RE: 210502
Lot 69 RR

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

Site Information:

Customer: Project Name: 210502
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE716LowRise Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 73 individual, dated Truss Design Drawings and 0 Additional Drawings.

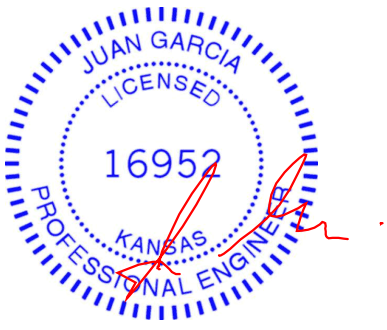
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I46126268	A1	7/13/2021	21	I46126288	D3	7/13/2021
2	I46126269	A2	7/13/2021	22	I46126289	D4	7/13/2021
3	I46126270	A3	7/13/2021	23	I46126290	E1	7/13/2021
4	I46126271	A4	7/13/2021	24	I46126291	E2	7/13/2021
5	I46126272	A5	7/13/2021	25	I46126292	E3	7/13/2021
6	I46126273	B1	7/13/2021	26	I46126293	E4	7/13/2021
7	I46126274	B2	7/13/2021	27	I46126294	G1	7/13/2021
8	I46126275	B3	7/13/2021	28	I46126295	G2	7/13/2021
9	I46126276	B4	7/13/2021	29	I46126296	G3	7/13/2021
10	I46126277	B5	7/13/2021	30	I46126297	G4	7/13/2021
11	I46126278	B6	7/13/2021	31	I46126298	G5	7/13/2021
12	I46126279	B7	7/13/2021	32	I46126299	H1	7/13/2021
13	I46126280	B8	7/13/2021	33	I46126300	H2	7/13/2021
14	I46126281	B9	7/13/2021	34	I46126301	H3	7/13/2021
15	I46126282	B10	7/13/2021	35	I46126302	H4	7/13/2021
16	I46126283	C1	7/13/2021	36	I46126303	J1	7/13/2021
17	I46126284	C2	7/13/2021	37	I46126304	J2	7/13/2021
18	I46126285	C3	7/13/2021	38	I46126305	J3	7/13/2021
19	I46126286	D1	7/13/2021	39	I46126306	J4	7/13/2021
20	I46126287	D2	7/13/2021	40	I46126307	J5	7/13/2021

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943



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

July 13, 2021

Garcia, Juan

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

RE: 210502 - Lot 69 RR

Site Information:

Project Customer: Project Name: 210502
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I46126308	J6	7/13/2021
42	I46126309	J7	7/13/2021
43	I46126310	J8	7/13/2021
44	I46126311	J9	7/13/2021
45	I46126312	J10	7/13/2021
46	I46126313	J11	7/13/2021
47	I46126314	J12	7/13/2021
48	I46126315	J13	7/13/2021
49	I46126316	J14	7/13/2021
50	I46126317	J15	7/13/2021
51	I46126318	J16	7/13/2021
52	I46126319	J17	7/13/2021
53	I46126320	J18	7/13/2021
54	I46126321	J19	7/13/2021
55	I46126322	J20	7/13/2021
56	I46126323	J21	7/13/2021
57	I46126324	LAY1	7/13/2021
58	I46126325	LAY2	7/13/2021
59	I46126326	LAY3	7/13/2021
60	I46126327	LAY4	7/13/2021
61	I46126328	LAY5	7/13/2021
62	I46126329	LAY6	7/13/2021
63	I46126330	V1	7/13/2021
64	I46126331	V2	7/13/2021
65	I46126332	V3	7/13/2021
66	I46126333	V4	7/13/2021
67	I46126334	V5	7/13/2021
68	I46126335	V6	7/13/2021
69	I46126336	V7	7/13/2021
70	I46126337	V8	7/13/2021
71	I46126338	V9	7/13/2021
72	I46126339	V10	7/13/2021
73	I46126340	V11	7/13/2021

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

RE: 210502
Lot 69 RR

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

Site Information:

Customer: Project Name: 210502
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE716LowRise Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 73 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
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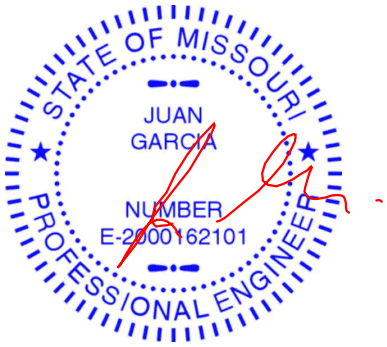
20	I46126287	D2	7/13/2021	40	I46126307	J5	7/13/2021

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193



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July 13, 2021

Garcia, Juan

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

RE: 210502 - Lot 69 RR

Site Information:

Project Customer: Project Name: 210502
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
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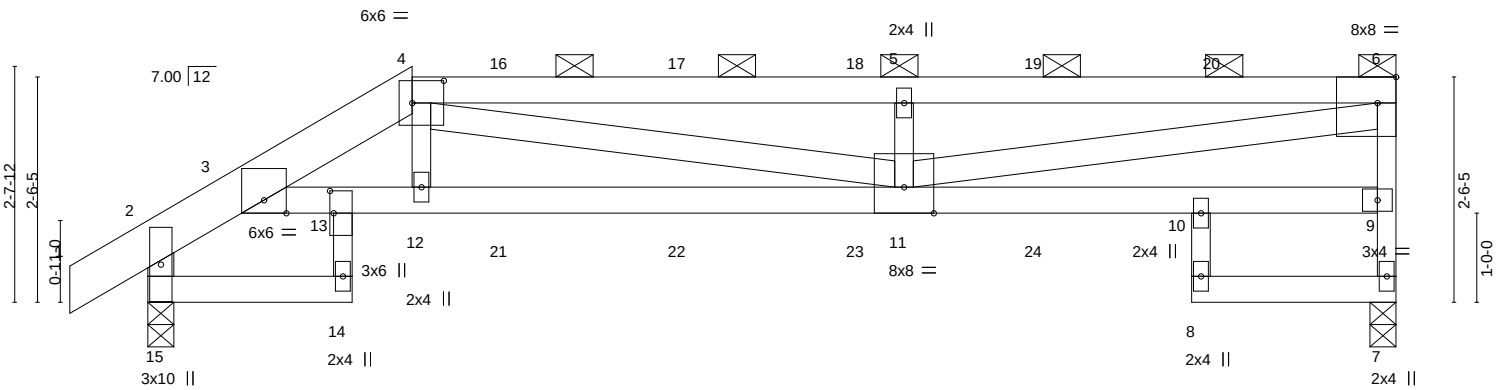
68	I46126335	V6	7/13/2021
69	I46126336	V7	7/13/2021
70	I46126337	V8	7/13/2021
71	I46126338	V9	7/13/2021
72	I46126339	V10	7/13/2021
73	I46126340	V11	7/13/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126258
210502	A1	Half Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:20 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-HFitld3OrZB?3DT??VIRoSAoDgsnC05rU2dNG6zGdWT

-0-10-8	2-3-8	2-11-9	8-5-13	11-8-8	14-0-0
0-10-8	2-3-8	0-8-1	5-6-3	3-2-11	2-3-8

Scale = 1:25.8



2-3-8	2-11-9	8-5-13	11-8-8	14-0-0
2-3-8	0-8-1	5-6-3	3-2-11	2-3-8

Plate Offsets (X,Y)-- [4:0-4-4,0-3-0], [6:0-2-8,Edge], [13:0-3-0,0-0-8]

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	0.66	Vert(LL)	-0.16	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.30	11-12	>551	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.16	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	11-12	>999	240	Weight: 60 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SP DSS *Except*
4-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
13-14,8-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-15,4-11,6-11: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-10 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 15=0-3-8
Max Horz 15=98(LC 5)
Max Uplift 7=-226(LC 5), 15=-249(LC 8)
Max Grav 7=1121(LC 1), 15=1204(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-604/130, 3-4=-2741/649, 4-5=-3439/788, 5-6=-3439/788, 7-9=-1084/240, 6-9=-995/258, 2-15=-1219/273
BOT CHORD 3-13=-604/2325, 12-13=-652/2469, 11-12=-660/2519, 9-10=-74/271
WEBS 4-11=-255/1000, 5-11=-673/273, 6-11=-782/3285, 4-12=-92/598

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) 7=226, 15=249.
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) 105 lb down and 72 lb up at 4-0-0, 105 lb down and 72 lb up at 6-0-0, 105 lb down and 72 lb up at 8-0-0, and 105 lb down and 72 lb up at 10-0-0, and 110 lb down and 56 lb up at 12-0-0 on top chord, and 209 lb down and 80 lb up at 2-11-9, 72 lb down and 21 lb up at 4-0-0, 72 lb down and 21 lb up at 6-0-0, 72 lb down and 21 lb up at 8-0-0, and 72 lb down and 21 lb up at 10-0-0, and 68 lb down at 11-9-12 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

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126258
210502	A1	Half Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

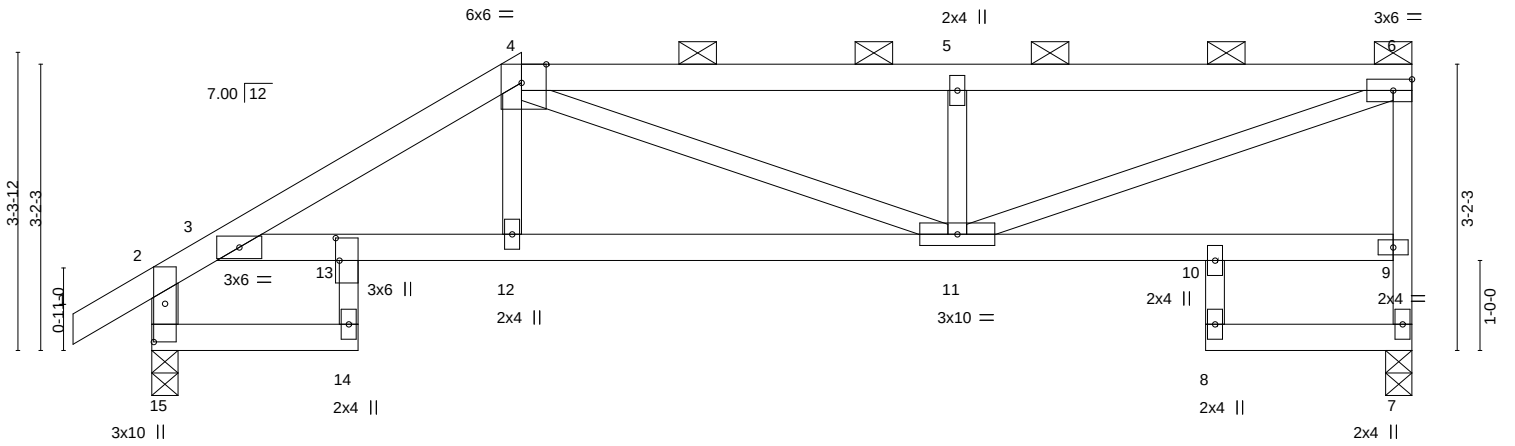
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 4-6=-70, 14-15=-20, 10-13=-20, 7-8=-20
   Concentrated Loads (lb)
   Vert: 10=-51(B) 12=-209(B) 16=-89(B) 17=-89(B) 18=-89(B) 19=-89(B) 20=-110(B) 21=-72(B) 22=-72(B) 23=-72(B) 24=-72(B)

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126259
210502	A2	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:20 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-HFitld3OrZB?3DT??VIRoSAus2cgmarU2dNG6zCdWT

-0-10-8	2-3-8	4-1-5	8-11-6	11-8-8	14-0-0
0-10-8	2-3-8	1-9-13	4-10-2	2-9-2	2-3-8

Scale = 1:25.6



2-3-8	4-1-5	8-11-6	11-8-8	14-0-0
2-3-8	1-9-13	4-10-2	2-9-2	2-3-8

Plate Offsets (X,Y)-- [4:0-3-5,Edge], [13:0-3-0,0-0-8], [15:0-5-2,0-1-8]

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	0.31	Vert(LL)	-0.05	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.09	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	12-13	>999	240	Weight: 53 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
13-14,8-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-15: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-8 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 7-8.

REACTIONS. (size) 7=0-3-8, 15=0-3-8
Max Horz 15=123(LC 5)
Max Uplift 7=-117(LC 5), 15=-72(LC 8)
Max Grav 7=616(LC 1), 15=693(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-415/38, 3-4=-1134/183, 4-5=-1119/206, 5-6=-1117/204, 7-9=-590/131, 6-9=-559/139, 2-15=-698/96
BOT CHORD 3-13=-162/827, 12-13=-225/959, 11-12=-225/949
WEBS 4-11=-146/268, 5-11=-399/168, 6-11=-222/1140

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) 15 except (jt=lb) 7=117.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	A3	Half Hip	1	1	I46126270 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:21 2021 Page 1
ID:Hr0UIoylgMOrZQ4rpild7XzssyG-lRGFyz40ctKshM1BZCpgKgPXc6GVkTJldvoYzGdWS

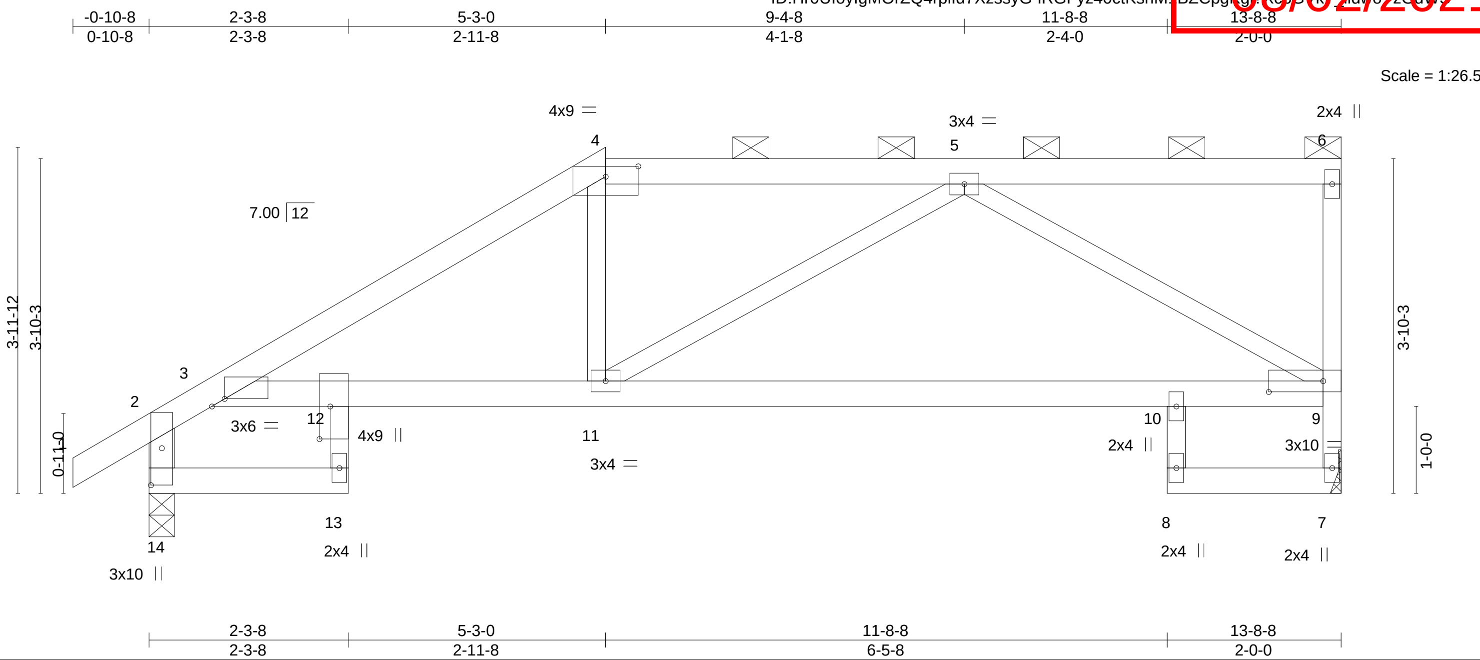


Plate Offsets (X,Y)-- [3:0-1-12,Edge], [4:0-4-8,0-1-7], [9:0-7-8,0-1-8], [12:0-4-8,0-1-8], [14:0-5-2,0-1-8]

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	0.57	Vert(LL)	-0.13	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.25	10-11	>643	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	11-12	>999	240	Weight: 51 lb	FT = 10%

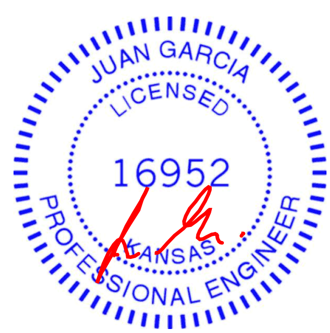
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
12-13,8-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 7-8.

REACTIONS. (size) 7=Mechanical, 14=0-3-8
Max Horz 14=121(LC 7)
Max Uplift 7=-37(LC 5), 14=-8(LC 8)
Max Grav 7=603(LC 1), 14=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-430/8, 3-4=-996/17, 4-5=-812/33, 7-9=-577/52, 2-14=-687/28
BOT CHORD 3-12=-22/661, 11-12=-74/816, 10-11=-111/698, 9-10=-102/705
WEBS 4-11=0/252, 5-9=-770/115

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) 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) 7, 14.
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.



May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126271
210502	A4	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:22 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-EdqdAJ5eNBSjJWcOTwKvttFca0RtEGO8xvMNUK_zGuWR

-0-10-8 | 2-3-8 | 6-4-11 | 11-8-8 | 13-8-8
0-10-8 | 2-3-8 | 4-1-3 | 5-3-13 | 2-0-0

Scale = 1:29.7

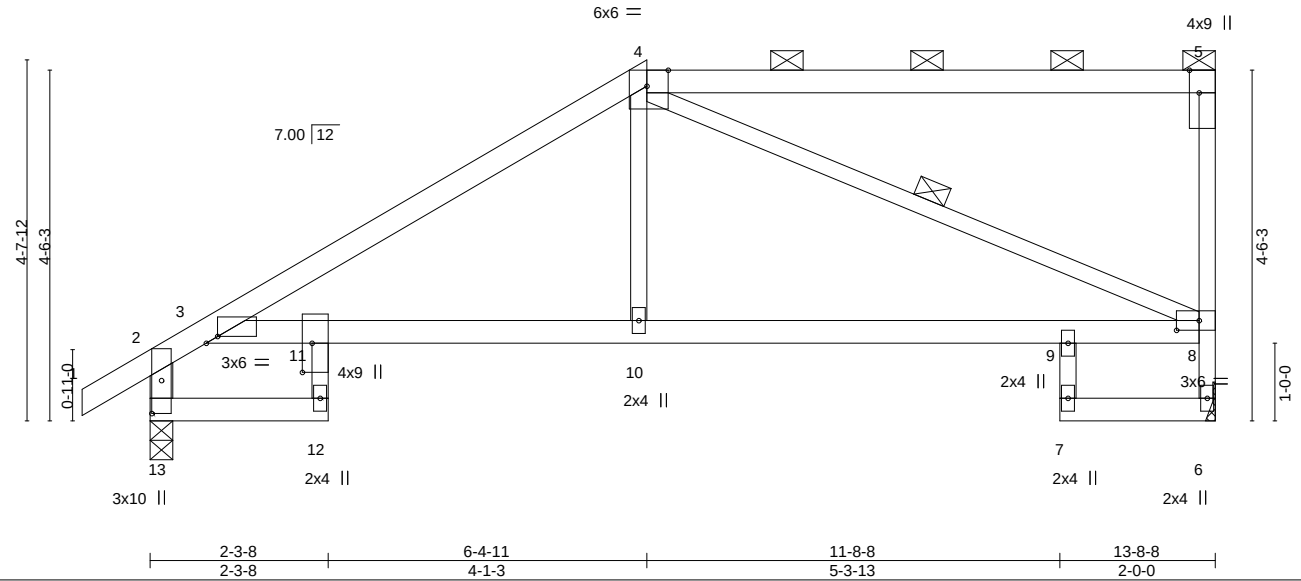


Plate Offsets (X,Y)-- [3:0-1-12,Edge], [4:0-3-5,Edge], [5:0-3-8,Edge], [8:0-3-8,0-1-8], [11:0-4-8,0-1-8], [13:0-5-2,0-1-8]

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	0.80	Vert(LL)	-0.10	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.18	10-11	>908	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.12	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	10-11	>999	240	Weight: 51 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
11-12,7-9: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-4 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, Except: 6-0-0 oc bracing: 6-7.
WEBS 1 Row at midpt 4-8

REACTIONS. (size) 6=Mechanical, 13=0-3-8
Max Horz 13=143(LC 7)
Max Uplift 6=-39(LC 5), 13=-12(LC 8)
Max Grav 6=603(LC 1), 13=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-440/18, 3-4=-891/15, 6-8=-578/52, 2-13=-686/36
BOT CHORD 3-11=-22/550, 10-11=-85/717, 9-10=-88/711, 8-9=-91/720
WEBS 4-10=0/341, 4-8=-725/58

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) 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) 6, 13.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126232
210502	A5	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:23 2021 Page 1
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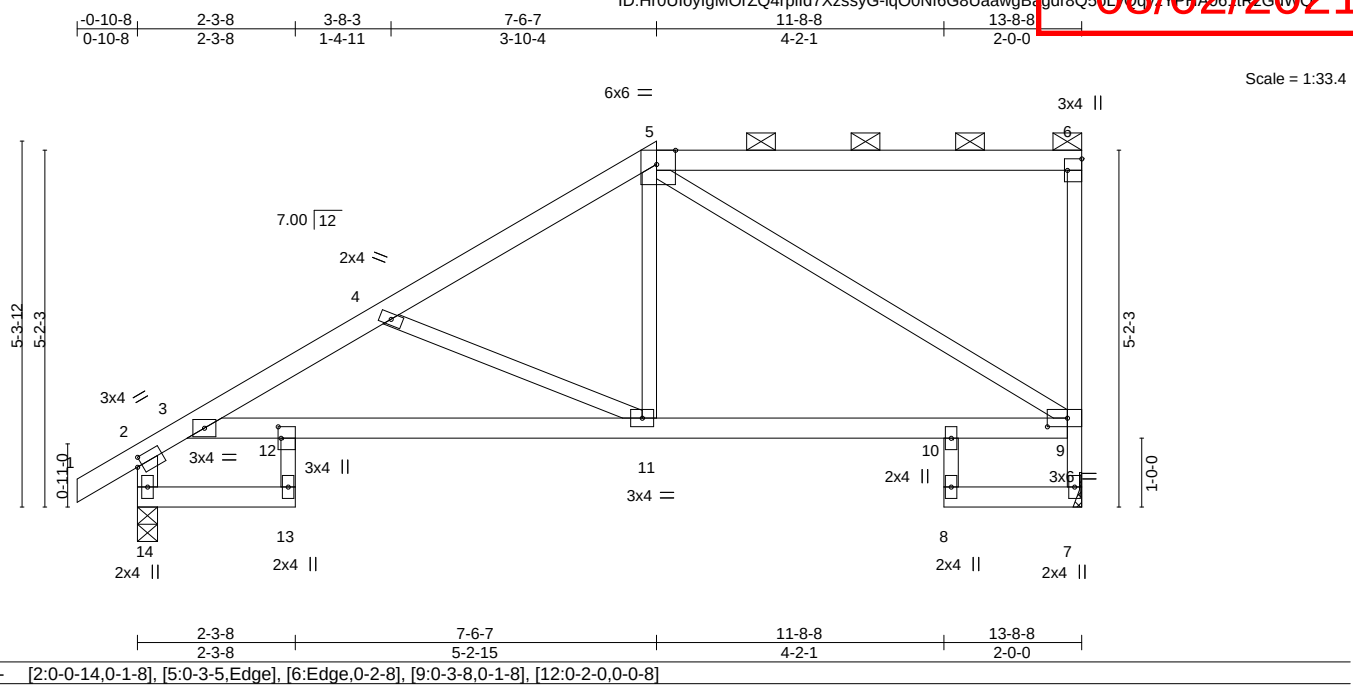

Plate Offsets (X,Y)-- [2:0-0-14,0-1-8], [5:0-3-5,Edge], [6:Edge,0-2-8], [9:0-3-8,0-1-8], [12:0-2-0,0-0-8]

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	0.57	Vert(LL)	-0.07	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.16	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	11-12	>999	240	Weight: 55 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
12-13,8-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 7-8.

REACTIONS. (size) 7=Mechanical, 14=0-3-8
Max Horz 14=165(LC 7)
Max Uplift 7=-41(LC 5), 14=-15(LC 8)
Max Grav 7=603(LC 1), 14=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-363/0, 3-4=-1035/60, 4-5=-724/19, 7-9=-581/53, 2-14=-674/39
BOT CHORD 3-12=-83/809, 11-12=-143/894, 10-11=-79/562, 9-10=-88/564
WEBS 5-11=0/378, 5-9=-641/46, 4-11=-380/108

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) 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) 7, 14.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126273
210502	B1	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:23 2021 Page 1
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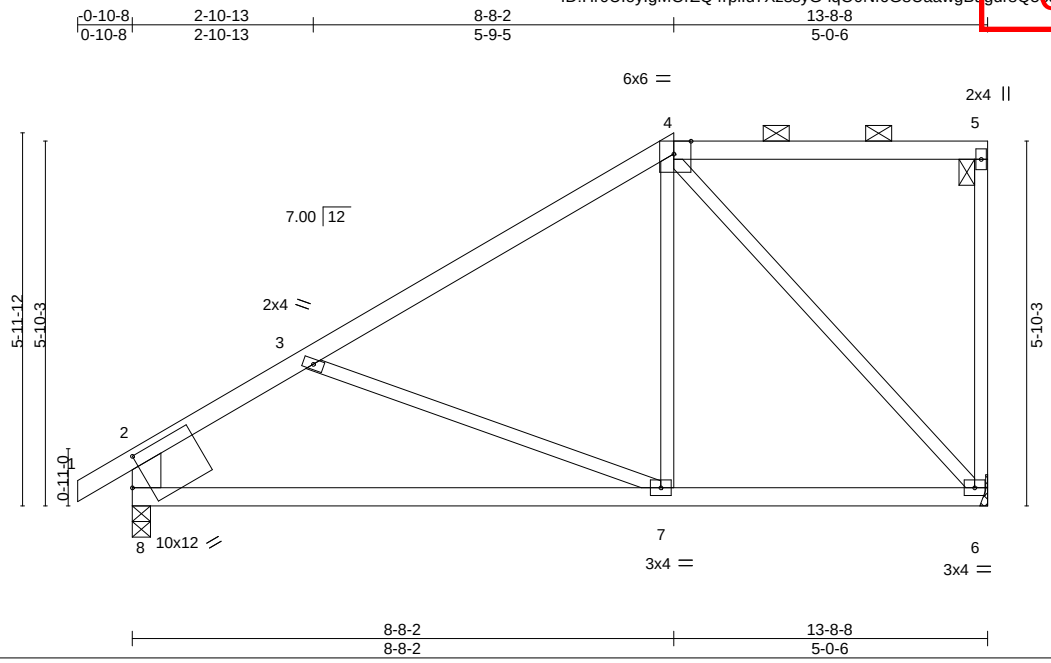

Plate Offsets (X,Y)-- [4:0-3-5,Edge], [8:0-3-1,0-5-4]

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	0.67	Vert(LL)	-0.12	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.23	7-8	>689	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	6-7	>999	240	Weight: 55 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-8 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. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=187(LC 7)
Max Uplift 6=-44(LC 5), 8=-17(LC 8)
Max Grav 6=599(LC 1), 8=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-751/69, 3-4=-529/23, 2-8=-593/63
BOT CHORD 7-8=-133/587, 6-7=-57/368
WEBS 4-7=0/335, 4-6=-548/33

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) 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) 6, 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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126274
210502	B2	Half Hip	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:24 2021 Page 1
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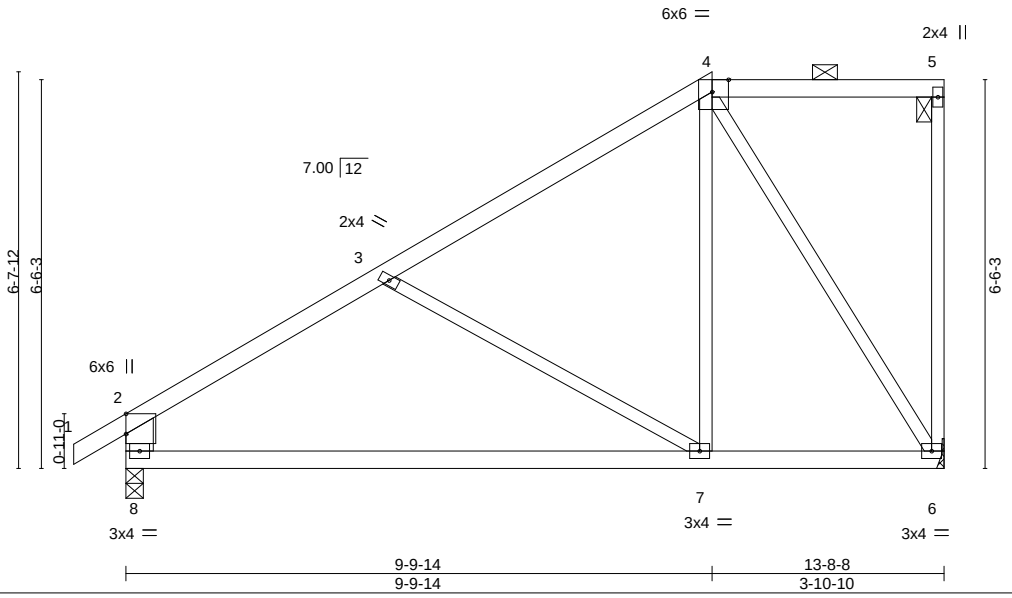

Plate Offsets (X,Y)-- [2:0-4-1,Edge], [4:0-3-5,Edge]

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	0.52	Vert(LL)	-0.20	7-8	>801	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.40	7-8	>406	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	6-7	>999	240	Weight: 56 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-8 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. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=208(LC 7)
Max Uplift 6=-47(LC 5), 8=-17(LC 8)
Max Grav 6=599(LC 1), 8=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-722/63, 3-4=-436/30, 2-8=-583/70
BOT CHORD 7-8=-124/561, 6-7=-53/290
WEBS 3-7=-304/131, 4-7=0/392, 4-6=-559/26

