



03/10/2021

RE: 210310
Lot 72 RR

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer: Project Name: 210310
Lot/Block:
Address:
City:

Model:
Subdivision:
State:

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

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

Design Program: MiTek 20/20 8.4
Wind Speed: 115 mph
Floor Load: N/A psf

This package includes 45 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45026353	B1	3/3/2021	21	I45026373	E2	3/3/2021
2	I45026354	B2	3/3/2021	22	I45026374	E3	3/3/2021
3	I45026355	B3A	3/3/2021	23	I45026375	G1	3/3/2021
4	I45026356	B4A	3/3/2021	24	I45026376	G2	3/3/2021
5	I45026357	B6A	3/3/2021	25	I45026377	G3	3/3/2021
6	I45026358	C1A	3/3/2021	26	I45026378	J5	3/3/2021
7	I45026359	C2A	3/3/2021	27	I45026379	J6	3/3/2021
8	I45026360	C3A	3/3/2021	28	I45026380	J7	3/3/2021
9	I45026361	C4A	3/3/2021	29	I45026381	J8	3/3/2021
10	I45026362	C5A	3/3/2021	30	I45026382	J9	3/3/2021
11	I45026363	C6	3/3/2021	31	I45026383	J10	3/3/2021
12	I45026364	C7	3/3/2021	32	I45026384	V1	3/3/2021
13	I45026365	C8	3/3/2021	33	I45026385	V2	3/3/2021
14	I45026366	C9	3/3/2021	34	I45026386	V3	3/3/2021
15	I45026367	C10	3/3/2021	35	I45026387	V4	3/3/2021
16	I45026368	C11	3/3/2021	36	I45026388	V5	3/3/2021
17	I45026369	D1	3/3/2021	37	I45026389	V6	3/3/2021
18	I45026370	D2	3/3/2021	38	I45026390	V7	3/3/2021
19	I45026371	D3	3/3/2021	39	I45026391	V8	3/3/2021
20	I45026372	E1	3/3/2021	40	I45026392	V9	3/3/2021

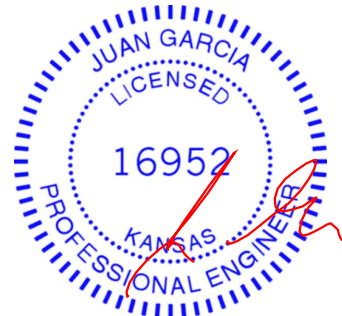
The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Wheeler - Waverly.

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.



March 03, 2021



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

03/10/2021

RE: 210310 - Lot 72 RR

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name: 210310

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
41	I45026393	V10	3/3/2021
42	I45026394	V11	3/3/2021
43	I45026395	V12	3/3/2021
44	I45026396	V13	3/3/2021
45	I45026397	V14	3/3/2021



03/10/2021

RE: 210310
Lot 72 RR

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer: Project Name: 210310
Lot/Block:
Address:
City:

Model:
Subdivision:
State:

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

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

Design Program: MiTek 20/20 8.4
Wind Speed: 115 mph
Floor Load: N/A psf

This package includes 45 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45026353	B1	3/3/2021	21	I45026373	E2	3/3/2021
2	I45026354	B2	3/3/2021	22	I45026374	E3	3/3/2021
3	I45026355	B3A	3/3/2021	23	I45026375	G1	3/3/2021
4	I45026356	B4A	3/3/2021	24	I45026376	G2	3/3/2021
5	I45026357	B6A	3/3/2021	25	I45026377	G3	3/3/2021
6	I45026358	C1A	3/3/2021	26	I45026378	J5	3/3/2021
7	I45026359	C2A	3/3/2021	27	I45026379	J6	3/3/2021
8	I45026360	C3A	3/3/2021	28	I45026380	J7	3/3/2021
9	I45026361	C4A	3/3/2021	29	I45026381	J8	3/3/2021
10	I45026362	C5A	3/3/2021	30	I45026382	J9	3/3/2021
11	I45026363	C6	3/3/2021	31	I45026383	J10	3/3/2021
12	I45026364	C7	3/3/2021	32	I45026384	V1	3/3/2021
13	I45026365	C8	3/3/2021	33	I45026385	V2	3/3/2021
14	I45026366	C9	3/3/2021	34	I45026386	V3	3/3/2021
15	I45026367	C10	3/3/2021	35	I45026387	V4	3/3/2021
16	I45026368	C11	3/3/2021	36	I45026388	V5	3/3/2021
17	I45026369	D1	3/3/2021	37	I45026389	V6	3/3/2021
18	I45026370	D2	3/3/2021	38	I45026390	V7	3/3/2021
19	I45026371	D3	3/3/2021	39	I45026391	V8	3/3/2021
20	I45026372	E1	3/3/2021	40	I45026392	V9	3/3/2021

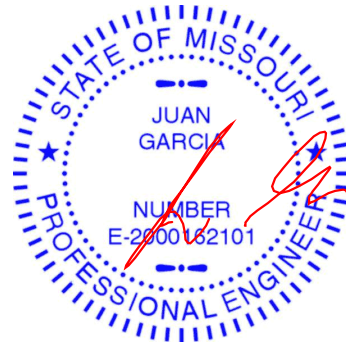
The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193

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



March 03, 2021



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

03/10/2021

RE: 210310 - Lot 72 RR

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name: 210310

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
41	I45026393	V10	3/3/2021
42	I45026394	V11	3/3/2021
43	I45026395	V12	3/3/2021
44	I45026396	V13	3/3/2021
45	I45026397	V14	3/3/2021

Job

210310

Truss

B1

Truss Type

Common Supported Gable

Qty

1

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Job Reference (optional)

ID: bDlNJA6?5tiTk6EI3KUKZyAkTB-P1XgUYRWybgWfl5E3OB_eqmp4yBW_AsuRNj_wzew6e

40-8-0

19-2-0

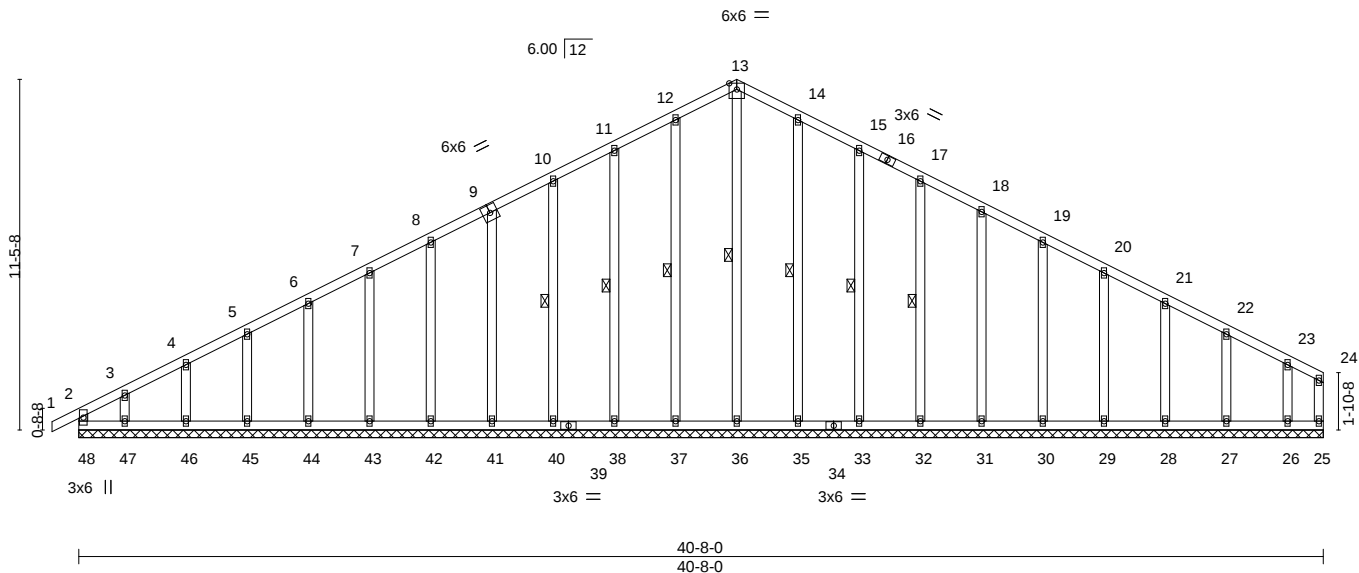
145026353

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

Scale = 1:75.3



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 0.08	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	25	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R							
									Weight: 236 lb	FT = 10%

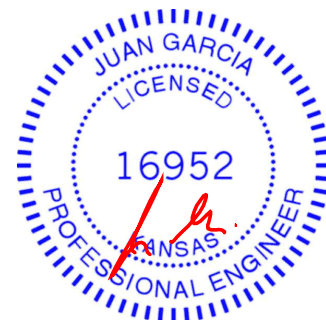
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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 13-36, 12-37, 11-38, 10-40, 14-35, 15-33, 17-32

REACTIONS. All bearings 40-8-0.
(lb) - Max Horz 48=199(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 48, 25, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27 except 47=-139(LC 8), 26=-142(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 48, 25, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 35, 33, 32, 31, 30, 29, 28, 27, 26 except 36=278(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-84/256, 9-10=-74/282, 10-11=-62/308, 11-12=-51/336, 12-13=-51/355, 13-14=-49/347, 14-15=-45/307, 15-17=-41/258
WEBS 13-36=-254/12

- 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) 48, 25, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27 except (jt=lb) 47=139, 26=142.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3,2021

Job

210310

Truss

B2

Truss Type

Roof Special

Qty

6

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021

MiTek Industries, Inc.

Lee's Summit, Missouri

Job Reference (optional)

0-10-8 2-8-5 7-8-9 13-8-9 21-6-0 26-3-0 33-3-7 40-8-0

0-10-8 2-8-5 5-0-4 6-0-0 7-9-7 4-9-0 7-0-7 7-4-9

145026354

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/10/2021

Scale = 1:74.6

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.39 16-18 >999 360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.69 16-18 >702 240	M18SHS		197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.38 12 n/a n/a	MT18HS		197/144	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25 19-20 >999 240	Weight: 185 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 5-7: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SPF 1650F 1.4E	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2 *Except* 2-20: 2x6 SPF 1650F 1.4E, 17-20: 2x4 SPF 2100F 1.8E 8-14: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 3-20: 2x6 SPF No.2, 6-16,11-12: 2x4 SPF No.2	WEBS	1 Row at midpt 4-18, 6-16, 8-16

REACTIONS.	
(size)	2=0-3-8, 12=Mechanical
Max Horz	2=207(LC 12)
Max Uplift	2=-257(LC 8), 12=-214(LC 9)
Max Grav	2=1970(LC 2), 12=1907(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-7462/1118, 3-4=-4240/548, 4-6=-3274/428, 6-7=-2278/318, 7-8=-2235/357, 8-10=-2732/334, 10-11=-2595/296, 11-12=-1789/250
BOT CHORD	2-20=-1167/6623, 19-20=-969/5371, 18-19=-576/3823, 16-18=-340/2842, 15-16=-111/2361, 8-15=-55/546
WEBS	3-20=-387/2612, 3-19=-1581/398, 4-19=-1/449, 4-18=-1109/267, 6-18=-34/799, 6-16=-1154/326, 7-16=-167/1595, 8-16=-799/259, 13-15=-210/2159, 10-13=-645/171, 11-13=-159/2158

NOTES-

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

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

3) All plates are MT20 plates unless otherwise indicated.

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

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

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

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=257, 12=214.

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.

March 3,2021

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

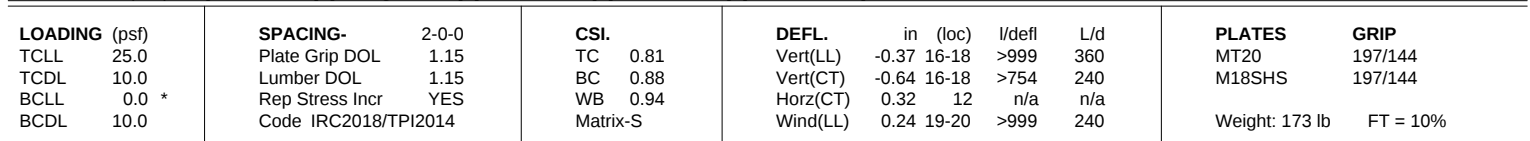
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017



BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-8-3 oc bracing: 2-20 7-8-15 oc bracing: 19-20.
WEBS	1 Row at midpt 4-18, 6-16, 9-16

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

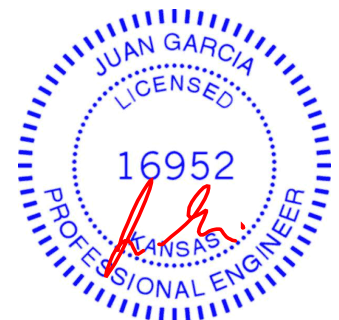
TOP CHORD
2-3=-7985/1231, 3-4=-1146/545, 4-6=-3241/427, 6-7=-2278/317, 7-9=-2279/348,
9-10=-2923/345, 10-11=-3072/340, 11-12=-1804/239

BOT CHORD
2-20=-1299/7164, 19-20=-1030/5512, 18-19=-579/3697, 16-18=-362/2836,
14-16=-145/2558, 13-14=-251/2685, 12-13=-71/384

WEBS
3-20=-450/2890, 3-19=-1869/460, 4-19=-20/531, 4-18=-980/246, 6-18=-31/740,
6-16=-1146/329, 7-16=-134/1519, 9-16=-822/273, 9-14=0/383, 11-13=-182/2321

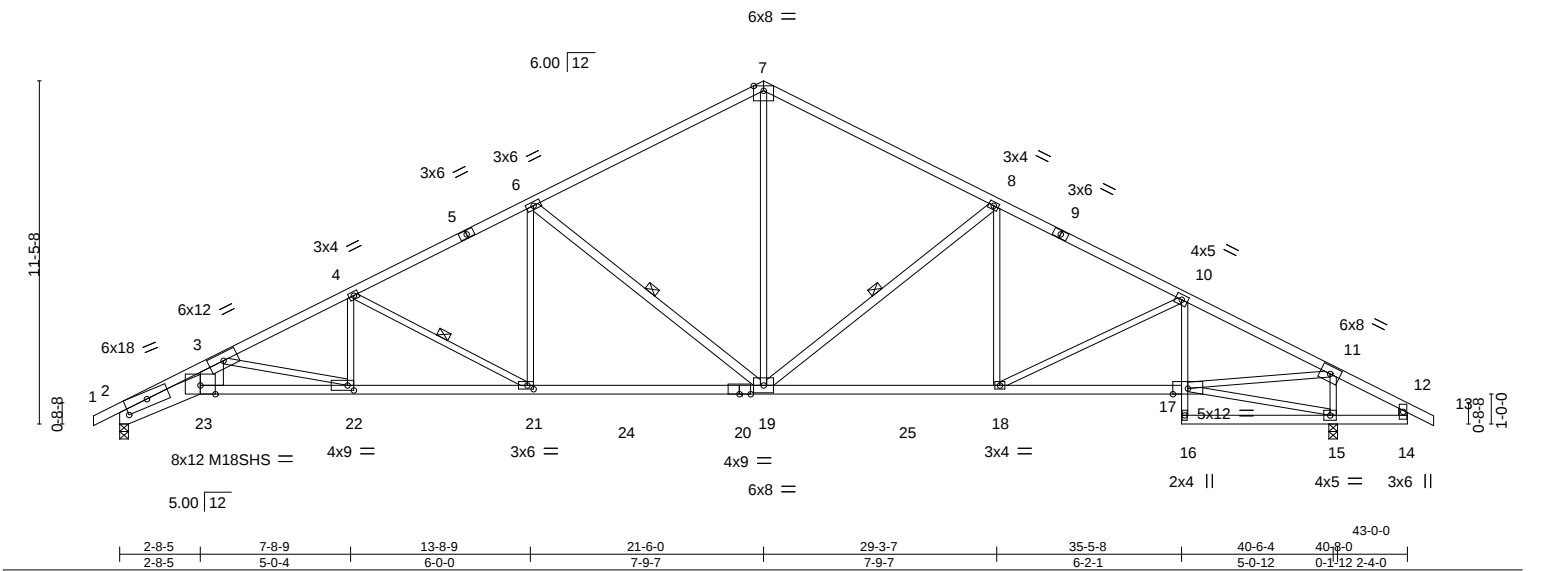
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 12=214.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

16023 Swingley Ridge Rd
Chesterfield, MO 63017



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 0.81	Vert(LL)	-0.37	19-21	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.65	19-21	>745	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.37	15	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.24	22-23	>999	Weight: 185 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E

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

2-23: 2x8 SP DSS, 10-16: 2x3 SPF No.2, 14-16: 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

3-23: 2x10 SP DSS, 6-19,8-19,12-14: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

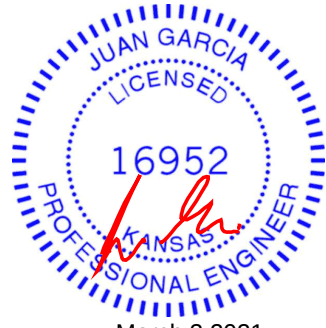
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

WEBS 1 Row at midpt 4-21, 6-19, 8-19

REACTIONS. (size) 2=0-3-8, 15=0-3-8
Max Horz 2=191(LC 12)
Max Uplift 2=257(LC 8), 15=278(LC 9)
Max Grav 2=1960(LC 2), 15=2201(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7957/1179, 3-4=-4129/535, 4-6=-3225/422, 6-7=-2262/315, 7-8=-2264/346, 8-10=-2898/327, 10-11=-3090/325
BOT CHORD 2-23=-1218/7185, 22-23=-967/5527, 21-22=-537/3687, 19-21=-325/2825, 18-19=-100/2531, 17-18=-170/2720
WEBS 3-23=-418/2900, 3-22=-1877/438, 4-22=-16/533, 4-21=-981/241, 6-21=-29/741, 6-19=-1148/327, 7-19=-133/1507, 8-19=-804/266, 8-18=0/372, 10-18=-250/120, 11-17=-236/2812, 11-15=-1964/313

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are MT20 plates unless otherwise indicated.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 15=278.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3,2021

Job

210310

Truss

C1A

Truss Type

Roof Special Girder

Qty

1

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021

MiTek Industries, Inc.

