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

04/14/2021

RE: 210361
Lot 87 W0

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

Site Information:

Customer: Project Name: 210361
Lot/Block: Model:
Address: Subdivision:
City: State:

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

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

This package includes 85 individual, dated Truss Design Drawings and 0 Additional Drawings.

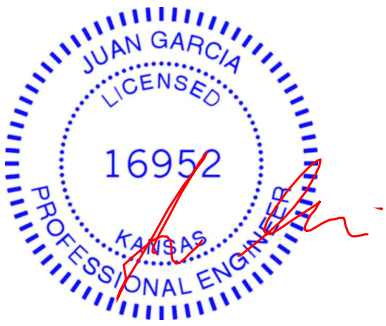
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45442739	A5	3/31/2021	21	I45442759	D2	3/31/2021
2	I45442740	A11	3/31/2021	22	I45442760	D3	3/31/2021
3	I45442741	A12	3/31/2021	23	I45442761	D4	3/31/2021
4	I45442742	A17	3/31/2021	24	I45442762	E1	3/31/2021
5	I45442743	A18	3/31/2021	25	I45442763	E2	3/31/2021
6	I45442744	A19	3/31/2021	26	I45442764	E3	3/31/2021
7	I45442745	A20	3/31/2021	27	I45442765	G1	3/31/2021
8	I45442746	B1	3/31/2021	28	I45442766	G2	3/31/2021
9	I45442747	B2	3/31/2021	29	I45442767	G3	3/31/2021
10	I45442748	B3	3/31/2021	30	I45442768	G4	3/31/2021
11	I45442749	C10A	3/31/2021	31	I45442769	G5	3/31/2021
12	I45442750	C11A	3/31/2021	32	I45442770	G6	3/31/2021
13	I45442751	C12A	3/31/2021	33	I45442771	G7	3/31/2021
14	I45442752	C13A	3/31/2021	34	I45442772	G8	3/31/2021
15	I45442753	C14A	3/31/2021	35	I45442773	H1	3/31/2021
16	I45442754	C15	3/31/2021	36	I45442774	H2	3/31/2021
17	I45442755	C16	3/31/2021	37	I45442775	J1	3/31/2021
18	I45442756	C17	3/31/2021	38	I45442776	J2	3/31/2021
19	I45442757	C18	3/31/2021	39	I45442777	J3	3/31/2021
20	I45442758	D1	3/31/2021	40	I45442778	J4	3/31/2021

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 31, 2021

Garcia, Juan

RELEASE FOR CONSTRUCTION
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

04/14/2021

RE: 210361 - Lot 87 W0

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

Site Information:

Project Customer: Project Name: 210361
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I45442779	J5	3/31/2021
42	I45442780	J6	3/31/2021
43	I45442781	J7	3/31/2021
44	I45442782	J8	3/31/2021
45	I45442783	J9	3/31/2021
46	I45442784	J10	3/31/2021
47	I45442785	J11	3/31/2021
48	I45442786	J12	3/31/2021
49	I45442787	J13	3/31/2021
50	I45442788	J14	3/31/2021
51	I45442789	J15	3/31/2021
52	I45442790	J16	3/31/2021
53	I45442791	J17	3/31/2021
54	I45442792	J18	3/31/2021
55	I45442793	J19	3/31/2021
56	I45442794	J20	3/31/2021
57	I45442795	J21	3/31/2021
58	I45442796	J22	3/31/2021
59	I45442797	J23	3/31/2021
60	I45442798	J24	3/31/2021
61	I45442799	J25	3/31/2021
62	I45442800	LAY1B	3/31/2021
63	I45442801	LAY3	3/31/2021
64	I45442802	LAY4	3/31/2021
65	I45442803	LAY5	3/31/2021
66	I45442804	LAY6	3/31/2021
67	I45442805	LAY7	3/31/2021
68	I45442806	LAY8	3/31/2021
69	I45442807	V6	3/31/2021
70	I45442808	V7	3/31/2021
71	I45442809	V8	3/31/2021
72	I45442810	V9	3/31/2021
73	I45442811	V10	3/31/2021
74	I45442812	V11	3/31/2021
75	I45442813	V12	3/31/2021
76	I45442814	V13	3/31/2021
77	I45442815	V14	3/31/2021
78	I45442816	V15	3/31/2021
79	I45442817	V16	3/31/2021
80	I45442818	V19	3/31/2021
81	I45442819	V20	3/31/2021
82	I45442820	V21	3/31/2021
83	I45442821	V22	3/31/2021
84	I45442822	V23	3/31/2021

No.	Seal#	Truss Name	Date
85	I45442823	V24	3/31/2021

RELEASE FOR CONSTRUCTION
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

04/14/2021

RE: 210361
Lot 87 W0

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

Site Information:

Customer: Project Name: 210361
Lot/Block: Model:
Address: Subdivision:
City: State:

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

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

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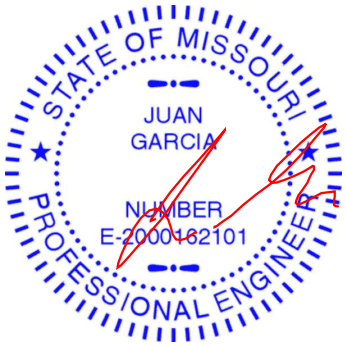
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

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 31, 2021

Garcia, Juan

RELEASE FOR CONSTRUCTION
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LEE'S SUMMIT, MISSOURI

04/14/2021

RE: 210361 - Lot 87 W0

MiTek USA, Inc.
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Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name: 210361
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55	I45442793	J19	3/31/2021
56	I45442794	J20	3/31/2021
57	I45442795	J21	3/31/2021
58	I45442796	J22	3/31/2021
59	I45442797	J23	3/31/2021
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76	I45442814	V13	3/31/2021
77	I45442815	V14	3/31/2021
78	I45442816	V15	3/31/2021
79	I45442817	V16	3/31/2021
80	I45442818	V19	3/31/2021
81	I45442819	V20	3/31/2021
82	I45442820	V21	3/31/2021
83	I45442821	V22	3/31/2021
84	I45442822	V23	3/31/2021

No.	Seal#	Truss Name	Date
85	I45442823	V24	3/31/2021

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A5	Half Hip Girder	1	2	Job Reference (optional)

I45442739

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 15:05:31 2021 Page 1
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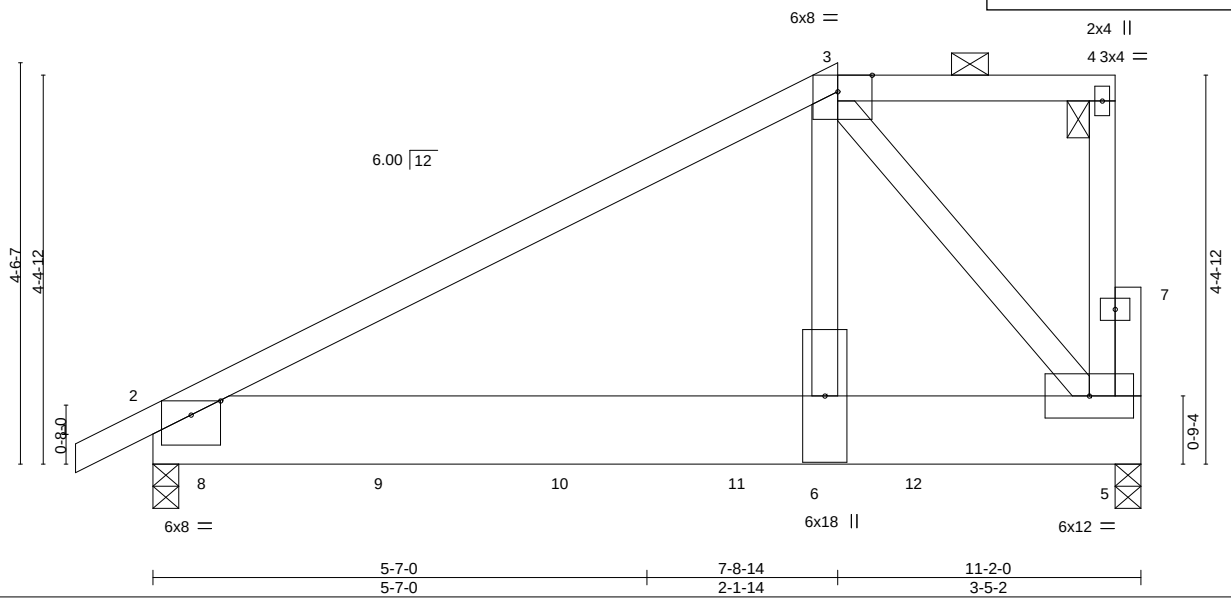


Plate Offsets (X,Y)-- [2:0-4-0,0-1-15], [3:0-4-10,Edge]

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	0.70	Vert(LL)	-0.07	2-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.13	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	2-6	>999	240	Weight: 145 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x10 SP DSS
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 5=0-3-8 (req. 0-3-13), 2=0-3-8 (req. 0-3-10)
Max Horz 2=131(LC 5)
Max Uplift 5=-112(LC 5)
Max Grav 5=4878(LC 2), 2=4637(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3598/63
BOT CHORD 2-6=-76/3103, 5-6=-76/2921
WEBS 3-6=-24/4888, 3-5=-4612/99

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) WARNING: Required bearing size at joint(s) 5, 2 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=112.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1444 lb down at 0-8-0, 1442 lb down and 36 lb up at 2-8-0, 1421 lb down and 44 lb up at 4-8-0, 1439 lb down and 46 lb up at 6-8-0, and 1439 lb down and 46 lb up at 8-8-0, and 1447 lb down and 38 lb up at 10-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

March 31,2021

LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A5	Half Hip Girder	1	2	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:15 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-apUZcAcQk9?Li_2FHFROtlUa_T6r9NfmY6kVwRzVRzo

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, 2-5=-20
   Concentrated Loads (lb)
   Vert: 5=-1383(B) 8=-1378(B) 9=-1373(B) 10=-1375(B) 11=-1375(B) 12=-1375(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

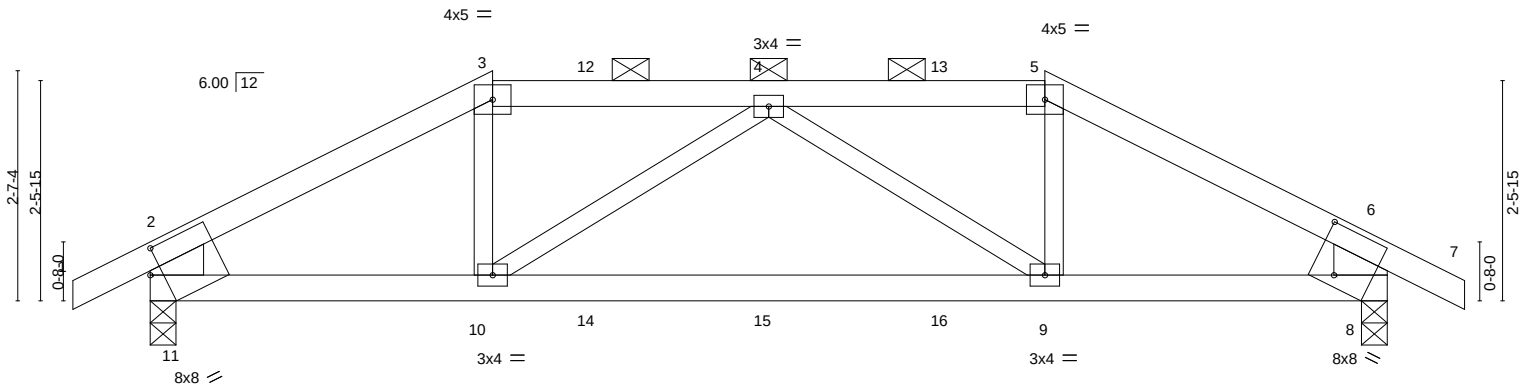
Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A11	Hip Girder	1	1	Job Reference (optional)

I45442740

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:03:31 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-lf7IL7Xf8JEC_3a5x_K_eUEXu20ulmit9AHAjnzVRzu

-0-10-8 / 0-10-8 | 3-10-8 / 3-10-8 | 7-0-0 / 3-1-8 | 10-1-8 / 3-1-8 | 14-0-0 / 3-10-8 | 14-10-8 / 0-10-8

Scale = 1:26.1



3-10-8 / 3-10-8 | 10-1-8 / 6-3-0 | 14-0-0 / 3-10-8

Plate Offsets (X,Y)-- [8:0-3-2,0-6-8], [11:0-1-10,0-3-4]

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	0.74	Vert(LL)	-0.11	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.25	9-10	>651	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	9-10	>999	240	Weight: 47 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
3-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,6-8: 2x8 SP DSS

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

REACTIONS. (size) 11=0-3-8, 8=0-3-8
Max Horz 11=49(LC 28)
Max Uplift 11=-241(LC 8), 8=-241(LC 9)
Max Grav 11=1034(LC 1), 8=1034(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1484/321, 3-4=-1206/304, 4-5=-1206/304, 5-6=-1484/321, 2-11=-953/237, 6-8=-953/237
BOT CHORD 10-11=-262/1227, 9-10=-386/1516, 8-9=-236/1227
WEBS 3-10=-54/529, 4-9=-412/185, 5-9=-54/529, 4-10=-412/185

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=241, 8=241.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 77 lb down and 72 lb up at 3-10-8, 84 lb down and 72 lb up at 5-0-0, 84 lb down and 72 lb up at 7-0-0, and 84 lb down and 72 lb up at 9-0-0, and 77 lb down and 72 lb up at 10-1-8 on top chord, and 210 lb down and 75 lb up at 3-10-8, 29 lb down at 5-0-0, 29 lb down at 7-0-0, and 29 lb down at 9-0-0, and 210 lb down and 75 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

March 31,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A11	Hip Girder	1	1	Job Reference (optional)

I45442740

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, 3-5=-70, 5-6=-70, 6-7=-70, 8-11=-20
   Concentrated Loads (lb)
   Vert: 3=-42(F) 5=-42(F) 10=-210(F) 9=-210(F) 4=-42(F) 12=-42(F) 13=-42(F) 14=-23(F) 15=-23(F) 16=-23(F)

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A12	Hip	1	1	

Job Reference (optional) I45442741

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:03:31 2021 Page 1
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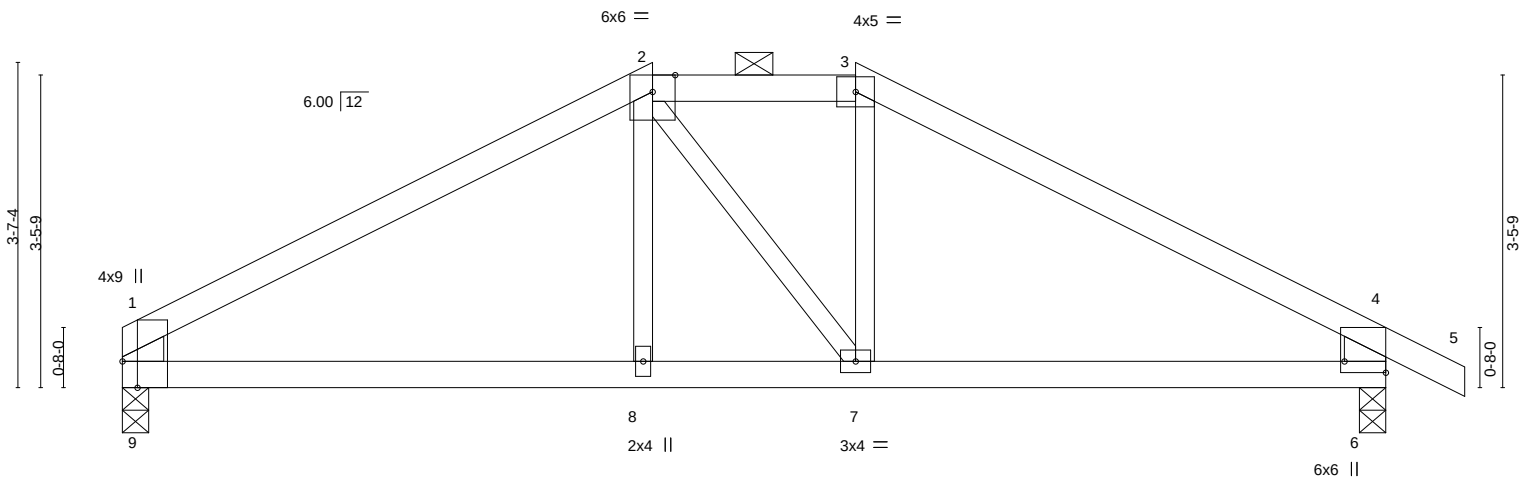

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [6:Edge,0-5-8]

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	0.50	Vert(LL)	-0.03	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.07	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	7	>999	240	Weight: 44 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-9,4-6: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-3-8, 6=0-3-8
Max Horz 9=-64(LC 4)
Max Uplift 9=-67(LC 8), 6=-93(LC 9)
Max Grav 9=606(LC 1), 6=690(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-805/75, 2-3=-635/112, 3-4=-815/76, 1-9=-531/106, 4-6=-627/136
BOT CHORD 8-9=-28/636, 7-8=-29/635, 6-7=0/638

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A17	Common	1	1	

Job Reference (optional) I45442742

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:05:51 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

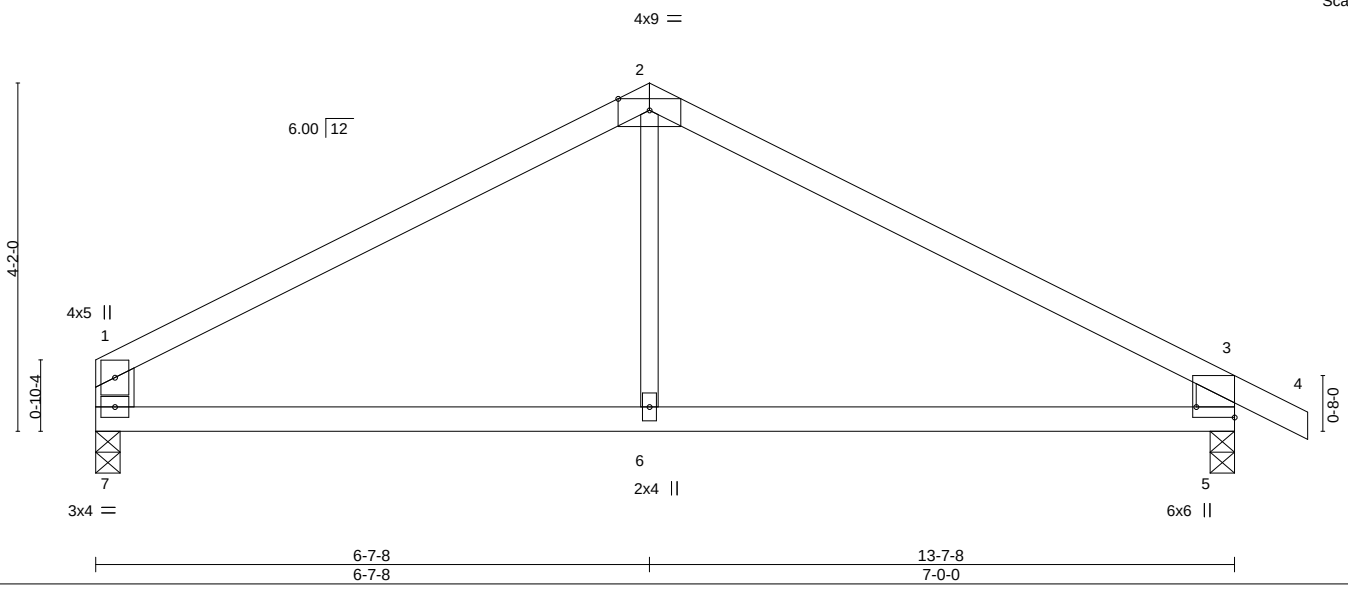

Plate Offsets (X,Y)-- [5:Edge,0-5-8]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.12	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.04	5-6	>999	240	Weight: 39 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x6 SPF No.2 *Except*
2-6: 2x3 SPF No.2

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

REACTIONS. (size) 7=0-3-8, 5=0-3-8
Max Horz 7=-78(LC 4)
Max Uplift 7=-71(LC 8), 5=-100(LC 9)
Max Grav 7=589(LC 1), 5=673(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-721/102, 2-3=-730/100, 1-7=-514/114, 3-5=-610/148
BOT CHORD 6-7=-16/549, 5-6=-16/549
WEBS 2-6=0/272

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A18	Roof Special Girder	1	1	Job Reference (optional)

I45442743

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMERSVILLE, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:31:31 2021 Page 1
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0-10-8	3-10-8	11-0-4	14-4-8	17-6-0	24-6-0	25-4-8
0-10-8	3-10-8	7-1-12	3-4-4	3-1-8	7-0-0	0-10-8

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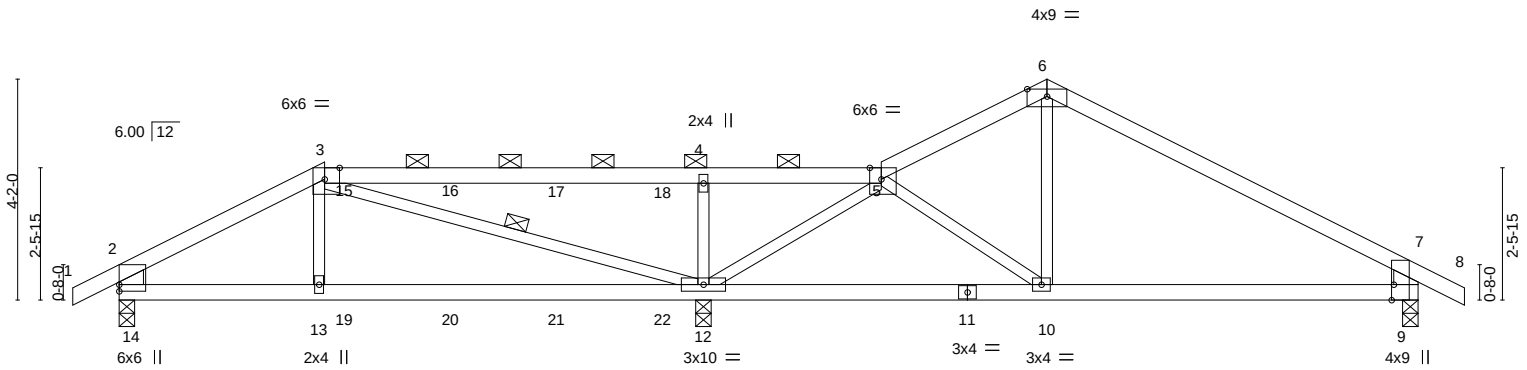

3-10-8	11-0-4	17-6-0	24-6-0
3-10-8	7-1-12	6-5-12	7-0-0

Plate Offsets (X,Y)-- [3:0-3-6,Edge], [5:0-2-10,Edge], [9:0-3-8,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	0.65	Vert(LL)	-0.09	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.20	12-13	>633	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	12-13	>999	240	Weight: 80 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14,7-9: 2x6 SPF No.2

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

REACTIONS. (size) 14=0-3-8, 12=0-3-8, 9=0-3-8
Max Horz 14=-69(LC 6)
Max Uplift 14=-200(LC 8), 12=-281(LC 8), 9=-156(LC 30)
Max Grav 14=731(LC 1), 12=1500(LC 1), 9=599(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1004/273, 3-4=0/305, 4-5=0/303, 5-6=-493/224, 6-7=-586/188, 2-14=-662/190, 7-9=-544/205
BOT CHORD 13-14=-234/832, 12-13=-237/817, 10-12=-217/381, 9-10=-67/422
WEBS 3-13=0/400, 3-12=-1143/239, 4-12=-621/305, 5-12=-626/125

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=200, 12=281, 9=156.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 72 lb up at 3-10-8, 92 lb down and 72 lb up at 4-3-0, 92 lb down and 72 lb up at 6-3-0, and 92 lb down and 72 lb up at 8-3-0, and 92 lb down and 72 lb up at 10-3-0 on top chord, and 210 lb down and 75 lb up at 3-10-8, 29 lb down at 4-3-0, 29 lb down at 6-3-0, and 29 lb down at 8-3-0, and 29 lb down at 10-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A18	Roof Special Girder	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:31 2021 Page 2
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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, 3-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 9-14=-20
   Concentrated Loads (lb)
   Vert: 3=-42(F) 13=-210(F) 15=-42(F) 16=-42(F) 17=-42(F) 18=-42(F) 19=-23(F) 20=-23(F) 21=-23(F) 22=-23(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A19	Roof Special	1	1	Job Reference (optional)

I45442744

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:35:51 2021 Page 1
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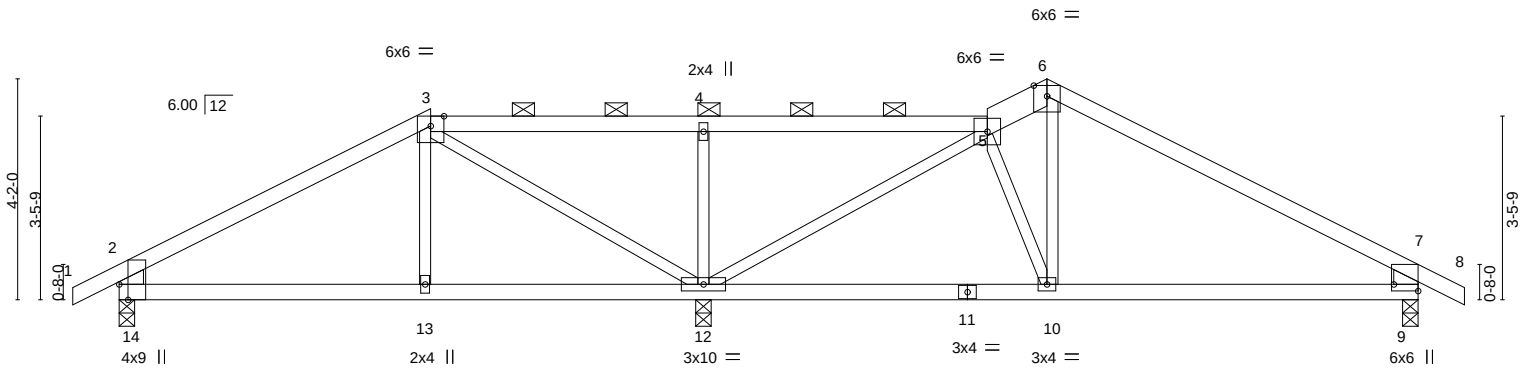
0-10-8 5-10-8 11-0-4 16-4-8 17-6-0 24-6-0 25-4-8
0-10-8 5-10-8 5-1-12 5-4-4 1-1-8 7-0-0 0-10-8

Scale = 1:43.5



5-10-8 11-0-4 17-6-0 24-6-0
5-10-8 5-1-12 6-5-12 7-0-0

Plate Offsets (X,Y)-- [9:Edge,0-5-8], [14:0-3-8,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	0.51	Vert(LL)	-0.04	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.09	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 82 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14,7-9: 2x6 SPF No.2

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

REACTIONS. (size) 14=0-3-8, 12=0-3-8, 9=0-3-8
Max Horz 14=-69(LC 6)
Max Uplift 14=-138(LC 8), 12=-123(LC 8), 9=-147(LC 9)
Max Grav 14=531(LC 1), 12=1140(LC 1), 9=647(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-517/159, 5-6=-573/191, 6-7=-696/170, 2-14=-481/175, 7-9=-592/192
BOT CHORD 13-14=-110/378, 12-13=-112/375, 10-12=-88/544, 9-10=-54/523
WEBS 3-12=-538/41, 4-12=-418/177, 5-12=-677/20, 6-10=-55/258

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=138, 12=123, 9=147.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	A20	Half Hip	1	1	

Job Reference (optional) I45442745

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 14:05:51 2021 Page 1
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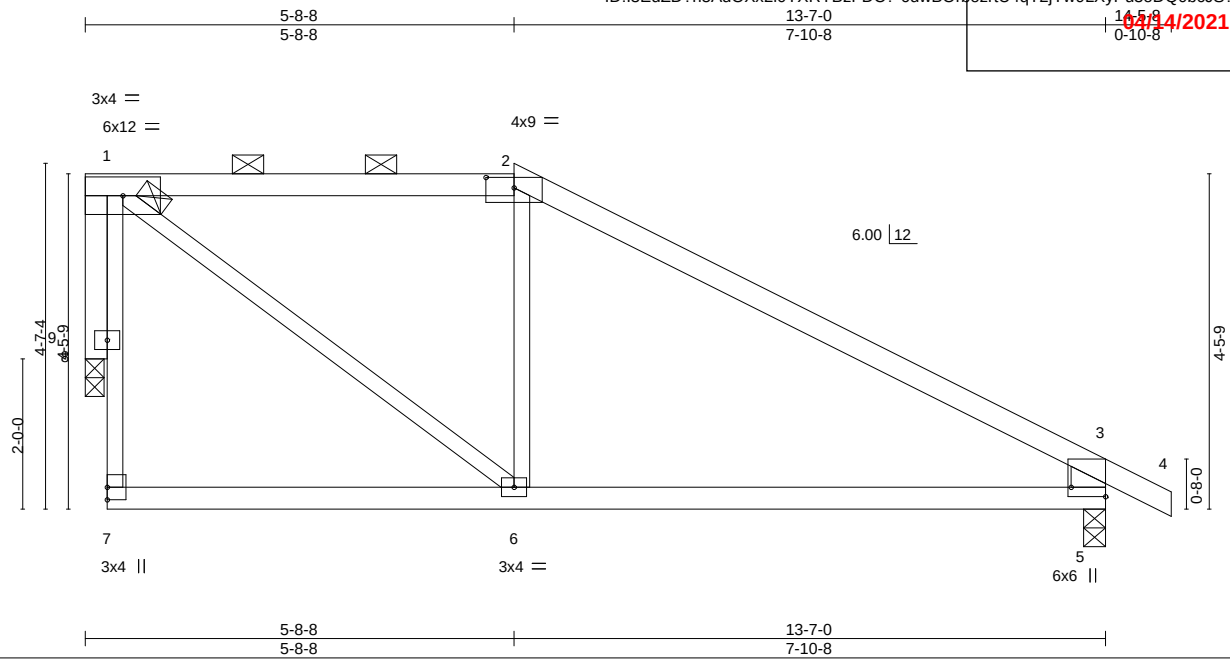


Plate Offsets (X,Y)-- [2:0-4-8,0-1-11], [5:Edge,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.08	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.16	5-6	>962	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	5-6	>999	240	Weight: 48 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-5: 2x6 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 5=0-3-8, 9=0-3-0
Max Horz 9=-143(LC 4)
Max Uplift 5=-110(LC 9), 9=-70(LC 4)
Max Grav 5=676(LC 1), 9=568(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-526/138, 2-3=-705/88, 3-5=-618/169
BOT CHORD 5-6=0/519
WEBS 1-6=-93/591, 1-9=-574/72

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 9 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) 9 except (jt=lb) 5=110.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

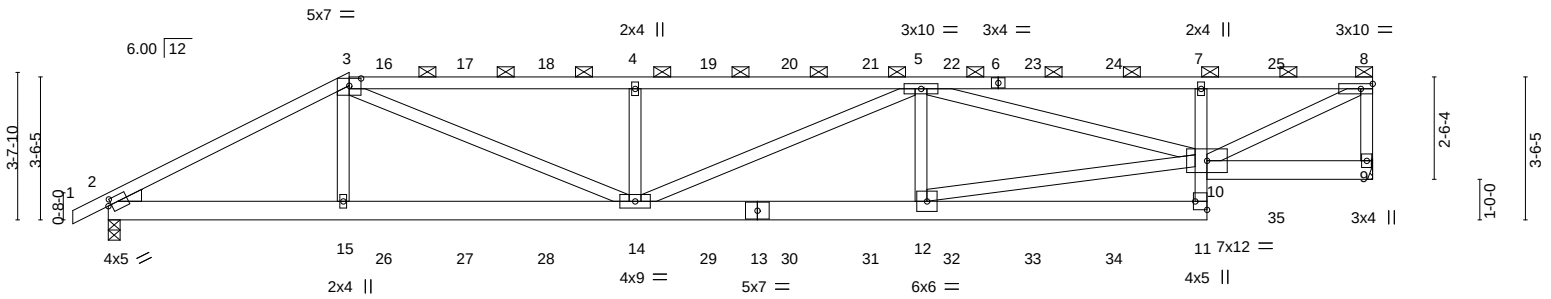
Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	B1	Half Hip Girder	1	2	Job Reference (optional)

I45442746

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:31:15 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-_O9iECeI04NwZSmqyN_5VN64Fg4WMiMCE4z9XmzVRzI

-0-10-8	5-11-4	12-11-13	20-0-7	27-1-0	31-2-0
0-10-8	5-11-4	7-0-9	7-0-9	7-0-9	4-1-0

Scale = 1:56.8



5-11-4	12-11-13	20-0-7	27-1-0	31-2-0
5-11-4	7-0-9	7-0-9	7-0-9	4-1-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.22	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.39	12-14	>943	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14	12-14	>999	240	Weight: 292 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except*
7-11: 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-15 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-15 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=93(LC 5)
Max Uplift 9=-251(LC 5), 2=-240(LC 5)
Max Grav 9=2784(LC 1), 2=2715(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5119/514, 3-4=-6772/647, 4-5=-6769/646, 5-7=-4328/425, 7-8=-4333/407, 8-9=-2520/294
BOT CHORD 2-15=-495/4400, 14-15=-497/4369, 12-14=-585/6272, 11-12=-57/892, 10-11=0/290, 7-10=-702/216
WEBS 3-15=0/691, 3-14=-229/2713, 4-14=-990/291, 5-14=-95/544, 5-12=-501/255, 10-12=-534/5436, 5-10=-2036/154, 8-10=-452/4793

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=251, 2=240.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	B1	Half Hip Girder	1	2	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:31 2021 Page 2
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-_O9iECeI04NwZSmqyN_5VN64Fg4WMiMCE4z9XmzVRzI

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 133 lb down and 72 lb up at 5-11-4, 114 lb down and 72 lb up at 6-9-0, 109 lb down and 72 lb up at 8-9-0, 109 lb down and 72 lb up at 10-9-0, 109 lb down and 72 lb up at 12-9-0, 109 lb down and 72 lb up at 14-9-0, 109 lb down and 72 lb up at 16-9-0, 109 lb down and 72 lb up at 18-9-0, 109 lb down and 72 lb up at 20-9-0, 109 lb down and 72 lb up at 22-9-0, 109 lb down and 72 lb up at 24-9-0, 109 lb down and 72 lb up at 26-9-0, and 110 lb down and 73 lb up at 28-9-0, and 136 lb down and 67 lb up at 31-0-4 on top chord, and 408 lb down and 116 lb up at 5-11-4, 68 lb down at 6-9-0, 68 lb down at 8-9-0, 68 lb down at 10-9-0, 68 lb down at 12-9-0, 68 lb down at 14-9-0, 68 lb down at 16-9-0, 68 lb down at 18-9-0, 68 lb down at 20-9-0, 68 lb down at 22-9-0, and 68 lb down at 24-9-0, and 68 lb down at 26-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-8=-70, 2-11=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 3=-109(F) 8=-136(F) 9=-59 11=-52(F) 7=-109(F) 15=-408(F) 14=-52(F) 4=-109(F) 16=-109(F) 17=-109(F) 18=-109(F) 19=-109(F) 20=-109(F) 21=-109(F) 22=-109(F) 23=-109(F) 24=-109(F) 25=-110(F) 26=-52(F) 27=-52(F) 28=-52(F) 29=-52(F) 30=-52(F) 31=-52(F) 32=-52(F) 33=-52(F) 34=-52(F) 35=-51