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) 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) 6, 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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126275
210502	B3	Half Hip	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:25 2021 Page 1
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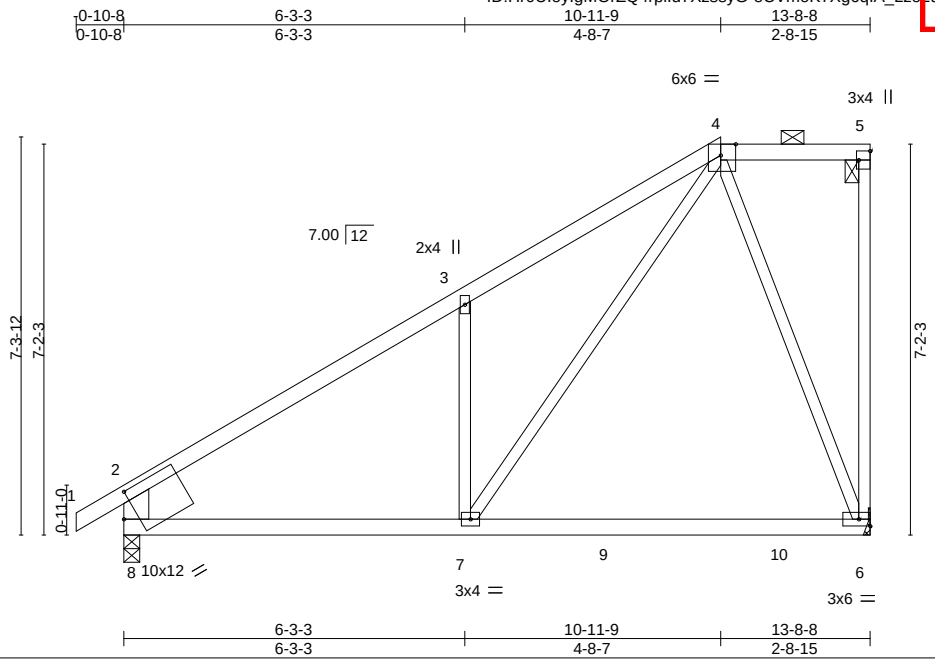

Plate Offsets (X,Y)-- [4:0-3-5,Edge], [5:Edge,0-2-8], [8:0-3-1,0-5-4]

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	0.58	Vert(LL)	-0.17	6-7	>934	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.28	6-7	>573	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.04	6-7	>999	240	Weight: 57 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-8 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. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=230(LC 7)
Max Uplift 6=-50(LC 5), 8=-16(LC 8)
Max Grav 6=689(LC 13), 8=734(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-774/20, 3-4=-771/129, 2-8=-640/53
BOT CHORD 7-8=-85/649
WEBS 3-7=-355/168, 4-7=-107/769, 4-6=-550/85

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126276
210502	B4	Half Hip	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:27 2021 Page 1
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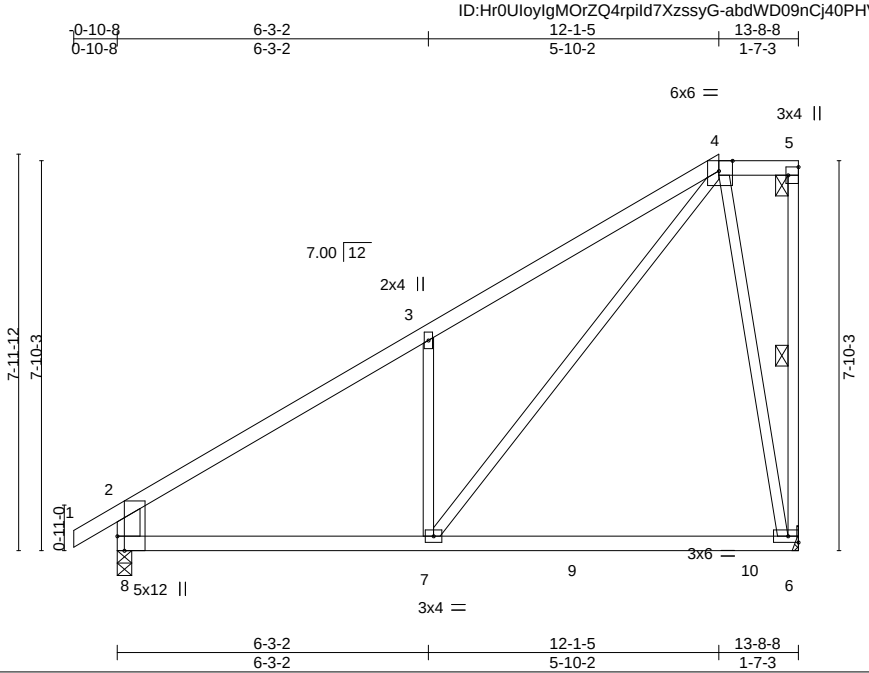

Plate Offsets (X,Y)-- [4:0-3-5,Edge], [5:Edge,0-2-8], [8:0-3-8,Edge]

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)	-0.17	6-7	>918	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.54	Vert(CT)	-0.29	6-7	>559	240		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.92	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.05	6-7	>999	240	Weight: 59 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-6 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.
WEBS 1 Row at midpt 5-6

REACTIONS. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=311(LC 5)
Max Uplift 6=-131(LC 8), 8=-93(LC 8)
Max Grav 6=725(LC 15), 8=734(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-795/83, 3-4=-796/260, 2-8=-638/132
BOT CHORD 7-8=-139/688
WEBS 3-7=-409/286, 4-7=-266/868, 4-6=-638/166

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) 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) 8 except (jt=lb) 6=131.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126277
210502	B5	Half Hip	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:27 2021 Page 1
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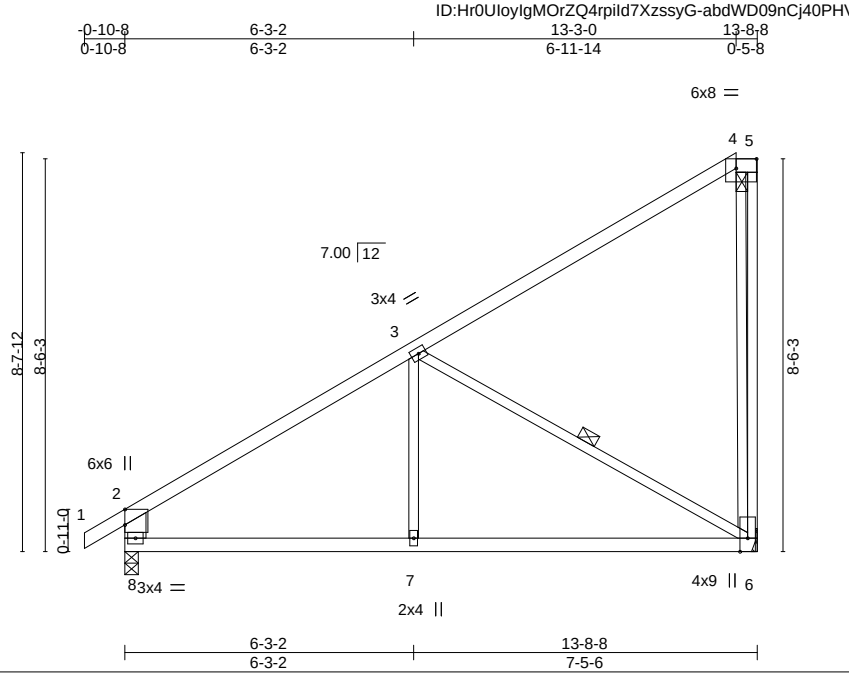

Plate Offsets (X,Y)-- [2:0-4-1,Edge], [4:0-5-5,Edge]

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	0.68	Vert(LL)	-0.10	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.21	6-7	>754	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.05	6-7	>999	240	Weight: 59 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 2x6 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 (10-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-6

REACTIONS. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=273(LC 7)
Max Uplift 6=-58(LC 8), 8=-8(LC 8)
Max Grav 6=608(LC 13), 8=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-733/14, 5-6=-148/327, 2-8=-612/45
BOT CHORD 7-8=-96/573, 6-7=-96/573
WEBS 3-7=0/299, 3-6=-608/119, 4-6=-563/215

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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) 6, 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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	B6	Monopitch	2	1	I46126278 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:29 2021 Page 1
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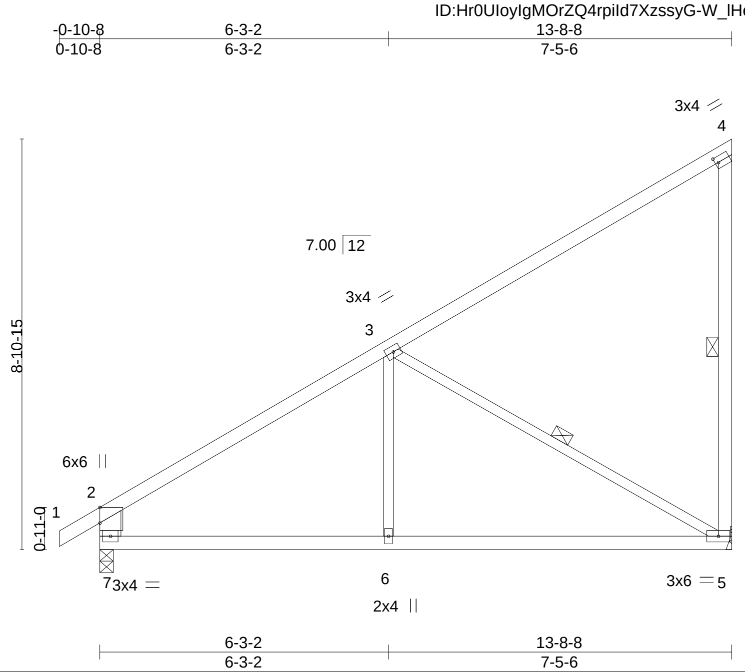

Plate Offsets (X,Y)-- [2:0-4-1,Edge], [4:0-0-13,0-1-8]

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	0.66	Vert(LL)	-0.09	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.19	5-6	>826	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.05	5-6	>999	240	Weight: 55 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-5: 2x4 SPF No.2, 2-7: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-5, 3-5

REACTIONS. (size) 5=Mechanical, 7=0-3-8
Max Horz 7=283(LC 7)
Max Uplift 5=-64(LC 8), 7=-6(LC 8)
Max Grav 5=616(LC 13), 7=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-733/11, 2-7=-607/43
BOT CHORD 6-7=-100/577, 5-6=-100/577
WEBS 3-6=0/291, 3-5=-625/123

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, 7.
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.

May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126279
210502	B7	Monopitch	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:30 2021 Page 1
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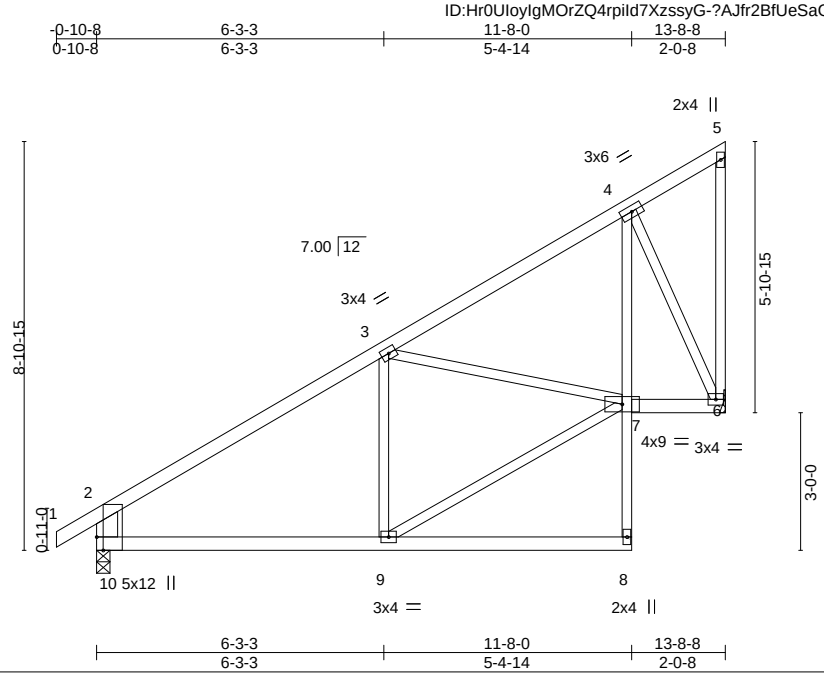

Plate Offsets (X,Y)-- [10:0-3-8,Edge]

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)	-0.03	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.01	8-9	>999	240	Weight: 62 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-8: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10: 2x6 SPF No.2

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

REACTIONS. (size) 6=Mechanical, 10=0-3-8
Max Horz 10=246(LC 5)
Max Uplift 6=-69(LC 8), 10=-1(LC 8)
Max Grav 6=617(LC 13), 10=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-708/1, 3-4=-412/34, 2-10=-611/42
BOT CHORD 9-10=-78/534, 4-7=-35/431, 6-7=-55/286
WEBS 7-9=-93/610, 4-6=-639/104

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) 6, 10.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126280
210502	B8	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:31 2021 Page 1
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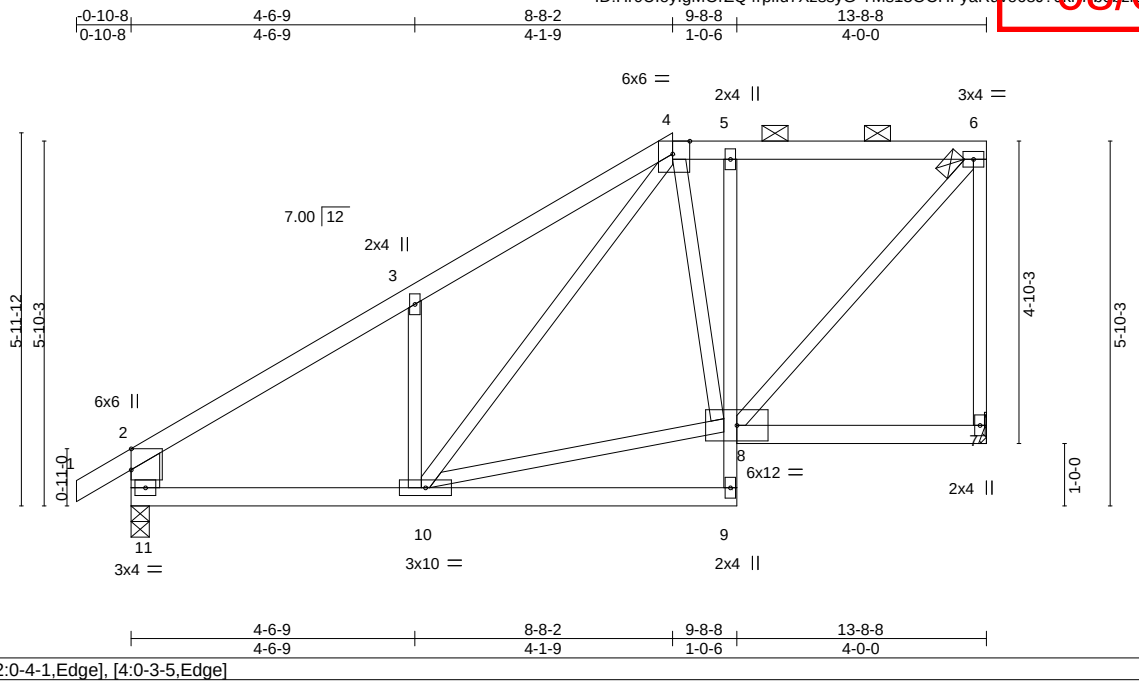

Plate Offsets (X,Y)-- [2:0-4-1,Edge], [4:0-3-5,Edge]

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	0.53	Vert(LL)	-0.04	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.09	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 63 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-9: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 11=0-3-8
Max Horz 11=175(LC 5)
Max Uplift 7=-44(LC 5), 11=-17(LC 8)
Max Grav 7=599(LC 1), 11=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-730/22, 3-4=-671/102, 4-5=-384/48, 5-6=-388/47, 6-7=-556/62, 2-11=-604/44
BOT CHORD 10-11=-80/539, 5-8=-250/73
WEBS 8-10=-63/366, 6-8=-51/578, 4-10=-80/265

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) 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) 7, 11.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126281
210502	B9	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:32 2021 Page 1
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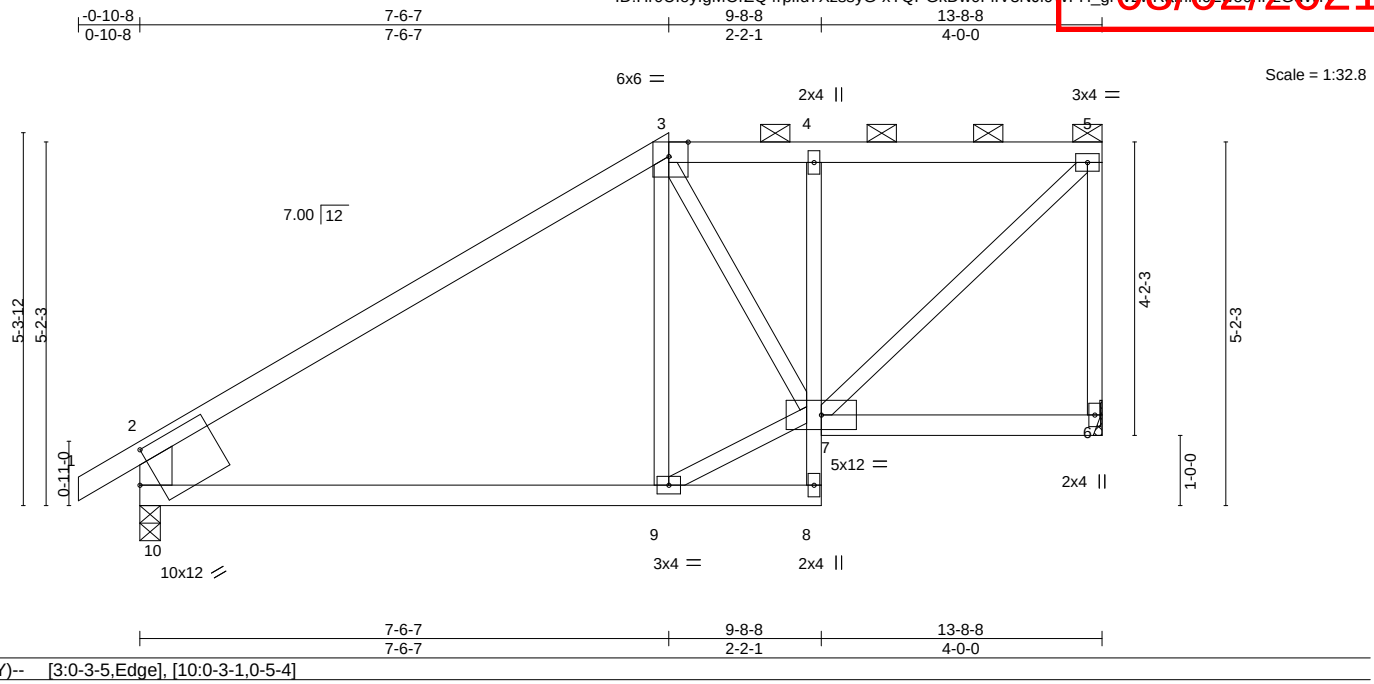

Plate Offsets (X,Y)-- [3:0-3-5,Edge], [10:0-3-1,0-5-4]

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	0.65	Vert(LL)	-0.06	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.13	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9	>999	240	Weight: 55 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-8: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-1 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. (size) 6=Mechanical, 10=0-3-8
Max Horz 10=153(LC 5)
Max Uplift 6=-41(LC 5), 10=-15(LC 8)
Max Grav 6=599(LC 1), 10=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-659/21, 3-4=-445/30, 4-5=-450/31, 5-6=-557/60, 2-10=-620/69
BOT CHORD 9-10=-57/448, 4-7=-264/81
WEBS 7-9=-46/495, 5-7=-47/615

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) 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) 6, 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	B10	Half Hip	1	1	I46126282 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:24 2021 Page 1
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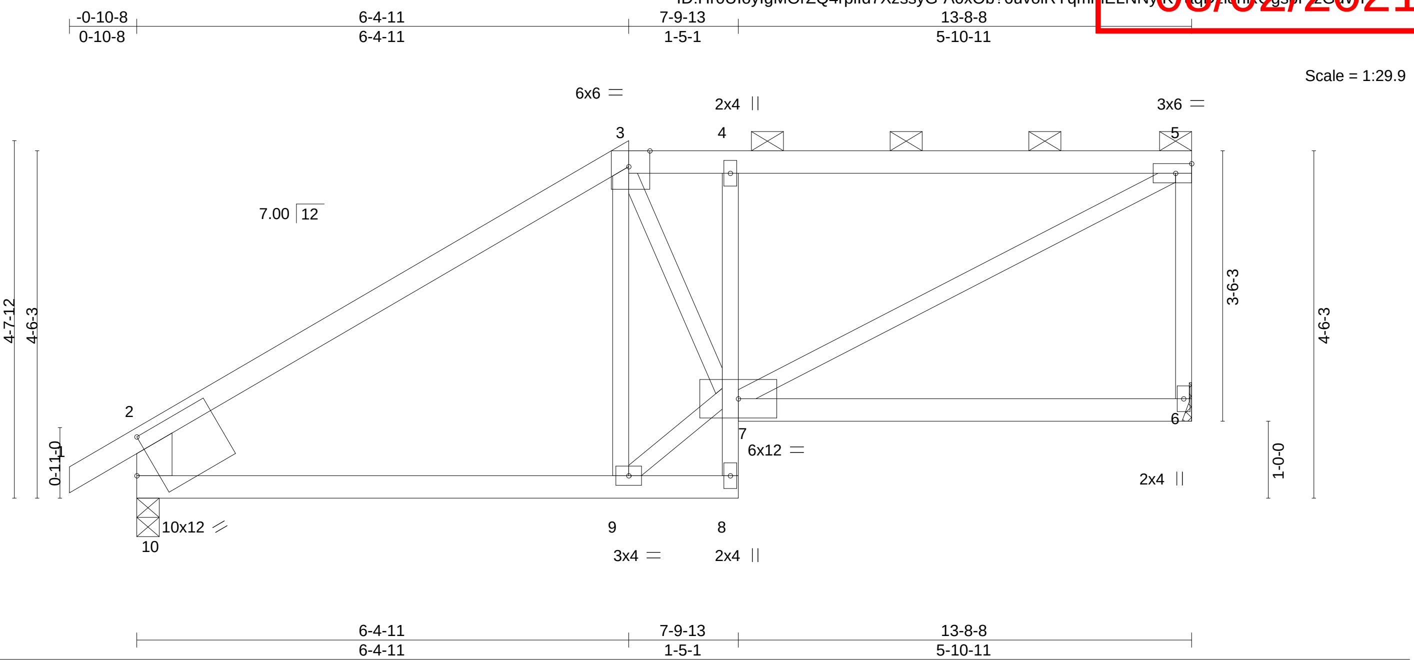

Plate Offsets (X,Y)-- [3:0-3-5,Edge], [10:0-3-1,0-5-4]

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	0.58	Vert(LL)	-0.05	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.11	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	4	>999	240	Weight: 53 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-8: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10: 2x6 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. (size) 6=Mechanical, 10=0-3-8
Max Horz 10=131(LC 5)
Max Uplift 6=-38(LC 5), 10=-12(LC 8)
Max Grav 6=599(LC 1), 10=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-693/16, 3-4=-670/36, 4-5=-681/35, 5-6=-539/70, 2-10=-616/58
BOT CHORD 9-10=-57/489, 4-7=-450/123
WEBS 7-9=-37/598, 3-7=-58/501, 5-7=-62/747

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) 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) 6, 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126283
210502	C1	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:32 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-Pl_oU4DYnZq97CyVGx1UqCC1FSHDJEBITaYZDszGuWG

-0-10-8 2-3-8 6-6-0 7-9-0 13-8-8
0-10-8 2-3-8 4-2-8 1-3-0 5-11-8

Scale = 1:29.6

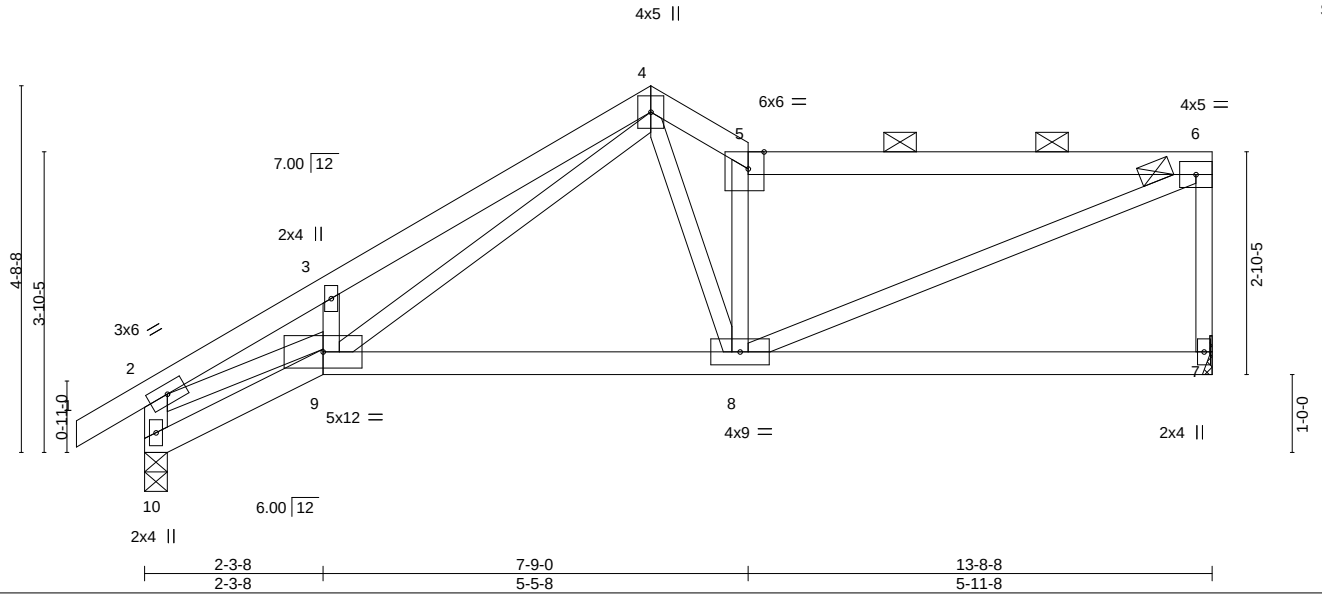

Plate Offsets (X,Y)-- [5:0-2-7,Edge]

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	0.58	Vert(LL)	-0.05	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.11	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 53 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-8 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 10=0-3-8
Max Horz 10=127(LC 5)
Max Uplift 7=-24(LC 9), 10=-12(LC 8)
Max Grav 7=603(LC 1), 10=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1344/62, 3-4=-1370/147, 4-5=-977/35, 5-6=-833/13, 6-7=-549/52, 2-10=-667/45
BOT CHORD 8-9=-31/613
WEBS 4-9=-137/713, 4-8=-1/594, 5-8=-765/90, 6-8=-18/862, 2-9=-30/1068

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) 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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	C2	Roof Special	5	1	I46126284 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,
8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:34 2021 Page 1
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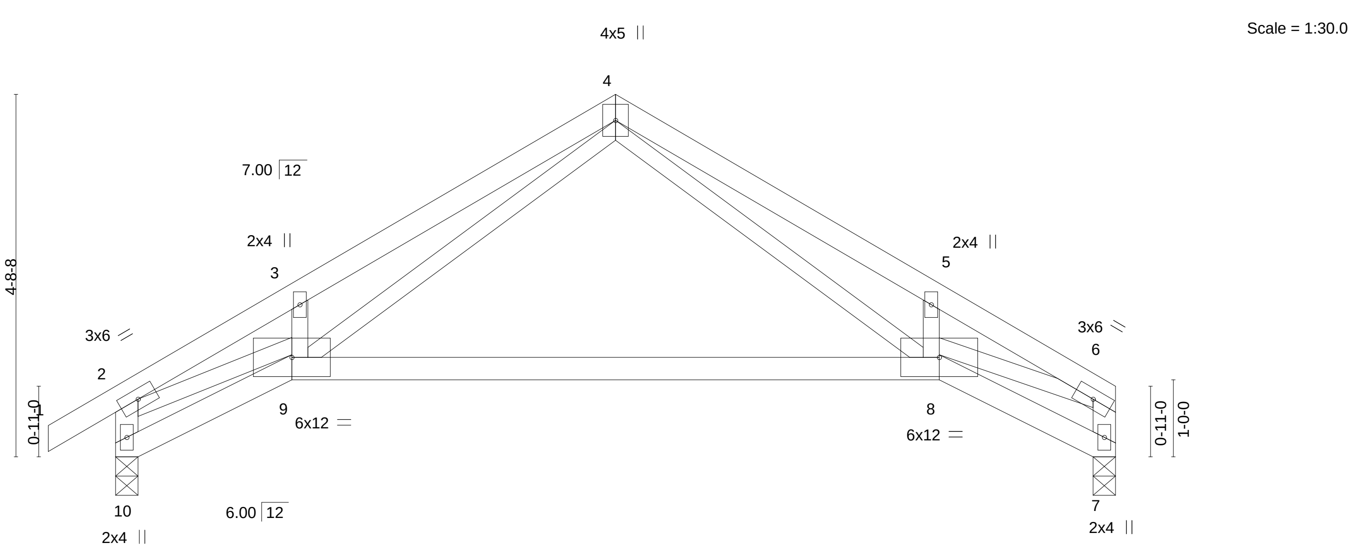

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.20	8-9	>769	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.42	8-9	>361	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	8-9	>999	240	Weight: 49 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,6-7: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=135(LC 5)
Max Uplift 10=-90(LC 8), 7=-66(LC 9)
Max Grav 10=646(LC 1), 7=569(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1326/166, 3-4=-1344/288, 4-5=-1377/245, 5-6=-1349/120, 2-10=-662/111, 6-7=-590/65
BOT CHORD 8-9=-34/517
WEBS 4-8=-162/810, 4-9=-194/857, 2-9=-102/1067, 6-8=-71/1080

