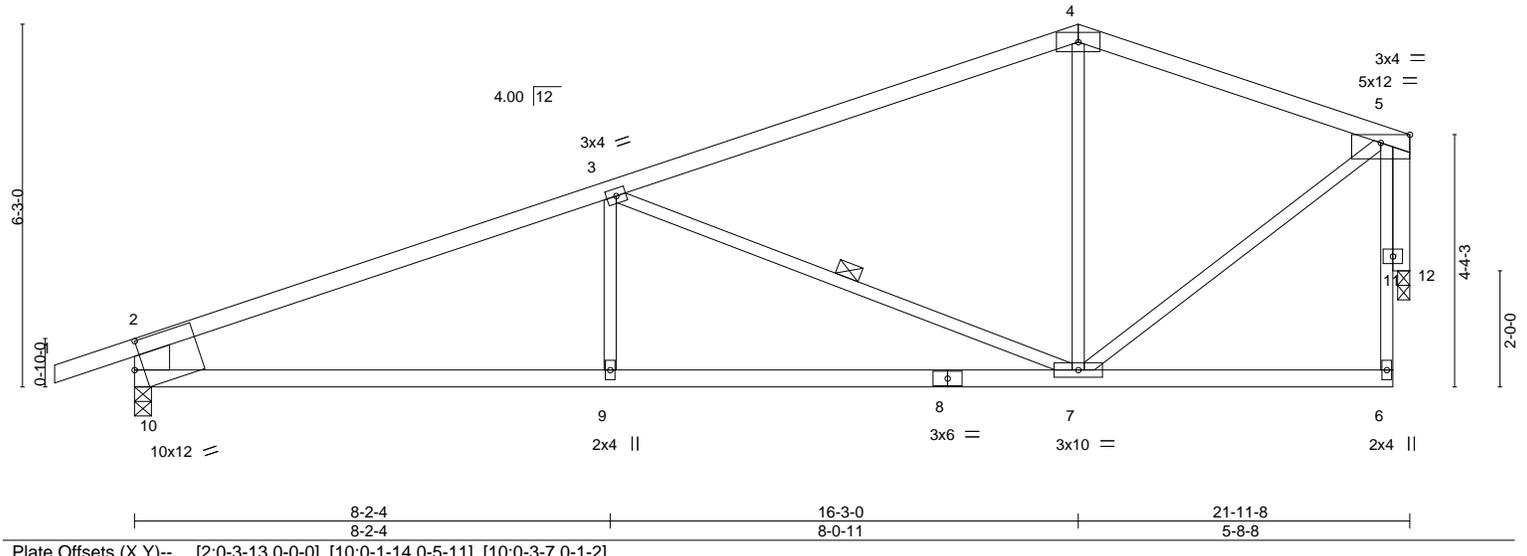
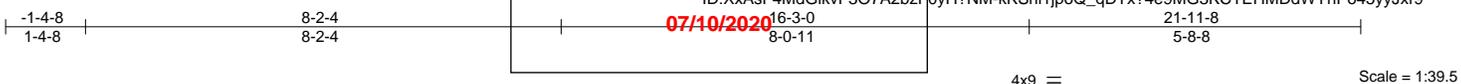
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Bearing at joint(s) 13 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 at joint(s) 13.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

Job 400370	Truss D6	Truss Type Roof Special	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252189
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH7NM-kkSni1jpoQ\_qDTx74e9MG3KCTEHMDdWYhPo45yyJxr9  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:00 2019 Page 1



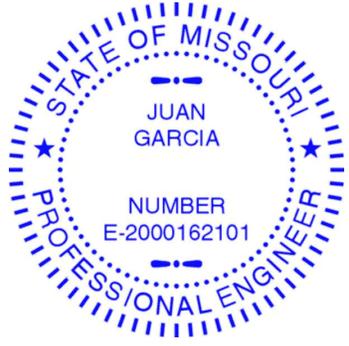
<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 2-0-0	TC 0.91	Vert(LL) -0.19 7-9 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.39 7-9 >665 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.08 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.10 7-9 >999 240	Weight: 79 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 4-5: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-10: 2x8 SP 2400F 2.0E	WEBS 1 Row at midpt 3-7
OTHERS 2x4 SPF No.2	

**REACTIONS.** (lb/size) 10=1092/0-3-8, 12=939/0-2-8  
 Max Horz 10=105(LC 5)  
 Max Uplift 10=-81(LC 4), 12=-24(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1739/61, 3-4=-853/46, 4-5=-799/57, 2-10=-980/124  
 BOT CHORD 9-10=-97/1546, 7-9=-97/1546  
 WEBS 3-9=0/306, 3-7=-915/111, 5-7=-22/812, 5-12=-949/25

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 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
  - 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.
  - Bearing at joint(s) 12 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 at joint(s) 12.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 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.



November 12, 2019

Job 400370	Truss E1	Truss Type Common	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>		Ply 1	Lot 24 HT	139252190
Wheeler Lumber, Waverly, KS 66871		8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:01 2019 Page 1		ID: XxAsF4MdGikvF3O7A2bzF0yH7NM-CX?9vNkRZk6hqdBELgpbHtS7ed2y3lhv3YedOyJxr8		Job Reference (optional)	
-1-4-8 1-4-8		8-2-4 8-2-4		16-3-0 8-0-11		24-3-12 8-0-12	
				<b>07/10/2020</b>		33-0-0 8-8-4	
						33-10-8 0-10-8	

Scale = 1:56.5

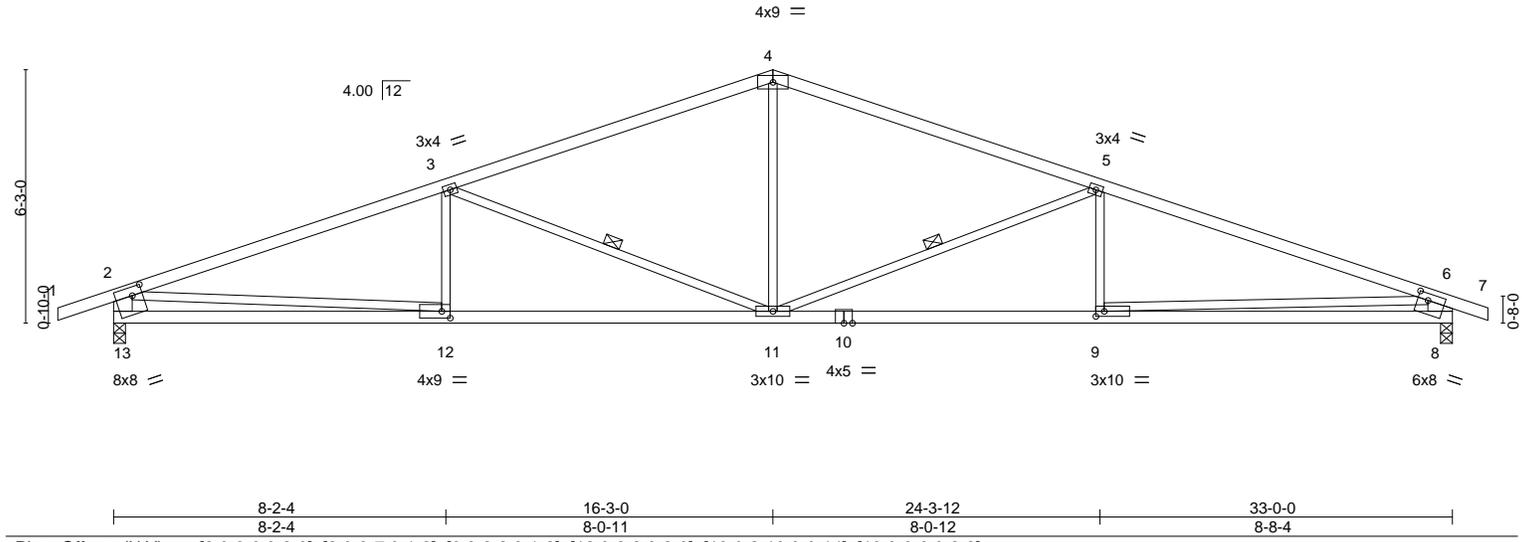


Plate Offsets (X, Y)--	[8:0-3-0,0-2-0], [8:0-3-7,0-1-2], [9:0-2-8,0-1-8], [12:0-2-8,0-2-0], [13:0-2-10,0-0-14], [13:0-3-0,0-2-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.20 9-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.41 11-12	>960	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.10 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14 11-12	>999	240	Weight: 118 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-8-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 9-5-0 oc bracing.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 3-11, 5-11
2-13: 2x6 SPF No.2, 6-8: 2x8 SP DSS	

<b>REACTIONS.</b> (lb/size)	13=1575/0-3-8, 8=1542/0-3-8
Max Horz	13=-86(LC 13)
Max Uplift	13=-281(LC 4), 8=-265(LC 5)

<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3039/425, 3-4=-2244/327, 4-5=-2244/322, 5-6=-3161/449, 2-13=-1490/323, 6-8=-1455/310
BOT CHORD 12-13=-232/772, 11-12=-383/2796, 9-11=-342/2906, 8-9=-246/1180
WEBS 3-11=-903/258, 4-11=-31/830, 5-11=-1007/276, 5-9=0/269, 2-12=-196/2030, 6-9=-107/1728

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 13=281, 8=265.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



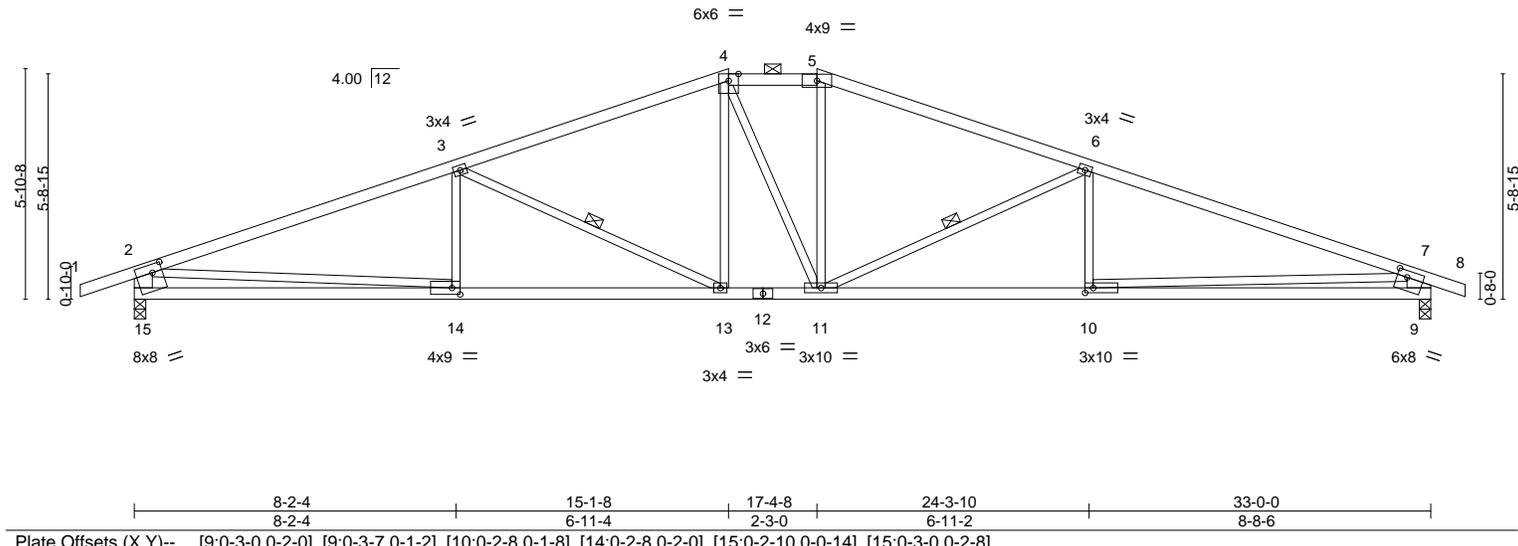
November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 400370	Truss E2	Truss Type Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252191
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF307A 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:03 2019 Page 1  
 2bzFOyH?NM-8v7wK3liiLMO4wgalmi3uiynIRKpQ\_k\_NN1kiHyJxr6  
 15-1-8 17-4-8 24-3-10 33-0-0 33-10-8  
 6-11-4 2-3-0 6-11-2 8-8-6 0-10-8

Scale = 1:58.4



<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	2-0-0	TC 0.62	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.19 13-14 >999 360	Weight: 124 lb	FT = 10%
BCLL 0.0 *	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.38 13-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.10 9 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.14 13-14 >999 240		

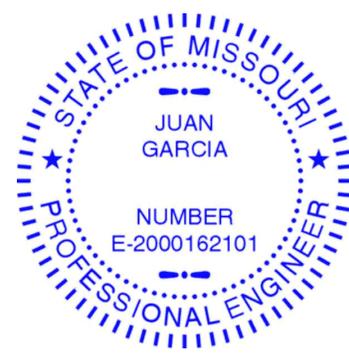
**LUMBER-**  
 TOP CHORD 2x4 SPF 2100F 1.8E \*Except\*  
 4-5: 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 2-15: 2x6 SPF No.2, 7-9: 2x8 SP DSS

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-8 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 9-4-1 oc bracing.  
 WEBS 1 Row at midpt 3-13, 6-11

**REACTIONS.** (lb/size) 15=1575/0-3-8, 9=1542/0-3-8  
 Max Horz 15=-78(LC 9)  
 Max Uplift 15=-289(LC 4), 9=-273(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3025/439, 3-4=-2353/357, 4-5=-2160/375, 5-6=-2364/364, 6-7=-3146/464,  
 2-15=-1490/332, 7-9=-1455/319  
 BOT CHORD 14-15=-240/803, 13-14=-389/2780, 11-13=-208/2151, 10-11=-354/2890, 9-10=-261/1217  
 WEBS 3-13=-746/217, 4-13=-44/410, 5-11=-37/415, 6-11=-847/234, 6-10=0/261,  
 2-14=-188/1982, 7-10=-98/1676

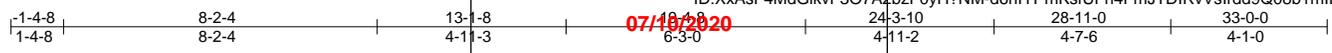
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=289, 9=273.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



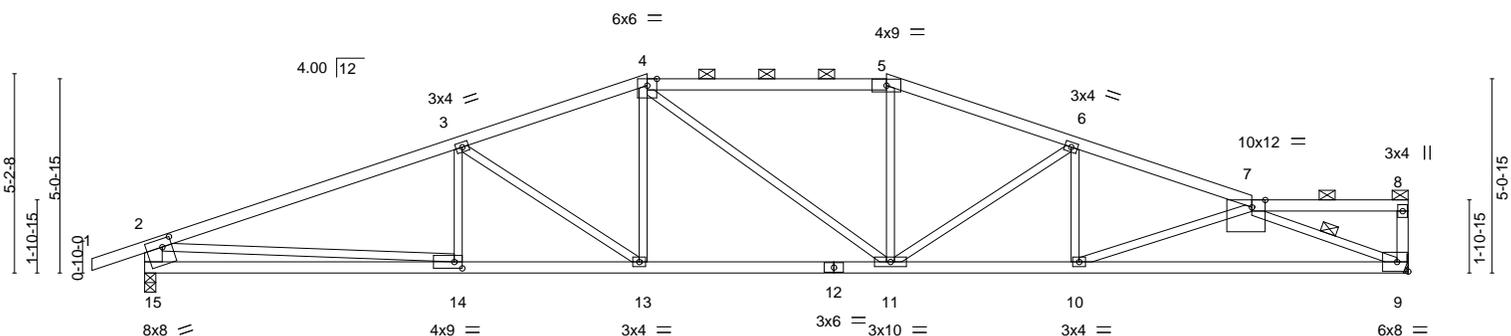
November 12, 2019

Job 400370	Truss E3	Truss Type ROOF SPECIAL	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252192
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7AzbzF0yH?NM-d6hYPmKsfUFh4FmJTDIRvVslrdd9Q08b1m1EjyJxr5  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:04 2019 Page 1



Scale = 1:59.9



	8-2-4	13-1-8	19-4-8	24-3-10	28-11-0	33-0-0
Plate Offsets (X,Y)--	[7:0-4-3,Edge],	[14:0-2-8,0-2-0],	[15:0-3-0,0-2-8],	[15:0-2-10,0-0-14]		

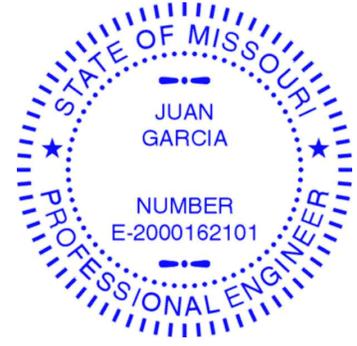
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.99	Vert(LL)	-0.22	10-11	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.94	Vert(CT)	-0.44	11-13	>889		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.12	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.12	10-11	>999	Weight: 122 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-2-15 max.): 4-5, 7-8.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x3 SPF No.2 *Except* 8-9: 2x4 SPF No.2, 2-15: 2x6 SPF No.2	WEBS 2-2-0 oc bracing: 9-10. 1 Row at midpt 7-9

**REACTIONS.** (lb/size) 9=1465/Mechanical, 15=1583/0-3-8  
 Max Horz 15=45(LC 8)  
 Max Uplift 9=-52(LC 5), 15=-97(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3015/103, 3-4=-2570/110, 4-5=-2422/122, 5-6=-2606/114, 6-7=-3094/100,  
 2-15=-1494/143  
 BOT CHORD 14-15=-111/848, 13-14=-67/2767, 11-13=-21/2382, 10-11=-84/2893, 9-10=-156/2976  
 WEBS 3-13=-497/80, 4-13=0/392, 4-11=-186/262, 5-11=0/410, 6-11=-585/55, 6-10=0/272,  
 7-9=-3129/178, 2-14=0/1925

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 15.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

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

Job 400370	Truss E4	Truss Type ROOF SPECIAL	Ply	Lot 24 HT	139252193
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Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MiTek Industries, Inc. Tue Nov 12 14:05:37 2019 Page 1  
ID:XXAsF4MdGikvF307A2bzF0yH?NM-KPV8HZvuuVS72RucqTSjkZigKJ\_GkZz?2GMgkHyJvDi



Scale = 1:61.8

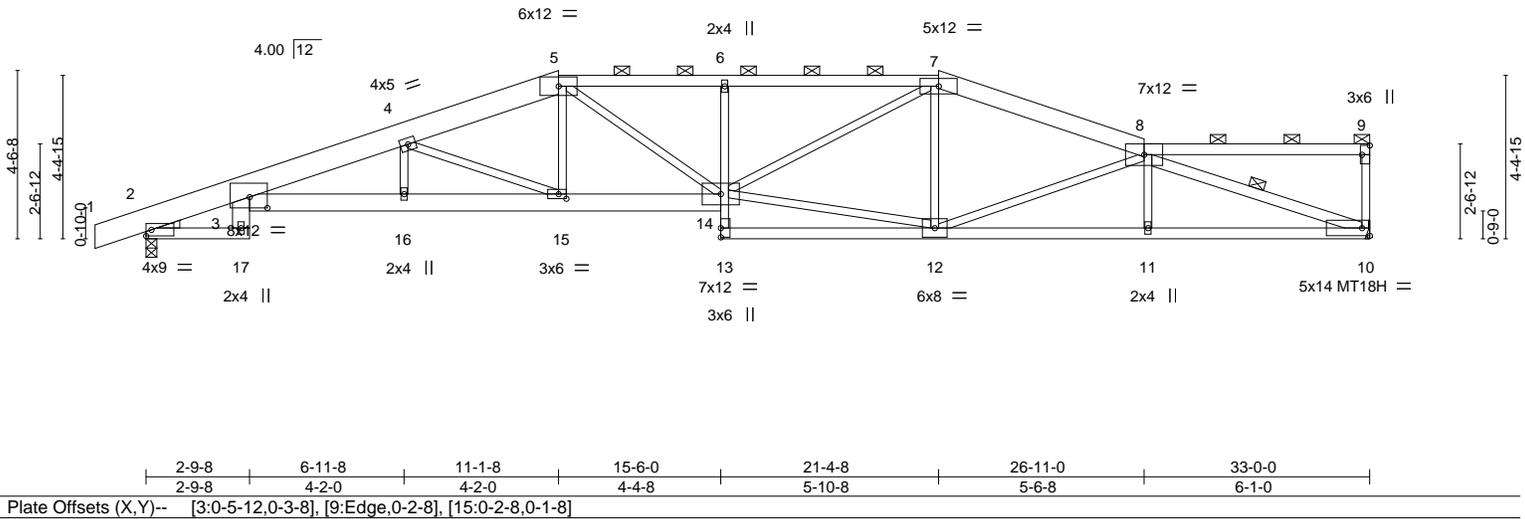


Plate Offsets (X,Y)--	[3:0-5-12,0-3-8], [9:Edge,0-2-8], [15:0-2-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.88	Vert(LL) -0.38 14-15 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.69 14-15 >568 240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.82	Horz(CT) 0.37 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.21 14 >999 240		Weight: 160 lb FT = 10%

**LUMBER-**  
**TOP CHORD** 2x4 SPF No.2 \*Except\*  
 1-5: 2x8 SP DSS, 7-8: 2x6 SPF No.2  
**BOT CHORD** 2x4 SPF No.2 \*Except\*  
 3-14: 2x6 SPF 1650F 1.4E, 6-13: 2x3 SPF No.2  
**WEBS** 2x3 SPF No.2 \*Except\*  
 3-17: 2x6 SPF No.2, 8-10: 2x4 SPF No.2  
**WEDGE**  
 Left: 2x3 SPF No.2

**BRACING-**  
**TOP CHORD** Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-7, 8-9.  
**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.  
**WEBS** 1 Row at midpt 8-10

**REACTIONS.** (lb/size) 10=1471/Mechanical, 2=1583/0-3-8  
 Max Horz 2=64(LC 5)  
 Max Uplift 10=60(LC 5), 2=100(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-661/12, 3-4=-4417/160, 4-5=-3547/139, 5-6=-3642/159, 6-7=-3635/162, 7-8=-2898/118  
**BOT CHORD** 3-16=-136/4357, 15-16=-134/4345, 14-15=-89/3324, 6-14=-393/95, 12-13=-1/336, 11-12=-136/3209, 10-11=-132/3214  
**WEBS** 4-15=-1136/77, 5-15=0/631, 5-14=-58/560, 12-14=-101/2377, 7-14=-75/1159, 8-12=-579/54, 8-10=-3373/122

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are MT20 plates unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 10 and 100 lb uplift at joint 2.
  - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





Job 400370	Truss E5	Truss Type ROOF SPECIAL	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 07/10/2020</b>	Ply <b>2</b>	Lot 24 HT  Job Reference (optional)	I39252194
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Wheeler Lumber, Waverly, KS 66871

- NOTES-**
- 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.

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job 400370	Truss E6	Truss Type HALF HIP GIRDER	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply <b>3</b>	Lot 24 HT  Job Reference (optional)
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:09 2019 Page 2  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-z3UBb6qThB6Yor7k61pT8zCmbsRSqfntJU3vwyJxr0

- NOTES-**
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 799 lb down and 223 lb up at 7-1-8, 247 lb down and 39 lb up at 9-2-4, 247 lb down and 39 lb up at 11-2-4, 247 lb down and 39 lb up at 13-2-4, 247 lb down and 39 lb up at 15-2-4, and 247 lb down and 39 lb up at 17-2-4, and 1030 lb down and 135 lb up at 17-10-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

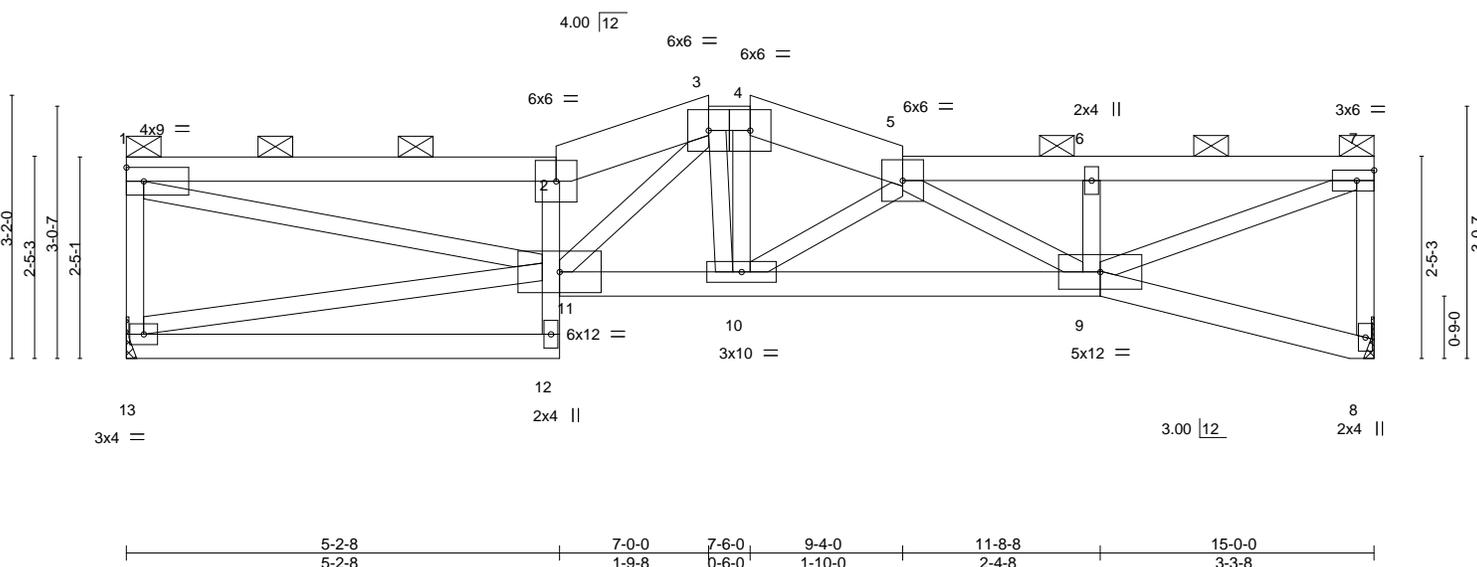
- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
 Vert: 1-5=-70, 5-12=-70, 2-22=-20, 4-19=-20, 16-18=-20, 14-15=-20, 13-14=-20
- Concentrated Loads (lb)  
 Vert: 21=-799(B) 20=-247(B) 23=-247(B) 24=-247(B) 25=-247(B) 26=-247(B) 27=-1030(B)

Job 400370	Truss G1	Truss Type Roof Special	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252196
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-RG2ZoSr5SVEPP?iwgkKigAl0eGp\_ZBi0\_zDcSNyJxr?  
 07/19/2020 8:240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:10 2019 Page 1



Scale = 1:27.6



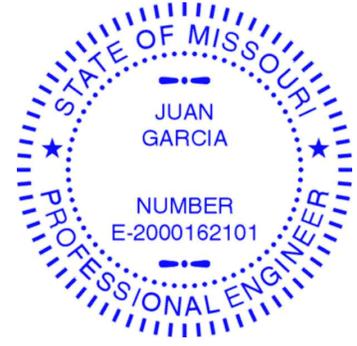
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.08	2	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.14	10-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.06	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.04	11	>999	Weight: 62 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 2-3,4-5: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-2 max.): 1-2, 3-4, 5-7.
BOT CHORD 2x4 SPF No.2 *Except* 2-12: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 13=666/Mechanical, 8=666/Mechanical  
 Max Horz 13=62(LC 7)  
 Max Uplift 13=-20(LC 4), 8=-22(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-13=-600/44, 1-2=-1553/18, 2-3=-1705/31, 3-4=-1251/24, 4-5=-1311/21, 5-6=-1248/33,  
 6-7=-1247/33, 7-8=-630/42  
 BOT CHORD 2-11=-778/76, 10-11=-35/1234, 9-10=-70/1608  
 WEBS 1-11=-23/1565, 3-11=-43/525, 4-10=0/285, 5-10=-458/43, 5-9=-425/16, 7-9=-50/1335

- 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; MWFERS (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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8.
  - 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.