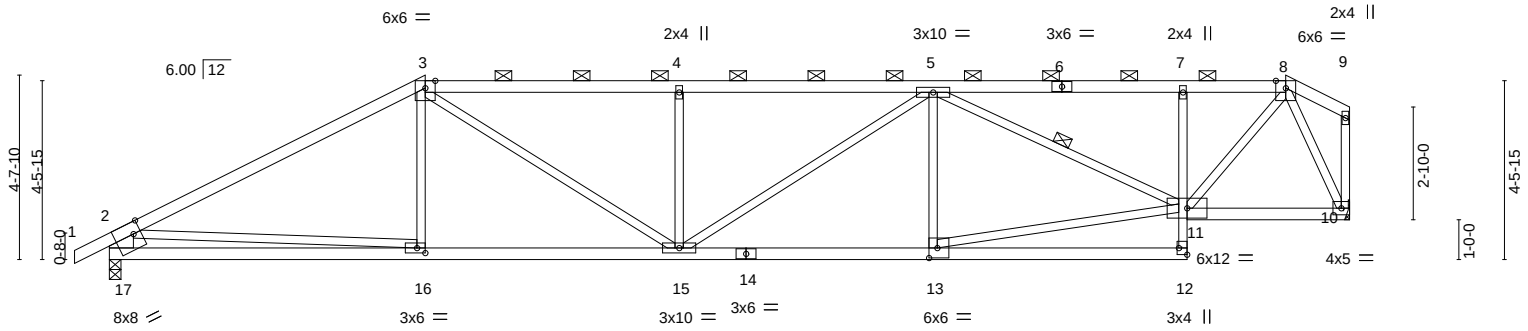
Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	B2	Hip	1	1	Job Reference (optional)

I45442747

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:31:35 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-Saj4RYfwnOVnBbL0W5VK2bfCz4S3583MTkii3CzVRzk

-0-10-8	7-11-4	14-3-13	20-8-7	27-1-0	29-6-12	31-2-0
0-10-8	7-11-4	6-4-9	6-4-9	6-4-9	2-5-12	1-7-4

Scale = 1:57.9



7-11-4	14-3-13	20-8-7	27-1-0	31-2-0
7-11-4	6-4-9	6-4-9	6-4-9	4-1-0

Plate Offsets (X,Y)-- [12:Edge,0-2-8], [13:0-2-8,0-3-0], [16:0-2-8,0-1-8], [17:0-2-4,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	0.96	Vert(LL)	-0.16	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.31	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	13-15	>999	240	Weight: 124 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 7-12: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-17: 2x8 SP DSS

BRACING-

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

REACTIONS. (size) 17=0-3-8, 10=Mechanical
Max Horz 17=120(LC 5)
Max Uplift 17=-9(LC 5), 10=-40(LC 5)
Max Grav 17=1468(LC 1), 10=1383(LC 1)

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

TOP CHORD	2-3=-2262/61, 3-4=-2578/114, 4-5=-2576/113, 5-7=-1559/87, 7-8=-1566/85, 2-17=-1395/52
BOT CHORD	16-17=-200/921, 15-16=-101/1906, 13-15=-123/2328, 7-11=-398/87, 10-11=-47/590
WEBS	3-15=-95/913, 4-15=-504/116, 5-15=-20/300, 11-13=-127/2226, 5-11=-870/29, 8-11=-77/1569, 2-16=-44/1199, 8-10=-1378/79

NOTES-

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	B3	Hip	1	1	Job Reference (optional)

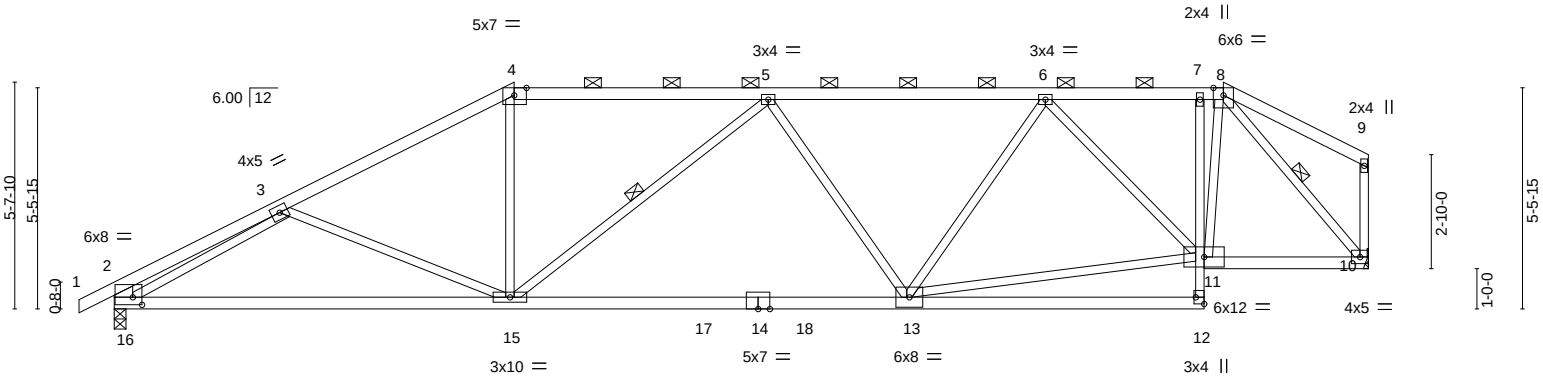
I25442748

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMERVILLE, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 20:05:51 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-wnHSfugZYhdeolwC4o0ZaoCRUUisqYtVhOSGcezVRzj

-0-10-8	4-2-13	9-11-4	16-3-0	23-1-11	27-1-0	27-6-12	31-2-0
0-10-8	4-2-13	5-8-7	6-3-12	6-10-10	3-11-5	0-5-12	3-7-4

Scale = 1:57.3



9-11-4	19-8-5	27-1-0	31-2-0
9-11-4	9-9-2	7-4-11	4-1-0

Plate Offsets (X,Y)-- [2:0-2-12,0-2-4], [4:0-3-10,Edge], [12:Edge,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.28	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.49	13-15	>761	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	13-15	>999	240	Weight: 127 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 14-16: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-16: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-10-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-5 max.): 4-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 13-15.
WEBS	1 Row at midpt 5-15, 8-10

REACTIONS. (size) 16=0-3-8, 10=Mechanical
Max Horz 16=130(LC 5)
Max Uplift 10=-8(LC 4)
Max Grav 16=1509(LC 2), 10=1444(LC 2)

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

TOP CHORD	2-3=-683/0, 3-4=-2211/38, 4-5=-1908/50, 5-6=-2022/48, 6-7=-1200/55, 7-8=-1205/54, 2-16=-465/11
BOT CHORD	15-16=-133/1997, 13-15=-117/2168, 10-11=-43/1066
WEBS	4-15=0/628, 5-15=-502/122, 5-13=-351/93, 6-13=0/396, 11-13=-99/1709, 6-11=-929/70, 8-11=-29/1056, 3-16=-1741/86, 8-10=-1630/45

NOTES-

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C10A	Hip	1	1	

Job Reference (optional) I45442749

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:32:21 2021 Page 1
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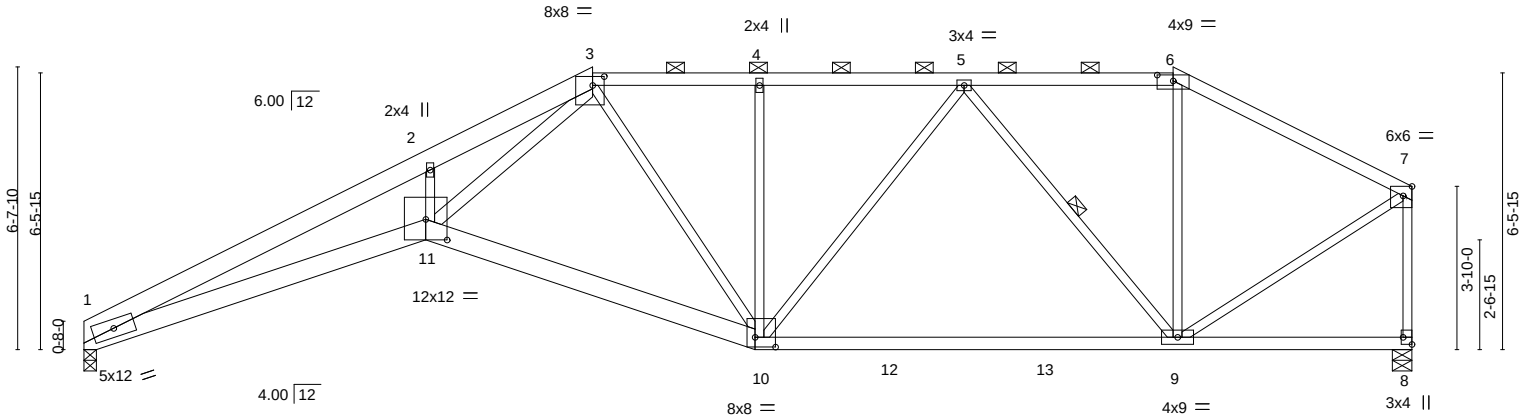
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

4-1-6	8-0-4	11-11-4	15-9-0	20-7-14	25-6-12	31-2-0
4-1-6	3-10-14	3-11-0	3-9-12	4-10-14	4-10-14	5-7-4

Scale = 1:54.1



8-0-4	15-9-0	25-6-12	31-2-0
8-0-4	7-8-12	9-9-12	5-7-4

Plate Offsets (X,Y)-- [3:0-3-4,0-2-8], [6:0-4-8,0-1-11], [7:0-2-8,Edge], [8:Edge,0-2-8], [10:0-5-12,0-2-12], [11:0-6-0,0-5-13]

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	0.63	Vert(LL)	-0.44	9-10	>849	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.77	9-10	>482	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.39	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.26	11	>999	240	Weight: 137 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SPF 1650F 1.4E *Except*
10-11: 2x6 SPF No.2, 8-10: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
3-11: 2x4 SPF 2100F 1.8E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-14 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-9

REACTIONS. (size) 1=0-3-8, 8=0-5-8
Max Horz 1=184(LC 7)
Max Uplift 1=-144(LC 8), 8=-109(LC 4)
Max Grav 1=1448(LC 2), 8=1466(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6015/678, 2-3=-5846/750, 3-4=-1874/241, 4-5=-1873/240, 5-6=-1115/157, 6-7=-1309/152, 7-8=-1427/126
BOT CHORD 1-11=-759/5532, 10-11=-359/2297, 9-10=-264/1622
WEBS 2-11=-182/271, 3-11=-586/4139, 3-10=-556/128, 4-10=-318/131, 5-10=-28/430, 5-9=-876/209, 6-9=0/334, 7-9=-123/1324

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 1 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) 1=144, 8=109.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C11A	Hip	1	1	Job Reference (optional)

I45442750

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMERVILLE, MISSOURI
04/12/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 12:35:51 2021 Page 1
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8-0-4	13-11-4	15-9-0	19-8-8	23-6-12	28-8-8	30-11-8	31-2-0
8-0-4	5-11-0	1-9-12	3-11-8	3-10-4	5-1-12	2-3-0	0-2-8

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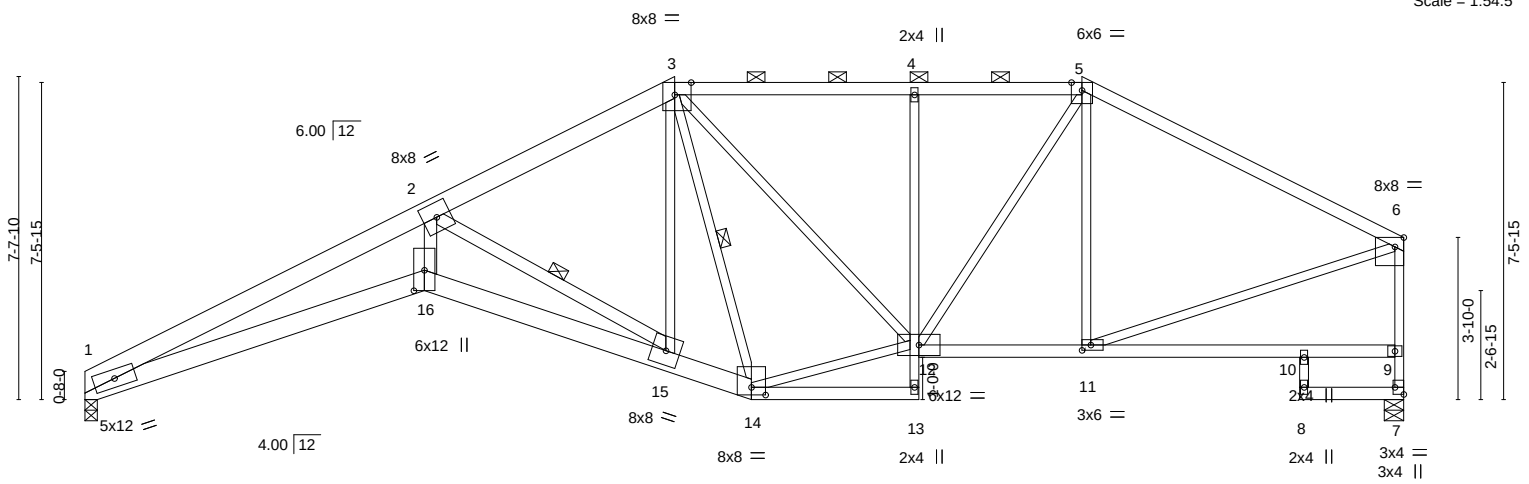

8-0-4	13-11-4	15-9-0	19-8-8	23-6-12	28-8-8	31-2-0
8-0-4	5-11-0	1-9-12	3-11-8	3-10-4	5-1-12	2-5-8

Plate Offsets (X,Y)-- [3:0-4-10,Edge], [6:0-2-8,Edge], [7:Edge,0-2-8], [11:0-2-8,0-1-8], [14:0-4-0,0-2-3], [16:0-5-13,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.37	16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.66	16	>558	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.40	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.26	16	>999	240	Weight: 163 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.4E *Except*
3-5: 2x4 SPF No.2, 5-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
1-16,14-16: 2x6 SP DSS, 4-13: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16,2-15: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-6 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-15, 3-14

REACTIONS. (size) 1=0-3-8, 7=0-5-8
Max Horz 1=197(LC 7)
Max Uplift 1=-161(LC 8), 7=-100(LC 9)
Max Grav 1=1391(LC 1), 7=1391(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5795/706, 2-3=-1951/234, 3-4=-1633/194, 4-5=-1634/196, 5-6=-1556/125, 7-9=-1360/113, 6-9=-1316/137
BOT CHORD 1-16=-707/5273, 15-16=-668/4955, 14-15=-219/1775, 4-12=-391/162, 11-12=-133/1299
WEBS 2-16=-342/3326, 2-15=-3588/638, 3-15=-121/1099, 3-14=-937/151, 12-14=-175/1408, 3-12=-91/403, 5-12=-146/714, 5-11=-281/119, 6-11=-105/1283

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 1 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) 7 except (jt=lb) 1=161.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C12A	Hip	1	1	

Job Reference (optional) I45442751

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:23:32 2021 Page 1
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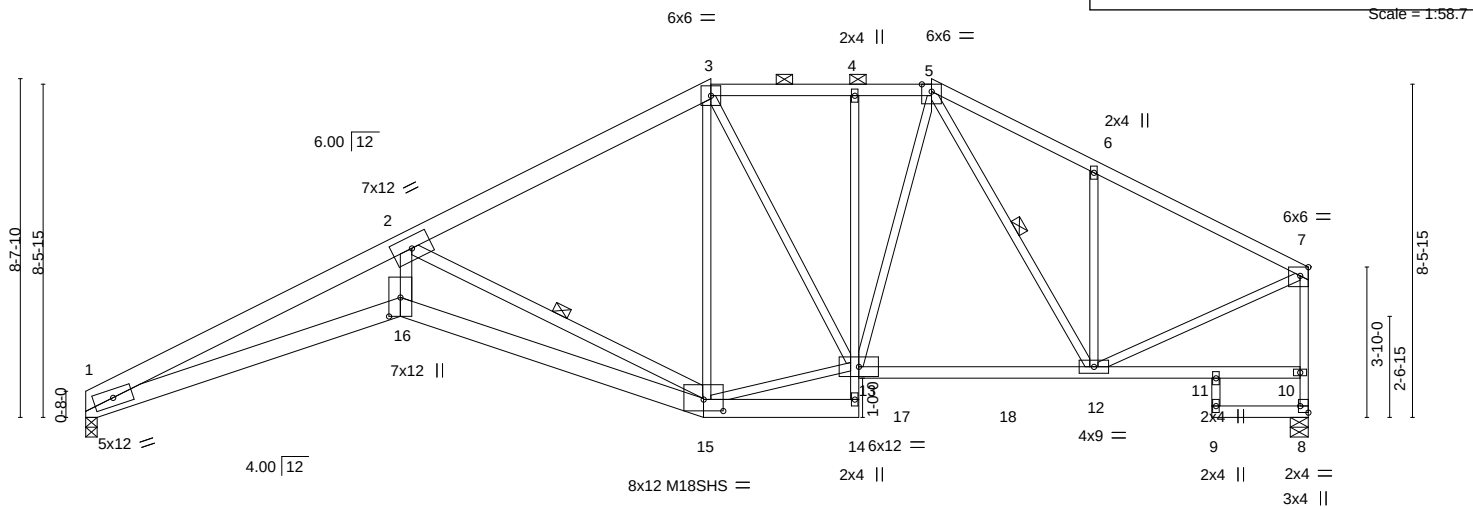

8-0-4	15-9-0	19-8-8	21-6-12	25-1-10	28-8-8	31-2-0
8-0-4	7-8-12	3-11-8	1-10-4	3-6-14	3-6-14	2-5-8

Plate Offsets (X,Y)-- [7:0-2-8,Edge], [8:Edge,0-2-8], [15:0-6-0,0-3-8], [16:0-5-13,0-3-8]

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	0.96	Vert(LL)	-0.41	15-16	>902	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.72	15-16	>514	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.43	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.29	16	>999	240	Weight: 171 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
1-16,15-16: 2x6 SP DSS, 14-15: 2x6 SPF No.2, 4-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16: 2x4 SPF No.2, 2-15: 2x4 SPF 2100F 1.8E

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-8-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-15, 5-12

REACTIONS. (size) 1=0-3-8, 8=0-5-8
Max Horz 1=209(LC 7)
Max Uplift 1=-175(LC 8), 8=-121(LC 9)
Max Grav 1=1443(LC 2), 8=1491(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6047/836, 2-3=-1692/226, 3-4=-1471/210, 4-5=-1476/210, 5-6=-1500/245, 6-7=-1507/132, 8-10=-1448/134, 7-10=-1388/143
BOT CHORD 1-16=-849/5570, 15-16=-809/5231, 12-13=-93/1323
WEBS 2-16=-417/3643, 2-15=-4029/780, 3-15=-49/279, 13-15=-98/1465, 5-13=-76/640, 6-12=-374/218, 7-12=-64/1393

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 1 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) 1=175, 8=121.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C13A	Hip	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

I45442752

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 13:24:05 2021 Page 1
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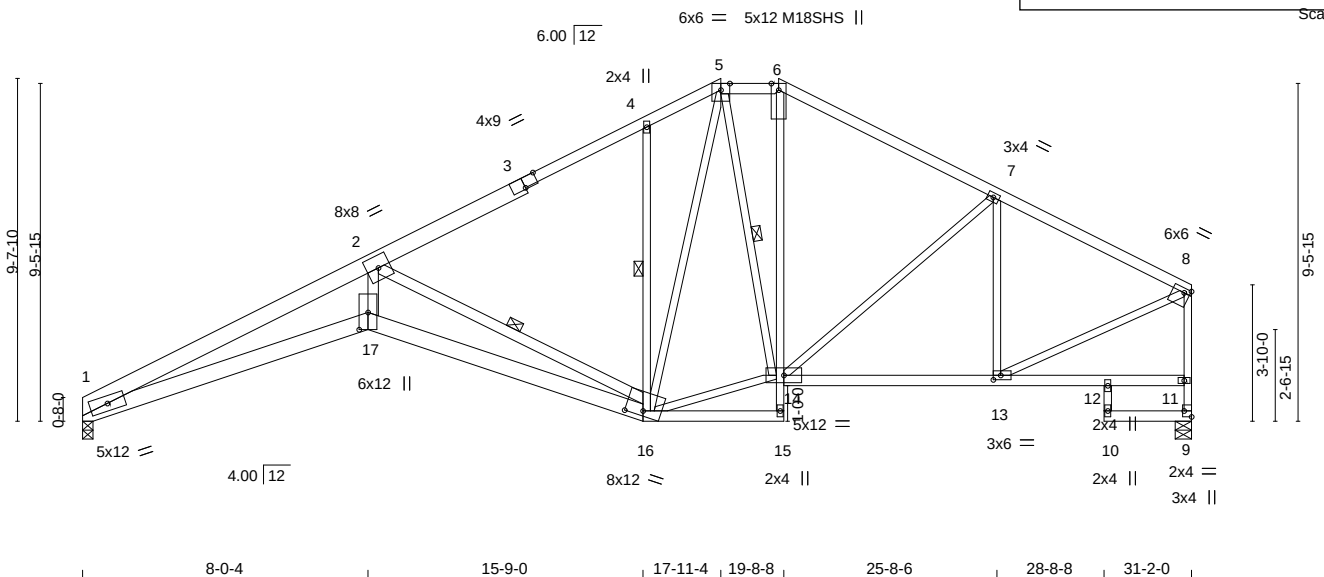

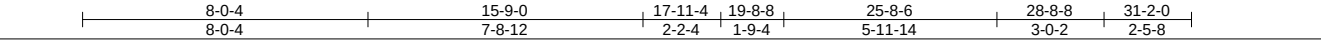

Plate Offsets (X,Y)-- [3:0-4-8,Edge], [8:0-2-0,0-1-8], [9:Edge,0-2-8], [13:0-2-8,0-1-8], [16:0-6-0,0-1-11], [17:0-5-13,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.39	17	>957	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.70	16-17	>530	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.41	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.31	17	>999	240	Weight: 169 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
1-17,16-17: 2x6 SP DSS, 6-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17: 2x4 SPF No.2, 2-16: 2x4 SPF 2100F 1.8E

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-1-10 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-16, 4-16, 5-14

REACTIONS. (size) 1=0-3-8, 9=0-5-8
Max Horz 1=222(LC 7)
Max Uplift 1=-186(LC 8), 9=-139(LC 9)
Max Grav 1=1391(LC 1), 9=1391(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5869/931, 2-4=-1626/258, 4-5=-1551/363, 5-6=-1227/242, 6-7=-1475/250, 7-8=-1443/162, 9-11=-1365/153, 8-11=-1342/162
BOT CHORD 1-17=-956/5374, 16-17=-912/5070, 6-14=-53/366, 13-14=-129/1231
WEBS 2-17=-490/3473, 2-16=-3969/842, 4-16=-391/216, 5-16=-271/636, 7-13=-450/125, 8-13=-97/1332, 14-16=-52/1243

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 1 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) 1=186, 9=139.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C14A	Roof Special	3	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:32:03 2021 Page 1
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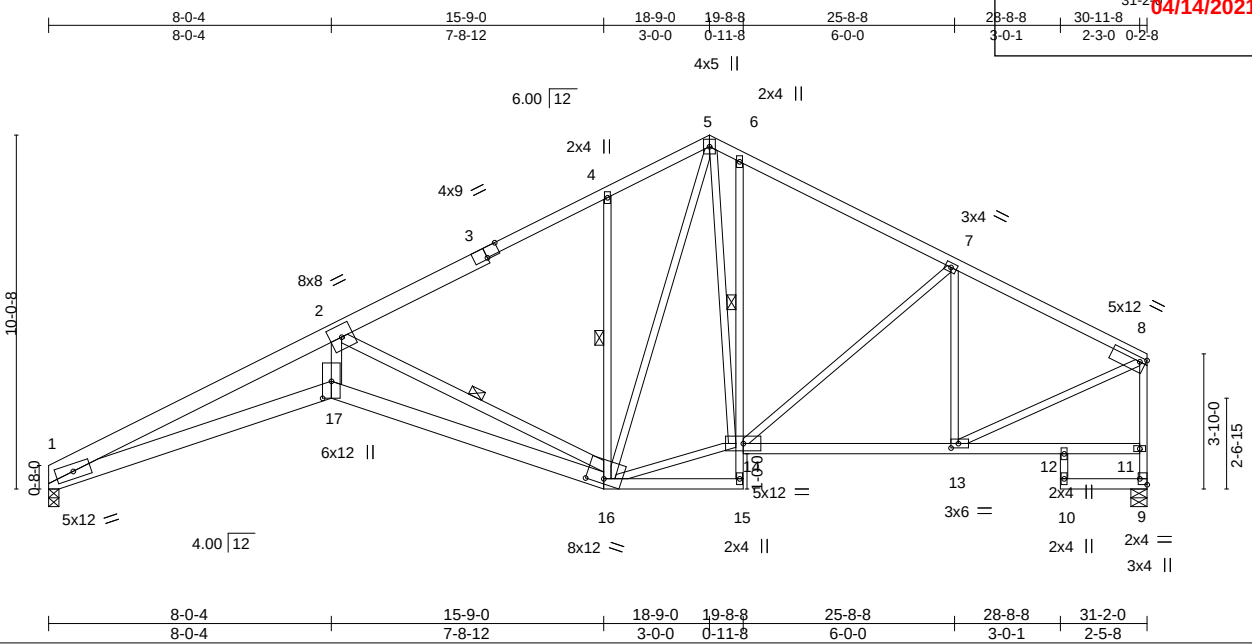

Plate Offsets (X,Y)-- [3:0-4-8,Edge], [8:0-2-0,0-1-8], [9:Edge,0-2-8], [13:0-2-8,0-1-8], [16:0-6-0,0-1-11], [17:0-5-13,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.39	17	>953	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.70	16-17	>528	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.41	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.31	17	>999	240	Weight: 170 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
1-17,16-17: 2x6 SP DSS, 6-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17: 2x4 SPF No.2, 2-16: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 6-14
WEBS 1 Row at midpt 2-16, 4-16

REACTIONS. (size) 1=0-3-8, 9=0-5-8
Max Horz 1=227(LC 7)
Max Uplift 1=-189(LC 8), 9=-145(LC 9)
Max Grav 1=1391(LC 1), 9=1391(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5873/964, 2-4=-1625/264, 4-5=-1578/384, 5-6=-1425/314, 6-7=-1474/268, 7-8=-1442/174, 9-11=-1365/159, 8-11=-1342/168
BOT CHORD 1-17=-996/5379, 16-17=-950/5075, 6-14=-328/200, 13-14=-134/1229
WEBS 2-17=-515/3475, 2-16=-3976/867, 4-16=-434/229, 5-16=-292/722, 5-14=-231/708, 7-13=-450/127, 8-13=-102/1329, 14-16=-42/1174

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=189, 9=145.
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 31,2021

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C15	Roof Special	3	1	Job Reference (optional)

I45442754

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:32 2021 Page 1
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8-0-4	15-9-0	18-9-0	23-8-7	31-2-0
8-0-4	7-8-12	3-0-0	4-11-7	7-5-9

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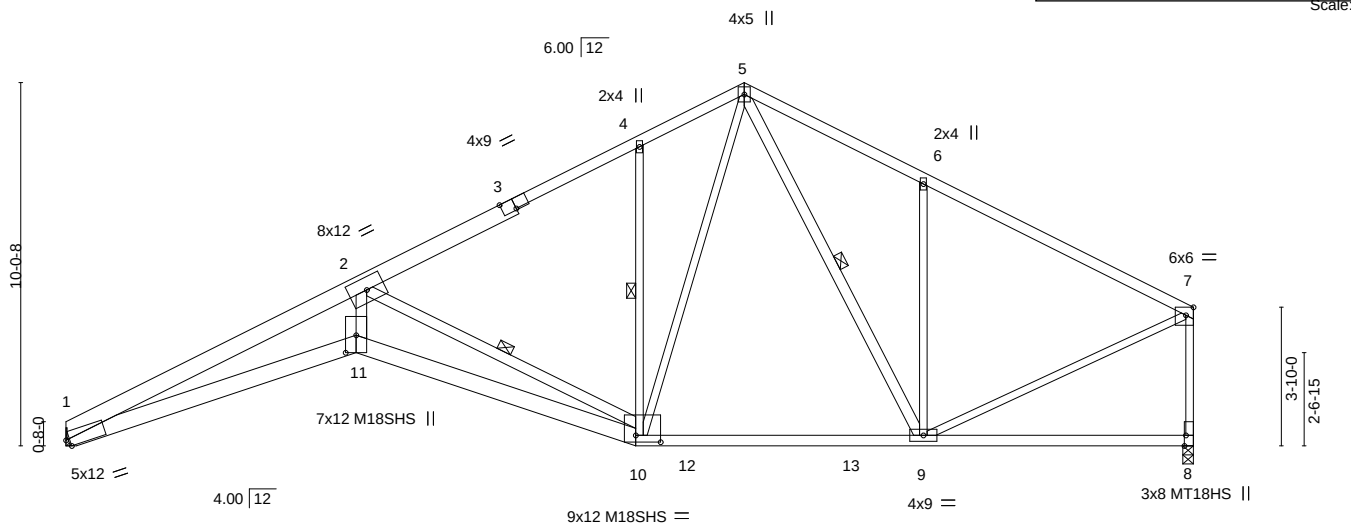

8-0-4	15-9-0	23-8-7	31-2-0
8-0-4	7-8-12	7-11-7	7-5-9

Plate Offsets (X,Y)-- [1:0-1-4,Edge], [3:0-4-8,Edge], [7:0-2-8,Edge], [8:0-3-8,Edge], [10:0-8-4,0-2-4], [11:0-5-13,0-3-8]

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	0.83	Vert(LL)	-0.43	10-11	>858	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.75	10-11	>493	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.41	8	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	11	>999	240	Weight: 159 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SP DSS *Except*
8-10: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,5-9: 2x4 SPF No.2, 2-10: 2x4 SPF 2100F 1.8E

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-10, 4-10, 5-9

REACTIONS. (size) 1=Mechanical, 8=0-3-8
Max Horz 1=187(LC 7)
Max Uplift 1=-26(LC 8), 8=-1(LC 9)
Max Grav 1=1459(LC 2), 8=1476(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6257/227, 2-4=-1711/83, 4-5=-1676/160, 5-6=-1452/128, 6-7=-1450/51, 7-8=-1375/34
BOT CHORD 1-11=-262/5845, 10-11=-257/5504, 9-10=0/1151
WEBS 2-11=-61/3865, 2-10=-4276/286, 4-10=-434/135, 5-10=-117/1104, 5-9=-99/334, 6-9=-525/179, 7-9=0/1321

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C16	Hip	1	1	Job Reference (optional)

I45442755

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:03:51 2021 Page 1
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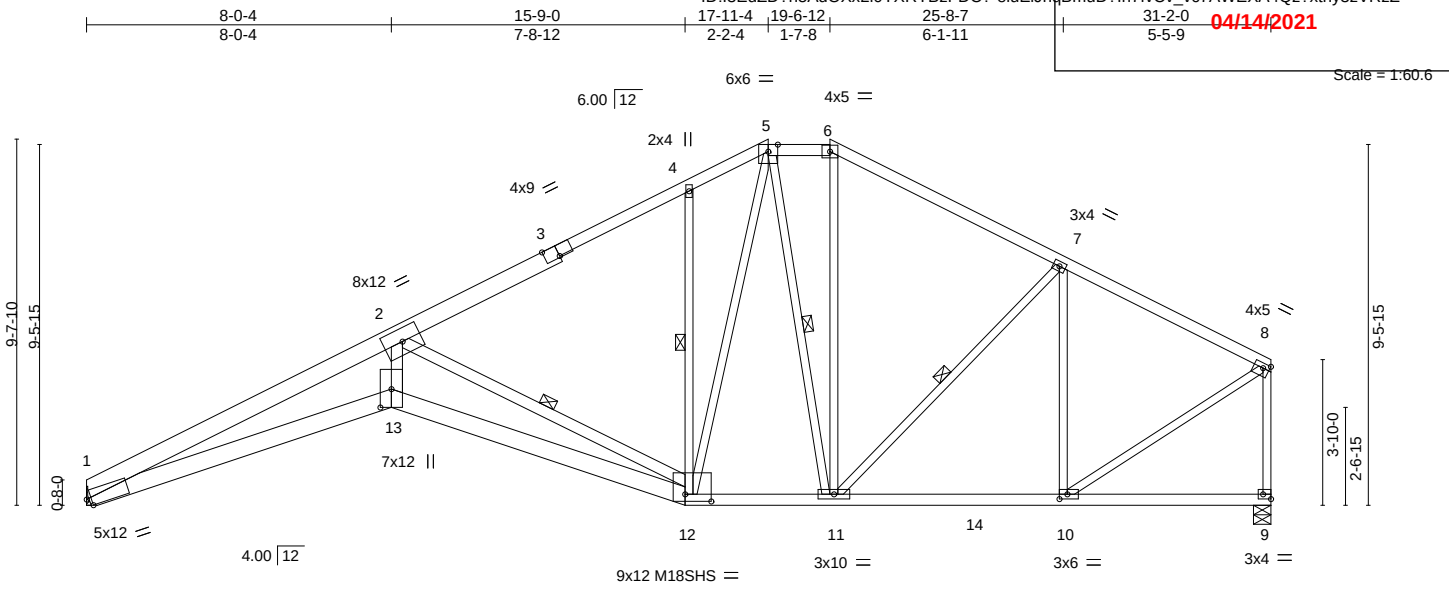


Plate Offsets (X,Y)-- [1:0-1-8,0-2-6], [3:0-4-8,Edge], [8:0-2-0,0-1-8], [9:Edge,0-1-8], [10:0-2-8,0-1-8], [12:0-8-4,0-2-4], [13:0-5-13,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.42	12-13	>877	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.75	12-13	>498	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.41	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	13	>999	240	Weight: 165 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SP DSS *Except*
9-12: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13: 2x4 SPF No.2, 2-12: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-14 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-12, 4-12, 5-11, 7-11

REACTIONS. (size) 1=Mechanical, 9=0-5-8
Max Horz 1=182(LC 7)
Max Uplift 1=-24(LC 8)
Max Grav 1=1441(LC 2), 9=1462(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6130/206, 2-4=-1661/82, 4-5=-1596/149, 5-6=-1151/91, 6-7=-1372/90, 7-8=-1275/36, 8-9=-1386/21
BOT CHORD 1-13=-237/5722, 12-13=-232/5390, 11-12=0/1205, 10-11=0/1091
WEBS 2-13=-43/3803, 2-12=-4214/268, 4-12=-388/130, 5-12=-133/918, 5-11=-374/57, 6-11=-3/378, 7-10=-560/67, 8-10=0/1294