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

May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126285
210502	C3	Roof Special Structural Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:35 2021 Page 1
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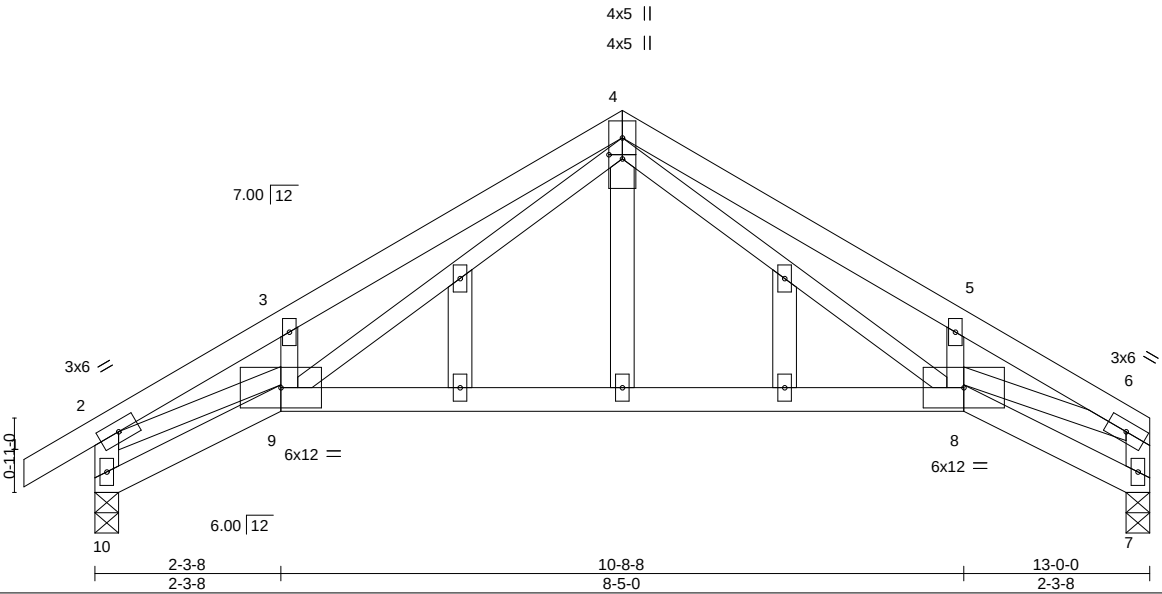


Plate Offsets (X,Y)-- [4:0-0-10,0-2-0]

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	0.28	Vert(LL)	-0.20	8-9	>769	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC	0.60	Vert(CT)	-0.42	8-9	>361	240		
BCLL 0.0	*	Rep Stress Incr YES	WB	0.37	Horz(CT)	0.08	7	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	8-9	>999	240	Weight: 55 lb	FT = 10%

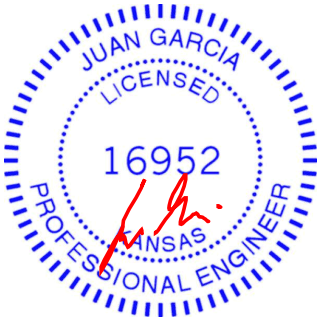
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,6-7: 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=135(LC 5)
Max Uplift 10=-90(LC 8), 7=-66(LC 9)
Max Grav 10=646(LC 1), 7=569(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1326/166, 3-4=-1344/288, 4-5=-1377/245, 5-6=-1349/120, 2-10=-662/111, 6-7=-590/65
BOT CHORD 8-9=-34/517
WEBS 4-8=-162/810, 4-9=-194/857, 2-9=-102/1067, 6-8=-71/1080

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



May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126286
210502	D1	HIP GIRDER	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:37 2021 Page 1
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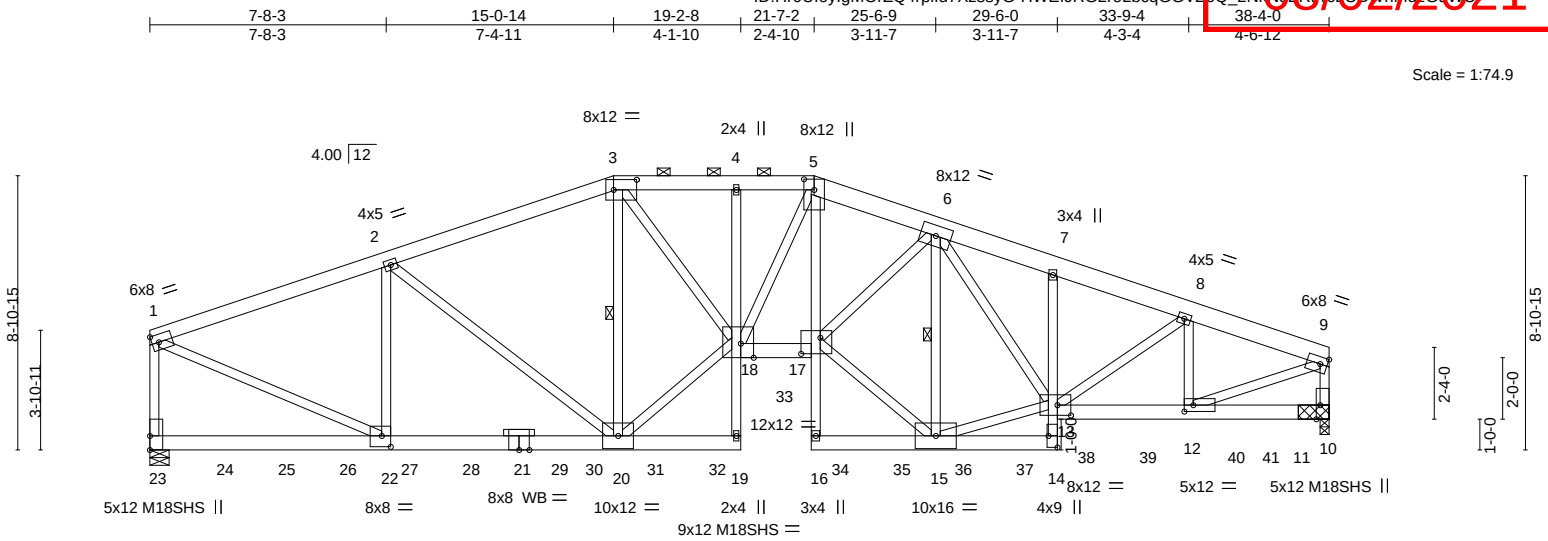


7-8-3	15-0-14	19-2-8	21-6-0	25-6-9	29-6-0	33-9-4	38-4-0	
7-8-3	7-4-11	4-1-10	2-3-8	4-0-9	3-11-7	4-3-4	4-6-12	

Plate Offsets (X,Y)-- [3:0-9-0,0-4-0], [5:0-4-3,0-4-0], [9:Edge,0-2-12], [10:0-5-8,Edge], [12:0-3-8,0-2-8], [13:0-5-4,0-4-0], [14:Edge,0-3-8], [17:0-7-8,0-6-4], [18:0-5-0,Edge], [22:0-3-8,0-4-4]

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	0.57	Vert(LL)	-0.34	16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.60	16	>759	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.33	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	16	>999	240	Weight: 634 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 5-9: 2x8 SP DSS
BOT CHORD	2x6 SP 2400F 2.0E *Except* 4-19,5-16,7-14: 2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* 18-20,15-17,1-22,9-12: 2x4 SPF 2100F 1.8E
OTHERS	2x3 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-2-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-3 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-20, 6-15

REACTIONS. (size) 23=0-7-8, 10=(0-3-8 + bearing block) (req. 0-5-7)
Max Horz 23=-69(LC 17)
Max Uplift 23=-739(LC 4), 10=-677(LC 5)
Max Grav 23=7471(LC 1), 10=6969(LC 1)

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

TOP CHORD	1-2=-8086/867, 2-3=-8388/978, 3-4=-12474/1421, 4-5=-12511/1424, 5-6=-14038/1581, 6-7=-10622/1187, 7-8=-10669/1153, 8-9=-9122/919, 1-23=-6211/682, 9-10=-6596/676
BOT CHORD	20-22=-767/7599, 18-19=-21/385, 17-18=-1384/13351, 16-17=-62/536, 5-17=-599/5511, 14-15=-101/963, 13-14=-19/471, 7-13=-324/78, 12-13=-866/8573
WEBS	2-22=-884/201, 2-20=-86/550, 3-20=-4238/440, 18-20=-994/9762, 3-18=-832/7915, 5-18=-1709/199, 15-17=-1186/11237, 6-17=-628/6302, 6-15=-7887/827, 13-15=-845/7984, 6-13=-232/2539, 8-13=-232/1899, 8-12=-1809/279, 1-22=-866/8225, 9-12=-905/9044

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 2x6 SP 2400F 2.0E bearing block 12" long at jt. 10 attached to each face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners per block. Bearing is assumed to be SPF No.2.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 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
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

May 14,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126286
210502	D1	HIP GIRDER	1	2	Job Reference (optional)	

NOTES-

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=739, 10=677.
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.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 591 lb down and 48 lb up at 0-1-12, 583 lb down and 59 lb up at 2-4-0, 583 lb down and 61 lb up at 4-4-0, 579 lb down and 64 lb up at 6-4-0, 579 lb down and 67 lb up at 8-4-0, 610 lb down and 70 lb up at 10-4-0, 623 lb down and 151 lb up at 12-4-0, 579 lb down and 78 lb up at 14-4-0, 577 lb down and 84 lb up at 16-4-0, 577 lb down and 84 lb up at 18-4-0, 579 lb down and 89 lb up at 20-4-0, 579 lb down and 78 lb up at 22-4-0, 623 lb down and 151 lb up at 24-4-0, 617 lb down and 70 lb up at 26-4-0, 579 lb down and 67 lb up at 28-4-0, 579 lb down and 64 lb up at 30-4-0, 579 lb down and 61 lb up at 32-4-0, and 579 lb down and 58 lb up at 34-4-0, and 583 lb down and 44 lb up at 36-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

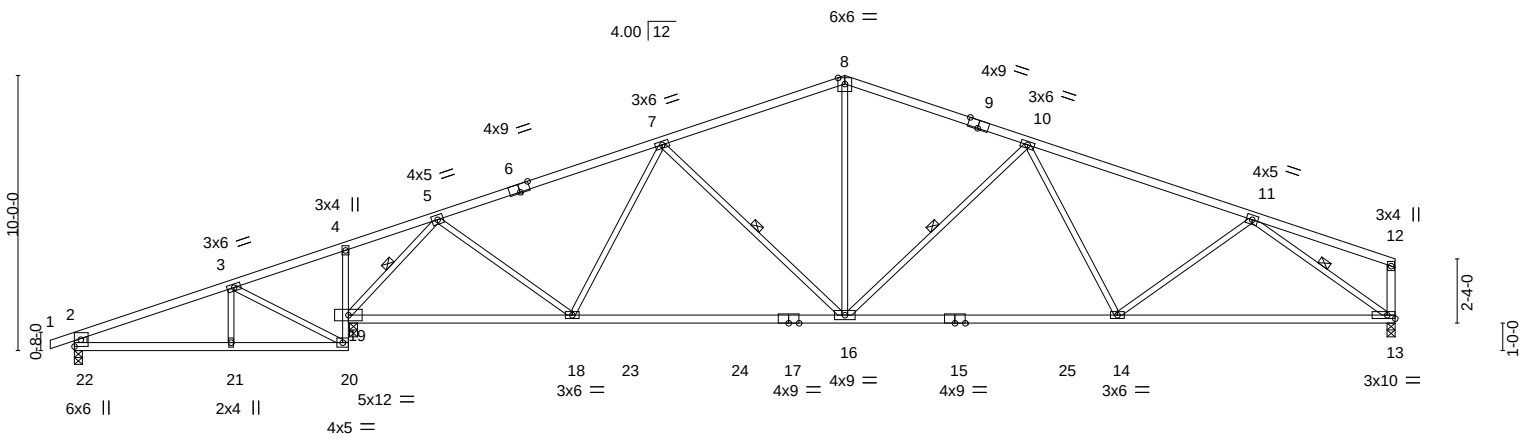
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 5-9=-70, 19-23=-20, 17-18=-20, 14-16=-20, 10-13=-20
   Concentrated Loads (lb)
   Vert: 23=-591(F) 24=-583(F) 25=-583(F) 26=-579(F) 27=-579(F) 28=-579(F) 29=-579(F) 30=-579(F) 31=-577(F) 32=-577(F) 33=-579(F) 34=-579(F) 35=-579(F) 36=-579(F) 37=-579(F) 38=-579(F) 39=-579(F) 40=-579(F) 41=-583(F)

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126287
210502	D2	Roof Special	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:38 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-miohXnHgc5TSD_T3HdfXFvonfu2IkVcFku2CdWB

-0-10-8	5-8-6	9-11-8	13-2-6	21-4-5	28-0-0	34-7-11	42-9-10	48-0-0
0-10-8	5-8-6	4-3-3	3-2-14	8-1-15	6-7-11	6-7-11	8-1-15	5-2-6

Scale = 1:83.7



5-1-0	9-11-8	10-0-0	18-1-2	28-0-0	37-10-14	48-0-0
5-1-0	4-10-8	0-0-8	8-1-2	9-10-14	9-10-14	10-1-2

Plate Offsets (X,Y)-- [6:0-4-8,Edge], [9:0-4-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.29	16-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.50	16-18	>920	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.07	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	14-16	>999	240	Weight: 176 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
20-22: 2x4 SPF No.2, 4-20: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-22: 2x6 SPF No.2, 12-13: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-19, 7-16, 10-16, 11-13

REACTIONS. (size) 22=0-3-8, 19=0-3-8 (req. 0-3-12), 13=0-3-8
Max Horz 22=189(LC 8)
Max Uplift 22=-94(LC 4), 19=-358(LC 4), 13=-255(LC 5)
Max Grav 22=449(LC 21), 19=2371(LC 2), 13=1792(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-452/61, 3-4=-76/282, 4-5=-47/321, 5-7=-2277/322, 7-8=-2185/360, 8-10=-2184/349, 10-11=-2691/385, 2-22=-400/129
BOT CHORD 21-22=-156/369, 20-21=-156/369, 19-20=-59/342, 18-19=-237/1310, 16-18=-258/2212, 14-16=-292/2430, 13-14=-353/2103
WEBS 3-20=-633/166, 5-19=-2345/372, 5-18=0/988, 7-18=-360/121, 7-16=-453/216, 8-16=-95/1019, 10-16=-684/246, 11-14=0/490, 11-13=-2509/433

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) WARNING: Required bearing size at joint(s) 19 greater than input bearing size.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22 except (jt=lb) 19=358, 13=255.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	D3	Roof Special	3	1	I46126288 Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:39 2021 Page 1
ID:Hr0UIoylgMOrZQ4rpild7XzssyG-EvL3k7IJNPbJr7Qfc_8u3TSzNAWjmXerV?tRVzGdWA

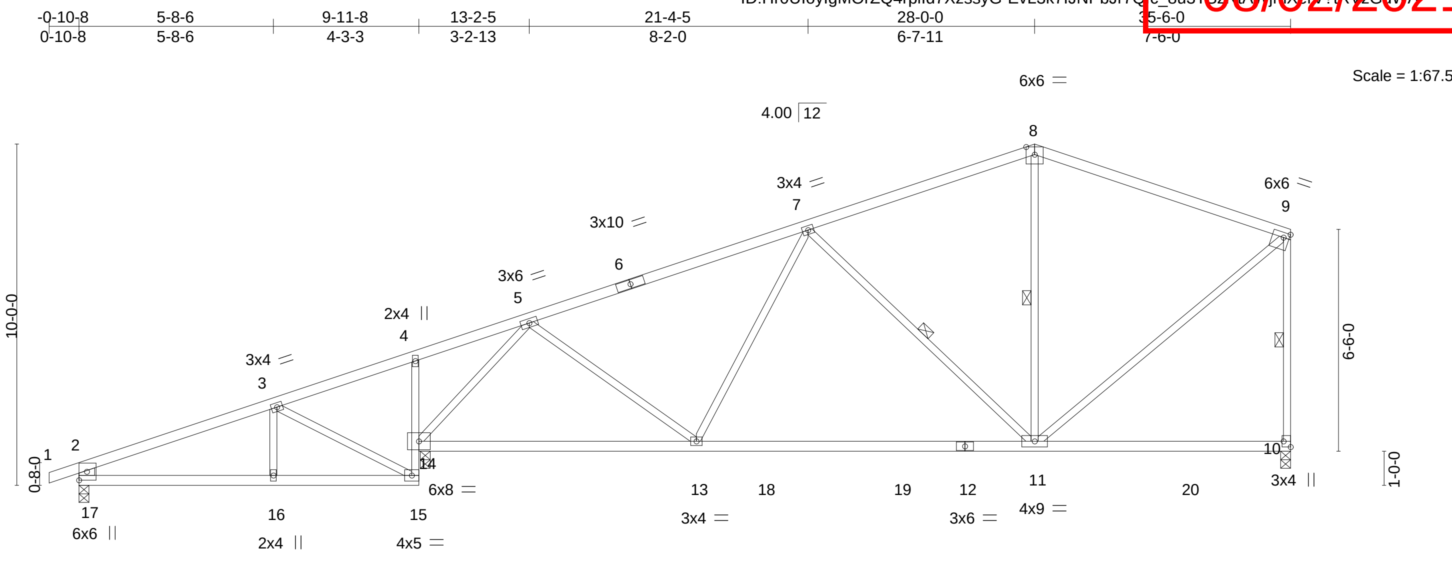


Plate Offsets (X,Y)-- [9:0-2-0,0-1-12], [10:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.31	11-13	>994	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.49	11-13	>625	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	-0.02	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	11-13	>999	240	Weight: 134 lb	FT = 10%

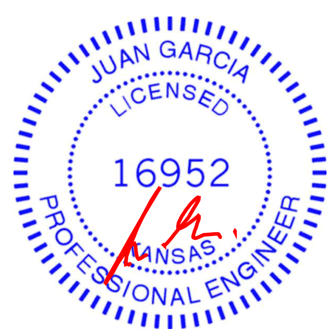
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-11, 8-11, 9-10

REACTIONS. (size) 17=0-3-8, 14=0-3-8, 10=0-3-8
Max Horz 17=279(LC 5)
Max Uplift 17=-89(LC 4), 14=-305(LC 4), 10=-148(LC 4)
Max Grav 17=468(LC 21), 14=1731(LC 2), 10=1231(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-557/24, 5-7=-1370/222, 7-8=-888/200, 8-9=-871/207, 2-17=-416/124,
9-10=-1103/186
BOT CHORD 16-17=-164/413, 15-16=-164/413, 14-15=-60/343, 13-14=-208/856, 11-13=-178/1185
WEBS 3-15=-616/168, 5-14=-1509/301, 5-13=0/473, 7-11=-618/230, 9-11=-104/998

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 14=305, 10=148.
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.



May 14,2021

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

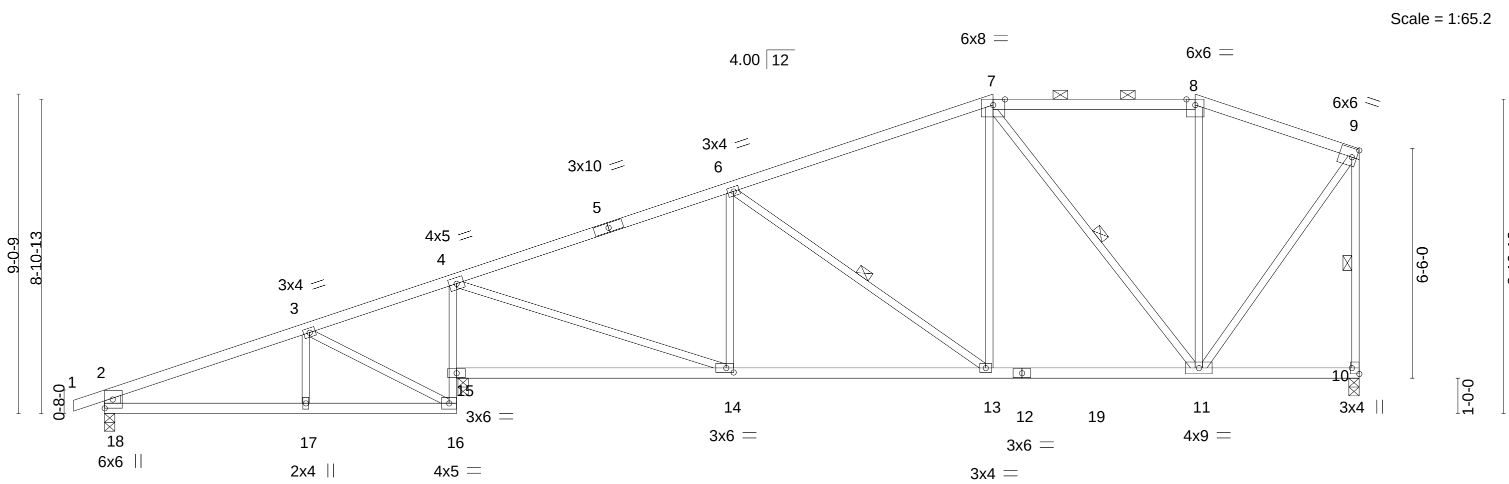
Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	D4	Hip	1	1	I46126289 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:40 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-i5vRyTJx8jj9TH_rAif7cg?DqHbkSJph49kRzyzGdW9

-0-10-8 | 5-8-6 | 9-11-8 | 17-8-5 | 25-1-11 | 30-10-5 | 35-6-0
0-10-8 | 5-8-6 | 4-3-3 | 7-8-13 | 7-5-6 | 5-8-10 | 4-7-11

Scale = 1:65.2



5-8-6 | 9-11-8 | 10-0-0 | 17-8-5 | 25-1-11 | 30-10-5 | 35-6-0
5-8-6 | 4-3-3 | 0-0-8 | 7-8-5 | 7-5-6 | 5-8-10 | 4-7-11

Plate Offsets (X,Y)-- [10:Edge,0-2-8], [14:0-2-8,0-1-8]

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	0.70	Vert(LL)	-0.10	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.20	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	-0.02	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	13-14	>999	240	Weight: 141 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-16: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-18: 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 (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15.
WEBS 1 Row at midpt 6-13, 7-11, 9-10

REACTIONS. (size) 18=0-3-8, 15=0-3-8, 10=0-3-8
Max Horz 18=292(LC 5)
Max Uplift 18=-92(LC 4), 15=-314(LC 4), 10=-173(LC 4)
Max Grav 18=472(LC 21), 15=1708(LC 2), 10=1191(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-565/26, 4-6=-1409/259, 6-7=-1112/252, 7-8=-595/188, 8-9=-650/184, 2-18=-421/128, 9-10=-1132/203
BOT CHORD 17-18=-150/406, 16-17=-150/406, 15-16=-42/317, 4-15=-1287/316, 13-14=-211/1272, 11-13=-165/982
WEBS 3-16=-553/128, 4-14=-177/1397, 6-14=-263/157, 6-13=-374/163, 7-13=-15/476, 7-11=-664/138, 9-11=-137/1016

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 15=314, 10=173.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

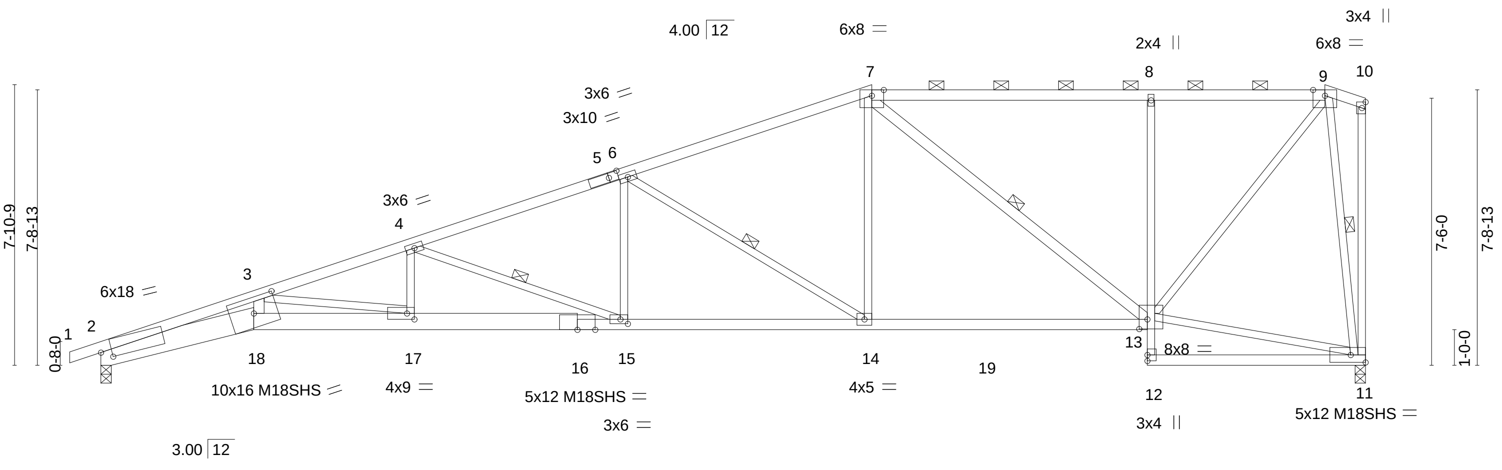
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	E1	Hip	1	1	I46126290 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:24:41 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpild7XzssyG-AHTp9pKZv0r04RZ1PAM8uXKdgtBgTxJpU_VOZGdV8

-0-10-8	4-3-8	8-8-5	14-8-4	21-7-11	29-4-8	34-4-5	35-6-0
0-10-8	4-3-8	4-4-13	5-11-14	6-11-7	7-8-13	4-11-13	1-1-11

Scale = 1:64.7



4-3-8	8-8-5	14-8-4	21-7-11	29-4-8	35-3-8	35-6-0
4-3-8	4-4-13	5-11-14	6-11-7	7-8-13	5-11-0	0-2-8

Plate Offsets (X,Y)-- [2:0-3-11,0-2-5], [5:0-3-3,0-1-8], [13:0-2-12,0-3-4], [15:0-2-8,0-1-8], [17:0-2-8,0-2-0], [18:0-8-0,0-5-4]

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	0.94	Vert(LL)	-0.49	17-18	>862	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.86	17-18	>493	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.35	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.38	17-18	>999	240	Weight: 168 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
2-18: 2x8 SP DSS, 16-18: 2x6 SP DSS, 8-12: 2x3 SPF No.2
13-16: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
3-18,7-13: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-15, 6-14, 7-13, 9-11

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=317(LC 7)
Max Uplift 2=-326(LC 4), 11=-309(LC 4)
Max Grav 2=1707(LC 2), 11=1662(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7861/1443, 3-4=-5266/952, 4-6=-3615/678, 6-7=-2405/479, 7-8=-1334/330, 8-9=-1327/331
BOT CHORD 2-18=-1461/7399, 17-18=-1379/6921, 15-17=-937/4995, 14-15=-601/3381, 13-14=-340/2210, 8-13=-581/230
WEBS 3-18=-230/1532, 3-17=-1960/449, 4-17=-58/776, 4-15=-1723/360, 6-15=-39/732, 6-14=-1360/334, 7-14=-79/1063, 7-13=-1141/202, 9-13=-345/1854, 9-11=-1562/341

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=326, 11=309.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

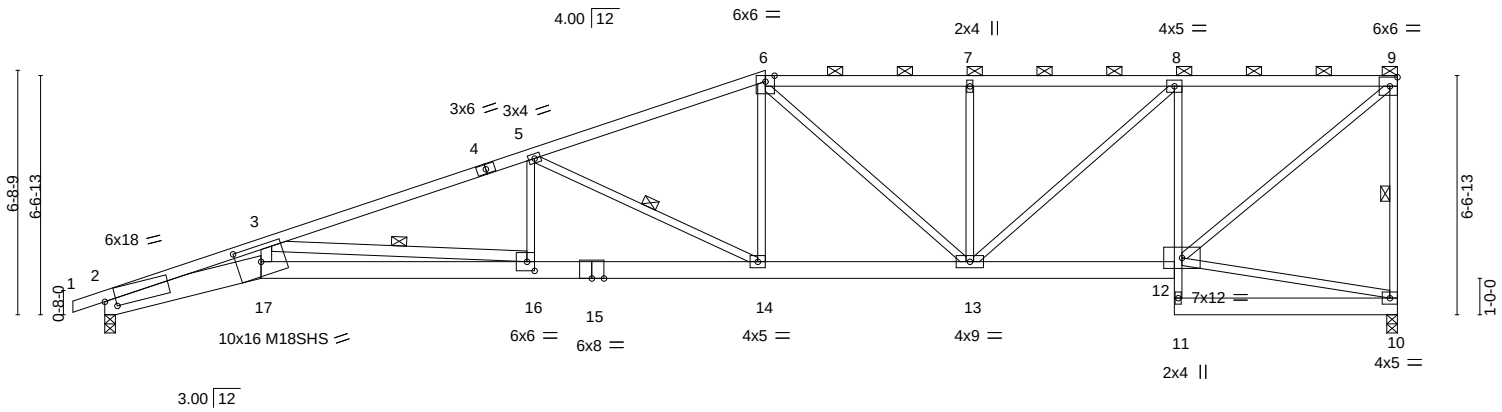
May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126291
210502	E2	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:42 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-eU1BN8KBgKztib8EI6hbh54VR4BJw9t4XZDX2nzCdW7

-0-10-8	4-3-8	11-8-6	18-1-11	23-9-1	29-4-8	35-6-0
0-10-8	4-3-8	7-4-14	6-5-5	5-7-6	5-7-6	6-1-8

Scale = 1:63.3



4-3-8	11-8-6	18-1-11	23-9-1	29-4-8	35-6-0
4-3-8	7-4-14	6-5-5	5-7-6	5-7-6	6-1-8

Plate Offsets (X,Y)-- [2:0-3-11,0-2-5], [16:0-2-8,0-3-0], [17:0-8-0,0-5-4]

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	0.92	Vert(LL)	-0.54	16-17	>784	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.83	Vert(CT)	-0.98	16-17	>431	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr YES	WB	0.79	Horz(CT)	0.37	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.45	16-17	>930	240	Weight: 174 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
6-9: 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
2-17: 2x8 SP DSS, 15-17: 2x6 SP DSS, 8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17,3-16: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-5 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 7-0-12 oc bracing.
WEBS 1 Row at midpt 9-10, 3-16, 5-14

