RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
11/03/2021 3:35:51

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

Re: MN131
Lot 131 MN

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

Pages or sheets covered by this seal: I48232923 thru I48233002

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193

October 7,2021

Sevier, Scott ,Engineer

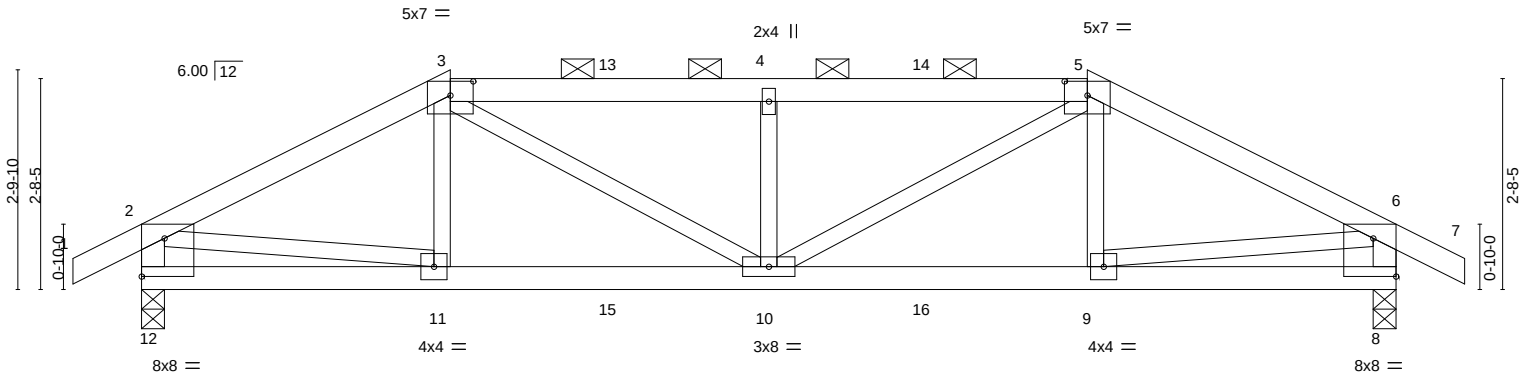
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO 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.

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	A3	Hip Girder	1	1	I48232923
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:34:51 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-jFDMUgX5bdioCuC5Mm97bSytgnPK9MCrRZpzVyyWAXo

-0-10-8 | 3-11-4 | 8-0-0 | 12-0-12 | 16-0-0 | 16-10-8
0-10-8 | 3-11-4 | 4-0-12 | 4-0-12 | 3-11-4 | 0-10-8

Scale = 1:29.4



3-11-4 | 8-0-0 | 12-0-12 | 16-0-0
3-11-4 | 4-0-12 | 4-0-12 | 3-11-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.06	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.11	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	10	>999	240	Weight: 59 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-8: 2x4 SPF No.2

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

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=-53(LC 6)
Max Uplift 12=-250(LC 8), 8=-250(LC 9)
Max Grav 12=1140(LC 1), 8=1140(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1617/373, 3-4=-1888/470, 4-5=-1888/470, 5-6=-1617/373, 2-12=-1094/265, 6-8=-1094/265
BOT CHORD 10-11=-325/1388, 9-10=-298/1388
WEBS 3-10=-171/619, 4-10=-465/233, 5-10=-171/619, 2-11=-287/1185, 6-9=-290/1185

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) 12=250, 8=250.
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) 78 lb down and 76 lb up at 3-11-4, 86 lb down and 76 lb up at 6-0-0, 86 lb down and 76 lb up at 8-0-0, and 86 lb down and 76 lb up at 10-0-0, and 78 lb down and 76 lb up at 12-0-12 on top chord, and 215 lb down and 77 lb up at 3-11-4, 30 lb down at 6-0-0, 30 lb down at 8-0-0, and 30 lb down at 10-0-0, and 215 lb down and 77 lb up at 12-0-0 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

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

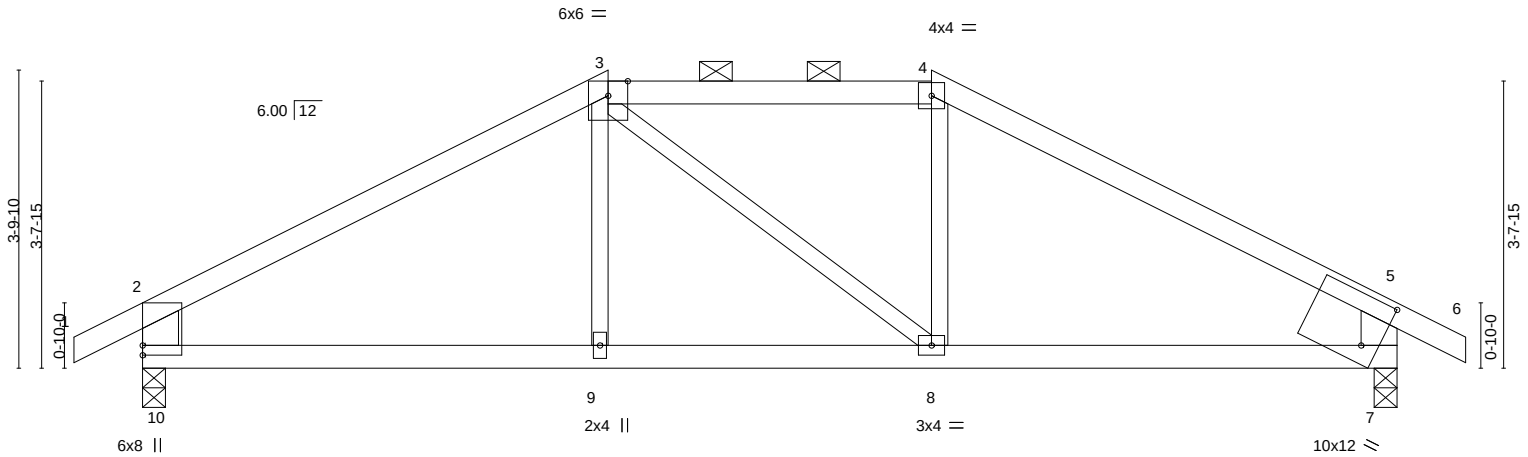
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-12=-20
   Concentrated Loads (lb)
   Vert: 3=-45(B) 5=-45(B) 11=-215(B) 10=-24(B) 4=-45(B) 9=-215(B) 13=-45(B) 14=-45(B) 15=-24(B) 16=-24(B)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	A4	Hip	1	1	I48232924
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:34:53 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-gdL6vMZM7FzWRCMTUBCbgt280a6XdLp8vtI4ZryWAXm

-0-10-8 | 5-11-4 | 10-0-12 | 16-0-0 | 16-10-8
0-10-8 | 5-11-4 | 4-1-8 | 5-11-4 | 0-10-8

Scale = 1:29.4



5-11-4 | 10-0-12 | 16-0-0
5-11-4 | 4-1-8 | 5-11-4

Plate Offsets (X,Y)-- [7:0-2-8,0-7-5]

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	0.68	Vert(LL)	-0.07	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.13	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	8-9	>999	240	Weight: 52 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-2 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) 10=0-3-8, 7=0-3-8
Max Horz 10=-67(LC 6)
Max Uplift 10=-96(LC 8), 7=-96(LC 9)
Max Grav 10=777(LC 1), 7=777(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-936/78, 3-4=-737/115, 4-5=-936/78, 2-10=-697/138, 5-7=-697/138
BOT CHORD 9-10=-39/739, 8-9=-41/737, 7-8=-5/739

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

October 7,2021

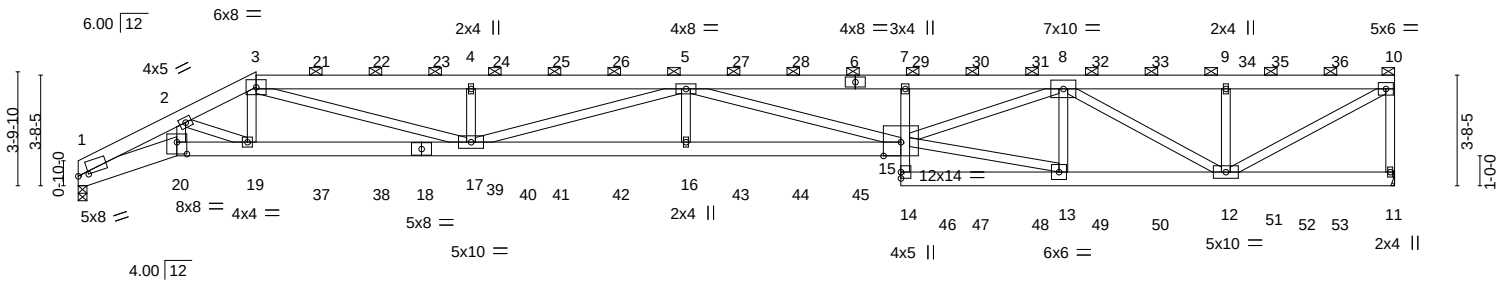
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN	
MN131	B1	HALF HIP GIRDER	1	3	Job Reference (optional)	I48232925

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:34:58 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-0b8?y3dUxnbpYzFRHknmNwl?_bkkHSqt29?rF2yWAXh

3-3-8	5-11-4	13-1-5	20-3-7	27-5-8	32-10-9	38-3-11	43-11-4
3-3-8	2-7-12	7-2-1	7-2-1	7-2-1	5-5-1	5-5-1	5-7-9

Scale = 1:76.9



3-3-8	5-11-4	13-1-5	20-3-7	27-5-8	32-10-9	38-3-11	43-11-4
3-3-8	2-7-12	7-2-1	7-2-1	7-2-1	5-5-1	5-5-1	5-7-9

Plate Offsets (X,Y)-- [1:0-4-3,0-0-8], [20:0-4-0,0-4-12]

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	0.60	Vert(LL)	-0.64	15-16	>821	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-1.15	15-16	>454	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.28	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.43	15-16	>999	240	Weight: 775 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except*
1-20: 2x8 SP DSS, 7-14: 2x4 SPF No.2
WEBS 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.): 3-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 11=Mechanical
Max Horz 1=106(LC 7)
Max Uplift 1=-361(LC 5), 11=-352(LC 5)
Max Grav 1=3672(LC 1), 11=3691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11759/1318, 2-3=-9989/1107, 3-4=-15424/1603, 4-5=-15422/1602, 5-7=-16989/1720, 7-8=-16611/1685, 8-9=-5628/559, 9-10=-5628/559, 10-11=-3560/389
BOT CHORD 1-20=-1237/10254, 19-20=-1142/9518, 17-19=-1063/9049, 16-17=-1919/18509, 15-16=-1919/18509, 14-15=0/274, 7-15=-550/157, 13-14=-140/1527, 12-13=-964/9584
WEBS 2-20=-295/2359, 2-19=-427/103, 3-19=-87/1409, 3-17=-637/6744, 4-17=-940/297, 5-17=-3283/319, 5-16=0/634, 5-15=-1589/166, 13-15=-839/8200, 8-15=-827/7631, 8-13=-1406/300, 8-12=-4605/464, 9-12=-682/224, 10-12=-624/6455

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 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.
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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=361, 11=352.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 134 lb down and 74 lb up at 5-11-4, 111 lb down and 74 lb up at 8-0-0, 111 lb down and 74 lb up at 10-0-0, 111 lb down and 74 lb up at 12-0-0, 111 lb down and 74 lb up at 14-0-0, 111 lb down and 74 lb up at 16-0-0, 111 lb down and 74 lb up at 18-0-0, 111 lb down and 74 lb up at 20-0-0, 111 lb down and 74 lb up at 22-0-0, 85 lb down and 37 lb up at 24-0-0, 66 lb down and 20 lb up at 26-0-0, 110 lb down and 74 lb up at 28-0-0, 110 lb down and 74 lb up at 30-0-0, 110 lb down and 74 lb up at 32-0-0, 110 lb down and 74 lb up at 34-0-0, 110 lb down and 74 lb up at 36-0-0, 110 lb down and 74 lb up at 38-0-0, and 110 lb down and 74 lb up at 40-0-0, and 110 lb down and 74 lb up at 42-0-0 on top chord, and 413 lb down and 123 lb up at 5-11-4, 68 lb down at 8-0-0, 68 lb down at 10-0-0, 68 lb down at 12-0-0, 68 lb down at 14-0-0, 68 lb down at 16-0-0, 68 lb down at 18-0-0, 68 lb down at 20-0-0, 68 lb down at 22-0-0, 106 lb down and 38 lb up at 24-0-0, 146 lb down and 55 lb up at 26-0-0, 69 lb down at 28-0-0, 69 lb down at 30-0-0, 69 lb down at 32-0-0, 69 lb down at 34-0-0, 69 lb down at 36-0-0, 69 lb down at 38-0-0, and 69 lb down at 40-0-0, and 69 lb down at 42-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

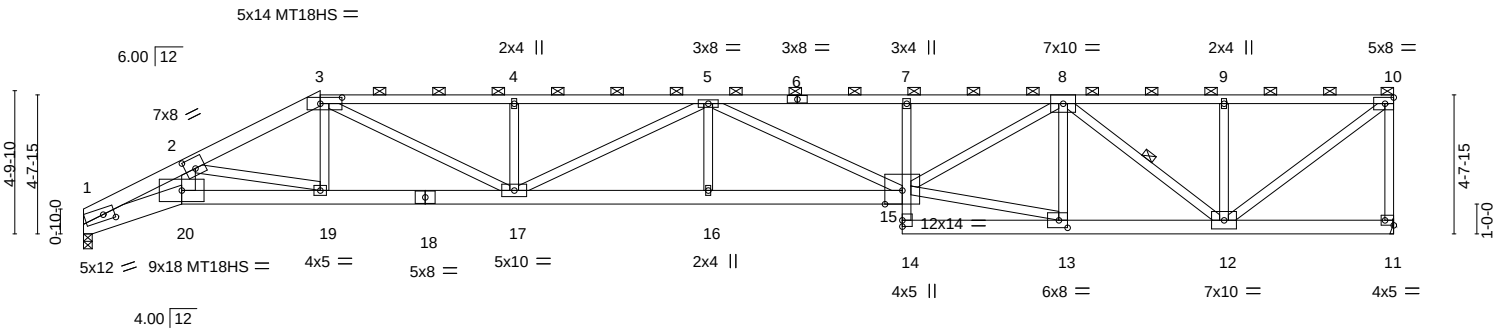
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-10=-70, 1-20=-20, 15-20=-20, 11-14=-20
   Concentrated Loads (lb)
   Vert: 3=-111(F) 6=-20(F) 19=-413(F) 5=-111(F) 16=-51(F) 21=-111(F) 22=-111(F) 23=-111(F) 24=-111(F) 25=-111(F) 26=-111(F) 27=-111(F) 28=-55(F) 29=-110(F) 30=-110(F) 31=-110(F) 32=-110(F) 33=-110(F) 34=-110(F) 35=-110(F) 36=-110(F) 37=-51(F) 38=-51(F) 39=-51(F) 40=-51(F) 41=-51(F) 42=-51(F) 43=-51(F) 44=-106(F) 45=-146(F) 46=-52(F) 47=-52(F) 48=-52(F) 49=-52(F) 50=-52(F) 51=-52(F) 52=-52(F) 53=-52(F)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	B2	Half Hip	1	1	I48232926
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:34:59 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-UniNAPd6i5jfA7qdqRI?w8H6n?4Z0sw1HplOnVyWAXg

3-3-8	7-11-4	14-5-5	20-11-7	27-5-8	32-10-4	38-3-0	43-11-4
3-3-8	4-7-12	6-6-1	6-6-1	6-6-1	5-4-12	5-4-12	5-8-4

Scale = 1:77.3



3-3-8	7-11-4	14-5-5	20-11-7	27-5-8	32-10-4	38-3-0	43-11-4
3-3-8	4-7-12	6-6-1	6-6-1	6-6-1	5-4-12	5-4-12	5-8-4

Plate Offsets (X,Y)-- [1:0-4-9,0-2-8], [2:0-4-0,0-4-4], [3:0-8-12,0-2-8], [11:Edge,0-2-0], [13:0-3-8,0-3-0]

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	0.85	Vert(LL)	-0.63	16	>832	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-1.14	15-16	>460	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.39	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.36	16	>999	240	Weight: 226 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except*
	1-3: 2x6 SPF No.2
BOT CHORD	2x6 SPF 1650F 1.4E *Except*
	1-20: 2x8 SP DSS, 7-14: 2x4 SPF No.2, 11-14: 2x6 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	2-20: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-10.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 8-12

REACTIONS. (size) 1=0-3-8, 11=Mechanical
Max Horz 1=140(LC 7)
Max Uplift 1=-33(LC 5), 11=-97(LC 5)
Max Grav 1=1964(LC 1), 11=1964(LC 1)

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

TOP CHORD	1-2=-6468/267, 2-3=-4345/187, 3-4=-5793/278, 4-5=-5792/278, 5-7=-6105/293, 7-8=-6033/289, 8-9=-2263/129, 9-10=-2263/129, 10-11=-1903/121
BOT CHORD	1-20=-358/5656, 19-20=-326/5062, 17-19=-233/3909, 16-17=-363/6587, 15-16=-363/6587, 7-15=-411/99, 13-14=-33/459, 12-13=-213/3788
WEBS	2-20=-57/1660, 2-19=-1210/93, 3-19=0/507, 3-17=-150/2200, 4-17=-484/114, 5-17=-963/72, 5-16=0/306, 5-15=-537/19, 13-15=-184/3388, 8-15=-152/2649, 8-13=-562/103, 8-12=-1947/96, 9-12=-413/101, 10-12=-137/2830

NOTES-

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

October 7,2021

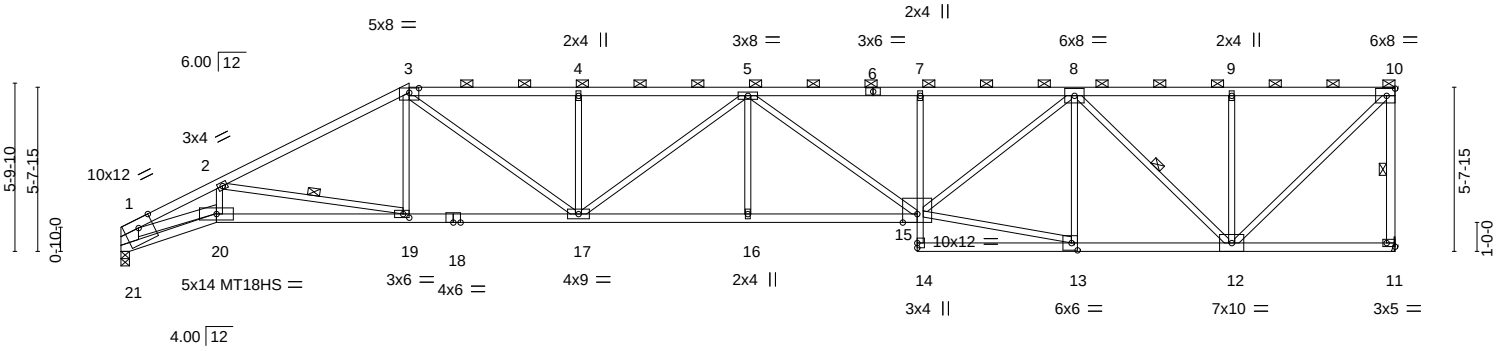
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN	
MN131	B3	Hip	1	1	Job Reference (optional)	I48232927

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:00 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-y_GmNlelTOrWnHOqO9qESLqIePQilHCAWSUyJxyWAXf

3-3-8	9-11-4	15-9-5	21-7-7	27-5-8	32-10-9	38-3-11	43-8-12	43-11-4
3-3-8	6-7-12	5-10-1	5-10-1	5-10-1	5-5-1	5-5-1	5-5-1	0-2-8

Scale = 1:79.5



3-3-8	9-11-4	15-9-5	21-7-7	27-5-8	32-10-9	38-3-11	43-11-4
3-3-8	6-7-12	5-10-1	5-10-1	5-10-1	5-5-1	5-5-1	5-7-9

Plate Offsets (X,Y)-- [3:0-4-0,0-1-15], [11:Edge,0-1-8], [13:0-2-8,0-3-0], [19:0-2-8,0-1-8]

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	0.78	Vert(LL)	-0.47	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.85	15-16	>611	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.36	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27	15-16	>999	240	Weight: 180 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
6-10: 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
20-21,11-14: 2x4 SPF No.2, 7-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-21: 2x8 SP DSS, 1-20: 2x4 SPF 2100F 1.8E, 10-11: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-3-6 max.): 3-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-19, 8-12, 10-11

REACTIONS. (size) 21=0-3-8, 11=Mechanical
Max Horz 21=174(LC 7)
Max Uplift 21=-17(LC 5), 11=-98(LC 5)
Max Grav 21=1957(LC 1), 11=1957(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5266/229, 2-3=-3860/150, 3-4=-4513/213, 4-5=-4510/211, 5-7=-4584/211, 7-8=-4566/211, 8-9=-1791/112, 9-10=-1791/112, 1-21=-1957/82, 10-11=-1903/123
BOT CHORD 19-20=-347/4619, 17-19=-218/3370, 16-17=-292/4925, 15-16=-292/4925, 7-15=-389/92, 12-13=-184/3014
WEBS 2-20=-13/583, 2-19=-1262/148, 3-19=0/437, 3-17=-124/1540, 4-17=-473/106, 5-17=-600/60, 5-16=0/266, 5-15=-424/18, 13-15=-176/2904, 8-15=-121/2009, 8-13=-436/101, 8-12=-1721/86, 9-12=-413/102, 10-12=-125/2481, 1-20=-188/4456

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 11.
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.

October 7,2021

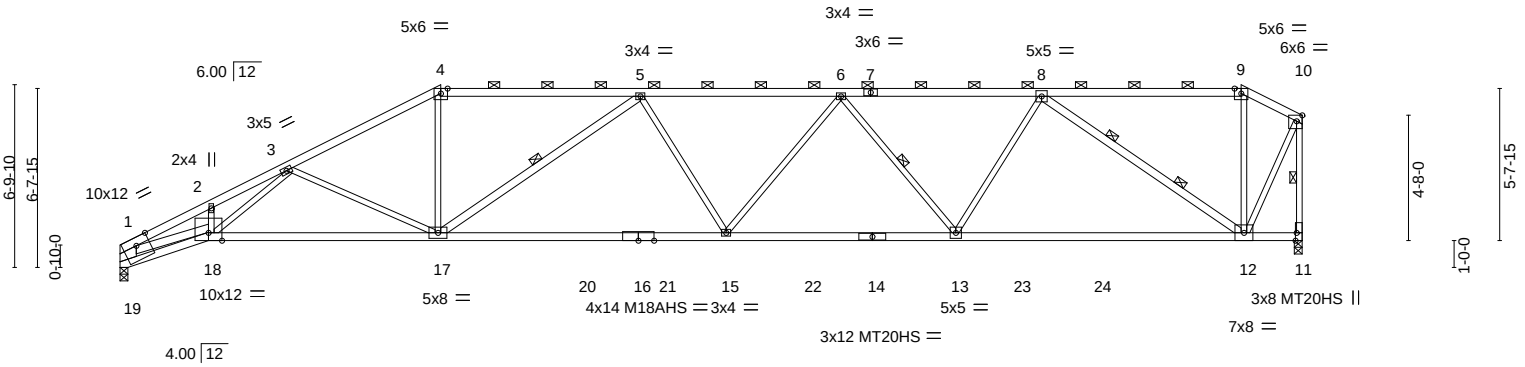
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	B4	Hip	1	1	I48232928
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:02 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-vMOWoRg??05E1bYCWasiXmvcAC3ODEXTzmz3OqyWAXd

3-3-8	6-3-12	11-11-4	19-4-6	26-10-0	34-3-10	41-8-12	44-0-0
3-3-8	3-0-4	5-7-8	7-5-2	7-5-10	7-5-10	7-5-2	2-3-4

Scale = 1:85.8



3-3-8	11-11-4	22-6-11	31-1-5	41-8-12	44-0-0
3-3-8	8-7-12	10-7-7	8-6-10	10-7-7	2-3-4

Plate Offsets (X,Y)-- [10:0-2-8,Edge], [11:0-3-8,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	0.90	Vert(LL)	-0.59	15-17	>891	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-1.04	15-17	>505	240	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.30	11	n/a	n/a	M18AHS	142/136
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.28	15	>999	240	Weight: 173 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
18-19: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-17,8-12: 2x4 SPF No.2, 1-19: 2x8 SP DSS
1-18: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-17, 6-13, 10-11
2 Rows at 1/3 pts 8-12

REACTIONS. (size) 19=0-3-8, 11=0-3-8
Max Horz 19=219(LC 5)
Max Uplift 19=-190(LC 5), 11=-297(LC 5)
Max Grav 19=2065(LC 2), 11=2092(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5415/694, 2-3=-5316/725, 3-4=-3827/519, 4-5=-3346/486, 5-6=-4294/651, 6-8=-3579/536, 8-9=-845/160, 9-10=-940/162, 1-19=-2081/276, 10-11=-2215/253
BOT CHORD 18-19=-259/342, 17-18=-694/4029, 15-17=-763/4213, 13-15=-740/4102, 12-13=-563/2959
WEBS 3-18=-141/1000, 3-17=-760/289, 4-17=-93/1323, 5-17=-1172/337, 6-15=0/323, 6-13=-869/225, 8-13=-72/1214, 8-12=-2603/506, 1-18=-554/4493, 10-12=-264/1991

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) 19 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) 19=190, 11=297.
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.

October 7,2021

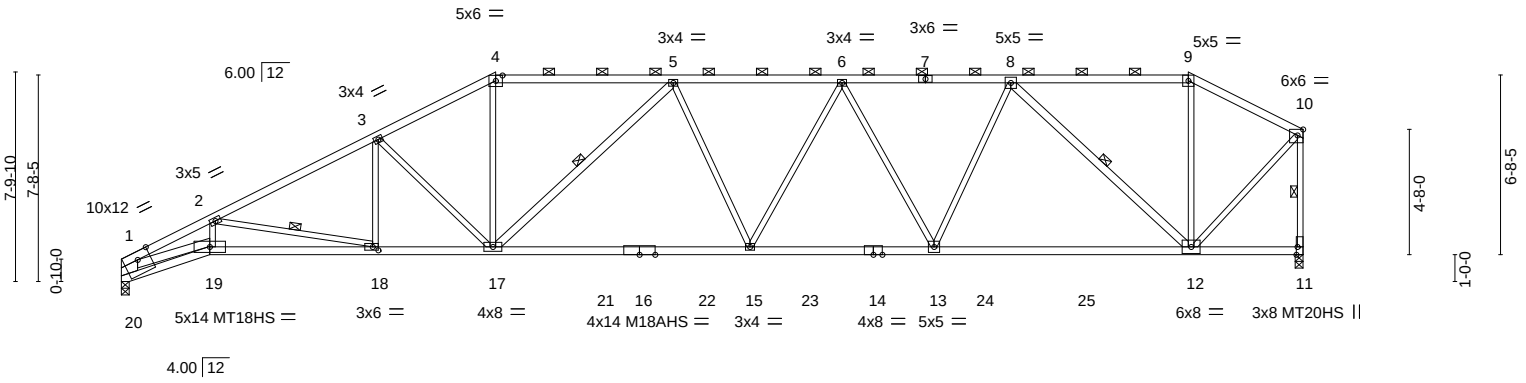
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	B5A	Hip	1	1	I48232929
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:03 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-NZxu?mgdmJD5ek7O3HNx4_SnIcRlyfZcCQjcwGyWAXc

3-3-8	9-5-9	13-11-4	20-6-9	26-10-0	33-1-7	39-8-12	44-0-0
3-3-8	6-2-0	4-5-11	6-7-5	6-3-7	6-3-7	6-7-5	4-3-4

Scale = 1:85.8



3-3-8	9-5-9	13-11-4	23-4-14	30-3-2	39-8-12	44-0-0
3-3-8	6-2-0	4-5-11	9-5-10	6-10-4	9-5-10	4-3-4

Plate Offsets (X,Y)-- [1:0-5-12,Edge], [4:0-3-0,0-2-7], [10:0-2-8,Edge], [11:0-3-8,Edge], [18:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.50	15-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.88	15-17	>597	240	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.28	11	n/a	n/a	M18AHS	142/136
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	15-17	>999	240	Weight: 183 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
19-20: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-17,8-12: 2x4 SPF No.2, 1-20: 2x8 SP DSS
1-19: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-10-14 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-10-14 oc bracing: 18-19
9-10-15 oc bracing: 15-17.
WEBS 1 Row at midpt 2-18, 5-17, 8-12, 10-11

REACTIONS. (size) 20=0-3-8, 11=0-3-8
Max Horz 20=232(LC 5)
Max Uplift 20=-173(LC 8), 11=-236(LC 5)
Max Grav 20=2075(LC 2), 11=2108(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5549/662, 2-3=-4088/473, 3-4=-3536/467, 4-5=-3098/433, 5-6=-3628/525, 6-8=-3142/451, 8-9=-1269/217, 9-10=-1451/223, 1-20=-2061/246, 10-11=-2100/245
BOT CHORD 19-20=-252/296, 18-19=-780/4861, 17-18=-552/3611, 15-17=-613/3603, 13-15=-584/3476, 12-13=-477/2711
WEBS 2-19=-70/690, 2-18=-1276/333, 3-18=-16/411, 3-17=-698/232, 4-17=-95/1272, 5-17=-815/259, 6-15=-14/333, 6-13=-728/174, 8-13=-62/1063, 8-12=-2008/379, 9-12=0/381, 1-19=-551/4698, 10-12=-243/1873

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) 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) 20 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) 20=173, 11=236.
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.

October 7,2021

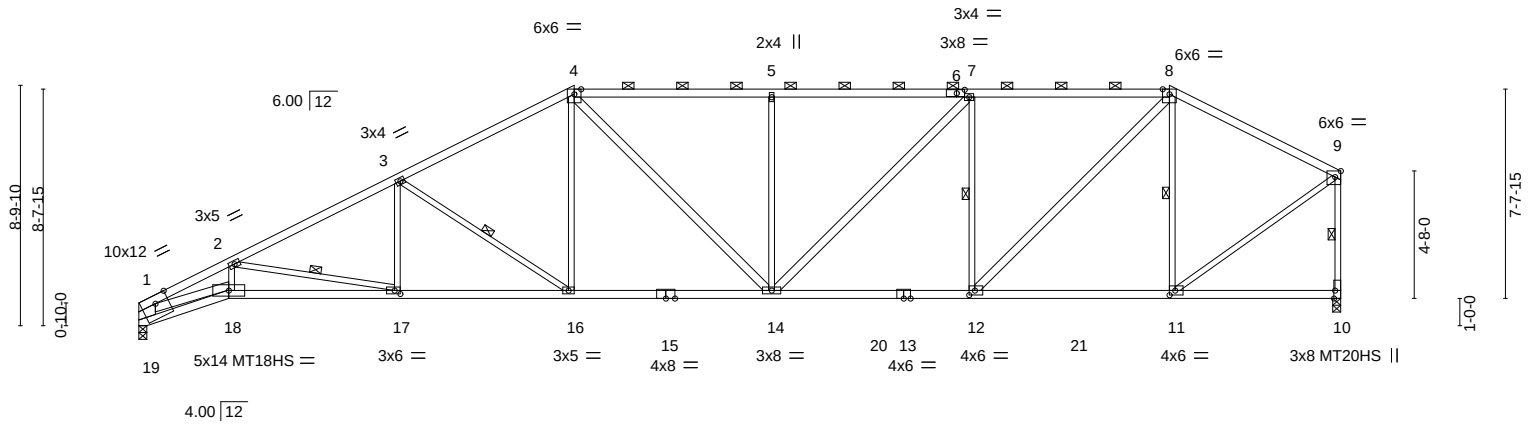
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	B6A	Hip	1	1	I48232930
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:05 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-Jx3fQSitIxTpu2HnBiPQ9PX8NQ3UQc3vfkCj_9yWAXa

3-3-8	9-5-9	15-11-4	23-2-0	30-6-0	37-8-12	44-0-0
3-3-8	6-2-1	6-5-11	7-2-12	7-4-0	7-2-12	6-3-4

Scale = 1:84.4



3-3-8	9-5-9	15-11-4	23-2-0	30-6-0	37-8-12	44-0-0
3-3-8	6-2-1	6-5-11	7-2-12	7-4-0	7-2-12	6-3-4

Plate Offsets (X,Y)-- [1:0-5-12,Edge], [6:0-3-8,0-1-8], [9:0-2-8,Edge], [10:0-3-8,Edge], [11:0-2-8,0-2-0], [12:0-2-8,0-2-0], [17:0-2-8,0-1-8]

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	0.84	Vert(LL)	-0.35	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.61	14-16	>862	240	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.26	10	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.20	14-16	>999	240	Weight: 191 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6,6-8: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
15-18,10-13: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
4-14,7-14,8-12: 2x4 SPF No.2, 1-19: 2x8 SP DSS
1-18: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-1 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 2-17, 3-16, 7-12, 8-11, 9-10

REACTIONS. (size) 19=0-3-8, 10=0-3-8
Max Horz 19=245(LC 5)
Max Uplift 19=-193(LC 8), 10=-186(LC 4)
Max Grav 19=2076(LC 2), 10=2115(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5527/644, 2-3=-4113/403, 3-4=-3310/402, 4-5=-3182/450, 5-7=-3180/449, 7-8=-2742/384, 8-9=-1793/239, 1-19=-2061/258, 9-10=-2032/217
BOT CHORD 18-19=-264/320, 17-18=-726/4840, 16-17=-503/3639, 14-16=-421/2880, 12-14=-422/2740, 11-12=-220/1557
WEBS 2-18=-73/677, 2-17=-1225/333, 3-17=0/482, 3-16=-899/272, 4-16=-69/783, 4-14=-198/597, 5-14=-569/229, 7-14=-94/643, 7-12=-1012/295, 8-12=-289/1731, 8-11=-875/223, 1-18=-529/4664, 9-11=-223/1889

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) 19 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) 19=193, 10=186.
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.