NOTES-

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

March 31,2021

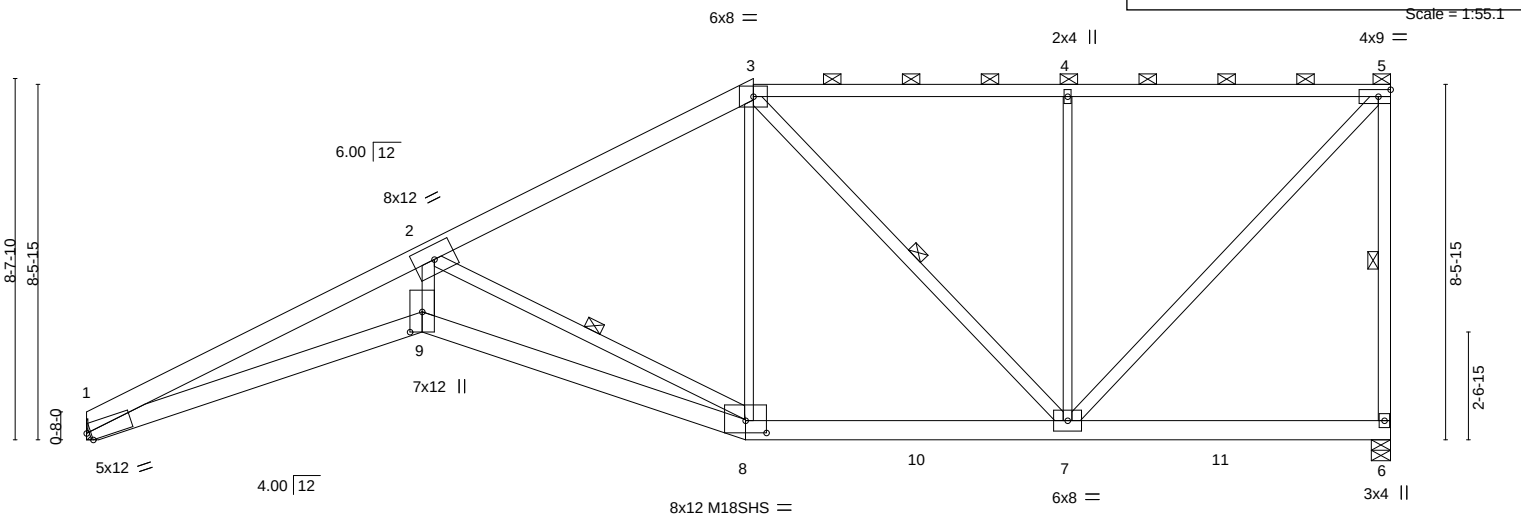
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C17	Half Hip	1	1	

Job Reference (optional) I45442756

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:53:31 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-6uSdzfoSy404dRGJDcj8X69EUwadvWf7DbcLUVzVRzY

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021



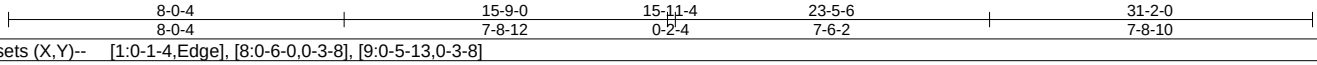


Plate Offsets (X,Y)-- [1:0-1-4,Edge], [8:0-6-0,0-3-8], [9:0-5-13,0-3-8]

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	0.98	Vert(LL)	-0.43	8-9	>868	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.74	8-9	>500	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.41	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	9	>999	240	Weight: 174 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
3-5: 2x4 SPF No.2
BOT CHORD 2x6 SP DSS *Except*
6-8: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-8: 2x4 SPF 2100F 1.8E, 4-7,3-8: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-2-9 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-6, 2-8, 3-7

REACTIONS. (size) 1=Mechanical, 6=0-5-8
Max Horz 1=268(LC 5)
Max Uplift 1=-16(LC 8), 6=-71(LC 5)
Max Grav 1=1462(LC 2), 6=1522(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6177/184, 2-3=-1716/54, 3-4=-1123/45, 4-5=-1122/44, 5-6=-1370/99
BOT CHORD 1-9=-402/5693, 8-9=-388/5347, 7-8=-123/1454
WEBS 2-9=-142/3718, 2-8=-4117/268, 3-7=-518/50, 4-7=-613/149, 5-7=-71/1624, 3-8=0/683

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	C18	Half Hip	1	1	

Job Reference (optional) I45442757

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:31 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Scale = 1:54.6

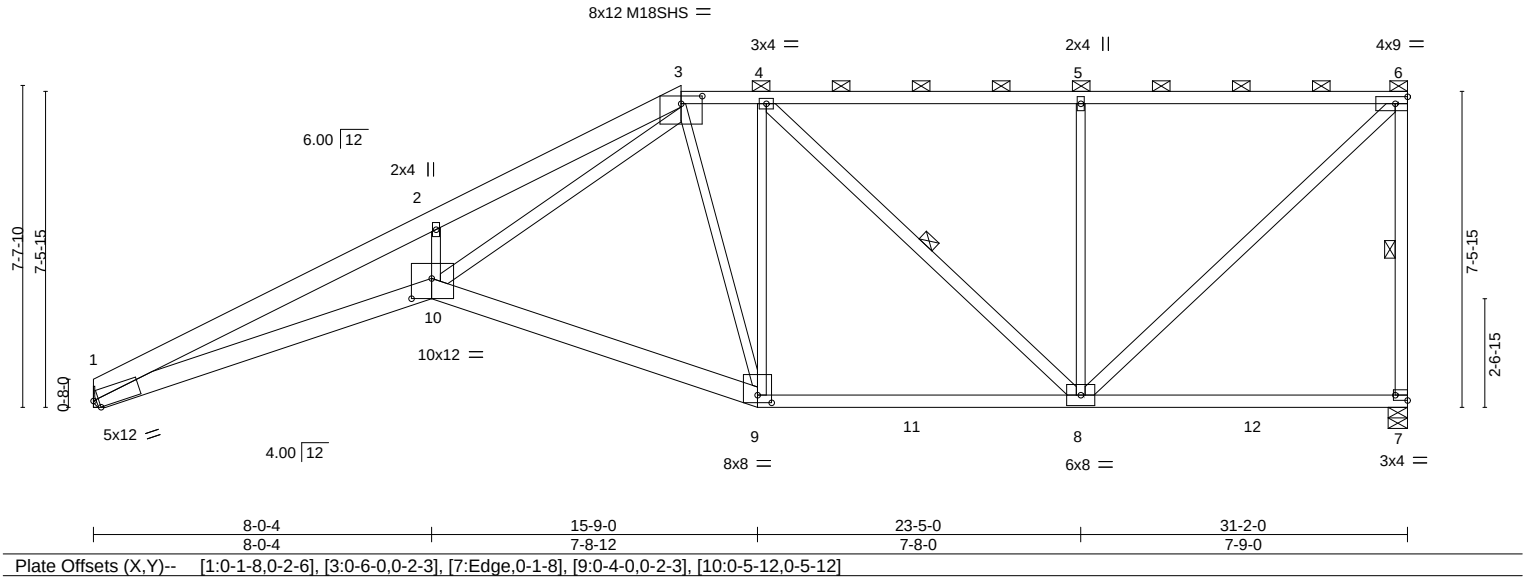

Plate Offsets (X,Y)-- [1:0-1-8,0-2-6], [3:0-6-0,0-2-3], [7:Edge,0-1-8], [9:0-4-0,0-2-3], [10:0-5-12,0-5-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.44	9-10	>848	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.76	9-10	>487	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.40	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	10	>999	240	Weight: 162 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.4E *Except*
3-6: 2x4 SPF No.2
BOT CHORD 2x6 SP DSS *Except*
7-9: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-7,4-8,6-8: 2x4 SPF No.2, 3-10: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-8 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 4-8

REACTIONS. (size) 1=Mechanical, 7=0-5-8
Max Horz 1=204(LC 8)
Max Uplift 7=-61(LC 5)
Max Grav 1=1459(LC 2), 7=1513(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6078/200, 2-3=-5947/324, 3-4=-1650/60, 4-5=-1263/49, 5-6=-1263/49, 6-7=-1361/97
BOT CHORD 1-10=-333/5594, 9-10=-83/1844, 8-9=-62/1650
WEBS 2-10=-275/189, 3-10=-341/4487, 3-9=-346/104, 4-8=-533/52, 5-8=-596/141, 6-8=-66/1709

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	D1	Half Hip	1	1	

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:33:05 2021 Page 1

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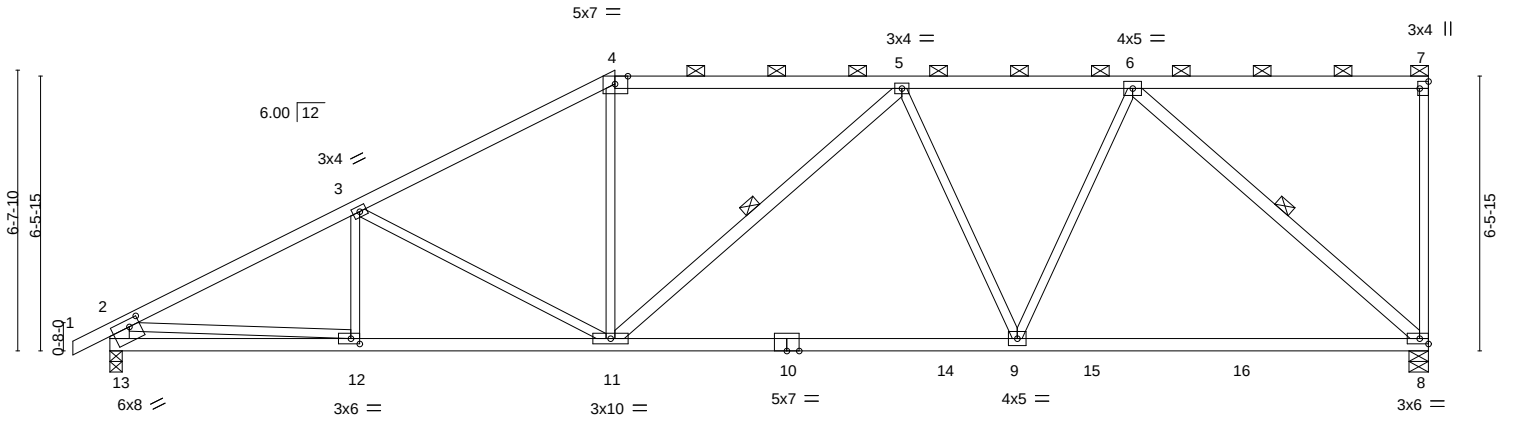
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

I45442758

-0-10-8	5-9-9	11-11-4	18-8-10	24-2-2	31-2-0
0-10-8	5-9-9	6-1-10	6-9-6	5-5-7	6-11-14

Scale = 1:54.5



5-9-9	11-11-4	21-5-6	31-2-0
5-9-9	6-1-10	9-6-2	9-8-10

Plate Offsets (X,Y)-- [4:0-3-10,Edge], [7:Edge,0-2-8], [12:0-2-8,0-1-8], [13:0-3-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.26	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.46	8-9	>800	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	9-11	>999	240	Weight: 127 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
8-10: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
5-11,6-8: 2x4 SPF No.2, 2-13: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-4 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 9-8-7 oc bracing.
WEBS 1 Row at midpt 5-11, 6-8

REACTIONS. (size) 8=0-5-8, 13=0-3-8
Max Horz 13=266(LC 5)
Max Uplift 8=-250(LC 5), 13=-167(LC 8)
Max Grav 8=1499(LC 2), 13=1525(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2430/232, 3-4=-2053/221, 4-5=-1765/221, 5-6=-1671/215, 2-13=-1417/198
BOT CHORD 12-13=-281/586, 11-12=-361/2105, 9-11=-358/1814, 8-9=-288/1324
WEBS 3-11=-411/197, 4-11=0/525, 5-9=-445/162, 6-9=-11/862, 6-8=-1758/317, 2-12=-81/1527

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=250, 13=167.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	D2	Half Hip	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

I45442759

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:33:35 2021 Page 1
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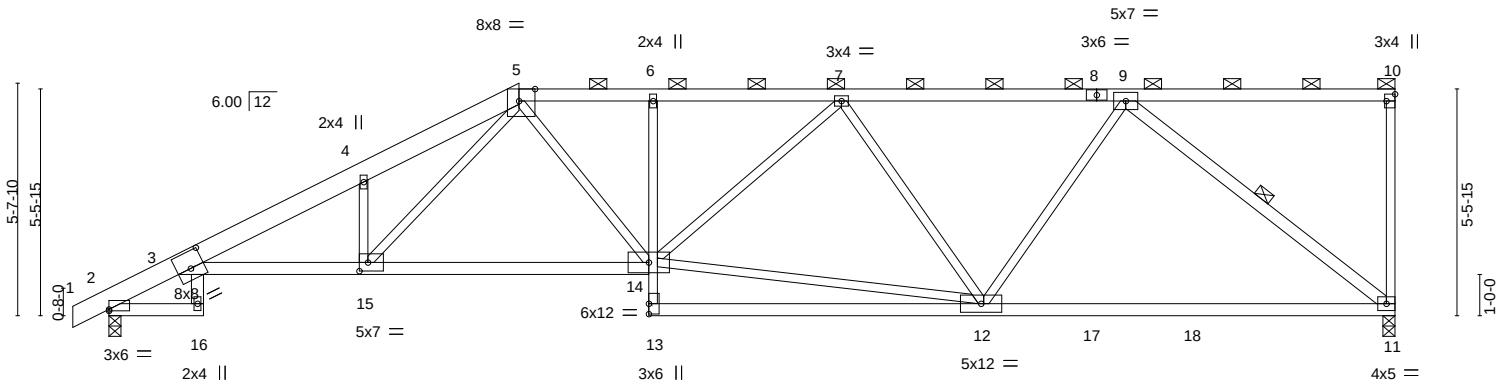
-0-10-8	2-3-8	6-2-1	9-11-4	13-1-0	17-9-1	24-7-11	31-2-0
0-10-8	2-3-8	3-10-9	3-9-3	3-1-12	4-8-1	6-10-11	6-6-5

Scale = 1:55.8



2-3-8	6-2-1	9-11-4	13-1-0	21-2-7	31-2-0
2-3-8	3-10-9	3-9-3	3-1-12	8-1-7	9-11-9

Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [3:0-4-0,0-4-12], [5:0-4-10,Edge], [10:Edge,0-2-8], [15:0-2-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.31	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.57	11-12	>649	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.32	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	14-15	>999	240	Weight: 138 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-14: 2x4 SPF 2100F 1.8E, 6-13: 2x3 SPF No.2
11-13: 2x4 SPF 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
3-16,9-11: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-13 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-16.
WEBS 1 Row at midpt 9-11

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=220(LC 5)
Max Uplift 11=-253(LC 5), 2=-141(LC 8)
Max Grav 11=1459(LC 2), 2=1515(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-872/75, 3-4=-3424/398, 4-5=-3648/501, 5-6=-2601/403, 6-7=-2583/402, 7-9=-1924/264
BOT CHORD 3-15=-542/3191, 14-15=-442/2261, 6-14=-262/108, 11-12=-326/1438
WEBS 5-14=-131/632, 12-14=-427/2193, 7-14=-42/371, 7-12=-781/234, 9-12=-8/867, 9-11=-1823/364, 4-15=-805/251, 5-15=-232/1397

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=253, 2=141.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	D3	Half Hip	1	1	

Job Reference (optional) I45442760

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:33:33 2021 Page 1

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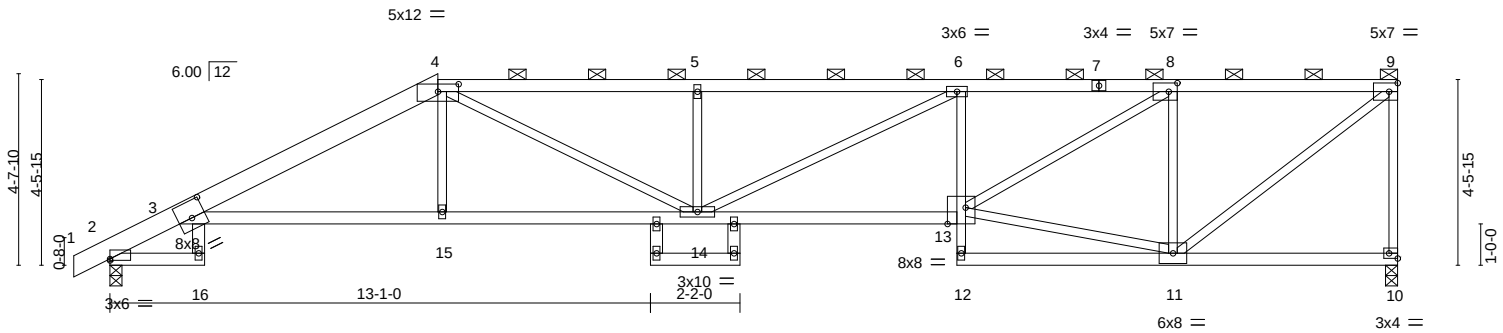
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF LEE'S SUMMIT, MISSOURI
04/14/2021

-0-10-8	2-3-8	7-11-4	14-2-10	20-6-0	25-8-12	31-2-0
0-10-8	2-3-8	5-7-12	6-3-6	6-3-6	5-2-12	5-5-4

Scale = 1:55.8



2-3-8	7-11-4	14-2-10	20-6-0	25-8-12	31-2-0
2-3-8	5-7-12	6-3-6	6-3-6	5-2-12	5-5-4

Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [3:0-4-0,0-4-12], [4:0-6-0,0-2-3], [8:0-2-8,0-2-8], [10:Edge,0-1-8], [13:0-5-4,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	0.82	Vert(LL)	-0.34	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.64	13-14	>582	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.40	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.28	13-14	>999	240	Weight: 130 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-13: 2x4 SPF 2100F 1.8E, 6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-16,17-19,18-20: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-2 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-16
9-9-11 oc bracing: 13-14.

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=178(LC 5)
Max Uplift 10=-256(LC 5), 2=-141(LC 5)
Max Grav 10=1391(LC 1), 2=1474(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-816/91, 3-4=-2898/428, 4-5=-3405/592, 5-6=-3405/592, 6-8=-3196/568, 8-9=-1513/286, 9-10=-1341/277
BOT CHORD 3-15=-498/2622, 14-15=-496/2628, 13-14=-644/3231, 6-13=-480/168
WEBS 4-15=0/295, 4-14=-259/1004, 5-14=-469/199, 11-13=-294/1468, 8-13=-381/1957, 8-11=-1397/363, 9-11=-347/1908

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 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=256, 2=141.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

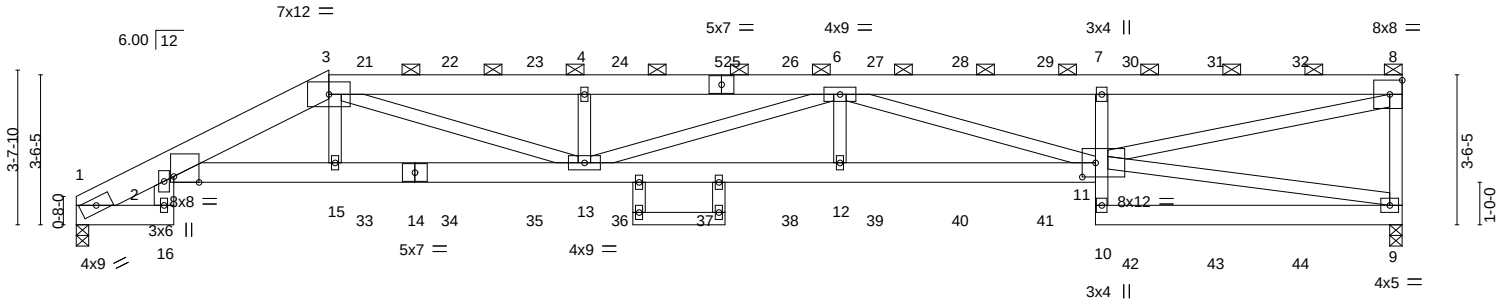
Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	D4	Half Hip Girder	1	2	Job Reference (optional)

I45442761

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:34:42 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-H?cnGPxMNSPWR8cRMQQjTR6BELL0_WpklpnQNNzVRzN

-0-10-8	2-3-8	5-11-4	11-11-5	17-11-7	23-11-8	31-2-0
0-10-8	2-3-8	3-7-12	6-0-1	6-0-1	6-0-1	7-2-8

Scale = 1:54.2



2-3-8	5-11-4	11-11-5	17-11-7	23-11-8	31-2-0
2-3-8	3-7-12	6-0-1	6-0-1	6-0-1	7-2-8

Plate Offsets (X,Y)-- [2:0-7-2,Edge], [11:0-3-12,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.33	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.62	12-13	>602	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	12-13	>999	240	Weight: 406 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SP 2400F 2.0E *Except* 1-3: 2x8 SP DSS
BOT CHORD 2x6 SP 2400F 2.0E *Except* 7-10,17-18: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 2-16: 2x6 SPF No.2

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

REACTIONS. (size) 1=0-3-8, 9=0-3-8
Max Horz 1=128(LC 7)
Max Uplift 1=-223(LC 5), 9=-279(LC 5)
Max Grav 1=2697(LC 1), 9=2820(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1491/137, 2-3=-7563/730, 3-4=-10021/811, 4-6=-10021/811, 6-7=-7254/714, 7-8=-7050/711, 8-9=-2578/371
BOT CHORD 2-15=-771/7150, 13-15=-772/7216, 12-13=-887/10190, 11-12=-887/10190, 10-11=0/267, 7-11=-850/313, 9-10=-13/436
WEBS 2-16=-19/275, 3-15=-26/850, 3-13=-147/3059, 4-13=-642/239, 6-12=0/499, 6-11=-3097/128, 9-11=-340/31, 8-11=-761/7254

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=223, 9=279.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 31,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 117 lb down and 55 lb up at 5-11-4, 109 lb down and 55 lb up at 6-9-0, 111 lb down and 55 lb up at 8-9-0, 111 lb down and 55 lb up at 10-9-0, 111 lb down and 55 lb up at 12-9-0, 111 lb down and 55 lb up at 14-9-0, 116 lb down and 67 lb up at 16-9-0, 116 lb down and 67 lb up at 18-9-0, 116 lb down and 67 lb up at 20-9-0, 116 lb down and 67 lb up at 22-9-0, 116 lb down and 67 lb up at 24-9-0, 116 lb down and 67 lb up at 26-9-0, and 116 lb down and 67 lb up at 28-9-0, and 135 lb down and 64 lb up at 31-0-4 on top chord, and 115 lb down at 14-9-0, 447 lb down and 129 lb up at 5-11-4, 73 lb down at 6-9-0, 73 lb down at 8-9-0, 73 lb down at 10-9-0, 73 lb down at 12-9-0, 68 lb down at 24-9-0, 68 lb down at 26-9-0, and 68 lb down at 28-9-0, and 83 lb down at 31-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-8=-70, 1-16=-20, 2-11=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 3=-94(B) 8=-135(B) 9=-59(B) 15=-447(B) 21=-94(B) 22=-94(B) 23=-94(B) 24=-94(B) 25=-94(B) 26=-110(B) 27=-110(B) 28=-110(B) 29=-110(B) 30=-109(B) 31=-109(B) 32=-109(B) 33=-73(B) 34=-73(B) 35=-73(B) 36=-73(B) 37=-115(B) 38=-51 39=-51 40=-51 41=-51 42=-52(B) 43=-52(B) 44=-52(B)
2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-58, 3-8=-58, 1-16=-20, 2-11=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 3=-79(B) 8=-112(B) 9=-56(B) 15=-383(B) 21=-79(B) 22=-79(B) 23=-79(B) 24=-79(B) 25=-79(B) 26=-92(B) 27=-92(B) 28=-92(B) 29=-92(B) 30=-91(B) 31=-91(B) 32=-91(B) 33=-65(B) 34=-65(B) 35=-65(B) 36=-65(B) 37=-115(B) 38=-48 39=-48 40=-48 41=-48 42=-48(B) 43=-48(B) 44=-48(B)
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-20, 3-8=-20, 1-16=-40, 2-11=-40, 9-10=-40
   Concentrated Loads (lb)
   Vert: 3=-47(B) 8=-49(B) 9=-83(B) 15=-298(B) 21=-47(B) 22=-47(B) 23=-47(B) 24=-47(B) 25=-47(B) 26=-42(B) 27=-42(B) 28=-42(B) 29=-42(B) 30=-42(B) 31=-42(B) 32=-42(B) 33=-73(B) 34=-73(B) 35=-73(B) 36=-73(B) 37=-115(B) 38=-68 39=-68 40=-68 41=-68 42=-68(B) 43=-68(B) 44=-68(B)
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-3=0, 3-8=29, 1-16=-12, 2-11=-12, 9-10=-12
   Horz: 1-3=-12, 8-9=22
   Concentrated Loads (lb)
   Vert: 3=31(B) 8=40(B) 9=-27(B) 15=109(B) 21=21(B) 22=18(B) 23=18(B) 24=18(B) 25=18(B) 26=30(B) 27=30(B) 28=30(B) 29=30(B) 30=29(B) 31=29(B) 32=29(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)
5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-3=13, 3-8=29, 1-16=-12, 2-11=-12, 9-10=-12
   Horz: 1-3=-25, 8-9=-17
   Concentrated Loads (lb)
   Vert: 3=25(B) 8=40(B) 9=-27(B) 15=109(B) 21=19(B) 22=18(B) 23=18(B) 24=18(B) 25=18(B) 26=30(B) 27=30(B) 28=30(B) 29=30(B) 30=29(B) 31=29(B) 32=29(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)
6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-3=-20, 3-8=9, 1-16=-20, 2-11=-20, 9-10=-20
   Horz: 1-3=-0, 8-9=10
   Concentrated Loads (lb)
   Vert: 3=51(B) 8=52(B) 9=-22(B) 15=129(B) 21=40(B) 22=38(B) 23=38(B) 24=38(B) 25=38(B) 26=50(B) 27=50(B) 28=50(B) 29=50(B) 30=49(B) 31=49(B) 32=49(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)
7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-3=-7, 3-8=9, 1-16=-20, 2-11=-20, 9-10=-20
   Horz: 1-3=-13, 8-9=-28
   Concentrated Loads (lb)
   Vert: 3=45(B) 8=52(B) 9=-22(B) 15=129(B) 21=39(B) 22=38(B) 23=38(B) 24=38(B) 25=38(B) 26=50(B) 27=50(B) 28=50(B) 29=50(B) 30=49(B) 31=49(B) 32=49(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-3=29, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
   Horz: 1-3=-41, 8-9=20
   Concentrated Loads (lb)
   Vert: 3=27(B) 8=51(B) 9=-27(B) 15=109(B) 21=34(B) 22=36(B) 23=36(B) 24=36(B) 25=36(B) 26=48(B) 27=48(B) 28=48(B) 29=48(B) 30=47(B) 31=47(B) 32=47(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)
9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-3=11, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
   Horz: 1-3=-23, 8-9=-14

Continued on page 3

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=36(B) 8=51(B) 9=-27(B) 15=109(B) 21=36(B) 22=36(B) 23=36(B) 24=36(B) 25=36(B) 26=48(B) 27=48(B) 28=48(B) 29=48(B) 30=47(B) 31=47(B) 32=47(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=29, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-41, 8-9=20
Concentrated Loads (lb)
Vert: 3=27(B) 8=51(B) 9=-27(B) 15=109(B) 21=34(B) 22=36(B) 23=36(B) 24=36(B) 25=36(B) 26=48(B) 27=48(B) 28=48(B) 29=48(B) 30=47(B) 31=47(B) 32=47(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=11, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-23, 8-9=-14
Concentrated Loads (lb)
Vert: 3=36(B) 8=51(B) 9=-27(B) 15=109(B) 21=36(B) 22=36(B) 23=36(B) 24=36(B) 25=36(B) 26=48(B) 27=48(B) 28=48(B) 29=48(B) 30=47(B) 31=47(B) 32=47(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=9, 3-8=-9, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-29, 8-9=8
Concentrated Loads (lb)
Vert: 3=47(B) 8=64(B) 9=-22(B) 15=129(B) 21=54(B) 22=55(B) 23=55(B) 24=55(B) 25=55(B) 26=67(B) 27=67(B) 28=67(B) 29=67(B) 30=67(B) 31=67(B) 32=67(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-9, 3-8=-9, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-11, 8-9=-26
Concentrated Loads (lb)
Vert: 3=55(B) 8=64(B) 9=-22(B) 15=129(B) 21=55(B) 22=55(B) 23=55(B) 24=55(B) 25=55(B) 26=67(B) 27=67(B) 28=67(B) 29=67(B) 30=67(B) 31=67(B) 32=67(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)

14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-8=-20, 1-16=-20, 2-11=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 3=-35(B) 8=-43(B) 9=-44(B) 15=-194(B) 21=-35(B) 22=-35(B) 23=-35(B) 24=-35(B) 25=-35(B) 26=-36(B) 27=-36(B) 28=-36(B) 29=-36(B) 30=-36(B) 31=-36(B) 32=-36(B) 33=-43(B) 34=-43(B) 35=-43(B) 36=-43(B) 37=-115(B) 38=-37 39=-37 40=-37 41=-37 42=-37(B) 43=-37(B) 44=-37(B)

15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-57, 3-8=-36, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-0, 8-9=7
Concentrated Loads (lb)
Vert: 3=35(B) 8=34(B) 9=-22(B) 15=72(B) 21=27(B) 22=25(B) 23=25(B) 24=25(B) 25=25(B) 26=34(B) 27=34(B) 28=34(B) 29=34(B) 30=33(B) 31=33(B) 32=33(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)

16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-48, 3-8=-36, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-10, 8-9=-21
Concentrated Loads (lb)
Vert: 3=31(B) 8=34(B) 9=-22(B) 15=72(B) 21=26(B) 22=25(B) 23=25(B) 24=25(B) 25=25(B) 26=34(B) 27=34(B) 28=34(B) 29=34(B) 30=33(B) 31=33(B) 32=33(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)

17) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-36, 3-8=-49, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-22, 8-9=6
Concentrated Loads (lb)
Vert: 3=32(B) 8=43(B) 9=-22(B) 15=72(B) 21=37(B) 22=38(B) 23=38(B) 24=38(B) 25=38(B) 26=47(B) 27=47(B) 28=47(B) 29=47(B) 30=47(B) 31=47(B) 32=47(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)

18) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-49, 3-8=-49, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-9, 8-9=-19
Concentrated Loads (lb)
Vert: 3=38(B) 8=43(B) 9=-22(B) 15=72(B) 21=38(B) 22=38(B) 23=38(B) 24=38(B) 25=38(B) 26=47(B) 27=47(B) 28=47(B) 29=47(B) 30=47(B) 31=47(B) 32=47(B) 33=-18(B) 34=-18(B) 35=-18(B) 36=-18(B) 37=-115(B) 38=-14 39=-14 40=-14 41=-14 42=-14(B) 43=-14(B) 44=-14(B)

19) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-16, 3-8=-12, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=4

Continued on page 4

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 3=44(B) 8=47(B) 9=-27(B) 15=77(B) 21=42(B) 22=42(B) 23=42(B) 24=42(B) 25=42(B) 26=51(B) 27=51(B) 28=51(B) 29=51(B) 30=51(B) 31=51(B) 32=51(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)

20) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-12, 3-8=-12, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 8-9=-16
Concentrated Loads (lb)
Vert: 3=42(B) 8=47(B) 9=-27(B) 15=77(B) 21=42(B) 22=42(B) 23=42(B) 24=42(B) 25=42(B) 26=51(B) 27=51(B) 28=51(B) 29=51(B) 30=51(B) 31=51(B) 32=51(B) 33=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-115(B) 38=-22 39=-22 40=-22 41=-22 42=-22(B) 43=-22(B) 44=-22(B)

21) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-8=-70, 1-16=-20, 2-11=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 3=-94(B) 8=-135(B) 9=-59(B) 15=-447(B) 21=-94(B) 22=-94(B) 23=-94(B) 24=-94(B) 25=-94(B) 26=-110(B) 27=-110(B) 28=-110(B) 29=-110(B) 30=-109(B) 31=-109(B) 32=-109(B) 33=-73(B) 34=-73(B) 35=-73(B) 36=-73(B) 37=-115(B) 38=-51 39=-51 40=-51 41=-51 42=-52(B) 43=-52(B) 44=-52(B)

22) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-8=-70, 1-16=-20, 2-11=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 3=-117(B) 8=-135(B) 9=-59(B) 15=-447(B) 21=-98(B) 22=-94(B) 23=-94(B) 24=-94(B) 25=-94(B) 26=-110(B) 27=-110(B) 28=-110(B) 29=-110(B) 30=-109(B) 31=-109(B) 32=-109(B) 33=-73(B) 34=-73(B) 35=-73(B) 36=-73(B) 37=-115(B) 38=-51 39=-51 40=-51 41=-51 42=-52(B) 43=-52(B) 44=-52(B)

23) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-58, 3-8=-58, 1-16=-20, 2-11=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 3=-79(B) 8=-112(B) 9=-56(B) 15=-383(B) 21=-79(B) 22=-79(B) 23=-79(B) 24=-79(B) 25=-79(B) 26=-92(B) 27=-92(B) 28=-92(B) 29=-92(B) 30=-91(B) 31=-91(B) 32=-91(B) 33=-65(B) 34=-65(B) 35=-65(B) 36=-65(B) 37=-115(B) 38=-48 39=-48 40=-48 41=-48 42=-48(B) 43=-48(B) 44=-48(B)

24) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-8=-58, 1-16=-20, 2-11=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 3=-97(B) 8=-112(B) 9=-56(B) 15=-383(B) 21=-83(B) 22=-79(B) 23=-79(B) 24=-79(B) 25=-79(B) 26=-92(B) 27=-92(B) 28=-92(B) 29=-92(B) 30=-91(B) 31=-91(B) 32=-91(B) 33=-65(B) 34=-65(B) 35=-65(B) 36=-65(B) 37=-115(B) 38=-48 39=-48 40=-48 41=-48 42=-48(B) 43=-48(B) 44=-48(B)

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=0, 3-8=29, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-12, 8-9=22
Concentrated Loads (lb)
Vert: 3=-98(B) 8=-105(B) 9=-55(B) 15=-277(B) 21=-108(B) 22=-111(B) 23=-111(B) 24=-111(B) 25=-111(B) 26=-116(B) 27=-116(B) 28=-116(B) 29=-116(B) 30=-116(B) 31=-116(B) 32=-116(B) 33=-60(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-115(B) 38=-50 39=-50 40=-50 41=-50 42=-50(B) 43=-50(B) 44=-50(B)

26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=13, 3-8=29, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-25, 8-9=-17
Concentrated Loads (lb)
Vert: 3=-104(B) 8=-105(B) 9=-55(B) 15=-277(B) 21=-109(B) 22=-111(B) 23=-111(B) 24=-111(B) 25=-111(B) 26=-116(B) 27=-116(B) 28=-116(B) 29=-116(B) 30=-116(B) 31=-116(B) 32=-116(B) 33=-60(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-115(B) 38=-50 39=-50 40=-50 41=-50 42=-50(B) 43=-50(B) 44=-50(B)

27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-20, 3-8=9, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-0, 8-9=10
Concentrated Loads (lb)
Vert: 3=-78(B) 8=-93(B) 9=-50(B) 15=-258(B) 21=-89(B) 22=-91(B) 23=-91(B) 24=-91(B) 25=-91(B) 26=-96(B) 27=-96(B) 28=-96(B) 29=-96(B) 30=-96(B) 31=-96(B) 32=-96(B) 33=-52(B) 34=-52(B) 35=-52(B) 36=-52(B) 37=-115(B) 38=-42 39=-42 40=-42 41=-42 42=-42(B) 43=-42(B) 44=-42(B)

28) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-7, 3-8=9, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-13, 8-9=-28
Concentrated Loads (lb)
Vert: 3=-84(B) 8=-93(B) 9=-50(B) 15=-258(B) 21=-90(B) 22=-91(B) 23=-91(B) 24=-91(B) 25=-91(B) 26=-96(B) 27=-96(B) 28=-96(B) 29=-96(B) 30=-96(B) 31=-96(B) 32=-96(B) 33=-52(B) 34=-52(B) 35=-52(B) 36=-52(B) 37=-115(B) 38=-42 39=-42 40=-42 41=-42 42=-42(B) 43=-42(B) 44=-42(B)

29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=29, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-41, 8-9=20
Concentrated Loads (lb)
Vert: 3=-102(B) 8=-94(B) 9=-55(B) 15=-277(B) 21=-95(B) 22=-93(B) 23=-93(B) 24=-93(B) 25=-93(B) 26=-99(B) 27=-99(B) 28=-99(B) 29=-99(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-60(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-115(B) 38=-50 39=-50 40=-50 41=-50 42=-50(B) 43=-50(B) 44=-50(B)

30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 5

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-3=11, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-23, 8-9=-14
Concentrated Loads (lb)
Vert: 3=-93(B) 8=-94(B) 9=-55(B) 15=-277(B) 21=-93(B) 22=-93(B) 23=-93(B) 24=-93(B) 25=-93(B) 26=-99(B) 27=-99(B) 28=-99(B) 29=-99(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-60(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-115(B) 38=-50 39=-50 40=-50 41=-50 42=-50(B) 43=-50(B) 44=-50(B)

31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=29, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-41, 8-9=20
Concentrated Loads (lb)
Vert: 3=-102(B) 8=-94(B) 9=-55(B) 15=-277(B) 21=-95(B) 22=-93(B) 23=-93(B) 24=-93(B) 25=-93(B) 26=-99(B) 27=-99(B) 28=-99(B) 29=-99(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-60(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-115(B) 38=-50 39=-50 40=-50 41=-50 42=-50(B) 43=-50(B) 44=-50(B)

32) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=11, 3-8=11, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=-23, 8-9=-14
Concentrated Loads (lb)
Vert: 3=-93(B) 8=-94(B) 9=-55(B) 15=-277(B) 21=-93(B) 22=-93(B) 23=-93(B) 24=-93(B) 25=-93(B) 26=-99(B) 27=-99(B) 28=-99(B) 29=-99(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-60(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-115(B) 38=-50 39=-50 40=-50 41=-50 42=-50(B) 43=-50(B) 44=-50(B)

33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=9, 3-8=-9, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-29, 8-9=8
Concentrated Loads (lb)
Vert: 3=-82(B) 8=-81(B) 9=-50(B) 15=-258(B) 21=-75(B) 22=-74(B) 23=-74(B) 24=-74(B) 25=-74(B) 26=-79(B) 27=-79(B) 28=-79(B) 29=-79(B) 30=-78(B) 31=-78(B) 32=-78(B) 33=-52(B) 34=-52(B) 35=-52(B) 36=-52(B) 37=-115(B) 38=-42 39=-42 40=-42 41=-42 42=-42(B) 43=-42(B) 44=-42(B)

34) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-9, 3-8=-9, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-11, 8-9=-26
Concentrated Loads (lb)
Vert: 3=-74(B) 8=-81(B) 9=-50(B) 15=-258(B) 21=-74(B) 22=-74(B) 23=-74(B) 24=-74(B) 25=-74(B) 26=-79(B) 27=-79(B) 28=-79(B) 29=-79(B) 30=-78(B) 31=-78(B) 32=-78(B) 33=-52(B) 34=-52(B) 35=-52(B) 36=-52(B) 37=-115(B) 38=-42 39=-42 40=-42 41=-42 42=-42(B) 43=-42(B) 44=-42(B)

35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-57, 3-8=-36, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-0, 8-9=7
Concentrated Loads (lb)
Vert: 3=-91(B) 8=-126(B) 9=-57(B) 15=-380(B) 21=-99(B) 22=-101(B) 23=-101(B) 24=-101(B) 25=-101(B) 26=-114(B) 27=-114(B) 28=-114(B) 29=-114(B) 30=-113(B) 31=-113(B) 32=-113(B) 33=-67(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-115(B) 38=-49 39=-49 40=-49 41=-49 42=-50(B) 43=-50(B) 44=-50(B)

36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-48, 3-8=-36, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-10, 8-9=-21
Concentrated Loads (lb)
Vert: 3=-95(B) 8=-126(B) 9=-57(B) 15=-380(B) 21=-100(B) 22=-101(B) 23=-101(B) 24=-101(B) 25=-101(B) 26=-114(B) 27=-114(B) 28=-114(B) 29=-114(B) 30=-113(B) 31=-113(B) 32=-113(B) 33=-67(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-115(B) 38=-49 39=-49 40=-49 41=-49 42=-50(B) 43=-50(B) 44=-50(B)

37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-36, 3-8=-49, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-22, 8-9=6
Concentrated Loads (lb)
Vert: 3=-94(B) 8=-118(B) 9=-57(B) 15=-380(B) 21=-89(B) 22=-88(B) 23=-88(B) 24=-88(B) 25=-88(B) 26=-101(B) 27=-101(B) 28=-101(B) 29=-101(B) 30=-100(B) 31=-100(B) 32=-100(B) 33=-67(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-115(B) 38=-49 39=-49 40=-49 41=-49 42=-50(B) 43=-50(B) 44=-50(B)

38) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-49, 3-8=-49, 1-16=-20, 2-11=-20, 9-10=-20
Horz: 1-3=-9, 8-9=-19
Concentrated Loads (lb)
Vert: 3=-88(B) 8=-118(B) 9=-57(B) 15=-380(B) 21=-88(B) 22=-88(B) 23=-88(B) 24=-88(B) 25=-88(B) 26=-101(B) 27=-101(B) 28=-101(B) 29=-101(B) 30=-100(B) 31=-100(B) 32=-100(B) 33=-67(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-115(B) 38=-49 39=-49 40=-49 41=-49 42=-50(B) 43=-50(B) 44=-50(B)

39) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-16, 3-8=-12, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 1-3=4

Continued on page 6

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	D4	Half Hip Girder	1	2	Job Reference (optional)

J45442761

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:42 2021 Page 6
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-H?cnGPxMNSPWR8cRMQQjTR6BELL0_WpklpnQNNzVRzN

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-52(B) 8=-60(B) 9=-52(B) 15=-238(B) 21=-53(B) 22=-53(B) 23=-53(B) 24=-53(B) 25=-53(B) 26=-56(B) 27=-56(B) 28=-56(B) 29=-56(B) 30=-56(B) 31=-56(B) 32=-56(B) 33=-54(B) 34=-54(B) 35=-54(B) 36=-54(B) 37=-115(B) 38=-47 39=-47 40=-47 41=-47 42=-47(B) 43=-47(B) 44=-47(B)

40) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-12, 3-8=-12, 1-16=-12, 2-11=-12, 9-10=-12
Horz: 8-9=-16
Concentrated Loads (lb)
Vert: 3=-53(B) 8=-60(B) 9=-52(B) 15=-238(B) 21=-53(B) 22=-53(B) 23=-53(B) 24=-53(B) 25=-53(B) 26=-56(B) 27=-56(B) 28=-56(B) 29=-56(B) 30=-56(B) 31=-56(B) 32=-56(B) 33=-54(B) 34=-54(B) 35=-54(B) 36=-54(B) 37=-115(B) 38=-47 39=-47 40=-47 41=-47 42=-47(B) 43=-47(B) 44=-47(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	E1	Hip Girder	1	1	J45442762

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:43:03 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-lCA9Ulx_7mXN3lBdw7xy0efNDlb0j6iu_TW_wpzVRzM

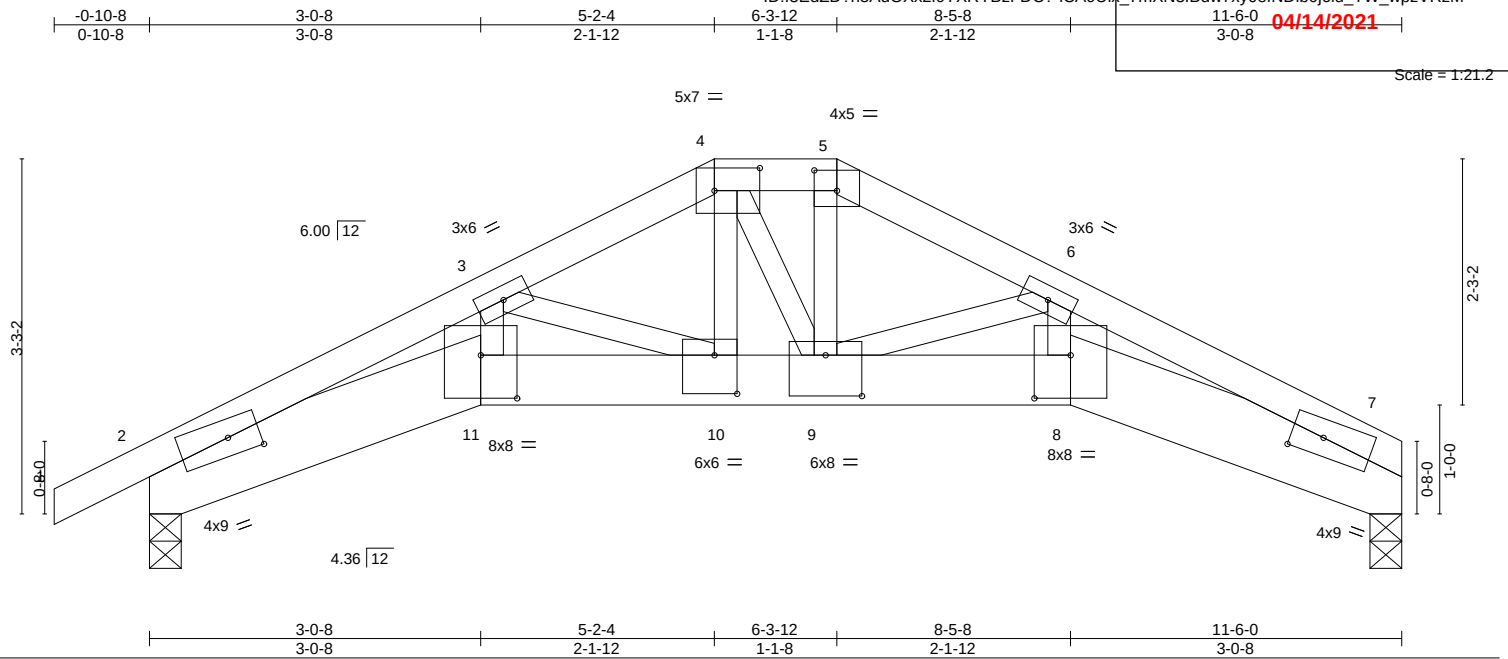


Plate Offsets (X,Y)-- [2:0-3-8,0-2-0], [4:0-5-0,0-2-8], [5:0-2-8,0-2-4], [7:0-3-8,0-2-0], [8:0-4-0,0-4-12], [9:0-4-0,0-4-8], [10:0-2-8,0-4-4], [11:0-4-0,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.09	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.17	10-11	>800	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.13	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	10-11	>999	240	Weight: 55 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS *Except*
8-11: 2x6 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-6 oc purlins, except 2-0-0 oc purlins (4-0-7 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 9-2-7 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=57(LC 12)
Max Uplift 7=-221(LC 9), 2=-246(LC 8)
Max Grav 7=974(LC 1), 2=1051(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3131/747, 3-4=-2251/573, 4-5=-2097/534, 5-6=-2307/578, 6-7=-3145/700
BOT CHORD 2-11=-674/2734, 10-11=-623/2523, 9-10=-472/2040, 8-9=-541/2546, 7-8=-583/2753
WEBS 3-11=-130/687, 3-10=-563/173, 4-10=-155/678, 5-9=-161/792, 6-9=-534/155, 6-8=-97/649

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 7, 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) 7=221, 2=246.
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) 109 lb down and 95 lb up at 5-2-4, and 109 lb down and 95 lb up at 6-3-12 on top chord, and 336 lb down and 119 lb up at 5-2-4, and 355 lb down and 124 lb up at 6-3-12 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

March 31,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	E1	Hip Girder	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:44 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-DOkXh5ycu3fEhRmpUrSBZsBYy9xFSZx1D6GXSFzVRzL

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-5=-70, 5-7=-70, 2-11=-20, 8-11=-20, 7-8=-20
   Concentrated Loads (lb)
   Vert: 4=-86(F) 5=-86(F) 10=-377(F=-336) 9=-396(F=-355)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	E2	Roof Special	1	1	

Job Reference (optional) I45442763

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:34 2021 Page 1

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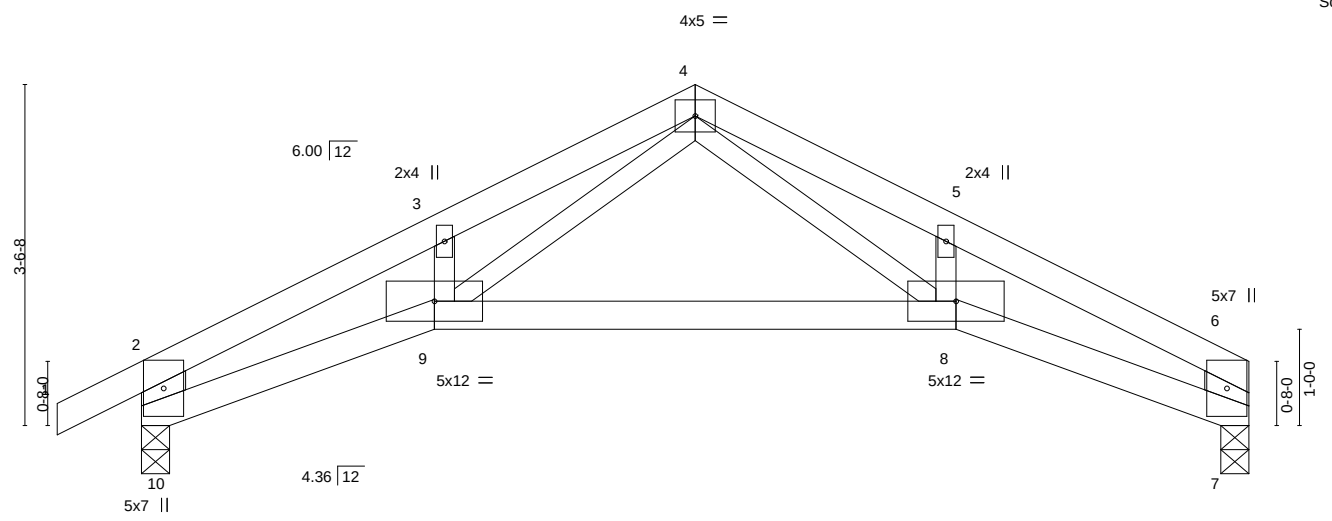
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

-0-10-8 / 0-10-8 | 3-0-8 / 3-0-8 | 5-9-0 / 2-8-8 | 8-5-8 / 2-8-8 | 11-6-0 / 3-0-8

Scale: 1/2"=1'



3-0-8 / 3-0-8 | 11-6-0 / 8-5-8

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	0.73	Vert(LL)	-0.12	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.25	8-9	>523	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.14	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.08	8-9	>999	240	Weight: 38 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,6-7: 2x6 SP DSS

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

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=65(LC 5)
Max Uplift 10=-87(LC 8), 7=-60(LC 9)
Max Grav 10=578(LC 1), 7=493(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1188/145, 3-4=-1053/213, 4-5=-1057/192, 5-6=-1172/116, 2-10=-830/139, 6-7=-718/93
BOT CHORD 9-10=-136/1000, 8-9=-36/595, 7-8=-78/990
WEBS 4-8=-122/471, 4-9=-132/459

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	E3	Half Hip Girder	1	2	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

I45442764

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:34 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-AnsH6n_sQhvywlvCbGUfeHHsNziuwNxKgQleW8zVRzJ

Scale: 1/2"=1'

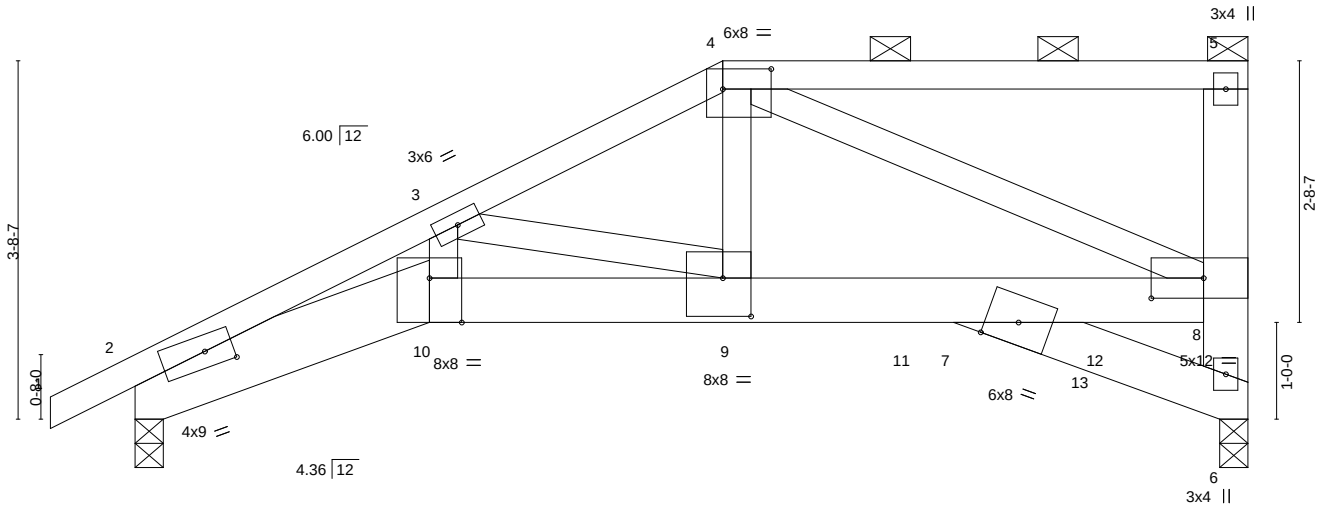


Plate Offsets (X,Y)-- [2:0-3-8,0-2-0], [4:0-6-0,0-2-8], [8:0-6-8,0-2-8], [9:0-3-8,0-4-12], [10:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.09	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.17	9-10	>792	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.12	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	9-10	>999	240	Weight: 138 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except*
2-10: 2x8 SP DSS
WEBS 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=142(LC 7)
Max Uplift 6=-486(LC 5), 2=-249(LC 8)
Max Grav 6=4134(LC 1), 2=2382(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7929/779, 3-4=-6105/563, 4-5=-551/87, 6-8=-3809/476
BOT CHORD 2-10=-777/6987, 9-10=-714/6435, 7-9=-598/5750, 7-8=-589/5791
WEBS 3-10=-153/1551, 3-9=-1029/213, 4-9=-393/4732, 4-8=-5693/536

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 6, 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) 6=486, 2=249.
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) 2764 lb down and 271 lb up at 6-0-13, and 1363 lb down and 60 lb up at 8-0-0, and 1370 lb down and 246 lb up at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

March 31,2021

Continued on page 2

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	E3	Half Hip Girder	1	2	Job Reference (optional)

I45442764

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:40 2021 Page 2
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-AnsH6n_sQhvywlvCbGUfeHHsNziuwNxKgQleW8zVRzJ

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-5=-70, 2-10=-20, 7-10=-20, 6-7=-20
   Concentrated Loads (lb)
   Vert: 9=-2764(B) 11=-1363(B) 12=-1316(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G1	Hip Girder	1	1	Job Reference (optional)

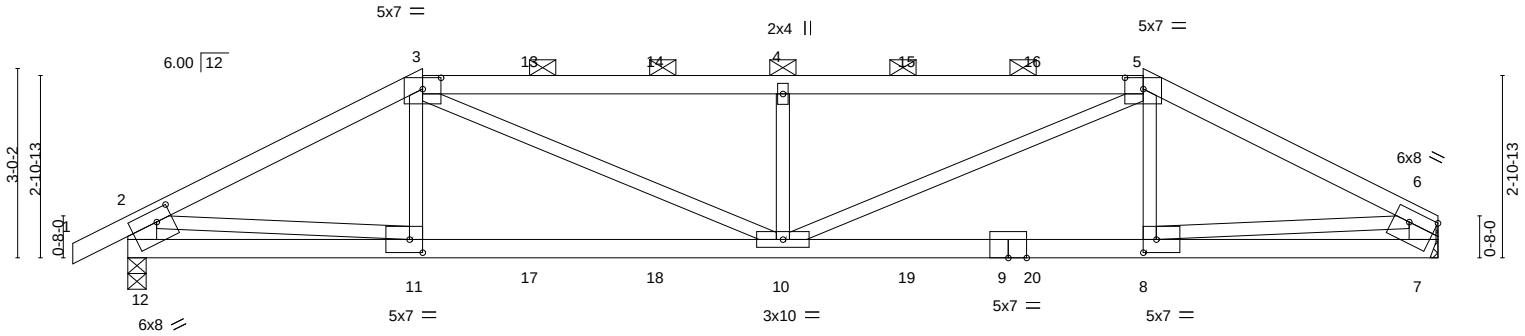
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
9/14/2021

I45442765

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Sep 01 10:34:47 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-ezPgJ7?VB_1pYvUO9z?uAUp4IMzXfquTv4UB3azVRzI

0-10-8	4-8-4	10-5-0	16-1-12	20-10-0
0-10-8	4-8-4	5-8-12	5-8-12	4-8-4

Scale = 1:36.6



4-8-4	10-5-0	16-1-12	20-10-0
4-8-4	5-8-12	5-8-12	4-8-4

Plate Offsets (X,Y)-- [3:0-3-8,0-2-3], [5:0-3-8,0-2-3], [6:Edge,0-2-4], [8:0-2-8,0-2-8], [11:0-2-8,0-2-8], [12:0-3-0,0-2-4]

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	0.55	Vert(LL)	-0.13	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.26	8-10	>953	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	10	>999	240	Weight: 73 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-7: 2x6 SPF No.2

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

REACTIONS. (size) 12=0-3-8, 7=Mechanical
Max Horz 12=57(LC 7)
Max Uplift 12=-227(LC 8), 7=-201(LC 9)
Max Grav 12=1603(LC 1), 7=1521(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2586/358, 3-4=-3301/471, 4-5=-3301/471, 5-6=-2590/357, 2-12=-1554/244, 6-7=-1471/218
BOT CHORD 11-12=-155/477, 10-11=-320/2242, 8-10=-286/2255, 7-8=-96/401
WEBS 3-11=0/294, 3-10=-185/1217, 4-10=-744/259, 5-10=-184/1209, 5-8=0/288, 2-11=-257/1813, 6-8=-261/1873

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=227, 7=201.
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) 92 lb down and 55 lb up at 4-8-4, 97 lb down and 55 lb up at 6-5-0, 97 lb down and 55 lb up at 8-5-0, 97 lb down and 55 lb up at 10-5-0, 97 lb down and 55 lb up at 12-5-0, and 97 lb down and 55 lb up at 14-5-0, and 92 lb down and 55 lb up at 16-1-12 on top chord, and 279 lb down and 82 lb up at 4-8-4, 44 lb down at 6-5-0, 44 lb down at 8-5-0, 44 lb down at 10-5-0, 44 lb down at 12-5-0, and 44 lb down at 14-5-0, and 279 lb down and 82 lb up at 16-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G1	Hip Girder	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:48 2021 Page 2
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-69z2XT?7yI9f933bjhX7jiMF2mJmOH8d7kEkb0zVRzH

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, 3-5=-70, 5-6=-70, 7-12=-20
   Concentrated Loads (lb)
   Vert: 3=-69(F) 5=-69(F) 11=-279(F) 10=-35(F) 4=-69(F) 8=-279(F) 13=-69(F) 14=-69(F) 15=-69(F) 16=-69(F) 17=-35(F) 18=-35(F) 19=-35(F) 20=-35(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G2	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)

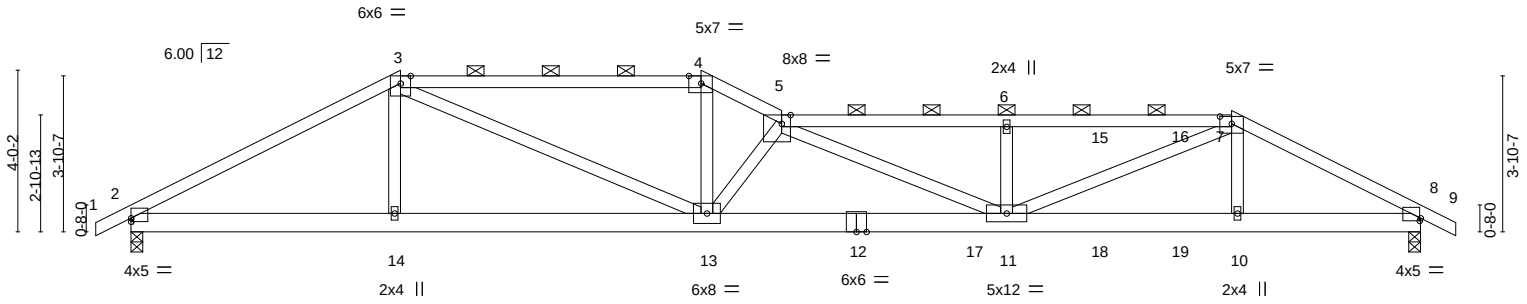
I45442766

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:34:49 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-aMXQkp0ljcHWnDenHO2MGvuOHAd07nlmMOzI7TzVRzG

-0-10-8 6-8-4 14-1-12 16-1-12 21-8-12 27-3-12 32-0-0 32-10-8
0-10-8 6-8-4 7-5-8 2-0-0 5-7-0 5-7-0 4-8-4 0-10-8

Scale = 1:57.2



6-8-4 14-1-12 16-1-12 21-8-12 27-3-12 32-0-0
6-8-4 7-5-8 2-0-0 5-7-0 5-7-0 4-8-4

Plate Offsets (X,Y)-- [2:0-0-0,0-1-1], [4:0-3-10,Edge], [5:0-2-10,Edge], [7:0-3-8,0-2-3], [8:0-0-4,0-0-13]

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	0.64	Vert(LL)	-0.27	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.48	11-13	>793	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	11-13	>999	240	Weight: 273 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4,5-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except* 8-12: 2x6 SPF 1650F 1.4E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except 2-0-0 oc purlins (5-5-4 max.): 3-4, 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-66(LC 13)
Max Uplift 2=-220(LC 5), 8=-433(LC 9)
Max Grav 2=1998(LC 1), 8=2737(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3601/457, 3-4=-5208/742, 4-5=-5898/824, 5-6=-7979/1190, 6-7=-7979/1190, 7-8=-5074/758
BOT CHORD 2-14=-383/3067, 13-14=-386/3060, 11-13=-1029/7427, 10-11=-589/4330, 8-10=-588/4350
WEBS 3-14=0/307, 3-13=-387/2483, 4-13=-260/2208, 5-13=-3639/613, 5-11=-498/815, 6-11=-700/242, 7-11=-628/4015, 7-10=0/393

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=220, 8=433.
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 31,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G2	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 119 lb down and 55 lb up at 22-0-0, 119 lb down and 55 lb up at 24-0-0, and 119 lb down and 55 lb up at 26-0-0, and 119 lb down and 55 lb up at 27-3-12 on top chord, and 1080 lb down and 200 lb up at 20-10-12, 44 lb down at 22-0-0, 44 lb down at 24-0-0, and 44 lb down at 26-0-0, and 279 lb down and 82 lb up at 27-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-4=-70, 4-5=-70, 5-7=-70, 7-9=-70, 2-8=-20
   Concentrated Loads (lb)
   Vert: 7=-69(F) 6=-69(F) 11=-35(F) 10=-279(F) 15=-69(F) 16=-69(F) 17=-1080(F) 18=-35(F) 19=-35(F)

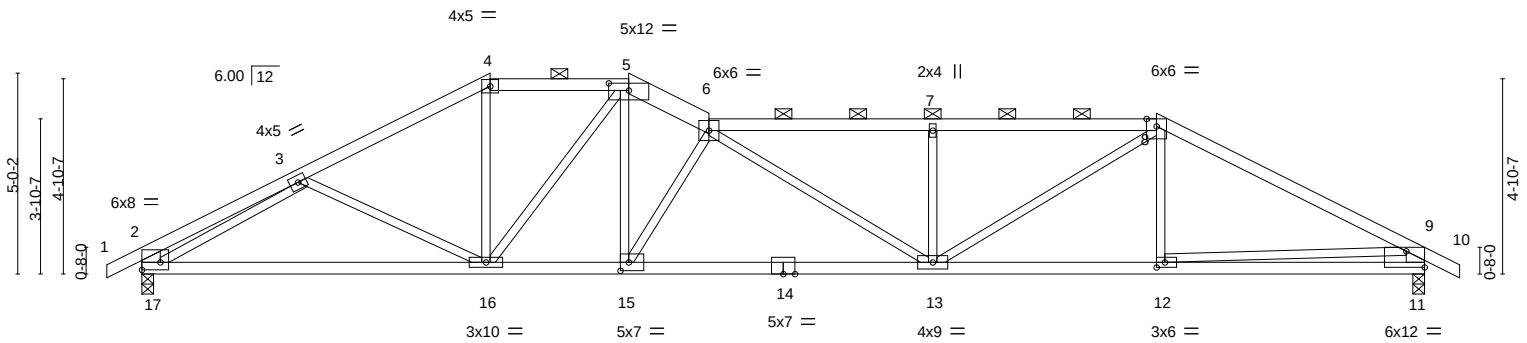
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G3	Roof Special	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:35:01 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-WkfA9U2?FDXE0Wo9Op4qLK_kO_IUbbv3qiSPCLzVRzE

-0-10-8	4-0-2	8-8-4	12-1-12	14-1-12	19-8-12	25-3-12	32-0-0	32-10-8
0-10-8	4-0-2	4-8-2	3-5-8	2-0-0	5-7-0	5-7-0	6-8-4	0-10-8

Scale = 1:57.5



8-8-4	12-1-12	14-1-12	19-8-12	25-3-12	32-0-0
8-8-4	3-5-8	2-0-0	5-7-0	5-7-0	6-8-4

Plate Offsets (X,Y)-- [2:Edge,0-2-4], [5:0-6-0,0-2-3], [11:Edge,0-4-13], [12:0-2-8,0-1-8], [15:0-2-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.22	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.47	13-15	>809	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	13-15	>999	240	Weight: 123 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17,9-11: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-13 max.): 4-5, 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Horz 17=-80(LC 6)
Max Uplift 17=-136(LC 8), 11=-245(LC 9)
Max Grav 17=1497(LC 1), 11=1497(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-618/25, 3-4=-2211/241, 4-5=-1908/230, 5-6=-2572/337, 6-7=-3019/476, 7-8=-3021/478, 8-9=-2376/362, 2-17=-478/78, 9-11=-1429/283
BOT CHORD 16-17=-208/1970, 15-16=-198/2302, 13-15=-310/3058, 12-13=-228/2028, 11-12=-235/784
WEBS 4-16=-56/659, 5-16=-725/143, 5-15=-223/1446, 6-15=-1560/328, 7-13=-479/192, 8-13=-194/1182, 3-17=-1749/230, 9-12=-168/1248

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=136, 11=245.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 31,2021

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G4	Roof Special	1	1	Job Reference (optional)

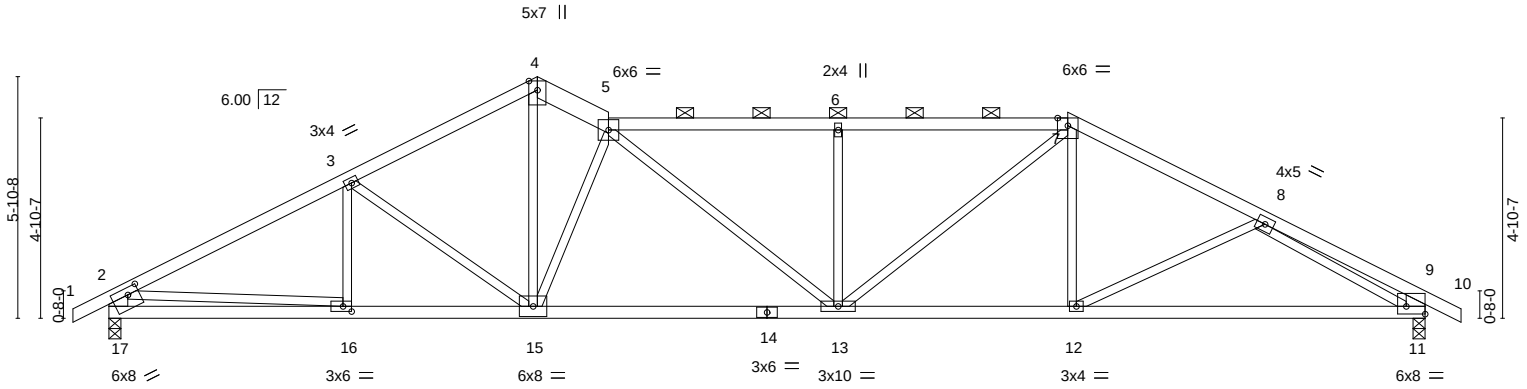
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/12/2021

I45442768

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:52:31 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-_xDZNq2d0Xf5egNMyWb3tYWxRNi3K2AC2MCykozVRzD

-0-10-8	5-9-9	10-5-0	12-1-12	17-8-12	23-3-12	27-11-14	32-0-0	32-10-8
0-10-8	5-9-9	4-7-8	1-8-12	5-7-0	5-7-0	4-8-2	4-0-2	0-10-8

Scale = 1:56.0



5-9-9	10-5-0	17-8-12	23-3-12	32-0-0
5-9-9	4-7-8	7-3-12	5-7-0	8-8-4

Plate Offsets (X,Y)-- [11:Edge,0-2-4], [16:0-2-8,0-1-8], [17:0-3-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.17	13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.36	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	13	>999	240	Weight: 126 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17,9-11: 2x6 SPF No.2

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

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Horz 17=91(LC 7)
Max Uplift 17=-155(LC 8), 11=-253(LC 9)
Max Grav 17=1497(LC 1), 11=1497(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2358/263, 3-4=-2078/310, 4-5=-2026/313, 5-6=-2466/438, 6-7=-2468/439, 7-8=-2213/375, 8-9=-620/71, 2-17=-1427/188, 9-11=-480/103
BOT CHORD 16-17=-191/622, 15-16=-181/2021, 13-15=-189/2286, 12-13=-191/1921, 11-12=-317/1969
WEBS 3-15=-347/157, 4-15=-234/1590, 5-15=-1391/323, 5-13=-88/357, 6-13=-476/189, 7-13=-141/707, 7-12=0/267, 2-16=-104/1404, 8-11=-1747/368

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=155, 11=253.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G5	Hip	1	1	

Job Reference (optional) I45442769

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:35:31 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

5-9-9	10-8-4	16-0-0	21-3-12	26-2-7	32-0-0	32-10-8
5-9-9	4-10-10	5-3-12	5-3-12	4-10-10	5-9-9	0-10-8