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=275(LC 7)
Max Uplift 10=-306(LC 4), 2=-330(LC 4)
Max Grav 10=1585(LC 1), 2=1659(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7911/1520, 3-5=-4322/820, 5-6=-2905/590, 6-7=-2422/528, 7-8=-2419/526, 8-9=-1621/373, 9-10=-1522/334
BOT CHORD 2-17=-1521/7451, 16-17=-1441/6963, 14-16=-768/4058, 13-14=-449/2670, 12-13=-337/1626, 8-12=-1172/315
WEBS 3-17=-227/1595, 3-16=-2921/677, 5-16=-7/590, 5-14=-1536/354, 6-14=-87/769, 6-13=-345/130, 7-13=-437/174, 8-13=-207/1075, 9-12=-398/2102

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=306, 2=330.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	E3	Half Hip	1	1	I46126292 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:44 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-as9ynqMRBxDbxvIcPXk3mW9b2uvpQ0CN?nje6iZGdV5

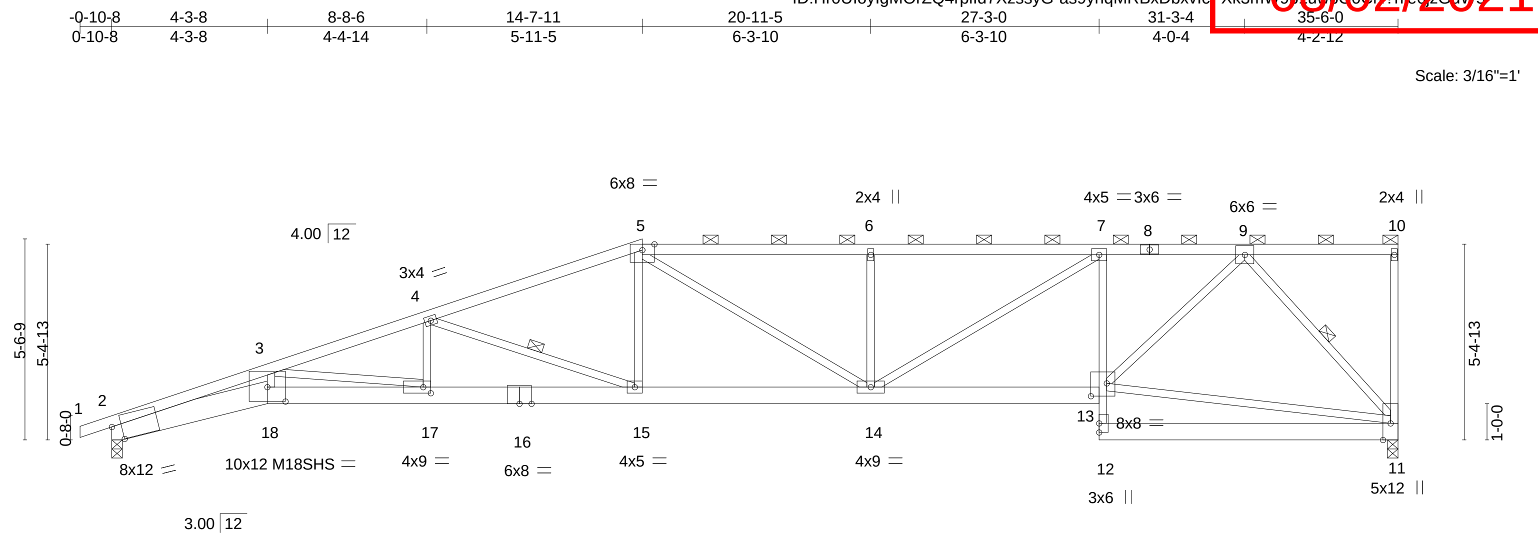


Plate Offsets (X,Y)-- [2:0-3-3,0-4-13], [13:0-5-4,0-4-4], [17:0-2-8,0-2-0], [18:0-6-0,0-4-12]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.47	17-18	>906	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.84	17-18	>503	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.36	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.39	17-18	>999	240	Weight: 167 lb	FT = 10%

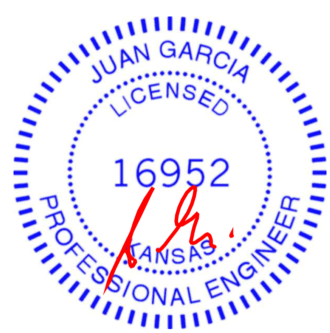
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except*
2-18: 2x8 SP DSS, 16-18: 2x6 SP DSS, 7-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 7-3-8 oc bracing.
WEBS 1 Row at midpt 4-15, 9-11

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=223(LC 7)
Max Uplift 11=-302(LC 4), 2=-333(LC 4)
Max Grav 11=1585(LC 1), 2=1659(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7509/1423, 3-4=-5089/974, 4-5=-3594/705, 5-6=-3424/702, 6-7=-3421/700, 7-9=-2613/547
BOT CHORD 2-18=-1402/7046, 17-18=-1336/6685, 15-17=-921/4822, 14-15=-585/3339, 13-14=-508/2638, 7-13=-855/245
WEBS 3-18=-215/1383, 3-17=-1893/421, 4-17=-39/601, 4-15=-1565/357, 5-15=-55/673, 5-14=-65/374, 6-14=-521/207, 7-14=-177/929, 11-13=-299/1182, 9-13=-313/1839, 9-11=-2024/423

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=302, 2=333.
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.



May 14,2021

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	E4	Half Hip Girder	1	2	I46126293 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:46 2021 Page 1

ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-XFGiCWNijZTJBCS1XymXrxFCanmsyZgS5BlBbzGdW3

Scale: 3/16"=1'

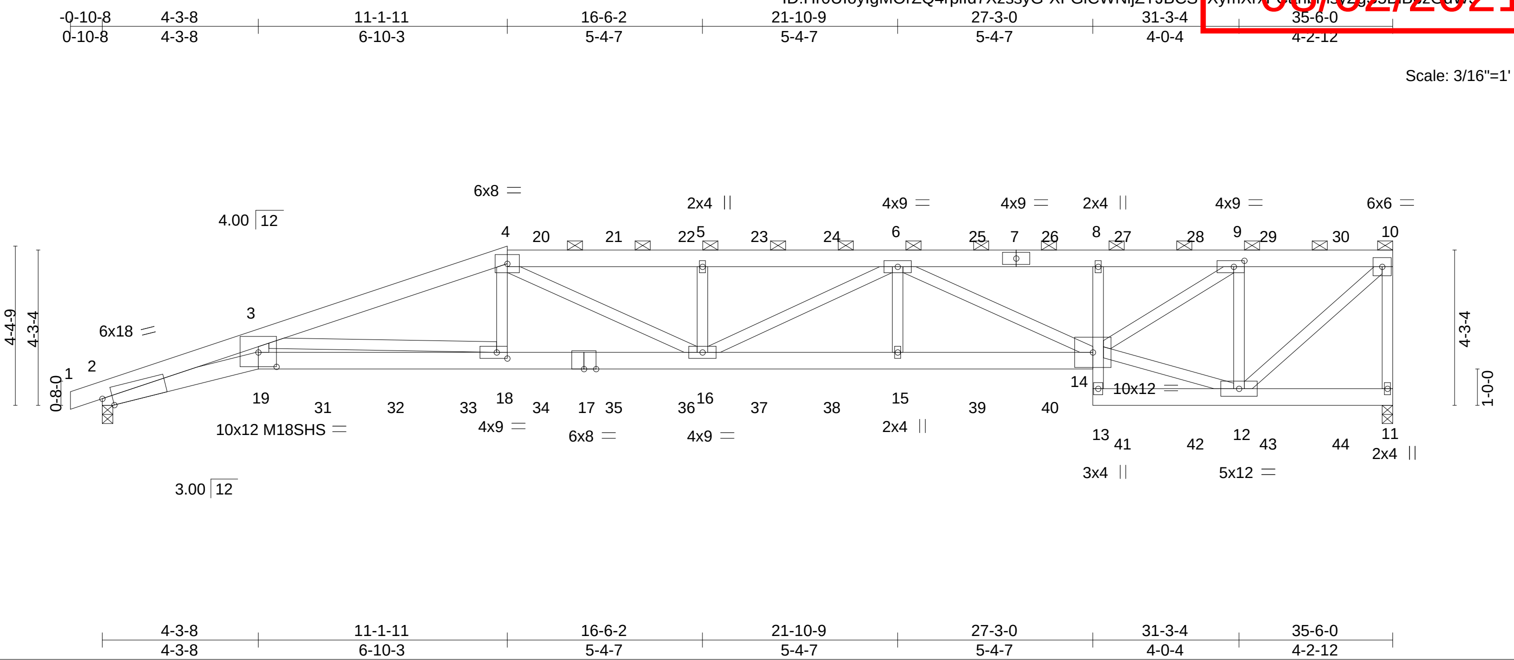


Plate Offsets (X,Y)-- [2:0-3-5,Edge], [9:0-3-8,0-2-0], [18:0-3-8,0-2-0], [19:0-6-0,0-4-12]

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	0.80	Vert(LL)	-0.54	18-19	>777	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.96	18-19	>438	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.38	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.38	18-19	>999	240	Weight: 423 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
1-4: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
8-13: 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=129(LC 24)
Max Uplift 11=-357(LC 4), 2=-393(LC 4)
Max Grav 11=3044(LC 1), 2=3052(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-15708/2020, 3-4=-9377/1163, 4-5=-9634/1188, 5-6=-9632/1187, 6-8=-6758/834, 8-9=-6661/825, 9-10=-2936/379, 10-11=-2936/389
BOT CHORD 2-19=-1922/14801, 18-19=-1771/13637, 16-18=-1072/8847, 15-16=-1105/9262, 14-15=-1105/9262, 8-14=-564/196, 12-13=-74/466
WEBS 3-19=-455/3670, 3-18=-4730/709, 4-18=-128/1646, 4-16=-92/1148, 5-16=-689/239, 6-16=-73/417, 6-15=0/490, 6-14=-2810/333, 12-14=-296/2551, 9-14=-559/4603, 9-12=-3245/516, 10-12=-466/3975

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=357, 2=393.
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.

May 14,2021

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126293
210502	E4	Half Hip Girder	1	2	Job Reference (optional)	

NOTES-

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 119 lb down and 83 lb up at 12-0-0, 119 lb down and 83 lb up at 14-0-0, 119 lb down and 83 lb up at 16-0-0, 119 lb down and 83 lb up at 18-0-0, 119 lb down and 83 lb up at 20-0-0, 119 lb down and 83 lb up at 22-0-0, 119 lb down and 83 lb up at 24-0-0, 119 lb down and 83 lb up at 26-0-0, 120 lb down and 84 lb up at 28-0-0, 120 lb down and 84 lb up at 30-0-0, and 120 lb down and 84 lb up at 32-0-0, and 120 lb down and 84 lb up at 34-0-0 on top chord, and 442 lb down and 129 lb up at 6-0-0, 230 lb down and 44 lb up at 8-0-0, 230 lb down and 49 lb up at 10-0-0, 70 lb down at 28-0-0, 70 lb down at 30-0-0, and 70 lb down at 32-0-0, and 70 lb down at 34-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-10=-70, 2-19=-20, 14-19=-20, 11-13=-20
   Concentrated Loads (lb)
   Vert: 15=-51 6=-111(B) 20=-111(B) 21=-111(B) 22=-111(B) 23=-111(B) 24=-111(B) 25=-111(B) 26=-111(B) 27=-115(B) 28=-115(B) 29=-115(B) 30=-115(B) 31=-442(B) 32=-230(B) 33=-230(B) 34=-51 35=-51 36=-51 37=-51 38=-51 39=-51 40=-51 41=-50(B) 42=-50(B) 43=-50(B) 44=-50(B)

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	G1	Common Supported Gable	1	1	I46126294 Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:47 2021 Page 1
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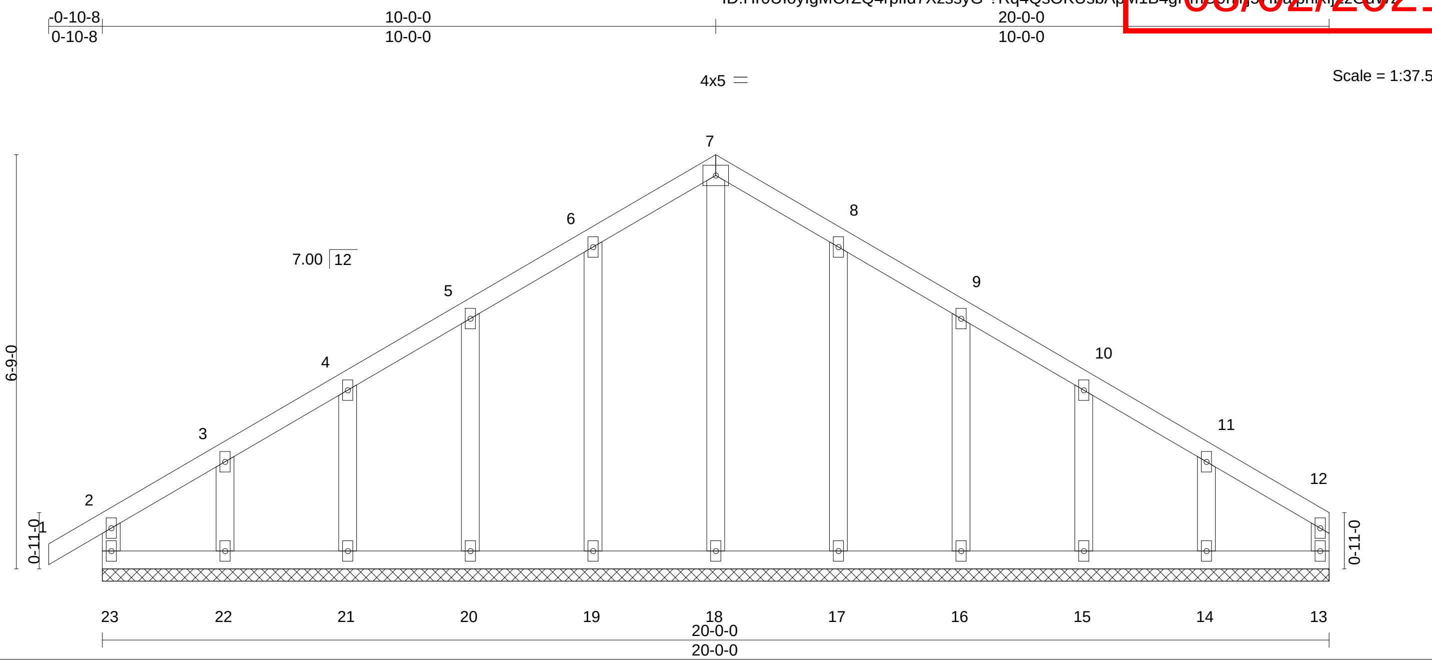

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 89 lb	FT = 10%

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

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

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 23=187(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 23, 13, 19, 20, 21, 17, 16, 15 except 22=-107(LC 8), 14=-101(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 23, 13, 18, 19, 20, 21, 22, 17, 16, 15, 14

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 13, 19, 20, 21, 17, 16, 15 except (jt=lb) 22=107, 14=101.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126295
210502	G2	Common	8	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:48 2021 Page 1
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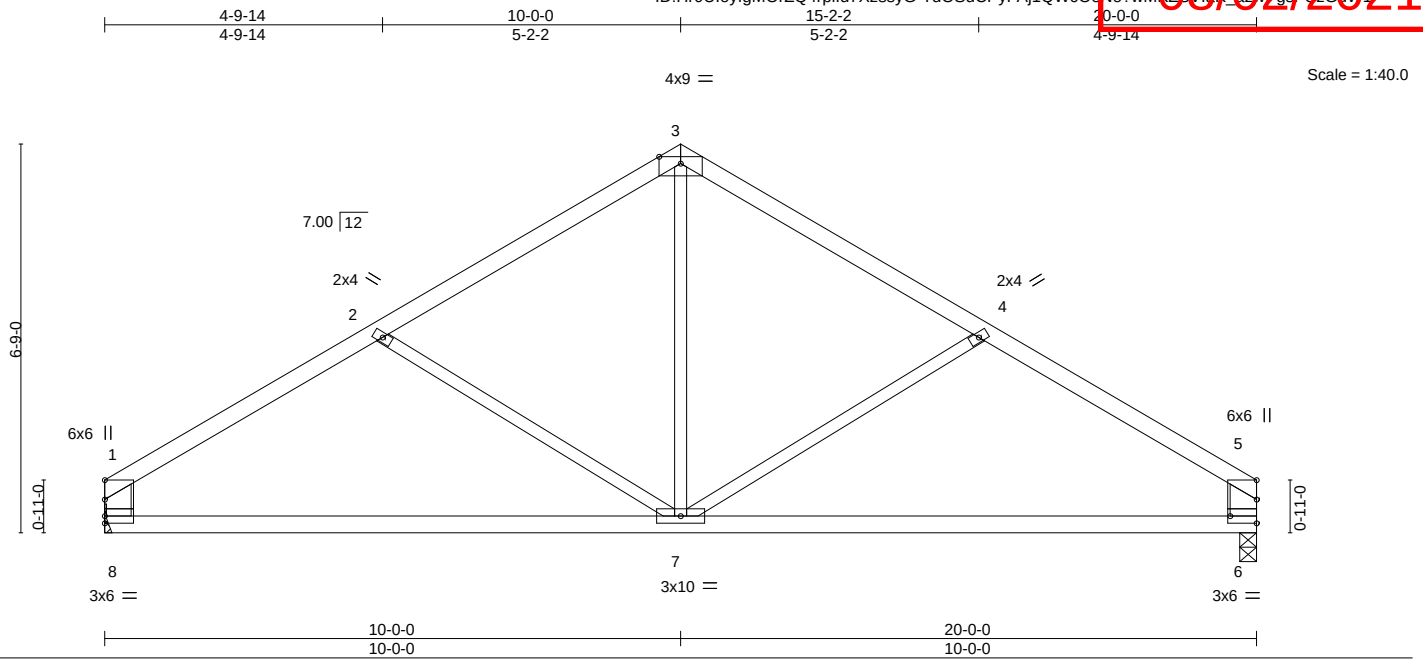

Plate Offsets (X,Y)-- [5:0-4-1,0-0-0], [6:Edge,0-1-8]

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	0.71	Vert(LL)	-0.18	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.37	7-8	>641	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	7	>999	240	Weight: 67 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-8,5-6: 2x6 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 6=0-3-8
Max Horz 8=177(LC 5)
Max Uplift 8=-103(LC 8), 6=-103(LC 9)
Max Grav 8=879(LC 1), 6=879(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1156/181, 2-3=-875/142, 3-4=-875/141, 4-5=-1156/181, 1-8=-763/149, 5-6=-763/149
BOT CHORD 7-8=-177/903, 6-7=-102/894
WEBS 3-7=-9/459, 4-7=-269/210, 2-7=-269/210

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=103, 6=103.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	G3	Roof Special	1	1	I46126296 Job Reference (optional)

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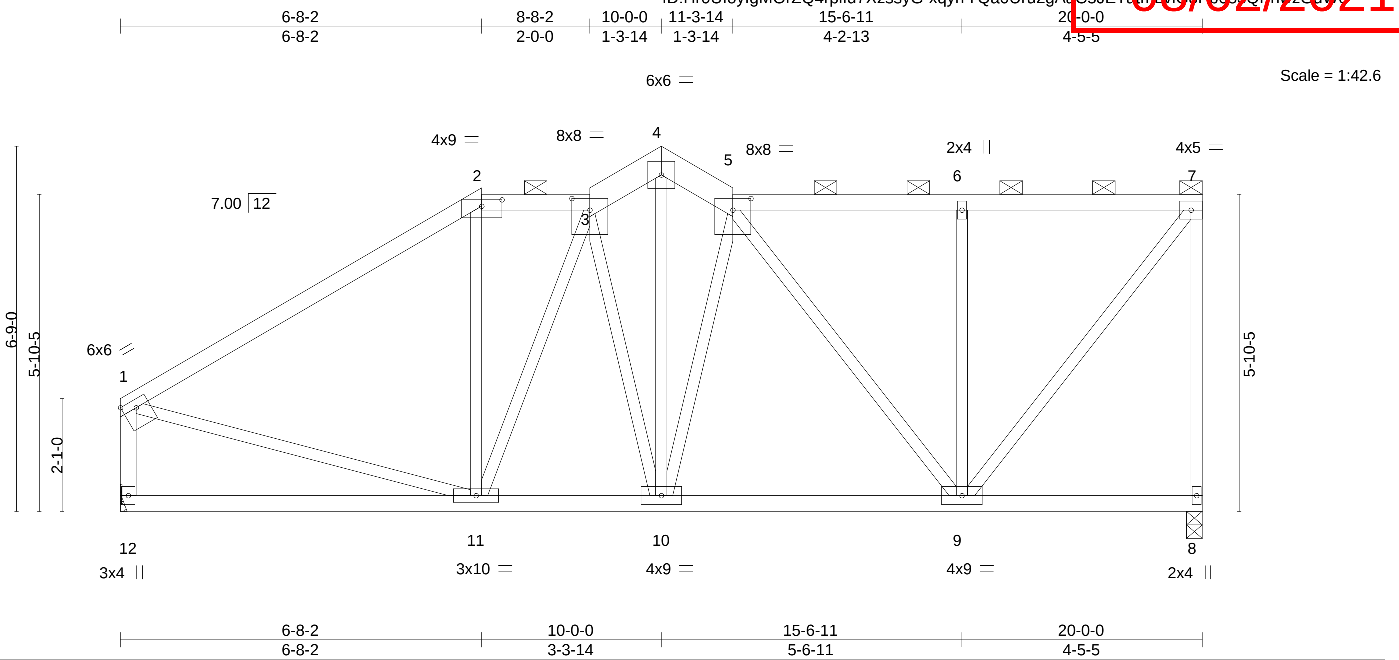


Plate Offsets (X,Y)-- [1:Edge,0-1-12], [2:0-4-8,0-1-7], [3:0-4-0,0-2-9], [5:0-4-0,0-2-9]

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	0.64	Vert(LL)	-0.05	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.11	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 99 lb	FT = 10%

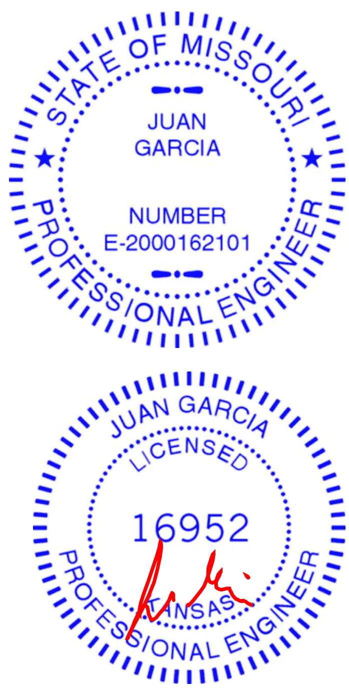
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-4,4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-12: 2x4 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 12=Mechanical
Max Horz 12=193(LC 5)
Max Uplift 8=-35(LC 9), 12=-8(LC 8)
Max Grav 8=889(LC 1), 12=889(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-949/31, 2-3=-722/64, 3-4=-781/51, 4-5=-806/60, 5-6=-573/30, 6-7=-573/30, 7-8=-853/50, 1-12=-825/43
BOT CHORD 10-11=-58/766, 9-10=-56/775
WEBS 4-10=-20/506, 5-10=-280/47, 5-9=-333/29, 6-9=-356/89, 7-9=-32/925, 1-11=0/644

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) 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) 8, 12.
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.



May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126297
210502	G4	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:49 2021 Page 1
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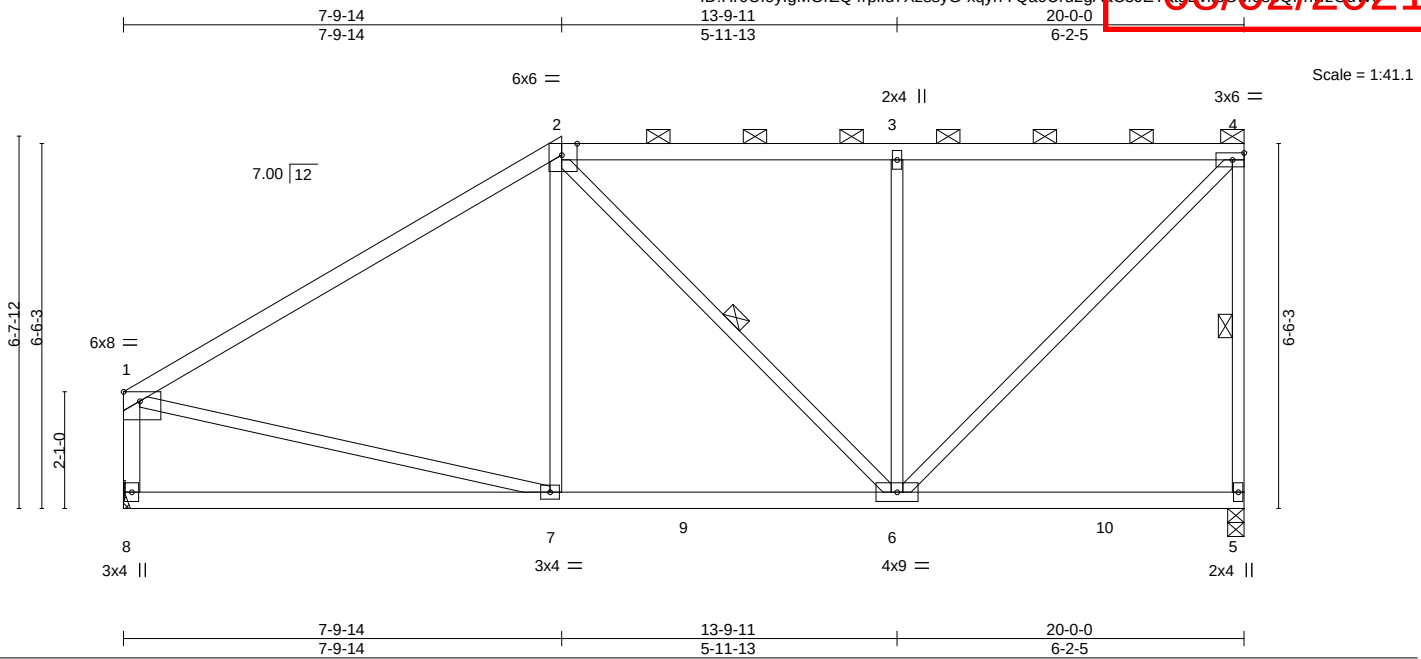

Plate Offsets (X,Y)-- [1:Edge,0-2-0], [2:0-3-5,Edge]

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	0.97	Vert(LL)	-0.09	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.18	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	6-7	>999	240	Weight: 83 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-8: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-5, 2-6

REACTIONS. (size) 5=0-3-8, 8=Mechanical
Max Horz 8=197(LC 7)
Max Uplift 5=-62(LC 5)
Max Grav 5=963(LC 2), 8=935(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-988/12, 2-3=-694/30, 3-4=-692/28, 4-5=-843/88, 1-8=-816/36
BOT CHORD 7-8=-187/252, 6-7=-106/775
WEBS 3-6=-503/119, 4-6=-72/976, 1-7=-8/639

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	G5	Half Hip	1	1	I46126298 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:59 2021 Page 1
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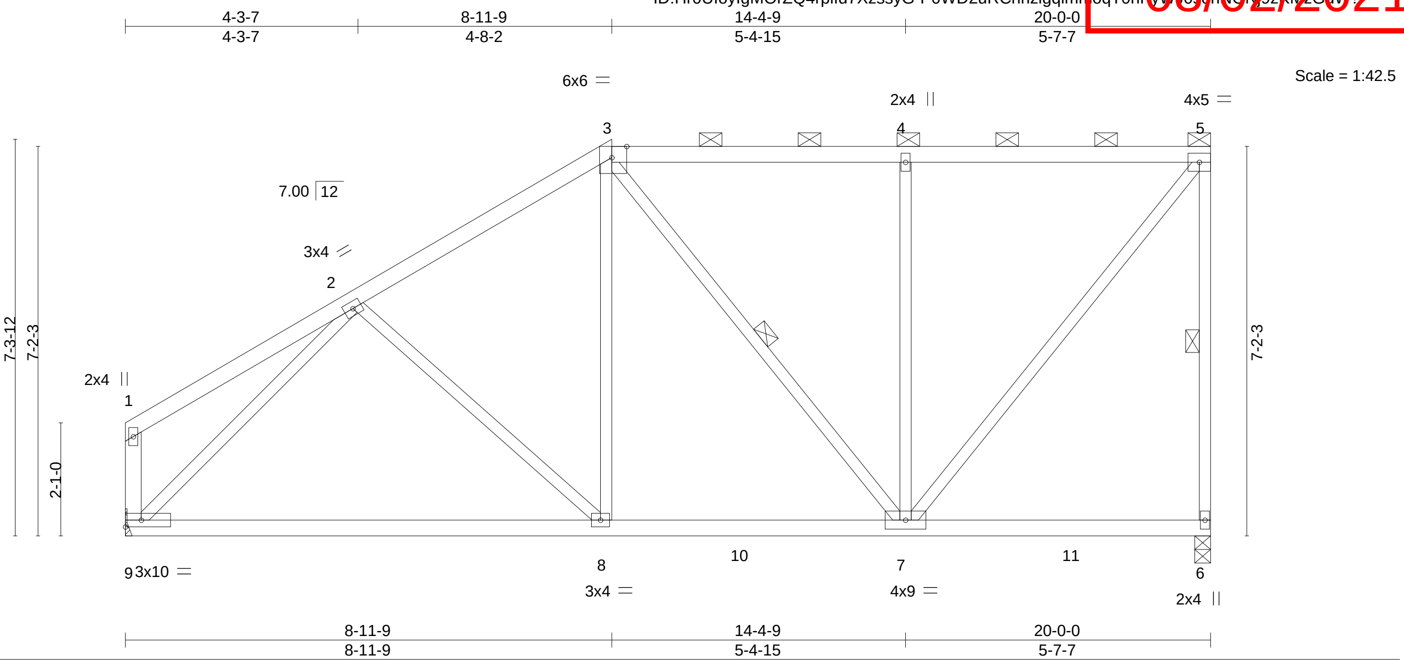


Plate Offsets (X,Y)-- [3:0-3-5,Edge]

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	0.55	Vert(LL)	-0.16	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.32	8-9	>750	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	7-8	>999	240	Weight: 89 lb	FT = 10%

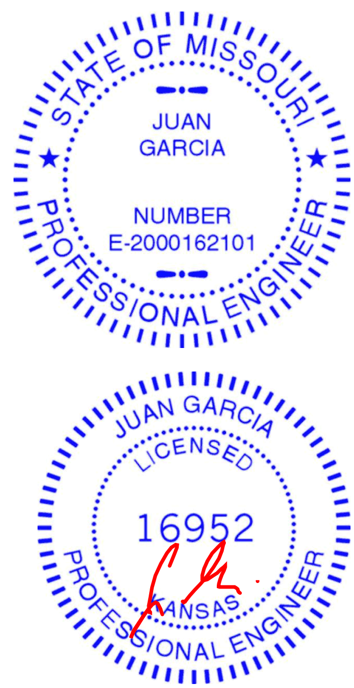
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-9: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-6, 3-7

REACTIONS. (size) 6=0-3-8, 9=Mechanical
Max Horz 9=219(LC 7)
Max Uplift 6=-65(LC 5)
Max Grav 6=967(LC 2), 9=943(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-890/38, 3-4=-590/45, 4-5=-589/44, 5-6=-853/88
BOT CHORD 8-9=-158/780, 7-8=-101/732
WEBS 3-8=0/349, 3-7=-256/19, 4-7=-459/114, 5-7=-74/928, 2-9=-900/28

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



May 14,2021

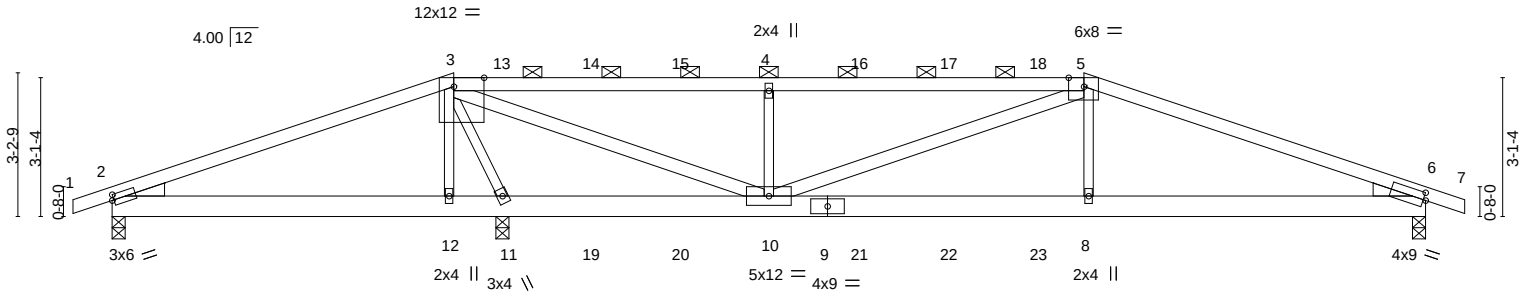
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126299
210502	H1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:52 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-LPezTZSSJPESv7v9tDtx5CVEJ6gEGgoKp1e8NFzGdYz

-0-10-8	7-7-11	14-8-4	21-8-13	29-4-8	30-3-0
0-10-8	7-7-11	7-0-9	7-0-9	7-7-11	0-10-8

Scale = 1:51.5



7-7-11	8-7-0	14-8-4	21-8-13	29-4-8
7-7-11	0-11-5	6-1-4	7-0-9	7-7-11

Plate Offsets (X,Y)-- [2:0-0-8,0-1-8], [3:0-8-2,Edge], [5:0-4-2,Edge], [6:0-0-11,0-2-0]

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	0.98	Vert(LL)	-0.12	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.23	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	8-10	>999	240	Weight: 117 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
3-5: 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-10,5-10: 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins, except 2-0-0 oc purlins (3-1-9 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 5-7-3 oc bracing.