October 7,2021

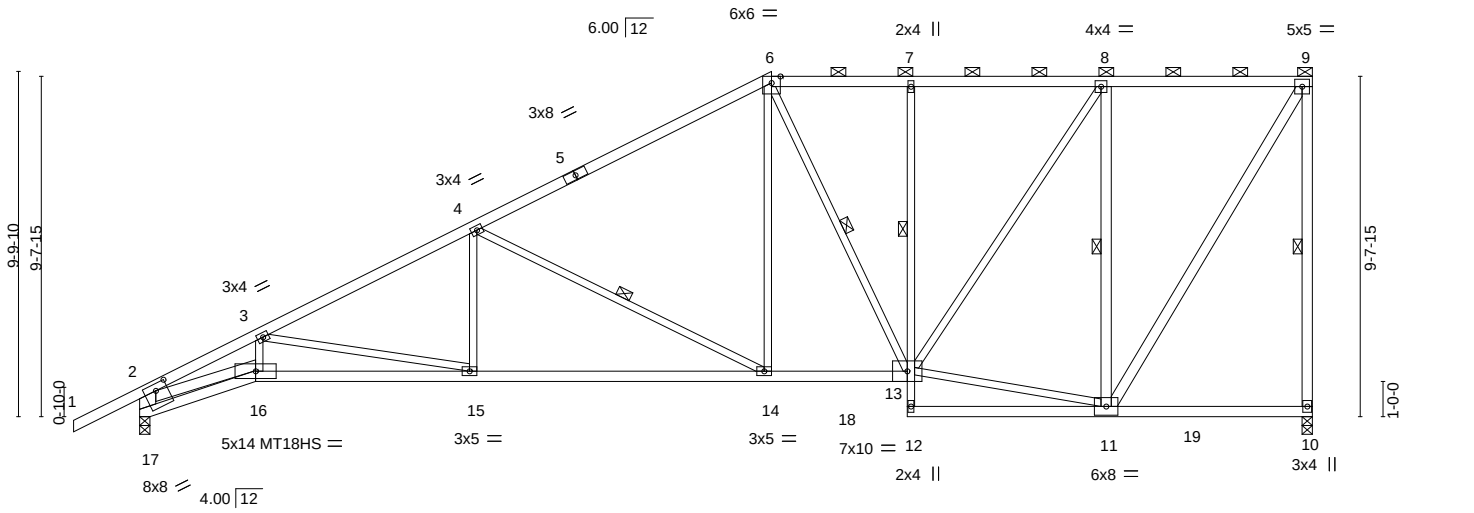
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C1	Half Hip	1	1	I48232931
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:06 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-n7d1eojV3EbgVCszlQxfic4liqWS90s3uOxGXbyWAXZ

-1-10-8	3-3-8	9-5-10	17-11-4	21-9-8	27-5-4	33-3-8
1-10-8	3-3-8	6-2-2	8-5-10	3-10-4	5-7-12	5-10-4

Scale = 1:65.4



3-3-8	9-5-10	17-11-4	21-9-8	27-5-4	33-3-8
3-3-8	6-2-2	8-5-10	3-10-4	5-7-12	5-10-4

Plate Offsets (X,Y)-- [17:0-4-0,0-2-4]

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	0.93	Vert(LL)	-0.23	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.43	14-15	>924	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.17	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	15-16	>999	240	Weight: 168 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
13-16: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
9-10,8-11,9-11,2-16: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and
2-0-0 oc purlins (4-8-14 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-9-4 oc bracing: 16-17
8-1-14 oc bracing: 15-16.
1 Row at midpt 7-13
WEBS 1 Row at midpt 9-10, 4-14, 6-13, 8-11

REACTIONS. (size) 10=0-3-8, 17=0-3-8
Max Horz 17=385(LC 8)
Max Uplift 10=-234(LC 5), 17=-210(LC 8)
Max Grav 10=1585(LC 2), 17=1664(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3981/695, 3-4=-2844/357, 4-6=-1846/204, 6-7=-1381/194, 7-8=-1379/192,
8-9=-817/119, 9-10=-1466/260, 2-17=-1626/332
BOT CHORD 16-17=-364/187, 15-16=-928/3457, 14-15=-548/2511, 13-14=-239/1540, 7-13=-346/141
WEBS 3-16=-125/535, 3-15=-965/387, 4-15=0/484, 4-14=-1079/347, 6-14=-70/776,
6-13=-424/156, 11-13=-124/759, 8-13=-174/1017, 8-11=-1263/297, 9-11=-226/1555,
2-16=-599/3351

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 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) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=234, 17=210.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C2	Half Hip	1	1	I48232932
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:07 2021 Page 1
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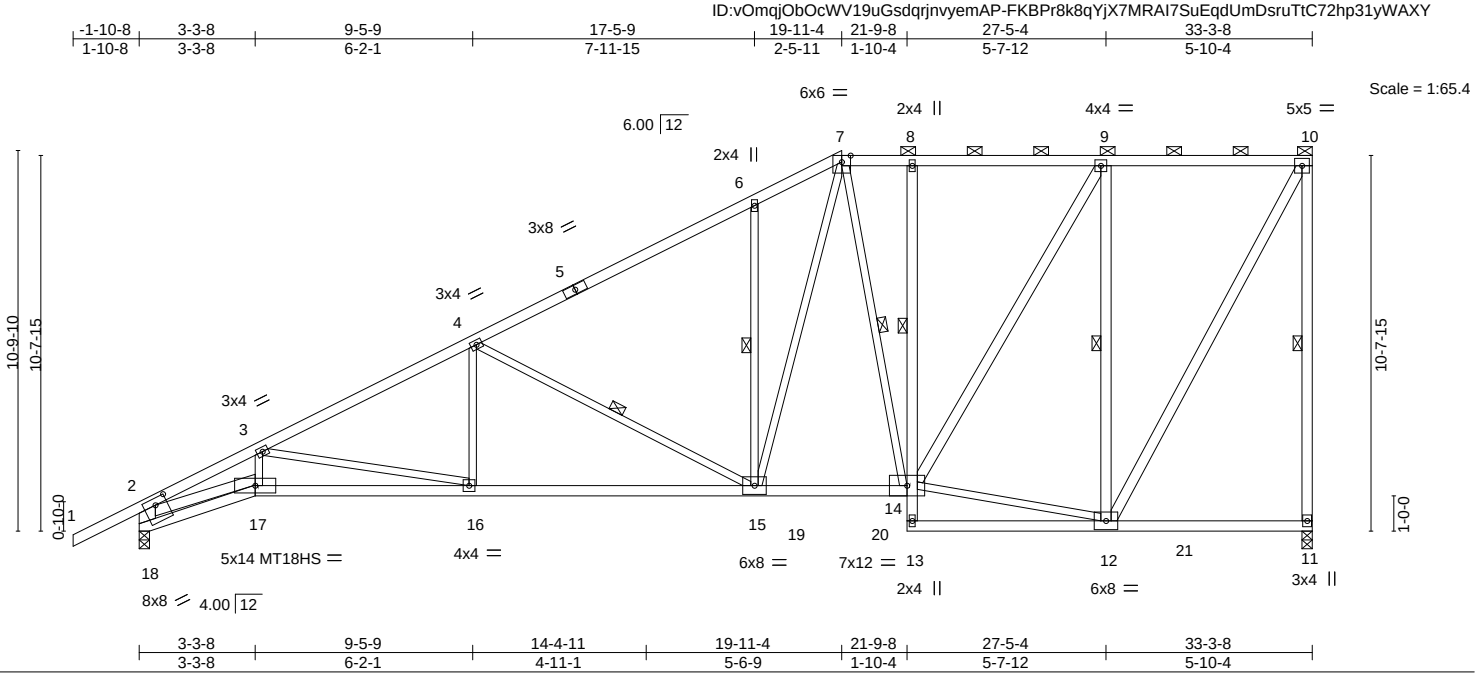

Plate Offsets (X,Y)-- [18:0-4-0,0-2-4]

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	0.85	Vert(LL)	-0.22	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.41	15-16	>954	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.17	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	16-17	>999	240	Weight: 187 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
14-17: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
10-11,9-14,9-12,10-12,2-17: 2x4 SPF No.2, 2-18: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-6 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-3-11 oc bracing: 17-18
7-9-13 oc bracing: 16-17.
1 Row at midpt 8-14
WEBS 1 Row at midpt 10-11, 4-15, 6-15, 7-14, 9-12

REACTIONS. (size) 11=0-3-8, 18=0-3-8
Max Horz 18=425(LC 8)
Max Uplift 11=-224(LC 5), 18=-213(LC 8)
Max Grav 11=1590(LC 2), 18=1665(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3990/747, 3-4=-2839/372, 4-6=-1884/229, 6-7=-1812/352, 7-8=-1238/194, 8-9=-1236/193, 9-10=-740/102, 10-11=-1470/250, 2-18=-1625/346
BOT CHORD 17-18=-401/183, 16-17=-1014/3467, 15-16=-599/2504, 14-15=-226/1308, 8-14=-306/124
WEBS 3-17=-140/537, 3-16=-982/423, 4-16=0/480, 4-15=-1036/326, 6-15=-404/257, 7-15=-334/1100, 7-14=-384/154, 12-14=-106/686, 9-14=-212/979, 9-12=-1250/283, 10-12=-208/1520, 2-17=-651/3367

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 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) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=224, 18=213.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C3	Half Hip	1	1	I48232933
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:08 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-jWln3UkmbssOlW0Msqz7n19jFdCqdwvLLiQNbTyWAXX

-0-10-8	3-3-8	9-5-10	17-11-4	21-9-8	27-5-4	33-3-8
0-10-8	3-3-8	6-2-2	8-5-10	3-10-4	5-7-12	5-10-4

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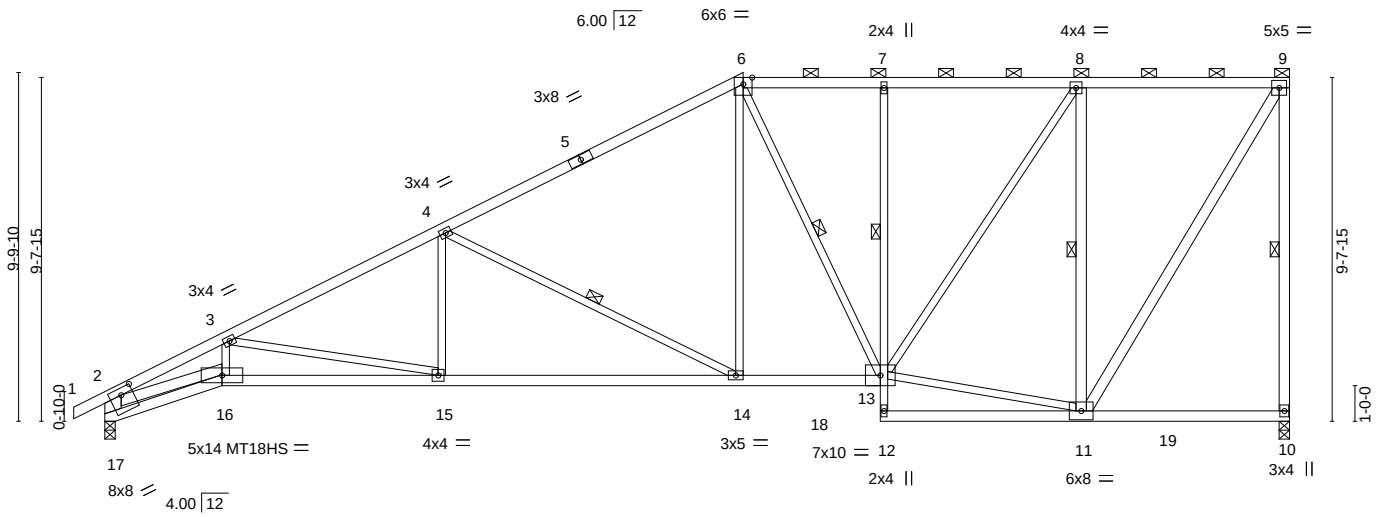

3-3-8	9-5-10	17-11-4	21-9-8	27-5-4	33-3-8
3-3-8	6-2-2	8-5-10	3-10-4	5-7-12	5-10-4

Plate Offsets (X,Y)-- [17:0-4-0,0-2-4]

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	0.61	Vert(LL)	-0.21	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.41	14-15	>971	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.17	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	15-16	>999	240	Weight: 167 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except*
	6-9: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	13-16: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	9-10,8-11,9-11,2-16: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-13 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	9-0-15 oc bracing: 16-17
	8-0-12 oc bracing: 15-16.
	1 Row at midpt 7-13
WEBS	1 Row at midpt 9-10, 4-14, 6-13, 8-11

REACTIONS. (size) 10=0-3-8, 17=0-3-8
Max Horz 17=367(LC 8)
Max Uplift 10=-234(LC 5), 17=-186(LC 8)
Max Grav 10=1587(LC 2), 17=1604(LC 2)

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

TOP CHORD	2-3=-4046/722, 3-4=-2863/367, 4-6=-1852/207, 6-7=-1385/194, 7-8=-1383/193, 8-9=-819/119, 9-10=-1469/261, 2-17=-1621/327
BOT CHORD	16-17=-423/351, 15-16=-950/3506, 14-15=-559/2531, 13-14=-240/1544, 7-13=-347/141
WEBS	3-16=-140/578, 3-15=-994/399, 4-15=0/489, 4-14=-1097/356, 6-14=-74/785, 6-13=-425/156, 11-13=-124/760, 8-13=-176/1021, 8-11=-1266/297, 9-11=-226/1558, 2-16=-565/3245

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 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) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=234, 17=186.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C4	Half Hip	1	1	I48232934
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:10 2021 Page 1
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-0-10-8 3-3-8 9-5-9 15-11-4 21-9-8 27-5-4 33-3-8
0-10-8 3-3-8 6-2-1 6-5-11 5-10-4 5-7-12 5-10-4

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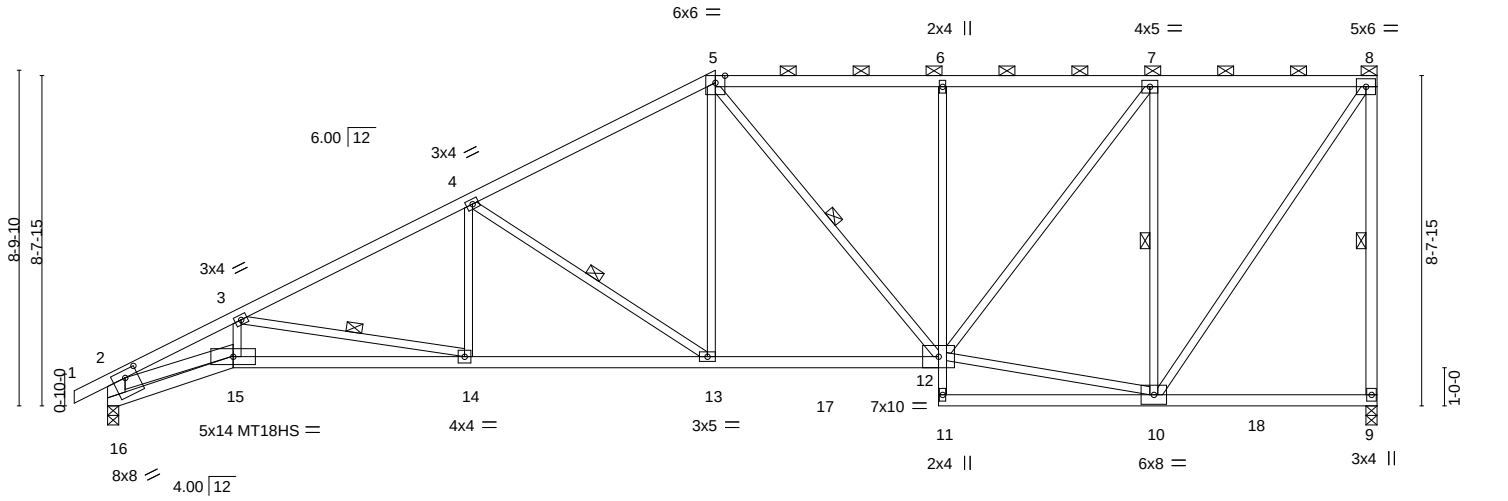

3-3-8 9-5-9 15-11-4 21-9-8 27-5-4 33-3-8
3-3-8 6-2-1 6-5-11 5-10-4 5-7-12 5-10-4

Plate Offsets (X,Y)-- [16:0-4-0,0-2-4]

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	0.59	Vert(LL)	-0.21	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.38	14-15	>999	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.18	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.15	14-15	>999	240	Weight: 154 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
12-15: 2x4 SPF 2100F 1.8E, 6-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-9,2-15: 2x4 SPF No.2, 2-16: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-13 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-9-11 oc bracing: 15-16
8-4-15 oc bracing: 14-15.
WEBS 1 Row at midpt 8-9, 3-14, 4-13, 5-12, 7-10

REACTIONS. (size) 9=0-3-8, 16=0-3-8
Max Horz 16=327(LC 8)
Max Uplift 9=-244(LC 5), 16=-179(LC 8)
Max Grav 9=1588(LC 2), 16=1610(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4106/683, 3-4=-2848/334, 4-5=-2063/233, 5-6=-1597/239, 6-7=-1590/236, 7-8=-915/138, 8-9=-1470/270, 2-16=-1609/299
BOT CHORD 15-16=-360/291, 14-15=-883/3571, 13-14=-481/2507, 12-13=-239/1759, 6-12=-439/178
WEBS 3-15=-113/585, 3-14=-1085/409, 4-14=-4/457, 4-13=-887/290, 5-13=-82/765, 5-12=-317/135, 10-12=-126/895, 7-12=-163/1123, 7-10=-1280/305, 8-10=-242/1605, 2-15=-555/3368

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 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) 16 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) 9=244, 16=179.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C5	Half Hip	1	1	I48232935
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:11 2021 Page 1

ID:vOmqjObOcWV19uGsdqrjnvyemAP-85QwhWnetnEyczkxXzWqPgnCUrA4qJJo1gf1CoyWAXU

-0-10-8 7-5-9 13-11-4 17-10-8 21-9-8 27-5-4 33-3-8

0-10-8 7-5-9 6-5-11 3-11-4 3-11-0 5-7-12 5-10-4

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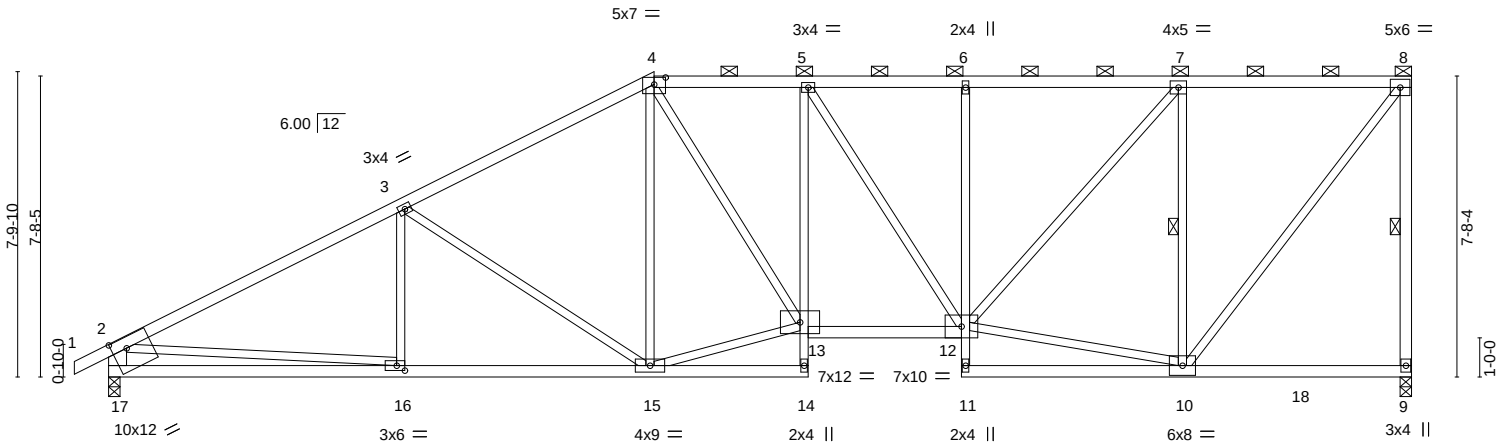


7-5-9 13-11-4 17-10-8 21-9-8 27-5-4 33-3-8

7-5-9 6-5-11 3-11-4 3-11-0 5-7-12 5-10-4

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

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	0.68	Vert(LL)	-0.15	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.27	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	12-13	>999	240	Weight: 159 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
5-14,6-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
8-9: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

BRACING-

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

BOT CHORD Rigid ceiling directly applied or 9-2-3 oc bracing.

WEBS 1 Row at midpt 8-9, 7-10

REACTIONS. (size) 9=0-3-8, 17=0-3-8
Max Horz 17=316(LC 5)
Max Uplift 9=-266(LC 5), 17=-186(LC 8)
Max Grav 9=1561(LC 2), 17=1589(LC 2)

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

TOP CHORD 2-3=-2444/249, 3-4=-1948/218, 4-5=-2013/292, 5-6=-1782/255, 6-7=-1779/255, 7-8=-1017/193, 8-9=-1444/285, 2-17=-1484/226

BOT CHORD 16-17=-354/634, 15-16=-375/2099, 12-13=-415/2019, 6-12=-335/138

WEBS 3-15=-545/210, 13-15=-333/1702, 4-13=-155/705, 5-12=-429/74, 10-12=-228/973, 7-12=-216/1163, 7-10=-1302/356, 8-10=-282/1645, 2-16=-21/1502

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) 9=266, 17=186.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C6	Half Hip	1	1	I48232936

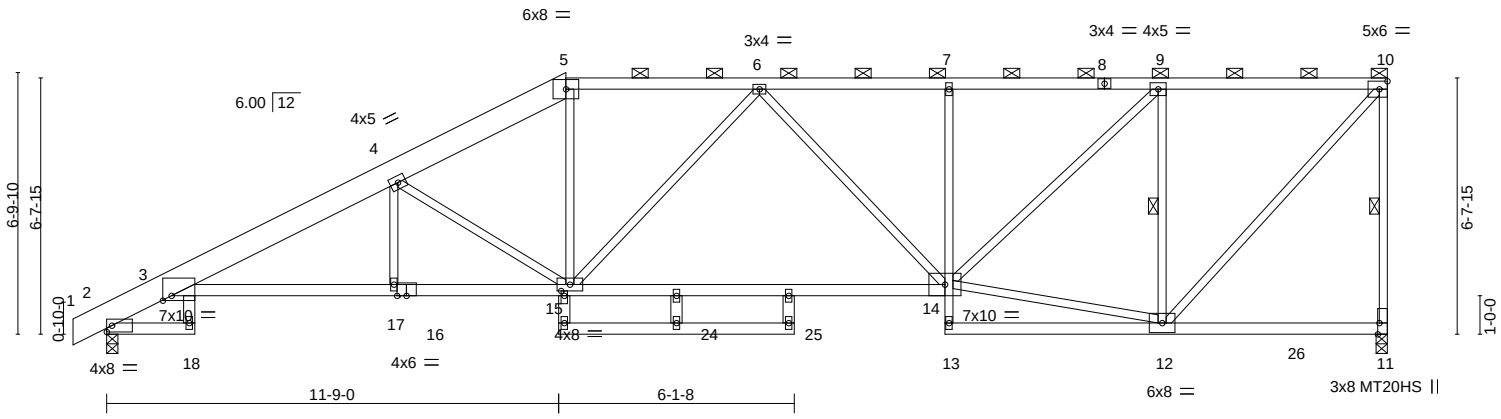
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:12 2021 Page 1

ID:vOmqjObOcWV19uGsdqrjnvyemAP-cH_lurnGe4MpD7J75g13xtKKJEWYZoLxGKOakFyWAXT

-0-10-8	2-3-8	7-5-9	11-11-4	16-11-10	21-9-8	27-5-4	33-3-8
0-10-8	2-3-8	5-2-1	4-5-10	5-0-6	4-9-14	5-7-12	5-10-4

Scale = 1:59.9



2-3-8	7-5-9	11-11-4	21-9-8	27-5-4	33-3-8
2-3-8	5-2-1	4-5-10	9-10-4	5-7-12	5-10-4

Plate Offsets (X,Y)-- [3:0-2-11,0-1-8], [11:0-3-8,Edge], [15:0-1-8,0-1-0], [16:0-2-15,0-0-0]

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	0.86	Vert(LL)	-0.41	14-15	>961	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.75	14-15	>527	240	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.26	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	14-15	>999	240	Weight: 172 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-16,14-16: 2x4 SPF 2100F 1.8E, 7-13: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-18,15-19,20-21,22-23: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-10 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 10-11, 9-12

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=267(LC 5)
Max Uplift 11=-269(LC 5), 2=-161(LC 8)
Max Grav 11=1583(LC 2), 2=1629(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1004/69, 3-4=-3283/358, 4-5=-2642/331, 5-6=-2292/307, 6-7=-2211/324, 7-9=-2198/325, 9-10=-1212/223, 10-11=-1471/289
BOT CHORD 3-17=-539/3038, 15-17=-538/3036, 14-15=-491/2384, 7-14=-344/144
WEBS 4-15=-921/265, 5-15=-61/957, 6-14=-288/98, 12-14=-215/1284, 9-14=-238/1373, 9-12=-1350/359, 10-12=-307/1796

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=269, 2=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.

October 7,2021

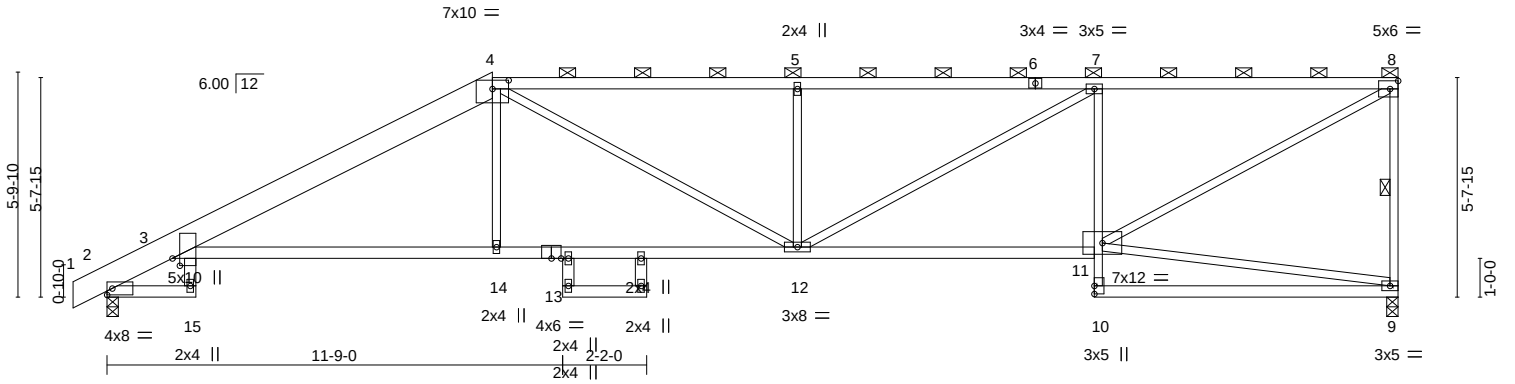
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C7	Half Hip	1	1	I48232937
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:13 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-4UYg6BouPOUgrHuJfOZIU5tX1ep2IBo5V_88HhyWAXS

-0-10-8	2-3-8	9-11-4	17-9-10	25-5-8	33-3-8
0-10-8	2-3-8	7-7-12	7-10-6	7-7-14	7-10-0

Scale = 1:59.4



2-3-8	9-11-4	17-9-10	25-5-8	33-3-8
2-3-8	7-7-12	7-10-6	7-7-14	7-10-0

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

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)	-0.25	3-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.56	3-14	>703	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.34	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.20	3-14	>999	240	Weight: 150 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
1-4: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
7-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-15,16-18,17-19: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=226(LC 5)
Max Uplift 9=-272(LC 5), 2=-141(LC 8)
Max Grav 9=1486(LC 1), 2=1571(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-914/85, 3-4=-2744/371, 4-5=-2895/488, 5-7=-2895/488, 7-8=-2165/382, 8-9=-1409/321
BOT CHORD 3-14=-475/2452, 12-14=-472/2455, 11-12=-468/2173, 7-11=-995/309
WEBS 4-14=0/333, 4-12=-215/502, 5-12=-541/235, 7-12=-127/830, 8-11=-486/2451

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) 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) 9=272, 2=141.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 7,2021

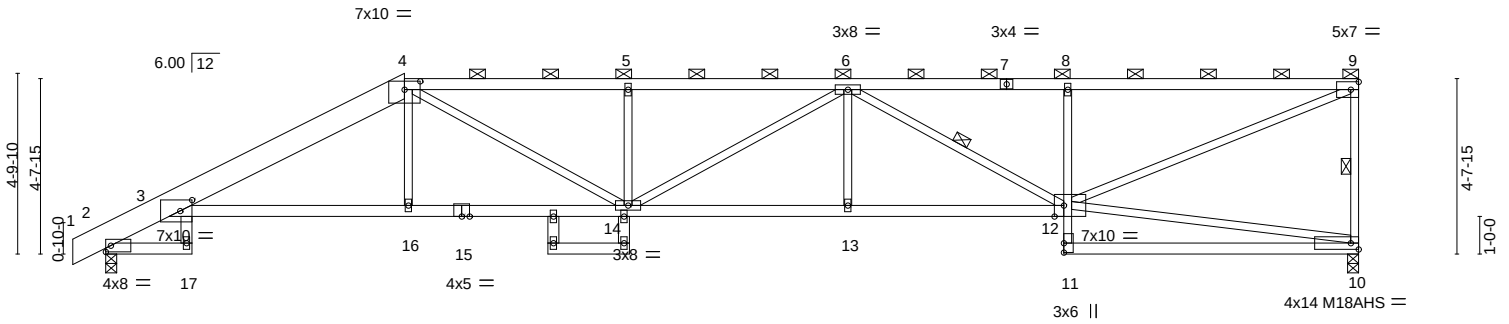
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C8	Half Hip	1	1	I48232938
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:14 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-Yg62JXpXAicXTRTWD54X0IPhv2931diEkethp7yWAXR

-0-10-8	2-3-8	7-11-4	13-10-9	19-8-10	25-5-8	33-3-8
0-10-8	2-3-8	5-7-12	5-11-5	5-10-1	5-8-14	7-10-0

