



RE: W2 50
Lot 50 W2

MiTek USA, Inc.

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

Site Information:

Customer: Project Name: W2 50
Lot/Block:
Address:
City:

Model:
Subdivision:
State:



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

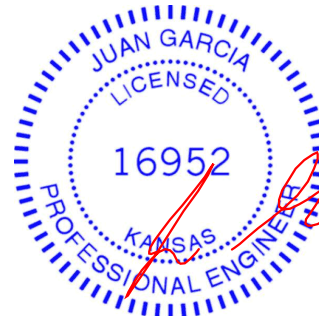
Design Code: IRC2018/TPI2014
Wind Code: N/A
Roof Load: 45.0 psf

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

This package includes 105 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43578910	A1	11/11/2020	21	I43578930	D3	11/11/2020
2	I43578911	A2	11/11/2020	22	I43578931	D4	11/11/2020
3	I43578912	A3	11/11/2020	23	I43578932	D5	11/11/2020
4	I43578913	B1	11/11/2020	24	I43578933	E1	11/11/2020
5	I43578914	B2	11/11/2020	25	I43578934	E2	11/11/2020
6	I43578915	B3	11/11/2020	26	I43578935	E3	11/11/2020
7	I43578916	B4	11/11/2020	27	I43578936	G1	11/11/2020
8	I43578917	B5	11/11/2020	28	I43578937	G2	11/11/2020
9	I43578918	B6	11/11/2020	29	I43578938	G3	11/11/2020
10	I43578919	B7	11/11/2020	30	I43578939	G4	11/11/2020
11	I43578920	B8	11/11/2020	31	I43578940	G5	11/11/2020
12	I43578921	B9	11/11/2020	32	I43578941	G6	11/11/2020
13	I43578922	B10	11/11/2020	33	I43578942	G7	11/11/2020
14	I43578923	B11	11/11/2020	34	I43578943	G8	11/11/2020
15	I43578924	C1	11/11/2020	35	I43578944	G9	11/11/2020
16	I43578925	C2	11/11/2020	36	I43578945	H1	11/11/2020
17	I43578926	C3	11/11/2020	37	I43578946	H2	11/11/2020
18	I43578927	C4	11/11/2020	38	I43578947	H3	11/11/2020
19	I43578928	D1	11/11/2020	39	I43578948	H4	11/11/2020
20	I43578929	D2	11/11/2020	40	I43578949	J1	11/11/2020

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



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



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No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
41	I43578950	J2	11/11/2020	85	I43578994	LAY6	11/11/2020
42	I43578951	J3	11/11/2020	86	I43578995	LAY7	11/11/2020
43	I43578952	J4	11/11/2020	87	I43578996	LAY8	11/11/2020
44	I43578953	J5	11/11/2020	88	I43578997	LAY9	11/11/2020
45	I43578954	J6	11/11/2020	89	I43578998	LAY10	11/11/2020
46	I43578955	J7	11/11/2020	90	I43578999	LAY11	11/11/2020
47	I43578956	J8	11/11/2020	91	I43579000	V1	11/11/2020
48	I43578957	J9	11/11/2020	92	I43579001	V2	11/11/2020
49	I43578958	J10	11/11/2020	93	I43579002	V3	11/11/2020
50	I43578959	J11	11/11/2020	94	I43579003	V4	11/11/2020
51	I43578960	J12	11/11/2020	95	I43579004	V5	11/11/2020
52	I43578961	J13	11/11/2020	96	I43579005	V6	11/11/2020
53	I43578962	J14	11/11/2020	97	I43579006	V7	11/11/2020
54	I43578963	J15	11/11/2020	98	I43579007	V8	11/11/2020
55	I43578964	J16	11/11/2020	99	I43579008	V9	11/11/2020
56	I43578965	J17	11/11/2020	100	I43579009	V10	11/11/2020
57	I43578966	J18	11/11/2020	101	I43579010	V11	11/11/2020
58	I43578967	J19	11/11/2020	102	I43579011	V12	11/11/2020
59	I43578968	J20	11/11/2020	103	I43579012	V13	11/11/2020
60	I43578969	J21	11/11/2020	104	I43579013	V14	11/11/2020
61	I43578970	J22	11/11/2020	105	I43579014	V15	11/11/2020
62	I43578971	J23	11/11/2020				
63	I43578972	J24	11/11/2020				
64	I43578973	J25	11/11/2020				
65	I43578974	J26	11/11/2020				
66	I43578975	J27	11/11/2020				
67	I43578976	J28	11/11/2020				
68	I43578977	J29	11/11/2020				
69	I43578978	J30	11/11/2020				
70	I43578979	J31	11/11/2020				
71	I43578980	J32	11/11/2020				
72	I43578981	J33	11/11/2020				
73	I43578982	J34	11/11/2020				
74	I43578983	J35	11/11/2020				
75	I43578984	J36	11/11/2020				
76	I43578985	J37	11/11/2020				
77	I43578986	J39	11/11/2020				
78	I43578987	J40	11/11/2020				
79	I43578988	J41	11/11/2020				
80	I43578989	LAY1	11/11/2020				
81	I43578990	LAY2	11/11/2020				
82	I43578991	LAY3	11/11/2020				
83	I43578992	LAY4	11/11/2020				
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General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

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

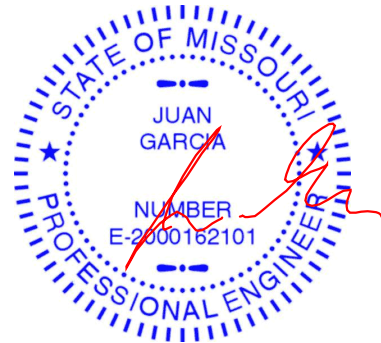
Design Program: MiTek 20/20 8.4
Wind Speed: 115 mph
Floor Load: N/A psf

This package includes 105 individual, dated Truss Design Drawings and 0 Additional Drawings.

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19	I43578928	D1	11/11/2020	39	I43578948	H4	11/11/2020
20	I43578929	D2	11/11/2020	40	I43578949	J1	11/11/2020

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

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



November 11, 2020



RE: W2 50 - Lot 50 W2

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Chesterfield, MO 63017
314-434-1200

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Project Customer: Project Name: W2 50

Lot/Block:

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No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
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68	I43578977	J29	11/11/2020				
69	I43578978	J30	11/11/2020				
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83	I43578992	LAY4	11/11/2020				
84	I43578993	LAY5	11/11/2020				

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578910
W2 50	A1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:20 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-kpYwWVcnThoiJpgvRnicTixXtcjplq5X0_BX0yKKJP

Job Reference (optional)

-0-10-8	3-5-9	8-6-7	12-0-0	12-10-8
0-10-8	3-5-9	5-0-15	3-5-9	0-10-8

Scale = 1:22.8

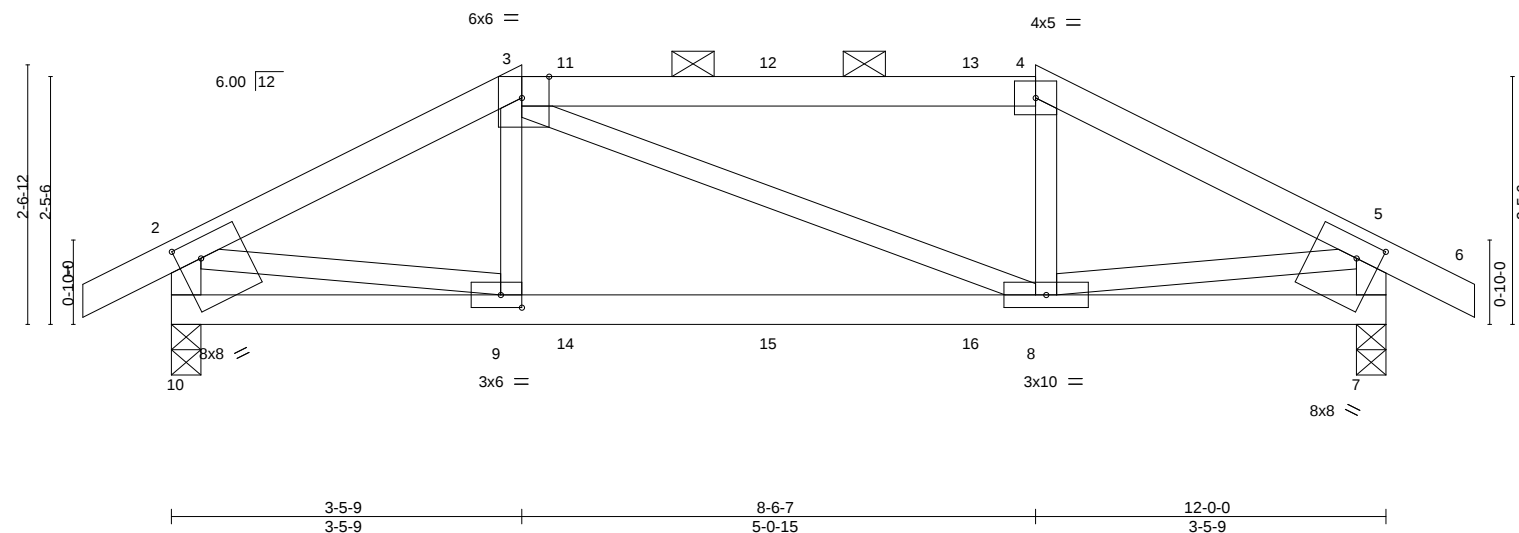


Plate Offsets (X,Y)-- [3:0-3-4,Edge], [7:0-2-12,0-2-4], [9:0-2-8,0-1-8], [10:0-2-12,0-2-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.03 8-9 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.08 8-9 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.01 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02 8-9 >999 240	Weight: 44 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 5-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-10 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=-50(LC 6)
Max Uplift 10=-190(LC 8), 7=-190(LC 9)
Max Grav 10=914(LC 1), 7=914(LC 1)

FORCES.

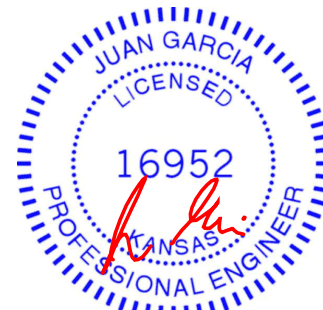
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1253/246, 3-4=-1078/248, 4-5=-1253/245, 2-10=-889/196, 5-7=-889/195
BOT CHORD 8-9=-218/1078
WEBS 2-9=-204/992, 5-8=-206/993

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 10 and 190 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 75 lb up at 4-0-0, and 89 lb down and 75 lb up at 6-0-0, and 86 lb down and 75 lb up at 8-0-0 on top chord, and 184 lb down and 72 lb up at 3-5-9, 38 lb down at 4-0-0, 38 lb down at 6-0-0, and 38 lb down at 8-0-0, and 184 lb down and 72 lb up at 8-6-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

Continued on page 2

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578910
W2 50	A1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:20 2020 Page 2
ID:wWQ0cVuS969af?GecLrtCNzdMNG-kpYwWVcnThoiJjpgvRnicTixXtcjplq5X0_BX0yKKJP

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=-184(F) 8=-184(F) 11=-58(F) 12=-58(F) 13=-58(F) 14=-29(F) 15=-29(F) 16=-29(F)

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578911
W2 50	A2	Hip	1	1	Job Reference (optional)	

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ID: wWQ0cVuS969af?GecLrtCNzdMNG-C?6JkrdPE_wZxtOsS9Ix9hEBeH?0YqjEmgjk3SyKKJO

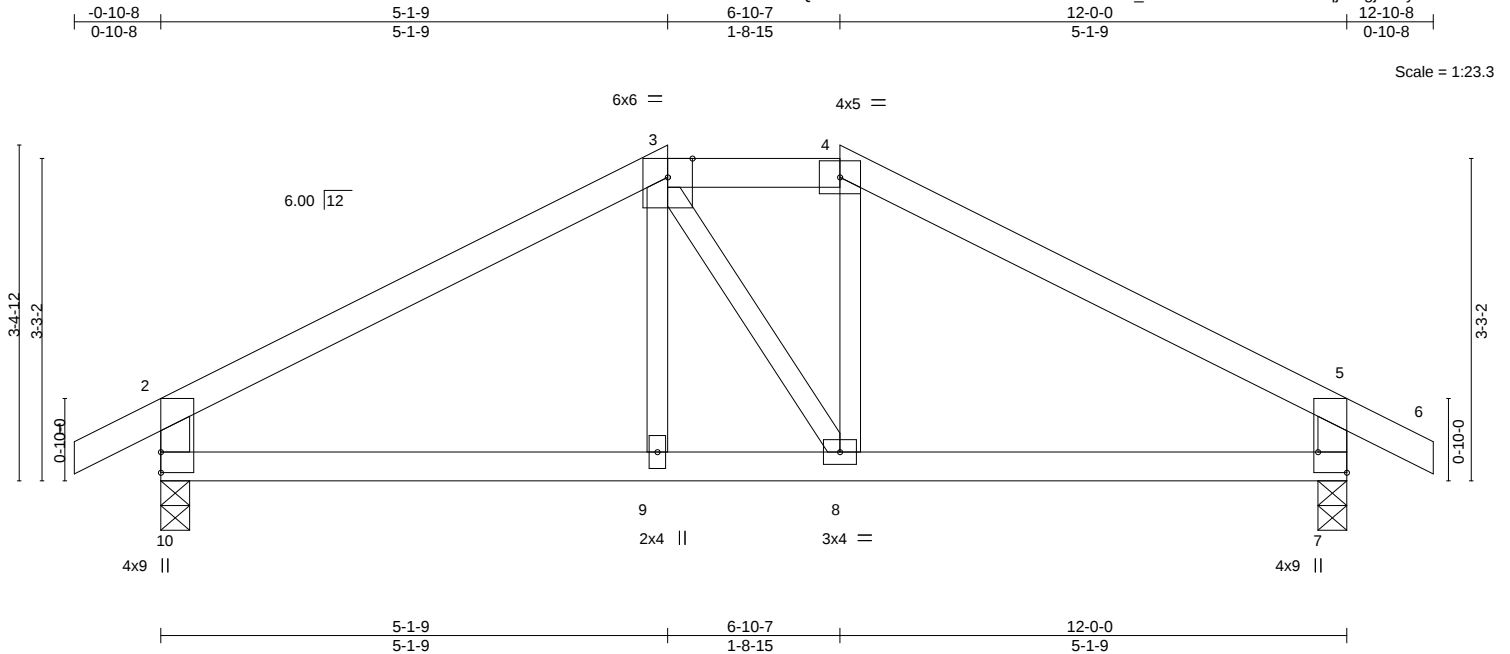


Plate Offsets (X,Y)--		[7:Edge,0-3-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.03	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	Weight: 39 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-10,5-7: 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=-61(LC 6)
 Max Uplift 10=-82(LC 8), 7=-82(LC 9)
 Max Grav 10=598(LC 1), 7=598(LC 1)

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

TOP CHORD 2-3=-647/66, 3-4=-494/99, 4-5=-647/66, 2-10=-531/119, 5-7=-531/119
 BOT CHORD 9-10=-20/495, 8-9=-21/494, 7-8=0/496

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 10 and 82 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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

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



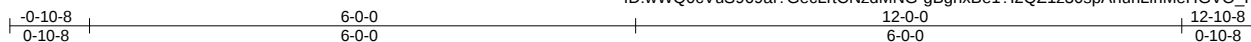
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578912
W2 50	A3	COMMON	2	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:22 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-gBghxBe1?I2QZ1z30spAhunLihMeHGVO_KTlibuyKKJN



4x5 =

Scale = 1:25.3

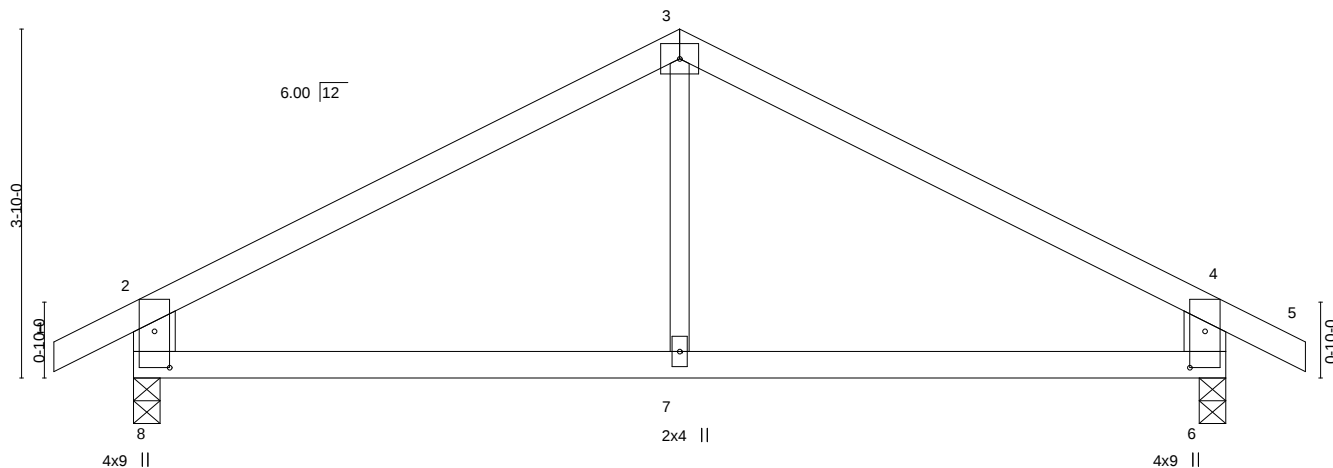


Plate Offsets (X,Y)--	[6:0-4-13,0-2-0], [8:0-4-13,0-2-0]
-----------------------	------------------------------------

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 0.48	Vert(LL)	-0.03	7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.06	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	7-8	>999	240	Weight: 36 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
 Max Horz 8=-69(LC 6)
 Max Uplift 8=-89(LC 8), 6=-89(LC 9)
 Max Grav 8=597(LC 1), 6=597(LC 1)

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

TOP CHORD 2-3=-606/90, 3-4=-606/90, 2-8=-536/131, 4-6=-536/131
 BOT CHORD 7-8=-12/448, 6-7=-12/448

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 8 and 89 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