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

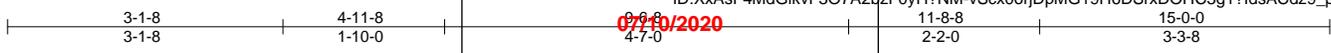
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss G2	Truss Type Roof Special	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252197
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:11 2019 Page 1  
ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-vScx0orjDpMG19H6DSrxDOHC3g1?lDsACdz9\_pyJr\_

07/10/2020



Scale = 1:26.0

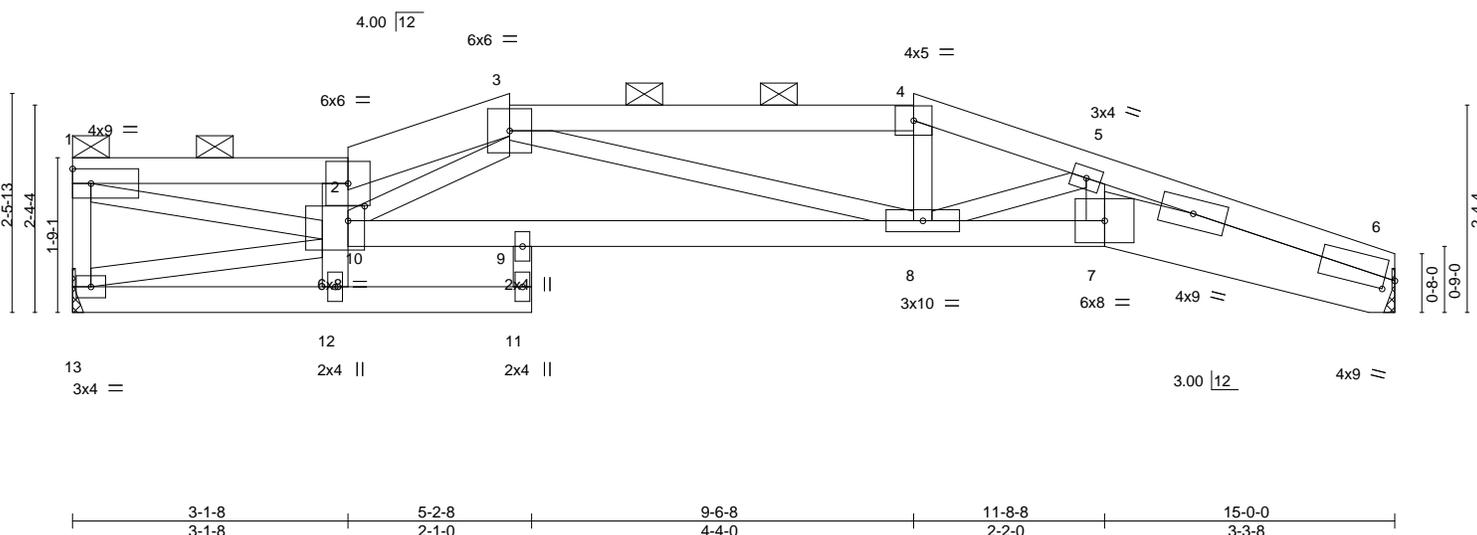


Plate Offsets (X,Y)--	[6:0-1-7,0-1-8], [10:0-2-4,0-2-0]
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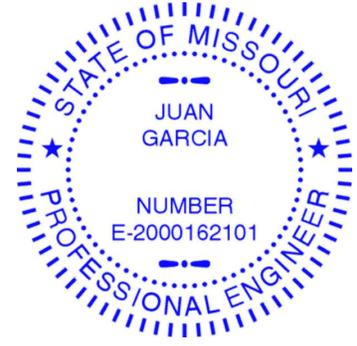
LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.44	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.12 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.61	Vert(CT) -0.26 8-9 >683 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.11 6 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.06 8-9 >999 240	Weight: 61 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 2-3: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-14 max.): 1-2, 3-4.
BOT CHORD 2x4 SPF No.2 *Except* 6-7: 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-12: 2x4 SPF No.2	

**REACTIONS.** (lb/size) 13=668/Mechanical, 6=668/Mechanical  
Max Horz 13=-43(LC 6)  
Max Uplift 13=-27(LC 4), 6=-25(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-13=-554/26, 1-2=-1769/10, 2-3=-2181/23, 3-4=-1771/49, 4-5=-1871/42, 5-6=-2577/96  
BOT CHORD 12-13=0/304, 9-10=-37/1650, 8-9=-37/1650, 7-8=-62/2243, 6-7=-69/2381  
WEBS 1-10=-15/1768, 2-10=-722/43, 3-8=-47/258, 4-8=0/295, 5-8=-487/77, 5-7=-8/510, 3-10=0/529, 10-13=-264/19

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 12, 2019

Job 400370	Truss G3	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252198
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:12 2019 Page 1  
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 07/10/2019

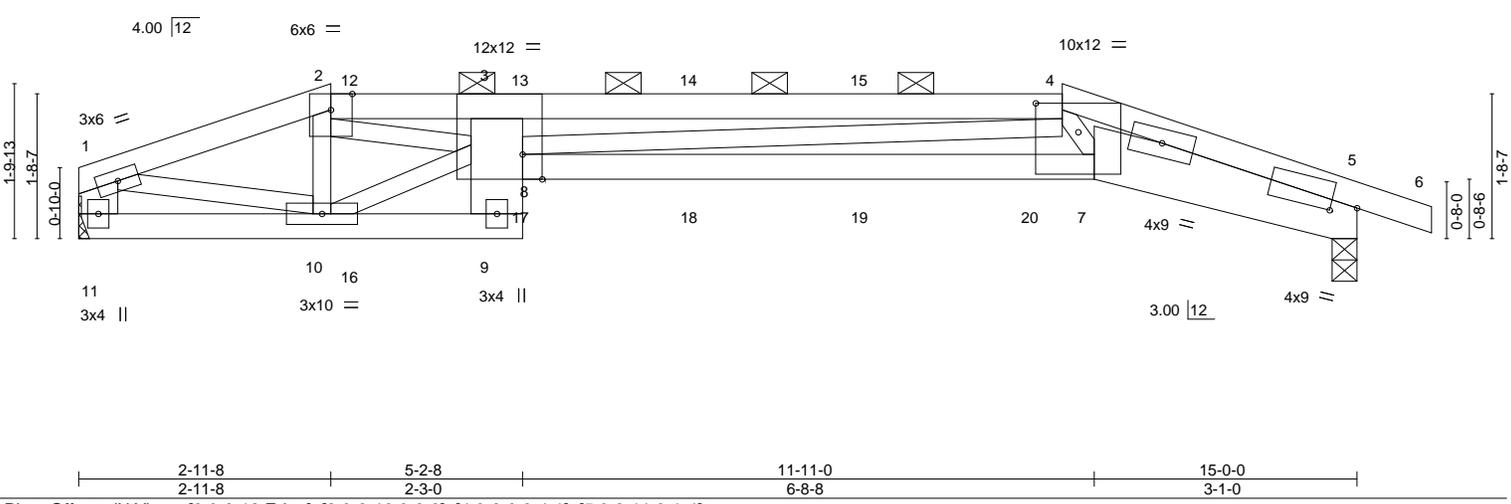


Plate Offsets (X, Y)-- [3:0-2-12, Edge], [3:0-3-10, 0-0-0], [4:0-6-0, 0-4-1], [5:0-3-11, 0-1-4]

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 0.78	Vert(LL)	-0.18	7-8	>949	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.42	7-8	>421		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.34	Horz(CT)	0.13	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.20	7-8	>900	Weight: 58 lb	FT = 10%

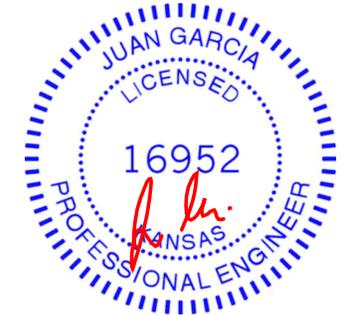
**LUMBER-**  
 TOP CHORD 2x4 SPF No.2 \*Except\*  
 2-4: 2x4 SPF 2100F 1.8E  
 BOT CHORD 2x4 SPF No.2 \*Except\*  
 3-9: 2x8 SP 2400F 2.0E, 7-8: 2x4 SPF 2100F 1.8E, 5-7: 2x8 SP DSS  
 WEBS 2x3 SPF No.2 \*Except\*  
 1-11: 2x6 SPF No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-5 max.): 2-4.  
 BOT CHORD Rigid ceiling directly applied or 9-2-11 oc bracing.

**REACTIONS.** (lb/size) 11=681/Mechanical, 5=756/0-3-8  
 Max Horz 11=-25(LC 34)  
 Max Uplift 11=-182(LC 4), 5=-224(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1150/326, 2-3=-1832/494, 3-4=-3398/936, 4-5=-3511/865, 1-11=-637/191  
 BOT CHORD 9-10=-315/1139, 3-8=-297/157, 7-8=-730/2736, 5-7=-802/3320  
 WEBS 2-8=-178/814, 4-8=-170/731, 4-7=-106/982, 1-10=-264/957

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=182, 5=224.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 126 lb up at 2-11-8, 65 lb down and 44 lb up at 3-3-4, 65 lb down and 43 lb up at 5-3-4, 65 lb down and 43 lb up at 7-3-0, and 65 lb down and 43 lb up at 9-3-0, and 147 lb down and 171 lb up at 11-6-8 on top chord, and 29 lb down at 2-11-8, 16 lb down at 3-3-4, 16 lb down at 5-3-4, 16 lb down at 7-3-0, 16 lb down at 9-3-0, and 16 lb down at 11-3-0, and 29 lb down at 11-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



November 12, 2019

LOAD CASE(S) Standard

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

**MiTek**  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss G3	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 07/10/2020</b>	Ply 1	Lot 24 HT  Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		<small>8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:12 2019 Page 2 ID:XxAsF4MdGikvF3O7A2bzF0yH?NM-OeAJD8sL_6V7fJsJn9MAmbqHV3Ss18JJRHijVFyJxqz</small>			

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 9-11=-20, 7-8=-20, 5-7=-20

Concentrated Loads (lb)

Vert: 2=-3(B) 4=-6(B) 10=-0(B) 12=-3(B) 13=-3(B) 14=-3(B) 15=-3(B) 16=-5(B) 17=-5(B) 18=-5(B) 19=-5(B) 20=-6(B)

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

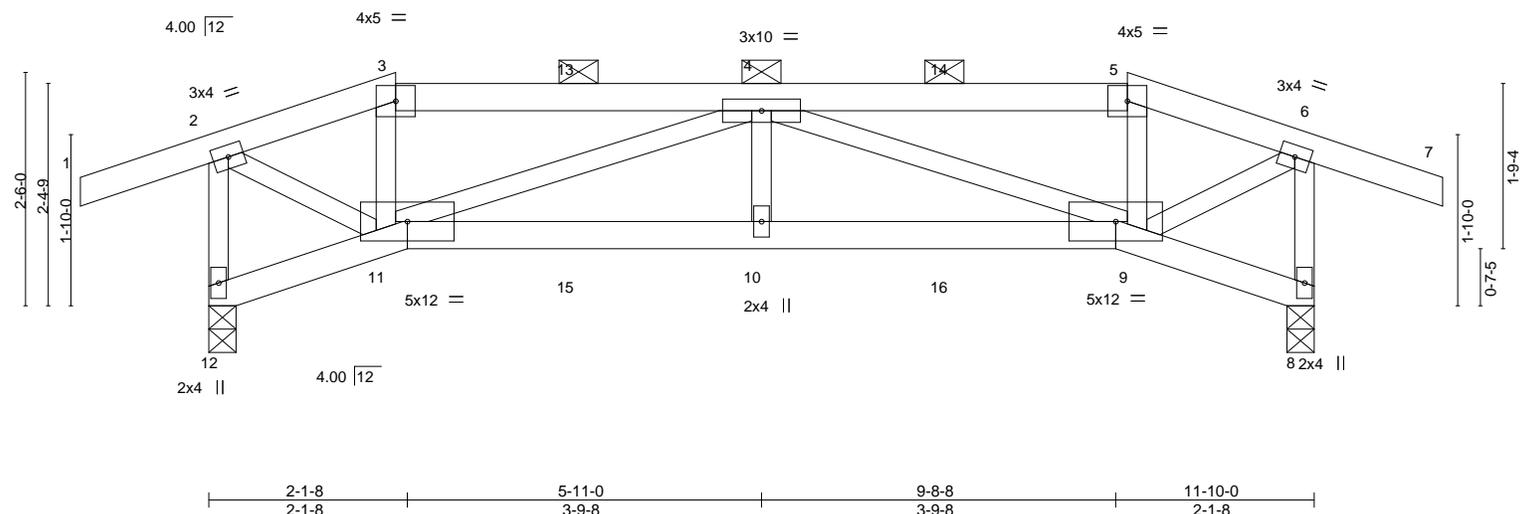
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss H1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>		Ply 1	Lot 24 HT 139252199
Wheeler Lumber, Waverly, KS 66871		8,240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:14 2019 Page 1				
-1-4-8 1-4-8		2-0-0 2-0-0		5-11-0 3-11-0		9-10-0 3-11-0
				11-10-0 2-0-0		13-2-8 1-4-8

Scale = 1:24.5



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 0.19	Vert(LL)	-0.03	10	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.06	10	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.28	Horz(CT)	0.03	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	10	>999	Weight: 46 lb	FT = 10%

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

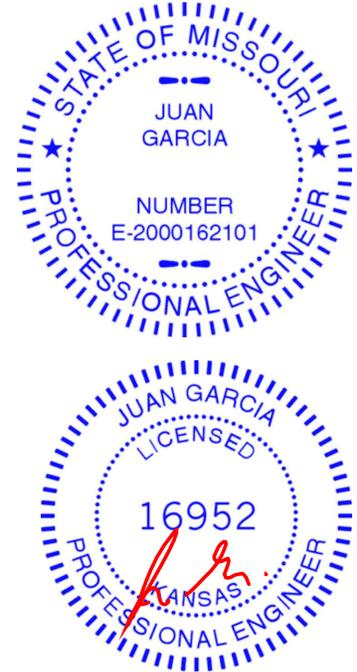
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (lb/size) 12=620/0-3-8, 8=620/0-3-8  
 Max Horz 12=-48(LC 6)  
 Max Uplift 12=-267(LC 4), 8=-267(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-12=-606/265, 2-3=-535/246, 3-4=-494/241, 4-5=-484/227, 5-6=-525/231, 6-8=-606/278  
 BOT CHORD 10-11=-390/1027, 9-10=-390/1027  
 WEBS 2-11=-226/577, 4-11=-598/203, 4-9=-598/205, 6-9=-219/572

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFERS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Bearing at joint(s) 12, 8 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) except (it=lb) 12=267, 8=267.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 117 lb down and 106 lb up at 2-0-0, 55 lb down and 27 lb up at 3-11-0, 55 lb down and 27 lb up at 5-11-0, and 55 lb down and 27 lb up at 7-11-0, and 117 lb down and 106 lb up at 9-10-0 on top chord, and 28 lb down and 37 lb up at 1-10-12, 18 lb down and 21 lb up at 3-11-0, 18 lb down and 21 lb up at 5-11-0, and 18 lb down and 21 lb up at 7-11-0, and 28 lb down and 37 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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



November 12, 2019

Job 400370	Truss H1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 07/10/2020</b>	Ply 1	Lot 24 HT  Job Reference (optional)	I39252199
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:14 2019 Page 2  
ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-K114epubVklruc?hvaPer0vnGtBdV2kcvbBqa8yJxqx

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 11-12=-20, 9-11=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 11=5(F) 10=2(F) 9=5(F) 15=2(F) 16=2(F)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

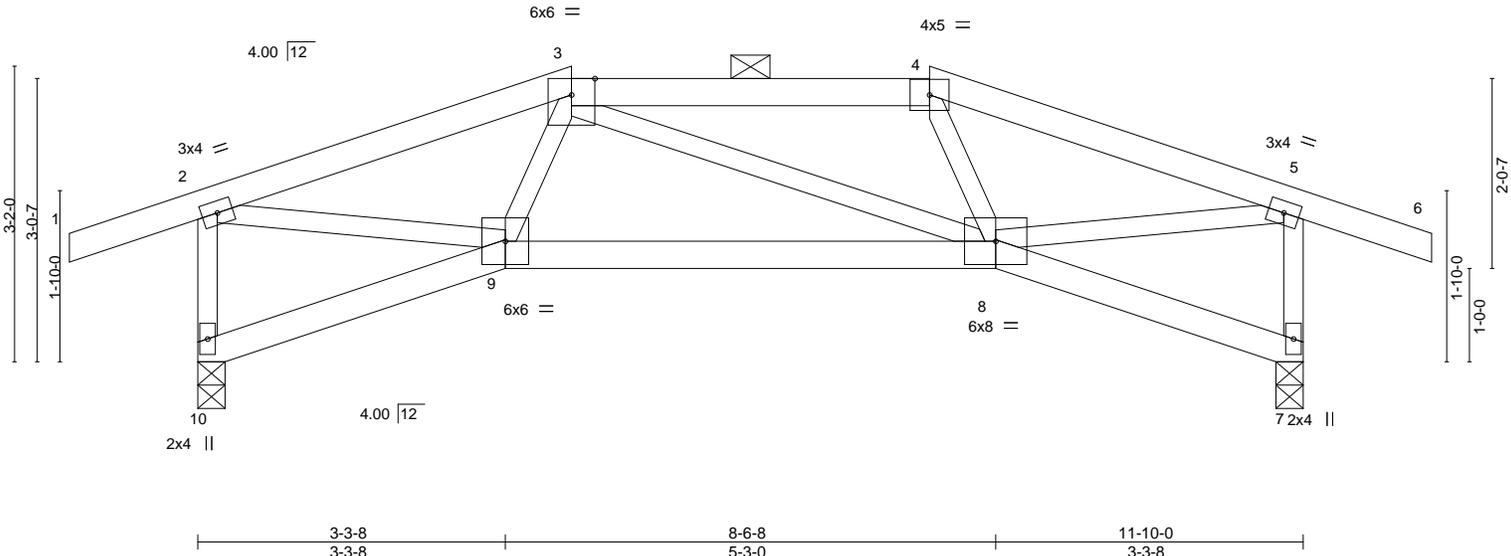
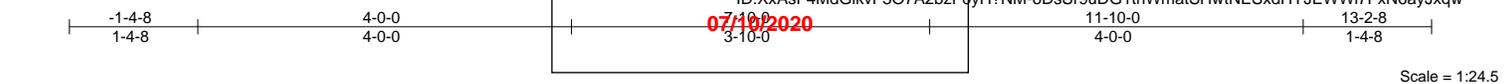


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss H2	Truss Type Hip	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252200
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Wheeler Lumber, Waverly, KS 66871  
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 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:15 2019 Page 1

07/10/2020



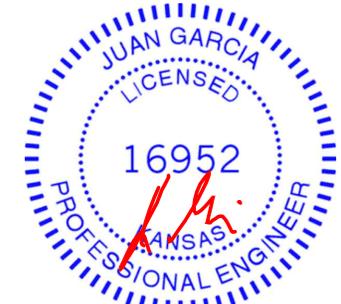
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.04 8-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.08 8-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.03 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02 8-9	>999	240	Weight: 45 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 10=627/0-3-8, 7=627/0-3-8  
 Max Horz 10=-40(LC 6)  
 Max Uplift 10=-154(LC 4), 7=-154(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-10=-602/162, 2-3=-794/114, 3-4=-726/159, 4-5=-793/121, 5-7=-602/172  
 BOT CHORD 8-9=-92/727  
 WEBS 2-9=-55/711, 5-8=-70/709

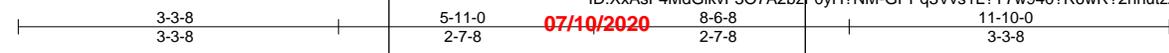
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Bearing at joint(s) 10, 7 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) except (jt=lb) 10=154, 7=154.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



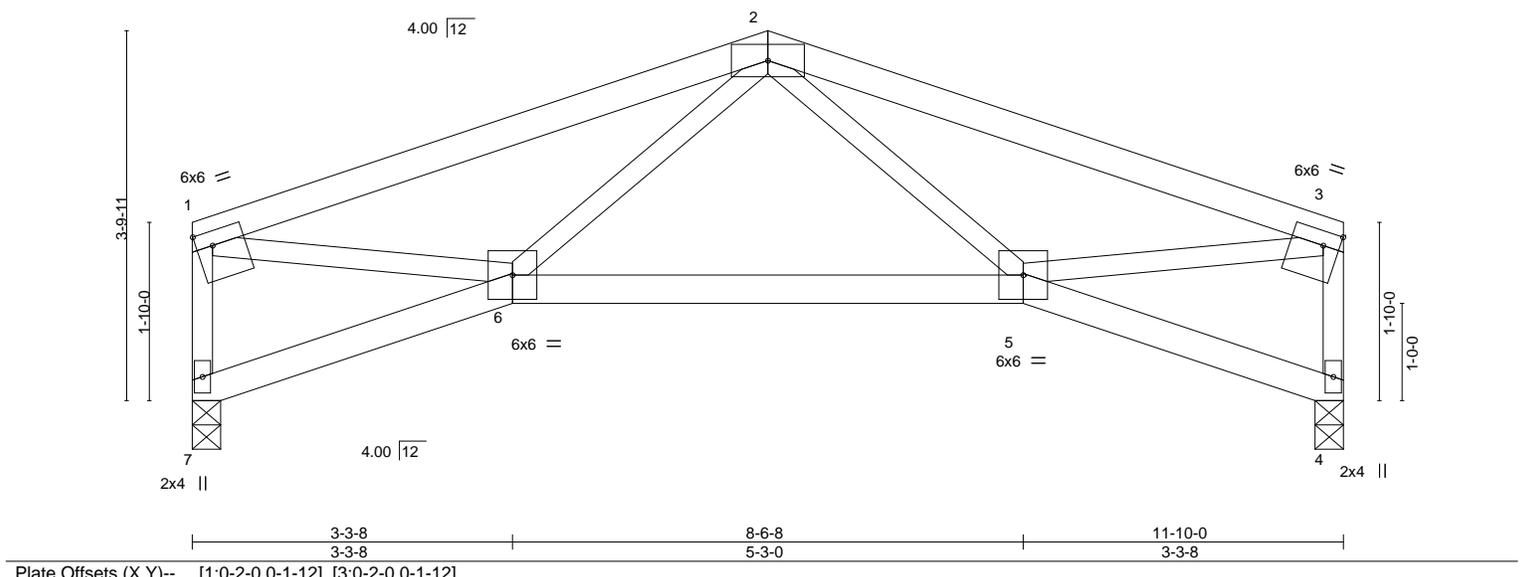
November 12, 2019

Job 400370	Truss H3	Truss Type Roof Special	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252201
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:16 2019 Page 1  
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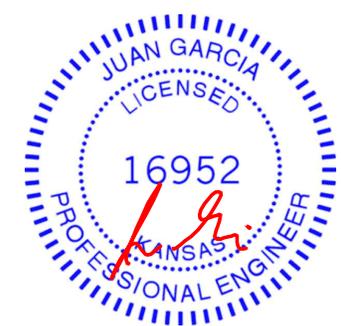
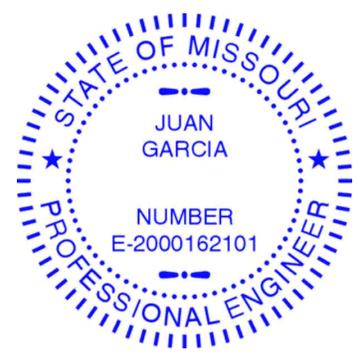
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.28	Vert(LL) -0.04 5-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.20	Vert(CT) -0.08 5-6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 4 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.01 5-6 >999 240	Weight: 41 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-6 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 7=523/0-3-8, 4=523/0-3-8  
 Max Horz 7=-37(LC 4)  
 Max Uplift 7=-78(LC 4), 4=-78(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-7=-510/91, 1-2=-739/86, 2-3=-739/75, 3-4=-510/103  
 BOT CHORD 5-6=-98/643  
 WEBS 3-5=-10/594, 1-6=-17/594

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; 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) Bearing at joint(s) 7, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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.



November 12, 2019

Job 400370	Truss J1	Truss Type Diagonal Hip	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252202
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:17 2019 Page 1  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-kczCGrwUof7P14kGaiyLTfXGg4ANITq2bZQUBTYJxqu  
 07/10/2020

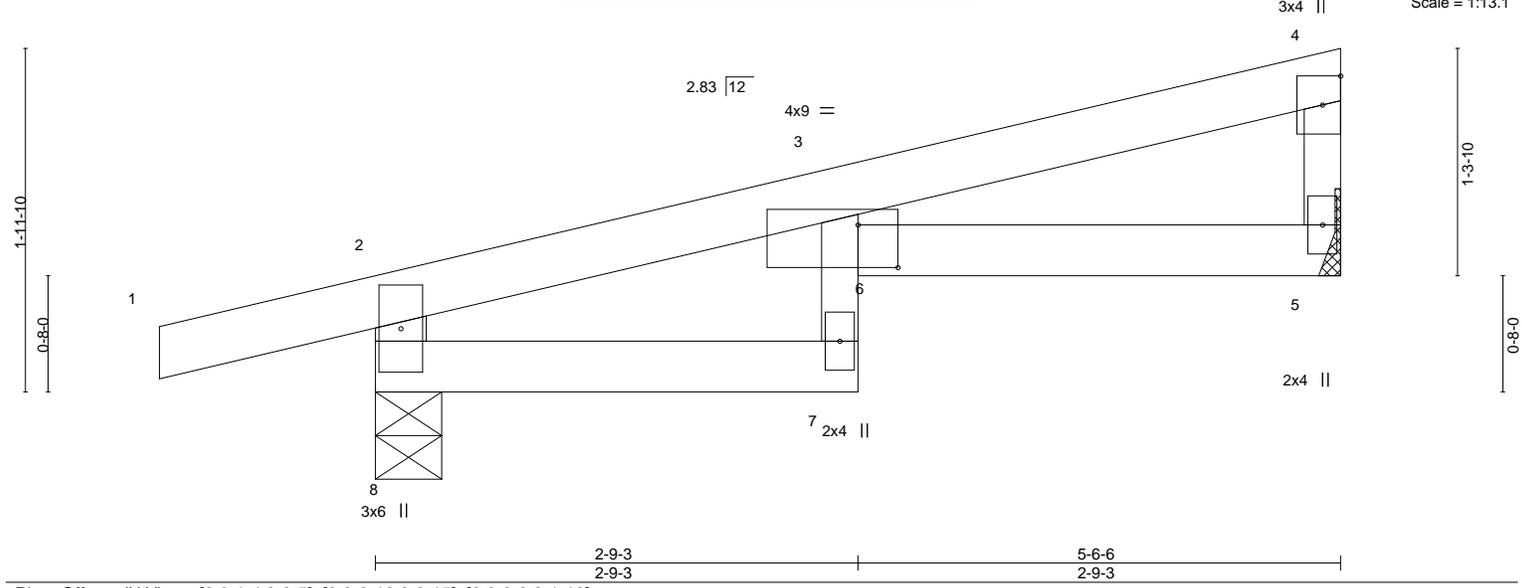


Plate Offsets (X,Y)--	[3:0-1-4,0-0-5], [3:0-2-12,0-2-15], [6:0-0-0,0-1-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL) -0.04 6 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.07 7 >882 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.02 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.04 6 >999 240	Weight: 16 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 3-7: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 4-5: 2x3 SPF No.2	

**REACTIONS.** (lb/size) 8=347/0-4-9, 5=225/Mechanical  
 Max Horz 8=64(LC 22)  
 Max Uplift 8=-105(LC 4), 5=-46(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-319/120

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 8=105.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 31 lb up at 2-9-8, and 67 lb down and 31 lb up at 2-9-8 on top chord, and 2 lb down and 0 lb up at 2-7-15, and 2 lb down and 0 lb up at 2-7-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

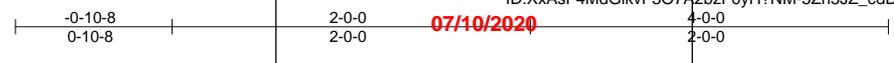
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20
- Concentrated Loads (lb)  
Vert: 7=1(F=0, B=0)



November 12, 2019

Job 400370	Truss J2	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252203
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Wheeler Lumber, Waverly, KS 66871 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:22 2019 Page 1  
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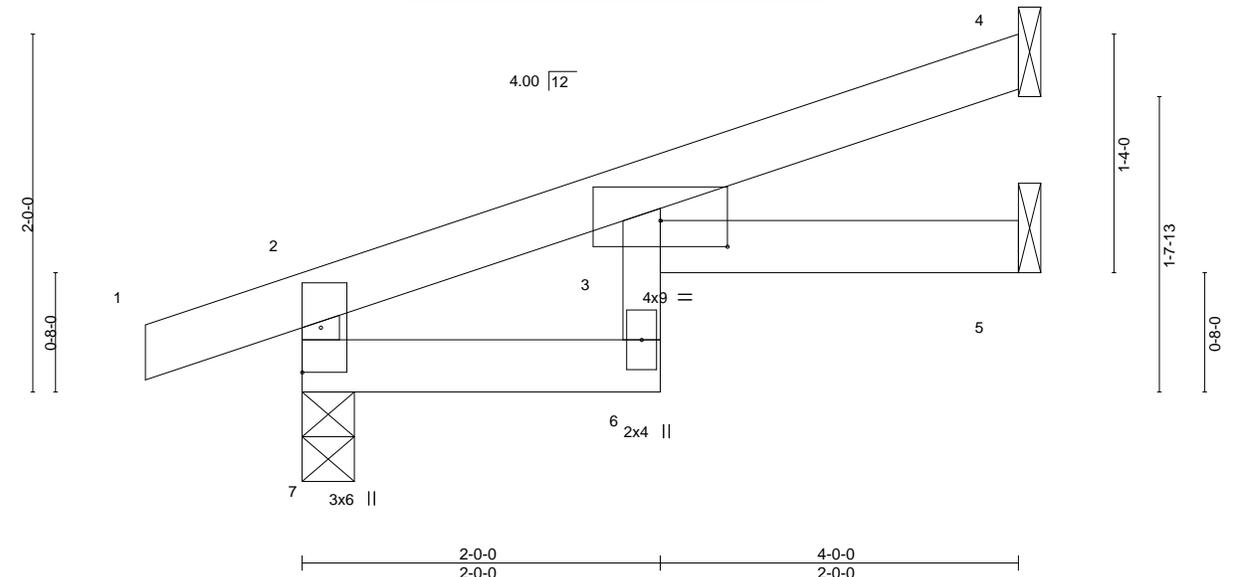


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [3:0-4-8,0-1-12], [7:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.02	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.04	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.03	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	6	>999	Weight: 11 lb	FT = 10%

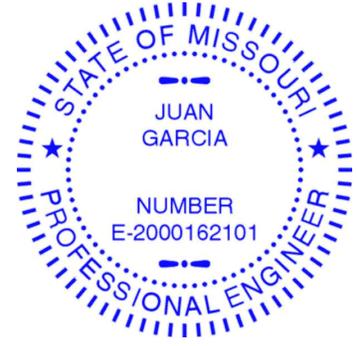
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 3-6: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 7=250/0-3-8, 4=100/Mechanical, 5=64/Mechanical  
 Max Horz 7=63(LC 4)  
 Max Uplift 7=-64(LC 4), 4=-39(LC 8), 5=-5(LC 8)  
 Max Grav 7=250(LC 1), 4=100(LC 1), 5=65(LC 3)

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

**NOTES-**

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



November 12, 2019

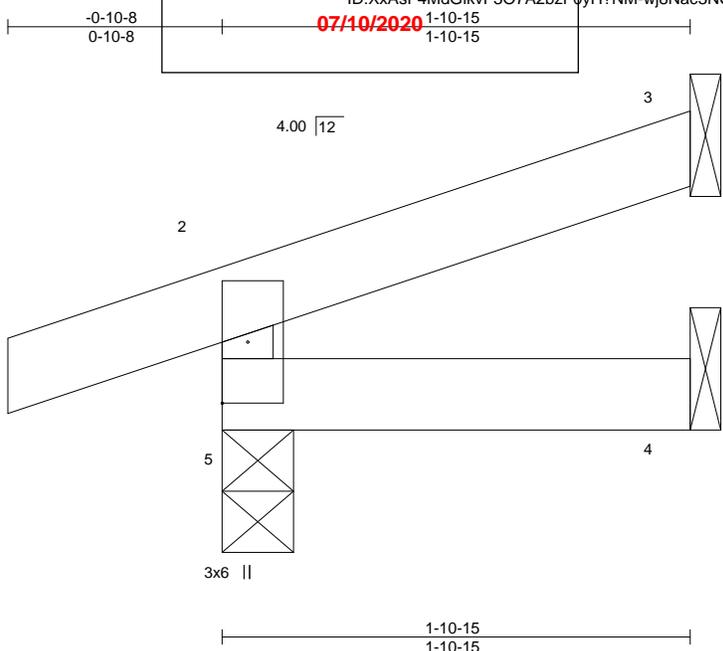
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J3	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252204
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Wheeler Lumber, Waverly, KS 66871  
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 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:28 2019 Page 1



Scale = 1:9.4

Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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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)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 6 lb	FT = 10%

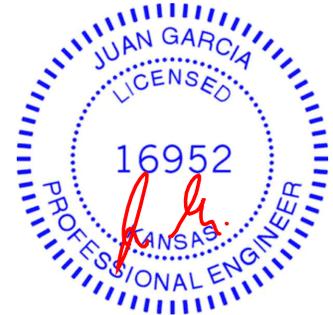
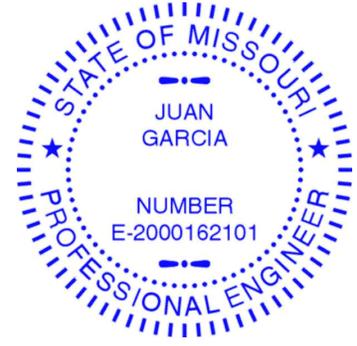
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=168/0-3-8, 3=46/Mechanical, 4=16/Mechanical  
 Max Horz 5=35(LC 4)  
 Max Uplift 5=-57(LC 4), 3=-26(LC 8)  
 Max Grav 5=168(LC 1), 3=46(LC 1), 4=33(LC 3)

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

**NOTES-**

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



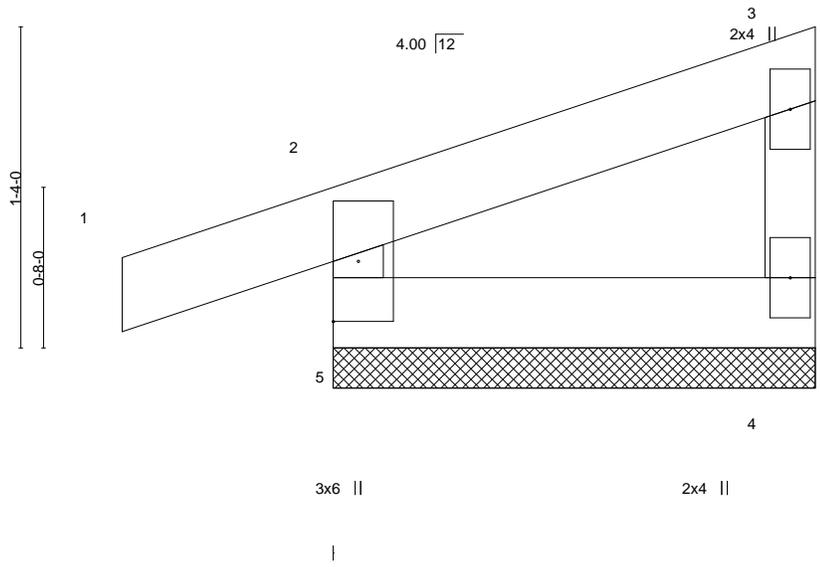
November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 400370	Truss J4	Truss Type Jack-Closed Supported Gable	Lot 24 HT 139252205
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**RELEASE FOR CONSTRUCTION**  
**AS NOTED ON PLANS REVIEW**  
**DEVELOPMENT SERVICES**  
**LEE'S SUMMIT, MISSOURI**  
 07/10/2020

Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:34 2019 Page 1  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-ktVerf78otG?lhXX4nmKfEKD9x51B91YVi1tH\_yJxqd



Scale = 1:9.5

Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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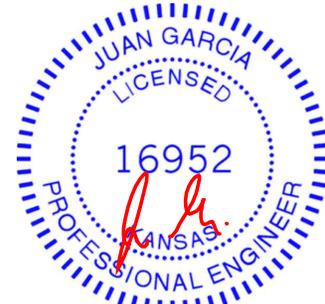
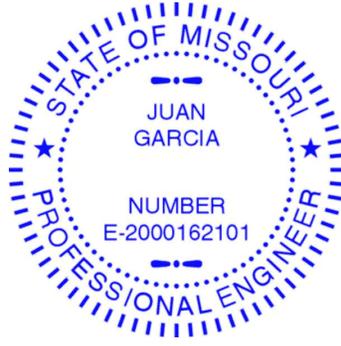
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	1	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 7 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=168/2-0-0, 4=62/2-0-0  
 Max Horz 5=49(LC 5)  
 Max Uplift 5=63(LC 4), 4=-14(LC 5)

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

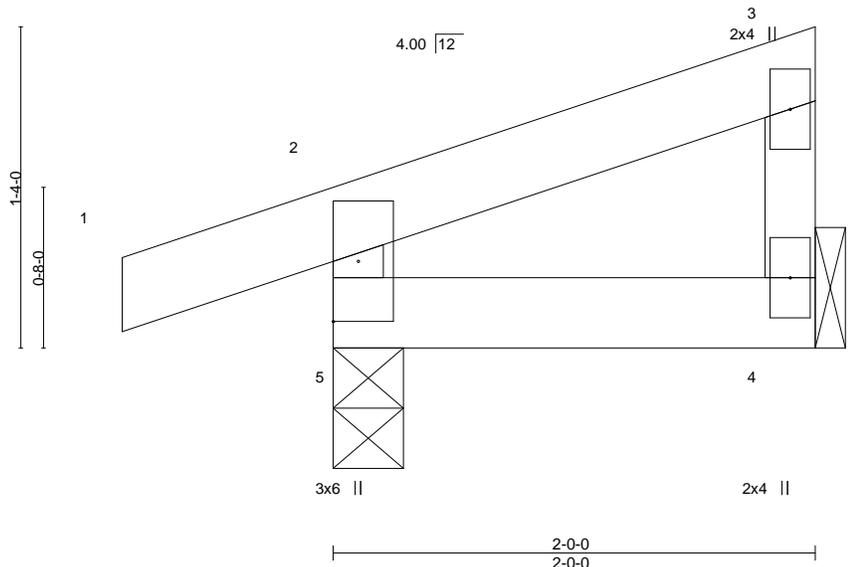
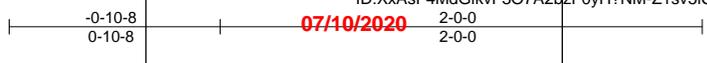
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind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



November 12, 2019

Job 400370	Truss J5	Truss Type Jack-Closed	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252206
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Wheeler Lumber, Waverly, KS 66871



Scale = 1:9.5

Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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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)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

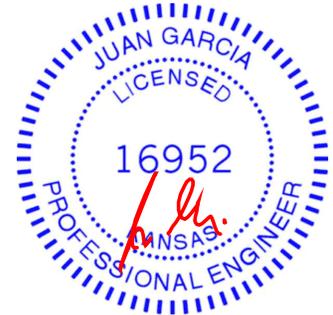
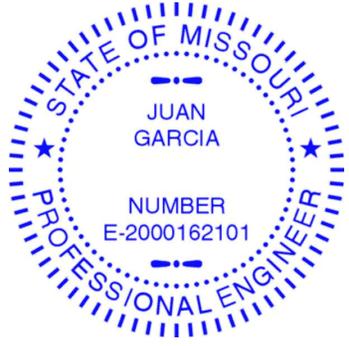
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=168/0-3-8, 4=62/Mechanical  
 Max Horz 5=49(LC 5)  
 Max Uplift 5=-63(LC 4), 4=-14(LC 5)

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

**NOTES-**

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

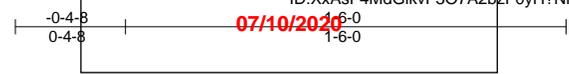


November 12, 2019

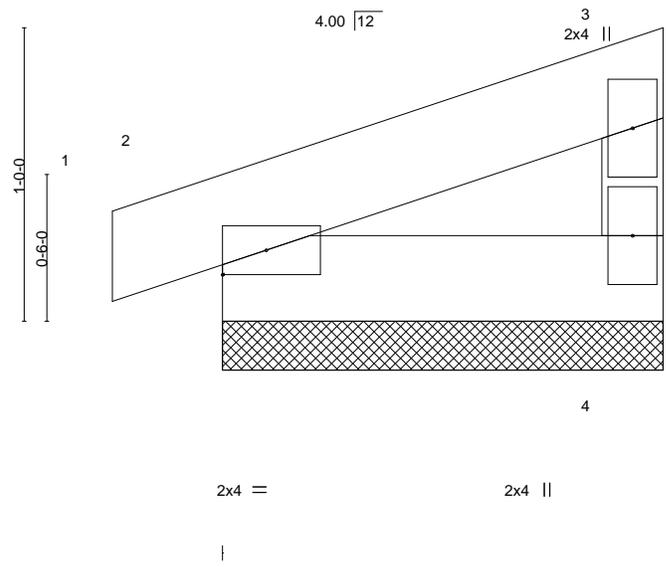
Job 400370	Truss J7	Truss Type JACK-CLOSED SUPPORT	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252207
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:40 2019 Page 1  
ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-Z1sv5iCvOj080c?hQ1tkuV\_FDM8XbtWRteUCVdyJxqX



Scale = 1:7.8



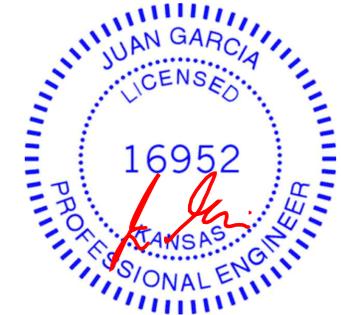
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 4 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 4=59/1-6-0, 2=93/1-6-0  
Max Horz 2=28(LC 5)  
Max Uplift 4=-14(LC 8), 2=-27(LC 4)

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

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

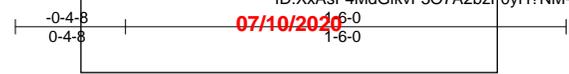


November 12, 2019

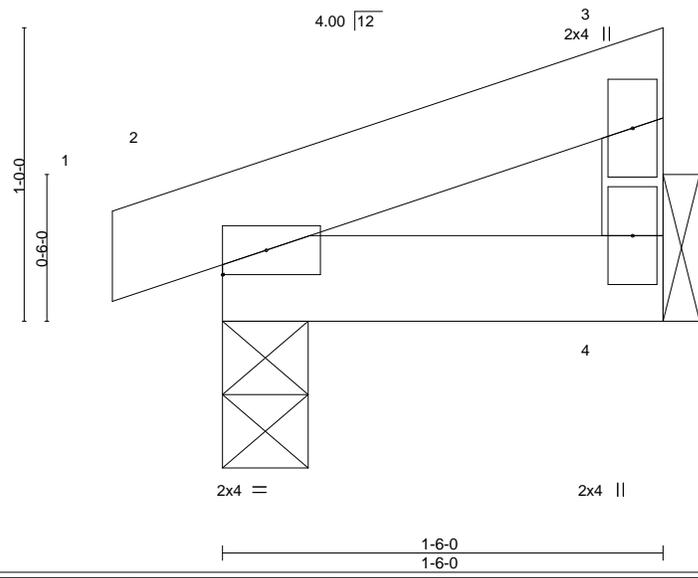
Job 400370	Truss J8	Truss Type JACK-CLOSED	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252208
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:41 2019 Page 1  
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Scale = 1:7.8



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

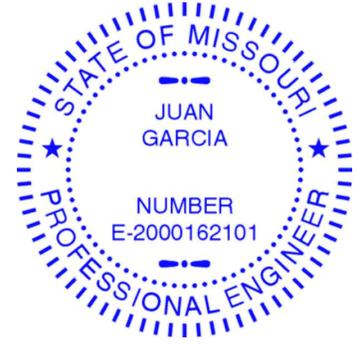
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 4=57/Mechanical, 2=94/0-3-8  
 Max Horz 2=28(LC 5)  
 Max Uplift 4=-13(LC 8), 2=-28(LC 4)

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

**NOTES-**

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



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J9	Truss Type Diagonal Hip	Girder	1	Lot 24 HT 139252209
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			
<p style="text-align: center;"><b>RELEASE FOR CONSTRUCTION</b>  <b>AS NOTED ON PLANS REVIEW</b>  <b>DEVELOPMENT SERVICES</b>  <b>LEE'S SUMMIT, MISSOURI</b></p> <p style="text-align: center;">ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-1DQHJ2DX908?dmat_OzRiXOUmUQKKma6IE14yJxqW</p> <p style="text-align: center;">07/10/2020</p>					
		-1-11-5 1-11-5			

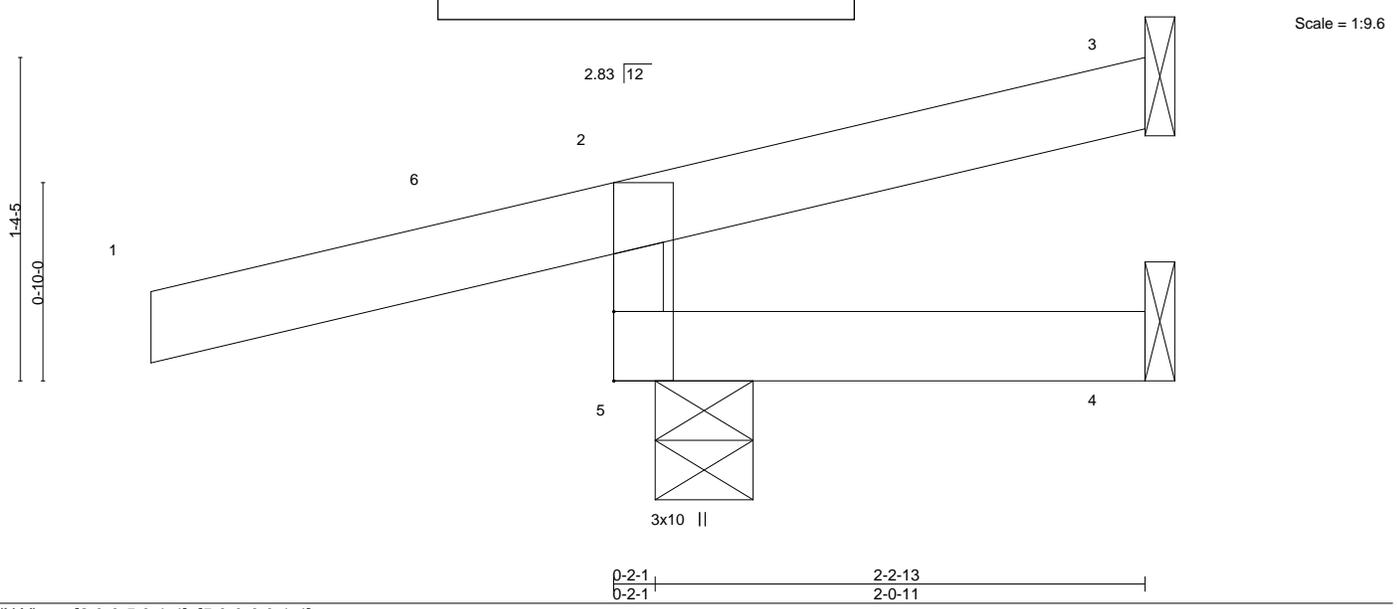


Plate Offsets (X,Y)--	[2:0-0-5,0-1-4], [5:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	5	>999	Weight: 8 lb	FT = 10%

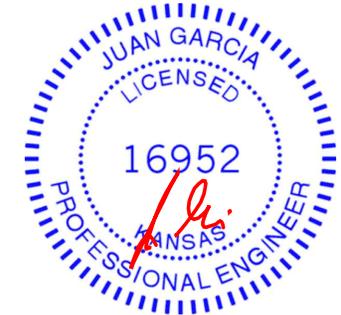
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-13 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=133/0-4-15, 3=4/Mechanical, 4=2/Mechanical  
 Max Horz 5=43(LC 7)  
 Max Uplift 5=-141(LC 6), 3=-15(LC 12)  
 Max Grav 5=133(LC 1), 3=8(LC 4), 4=27(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=141.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 22 lb down and 8 lb up at -1-11-5, and 22 lb down and 8 lb up at -1-11-5 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

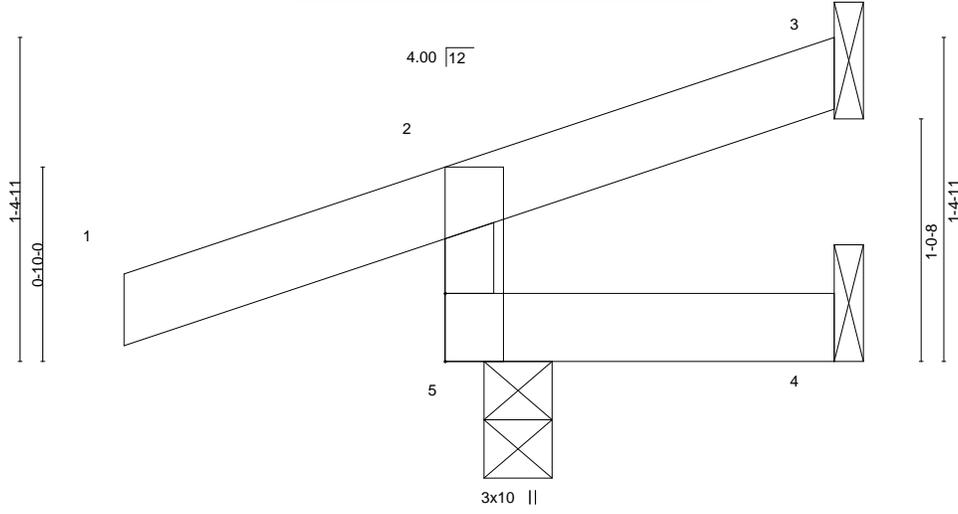
- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Concentrated Loads (lb)  
 Vert: 1=-35(F=-18, B=-18)  
 Trapezoidal Loads (plf)  
 Vert: 1=-0(F=35, B=35)-to-6=-24(F=23, B=23), 6=0(F=35, B=35)-to-2=-13(F=29, B=29), 2=-13(F=29, B=29)-to-3=-49(F=10, B=10), 5=-4(F=8, B=8)-to-4=-14(F=3, B=3)



November 12, 2019

Job 400370	Truss J10	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252210
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Wheeler Lumber, Waverly, KS 66871  
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 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:17 2019 Page 1



Scale = 1:9.8

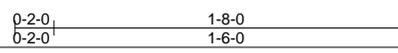


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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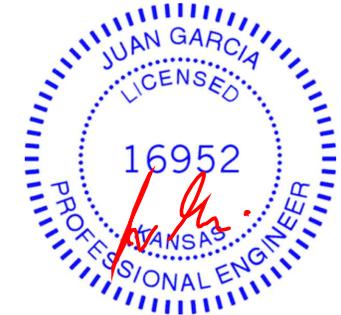
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 6 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-8-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=223/0-3-8, 3=13/Mechanical, 4=7/Mechanical  
 Max Horz 5=38(LC 4)  
 Max Uplift 5=90(LC 4), 3=-15(LC 8)  
 Max Grav 5=223(LC 1), 3=13(LC 1), 4=27(LC 3)

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

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



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J11	Truss Type Diagonal Hip	Girder	Lot 24 HT 139252211
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**RELEASE FOR CONSTRUCTION**  
**AS NOTED ON PLANS REVIEW**  
**DEVELOPMENT SERVICES**  
**LEE'S SUMMIT, MISSOURI**

Wheeler Lumber, Waverly, KS 66871

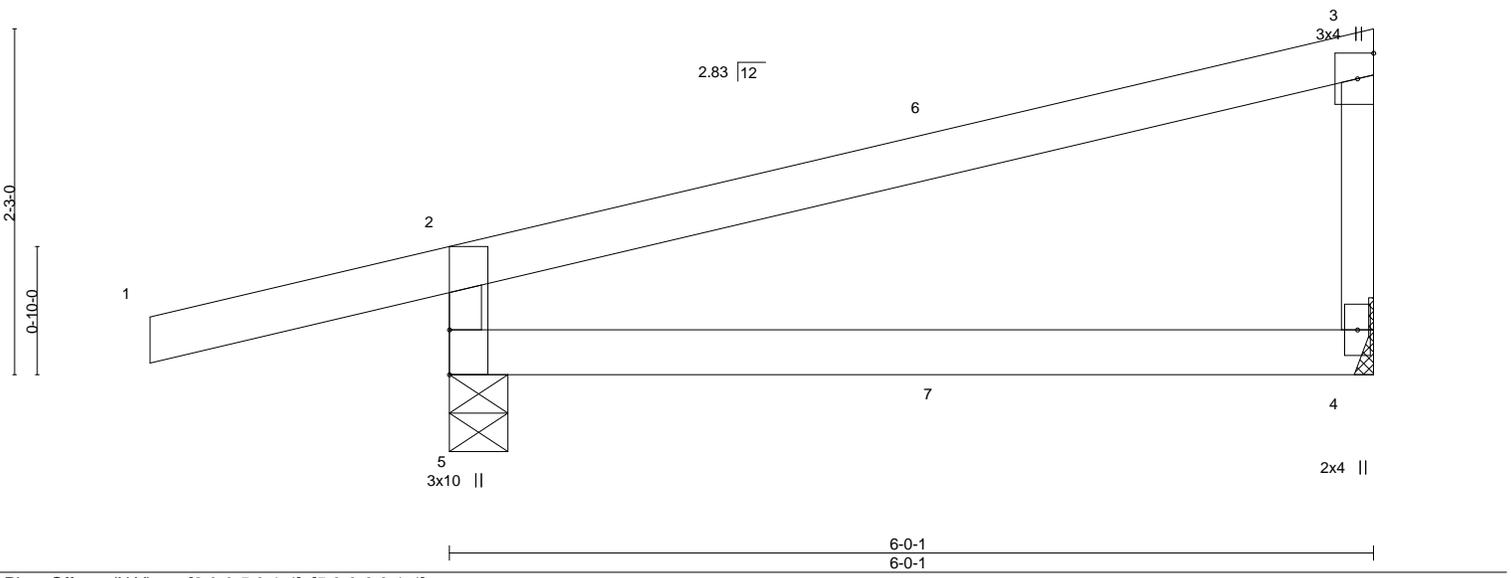
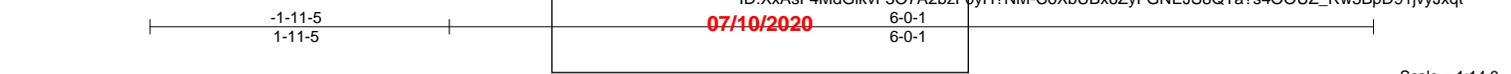


Plate Offsets (X,Y)--	[2:0-0-5,0-1-4], [5:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.43	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(LL) -0.05 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.09 4-5 >766 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-R	Horz(CT) 0.00 4 n/a n/a	Weight: 18 lb	FT = 10%
	Code IRC2018/TPI2014		Wind(LL) 0.01 4-5 >999 240		

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

**REACTIONS.** (lb/size) 5=427/0-4-9, 4=233/Mechanical  
 Max Horz 5=90(LC 5)  
 Max Uplift 5=145(LC 4), 4=47(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-378/183

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFERS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=145.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 30 lb up at 3-3-2, and 68 lb down and 30 lb up at 3-3-2 on top chord, and 4 lb down and 2 lb up at 3-3-2, and 4 lb down and 2 lb up at 3-3-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

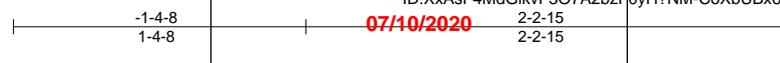
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=5(F=2, B=2)



November 12, 2019

Job 400370	Truss J12	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252212
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Wheeler Lumber, Waverly, KS 66871 8,240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:18 2019 Page 1  
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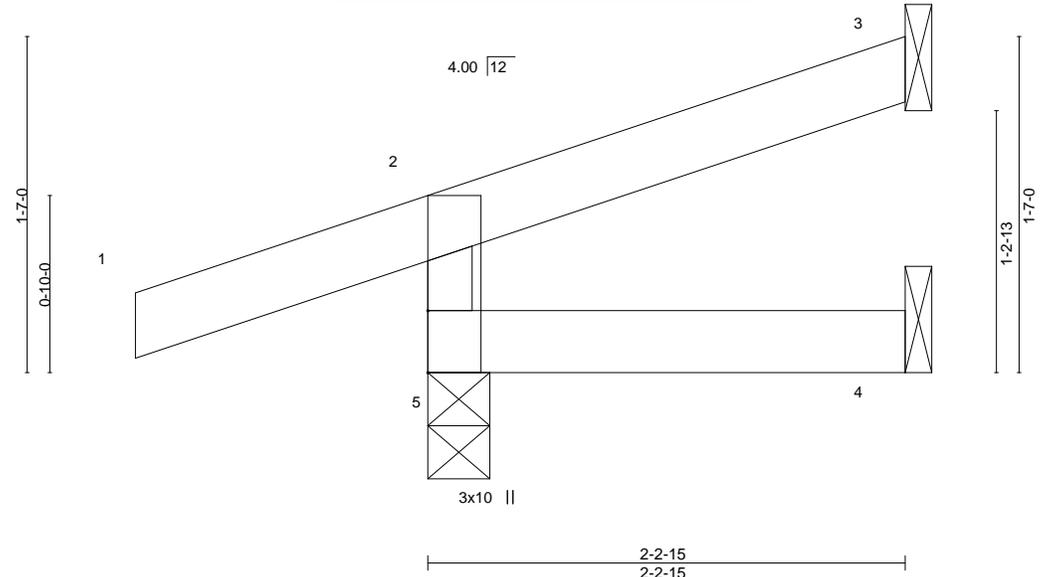


Plate Offsets (X,Y)--	[2-0-0-7,0-1-4], [5-0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 7 lb	FT = 10%

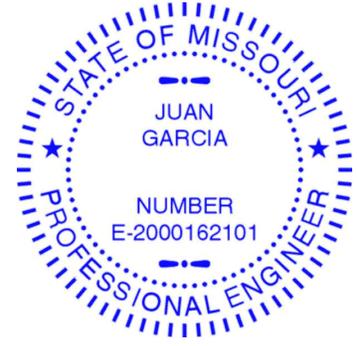
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=234/0-3-8, 3=42/Mechanical, 4=15/Mechanical  
 Max Horz 5=46(LC 4)  
 Max Uplift 5=-87(LC 4), 3=-27(LC 8)  
 Max Grav 5=234(LC 1), 3=42(LC 1), 4=38(LC 3)

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

**NOTES-**

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



November 12, 2019

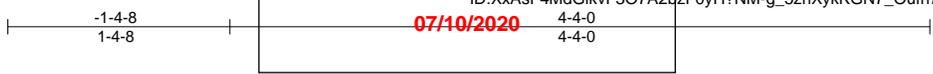
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J13	Truss Type Jack-Closed	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252213
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Wheeler Lumber, Waverly, KS 66871  
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 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:19 2019 Page 1



Scale = 1:14.2

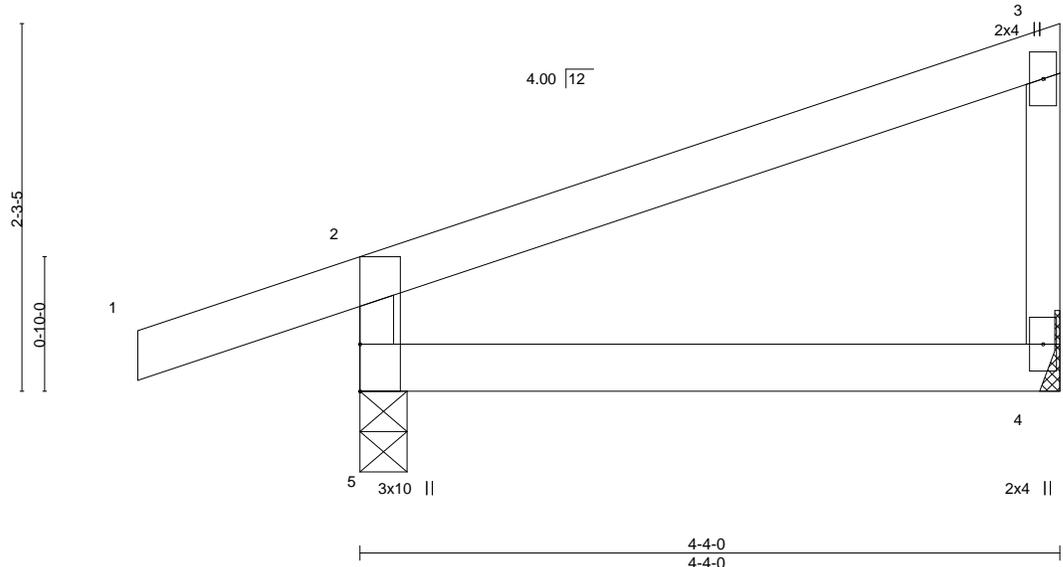


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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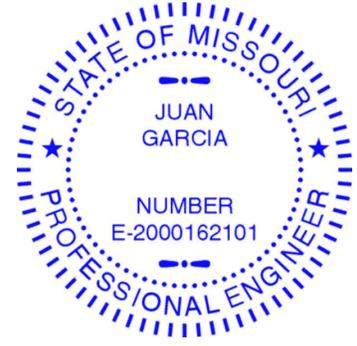
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) -0.01 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.02 4-5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 4 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.00 4-5 >999 240	Weight: 14 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=308/0-3-8, 4=167/Mechanical  
 Max Horz 5=94(LC 5)  
 Max Uplift 5=100(LC 4), 4=37(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-271/129

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



November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job 400370	Truss J14	Truss Type Diagonal Hip	Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b> <b>07/10/2020</b>	Ply 1	Lot 24 HT 139252214
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Wheeler Lumber, Waverly, KS 66871  
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 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:20 2019 Page 1

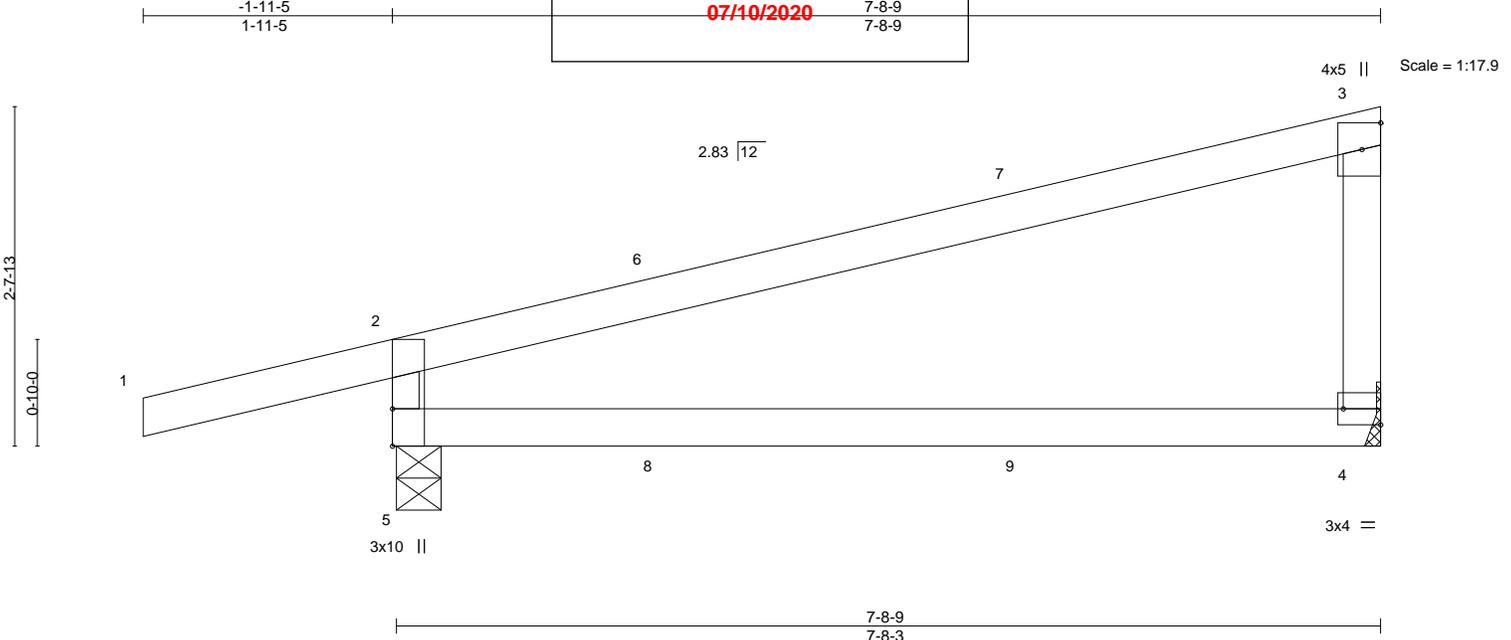


Plate Offsets (X,Y)-- [2:0-0-5,0-1-4], [4:Edge,0-1-8], [5:0-0-0,0-1-4]

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 0.77	Vert(LL)	-0.12	4-5	>774	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.24	4-5	>378		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	Weight: 23 lb	FT = 10%

**LUMBER-**  
 TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 3-4: 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.** (lb/size) 5=495/0-4-3, 4=319/Mechanical  
 Max Horz 5=106(LC 5)  
 Max Uplift 5=-158(LC 4), 4=-71(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-439/210

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=158.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 72 lb up at 2-1-12, 70 lb down and 72 lb up at 2-1-12, and 84 lb down and 57 lb up at 4-11-11, and 84 lb down and 57 lb up at 4-11-11 on top chord, and 3 lb down and 5 lb up at 2-1-12, 3 lb down and 5 lb up at 2-1-12, and 17 lb down at 4-11-11, and 17 lb down at 4-11-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)  
 Vert: 1-2=-70, 2-3=-70, 4-5=-20

Concentrated Loads (lb)  
 Vert: 8=10(F=5, B=5) 9=-8(F=-4, B=-4)



November 12, 2019

Job 400370	Truss J16	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252215
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Wheeler Lumber, Waverly, KS 66871  
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 07/10/2020 5-6-8 5-6-8  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:20 2019 Page 1