Scale = 1:61.2



2-3-8	7-11-4	13-10-9	19-8-10	25-5-8	33-3-8
2-3-8	5-7-12	5-11-5	5-10-1	5-8-14	7-10-0

Plate Offsets (X,Y)-- [3:0-3-13,0-3-8], [4:0-5-0,0-2-11], [12:0-3-0,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	0.79	Vert(LL)	-0.35	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.64	13-14	>618	240	M18AHS	142/136
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.35	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.29	13-14	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
4-7: 2x4 SPF No.2, 7-9: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17,18-20,14-19: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-5-8 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 9-10, 6-12

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=184(LC 5)
Max Uplift 10=-275(LC 5), 2=-157(LC 5)
Max Grav 10=1486(LC 1), 2=1571(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-914/103, 3-4=-3001/449, 4-5=-3604/634, 5-6=-3603/635, 6-8=-2682/487, 8-9=-2680/494, 9-10=-1404/324
BOT CHORD 3-16=-526/2721, 14-16=-522/2723, 13-14=-698/3576, 12-13=-698/3576, 8-12=-536/226
WEBS 4-14=-274/1009, 5-14=-412/181, 6-13=0/256, 6-12=-1032/160, 9-12=-576/2899

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
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=275, 2=157.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	C9	Half Hip Girder	1	2	I48232939

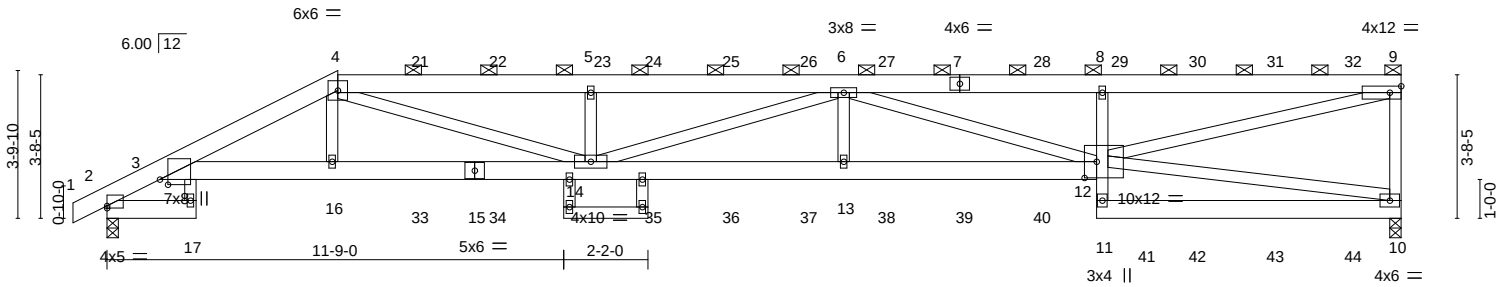
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:17 2021 Page 1

ID:vOmqjObOcWV19uGsdqrjnvyemAP-zFoBxZrPTd_6KuC5uDdEex1EnFHjE_WgQc6LQSyWAXO

-0-10-8	2-3-8	5-11-4	12-5-5	18-11-7	25-5-8	33-3-8
0-10-8	2-3-8	3-7-12	6-6-1	6-6-1	6-6-1	7-10-0

Scale = 1:59.3



2-3-8	5-11-4	12-5-5	18-11-7	25-5-8	33-3-8
2-3-8	3-7-12	6-6-1	6-6-1	6-6-1	7-10-0

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

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	0.69	Vert(LL)	-0.40	13-14	>982	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.73	13-14	>545	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.29	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.29	13-14	>999	240	Weight: 403 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
1-4: 2x6 SP 2400F 2.0E

BOT CHORD 2x6 SP 2400F 2.0E *Except*
8-11,18-19: 2x4 SPF No.2

WEBS 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 (4-6-6 max.): 4-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=107(LC 26)
Max Uplift 10=-314(LC 5), 2=-284(LC 5)
Max Grav 10=2820(LC 1), 2=2824(LC 1)

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

TOP CHORD 2-3=-1777/199, 3-4=-7265/889, 4-5=-9850/1207, 5-6=-9847/1207, 6-8=-7529/918, 8-9=-7363/915, 9-10=-2596/398

BOT CHORD 3-16=-877/6647, 14-16=-873/6578, 13-14=-1313/10418, 12-13=-1313/10418, 11-12=0/305, 8-12=-893/268, 10-11=-3/496

WEBS 3-17=-27/321, 4-16=-63/1076, 4-14=-445/3555, 5-14=-776/214, 6-14=-656/103, 6-13=0/490, 6-12=-3048/375, 10-12=-383/16, 9-12=-963/7557

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 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) 10=314, 2=284.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 7,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 120 lb down and 63 lb up at 5-11-4, 100 lb down and 63 lb up at 8-0-0, 100 lb down and 63 lb up at 10-0-0, 100 lb down and 63 lb up at 12-0-0, 97 lb down and 50 lb up at 14-0-0, 97 lb down and 50 lb up at 16-0-0, 97 lb down and 50 lb up at 18-0-0, 97 lb down and 50 lb up at 20-0-0, 97 lb down and 50 lb up at 22-0-0, 97 lb down and 50 lb up at 24-0-0, 110 lb down and 74 lb up at 26-0-0, 110 lb down and 74 lb up at 28-0-0, and 110 lb down and 74 lb up at 30-0-0, and 110 lb down and 74 lb up at 32-0-0 on top chord, and 443 lb down and 138 lb up at 5-11-4, 76 lb down at 8-0-0, 76 lb down at 10-0-0, 80 lb down and 25 lb up at 14-0-0, 80 lb down and 25 lb up at 16-0-0, 80 lb down and 25 lb up at 18-0-0, 80 lb down and 25 lb up at 20-0-0, 80 lb down and 25 lb up at 22-0-0, 80 lb down and 25 lb up at 24-0-0, 69 lb down at 26-0-0, 69 lb down at 28-0-0, and 69 lb down at 30-0-0, and 69 lb down at 32-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

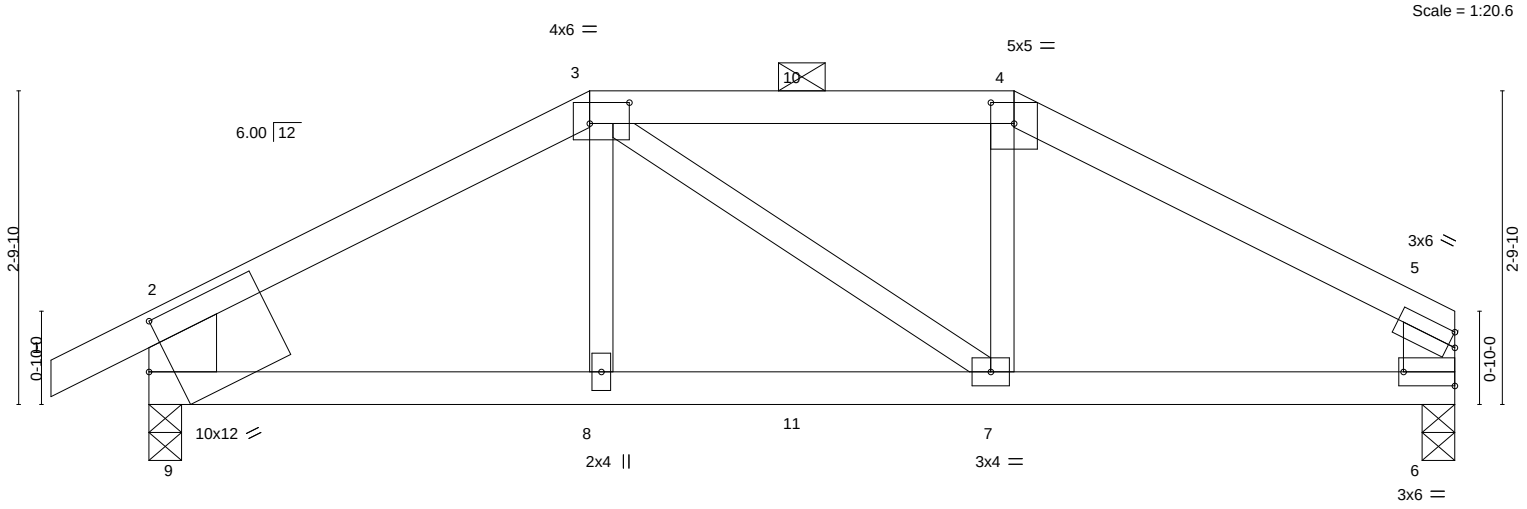
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-9=-70, 2-17=-20, 3-12=-20, 10-11=-20
   Concentrated Loads (lb)
   Vert: 4=-97(B) 7=-81(B) 16=-443(B) 21=-97(B) 22=-97(B) 23=-97(B) 24=-81(B) 25=-81(B) 26=-81(B) 27=-81(B) 28=-81(B) 29=-110(B) 30=-110(B) 31=-110(B) 32=-110(B) 33=-71(B) 34=-71(B) 35=-80(B) 36=-80(B) 37=-80(B) 38=-80(B) 39=-80(B) 40=-80(B) 41=-52(B) 42=-52(B) 43=-52(B) 44=-52(B)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	D1	Hip Girder	1	1	I48232940
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:19 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-vevxMFtf?EEqZCLT?efijM6Xd3t_i5DztwbSULyWAXM

-0-10-8 / 0-10-8 | 3-11-4 / 3-11-4 | 7-8-12 / 3-9-8 | 11-8-0 / 3-11-4

Scale = 1:20.6



3-11-4 / 3-11-4 | 7-8-12 / 3-9-8 | 11-8-0 / 3-11-4

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.10	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.18	7-8	>757	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	7-8	>999	240	Weight: 39 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-9: 2x8 SP DSS, 5-6: 2x6 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-12 max.): 3-4.
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=59(LC 5)
Max Uplift 9=-205(LC 8), 6=-176(LC 9)
Max Grav 9=883(LC 1), 6=788(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1096/261, 3-4=-898/253, 4-5=-1088/259, 2-9=-772/212, 5-6=-653/177
BOT CHORD 8-9=-219/880, 7-8=-218/890, 6-7=-196/890
WEBS 3-8=0/253

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) 9=205, 6=176.
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) 78 lb down and 76 lb up at 3-11-4, and 86 lb down and 76 lb up at 5-10-0, and 78 lb down and 76 lb up at 7-8-12 on top chord, and 215 lb down and 77 lb up at 3-11-4, and 30 lb down at 5-10-0, and 215 lb down and 77 lb up at 7-8-0 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-9=-20

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MiTek
16023 Swingley Ridge Rd
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-45(F) 4=-45(F) 8=-215(F) 7=-215(F) 10=-45(F) 11=-24(F)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	D2	Common	2	1	I48232941
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:20 2021 Page 1
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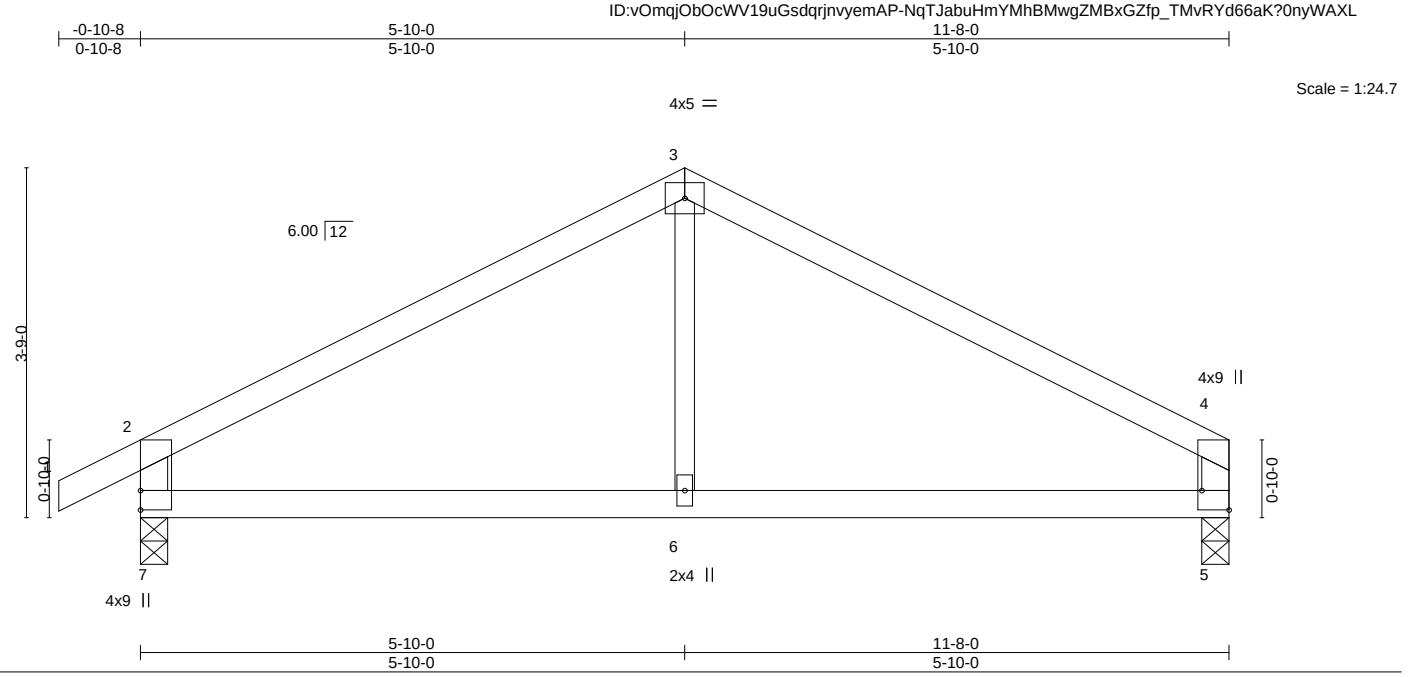

Plate Offsets (X,Y)-- [4:Edge,0-3-8]

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	0.43	Vert(LL)	-0.03	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	6-7	>999	240	Weight: 33 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-6: 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) 7=0-3-8, 5=0-3-8
Max Horz 7=69(LC 5)
Max Uplift 7=-86(LC 8), 5=-62(LC 9)
Max Grav 7=587(LC 1), 5=509(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-605/88, 3-4=-600/86, 2-7=-522/125, 4-5=-439/100
BOT CHORD 6-7=-21/451, 5-6=-21/451

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.

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Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	D3	Half Hip	1	1	I48232942
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:20 2021 Page 1
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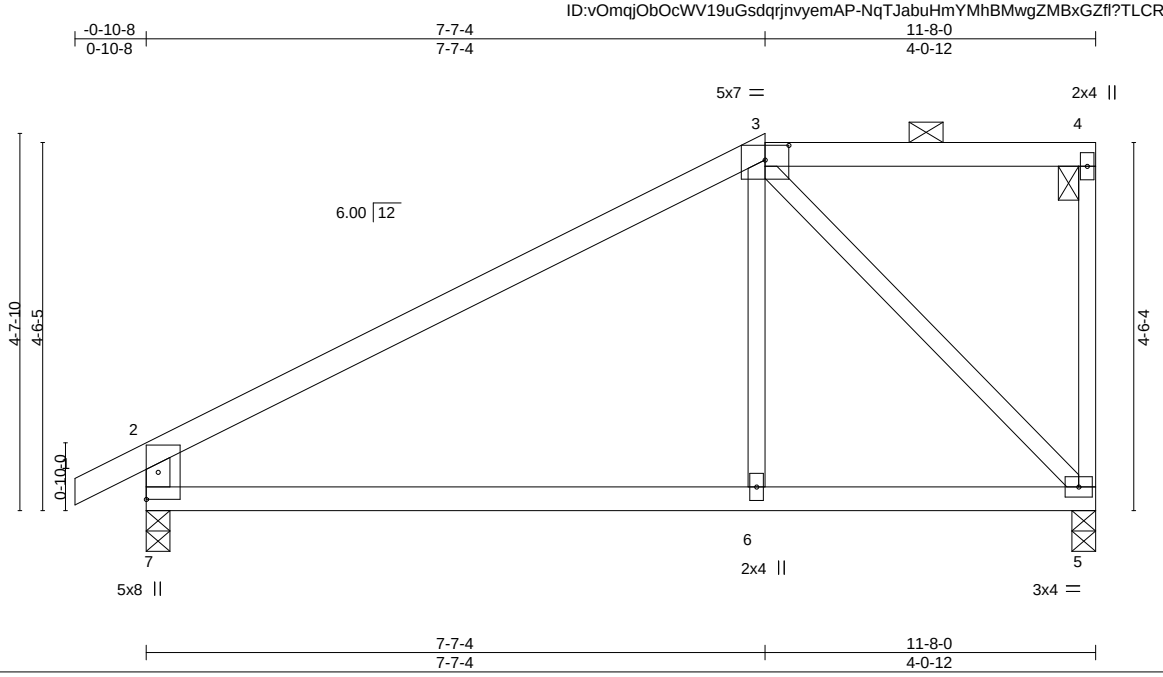

Plate Offsets (X,Y)-- [3:0-3-8,0-2-3]

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	0.69	Vert(LL)	-0.07	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.15	6-7	>885	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	6-7	>999	240	Weight: 40 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-11 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, 7=0-3-8
Max Horz 7=183(LC 5)
Max Uplift 5=-90(LC 5), 7=-92(LC 8)
Max Grav 5=511(LC 1), 7=588(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-538/61, 2-7=-532/149
BOT CHORD 6-7=-93/373, 5-6=-95/369
WEBS 3-6=0/283, 3-5=-540/107

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) 5, 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	D4	HALF HIP GIRDER	1	2	I48232943

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:22 2021 Page 1
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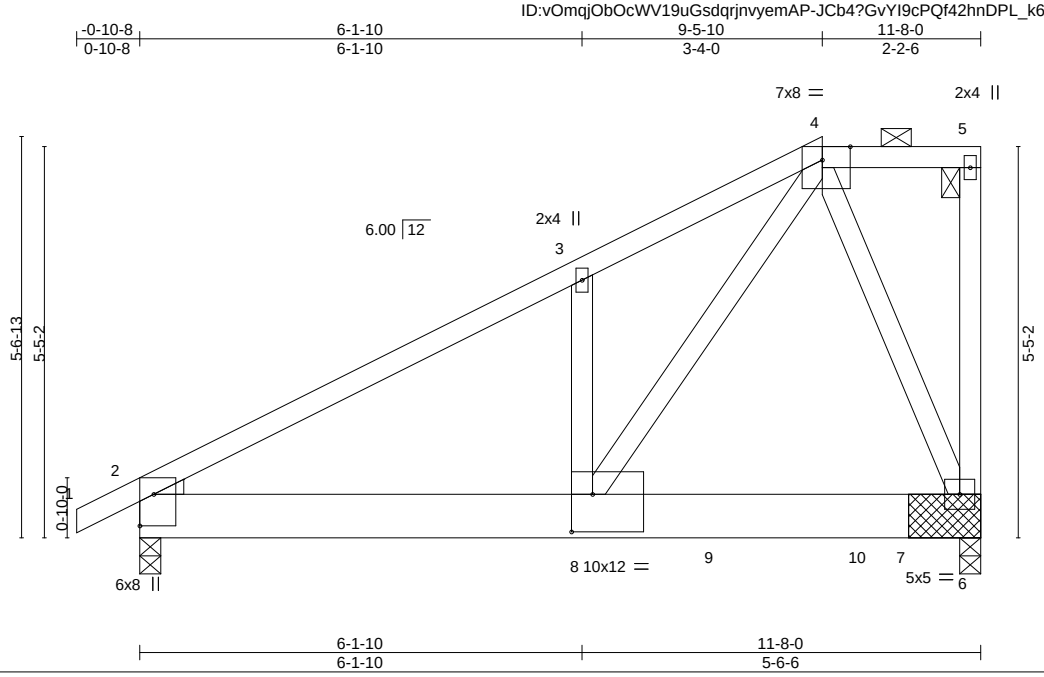

Plate Offsets (X,Y)-- [2:Edge,0-2-5], [4:0-4-10,Edge], [8:0-3-8,0-6-4]

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	0.64	Vert(LL)	-0.08	6-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.14	6-8	>986	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	6-8	>999	240	Weight: 158 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-13 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 + bearing block) (req. 0-4-5), 2=0-3-8
Max Horz 2=208(LC 26)
Max Uplift 6=-447(LC 8), 2=-314(LC 8)
Max Grav 6=5462(LC 1), 2=3185(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6054/523, 3-4=-5765/615
BOT CHORD 2-8=-482/5146, 6-8=-179/1411
WEBS 3-8=-259/473, 4-8=-689/6773, 4-6=-3612/365

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: 2x8 - 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) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 6 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SPF No.2.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
6) Provide adequate drainage to prevent water ponding.
7) 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) 6=447, 2=314.
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) 3671 lb down and 372 lb up at 6-1-10, and 1944 lb down and 117 lb up at 8-0-0, and 1937 lb down and 118 lb up at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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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: 1-4=-70, 4-5=-70, 2-6=-20
   Concentrated Loads (lb)
   Vert: 8=-3671(B) 9=-1944(B) 10=-1937(B)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	E1	Hip Girder	1	1	I48232944
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:23 2021 Page 1
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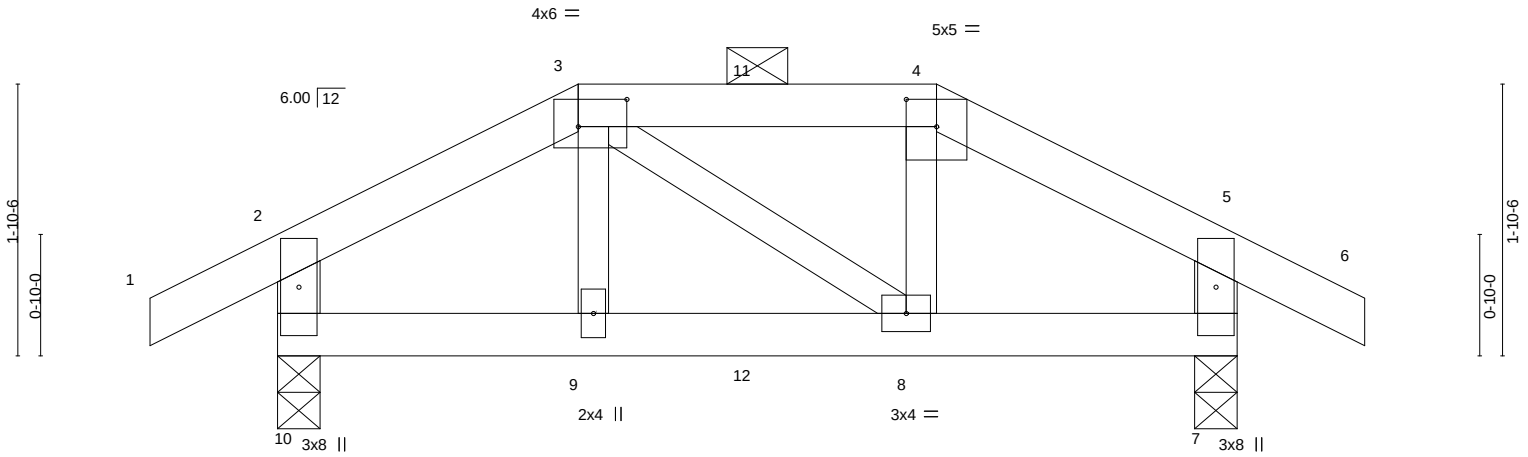
-0-10-8 2-0-12 4-6-4 6-7-0 7-5-8
0-10-8 2-0-12 2-5-8 2-0-12 0-10-8

Scale = 1:15.8



2-0-12 4-6-4 6-7-0
2-0-12 2-5-8 2-0-12

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

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	0.20	Vert(LL)	-0.01	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.17	Vert(CT)	-0.02	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB	0.02	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	8-9	>999	240	Weight: 23 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 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) 10=0-3-8, 7=0-3-8
Max Horz 10=-42(LC 6)
Max Uplift 10=-113(LC 8), 7=-113(LC 9)
Max Grav 10=351(LC 1), 7=351(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-290/117, 4-5=-290/116, 2-10=-294/112, 5-7=-294/112

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) 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) 10=113, 7=113.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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 109 lb up at 2-0-12, and 56 lb down and 36 lb up at 3-3-8, and 92 lb down and 109 lb up at 4-6-4 on top chord, and 14 lb down and 5 lb up at 2-0-12, and 8 lb down and 1 lb up at 3-3-8, and 14 lb down and 5 lb up at 4-5-8 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, 7-10=-20
Concentrated Loads (lb)
Vert: 9=3(F) 8=3(F) 12=1(F)

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Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	E2	Common	2	1	I48232945
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:24 2021 Page 1
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0-10-8 3-3-8 3-3-8 0-10-8

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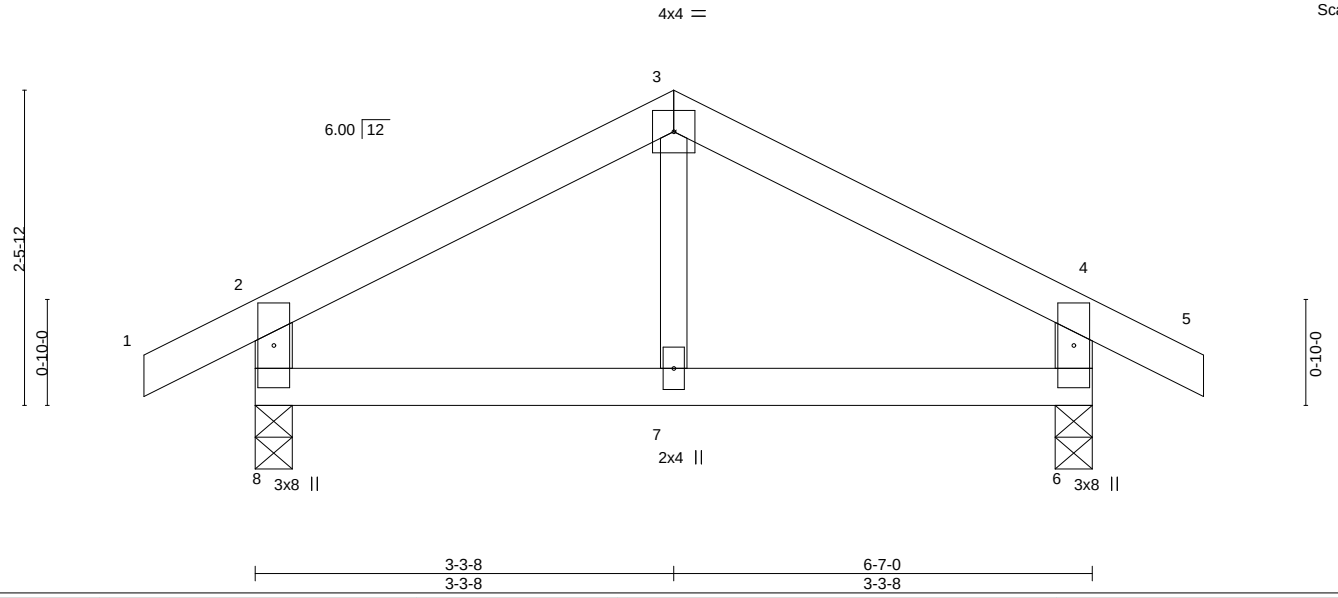

3-3-8 6-7-0
3-3-8 3-3-8

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	0.19	Vert(LL)	-0.01	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	7	>999	240		
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		Wind(LL)	0.00	7	>999	240	Weight: 21 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=50(LC 7)
Max Uplift 8=-58(LC 8), 6=-58(LC 9)
Max Grav 8=355(LC 1), 6=355(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-271/48, 3-4=-271/47, 2-8=-305/80, 4-6=-305/80

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) 8, 6.
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.

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Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	E3	Common	2	1	I48232946

Job Reference (optional)

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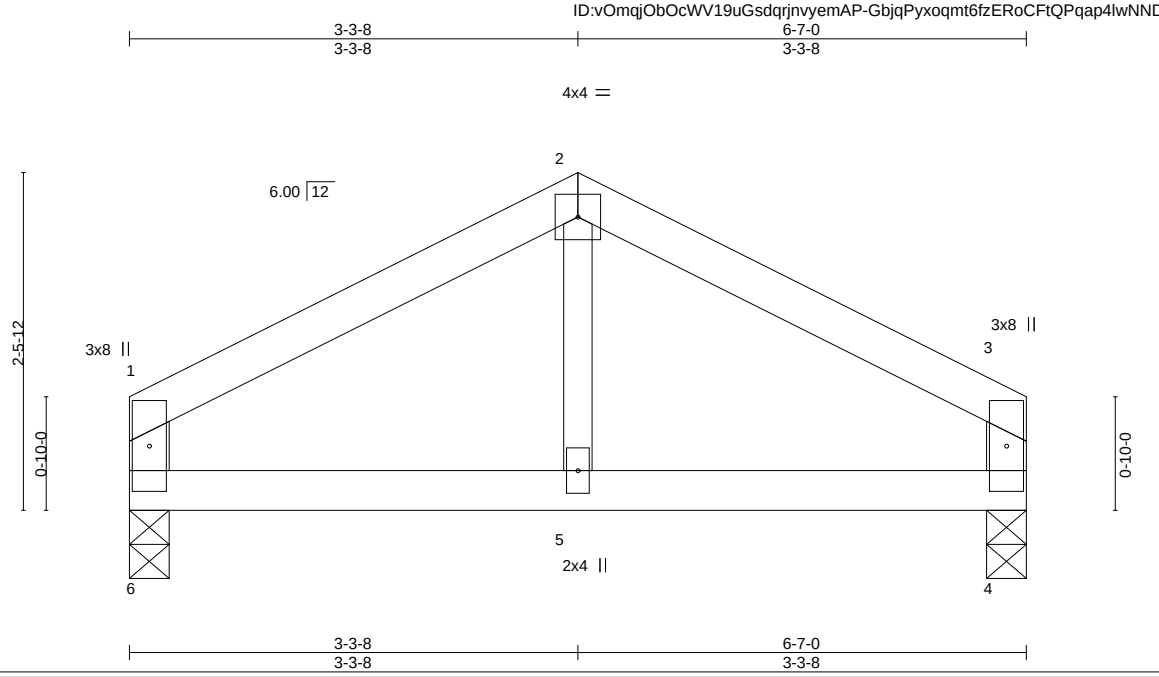

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 19 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* 2-5: 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) 6=0-3-8, 4=0-3-8
Max Horz 6=43(LC 7)
Max Uplift 6=-34(LC 8), 4=-34(LC 9)
Max Grav 6=283(LC 1), 4=283(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-283/48, 2-3=-283/48

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) 6, 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G1	Hip Girder	1	1	I48232947

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:26 2021 Page 1
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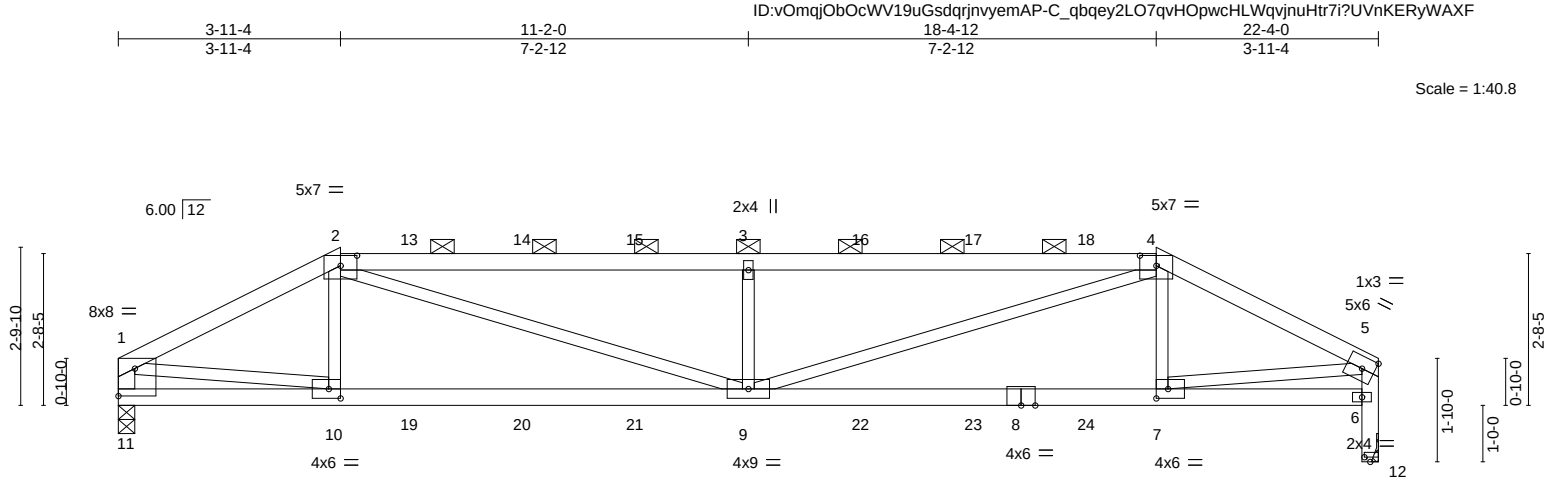

Plate Offsets (X,Y)-- [1:Edge,0-5-13], [2:0-3-8,0-2-3], [4:0-3-8,0-2-3], [7:0-2-8,0-2-0], [10:0-2-8,0-2-0], [12:0-1-4,0-1-0]

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	0.86	Vert(LL)	-0.18	9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.36	7-9	>740	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.07	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.17	9	>999	240	Weight: 77 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
2-4: 2x4 SPF 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,5-12: 2x4 SPF No.2

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

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

REACTIONS. (size) 11=0-3-8, 12=Mechanical
Max Horz 11=-41(LC 27)
Max Uplift 11=-323(LC 5), 12=-323(LC 4)
Max Grav 11=1489(LC 1), 12=1489(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2413/564, 2-3=-3679/929, 3-4=-3679/929, 4-5=-2413/562, 1-11=-1465/326, 6-12=-1489/323, 5-6=-1464/326
BOT CHORD 9-10=-508/2121, 7-9=-483/2121
WEBS 2-9=-454/1689, 3-9=-814/417, 4-9=-455/1689, 1-10=-458/1959, 5-7=-455/1955

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 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) 11=323, 12=323.
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) 78 lb down and 76 lb up at 3-11-4, 86 lb down and 76 lb up at 5-2-0, 86 lb down and 76 lb up at 7-2-0, 86 lb down and 76 lb up at 9-2-0, 86 lb down and 76 lb up at 11-2-0, 86 lb down and 76 lb up at 13-2-0, 86 lb down and 76 lb up at 15-2-0, and 86 lb down and 76 lb up at 17-2-0, and 78 lb down and 76 lb up at 18-4-12 on top chord, and 215 lb down and 77 lb up at 3-11-4, 30 lb down at 5-2-0, 30 lb down at 7-2-0, 30 lb down at 9-2-0, 30 lb down at 11-2-0, 30 lb down at 13-2-0, 30 lb down at 15-2-0, and 30 lb down at 17-2-0, and 215 lb down and 77 lb up at 18-4-0 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).