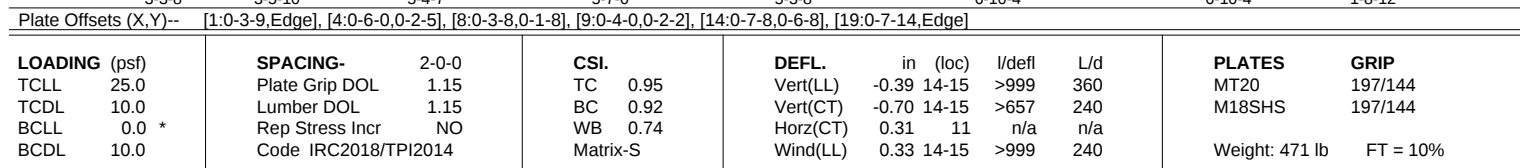
Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:24 2020 Page 1

ID:wwQ0cVuS969af?GecLrtCNzdMNG-caorMsfWvI8oL6R8HrenJsaoUstI?ahSeyPgnyKKJL

3-3-8 6-9-2 12-1-8 17-8-8 23-0-0 29-10-4 36-8-8 38-5-4

3-3-8 3-5-10 5-4-7 5-7-0 5-3-8 6-10-4 6-10-4 1-8-12

Scale = 1:68.4



REACTIONS. (size) 1=0-3-8, 11=Mechanical
 Max Horz 1=161(LC 24)
 Max Uplift 1=-667(LC 8), 11=-998(LC 5)
 Max Grav 1=3609(LC 1), 11=4644(LC 1)

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

TOP CHORD 1-2=-15294/3077, 2-3=-11212/2300, 3-4=-8332/1741, 4-5=-8993/1932, 5-7=-8993/1932, 7-8=-9500/2066, 8-9=-5984/1347

BOT CHORD 1-19=-2944/13893, 18-19=-2574/12096, 17-18=-2266/10507, 15-17=-1679/7684, 14-15=-2127/9580, 13-14=-118/550, 12-13=-181/773, 11-12=-303/1228

WEBS 2-19=-801/3992, 2-18=-1630/316, 3-18=-314/1443, 3-17=-3078/687, 4-17=-307/1641, 4-15=-396/1807, 5-15=-659/218, 7-15=-849/194, 12-14=-1182/5298, 8-14=-896/4115, 8-12=-2694/593, 9-12=-1320/6040, 9-11=-4121/919

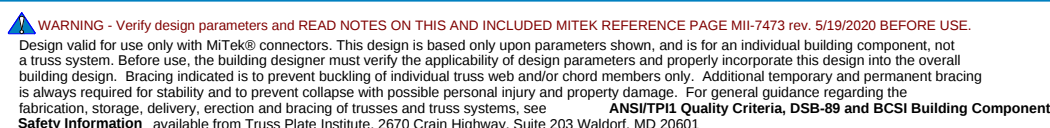
NOTES-

- 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 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 667 lb uplift at joint 1 and 998 lb uplift

Continued on page 2



November 11.2020



Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	B1	Hip Girder	1	2	I43578913

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:24 2020 Page 2
ID:wWQ0cVuS969af?GecLrtCNzdMNG-caoRMsfWvI8oL6R8HrenJsaoUsTI?ahSeyPgnyKKJL

- NOTES-**
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 110 lb down and 72 lb up at 12-1-8, 112 lb down and 72 lb up at 14-5-0, 112 lb down and 72 lb up at 16-5-0, 112 lb down and 72 lb up at 18-5-0, and 112 lb down and 72 lb up at 20-5-0, and 112 lb down and 72 lb up at 22-5-0 on top chord, and 487 lb down and 190 lb up at 6-5-0, 232 lb down and 70 lb up at 8-5-0, 232 lb down and 83 lb up at 10-5-0, 76 lb down and 32 lb up at 12-5-0, 76 lb down and 32 lb up at 14-5-0, 76 lb down and 32 lb up at 16-5-0, 76 lb down and 32 lb up at 18-5-0, 76 lb down and 32 lb up at 20-5-0, 76 lb down and 32 lb up at 22-5-0, 412 lb down and 132 lb up at 24-5-0, 412 lb down and 132 lb up at 26-5-0, 412 lb down and 132 lb up at 28-5-0, 412 lb down and 132 lb up at 30-5-0, 412 lb down and 132 lb up at 32-5-0, and 412 lb down and 132 lb up at 34-5-0, and 412 lb down and 132 lb up at 36-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-70, 4-9=-70, 9-10=-70, 1-19=-20, 14-19=-20, 11-13=-20
- Concentrated Loads (lb)
 - Vert: 4=-88(F) 6=-88(F) 17=-76 20=-88(F) 21=-88(F) 22=-88(F) 23=-88(F) 24=-487(F) 25=-232(F) 26=-232(F) 27=-76 28=-76 29=-76 30=-76 31=-76 32=-412(F) 33=-412(F) 34=-412(F) 35=-412(F) 36=-412(F) 37=-412(F) 38=-412(F)

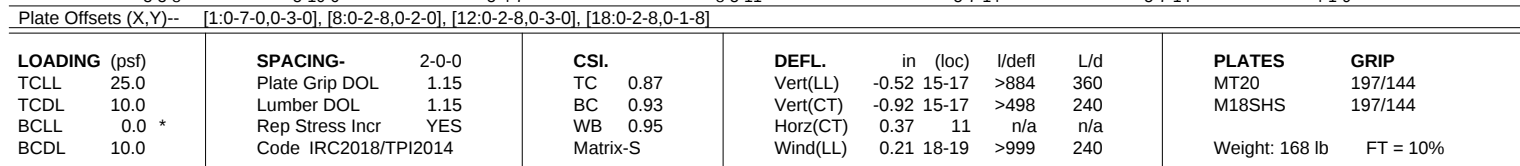
Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:27 2020 Page 1

ID:wWQ0cVuS969af?GecLrCNzdmNG-09Ua_uiaPqgjfor0pQPLOyU6Jiu6yJ778cB3H6yKKJl

3-3-8 9-1-14 14-6-5 18-9-2 23-0-0 28-3-14 34-3-14 38-5-4

3-3-8 5-10-6 5-4-7 4-2-14 4-2-14 5-7-14 5-7-14 4-1-9

Scale = 1:68.4



REACTIONS. (size) 1=0-3-8, 11=Mechanical
Max Horz 1=162(LC 7)
Max Uplift 11=-45(LC 5)
Max Grav 1=1787(LC 2), 11=1812(LC 2)

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

TOP CHORD 1-2=-7816/155, 2-3=-4232/73, 3-4=-3342/89, 4-5=-3016/93, 5-7=-3107/128,
7-8=-3094/130, 8-9=-2086/122, 9-10=-1131/84, 10-11=-1763/59

BOT CHORD 1-19=-286/7157, 18-19=-263/6056, 17-18=-154/3887, 15-17=-163/3178, 7-15=-337/79,
12-13=-64/1031

WEBS 2-19=-25/2376, 2-18=-2199/121, 3-18=0/502, 3-17=-1004/106, 4-17=0/1034,
5-17=-469/81, 13-15=-83/2096, 8-15=-55/1407, 8-13=-1388/140, 9-13=-66/1610,
9-12=-1073/105, 10-12=-51/1604

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) 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 45 lb uplift at joint 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.



November 11.2020



WARNING: Velly design parameters and READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MP147316V, 3/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCS Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	
W2 50	B3	Hip	1	1		I43578915
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:28 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdmNG-VL1yCEioa8paHyQCN7wax91Ho6EUhmYNGWcpYyKKJH



Scale = 1:67.9

Plate Offsets (X,Y)--	[1:0-7-0,0-3-0], [9:0-2-5,Edge], [10:Edge,0-1-8], [14:0-2-8,0-1-8], [16:0-2-8,0-1-8]
-----------------------	--

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 0.89	Vert(LL)	-0.42 16-17	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.74 16-17	>621	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.36 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.20 16-17	>999	240	Weight: 169 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 5-8,8-9: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-11-10 max.): 5-8.
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 1-17: 2x8 SP DSS, 6-12: 2x3 SPF No.2, 10-12: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 16-17.
WEBS 2x3 SPF No.2 *Except* 2-17: 2x8 SP DSS, 9-10: 2x4 SPF No.2	WEBS 1 Row at midpt 2-16, 3-14, 5-13, 7-11
OTHERS 2x3 SPF No.2	

REACTIONS. (size) 1=0-3-8, 10=Mechanical
Max Horz 1=162(LC 7)
Max Uplift 1=13(LC 8), 10=22(LC 5)
Max Grav 1=1784(LC 2), 10=1782(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-7753/121, 2-3=-4265/43, 3-5=-2998/71, 5-6=-2598/109, 6-7=-2586/108,
7-8=-1315/85, 8-9=-1487/77, 9-10=-1700/46
BOT CHORD 1-17=-234/7096, 16-17=-214/6009, 14-16=-118/3924, 13-14=-89/2675, 6-13=-437/95
WEBS 2-17=-19/2338, 2-16=-2114/126, 3-16=0/567, 3-14=-1342/131, 5-14=0/833,
11-13=-116/1817, 7-13=-14/1058, 7-11=-1335/91, 8-11=0/325, 9-11=-22/1622

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) 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 13 lb uplift at joint 1 and 22 lb uplift at joint 10.
 - 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.



November 11,2020

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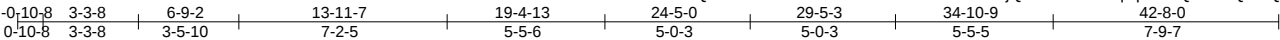
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578916
W2 50	B4	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:29 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-zXbKPajQLSxRu6?PwqRpTNZQLVaPqENQbwgAL_yKKJG



Scale = 1:79.6

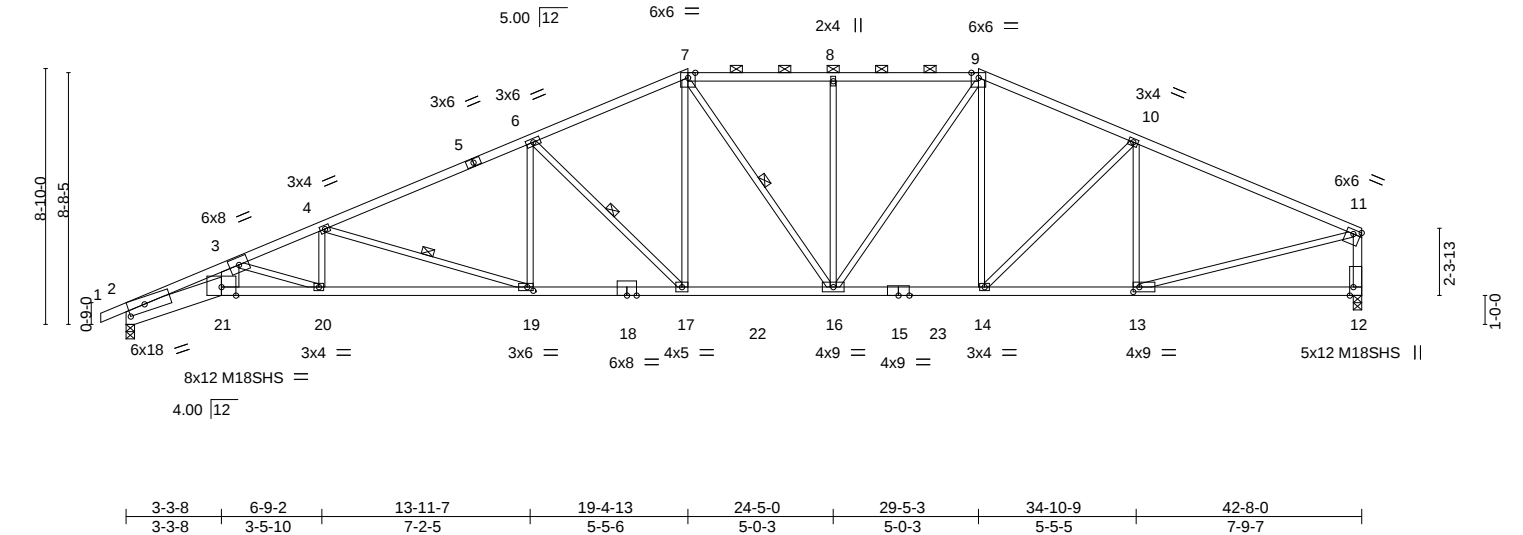


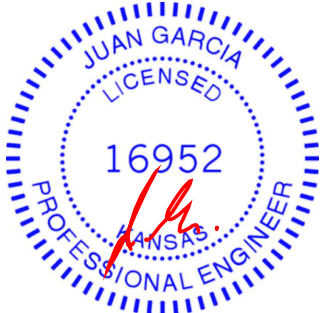
Plate Offsets (X,Y)--		[2:0-7-0,0-3-0], [11:0-3-0,0-1-12], [12:0-3-8,Edge], [13:0-2-8,0-2-0], [19:0-2-8,0-1-8]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
	CSI.	
	TC 0.96	
	BC 0.94	
	WB 0.83	
	Matrix-S	
	DEFL.	
	in (loc)	l/defl
	Vert(LL)	-0.44 19-20 >999 360
	Vert(CT)	-0.78 19-20 >653 240
	Horz(CT)	0.33 12 n/a n/a
	Wind(LL)	0.27 19-20 >999 240
	PLATES	
	MT20	197/144
	M18SHS	197/144
	GRIP	
	Weight: 181 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 2-1-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-5 max.): 7-9.
9-11: 2x4 SPF 2100F 1.8E, 1-5: 2x4 SPF 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
BOT CHORD 2x4 SPF No.2 *Except*	WEBS 1 Row at midpt 4-19, 6-17, 7-16
2-21: 2x8 SP DSS, 18-21: 2x4 SPF 2400F 2.0E	
WEBS 2x3 SPF No.2 *Except*	
3-21: 2x8 SP DSS, 11-12: 2x4 SPF No.2	

REACTIONS.	(size) 2=0-3-8, 12=0-3-8
	Max Horz 2=176(LC 8)
	Max Uplift 2=254(LC 8), 12=172(LC 5)
	Max Grav 2=2051(LC 2), 12=2002(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-8436/1109, 3-4=-5451/659, 4-6=-3987/435, 6-7=-3162/394, 7-8=-2861/396, 8-9=-2861/396, 9-10=-2733/350, 10-11=-2754/278, 11-12=-1871/213	
BOT CHORD 2-21=-1155/7698, 20-21=-987/6550, 19-20=-693/5056, 17-19=-371/3607, 16-17=-236/2854, 14-16=-213/2464, 13-14=-229/2469	
WEBS 3-21=-339/2461, 3-20=-1559/306, 4-20=-0/604, 4-19=-1518/337, 6-19=-21/682, 6-17=-1038/266, 7-17=-130/929, 7-16=-121/267, 8-16=-457/174, 9-16=-109/800, 10-13=-469/145, 11-13=-206/2427	

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 2 and 172 lb uplift at joint 12.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578917
W2 50	B5	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:30 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdmNG-Rk9idwk36l3lWGabUYy20a6b7vub9hKZqZPjtrYKKJF

-0-10-8	3-3-8	9-1-13	16-4-3	21-8-11	27-1-5	34-10-8	42-8-0
0-10-8	3-3-8	5-10-5	7-2-6	5-4-8	5-4-10	7-9-3	7-9-8

Scale = 1:79.6

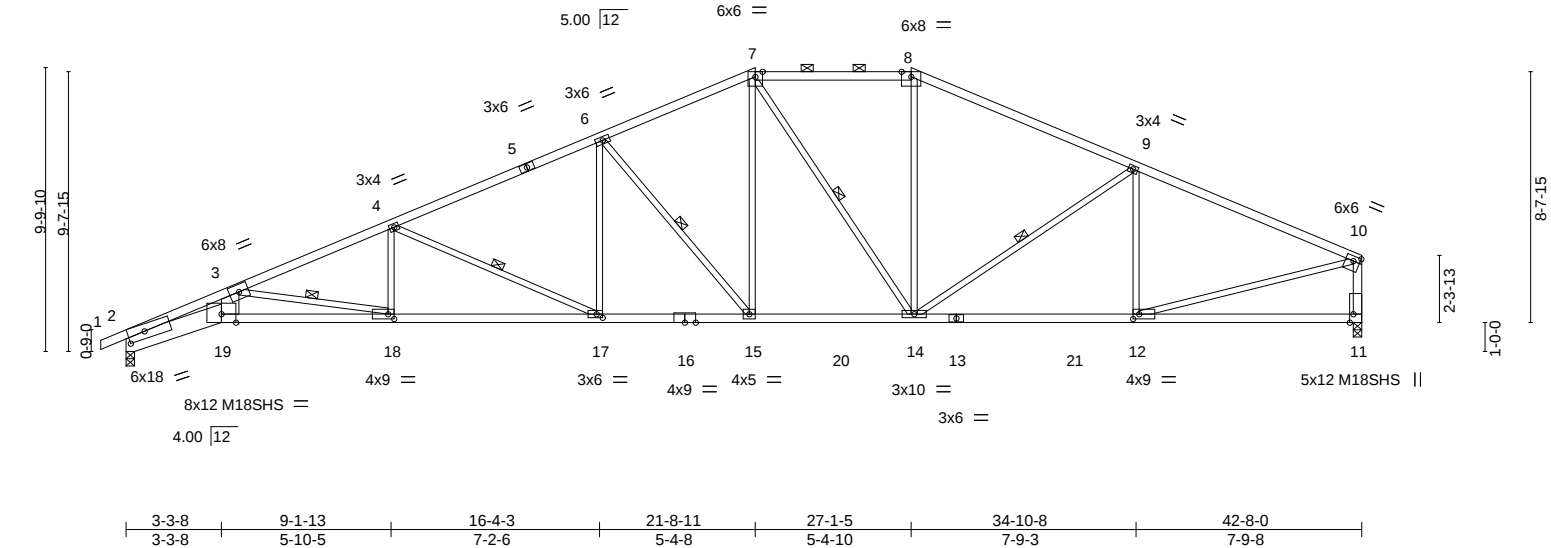


Plate Offsets (X,Y)-- [2:0-7-0,0-3-0], [10:0-2-12,0-2-0], [11:0-3-8,Edge], [12:0-2-8,0-2-0], [17:0-2-8,0-1-8], [18:0-2-8,0-2-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.46 18-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.82 17-18	>622	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.38 11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.33 18-19	>999	240	Weight: 177 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 8-10: 2x4 SPF 2100F 1.8E, 1-5: 2x4 SPF 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-14 max.): 7-8.
BOT CHORD 2x4 SPF No.2 *Except* 2-19: 2x8 SP DSS, 16-19: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 2x3 SPF No.2 *Except* 3-19: 2x8 SP DSS, 10-11: 2x4 SPF No.2	WEBS 1 Row at midpt 3-18, 4-17, 6-15, 7-14, 9-14

REACTIONS.	(size) 2=0-3-8, 11=0-3-8 Max Horz 2=193(LC 8) Max Uplift 2=-271(LC 8), 11=-192(LC 9) Max Grav 2=2047(LC 2), 11=2009(LC 2)
-------------------	--

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-8653/1247, 3-4=-4861/621, 4-6=-3602/442, 6-7=-2825/362, 7-8=-2373/294, 8-9=-2666/292, 9-10=-2789/265, 10-11=-1887/231	
BOT CHORD 2-19=-1305/7914, 18-19=-1129/6705, 17-18=-641/4475, 15-17=-352/3247, 14-15=-171/2546, 12-14=-200/2506	
WEBS 3-19=-351/2599, 3-18=-2261/495, 4-18=0/591, 4-17=-1349/316, 6-17=-50/766, 6-15=-1069/279, 7-15=-157/1022, 7-14=-490/139, 8-14=-36/611, 9-14=-273/189, 9-12=-457/148, 10-12=-170/2481	

NOTES-	
1) Unbalanced roof live loads have been considered for this design.	
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60	
3) Provide adequate drainage to prevent water ponding.	
4) All plates are MT20 plates unless otherwise indicated.	
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.	
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.	
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 271 lb uplift at joint 2 and 192 lb uplift at joint 11.	
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.	
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.	