REACTIONS. (size) 2=0-3-8, 11=0-3-8 (req. 0-3-14), 6=0-3-8
Max Horz 2=-49(LC 34)
Max Uplift 2=-195(LC 25), 11=-548(LC 4), 6=-287(LC 5)
Max Grav 2=205(LC 18), 11=2476(LC 1), 6=1182(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-109/695, 3-4=-1455/347, 4-5=-1458/349, 5-6=-2439/539
BOT CHORD 2-12=-624/162, 11-12=-629/162, 10-11=-1460/366, 8-10=-429/2177, 6-8=-431/2198
WEBS 3-12=-48/256, 3-10=-646/3112, 4-10=-745/304, 5-10=-799/216, 5-8=-45/574, 3-11=-2270/556

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) WARNING: Required bearing size at joint(s) 11 greater than input bearing size.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=195, 11=548, 6=287.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 101 lb down and 84 lb up at 8-8-4, 96 lb down and 55 lb up at 10-8-4, 96 lb down and 55 lb up at 12-8-4, 96 lb down and 55 lb up at 14-8-4, 96 lb down and 55 lb up at 16-8-4, and 96 lb down and 55 lb up at 18-8-4, and 96 lb down and 55 lb up at 20-8-4 on top chord, and 305 lb down and 147 lb up at 7-7-11, 32 lb down at 10-8-4, 32 lb down at 12-8-4, 32 lb down at 14-8-4, 32 lb down at 16-8-4, 32 lb down at 18-8-4, and 32 lb down at 20-8-4, and 305 lb down and 147 lb up at 21-8-13 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).

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	H1	Hip Girder	1	1	I46126299

Job Reference (optional)

LOAD CASE(S) Standard

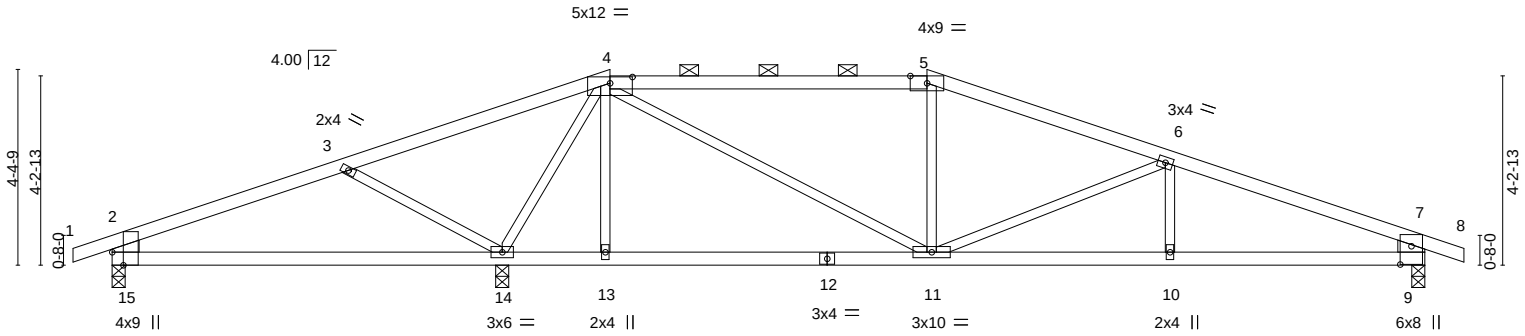
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
   Concentrated Loads (lb)
   Vert: 12=-305(B) 10=-24(B) 4=-44(B) 8=-305(B) 13=-45(B) 14=-44(B) 15=-44(B) 16=-44(B) 17=-44(B) 18=-44(B) 19=-24(B) 20=-24(B) 21=-24(B) 22=-24(B) 23=-24(B)

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126390
210502	H2	Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:52 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-qbCLgvT54iMJXHULRwOAdC1NpW02T8Ri3nOdvnzGdYy

-0-10-8 5-3-7 11-1-11 18-2-13 23-8-1 29-4-8 30-3-0
0-10-8 5-3-7 5-10-5 7-1-2 5-5-4 5-8-7 0-10-8

Scale = 1:51.6



8-8-12 11-1-11 18-2-13 23-8-1 29-4-8
8-8-12 2-4-15 7-1-2 5-5-4 5-8-7

Plate Offsets (X,Y)-- [4:0-6-0,0-1-11], [9:0-4-14,0-3-0], [15:0-3-8,Edge]

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	0.93	Vert(LL)	-0.13	14-15	>796	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.69	Vert(CT)	-0.25	14-15	>398	240		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.73	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.09	10-11	>999	240	Weight: 98 lb	FT = 10%

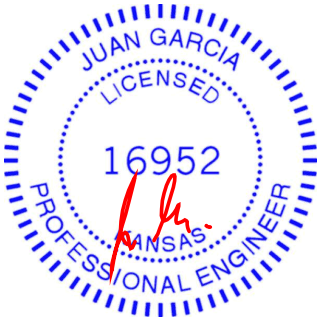
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-15,7-9: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15.

REACTIONS. (size) 15=0-3-8, 14=0-3-8, 9=0-3-8
Max Horz 15=54(LC 8)
Max Uplift 15=-73(LC 4), 14=-268(LC 4), 9=-199(LC 5)
Max Grav 15=291(LC 21), 14=1631(LC 1), 9=918(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-59/296, 3-4=-131/715, 4-5=-1004/240, 5-6=-1101/222, 6-7=-1543/282, 7-9=-814/222
BOT CHORD 14-15=-254/103, 10-11=-204/1383, 9-10=-204/1383
WEBS 3-14=-581/249, 4-14=-1372/265, 4-11=-190/997, 6-11=-428/170

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) 15 except (jt=lb) 14=268, 9=199.
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.



May 14,2021

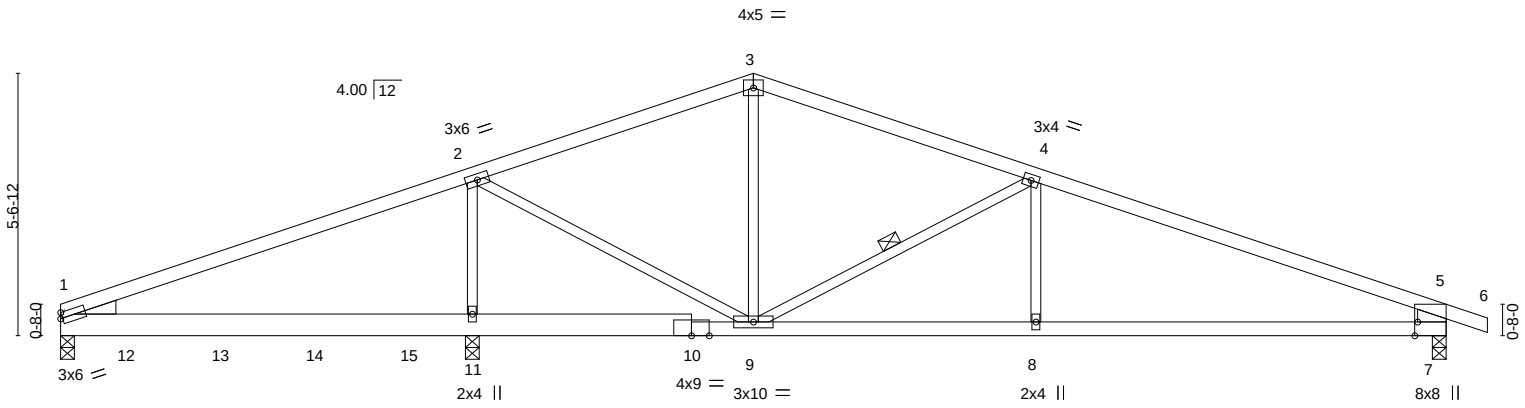
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126391
210502	H3	Common Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:54 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-InlkuFUjr0UA8P3X?evPAcaoRyKckgIrL7AS8z6dVx

8-8-12 | 14-8-4 | 20-8-2 | 29-4-8 | 30-3-0
8-8-12 | 5-11-8 | 5-11-14 | 8-8-6 | 0-10-8

Scale = 1:48.8



8-8-12 | 14-8-4 | 20-8-2 | 29-4-8
8-8-12 | 5-11-8 | 5-11-14 | 8-8-6

Plate Offsets (X,Y)-- [7:0-3-8,Edge]

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	0.75	Vert(LL)	-0.21	1-11	>498	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.38	1-11	>274	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	8	>999	240	Weight: 100 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF 1650F 1.4E *Except*
7-10: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-7: 2x8 SP DSS
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-9

REACTIONS. (size) 1=0-3-8, 11=0-3-8, 7=0-3-8
Max Horz 1=85(LC 12)
Max Uplift 11=-44(LC 4), 7=-222(LC 26)
Max Grav 1=641(LC 21), 11=2186(LC 1), 7=875(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-0/524, 2-3=-501/251, 3-4=-491/241, 4-5=-1341/324, 5-7=-792/270
BOT CHORD 1-11=-377/69, 9-11=-377/71, 8-9=-226/1177, 7-8=-226/1177
WEBS 2-11=-1322/304, 2-9=-126/876, 4-9=-908/217, 4-8=0/325

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=222.
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) 236 lb down at 1-4-8, 236 lb down at 3-4-8, and 236 lb down at 5-4-8, and 236 lb down at 7-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

May 14,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126391
210502	H3	Common Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 12=-236(F) 13=-236(F) 14=-236(F) 15=-236(F)

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126392
210502	H4	COMMON GIRDER	1	3	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:55 2021 Page 1
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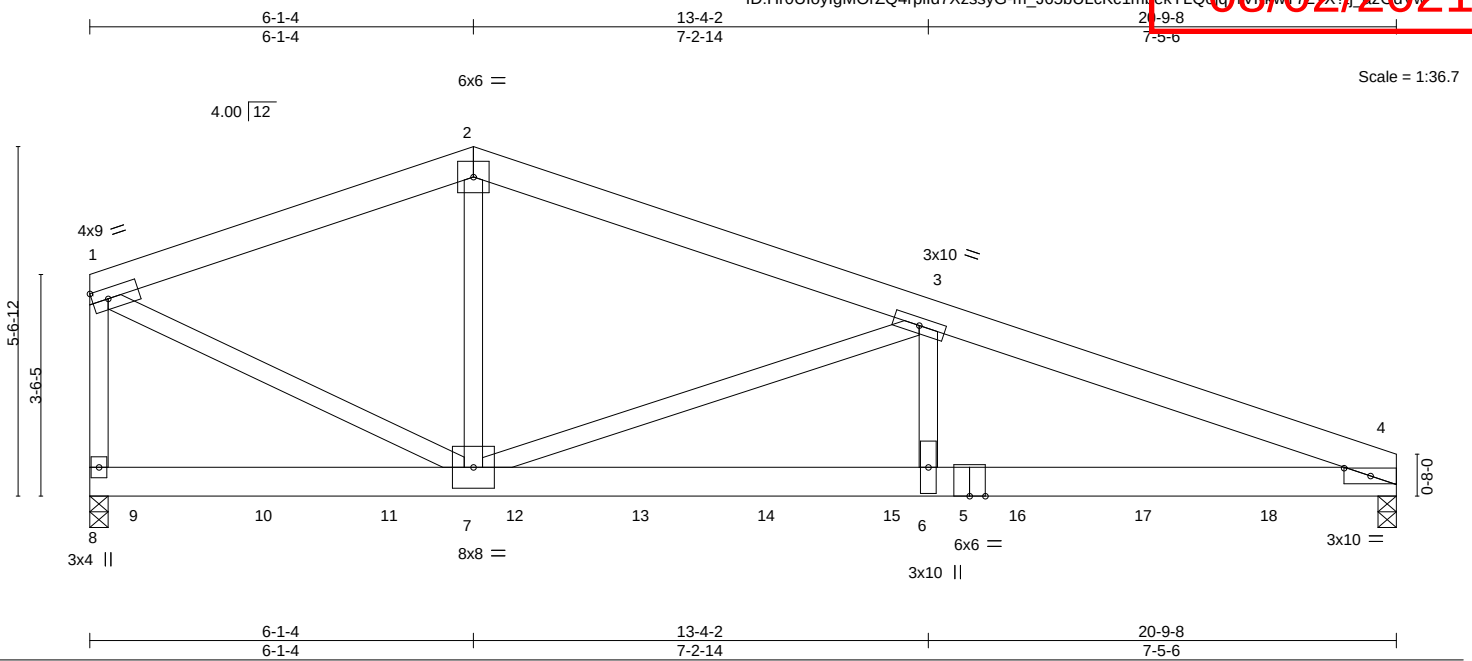

Plate Offsets (X,Y)-- [4:0-5-1,0-1-8]

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	0.40	Vert(LL)	-0.12	4-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.22	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	4-6	>999	240	Weight: 344 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 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. (size) 4=0-3-8, 8=0-3-8
Max Horz 8=-112(LC 6)
Max Uplift 4=-617(LC 5), 8=-24(LC 5)
Max Grav 4=4970(LC 1), 8=5500(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5161/467, 2-3=-5177/454, 3-4=-10810/1310, 1-8=-4272/387
BOT CHORD 6-7=-1167/10104, 4-6=-1167/10104
WEBS 2-7=-139/2823, 3-7=-5640/975, 3-6=-405/3470, 1-7=-441/5327

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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) 8 except (jt=lb) 4=617.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 918 lb down at 0-9-8, 915 lb down at 2-9-8, 869 lb down and 28 lb up at 4-9-8, 859 lb down and 123 lb up at 6-9-8, 859 lb down and 123 lb up at 8-9-8, 859 lb down and 123 lb up at 10-9-8, 859 lb down and 123 lb up at 12-9-8, 859 lb down and 123 lb up at 14-9-8, and 859 lb down and 123 lb up at 16-9-8, and 859 lb down and 123 lb up at 18-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

May 14,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126392
210502	H4	COMMON GIRDER	1	3	Job Reference (optional)	

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, 4-8=-20
   Concentrated Loads (lb)
   Vert: 9=-872(F) 10=-869(F) 11=-869(F) 12=-859(F) 13=-859(F) 14=-859(F) 15=-859(F) 16=-859(F) 17=-859(F) 18=-859(F)

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126393
210502	J1	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:57 2021 Page 1
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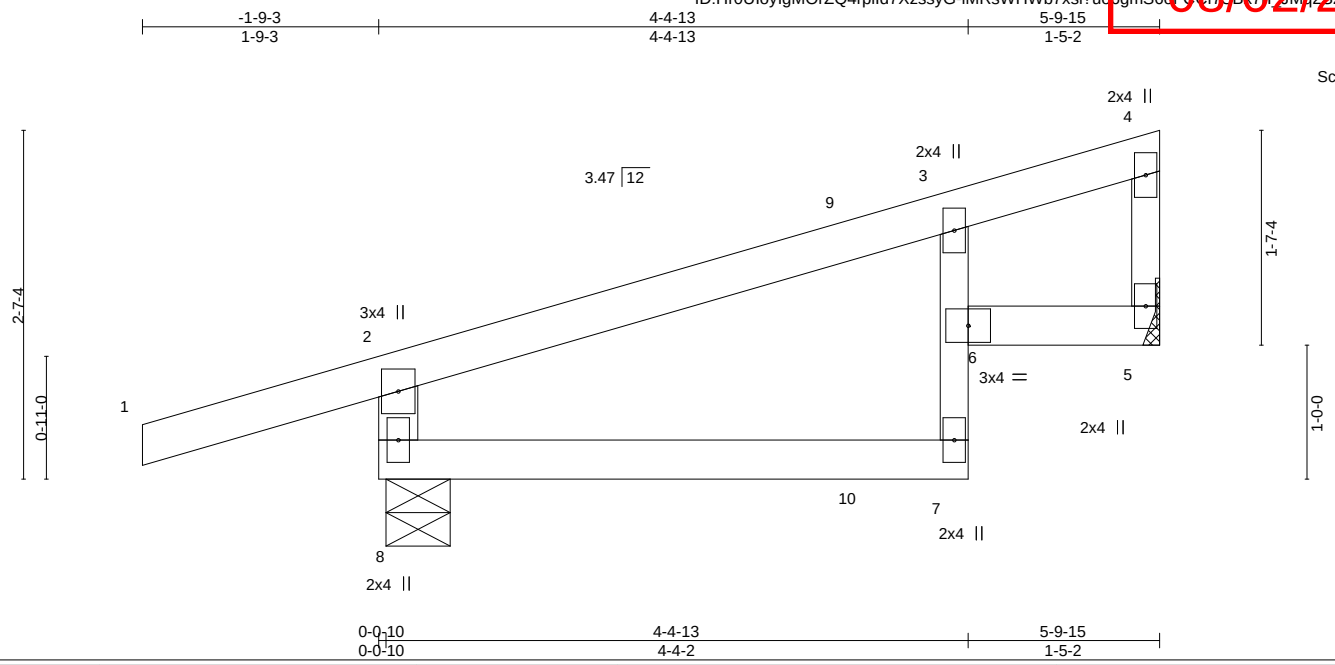


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.02	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.04	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	7	>999	240	Weight: 18 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-5: 2x3 SPF No.2

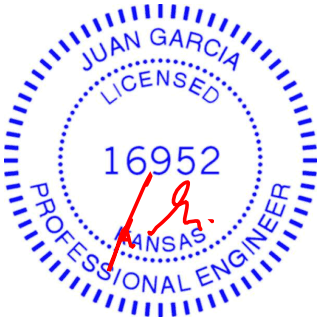
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-5-12, 5=Mechanical
Max Horz 8=91(LC 5)
Max Uplift 8=-135(LC 4), 5=-57(LC 8)
Max Grav 8=410(LC 1), 5=232(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-366/161

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=135.
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 36 lb up at 3-7-3, and 110 lb down and 70 lb up at 3-9-12 on top chord, and 7 lb down and 11 lb up at 3-7-3, and 16 lb down at 3-9-12 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: 10=-6(F=2, B=-7)



May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126394
210502	J2	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:04 2021 Page 1
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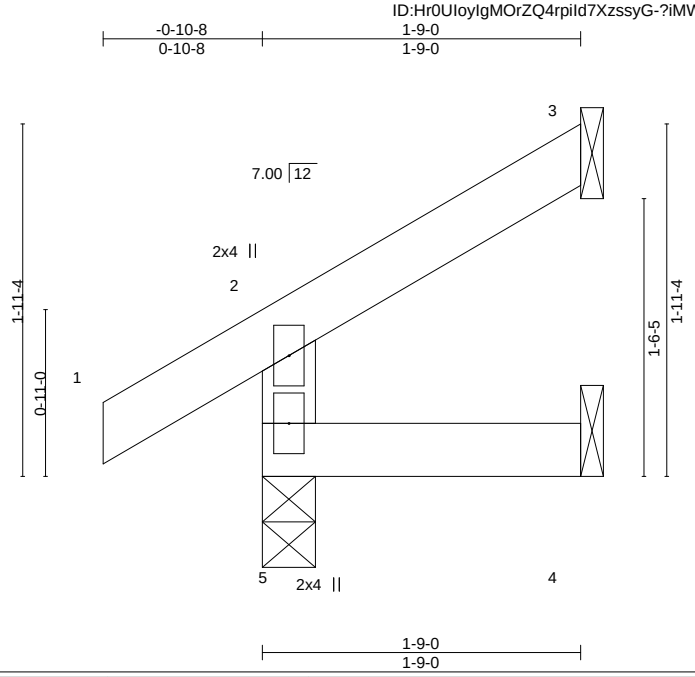

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=49(LC 8)
Max Uplift 5=-14(LC 8), 3=-34(LC 8), 4=-2(LC 8)
Max Grav 5=166(LC 1), 3=44(LC 15), 4=29(LC 3)

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

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126395
210502	J3	Jack-Open	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:05 2021 Page 1
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0-10-8 4-0-3

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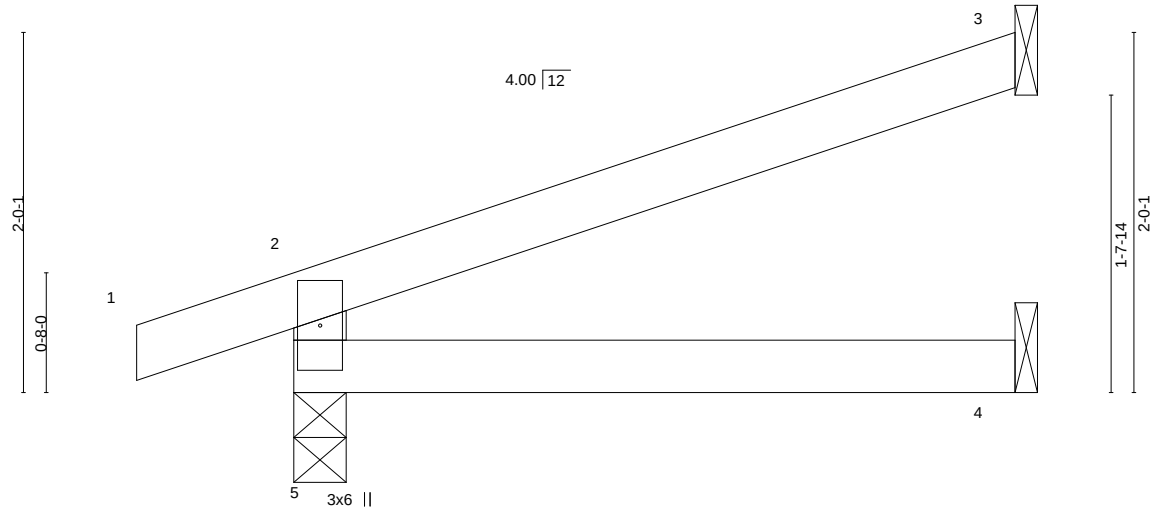

4-0-3
4-0-3

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 4)
Max Uplift 5=-66(LC 4), 3=-55(LC 8)
Max Grav 5=252(LC 1), 3=117(LC 1), 4=71(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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126396
210502	J4	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:36:06 2021 Page 1
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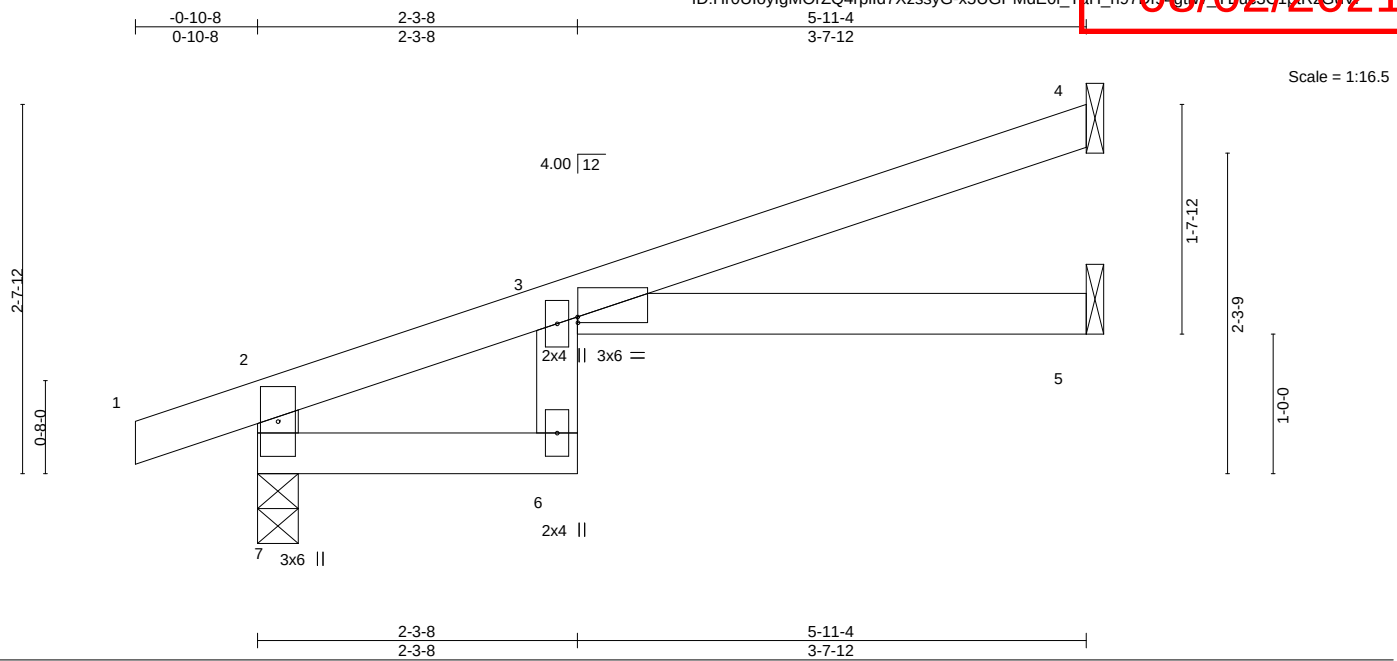


Plate Offsets (X,Y)-- [3:Edge,0-0-8]

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	0.59	Vert(LL)	-0.09	3-5	>782	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.16	3-5	>426	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.09	3-5	>751	240	Weight: 16 lb	FT = 10%

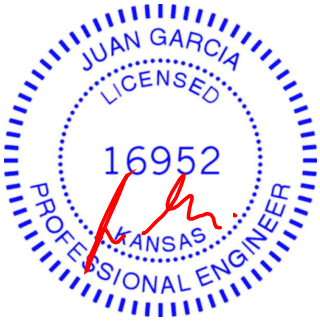
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=89(LC 4)
Max Uplift 7=-76(LC 4), 4=-64(LC 8), 5=-1(LC 8)
Max Grav 7=336(LC 1), 4=159(LC 1), 5=100(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-344/106

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.