October 7,2021

LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 4-5=-70, 6-11=-20
   Concentrated Loads (lb)
   Vert: 2=-45(F) 4=-45(F) 10=-215(F) 9=-24(F) 3=-45(F) 7=-215(F) 13=-45(F) 14=-45(F) 15=-45(F) 16=-45(F) 17=-45(F) 18=-45(F) 19=-24(F) 20=-24(F) 21=-24(F) 22=-24(F) 23=-24(F) 24=-24(F)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G2	Hip	1	1	I48232948

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:28 2021 Page 1

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5-11-4	11-2-0	16-4-12	20-3-10	22-4-0
5-11-4	5-2-12	5-2-12	3-10-14	2-0-6

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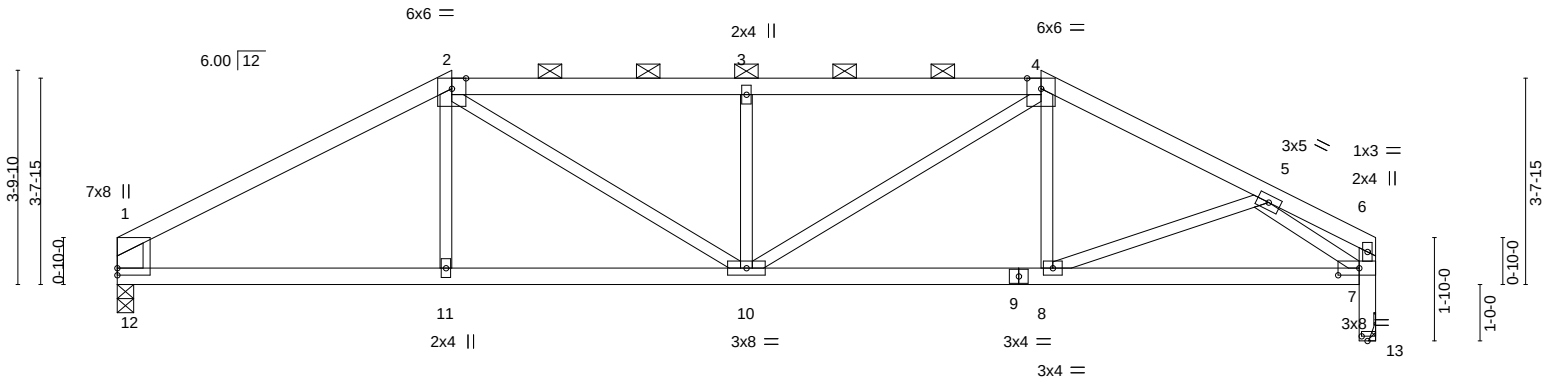

5-11-4	11-2-0	16-4-12	22-4-0
5-11-4	5-2-12	5-2-12	5-11-4

Plate Offsets (X,Y)-- [7:0-4-8,0-1-8], [13:0-1-4,0-1-0]

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	0.67	Vert(LL)	-0.15	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.28	10-11	>946	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	10-11	>999	240	Weight: 78 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
9-12: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
1-12: 2x6 SP 2400F 2.0E, 6-13: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-9 max.): 2-4.

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

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

REACTIONS. (size) 12=0-3-8, 13=Mechanical
Max Horz 12=-47(LC 6)
Max Grav 12=988(LC 1), 13=988(LC 1)

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

TOP CHORD 1-2=-1445/22, 2-3=-1688/43, 3-4=-1688/43, 4-5=-1462/21, 1-12=-842/26, 7-13=-988/0

BOT CHORD 11-12=-9/1196, 10-11=-11/1197, 8-10=0/1260, 7-8=-11/1087

WEBS 2-10=-58/667, 3-10=-468/101, 4-10=-56/582, 5-8=-5/295, 5-7=-1252/51

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) 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) This truss 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G3	Roof Special	1	1	I48232949

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:29 2021 Page 1

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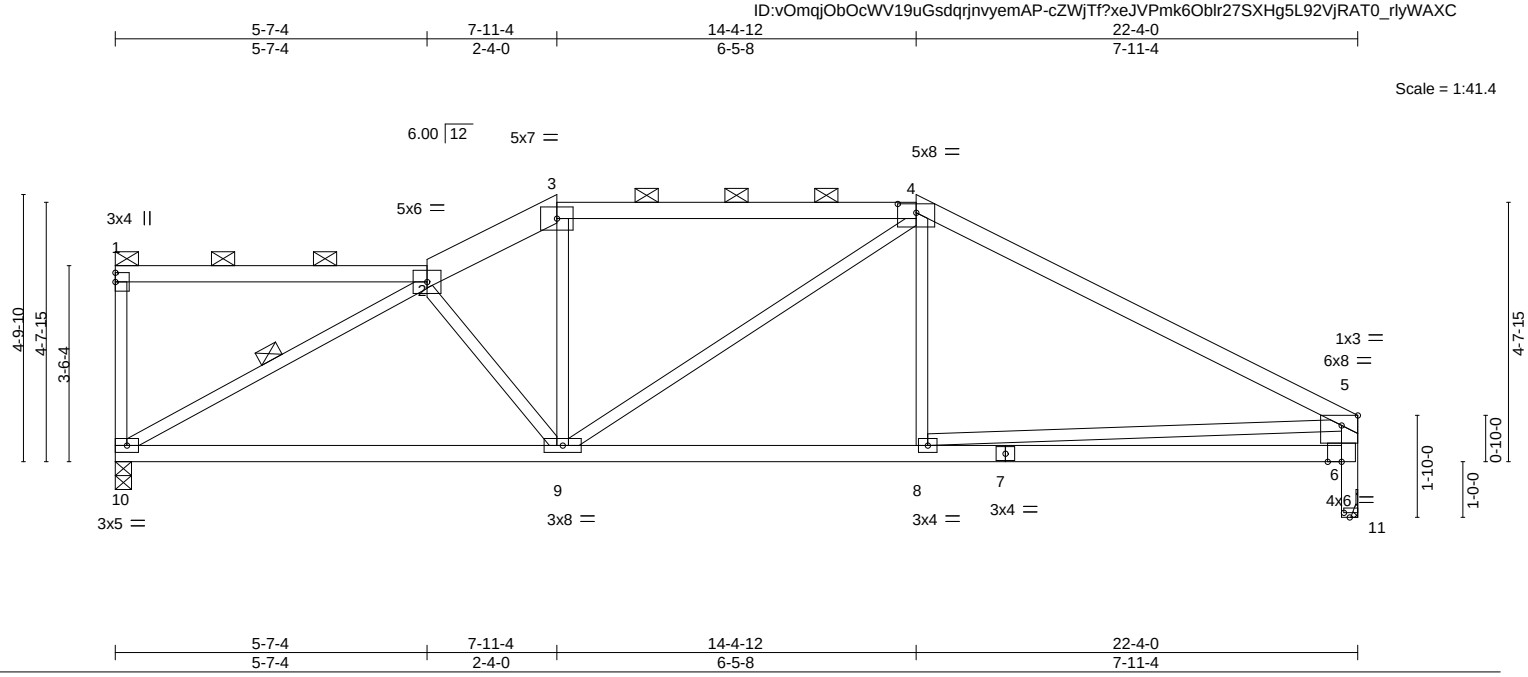

Plate Offsets (X,Y)-- [4:0-4-0,0-1-15], [5:0-3-8,Edge], [11:0-1-4,0-1-0]

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	0.69	Vert(LL)	-0.13	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.26	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.04	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 85 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x6 SPF No.2, 4-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-11: 2x4 SPF No.2

BRACING-

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

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

REACTIONS. (size) 10=0-3-8, 11=Mechanical
Max Horz 10=-87(LC 9)
Max Uplift 10=-13(LC 4)
Max Grav 10=994(LC 1), 11=994(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1360/8, 3-4=-1201/7, 4-5=-1453/5, 6-11=-994/0, 5-6=-917/36
BOT CHORD 9-10=0/1283, 8-9=0/1192, 6-8=-58/519
WEBS 2-10=-1453/26, 3-9=0/302, 5-8=0/714

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 ; 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) 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G4	Roof Special	1	1	I48232950
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:30 2021 Page 1

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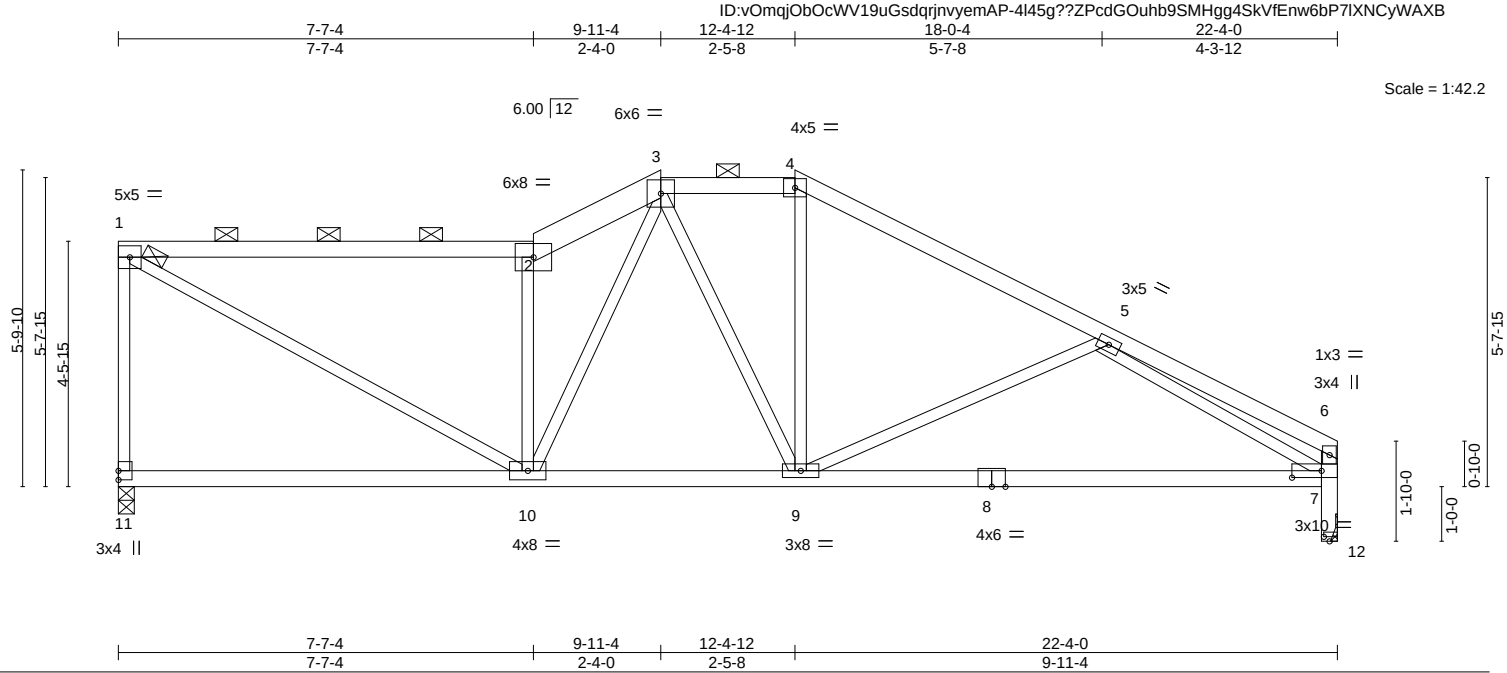

Plate Offsets (X,Y)-- [7:0-6-8,0-1-8], [12:0-1-4,0-1-0]

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	0.67	Vert(LL)	-0.24	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.48	7-9	>552	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	9-10	>999	240	Weight: 91 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-2: 2x4 SPF 2100F 1.8E, 2-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-12: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 11=0-3-8, 12=Mechanical
Max Horz 11=-115(LC 9)
Max Uplift 11=-17(LC 8)
Max Grav 11=994(LC 1), 12=994(LC 1)

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-921/57, 1-2=-1213/3, 2-3=-1459/41, 3-4=-1038/27, 4-5=-1254/2, 5-6=-408/0, 7-12=-994/0, 6-7=-252/0
BOT CHORD 9-10=0/1013, 7-9=-16/1275
WEBS 1-10=-2/1360, 2-10=-1061/121, 3-10=-52/557, 4-9=0/279, 5-9=-290/140, 5-7=-1187/106

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 ; 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) 11.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G5	Roof Special	1	1	I48232951
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:31 2021 Page 1
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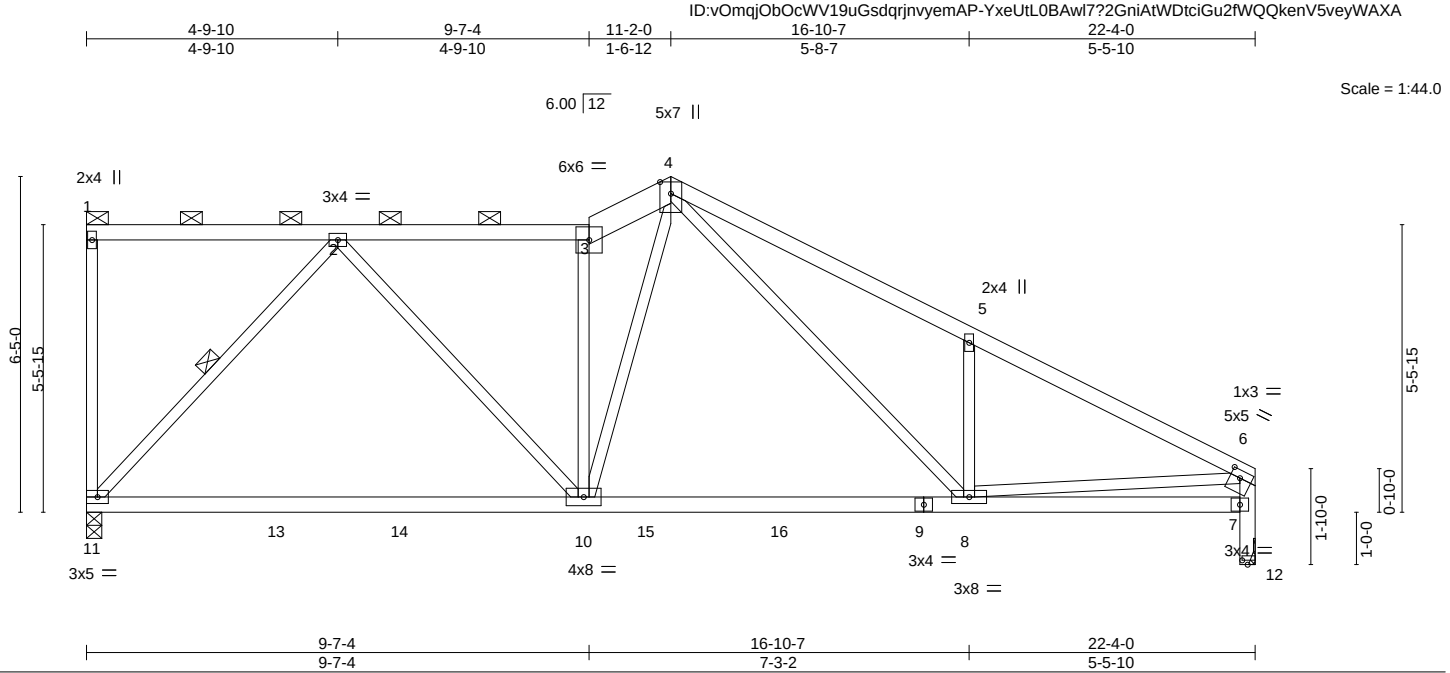

Plate Offsets (X,Y)-- [6:0-2-4,0-1-12], [12:0-1-4,0-1-0]

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	0.37	Vert(LL)	-0.25	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.45	10-11	>590	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-10	>999	240	Weight: 93 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
6-12: 2x4 SPF No.2

BRACING-

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

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

REACTIONS. (size) 11=0-3-8, 12=Mechanical
Max Horz 11=-140(LC 9)
Max Uplift 11=-29(LC 8)
Max Grav 11=1067(LC 2), 12=1049(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1172/0, 3-4=-1342/17, 4-5=-1620/106, 5-6=-1607/10, 7-12=-1049/0, 6-7=-957/28
BOT CHORD 10-11=0/743, 8-10=0/999, 7-8=-13/277
WEBS 2-11=-1084/63, 2-10=0/643, 3-10=-744/52, 4-10=0/733, 4-8=-110/591, 5-8=-419/146, 6-8=0/1114

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 ; 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) 11.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G6	Half Hip	1	1	I48232952
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:32 2021 Page 1
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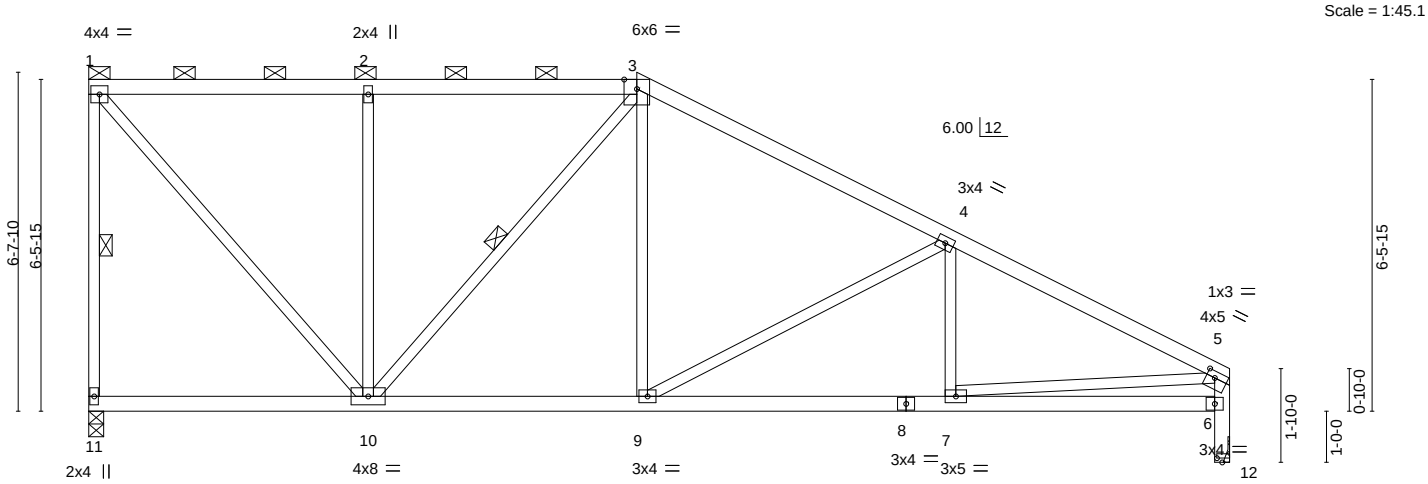
5-5-10	5-3-2	6-1-11	5-5-9

Scale = 1:45.1



5-5-10	10-8-12	16-10-7	22-4-0
5-5-10	5-3-2	6-1-11	5-5-9

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

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	0.43	Vert(LL)	-0.05	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.12	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-9	>999	240	Weight: 93 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-12: 2x4 SPF No.2

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

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

REACTIONS. (size) 11=0-3-8, 12=Mechanical
Max Horz 11=-160(LC 9)
Max Uplift 11=-43(LC 4)
Max Grav 11=994(LC 1), 12=994(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-946/69, 1-2=-691/29, 2-3=-693/30, 3-4=-1111/20, 4-5=-1539/6, 6-12=-994/0, 5-6=-937/25
BOT CHORD 9-10=0/899, 7-9=0/1313
WEBS 1-10=-44/1047, 2-10=-446/105, 3-10=-324/53, 3-9=0/369, 4-9=-463/97, 5-7=0/1074

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 ; 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) 11.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G7	Half Hip	1	1	I48232953
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:33 2021 Page 1
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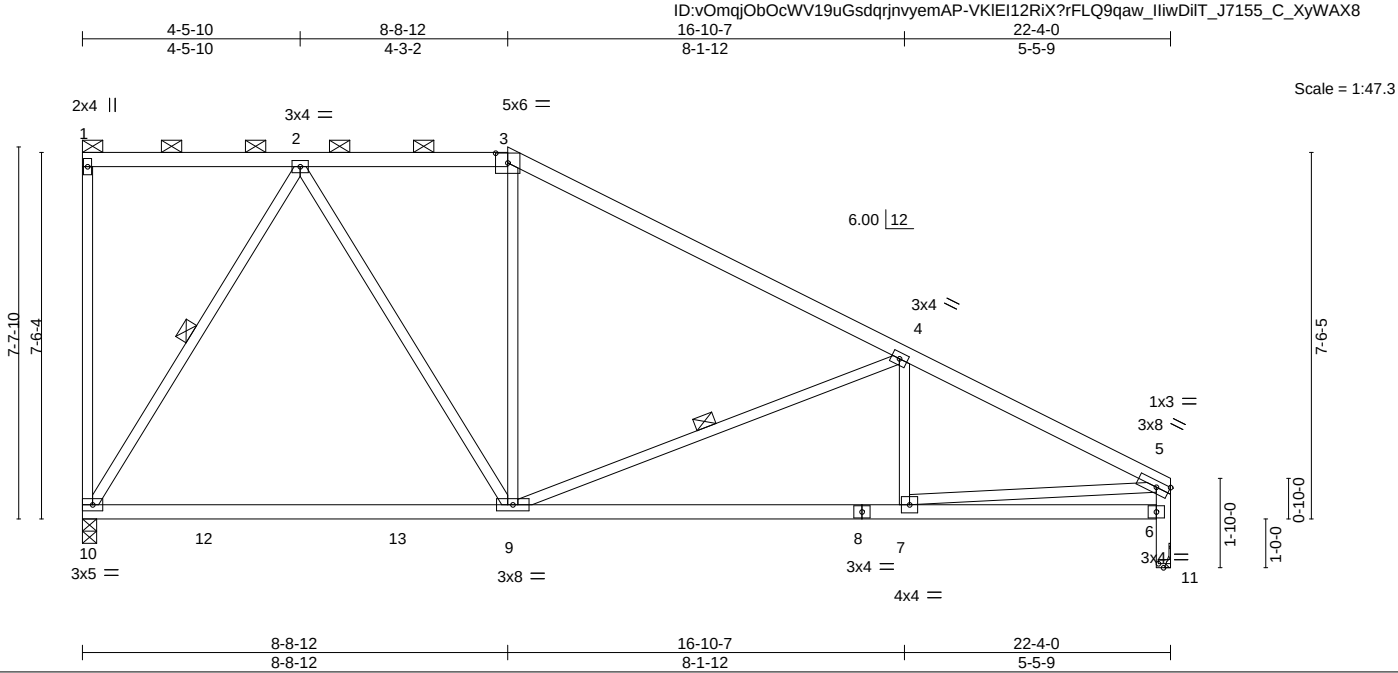

Plate Offsets (X,Y)-- [3:0-3-0,0-2-7], [11:0-1-4,0-1-0]

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	0.85	Vert(LL)	-0.25	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.39	9-10	>688	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-9	>999	240	Weight: 93 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: 2x4 SPF No.2

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

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

REACTIONS. (size) 10=0-3-8, 11=Mechanical
Max Horz 10=-189(LC 9)
Max Uplift 10=-40(LC 4)
Max Grav 10=1069(LC 2), 11=1033(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-829/39, 3-4=-1036/4, 4-5=-1617/16, 6-11=-1033/0, 5-6=-942/23
BOT CHORD 9-10=0/527, 7-9=0/1403
WEBS 2-10=-944/63, 2-9=-29/654, 4-9=-647/135, 5-7=0/1199

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 ; 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G8	Half Hip	1	1	I48232954
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:34 2021 Page 1
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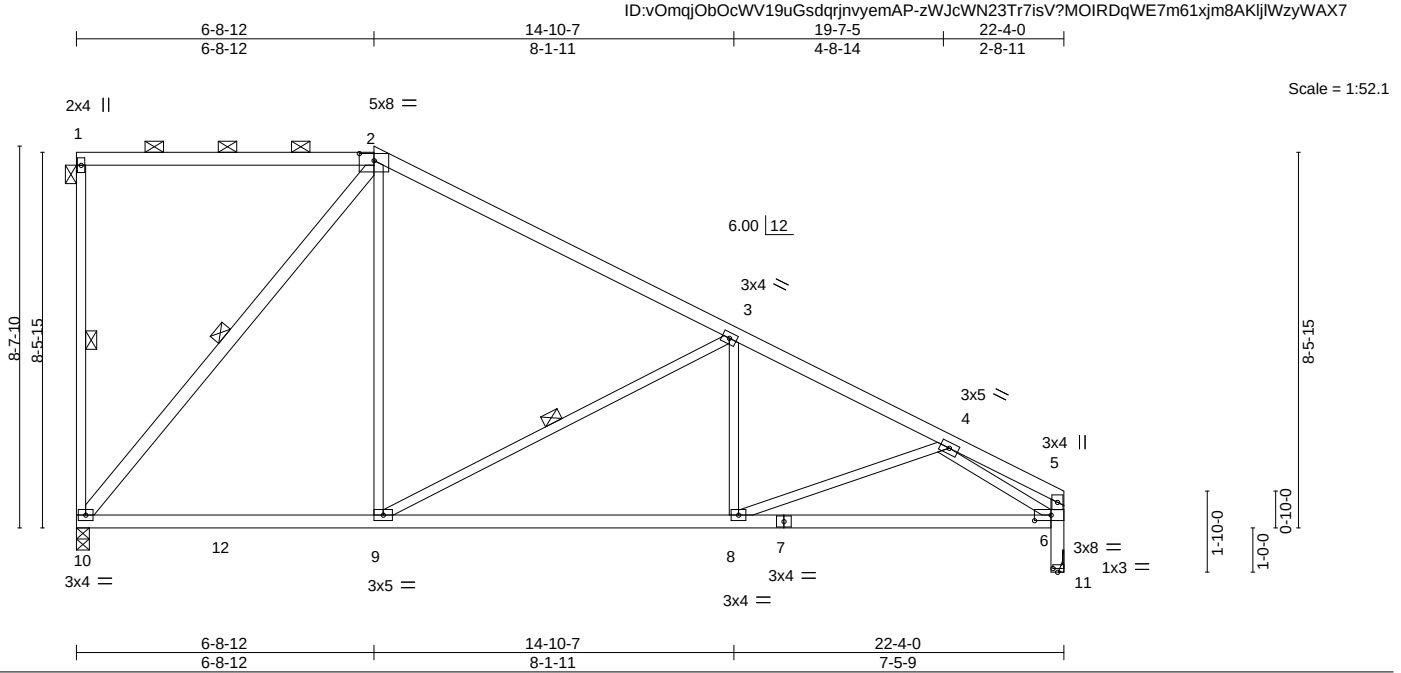

Plate Offsets (X,Y)-- [2:0-4-0,0-1-15], [6:0-4-8,0-1-8], [11:0-1-4,0-1-0]

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	0.73	Vert(LL)	-0.10	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.17	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.05	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 96 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-10,5-11: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-5-15 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.
WEBS	1 Row at midpt 1-10, 2-10, 3-9

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

REACTIONS. (size) 10=0-3-8, 11=Mechanical
Max Horz 10=-217(LC 9)
Max Uplift 10=-37(LC 4)
Max Grav 10=1063(LC 2), 11=1037(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-833/9, 3-4=-1482/5, 4-5=-314/0, 6-11=-1037/0
BOT CHORD 9-10=0/654, 8-9=0/1304, 6-8=0/1181
WEBS 2-10=-1012/67, 2-9=0/691, 3-9=-769/124, 3-8=0/283, 4-6=-1208/37

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 ; 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN	
MN131	G9	Half Hip	1	1	Job Reference (optional)	I48232955

Wheeler Lumber, Waverly, KS 66871 — 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 15:44:04 2021 Page 1
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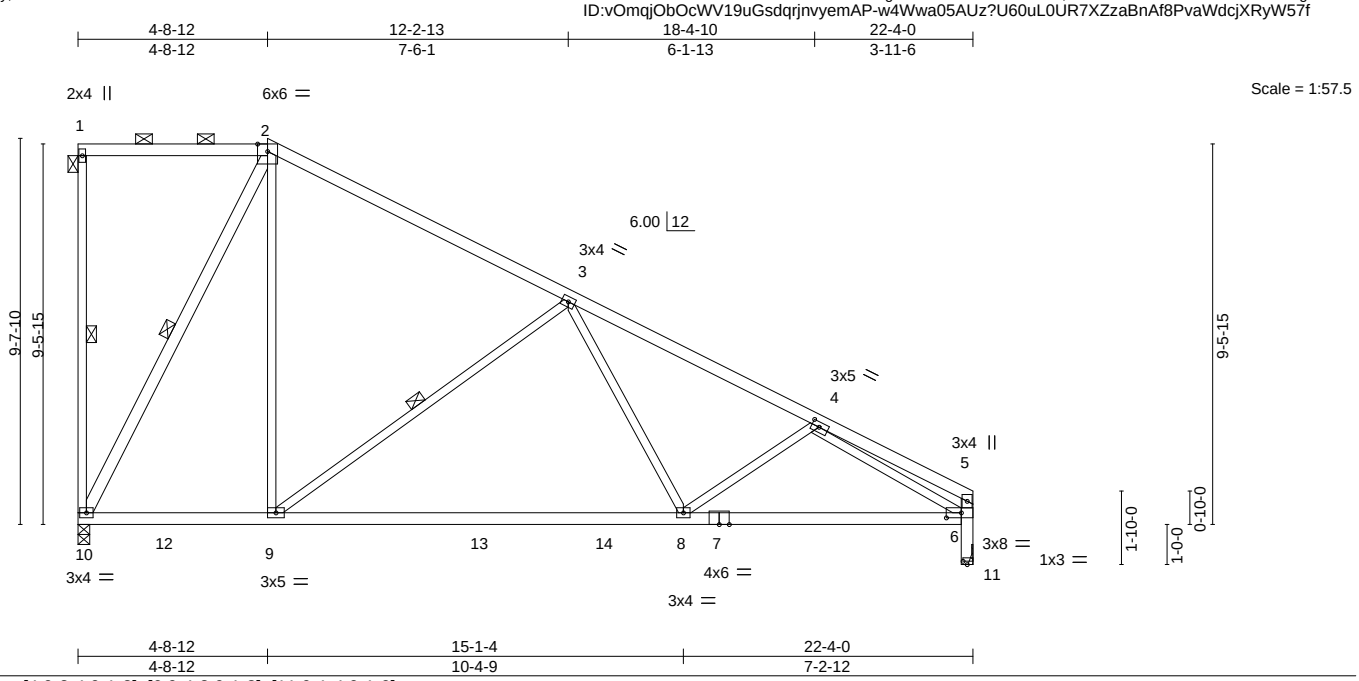