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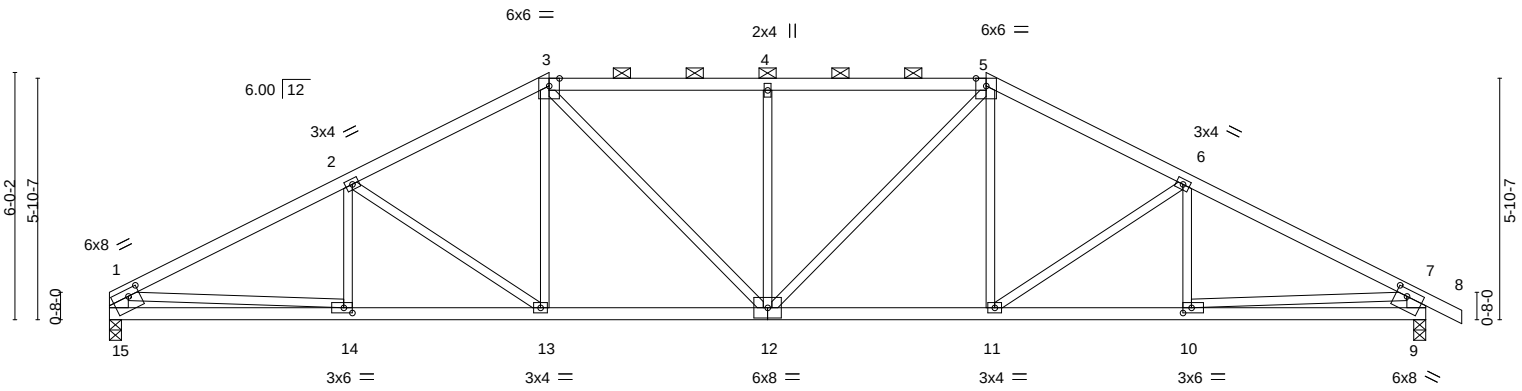

5-9-9	10-8-4	16-0-0	21-3-12	26-2-7	32-0-0
5-9-9	4-10-10	5-3-12	5-3-12	4-10-10	5-9-9

Plate Offsets (X,Y)-- [1:0-3-4,0-2-0], [9:0-3-4,0-2-0], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.13	12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.23	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	12	>999	240	Weight: 126 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-15,7-9: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-1 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 15=-95(LC 4)
Max Uplift 15=-132(LC 8), 9=-158(LC 9)
Max Grav 15=1418(LC 1), 9=1498(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2376/209, 2-3=-2067/195, 3-4=-2046/217, 4-5=-2046/217, 5-6=-2061/195, 6-7=-2369/207, 1-15=-1348/163, 7-9=-1431/189
BOT CHORD 14-15=-140/486, 13-14=-193/2048, 12-13=-124/1778, 11-12=-68/1776, 10-11=-103/2032, 9-10=-115/606
WEBS 2-13=-338/163, 3-13=-34/318, 3-12=-118/511, 4-12=-463/183, 5-12=-119/513, 5-11=-31/314, 6-11=-321/158, 1-14=-65/1568, 7-10=-39/1431

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=132, 9=158.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G6	Hip	1	1	

Job Reference (optional) I45442770

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:35:15 2021 Page 1

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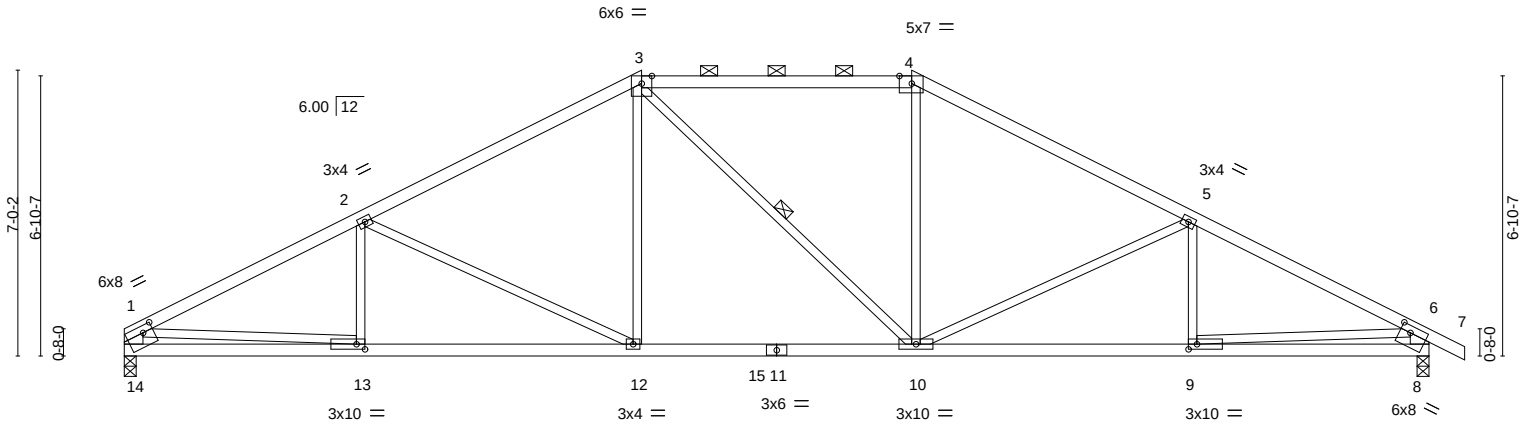
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMERSVILLE, MISSOURI
04/14/2021

5-9-9	12-8-4	19-3-12	26-2-7	32-0-0	32-10-8
5-9-9	6-10-11	6-7-8	6-10-11	5-9-9	0-10-8

Scale = 1:56.5



5-9-9	12-8-4	19-3-12	26-2-7	32-0-0
5-9-9	6-10-11	6-7-8	6-10-11	5-9-9

Plate Offsets (X,Y)-- [1:0-3-0,0-2-0], [4:0-3-10,Edge], [8:0-3-0,0-2-0], [9:0-2-8,0-1-8], [13:0-2-8,0-1-8]

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	0.86	Vert(LL)	-0.16	10-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.27	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	12-13	>999	240	Weight: 122 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 1-14,6-8: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-9-12 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-10

REACTIONS. (size) 14=0-3-8, 8=0-3-8
Max Horz 14=-112(LC 13)
Max Uplift 14=-151(LC 8), 8=-177(LC 9)
Max Grav 14=1482(LC 2), 8=1542(LC 2)

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

TOP CHORD	1-2=-2501/254, 2-3=-2040/198, 3-4=-1730/224, 4-5=-2026/196, 5-6=-2486/252, 1-14=-1380/178, 6-8=-1442/204
BOT CHORD	13-14=-142/499, 12-13=-256/2179, 10-12=-62/1741, 9-10=-149/2158, 8-9=-83/543
WEBS	2-12=-504/215, 3-12=-11/502, 4-10=0/473, 5-10=-494/211, 1-13=-115/1728, 6-9=-67/1622

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=151, 8=177.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G7	Hip	1	1	

Job Reference (optional) I45442771

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:35:15 2021 Page 1

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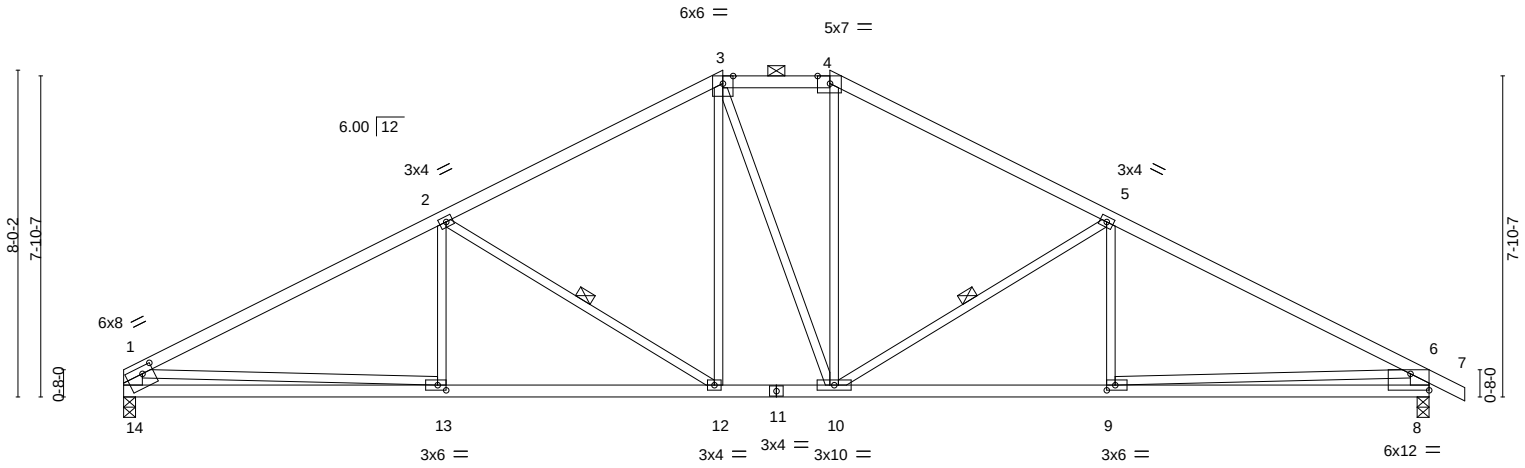
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Scale = 1:56.5



7-9-9	14-8-4	17-3-12	24-2-7	32-0-0	32-10-8
7-9-9	6-10-10	2-7-8	6-10-10	7-9-9	0-10-8

Plate Offsets (X,Y)-- [1:0-3-4,0-2-0], [4:0-3-10,Edge], [8:Edge,0-4-13], [9:0-2-8,0-1-8], [13:0-2-8,0-1-8]

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	0.91	Vert(LL)	-0.12	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.25	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	12-13	>999	240	Weight: 129 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 1-14,6-8: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-7-11 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 2-12, 5-10

REACTIONS. (size) 14=0-3-8, 8=0-3-8
Max Horz 14=-130(LC 9)
Max Uplift 14=-167(LC 8), 8=-193(LC 9)
Max Grav 14=1418(LC 1), 8=1498(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2366/268, 2-3=-1768/226, 3-4=-1473/246, 4-5=-1767/224, 5-6=-2361/267, 1-14=-1340/209, 6-8=-1422/235
BOT CHORD 13-14=-226/639, 12-13=-258/2018, 10-12=-60/1471, 9-10=-133/2004, 8-9=-223/846
WEBS 2-13=0/253, 2-12=-664/233, 3-12=-71/441, 4-10=-53/418, 5-10=-646/227, 5-9=0/258, 1-13=-37/1382, 6-9=0/1160

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) The Fabrication Tolerance at joint 6 = 6%
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=167, 8=193.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	G8	Common	2	1	Job Reference (optional)

J45442772

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:13:35 2021 Page 1
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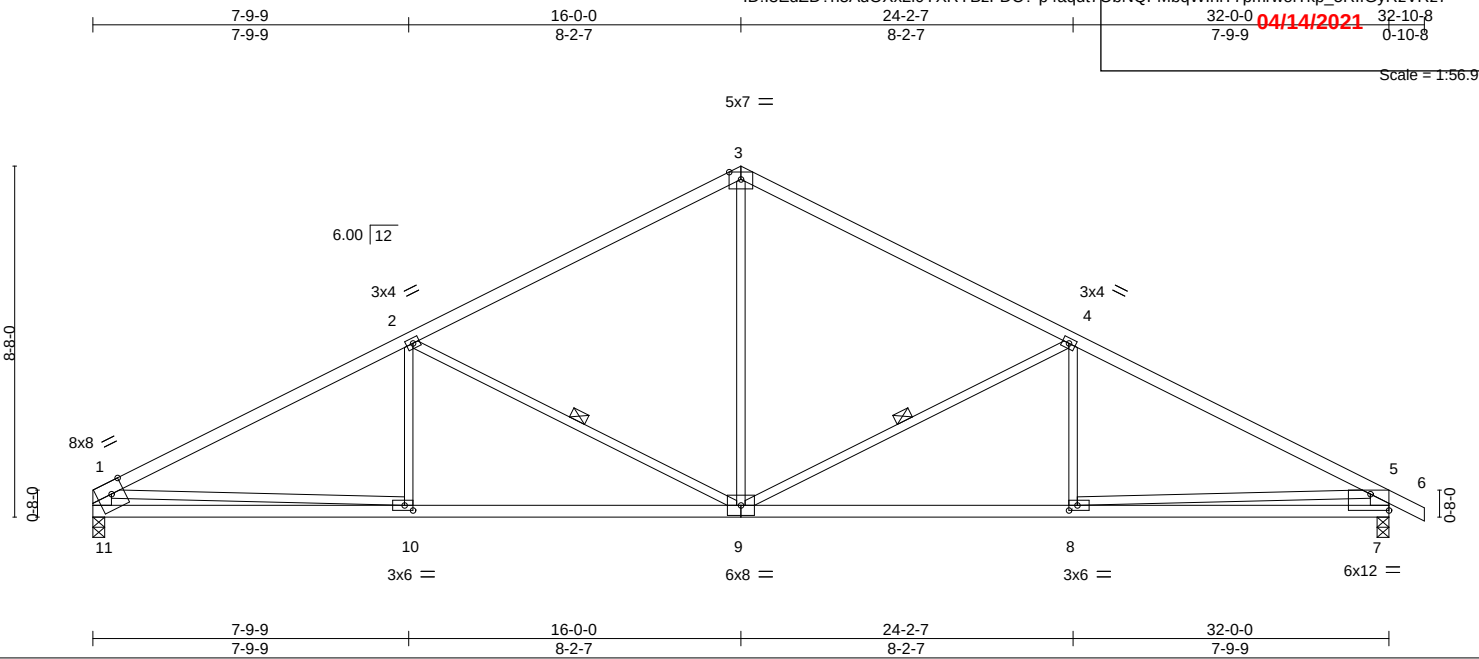

Plate Offsets (X,Y)-- [1:0-3-12,Edge], [7:Edge,0-4-13], [8:0-2-8,0-1-8], [10:0-2-8,0-1-8]

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)	-0.12	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.27	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	9-10	>999	240	Weight: 119 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,5-7: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-9, 2-9

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=-142(LC 9)
Max Uplift 11=-176(LC 8), 7=-202(LC 9)
Max Grav 11=1418(LC 1), 7=1498(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2379/292, 2-3=-1680/253, 3-4=-1678/254, 4-5=-2376/291, 1-11=-1341/216, 5-7=-1423/242
BOT CHORD 10-11=-224/609, 9-10=-295/2034, 8-9=-158/2021, 7-8=-187/808
WEBS 3-9=-47/848, 4-9=-771/269, 4-8=0/272, 2-9=-782/273, 2-10=0/265, 1-10=-72/1428, 5-8=-17/1216

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=176, 7=202.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	H1	Hip Girder	1	1	Job Reference (optional)

I45442773

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/24/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:04:40 2021 Page 1
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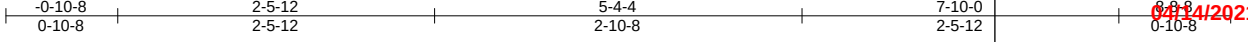

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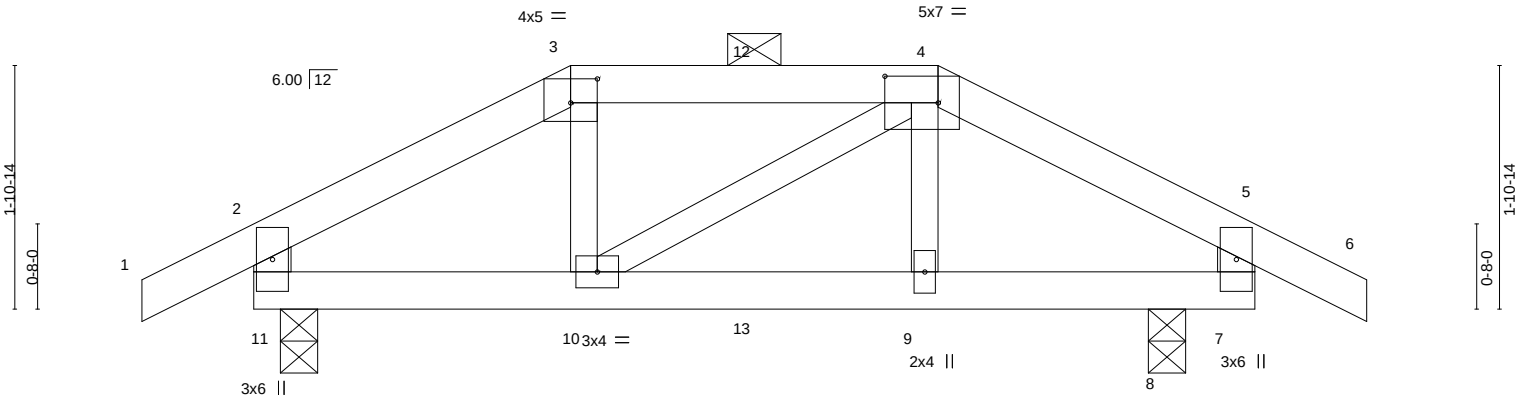

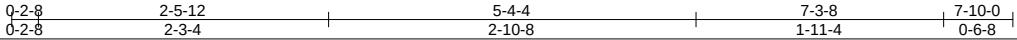

Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [4:0-5-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.02	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.03	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 26 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,5-7: 2x4 SPF No.2

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

REACTIONS. (size) 11=0-3-8, 8=0-3-8
Max Horz 11=-38(LC 6)
Max Uplift 11=-138(LC 8), 8=-168(LC 9)
Max Grav 11=383(LC 21), 8=445(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-380/166, 3-4=-296/157, 4-5=-309/155, 2-11=-335/142, 5-7=-302/134
BOT CHORD 10-11=-129/318

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=138, 8=168.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 111 lb down and 126 lb up at 2-5-12, and 62 lb down and 43 lb up at 3-11-0, and 103 lb down and 141 lb up at 5-4-4 on top chord, and 17 lb down and 5 lb up at 2-5-12, and 12 lb down at 3-11-0, and 37 lb down and 53 lb up at 5-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-11=-20

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	H1	Hip Girder	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:40 2021 Page 2
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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 10=-0(F) 9=-2(F) 13=-2(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	H2	Common	3	1	

Job Reference (optional) I45442774

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:15:52 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
3/24/2021

-0-10-8 / 0-10-8 | 3-11-0 / 3-11-0 | 7-10-0 / 3-11-0 | 8-8-8 / 0-10-8

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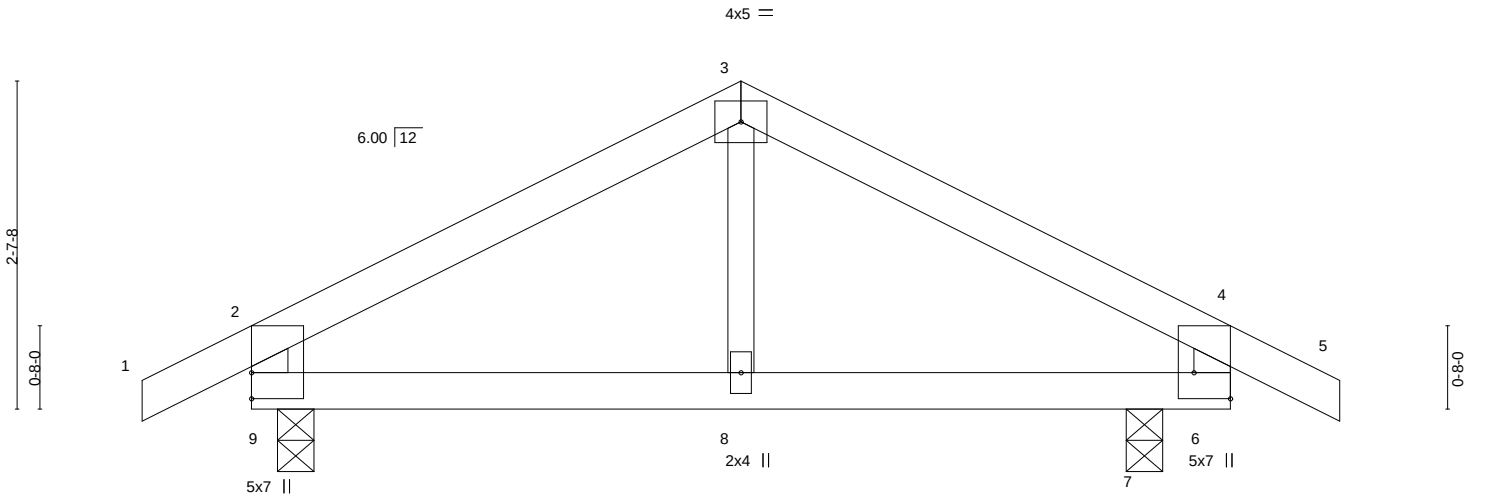

Plate Offsets (X,Y)-- [6:Edge,0-3-8]

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	0.28	Vert(LL)	-0.01	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.03	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	8-9	>999	240	Weight: 24 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-8: 2x3 SPF No.2

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

REACTIONS. (size) 9=0-3-8, 7=0-3-8
Max Horz 9=-47(LC 6)
Max Uplift 9=-64(LC 8), 7=-71(LC 9)
Max Grav 9=379(LC 1), 7=443(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-298/43, 3-4=-306/52, 2-9=-325/89, 4-6=-342/90

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J1	Diagonal Hip Girder	3	1	

Job Reference (optional) I45442775

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:40 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

-1-2-14 / 1-2-14 | 5-4-4 / 5-4-4

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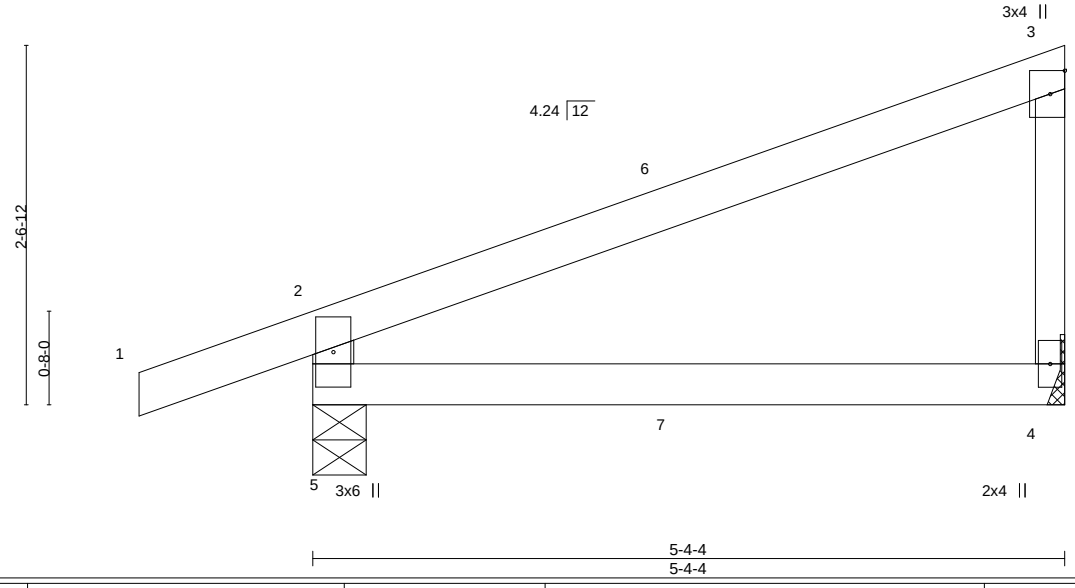

5-4-4 / 5-4-4

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-4-9, 4=Mechanical
Max Horz 5=108(LC 22)
Max Uplift 5=-100(LC 4), 4=-48(LC 8)
Max Grav 5=338(LC 1), 4=215(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-300/138

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=100.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 33 lb up at 2-7-6, and 68 lb down and 33 lb up at 2-7-6 on top chord, and 3 lb down and 2 lb up at 2-7-6, and 3 lb down and 2 lb up at 2-7-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J2	Jack-Open	10	1	

Job Reference (optional) I45442776

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:15 2021 Page 1

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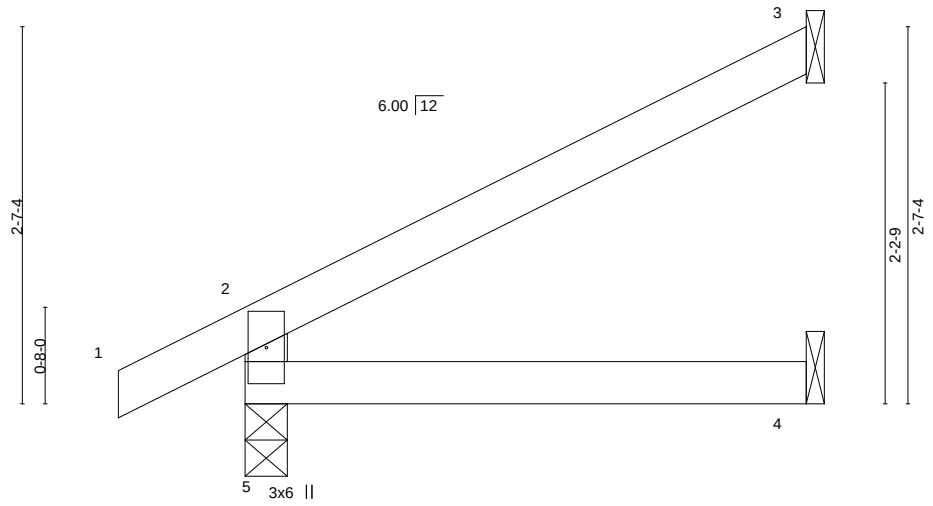
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

-0-10-8 0-10-8 | 3-10-8 3-10-8

Scale: 3/4"=1'



3-10-8 3-10-8

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	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

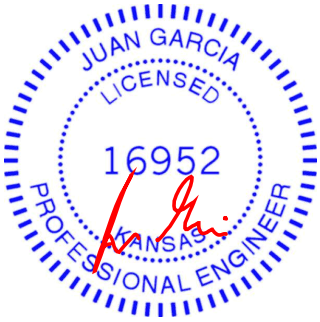
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=87(LC 8)
Max Uplift 5=-29(LC 8), 3=-64(LC 8)
Max Grav 5=246(LC 1), 3=112(LC 1), 4=69(LC 3)

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

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



March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J3	Jack-Open	6	1	

Job Reference (optional) J45442777

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:23 2021 Page 1
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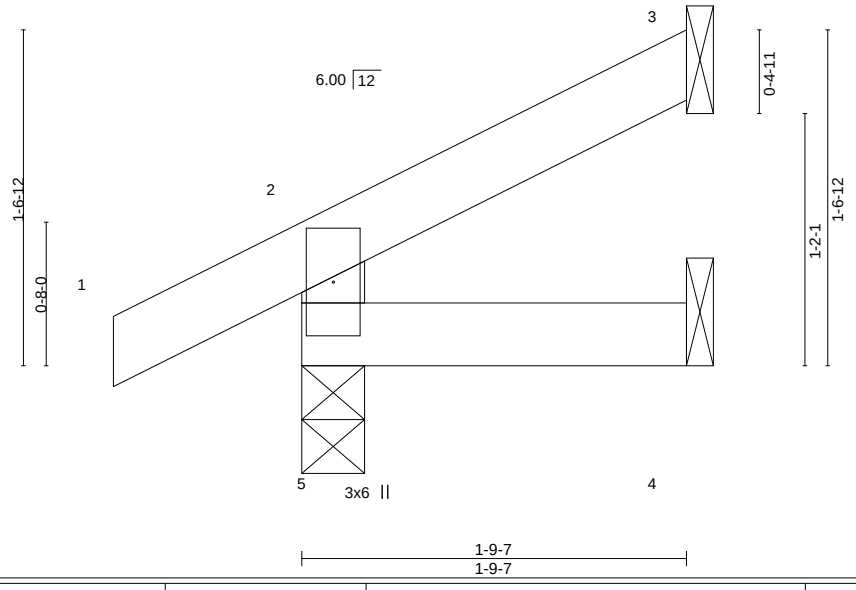

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 8)
Max Uplift 5=-26(LC 8), 3=-28(LC 8)
Max Grav 5=167(LC 1), 3=39(LC 1), 4=29(LC 3)

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

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J4	Diagonal Hip Girder	1	1	

Job Reference (optional) I45442778

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 08:41:24 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

-1-2-14 / 1-2-14 | 4-1-10 / 4-1-10 | 8-3-4 / 4-1-10

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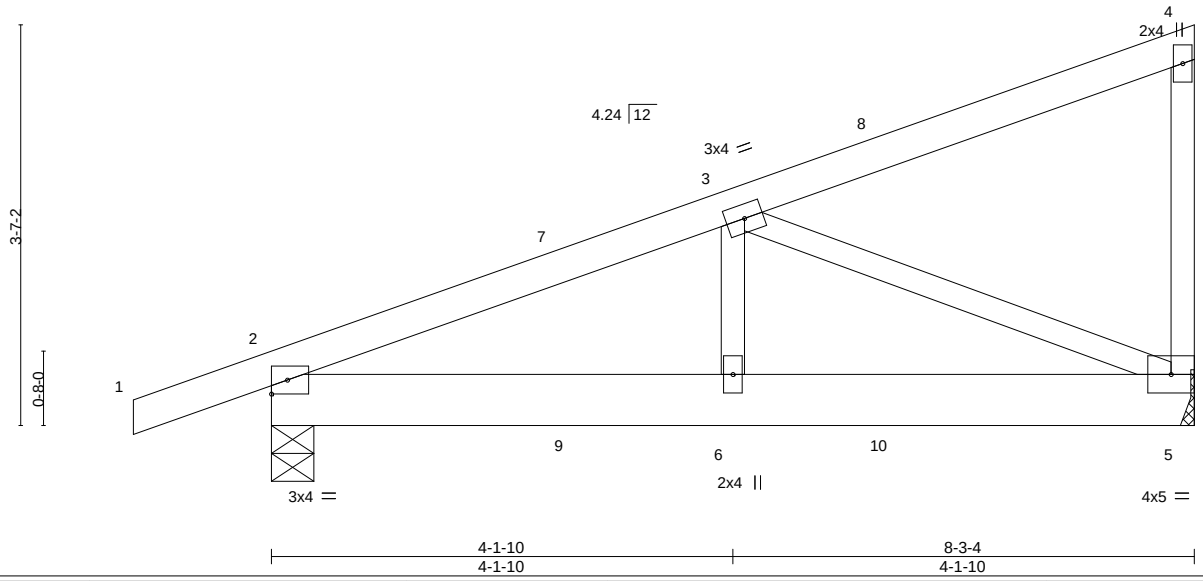

4-1-10 / 4-1-10 | 8-3-4 / 4-1-10

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.01	6	>999	240	Weight: 33 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 5=Mechanical, 2=0-4-9
Max Horz 2=146(LC 22)
Max Uplift 5=-102(LC 8), 2=-133(LC 4)
Max Grav 5=385(LC 1), 2=483(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-614/102
BOT CHORD 2-6=-141/494, 5-6=-141/494
WEBS 3-5=-538/166

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=102, 2=133.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 34 lb up at 2-8-7, 68 lb down and 34 lb up at 2-8-7, and 96 lb down and 72 lb up at 5-6-6, and 96 lb down and 72 lb up at 5-6-6 on top chord, and 3 lb down and 1 lb up at 2-8-7, 3 lb down and 1 lb up at 2-8-7, and 22 lb down at 5-6-6, and 22 lb down at 5-6-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 8=-24(F=-12, B=-12) 9=3(F=1, B=1) 10=-29(F=-14, B=-14)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J5	Jack-Open	16	1	

Job Reference (optional) I45442779

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:25 2021 Page 1

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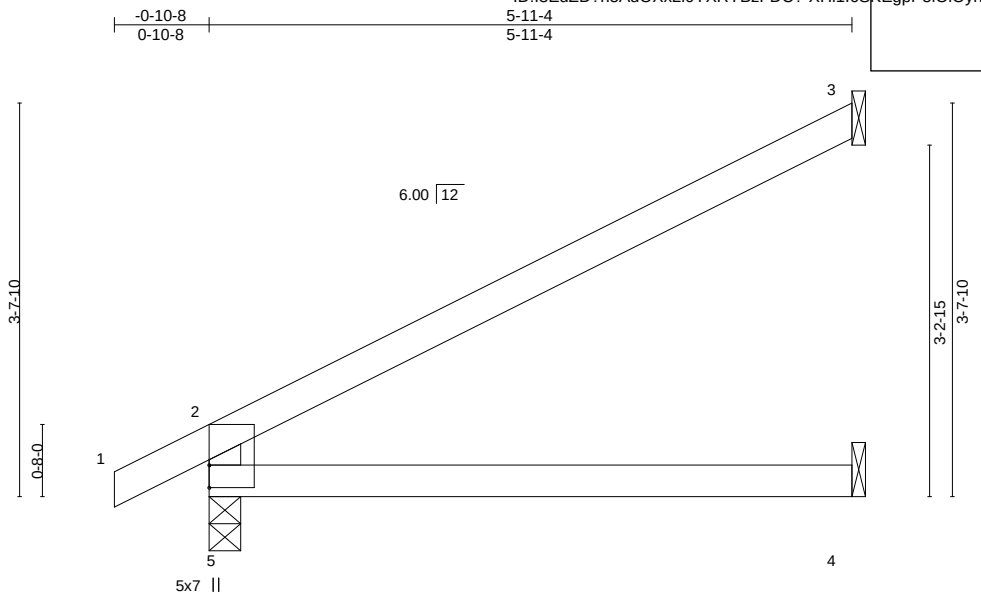
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	4-5	>612	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	4-5	>999	240	Weight: 16 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=90(LC 8)
Max Uplift 3=-58(LC 8)
Max Grav 5=336(LC 1), 3=179(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-293/47

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J6	Jack-Open	2	1	

Job Reference (optional) I45442780

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:12 2021 Page 1
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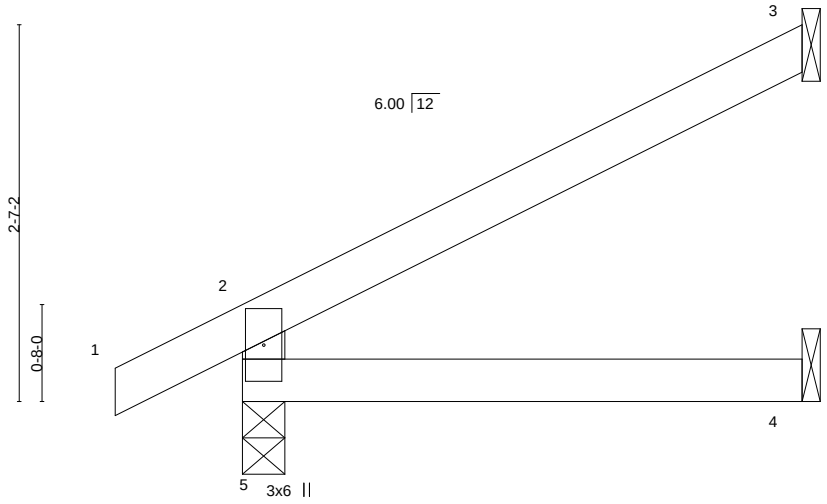
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

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

Scale: 3/4"=1'



3-10-3
3-10-3

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	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=86(LC 8)
Max Uplift 5=-29(LC 8), 3=-63(LC 8)
Max Grav 5=245(LC 1), 3=111(LC 1), 4=68(LC 3)

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

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J7	Jack-Open	4	1	

Job Reference (optional) I45442781

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:27 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