May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126397
210502	J5	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:07 2021 Page 1
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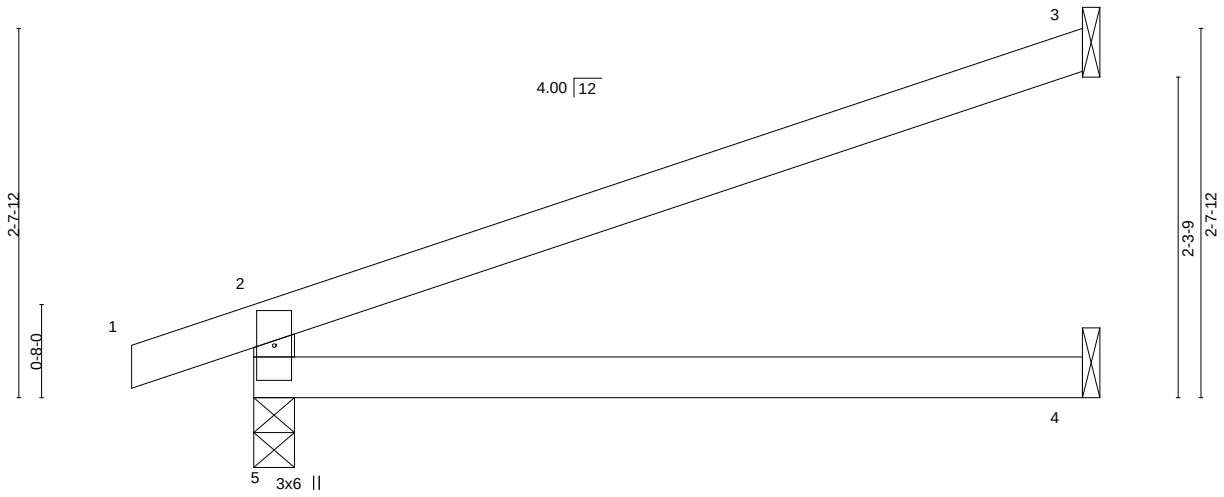

5-11-4 / 5-11-4

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	0.52	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	4-5	>620	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 15 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 4)
Max Uplift 5=-32(LC 4), 3=-47(LC 8)
Max Grav 5=336(LC 1), 3=180(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-292/78

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126398
210502	J6	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:07 2021 Page 1
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0-10-8 5-11-4

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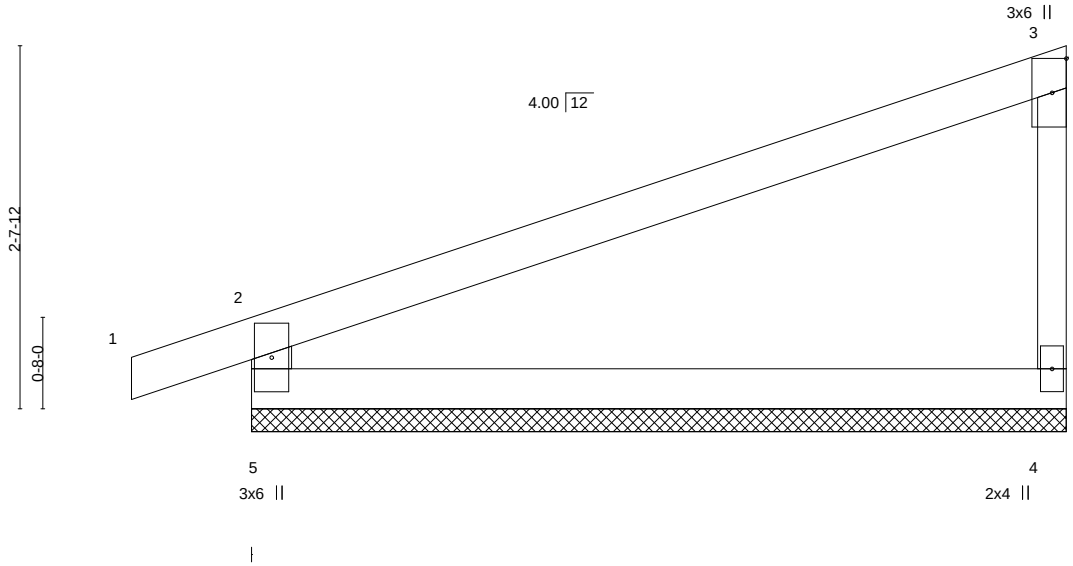

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.01	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 17 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-4: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=5-11-4, 4=5-11-4
Max Horz 5=108(LC 5)
Max Uplift 5=-86(LC 4), 4=-55(LC 8)
Max Grav 5=334(LC 1), 4=250(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-293/129

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) 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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126399
210502	J7	Diagonal Hip Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:09 2021 Page 1
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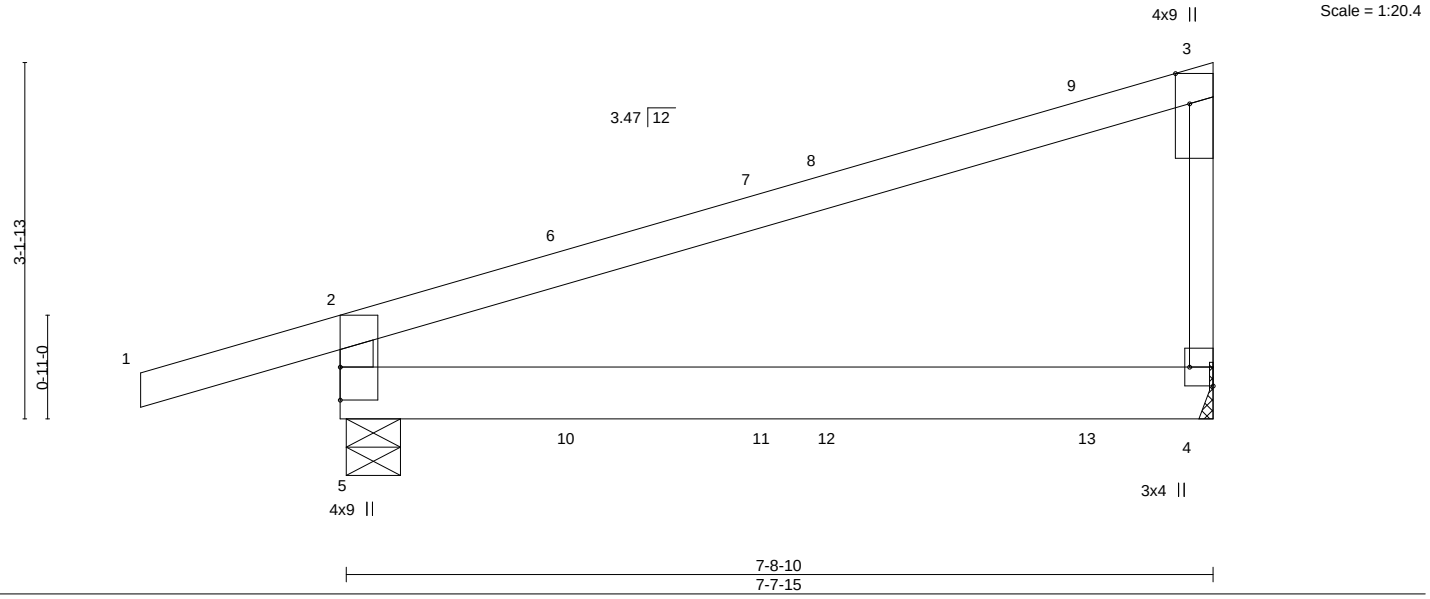

Plate Offsets (X,Y)-- [3:0-3-3,Edge], [4:Edge,0-2-8]

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC	0.77	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.28	Vert(CT)	-0.09	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 27 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-4: 2x3 SPF No.2

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

REACTIONS. (size) 5=0-5-12, 4=Mechanical
Max Horz 5=128(LC 5)
Max Uplift 5=-173(LC 4), 4=-107(LC 8)
Max Grav 5=477(LC 1), 4=346(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-421/222

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) except (jt=lb) 5=173, 4=107.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 50 lb down and 84 lb up at 2-1-1, 111 lb down and 70 lb up at 3-9-12, and 72 lb down and 45 lb up at 4-4-11, and 90 lb down and 68 lb up at 6-8-5 on top chord, and 9 lb down and 11 lb up at 2-1-1, 16 lb down at 3-9-12, and 11 lb down and 12 lb up at 4-4-11, and 25 lb down at 6-8-5 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=23(B) 9=-20(B) 11=-7(F) 12=0(B) 13=-13(B)

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126310
210502	J8	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:09 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-Mg9P1Nf7JdN2RkQNHgw-In?K3oNYg3kAGTUmzGoVz

-0-10-8 3-3-7
0-10-8 3-3-7

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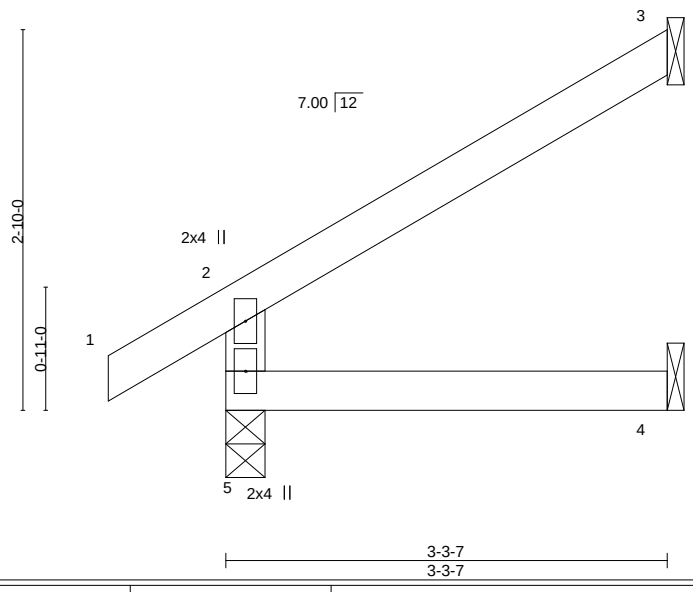


3-3-7
3-3-7

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)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

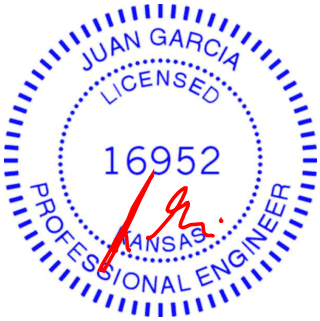
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=84(LC 8)
Max Uplift 5=-14(LC 8), 3=-63(LC 8)
Max Grav 5=222(LC 1), 3=99(LC 15), 4=58(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.



May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126311
210502	J9	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:09 2021 Page 1
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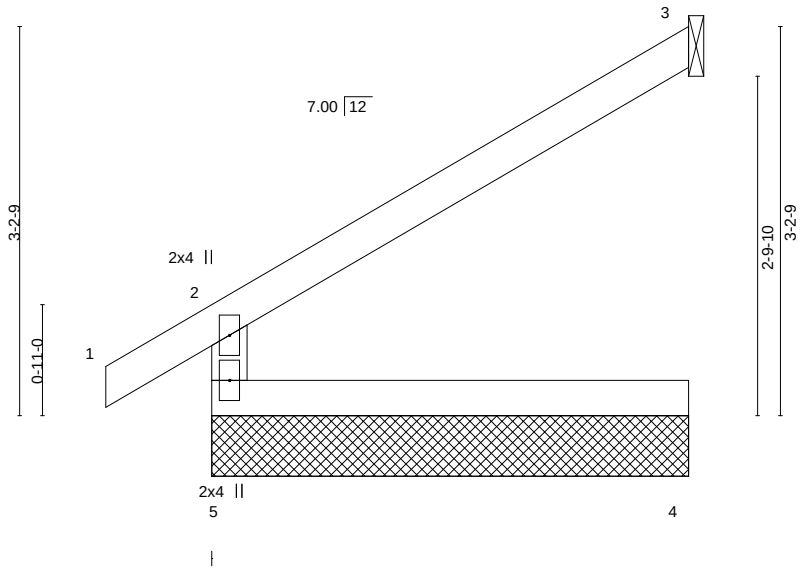

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		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 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 3-11-4 except (jt=length) 3=Mechanical, 3=Mechanical.
(lb) - Max Horz 5=100(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 5, 3
Max Grav All reactions 250 lb or less at joint(s) 5, 3, 3, 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 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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126312
210502	J10	Jack-Open	6	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:57 2021 Page 1
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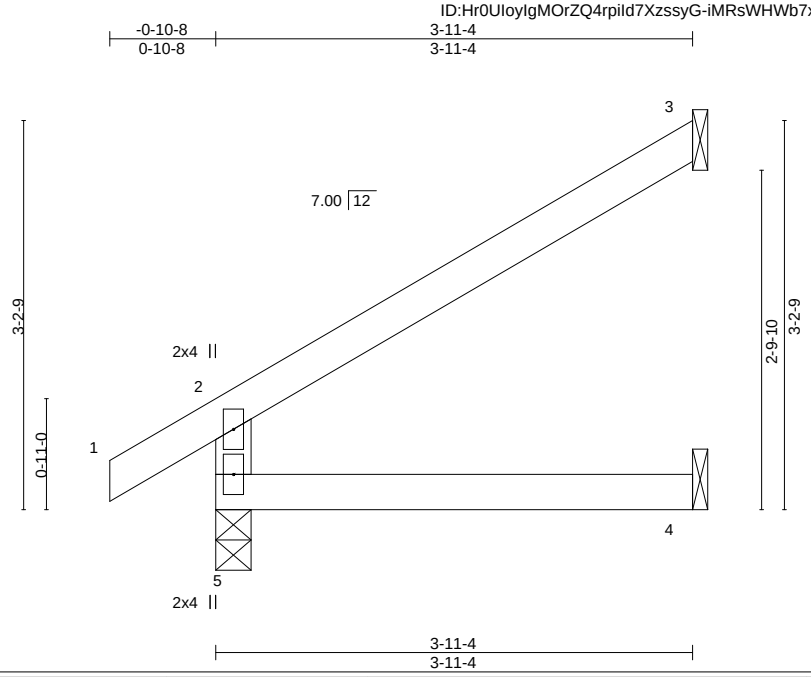

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		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 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=70(LC 8)
Max Uplift 3=-46(LC 8)
Max Grav 5=249(LC 1), 3=118(LC 13), 4=70(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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126313
210502	J11	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:58 2021 Page 1
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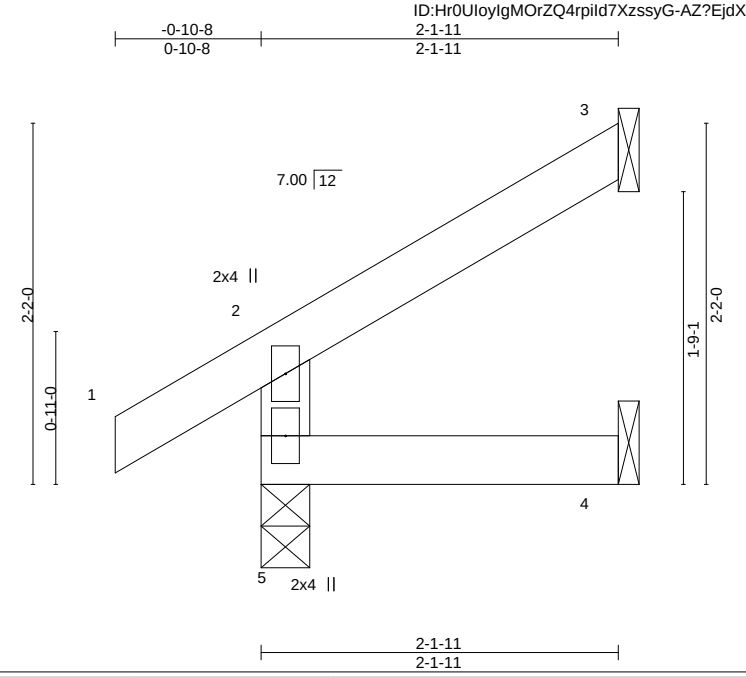

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=57(LC 8)
Max Uplift 5=-14(LC 8), 3=-41(LC 8), 4=-1(LC 8)
Max Grav 5=177(LC 1), 3=58(LC 15), 4=35(LC 3)

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

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126314
210502	J12	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:58 2021 Page 1
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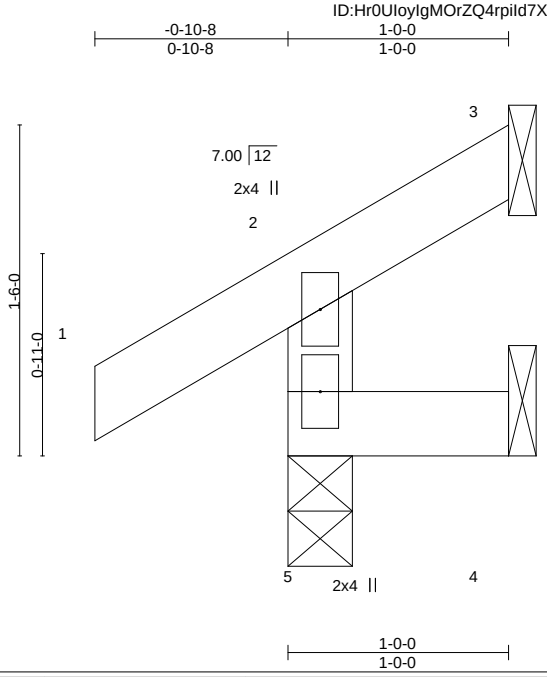

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 4 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=36(LC 5)
Max Uplift 5=-17(LC 8), 3=-15(LC 8), 4=-7(LC 5)
Max Grav 5=153(LC 1), 3=10(LC 6), 4=14(LC 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) 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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126315
210502	J13	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:59 2021 Page 1
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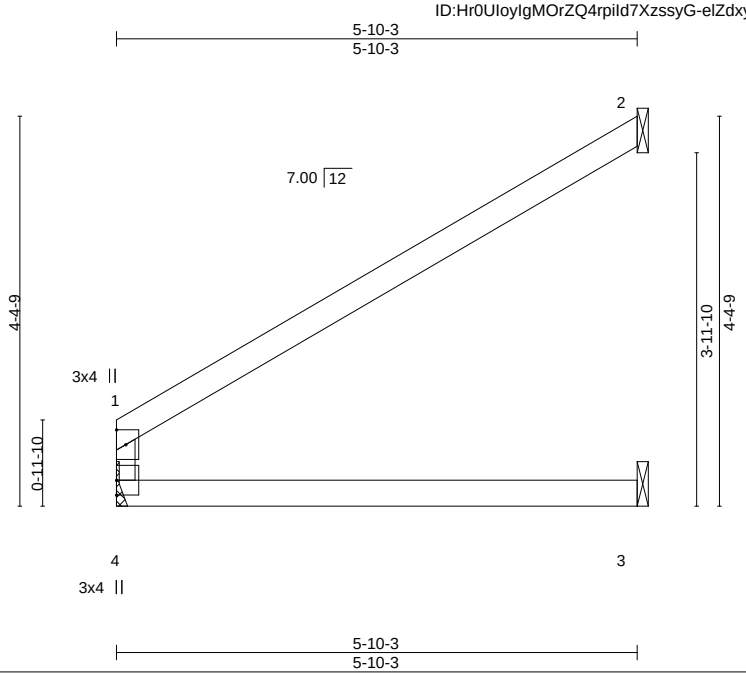

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.05	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.12	3-4	>592	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	3-4	>999	240	Weight: 15 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 5-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=89(LC 8)
Max Uplift 2=-70(LC 8)
Max Grav 4=256(LC 1), 2=188(LC 13), 3=110(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); 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126316
210502	J14	Jack-Open	8	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:21:59 2021 Page 1
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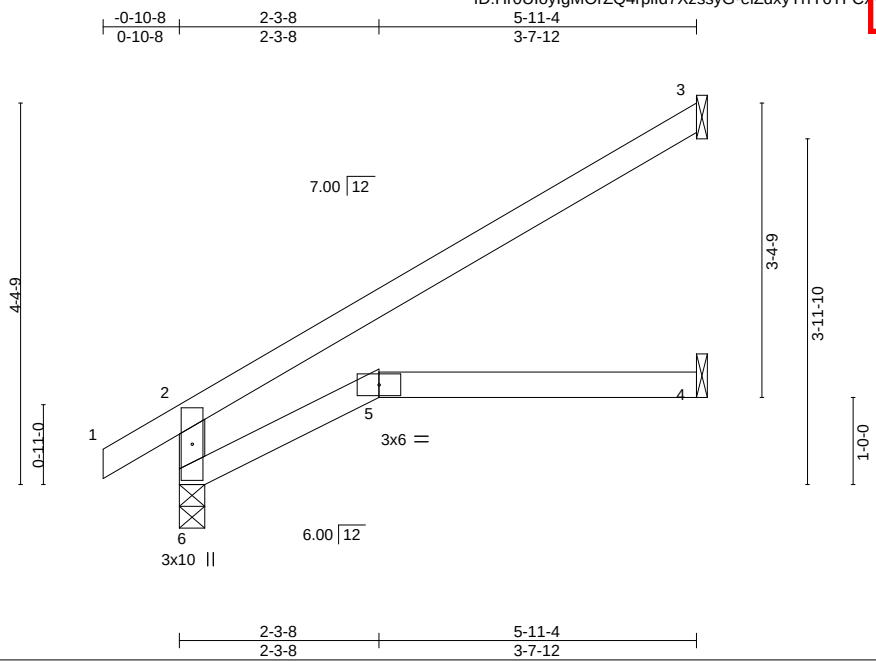

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.12	4-5	>593	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	5	>999	240	Weight: 17 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=103(LC 8)
Max Uplift 3=-69(LC 8)
Max Grav 6=336(LC 1), 3=184(LC 13), 4=109(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/36

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126317
210502	J15	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:36:00 2021 Page 1
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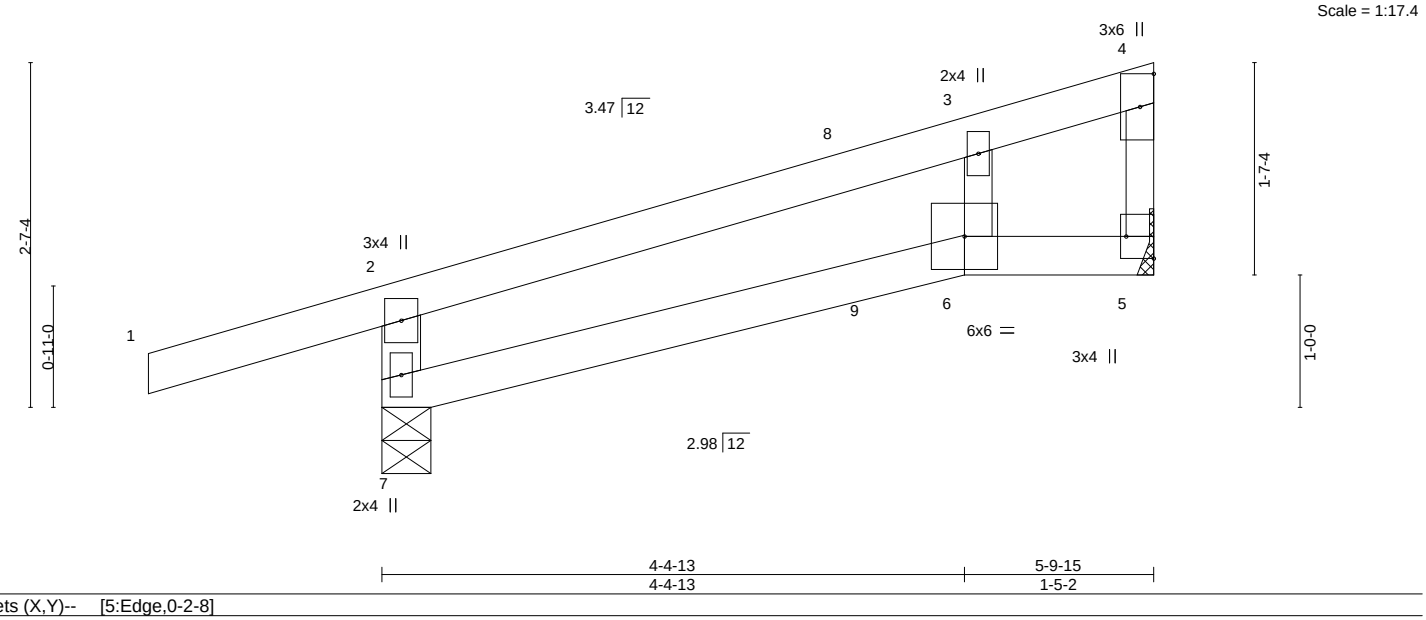
-1-9-3 / 1-9-3 | 4-4-13 / 4-4-13 | 5-9-15 / 1-5-2

Scale = 1:17.4



4-4-13 / 4-4-13 | 5-9-15 / 1-5-2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.03	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.06	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6-7	>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 *Except*
2-7: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-4-7, 5=Mechanical
Max Horz 7=92(LC 22)
Max Uplift 7=-135(LC 4), 5=-58(LC 8)
Max Grav 7=410(LC 1), 5=232(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-375/160

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=135.
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) 68 lb down and 37 lb up at 3-7-3, and 110 lb down and 70 lb up at 3-9-12 on top chord, and 7 lb down and 11 lb up at 3-7-3, and 16 lb down at 3-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126318
210502	J16	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:01 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-b8gNMeZ6BAMBUW5tvcX2y6NUrKsHtVRvwKZCEzGdYg

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0-10-8 2-3-8 2-11-8 0-8-4

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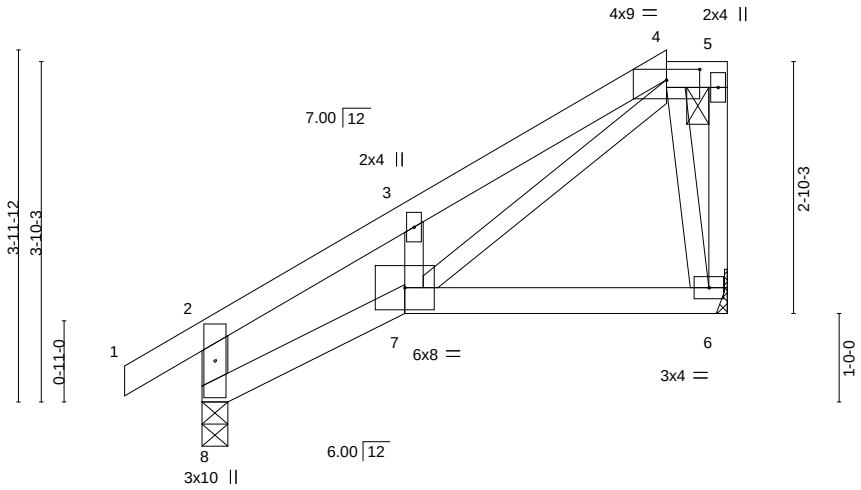


2-3-8 5-3-0 5-11-4
2-3-8 2-11-8 0-8-4

Plate Offsets (X,Y)-- [4:0-4-8,0-1-7]

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	0.29	Vert(LL)	-0.02	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	7	>999	240	Weight: 24 lb	FT = 10%

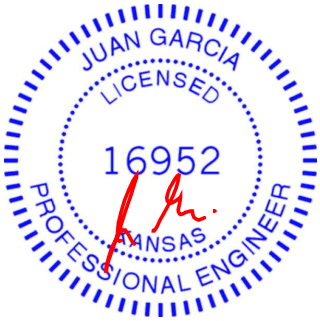
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 2x4 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 6=Mechanical
Max Horz 8=111(LC 5)
Max Uplift 8=-8(LC 8), 6=-29(LC 5)
Max Grav 8=334(LC 1), 6=250(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-385/42, 2-3=-380/35, 3-4=-336/92
BOT CHORD 7-8=-99/314
WEBS 4-7=-86/304, 4-6=-258/60

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) 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) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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.