Plate Offsets (X,Y)-- [4:0-2-4,0-1-8], [6:0-4-8,0-1-8], [11:0-1-4,0-1-0]

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	0.66	Vert(LL)	-0.28	8-9	>957	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.48	8-9	>549	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 100 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-10: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-10,5-11: 2x4 SPF No.2

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

REACTIONS. (lb/size) 10=994/0-3-8, 11=994/Mechanical
Max Horz 10=-245(LC 9)
Max Uplift 10=-60(LC 9)
Max Grav 10=1079(LC 2), 11=1062(LC 14)

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-638/3, 3-4=-1519/0, 4-5=-283/17, 6-11=-1062/0
BOT CHORD 10-12=0/515, 9-12=0/515, 9-13=0/1078, 13-14=0/1078, 8-14=0/1078, 7-8=0/1364, 6-7=0/1364
WEBS 2-10=-1048/73, 2-9=0/836, 3-9=-776/148, 3-8=0/470, 4-6=-1382/0

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 ; 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 60 lb uplift at joint 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	G10	Hip	1	1	I48232956

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:27 2021 Page 1

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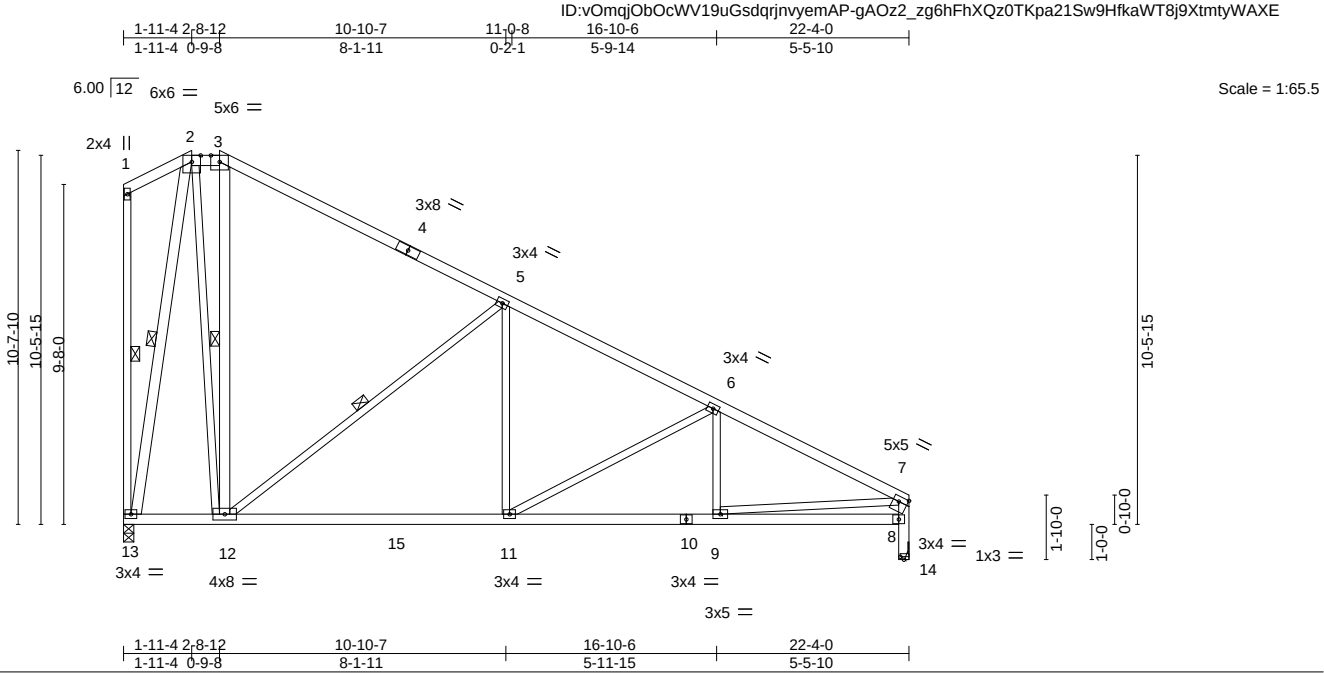

Plate Offsets (X,Y)-- [7:Edge,0-1-12], [14:0-1-4,0-1-0]

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	0.76	Vert(LL)	-0.14	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.25	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	11	>999	240	Weight: 119 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-12,2-13,7-14: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-14 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.
WEBS 1 Row at midpt 3-12, 1-13, 2-13, 5-12

REACTIONS. (size) 13=0-3-8, 14=Mechanical
Max Horz 13=-259(LC 9)
Max Uplift 13=-83(LC 9)
Max Grav 13=1053(LC 14), 14=1054(LC 14)

BOTH END VERTICALS MUST BE INTERIOR MEMBERS AND MUST NOT BE EXPOSED TO WIND.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-274/36, 3-5=-425/0, 5-6=-1207/0, 6-7=-1592/0, 8-14=-1054/0, 7-8=-956/16
BOT CHORD 12-13=0/277, 11-12=0/1017, 9-11=0/1361, 8-9=-16/300
WEBS 2-12=-128/1040, 3-12=-295/131, 2-13=-1064/79, 5-12=-966/132, 5-11=0/497, 6-11=-392/76, 7-9=0/1068

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; 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) 13.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	H1	Hip Girder	1	1	I48232957
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:37 2021 Page 1
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0-10-8	3-10-8	10-6-0	17-1-8	21-0-0	21-10-8
0-10-8	3-10-8	6-7-8	6-7-8	3-10-8	0-10-8

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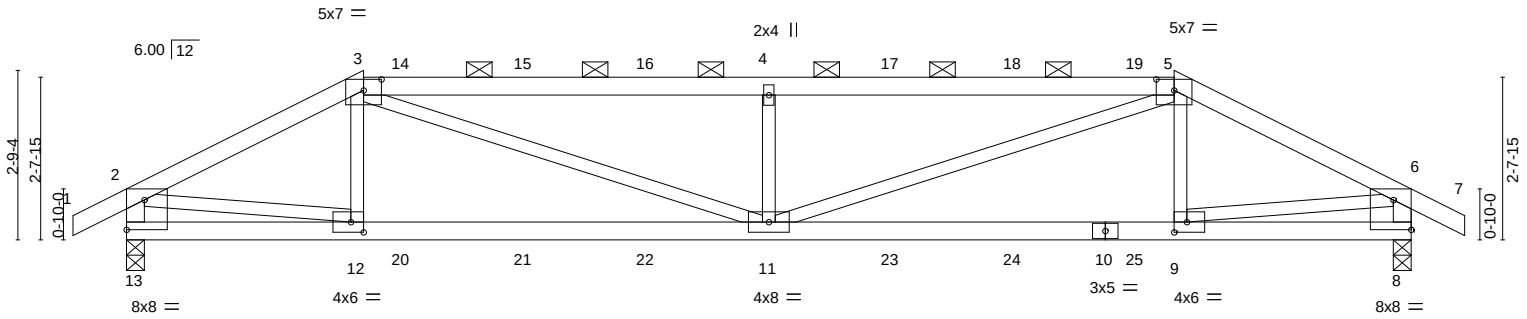


3-10-8	10-6-0	17-1-8	21-0-0
3-10-8	6-7-8	6-7-8	3-10-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.15	11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.29	9-11	>857	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14	11	>999	240	Weight: 74 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*
2-13,6-8: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-5 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 8-4-7 oc bracing.

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=53(LC 28)
Max Uplift 13=-334(LC 8), 8=-334(LC 9)
Max Grav 13=1483(LC 1), 8=1483(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2248/544, 3-4=-3282/846, 4-5=-3282/846, 5-6=-2248/544, 2-13=-1454/340, 6-8=-1454/340
BOT CHORD 11-12=-485/1965, 9-11=-456/1965
WEBS 3-11=-389/1435, 4-11=-742/379, 5-11=-389/1435, 2-12=-442/1782, 6-9=-445/1782

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) 13=334, 8=334.
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 75 lb up at 3-10-8, 82 lb down and 75 lb up at 4-6-0, 85 lb down and 75 lb up at 6-6-0, 85 lb down and 75 lb up at 8-6-0, 85 lb down and 75 lb up at 10-6-0, 85 lb down and 75 lb up at 12-6-0, 85 lb down and 75 lb up at 14-6-0, and 82 lb down and 75 lb up at 16-6-0, and 77 lb down and 75 lb up at 17-1-8 on top chord, and 209 lb down and 76 lb up at 3-10-8, 29 lb down at 4-6-0, 29 lb down at 6-6-0, 29 lb down at 8-6-0, 29 lb down at 10-6-0, 29 lb down at 12-6-0, 29 lb down at 14-6-0, and 29 lb down at 16-6-0, and 209 lb down and 76 lb up at 17-0-12 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).

October 7,2021

LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

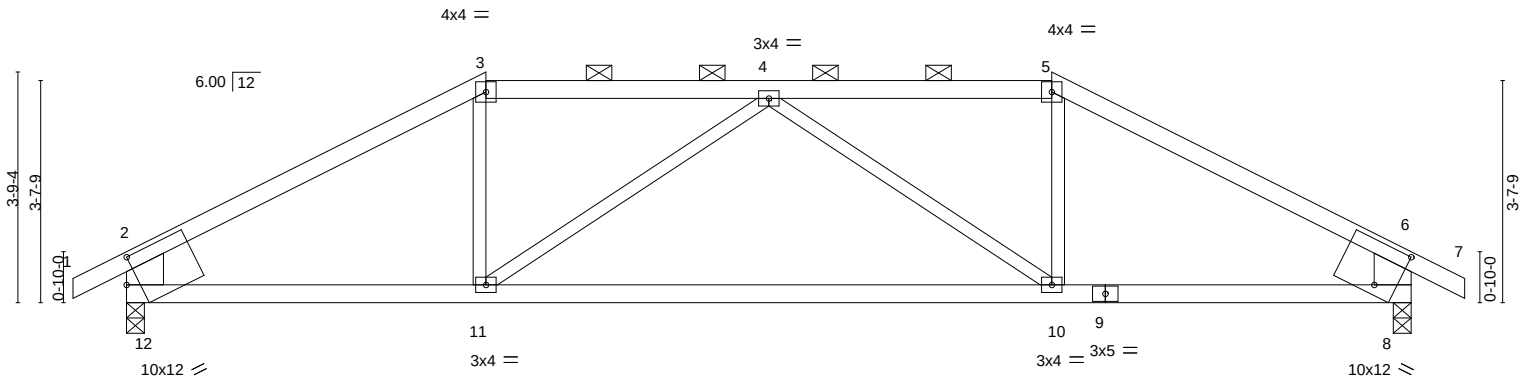
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-13=-20
   Concentrated Loads (lb)
   Vert: 3=-42(B) 5=-42(B) 12=-209(B) 11=-23(B) 4=-42(B) 9=-209(B) 14=-42(B) 15=-42(B) 16=-42(B) 17=-42(B) 18=-42(B) 19=-42(B) 20=-23(B) 21=-23(B) 22=-23(B) 23=-23(B) 24=-23(B) 25=-23(B)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	H2	Hip	1	1	I48232958
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:38 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-rHZ7Lk6aX3d7L7I7d8V9?MPqtjO6fdImFNhyfkyWAX3

0-10-8	5-10-8	10-6-0	15-1-8	21-0-0	21-10-8
0-10-8	5-10-8	4-7-8	4-7-8	5-10-8	0-10-8

Scale = 1:37.7



5-10-8	15-1-8	21-0-0
5-10-8	9-3-0	5-10-8

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.25	10-11	>971	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.57	10-11	>428	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	10-11	>999	240	Weight: 69 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*
2-12,6-8: 2x8 SP DSS

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

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=-68(LC 6)
Max Uplift 12=-99(LC 8), 8=-99(LC 9)
Max Grav 12=1000(LC 1), 8=1000(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1359/130, 3-4=-1093/136, 4-5=-1093/136, 5-6=-1359/130, 2-12=-924/129, 6-8=-924/129
BOT CHORD 11-12=-99/1101, 10-11=-188/1395, 8-10=-53/1101
WEBS 3-11=0/388, 4-11=-449/164, 4-10=-449/164, 5-10=0/388

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) 12, 8.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	H3	Hip	1	1	I48232959

Job Reference (optional)

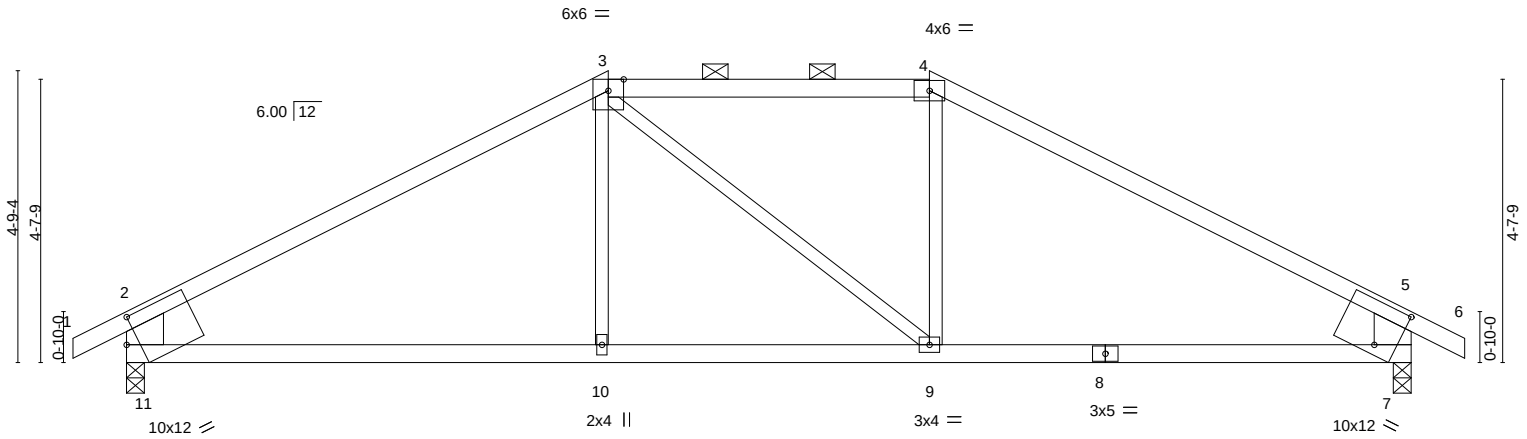
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:38 2021 Page 1

ID:vOmqjObOcWV19uGsdqrjnvyemAP-rHZ7Lk6aX3d7L7I7d8V9?MPq1jRFfgRmFNhyfkyWAX3

0-10-8 7-10-8 13-1-8 21-0-0 21-10-8

0-10-8 7-10-8 5-3-0 7-10-8 0-10-8

Scale = 1:37.7



7-10-8 13-1-8 21-0-0

7-10-8 5-3-0 7-10-8

Plate Offsets (X,Y)-- [7:0-4-1,0-8-2], [11:0-2-7,0-4-14]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.09	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.19	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	9-10	>999	240	Weight: 68 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
3-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,5-7: 2x8 SP DSS

BRACING-

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

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=81(LC 7)
Max Uplift 11=-120(LC 8), 7=-120(LC 9)
Max Grav 11=1000(LC 1), 7=1000(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1278/103, 3-4=-1013/151, 4-5=-1278/103, 2-11=-912/176, 5-7=-912/176
BOT CHORD 10-11=-50/1016, 9-10=-52/1013, 7-9=-6/1016

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=120, 7=120.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	H4	HIP GIRDER	1	3	I48232960

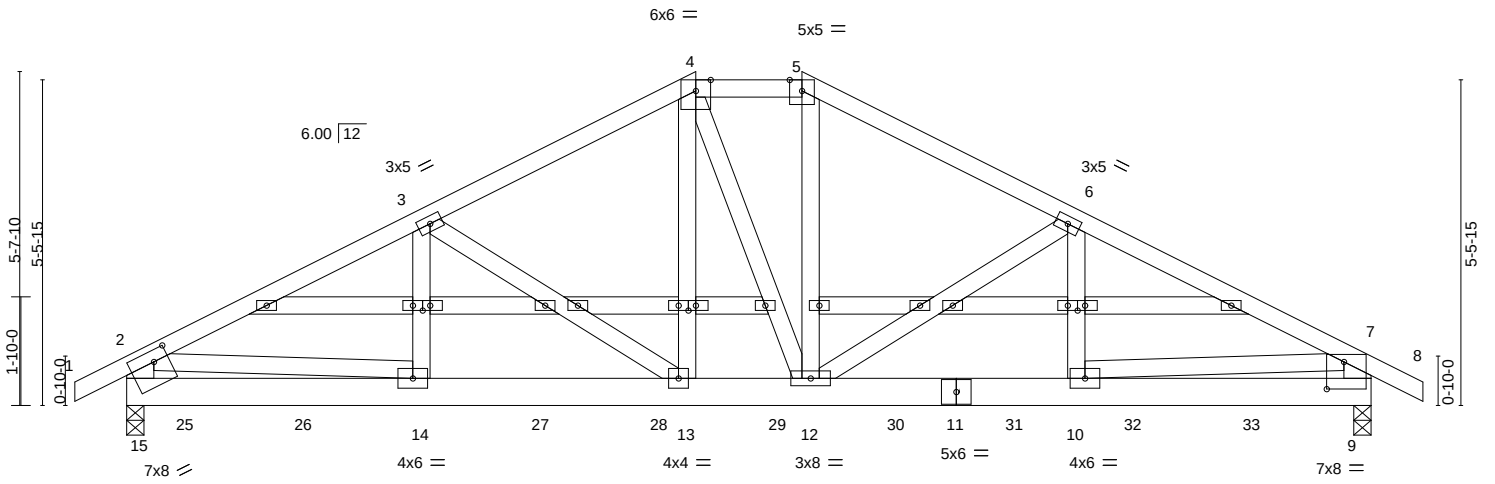
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:40 2021 Page 1

ID:vOmqjObOcWV19uGsdqrjnvyemAP-oghtmQ7q2huraQSWkZYd4nUFHXBF7W33ihA3kdyWAX1

0-10-8	4-11-11	9-7-4	11-4-12	16-0-5	21-0-0	21-10-8
0-10-8	4-11-11	4-7-9	1-9-8	4-7-9	4-11-11	0-10-8

Scale = 1:38.9



4-11-11	9-7-4	11-4-12	16-0-5	21-0-0
4-11-11	4-7-9	1-9-8	4-7-9	4-11-11

Plate Offsets (X,Y)-- [9:0-3-8,0-5-8], [15:0-3-0,0-2-4], [17:0-1-8,0-1-0], [19:0-1-8,0-1-0], [23:0-1-8,0-1-0]

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	0.35	Vert(LL)	-0.08	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.15	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 422 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except*
2-15,7-9: 2x6 SP DSS

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.): 4-5.
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=-76(LC 6)
Max Grav 15=6140(LC 1), 9=6068(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8610/0, 3-4=-6770/0, 4-5=-6024/0, 5-6=-6835/0, 6-7=-8782/0, 2-15=-4712/0, 7-9=-4785/0
BOT CHORD 14-15=0/2458, 13-14=0/7610, 12-13=0/5967, 10-12=0/7764, 9-10=0/2658
WEBS 3-14=0/1810, 3-13=-1993/0, 4-13=0/2581, 4-12=-73/290, 5-12=0/2722, 6-12=-2019/0, 6-10=0/1796, 2-14=0/5188, 7-10=0/5141

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 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) This truss 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) 1023 lb down at 1-0-0, 1028 lb down at 3-0-0, 1013 lb down at 5-0-0, 1009 lb down at 7-0-0, 970 lb down at 9-0-0, 1026 lb down at 11-0-0, 970 lb down at 13-0-0, 974 lb down at 15-0-0, and 968 lb down at 17-0-0, and 1464 lb down and 342 lb up at 19-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

October 7,2021

LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-7=-70, 7-8=-70, 9-15=-20
   Concentrated Loads (lb)
   Vert: 14=-974(F) 25=-975(F) 26=-970(F) 27=-970(F) 28=-970(F) 29=-970(F) 30=-970(F) 31=-974(F) 32=-968(F) 33=-1464(F)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J1	Diagonal Hip Girder	6	1	I48232961

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:41 2021 Page 1
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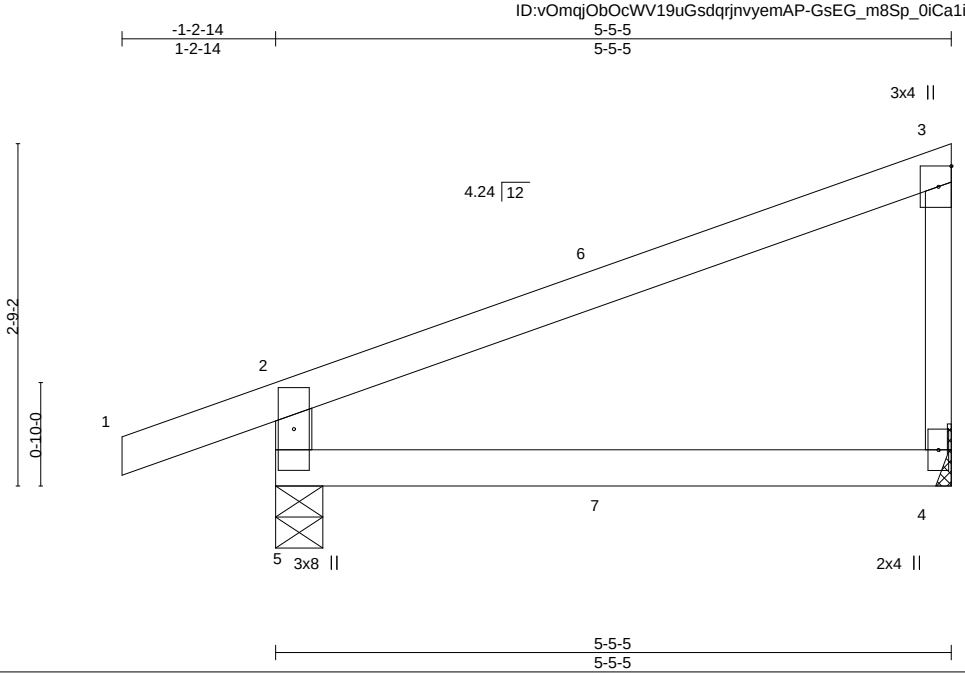

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-5-5 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=116(LC 5)
Max Uplift 5=-99(LC 4), 4=-51(LC 8)
Max Grav 5=342(LC 1), 4=219(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-302/138

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) 5, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 36 lb up at 2-8-7, and 69 lb down and 36 lb up at 2-8-7 on top chord, and 4 lb down and 1 lb up at 2-8-7, and 4 lb down and 1 lb up at 2-8-7 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=1, B=1)

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J2	Jack-Open	12	1	I48232962

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:48 2021 Page 1

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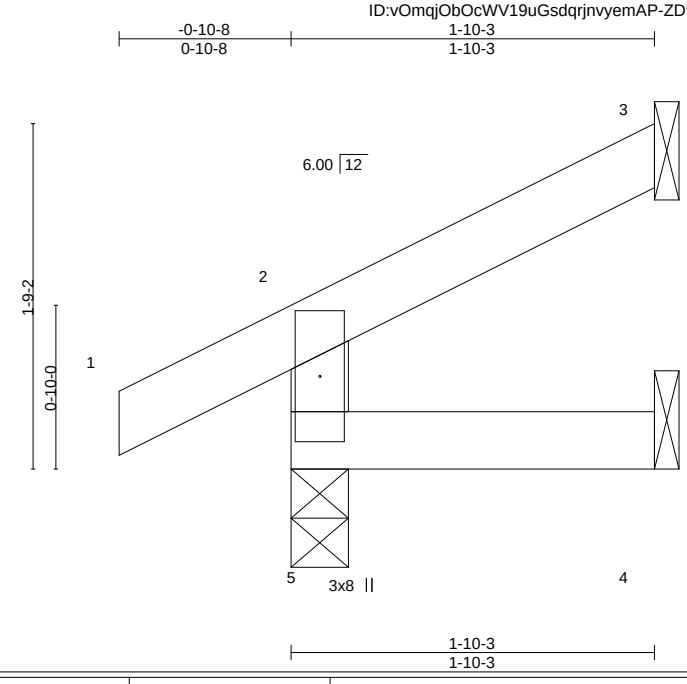

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 1-10-3 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=44(LC 8)
Max Uplift 5=-22(LC 8), 3=-31(LC 8)
Max Grav 5=169(LC 1), 3=41(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J3	Jack-Open	17	1	I48232963

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:51 2021 Page 1

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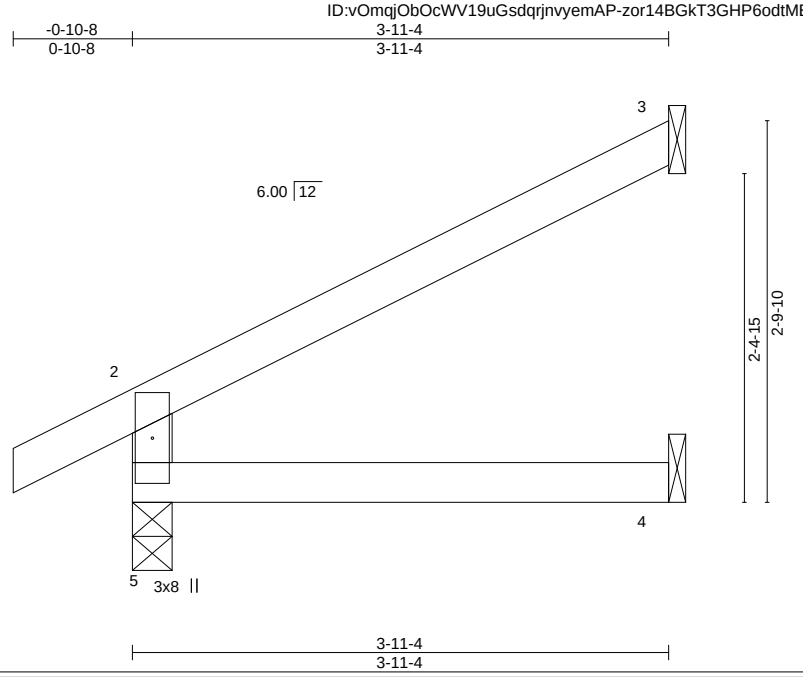

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 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 3-11-4 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=86(LC 8)
Max Uplift 5=-26(LC 8), 3=-67(LC 8)
Max Grav 5=249(LC 1), 3=115(LC 1), 4=70(LC 3)

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

NOTES-

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

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J4	Diagonal Hip Girder	1	1	I48232964

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:52 2021 Page 1

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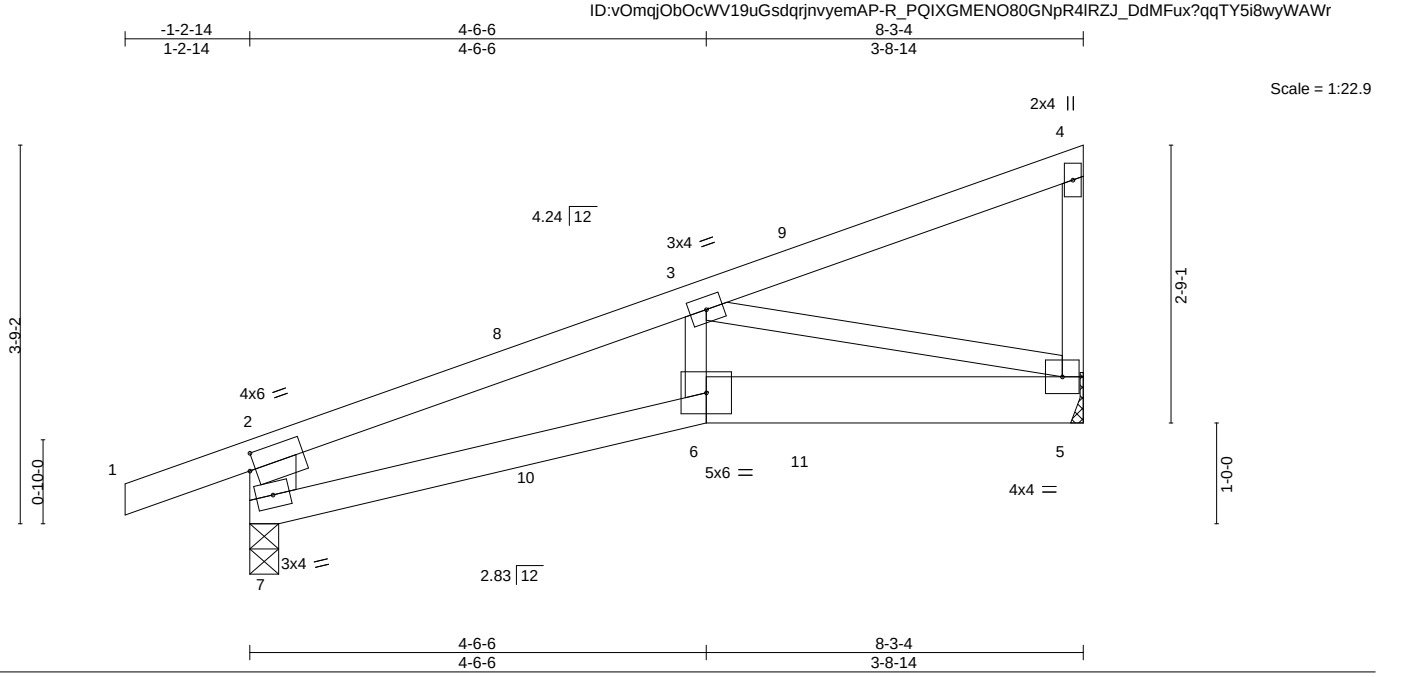

Plate Offsets (X,Y)-- [2:0-0-11,0-2-0]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.06	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.10	6	>972	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	6	>999	240	Weight: 30 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 5-9-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-7, 5=Mechanical
Max Horz 7=143(LC 5)
Max Uplift 7=-133(LC 4), 5=-109(LC 8)
Max Grav 7=492(LC 1), 5=391(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-549/192, 2-3=-731/186
BOT CHORD 6-7=-233/634, 5-6=-222/635
WEBS 3-5=-632/222

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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) except (jt=lb) 7=133, 5=109.
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) 70 lb down and 42 lb up at 2-8-7, 70 lb down and 36 lb up at 2-8-7, and 98 lb down and 75 lb up at 5-6-6, and 97 lb down and 74 lb up at 5-6-6 on top chord, and 5 lb down at 2-8-7, 4 lb down and 1 lb up at 2-8-7, and 24 lb down at 5-6-6, and 23 lb down at 5-6-6 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

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 9=-32(F=-13, B=-19) 10=-2(F=1, B=-4) 11=-31(F=-14, B=-18)