-0-10-8 0-10-8 | 1-10-3 1-10-3

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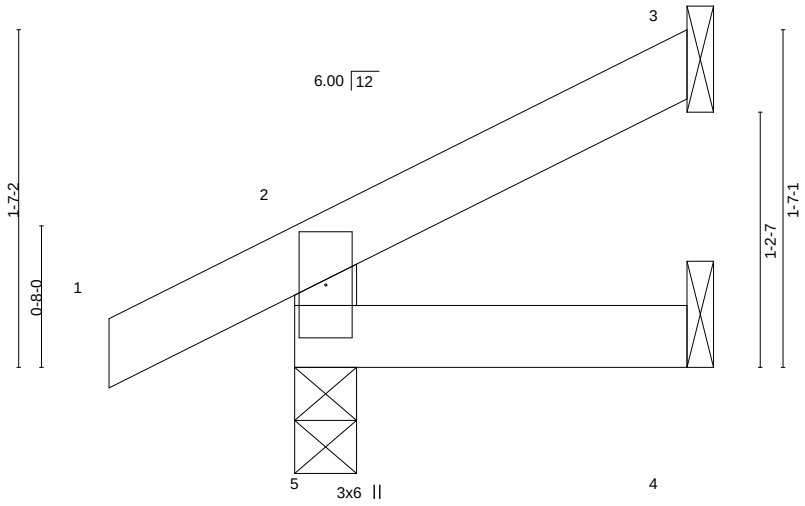

1-10-3 1-10-3

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	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=46(LC 8)
Max Uplift 5=-26(LC 8), 3=-29(LC 8)
Max Grav 5=169(LC 1), 3=42(LC 1), 4=30(LC 3)

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

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J8	Jack-Open	2	1	

Job Reference (optional) I45442782

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:47:12 2021 Page 1
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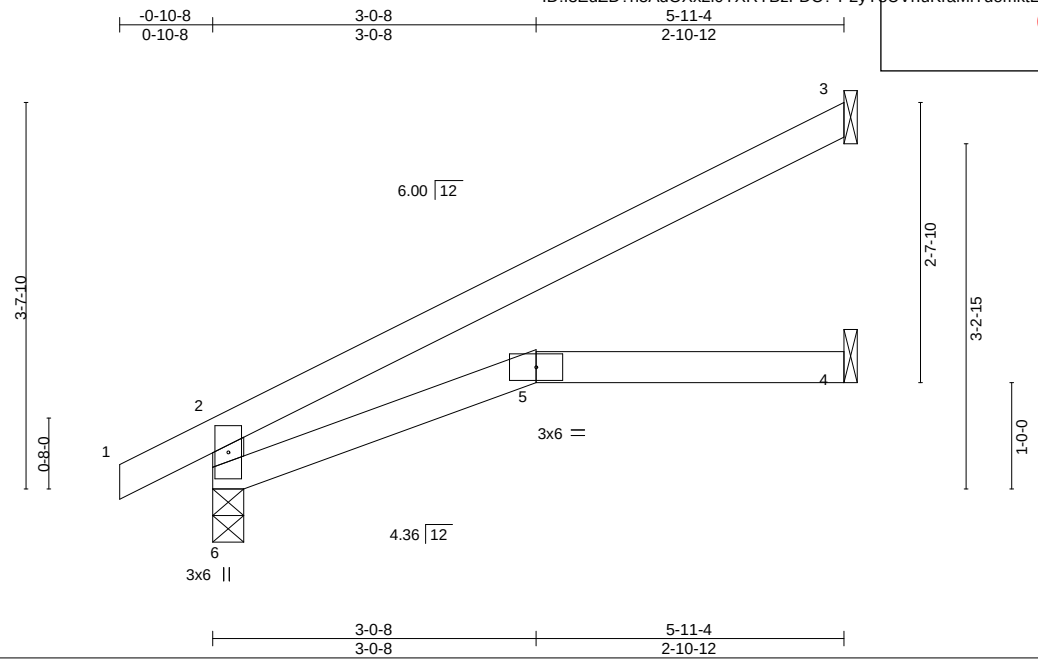
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.05	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.11	5	>598	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	5-6	>999	240	Weight: 16 lb	FT = 10%

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

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=89(LC 8)
Max Uplift 3=-59(LC 8)
Max Grav 6=336(LC 1), 3=180(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/46

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J9	Diagonal Hip Girder	1	1	Job Reference (optional)

J45442783

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:43:13 2021 Page 1
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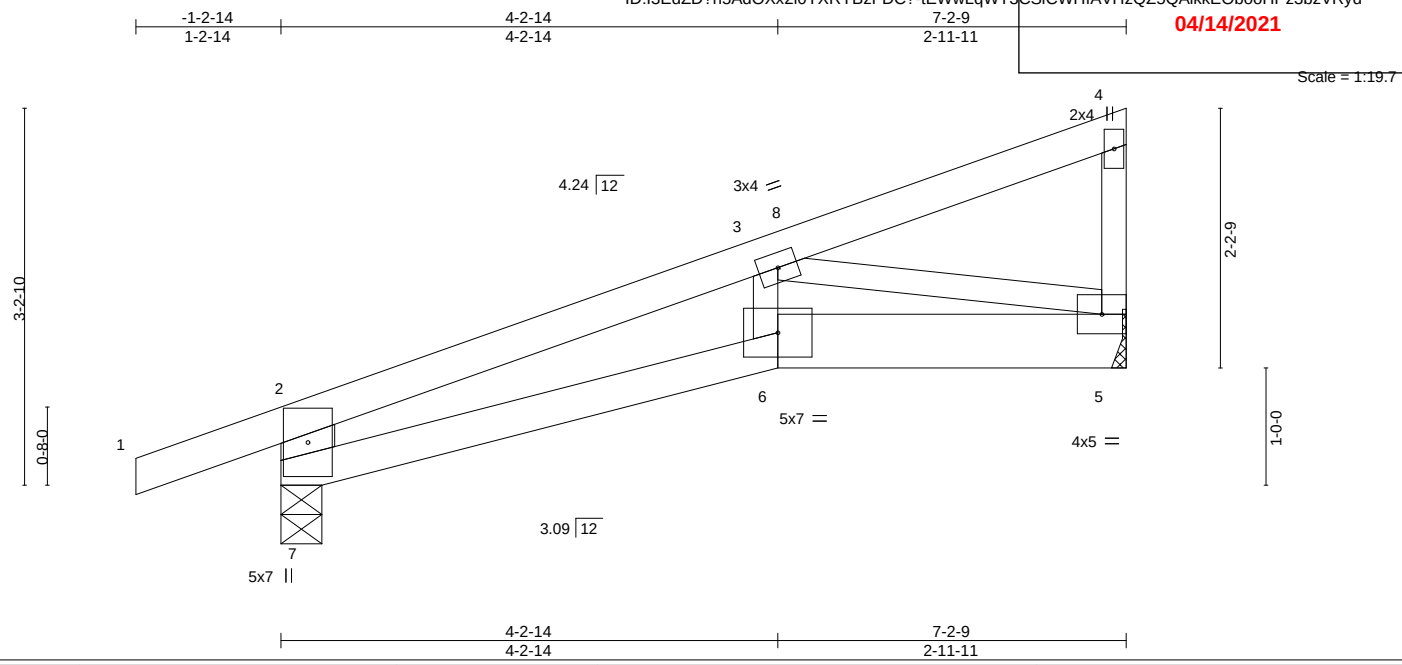

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.08	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	6	>999	240	Weight: 25 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
6-7: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-7: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-4-3, 5=Mechanical
Max Horz 7=120(LC 5)
Max Uplift 7=-129(LC 4), 5=-91(LC 8)
Max Grav 7=470(LC 1), 5=364(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-561/190, 2-3=-783/184
BOT CHORD 6-7=-205/690, 5-6=-200/705
WEBS 3-6=-27/329, 3-5=-700/218

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=129.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 38 lb up at 4-5-10, and 69 lb down and 38 lb up at 4-5-10 on top chord, and 56 lb down and 31 lb up at 4-2-14, and 56 lb down and 31 lb up at 4-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

March 31,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J9	Diagonal Hip Girder	1	1	Job Reference (optional)

J45442783

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6=-112(F=-56, B=-56)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J10	Diagonal Hip Girder	1	1	

Job Reference (optional) I45442784

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:03 2021 Page 1

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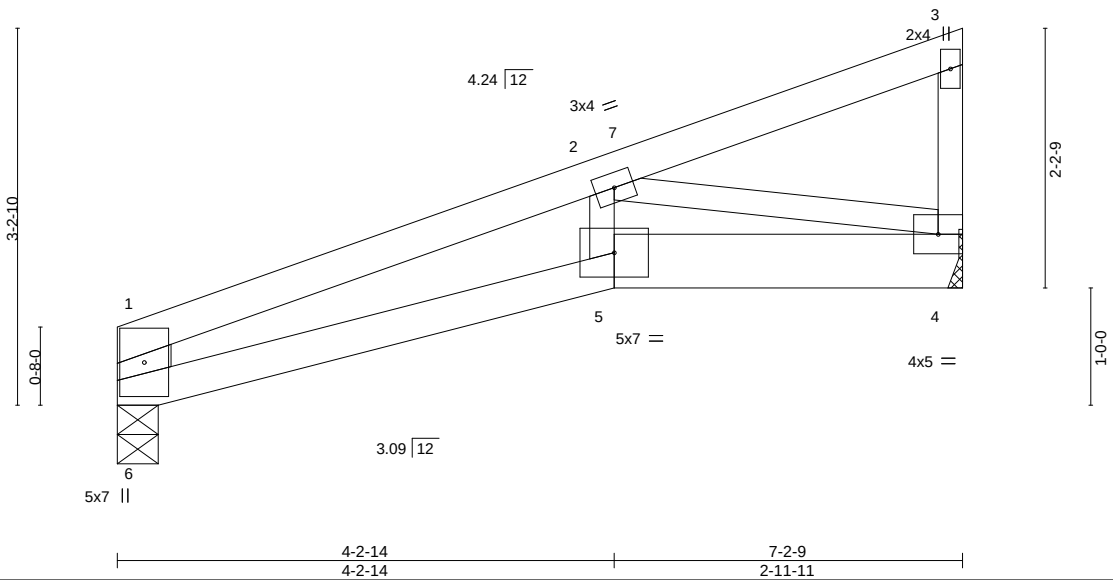
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF LEE'S SUMMIT, MISSOURI
04/14/2021

Scale = 1:19.7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.05	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.09	5	>882	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.03	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	5	>999	240	Weight: 24 lb	FT = 10%

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

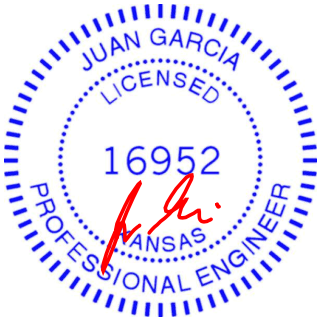
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-4-3, 4=Mechanical
Max Horz 6=109(LC 5)
Max Uplift 6=-62(LC 4), 4=-96(LC 8)
Max Grav 6=363(LC 1), 4=384(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-451/128, 1-2=-825/194
BOT CHORD 5-6=-217/735, 4-5=-212/753
WEBS 2-5=-27/318, 2-4=-749/230

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 37 lb up at 4-5-10, and 69 lb down and 38 lb up at 4-5-10 on top chord, and 71 lb down and 34 lb up at 4-2-14, and 56 lb down and 31 lb up at 4-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 5-6=-20, 4-5=-20
Concentrated Loads (lb)
Vert: 5=-127(F=-71, B=-56)



March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J11	Jack-Open	2	1	

Job Reference (optional) I45442785

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:40:40 2021 Page 1
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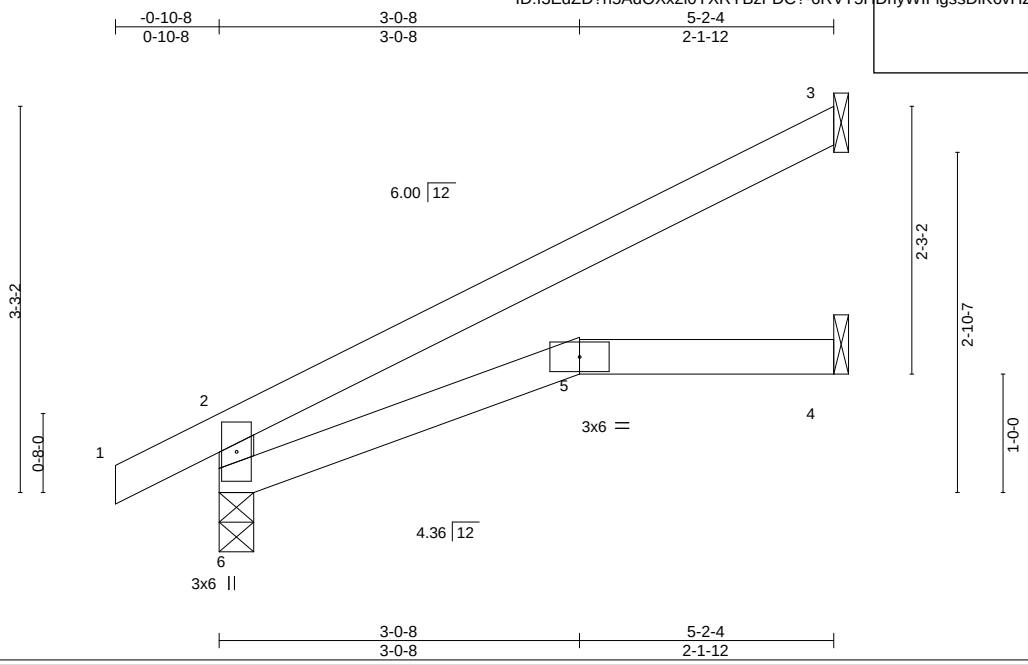
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.07	5-6	>907	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	5-6	>999	240	Weight: 14 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=113(LC 8)
Max Uplift 6=-32(LC 8), 3=-86(LC 8)
Max Grav 6=303(LC 1), 3=156(LC 1), 4=94(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-264/80

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J12	Jack-Open	3	1	

Job Reference (optional) I45442786

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:40 2021 Page 1

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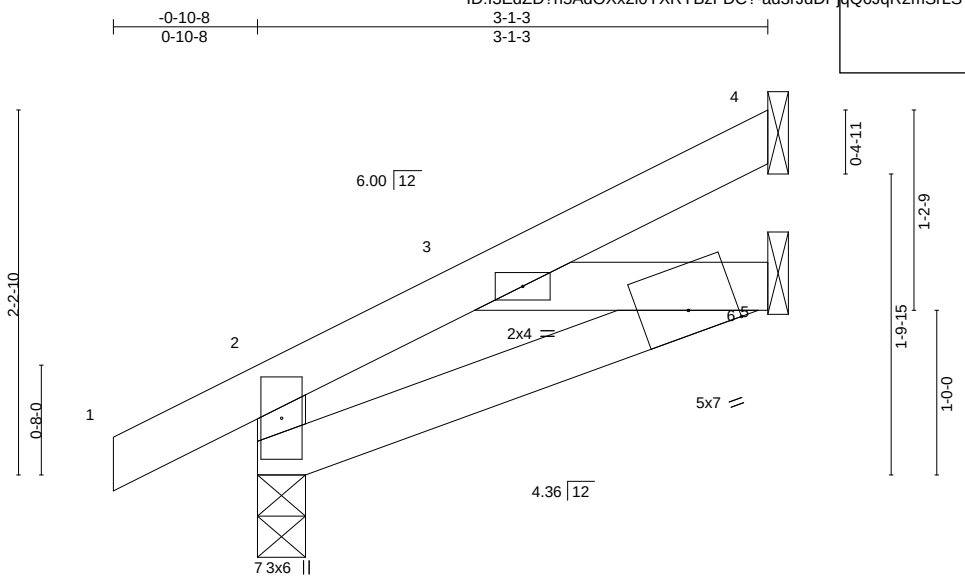
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021



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	3	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 6=Mechanical
Max Horz 7=70(LC 8)
Max Uplift 7=-20(LC 8), 4=-28(LC 8), 6=-2(LC 8)
Max Grav 7=224(LC 1), 4=59(LC 1), 6=112(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J13	Jack-Open	1	1	

Job Reference (optional) I45442787

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:07 2021 Page 1

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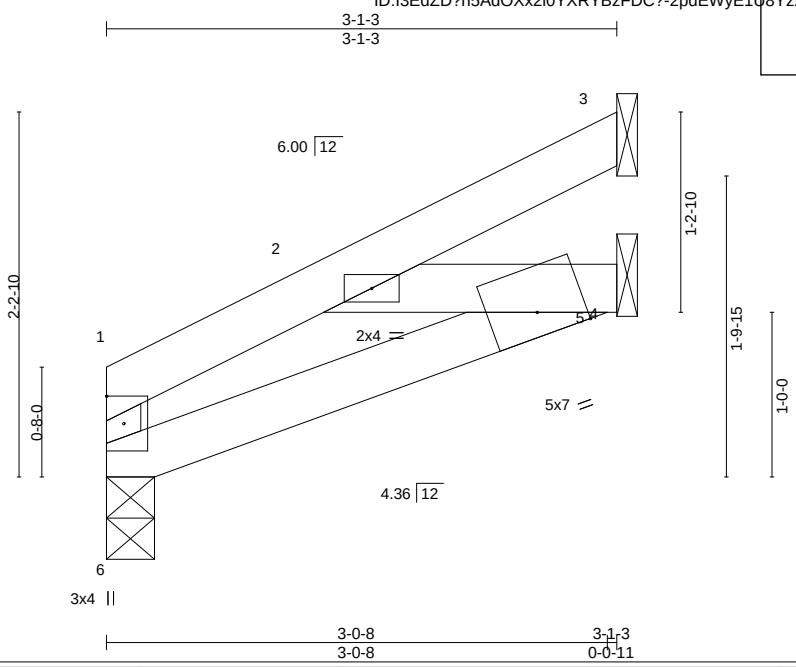
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021



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	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	2	>999	240	Weight: 10 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 5=Mechanical
Max Horz 6=53(LC 8)
Max Uplift 3=-28(LC 8), 5=-6(LC 8)
Max Grav 6=141(LC 1), 3=58(LC 1), 5=117(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J14	Diagonal Hip Girder	1	1	

Job Reference (optional) I45442788

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:08:10 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

-1-2-14 3-4-9
1-2-14 3-4-9

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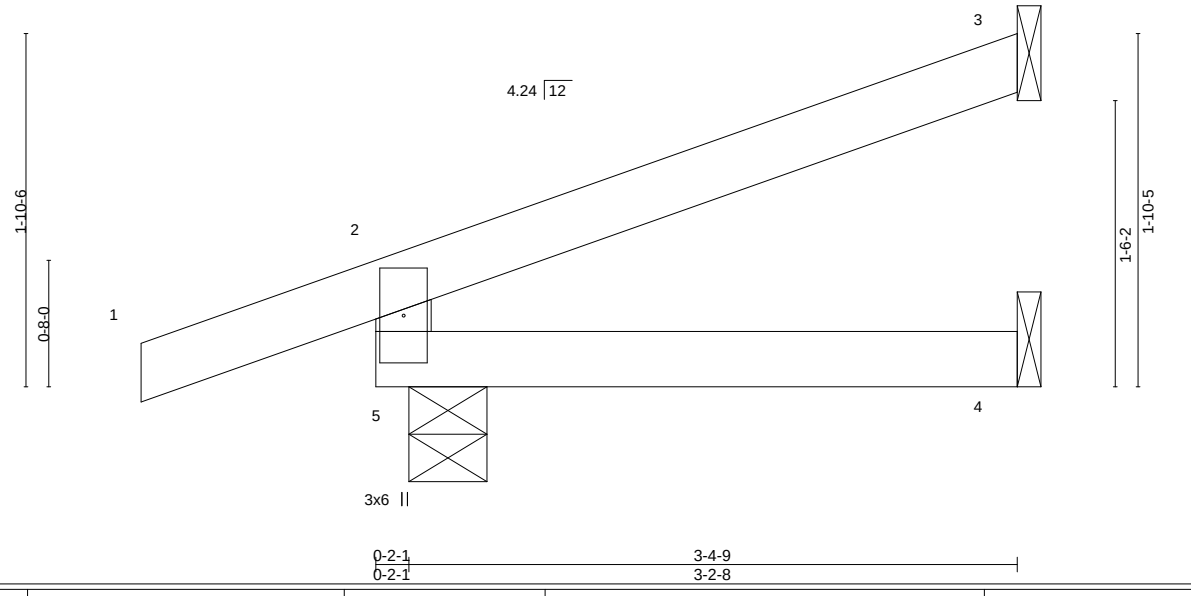

0-2-1 3-4-9
0-2-1 3-2-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	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	4-5	>999	240	Weight: 10 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-15, 3=Mechanical, 4=Mechanical
Max Horz 5=73(LC 12)
Max Uplift 5=-95(LC 6), 3=-51(LC 12), 4=-1(LC 19)
Max Grav 5=116(LC 1), 3=50(LC 1), 4=44(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 25 lb down and 9 lb up at -1-2-14, and 25 lb down and 9 lb up at -1-2-14 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=-38(F=-19, B=-19)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=34, B=34)-to-3=-59(F=5, B=5), 5=0(F=10, B=10)-to-4=-17(F=2, B=2)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J15	Diagonal Hip Girder	1	1	

Job Reference (optional) I45442789

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 09:14:09 2021 Page 1

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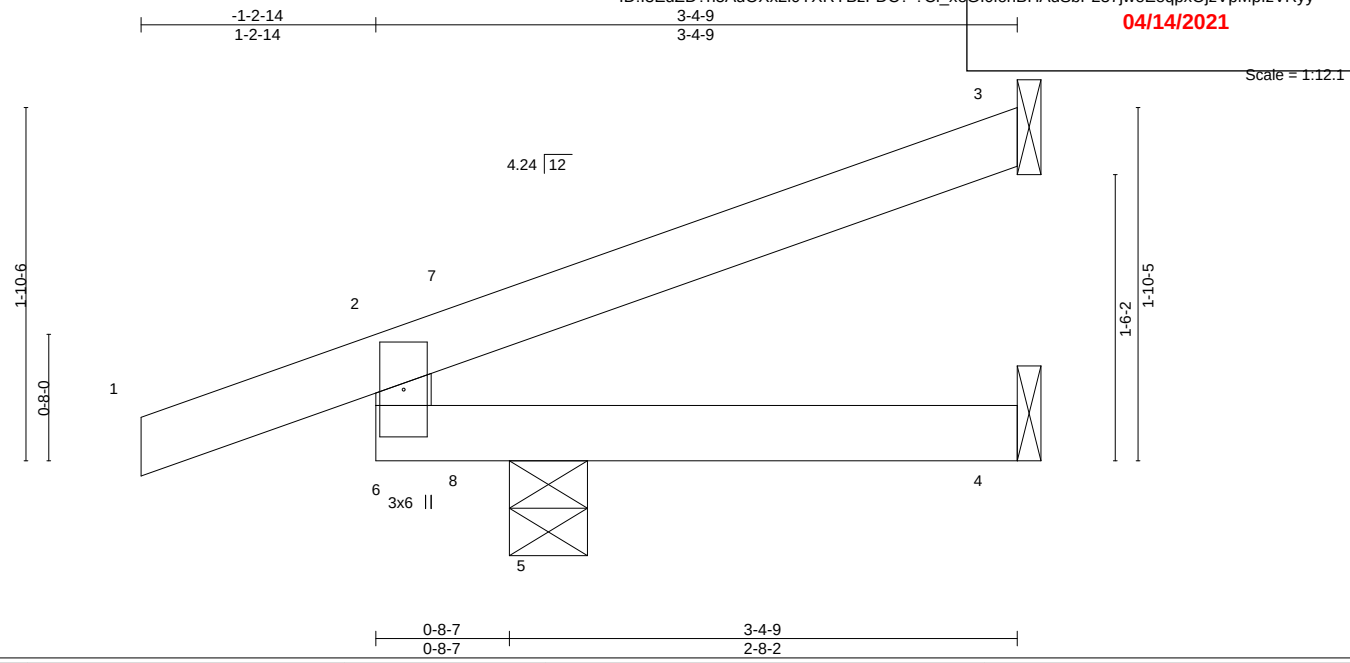
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF LEE'S SUMMIT, MISSOURI
04/14/2021



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)	0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-4-15
Max Horz 5=76(LC 12)
Max Uplift 3=-57(LC 12), 4=-22(LC 1), 5=-130(LC 6)
Max Grav 3=23(LC 1), 4=26(LC 4), 5=165(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) 3, 4 except (jt=lb) 5=130.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 31 lb down and 12 lb up at -1-2-14, and 31 lb down and 12 lb up at -1-2-14 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=-48(F=-24, B=-24)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-24(F=23, B=23)-to-7=-31(F=19, B=19), 7=0(F=35, B=35)-to-3=-49(F=10, B=10), 6=0(F=10, B=10)-to-8=-6(F=7, B=7), 8=0(F=10, B=10)-to-4=-14(F=3, B=3)

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J16	Jack-Open	3	1	

Job Reference (optional) I45442700

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:10 2021 Page 1

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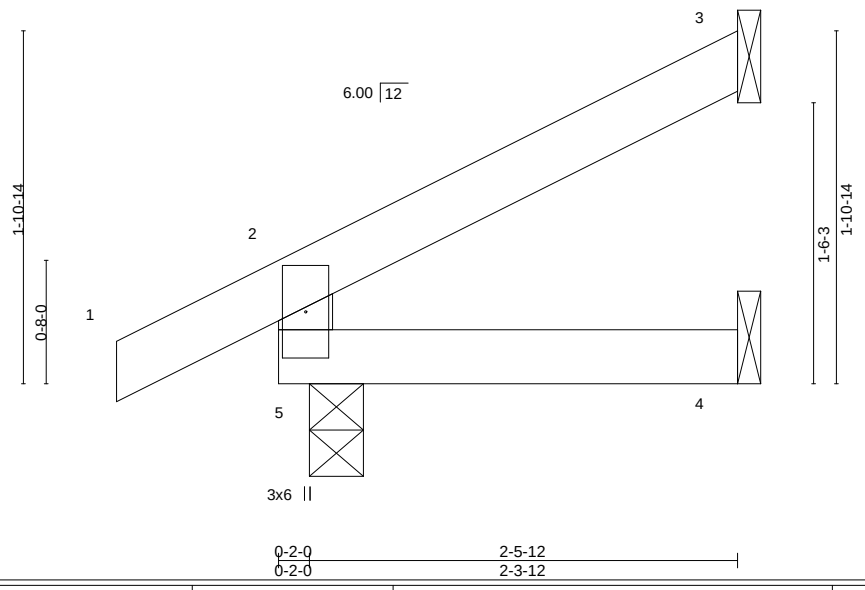
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

-0-10-8 2-5-12
0-10-8 2-5-12

Scale = 1:12.4



0-2-0 2-5-12
0-2-0 2-3-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=58(LC 8)
Max Uplift 5=-27(LC 8), 3=-40(LC 8)
Max Grav 5=190(LC 1), 3=64(LC 1), 4=42(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J17	Diagonal Hip Girder	3	1	Job Reference (optional)

I45442701

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:11 2021 Page 1
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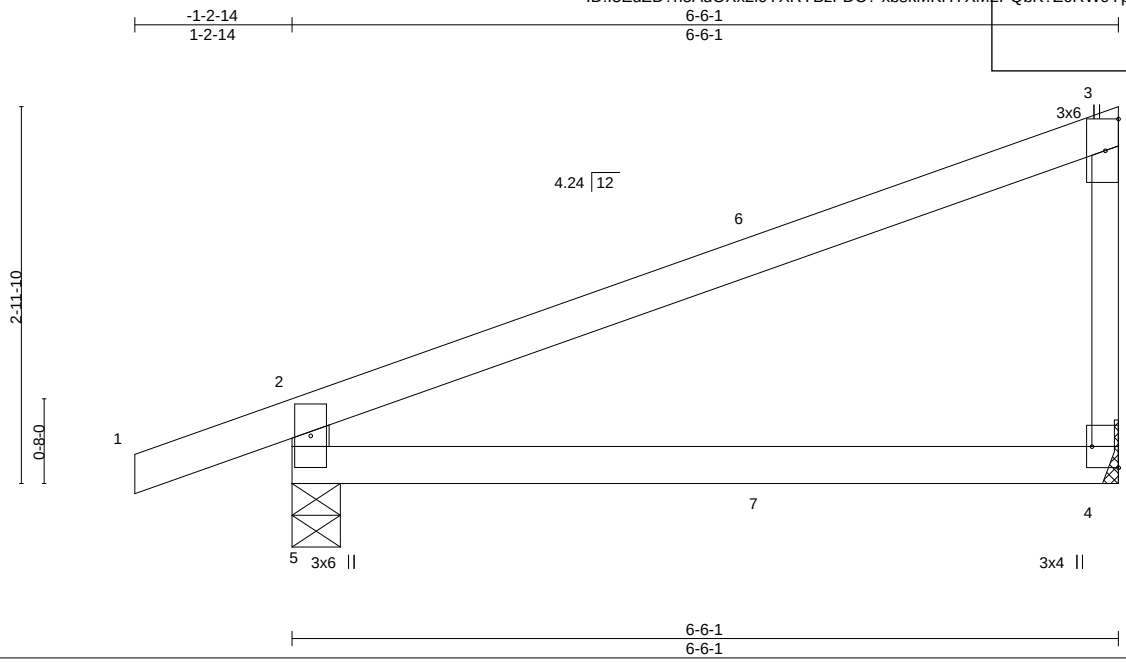

Plate Offsets (X,Y)-- [4:Edge,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.06	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.13	4-5	>578	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 19 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-4-9, 4=Mechanical
Max Horz 5=126(LC 22)
Max Uplift 5=-107(LC 4), 4=-61(LC 8)
Max Grav 5=390(LC 1), 4=273(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-342/154

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=107.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 76 lb down and 50 lb up at 3-9-3, and 76 lb down and 50 lb up at 3-9-3 on top chord, and 8 lb down at 3-9-3, and 8 lb down at 3-9-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J18	Jack-Open	11	1	Job Reference (optional)

I45442702

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:12 2021 Page 1
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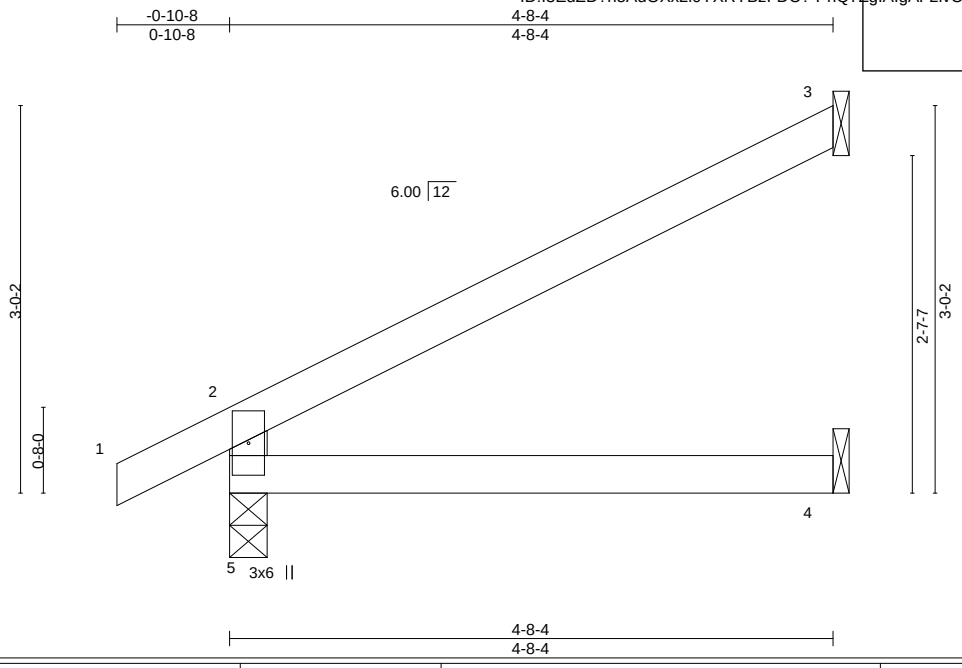

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 13 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=72(LC 8)
Max Uplift 3=-46(LC 8)
Max Grav 5=281(LC 1), 3=139(LC 1), 4=84(LC 3)

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

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J19	Jack-Open	5	1	

Job Reference (optional) J45442703

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

-0-10-8 2-7-3
0-10-8 2-7-3

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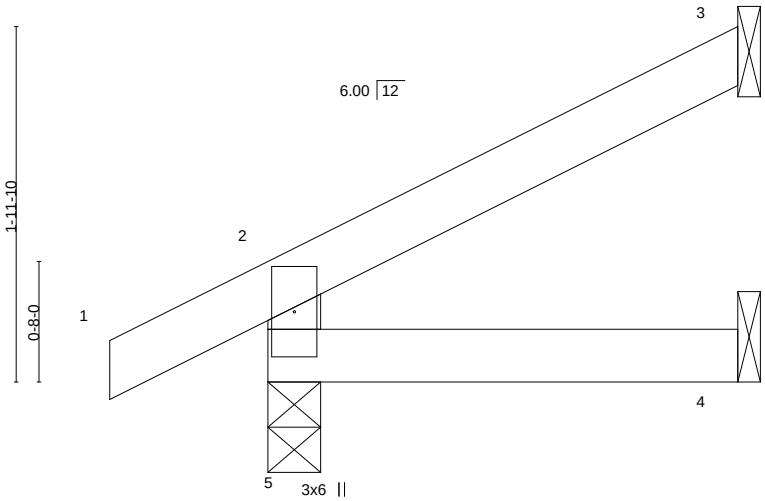

2-7-3
2-7-3

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	0.07	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=61(LC 8)
Max Uplift 5=-27(LC 8), 3=-42(LC 8)
Max Grav 5=194(LC 1), 3=68(LC 1), 4=44(LC 3)

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

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J20	Jack-Open	1	1	

Job Reference (optional) I45442704

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:16 2021 Page 1

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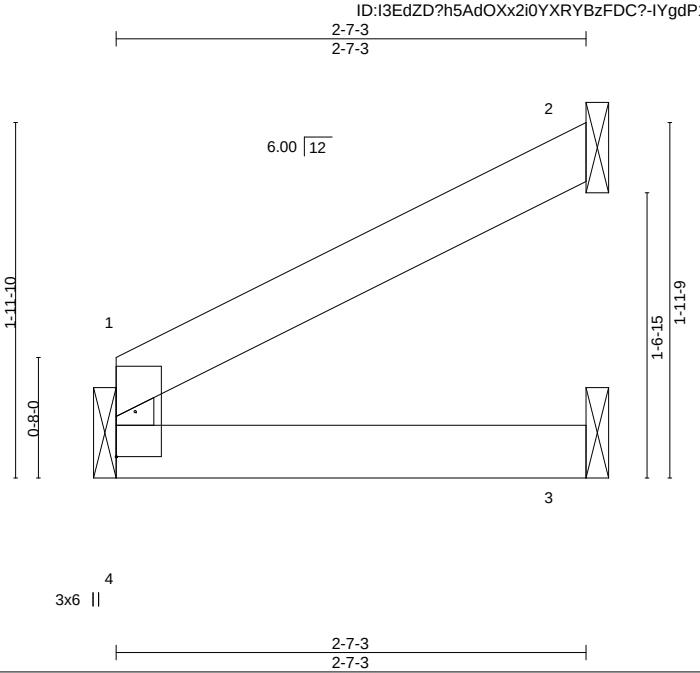
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Scale = 1:12.7



2-7-3
2-7-3

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	0.09	Vert(LL)	-0.00	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 7 lb	FT = 10%