May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126319
210502	J17	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:02 2021 Page 1
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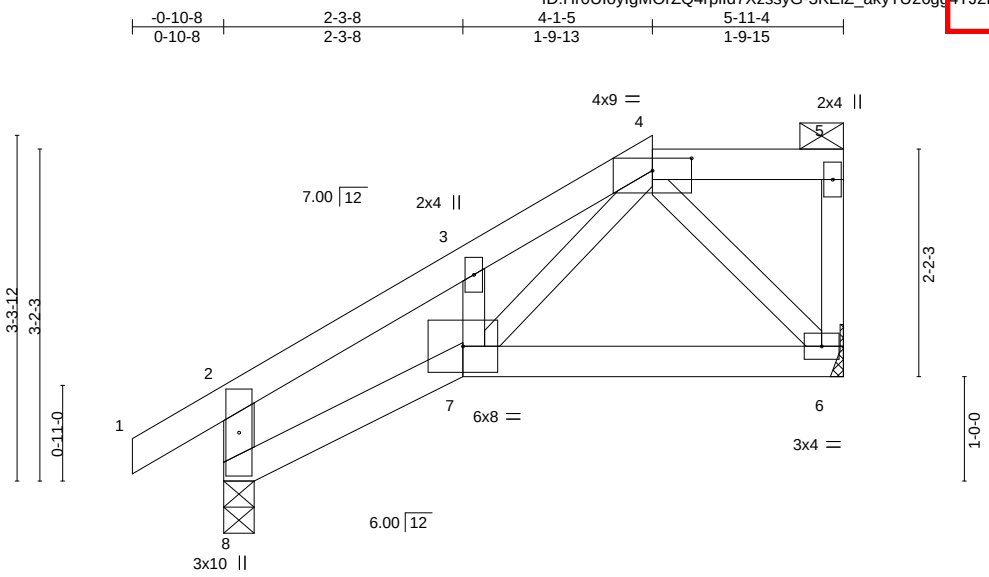

Plate Offsets (X,Y)-- [4:0-4-8,0-1-7]

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)	-0.02	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	7	>999	240	Weight: 22 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 5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 6=Mechanical
Max Horz 8=89(LC 5)
Max Uplift 8=-10(LC 8), 6=-24(LC 5)
Max Grav 8=334(LC 1), 6=250(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-385/40, 2-3=-364/30, 3-4=-278/74
BOT CHORD 7-8=-81/284

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) 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) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126320
210502	J18	Jack-Closed Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:20:02 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-XWo7nKbMjncvjpFG0ZW1WsDnYGiJmeAMEp9G6zQdVo

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0-10-8 2-11-9 2-11-11

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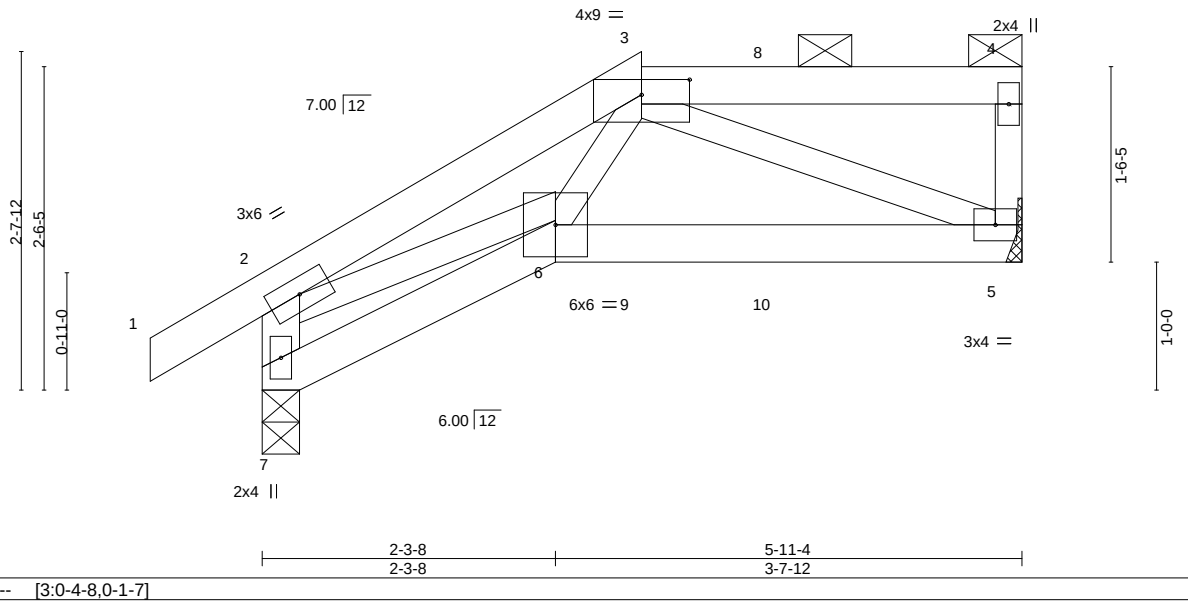

2-3-8 5-11-4
2-3-8 3-7-12

Plate Offsets (X,Y)-- [3:0-4-8,0-1-7]

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	0.32	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.06	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.02	5-6	>999	240	Weight: 22 lb	FT = 10%

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

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

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=82(LC 5)
Max Uplift 7=-102(LC 8), 5=-109(LC 5)
Max Grav 7=491(LC 1), 5=462(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-470/142, 2-3=-838/189
BOT CHORD 5-6=-160/497
WEBS 2-6=-122/689, 3-6=-75/397, 3-5=-545/164

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) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=102, 5=109.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 111 lb down and 91 lb up at 4-0-0 on top chord, and 209 lb down and 81 lb up at 2-11-9, and 68 lb down at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) 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

May 14,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126320
210502	J18	Jack-Closed Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-70, 6-7=-20, 5-6=-20
   Concentrated Loads (lb)
   Vert: 8=-111(F) 9=-209(F) 10=-51(F)

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126321
210502	J19	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:20:02 2021 Page 1
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0-10-8 1-9-0

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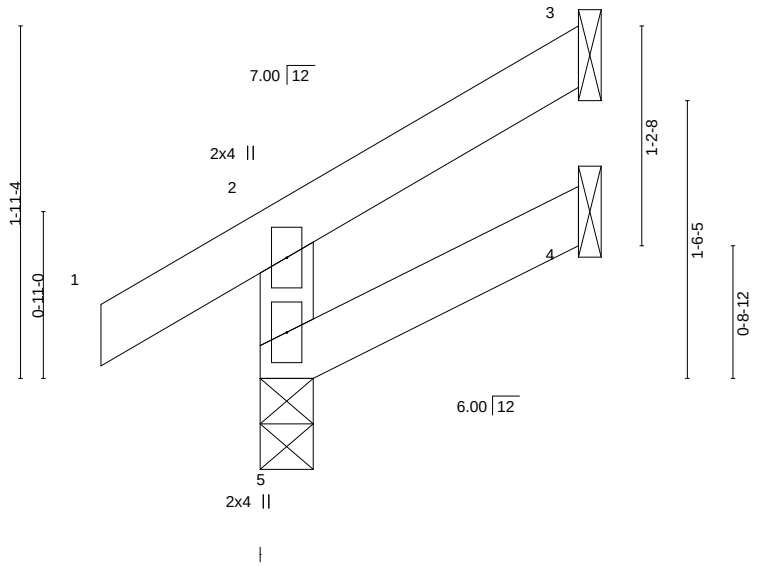

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=48(LC 8)
Max Uplift 5=-12(LC 8), 3=-35(LC 8), 4=-3(LC 8)
Max Grav 5=166(LC 1), 3=44(LC 15), 4=29(LC 3)

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

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126232
210502	J20	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:04 2021 Page 1
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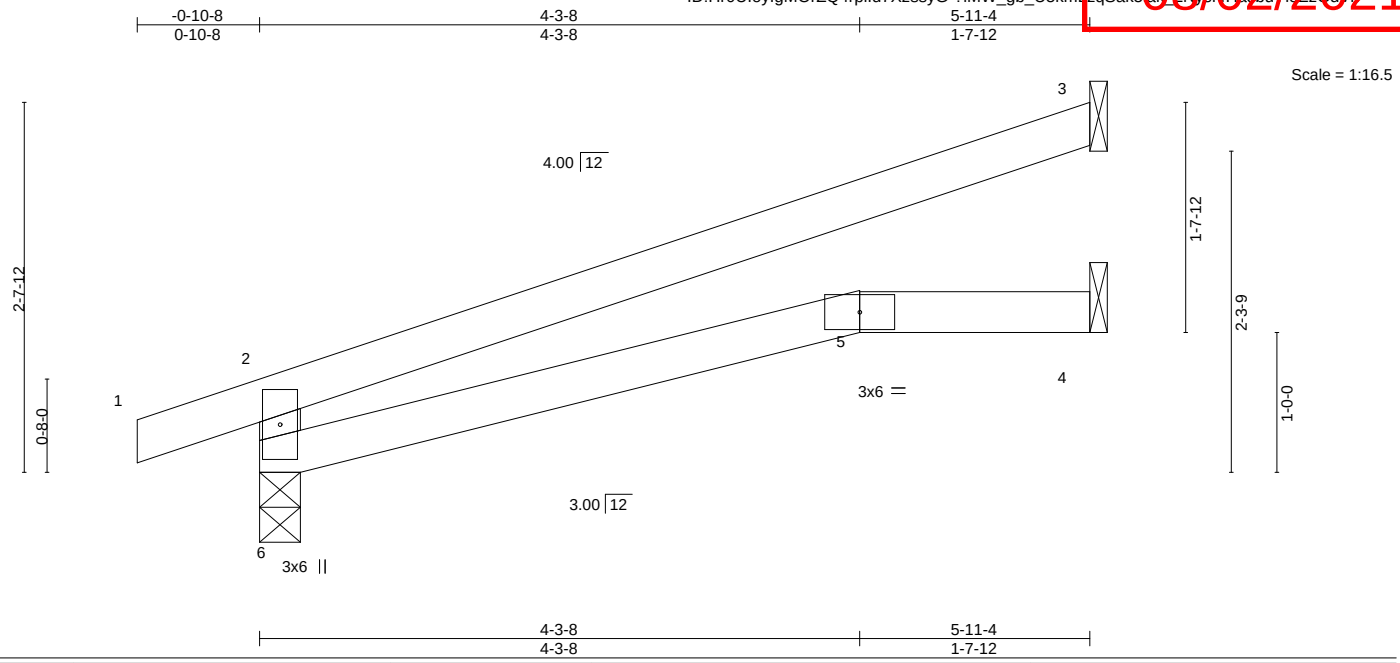

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.05	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	5-6	>607	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	5-6	>999	240	Weight: 16 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=89(LC 4)
Max Uplift 6=-76(LC 4), 3=-83(LC 8)
Max Grav 6=336(LC 1), 3=181(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/126

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126323
210502	J21	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:05 2021 Page 1
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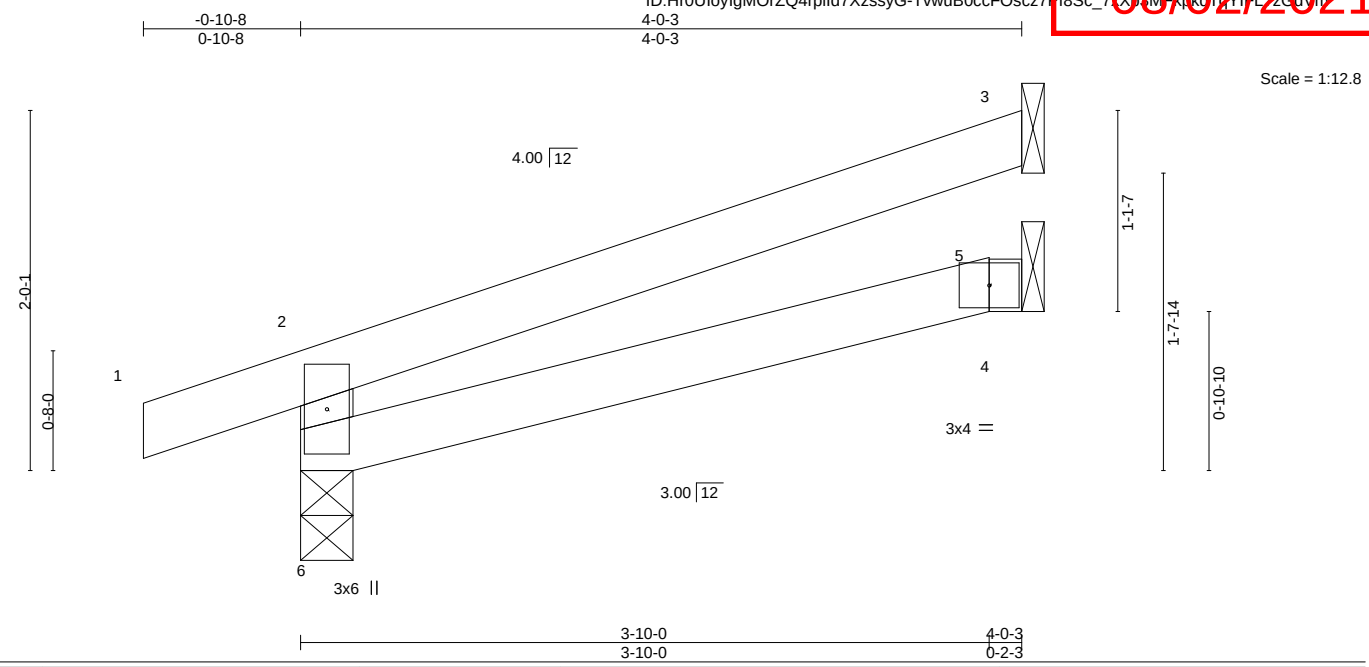

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=63(LC 4)
Max Uplift 6=-65(LC 4), 3=-56(LC 8)
Max Grav 6=252(LC 1), 3=117(LC 1), 4=71(LC 3)

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

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126324
210502	LAY1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:10 2021 Page 1
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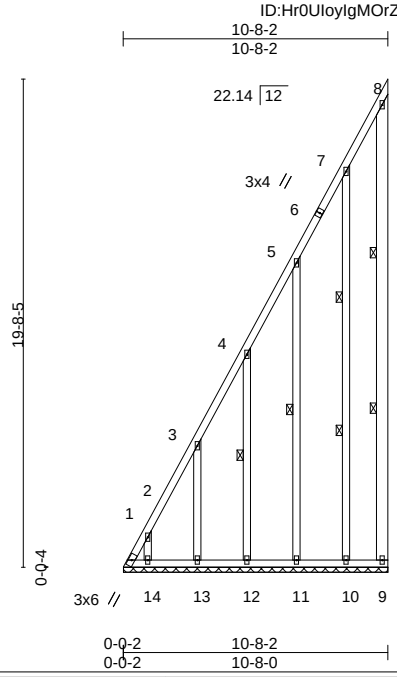

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 120 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x6 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12, 5-11
2 Rows at 1/3 pts 8-9, 7-10

REACTIONS. All bearings 10-8-0.
(lb) - Max Horz 1=768(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 9=-103(LC 8), 1=-680(LC 6), 14=-259(LC 8), 13=-320(LC 8), 12=-307(LC 8), 11=-324(LC 8), 10=-267(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 9, 14 except 1=1409(LC 8), 13=294(LC 15), 12=281(LC 15), 11=295(LC 15), 10=253(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1584/778, 2-3=-1352/667, 3-4=-1026/508, 4-5=-714/358, 5-7=-388/198
WEBS 2-14=-196/255, 3-13=-253/347, 4-12=-242/331, 5-11=-254/347, 7-10=-219/297

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 9, 680 lb uplift at joint 1, 259 lb uplift at joint 14, 320 lb uplift at joint 13, 307 lb uplift at joint 12, 324 lb uplift at joint 11 and 267 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126325
210502	LAY2	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:10 2021 Page 1
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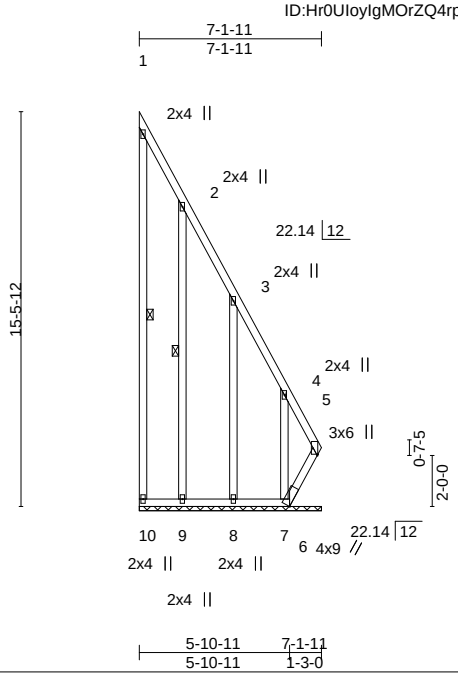

Plate Offsets (X,Y)-- [5:0-0-9,0-0-4]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 71 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-9-13 oc bracing: 5-6.
WEBS 1 Row at midpt 1-10, 2-9

REACTIONS. All bearings 7-1-11.
(lb) - Max Horz 10=-527(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 10 except 5=-1049(LC 7), 6=-1074(LC 9), 9=-293(LC 9), 8=-333(LC 9), 7=-532(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 10 except 5=2213(LC 9), 6=496(LC 7), 9=272(LC 16), 8=301(LC 16), 7=367(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-404/207, 3-4=-739/371, 4-5=-1258/621
BOT CHORD 9-10=-255/527, 8-9=-255/527, 7-8=-255/527, 6-7=-255/527, 5-6=-580/1190
WEBS 2-9=-233/317, 3-8=-260/357, 4-7=-316/562

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 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) 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) 10 except (jt=lb) 5=1049, 6=1074, 9=293, 8=333, 7=532.
7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5.
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) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.

May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	LAY3	GABLE	1	1	I46126326 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:22:11 2021 Page 1
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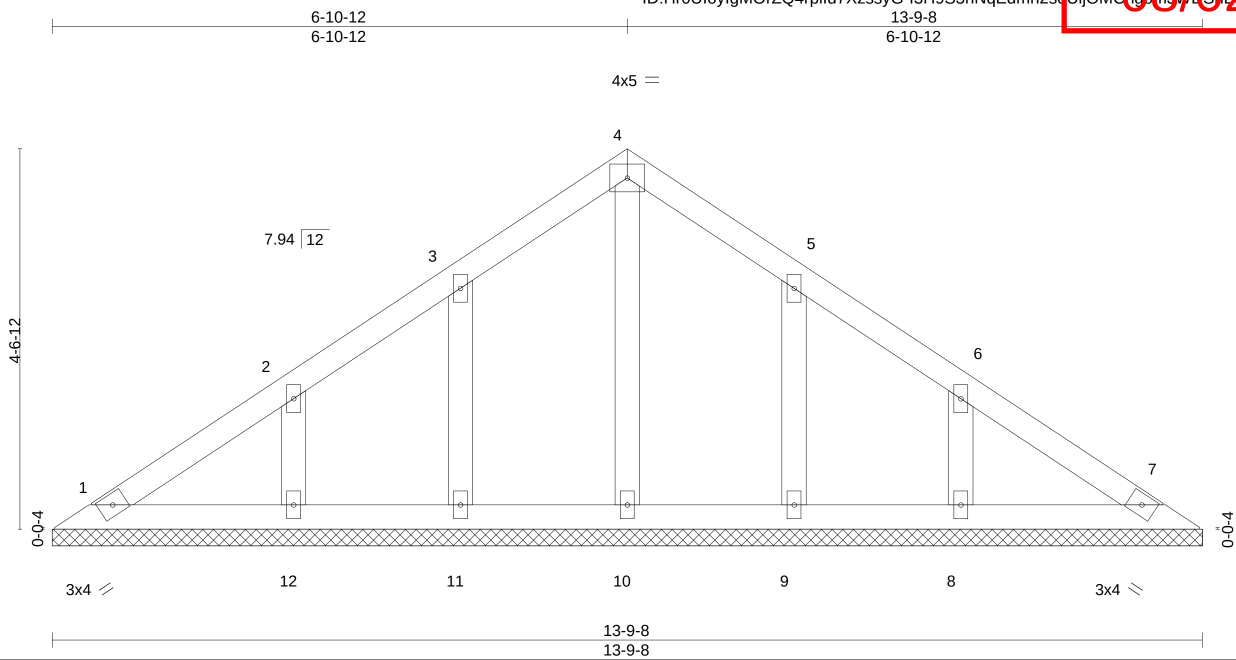

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 47 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 13-9-8.
(lb) - Max Horz 1=-111(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 12, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 12, 9, 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.

May 14,2021

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126327
210502	LAY4	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:38:12 2021 Page 1
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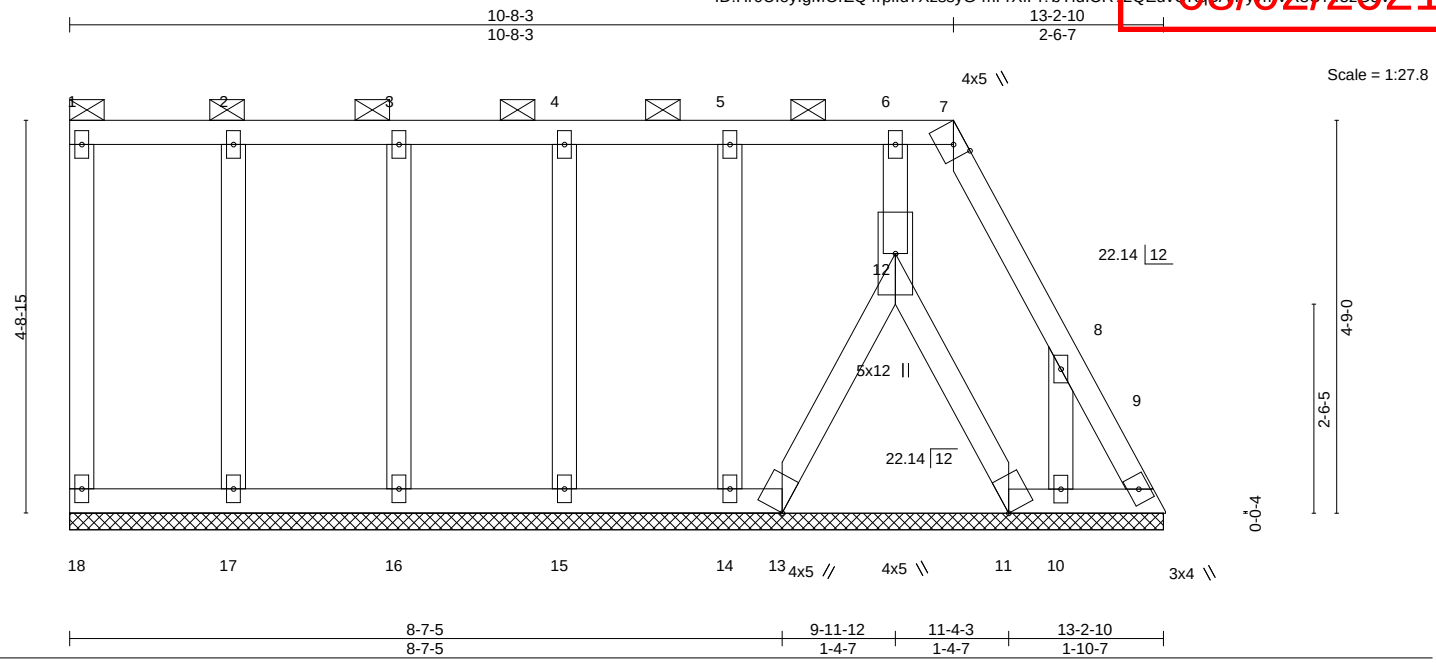

Plate Offsets (X,Y)-- [7:0-1-15,Edge]

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	0.09	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	0.05	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 65 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-2-10.
(lb) - Max Horz 18=-175(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 18, 17, 16, 15, 14 except 9=-164(LC 7), 13=-249(LC 9), 12=-303(LC 7), 11=-241(LC 9), 10=-246(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 18, 9, 13, 11, 17, 16, 15, 14, 10 except 12=502(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-265/218
BOT CHORD 12-13=-241/301, 11-12=-242/301

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate 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) 18, 17, 16, 15, 14 except (jt=lb) 9=164, 13=249, 12=303, 11=241, 10=246.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	LAY5	GABLE	1	1	I46126328 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:22:14 2021 Page 1
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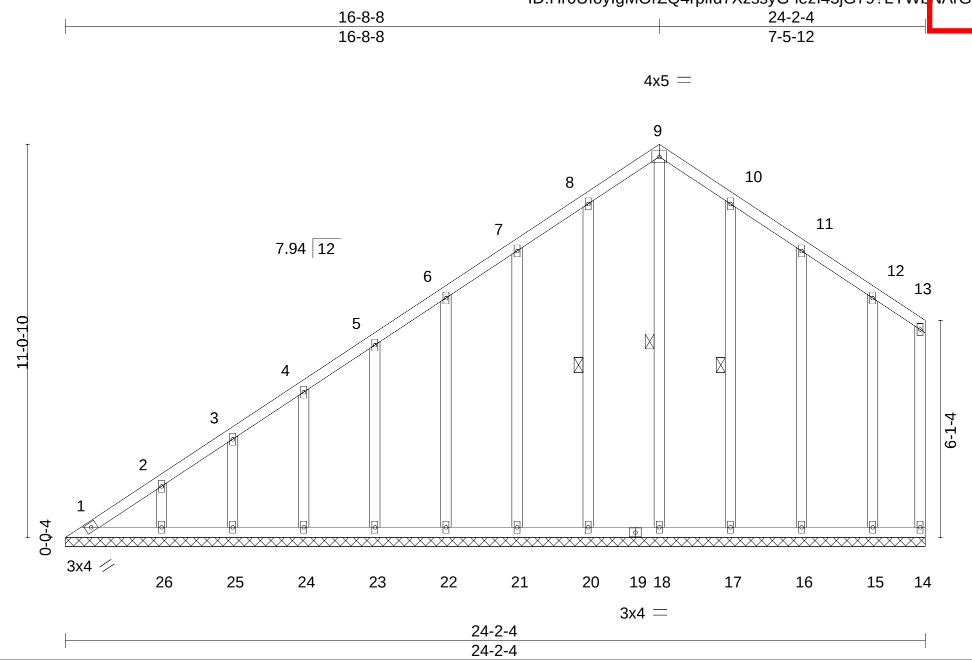

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 147 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-18, 8-20, 10-17

REACTIONS. All bearings 24-2-4.
(lb) - Max Horz 1=361(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 14, 20, 21, 22, 23, 24, 25, 26, 17, 16, 15 except 1=-111(LC 4), 18=-109(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 1, 14, 18, 20, 21, 22, 23, 24, 25, 26, 17, 16, 15

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-361/292, 2-3=-319/260, 3-4=-294/241, 4-5=-276/237, 5-6=-258/232

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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) 14, 20, 21, 22, 23, 24, 25, 26, 17, 16, 15 except (jt=lb) 1=111, 18=109.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126329
210502	LAY6	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:14 2021 Page 1
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2-10-14
2-10-14

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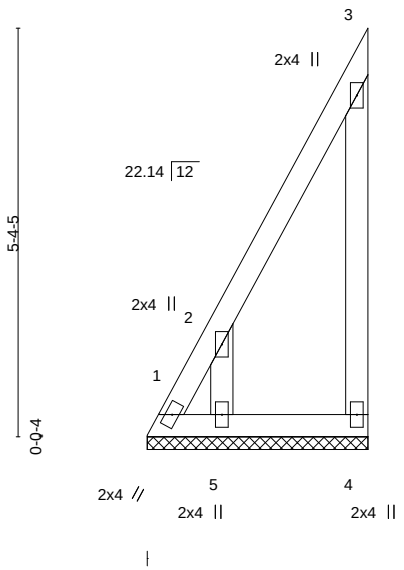

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 16 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-10-12, 4=2-10-12, 5=2-10-12
Max Horz 1=182(LC 5)
Max Uplift 1=-211(LC 6), 4=-127(LC 7), 5=-275(LC 8)
Max Grav 1=265(LC 5), 4=135(LC 15), 5=256(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-300/253
WEBS 2-5=-220/296

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) except (jt=lb) 1=211, 4=127, 5=275.
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.

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126330
210502	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:20:15 2021 Page 1
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3-9-15
3-9-15

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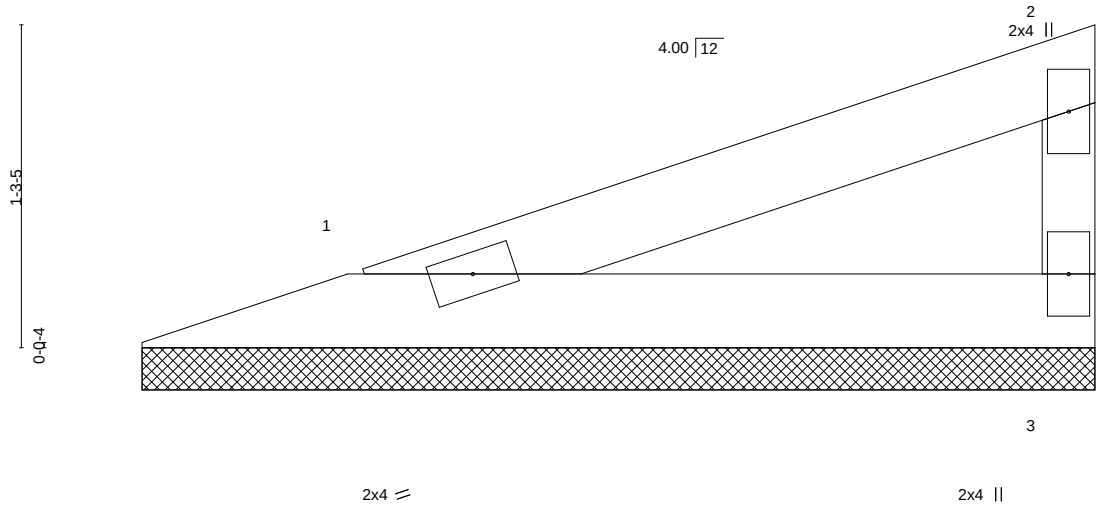

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014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

LUMBER-
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 3-9-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-9-3, 3=3-9-3
Max Horz 1=42(LC 5)
Max Uplift 1=-20(LC 4), 3=-27(LC 8)
Max Grav 1=125(LC 1), 3=125(LC 1)

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

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126331
210502	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:17 2021 Page 1
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7-3-15
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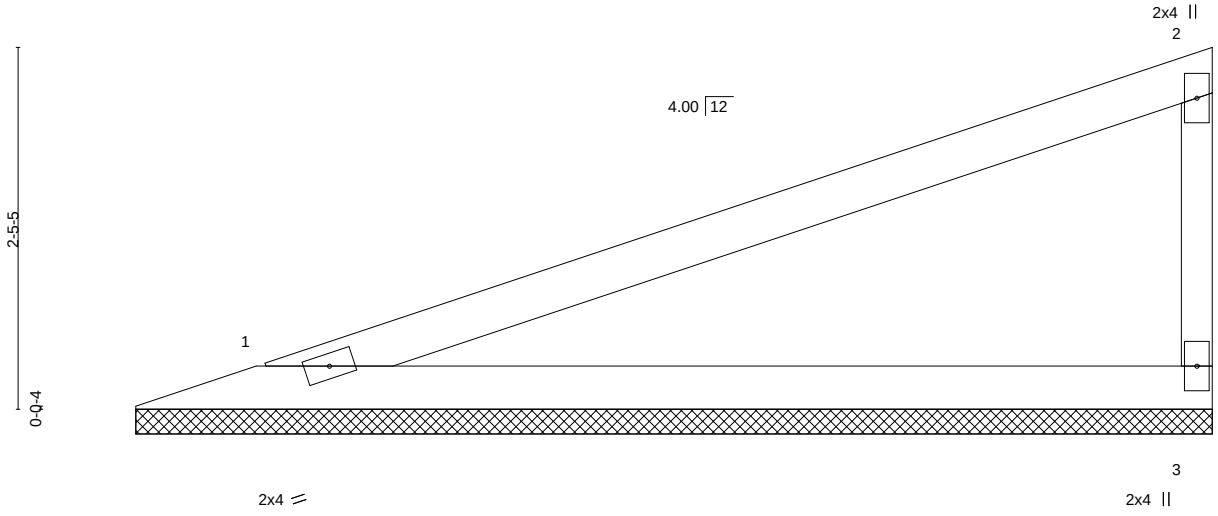

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 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 7-3-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-3-3, 3=7-3-3
Max Horz 1=94(LC 5)
Max Uplift 1=-46(LC 4), 3=-60(LC 8)
Max Grav 1=283(LC 1), 3=283(LC 1)

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

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126232
210502	V3	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:17 2021 Page 1
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3-9-7