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J5	Jack-Open	1	1	I48232965

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:53 2021 Page 1

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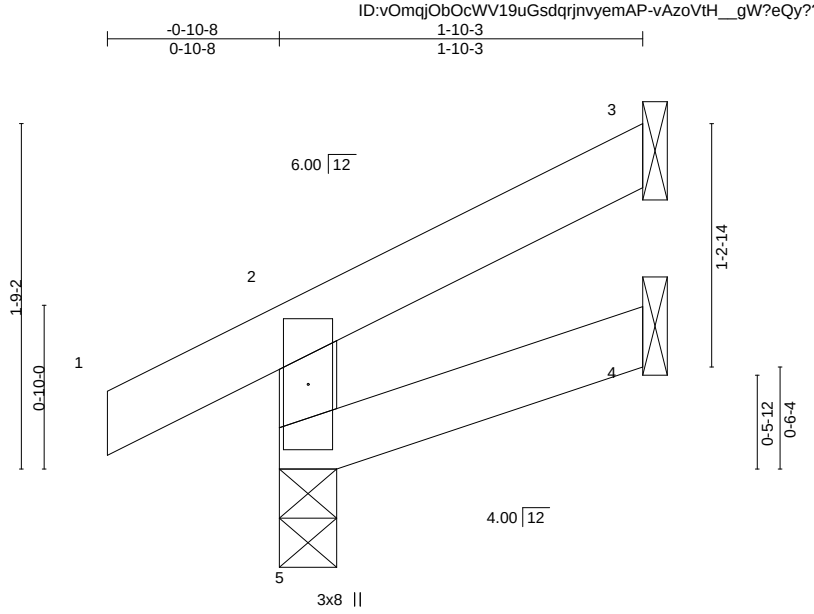

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 1-10-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 5)
Max Uplift 5=-21(LC 8), 3=-32(LC 8)
Max Grav 5=169(LC 1), 3=41(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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J5A	Jack-Open	1	1	I48232966

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:53 2021 Page 1

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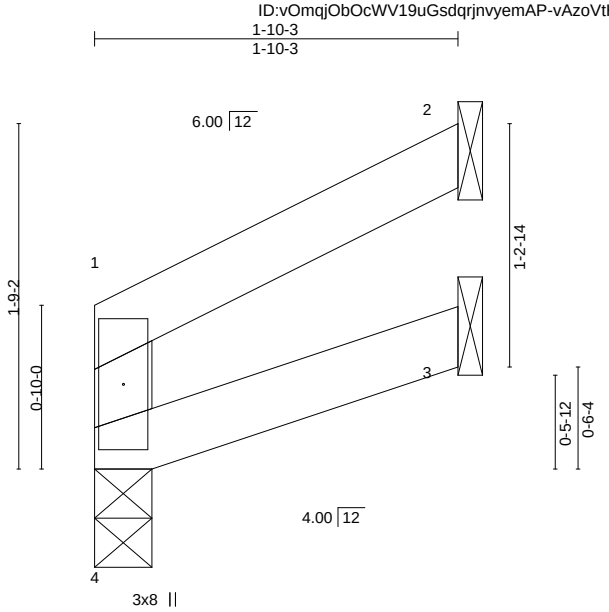

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4	>999	240	Weight: 5 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 6-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=35(LC 5)
Max Uplift 2=-35(LC 8)
Max Grav 4=76(LC 1), 2=56(LC 1), 3=33(LC 3)

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

NOTES-

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

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J6	Jack-Open	1	1	I48232967
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:54 2021 Page 1
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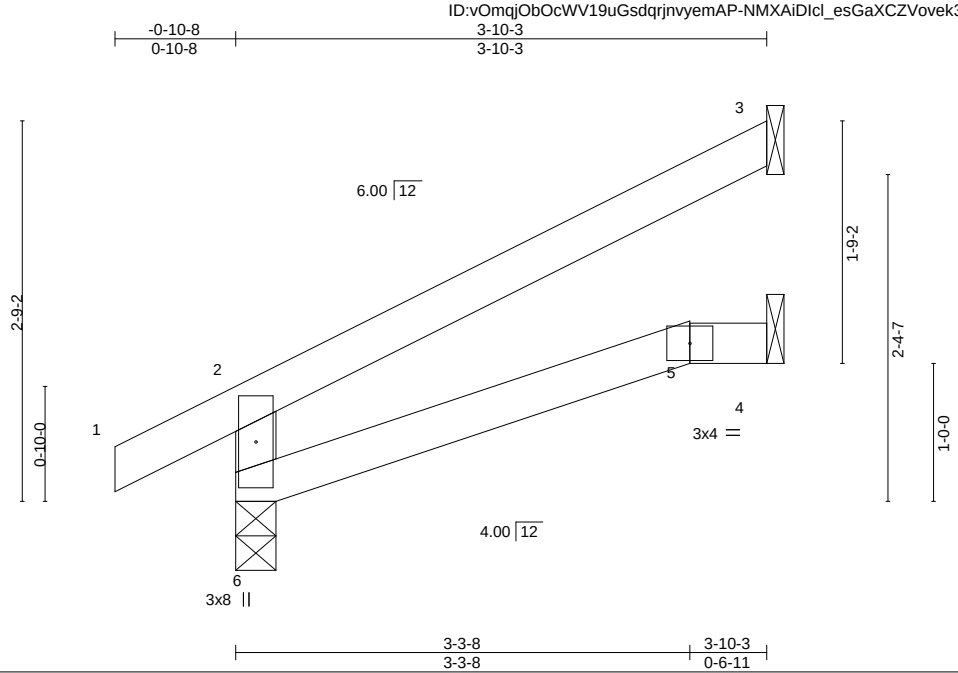

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=83(LC 8)
Max Uplift 6=-25(LC 8), 3=-66(LC 8)
Max Grav 6=245(LC 1), 3=112(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) 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J6A	Jack-Open	1	1	I48232968
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:55 2021 Page 1
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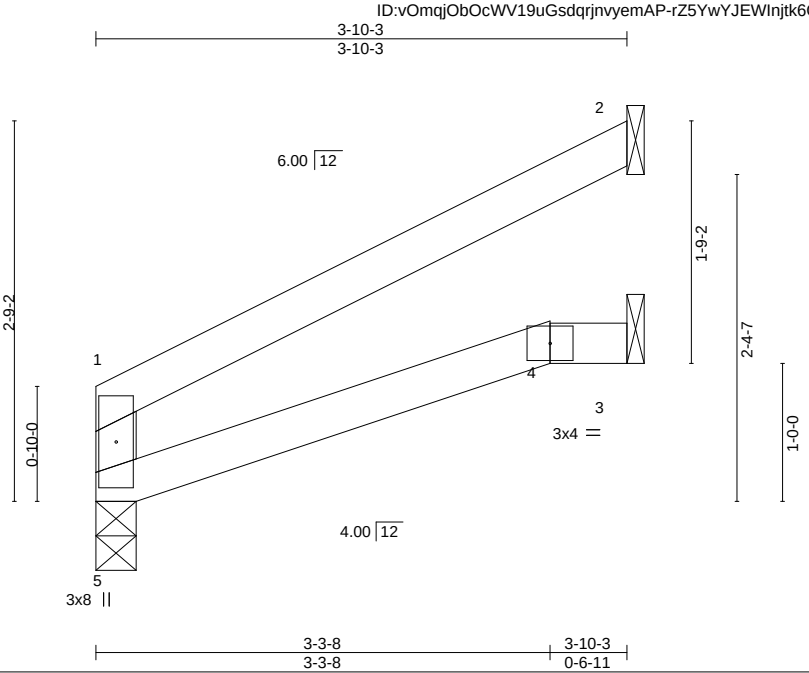

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 3-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 5=65(LC 8)
Max Uplift 2=-68(LC 8)
Max Grav 5=164(LC 1), 2=118(LC 1), 3=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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J7	Jack-Open	9	1	I48232969
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:55 2021 Page 1
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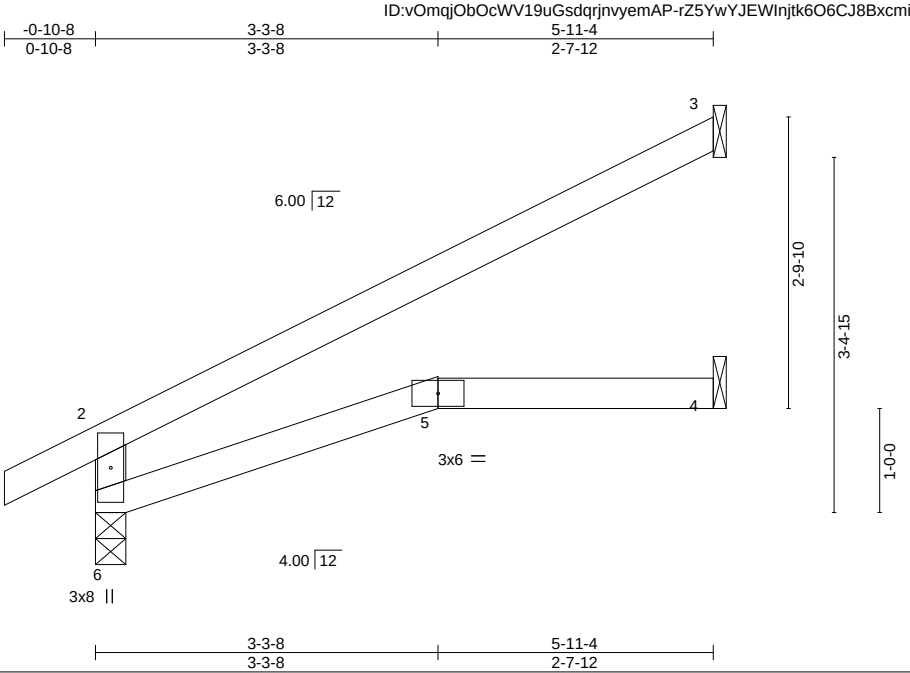

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.05	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.12	5-6	>594	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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=88(LC 8)
Max Uplift 3=-60(LC 8)
Max Grav 6=336(LC 1), 3=181(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/44

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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J8	Jack-Open	1	1	I48232970
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:56 2021 Page 1
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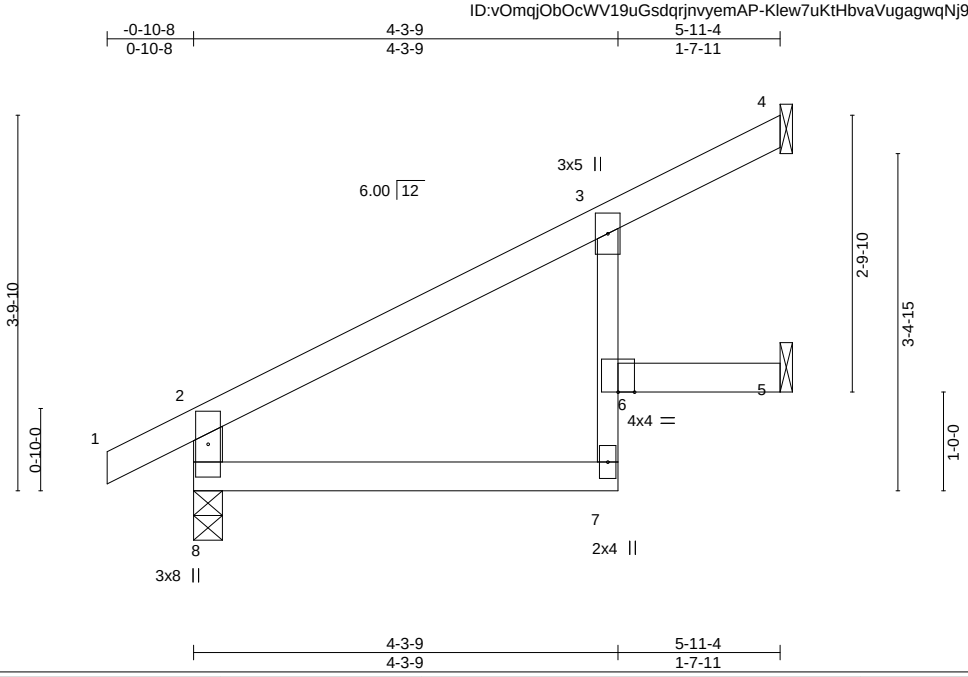

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.07	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	6	>999	240	Weight: 18 lb	FT = 10%

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

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=89(LC 8)
Max Uplift 4=-23(LC 8), 5=-18(LC 8)
Max Grav 8=336(LC 1), 4=125(LC 1), 5=126(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-302/28

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, 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J9	Jack-Open	1	1	I48232971
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:57 2021 Page 1
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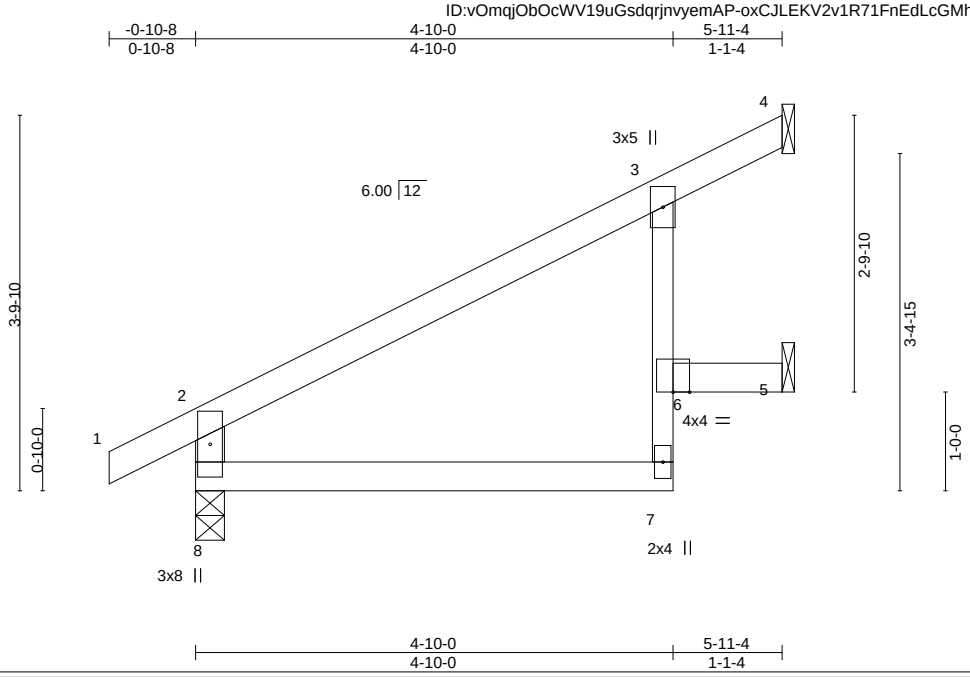

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.05	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	6	>999	240	Weight: 18 lb	FT = 10%

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

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=89(LC 8)
Max Uplift 4=-6(LC 8), 5=-35(LC 8)
Max Grav 8=336(LC 1), 4=86(LC 1), 5=166(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-296/31

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, 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J10	Jack-Open	12	1	I48232972
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:42 2021 Page 1
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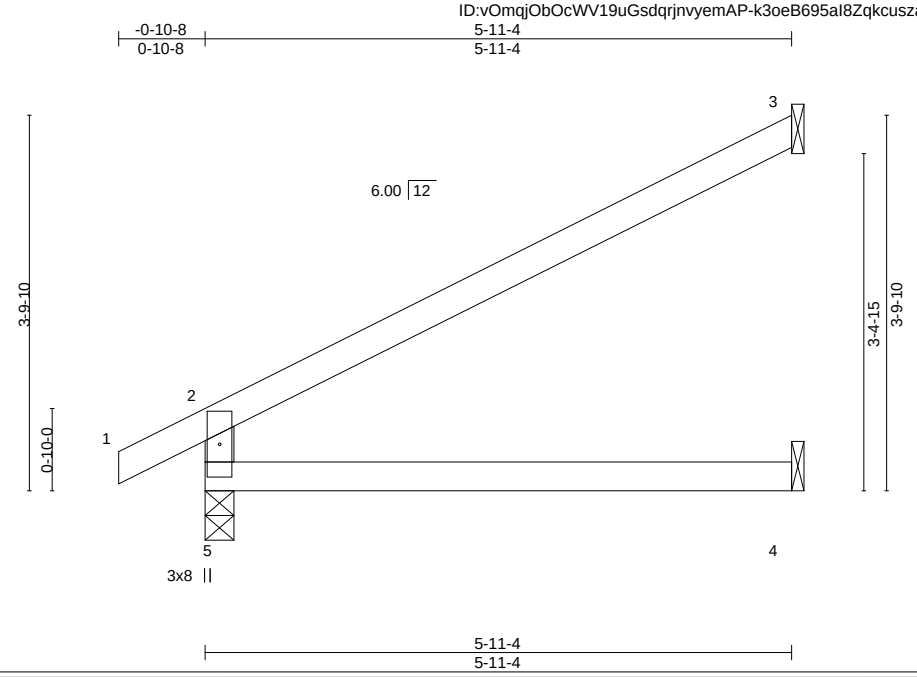

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	4-5	>609	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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=89(LC 8)
Max Uplift 3=-60(LC 8)
Max Grav 5=336(LC 1), 3=180(LC 1), 4=109(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-293/45

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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J11	Jack-Open	2	1	I48232973
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:42 2021 Page 1

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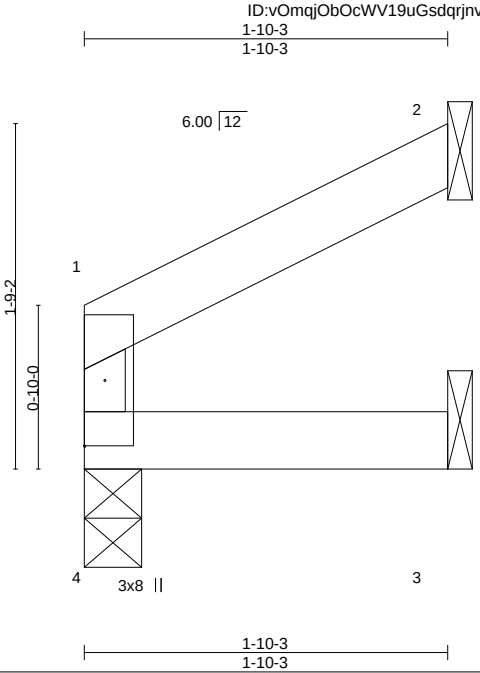

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4	>999	240	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 1-10-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=34(LC 5)
Max Uplift 2=-37(LC 8)
Max Grav 4=78(LC 1), 2=58(LC 1), 3=34(LC 3)

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

NOTES-

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

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J12	Jack-Open Girder	2	1	I48232974

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:43 2021 Page 1

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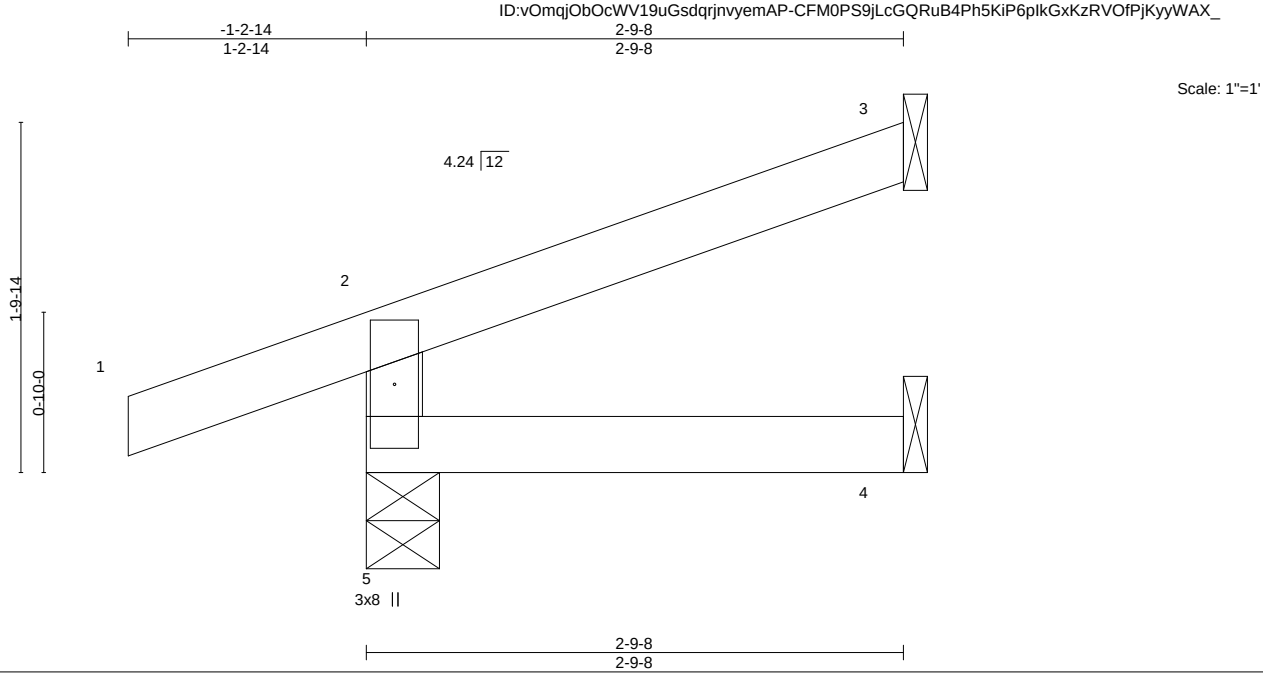

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 9 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 2-9-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=64(LC 7)
Max Uplift 5=-95(LC 6), 3=-48(LC 12), 4=-4(LC 19)
Max Grav 5=97(LC 1), 3=30(LC 1), 4=34(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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) 20 lb down and 7 lb up at -1-2-14, and 20 lb down and 7 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=-31(F=-15, B=-15)
   Trapezoidal Loads (plf)
   Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=33, B=33)-to-3=-50(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J13	Jack-Open	3	1	I48232975

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:44 2021 Page 1

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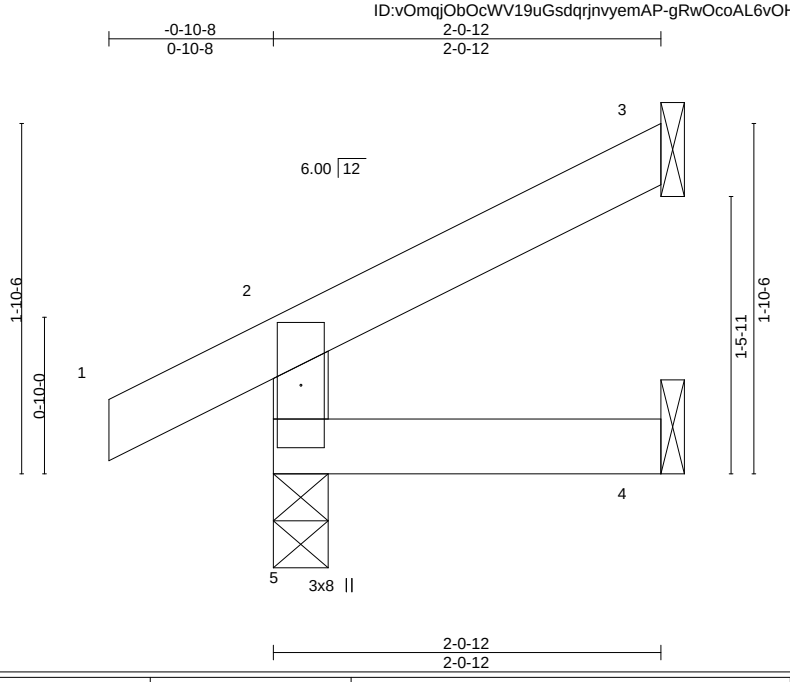

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	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 2-0-12 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=47(LC 8)
Max Uplift 5=-22(LC 8), 3=-34(LC 8)
Max Grav 5=175(LC 1), 3=48(LC 1), 4=34(LC 3)

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

NOTES-

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

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J15	Diagonal Hip Girder	2	1	I48232976

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:45 2021 Page 1
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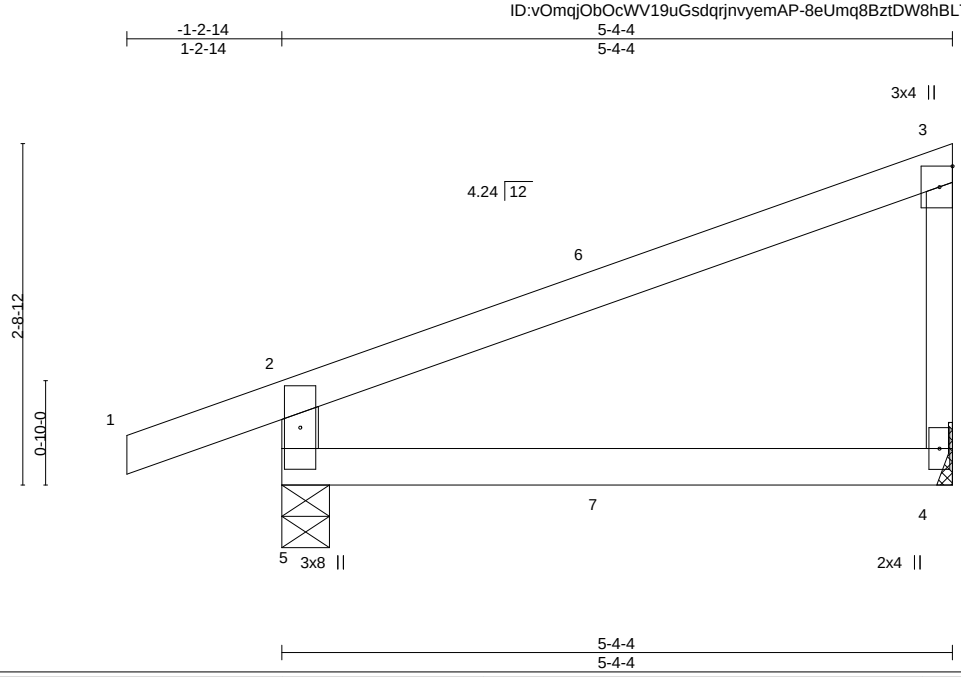

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	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=114(LC 5)
Max Uplift 5=-99(LC 4), 4=-50(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=-299/137

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 34 lb up at 2-7-6, and 69 lb down and 34 lb up at 2-7-6 on top chord, and 4 lb down and 2 lb up at 2-7-6, and 4 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)

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J16	Jack-Open	4	1	I48232977

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:46 2021 Page 1

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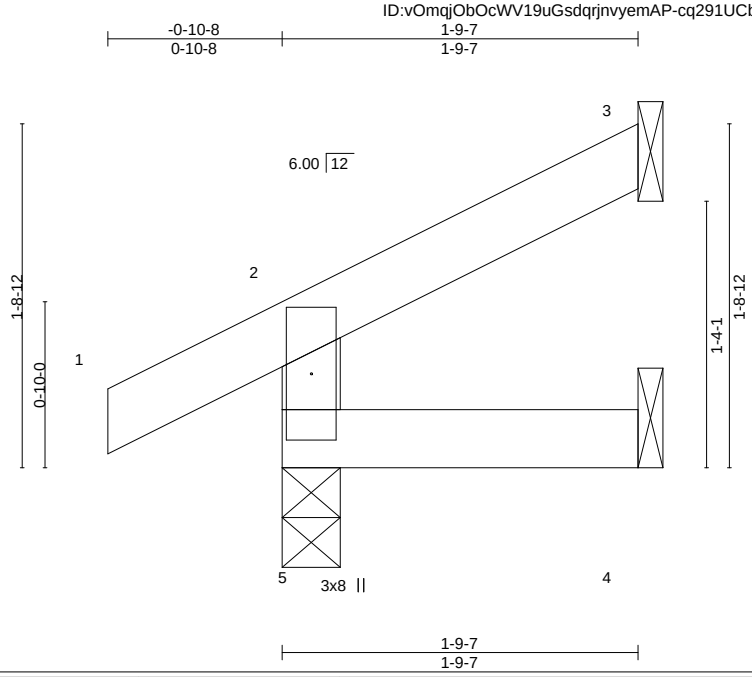

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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=43(LC 5)
Max Uplift 5=-22(LC 8), 3=-30(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J17	Jack-Open	9	1	I48232978
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:46 2021 Page 1
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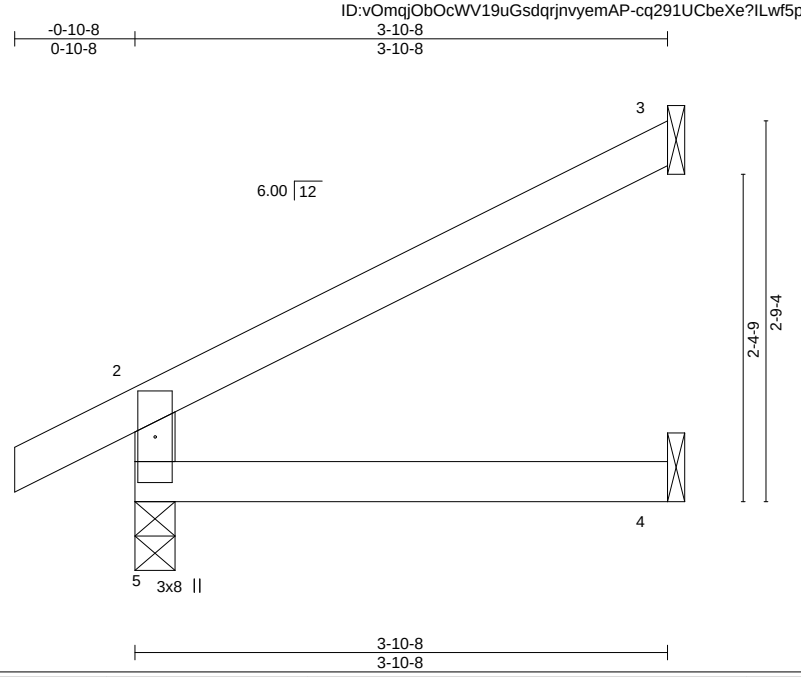

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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=84(LC 8)
Max Uplift 5=-26(LC 8), 3=-66(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J18	Jack-Open	6	1	I48232979
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:47 2021 Page 1
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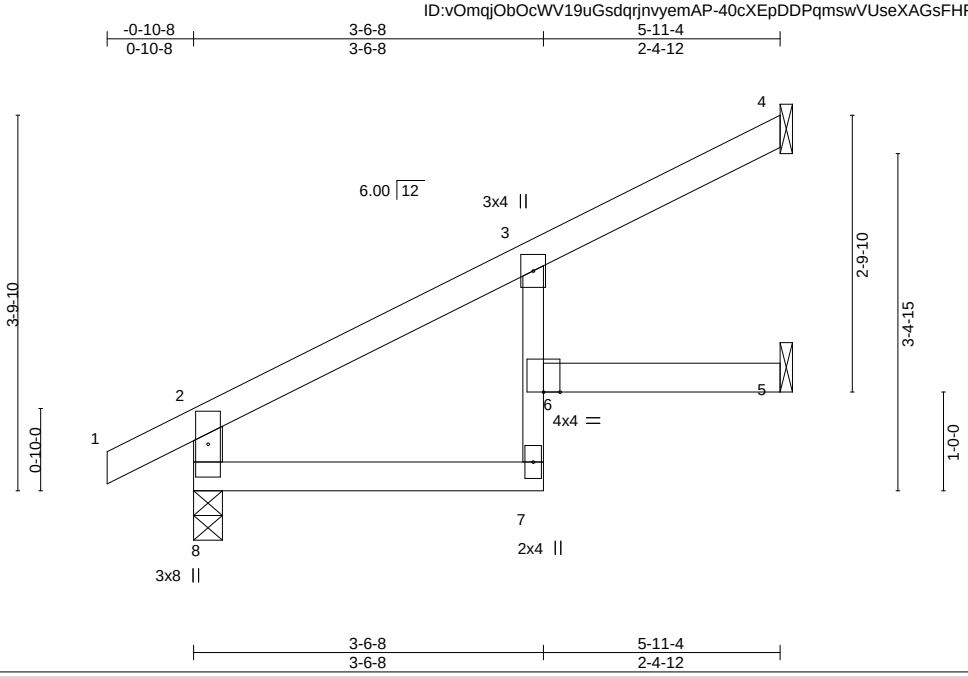

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.06	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.11	7	>630	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.05	6	>999	240	Weight: 18 lb	FT = 10%

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

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=89(LC 8)
Max Uplift 4=-36(LC 8), 5=-5(LC 8)
Max Grav 8=336(LC 1), 4=151(LC 1), 5=100(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-309/25