Lee's Summit, MO

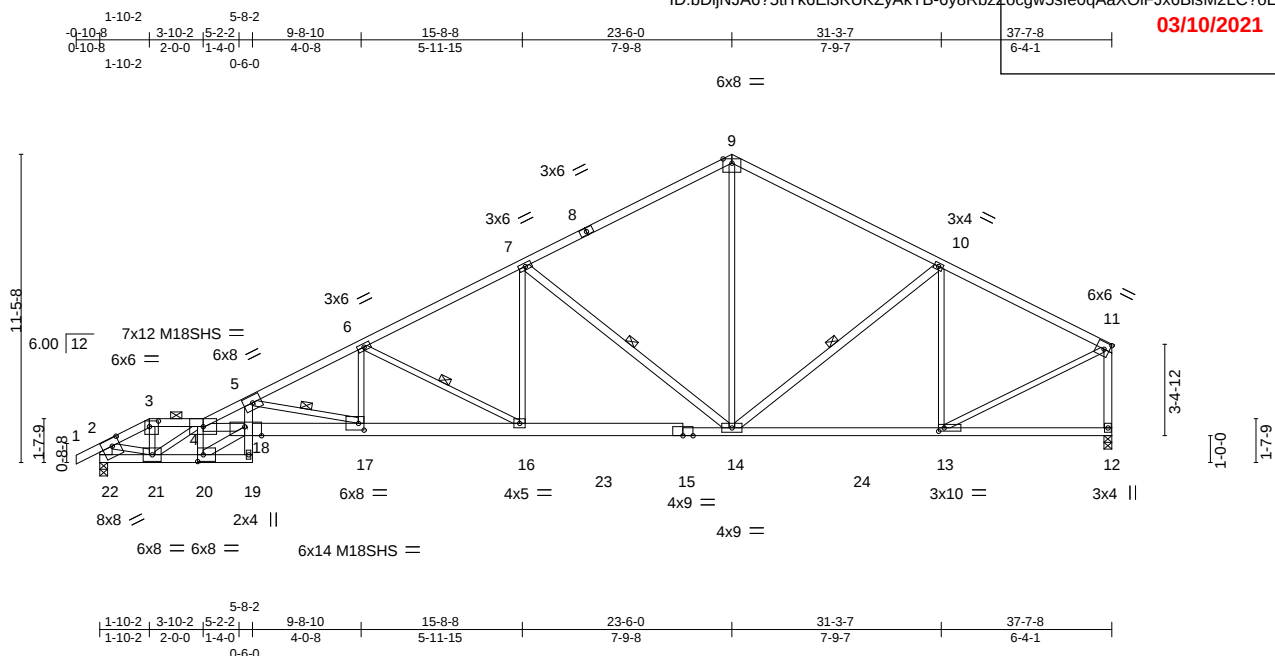
Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

03/10/2021

Scale = 1:85.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.37	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.65	M18SHS	197/144		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.23				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27			Weight: 173 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF 2100F 1.8E *Except* 1-3,3-4: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-1-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-2 max.): 3-4.
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 15-18: 2x6 SPF 1650F 1.4E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-2-13 oc bracing: 20-21 7-7-10 oc bracing: 17-18.
WEBS	2x3 SPF No.2 *Except* 5-19,18-20: 2x4 SPF 2100F 1.8E 4-18,7-14,10-14,11-12: 2x4 SPF No.2, 2-22: 2x6 SPF No.2	WEBS	1 Row at midpt 5-17, 6-16, 7-14, 10-14

REACTIONS.	
(size)	22=0-3-8, 12=0-3-8
Max Horz	22=255(LC 5)
Max Uplift	22=-262(LC 8), 12=-169(LC 9)
Max Grav	22=1821(LC 2), 12=1778(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-2333/314, 3-4=-2117/297, 4-5=-7880/1236, 5-6=-4454/640, 6-7=-3053/442, 7-9=-1854/300, 9-10=-1856/331, 10-11=-1798/215, 2-22=-1720/264, 11-12=-1692/197
BOT CHORD	21-22=-230/367, 20-21=-735/4203, 19-20=-55/323, 17-18=-1321/7352, 16-17=-668/3975, 14-16=-385/2673, 13-14=-143/1551
WEBS	5-18=-364/2341, 3-21=-108/958, 4-21=-2548/320, 4-20=-2525/478, 18-20=-842/4789, 4-18=-497/2640, 5-17=-3488/674, 6-17=-96/998, 6-16=-1477/321, 7-16=-68/1011, 7-14=-1418/368, 9-14=-120/1144, 10-13=-577/152, 2-21=-246/1833, 11-13=-127/1704

- 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) The Fabrication Tolerance at joint 18 = 6%

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, with BCDL = 10.0psf.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=262, 12=169.

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) 72 lb down and 73 lb up at 1-10-2 on top chord, and 11 lb down at 1-10-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
- ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component
- March 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 72 RR
210310	C1A	Roof Special Girder	1	1	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64086 Page 2

ID:bDljNJA675tiTk6EI3KUKZyAkTB-a8iqoJaQNz2yUSDCOt5mxznUhWW_bplUQfXotozew6T

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/10/2021

145026358

NOTES-
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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-9=-70, 9-11=-70, 19-22=-20, 12-18=-20
 Concentrated Loads (lb)
 Vert: 21=-0(F)



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
FILE # 501004125 MISS GRI
03/10/2021



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" tall by 2'-0" wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 24=261, 13=169.
- 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.

A circular blue seal for a Professional Engineer in the State of Kansas. The outer ring contains the text "JUAN GARCIA" at the top and "PROFESSIONAL ENGINEER" at the bottom. Inside this, a dotted circle contains the word "LICENSED" at the top and "KANSAS" at the bottom. In the center, the license number "16952" is displayed. A red ink signature is written across the center of the seal, overlapping the license number and the word "KANSAS".

Job

210310

Truss

C3A

Truss Type

Roof Special

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

145026360

45026360

Wheeler Lumber,

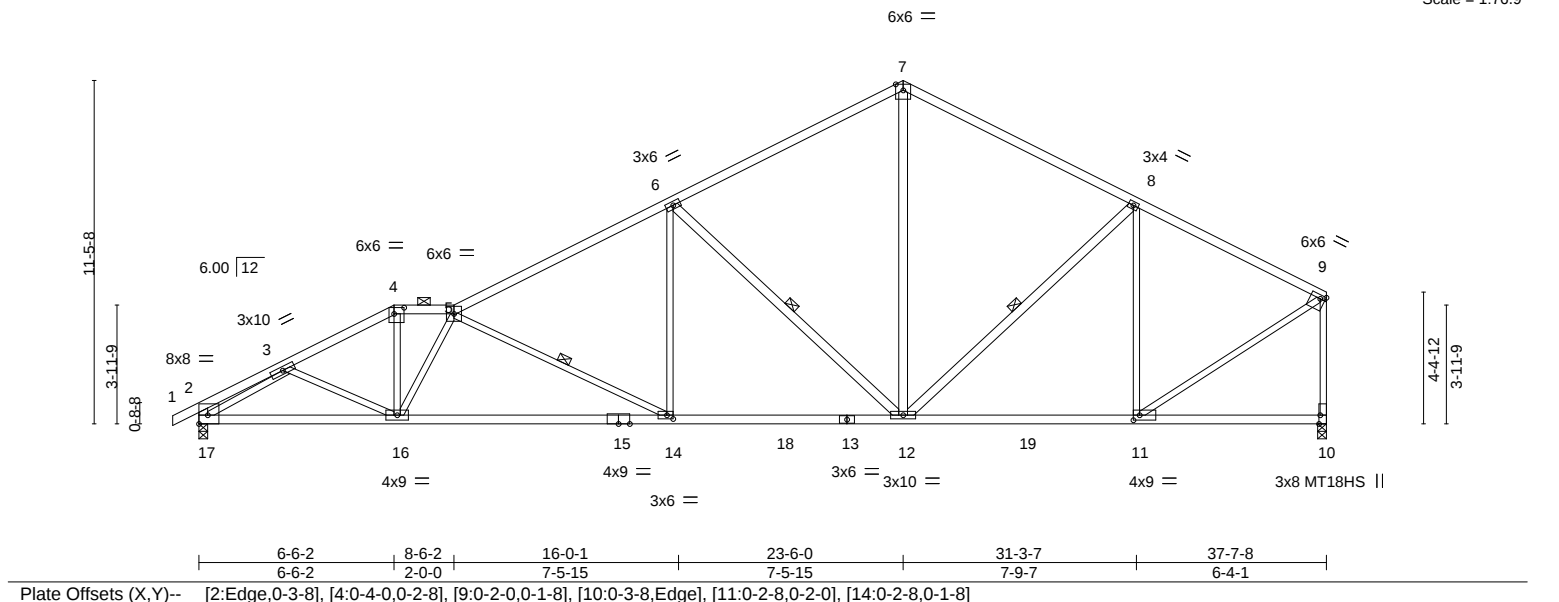
Waverly, KS - 66871,

ID: bDijNJA675tiTk6EI3KUKZyAKTB-jNyQKcfuRXLvxn30eTZbPyriXgo86w6dmSU6zew6Q

0-10-8 2-11-0 6-6-2 8-6-2 15-8-10 23-6-0 31-3-7 37-7-8

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

Scale = 1:76.9



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	0.94	Vert(LL)	-0.24	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.46	14-16	>974	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	14-16	>999	240	Weight: 167 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-11 max.): 4-5.
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 10-13: 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 6-12,7-12,8-12,2-17: 2x4 SPF No.2	WEBS	1 Row at midpt 5-14, 6-12, 8-12

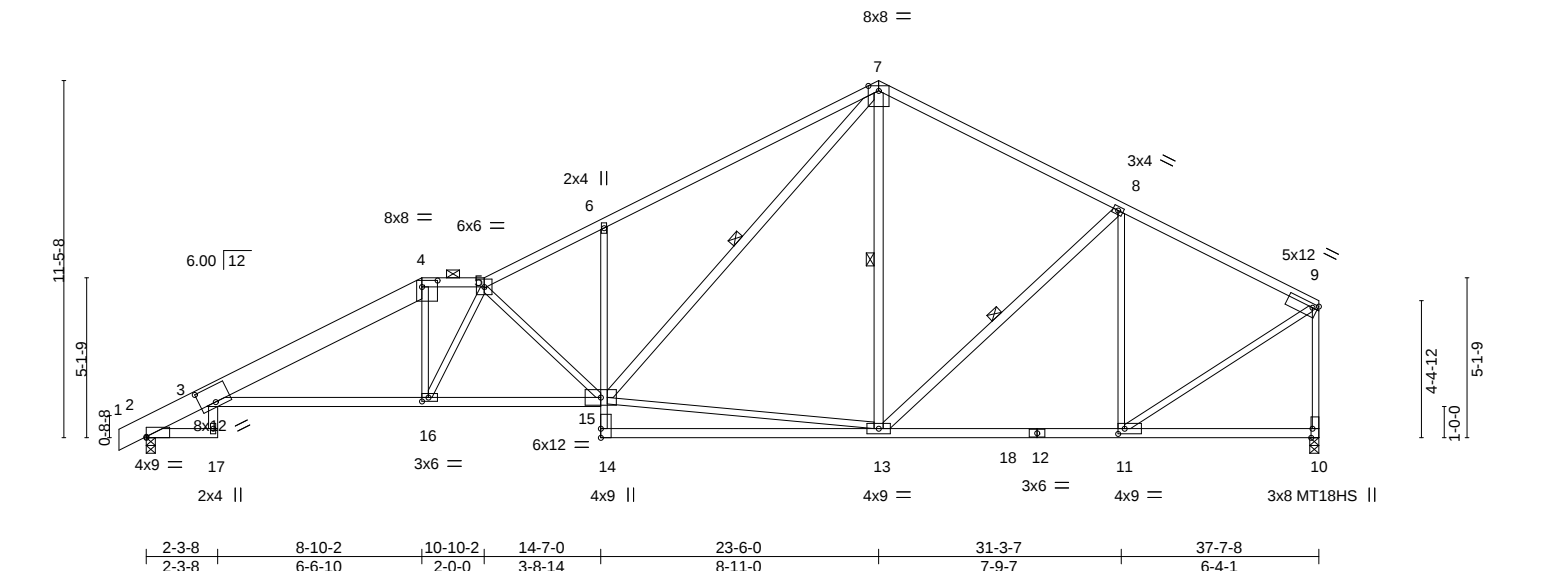
REACTIONS.	
(size)	10=0-3-8, 17=0-3-8
Max Horz	17=271(LC 5)
Max Uplift	10=-169(LC 9), 17=-261(LC 8)
Max Grav	10=1798(LC 2), 17=1830(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-613/79, 3-4=-2960/388, 4-5=-2649/378, 5-6=-2680/371, 6-7=-1729/294, 7-8=-1727/323, 8-9=-1571/205, 2-17=-451/94, 9-10=-1714/195
BOT CHORD	16-17=-514/2364, 14-16=-531/3158, 12-14=-312/2330, 11-12=-136/1365
WEBS	3-16=0/288, 4-16=-109/1145, 5-16=-1106/200, 5-14=-928/245, 6-14=-8/771, 6-12=-1210/331, 7-12=-119/1042, 8-12=-103/263, 8-11=-681/165, 3-17=-2270/347, 9-11=-124/1620

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=169, 17=261.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 3,2021



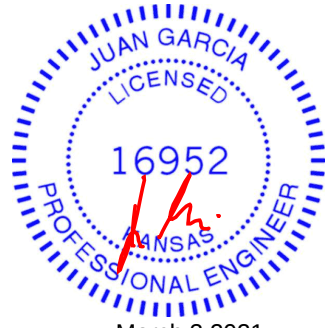
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.35 13-14 >999 360	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.67 13-14 >665 240	MT18HS	197/144		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.34 10 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24 3-16 >999 240			Weight: 191 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x8 SP DSS, 5-7: 2x4 SPF 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-8-2 max.): 4-5.
BOT CHORD	2x4 SPF No.2 *Except* 3-15: 2x4 SPF 2100F 1.8E, 6-14: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.
WEBS	2x3 SPF No.2 *Except* 3-17,7-13,8-13,7-15: 2x4 SPF No.2	WEBS	1 Row at midpt 7-13, 8-13, 7-15

REACTIONS.	
(size)	2=0-3-8, 10=0-3-8
Max Horz	2=266(LC 5)
Max Uplift	2=-257(LC 8), 10=-168(LC 9)
Max Grav	2=1812(LC 2), 10=1772(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1044/52, 3-4=-3531/479, 4-5=-3255/518, 5-6=-3075/471, 6-7=-3196/672, 7-8=-1698/321, 8-9=-1543/206, 9-10=-1686/196
BOT CHORD	3-16=-532/3225, 15-16=-546/3460, 6-15=-611/335, 11-13=-137/1339
WEBS	5-15=-998/188, 7-13=-114/258, 8-13=-91/276, 8-11=-688/160, 9-11=-125/1589, 4-16=0/697, 5-16=-499/74, 7-15=-531/2024, 13-15=-89/1249

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 10=168.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 3,2021

Job

210310

Truss

C5A

Truss Type

Roof Special

Qty

1

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021

MiTek Industries, Inc.

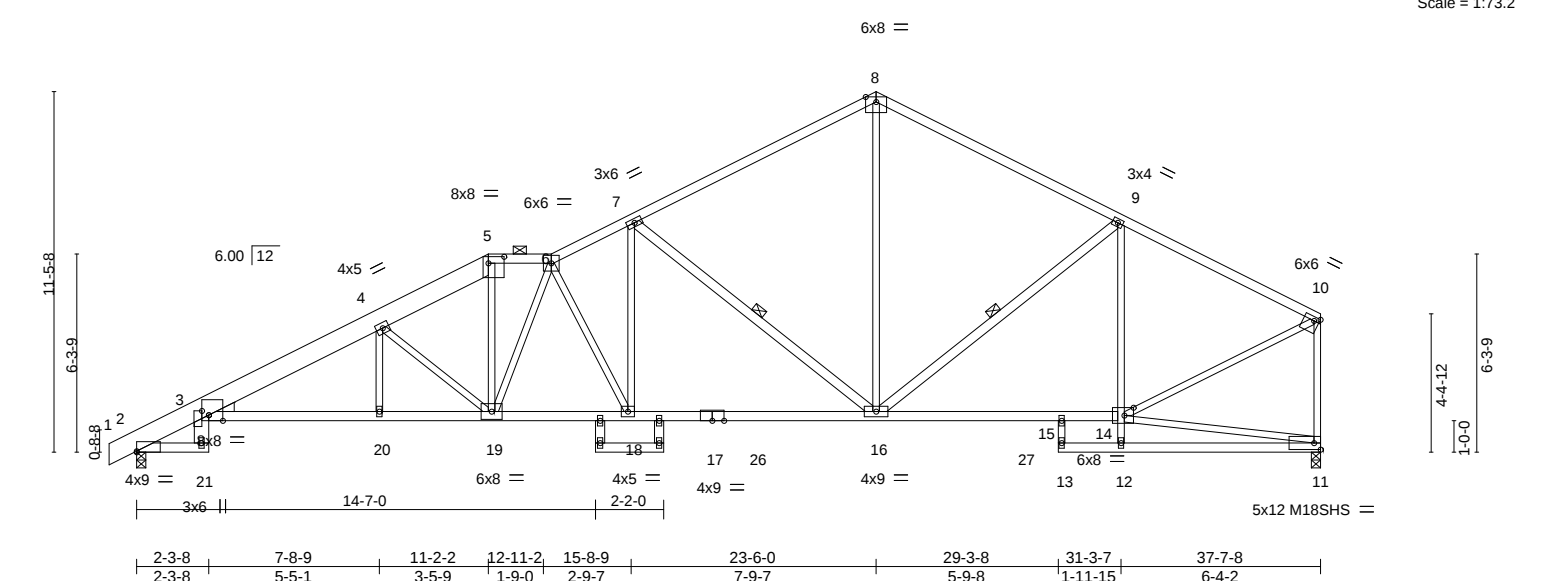
Lee's Summit, Missouri

Job Reference (optional)

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

03/10/2021

Scale = 1:73.2



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 0.96	Vert(LL)	-0.32 16-18	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.56 16-18	>805	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.36 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.22 3-20	>999	240	Weight: 201 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x8 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except*
3-17,14-17: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
3-21: 2x6 SPF No.2, 9-16,22-24,23-25,7-16: 2x4 SPF No.2

WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-8 max.): 5-6.

BOT CHORD Rigid ceiling directly applied or 9-8-3 oc bracing.

WEBS 1 Row at midpt 9-16, 7-16

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=266(LC 5)
Max Uplift 2=-261(LC 8), 11=-169(LC 9)
Max Grav 2=1833(LC 2), 11=1829(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1054/52, 3-4=-3956/571, 4-5=-3324/514, 5-6=-2866/467, 6-7=-2969/437,
7-8=-1901/299, 8-9=-1903/330, 9-10=-1855/218, 10-11=-1740/202
BOT CHORD 3-20=-657/3743, 19-20=-654/3738, 18-19=-433/3031, 16-18=-361/2685, 15-16=-158/1612,
14-15=-158/1612
WEBS 4-19=-1192/296, 5-19=-159/1310, 6-19=-487/52, 6-18=-764/160, 8-16=-119/1189,
12-14=0/325, 9-14=-579/151, 10-14=-143/1789, 7-16=-1385/364, 7-18=-62/950

- 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 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, with BCDL = 10.0psf.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=261, 11=169.
 - 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.



March 3,2021

Job

210310

Truss

C6

Truss Type

Roof Special

Qty

1

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021

MiTek Industries, Inc.