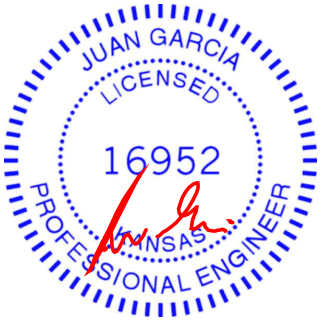
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=44(LC 8)
Max Uplift 2=-46(LC 8)
Max Grav 4=109(LC 1), 2=80(LC 1), 3=47(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) 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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J21	Jack-Closed Girder	1	1	

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:17 2021 Page 1

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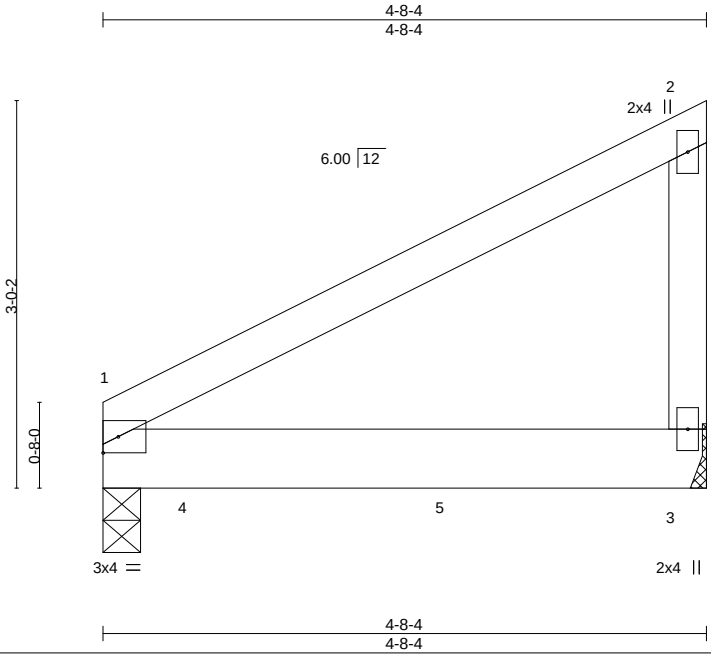
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

I45442795

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	0.47	Vert(LL)	-0.07	1-3	>810	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.12	1-3	>447	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-P		Wind(LL)	0.05	1-3	>999	240	Weight: 20 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-2-6 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=Mechanical
Max Horz 1=106(LC 5)
Max Uplift 1=-117(LC 8), 3=-180(LC 8)
Max Grav 1=890(LC 1), 3=1100(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) except (jt=lb) 1=117, 3=180.
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) 93 lb down and 16 lb up at 0-9-0, and 1501 lb down and 221 lb up at 2-9-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 4=-93(B) 5=-1501(B)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J22	Jack-Open	4	1	

Job Reference (optional) I45442706

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:18 2021 Page 1

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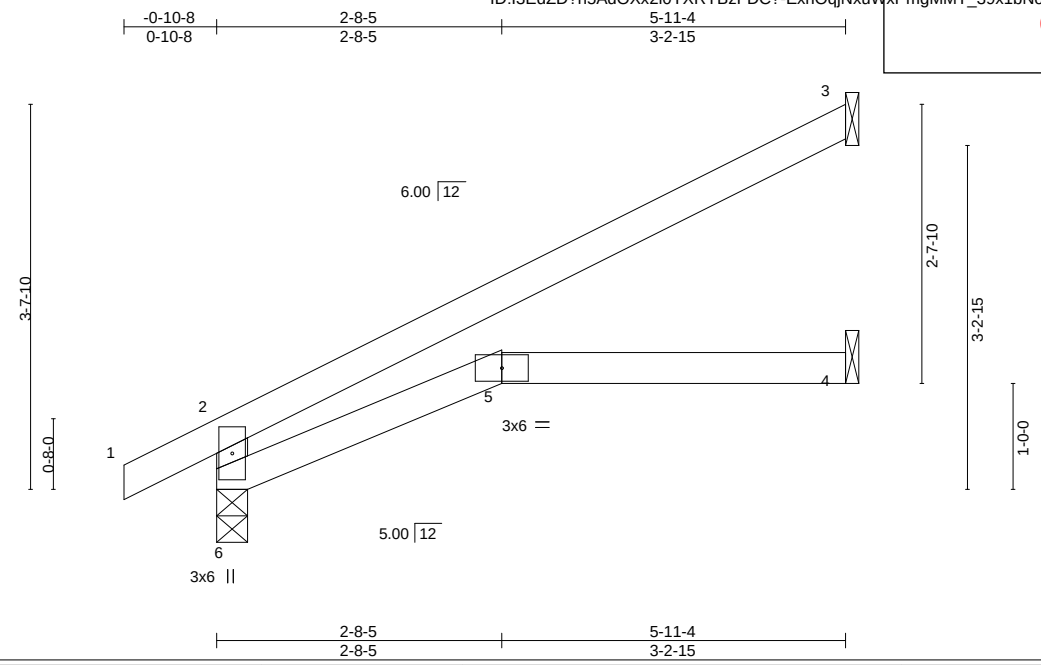
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LINN MISSOURI
04/14/2021



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.11	4-5	>600	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	5	>999	240	Weight: 16 lb	FT = 10%

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

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=89(LC 8)
Max Uplift 3=-59(LC 8)
Max Grav 6=336(LC 1), 3=180(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/46

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J23	Jack-Open	6	1	

Job Reference (optional) J45442707

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:19 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021

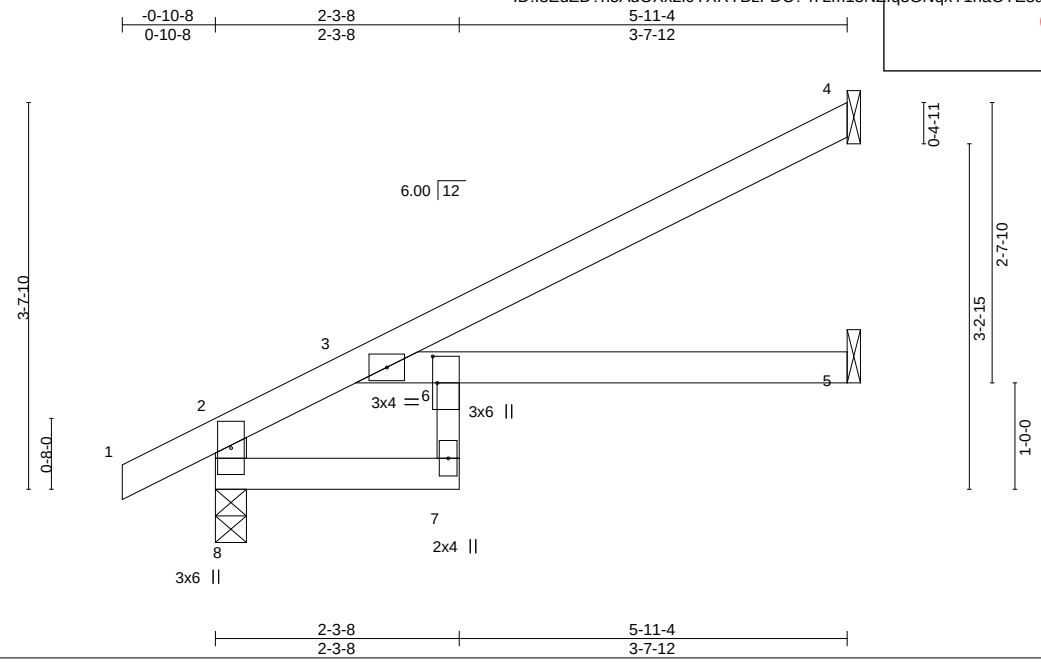

Plate Offsets (X,Y)-- [6:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.07	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.13	5-6	>512	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.06	5-6	>999	240	Weight: 18 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=90(LC 8)
Max Uplift 4=-47(LC 8)
Max Grav 8=348(LC 1), 4=164(LC 1), 5=113(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-345/16

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J24	Diagonal Hip Girder	1	1	

J45442708

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:12 2021 Page 1
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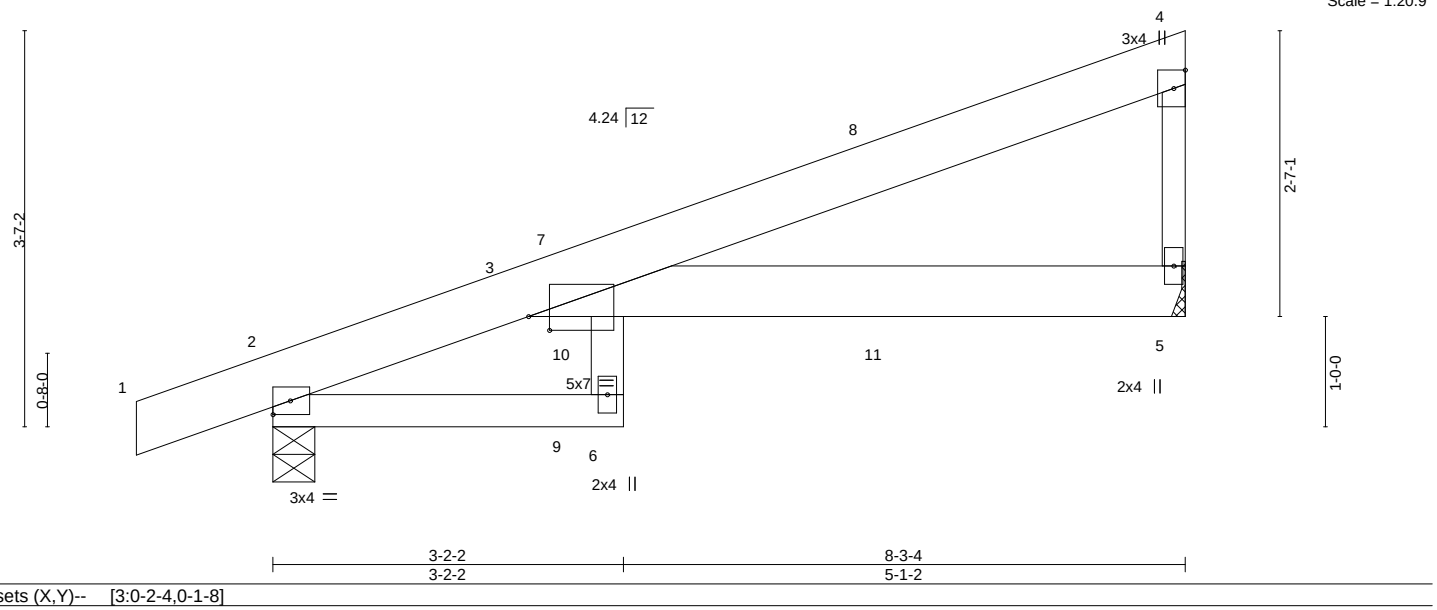

Plate Offsets (X,Y)-- [3:0-2-4,0-1-8]

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	0.55	Vert(LL)	-0.11	6	>860	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.21	6	>466	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	6	>802	240	Weight: 35 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
2-6: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-6: 2x4 SPF No.2

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

REACTIONS. (size) 5=Mechanical, 2=0-4-9
Max Horz 2=128(LC 5)
Max Uplift 5=-118(LC 8), 2=-134(LC 4)
Max Grav 5=402(LC 1), 2=500(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-256/102

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=118, 2=134.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 34 lb up at 2-8-7, 68 lb down and 34 lb up at 2-8-7, and 93 lb down and 55 lb up at 5-6-6, and 93 lb down and 55 lb up at 5-6-6 on top chord, and 3 lb down and 1 lb up at 2-8-7, 3 lb down and 1 lb up at 2-8-7, and 28 lb down and 31 lb up at 5-6-6, and 28 lb down and 31 lb up at 5-6-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 2-6=-20, 3-5=-20
Concentrated Loads (lb)
Vert: 8=-17(F=-8, B=-8) 9=3(F=1, B=1) 11=-56(F=-28, B=-28)

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	J25	Jack-Open	2	1	

Job Reference (optional) I45442709

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:22 2021 Page 1
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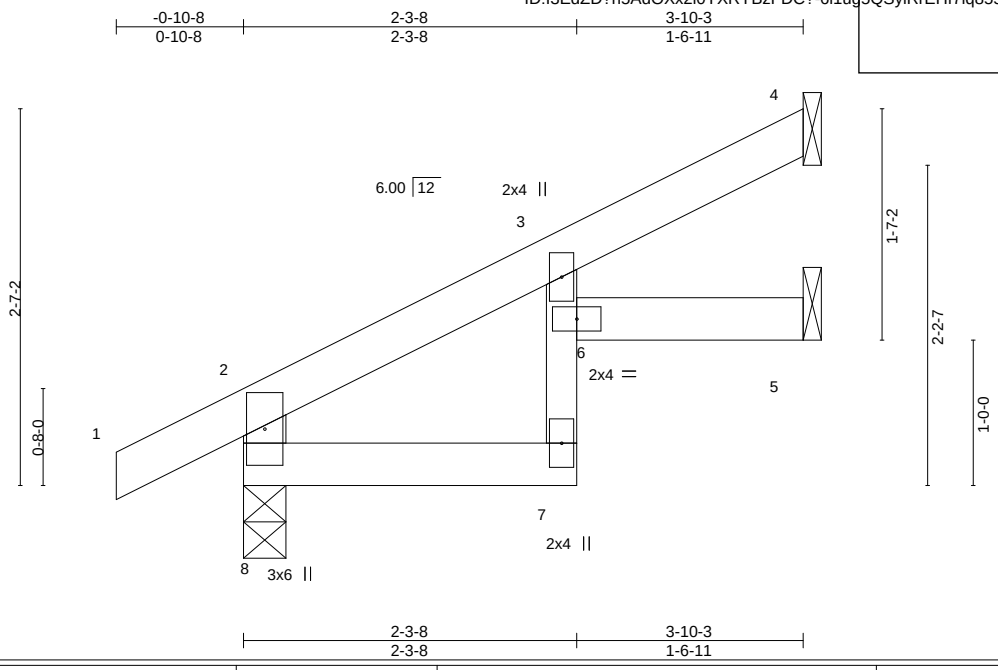
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
SUMMIT, MISSOURI
04/14/2021



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)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	7	>999	240	Weight: 12 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=86(LC 8)
Max Uplift 8=-29(LC 8), 4=-44(LC 8), 5=-11(LC 8)
Max Grav 8=245(LC 1), 4=98(LC 1), 5=58(LC 3)

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

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	LAY1B	GABLE	1	1	

Job Reference (optional) I45442800

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:03:41 2021 Page 1
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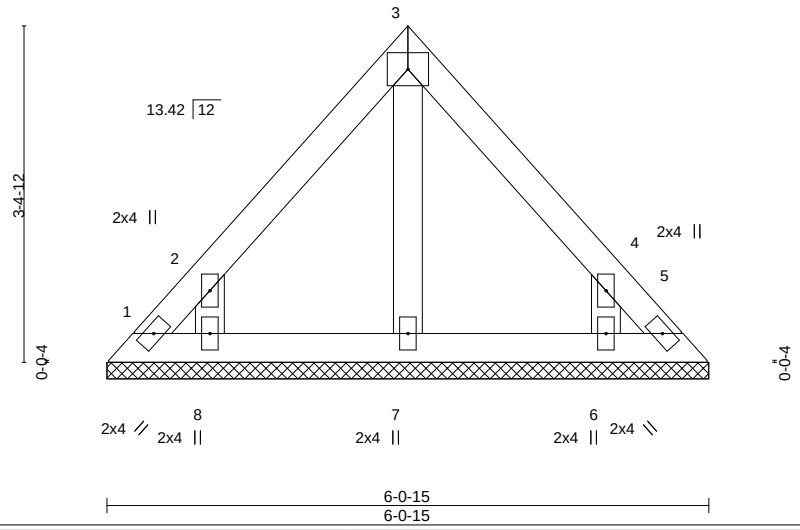
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

3-0-8
3-0-8
6-0-15
3-0-8

4x5 =

Scale = 1:23.3



6-0-15
6-0-15

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

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

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

REACTIONS. All bearings 6-0-15.
(lb) - Max Horz 1=-82(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-143(LC 8), 6=-143(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-
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, 5 except (jt=lb) 8=143, 6=143.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	LAY3	GABLE	2	1	

Job Reference (optional) I45442801

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:53:31 2021 Page 1
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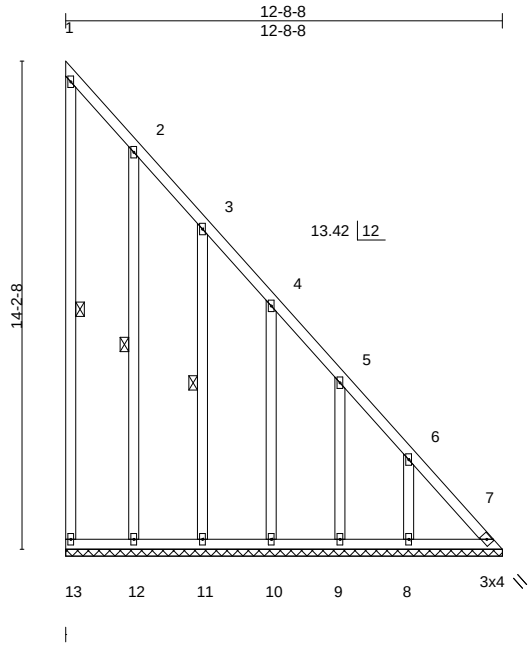
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021



Scale = 1:67.0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 91 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 1-13, 2-12, 3-11

REACTIONS. All bearings 12-8-8.
(lb) - Max Horz 13=-558(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 13 except 7=-166(LC 7), 12=-137(LC 9), 11=-137(LC 9), 10=-138(LC 9), 9=-125(LC 9), 8=-174(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 13, 12, 11, 10, 9 except 7=557(LC 9), 8=267(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-339/141, 4-5=-477/195, 5-6=-607/242, 6-7=-772/313
BOT CHORD 12-13=-214/558, 11-12=-214/558, 10-11=-214/558, 9-10=-214/558, 8-9=-214/558, 7-8=-214/558

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 7=166, 12=137, 11=137, 10=138, 9=125, 8=174.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

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16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	LAY4	GABLE	2	1	

Job Reference (optional) I45442802

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1
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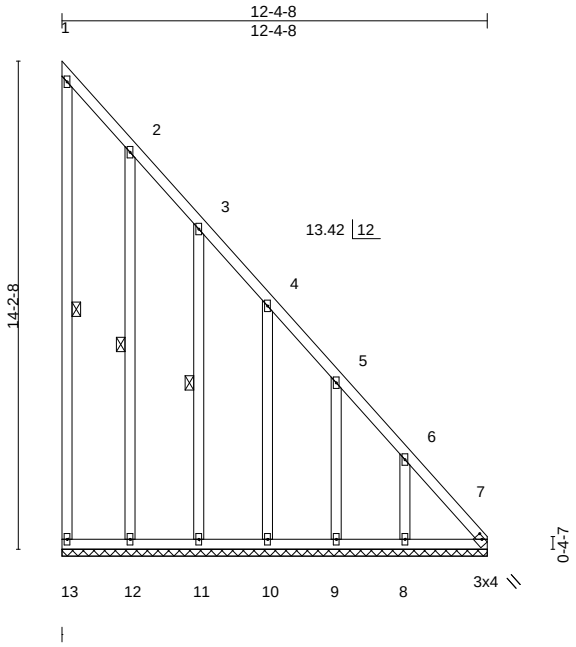
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021



Scale = 1:67.0

Plate Offsets (X,Y)-- [7:0-2-0,0-0-13]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 90 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 1-13, 2-12, 3-11

REACTIONS. All bearings 12-4-8.
(lb) - Max Horz 13=-558(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 13 except 7=-184(LC 7), 12=-137(LC 9), 11=-137(LC 9), 10=-137(LC 9), 9=-126(LC 9), 8=-209(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 13, 12, 11, 10, 9 except 7=597(LC 9), 8=267(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-339/141, 4-5=-477/195, 5-6=-608/243, 6-7=-800/324
BOT CHORD 12-13=-214/558, 11-12=-214/558, 10-11=-214/558, 9-10=-214/558, 8-9=-214/558, 7-8=-214/558

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 7=184, 12=137, 11=137, 10=137, 9=126, 8=209.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	LAY5	GABLE	1	1	

Job Reference (optional) I45442803

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:33 2021 Page 1
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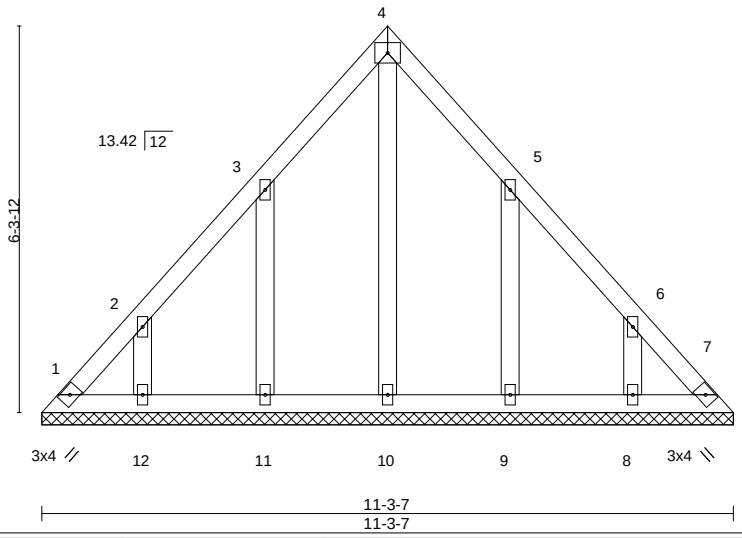
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021



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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 49 lb	FT = 10%

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

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

REACTIONS. All bearings 11-3-7.
(lb) - Max Horz 1=-160(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-145(LC 8), 12=-124(LC 8), 9=-144(LC 9), 8=-125(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=145, 12=124, 9=144, 8=125.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	LAY6	GABLE	1	1	

Job Reference (optional)

RELEASE FOR CONSTRUCTION
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

I45442804

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:34 2021 Page 1
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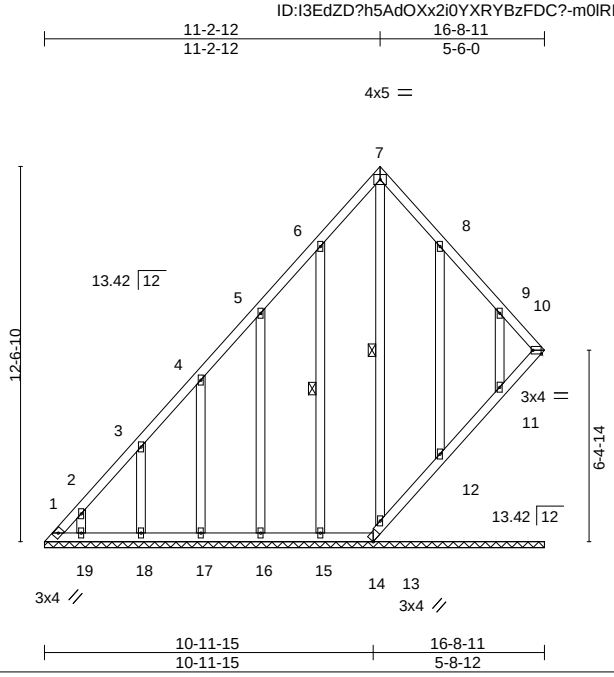

Plate Offsets (X,Y)-- [10:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 105 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-13, 6-15

REACTIONS. All bearings 16-8-11.
(lb) - Max Horz 1=360(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-184(LC 6), 10=-139(LC 7), 14=-155(LC 9), 15=-133(LC 8), 16=-140(LC 8), 17=-134(LC 8), 18=-140(LC 8), 19=-114(LC 8), 12=-134(LC 9), 11=-129(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 10, 14, 13, 15, 16, 17, 18, 19, 12, 11 except 1=406(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-546/268, 2-3=-442/230, 3-4=-301/175

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 1, 139 lb uplift at joint 10, 155 lb uplift at joint 14, 133 lb uplift at joint 15, 140 lb uplift at joint 16, 134 lb uplift at joint 17, 140 lb uplift at joint 18, 114 lb uplift at joint 19, 134 lb uplift at joint 12 and 129 lb uplift at joint 11.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 13, 12, 11.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	LAY7	GABLE	1	1	

Job Reference (optional) I45442805

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

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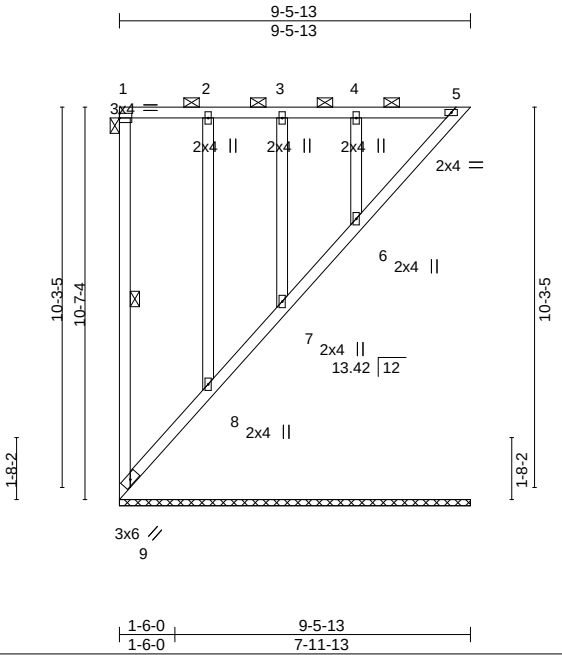

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 55 lb	FT = 10%

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

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 1-9

REACTIONS. All bearings 9-5-13.
(lb) - Max Horz 9=-286(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 8, 7, 6 except 9=-147(LC 6), 5=-141(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 9, 5, 8, 7 except 6=259(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 8-9=-213/290

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 9 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) 8, 7, 6 except (jt=lb) 9=147, 5=141.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 5, 8, 7, 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	LAY8	GABLE	1	1	

Job Reference (optional) I45442806

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:43 2021 Page 1
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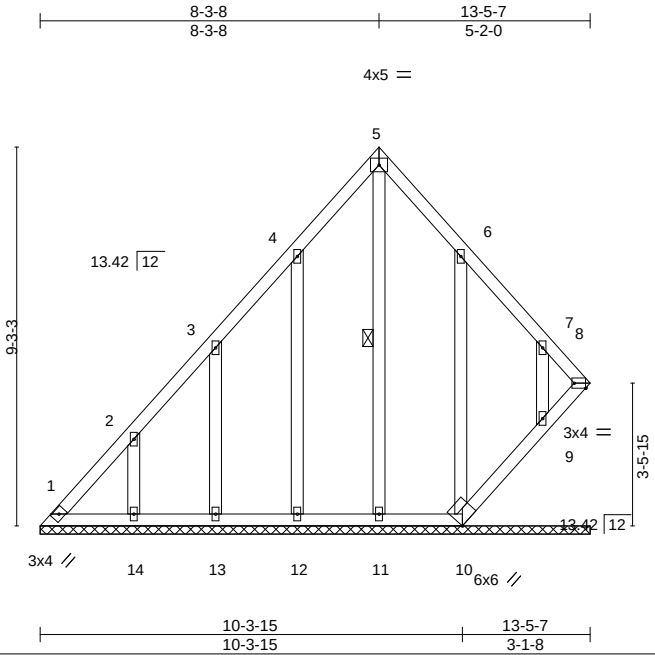


Plate Offsets (X,Y)-- [8:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 74 lb	FT = 10%

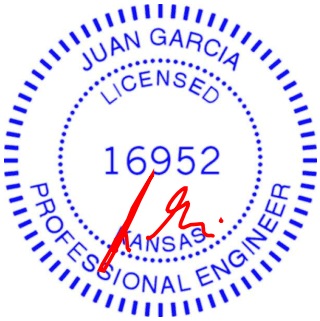
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-11

REACTIONS. All bearings 13-5-7.
(lb) - Max Horz 1=235(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-137(LC 7), 12=-140(LC 8), 13=-133(LC 8), 14=-151(LC 8), 10=-277(LC 9), 9=-116(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 12, 13, 14, 9 except 8=254(LC 9), 10=260(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-342/190

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=137, 12=140, 13=133, 14=151, 10=277, 9=116.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 9.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V6	Valley	1	1	

Job Reference (optional) I45442807

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 08:14:40 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
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-0-10-8 0-10-8 | 3-11-0 3-11-0 | 7-10-0 3-11-0 | 8-8-8 0-10-8

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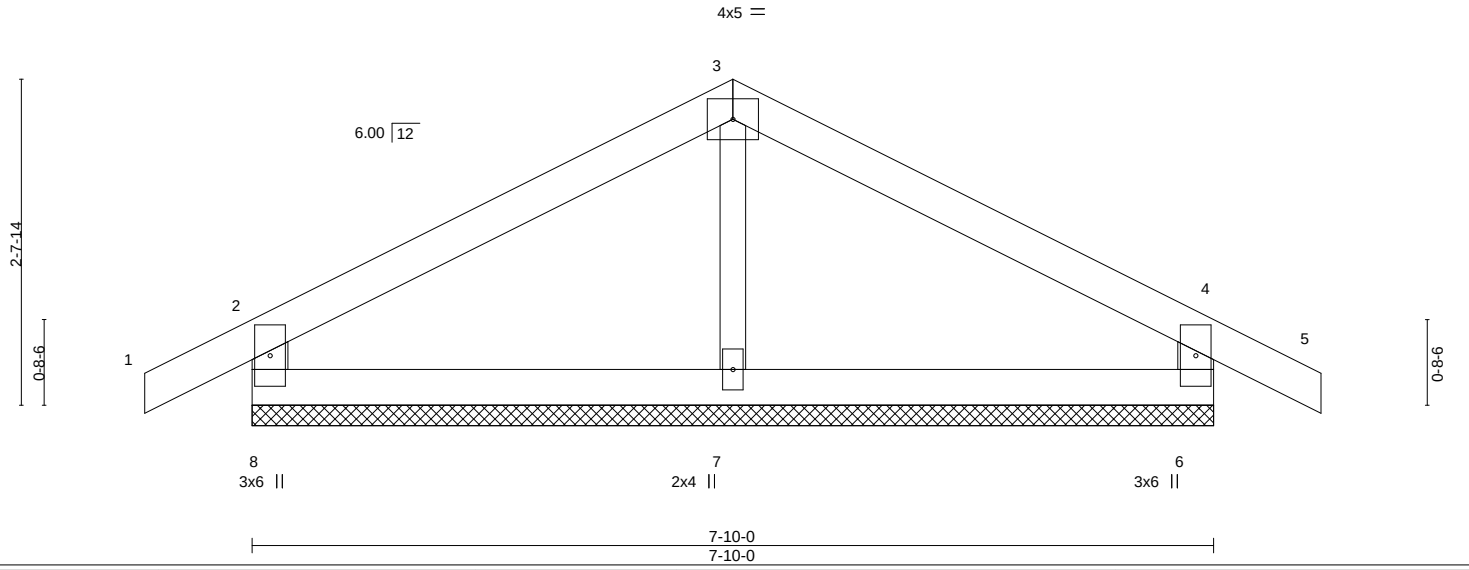

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	0.01	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 24 lb	FT = 10%

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

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

REACTIONS. (size) 8=7-10-0, 6=7-10-0, 7=7-10-0
Max Horz 8=-48(LC 6)
Max Uplift 8=-88(LC 8), 6=-90(LC 9)
Max Grav 8=300(LC 1), 6=300(LC 1), 7=223(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-269/111, 4-6=-269/112

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) 8, 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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V7	Valley	1	1	

Job Reference (optional) I45442808

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:47 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

3-3-12 6-7-8
3-3-12 3-3-12

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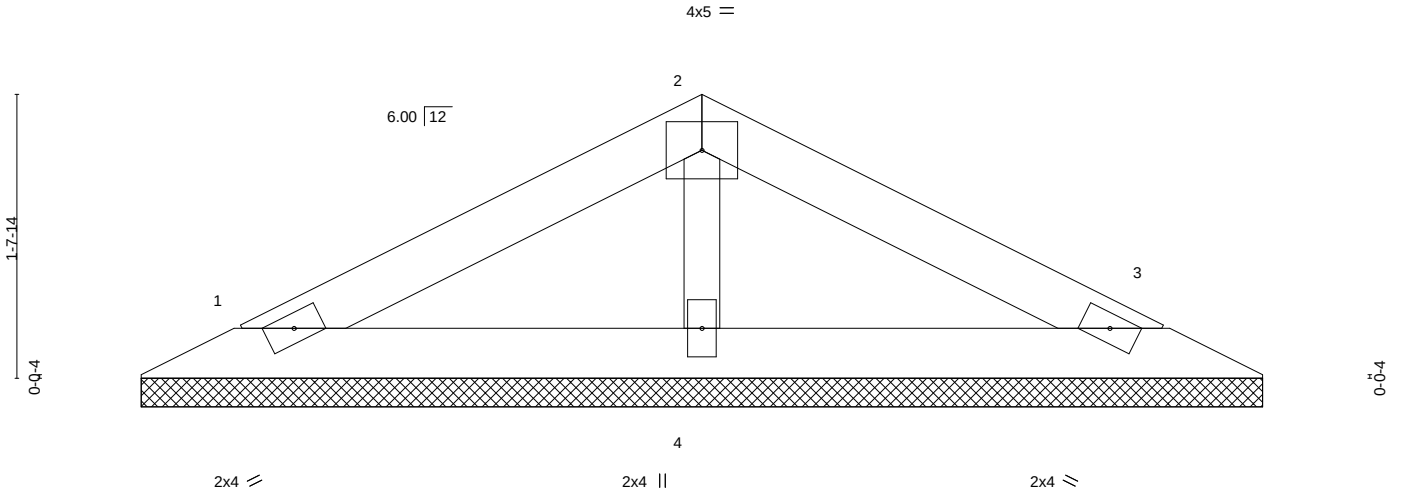

0-0-8 6-7-8
0-0-8 6-7-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	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: 15 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=6-6-8, 3=6-6-8, 4=6-6-8
Max Horz 1=-24(LC 9)
Max Uplift 1=-29(LC 8), 3=-33(LC 9), 4=-3(LC 8)
Max Grav 1=126(LC 1), 3=126(LC 1), 4=231(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, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V8	Valley	1	1	

Job Reference (optional) I45442809

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:48 2021 Page 1
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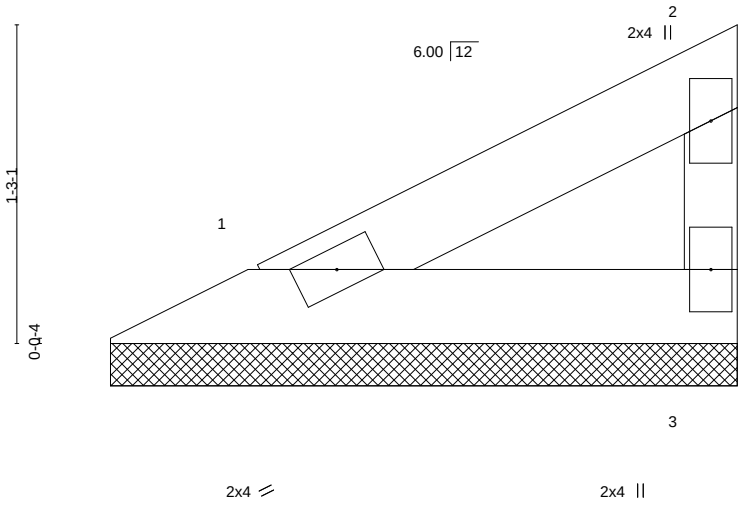
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