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, 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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J19	Jack-Open	4	1	I48232980
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:48 2021 Page 1
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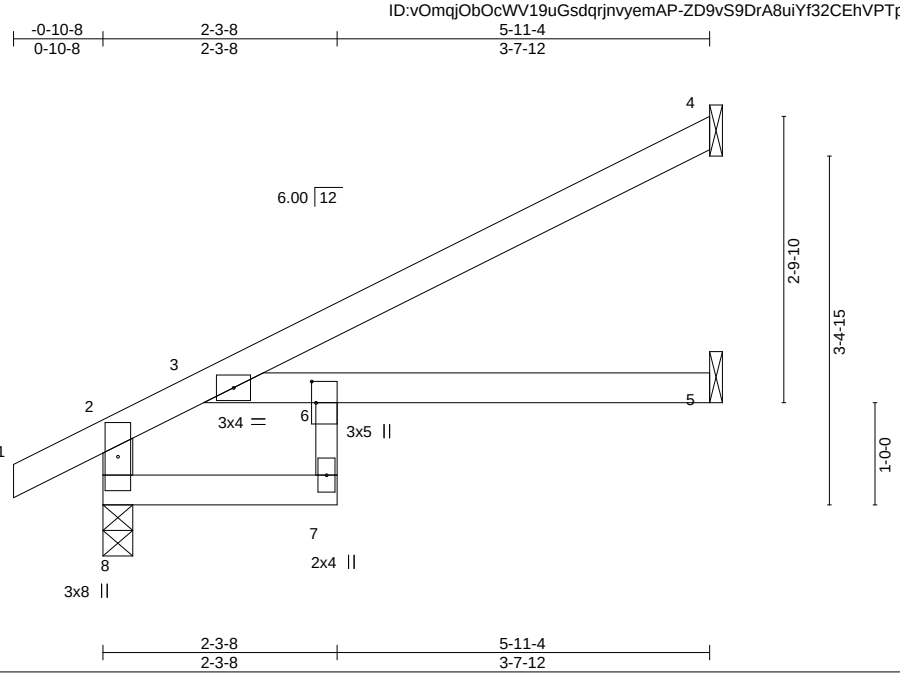

Plate Offsets (X,Y)-- [6:0-2-8,0-0-8]

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	0.44	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13	5-6	>530	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	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=89(LC 8)
Max Uplift 4=-49(LC 8)
Max Grav 8=354(LC 1), 4=167(LC 1), 5=116(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-345/13

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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J20	Diagonal Hip Girder	1	1	I48232981
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:49 2021 Page 1
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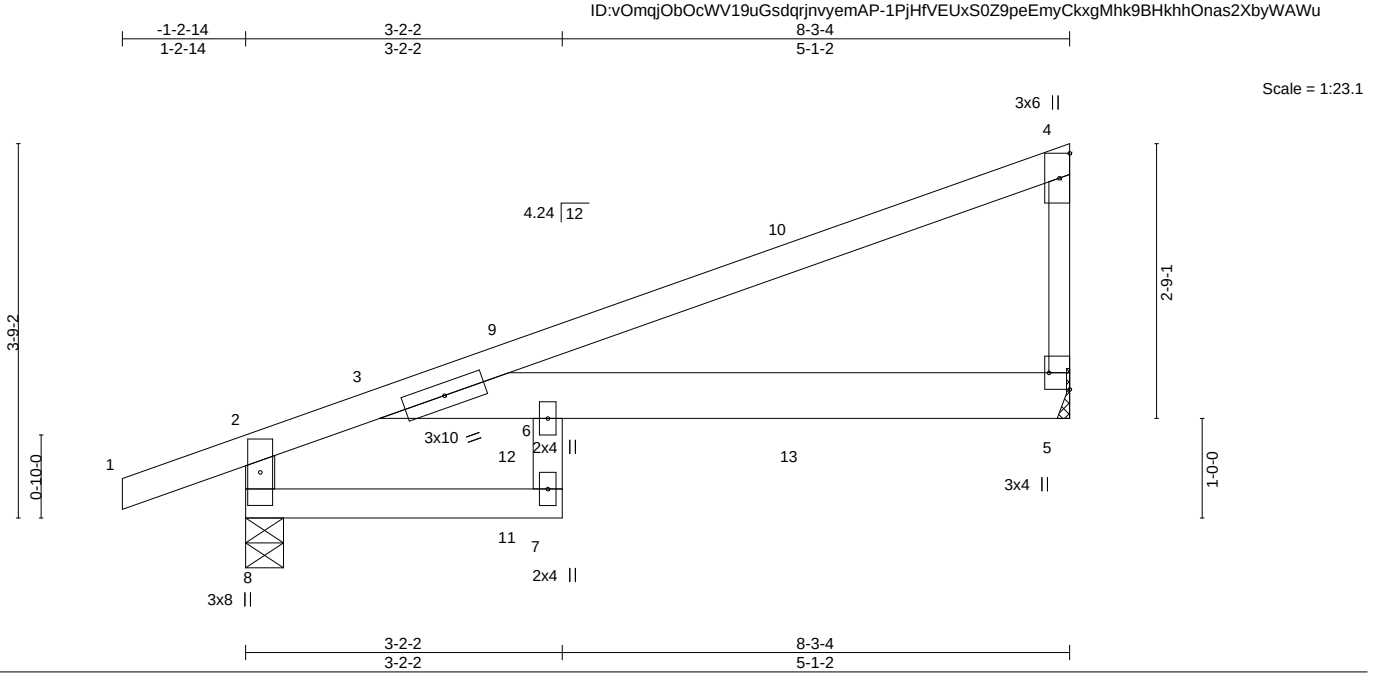

Plate Offsets (X,Y)-- [5:Edge,0-2-8]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.11	5-6	>871	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.21	5-6	>465	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.11	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.13	5-6	>741	240	Weight: 30 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-5: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-5: 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=0-4-9, 5=Mechanical
Max Horz 8=142(LC 5)
Max Uplift 8=-139(LC 4), 5=-128(LC 8)
Max Grav 8=488(LC 1), 5=400(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-479/170

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) 8=139, 5=128.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 36 lb up at 2-8-7, 69 lb down and 36 lb up at 2-8-7, and 94 lb down and 56 lb up at 5-6-6, and 94 lb down and 56 lb up at 5-6-6 on top chord, and 4 lb down and 1 lb up at 2-8-7, 4 lb down and 1 lb up at 2-8-7, and 28 lb down and 34 lb up at 5-6-6, and 28 lb down and 34 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: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 10=-16(F=-8, B=-8) 11=3(F=1, B=1) 13=-56(F=-28, B=-28)

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	J21	Jack-Open	2	1	I48232982
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:50 2021 Page 1
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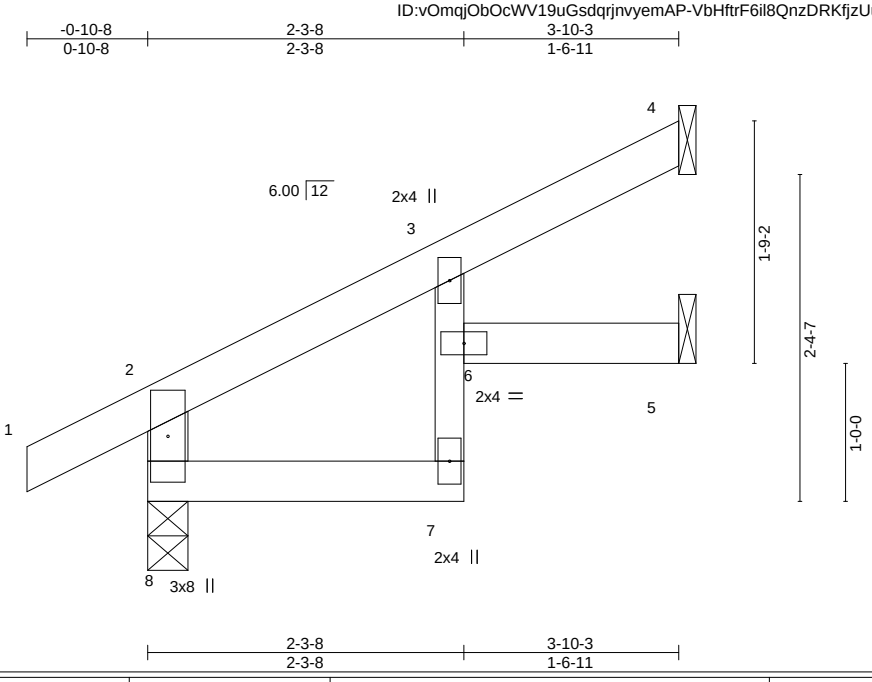

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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=84(LC 8)
Max Uplift 8=-26(LC 8), 4=-45(LC 8), 5=-14(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY1	GABLE	1	1	I48232983
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:35:59 2021 Page 1
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7-11-1 | 33-8-6 | 37-10-12
7-11-1 | 25-9-5 | 4-2-6

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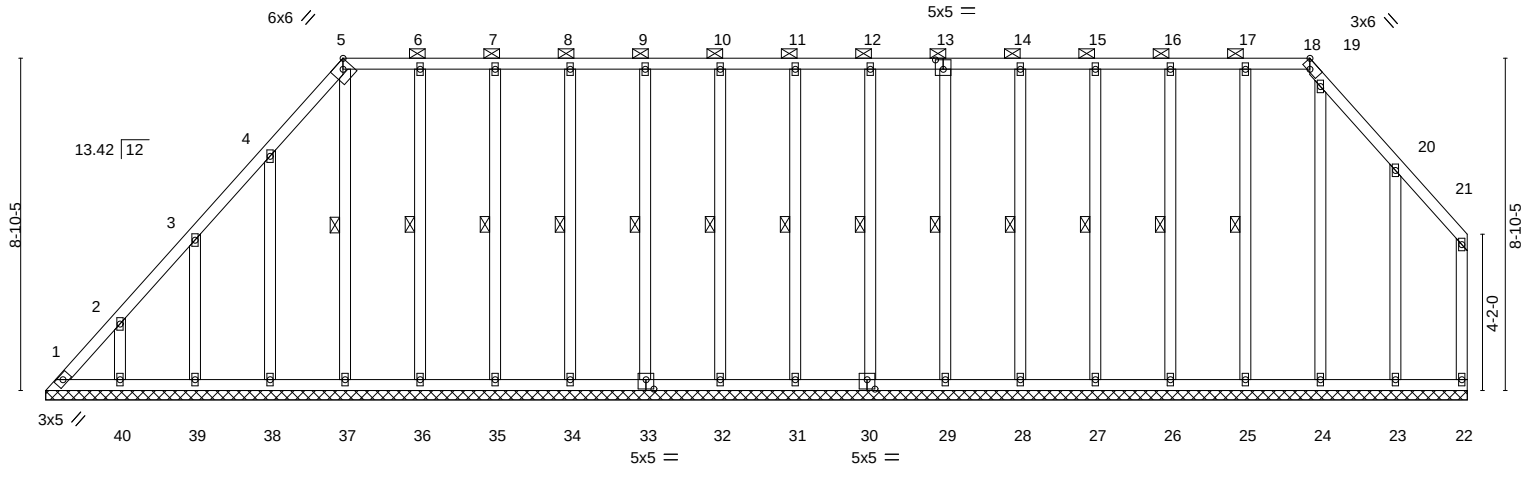

37-10-12
37-10-12

Plate Offsets (X,Y)-- [5:0-2-10,Edge], [13:0-2-8,0-3-0], [18:0-2-10,Edge], [30:0-2-8,0-3-0], [33:0-2-8,0-3-0]

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	0.08	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	0.16	Horz(CT)	-0.00	22	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 249 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-18.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-37, 6-36, 7-35, 8-34, 9-33, 10-32, 11-31, 12-30, 13-29, 14-28, 15-27, 16-26, 17-25

REACTIONS. All bearings 37-10-12.
(lb) - Max Horz 1=282(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 22, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24 except 1=-177(LC 6), 40=-137(LC 8), 39=-137(LC 8), 38=-141(LC 8), 37=-107(LC 7), 23=-168(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 22, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23 except 1=258(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-348/297, 2-3=-297/255, 3-4=-261/244

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) Gable requires continuous bottom chord bearing.
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) 22, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24 except (jt=lb) 1=177, 40=137, 39=137, 38=141, 37=107, 23=168.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY2	GABLE	1	1	I48232984
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:01 2021 Page 1
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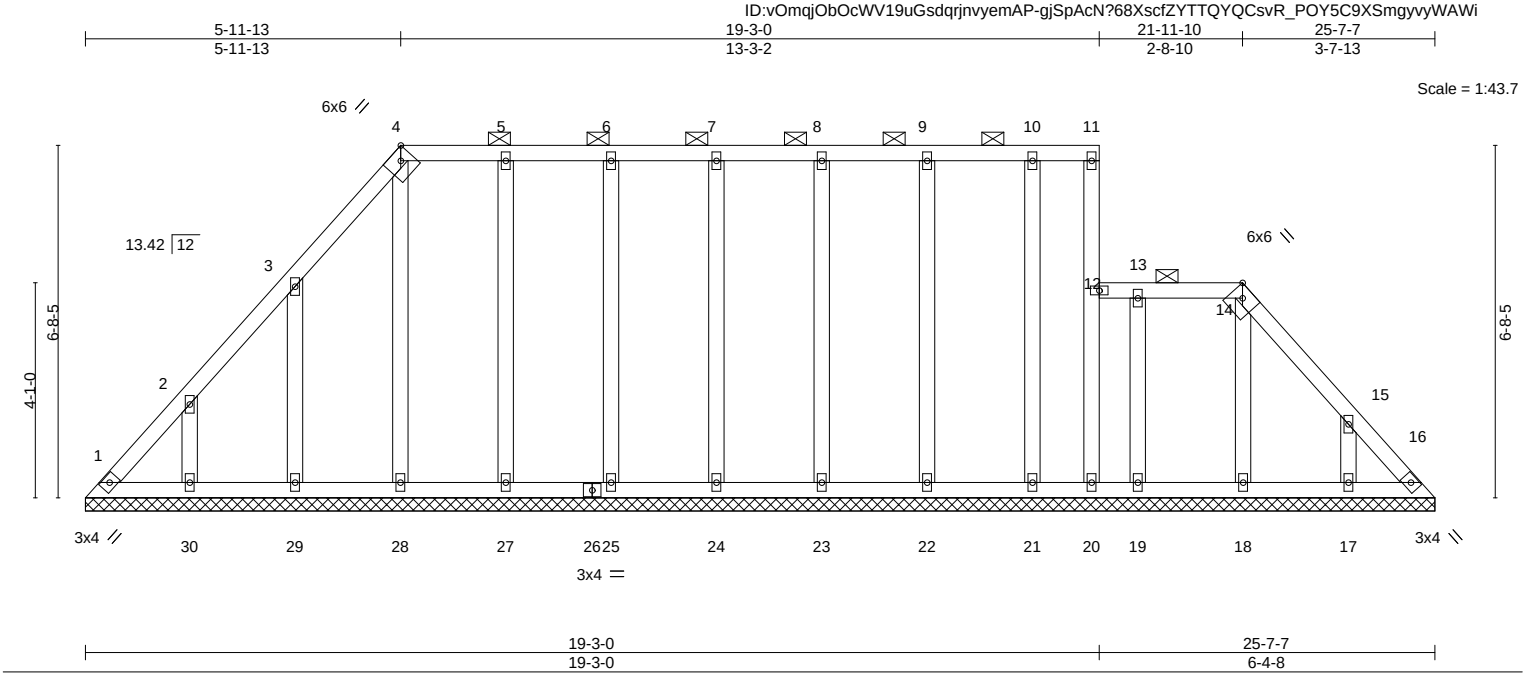

Plate Offsets (X,Y)-- [4:0-2-10,Edge], [14:0-2-10,Edge]

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	0.06	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	0.11	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 134 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-11, 12-20, 12-14.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 25-7-7.
(lb) - Max Horz 1=279(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 20, 16, 27, 25, 24, 23, 22, 21, 19, 18 except 1=-102(LC 6), 30=-134(LC 8), 29=-149(LC 8), 28=-106(LC 8), 17=-139(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 20, 16, 30, 29, 28, 27, 25, 24, 23, 22, 21, 19, 18, 17 except 1=294(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-410/197, 2-3=-282/148

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) Gable requires continuous bottom chord bearing.
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) 20, 16, 27, 25, 24, 23, 22, 21, 19, 18 except (jt=lb) 1=102, 30=134, 29=149, 28=106, 17=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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY3	GABLE	1	1	I48232985
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:02 2021 Page 1
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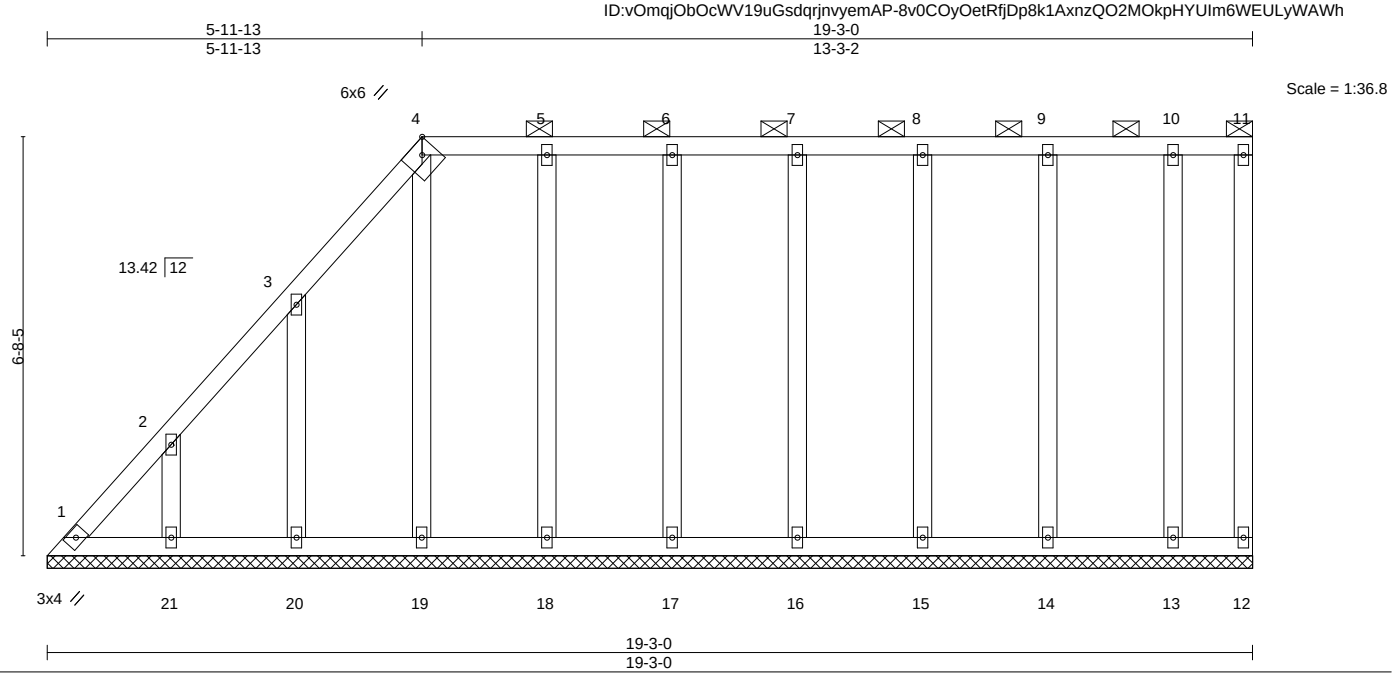

Plate Offsets (X,Y)-- [4:0-2-10,Edge]

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 109 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 19-3-0.
(lb) - Max Horz 1=255(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 19, 18, 17, 16, 15, 14, 13 except 21=-135(LC 8), 20=-147(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-280/191

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 19, 18, 17, 16, 15, 14, 13 except (jt=lb) 21=135, 20=147.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY4	GABLE	1	1	I48232986
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:04 2021 Page 1
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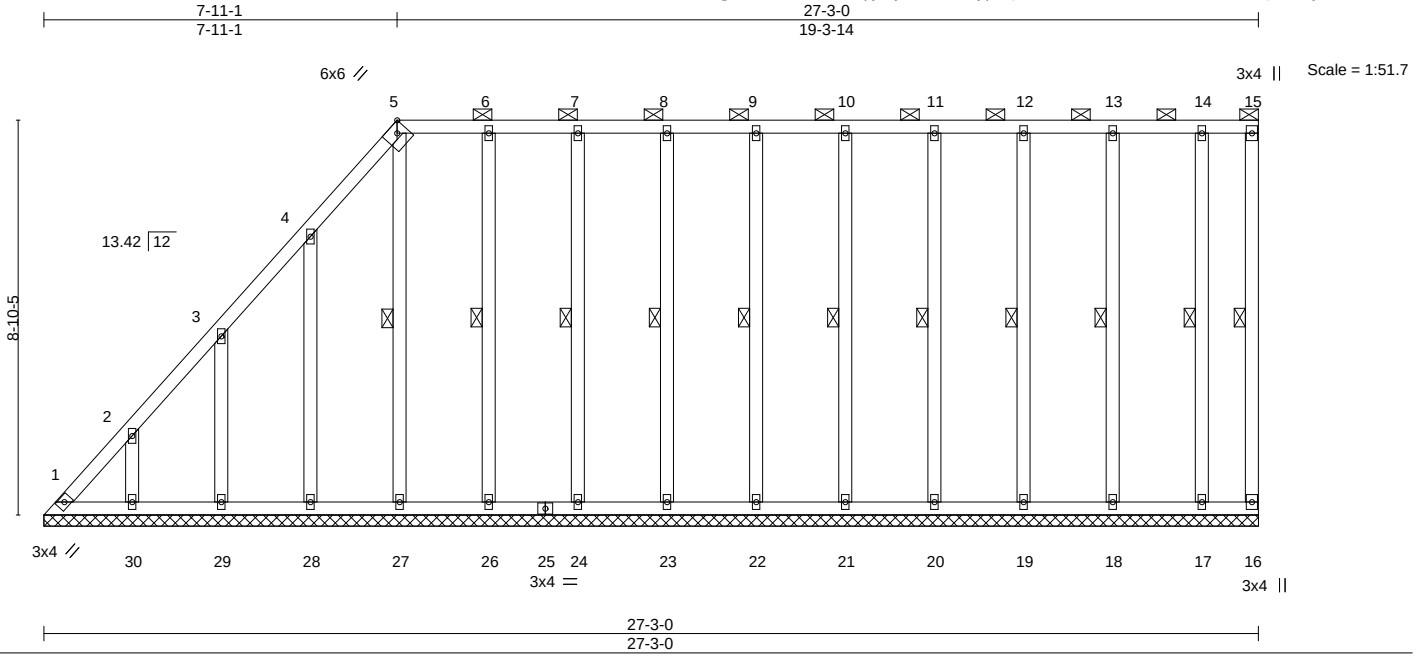

Plate Offsets (X,Y)-- [5:0-2-10,Edge]

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	0.32	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	0.12	Horz(CT)	-0.01	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 183 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-15.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 15-16, 5-27, 6-26, 7-24, 8-23, 9-22, 10-21, 11-20, 12-19, 13-18, 14-17

REACTIONS. All bearings 27-3-0.
(lb) - Max Horz 1=341(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 16, 26, 24, 23, 22, 21, 20, 19, 18, 17 except 1=-147(LC 6), 30=-138(LC 8), 29=-135(LC 8), 28=-143(LC 8), 27=-115(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 16, 30, 29, 28, 27, 26, 24, 23, 22, 21, 20, 19, 18, 17 except 1=282(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-381/257, 2-3=-309/206, 3-4=-255/165

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 26, 24, 23, 22, 21, 20, 19, 18, 17 except (jt=lb) 1=147, 30=138, 29=135, 28=143, 27=115.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY5	GABLE	1	1	I48232987

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:05 2021 Page 1

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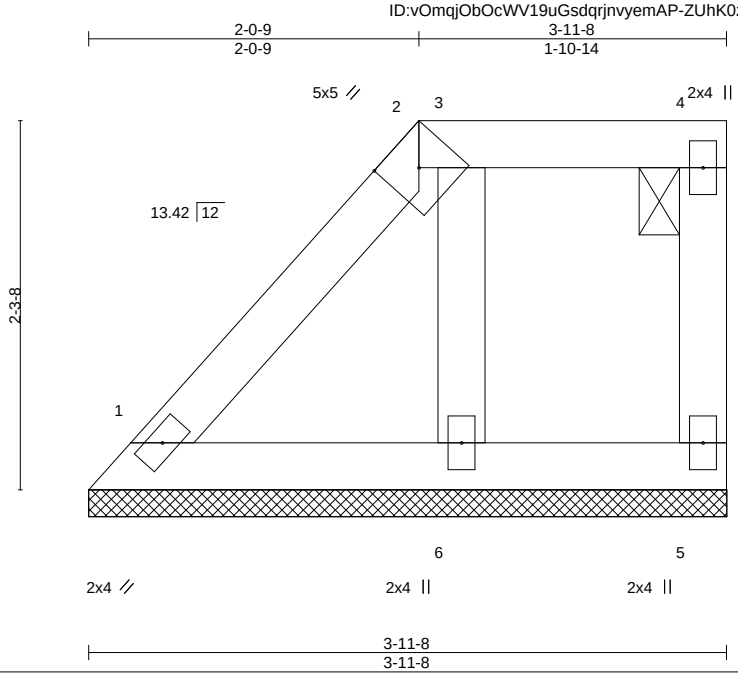

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Plate Offsets (X,Y)-- [2:0-2-6,Edge]

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	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 14 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 3-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-11-8, 5=3-11-8, 6=3-11-8
Max Horz 1=79(LC 5)
Max Uplift 1=-5(LC 4), 5=-21(LC 4), 6=-67(LC 5)
Max Grav 1=90(LC 16), 5=49(LC 1), 6=189(LC 1)

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

NOTES-

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

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY6	GABLE	1	1	I48232988
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:05 2021 Page 1
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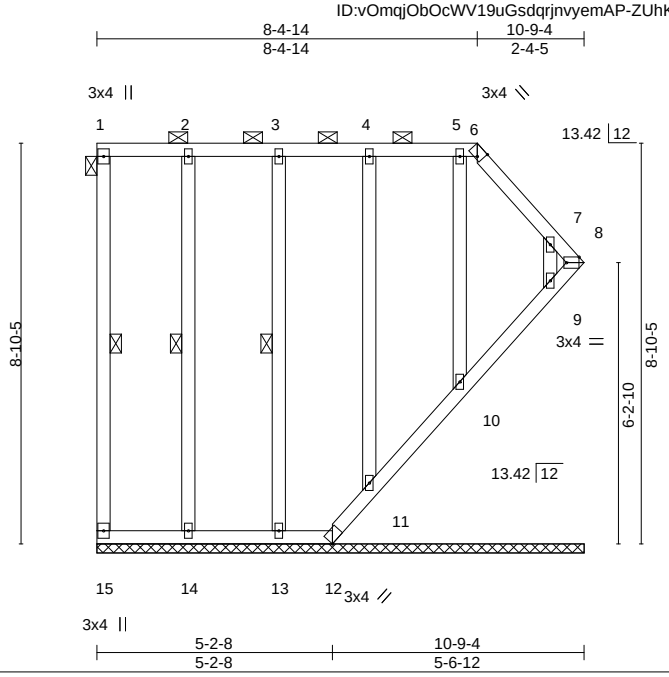

Plate Offsets (X,Y)-- [6:0-1-6,Edge], [8:Edge,0-1-8]

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	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 73 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10,8-9.
WEBS	1 Row at midpt 1-15, 2-14, 3-13

REACTIONS. All bearings 10-9-4.
(lb) - Max Horz 15=-271(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 15, 14, 13, 11, 9 except 8=-255(LC 5), 12=-157(LC 6), 10=-121(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 15, 12, 14, 13, 11, 10, 9 except 8=358(LC 6)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 14, 13, 11, 9 except (jt=lb) 8=255, 12=157, 10=121.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 11, 10, 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY7	GABLE	1	1	I48232989

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:06 2021 Page 1
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2-3-12 6-3-12

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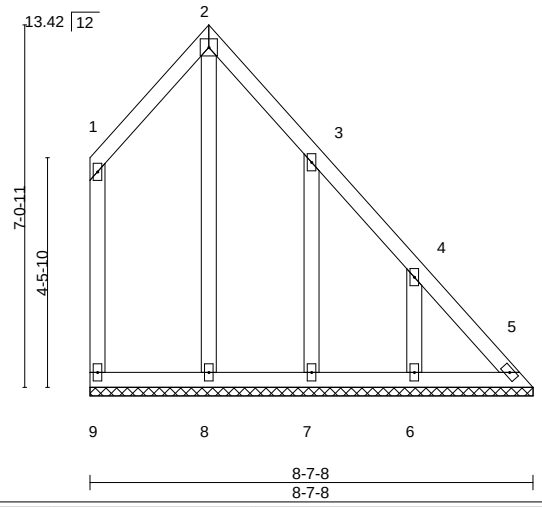

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 44 lb	FT = 10%

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

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

REACTIONS. All bearings 8-7-8.
(lb) - Max Horz 9=-235(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 5=-117(LC 5), 8=-116(LC 6), 7=-150(LC 9), 6=-150(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 9, 5, 8, 7, 6

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-273/226

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) 9 except (jt=lb) 5=117, 8=116, 7=150, 6=150.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY8	GABLE	1	1	I48232990

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:07 2021 Page 1

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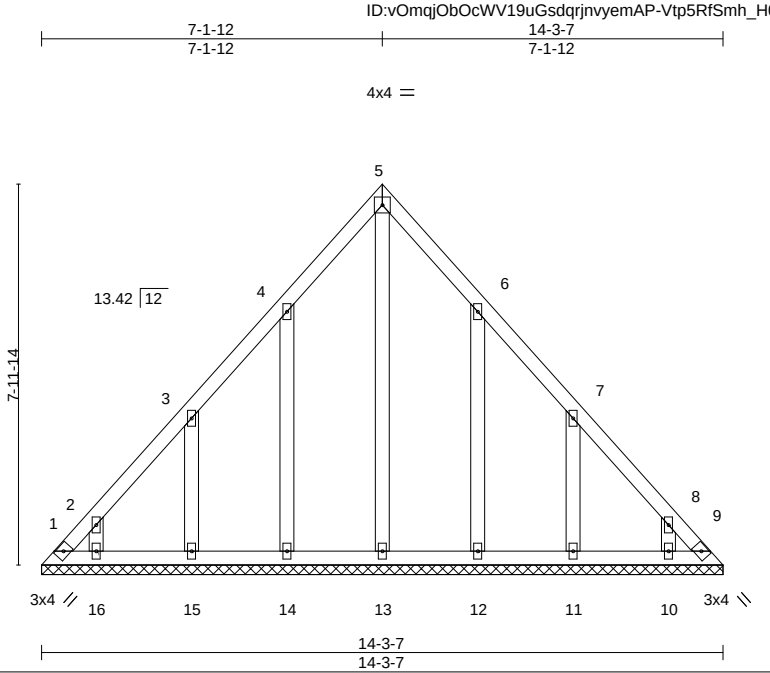

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 68 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 14-3-7.
(lb) - Max Horz 1=-206(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 1=-126(LC 6), 14=-139(LC 8), 15=-141(LC 8), 16=-113(LC 8), 12=-137(LC 9), 11=-141(LC 9), 10=-113(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-304/186, 8-9=-275/143

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) 9 except (jt=lb) 1=126, 14=139, 15=141, 16=113, 12=137, 11=141, 10=113.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY9	GABLE	1	1	I48232991
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:09 2021 Page 1
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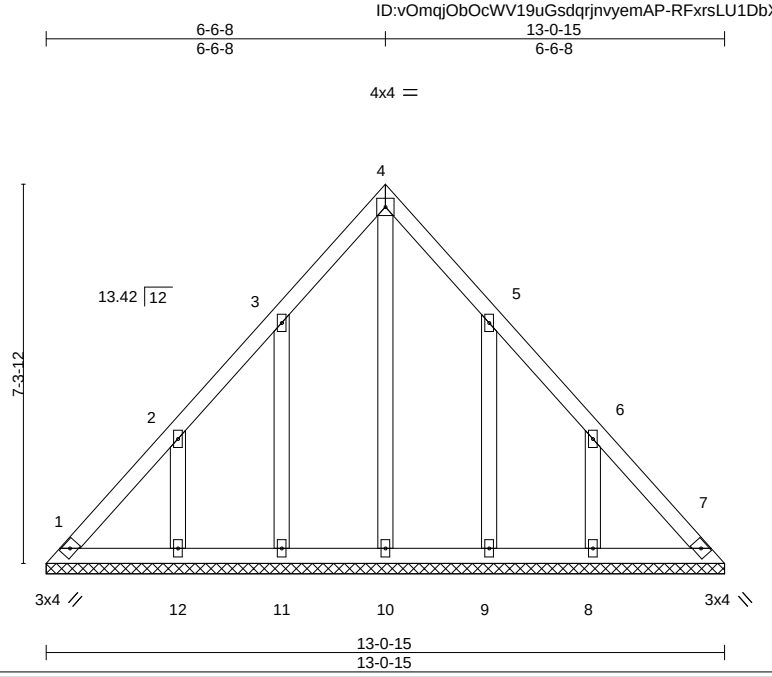

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 59 lb	FT = 10%

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

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

REACTIONS. All bearings 13-0-15.
(lb) - Max Horz 1=-187(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-133(LC 8), 12=-164(LC 8), 9=-132(LC 9), 8=-165(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9 except 8=250(LC 16)

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=133, 12=164, 9=132, 8=165.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	LAY10	GABLE	1	1	I48232992

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:00 2021 Page 1

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3-11-12 7-11-7

3-11-12 3-11-12

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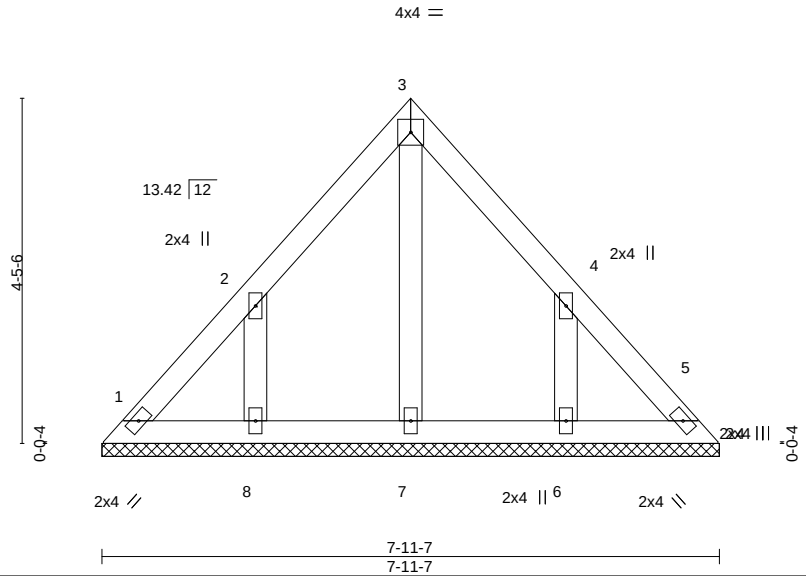

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 30 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 7-11-7.