145026363

ID: bDjNJA6?5tiT6Ei3KUKZyAkTB-PI353MeBypp5CNgMk8CAAE1SYxWN?YeMpb_64Rzew6N

5CNGMk8CAAE1SYxWN?YeMpb_64Rzew6N

Job Reference (optional)

LEE SUMMIT, MISSOURI

0-10-8 2-3-8

7-8-10

10-7-2

12-7-2

15-8-10

23-6-0

29-3-8

31-3-7

37-7-8

0-10-8 2-3-8

5-5-2

2-10-8

2-0-0

3-1-7

7-9-6

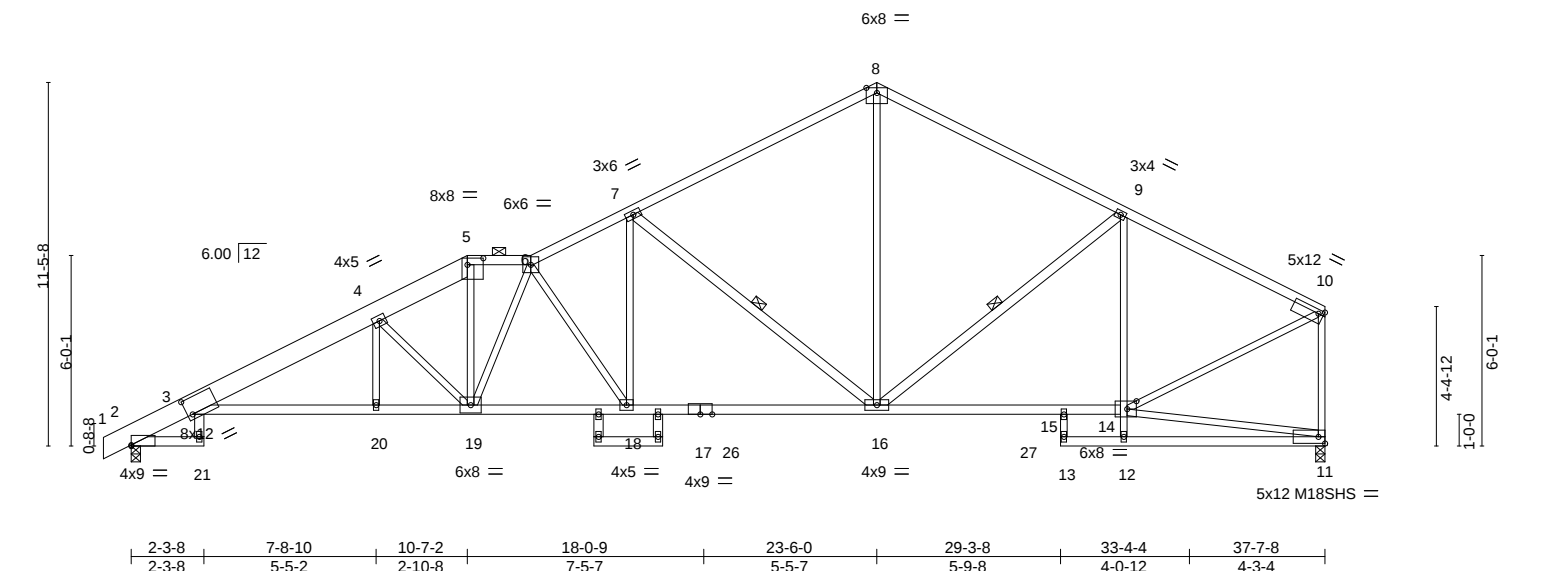
5-9-8

1-11-15

6-4-2

03/10/2021

Scale = 1:72.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.31 16-18 >999 360	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.55 16-18 >812 240	M18SHS	197/144		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.33 11 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.21 18-19 >999 240			Weight: 197 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x8 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-3 max.): 5-6.
BOT CHORD	2x4 SPF No.2 *Except* 3-17: 2x4 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS	2x3 SPF No.2 *Except* 3-21,7-16,9-16,22-24,23-25: 2x4 SPF No.2	WEBS	1 Row at midpt 7-16, 9-16

REACTIONS.	
(size)	2=0-3-8, 11=0-3-8
Max Horz	2=266(LC 5)
Max Uplift	2=-257(LC 8), 11=-168(LC 9)
Max Grav	2=1845(LC 2), 11=1830(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1062/51, 3-4=-3990/573, 4-5=-3426/532, 5-6=-2955/476, 6-7=-2995/438, 7-8=-1901/299, 8-9=-1903/330, 9-10=-1858/217, 10-11=-1743/201
BOT CHORD	3-20=-651/3725, 19-20=-650/3725, 18-19=-460/3147, 16-18=-358/2688, 15-16=-157/1615, 14-15=-157/1615
WEBS	4-19=-1157/286, 5-19=-188/1401, 6-19=-536/58, 6-18=-829/184, 7-18=-68/972, 7-16=-1389/361, 8-16=-118/1187, 12-14=0/337, 9-14=-578/152, 10-14=-142/1792

- 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 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, with BCDL = 10.0psf.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 11=168.
 - 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.



March 3,2021

Job

210310

Truss

C7

Truss Type

Roof Special

Qty

1

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee Maum 8432 MISSOURI

Job Reference (optional)

8432 MISSOURI

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

03/10/2021

Scale = 1:73.2

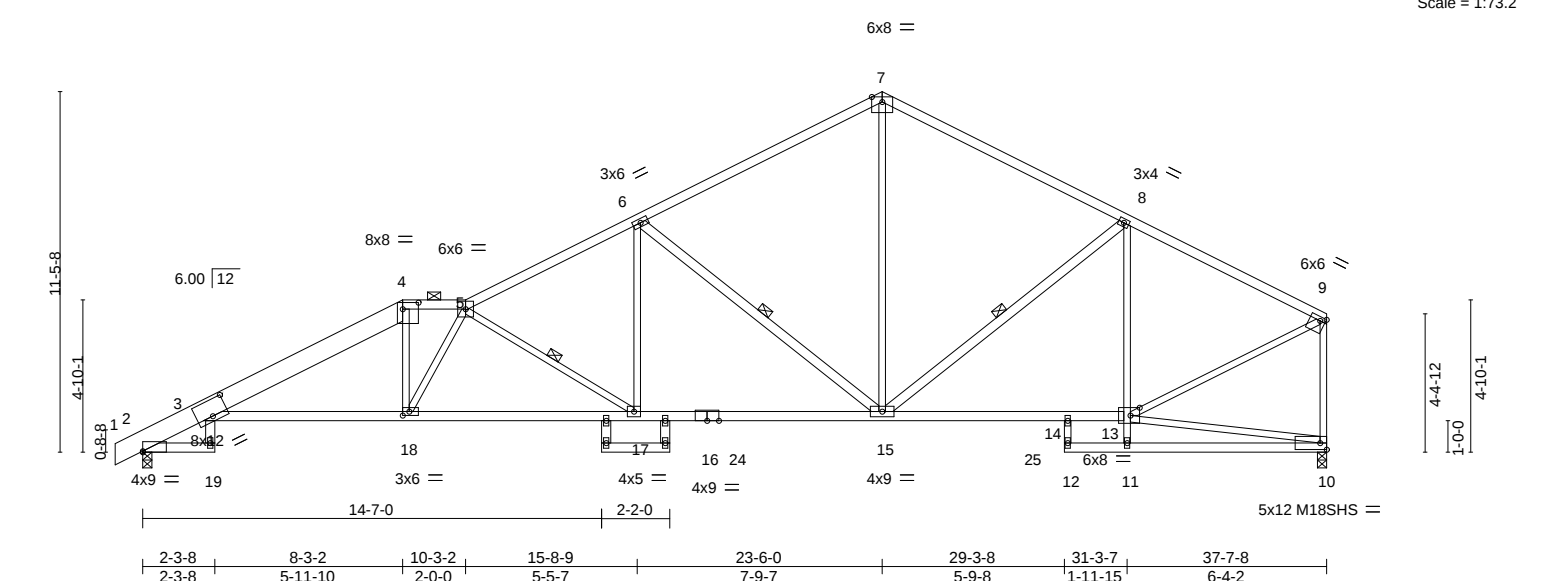


Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [3:0-6-0,0-6-1], [4:0-6-0,0-2-8], [9:0-2-0,0-1-8], [13:0-3-8,0-3-0], [18:0-2-8,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.33	15-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.57	15-17	>781	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.36	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	3-18	>999	240	Weight: 186 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x8 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-8-5 max.): 4-5.
BOT CHORD	2x4 SPF No.2 *Except* 3-16: 2x4 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-19 2-2-0 oc bracing: 15-17.
WEBS	2x3 SPF No.2 *Except* 3-19,6-15,8-15,20-22,21-23: 2x4 SPF No.2	WEBS	1 Row at midpt 5-17, 6-15, 8-15

REACTIONS.	
(size)	2=0-3-8, 10=0-3-8
Max Horz	2=266(LC 5)
Max Uplift	2=-257(LC 8), 10=-168(LC 9)
Max Grav	2=1845(LC 2), 10=1830(LC 2)
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1062/53, 3-4=-3693/488, 4-5=-3424/527, 5-6=-3041/433, 6-7=-1902/299, 7-8=-1902/331, 8-9=-1858/217, 9-10=-1743/201
BOT CHORD	3-18=-553/3391, 17-18=-590/3726, 15-17=-358/2693, 14-15=-157/1615, 13-14=-157/1615
WEBS	4-18=0/807, 5-18=-662/88, 5-17=-1231/276, 6-17=-56/965, 6-15=-1396/361, 7-15=-120/1190, 11-13=0/338, 8-13=-578/152, 9-13=-142/1792

- 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) All plates are 2x4 MT20 unless otherwise indicated.

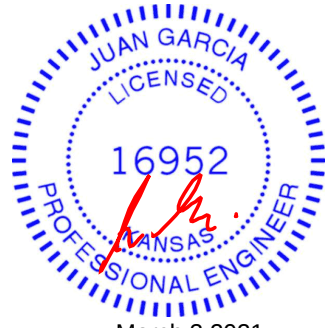
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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, with BCDL = 10.0psf.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 10=168.

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.



March 3,2021

Job

210310

Truss

C8

Truss Type

Roof Special

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

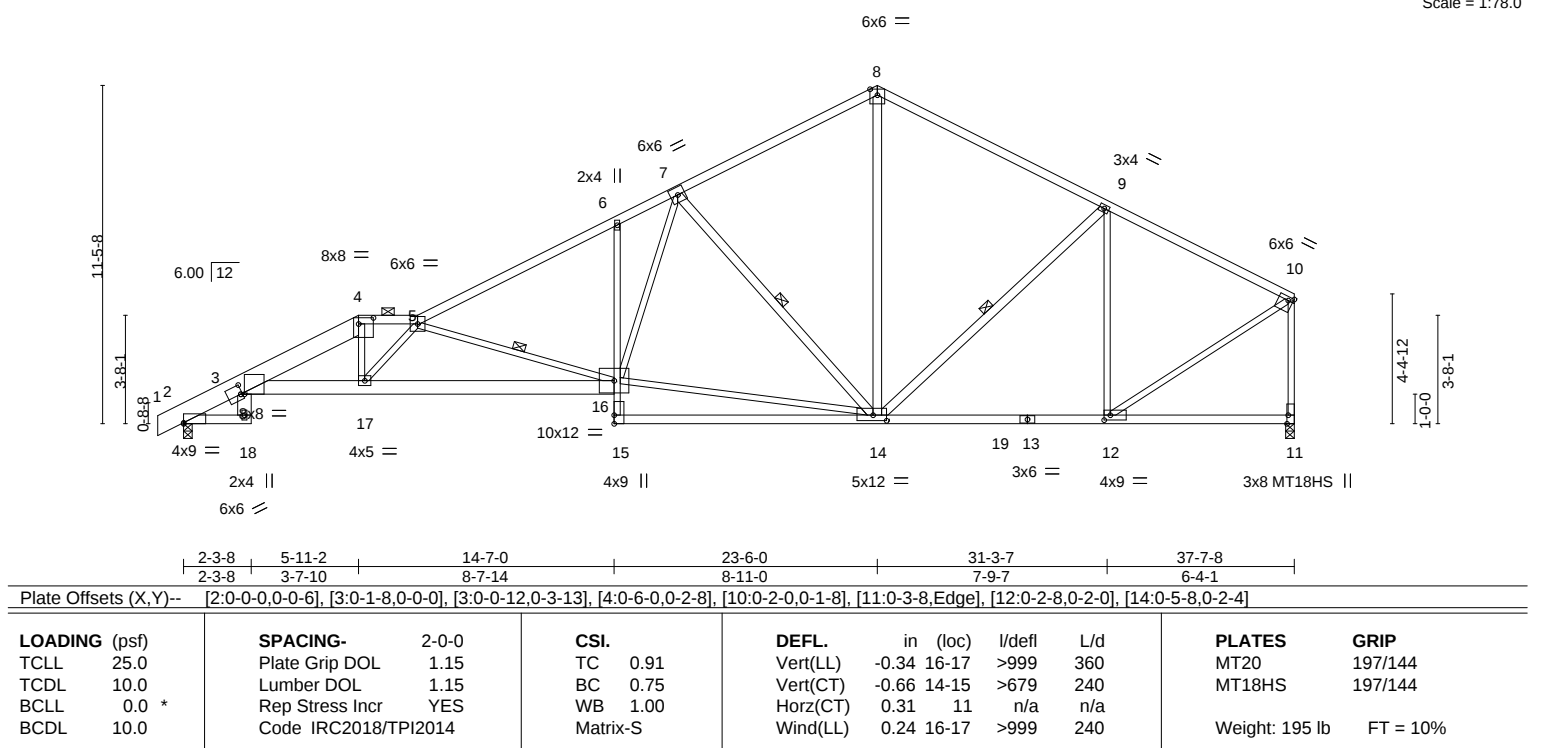
8430 s Feb 12 2021 MiTek Industries, Inc.

ID: bDljNJA675tiTk6EI3KUKZyAkTB-ptkDhOh3FkBg3qPxPGltosf_k8c0CqppVYDmhmzew6K

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

03/10/2021

Scale = 1:78.0



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x8 SP DSS, 5-8: 2x4 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-8-3 max.): 4-5.
BOT CHORD	2x4 SPF No.2 *Except* 3-18: 2x6 SPF No.2, 3-16: 2x6 SPF 1650F 1.4E, 6-15: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-18 9-7-12 oc bracing: 16-17.
WEBS	2x3 SPF No.2 *Except* 7-14,8-14,9-14: 2x4 SPF No.2	WEBS	1 Row at midpt 5-16, 7-14, 9-14

REACTIONS.	
(size)	2=0-3-8, 11=0-3-8
Max Horz	2=266(LC 5)
Max Uplift	2=-258(LC 8), 11=-168(LC 9)
Max Grav	2=1809(LC 2), 11=1772(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1064/50, 3-4=-4265/578, 4-5=-4026/602, 5-6=-3174/455, 6-7=-3099/539, 7-8=-1685/296, 8-9=-1695/321, 9-10=-1544/206, 10-11=-1687/196
BOT CHORD	3-17=-672/3964, 16-17=-814/4667, 6-16=-314/172, 12-14=-137/1341
WEBS	4-17=-80/1139, 5-17=-1067/217, 5-16=-2002/439, 14-16=-305/2136, 7-16=-271/1493, 7-14=-1364/380, 8-14=-128/1029, 9-14=-95/265, 9-12=-686/161, 10-12=-125/1591

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=258, 11=168.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 3,2021

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 145026366
210310	C9	Roof Special	1	1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS - 66871,						8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO
0-10-8 2-3-8 3-7-2 5-7-2 9-8-9 14-7-0 16-8-14 23-6-0 31-3-7 37-7-8						03/10/2021
0-10-8 2-3-8 1-3-10 2-0-0 4-1-6 4-10-7 2-1-14 6-9-3 7-9-7 6-4-1						
ID: bDlJNJA675tiTk6EI3KUKZyAkTB-H3lcujh02JXh_7z_G6L4C9VYwzxJykCyKDCzew6J						

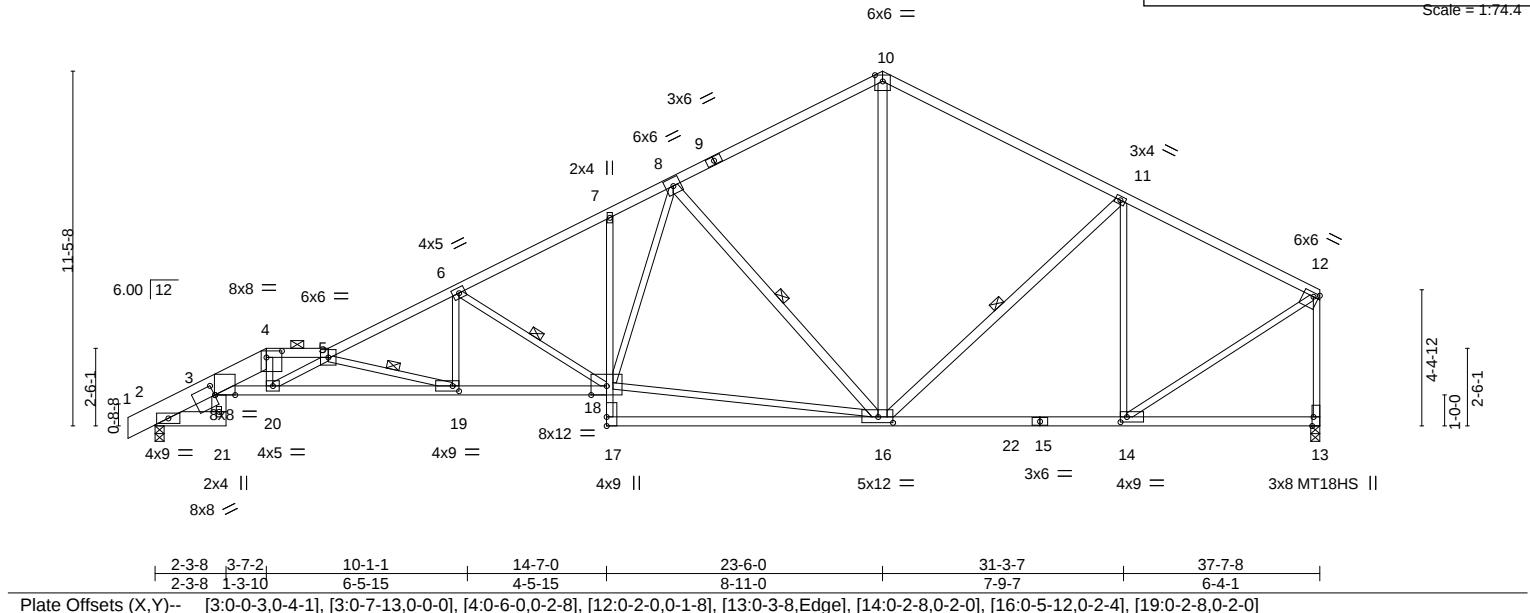


Plate Offsets (X, Y)--		[3:0-0-3,0-4-1], [3:0-7-13,0-0-0], [4:0-6-0,0-2-8], [12:0-2-0,0-1-8], [13:0-3-8,Edge], [14:0-2-8,0-2-0], [16:0-5-12,0-2-4], [19:0-2-8,0-2-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.91
TCDL 10.0	Lumber DOL	1.15	BC 0.83
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.89
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.40 18-19 >999 360
			Vert(CT) -0.77 16-17 >583 240
			Horz(CT) 0.33 13 n/a n/a
			Wind(LL) 0.30 18-19 >999 240
			PLATES GRIP
			MT20 197/144
			MT18HS 197/144
			Weight: 186 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
2x4 SPF No.2 *Except*	Structural wood sheathing directly applied, except end verticals, and
1-4: 2x8 SP 2400F 2.0E	2-0-0 oc purlins (2-3-6 max.): 4-5.
BOT CHORD	BOT CHORD
2x4 SPF No.2 *Except*	Rigid ceiling directly applied or 6-0-0 oc bracing.
2-21: 2x6 SPF No.2, 3-18: 2x4 SPF 2100F 1.8E, 7-17: 2x3 SPF No.2	WEBS
2x3 SPF No.2 *Except*	1 Row at midpt
3-21: 2x6 SPF No.2, 8-16,10-16,11-16: 2x4 SPF No.2	5-19, 6-18, 8-16, 11-16

REACTIONS.	(size) 2=0-3-8, 13=0-3-8
	Max Horz 2=267(LC 7)
	Max Uplift 2=-259(LC 8), 13=-168(LC 9)
	Max Grav 2=1809(LC 2), 13=1772(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1028/59, 3-4=-4885/725, 4-5=-4963/782, 5-6=-4359/618, 6-7=-3093/456, 7-8=-2982/494, 8-10=-1686/296, 10-11=-1695/320, 11-12=-1545/206, 12-13=-1687/196
BOT CHORD	3-20=-903/4883, 19-20=-1144/6550, 18-19=-630/3884, 14-16=-137/1341
WEBS	4-20=-30/860, 5-20=-1892/286, 5-19=-2778/535, 6-19=-81/1025, 6-18=-1414/302, 16-18=-321/2083, 8-18=-207/1345, 8-16=-1335/378, 10-16=-128/1032, 11-16=-97/266, 11-14=-686/161, 12-14=-125/1592

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=259, 13=168.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 3, 2021

Job

210310

Truss

C10

Truss Type

Roof Special Girder

Qty

1

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Job Reference (optional)