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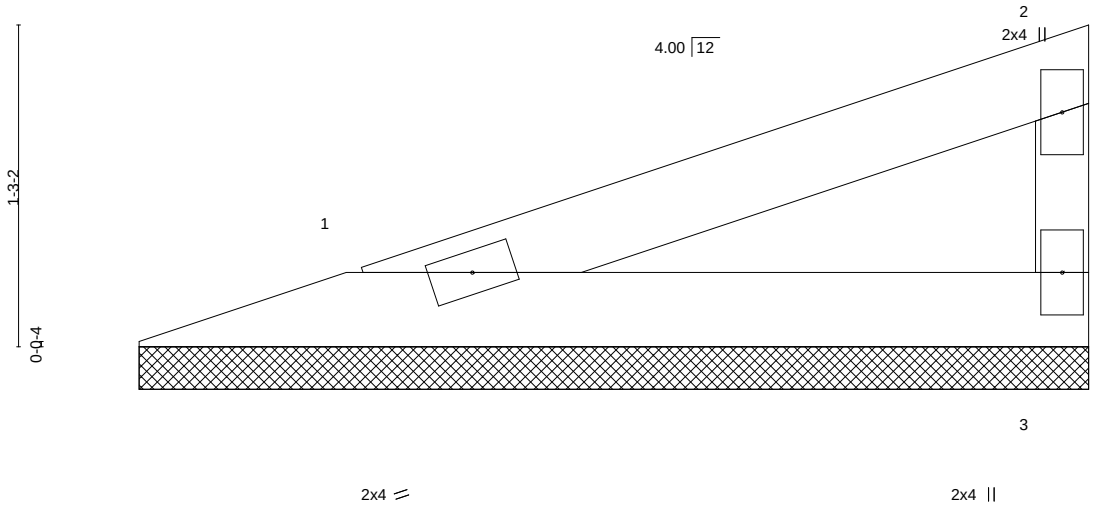

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014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

LUMBER-
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 3-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-8-11, 3=3-8-11
Max Horz 1=41(LC 5)
Max Uplift 1=-20(LC 4), 3=-26(LC 8)
Max Grav 1=123(LC 1), 3=123(LC 1)

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

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	V4	Valley	1	1	I46126333 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:22:18 2021 Page 1
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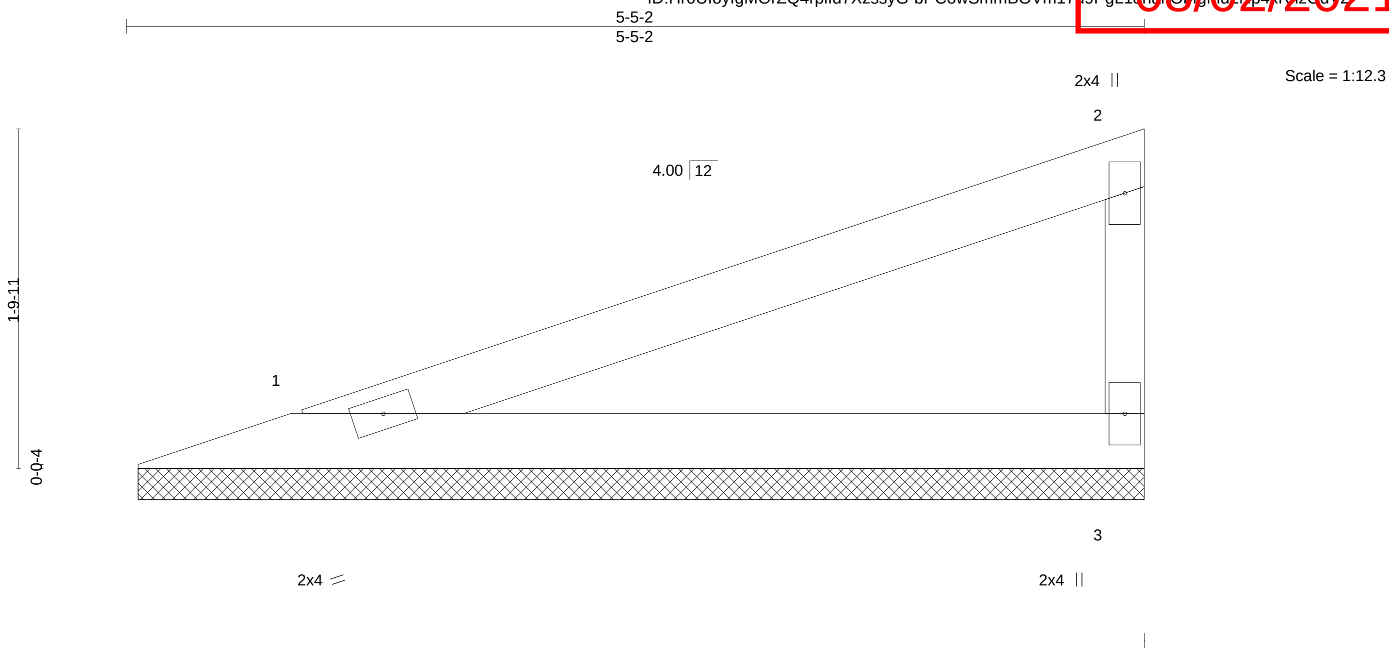


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 13 lb	FT = 10%

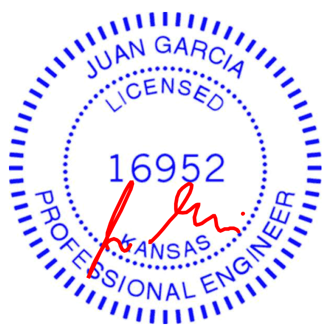
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-4-6, 3=5-4-6
Max Horz 1=66(LC 5)
Max Uplift 1=-32(LC 4), 3=-42(LC 8)
Max Grav 1=197(LC 1), 3=197(LC 1)

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

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



May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	V5	Valley	1	1	I46126334 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:22:18 2021 Page 1

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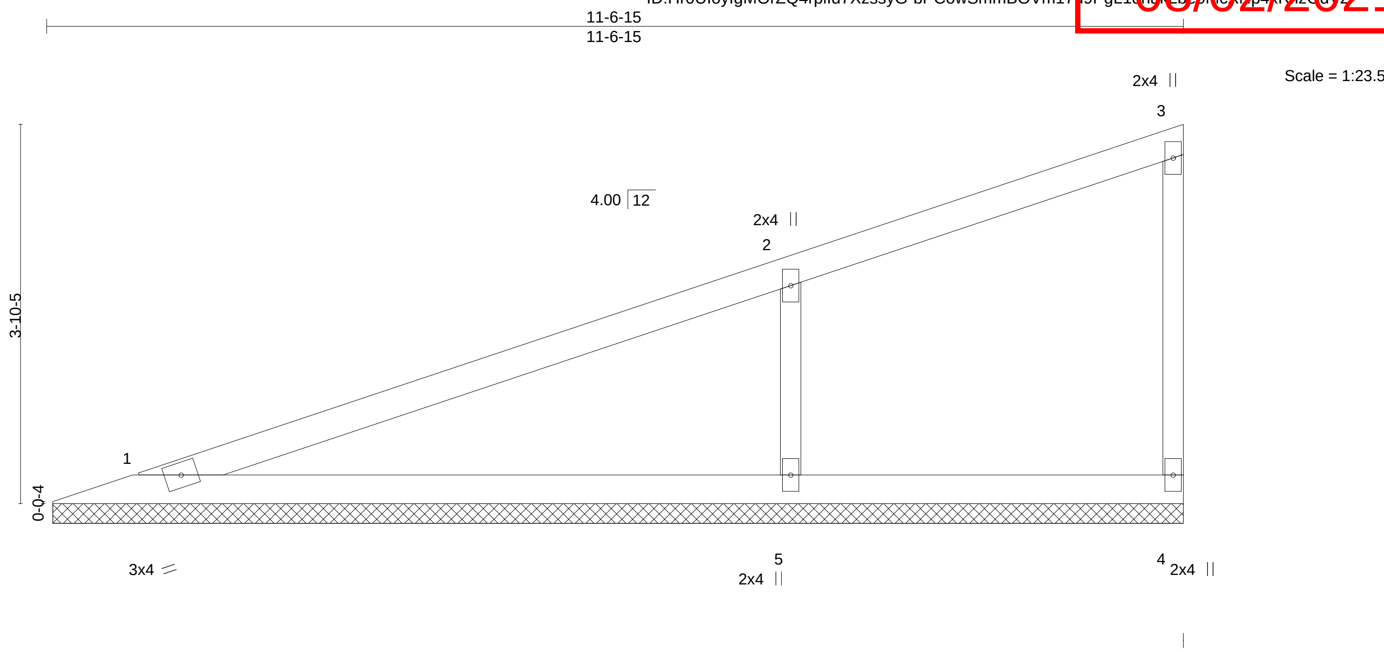


LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 30 lb	FT = 10%

SPACING- 2-0-0

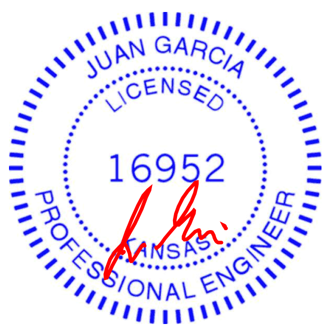
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. (size) 1=11-6-3, 4=11-6-3, 5=11-6-3
Max Horz 1=157(LC 5)
Max Uplift 1=-22(LC 4), 4=-16(LC 5), 5=-149(LC 8)
Max Grav 1=242(LC 1), 4=79(LC 1), 5=628(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-472/215

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, 4 except (jt=lb) 5=149.
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.



May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126235
210502	V6	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:19 2021 Page 1
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8-0-15
8-0-15

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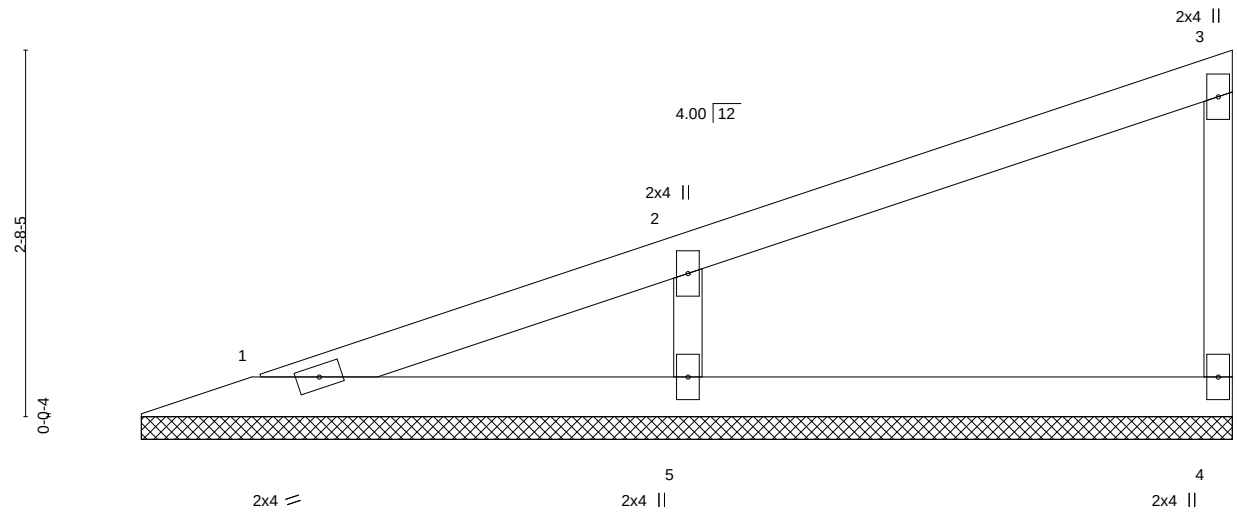

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 10%

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

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

REACTIONS. (size) 1=8-0-3, 4=8-0-3, 5=8-0-3
Max Horz 1=105(LC 5)
Max Uplift 4=-25(LC 8), 5=-95(LC 8)
Max Grav 1=95(LC 1), 4=138(LC 1), 5=399(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-310/148

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/02/2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR
210502	V7	Valley	1	1	I46126336 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:22:19 2021 Page 1
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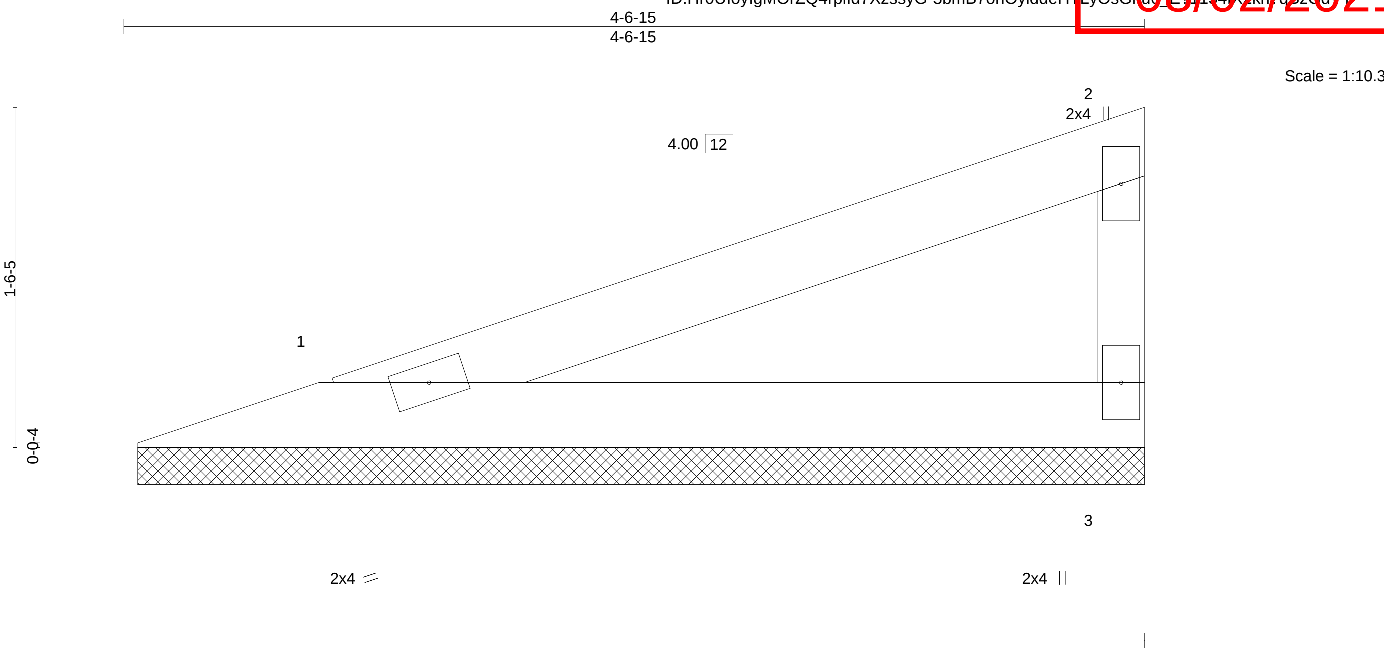


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 10 lb	FT = 10%

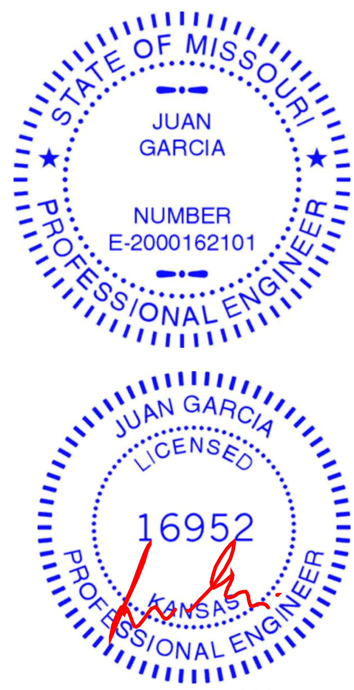
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-6-3, 3=4-6-3
Max Horz 1=53(LC 5)
Max Uplift 1=-26(LC 4), 3=-34(LC 8)
Max Grav 1=159(LC 1), 3=159(LC 1)

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

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



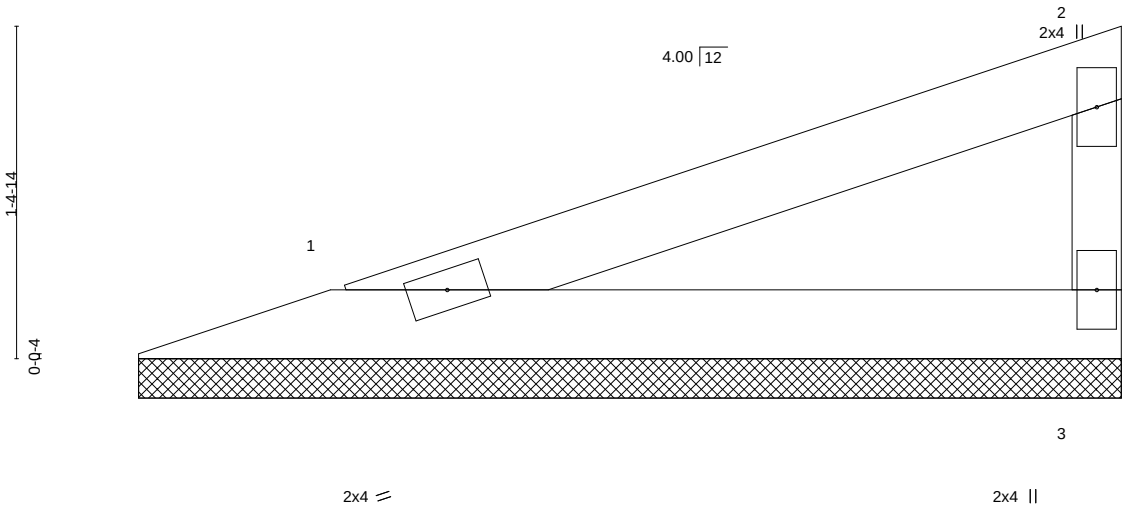
May 14,2021

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126237
210502	V8	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:20 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-XnKZL8o0j?lUGR2XV5NVD6AiPNggXYgHCQYMzzGdYX

4-2-11
4-2-11

Scale = 1:9.8



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 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 4-2-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-1-15, 3=4-1-15
Max Horz 1=48(LC 5)
Max Uplift 1=-23(LC 4), 3=-30(LC 8)
Max Grav 1=143(LC 1), 3=143(LC 1)

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

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

May 14,2021

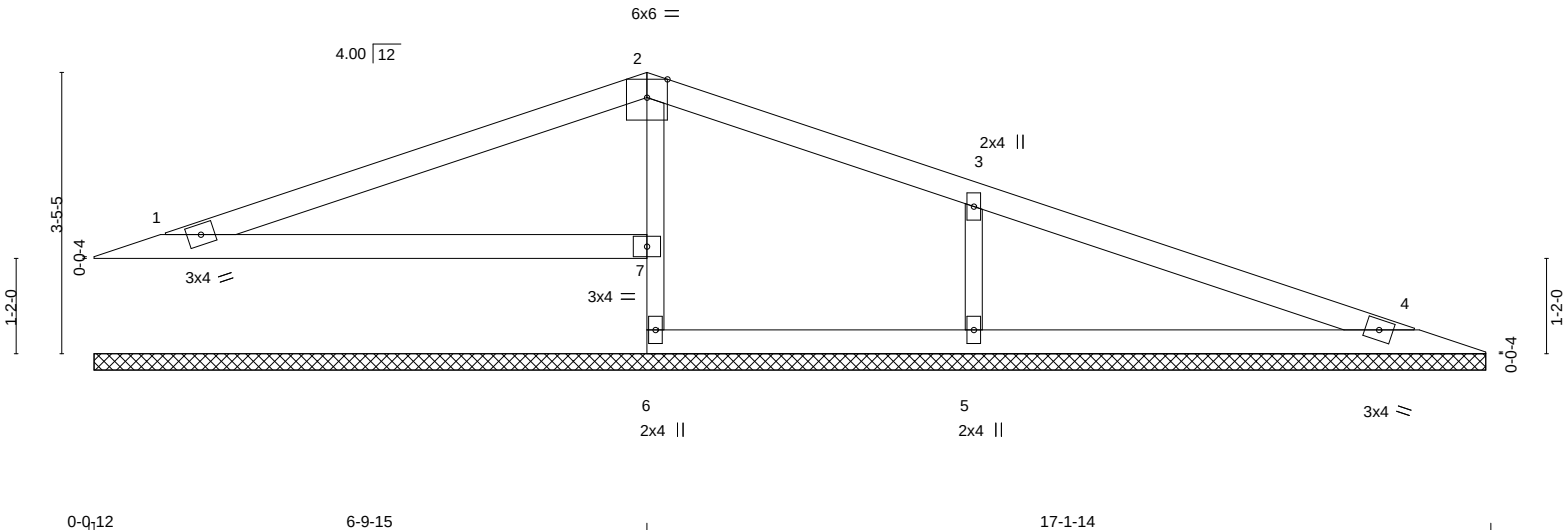
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126238
210502	V9	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:21 2021 Page 1
ID:Hr0UIoyIgMOrZQ4rpiId7XzssyG-?_uxYUpfUJtLuad4pukmJCGobg8ZydgV2A6v3zGiVW

6-9-15 17-1-14
6-9-15 10-3-15

Scale = 1:28.2



0-0-12 6-9-15 17-1-14
0-0-12 6-9-3 10-3-15

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)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 lb	FT = 10%

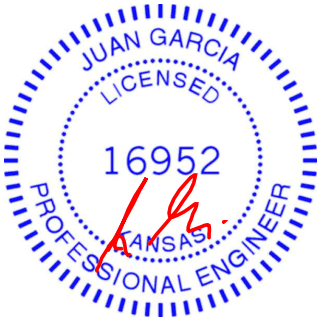
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-6: 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. All bearings 17-0-6.
(lb) - Max Horz 1=-82(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 4, 7 except 5=-122(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 4, 6 except 1=251(LC 21), 7=405(LC 1), 5=525(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-7=-329/71
WEBS 3-5=-395/182

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 7 except (jt=lb) 5=122.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.
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.



May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126339
210502	V10	Valley	1	1	Job Reference (optional)	

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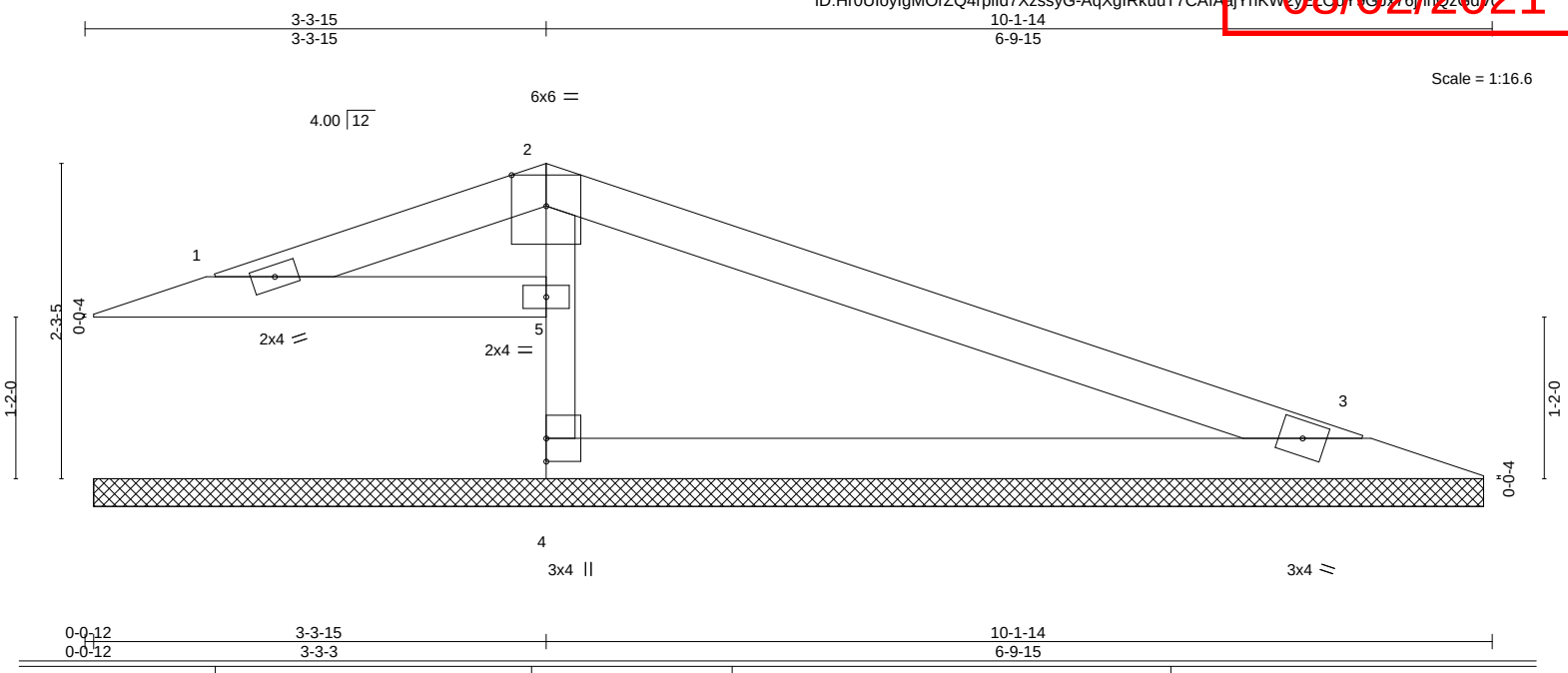

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 23 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-4: 2x3 SPF No.2

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

REACTIONS. All bearings 10-0-6.
(lb) - Max Horz 1=-62(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 3, 5
Max Grav All reactions 250 lb or less at joint(s) 1, 3, 4 except 5=348(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-5=-318/98

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

May 14,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 69 RR	I46126340
210502	V11	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 09:26:16 2021 Page 1
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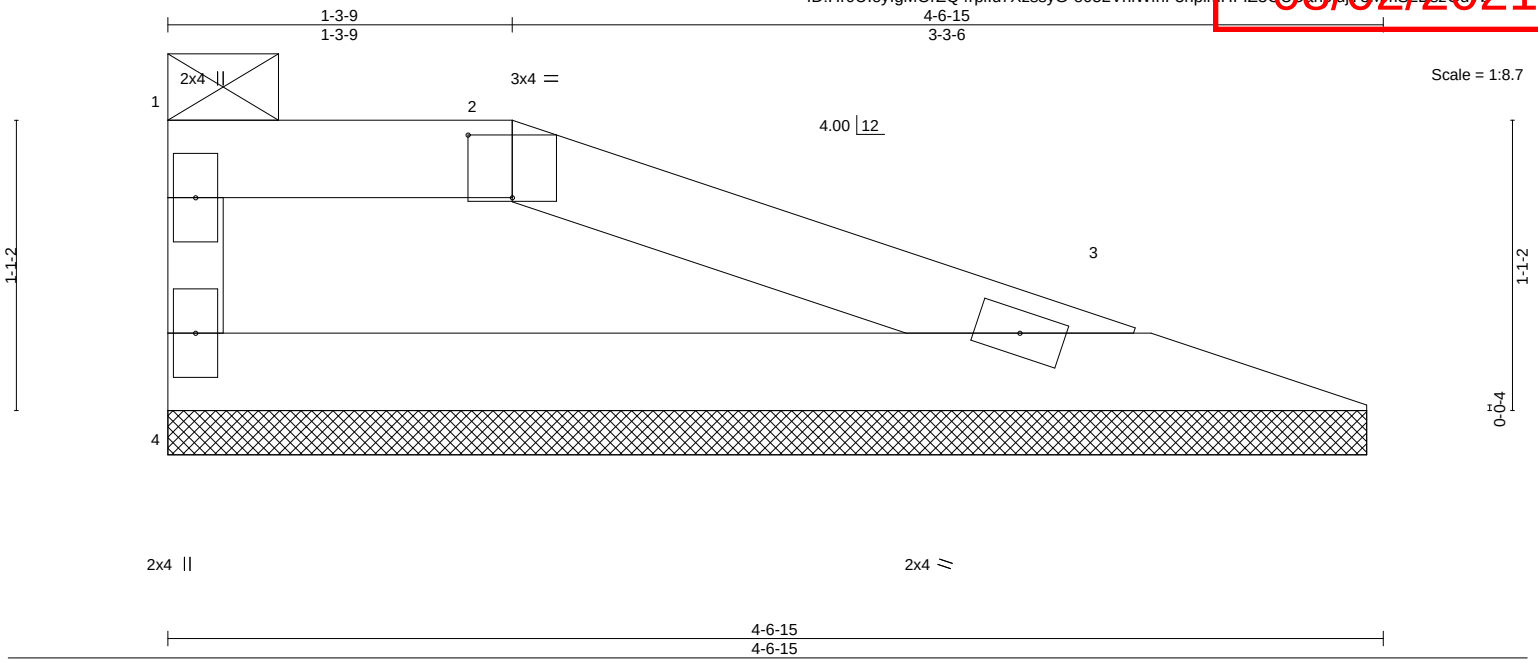


Plate Offsets (X,Y)-- [2:0-2-0,0-2-13]

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

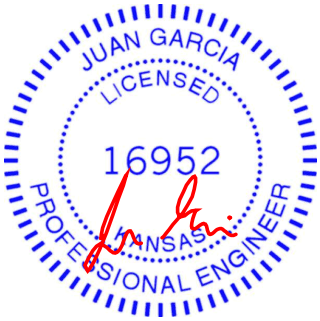
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, except end verticals, and 2-0-0 oc purlins: 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=4-6-3, 3=4-6-3
Max Horz 4=-36(LC 4)
Max Uplift 4=-31(LC 5), 3=-28(LC 5)
Max Grav 4=159(LC 1), 3=159(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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

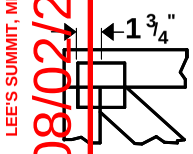


May 14,2021

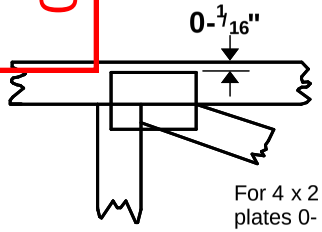
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

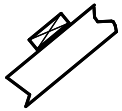
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

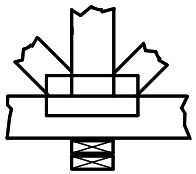
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

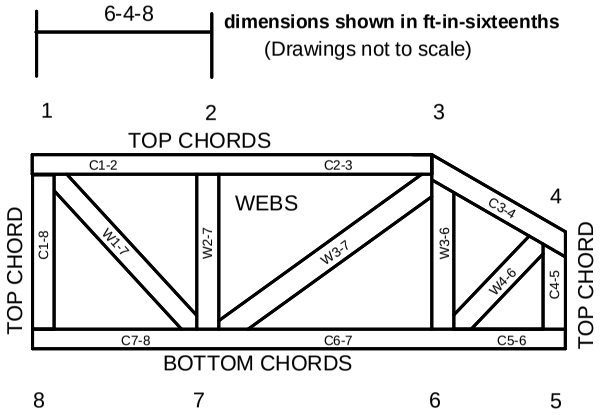


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: 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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.