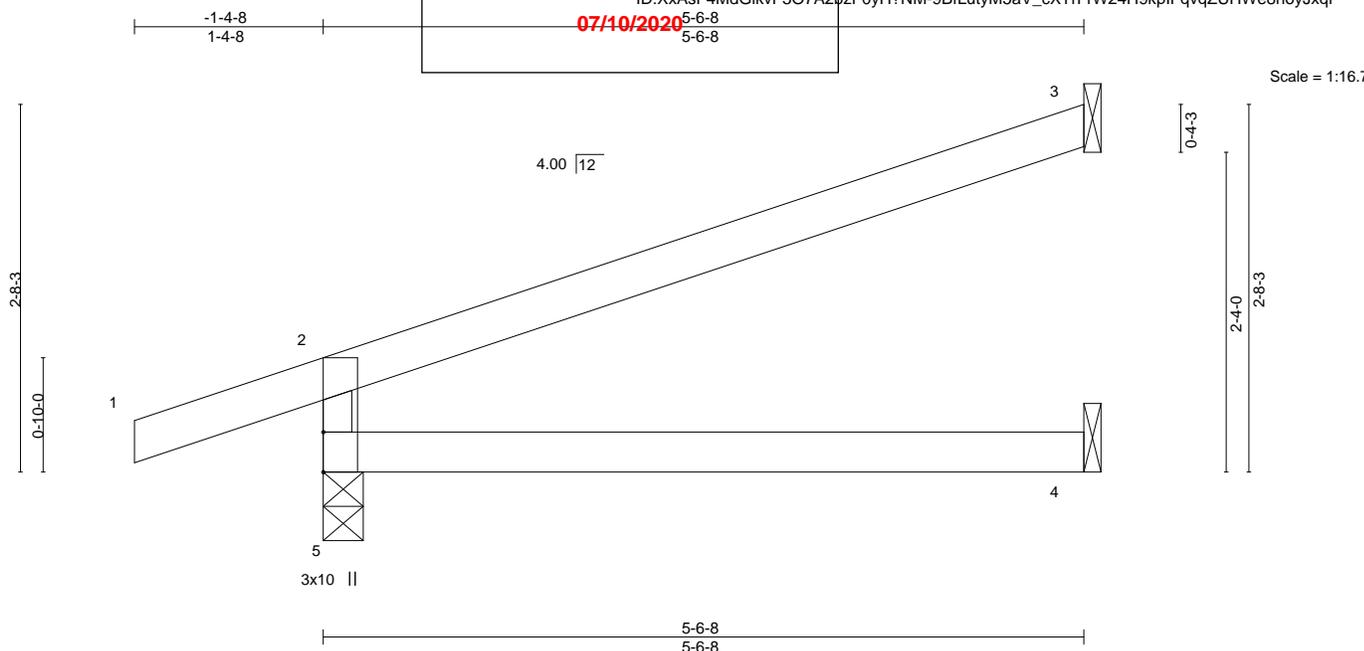


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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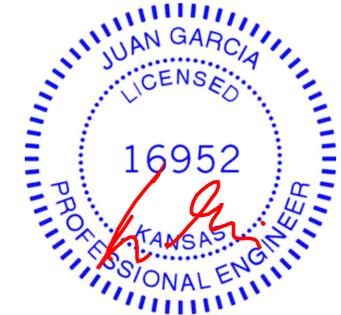
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0 1.15	TC 0.44	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(LL) -0.04 4-5 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.09 4-5 >740 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) 0.03 3 n/a n/a	Weight: 15 lb	FT = 10%
			Wind(LL) 0.02 4-5 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=360/0-3-8, 3=167/Mechanical, 4=61/Mechanical  
 Max Horz 5=65(LC 4)  
 Max Uplift 5=-47(LC 4), 3=-46(LC 8)  
 Max Grav 5=360(LC 1), 3=167(LC 1), 4=102(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-313/88

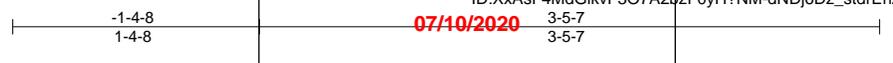
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a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



November 12, 2019

Job 400370	Truss J17	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252216
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Wheeler Lumber, Waverly, KS 66871  
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 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:21 2019 Page 1



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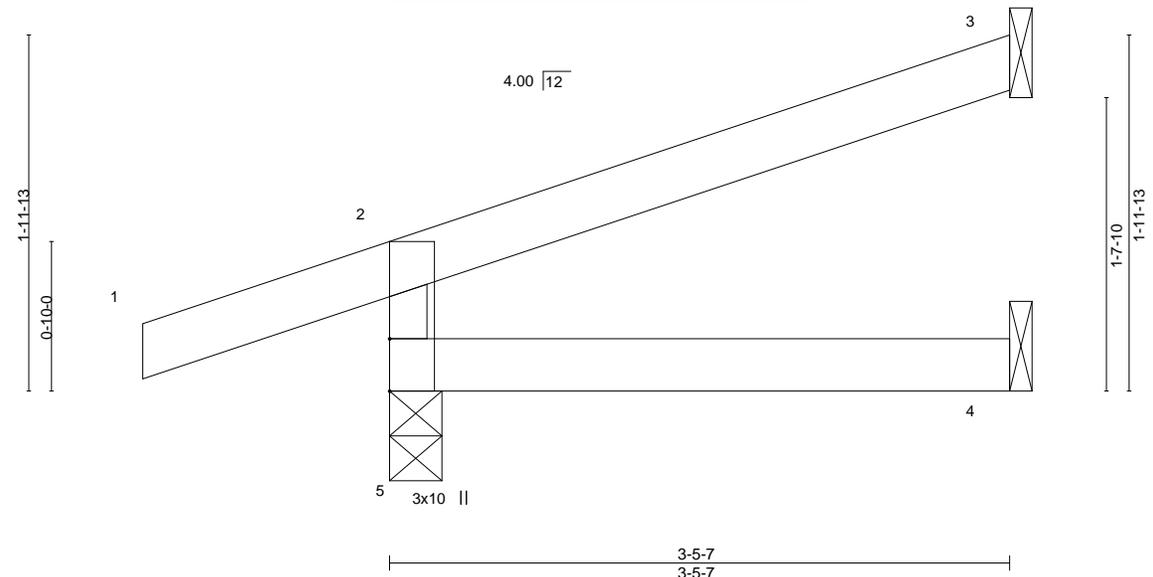


Plate Offsets (X,Y)--	[2-0-0-7,0-1-4], [5-0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.01	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	Weight: 10 lb	FT = 10%

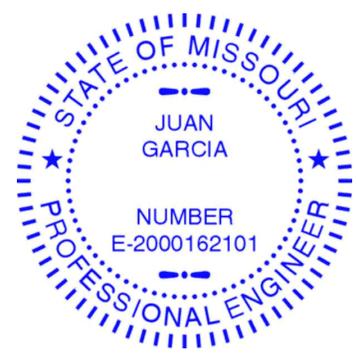
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-5-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=275/0-3-8, 3=92/Mechanical, 4=32/Mechanical  
 Max Horz 5=62(LC 4)  
 Max Uplift 5=-87(LC 4), 3=-48(LC 8)  
 Max Grav 5=275(LC 1), 3=92(LC 1), 4=61(LC 3)

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

**NOTES-**

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



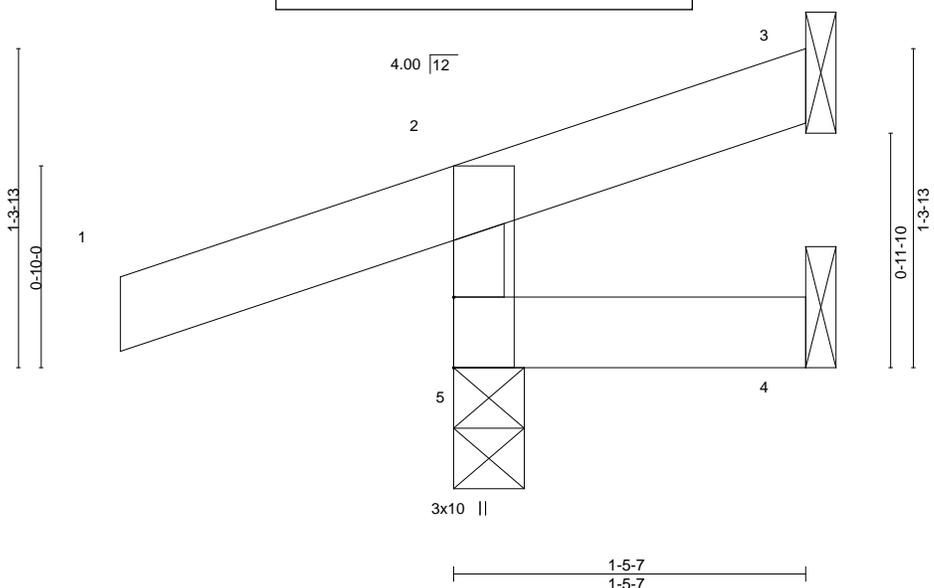
November 12, 2019

Job 400370	Truss J18	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252217
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Wheeler Lumber, Waverly, KS 66871

07/10/2020

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:22 2019 Page 1  
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Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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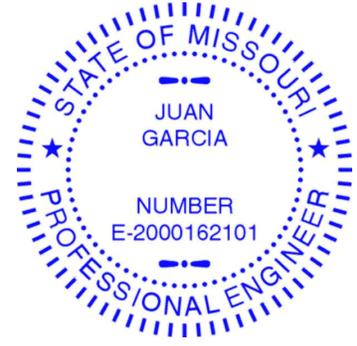
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 5 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-5-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=221/0-3-8, 3=-1/Mechanical, 4=4/Mechanical  
 Max Horz 5=36(LC 4)  
 Max Uplift 5=-93(LC 4), 3=-10(LC 8)  
 Max Grav 5=221(LC 1), 3=3(LC 19), 4=23(LC 3)

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

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



November 12, 2019

Job 400370	Truss J21	Truss Type Diagonal Hip	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252218
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Wheeler Lumber, Waverly, KS 66871 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:23 2019 Page 1  
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1-11-5  
07/10/2020  
2-6-5  
2-6-5

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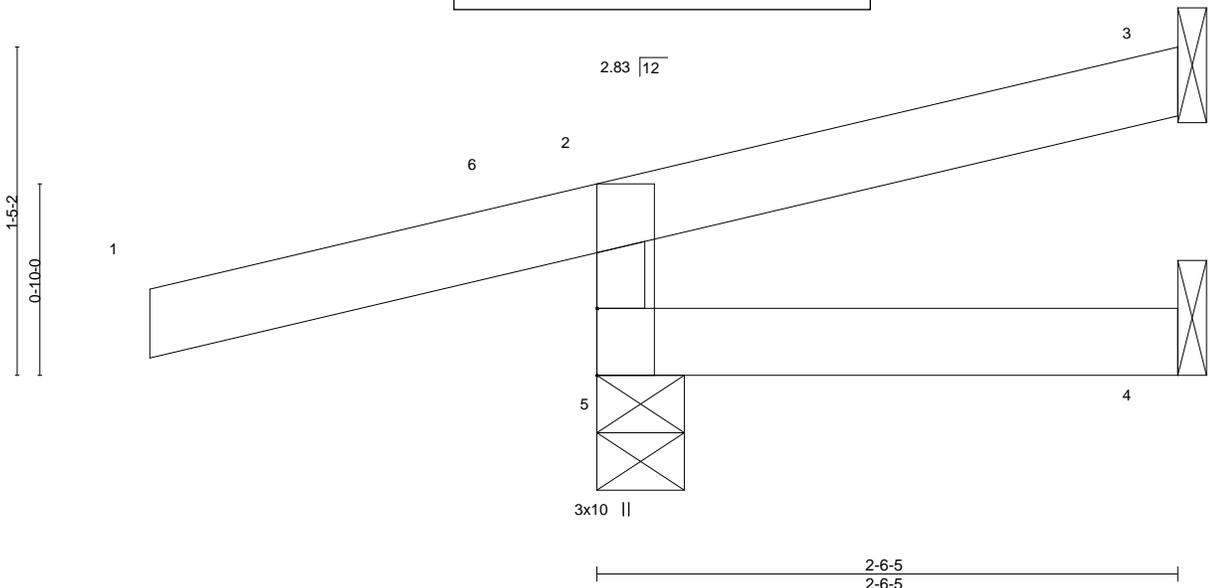


Plate Offsets (X,Y)--	[2:0-0-5,0-1-4], [5:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	4-5	>999	Weight: 8 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-5 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=148/0-4-9, 3=5/Mechanical, 4=1/Mechanical  
 Max Horz 5=46(LC 7)  
 Max Uplift 5=-128(LC 6), 3=-30(LC 12), 4=-1(LC 19)  
 Max Grav 5=148(LC 1), 3=6(LC 4), 4=31(LC 3)

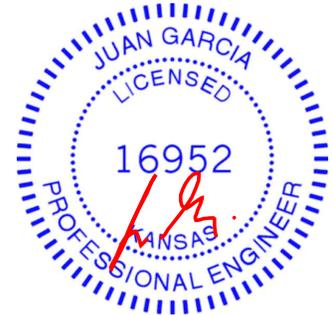
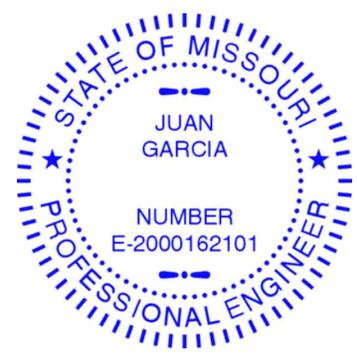
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=128.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 28 lb down and 10 lb up at -1-11-5, and 28 lb down and 10 lb up at -1-11-5 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Concentrated Loads (lb)  
 Vert: 1=-44(F=-22, B=-22)  
 Trapezoidal Loads (plf)  
 Vert: 1=0(F=35, B=35)-to-6=-29(F=21, B=21), 6=0(F=35, B=35)-to-2=-7(F=31, B=31), 2=-7(F=31, B=31)-to-3=-50(F=10, B=10), 5=-2(F=9, B=9)-to-4=-14(F=3, B=3)

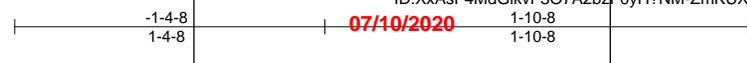


November 12, 2019

Job 400370	Truss J22	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252219
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:23 2019 Page 1  
ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-ZmKUXu?FOVtZT?CQwz3liwnJgVKR6BJxzUtoO7yJxqo



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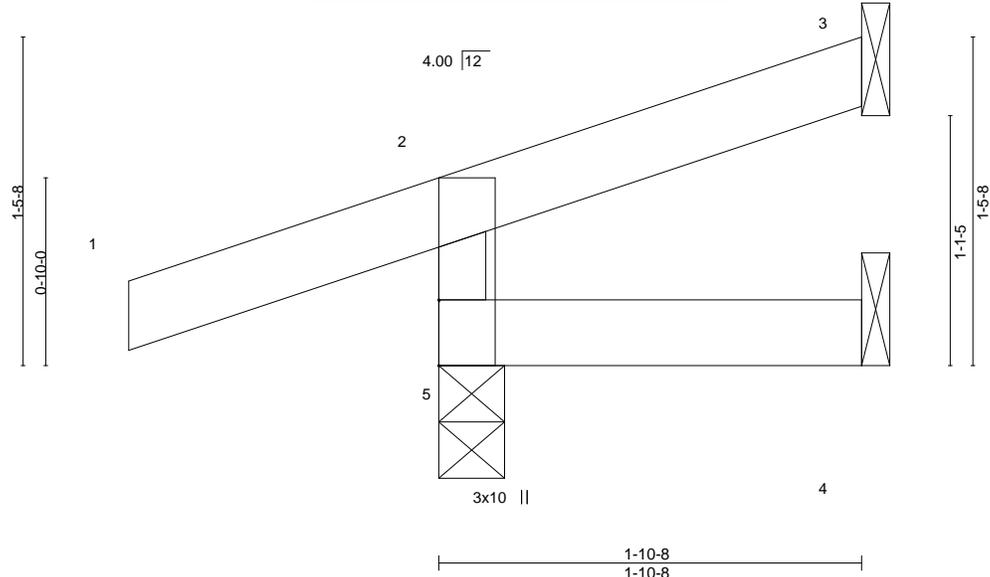


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

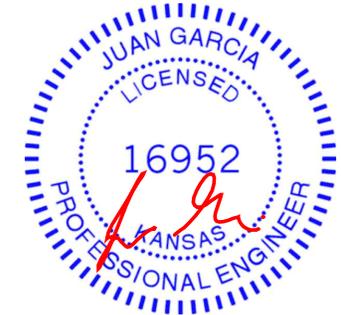
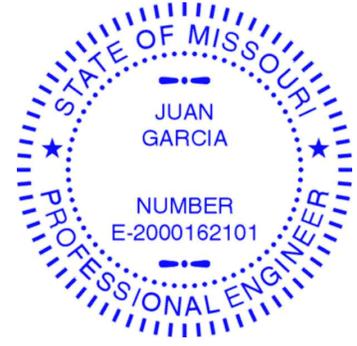
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=226/0-3-8, 3=25/Mechanical, 4=10/Mechanical  
 Max Horz 5=41(LC 4)  
 Max Uplift 5=-89(LC 4), 3=-20(LC 8)  
 Max Grav 5=226(LC 1), 3=25(LC 1), 4=31(LC 3)

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

**NOTES-**

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



November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 400370	Truss J23	Truss Type Diagonal Hip	Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b> ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-1yuskE?t9o?Q59mcUga_F7KMyvWcreZ4C8cMwZyJxqn <b>07/10/2020</b>	Ply 1	Lot 24 HT 139252220
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Wheeler Lumber, Waverly, KS 66871  
 Job Reference (optional)  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:24 2019 Page 1  
 8-8-9 8-8-9

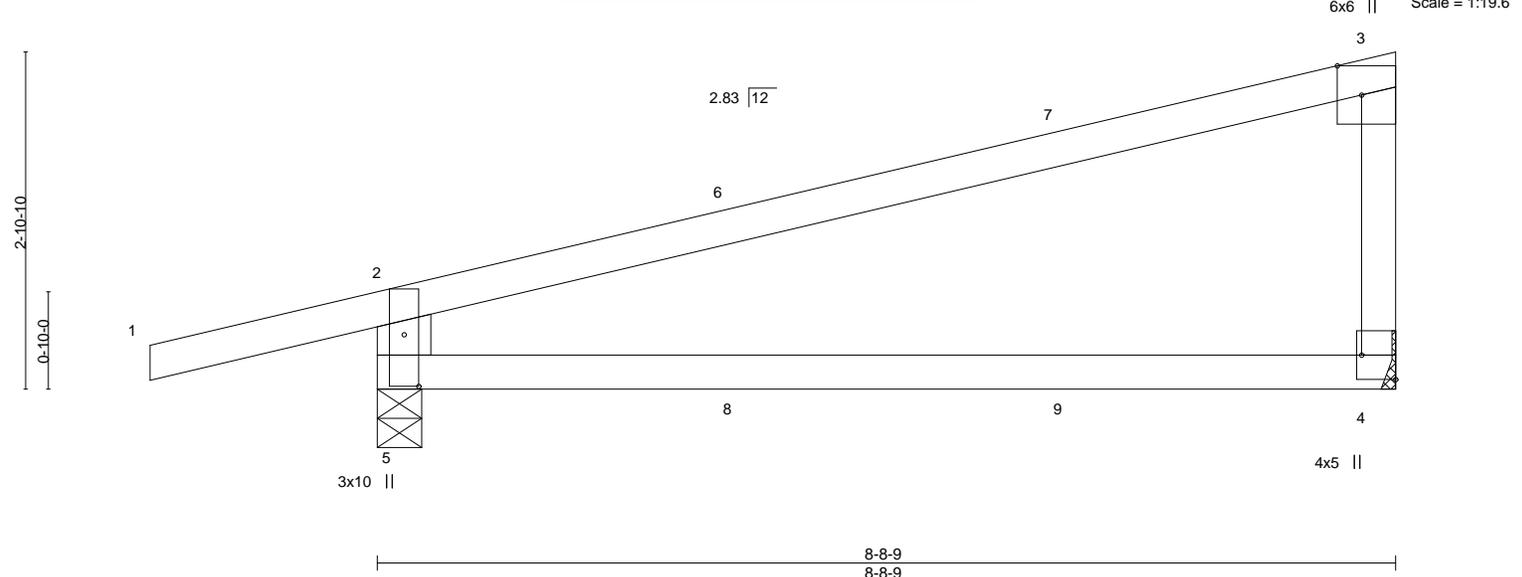


Plate Offsets (X,Y)-- [3:0-3-0,Edge], [4:Edge,0-3-8], [5:0-5-5,0-1-8]

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 0.69	Vert(LL)	-0.18	4-5	>543	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.39	4-5	>260		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.05	4-5	>999	Weight: 26 lb	FT = 10%

**LUMBER-**  
 TOP CHORD 2x4 SPF 2100F 1.8E  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x6 SPF No.2 \*Except\*  
 3-4: 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.** (lb/size) 5=564/0-4-9, 4=399/Mechanical  
 Max Horz 5=117(LC 24)  
 Max Uplift 5=-174(LC 4), 4=-88(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-496/237, 3-4=-279/136

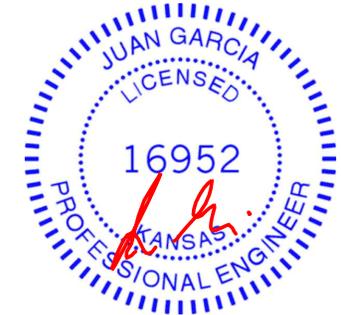
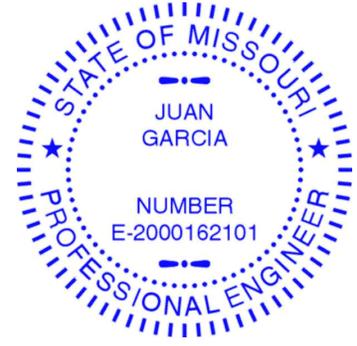
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=174.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 28 lb up at 3-1-12, 68 lb down and 28 lb up at 3-1-12, and 95 lb down and 66 lb up at 5-11-11, and 95 lb down and 66 lb up at 5-11-11 on top chord, and 3 lb down and 3 lb up at 3-1-12, 3 lb down and 3 lb up at 3-1-12, and 24 lb down at 5-11-11, and 24 lb down at 5-11-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)  
 Vert: 1-2=-70, 2-3=-70, 4-5=-20

Concentrated Loads (lb)  
 Vert: 7=-39(F=-20, B=-20) 8=5(F=3, B=3) 9=-27(F=-14, B=-14)



November 12, 2019

Job 400370	Truss J24	Truss Type Diagonal Hip	Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b> ID: XxAsF4MdGikvF3O7A2bzFdyH?NM-V8SEya0Vw67HiJLo2O5DnLtWajuPa5oDQoMvT?yJxqm <b>07/10/2020</b>	Ply 1	Lot 24 HT 139252221
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Wheeler Lumber, Waverly, KS 66871 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:25 2019 Page 1  
 Job Reference (optional)

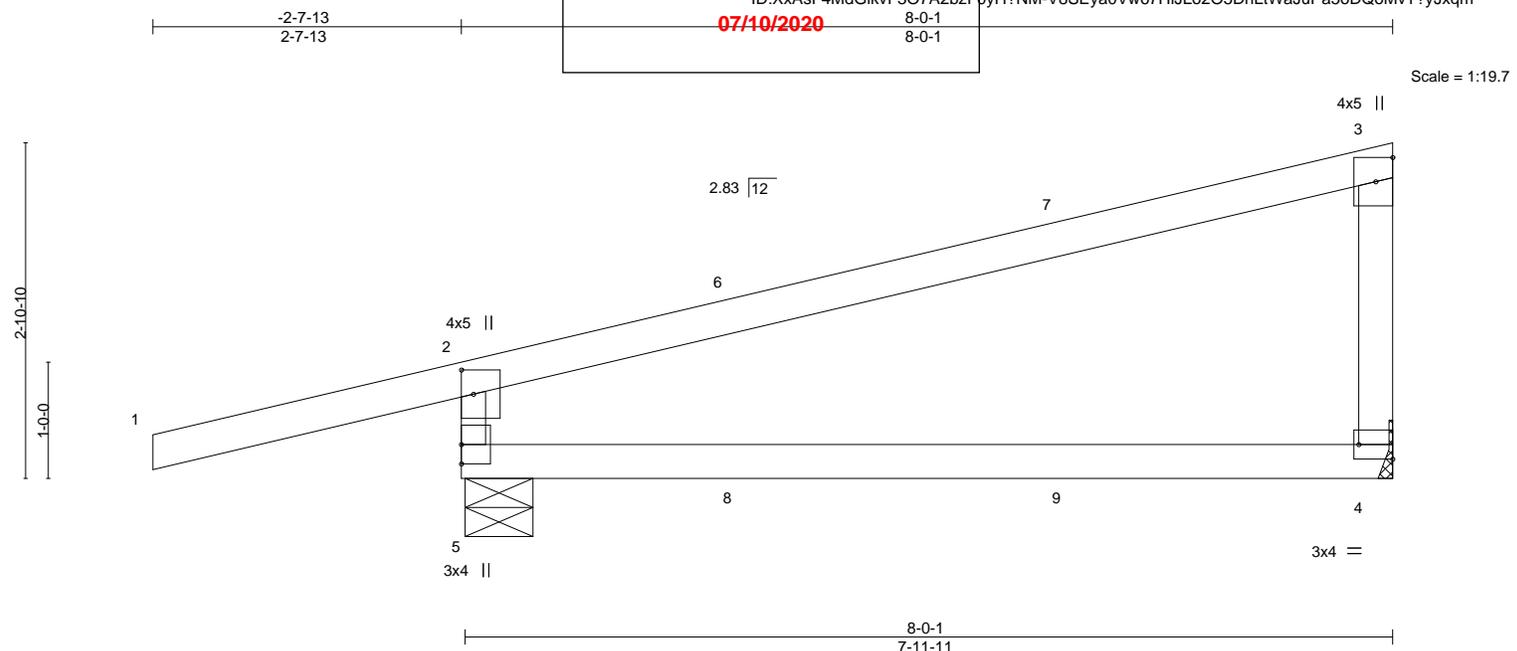


Plate Offsets (X,Y)--	[2:0-2-8,0-1-4], [4:Edge,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.15	4-5	>641	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.29	4-5	>322	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.03	4-5	>999	240	Weight: 25 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 3-4: 2x4 SPF No.2	

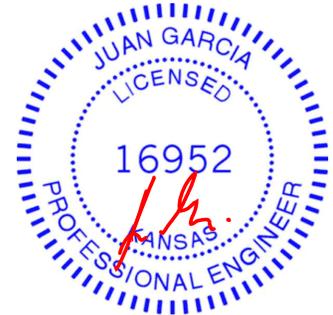
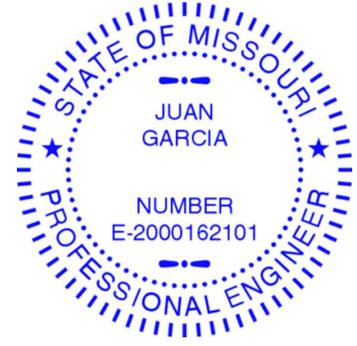
**REACTIONS.** (lb/size) 5=559/0-7-0, 4=326/Mechanical  
 Max Horz 5=119(LC 7)  
 Max Uplift 5=-181(LC 4), 4=-65(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-492/233

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=181.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 119 lb up at 2-5-4, 68 lb down and 28 lb up at 2-5-4, and 84 lb down and 56 lb up at 5-3-3, and 95 lb down and 66 lb up at 5-3-3 on top chord, and 4 lb down and 7 lb up at 2-5-4, 3 lb down and 3 lb up at 2-5-4, and 18 lb down at 5-3-3, and 24 lb down at 5-3-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 6=32(F) 7=-20(B) 8=10(F=7, B=3) 9=-16(F=-2, B=-14)



November 12, 2019

Job 400370	Truss J25	Truss Type Jack-Closed	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252222
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Wheeler Lumber, Waverly, KS 66871  
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 07/10/2020 6-3-0 6-3-0

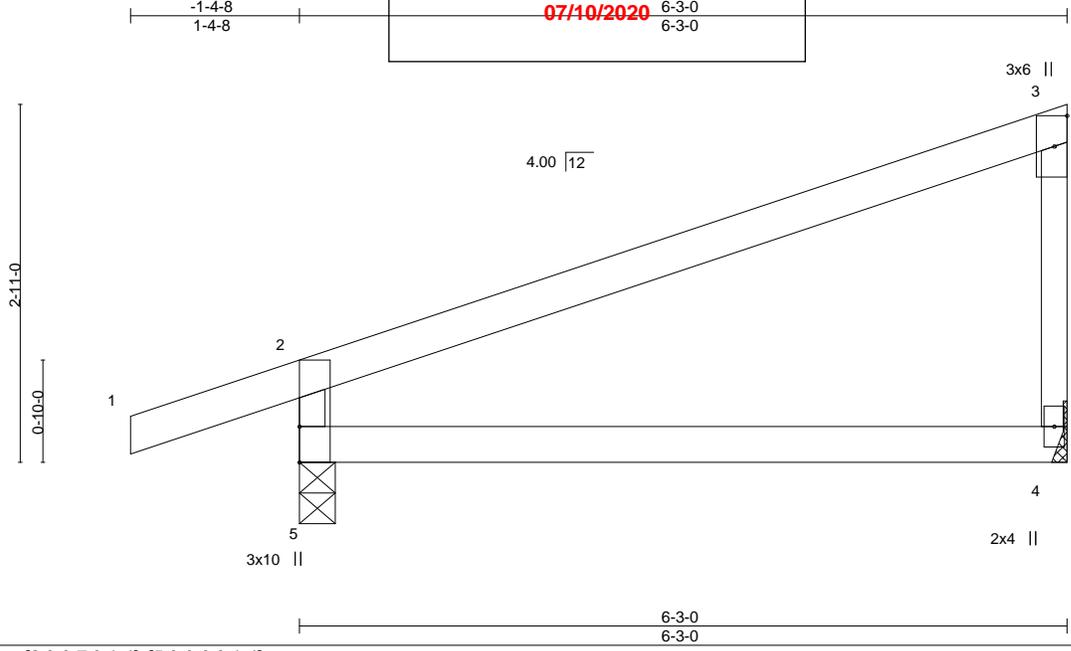


Plate Offsets (X,Y)--	[2-0-0-7,0-1-4], [5-0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.06	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.11	4-5	>636		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	Weight: 19 lb	FT = 10%

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

**REACTIONS.** (lb/size) 5=388/0-3-8, 4=259/Mechanical  
 Max Horz 5=92(LC 7)  
 Max Uplift 5=-57(LC 4), 4=-18(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-340/98

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

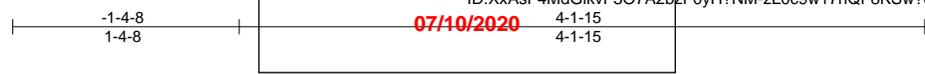


November 12, 2019

Job 400370	Truss J26	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252223
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:26 2019 Page 1  
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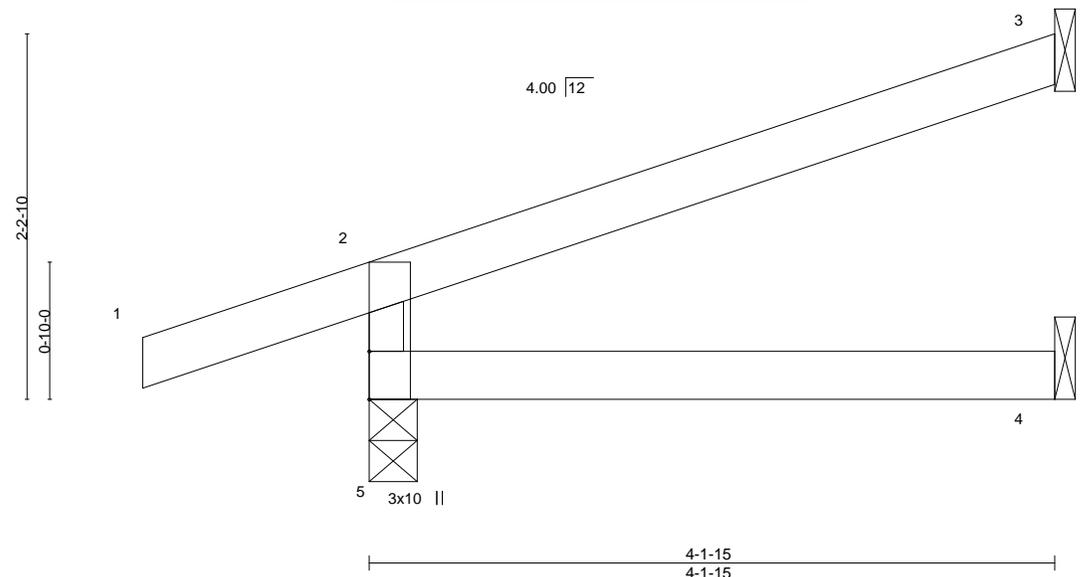