15026367

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

ID: bDljNJA6?5tiT6EI3KUKZyAkTB-hNSJyxXvJIYW?qrR920qn7dktv9sf_JuV1Zak0zew6X

Scale = 1:76.9

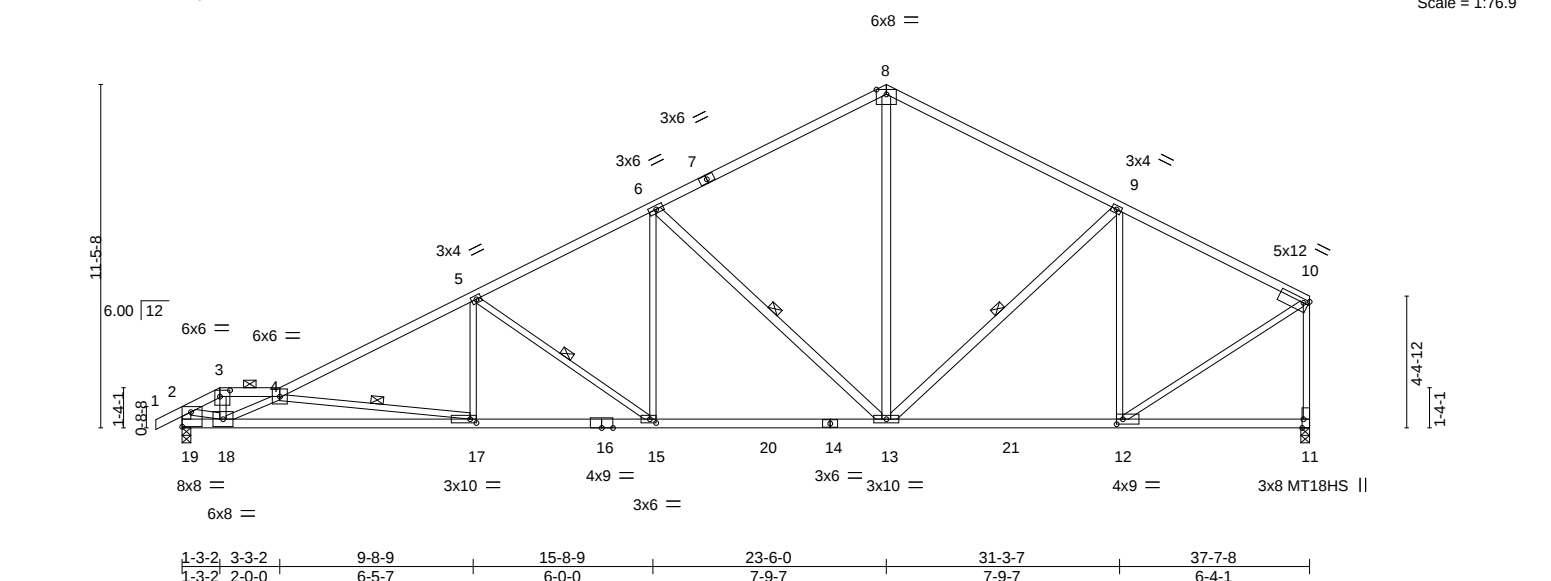


Plate Offsets (X,Y)-- [3:0-4-0,0-2-8], [10:0-2-0,0-1-8], [11:0-3-8,Edge], [12:0-2-8,0-2-0], [15:0-2-8,0-1-8], [17:0-2-8,0-1-8], [19:Edge,0-5-13]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.27	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.49	17-18	>924	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	17	>999	240	Weight: 166 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 7-8,4-7: 2x4 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-1-0 max.): 3-4.
BOT CHORD	2x4 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x3 SPF No.2 *Except* 6-13,8-13,9-13,2-19: 2x4 SPF No.2	WEBS	8-4-14 oc bracing: 17-18. 1 Row at midpt 4-17, 5-15, 6-13, 9-13

REACTIONS.	
(size)	19=0-3-8, 11=0-3-8
Max Horz	19=271(LC 7)
Max Uplift	19=287(LC 8), 11=-169(LC 9)
Max Grav	19=1808(LC 2), 11=1797(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-2214/229, 3-4=-2034/217, 4-5=-3470/453, 5-6=-2650/389, 6-8=-1727/292, 8-9=-1729/324, 9-10=-1568/206, 2-19=-1797/205, 10-11=-1712/195
BOT CHORD	18-19=-252/314, 17-18=-871/4708, 15-17=-497/3059, 13-15=-313/2306, 12-13=-137/1362
WEBS	3-18=-120/991, 4-18=-3051/562, 4-17=-1670/378, 5-17=0/528, 5-15=-925/227, 6-15=-52/806, 6-13=-1172/330, 8-13=-113/1031, 9-13=-98/267, 9-12=-684/164, 2-18=-153/1835, 10-12=-124/1617

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=287, 11=169.

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.

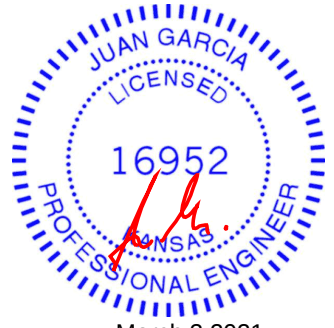
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 127 lb down and 81 lb up at 1-3-2 on top chord, and 10 lb down and 13 lb up at 1-3-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

LOAD CASE(S) Standard

Continued on page 2



March 3,2021

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR
210310	C10	Roof Special Girder	1	1	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64063 Page 2
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-hNSJyxXvJIYW?qvR920qn7dktv9sf_JuV1Zak0zew6X

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/10/2021

J45026367

LOAD CASE(S) Standard

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

Uniform Loads (plf)

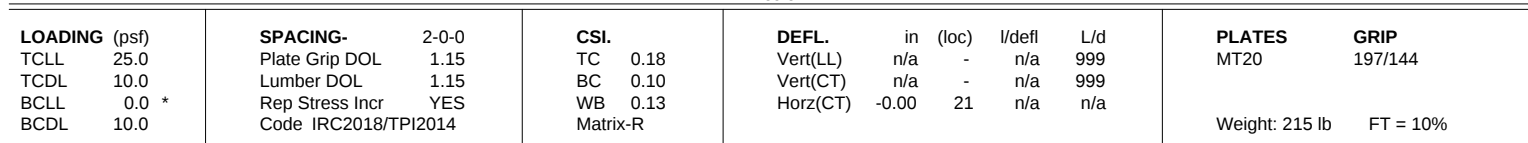
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-8=-70, 8-10=-70, 11-19=-20

Concentrated Loads (lb)

Vert: 3=21(B) 18=3(B)



**RELEASE FOR
CONSTRUCTION**
145026368
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LET'S SUMMIT MISSOURI
Page 1
YArMoEE83qGS3sYIH0i0i74gBzL2hovzew6V
B-12
03/10/2021
1-8



REACTIONS. All bearings 35-3-12.
(lb) - Max Horz 40=261(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 21, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 27, 26, 25, 24, 23,
22 except 40=-117(LC 6), 39=-207(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 21, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 27, 26, 25,
24, 23, 22 except 40=250(LC 8)

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=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) 21, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 27, 26, 25, 24, 23, 22 except (jt=lb) 40=117, 39=207.
- 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.



 **WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEESUMMIT, MISSOURI 03/10/2021
210310	D1	GABLE	1	1		145026369
Wheeler Lumber, Waverly, KS - 66871,						8.430 s Feb 12 2021 MiTek Industries, Inc. For use on: 145026369 Page 1
Job Reference (optional)						ID: bDlJnJA6?5tiTk6EI3KUKZyAkTB-IGs_63iJnMROI8YKXhoLthkWdyS3gy_6ysitmfwz6I
0-10-8 11-3-3 12-8-0 0-10-8 11-3-3 1-4-13						4x5 =
						Scale = 1:45.4

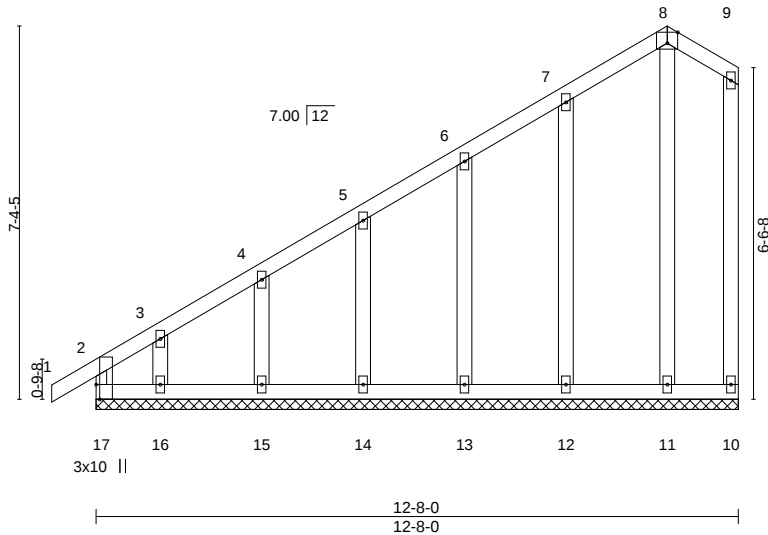


Plate Offsets (X,Y)-- [8:0-2-7,Edge], [17:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00 1 n/r	120	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00 1 n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 66 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 9-10: 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 12-8-0.
 (lb) - Max Horz 17=280(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 12, 13, 14, 15 except 17=-106(LC 4), 16=-159(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 17, 10, 11, 12, 13, 14, 15, 16

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

TOP CHORD 2-3=-262/174

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11, 12, 13, 14, 15 except (jt=lb) 17=106, 16=159.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR	CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021
210310	D2	Common	1	1		
Wheeler Lumber, Waverly, KS - 66871,						

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64086

ID:bdijnJA675tk6EI3KUKZyAkTB-ESQMJPjyYIZFwI7W5PJJaQVHc1Mj?PFfBWRQI5zew6H

6-5-12

6-5-12

11-3-3

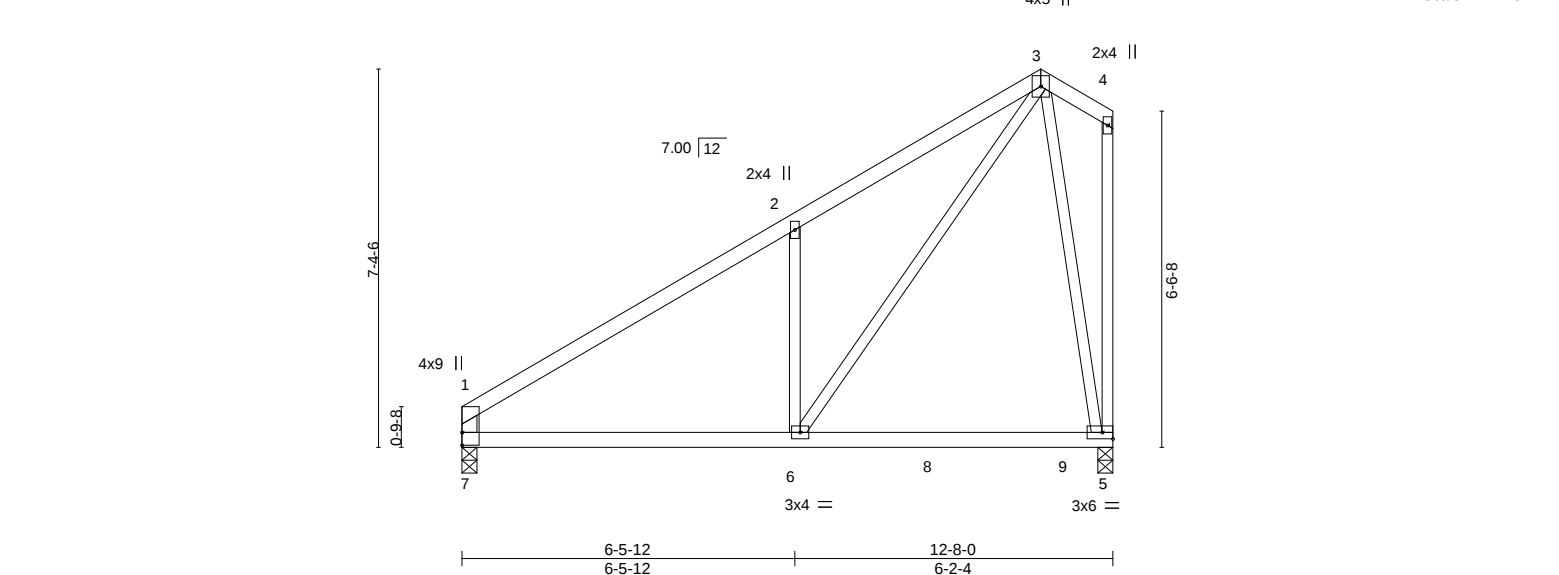
4-9-7

12-8-0

1-4-13

4x5 11

Scale = 1/4" = 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)	-0.08	5-6	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.13	5-6	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.01	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	-0.03	5-6	>999	240	
									Weight: 52 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 1-7: 2x4 SPF No.2	

REACTIONS.	(size) 7=0-3-8, 5=0-3-8
	Max Horz 7=269(LC 5)
	Max Uplift 7=-63(LC 8), 5=-122(LC 8)
	Max Grav 7=611(LC 15), 5=689(LC 15)

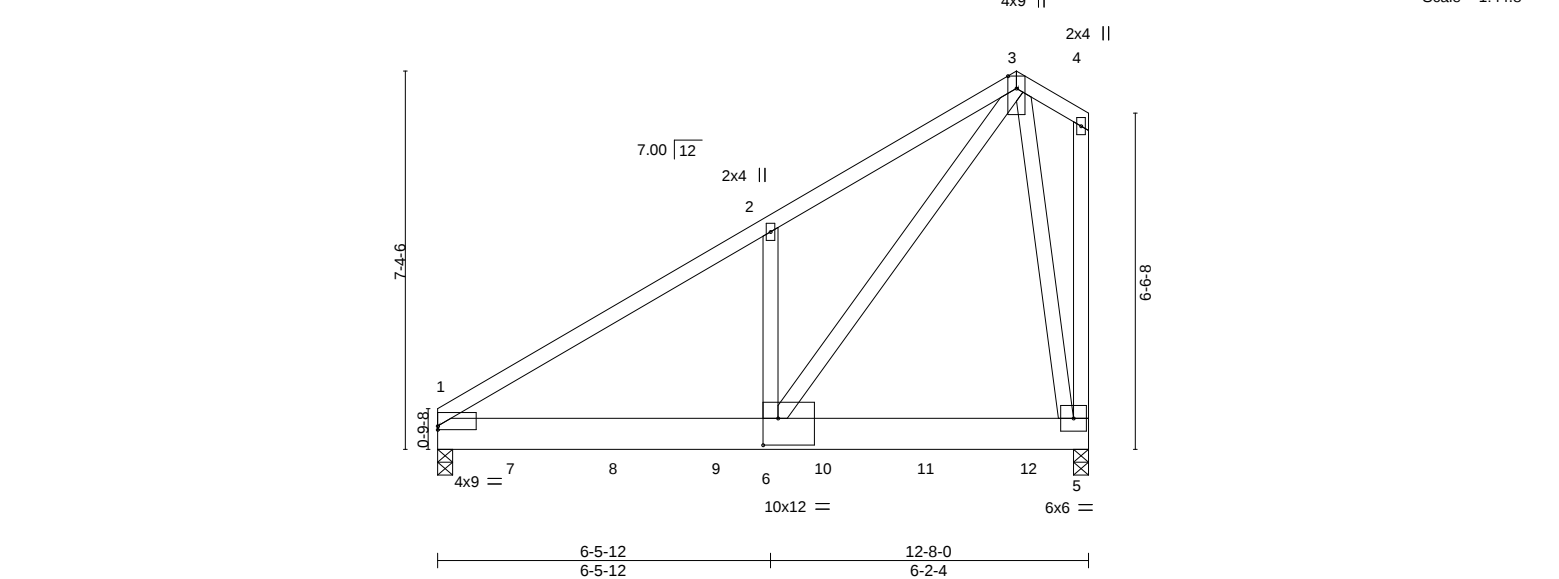
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-709/72, 2-3=-716/244, 1-7=-505/104
BOT CHORD	6-7=-115/611
WEBS	2-6=-446/284, 3-6=-258/844, 3-5=-601/139

- 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) 7 except (jt=lb) 5=122.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021 Scale = 1:44.8
210310	D3	Common Girder	1	3	Job Reference (optional)	
Wheeler Lumber,	Waverly, KS - 66871,				8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO	
					ID: bDlJnJA675tT6EI3KUKZyAkTB-ie_kXlkaJzh6YSie6qpziqj11b8iHOQAB_qXzew6G	



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)	-0.07	1-6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.13	1-6	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.71	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	1-6	>999	Weight: 250 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x8 SP DSS		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2			

REACTIONS.	(size) 1=0-3-8, 5=0-3-8
	Max Horz 1=264(LC 7)
	Max Uplift 1=-725(LC 8), 5=-819(LC 8)
	Max Grav 1=6038(LC 2), 5=6349(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-6858/812, 2-3=-6679/965
BOT CHORD	1-6=-733/5701, 5-6=-174/754
WEBS	2-6=-443/453, 3-6=-1212/8674, 3-5=-3960/548

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=725, 5=819.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1872 lb down and 234 lb up at 1-6-0, 1872 lb down and 234 lb up at 3-6-0, 1872 lb down and 234 lb up at 5-6-0, 1872 lb down and 234 lb up at 7-6-0, and 1863 lb down and 234 lb up at 9-6-0, and 1863 lb down and 234 lb up at 11-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S)	Standard
---------------------	----------

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR
210310	D3	Common Girder	1	3	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64063 Page 2
 ID:bDljnJA6?5tiTk6EI3KUKZyAkTB-ie_kXlkaJzh6YSie6qpziqj1l1b8iHOQAB_qXzew6G

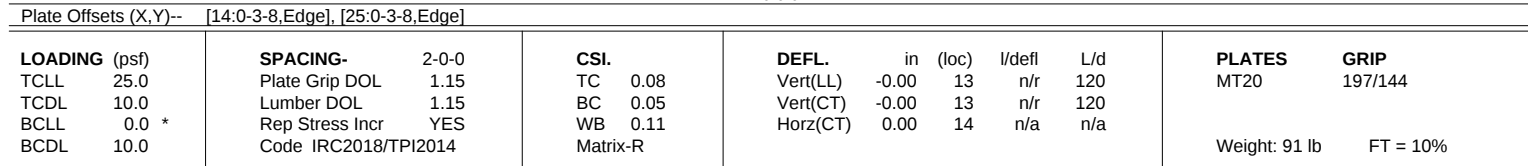
RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/10/2021

145026371

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-70, 3-4=-70, 1-5=-20
 Concentrated Loads (lb)
 Vert: 7=-1796(B) 8=-1796(B) 9=-1796(B) 10=-1796(B) 11=-1796(B) 12=-1796(B)



RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT MASS CURT
03/10/2021
0-10-8



REACTIONS. All bearings 20-6-0.
(lb) - Max Horz 25=-190(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 19, 17, 16, 15 except 24=-101(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 17, 16, 15

NOTES-

-
- STATE OF MISSOURI
JUAN GARCIA
NUMBER
E-2000162101
PROFESSIONAL ENGINEER
- KANSAS
JUAN GARCIA
LICENSED
16952
PROFESSIONAL ENGINEER

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.

MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 210310	Truss E2	Truss Type Common	Qty 6	Ply 1	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/19/2021
Wheeler Lumber, Waverly, KS - 66871,		8.430 s Feb 12 2021 MiTek Industries, Inc. File: M210310.dwg ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-e16VxRlqraxqnlS5mXsl27v0GZFkclThtUg5vQzew6E				
		5-2-12 5-2-12 10-3-0 5-0-4 15-3-4 5-0-4 20-6-0 5-2-12 0-10-8 4x9 = Scale = 1:44.1				

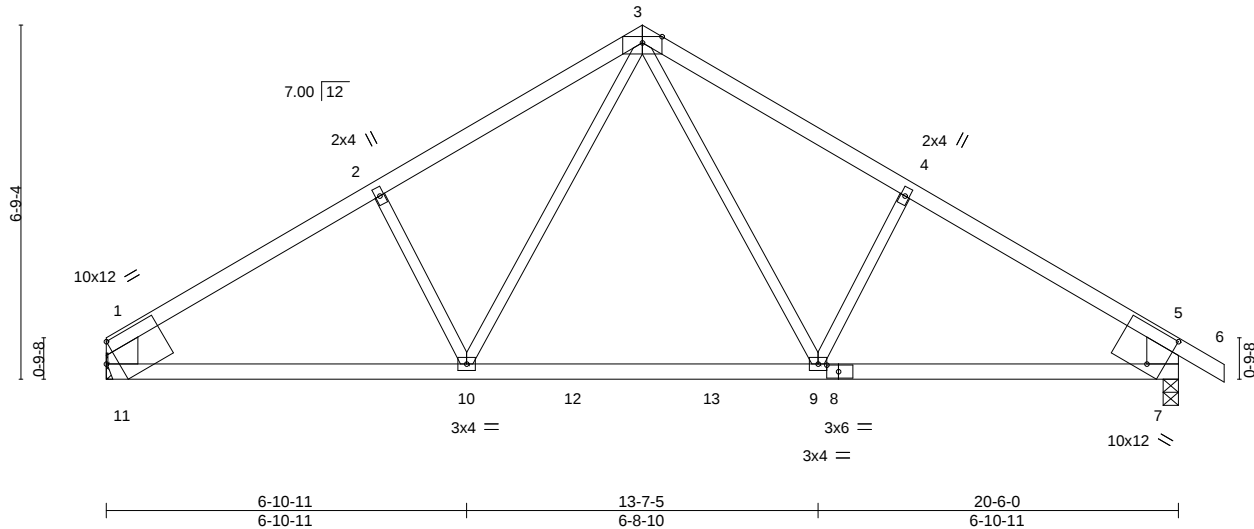


Plate Offsets (X,Y)--		[1:Edge,0-4-7], [7:0-3-11,0-8-1], [8:0-2-11,0-1-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.85	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.76	Vert(LL) -0.22 9-10 >999 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) -0.35 9-10 >679 240
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 7 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) 0.09 9-10 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 72 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 1-11,5-7: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 11=Mechanical, 7=0-3-8
 Max Horz 11=-188(LC 4)
 Max Uplift 11=-105(LC 8), 7=-133(LC 9)
 Max Grav 11=979(LC 15), 7=1058(LC 16)

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

TOP CHORD 1-2=-1294/162, 2-3=-1170/207, 3-4=-1157/207, 4-5=-1297/162, 1-11=-831/138, 5-7=-929/168
 BOT CHORD 10-11=-151/1141, 9-10=-12/805, 7-9=-57/1007
 WEBS 3-9=-106/498, 3-10=-106/490, 2-10=-264/203

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=105, 7=133.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

210310

Truss

E3

Truss Type

Common

Qty

5

Ply

1

Lot 72 RR

Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID: bDlJNJA675tiTk6EI3KUKZyAKTB-6Dft9nmSbu3hPvRHkENXaLSEez7YLCjr68PeRszew6D

20-6-0

5-2-12

03/10/2021

Scale = 1:43.4

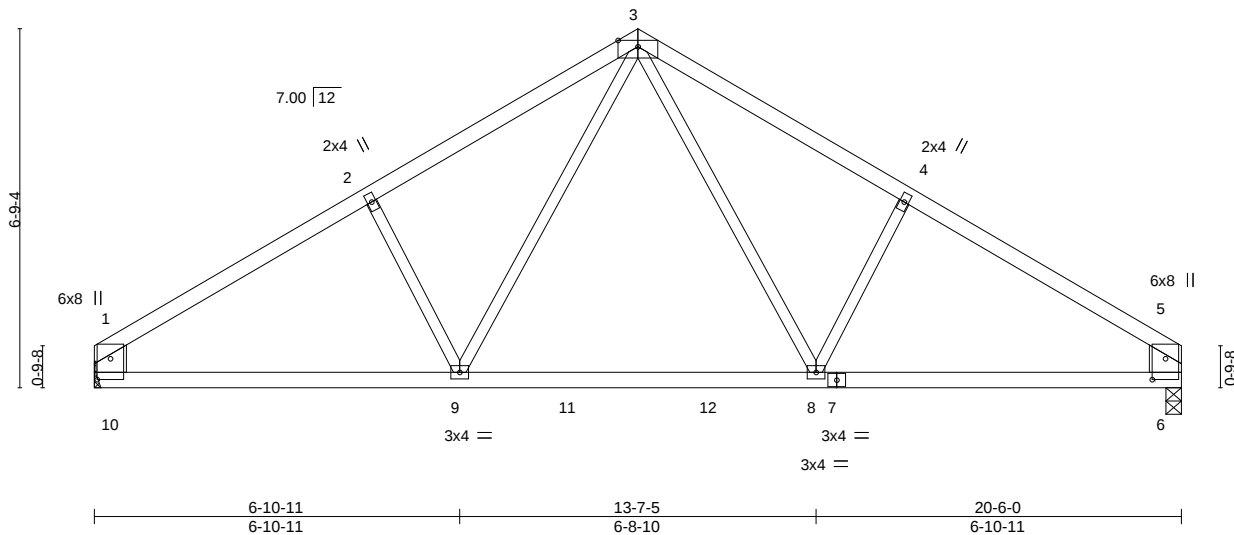


Plate Offsets (X, Y)--		[1:0-4-12,0-3-0], [5:0-4-12,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.64
TCDL 10.0	Lumber DOL	1.15	BC 0.76
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.24 8-9 >977 360
			Vert(CT) -0.40 8-9 >598 240
			Horz(CT) 0.03 6 n/a n/a
			Wind(LL) 0.08 8-9 >999 240
			PLATES
			MT20
			GRIP
			197/144
			Weight: 71 lb FT = 10%

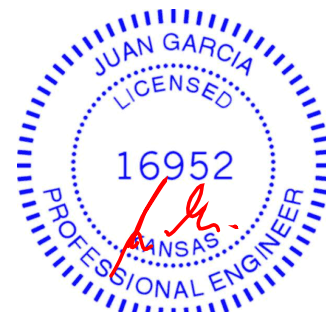
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,5-6: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=Mechanical, 6=0-3-8
Max Horz 10=141(LC 5)
Max Uplift 10=-7(LC 8), 6=-7(LC 9)
Max Grav 10=980(LC 13), 6=980(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1301/38, 2-3=-1176/78, 3-4=-1176/78, 4-5=-1301/38, 1-10=-833/44, 5-6=-833/44
BOT CHORD 9-10=-35/1114, 8-9=0/786, 6-8=0/1013
WEBS 3-8=-38/486, 4-8=-264/130, 3-9=-38/486, 2-9=-264/130

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



March 3,2021

Job

210310

Truss

G1

Truss Type

Common Supported Gable

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma 840 MISSOURI

Wheeler Lumber,

Waverly, KS - 66871,

ID: bDlJNJA6?5tiTk6EI3KUKZyAkTB-6Dft9nmSbu3hPvRHKENXaLSNEzAvLD?r68PeRszew6D

03/10/2021

0-10-8

0-10-8

10-4-0

10-4-0

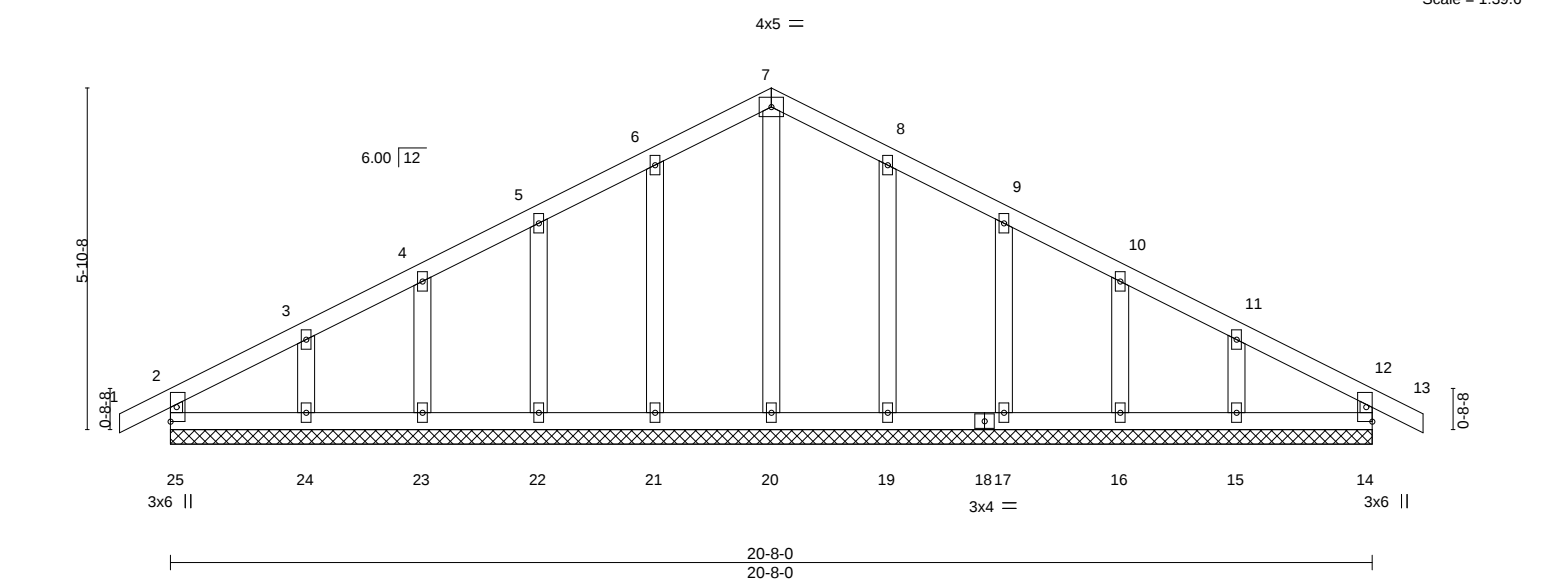
20-8-0

10-4-0

0-8-8

0-10-8

Scale = 1:39.6



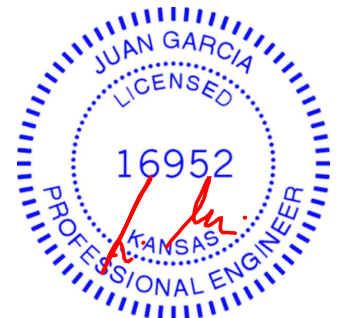
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	13	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 85 lb	FT = 10%

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

REACTIONS. All bearings 20-8-0.
 (lb) - Max Horz 25--89(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15
 Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 17, 16, 15

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

Job 210310	Truss G2	Truss Type Common	Qty 4	Ply 1	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021
Wheeler Lumber, Waverly, KS - 66871,		8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Ma			Job Reference (optional)	

ID: bDlJNJA675tiTk6EI3KUKZyAkTB-aPDFM7n4MCCX030Ttyvm7Y_MJNNX4gP_Lo9Bzizew6C

0-10-8 4-1-13 10-4-0 16-6-3 20-8-0 24-6-8 28-8-0 32-6-8 36-8-0 40-8-0

0-10-8 4-1-13 6-2-3 6-2-3 6-2-3 6-2-3 6-2-3 6-2-3 6-2-3 6-2-3

Scale = 1:40.0

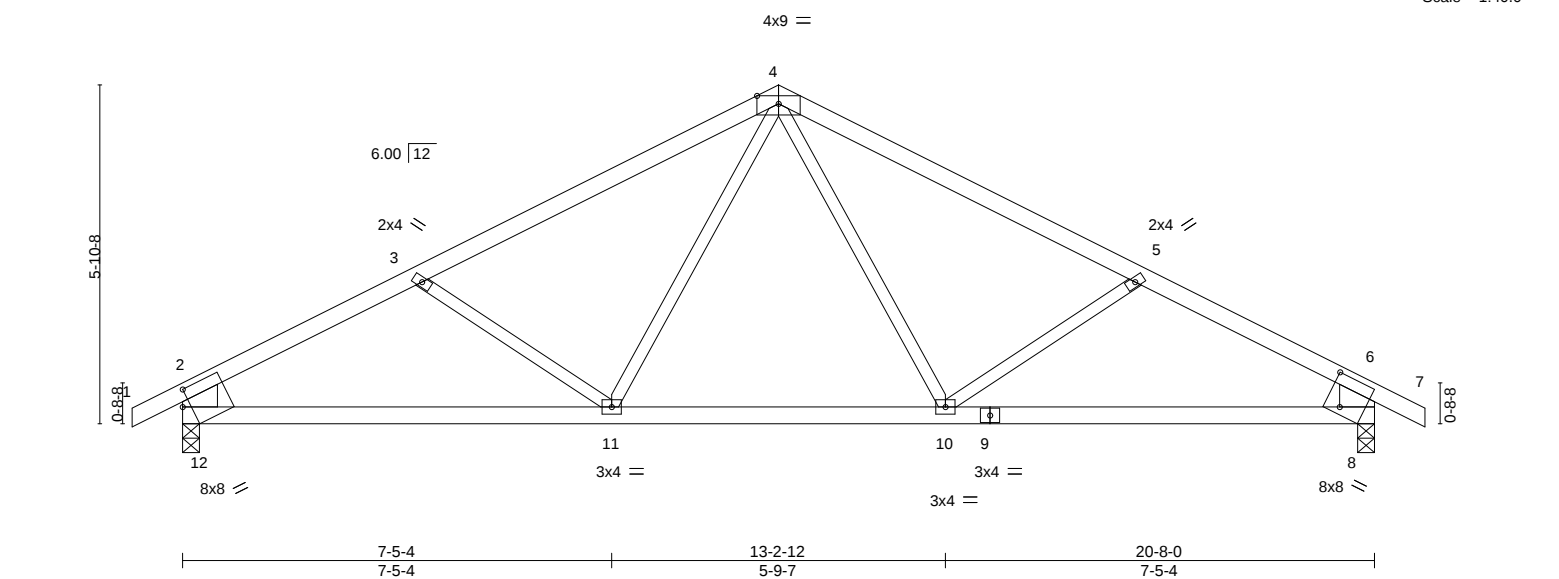


Plate Offsets (X,Y)--		[8:0-3-2,0-6-8], [12:0-1-10,0-3-4]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.14 10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.22 10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.03 8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09 10-11	>999	240	Weight: 71 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except*		
	2-12,6-8: 2x8 SP DSS		

REACTIONS.	(size) 12=0-3-8, 8=0-3-8
	Max Horz 12=-93(LC 6)
	Max Uplift 12=-139(LC 8), 8=-139(LC 9)
	Max Grav 12=985(LC 1), 8=985(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1375/219, 3-4=-1152/156, 4-5=-1152/156, 5-6=-1375/220, 2-12=-892/174, 6-8=-892/174
BOT CHORD	11-12=-217/1132, 10-11=-33/827, 8-10=-137/1132
WEBS	4-10=-36/300, 5-10=-273/205, 4-11=-36/300, 3-11=-273/205

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=139, 8=139.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3,2021

Job

210310

Truss

G3

Truss Type

COMMON GIRDER

Qty

1

Ply

3

Lot 72 RR

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma 842 Missouri

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

145026377

03/10/2021

Wheeler Lumber,

Waverly, KS - 66871,

0-10-8

0-10-8

4-1-13

4-1-13

10-4-0

6-2-3

16-6-3

6-2-3

20-8-0

4-1-13

23-6-8

0-10-8

ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-2cndaTot7VKOeDbgRfQ?gmXfYmOp4q8ZSulWizew6B

Scale = 1:40.0

Plate Offsets (X,Y)--		[2:0-9-0,0-0-1], [6:0-9-0,0-0-1], [9:0-4-0,0-4-8], [10:0-4-0,0-4-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.33
TCDL 10.0	Lumber DOL	1.15	BC 0.48
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.31
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.10 2-10 >999 360
			Vert(CT) -0.18 2-10 >999 240
			Horz(CT) 0.03 6 n/a n/a
			Wind(LL) 0.06 6-9 >999 240
			PLATES MT20 GRIP 197/144
			Weight: 347 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS.	(size) 2=0-3-8, 6=0-3-8
	Max Horz 2=-64(LC 25)
	Max Uplift 2=-264(LC 8), 6=-459(LC 9)
	Max Grav 2=5780(LC 2), 6=5112(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-7893/489, 3-4=-7793/468, 4-5=-7770/669, 5-6=-7862/695	
BOT CHORD 2-10=-442/6891, 9-10=-313/5139, 6-9=-572/6857	
WEBS 4-9=-451/3688, 5-9=-282/288, 4-10=-72/3731, 3-10=-291/279	

NOTES-

- 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.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 6=459.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 925 lb down and 22 lb up at 0-7-4, 920 lb down and 27 lb up at 2-7-4, 920 lb down and 27 lb up at 4-7-4, 920 lb down and 27 lb up at 6-7-4, 920 lb down and 27 lb up at 8-7-4, 918 lb down and 125 lb up at 10-7-4, 918 lb down and 125 lb up at 12-7-4, 918 lb down and 125 lb up at 14-7-4, and 918 lb down and 125 lb up at 16-7-4, and 918 lb down and 125 lb up at 18-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2

March 3, 2021

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

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR
210310	G3	COMMON GIRDER	1	3	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee Mo 145026377

ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-2cndaTot7VKOeDbgRfQ?gmXfYmOp4q8ZSulWizew6B

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/10/2021

145026377

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 11=-881(F) 12=-875(F) 13=-875(F) 14=-875(F) 15=-875(F) 16=-873(F) 17=-873(F) 18=-873(F) 19=-873(F) 20=-873(F)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

210310

Truss

J5

Truss Type

Jack-Closed Supported Gable

Qty

2

Ply

1

Lot 72 RR

Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID: bDlJNJA6?5tiTk6EI3KUKZyAKTB-TBTmCUqbQQizVgJF6oziHO9Fa_tK0ULaFQ7P64zew68

03/10/2021

RELEASE FOR CONSTRUCTION

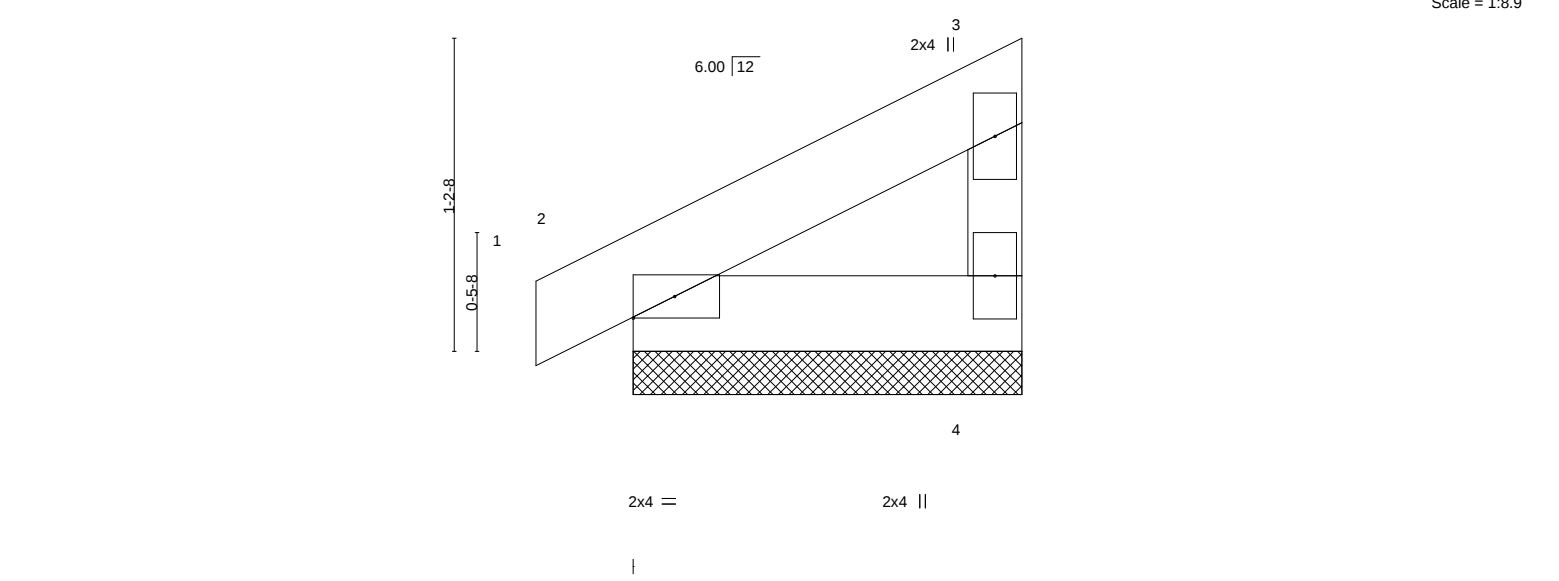
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