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578918
W2 50	B6	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:32 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdmNG-N6HT2clJeNJ0Izk_cz?W5?Bw3jb6dc1sHtuqyJyKKJD

-0-10-8	3-3-8	9-1-14	16-4-5	24-1-8	24-8-8	32-5-11	39-8-3	42-8-0
0-10-8	3-3-8	5-10-6	7-2-7	7-9-3	0-7-0	7-9-3	7-2-8	2-11-14

Scale = 1:78.1

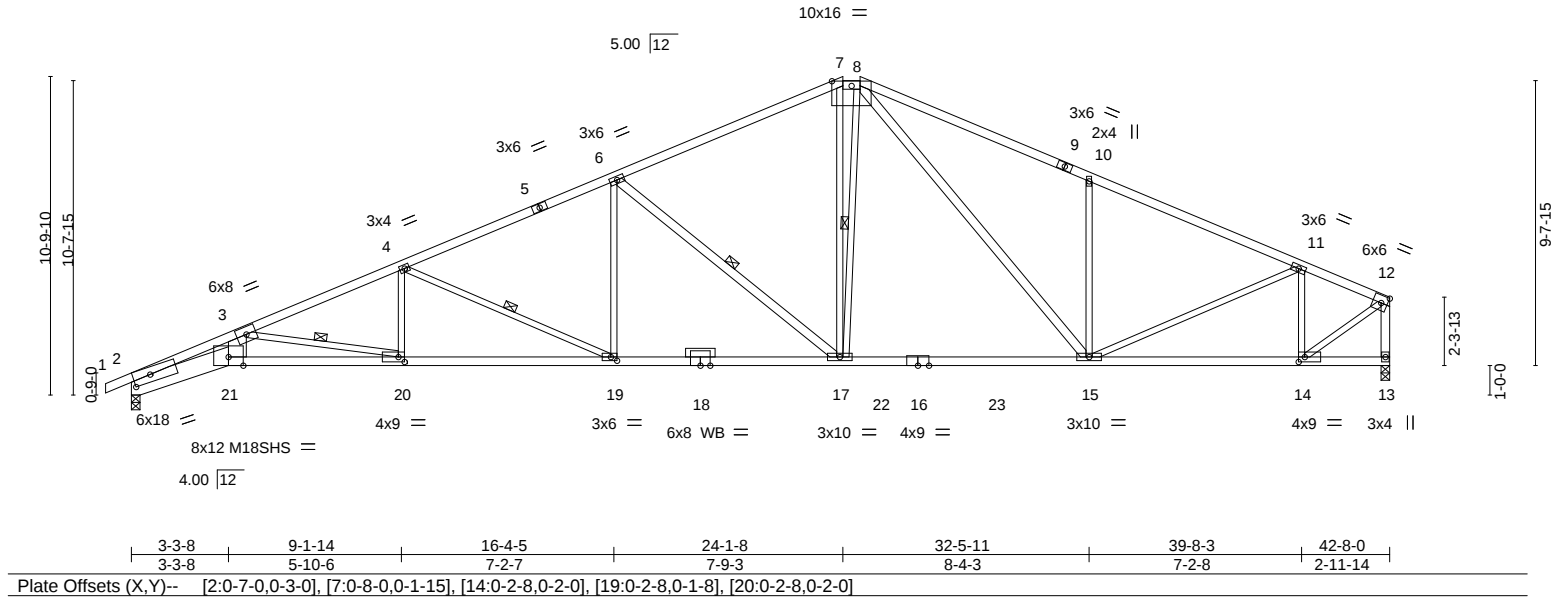


Plate Offsets (X,Y)--		[2:0-7-0,0-3-0], [7:0-8-0,0-1-15], [14:0-2-8,0-2-0], [19:0-2-8,0-1-8], [20:0-2-8,0-2-0]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.45	20-21	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.78	20-21	>649
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.35	13	n/a
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.32	20-21	>999
								PLATES	GRIP
								MT20	197/144
								M18SHS	197/144
								Weight: 189 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
7-8,9-12: 2x4 SPF No.2, 1-5: 2x4 SPF 2400F 2.0E
BOT CHORD 2x4 SPF 2400F 2.0E *Except*
2-21: 2x8 SP DSS, 16-18: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
3-21: 2x8 SP DSS, 6-17,8-15,12-13: 2x4 SPF No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-8 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 7-6-4 oc bracing.
WEBS 1 Row at midpt 3-20, 4-19, 6-17, 8-17

REACTIONS.

(size) 2=0-3-8, 13=0-3-8
Max Horz 2=210(LC 8)
Max Uplift 2=-287(LC 8), 13=-214(LC 9)
Max Grav 2=2072(LC 2), 13=2023(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8769/1345, 3-4=-4923/669, 4-6=-3689/492, 6-7=-2597/353, 7-8=-2316/364, 8-10=-2873/453, 10-11=-2869/310, 11-12=-1878/201, 12-13=-1993/216
BOT CHORD 2-21=-1414/8024, 20-21=-1225/6803, 19-20=-701/4530, 17-19=-421/3333, 15-17=-149/2289, 14-15=-199/1724
WEBS 3-21=-380/2623, 3-20=-2304/531, 4-20=-0/591, 4-19=-1314/307, 6-19=-35/818, 6-17=-1307/339, 7-17=-136/876, 8-17=-219/578, 8-15=-246/605, 10-15=-545/287, 11-15=-67/940, 11-14=-1076/205, 12-14=-228/2115

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 287 lb uplift at joint 2 and 214 lb uplift at joint 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	
W2 50	B7	Roof Special	1	1		I43578919
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:33 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-rJrrFmxPgRsNjlA9gWleDk5N7wuM4P0WXeNUmyKKJC

1-10-8	3-3-8	9-1-13	16-4-5	24-5-0	32-5-11	39-8-1	42-8-0
1-10-8	3-3-8	5-10-4	7-2-8	8-0-11	8-0-11	7-2-6	2-11-15

Scale = 1:76.0

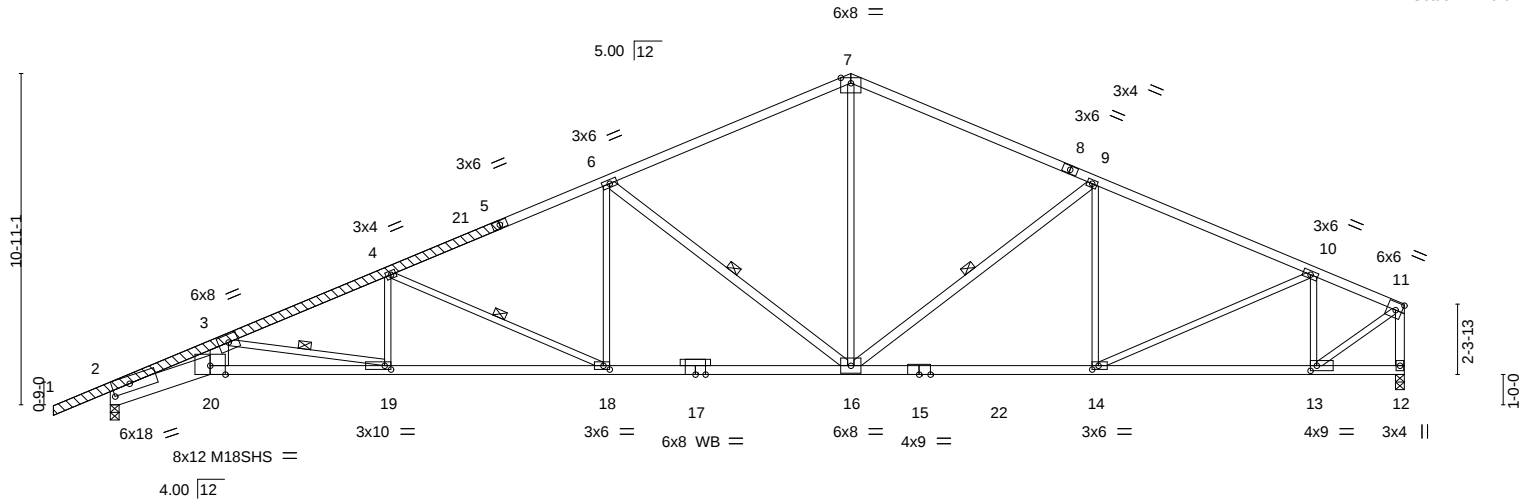


Plate Offsets (X,Y)--		[2:0-7-0,0-3-0], [13:0-2-8,0-2-0], [14:0-2-8,0-1-8], [18:0-2-8,0-1-8], [19:0-2-8,0-1-8]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
CSL	DEFL.	in (loc) l/defl L/d
TC 0.96	Vert(LL) -0.46	19-20 >999 360
BC 0.97	Vert(CT) -0.81	19-20 >629 240
WB 0.77	Horz(CT) 0.36	12 n/a n/a
Matrix-S	Wind(LL) 0.33	19-20 >999 240
PLATES	GRIP	
MT20	197/144	
M18SHS	197/144	
Weight: 199 lb		FT = 10%

LUMBER-

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

8-11: 2x4 SPF No.2

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

2-20: 2x8 SP DSS

WEBS 2x3 SPF No.2 *Except*

3-20: 2x8 SP DSS, 6-16,9-16,11-12: 2x4 SPF No.2

OTHERS 2x4 SPF 2100F 1.8E *Except*

17-17: 2x3 SPF No.2

LBR SCAB 1-5 2x4 SPF 2100F 1.8E one side

REACTIONS.

(size) 2=0-3-8, 12=0-3-8

Max Horz 2=228(LC 8)

Max Uplift 2=-312(LC 8), 12=-216(LC 9)

Max Grav 2=2118(LC 2), 12=2010(LC 2)

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

TOP CHORD 2-3=-8286/1249, 3-4=-4853/663, 4-6=-3649/494, 6-7=-2497/347, 7-9=-2497/372,

9-10=-2843/316, 10-11=-1870/201, 11-12=-1984/217

BOT CHORD 2-20=-1318/7537, 19-20=-1146/6386, 18-19=-703/4480, 16-18=-426/3295,

14-16=-201/2558, 13-14=-197/1715

WEBS 3-20=-346/2477, 3-19=-1933/449, 4-19=0/522, 4-18=-1299/304, 6-18=-31/833,

6-16=-1365/350, 7-16=-115/1414, 9-16=-541/221, 10-14=-70/926, 10-13=-1069/206,

11-13=-225/2103

NOTES-

1) Attached 16-0-0 scab 1 to 5, front face(s) 2x4 SPF 2100F 1.8E with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting

at 1-0-8 from end at joint 1, nail 1 row(s) at 7" o.c. for 2-0-0; starting at 10-11-5 from end at joint 1, nail 1 row(s) at 7" o.c. for 2-0-0.

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

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

4) All plates are MT20 plates unless otherwise indicated.

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

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

7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 312 lb uplift at joint 2 and 216 lb uplift at joint 12.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578920
W2 50	B8	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:34 2020 Page 1

ID:wwQ0cVuS969af?GecLrtCNzdMNG-JVPDSHnZA_Zj?ttmJO1_AQHMDWH25Xl9IBNx0CyKKJB

1-10-8	3-3-8	9-1-15	16-4-4	21-10-0	24-1-8	24-8-8	30-3-8
1-10-8	3-3-8	5-10-7	7-2-6	5-5-12	2-3-8	0-7-0	5-7-0

6x12 =

Scale = 1:68.2

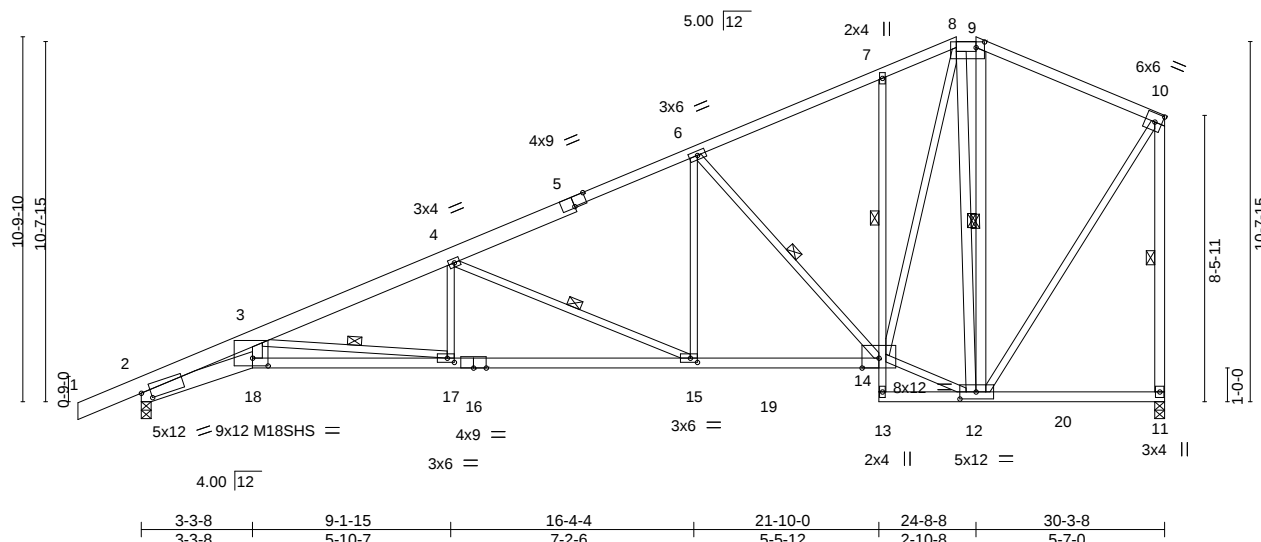


Plate Offsets (X,Y)--										[2-0-3-5,0-2-12], [5-0-4-8,Edge], [8-0-3-0,0-2-0], [12-0-5-12,0-2-8], [15-0-2-8,0-1-8], [17-0-2-8,0-1-8], [18-0-5-8,0-2-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP							
TCLL	25.0	Plate Grip DOL 1.15		TC	0.63	Vert(LL)	-0.28	17-18	>999	360	MT20	197/144							
TCDL	10.0	Lumber DOL 1.15		BC	0.91	Vert(CT)	-0.49	17-18	>731	240	M18SHS	197/144							
BCLL	0.0 *	Rep Stress Incr YES		WB	0.76	Horz(CT)	0.26	11	n/a	n/a									
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	17-18	>999	240	Weight: 180 lb	FT = 10%							

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
2-18: 2x6 SP DSS, 16-18: 2x4 SPF 2100F 1.8E, 7-13: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-18,8-12,9-12,10-11: 2x4 SPF No.2

BRACING-

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

REACTIONS.