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(LL) -0.01 4-5 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.03 4-5 >999 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) 0.01 3 n/a n/a		
			Wind(LL) 0.01 4-5 >999 240	Weight: 12 lb	FT = 10%

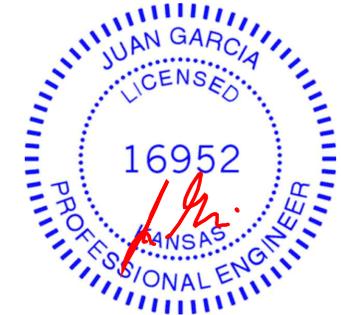
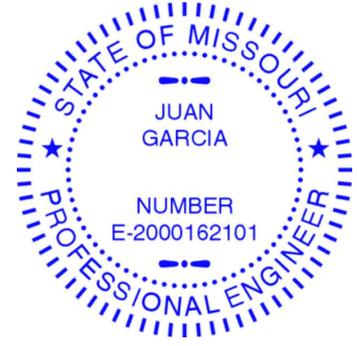
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=302/0-3-8, 3=119/Mechanical, 4=42/Mechanical  
 Max Horz 5=72(LC 4)  
 Max Uplift 5=-90(LC 4), 3=-59(LC 8)  
 Max Grav 5=302(LC 1), 3=119(LC 1), 4=75(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-265/122

**NOTES-**

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

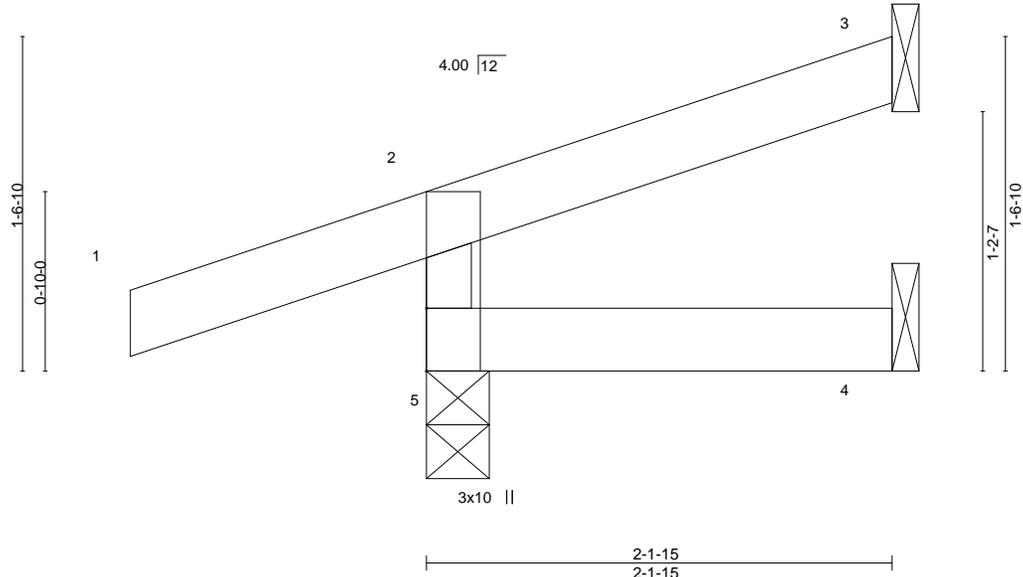


November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>16023 Swingley Ridge Rd Chestertown, MO 63017</p>
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Job 400370	Truss J27	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252224
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-zL0c9w17hQF8KSw?c5dSKYPqijM2JY2NfS5S?RyJxql  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:26 2019 Page 1



Scale = 1:10.6

Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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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 0.14	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 7 lb	FT = 10%

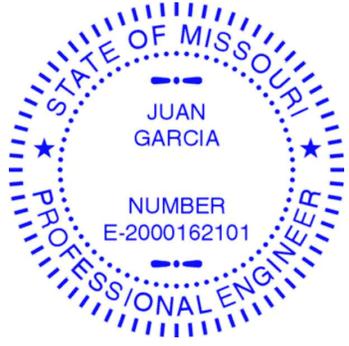
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-1-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=232/0-3-8, 3=38/Mechanical, 4=14/Mechanical  
 Max Horz 5=44(LC 4)  
 Max Uplift 5=-87(LC 4), 3=-25(LC 8)  
 Max Grav 5=232(LC 1), 3=38(LC 1), 4=36(LC 3)

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

**NOTES-**

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



November 12, 2019

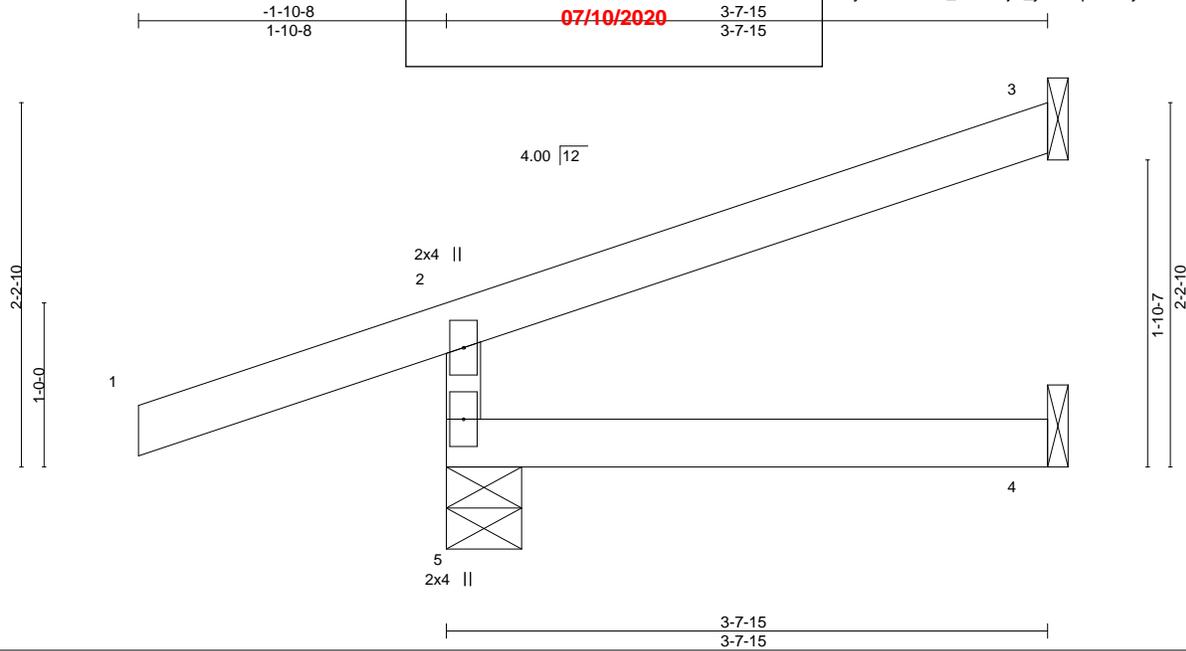
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J28	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252225
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-RXa\_MG2ISJO\_ycVB9p8hsmyzk6h82?IWu6r0XuyJxqk  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:27 2019 Page 1  
 Job Reference (optional)



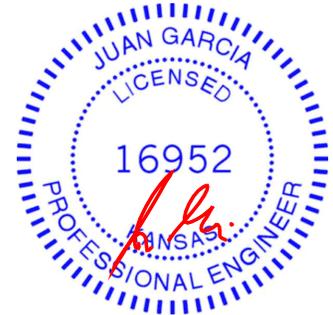
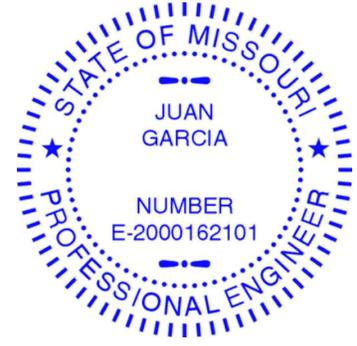
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.01	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	Weight: 11 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=335/0-5-8, 3=88/Mechanical, 4=30/Mechanical  
 Max Horz 5=71(LC 4)  
 Max Uplift 5=-116(LC 4), 3=-49(LC 8)  
 Max Grav 5=335(LC 1), 3=88(LC 1), 4=65(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-295/143

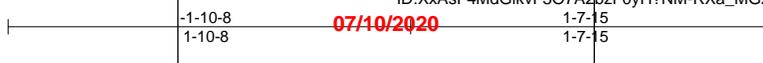
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=116.
  - 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.



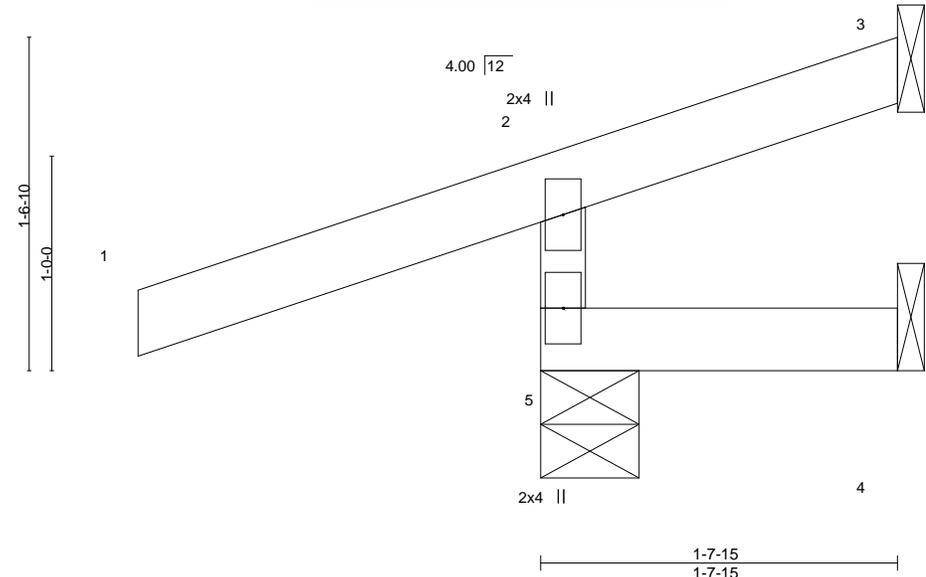
November 12, 2019

Job 400370	Truss J29	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252226
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:27 2019 Page 1  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-RXa\_MG2ISJO\_ycVB9p8hsmyzk6i72?IWu6r0XuyJxqk



Scale = 1:10.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

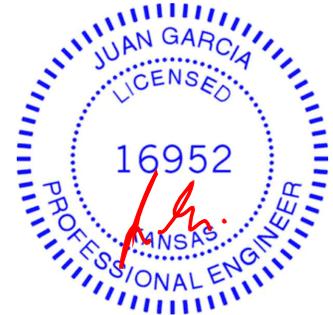
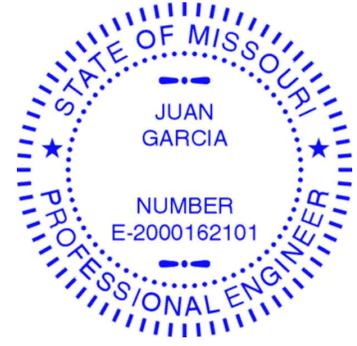
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-7-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=297/0-5-8, 3=-20/Mechanical, 4=1/Mechanical  
 Max Horz 5=45(LC 5)  
 Max Uplift 5=-130(LC 4), 3=-20(LC 1)  
 Max Grav 5=297(LC 1), 3=14(LC 4), 4=26(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-267/142

**NOTES-**

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



November 12, 2019

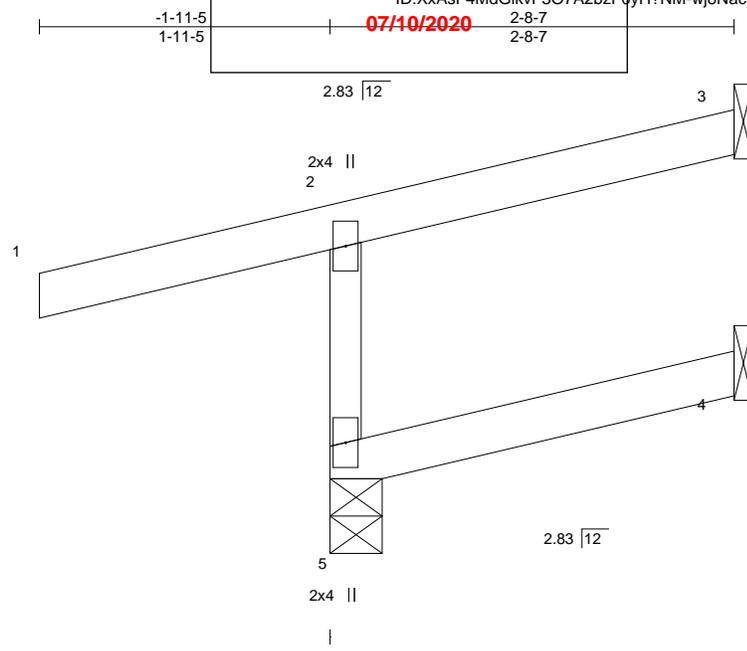
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J30	Truss Type Diagonal Hip	Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252227
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzFDyH?NM-wj8Nac3NC1WrZm4NjWfwPzV8MW1snSYg7maZ3KyJxqj  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:28 2019 Page 1  
 Job Reference (optional)



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 0.28	Vert(LL)	0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.03	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 10 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=165/0-4-3, 3=0/Mechanical, 4=6/Mechanical  
 Max Horz 5=56(LC 7)  
 Max Uplift 5=-106(LC 6), 3=-46(LC 12), 4=-5(LC 7)  
 Max Grav 5=165(LC 1), 3=7(LC 4), 4=34(LC 3)

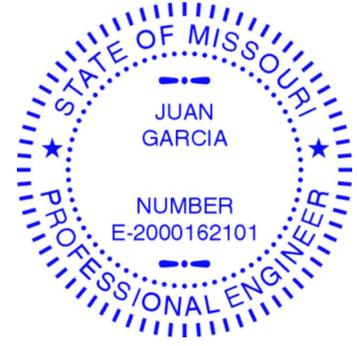
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=106.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 31 lb down and 11 lb up at -1-11-5, and 31 lb down and 11 lb up at -1-11-5 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Concentrated Loads (lb)  
 Vert: 1=-49(F=-24, B=-24)  
 Trapezoidal Loads (plf)  
 Vert: 1=-0(F=35, B=35)-to-2=-36(F=17, B=17), 2=-4(F=33, B=33)-to-3=-49(F=10, B=10), 5=-0(F=10, B=10)-to-4=-14(F=3, B=3)



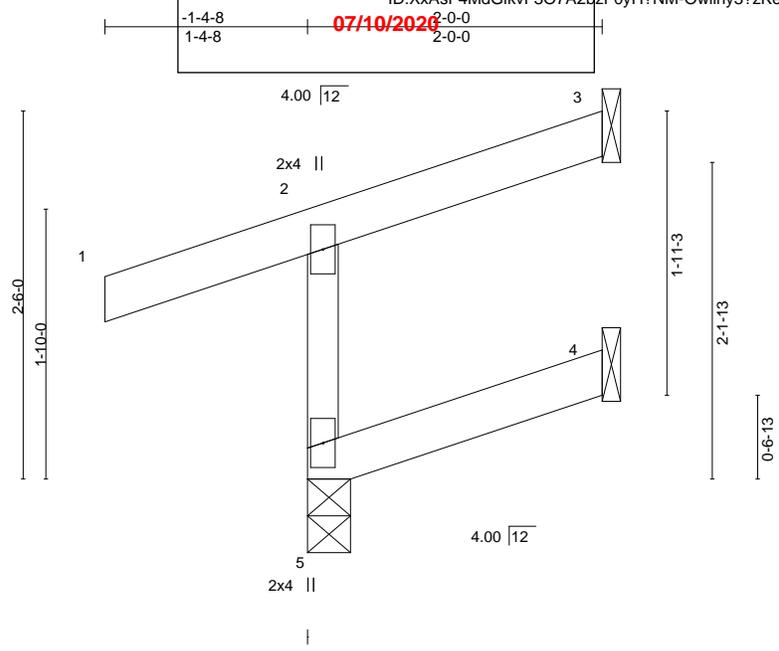
November 12, 2019

Job 400370	Truss J31	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252228
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:29 2019 Page 1

ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-Owilny3?zKeiBwfaHEA9yB1L9wOJWvopLQK6cmYJxqi



Scale = 1:15.6

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 0.14	Vert(LL)	0.00	5 >999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	4-5 >999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 8 lb	FT = 10%

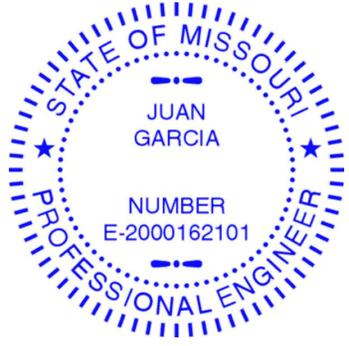
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=229/0-3-8, 3=29/Mechanical, 4=15/Mechanical  
 Max Horz 5=63(LC 5)  
 Max Uplift 5=69(LC 4), 3=-31(LC 8), 4=-10(LC 5)  
 Max Grav 5=229(LC 1), 3=29(LC 1), 4=36(LC 3)

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

**NOTES-**

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



November 12, 2019

Job 400370	Truss J32	Truss Type Diagonal Hip	Girder	Lot 24 HT 139252229
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**RELEASE FOR CONSTRUCTION**  
**AS NOTED ON PLANS REVIEW**  
**DEVELOPMENT SERVICES**  
**LEE'S SUMMIT, MISSOURI**

Wheeler Lumber, Waverly, KS 66871

ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-s6G7?I4ekemZp4EmrxhOUOaS6KfHFM2za43g8DyJxqh

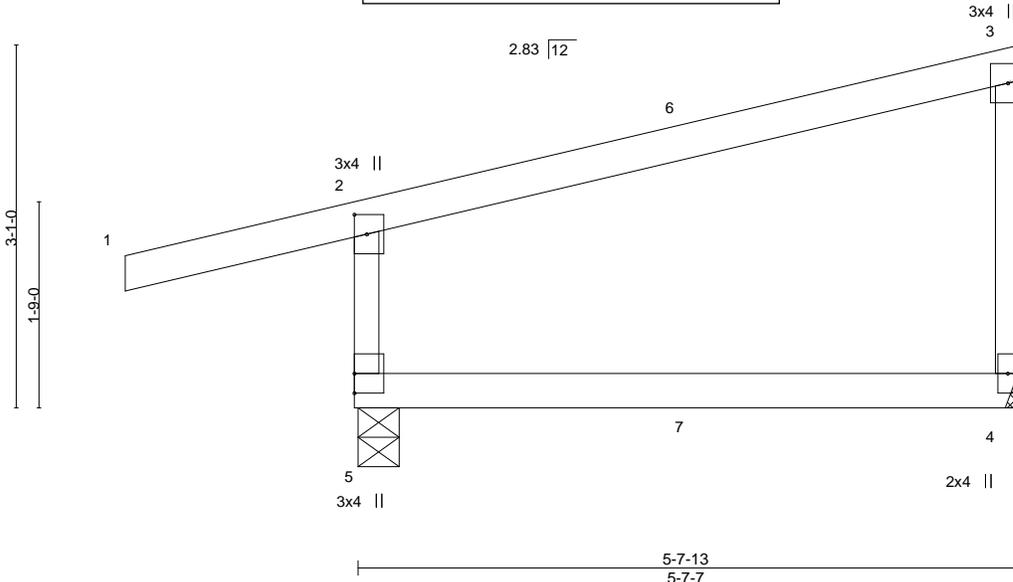
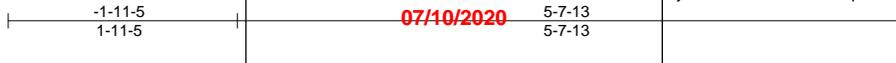


Plate Offsets (X,Y)--	[2-0-2-0-0-1-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.39	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(LL) -0.04 4-5 >999 360		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Vert(CT) -0.07 4-5 >874 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) -0.00 4 n/a n/a		
			Wind(LL) 0.03 4-5 >999 240	Weight: 18 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-13 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=414/0-4-3, 4=217/Mechanical  
 Max Horz 5=121(LC 5)  
 Max Uplift 5=-158(LC 4), 4=-62(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-363/178

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (it=lb) 5=158.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 39 lb up at 2-10-15, and 71 lb down and 29 lb up at 2-10-15 on top chord, and 12 lb down and 16 lb up at 2-10-15, and 11 lb down and 18 lb up at 2-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-70, 2-3=-70, 4-5=-20  
 Concentrated Loads (lb)  
 Vert: 7=2(F=1, B=2)



November 12, 2019

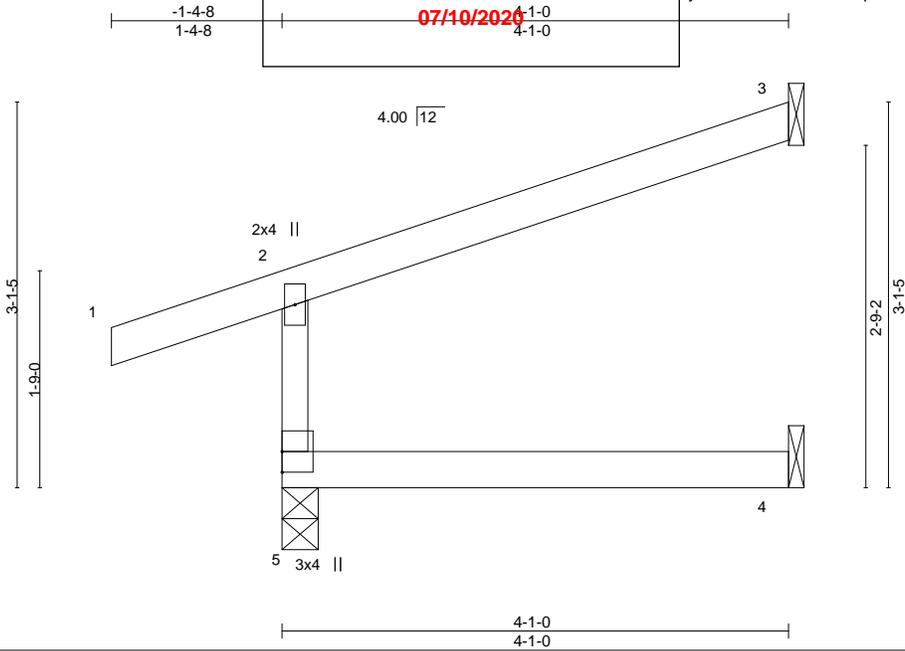
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400370	Truss J33	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252230
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF3DyH?NM-s6G7?I4ekemZp4EmrxhOUOaV\_KhDFM2za43g8DyJxqh  
 07/10/2016



Scale = 1:18.5

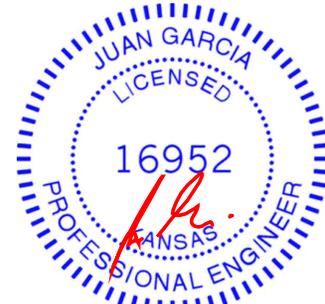
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.01	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.04	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	Weight: 12 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=299/0-3-8, 3=116/Mechanical, 4=40/Mechanical  
 Max Horz 5=79(LC 5)  
 Max Uplift 5=-75(LC 4), 3=-67(LC 8)  
 Max Grav 5=299(LC 1), 3=116(LC 1), 4=75(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-261/112

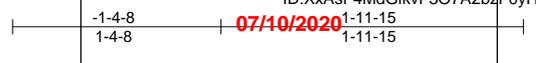
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been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



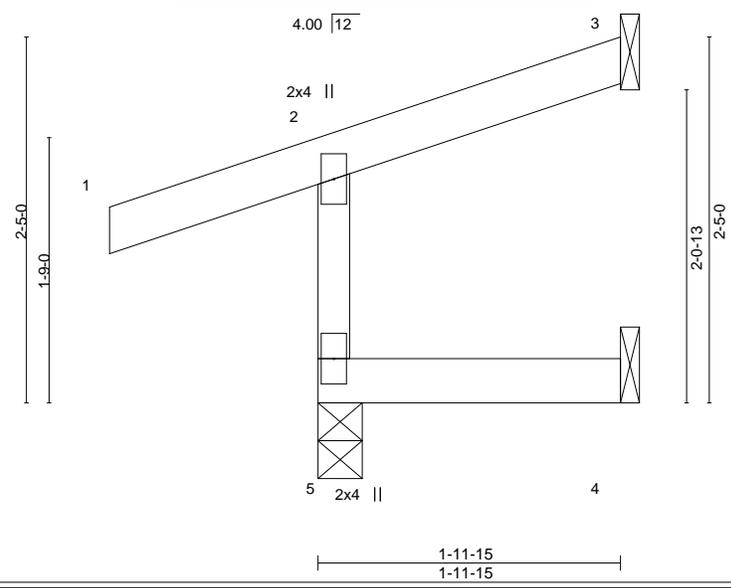
November 12, 2019

Job 400370	Truss J34	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252231
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-KlpVCd5GVyuQREpyOeCd1c6hek3v\_pH6kpDgfyJxqg  
 8,240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:31 2019 Page 1



Scale = 1:15.1



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL) 0.00 5 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT) -0.00 4-5 >999 240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT) -0.01 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R		Weight: 7 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-11-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=229/0-3-8, 3=29/Mechanical, 4=15/Mechanical  
 Max Horz 5=60(LC 5)  
 Max Uplift 5=-71(LC 4), 3=-30(LC 8), 4=-8(LC 5)  
 Max Grav 5=229(LC 1), 3=29(LC 1), 4=36(LC 3)

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

**NOTES-**

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

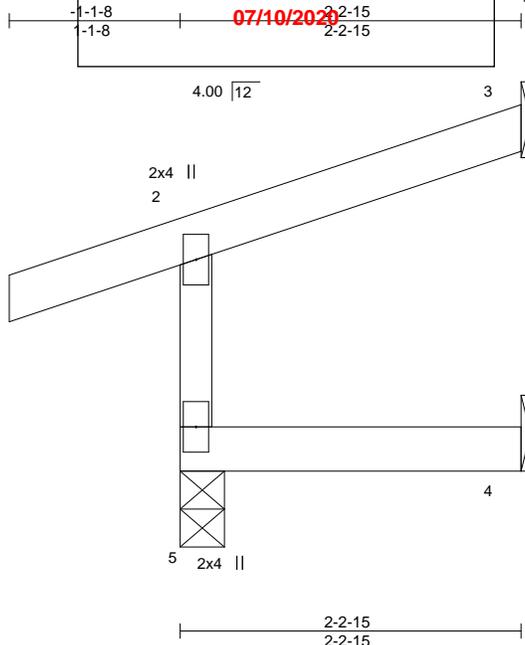


November 12, 2019

Job 400370	Truss J35	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252232
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Wheeler Lumber, Waverly, KS 66871

ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-KlpVCd5GvyuQREpyOeCd1c6ilk3w\_pH6pkpDgfyJxqq  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:31 2019 Page 1



Scale = 1:15.1

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 0.10	Vert(LL)	-0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	Weight: 8 lb	FT = 10%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-2-15 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 5=205/0-3-8, 3=49/Mechanical, 4=19/Mechanical  
 Max Horz 5=59(LC 5)  
 Max Uplift 5=-56(LC 4), 3=-36(LC 8), 4=-4(LC 5)  
 Max Grav 5=205(LC 1), 3=49(LC 1), 4=40(LC 3)

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

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



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400370	Truss J36	Truss Type Diagonal Hip	Girder	Lot 24 HT 139252233
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**RELEASE FOR CONSTRUCTION**  
**AS NOTED ON PLANS REVIEW**  
**DEVELOPMENT SERVICES**  
**LEE'S SUMMIT, MISSOURI**

Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:32 2019 Page 1  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-oUNtQz6uGF0H2NO9yMjsZpfp7OMjFXF1OYnC5yJxqf  
 07/10/2020

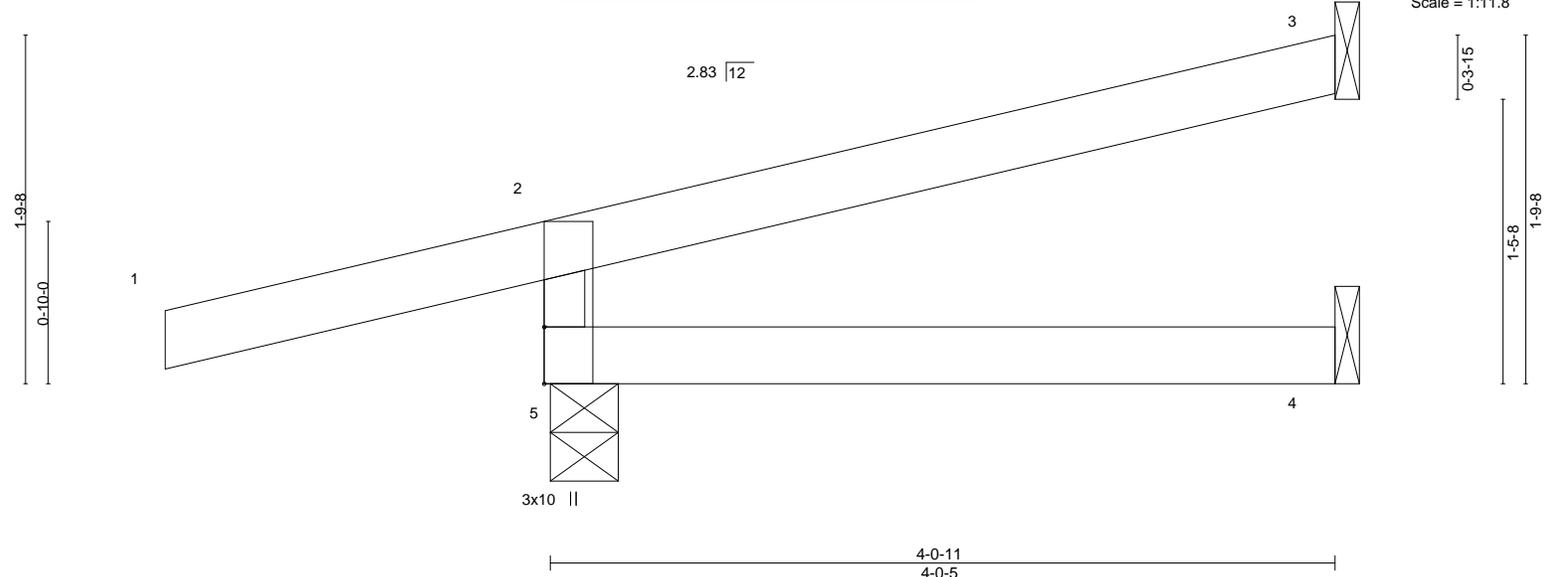


Plate Offsets (X,Y)-- [2:0-0-5,0-1-4], [5:0-0-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.38	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) -0.01 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 4-5 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-R	Horz(CT) -0.01 3 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.01 4-5 >999 240	Weight: 12 lb	FT = 10%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-0-11 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

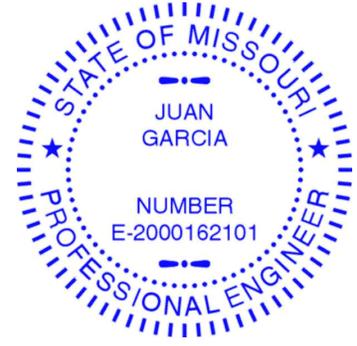
**REACTIONS.** (lb/size) 5=216/0-4-3, 3=59/Mechanical, 4=16/Mechanical  
 Max Horz 5=54(LC 12)  
 Max Uplift 5=-101(LC 4), 3=-51(LC 2)  
 Max Grav 5=216(LC 1), 3=59(LC 1), 4=58(LC 3)