Scale = 1:8.9



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 0.03	Vert(LL)	-0.00	1	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 5 lb	FT = 10%

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

REACTIONS. (size) 4=1-6-0, 2=1-6-0
Max Horz 2=36(LC 5)
Max Uplift 4=16(LC 8), 2=16(LC 8)
Max Grav 4=59(LC 1), 2=93(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) Gable studs spaced at 2-0-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 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) 4, 2.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

Job

210310

Truss

J6

Truss Type

Jack-Closed

Qty

2

Ply

1

Lot 72 RR

Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID: bDlJNJA675tiTk6EI3KUKZyAKTB-TBTmCUcbQQizVgJF6oziHO9Fc_tLOULaFQ7P64zew68

03/10/2021

RELEASE FOR CONSTRUCTION

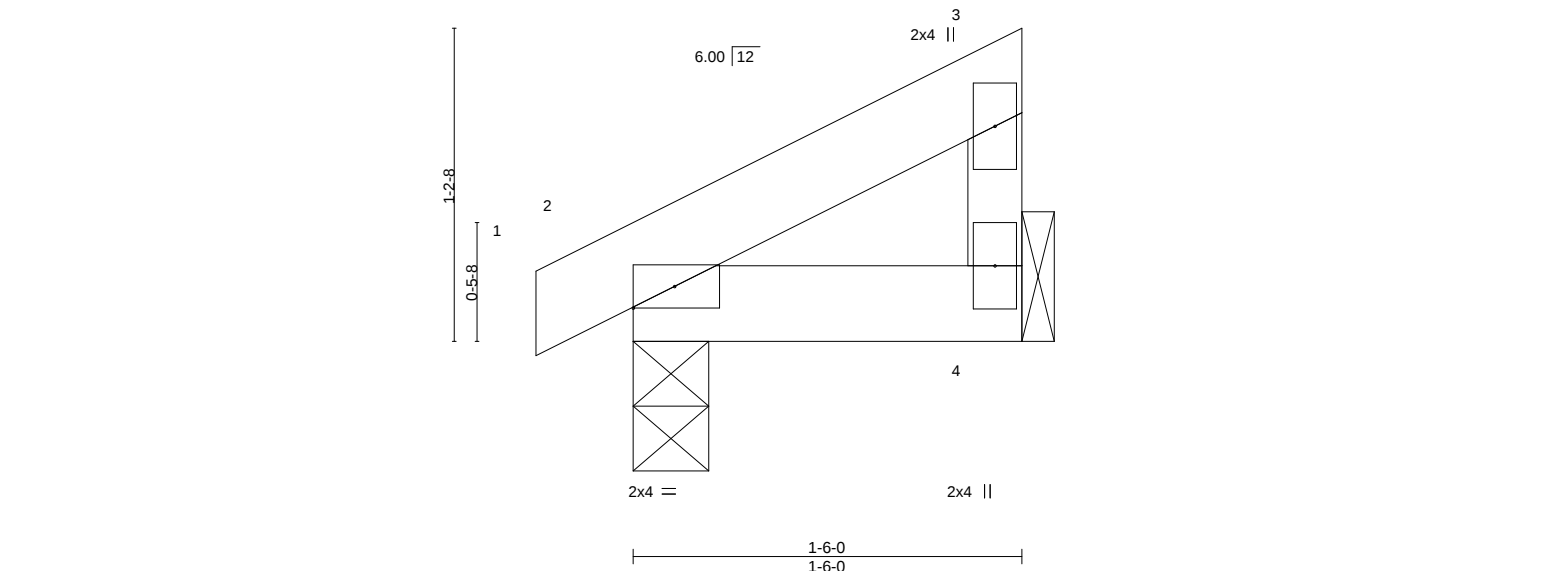
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

Scale = 1:8.9



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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=36(LC 5)
Max Uplift 4=16(LC 8), 2=17(LC 8)
Max Grav 4=57(LC 1), 2=94(LC 1)

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

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



March 3, 2021

Job

210310

Truss

J7

Truss Type

Jack-Open Girder

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID: bDlJNJA675tiTk6EI3KUKZyAkTB-xN18PdrDBkqq7quRgVUxqciPuODglxbjU4tyfWzew67

03/10/2021

RELEASE FOR

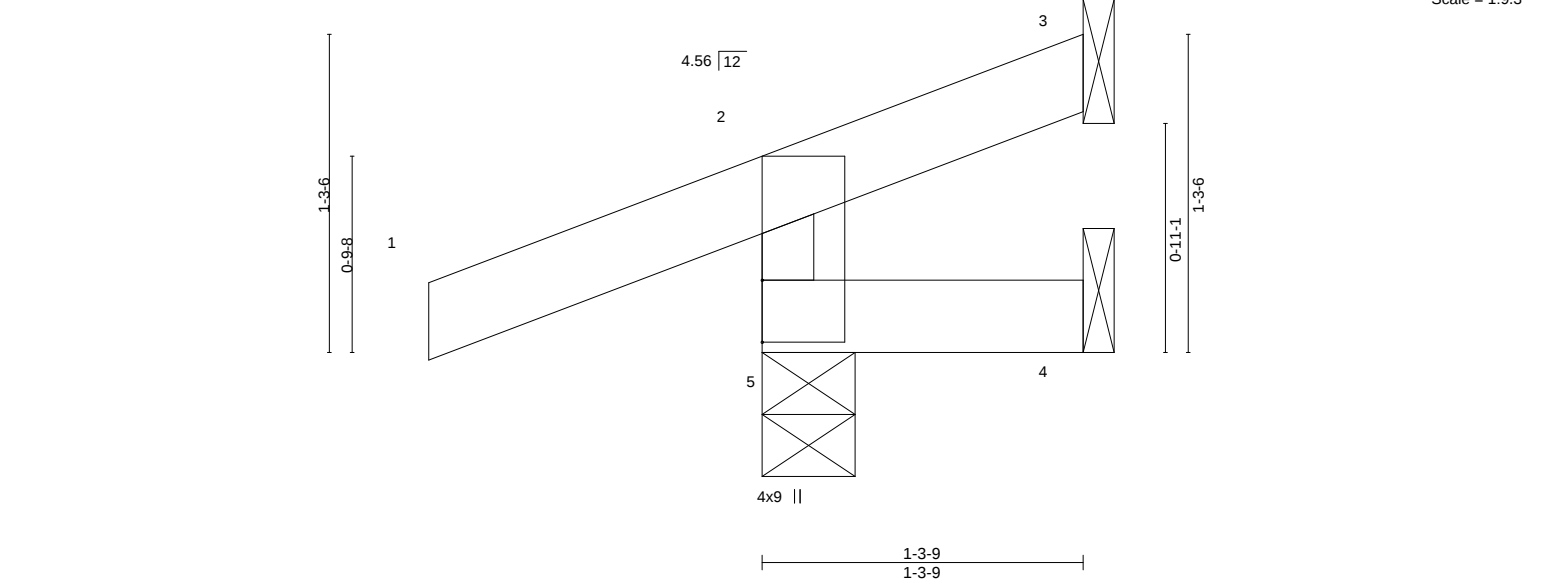
CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/10/2021

Scale = 1:9.3



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 0.12	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	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: 5 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-3-9 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 5=0-4-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=46(LC 7)
 Max Uplift 5=-147(LC 12), 3=-20(LC 5), 4=-1(LC 5)
 Max Grav 5=68(LC 9), 3=32(LC 15), 4=18(LC 3)

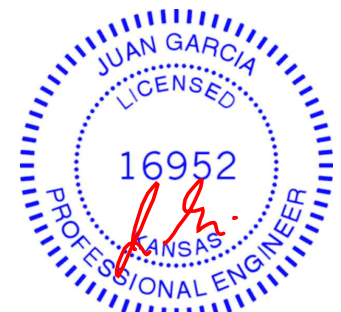
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=147.
 - 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) 1 lb down and 3 lb up at -1-4-2, and 1 lb down and 3 lb up at -1-4-2 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

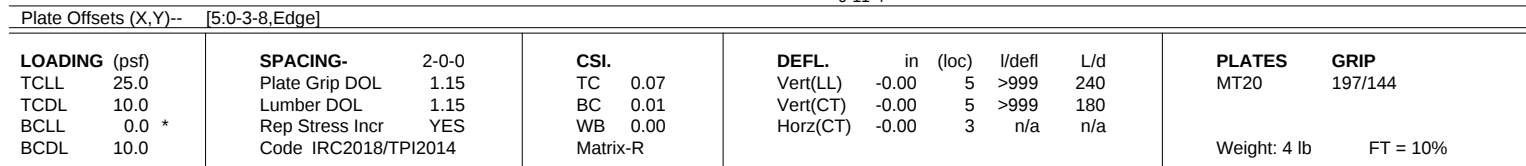
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Concentrated Loads (lb)
 Vert: 1=5(F=2, B=2)
 Trapezoidal Loads (plf)
 Vert: 1=-0(F=35, B=35)-to-2=-27(F=21, B=21), 2=-27(F=21, B=21)-to-3=-50(F=10, B=10), 5=-8(F=6, B=6)-to-4=-14(F=3, B=3)



March 3, 2021

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 145026381
DEVELOPMENT SERVICES
LEE'S SUMMIT WISCONSIN
03/10/2021



REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=33(LC 5)
 Max Uplift 5=-21(LC 8), 3=-11(LC 8), 4=-4(LC 8)
 Max Grav 5=146(LC 1), 3=7(LC 4), 4=14(LC 3)

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=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.



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

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

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



Job	Truss	Truss Type	Qty	Ply	Lot 72 RR	CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
210310	J9	Jack-Open Girder	1	1	Job Reference (optional)	

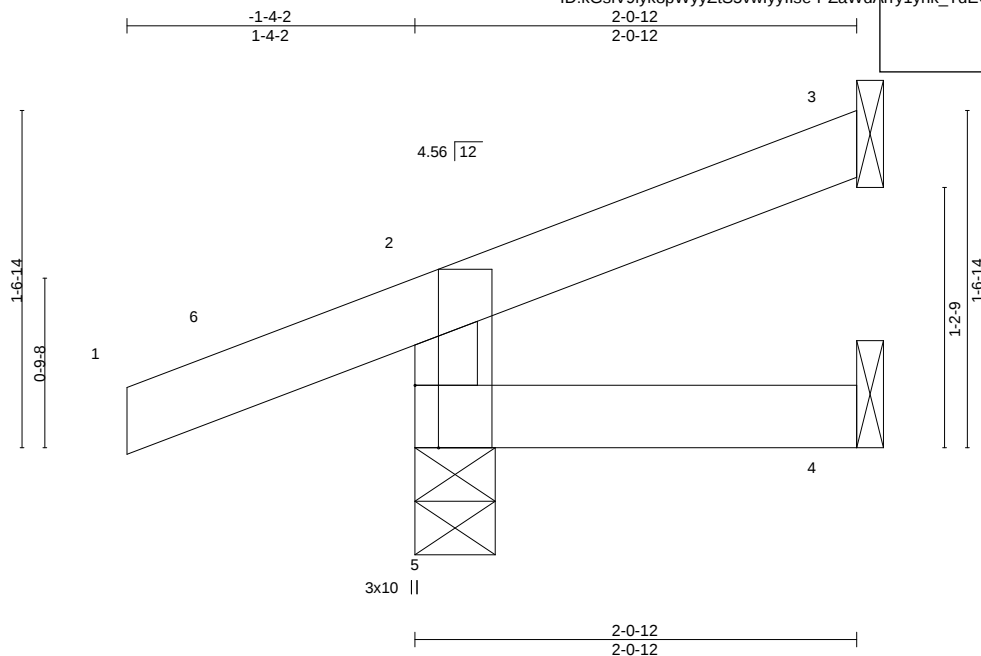


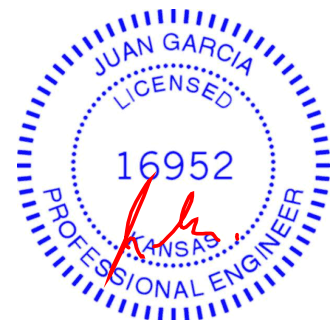
Plate Offsets (X,Y)--		[5:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	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: 7 lb FT = 10%

REACTIONS. (size) 5=0-4-8, 3=Mechanical, 4=Mechanical
Max Horz 5=59(LC 7)
Max Uplift 5=-120(LC 12), 3=-20(LC 12)
Max Grav 5=72(LC 1), 3=24(LC 1), 4=26(LC 3)

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=120.
- 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) 10 lb down and 4 lb up at -1-4-2 , and 10 lb down and 4 lb up at -1-4-2 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-15(F=-7, B=-7)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-6=-10(F=30, B=30), 6=0(F=35, B=35)-to-2=-16(F=27, B=27), 2=-16(F=27, B=27)-to-3=-49(F=10, B=10), 5=-5(F=8, B=8)-to-4=-14(F=3, B=3)



March 3, 2021



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2602 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

210310

Truss

J10

Truss Type

Jack-Open

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64063

Wheeler Lumber,

Waverly, KS - 66871,

ID:kGslV9lyk8pWyyZtS5vwyllse-WoL?noolUpSFGNAs?NxECz4v4ABuYbrHo6el2Bzew6A

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

Scale = 1:11.1

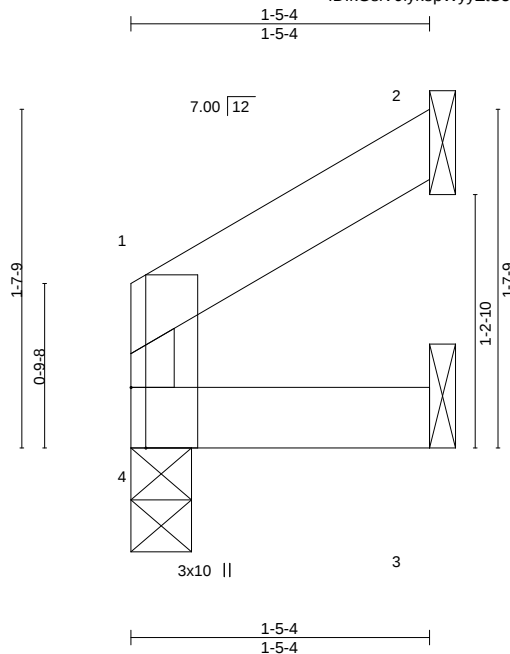


Plate Offsets (X,Y)--		[4:0-3-8,Edge]	
LOADING (psf)		SPACING-	2-0-0
TCLL 25.0		Plate Grip DOL	1.15
TCDL 10.0		Lumber DOL	1.15
BCLL 0.0 *		Rep Stress Incr	YES
BCDL 10.0		Code	IRC2018/TPI2014
		CSI.	
		TC	0.03
		BC	0.01
		WB	0.00
		Matrix-R	
		DEFL.	
		in (loc)	l/defl L/d
		Vert(LL)	-0.00 4 >999 360
		Vert(CT)	-0.00 4 >999 240
		Horz(CT)	-0.00 2 n/a n/a
		Wind(LL)	0.00 4 >999 240
		PLATES	GRIP
		MT20	197/144
		Weight: 4 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 1-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=29(LC 5)
Max Uplift 2=-32(LC 8)
Max Grav 4=59(LC 1), 2=48(LC 15), 3=26(LC 3)

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

NOTES-

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



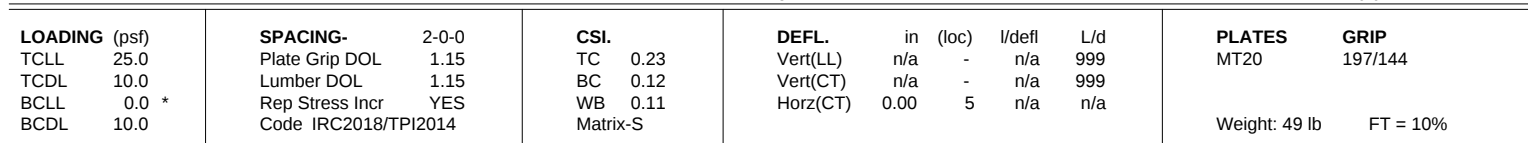
March 3, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017



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.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=155, 6=155.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WARNING – Verify design parameters and READ NOTES ON THIS AND INCLUDED WELDER REFERENCE PAGE MHF-473 (Rev. 3/29/2020) BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

210310

Truss

V2

Truss Type

Valley

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma 152 Missouri

Wheeler Lumber,

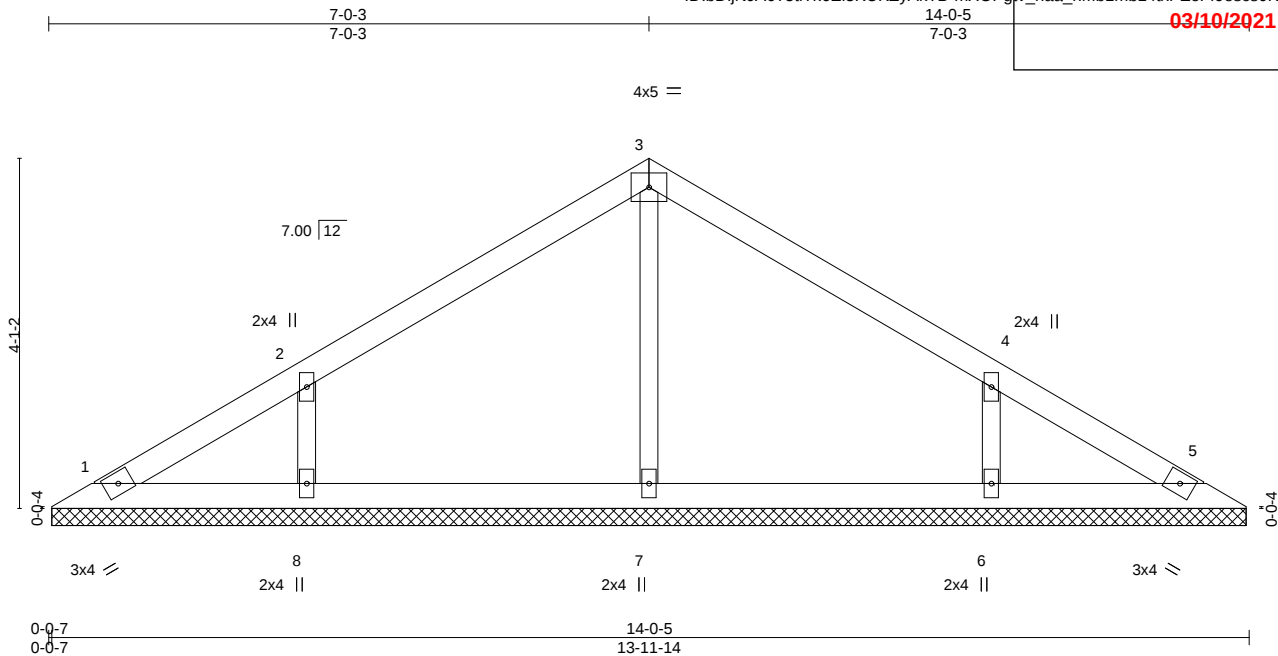
Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma 152 Missouri

ID: bDijNJA6?5tiTk6EI3KUKZyAkTB-mXOPgTv_naa_rIMb1mbl4txPZoFf9escs0KHsAzew61

03/10/2021

Scale = 1:26.9



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 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 38 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 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 10-0-0 oc bracing.