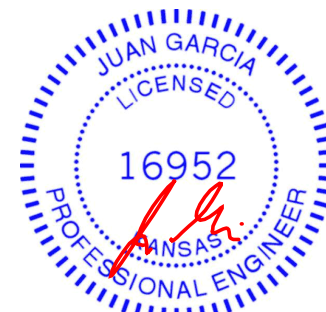
(size) 2=0-3-8, 11=0-3-8
Max Horz 2=365(LC 7)
Max Uplift 2=-254(LC 8), 11=-190(LC 8)
Max Grav 2=1524(LC 2), 11=1444(LC 2)

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

TOP CHORD 2-3=-5346/924, 3-4=-3170/514, 4-6=-1978/330, 6-7=-1146/246, 7-8=-1093/305,
8-9=-610/208, 9-10=-736/216, 10-11=-1330/231
BOT CHORD 2-18=-1008/4807, 17-18=-910/4265, 15-17=-570/2934, 14-15=-258/1731, 7-14=-270/142
WEBS 3-18=-252/1606, 3-17=-1344/342, 4-17=0/428, 4-15=-1314/341, 6-15=-54/798,
6-14=-1104/271, 12-14=-116/720, 8-14=-311/1401, 8-12=-926/183, 10-12=-142/1120

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 2 and 190 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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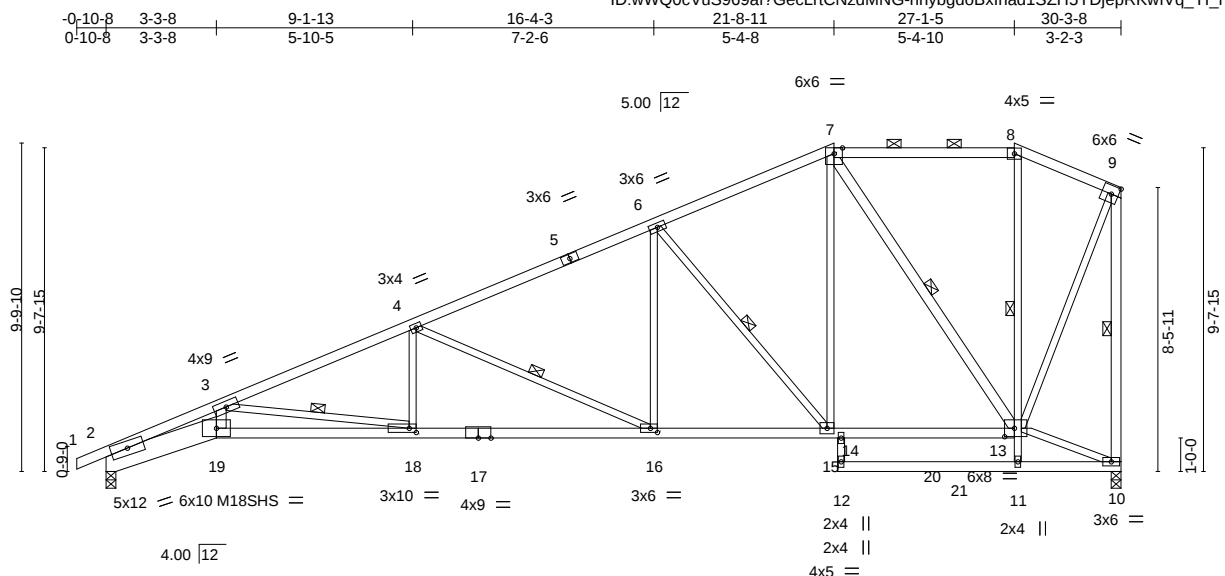
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578921
W2 50	B9	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:35 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-nhybgdoBxIhad1SZH5YDjepRKwVq_Yl_r7UZeyKKJA



	3-3-8	9-1-13	16-4-3	21-8-11	21-10-0	27-1-5	30-3-8
	3-3-8	5-10-5	7-2-6	5-4-8	0-1-5	5-3-5	3-2-3

Plate Offsets (X,Y)-- [13:0-3-8,0-3-0], [16:0-2-8,0-1-8], [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 1.00	Vert(LL)	-0.35 18-19	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.61 18-19	>586	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.29 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.26 18-19	>999	240	Weight: 155 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-19: 2x8 SP DSS, 17-19: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2 *Except*
 3-19,7-13,9-10: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 10=0-3-8
 Max Horz 2=356(LC 7)
 Max Uplift 2=-226(LC 8), 10=-159(LC 5)
 Max Grav 2=1480(LC 2), 10=1512(LC 2)

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

TOP CHORD 2-3=-5891/1027, 3-4=-3174/484, 4-6=-2015/315, 6-7=-1266/238, 7-8=-512/143, 8-9=-575/149, 9-10=-1482/170
 BOT CHORD 2-19=-1098/5370, 18-19=-1000/4825, 16-18=-510/2906, 15-16=-267/1784, 14-15=-203/1098, 13-14=-203/1098
 WEBS 3-19=-270/1715, 3-18=-1941/495, 4-18=-0/531, 4-16=-1232/304, 6-16=-44/716, 6-15=-1043/276, 7-13=-1098/193, 9-13=-178/1314, 7-15=-154/1079

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 226 lb uplift at joint 2 and 159 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
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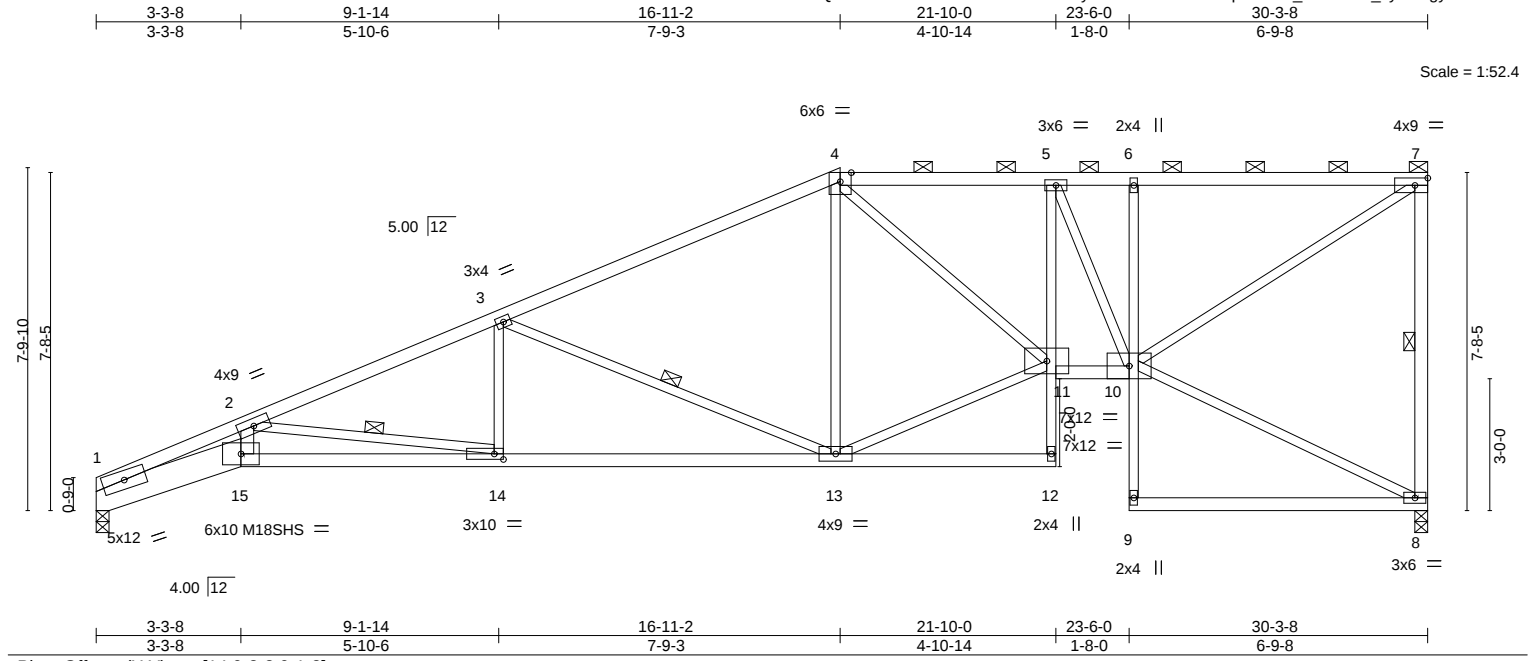
Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578923
W2 50	B11	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:26 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdmNG-YywCnYhY2XYs1eGqFiu6sk_KlbGDuh_vyRVkgyKKJJ

Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.29 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.53 14-15	>681	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.32 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.23 14-15	>999	240		
								Weight: 141 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 4-7: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-4 max.): 4-7.
BOT CHORD 2x4 SPF No.2 *Except* 1-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E 5-12,6-9: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-6-13 oc bracing: 14-15 9-1-6 oc bracing: 10-11.
WEBS 2x3 SPF No.2 *Except* 2-15,7-8: 2x4 SPF No.2	WEBS 1 Row at midpt 2-14, 3-13, 7-8

REACTIONS.	(size) 1=0-3-8, 8=0-3-8 Max Horz 1=321(LC 7) Max Uplift 1=182(LC 8), 8=226(LC 5) Max Grav 1=1350(LC 1), 8=1350(LC 1)
-------------------	---

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-5596/881, 2-3=-3022/425, 3-4=-1836/254, 4-5=-1946/302, 5-6=-1620/267, 6-7=-1622/270, 7-8=-1283/292
BOT CHORD	1-15=-927/5086, 14-15=-844/4580, 13-14=-444/2765, 5-11=-72/621, 10-11=-424/1949, 6-10=-425/185
WEBS	2-15=-223/1581, 2-14=-1836/427, 3-14=0/465, 3-13=-1276/337, 11-13=-334/1714, 4-11=-154/522, 5-10=-815/100, 7-10=-389/1936

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 1 and 226 lb uplift at joint 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578924
W2 50	C1	Roof Special Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:37 2020 Page 1

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-0-10-8	2-6-5	4-6-5	8-9-1	16-6-5	24-3-2	32-3-8
0-10-8	2-6-5	2-0-0	4-2-12	7-9-4	7-8-14	8-0-6

Scale = 1:57.0

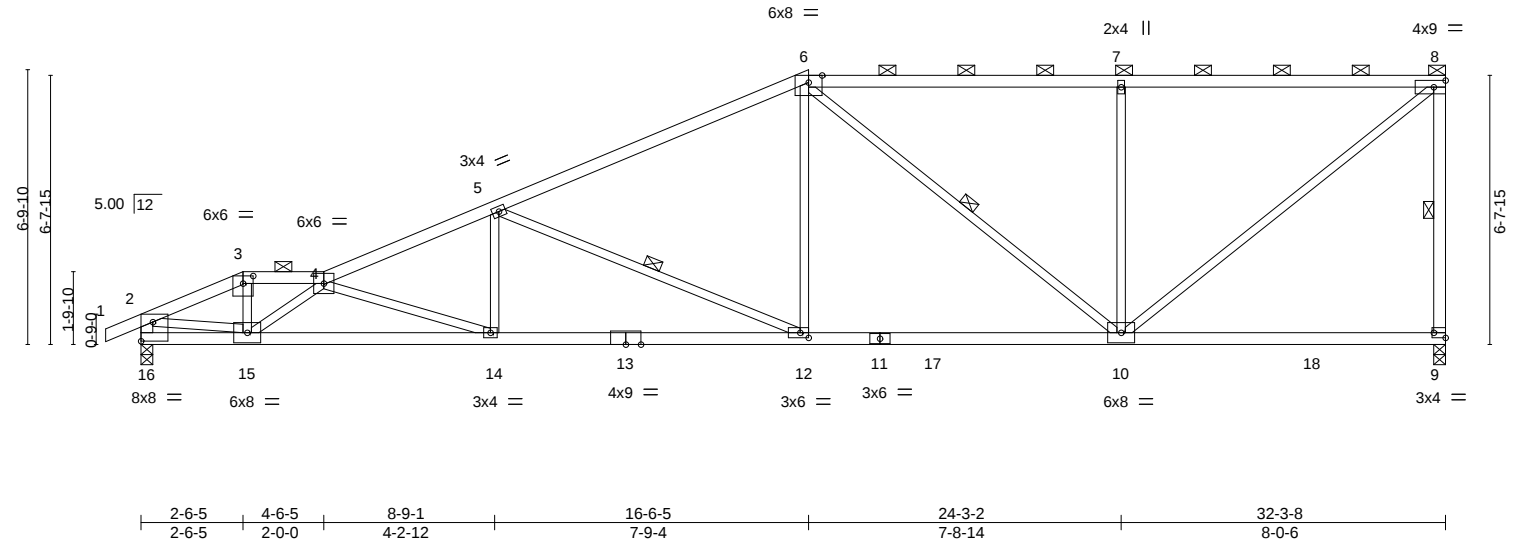


Plate Offsets (X,Y)-- [3:0-3-0,0-2-4], [9:Edge,0-1-8], [12:0-2-8,0-1-8], [16:Edge,0-5-11]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.20 12-14	>999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.37 12-14	>999 240
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.75	Horz(CT)	0.08 9	n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13 12-14	>999 240
					PLATES	GRIP
					MT20	197/144
					Weight: 127 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6-6-8: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
9-11: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16,8-9: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 16=0-3-8, 9=0-3-8
Max Horz 16=284(LC 5)
Max Uplift 16=-233(LC 8), 9=-241(LC 5)
Max Grav 16=1561(LC 2), 9=1551(LC 2)

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

TOP CHORD 2-3=-2437/321, 3-4=-2263/311, 4-5=-3287/408, 5-6=-2208/306, 6-7=-1515/291, 7-8=-1513/289, 2-16=-1486/231, 8-9=-1393/277
BOT CHORD 15-16=-287/325, 14-15=-567/3672, 12-14=-422/3026, 10-12=-322/1949
WEBS 3-15=-62/834, 4-15=-1799/243, 4-14=-685/156, 5-14=0/480, 5-12=-1157/307, 6-12=-277/69, 6-10=-567/136, 7-10=-649/268, 8-10=-298/1910, 2-15=-221/1919

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 16 and 241 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 74 lb up at 2-6-5 on top chord, and 7 lb down and 6 lb up at 2-6-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



November 11,2020

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578924
W2 50	C1	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:37 2020 Page 2
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LOAD CASE(S) Standard

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

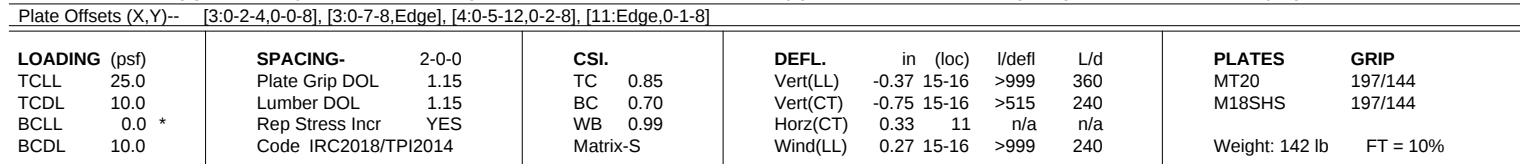
Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-6=-70, 6-8=-70, 9-16=-20

Concentrated Loads (lb)

Vert: 15=3(F)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:38 2020 Page 1
 ID:WWQ0cVuS969af?GecLrtCNzdMNG-CGekHfq4DD39UUB7yD6wLGR_r8iC1H7IgpL89yzKKJ7
 -0-10-8 2-3-8 4-11-2 6-11-2 13-1-0 14-1-8 20-1-5 26-1-3 32-3-8
 0-10-8 2-3-8 2-7-10 2-0-0 6-1-14 1-0-8 5-11-13 5-11-13 6-2-5
 Scale = 1:58.8



REACTIONS. (size) 11=0-3-8, 2=0-3-8
 Max Horz 2=236(LC 5)
 Max Uplift 11=-245(LC 5), 2=-194(LC 8)
 Max Grav 11=1441(LC 1), 2=1514(LC 1)

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

TOP CHORD 2-3=-728/65, 3-4=-4235/465, 4-5=-4220/486, 5-6=-3060/436, 6-7=-2897/462,
7-8=-2076/379, 8-9=-1379/284, 9-10=-1379/284, 10-11=-1386/276

BOT CHORD 3-16=-589/4173, 15-16=-725/5073, 12-13=-377/2069

WEBS 4-16=-27/620, 5-16=-1098/240, 5-15=-2363/425, 13-15=-410/2415, 7-15=-256/1111,
7-13=-599/136, 8-13=0/288, 8-12=-926/137, 9-12=-459/196, 10-12=-305/1823

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 11 and 194 lb uplift at joint 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11.2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578926
W2 50	C3	Roof Special	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:39 2020 Page 1

ID:wWQ0cVuS969af?GecLrCNzdmNG-gTC6W?ri_WB05emKWxd9tU_9pX4wmpwuut5hiPyKKJ6

0-10-8	2-3-8	7-3-14	9-3-14	11-8-11	16-1-6	20-6-0	26-3-8	32-3-8
0-10-8	2-3-8	5-0-6	2-0-0	2-4-13	4-4-10	4-4-10	5-9-8	6-0-0

Scale = 1:58.8

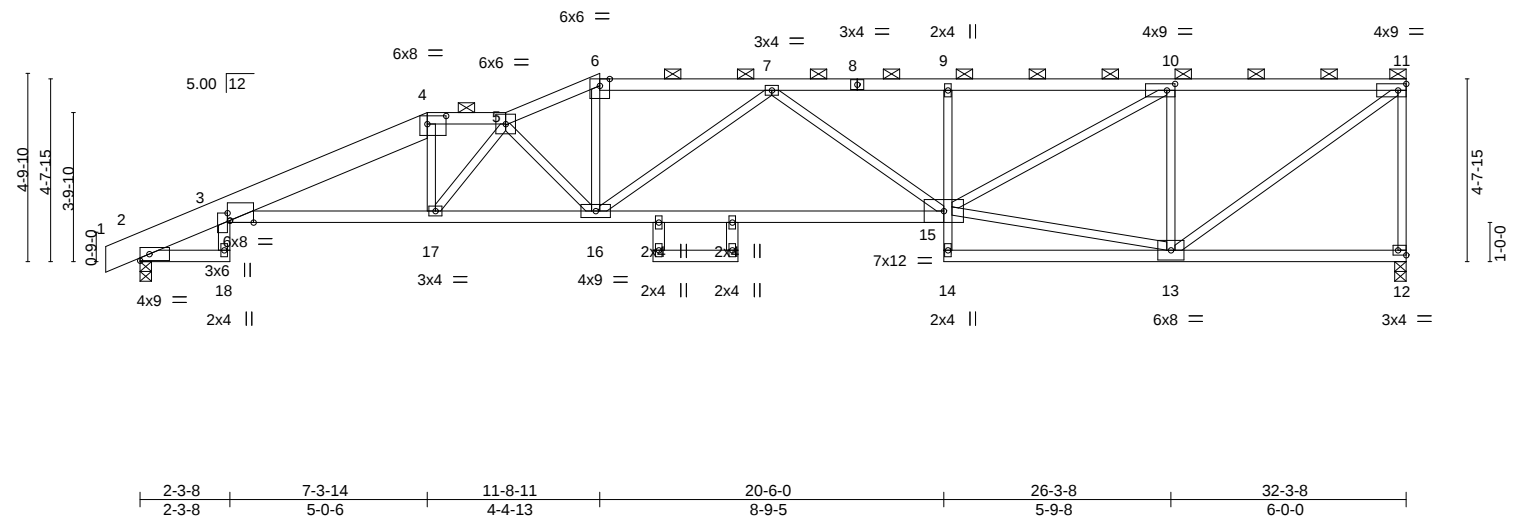


Plate Offsets (X,Y)-- [3:0-2-4,0-0-12], [3:0-7-4,Edge], [4:0-5-12,0-2-8], [10:0-2-8,0-2-0], [12:Edge,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.35	15-16	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.75	15-16	>510	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.34	12	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27	15-16	>999	240	Weight: 142 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-15: 2x4 SPF 2100F 1.8E, 9-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-18,19-21,20-22: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 12=0-3-8, 2=0-3-8
Max Horz 2=192(LC 5)
Max Uplift 12=-253(LC 4), 2=-208(LC 4)
Max Grav 12=1441(LC 1), 2=1514(LC 1)