(lb) - Max Horz 1=110(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-156(LC 8), 6=-156(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=156, 6=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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V4	Valley	1	1	I48232993
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:13 2021 Page 1
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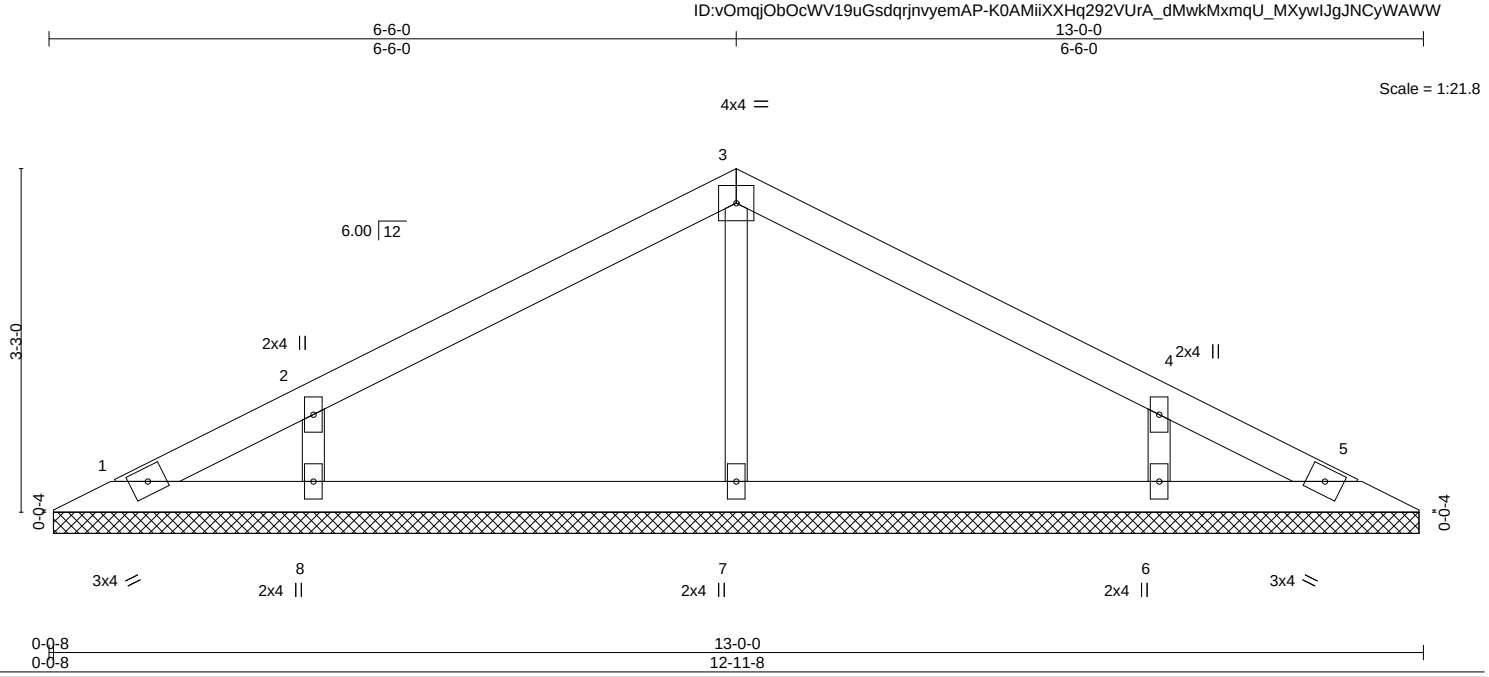

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 10%

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

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

REACTIONS. All bearings 12-11-0.
(lb) - Max Horz 1=52(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-109(LC 8), 6=-109(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=314(LC 1), 8=336(LC 21), 6=336(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-272/150, 4-6=-272/150

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 except (jt=lb) 8=109, 6=109.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V5	Valley	1	1	I48232994
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:13 2021 Page 1
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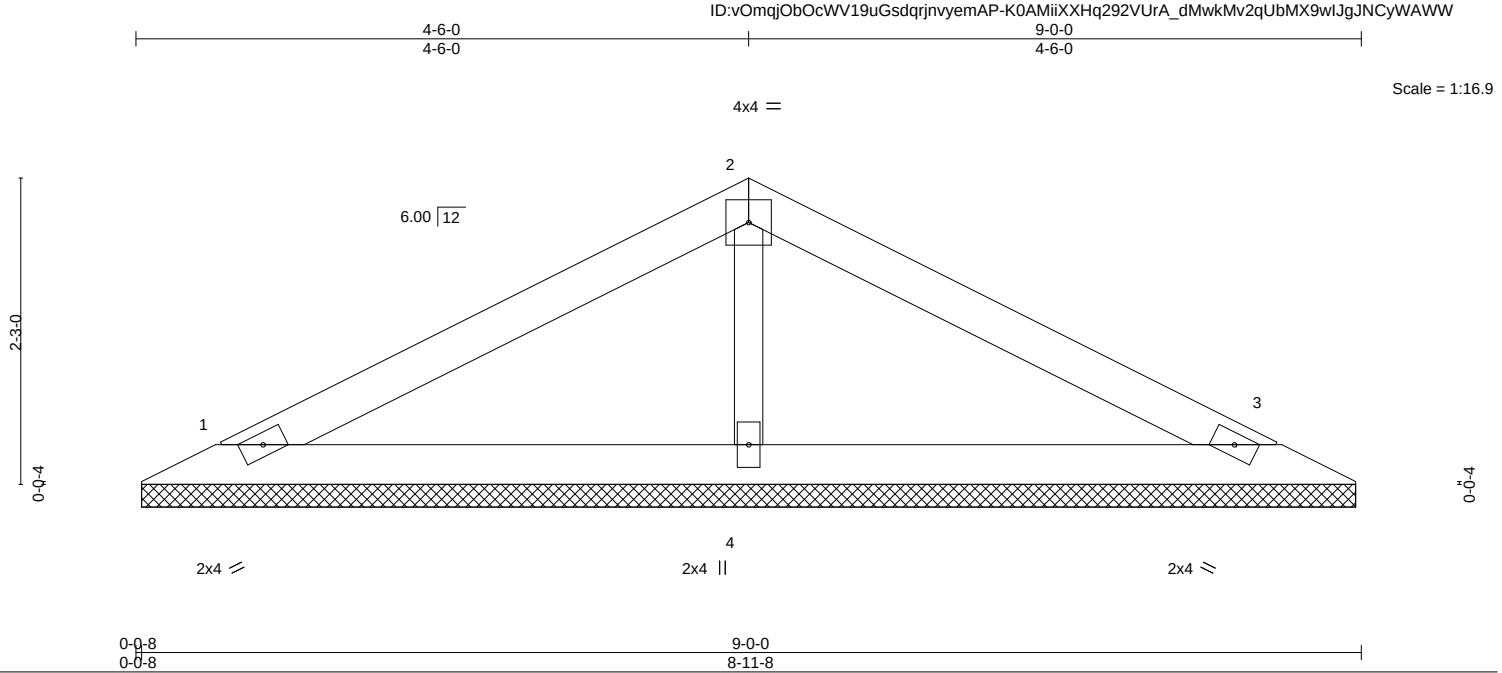

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 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=8-11-0, 3=8-11-0, 4=8-11-0
Max Horz 1=34(LC 12)
Max Uplift 1=-42(LC 8), 3=-48(LC 9), 4=-4(LC 8)
Max Grav 1=182(LC 1), 3=182(LC 1), 4=333(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V6	Valley	1	1	I48232995
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:14 2021 Page 1
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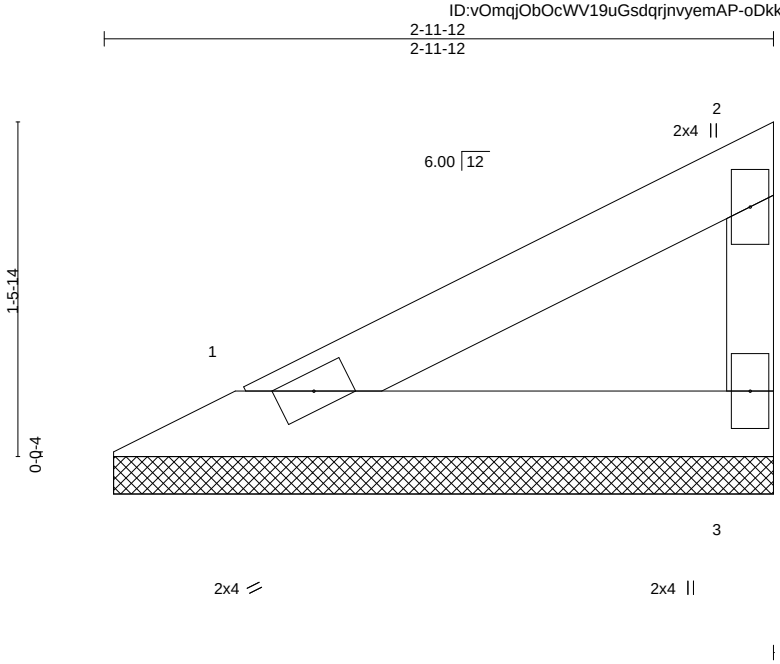

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 2-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-11-4, 3=2-11-4
Max Horz 1=47(LC 7)
Max Uplift 1=-13(LC 8), 3=-25(LC 8)
Max Grav 1=101(LC 1), 3=101(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V7	Valley	1	1	I48232996
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:15 2021 Page 1
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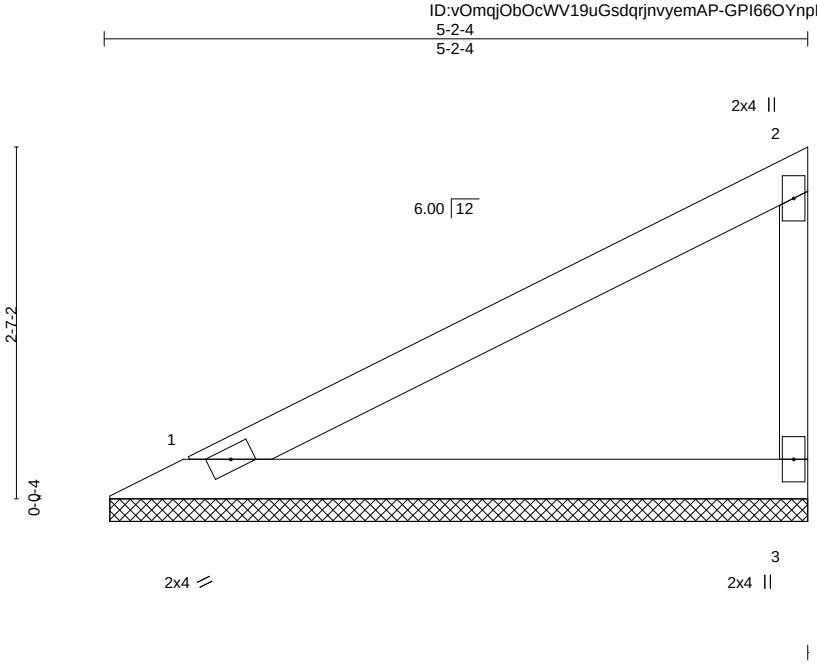

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 5-2-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-1-12, 3=5-1-12
Max Horz 1=93(LC 5)
Max Uplift 1=-26(LC 8), 3=-49(LC 8)
Max Grav 1=200(LC 1), 3=200(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V8	Valley	1	1	I48232997
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:16 2021 Page 1
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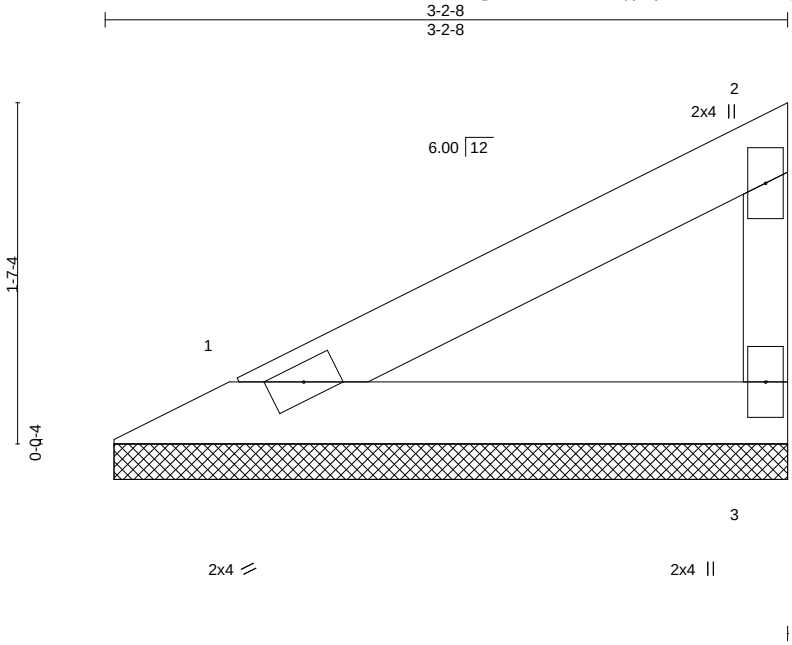

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 10%

LUMBER-
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 3-2-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-2-0, 3=3-2-0
Max Horz 1=52(LC 7)
Max Uplift 1=-14(LC 8), 3=-27(LC 8)
Max Grav 1=111(LC 1), 3=111(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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V9	Valley	1	1	I48232998
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:16 2021 Page 1
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5-10-8

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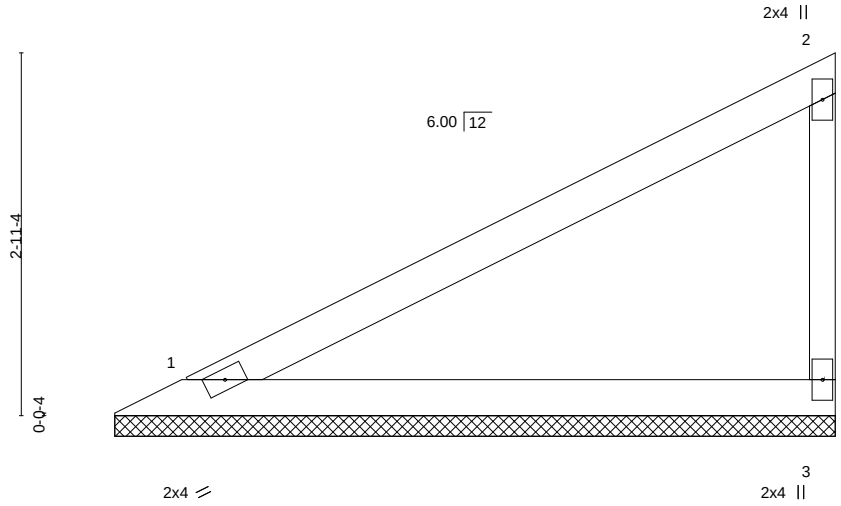


LOADING (psf)			SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0		Plate Grip DOL	1.15	TC	0.51	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0		Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0		Code IRC2018/TPI2014		Matrix-P							Weight: 15 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-10-0, 3=5-10-0
Max Horz 1=107(LC 5)
Max Uplift 1=-30(LC 8), 3=-57(LC 8)
Max Grav 1=231(LC 1), 3=231(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.

October 7,2021

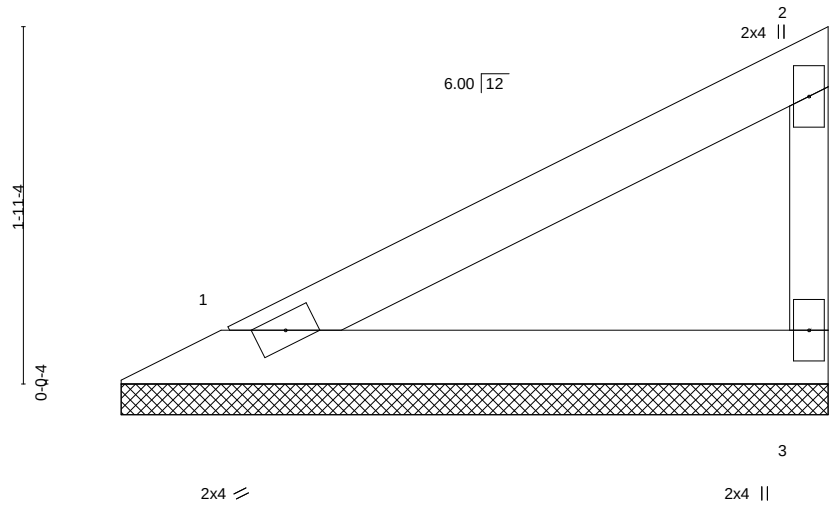
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V10	Valley	1	1	I48232999
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:09 2021 Page 1
ID:vOmqjObOcWV19uGsdqrjnvyemAP-RFxrsLU1DbXkZtA4x8ZQluBFeD79QksKNii5ERyWAWa

3-10-8
3-10-8

Scale = 1:12.5



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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 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 3-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-10-0, 3=3-10-0
Max Horz 1=66(LC 5)
Max Uplift 1=-18(LC 8), 3=-35(LC 8)
Max Grav 1=141(LC 1), 3=141(LC 1)

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

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

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V11	Valley	1	1	I48233000

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:10 2021 Page 1

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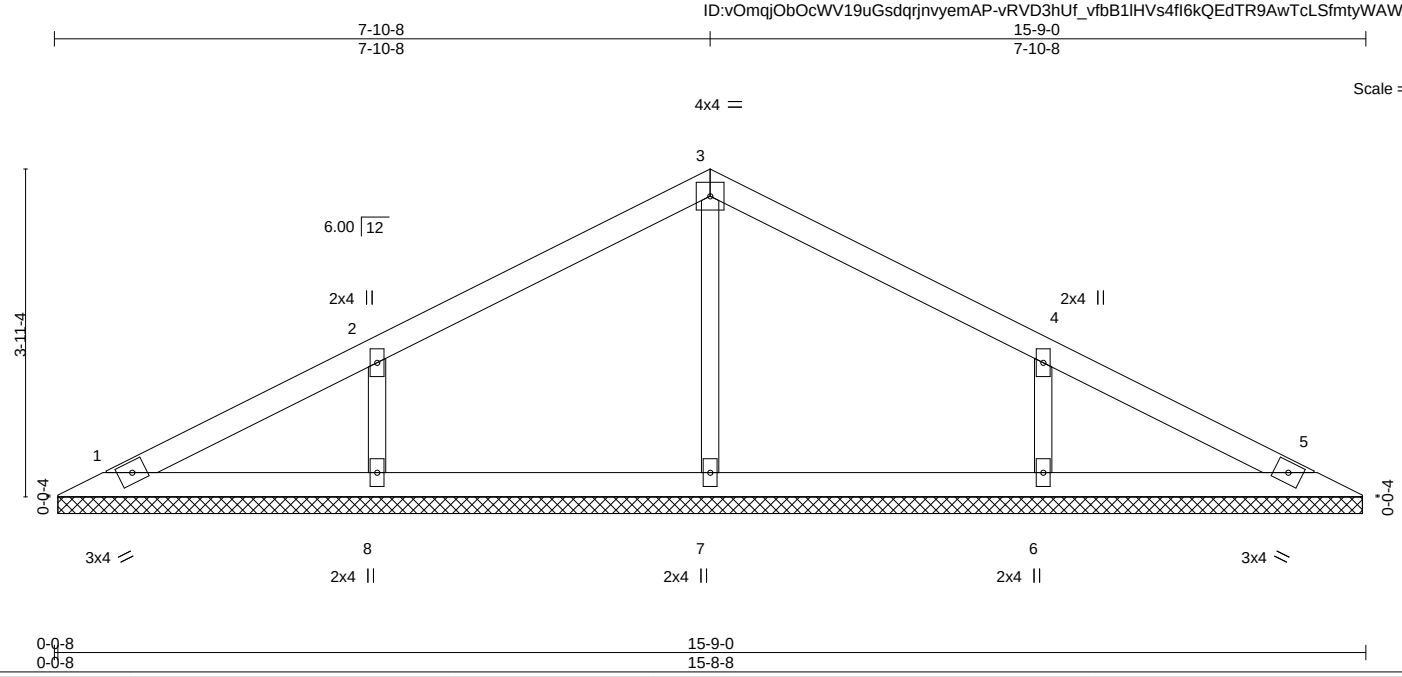

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 15-8-0.
(lb) - Max Horz 1=64(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-122(LC 8), 6=-122(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=299(LC 1), 8=387(LC 21), 6=387(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-302/165, 4-6=-302/165

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) 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=122, 6=122.
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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V12	Valley	1	1	I48233001
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:11 2021 Page 1
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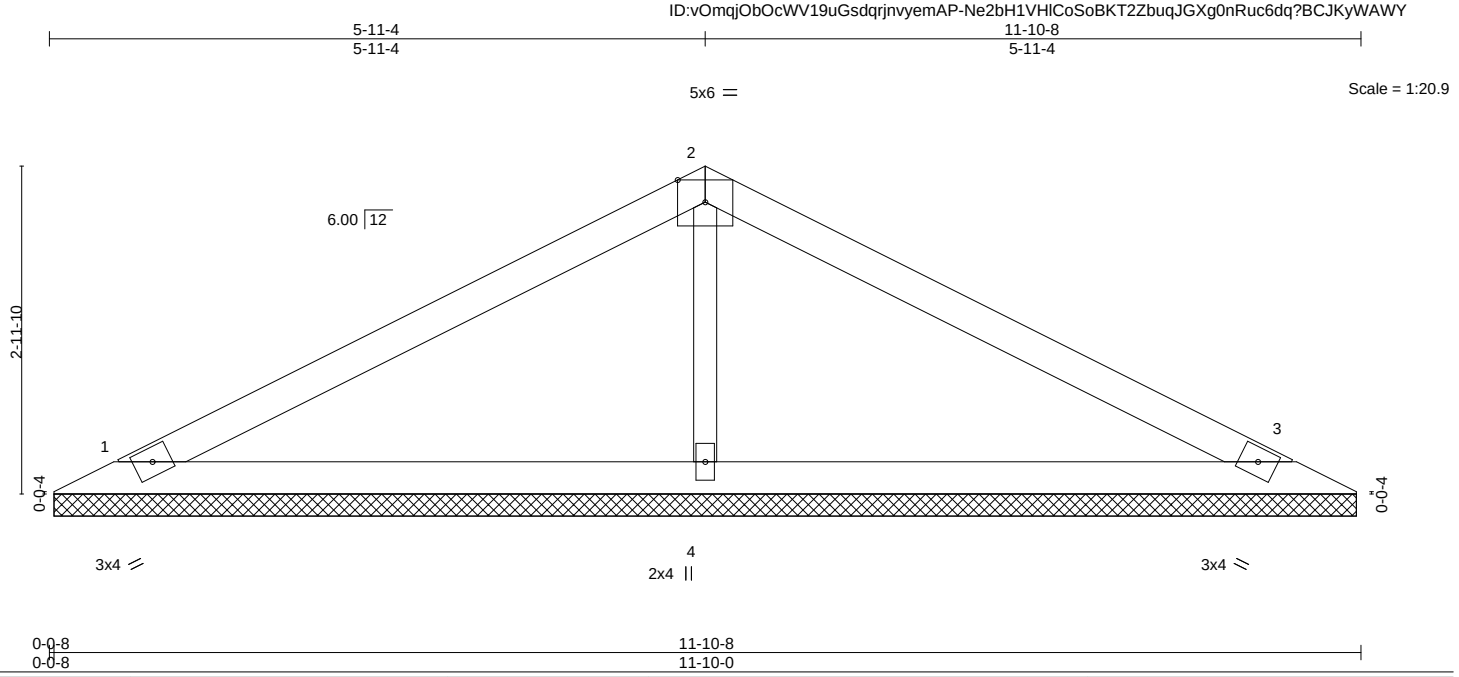

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 29 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=11-9-8, 3=11-9-8, 4=11-9-8
Max Horz 1=-47(LC 9)
Max Uplift 1=-46(LC 8), 3=-54(LC 9), 4=-28(LC 8)
Max Grav 1=225(LC 21), 3=225(LC 22), 4=507(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-346/91

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.

October 7,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 131 MN
MN131	V13	Valley	1	1	I48233002

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 09:36:12 2021 Page 1

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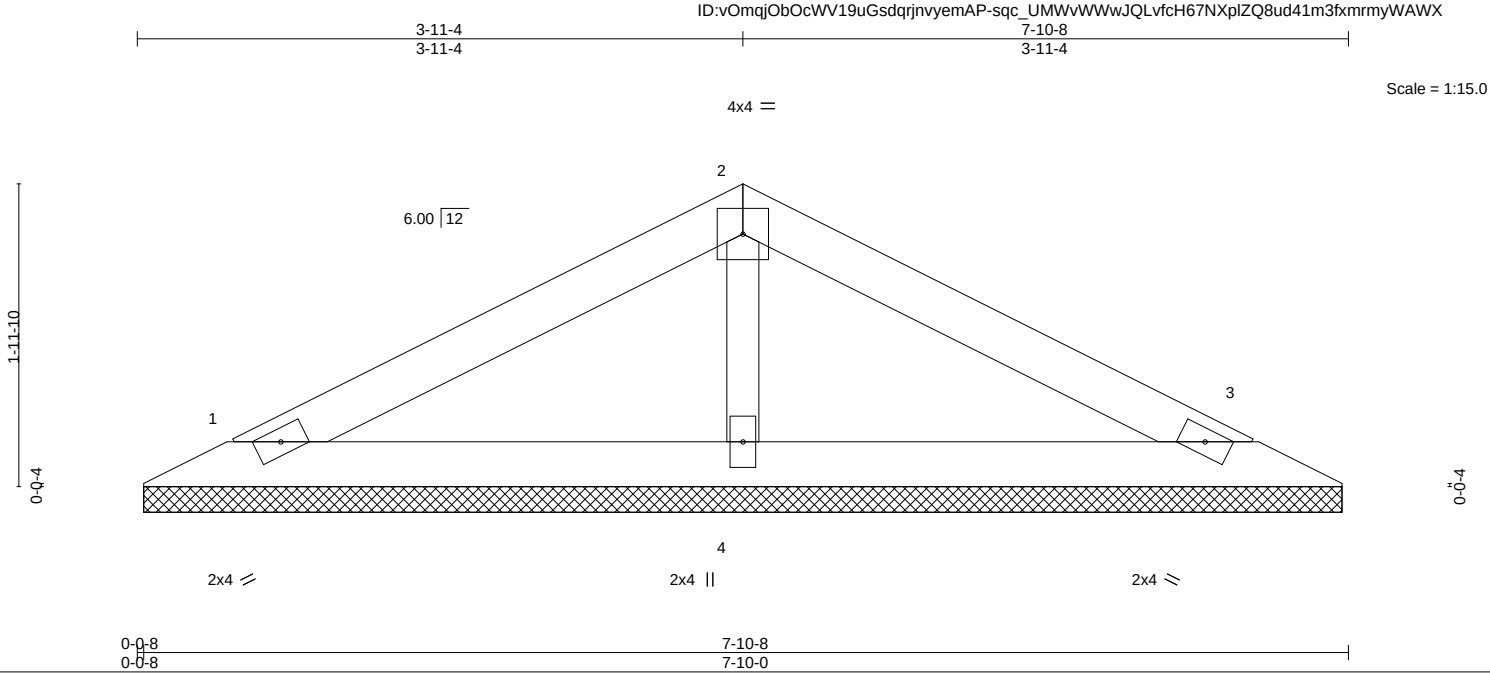


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 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=7-9-8, 3=7-9-8, 4=7-9-8
Max Horz 1=-29(LC 9)
Max Uplift 1=-35(LC 8), 3=-41(LC 9), 4=-4(LC 8)
Max Grav 1=155(LC 1), 3=155(LC 1), 4=284(LC 1)

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

NOTES-

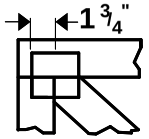
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber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

October 7,2021

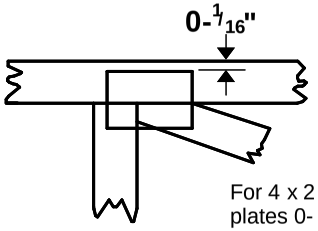
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

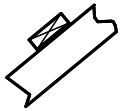
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

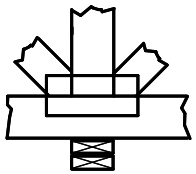
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

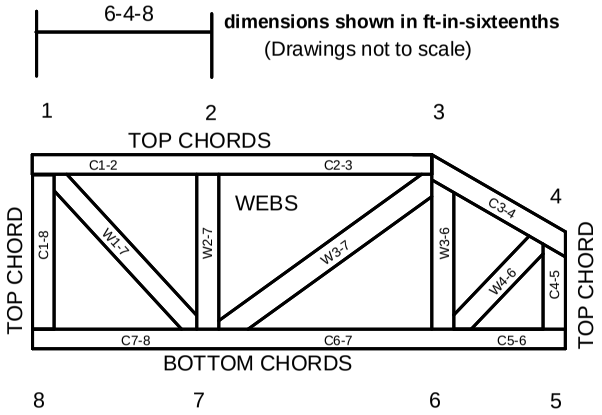


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21.The design does not take into account any dynamic or other loads other than those expressly stated.