REACTIONS. All bearings 13-11-7.
(lb) - Max Horz 1=-99(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-127(LC 8), 6=-126(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=297(LC 1), 8=357(LC 15), 6=357(LC 16)

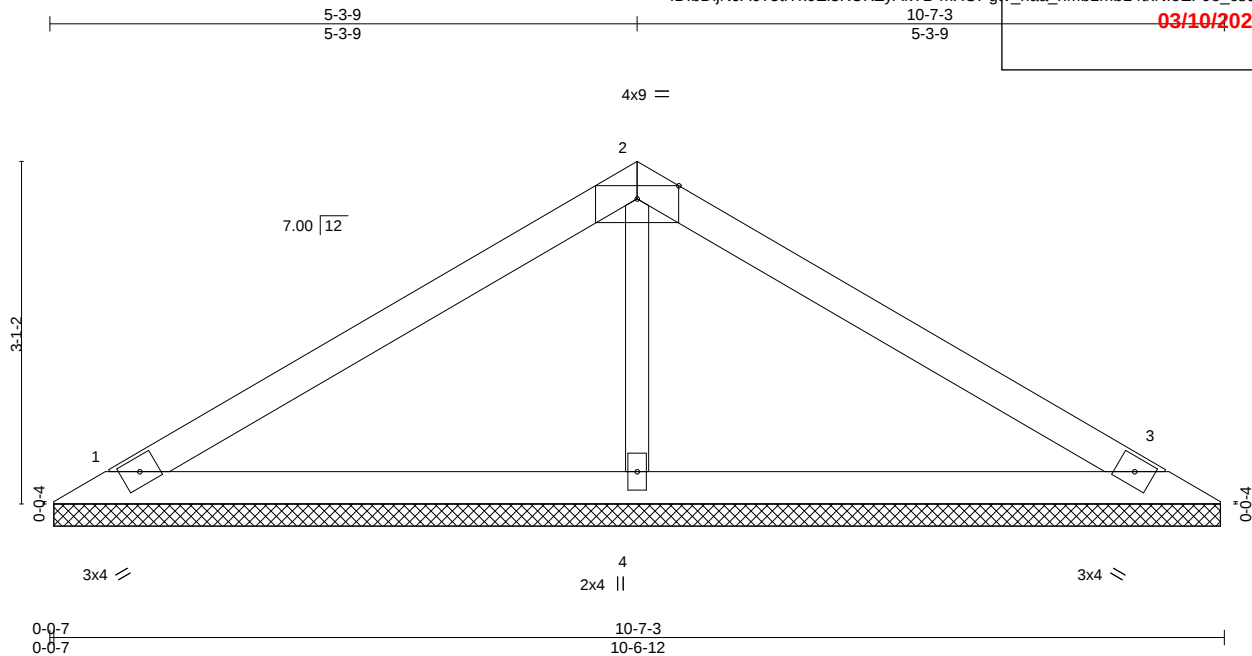
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-284/168, 4-6=-284/168

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=127, 6=126.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

Job 210310	Truss V3	Truss Type Valley	Qty 1	Ply 1	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021
Wheeler Lumber, Waverly, KS - 66871,		8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, Missouri ID: bDlJnJA675tiTk6EI3KUKZyAKTB-mXOPgty_naa_rIMb1mbL4txNloEF9e_cs0KHsAzew61				



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)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 27 lb	FT = 10%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 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 10-0-0 oc bracing.

REACTIONS. (size) 1=10-6-5, 3=10-6-5, 4=10-6-5
 Max Horz 1=-73(LC 4)
 Max Uplift 1=-42(LC 8), 3=-51(LC 9), 4=-21(LC 8)
 Max Grav 1=210(LC 1), 3=210(LC 1), 4=436(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-291/75

NOTES-

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

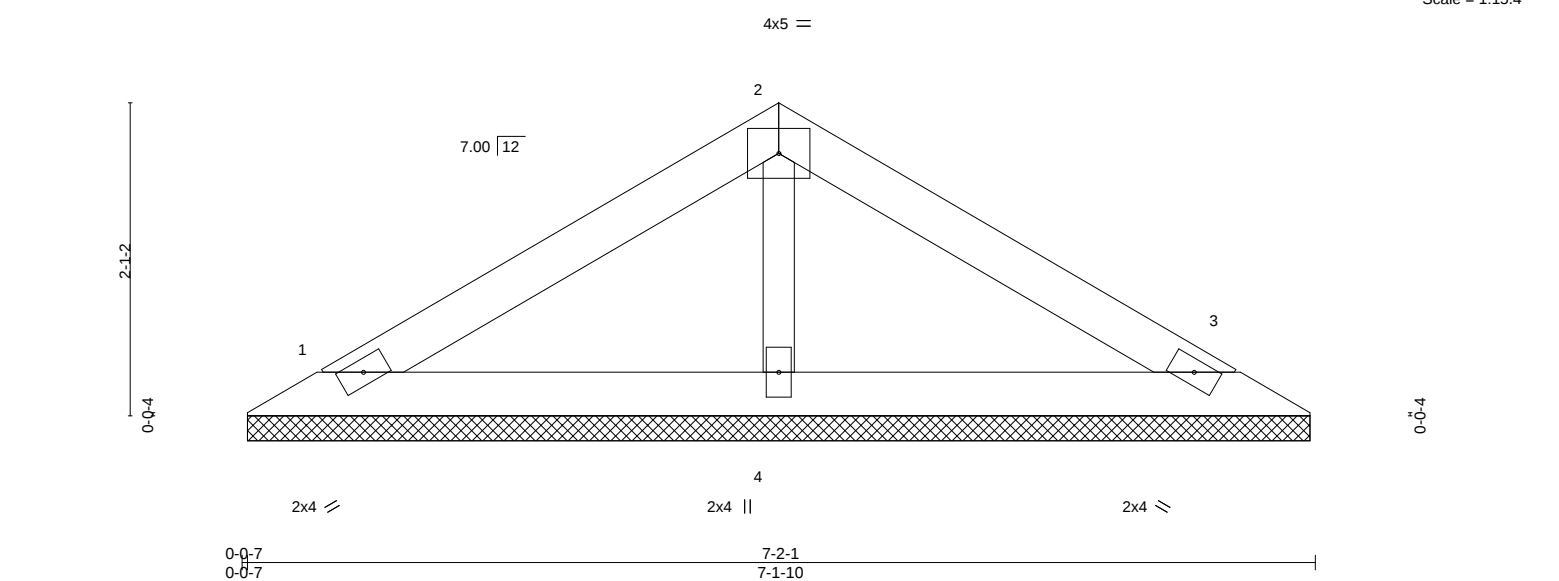


March 3, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 210310	Truss V4	Truss Type Valley	Qty 1	Ply 1	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021
Wheeler Lumber, Waverly, KS - 66871,		8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO ID: bDijNJA6?5tiTk6Ei3KUKZyAkTB-EjynuDwcYtiqTvxnaT6ac4UaNCbDu6pL5g3qOczew60 7-2-1 3-7-0 Scale = 1:15.4				



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 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 17 lb	FT = 10%

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

REACTIONS. (size) 1=7-1-3, 3=7-1-3, 4=7-1-3
 Max Horz 1=-46(LC 4)
 Max Uplift 1=-33(LC 8), 3=-39(LC 9)
 Max Grav 1=148(LC 1), 3=148(LC 1), 4=251(LC 1)

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

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



March 3, 2021

Job

210310

Truss

V5

Truss Type

Valley

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID: bDijNJA675tiT6Ei3KUKZyAkTB-ivW95ZxEIBqh43Vz8Bdp9i1nlcxadZZvKKpNx2zew6?

3-8-14

1-10-7

1-10-7

03/10/2021

Scale = 1:8.2

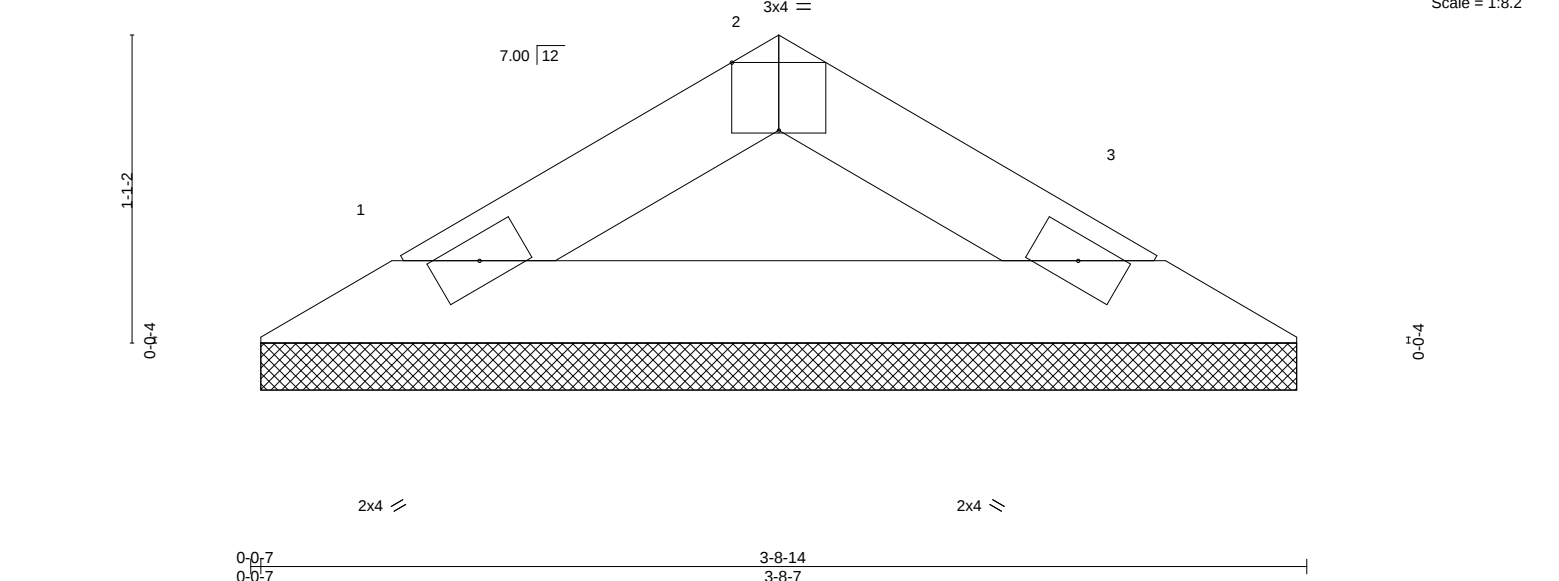


Plate Offsets (X,Y)--		[2:0-2-0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	(loc)	-	l/defl	L/d
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a		-	n/a	999
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		3	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P						Weight: 8 lb	
										FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 3-8-14 oc purlins.

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

REACTIONS.

(size) 1=3-8-1, 3=3-8-1

Max Horz 1=20(LC 7)

Max Uplift 1=14(LC 8), 3=14(LC 9)

Max Grav 1=120(LC 1), 3=120(LC 1)

FORCES.

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

- NOTES-**

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

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

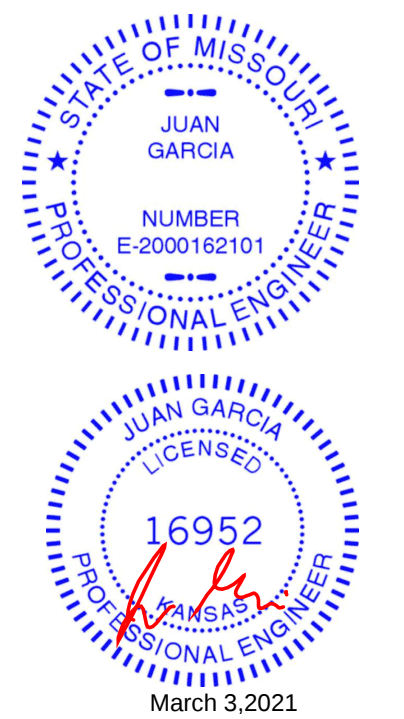
3) Gable requires continuous bottom chord bearing.

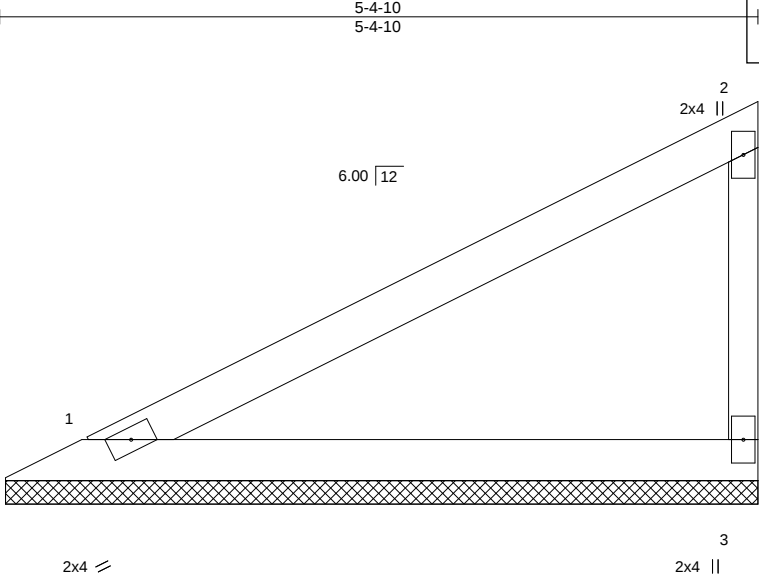
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

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.





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 0.41	Vert(LL) n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P				Weight: 14 lb	FT = 10%

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

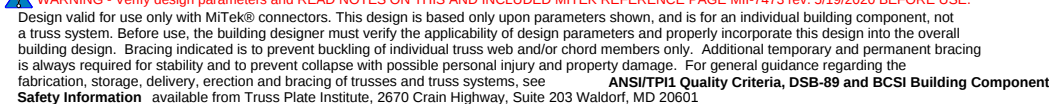
REACTIONS. (size) 1=5-4-2, 3=5-4-2
 Max Horz 1=97(LC 5)
 Max Uplift 1=27(LC 8), 3=-51(LC 8)
 Max Grav 1=209(LC 1), 3=209(LC 1)

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

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



March 3, 2021



Job

210310

Truss

V7

Truss Type

Valley

Qty

1

Ply

1

Lot 72 RR

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Job Reference (optional)

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

Scale = 1:10.4

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 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 7 lb	FT = 10%

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

REACTIONS.	(size) 1=3-0-2, 3=3-0-2
Max Horz	1=48(LC 5)
Max Uplift	1=-13(LC 8), 3=-26(LC 8)
Max Grav	1=104(LC 1), 3=104(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.

March 3, 2021

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

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

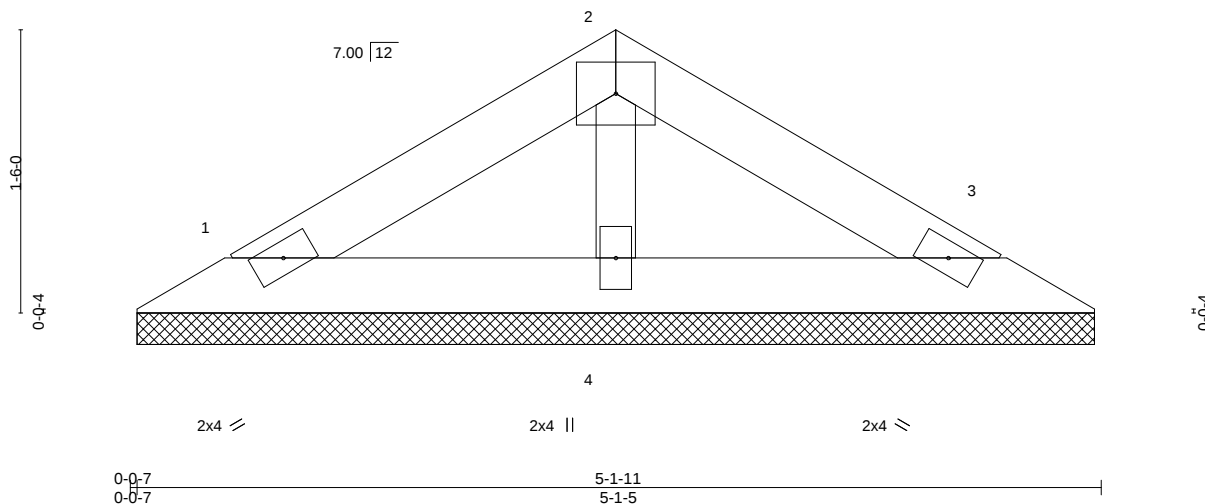
Job	Truss	Truss Type	Qty	Ply	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021
210310	V8	Valley	1	1		
Wheeler Lumber, Waverly, KS - 66871,					Job Reference (optional)	

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma 1584158 Page 1
ID: bDljNJA675tiTk6EI3KUKZyAkTB-A63Ylvys3VyYiD4Aiu92hVZxN0HNMOV2Z_YxTVzew6_

2-6-14
2-6-14
5-1-11
2-6-14

4x5 =

Scale = 1:12.2



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)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-0-14, 3=5-0-14, 4=5-0-14
Max Horz 1=-31(LC 4)
Max Uplift 1=-22(LC 8), 3=-26(LC 9)
Max Grav 1=99(LC 1), 3=99(LC 1), 4=167(LC 1)

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

NOTES-

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



March 3, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR
210310	V9	Valley	1	1	

Wheeler Lumber,	Waverly, KS - 66871,	8.430 s Feb 12 2021 MiTek Industries, Inc. For Sale	Job Reference (optional)
-----------------	----------------------	---	--------------------------

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

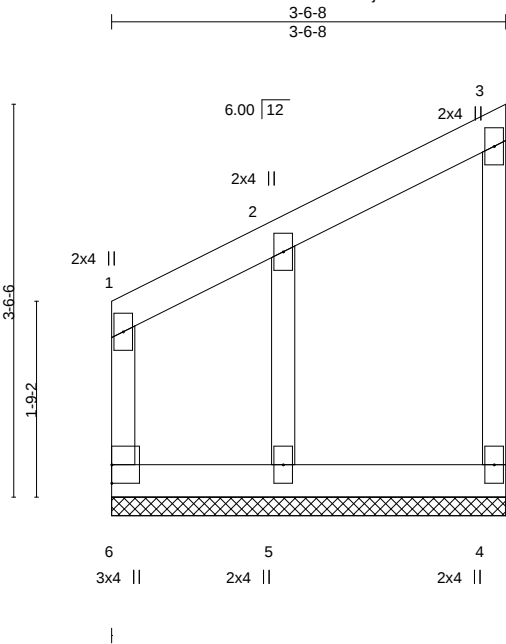
LEE'S SUMMIT, MISSOURI

03/10/2021

145026392

8.430 s Feb 12 2021 MiTek Industries, Inc. For Sale

Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 14 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 3-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

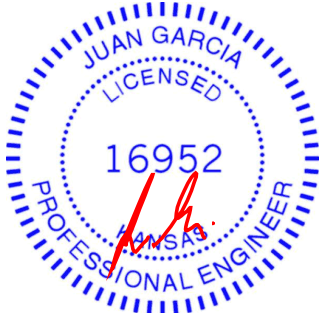
REACTIONS.