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

TOP CHORD 2-3=-728/80, 3-4=-3553/504, 4-5=-3411/514, 5-6=-3407/527, 6-7=-3140/500,
7-9=-3205/570, 9-10=-3183/573, 10-11=-1653/333, 11-12=-1387/283
BOT CHORD 3-17=-534/3383, 16-17=-582/3755, 15-16=-633/3414, 9-15=-337/140
WEBS 4-17=-34/482, 5-17=-588/104, 5-16=-869/187, 6-16=-110/1008, 7-16=-508/164,
7-15=-261/106, 13-15=-282/1603, 10-15=-301/1778, 10-13=-1368/347, 11-13=-352/2038

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 253 lb uplift at joint 12 and 208 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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

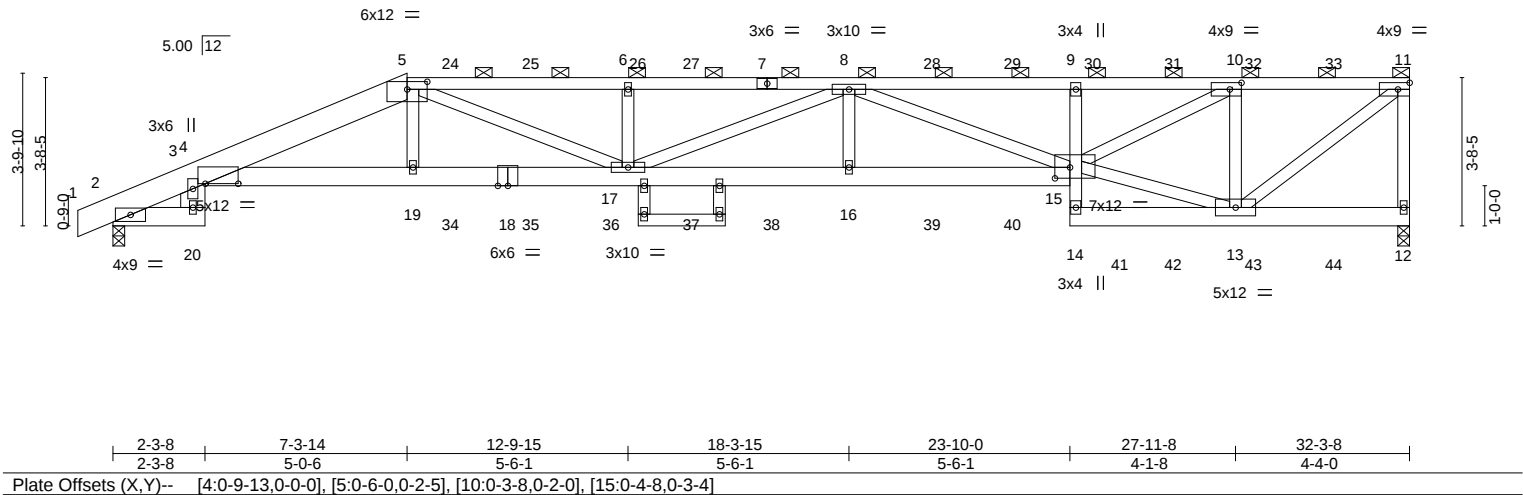
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578927
W2 50	C4	Half Hip Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:44 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-1Q??Zivrp3qJCPeHJUCKaXh0HYn8R4ld2loSNdyKKJ1
0-10-8 2-3-8 7-3-14 12-9-15 18-3-15 23-10-0 27-11-8 32-3-8
0-10-8 2-3-8 5-0-6 5-6-1 5-6-1 5-6-1 4-1-8 4-4-0
Scale = 1:57.4

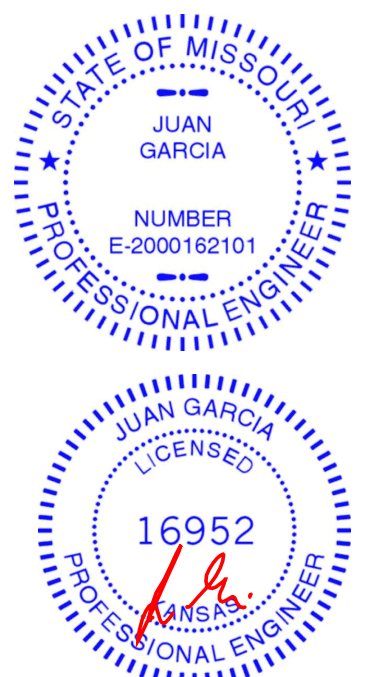


LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.40 16-17	>964	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.74 16-17	>518	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.60	Horz(CT)	0.31 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.29 16-17	>999	240	Weight: 373 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x8 SP DSS *Except* 5-7: 2x4 SPF 2100F 1.8E, 7-11: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-0 max.): 5-11.
BOT CHORD 2x6 SP 2400F 2.0E *Except* 9-14,21-22: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 3-20: 2x8 SP DSS	

REACTIONS.	(size) 12=0-3-8, 2=0-3-8 Max Horz 2=149(LC 24) Max Uplift 12=-320(LC 5), 2=-326(LC 4) Max Grav 12=2798(LC 1), 2=2780(LC 1)
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1447/152, 4-5=-8199/944, 5-6=-9782/970, 6-8=-9779/971, 8-9=-7559/846, 9-10=-7396/824, 10-11=-3179/381, 11-12=-2685/342
BOT CHORD	4-19=-980/7744, 17-19=-988/7821, 16-17=-1065/10012, 15-16=-1065/10012, 9-15=-581/214, 13-14=-93/662
WEBS	3-20=-30/311, 5-19=-125/1214, 5-17=-53/2120, 6-17=-586/226, 8-17=-257/56, 8-16=0/523, 8-15=-2651/199, 13-15=-294/2595, 10-15=-554/4881, 10-13=-3029/478, 11-13=-434/3999

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 320 lb uplift at joint 12 and 326 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	C4	Half Hip Girder	1	2	143578927
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:44 2020 Page 2
ID:wWQ0cVuS969af?GecLrtCNzdMNG-1Q??Zivrp3qJCPeHJUCKaXh0HYn8R4ld2loSNdyKKJ1

NOTES-

- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 116 lb down and 60 lb up at 8-5-0, 116 lb down and 60 lb up at 10-5-0, 116 lb down and 60 lb up at 12-5-0, 116 lb down and 60 lb up at 14-5-0, 117 lb down and 69 lb up at 16-5-0, 117 lb down and 69 lb up at 18-5-0, 117 lb down and 69 lb up at 20-5-0, 117 lb down and 69 lb up at 22-5-0, 119 lb down and 71 lb up at 24-5-0, 119 lb down and 71 lb up at 26-5-0, and 119 lb down and 71 lb up at 28-5-0, and 119 lb down and 71 lb up at 30-5-0 on top chord, and 115 lb down at 14-5-0, 588 lb down and 180 lb up at 7-3-14, 73 lb down at 8-5-0, 73 lb down at 10-5-0, 73 lb down at 12-5-0, 68 lb down at 16-5-0, 68 lb down at 18-5-0, 68 lb down at 20-5-0, 68 lb down at 22-5-0, 71 lb down at 24-5-0, 71 lb down at 26-5-0, and 71 lb down at 28-5-0, and 71 lb down at 30-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-70, 5-11=-70, 2-20=-20, 4-15=-20, 12-14=-20
Concentrated Loads (lb)
Vert: 7=-111(B) 19=-588(B) 16=-51(B) 8=-111(B) 24=-103(B) 25=-103(B) 26=-103(B) 27=-103(B) 28=-111(B) 29=-111(B) 30=-118(B) 31=-118(B) 32=-118(B) 33=-118(B) 34=-65(B) 35=-65(B) 36=-65(B) 37=-115(F) 38=-51(B) 39=-51(B) 40=-51(B) 41=-52(B) 42=-52(B) 43=-52(B) 44=-52(B)
- Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-57, 5-11=-58, 2-20=-20, 4-15=-20, 12-14=-20
Concentrated Loads (lb)
Vert: 7=-92(B) 19=-503(B) 16=-47(B) 8=-92(B) 24=-86(B) 25=-86(B) 26=-86(B) 27=-86(B) 28=-92(B) 29=-92(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-98(B) 34=-59(B) 35=-59(B) 36=-59(B) 37=-115(F) 38=-47(B) 39=-47(B) 40=-47(B) 41=-49(B) 42=-49(B) 43=-49(B) 44=-49(B)
- Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-20, 5-11=-20, 2-20=-40, 4-15=-40, 12-14=-40
Concentrated Loads (lb)
Vert: 7=-42(B) 19=-356(B) 16=-68(B) 8=-42(B) 24=-49(B) 25=-49(B) 26=-49(B) 27=-49(B) 28=-42(B) 29=-42(B) 30=-42(B) 31=-42(B) 32=-42(B) 33=-42(B) 34=-73(B) 35=-73(B) 36=-73(B) 37=-115(F) 38=-68(B) 39=-68(B) 40=-68(B) 41=-71(B) 42=-71(B) 43=-71(B) 44=-71(B)
- Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=31, 2-5=17, 5-11=29, 2-20=-12, 4-15=-12, 12-14=-12
Horz: 1-2=-43, 2-3=-29, 3-4=29, 4-5=-29, 11-12=22
Drag: 5-6=-0
Concentrated Loads (lb)
Vert: 7=32(B) 19=167(B) 16=-22(B) 8=32(B) 24=23(B) 25=23(B) 26=23(B) 27=23(B) 28=32(B) 29=32(B) 30=33(B) 31=33(B) 32=33(B) 33=33(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=9, 2-5=15, 5-11=29, 2-20=-12, 4-15=-12, 12-14=-12
Horz: 1-2=-21, 2-3=-27, 3-4=27, 4-5=-27, 11-12=-17
Drag: 5-6=-0
Concentrated Loads (lb)
Vert: 7=32(B) 19=167(B) 16=-22(B) 8=32(B) 24=23(B) 25=23(B) 26=23(B) 27=23(B) 28=32(B) 29=32(B) 30=33(B) 31=33(B) 32=33(B) 33=33(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-5=-2, 5-11=9, 2-20=-20, 4-15=-20, 12-14=-20
Horz: 1-2=-24, 2-3=-18, 3-4=18, 4-5=-18, 11-12=10
Drag: 5-6=-0
Concentrated Loads (lb)
Vert: 7=51(B) 19=180(B) 16=-14(B) 8=51(B) 24=43(B) 25=43(B) 26=43(B) 27=43(B) 28=51(B) 29=51(B) 30=53(B) 31=53(B) 32=53(B) 33=53(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-5=-5, 5-11=9, 2-20=-20, 4-15=-20, 12-14=-20
Horz: 1-2=-21, 2-3=-15, 3-4=15, 4-5=-15, 11-12=-28
Drag: 5-6=-0
Concentrated Loads (lb)
Vert: 7=51(B) 19=180(B) 16=-14(B) 8=51(B) 24=43(B) 25=43(B) 26=43(B) 27=43(B) 28=51(B) 29=51(B) 30=53(B) 31=53(B) 32=53(B) 33=53(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=23, 2-5=29, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
Horz: 1-2=-35, 2-3=-41, 3-4=41, 4-5=-41, 11-12=20
Drag: 5-6=-0
Concentrated Loads (lb)
Vert: 7=49(B) 19=167(B) 16=-22(B) 8=49(B) 24=41(B) 25=41(B) 26=41(B) 27=41(B) 28=49(B) 29=49(B) 30=51(B) 31=51(B) 32=51(B) 33=51(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	C4	Half Hip Girder	1	2	143578927
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:44 2020 Page 3
ID:wWQ0cVuS969af?GecLrtCNzdMNG-1Q??Zivrp3qJCPeHJUCKaXh0HYn8R4ld2loSNdyKKJ1

LOAD CASE(S) Standard

- Uniform Loads (plf)
 Vert: 1-2=5, 2-5=11, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-17, 2-3=-23, 3-4=23, 4-5=-23, 11-12=-14
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=49(B) 19=167(B) 16=-22(B) 8=49(B) 24=41(B) 25=41(B) 26=41(B) 27=41(B) 28=49(B) 29=49(B) 30=51(B) 31=51(B) 32=51(B) 33=51(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=23, 2-5=29, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-35, 2-3=-41, 3-4=41, 4-5=-41, 11-12=20
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=49(B) 19=167(B) 16=-22(B) 8=49(B) 24=41(B) 25=41(B) 26=41(B) 27=41(B) 28=49(B) 29=49(B) 30=51(B) 31=51(B) 32=51(B) 33=51(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=5, 2-5=11, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-17, 2-3=-23, 3-4=23, 4-5=-23, 11-12=-14
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=49(B) 19=167(B) 16=-22(B) 8=49(B) 24=41(B) 25=41(B) 26=41(B) 27=41(B) 28=49(B) 29=49(B) 30=51(B) 31=51(B) 32=51(B) 33=51(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=15, 2-5=9, 5-11=-9, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-35, 2-3=-29, 3-4=29, 4-5=-29, 11-12=8
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=69(B) 19=180(B) 16=-14(B) 8=69(B) 24=60(B) 25=60(B) 26=60(B) 27=60(B) 28=69(B) 29=69(B) 30=71(B) 31=71(B) 32=71(B) 33=71(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-3, 2-5=-9, 5-11=-9, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-17, 2-3=-11, 3-4=11, 4-5=-11, 11-12=-26
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=69(B) 19=180(B) 16=-14(B) 8=69(B) 24=60(B) 25=60(B) 26=60(B) 27=60(B) 28=69(B) 29=69(B) 30=71(B) 31=71(B) 32=71(B) 33=71(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- 14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
 Uniform Loads (plf)
 Vert: 1-5=-20, 5-11=-20, 2-20=-20, 4-15=-20, 12-14=-20
 Concentrated Loads (lb)
 Vert: 7=-36(B) 19=-245(B) 16=-37(B) 8=-36(B) 24=-38(B) 25=-38(B) 26=-38(B) 27=-38(B) 28=-36(B) 29=-36(B) 30=-37(B) 31=-37(B) 32=-37(B) 33=-37(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-37(B) 41=-38(B) 42=-38(B) 43=-38(B) 44=-38(B)
- 15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-40, 2-5=-44, 5-11=-36, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-18, 2-3=-13, 3-4=13, 4-5=-13, 11-12=7
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=35(B) 19=101(B) 16=-14(B) 8=35(B) 24=28(B) 25=28(B) 26=28(B) 27=28(B) 28=35(B) 29=35(B) 30=36(B) 31=36(B) 32=36(B) 33=36(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- 16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-42, 2-5=-46, 5-11=-36, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-16, 2-3=-11, 3-4=11, 4-5=-11, 11-12=-21
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=35(B) 19=101(B) 16=-14(B) 8=35(B) 24=28(B) 25=28(B) 26=28(B) 27=28(B) 28=35(B) 29=35(B) 30=36(B) 31=36(B) 32=36(B) 33=36(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- 17) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-31, 2-5=-36, 5-11=-49, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-26, 2-3=-22, 3-4=22, 4-5=-22, 11-12=6
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=48(B) 19=101(B) 16=-14(B) 8=48(B) 24=42(B) 25=42(B) 26=42(B) 27=42(B) 28=48(B) 29=48(B) 30=50(B) 31=50(B) 32=50(B) 33=50(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- 18) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	C4	Half Hip Girder	1	2	I43578927

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:44 2020 Page 4
ID:wWQ0cVuS969af?GecLrtCNzdMNG-1Q??Zivrp3qJCpEHJUCKaXh0HYn8R4ld2loSNdyKKJ1