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

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFERS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=101.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 47 lb down and 16 lb up at -1-11-5, and 47 lb down and 16 lb up at -1-11-5 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Concentrated Loads (lb)  
 Vert: 1=-73(F=-36, B=-36)  
 Trapezoidal Loads (plf)  
 Vert: 1=0(F=35, B=35)-to-2=-36(F=17, B=17), 2=-2(F=34, B=34)-to-3=-71(F=-1, B=-1), 5=0(F=10, B=10)-to-4=-20(F=-0, B=-0)



November 12, 2019

Job 400370	Truss J37	Truss Type Diagonal Hip	Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252234
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Wheeler Lumber, Waverly, KS 66871  
 11-11-5  
 1-11-5  
 07/10/2020  
 4-0-11  
 4-0-11  
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 8,240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:32 2019 Page 1

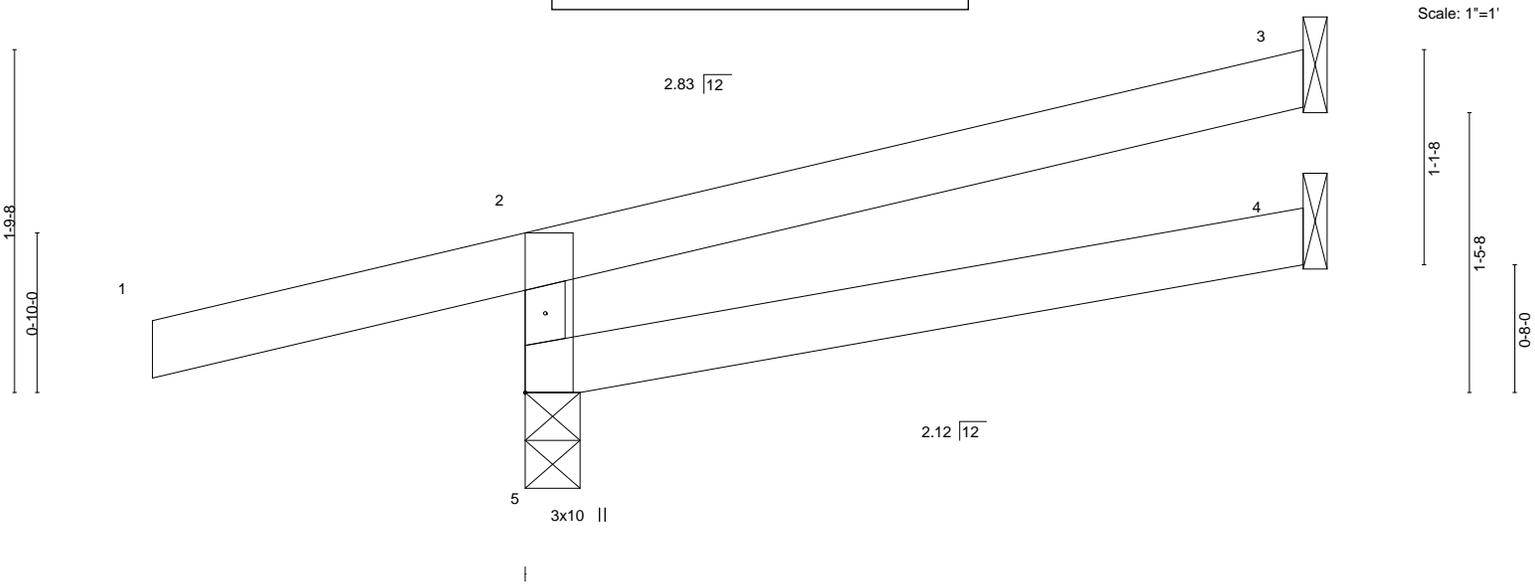


Plate Offsets (X,Y)-- [2:0-0-5,0-1-4], [5:0-5-0,Edge], [5:0-0-4,0-1-4]

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 0.38	Vert(LL)	-0.01	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.02	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	Weight: 12 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-11 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=216/0-3-7, 3=59/Mechanical, 4=16/Mechanical  
 Max Horz 5=53(LC 7)  
 Max Uplift 5=101(LC 4), 3=52(LC 12)  
 Max Grav 5=216(LC 1), 3=59(LC 1), 4=58(LC 3)

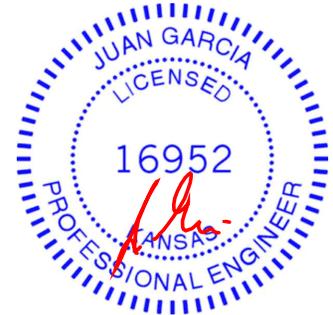
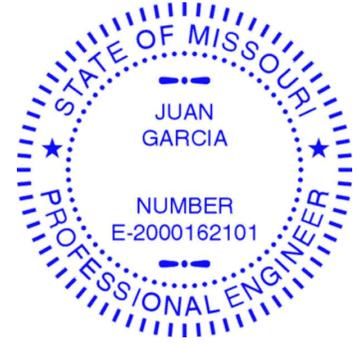
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=101.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 47 lb down and 16 lb up at -1-11-5, and 47 lb down and 16 lb up at -1-11-5 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Concentrated Loads (lb)  
 Vert: 1=-73(F=-36, B=-36)
- Trapezoidal Loads (plf)  
 Vert: 1=-0(F=35, B=35)-to-2=-36(F=17, B=17), 2=-2(F=34, B=34)-to-3=-71(F=-1, B=-1), 5=-0(F=10, B=10)-to-4=-20(F=-0, B=-0)

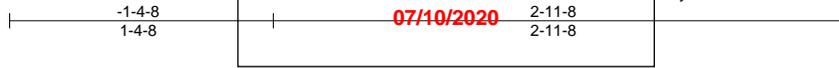


November 12, 2019

Job 400370	Truss J38	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252235
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Wheeler Lumber, Waverly, KS 66871

ID: XxAsF4MdGikvF3O7A2bzFoyH?NM-GhxGdJ6W1Z88gXyLW3F561C18Xl9SinPG2IKlXyJxqe  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:33 2019 Page 1



Scale: 1"=1'

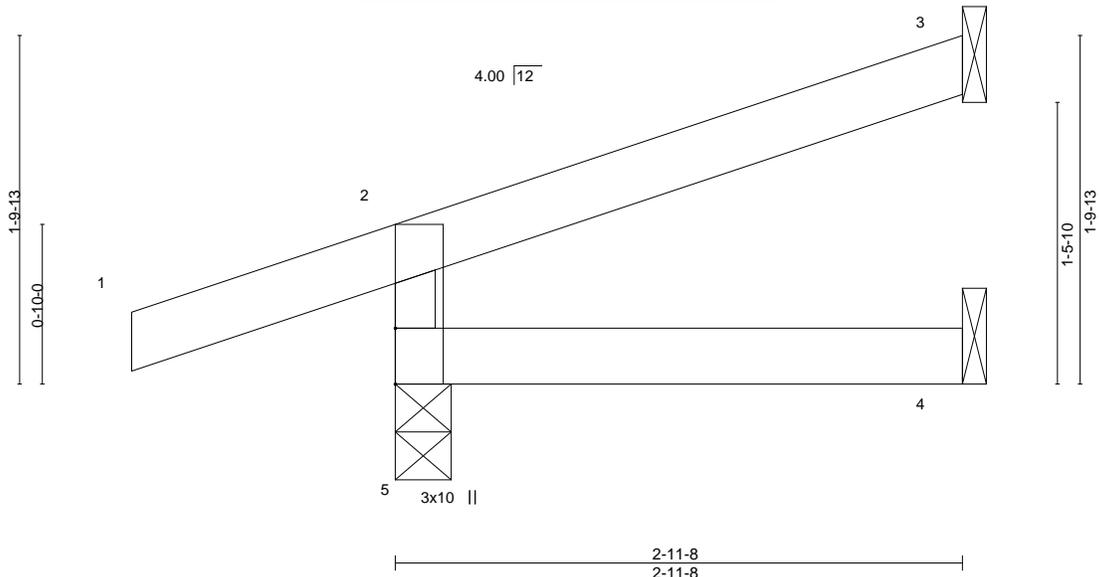


Plate Offsets (X,Y)--	[2-0-0-7,0-1-4], [5-0-0-0,0-1-4]
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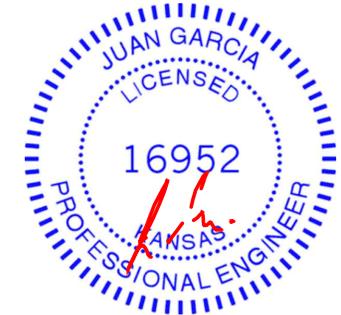
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 4-5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 3 n/a n/a	Weight: 9 lb	FT = 10%
	Code IRC2018/TPI2014		Wind(LL) 0.00 4-5 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=257/0-3-8, 3=73/Mechanical, 4=25/Mechanical  
 Max Horz 5=55(LC 4)  
 Max Uplift 5=-87(LC 4), 3=-40(LC 8)  
 Max Grav 5=257(LC 1), 3=73(LC 1), 4=52(LC 3)

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

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



November 12, 2019

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

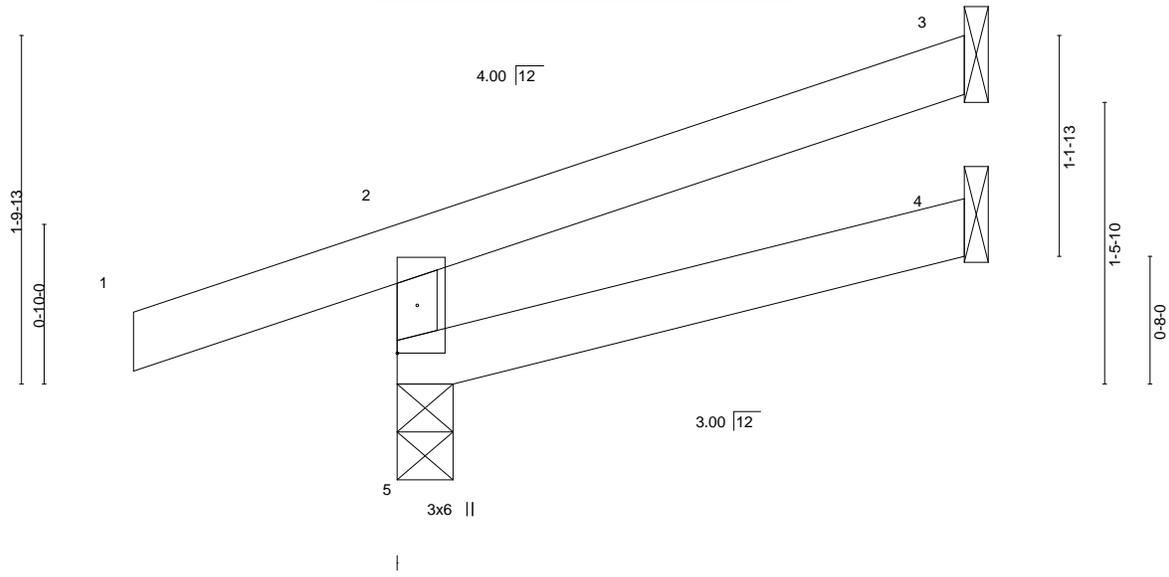
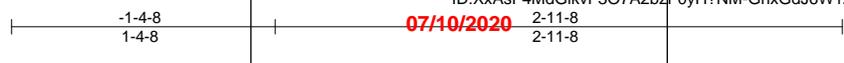
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J39	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252236
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Wheeler Lumber, Waverly, KS 66871 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:33 2019 Page 1  
 ID: XxAsF4MdGikvF307A2bzF0yH?NM-GhxGdJ6W1Z88gXyLW3F561C18Xk8SinPG2IKIXyJxqe



Scale: 1"=1'

Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-5,0-1-4]
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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 0.14	Vert(LL)	-0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	Weight: 9 lb	FT = 10%

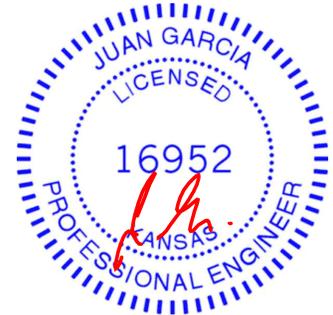
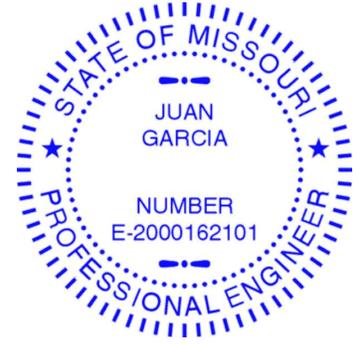
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=257/0-3-8, 3=73/Mechanical, 4=25/Mechanical  
 Max Horz 5=55(LC 4)  
 Max Uplift 5=-86(LC 4), 3=-40(LC 8)  
 Max Grav 5=257(LC 1), 3=73(LC 1), 4=52(LC 3)

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

**NOTES-**

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



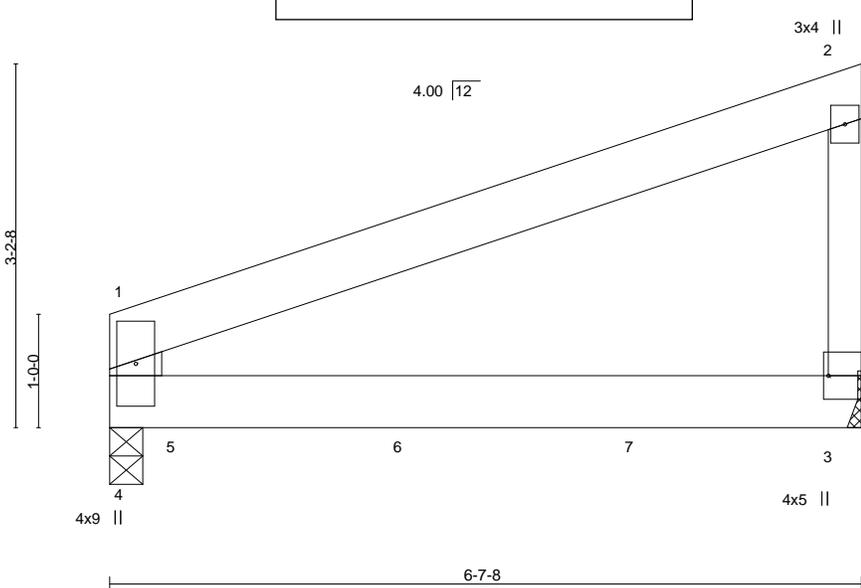
November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 400370	Truss J41	Truss Type Jack-Closed Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply <b>2</b>	Lot 24 HT I39252237
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:34 2019 Page 1  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-ktVerf78otG?IhXX4nmKfEk7TwxYB91YVi1tH\_yJxqd

07/10/2020



Scale = 1:20.2

Plate Offsets (X,Y)--	[3:Edge,0-3-8]
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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 0.43	Vert(LL)	-0.08	3-4	>963	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.14	3-4	>520		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.05	3-4	>999	Weight: 55 lb	FT = 10%

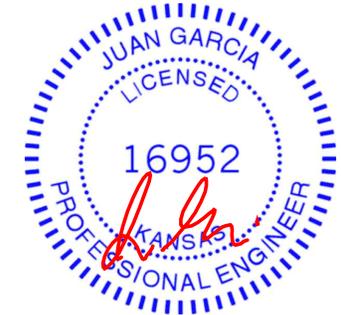
LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SPF No.2 *Except* 2-3: 2x4 SPF No.2	

REACTIONS.	(lb/size)
4=1472/0-3-8, 3=1050/Mechanical	
Max Horz 4=116(LC 5)	
Max Uplift 4=-253(LC 4), 3=-115(LC 8)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-261/25

- NOTES-**
- 2-ply truss to be connected together as follows:  
Top chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=253, 3=115.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 666 lb down and 197 lb up at 0-8-4, and 648 lb down and 47 lb up at 2-8-4, and 646 lb down and 40 lb up at 4-8-12 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:	1-2=-70, 3-4=-20
Concentrated Loads (lb)	
Vert:	5=-666(B) 6=-648(B) 7=-646(B)



November 12, 2019

Job 400370	Truss J42	Truss Type Diagonal Hip	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252238
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzFdyH?NM-C330278mZAOsvr6jdUHZBRHELLO1wWhikMnRpQyJxqc  
 07/10/2020  
 8,240 sq ft  
 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:35 2019 Page 1  
 3-9-14 3-9-14 5-3-0 1-5-2 9-2-15 3-11-15

Scale = 1:22.5

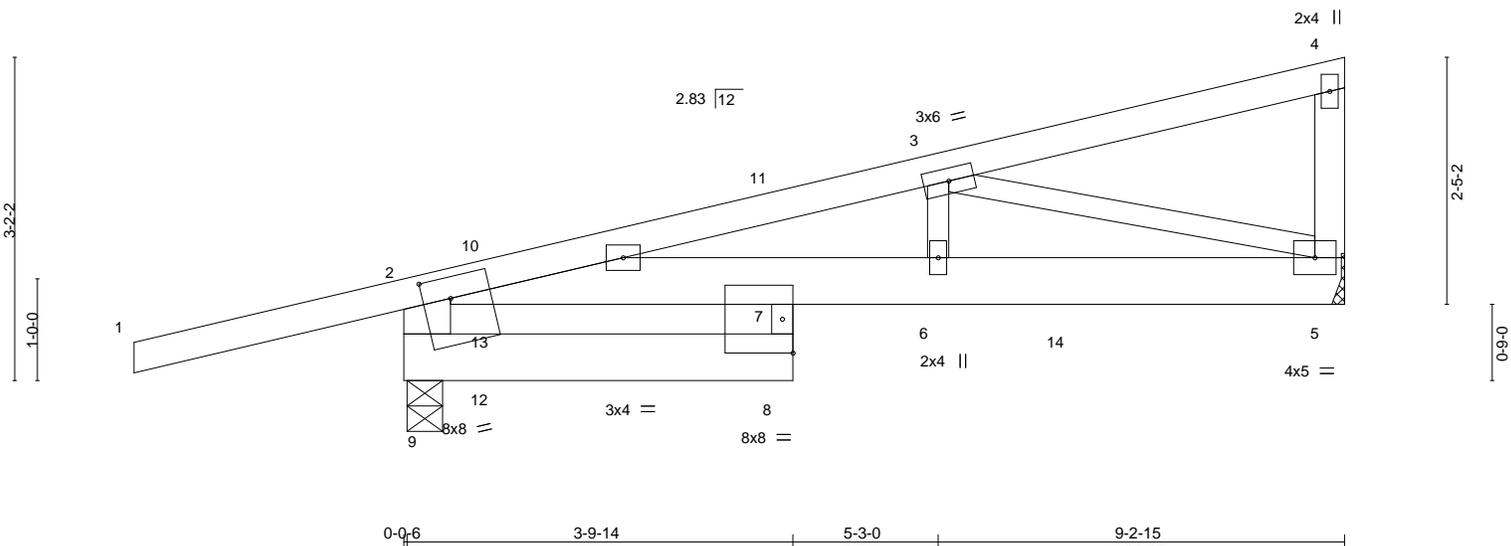


Plate Offsets (X,Y)--	[7:0-1-4,0-0-0], [8:0-1-4,0-0-0], [9:0-2-11,0-0-10], [9:0-3-4,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.68	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(LL) -0.03 6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.42	Vert(CT) -0.05 5-6 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 5 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.03 6 >999 240	Weight: 48 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.
BOT CHORD 2x6 SPF No.2 *Except* 2-5: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-9: 2x6 SPF No.2, 4-5: 2x4 SPF No.2	

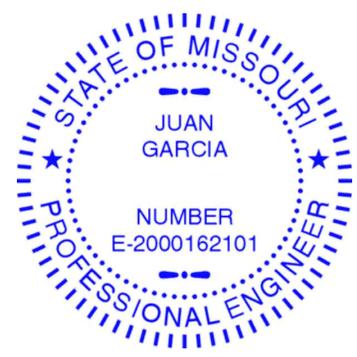
**REACTIONS.** (lb/size) 9=688/0-4-3, 5=580/Mechanical  
 Max Horz 9=116(LC 5)  
 Max Uplift 9=-217(LC 4), 5=-155(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-9=-642/231, 2-3=-1129/275  
 BOT CHORD 2-7=-281/1062, 6-7=-281/1063, 5-6=-281/1063  
 WEBS 3-5=-1051/297, 3-6=-40/266

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=217, 5=155.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 77 lb down and 138 lb up at 0-10-3, and 78 lb down and 48 lb up at 3-8-2, and 70 lb down and 28 lb up at 3-8-2 on top chord, and 3 lb down and 8 lb up at 0-10-3, 12 lb down and 0 lb up at 3-8-10, 6 lb down and 5 lb up at 3-8-10, and 173 lb down and 74 lb up at 6-6-1, and 135 lb down and 66 lb up at 6-6-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-70, 2-4=-70, 8-9=-20, 5-7=-20  
 Concentrated Loads (lb)  
 Vert: 8=5(F=0, B=5) 10=35(F) 14=308(F=-173, B=-135)

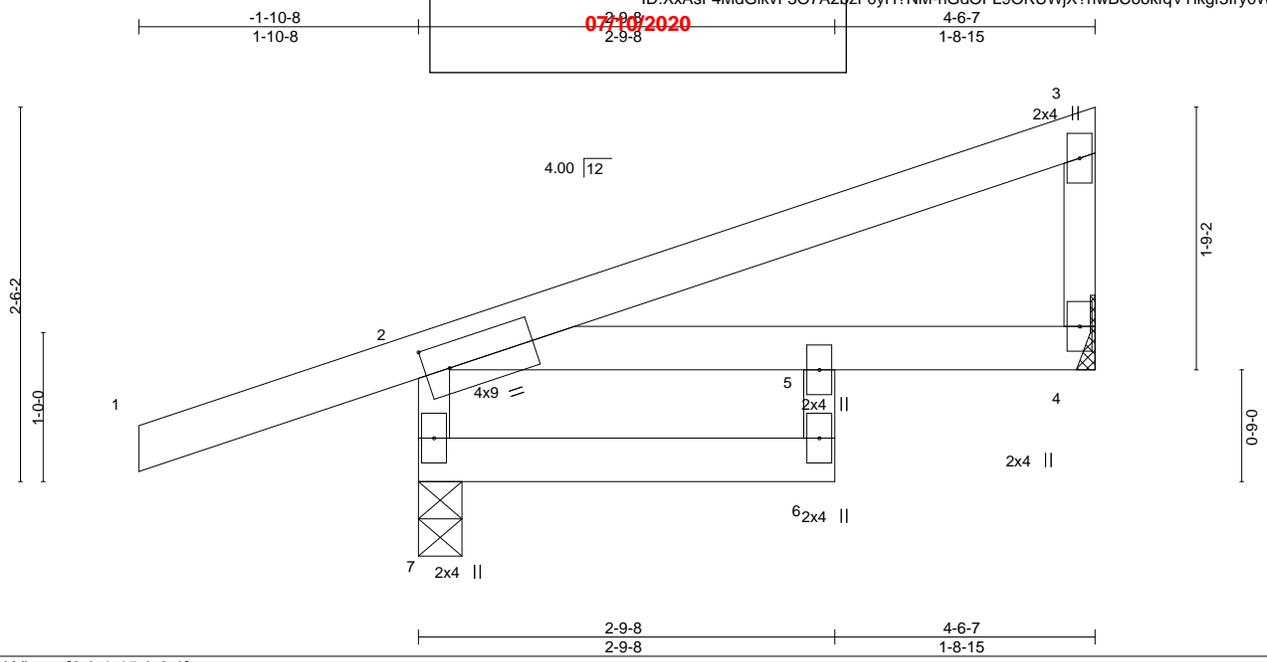


November 12, 2019

Job 400370	Truss J43	Truss Type Jack-Closed	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252239
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:36 2019 Page 1  
ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-hGdOFL9OKUWjX?hwBCookfqVTIkgf3Iry0W\_LsyJxqb



Scale = 1:15.4

Plate Offsets (X,Y)--	[2-0-1-15,0-2-0]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	5	>999	240	Weight: 18 lb	FT = 10%

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

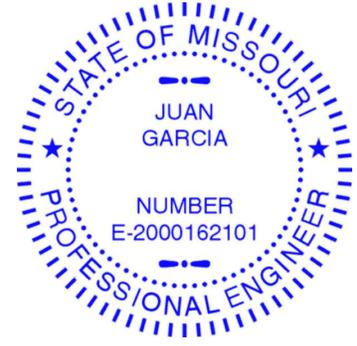
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-6-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 7=365/0-3-8, 4=163/Mechanical  
Max Horz 7=94(LC 5)  
Max Uplift 7=128(LC 4), 4=37(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-7=-338/149

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 7=128.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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RELEASE FOR

CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Job 400370	Truss J44	Truss Type Jack-Open	Ply 1	Lot 24 HT 139252240
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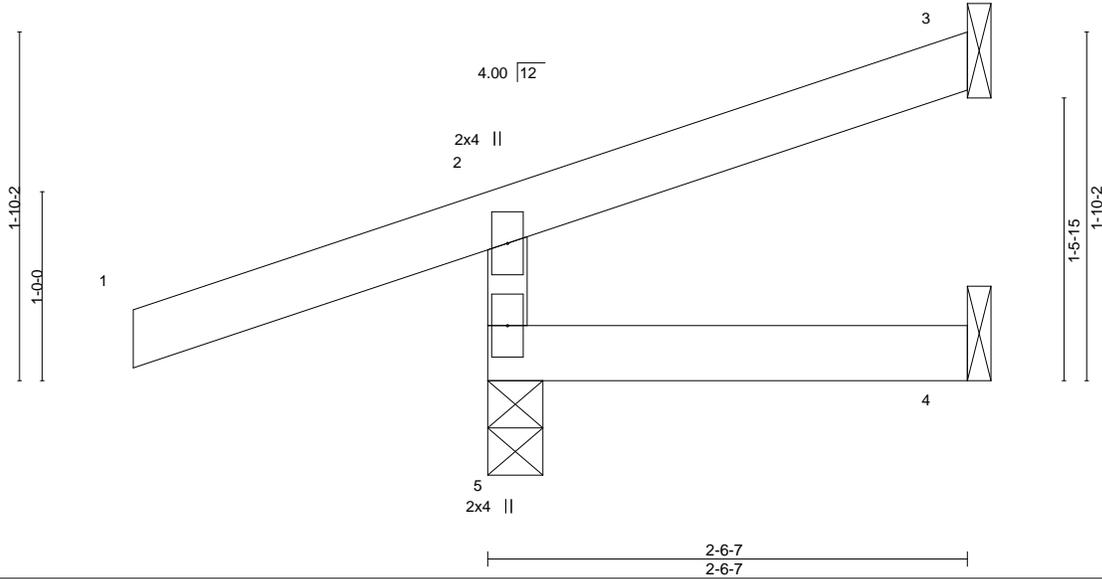
Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:36 2019 Page 1  
ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-hGdOFL9OKUWjX?hwBCookfqVTImBf3Xry0W\_LsyJxqb

07/10/2020

2-6-7  
2-6-7

Scale = 1:12.1



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 0.27	Vert(LL)	-0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 9 lb	FT = 10%

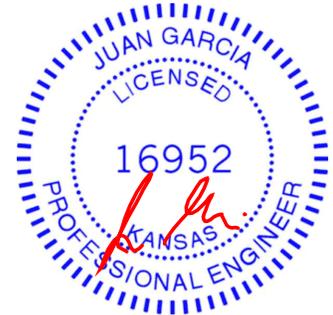
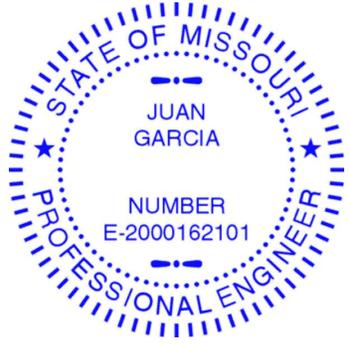
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=303/0-3-8, 3=35/Mechanical, 4=14/Mechanical  
 Max Horz 5=56(LC 4)  
 Max Uplift 5=-119(LC 4), 3=-27(LC 8)  
 Max Grav 5=303(LC 1), 3=35(LC 1), 4=42(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-269/137

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=119.
- 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.



November 12, 2019

Job 400370	Truss J45	Truss Type Jack-Closed	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252241
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-9SBmThA15oea99G6lvJ1GsMhS84BOWX\_BgYyUjYxqa  
 07/10/2020  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:37 2019 Page 1

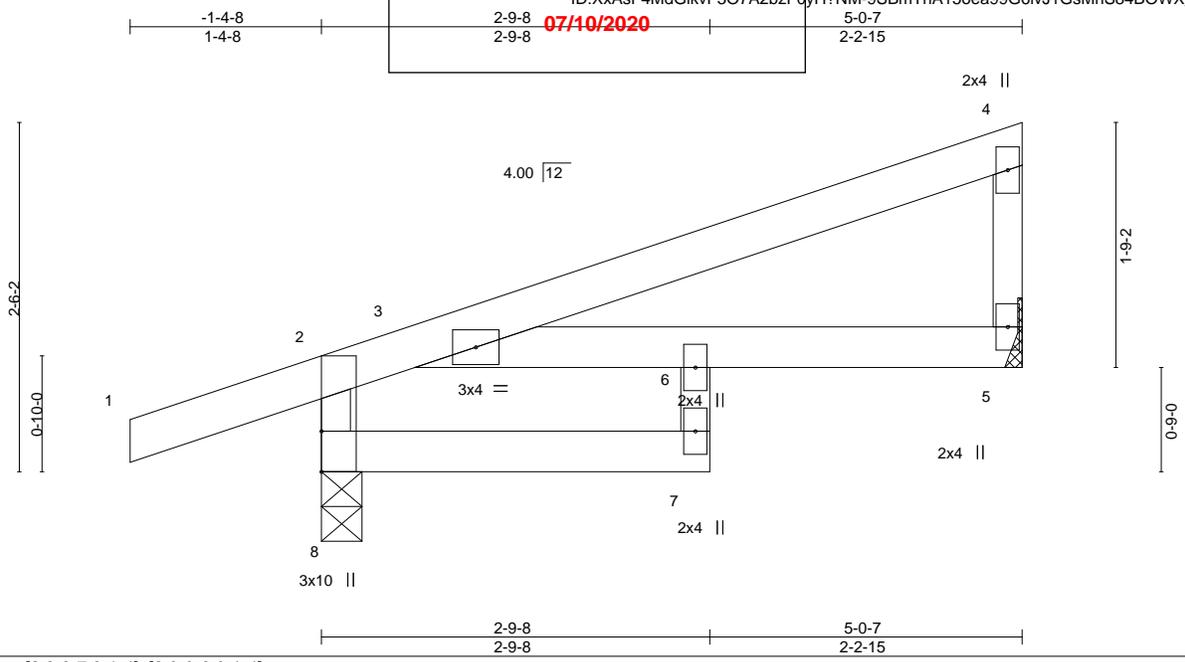


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [8:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) -0.02 3-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.04 6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.02 5 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.02 3-6 >999 240	Weight: 18 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 8=337/0-3-8, 5=201/Mechanical  
 Max Horz 8=92(LC 5)  
 Max Uplift 8=-102(LC 4), 5=-46(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-315/125

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 8=102.
  - 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.