(size) 6=3-6-8, 4=3-6-8, 5=3-6-8
Max Horz 6=127(LC 5)
Max Uplift 6=-29(LC 4), 4=-22(LC 5), 5=-96(LC 5)
Max Grav 6=120(LC 7), 4=71(LC 1), 5=183(LC 15)

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

NOTES-

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



March 3,2021

Job

210310

Truss

V10

Truss Type

Valley

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID: bDlJnJA675iTk6Ei3KUKZyAKTB-tm8uqWstJL4YM82powXPv1nkiButDr40yOM3jPzew65

145026393

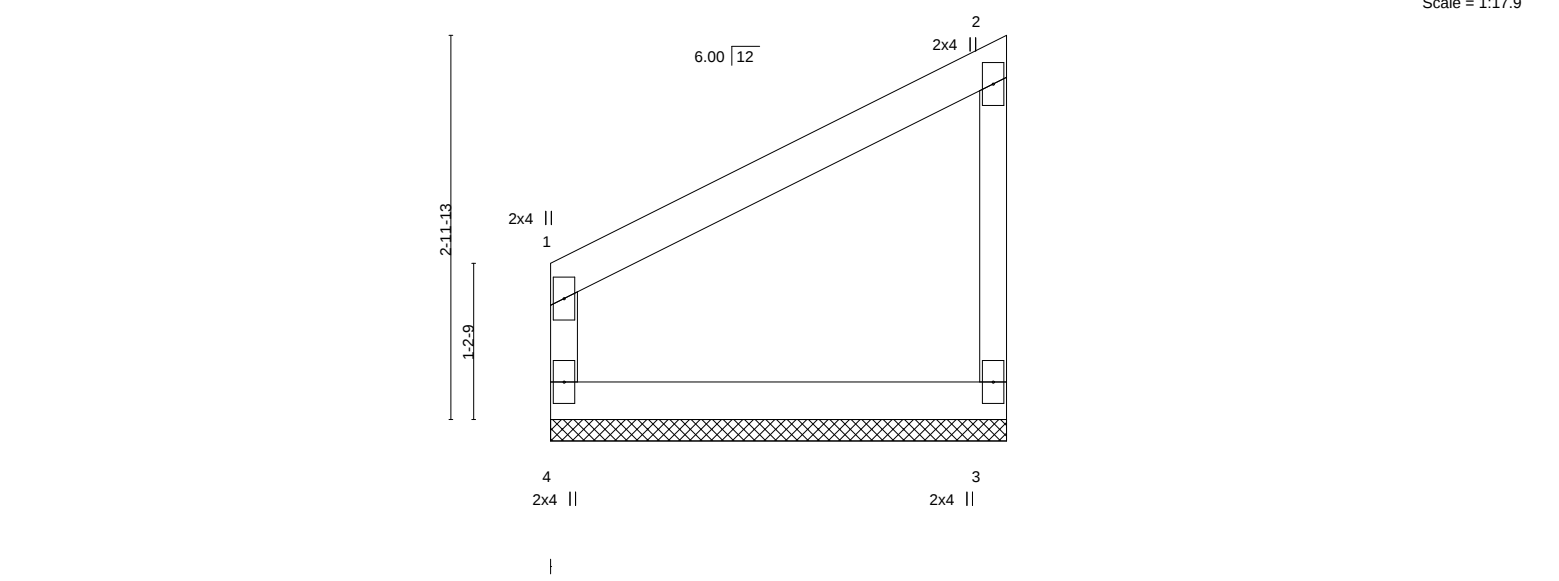
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/10/2021

Scale = 1:17.9



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 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 11 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2			

REACTIONS.	(size) 4=3-6-8, 3=3-6-8
	Max Horz 4=106(LC 5)
	Max Uplift 4=14(LC 8), 3=44(LC 5)
	Max Grav 4=150(LC 1), 3=150(LC 1)

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

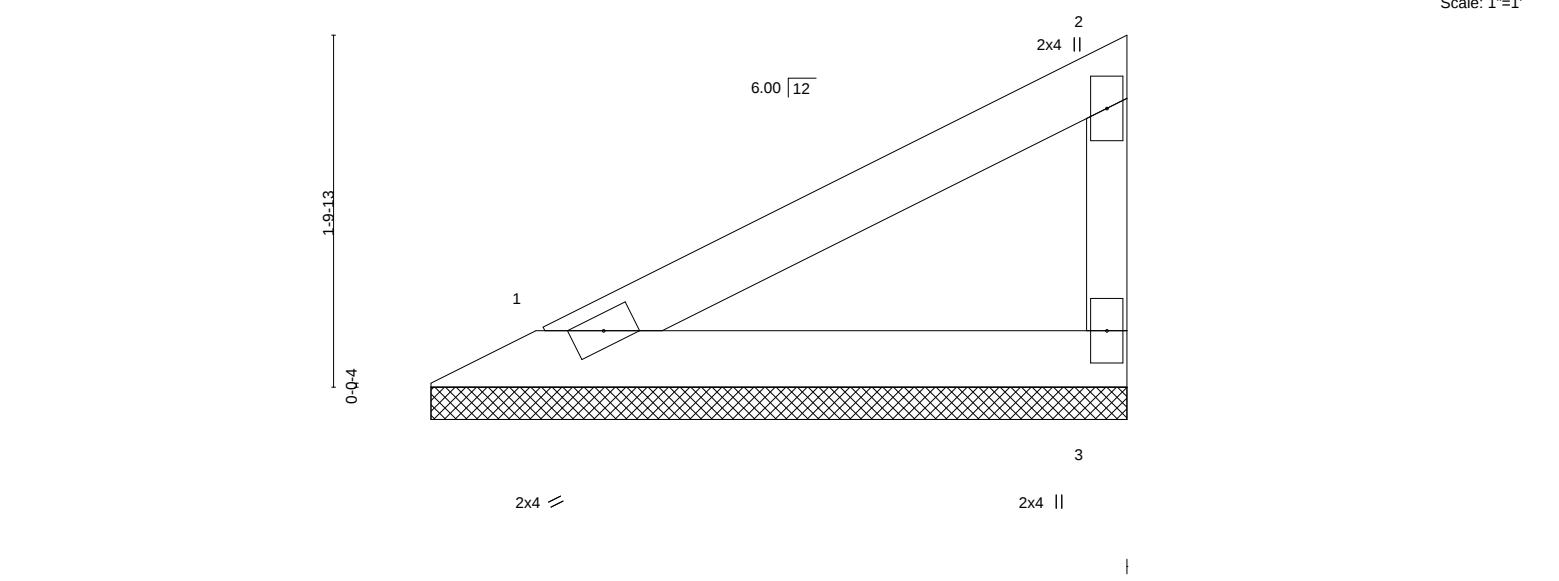
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Gable requires continuous 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) 4, 3.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3,2021

Job	Truss	Truss Type	Qty	Ply	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021
210310	V11	Valley	1	1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS - 66871,					8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64081	

ID: bDijNJA675tiTk6EI3KUKZyAKTB-LyiH2st5UfCP_Id0Ld2eSEKvfbDGyIK9A25cFrzew64



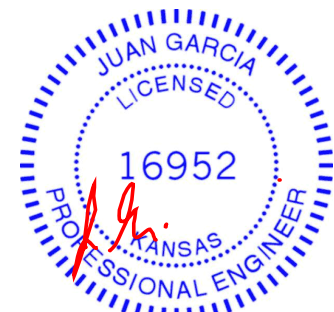
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 9 lb	FT = 10%

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

REACTIONS.	(size) 1=3-7-2, 3=3-7-2
	Max Horz 1=61(LC 5)
	Max Uplift 1=17(LC 8), 3=32(LC 8)
	Max Grav 1=131(LC 1), 3=131(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.



March 3,2021

Job

210310

Truss

V12

Truss Type

Valley

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma 150150 Missouri

Wheeler Lumber,

Waverly, KS - 66871,

ID: bDlJNJA675tiTk6EI3KUKZyAKTB-p8GfCukFyKGbRCCvLZt_Ss4r?ZFhkLJPirAoHzew63

RELEASE FOR CONSTRUCTION

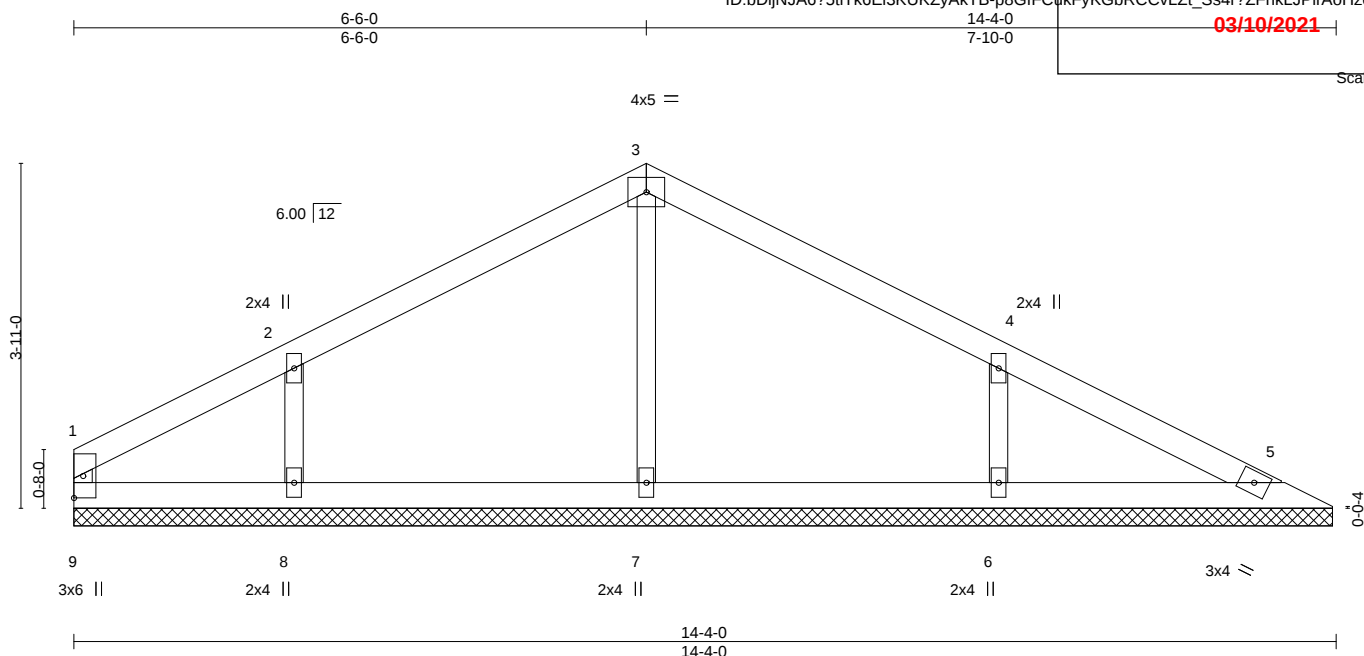
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/10/2021

Scale = 1:26.2



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 0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 39 lb	FT = 10%

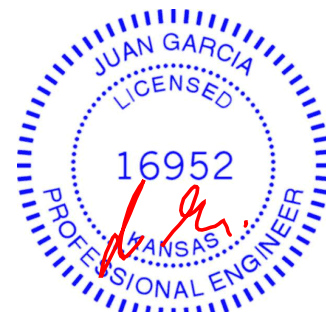
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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. All bearings 14-3-8.
(lb) - Max Horz 9=65(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 9, 5 except 8=119(LC 8), 6=121(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 9, 5 except 7=314(LC 1), 8=346(LC 21), 6=384(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-277/157, 4-6=-301/164

- 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) 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) 9, 5 except (jt=lb) 8=119, 6=121.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3, 2021

Job

210310

Truss

V13

Truss Type

Valley

Qty

1

Ply

1

Lot 72 RR

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Moine, MO 64501

Wheeler Lumber,

Waverly, KS - 66871,

ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-p8GfCukFyKGbRCCvLZt_Ss1Y?XfhkVJPirAoHzew63

03/10/2021

RELEASE FOR CONSTRUCTION

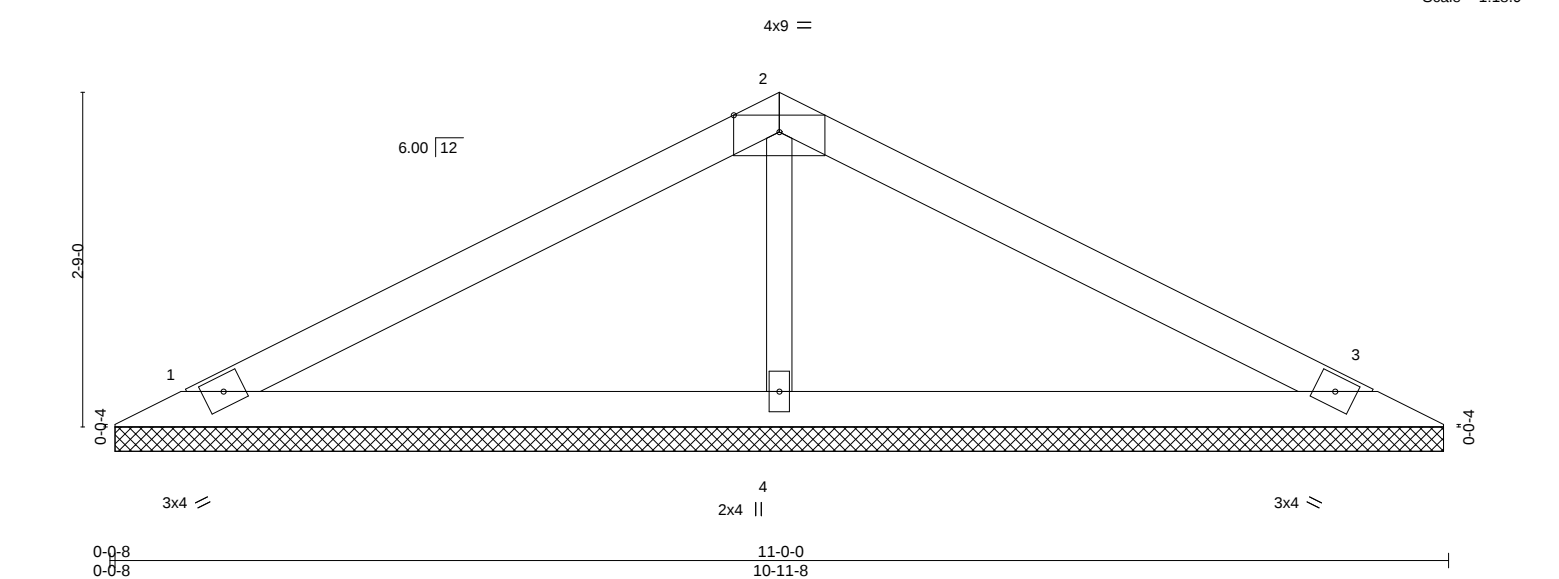
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145026396

Scale = 1:18.9



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 0.33	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 0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 27 lb	FT = 10%

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

REACTIONS. (size) 1=10-11-0, 3=10-11-0, 4=10-11-0
Max Horz 1=43(LC 8)
Max Uplift 1=-42(LC 8), 3=-50(LC 9), 4=-26(LC 8)
Max Grav 1=207(LC 21), 3=207(LC 22), 4=465(LC 1)

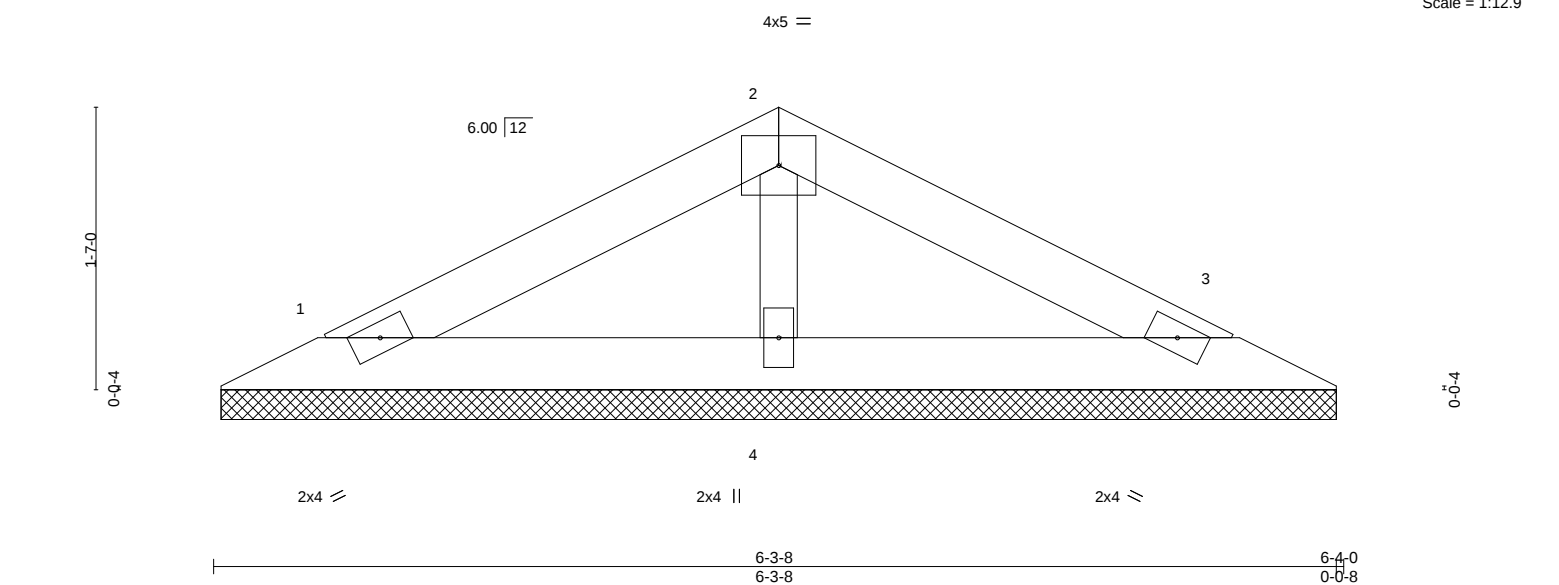
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-318/83

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



March 3, 2021

Job 210310	Truss V14	Truss Type Valley	Qty 1	Ply 1	Lot 72 RR	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/10/2021
Wheeler Lumber, Waverly, KS - 66871,		Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO ID: bDlJNJA6?5tiTk6EI3KUKZyAkTB-HLq1TXvMCGS7DbnOT246XfPGkPw7QCPSeMajKzew62				



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 14 lb	FT = 10%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 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 10-0-0 oc bracing.

REACTIONS. (size) 1=6-3-0, 3=6-3-0, 4=6-3-0
 Max Horz 1=22(LC 8)
 Max Uplift 1=27(LC 8), 3=31(LC 9), 4=3(LC 8)
 Max Grav 1=119(LC 1), 3=119(LC 1), 4=218(LC 1)

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

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



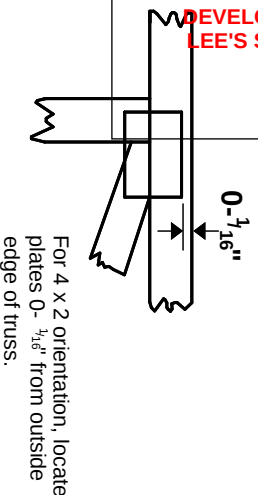
March 3, 2021

Symbols

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/10/2021

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.



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

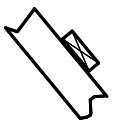
* Plate location details available in **MiTek 20120** software or upon request.

PLATE SIZE

4 X 4

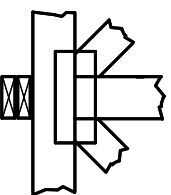
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



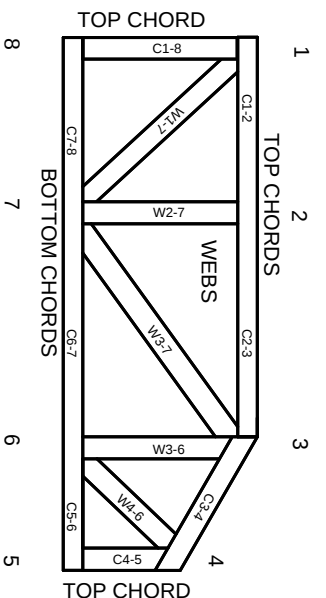
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MiTek® All Rights Reserved



MiTek Engineering Reference Sheet: MII-7473 rev. 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 T or I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.