LOAD CASE(S) Standard

- Uniform Loads (plf)
 Vert: 1-2=-45, 2-5=-49, 5-11=-49, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-13, 2-3=-9, 3-4=9, 4-5=-9, 11-12=-19
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=48(B) 19=101(B) 16=-14(B) 8=48(B) 24=42(B) 25=42(B) 26=42(B) 27=42(B) 28=48(B) 29=48(B) 30=50(B) 31=50(B) 32=50(B) 33=50(B) 34=-17(B) 35=-17(B) 36=-17(B) 37=-115(F) 38=-14(B) 39=-14(B) 40=-14(B) 41=-15(B) 42=-15(B) 43=-15(B) 44=-15(B)
- 19) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-12, 2-5=-15, 5-11=-12, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 2-3=3, 3-4=-3, 4-5=3
 Concentrated Loads (lb)
 Vert: 7=53(B) 19=124(B) 16=-22(B) 8=53(B) 24=46(B) 25=46(B) 26=46(B) 27=46(B) 28=53(B) 29=53(B) 30=54(B) 31=54(B) 32=54(B) 33=54(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- 20) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-5=-12, 5-11=-12, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 11-12=-16
 Concentrated Loads (lb)
 Vert: 7=53(B) 19=124(B) 16=-22(B) 8=53(B) 24=46(B) 25=46(B) 26=46(B) 27=46(B) 28=53(B) 29=53(B) 30=54(B) 31=54(B) 32=54(B) 33=54(B) 34=-25(B) 35=-25(B) 36=-25(B) 37=-115(F) 38=-22(B) 39=-22(B) 40=-22(B) 41=-23(B) 42=-23(B) 43=-23(B) 44=-23(B)
- 21) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=31, 2-5=17, 5-11=29, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-43, 2-3=-29, 3-4=29, 4-5=-29, 11-12=22
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=-117(B) 19=-339(B) 16=-51(B) 8=-117(B) 24=-116(B) 25=-116(B) 26=-116(B) 27=-116(B) 28=-117(B) 29=-117(B) 30=-119(B) 31=-119(B) 32=-119(B) 33=-119(B) 34=-57(B) 35=-57(B) 36=-57(B) 37=-115(F) 38=-51(B) 39=-51(B) 40=-51(B) 41=-51(B) 42=-51(B) 43=-51(B) 44=-51(B)
- 22) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=9, 2-5=15, 5-11=29, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-21, 2-3=-27, 3-4=27, 4-5=-27, 11-12=-17
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=-117(B) 19=-339(B) 16=-51(B) 8=-117(B) 24=-116(B) 25=-116(B) 26=-116(B) 27=-116(B) 28=-117(B) 29=-117(B) 30=-119(B) 31=-119(B) 32=-119(B) 33=-119(B) 34=-57(B) 35=-57(B) 36=-57(B) 37=-115(F) 38=-51(B) 39=-51(B) 40=-51(B) 41=-51(B) 42=-51(B) 43=-51(B) 44=-51(B)
- 23) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=4, 2-5=-2, 5-11=9, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-24, 2-3=-18, 3-4=18, 4-5=-18, 11-12=10
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=-97(B) 19=-327(B) 16=-43(B) 8=-97(B) 24=-96(B) 25=-96(B) 26=-96(B) 27=-96(B) 28=-97(B) 29=-97(B) 30=-99(B) 31=-99(B) 32=-99(B) 33=-99(B) 34=-49(B) 35=-49(B) 36=-49(B) 37=-115(F) 38=-43(B) 39=-43(B) 40=-43(B) 41=-43(B) 42=-43(B) 43=-43(B) 44=-43(B)
- 24) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=1, 2-5=-5, 5-11=9, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-21, 2-3=-15, 3-4=15, 4-5=-15, 11-12=-28
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=-97(B) 19=-327(B) 16=-43(B) 8=-97(B) 24=-96(B) 25=-96(B) 26=-96(B) 27=-96(B) 28=-97(B) 29=-97(B) 30=-99(B) 31=-99(B) 32=-99(B) 33=-99(B) 34=-49(B) 35=-49(B) 36=-49(B) 37=-115(F) 38=-43(B) 39=-43(B) 40=-43(B) 41=-43(B) 42=-43(B) 43=-43(B) 44=-43(B)
- 25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=23, 2-5=29, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-35, 2-3=-41, 3-4=41, 4-5=-41, 11-12=20
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=-99(B) 19=-339(B) 16=-51(B) 8=-99(B) 24=-98(B) 25=-98(B) 26=-98(B) 27=-98(B) 28=-99(B) 29=-99(B) 30=-101(B) 31=-101(B) 32=-101(B) 33=-101(B) 34=-57(B) 35=-57(B) 36=-57(B) 37=-115(F) 38=-51(B) 39=-51(B) 40=-51(B) 41=-51(B) 42=-51(B) 43=-51(B) 44=-51(B)
- 26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=5, 2-5=11, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-17, 2-3=-23, 3-4=23, 4-5=-23, 11-12=-14
 Drag: 5-6=-0
 Concentrated Loads (lb)
 Vert: 7=-99(B) 19=-339(B) 16=-51(B) 8=-99(B) 24=-98(B) 25=-98(B) 26=-98(B) 27=-98(B) 28=-99(B) 29=-99(B) 30=-101(B) 31=-101(B) 32=-101(B) 33=-101(B) 34=-57(B) 35=-57(B) 36=-57(B) 37=-115(F) 38=-51(B) 39=-51(B) 40=-51(B) 41=-51(B) 42=-51(B) 43=-51(B) 44=-51(B)
- 27) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 5

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	C4	Half Hip Girder	1	2	I43578927

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:44 2020 Page 5
ID:wWQ0cVuS969af?GecLrtCNzdMNG-1Q??Zivrp3qJCPeHJUCKaXh0HYn8R4ld2loSNdyKKJ1

LOAD CASE(S) Standard

- Uniform Loads (plf)
 Vert: 1-2=23, 2-5=29, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-35, 2-3=-41, 3-4=41, 4-5=-41, 11-12=20
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-99(B) 19=-339(B) 16=-51(B) 8=-99(B) 24=-98(B) 25=-98(B) 26=-98(B) 27=-98(B) 28=-99(B) 29=-99(B) 30=-101(B) 31=-101(B) 32=-101(B) 33=-101(B)
 34=-57(B) 35=-57(B) 36=-57(B) 37=-115(F) 38=-51(B) 39=-51(B) 40=-51(B) 41=-51(B) 42=-51(B) 43=-51(B) 44=-51(B)
- 28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=5, 2-5=11, 5-11=11, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 1-2=-17, 2-3=-23, 3-4=23, 4-5=-23, 11-12=-14
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-99(B) 19=-339(B) 16=-51(B) 8=-99(B) 24=-98(B) 25=-98(B) 26=-98(B) 27=-98(B) 28=-99(B) 29=-99(B) 30=-101(B) 31=-101(B) 32=-101(B) 33=-101(B)
 34=-57(B) 35=-57(B) 36=-57(B) 37=-115(F) 38=-51(B) 39=-51(B) 40=-51(B) 41=-51(B) 42=-51(B) 43=-51(B) 44=-51(B)
- 29) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=15, 2-5=9, 5-11=-9, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-35, 2-3=-29, 3-4=29, 4-5=-29, 11-12=8
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-80(B) 19=-327(B) 16=-43(B) 8=-80(B) 24=-78(B) 25=-78(B) 26=-78(B) 27=-78(B) 28=-80(B) 29=-80(B) 30=-81(B) 31=-81(B) 32=-81(B) 33=-81(B)
 34=-49(B) 35=-49(B) 36=-49(B) 37=-115(F) 38=-43(B) 39=-43(B) 40=-43(B) 41=-43(B) 42=-43(B) 43=-43(B) 44=-43(B)
- 30) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-3, 2-5=-9, 5-11=-9, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-17, 2-3=-11, 3-4=11, 4-5=-11, 11-12=-26
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-80(B) 19=-327(B) 16=-43(B) 8=-80(B) 24=-78(B) 25=-78(B) 26=-78(B) 27=-78(B) 28=-80(B) 29=-80(B) 30=-81(B) 31=-81(B) 32=-81(B) 33=-81(B)
 34=-49(B) 35=-49(B) 36=-49(B) 37=-115(F) 38=-43(B) 39=-43(B) 40=-43(B) 41=-43(B) 42=-43(B) 43=-43(B) 44=-43(B)
- 31) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-40, 2-5=-44, 5-11=-36, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-18, 2-3=-13, 3-4=13, 4-5=-13, 11-12=7
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-115(B) 19=-479(B) 16=-49(B) 8=-115(B) 24=-109(B) 25=-109(B) 26=-109(B) 27=-109(B) 28=-115(B) 29=-115(B) 30=-119(B) 31=-119(B) 32=-119(B)
 33=-119(B) 34=-61(B) 35=-61(B) 36=-61(B) 37=-115(F) 38=-49(B) 39=-49(B) 40=-49(B) 41=-50(B) 42=-50(B) 43=-50(B) 44=-50(B)
- 32) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-42, 2-5=-46, 5-11=-36, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-16, 2-3=-11, 3-4=11, 4-5=-11, 11-12=-21
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-115(B) 19=-479(B) 16=-49(B) 8=-115(B) 24=-109(B) 25=-109(B) 26=-109(B) 27=-109(B) 28=-115(B) 29=-115(B) 30=-119(B) 31=-119(B) 32=-119(B)
 33=-119(B) 34=-61(B) 35=-61(B) 36=-61(B) 37=-115(F) 38=-49(B) 39=-49(B) 40=-49(B) 41=-50(B) 42=-50(B) 43=-50(B) 44=-50(B)
- 33) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-31, 2-5=-36, 5-11=-49, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-26, 2-3=-22, 3-4=22, 4-5=-22, 11-12=6
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-101(B) 19=-479(B) 16=-49(B) 8=-101(B) 24=-95(B) 25=-95(B) 26=-95(B) 27=-95(B) 28=-101(B) 29=-101(B)
 30=-106(B) 31=-106(B) 32=-106(B) 33=-106(B) 34=-61(B) 35=-61(B) 36=-61(B) 37=-115(F) 38=-49(B) 39=-49(B) 40=-49(B)
 41=-50(B) 42=-50(B) 43=-50(B) 44=-50(B)
- 34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-45, 2-5=-49, 5-11=-49, 2-20=-20, 4-15=-20, 12-14=-20
 Horz: 1-2=-13, 2-3=-9, 3-4=9, 4-5=-9, 11-12=-19
 Drag: 5-6=-0
- Concentrated Loads (lb)
 Vert: 7=-101(B) 19=-479(B) 16=-49(B) 8=-101(B) 24=-95(B) 25=-95(B) 26=-95(B) 27=-95(B) 28=-101(B) 29=-101(B)
 30=-106(B) 31=-106(B) 32=-106(B) 33=-106(B) 34=-61(B) 35=-61(B) 36=-61(B) 37=-115(F) 38=-49(B) 39=-49(B) 40=-49(B)
 41=-50(B) 42=-50(B) 43=-50(B) 44=-50(B)
- 35) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-12, 2-5=-15, 5-11=-12, 2-20=-12, 4-15=-12, 12-14=-12
 Horz: 2-3=3, 3-4=-3, 4-5=3

Continued on page 6

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	C4	Half Hip Girder	1	2	I43578927

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:44 2020 Page 6
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- LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-56(B) 19=-290(B) 16=-47(B) 8=-56(B) 24=-57(B) 25=-57(B) 26=-57(B) 27=-57(B) 28=-56(B) 29=-56(B) 30=-58(B) 31=-58(B) 32=-58(B) 33=-58(B) 34=-53(B) 35=-53(B) 36=-53(B) 37=-115(F) 38=-47(B) 39=-47(B) 40=-47(B) 41=-48(B) 42=-48(B) 43=-48(B) 44=-48(B)
- 36) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-5=-12, 5-11=-12, 2-20=-12, 4-15=-12, 12-14=-12

Horz: 11-12=-16
- Concentrated Loads (lb)

Vert: 7=-56(B) 19=-290(B) 16=-47(B) 8=-56(B) 24=-57(B) 25=-57(B) 26=-57(B) 27=-57(B) 28=-56(B) 29=-56(B) 30=-58(B) 31=-58(B) 32=-58(B) 33=-58(B) 34=-53(B) 35=-53(B) 36=-53(B) 37=-115(F) 38=-47(B) 39=-47(B) 40=-47(B) 41=-48(B) 42=-48(B) 43=-48(B) 44=-48(B)

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578928
W2 50	D1	Roof Special Girder	1	1		

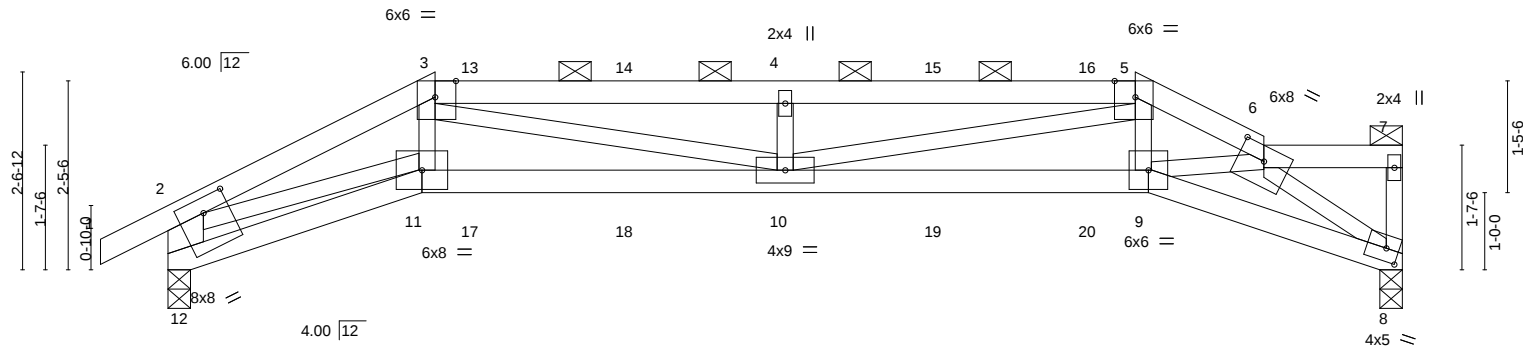
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:45 2020 Page 1

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Scale = 1:29.9



	3-3-8	8-0-0	12-8-8	14-2-7	16-0-0
	3-3-8	4-8-8	4-8-8	1-5-15	1-9-9
Plate Offsets (X,Y)--	[3:0-3-4,Edge], [5:0-3-4,Edge], [6:0-4-0,0-2-4], [8:0-1-15,0-2-0], [12:0-4-0,0-2-4]				

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 0.55	Vert(LL)	-0.21	10	>900	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.37	10	>503	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.86	Horz(CT)	0.20	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.18	10	>999	240	Weight: 56 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 3-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-15 max.): 3-5, 6-7.
3-5: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 7-3-8 oc bracing.
BOT CHORD 2x4 SPF No.2	
WEBS 2x3 SPF No.2 *Except*	
2-12: 2x6 SPF No.2	

REACTIONS. (size) 8=0-3-8, 12=0-3-8
Max Horz 12=74(LC 7)
Max Uplift 8=-227(LC 5), 12=-241(LC 8)
Max Grav 8=1118(LC 1), 12=1196(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3113/710, 3-4=-4010/912, 4-5=-4010/912, 5-6=-3233/700, 2-12=-1226/279
BOT CHORD 11-12=-120/277, 10-11=-647/2651, 9-10=-641/2816, 8-9=-449/2048
WEBS 3-11=-105/662, 3-10=-329/1463, 4-10=-486/247, 5-10=-292/1298, 5-9=-101/718, 6-9=-240/1051, 6-8=-2496/534, 2-11=-555/2516

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 8, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 8 and 241 lb uplift at joint 12.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 76 lb up at 4-0-0, 90 lb down and 76 lb up at 6-0-0, 90 lb down and 76 lb up at 8-0-0, and 90 lb down and 76 lb up at 10-0-0, and 86 lb down and 76 lb up at 12-0-0 on top chord, and 184 lb down and 75 lb up at 3-3-3, 38 lb down at 4-0-0, 38 lb down at 6-0-0, 38 lb down at 8-0-0, 38 lb down at 10-0-0, and 38 lb down at 12-0-0, and 204 lb down and 79 lb up at 12-8-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



November 11,2020

LOAD CASE(S) Standard

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578928
W2 50	D1	Roof Special Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 11-12=-20, 9-11=-20, 8-9=-20
- Concentrated Loads (lb)
- Vert: 11=-184(F) 10=-29(F) 4=-59(F) 9=-204(F) 13=-59(F) 14=-59(F) 15=-59(F) 16=-59(F) 17=-29(F) 18=-29(F) 19=-29(F) 20=-29(F)



Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578929
W2 50	D2	Roof Special	1	1		

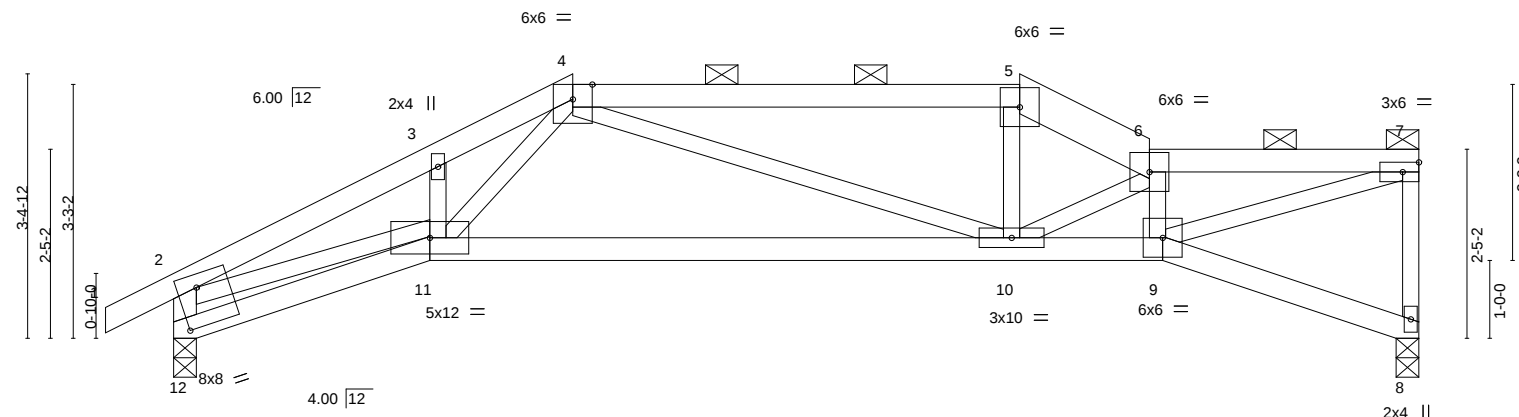
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:46 2020 Page 1

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-0-10-8	3-3-8	5-1-9	10-10-7	12-6-7	16-0-0
0-10-8	3-3-8	1-10-1	5-8-15	1-8-0	3-5-9

Scale = 1:29.6



	3-3-8	5-1-9	10-10-7	12-8-8	16-0-0
	3-3-8	1-10-1	5-8-15	1-10-1	3-3-8

Plate Offsets (X,Y)-- [12:0-3-0,0-6-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.53	Vert(LL)	-0.11 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.24 10-11	>775	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.09 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05 10-11	>999	240	Weight: 59 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-9 max.): 4-5, 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

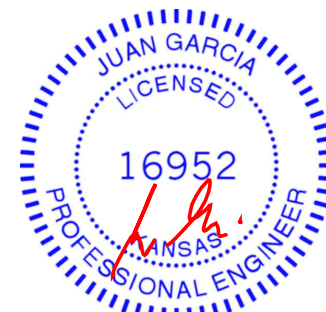
(size) 8=0-3-8, 12=0-3-8
Max Horz 12=108(LC 7)
Max Uplift 8=93(LC 5), 12=86(LC 8)
Max Grav 8=706(LC 1), 12=783(LC 1)

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

TOP CHORD 2-3=-1717/195, 3-4=-1607/212, 4-5=-1328/152, 5-6=-1457/159, 6-7=-1497/178,
7-8=-665/116, 2-12=-812/122
BOT CHORD 10-11=-232/1195, 9-10=-226/1590
WEBS 4-11=-72/405, 5-10=0/344, 6-10=-334/101, 6-9=-564/70, 7-9=-205/1568,
2-11=-107/1278