November 12, 2019

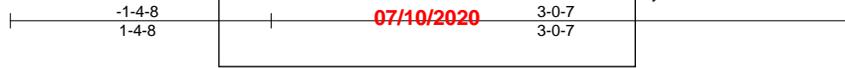
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J46	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252242
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-9SBmThA15oea99G6lvJ1GsMi8851OWn\_BgYulyJxqa  
 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:38 2019 Page 1  
 Job Reference (optional)



Scale: 1"=1'

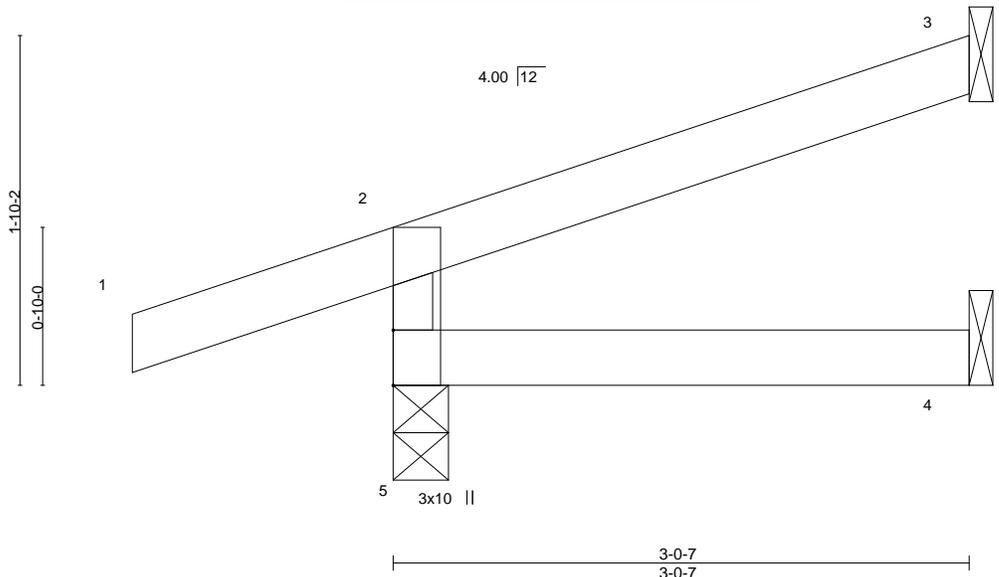


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) -0.00 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 4-5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 3 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.00 4-5 >999 240	Weight: 9 lb	FT = 10%

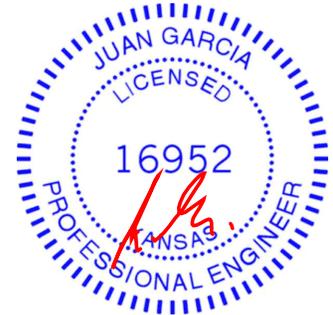
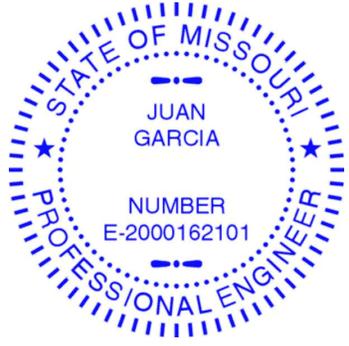
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=259/0-3-8, 3=76/Mechanical, 4=26/Mechanical  
 Max Horz 5=56(LC 4)  
 Max Uplift 5=-87(LC 4), 3=-41(LC 8)  
 Max Grav 5=259(LC 1), 3=76(LC 1), 4=53(LC 3)

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

**NOTES-**

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



November 12, 2019

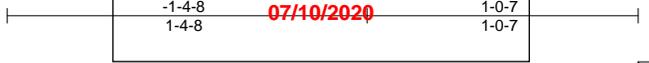
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss J47	Truss Type Jack-Open	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252243
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:38 2019 Page 1  
 ID: XxAsF4MdGikvF3O7A2zbzF0yH?NM-dek9g1Afs5mRmJrJcqGp4vtYS7z08QK?5QlyJxqZ



Scale = 1:8.8

Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]
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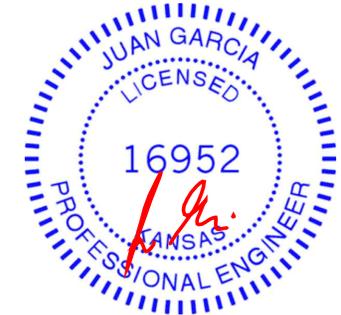
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL) 0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT) 0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL) 0.00	5	>999	240	Weight: 4 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-0-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 5=228/0-3-8, 3=39/Mechanical, 4=3/Mechanical  
 Max Horz 5=32(LC 5)  
 Max Uplift 5=104(LC 4), 3=39(LC 1), 4=3(LC 1)  
 Max Grav 5=228(LC 1), 3=23(LC 4), 4=14(LC 3)

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

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



November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job 400370	Truss J48	Truss Type Jack-Closed	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252244
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Wheeler Lumber, Waverly, KS 66871  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:39 2019 Page 1  
 ID: XxAsF4MdGikvF3O7A2bzFoyH?NM-5r1XuNBhdPuHOSQVksLVMHszzykisQ1Hf\_leyByJxqY

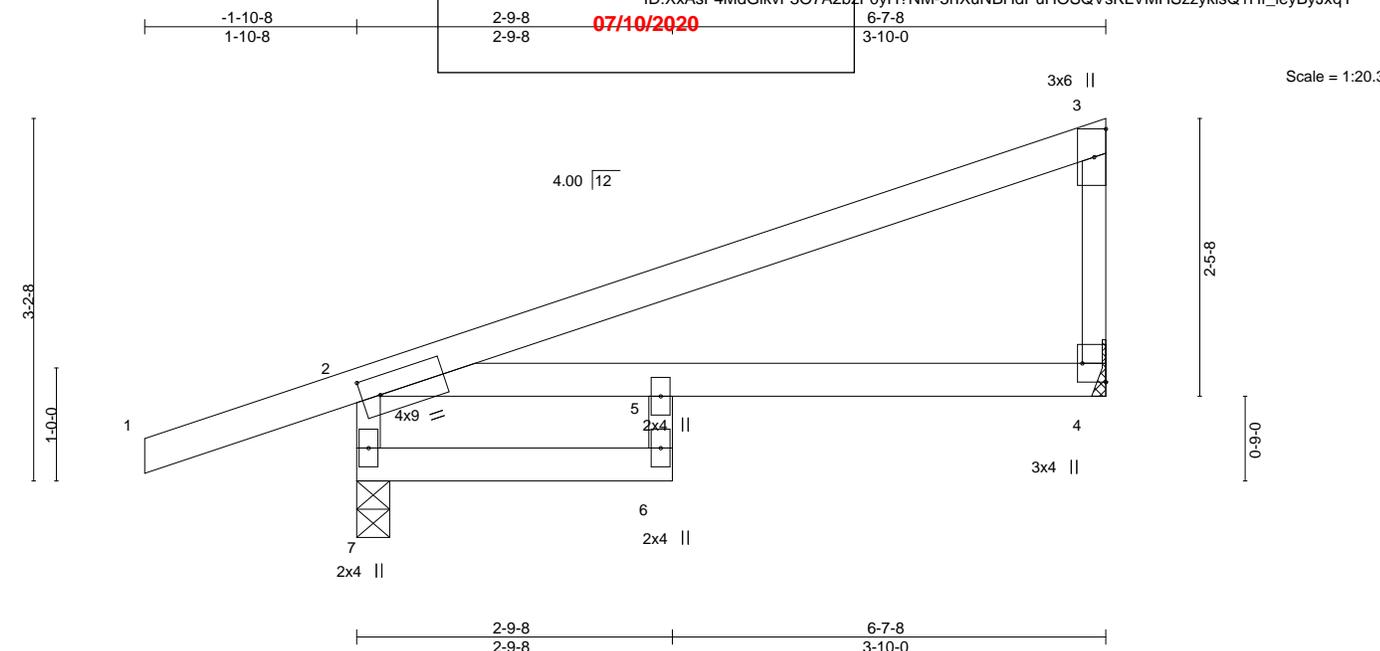


Plate Offsets (X,Y)--	[2:0-1-15,0-2-0], [4:Edge,0-2-8]
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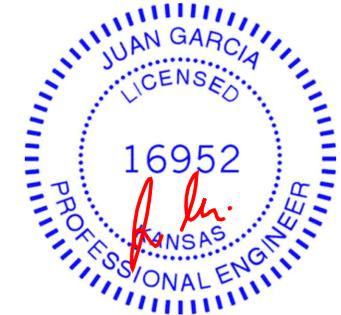
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.06	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.13	4-5	>593		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.04	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.03	6	>999	Weight: 23 lb	FT = 10%

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

**REACTIONS.** (lb/size) 7=449/0-3-8, 4=267/Mechanical  
 Max Horz 7=95(LC 5)  
 Max Uplift 7=-75(LC 4), 4=-19(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-7=-431/99

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



November 12, 2019

Job 400370	Truss J49	Truss Type Jack-Closed	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252245
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-5r1XuNBhdPuHOSQVsKLVMSyjjjBsQGhf\_leyByJxqY  
 07/10/2020  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:39 2019 Page 1

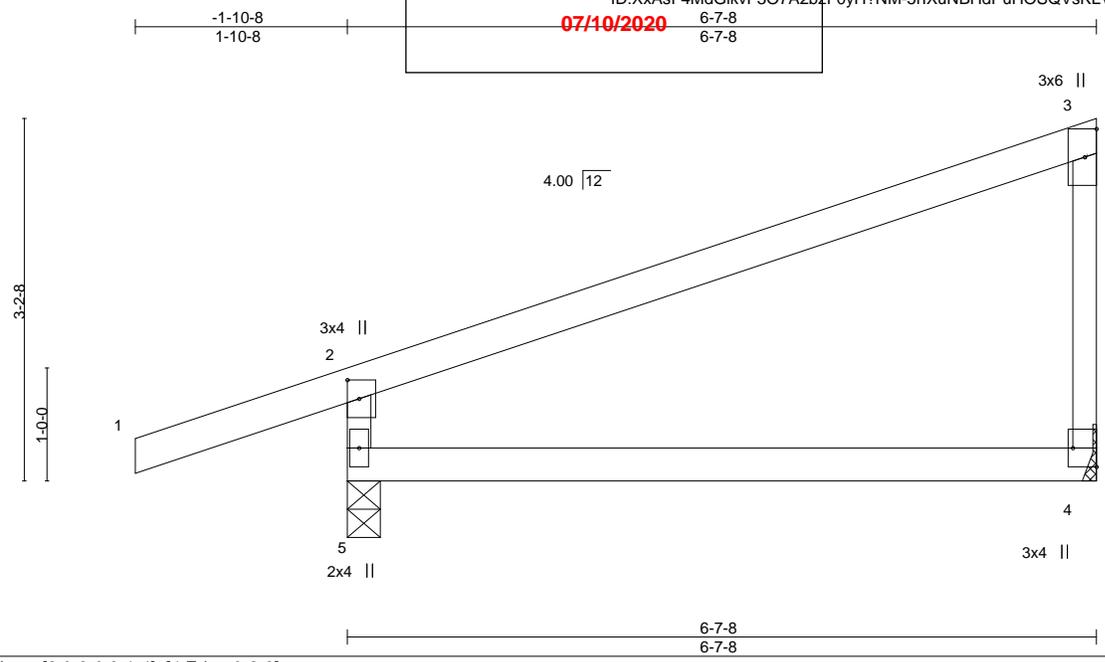


Plate Offsets (X,Y)--	[2:0-2-0,0-1-4], [4:Edge,0-2-8]
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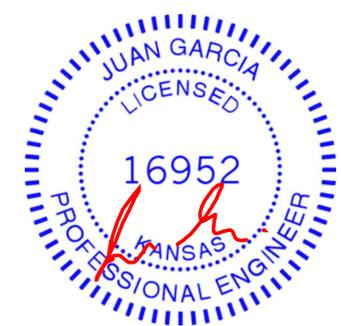
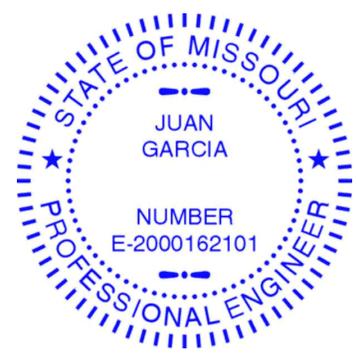
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0 1.15	TC 0.52	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(LL) -0.07 4-5 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.14 4-5 >534 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) 0.00 4 n/a n/a	Weight: 20 lb	FT = 10%
			Wind(LL) 0.01 4-5 >999 240		

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

**REACTIONS.** (lb/size) 5=449/0-3-8, 4=267/Mechanical  
 Max Horz 5=104(LC 7)  
 Max Uplift 5=-76(LC 4), 4=-19(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-394/118

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

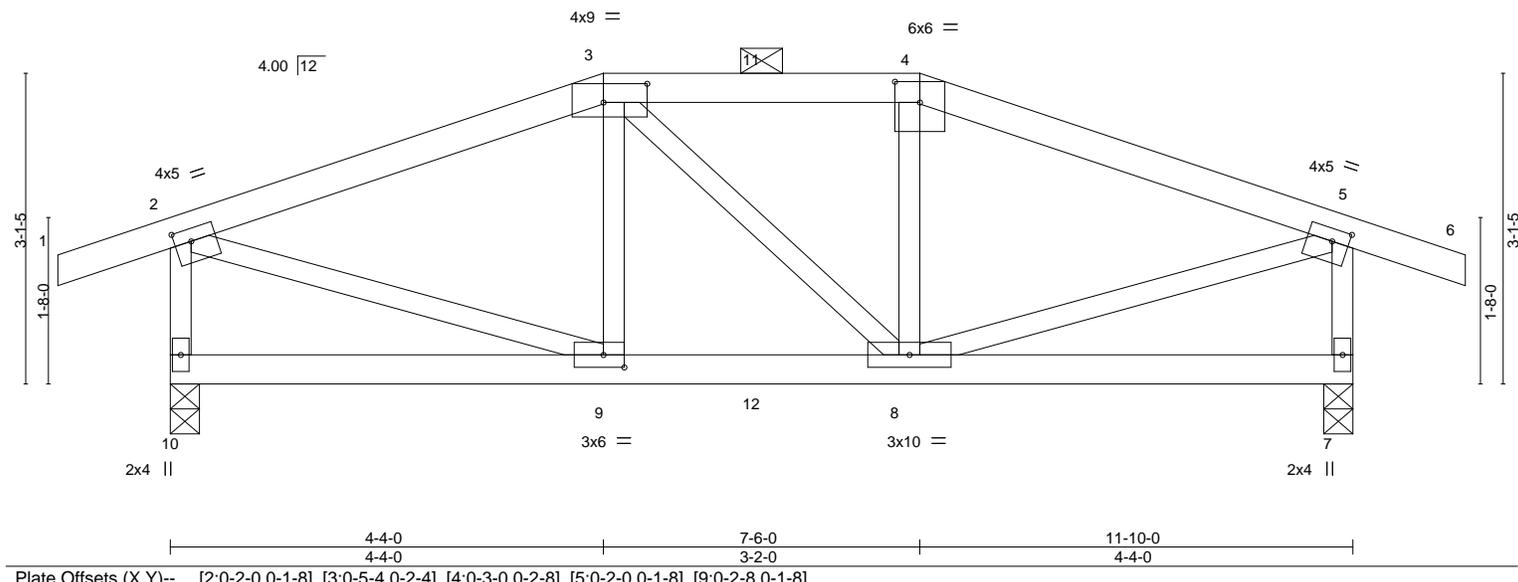


November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 400370	Truss K1	Truss Type Hip Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252246
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Wheeler Lumber, Waverly, KS 66871  
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 07/10/2020  
 Scale = 1:22.9



<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.02 8-9 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.28	Vert(CT) -0.04 8-9 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.32	Horz(CT) 0.01 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.02 8-9 >999 240	Weight: 46 lb	FT = 10%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-11 max.): 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

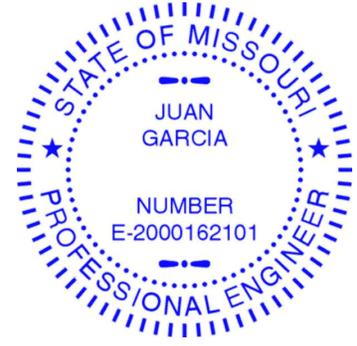
**REACTIONS.** (lb/size) 10=898/0-3-8, 7=898/0-3-8  
 Max Horz 10=30(LC 7)  
 Max Uplift 10=-262(LC 4), 7=-262(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1049/299, 3-4=-947/300, 4-5=-1049/298, 2-10=-852/283, 5-7=-852/283  
 BOT CHORD 8-9=-234/947  
 WEBS 2-9=-239/944, 5-8=-239/944

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=262, 7=262.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 75 lb up at 4-4-0, and 85 lb down and 75 lb up at 5-11-0, and 85 lb down and 75 lb up at 7-6-0 on top chord, and 209 lb down and 88 lb up at 4-4-0, and 35 lb down at 5-11-0, and 209 lb down and 88 lb up at 7-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20  
 Concentrated Loads (lb)  
 Vert: 3=-46(F) 4=-46(F) 9=-209(F) 8=-209(F) 11=-46(F) 12=-20(F)



November 12, 2019

Job 400370	Truss K2	Truss Type Common	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252247
Wheeler Lumber, Waverly, KS 66871			Job Reference (optional)		
-1-1-8 1-1-8			5-11-0 5-11-0		
4x5 =			11-10-0 5-11-0		
			12-11-8 1-1-8		

07/10/2020

Scale = 1:23.7

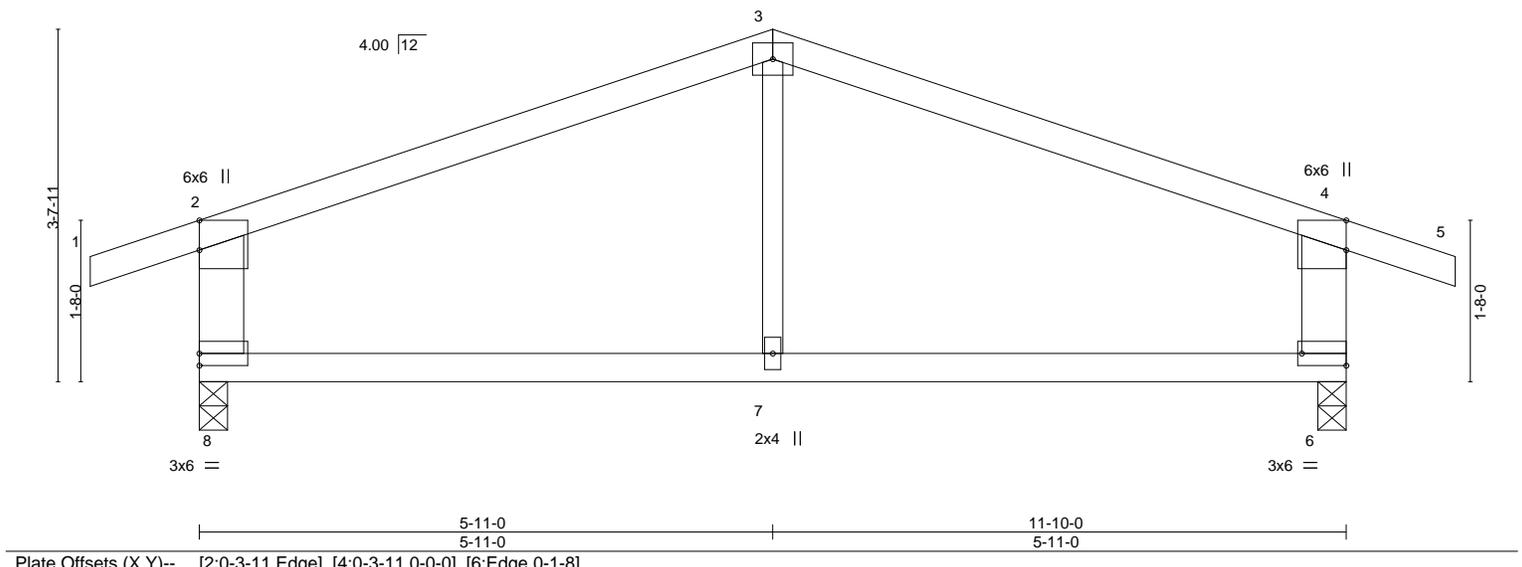


Plate Offsets (X,Y)-- [2:0-3-11,Edge], [4:0-3-11,0-0-0], [6:Edge,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.11	7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.22	7	>613	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.06	7	>999	240	Weight: 37 lb	FT = 10%

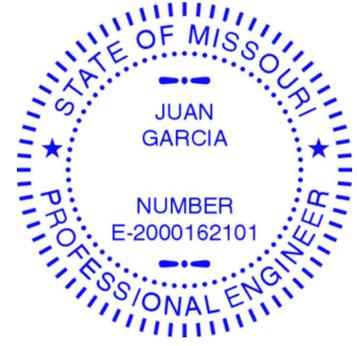
**LUMBER-**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x6 SPF No.2 \*Except\*  
3-7: 2x3 SPF No.2

**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.** (lb/size) 8=607/0-3-8, 6=607/0-3-8  
Max Horz 8=28(LC 20)  
Max Uplift 8=-134(LC 4), 6=-134(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-492/88, 3-4=-492/88, 2-8=-501/167, 4-6=-501/167  
BOT CHORD 7-8=-21/384, 6-7=-21/384

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; 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=134, 6=134.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss K3	Truss Type Common Girder	<b>RELEASE FOR CONSTRUCTION</b> <b>AS NOTED ON PLANS REVIEW</b> <b>DEVELOPMENT SERVICES</b> <b>LEE'S SUMMIT, MISSOURI</b>	Ply <b>2</b>	Lot 24 HT 139252248
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Wheeler Lumber, Waverly, KS 66871  
 8,240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:44 2019 Page 1  
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 07/10/2020  
 Scale = 1:23.7

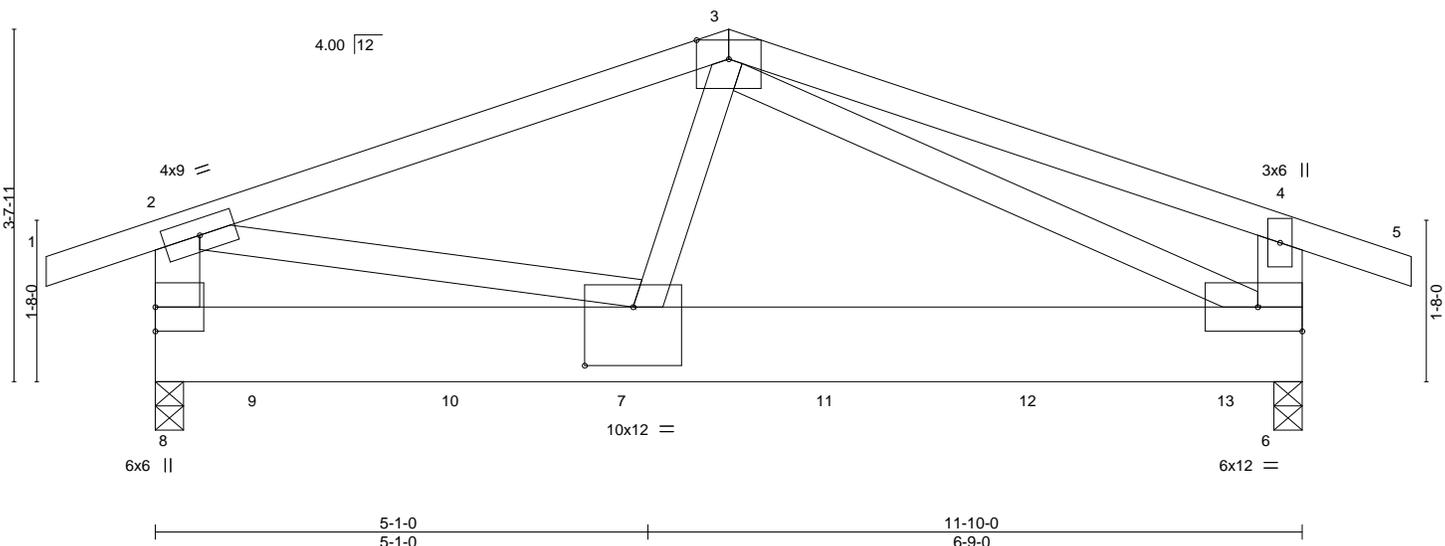


Plate Offsets (X,Y)--	[7:0-6-0,0-7-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.06	6-7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.10	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.59	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	6-7	>999	Weight: 163 lb	FT = 10%

**LUMBER-**  
 TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x10 SP 2400F 2.0E  
 WEBS 2x4 SPF No.2 \*Except\*  
 2-8,4-6: 2x6 SPF No.2

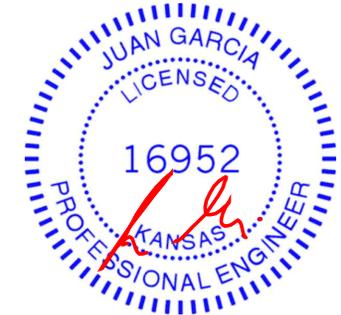
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 8=5107/0-3-8, 6=4419/0-3-8  
 Max Horz 8=-25(LC 35)  
 Max Uplift 8=-330(LC 4), 6=-328(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5916/401, 3-4=-1350/157, 2-8=-3360/283, 4-6=-750/138  
 BOT CHORD 7-8=-84/921, 6-7=-270/4400  
 WEBS 3-7=-219/3902, 2-7=-288/4775, 3-6=-3637/218

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=330, 6=328.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1446 lb down and 71 lb up at 1-1-12, 1451 lb down and 80 lb up at 3-1-12, 1446 lb down and 89 lb up at 5-0-15, 2672 lb down and 270 lb up at 7-0-2, and 646 lb down and 42 lb up at 9-1-4, and 653 lb down and 39 lb up at 11-1-12 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



November 12, 2019

Continued on page 2

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

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 400370	Truss K3	Truss Type Common Girder	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 07/10/2020</b>	Ply <b>2</b>	Lot 24 HT I39252248
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Wheeler Lumber, Waverly, KS 66871

**LOAD CASE(S)** Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=-1446(B) 9=-1446(B) 10=-1451(B) 11=-2672(B) 12=-646(B) 13=-653(B)

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:44 2019 Page 2  
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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



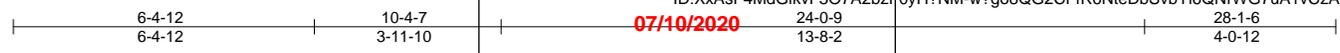
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss LAY2	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252249
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:45 2019 Page 1  
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07/10/2020



Scale = 1:48.7

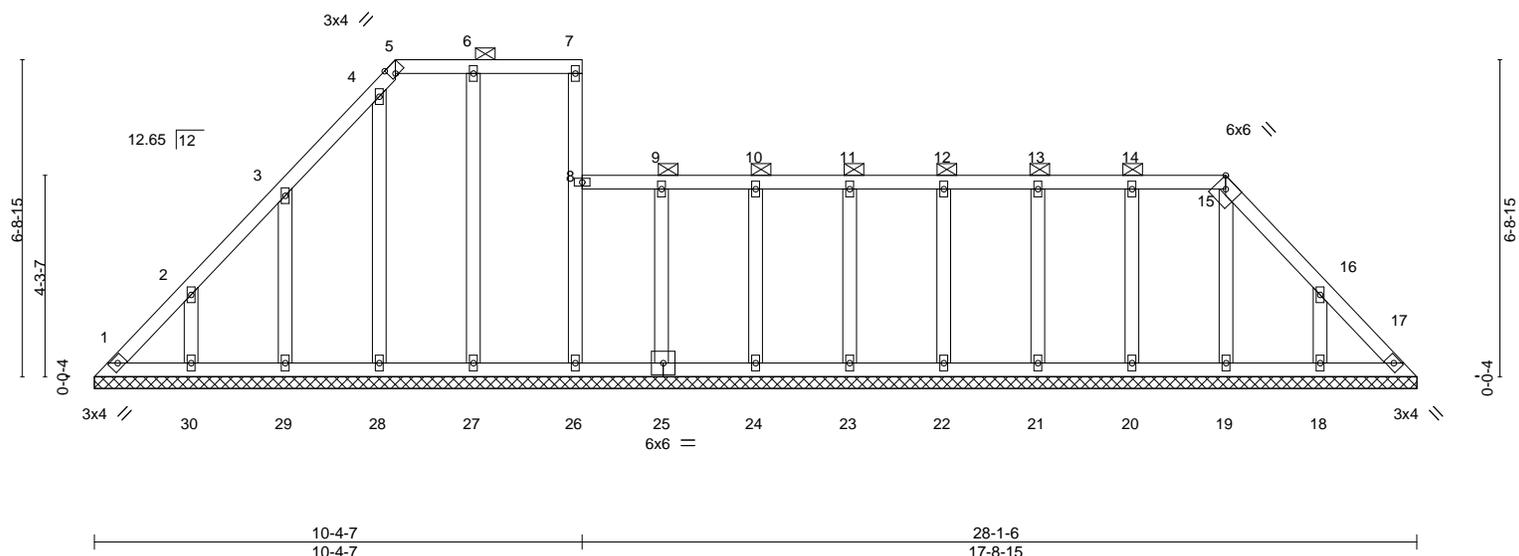


Plate Offsets (X,Y)--	[5:0-1-7,Edge], [15:0-2-9,Edge]
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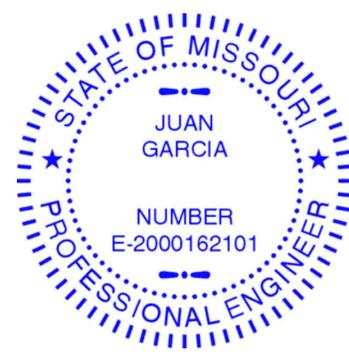
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	17	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 127 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-26, 8-15.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

**REACTIONS.** All bearings 28-1-6.  
 (lb) - Max Horz 1=271(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 26, 17, 24, 25, 27, 23, 22, 21, 20, 19 except 28=120(LC 8), 29=127(LC 8), 30=128(LC 8), 18=140(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 26, 17, 24, 25, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18 except 1=279(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-401/193, 2-3=-280/147

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 26, 17, 24, 25, 27, 23, 22, 21, 20, 19 except (jt=lb) 28=120, 29=127, 30=128, 18=140.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

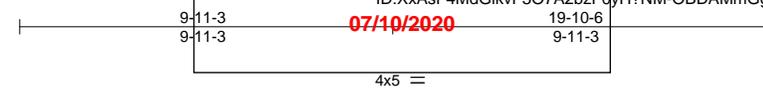


November 12, 2019

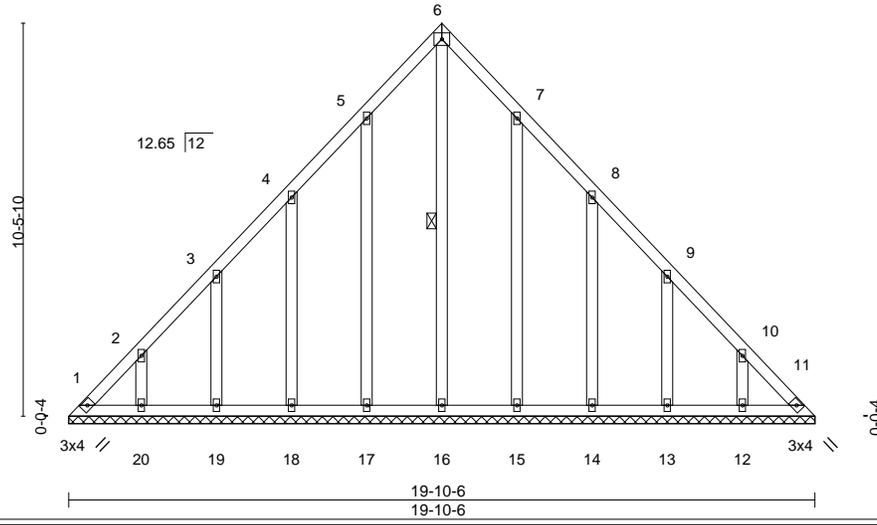
Job 400370	Truss LAY3	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252250
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:46 2019 Page 1  
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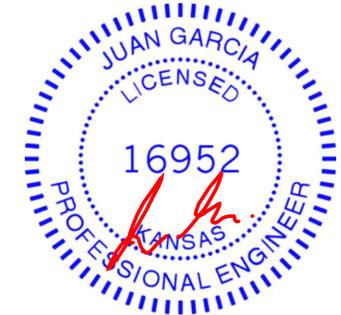
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	0.01	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 108 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midpt 6-16