2-6-2
2-6-2

Scale = 1:9.1



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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 6 lb	FT = 10%

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

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

REACTIONS. (size) 1=2-5-10, 3=2-5-10
Max Horz 1=37(LC 5)
Max Uplift 1=-10(LC 8), 3=-20(LC 8)
Max Grav 1=80(LC 1), 3=80(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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V9	Valley	1	1	

Job Reference (optional) I45442810

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:48 2021 Page 1
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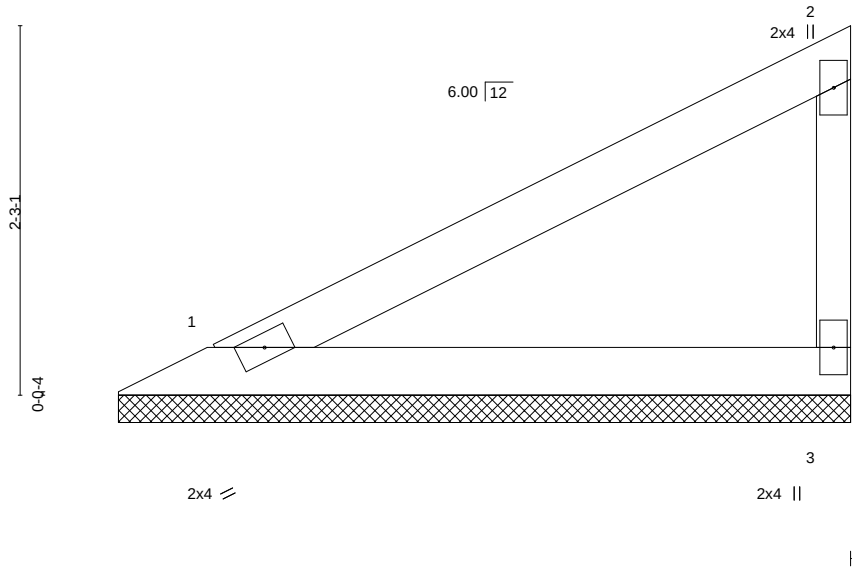
4-6-2
4-6-2

Scale = 1:14.1



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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

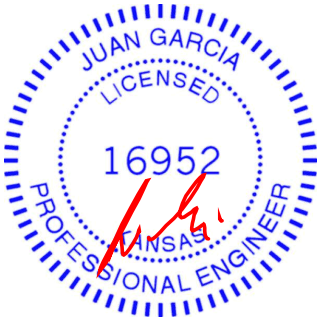
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 1=4-5-10, 3=4-5-10
Max Horz 1=79(LC 5)
Max Uplift 1=-22(LC 8), 3=-42(LC 8)
Max Grav 1=170(LC 1), 3=170(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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V10	Valley	1	1	

Job Reference (optional) I45442811

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1

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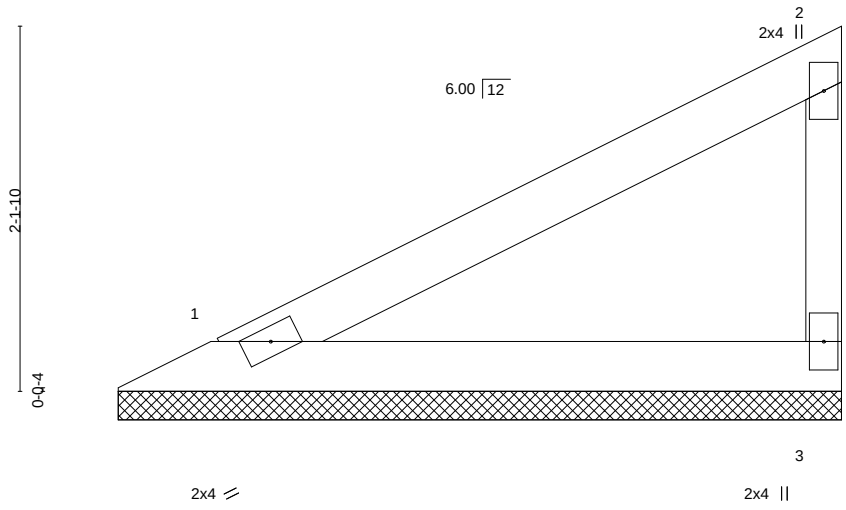
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

4-3-4
4-3-4

Scale = 1:13.5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

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

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

REACTIONS. (size) 1=4-2-12, 3=4-2-12
Max Horz 1=74(LC 5)
Max Uplift 1=-20(LC 8), 3=-39(LC 8)
Max Grav 1=159(LC 1), 3=159(LC 1)

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

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

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V11	Valley	1	1	

Job Reference (optional) I45442812

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1

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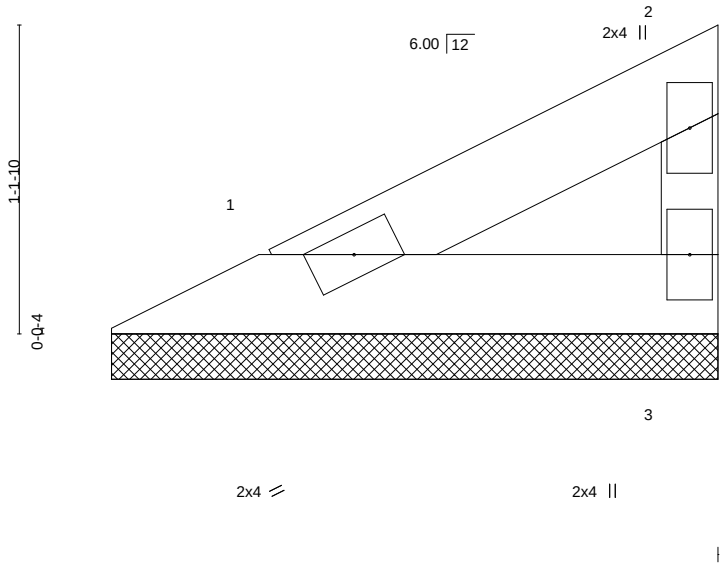
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

2-3-4
2-3-4

Scale = 1:8.5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb	FT = 10%

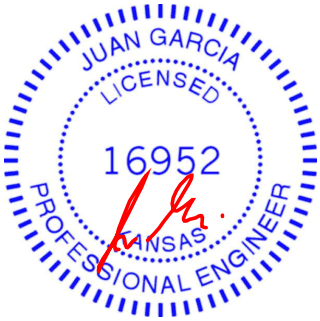
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 1=2-2-12, 3=2-2-12
Max Horz 1=32(LC 5)
Max Uplift 1=-9(LC 8), 3=-17(LC 8)
Max Grav 1=69(LC 1), 3=69(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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V12	Valley	1	1	

Job Reference (optional) I45442813

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1
ID:l3EdZD?h5AdOXx2i0YXRYBzFDC?-en?y1ZcUBfSZ9kuCeBQrlFQsjwXD61Q_dWLOL7zVRyV

9-1-8
9-1-8

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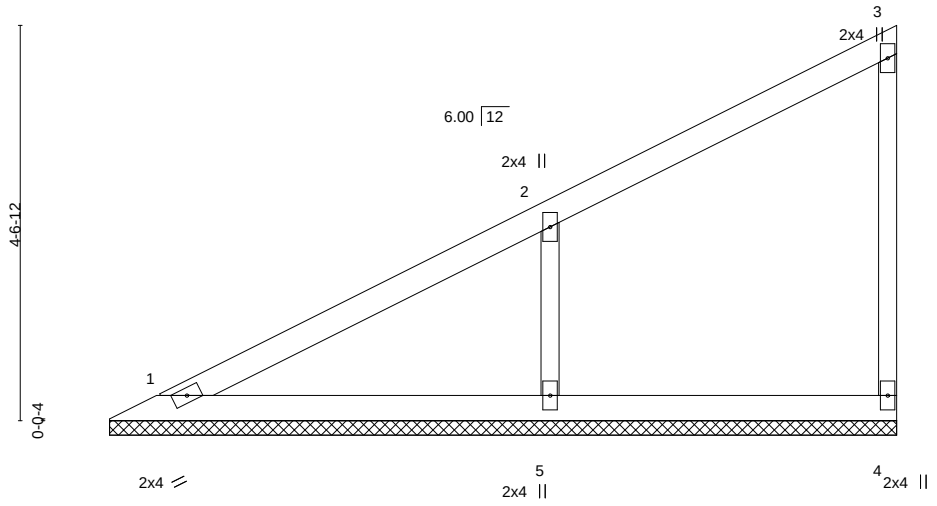

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 26 lb	FT = 10%

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

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

REACTIONS. (size) 1=9-1-0, 4=9-1-0, 5=9-1-0
Max Horz 1=175(LC 7)
Max Uplift 4=-28(LC 5), 5=-140(LC 8)
Max Grav 1=160(LC 1), 4=127(LC 1), 5=468(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-356/189

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=140.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V13	Valley	1	1	

Job Reference (optional) I45442814

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1
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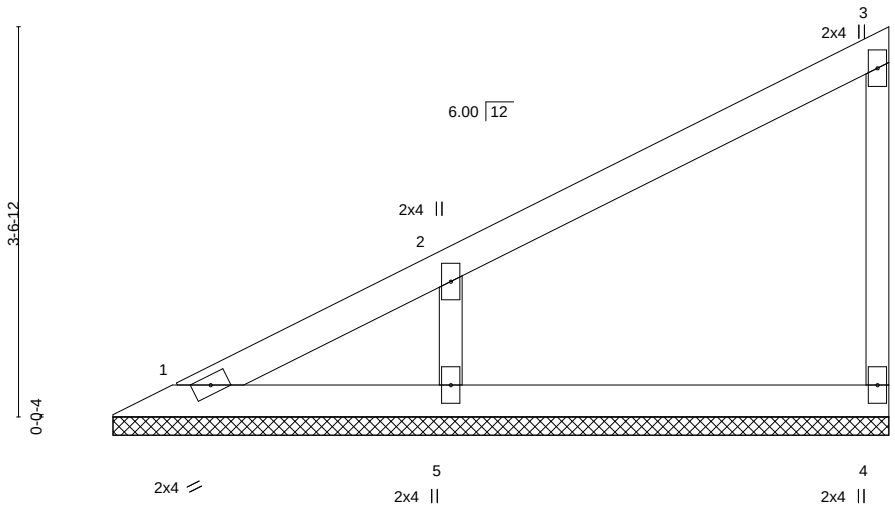
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

7-1-8
7-1-8

Scale = 1:21.0



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 10%

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

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

REACTIONS. (size) 1=7-1-0, 4=7-1-0, 5=7-1-0
Max Horz 1=133(LC 5)
Max Uplift 4=-27(LC 8), 5=-112(LC 8)
Max Grav 1=76(LC 16), 4=142(LC 1), 5=374(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-290/162

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=112.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V14	Valley	1	1	

Job Reference (optional)

I45442815

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:13 2021 Page 1
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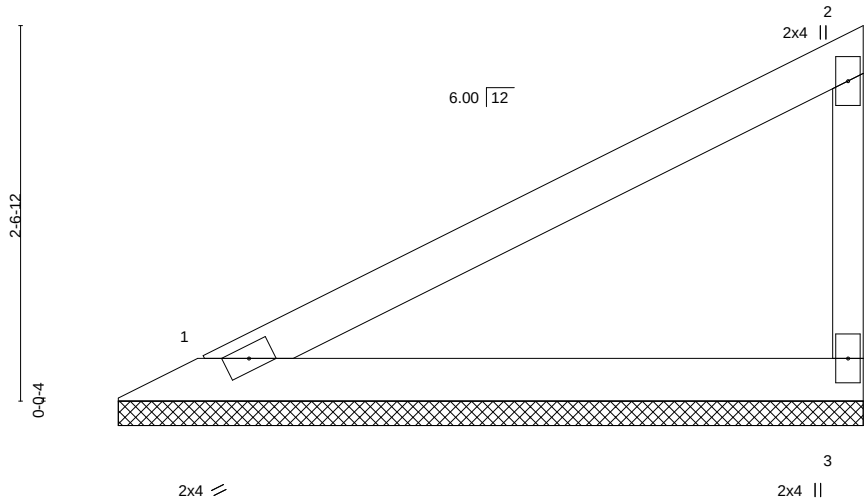
5-1-8
5-1-8

Scale = 1:15.7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-1-0, 3=5-1-0
Max Horz 1=92(LC 5)
Max Uplift 1=-25(LC 8), 3=-48(LC 8)
Max Grav 1=198(LC 1), 3=198(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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V15	Valley	1	1	

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:13 2021 Page 1

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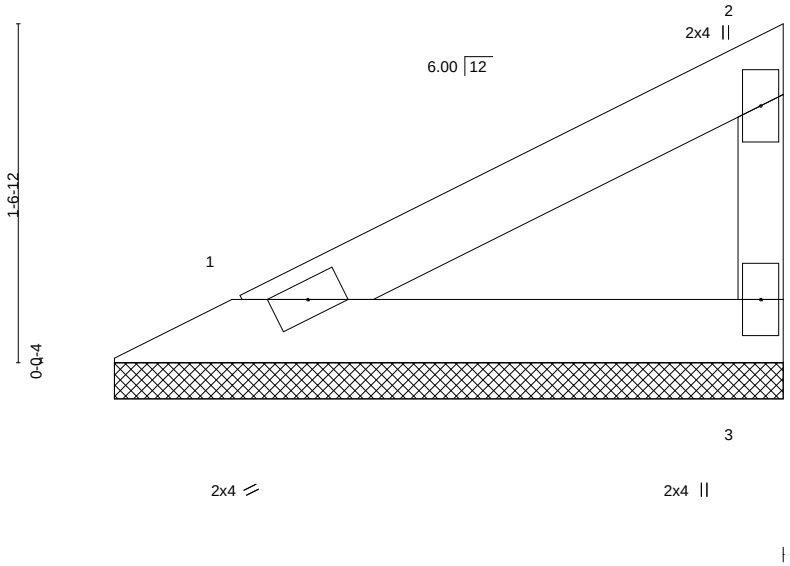
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

I45442816

3-1-8
3-1-8

Scale = 1:10.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-1-0, 3=3-1-0
Max Horz 1=50(LC 5)
Max Uplift 1=-14(LC 8), 3=-26(LC 8)
Max Grav 1=108(LC 1), 3=108(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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V16	Valley	1	1	

Job Reference (optional) I45442817

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:44:40 2021 Page 1
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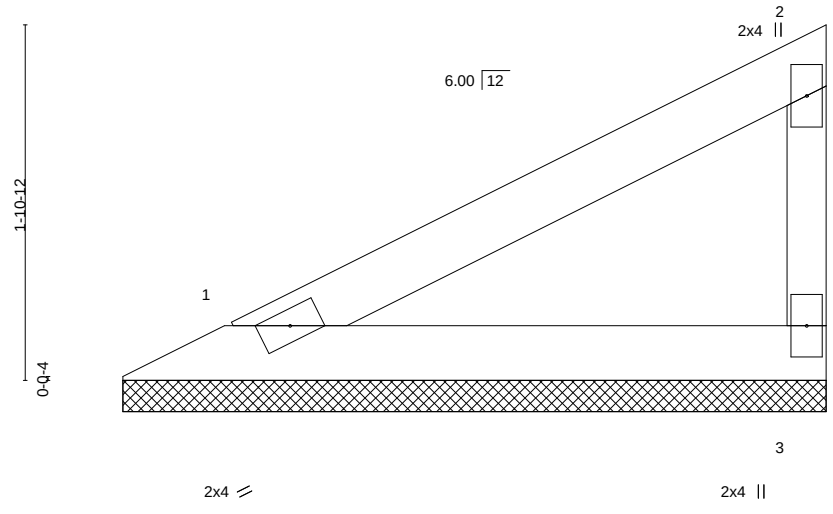
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

3-9-8
3-9-8

Scale = 1:12.3



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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-9-0, 3=3-9-0
Max Horz 1=64(LC 5)
Max Uplift 1=-18(LC 8), 3=-34(LC 8)
Max Grav 1=138(LC 1), 3=138(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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V19	Valley	1	1	

Job Reference (optional) I45442818

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:40 2021 Page 1
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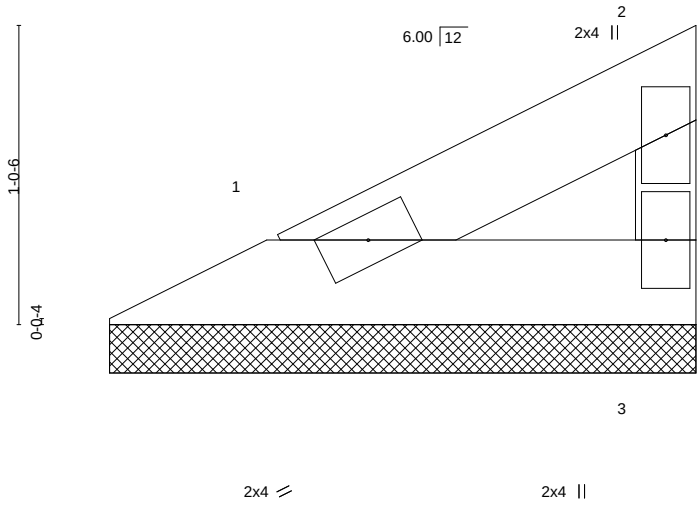
Scale: 1.5"=1'



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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	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: 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 2-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-0-4, 3=2-0-4
Max Horz 1=28(LC 5)
Max Uplift 1=-8(LC 8), 3=-15(LC 8)
Max Grav 1=60(LC 1), 3=60(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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V20	Valley	1	1	Job Reference (optional)

I45442819

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:03 2021 Page 1
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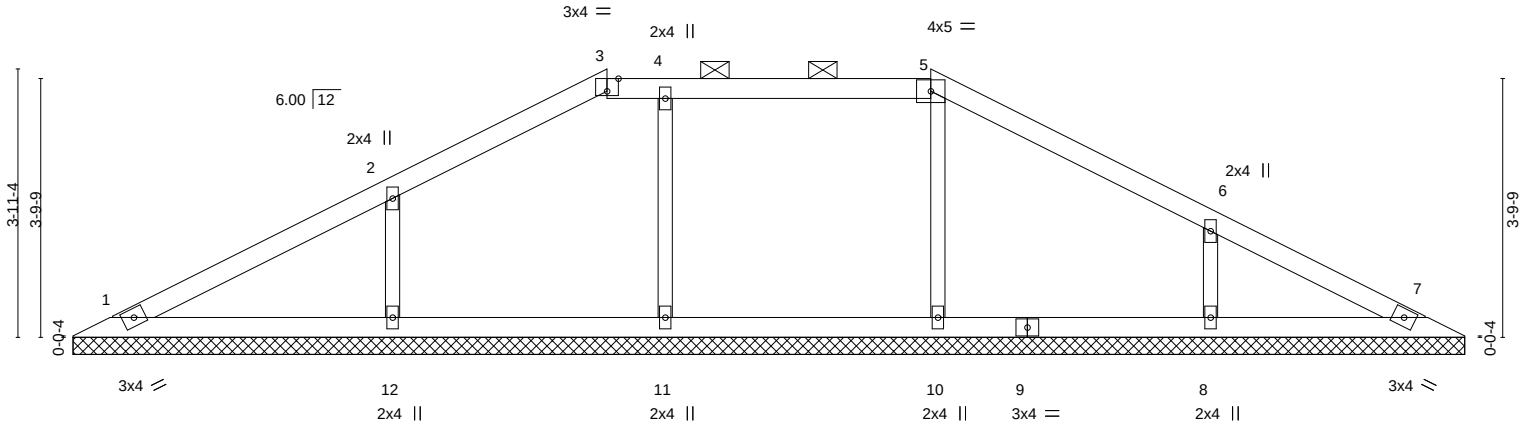
7-10-8 | 12-7-8 | 20-6-0
7-10-8 | 4-9-0 | 7-10-8

Scale = 1:33.8



0-0-8 | 20-6-0
0-0-8 | 20-5-8

Plate Offsets (X,Y)-- [3:0-2-0,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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 55 lb	FT = 10%

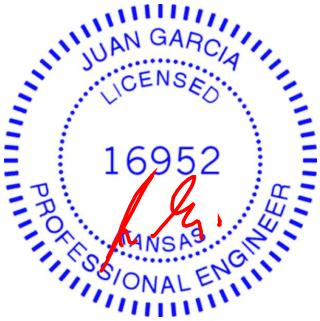
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. All bearings 20-5-0.
(lb) - Max Horz 1=-63(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 11 except 12=-119(LC 8), 8=-122(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=354(LC 22), 11=354(LC 21), 12=408(LC 1), 8=379(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-10=-274/81, 4-11=-280/99, 2-12=-308/166, 6-8=-296/165

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 11 except (jt=lb) 12=119, 8=122.
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 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V21	Valley	1	1	

Job Reference (optional) I45442820

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:44:05 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Scale = 1:27.2

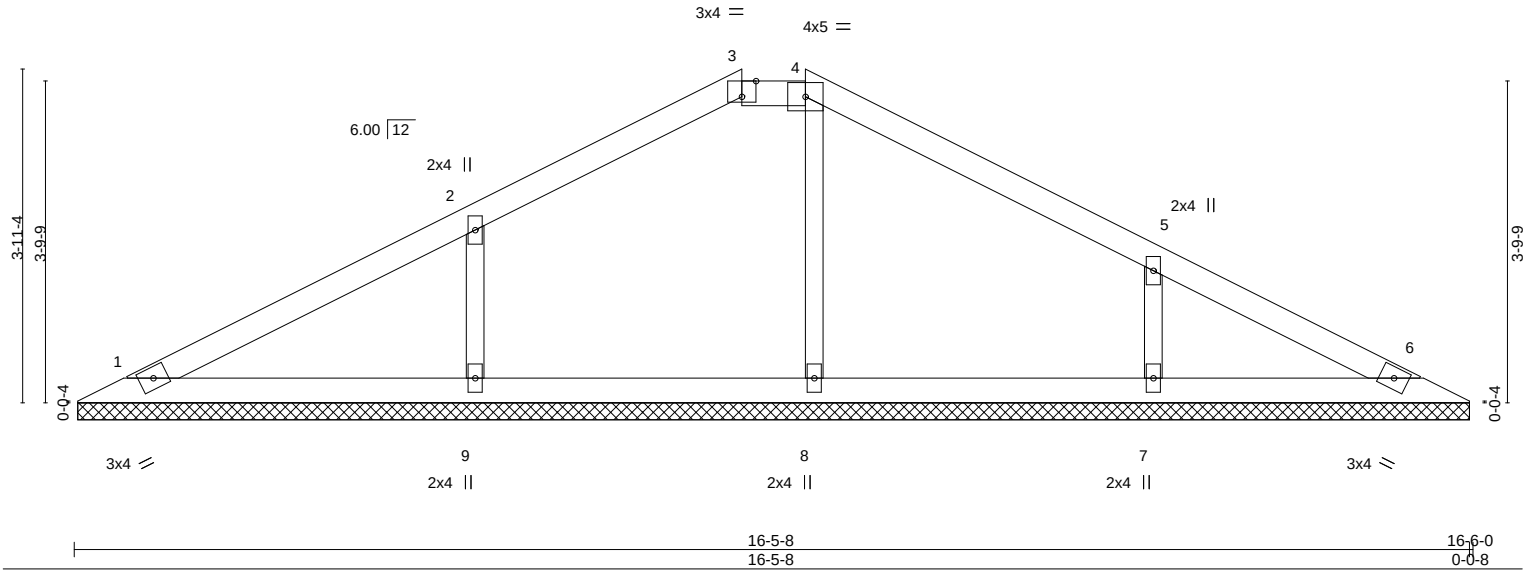

Plate Offsets (X,Y)-- [3:0-2-0,Edge]

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 43 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, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 16-5-0.
(lb) - Max Horz 1=-63(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6 except 9=-120(LC 8), 7=-124(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=276(LC 1), 9=419(LC 21), 7=385(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-319/167, 5-7=-301/168

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6 except (jt=lb) 9=120, 7=124.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V22	Valley	1	1	

Job Reference (optional) I45442821

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:44:03 2021 Page 1
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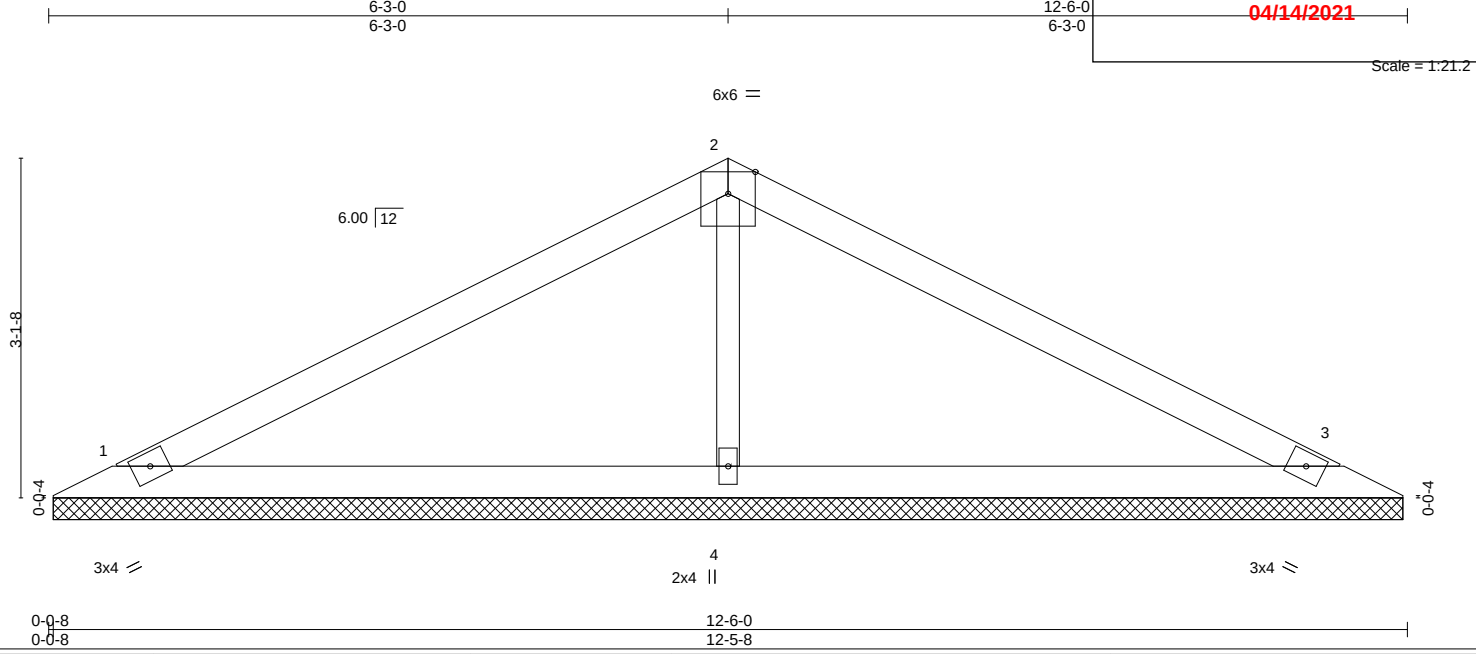

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 31 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=12-5-0, 3=12-5-0, 4=12-5-0
Max Horz 1=-50(LC 13)
Max Uplift 1=-49(LC 8), 3=-58(LC 9), 4=-30(LC 8)
Max Grav 1=238(LC 21), 3=238(LC 22), 4=537(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-367/96

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, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V23	Valley	1	1	

Job Reference (optional) I45442822

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:41:45 2021 Page 1
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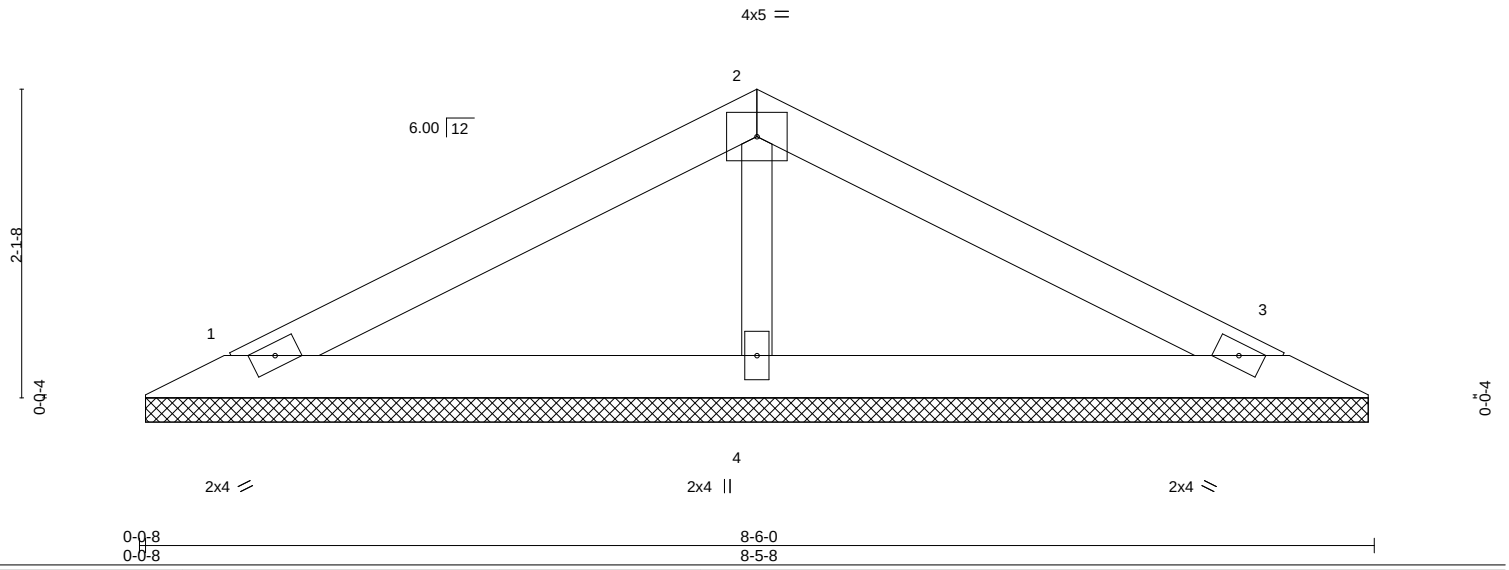


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 20 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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=8-5-0, 3=8-5-0, 4=8-5-0
Max Horz 1=32(LC 12)
Max Uplift 1=-39(LC 8), 3=-45(LC 9), 4=-4(LC 8)
Max Grav 1=170(LC 1), 3=170(LC 1), 4=311(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, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 31,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 87 W0
210361	V24	Valley	1	1	

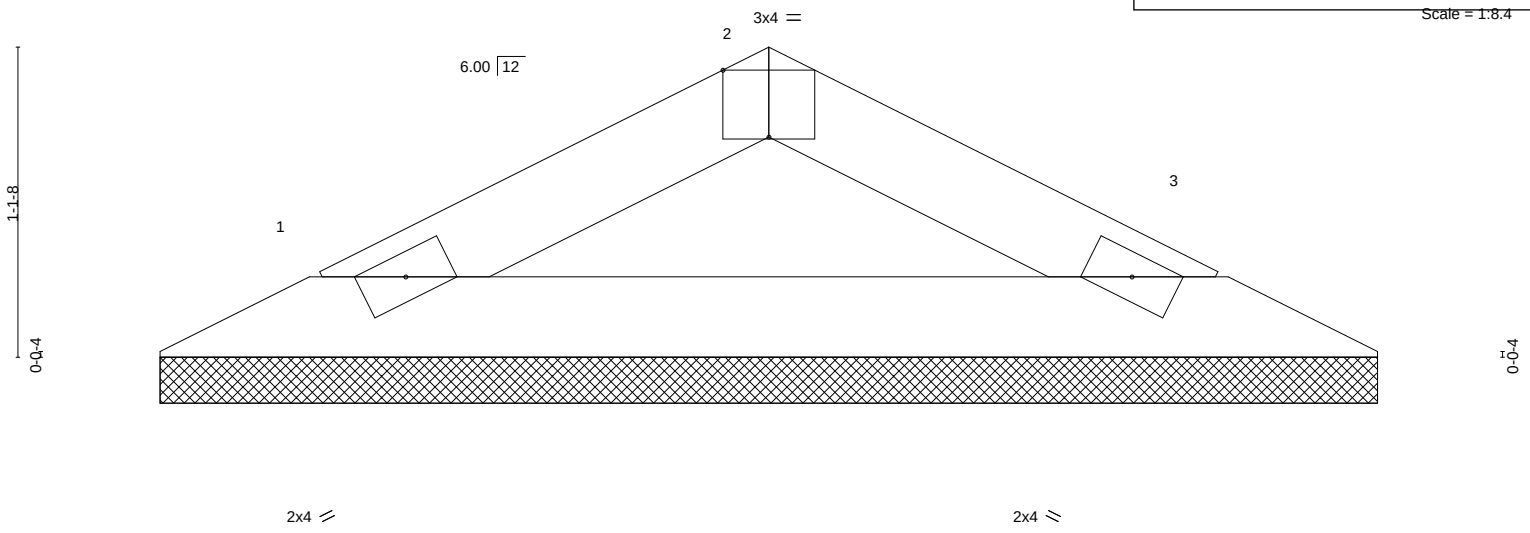
Job Reference (optional) I45442823

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/14/2021

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 10:14:40 2021 Page 1
ID:I3EdZD?h5AdOXx2i0YXRYBzFDC?-PJUziliVI7TR7zVk6sZj3xmHH9Hf_gY9TmHpdfzVRyN

2-3-0
2-3-0
4-6-0
2-3-0

Scale = 1:8.4



0-0-8
0-0-8
4-6-0
4-5-8

Plate Offsets (X,Y)-- [2:0-2-0,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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 9 lb	FT = 10%

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

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

REACTIONS. (size) 1=4-5-0, 3=4-5-0
Max Horz 1=14(LC 8)
Max Uplift 1=-18(LC 8), 3=-18(LC 9)
Max Grav 1=146(LC 1), 3=146(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.

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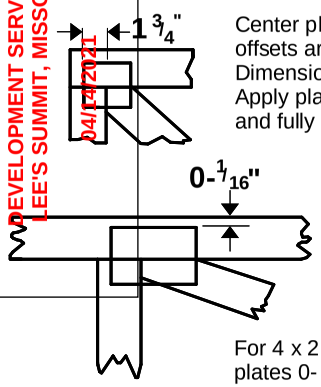
Symbols

PLATE LOCATION AND ORIENTATION



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

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

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

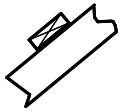
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

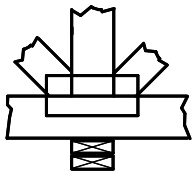
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

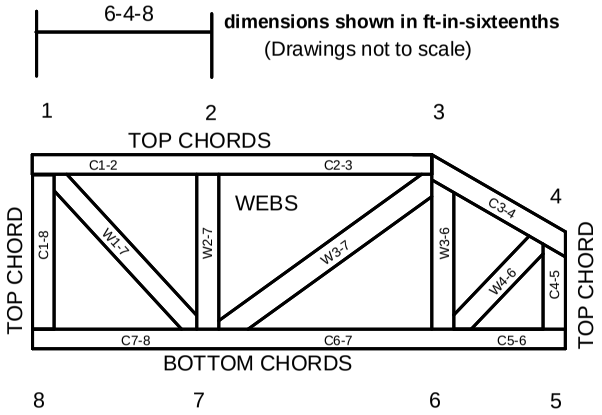


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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