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 8, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 8 and 86 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578930
W2 50	D3	Roof Special	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:47 2020 Page 1

ID:wwQ0cVuS969af?GecLrTCNzdMNG-R?h8Bkxj6_Ct3tNs_cm1CAJeXmr9eTr3kj17_yyKKJ_

Job Reference (optional)

-0-10-8	3-3-8	6-9-9	9-2-7	10-10-7	12-8-8	16-0-0
0-10-8	3-3-8	3-6-1	2-4-15	1-8-0	1-10-1	3-3-8

Scale = 1:29.6

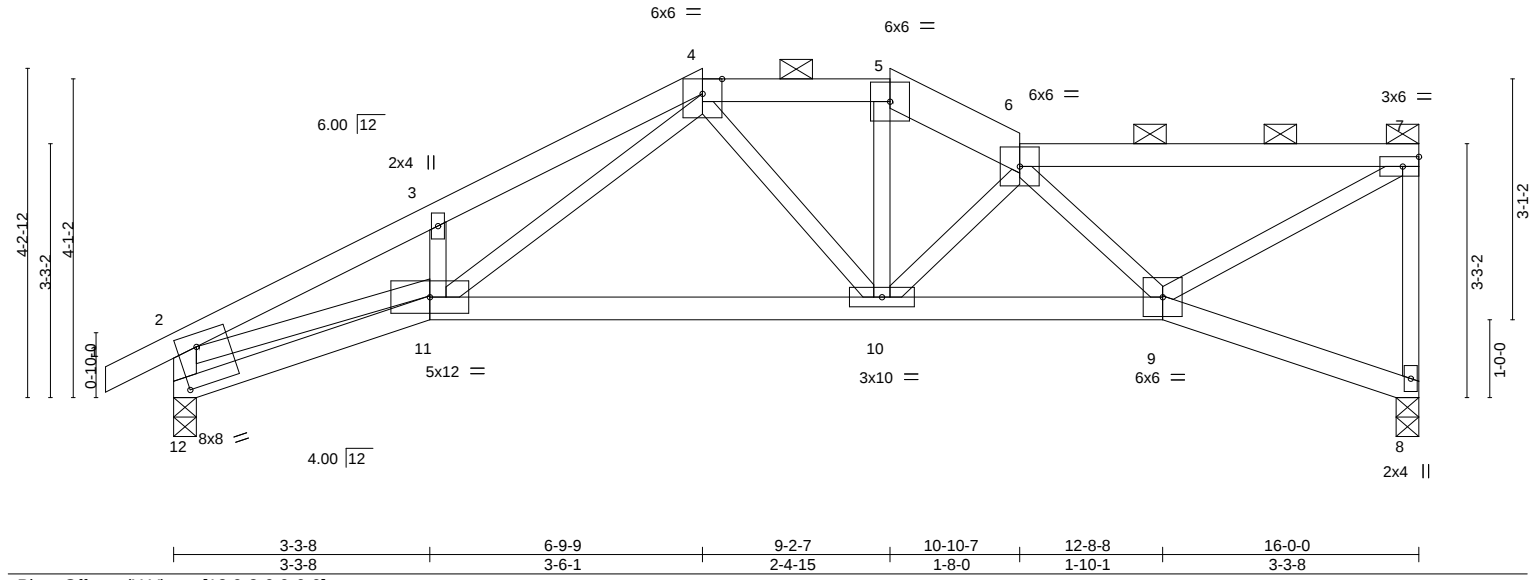


Plate Offsets (X,Y)--		[12:0-3-0,0-6-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.41	Vert(LL)	-0.06	10-11	>999	360	MT20		197/144	
TCDL	10.0	Lumber DOL 1.15		BC	0.39	Vert(CT)	-0.14	10-11	>999	240				
BCLL	0.0 *	Rep Stress Incr YES		WB	0.45	Horz(CT)	0.07	8	n/a	n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	10-11	>999	240	Weight: 62 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 12=0-3-8
Max Horz 12=144(LC 7)
Max Uplift 8=94(LC 5), 12=101(LC 8)
Max Grav 8=706(LC 1), 12=783(LC 1)

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

TOP CHORD 2-3=-1725/200, 3-4=-1682/283, 4-5=-992/100, 5-6=-1137/114, 6-7=-838/68, 7-8=-674/119, 2-12=-797/143
BOT CHORD 10-11=-165/963, 9-10=-192/1259
WEBS 4-11=-182/680, 5-10=-34/406, 6-10=-424/117, 6-9=-620/111, 7-9=-101/961, 2-11=-103/1306

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 8, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 8 and 101 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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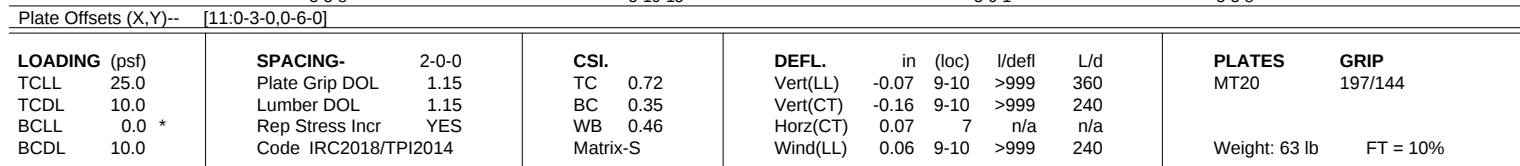
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:48 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-vBFWO4yLttHKkg1y2YKHGInsjJAC1NwvDzNmgyVoYKKIz

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

6x8 || Scale: 3/8"=1'

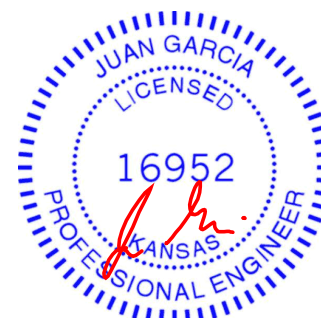


REACTIONS. (size) 7=0-3-8, 11=0-3-8
 Max Horz 11=177(LC 7)
 Max Uplift 7=-112(LC 9), 11=-108(LC 8)
 Max Grav 7=706(LC 1), 11=783(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1743/246, 3-4=-1754/358, 4-5=-1270/199, 5-6=-543/56, 6-7=-675/137,
 2-11=-791/151
BOT CHORD 9-10=-149/816, 8-9=-185/1049
WEBS 3-10=-256/168, 4-10=-262/886, 4-9=-119/721, 5-9=-555/179, 5-8=-650/119,
 6-8=-74/690, 2-10=-153/1341

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 7, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 7 and 108 lb uplift at joint 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.



November 11.2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578932
W2 50	D5	Half Hip Girder	1	3	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:49 2020 Page 1

ID:WQ0cVuS969af?GeclrtCNzdMNG-NOpuCQzzebSblBXF51oVHbOsnZY06LuMC1WD1qyKKly



Scale = 1:32.8

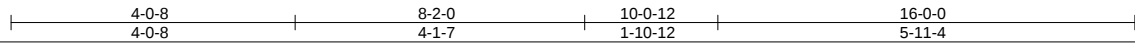
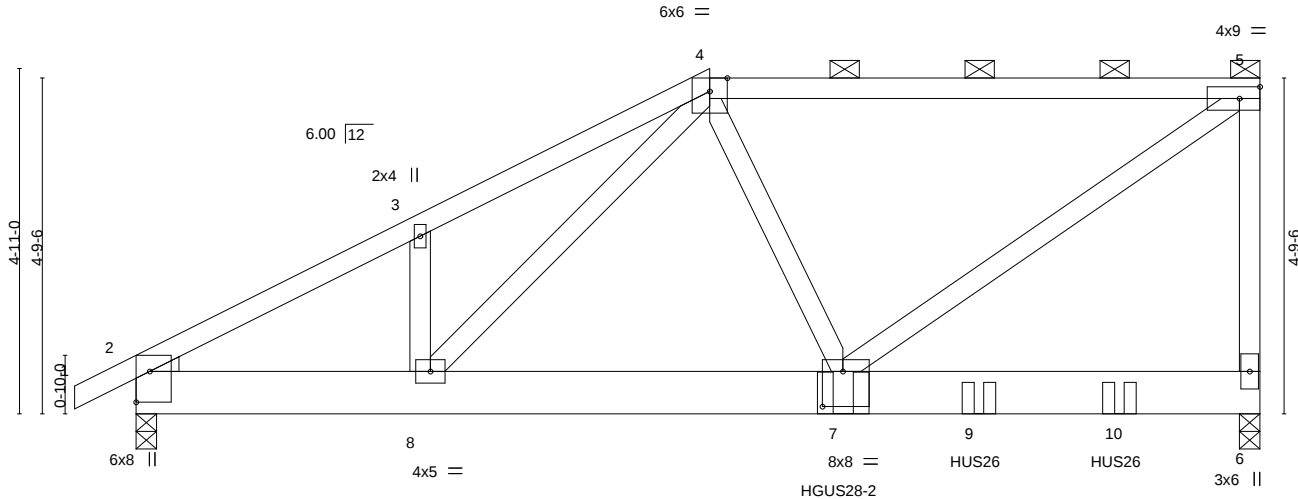


Plate Offsets (X,Y)-- [2:Edge,0-2-5], [7:0-3-8,0-6-0]

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 0.87	Vert(LL)	-0.06	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.10	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.04	6-7	>999	240	Weight: 288 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 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) 6=0-3-8, 2=0-3-8
Max Horz 2=143(LC 7)
Max Uplift 6=-749(LC 5), 2=-409(LC 8)
Max Grav 6=6400(LC 1), 2=3102(LC 1)

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

TOP CHORD 2-3=-5162/724, 3-4=-4871/757, 4-5=-6030/892, 5-6=-4753/716
BOT CHORD 2-8=-683/4337, 7-8=-773/4988
WEBS 3-8=-166/489, 4-8=-1168/324, 4-7=-467/2721, 5-7=-1079/7400

NOTES-

- N/A
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 4 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 749 lb uplift at joint 6 and 409 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HGUS28-2 (36-16d Girder, 12-16d Truss) or equivalent at 10-0-13 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 12-0-0 from the left end to 14-0-0 to connect truss(es) to back face of bottom chord.

On full end plates where hanger is in contact with lumber.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	D5	Half Hip Girder	1	3	I43578932

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:49 2020 Page 2
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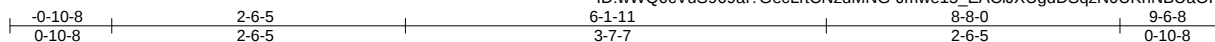
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 7=-4624(B) 9=-1697(B) 10=-1697(B)

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578933
W2 50	E1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:51 2020 Page 1

ID: wWQ0cVuS969af?GecLrtCNzdMNG-Jmwe15_EACiXUgdDSqzN0UKnNBuaORfL?K6jyKKIw



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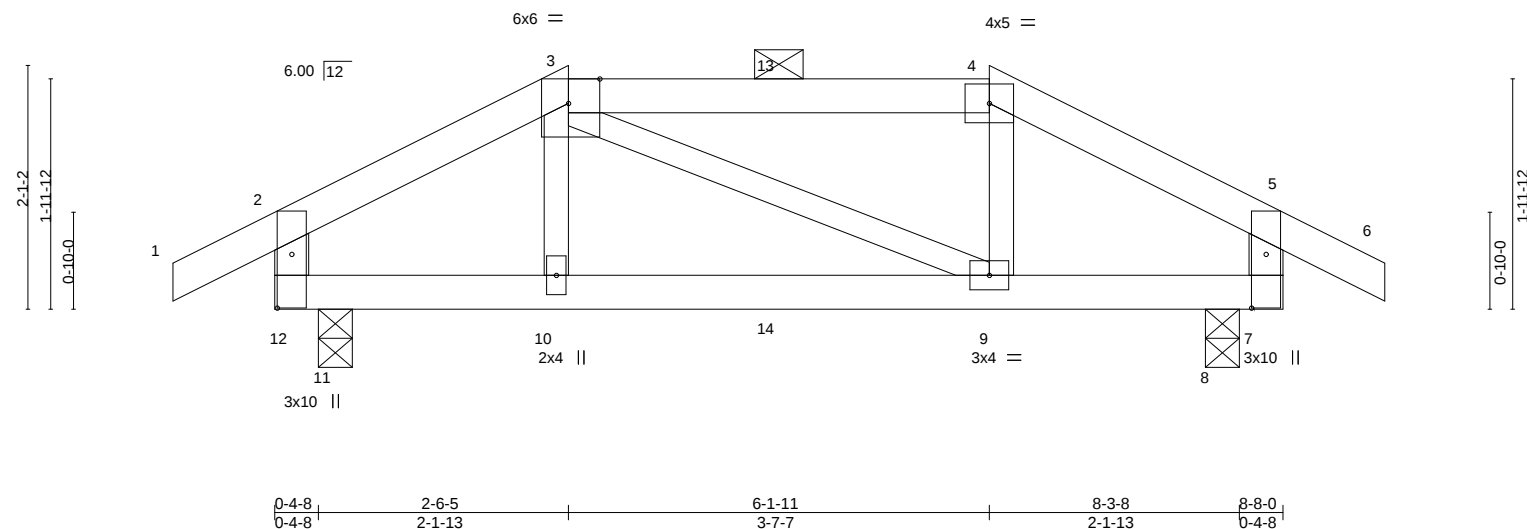


Plate Offsets (X,Y)-- [3:0-3-4,Edge], [7:0-5-9,0-1-8], [12:0-5-9,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.03	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.07	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	9-10	>999	240	Weight: 29 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-12,5-7: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 11=0-3-8, 8=0-3-8
 Max Horz 11=44(LC 28)
 Max Uplift 11=-109(LC 8), 8=-109(LC 9)
 Max Grav 11=512(LC 21), 8=512(LC 22)

FORCES.

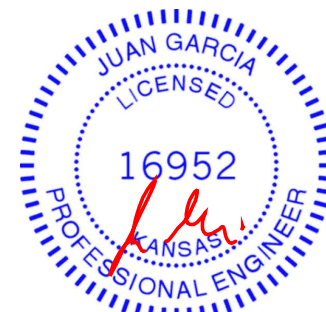
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-403/90, 3-4=-318/93, 4-5=-403/90, 2-12=-363/95, 5-7=-363/95
 BOT CHORD 11-12=-57/317, 10-11=-72/317, 9-10=-76/317, 8-9=-57/317, 7-8=-57/317

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 11 and 109 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 87 lb down and 75 lb up at 2-6-5, and 72 lb down and 54 lb up at 4-4-0, and 87 lb down and 75 lb up at 6-1-11 on top chord, and 31 lb down at 2-6-5, and 20 lb down at 4-4-0, and 31 lb down at 6-1-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

Continued on page 2

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578933
W2 50	E1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:51 2020 Page 2
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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-25(F) 4=-25(F) 10=-19(F) 9=-19(F) 13=-21(F) 14=-13(F)

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578935
W2 50	E3	Common	2	1		

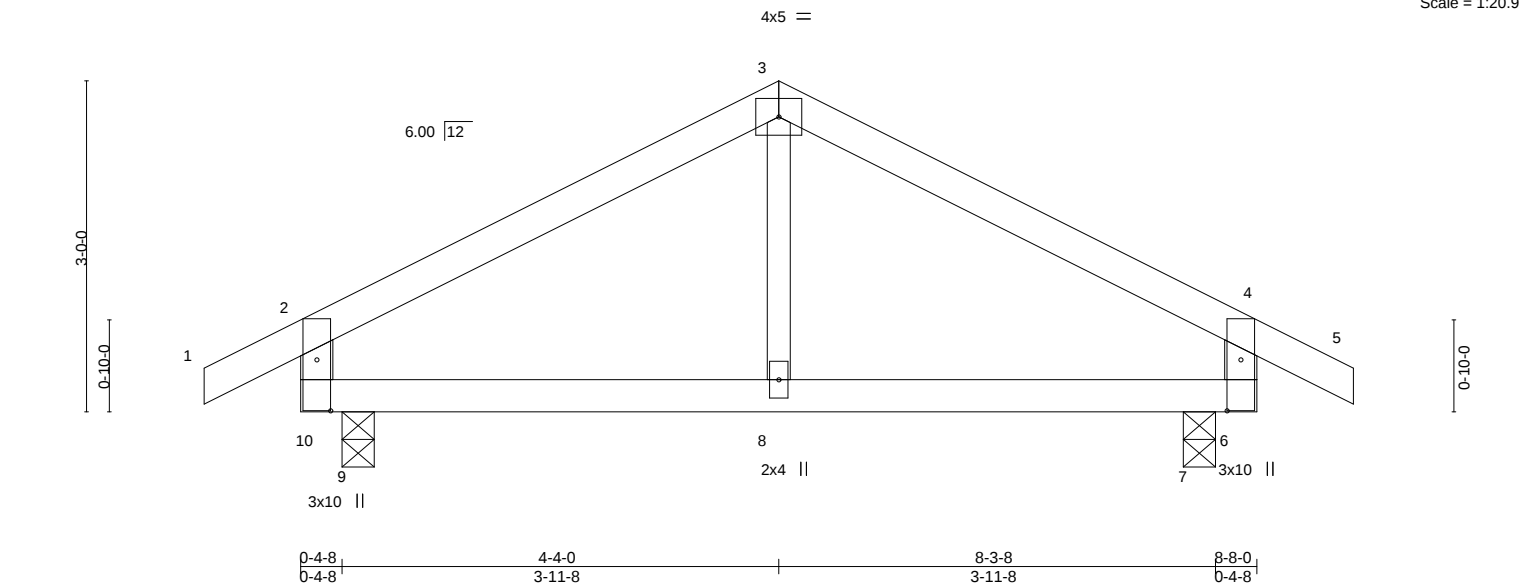
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:55 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-CYA9tT1kDRCl06_PSIvXse1N_ayWCJFayzYFUYKKIs

-0-10-8	4-4-0	8-8-0	9-6-8
0-10-8	4-4-0	4-4-0	0-10-8

Scale = 1:20.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.02	8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.03	8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	8	>999	240	Weight: 26 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