**REACTIONS.** All bearings 19-10-6.  
 (lb) - Max Horz 1=268(LC 4)  
 Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=125(LC 6), 17=122(LC 8), 18=128(LC 8), 19=124(LC 8), 20=124(LC 8), 15=120(LC 9), 14=129(LC 9), 13=124(LC 9), 12=124(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 11, 16, 17, 18, 19, 20, 15, 14, 13, 12 except 1=256(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-369/230, 2-3=-252/186, 10-11=-327/168

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 1=125, 17=122, 18=128, 19=124, 20=124, 15=120, 14=129, 13=124, 12=124.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 12, 2019

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

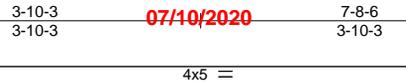
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



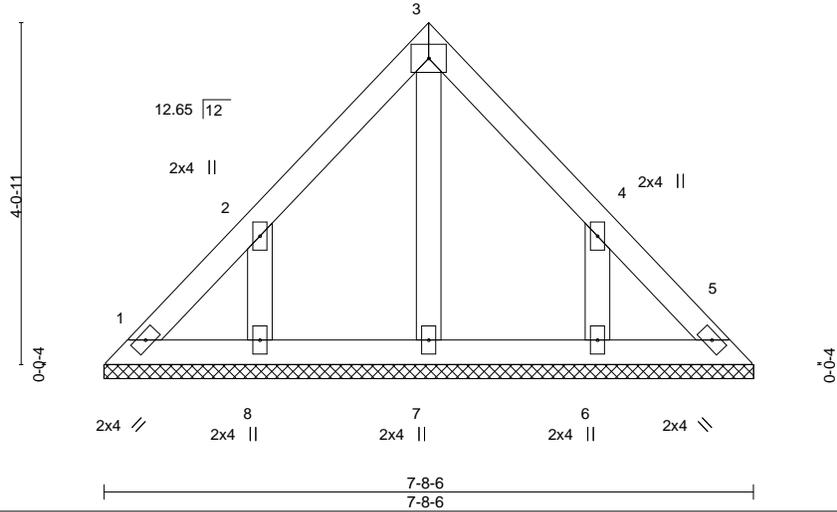
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss LAY4	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252251
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Wheeler Lumber, Waverly, KS 66871



Scale = 1:27.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 27 lb	FT = 10%

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

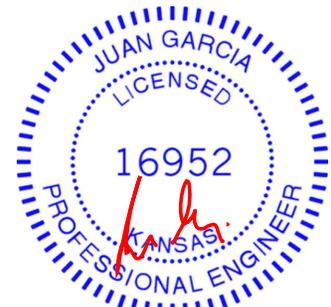
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 7-8-6.  
 (lb) - Max Horz 1=98(LC 5)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-139(LC 8), 6=-139(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=139, 6=139.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 12, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



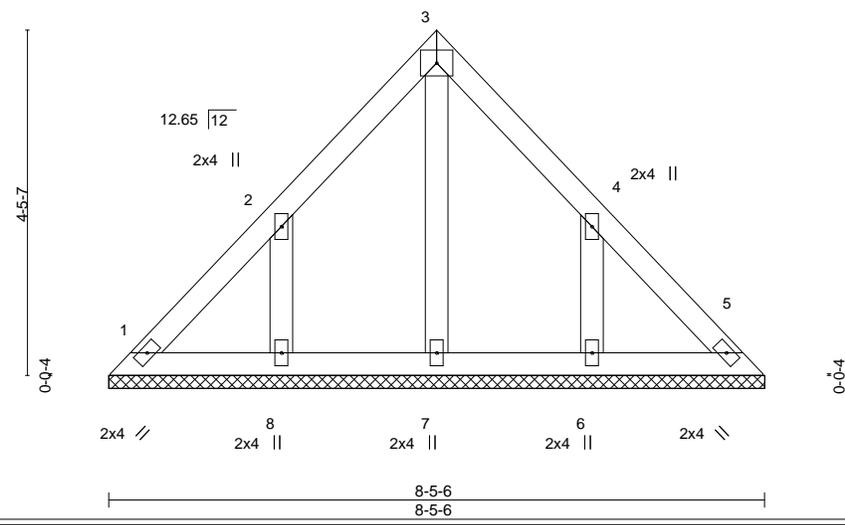
Job 400370	Truss LAY5	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252252
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Wheeler Lumber, Waverly, KS 66871

07/10/2020

4x5 =

Scale = 1:29.5



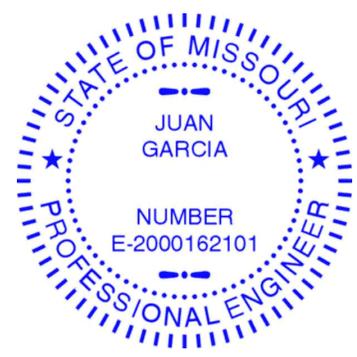
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 31 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SPF No.2	

**REACTIONS.** All bearings 8-5-6.  
 (lb) - Max Horz 1=109(LC 4)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=151(LC 8), 6=151(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; 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.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=151, 6=151.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 12, 2019

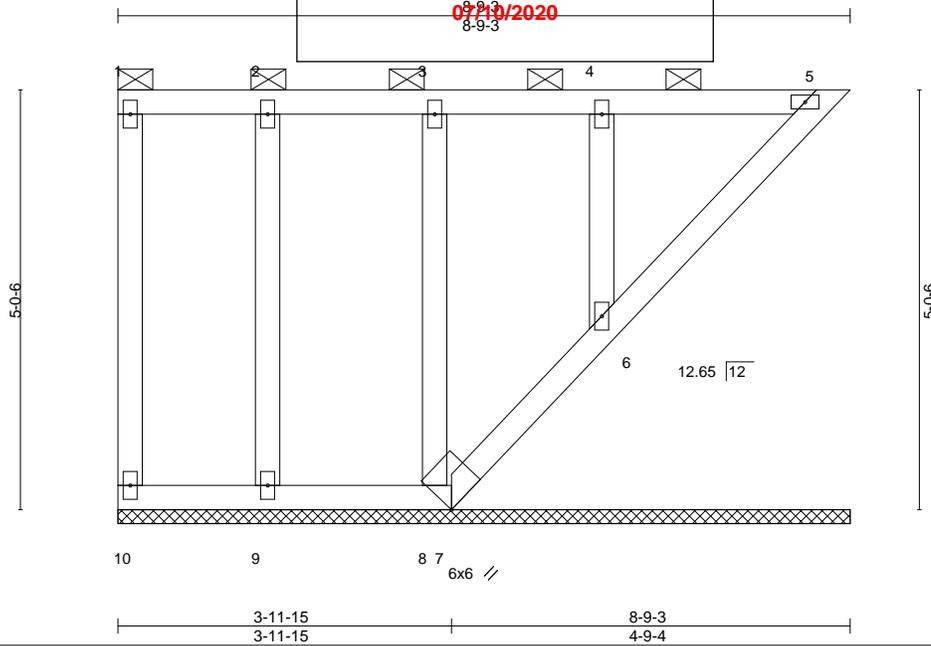
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss LAY6	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252253
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Wheeler Lumber, Waverly, KS 66871  
 ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-KZLwnSlwVA10zrcDujOcDBKbMatrTVccjtQdnAyJxqP  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:48 2019 Page 1



Scale = 1:27.5

Plate Offsets (X,Y)--	[7:0-1-4,0-1-3], [8:0-1-3,0-1-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) n/a - n/a 999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 40 lb	FT = 10%

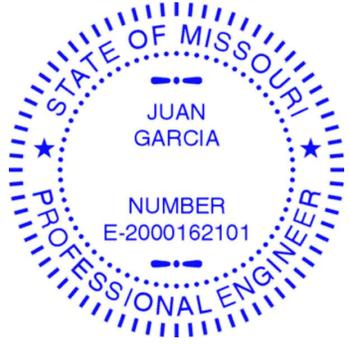
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD 2-0-0 oc purlins: 1-5, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SPF No.2	6-0-0 oc bracing: 5-6.
OTHERS 2x4 SPF No.2	

**REACTIONS.** All bearings 8-9-3.  
 (lb) - Max Horz 10=-135(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 10, 5, 7, 9, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 10, 5, 7, 9, 8, 6

**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) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 5, 7, 9, 8, 6.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 6.
- 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.



November 12, 2019

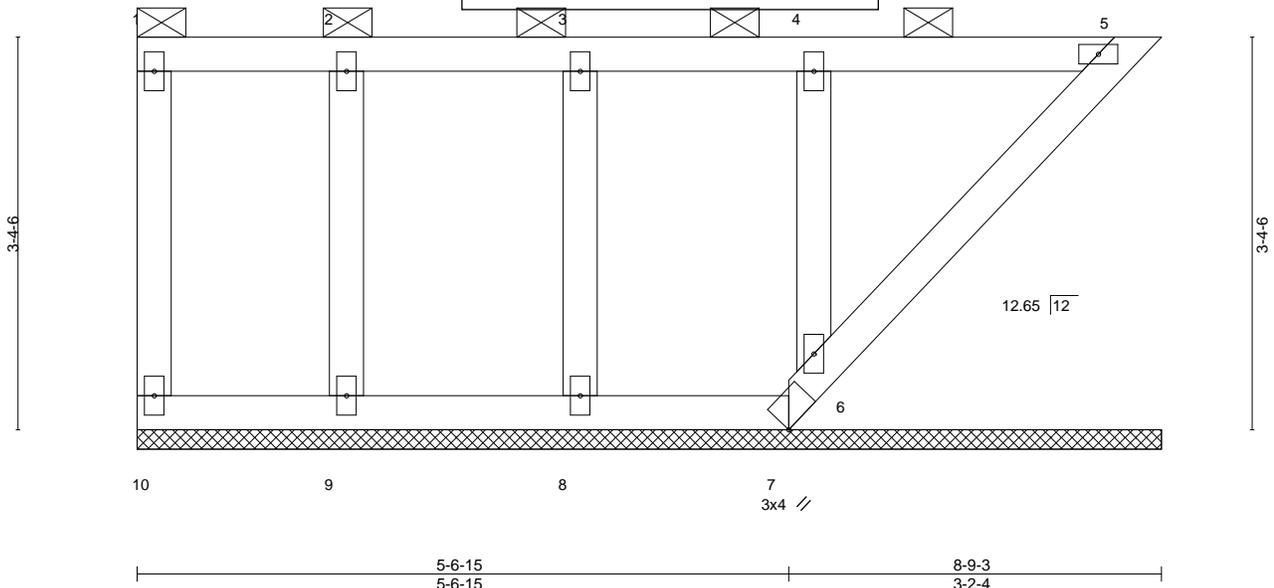
Job 400370	Truss LAY7	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252254
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:49 2019 Page 1  
ID:XXAsF4MdGikvF3O7A2bzF0yH?NM-omvJ\_nJYGU9tb?BQSQRmOsn3\_BiCyFmyXAAJcyJxq0

07/19/2020

Scale = 1:19.6



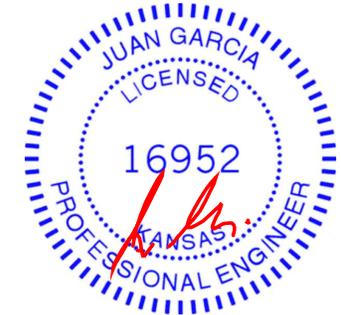
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 34 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD 2-0-0 oc purlins: 1-5, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SPF No.2	6-0-0 oc bracing: 5-6.
OTHERS 2x4 SPF No.2	

**REACTIONS.** All bearings 8-9-3.  
 (lb) - Max Horz 10=-87(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 10, 5, 9, 8, 6 except 7=-115(LC 6)  
 Max Grav All reactions 250 lb or less at joint(s) 10, 5, 7, 9, 8 except 6=298(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) Provide adequate drainage to prevent water ponding.
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 5, 9, 8, 6 except (jt=lb) 7=115.
  - 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 6.
  - 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.



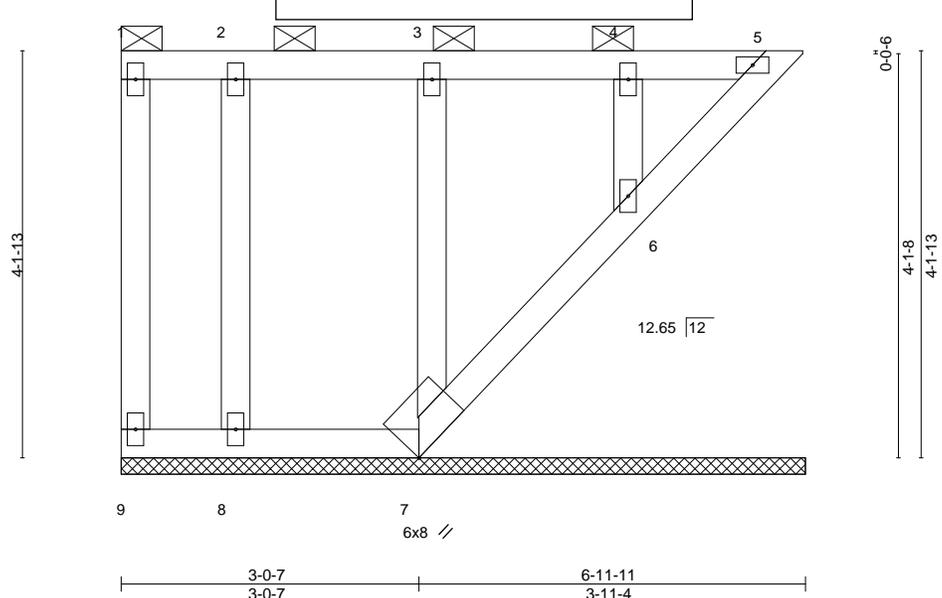
November 12, 2019

Job 400370	Truss LAY8	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT I39252255
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Wheeler Lumber, Waverly, KS 66871

ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-omvJ\_nJYGU9tb?BQSQXrmOsnx\_CJCyCmyXAAJcyJxqQ  
 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:49 2019 Page 1

6-11-11  
6-11-11



Scale = 1:23.4

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 31 lb	FT = 10%

**LUMBER-**  
 TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x4 SPF No.2  
 OTHERS 2x4 SPF No.2

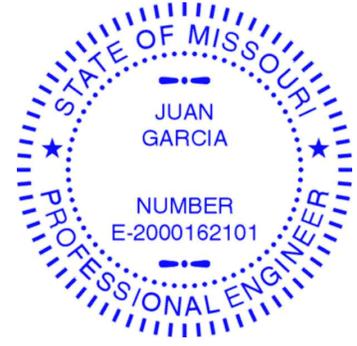
**BRACING-**  
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 6-11-11.  
 (lb) - Max Horz 9=110(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 5, 8, 7, 6  
 Max Grav All reactions 250 lb or less at joint(s) 9, 5, 8, 7, 6

**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) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 5, 8, 7, 6.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 6.
- 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.



November 12, 2019

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

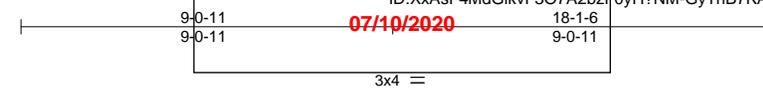
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400370	Truss LAY9	Truss Type GABLE	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252256
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Wheeler Lumber, Waverly, KS 66871

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ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-GyThB7KA1nHkC9mc0824lcPx4OYExMXvABvkr2yJxqN



Scale = 1:55.9

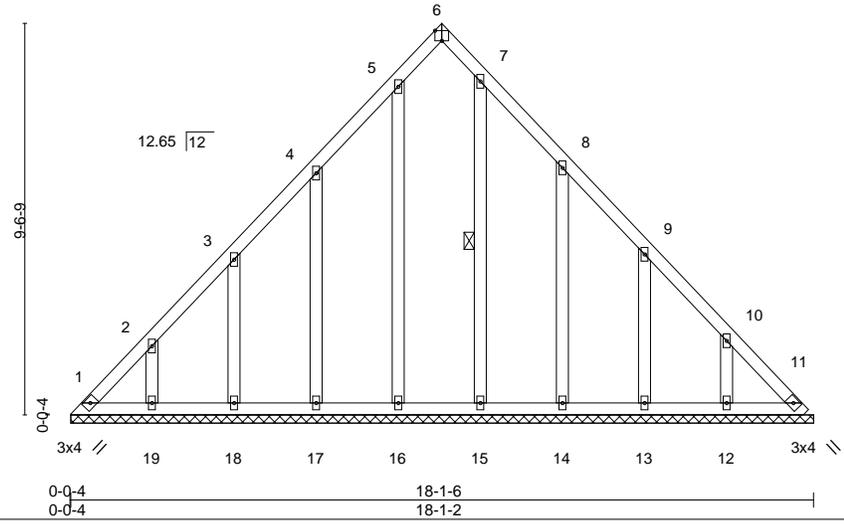


Plate Offsets (X,Y)--	[6:Edge,0-3-0]
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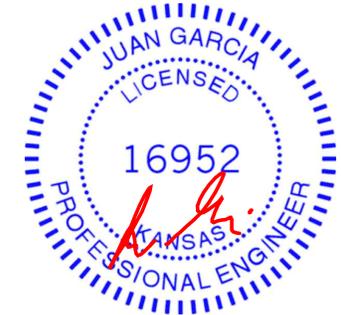
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.01	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 93 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midt 7-15

**REACTIONS.** All bearings 18-1-2.  
 (lb) - Max Horz 1=244(LC 4)  
 Max Uplift All uplift 100 lb or less at joint(s) 11, 16, 15 except 1=100(LC 6), 19=127(LC 8), 18=120(LC 8), 17=145(LC 8), 14=150(LC 9), 13=118(LC 9), 12=132(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 19, 18, 17, 16, 15, 14, 13, 12 except 1=284(LC 8), 11=268(LC 9)

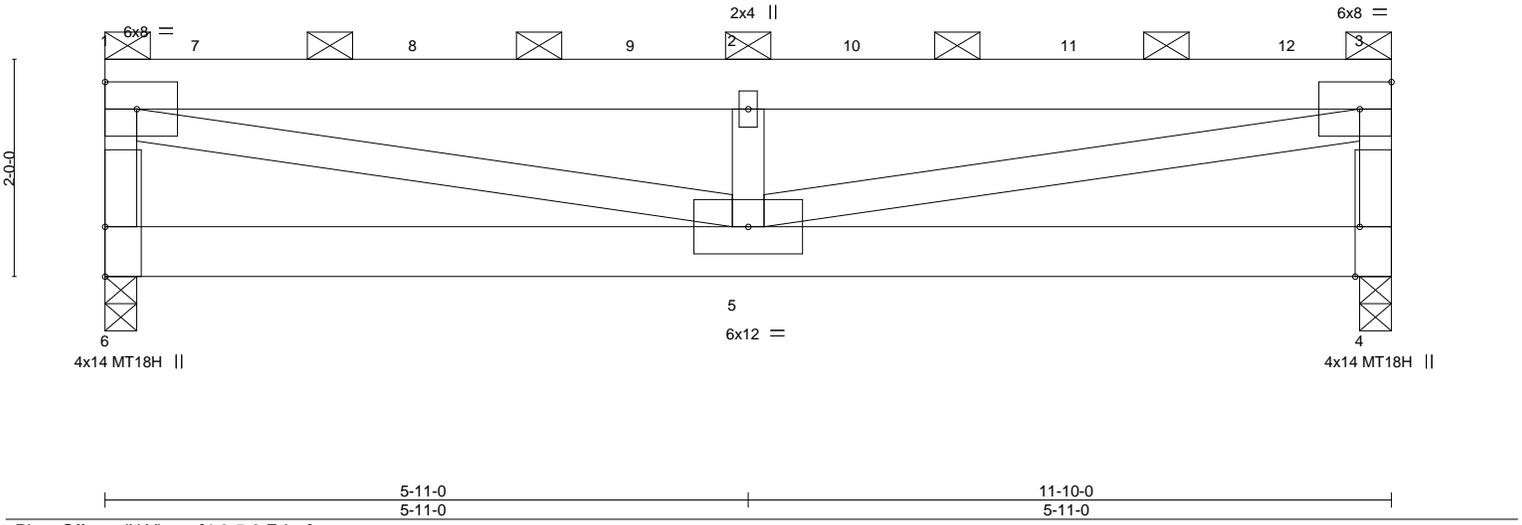
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-408/198, 2-3=-288/153, 9-10=-262/124, 10-11=-387/172  
 BOT CHORD 1-19=-120/295, 18-19=-120/295, 17-18=-120/295, 16-17=-120/295, 15-16=-120/295, 14-15=-120/295, 13-14=-120/295, 12-13=-120/295, 11-12=-120/295

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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.
  - Bearing at joint(s) 1, 11, 19, 18, 17, 16, 15, 14, 13, 12 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) 11, 16, 15 except (jt=lb) 1=100, 19=127, 18=120, 17=145, 14=150, 13=118, 12=132.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 12, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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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 0.57	Vert(LL)	-0.09	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.16	5	>858	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.71	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	5	>999		Weight: 131 lb FT = 10%

**LUMBER-**  
 TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SPF No.2  
 WEBS 2x4 SPF No.2

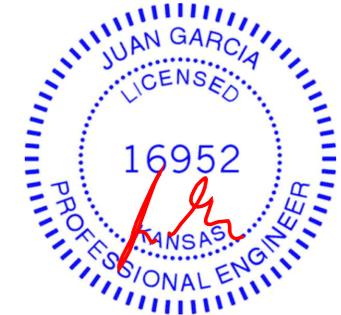
**BRACING-**  
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=3105/0-3-8, 4=3165/0-3-8  
 Max Horz 6=59(LC 22)  
 Max Uplift 6=96(LC 4), 4=-91(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-6=-2907/119, 1-2=-6119/174, 2-3=-6119/174, 3-4=-2968/115  
 BOT CHORD 5-6=-55/510, 4-5=-26/509  
 WEBS 1-5=-177/5806, 2-5=-3161/176, 3-5=-179/5807

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 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; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; 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
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 875 lb down and 23 lb up at 0-11-12, 869 lb down and 15 lb up at 2-11-12, 869 lb down and 15 lb up at 4-11-12, 869 lb down and 15 lb up at 6-11-12, and 869 lb down and 15 lb up at 8-11-12, and 879 lb down and 16 lb up at 10-11-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



November 12, 2019

Continued on page 2

Job 400370	Truss R1	Truss Type FLAT GIRDER	<p style="text-align: center;"><b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 07/10/2020</b></p>	Ply <b>2</b>	Lot 24 HT  I39252257  Job Reference (optional)
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Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:51 2019 Page 2  
ID: XxAsF4MdGikvF3O7A2bzF0yH?NM-k813PTKpo5PbqIKoZrZJrpy?\_opzgg62PrfHNvYJxqM

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=-875 8=-869 9=-869 10=-869 11=-869 12=-879

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

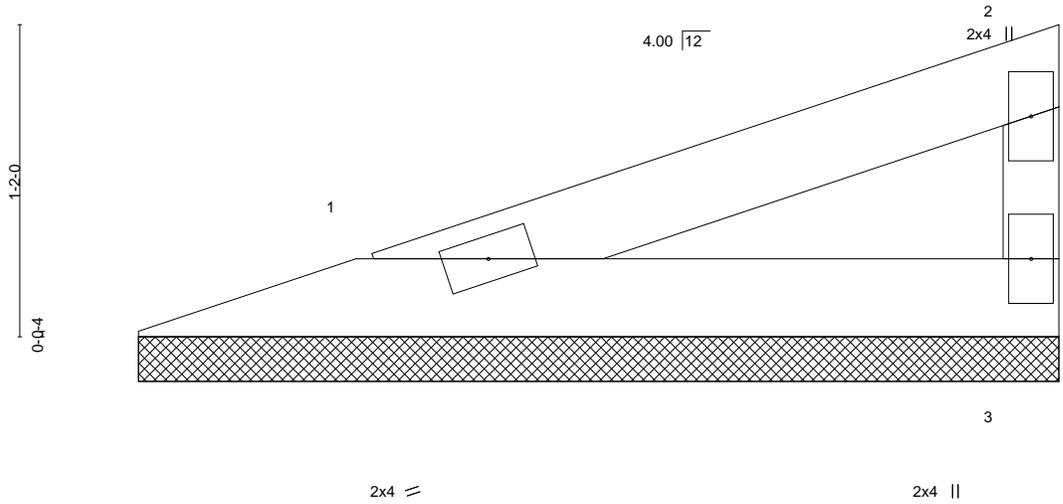


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 400370	Truss V1	Truss Type Valley	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252258
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Wheeler Lumber, Waverly, KS 66871  
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 07/19/2020  
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 3-6-0

Scale = 1:8.6



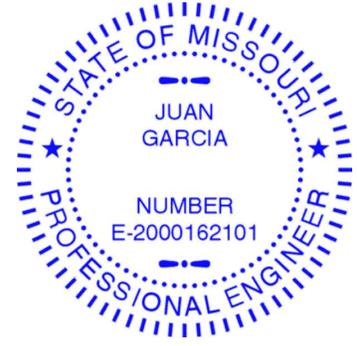
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 7 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 1=110/3-5-4, 3=110/3-5-4  
 Max Horz 1=37(LC 5)  
 Max Uplift 1=-18(LC 4), 3=-24(LC 8)

**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.



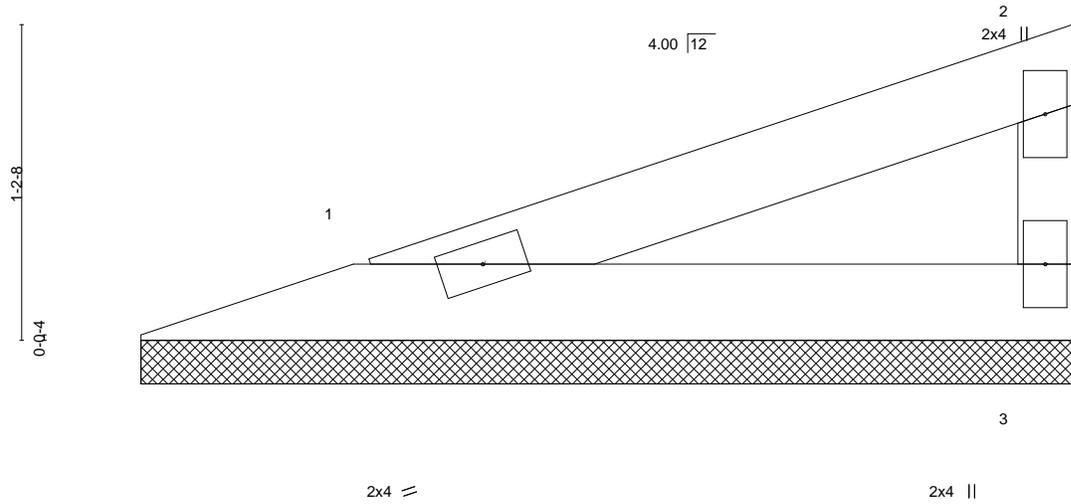
November 12, 2019

Job 400370	Truss V2	Truss Type Valley	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252259
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Wheeler Lumber, Waverly, KS 66871 8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:52 2019 Page 1  
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07/10/2020  
2-7-8  
3-7-8

Scale = 1:8.8



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 0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 8 lb	FT = 10%

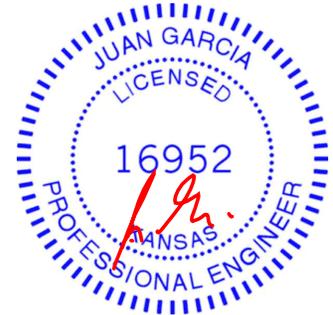
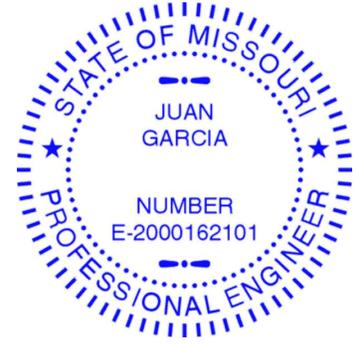
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 1=116/3-6-12, 3=116/3-6-12  
 Max Horz 1=39(LC 7)  
 Max Uplift 1=-19(LC 4), 3=-25(LC 8)

**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.



November 12, 2019

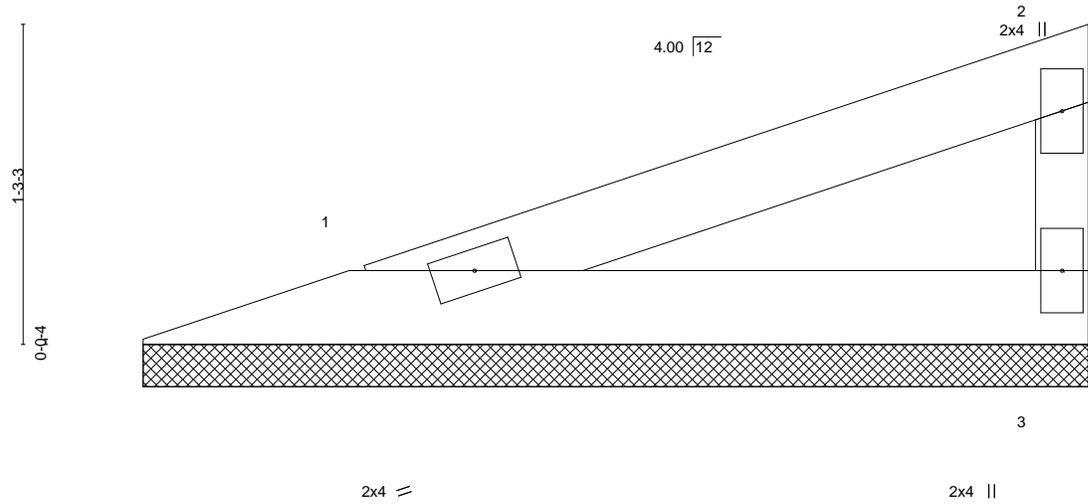
Job 400370	Truss V3	Truss Type Valley	<b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI</b>	Ply 1	Lot 24 HT 139252260
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Wheeler Lumber, Waverly, KS 66871

8.240 s Ju 14 2019 MiTek Industries, Inc. Tue Nov 12 11:07:53 2019 Page 1  
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07/10/2020

Scale = 1:9.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 8 lb	FT = 10%

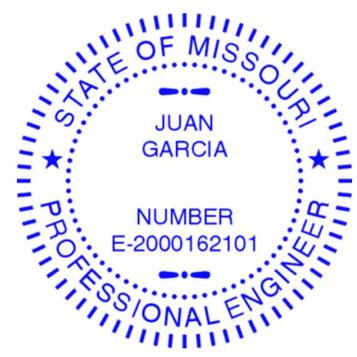
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

**REACTIONS.** (lb/size) 1=124/3-8-12, 3=124/3-8-12  
 Max Horz 1=41(LC 5)  
 Max Uplift 1=-20(LC 4), 3=-26(LC 8)

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

**NOTES-**

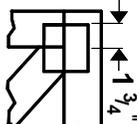
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom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



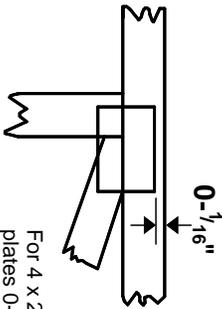
November 12, 2019

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

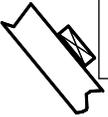
Plate location details available in **MITek 20/20** software or upon request.

## PLATE SIZE



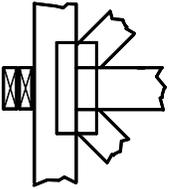
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



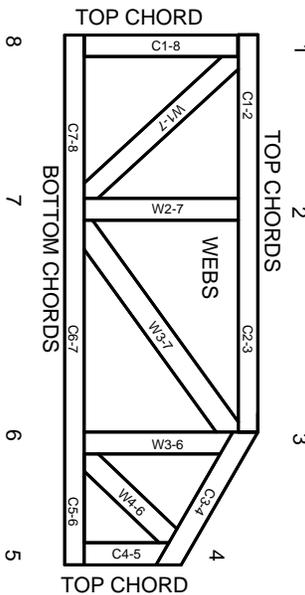
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.



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