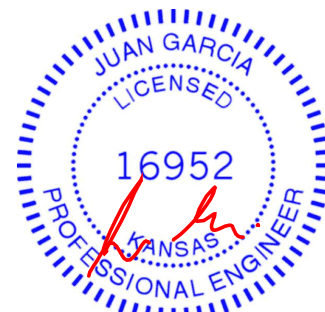
(size) 9=0-3-8, 7=0-3-8
 Max Horz 9=56(LC 7)
 Max Uplift 9=72(LC 8), 7=72(LC 9)
 Max Grav 9=448(LC 1), 7=448(LC 1)

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

TOP CHORD 2-3=-312/54, 3-4=-312/54, 2-10=-353/98, 4-6=-353/98

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6'-0 tall by 2'-0'-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 9 and 72 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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

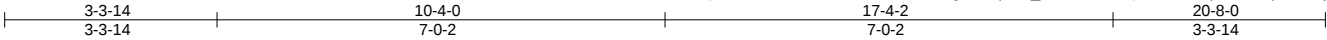
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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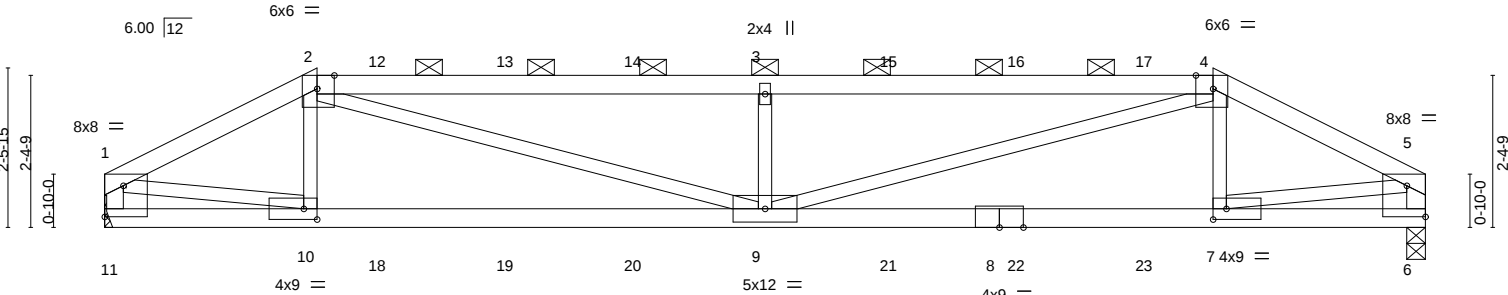
Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578936
W2 50	G1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:56 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-gkkX4p2M_IKceGZb0?Q843B1B0pJFV2OpCi5nwyKKlr



Scale = 1:36.1



	3-3-14 3-3-14	10-4-0 7-0-2	17-4-2 7-0-2	20-8-0 3-3-14
Plate Offsets (X,Y)--	[1:Edge,0-5-13], [2:0-3-4,Edge], [4:0-3-4,Edge], [5:Edge,0-5-13], [7:0-2-8,0-2-0], [10:0-2-8,0-2-0]			
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES
TCLL 25.0	Plate Grip DOL 1.15	TC 0.99	in (loc) l/defl L/d	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(LL) -0.19 9 >999 360	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.64	Vert(CT) -0.36 7-9 >679 240	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.05 6 n/a n/a	
			Wind(LL) 0.12 9 >999 240	Weight: 70 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,5-6: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 11=Mechanical, 6=0-3-8
Max Horz 11=-36(LC 4)
Max Uplift 11=-110(LC 5), 6=-114(LC 4)
Max Grav 11=1376(LC 1), 6=1389(LC 1)

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

TOP CHORD 1-2=-2183/189, 2-3=-3678/319, 3-4=-3678/319, 4-5=-2204/195, 1-11=-1368/109, 5-6=-1381/112
BOT CHORD 9-10=-179/1932, 7-9=-155/1950
WEBS 2-9=-169/1869, 3-9=-819/225, 4-9=-165/1850, 1-10=-139/1835, 5-7=-144/1853

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 11 and 114 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 51 lb up at 4-4-0, 74 lb down and 51 lb up at 6-4-0, 74 lb down and 51 lb up at 8-4-0, 74 lb down and 51 lb up at 10-4-0, 74 lb down and 51 lb up at 12-4-0, and 74 lb down and 51 lb up at 14-4-0, and 74 lb down and 51 lb up at 16-4-0 on top chord, and 177 lb down and 70 lb up at 3-3-14, 35 lb down at 4-4-0, 35 lb down at 6-4-0, 35 lb down at 8-4-0, 35 lb down at 10-4-0, 35 lb down at 12-4-0, 35 lb down at 14-4-0, and 35 lb down at 16-4-0, and 195 lb down and 75 lb up at 17-4-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578936
W2 50	G1	Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-4=-70, 4-5=-70, 6-11=-20
- Concentrated Loads (lb)
- Vert: 10=-177(B) 9=-27(B) 3=-53(B) 7=-195(B) 12=-53(B) 13=-53(B) 14=-53(B) 15=-53(B) 16=-53(B) 17=-53(B) 18=-27(B) 19=-27(B) 20=-27(B) 21=-27(B) 22=-27(B) 23=-27(B)

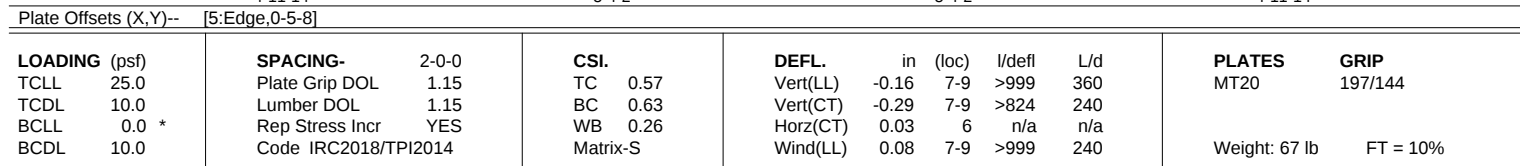
 **WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:58 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdmNG-c6rlVU4dWMAJtZjz7QTc9UGU6CY_jVhGwGBCspYKKlp
4-11-14 10-4-0 15-8-2 20-8-0
4-11-14 5-4-2 5-4-2 4-11-14
Scale = 1:36.1



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

REACTIONS. (size) 11=0-3-8, 6=Mechanical
Max Horz 11=-46(LC 4)
Max Grav 11=909(LC 1), 6=909(LC 1)

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

TOP CHORD	1-2=-1308/27, 2-3=-1696/51, 3-4=-1696/51, 4-5=-1308/27, 1-11=-757/25, 5-6=-757/25
BOT CHORD	10-11=-24/1086, 9-10=-26/1088, 7-9=0/1088, 6-7=0/1086
WEBS	2-9=-56/757, 3-9=-487/102, 4-9=56/757

NOTES-

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



November 11.2020



WARNING: Velly design parameters are listed on this and included with reference page MP147316v, 3/19/2020 before use. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for the individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCS1 Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.



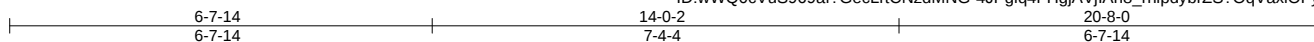
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578938
W2 50	G3	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:16:59 2020 Page 1

ID:wwQ0cVuS969af?GeclRtCNzdMNG-4JPgiq4FHgjAVjIAh8_rhipdybrZS?OqVaxIOFyKkIo



Scale = 1:36.3

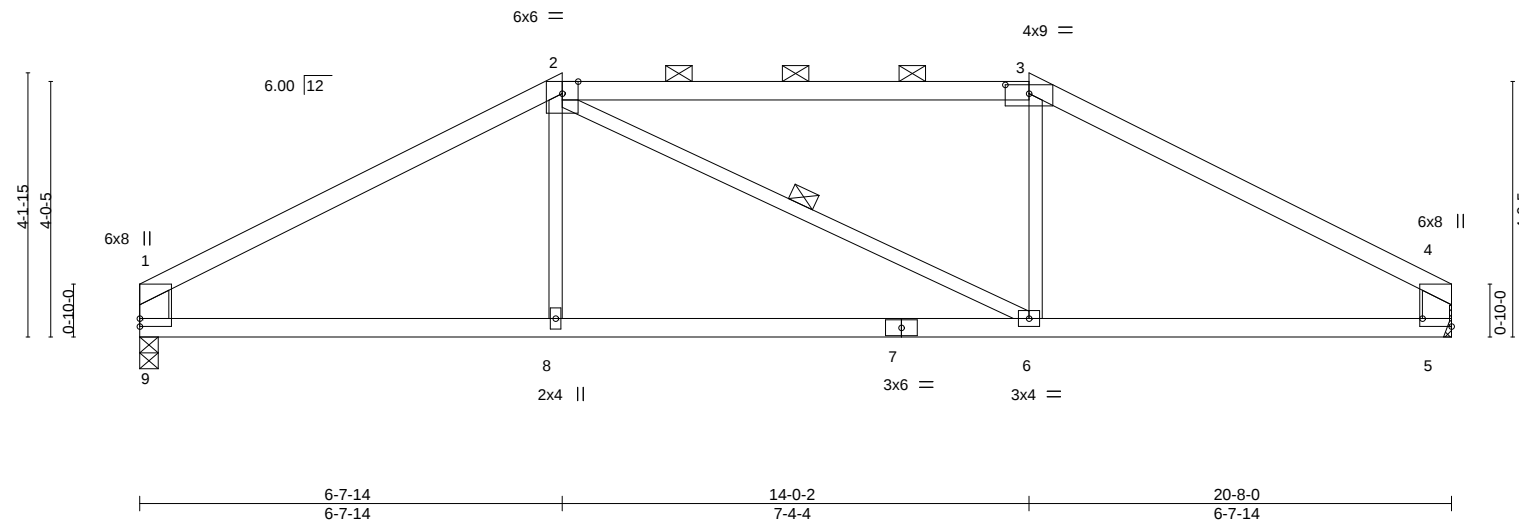


Plate Offsets (X,Y)--		[3:0-4-8,0-1-11], [4:Edge,0-5-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.70		Vert(LL)	-0.24 6-8	>999	360
TCDL 10.0		Lumber DOL	1.15	BC 0.80		Vert(CT)	-0.49 6-8	>499	240
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.09		Horz(CT)	0.04 5	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11 6-8	>999	240
						PLATES	GRIP		
						MT20	197/144		
						Weight: 64 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-9,4-5: 2x6 SP DSS

BRACING-

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

REACTIONS.

(size) 9=0-3-8, 5=Mechanical
Max Horz 9=-55(LC 4)
Max Grav 9=909(LC 1), 5=909(LC 1)

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

TOP CHORD 1-2=-1328/0, 2-3=-1085/22, 3-4=-1328/0, 1-9=-799/34, 4-5=-799/34
BOT CHORD 8-9=0/1087, 6-8=-1/1085, 5-6=0/1088
WEBS 2-8=0/256, 3-6=0/256

NOTES-

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



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578939
W2 50	G4	Hip	1	1		

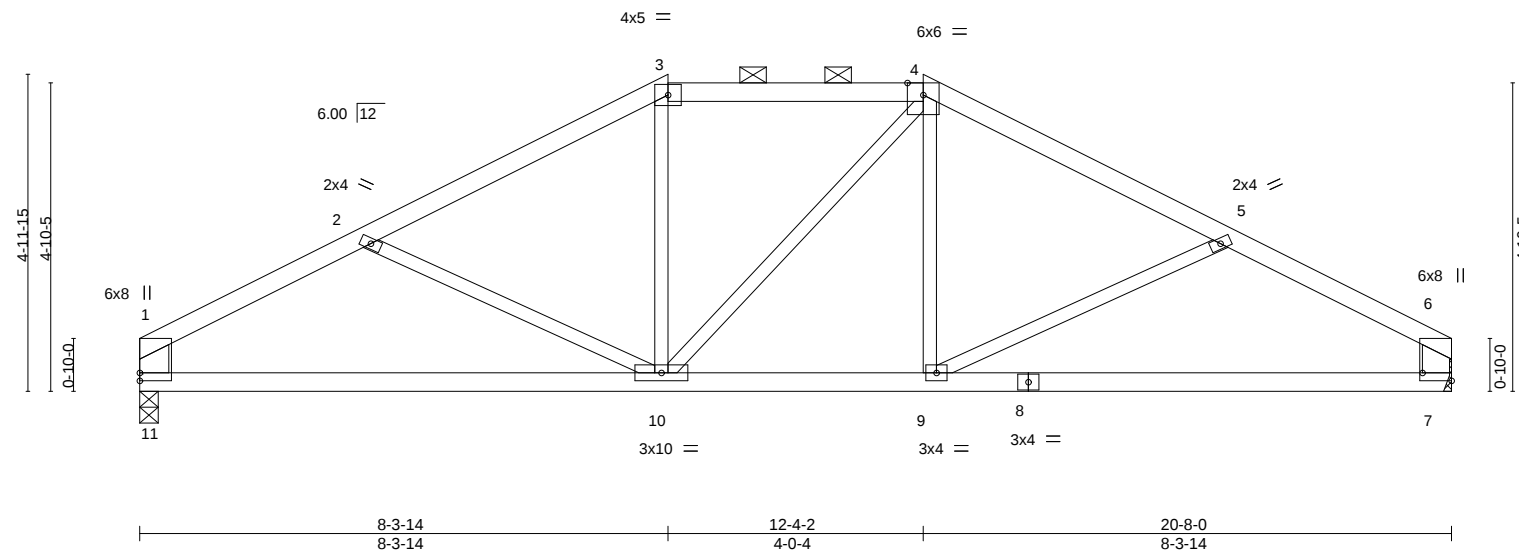
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:00 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-ZVz2wA5t2zr16ttMFrV4EvMkl?D1BRO_jEgJwhyKKIn

3-7-11	8-3-14	12-4-2	17-0-5	20-8-0
3-7-11	4-8-3	4-0-4	4-8-3	3-7-11

Scale = 1:36.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.17	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.25				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.03				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	Weight: 72 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,6-7: 2x6 SP DSS

BRACING-

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

REACTIONS.

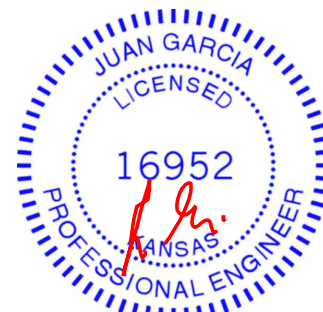
(size) 11=0-3-8, 7=Mechanical
Max Horz 11=-65(LC 4)
Max Uplift 11=-1(LC 8), 7=-1(LC 9)
Max Grav 11=909(LC 1), 7=909(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1312/49, 2-3=-1135/7, 3-4=-976/28, 4-5=-1135/7, 5-6=-1312/49, 1-11=-802/46, 6-7=-802/46
BOT CHORD 10-11=-45/1066, 9-10=0/976, 7-9=-17/1066

NOTES-

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



November 11,2020

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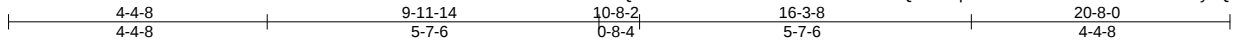
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578940
W2 50	G5	Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:01 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-1hXQ7W6VpHzuk1RYoZ0Jm7ux?PYCwrC7yuQsT8yKKlm



4x9 =
6x6 =

Scale = 1:39.0

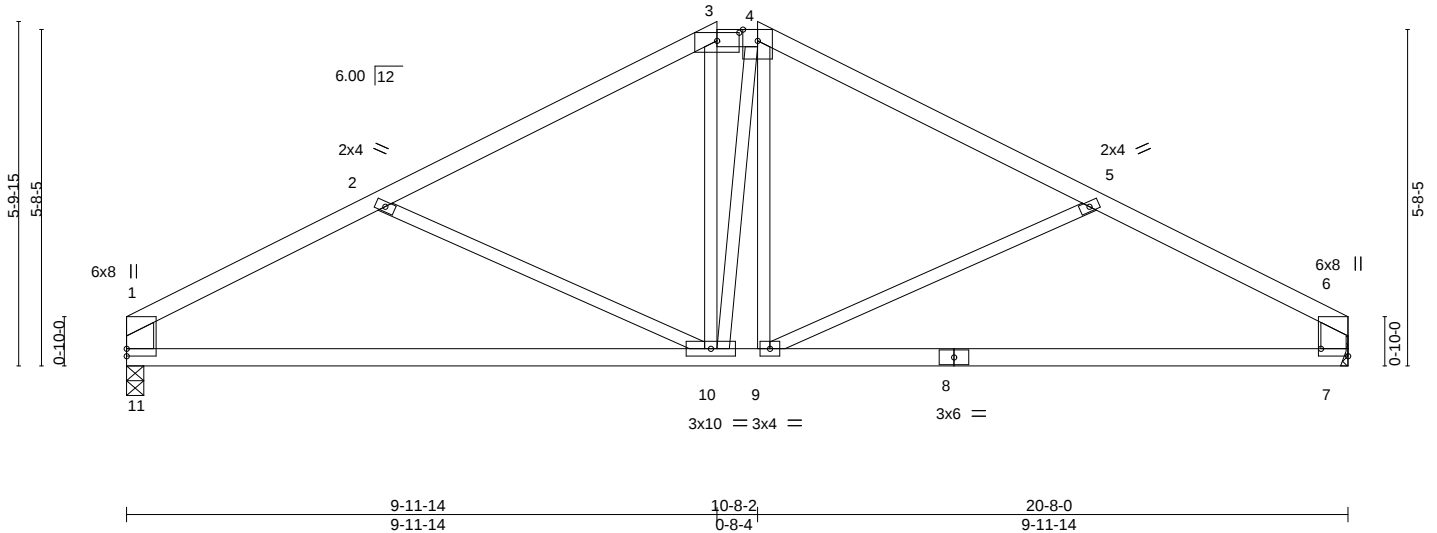


Plate Offsets (X,Y)-- [3:0-4-8,0-1-11], [6:Edge,0-5-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.79	Vert(LL)	-0.20	7-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.41	7-9	>595	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.26	Horz(CT)	0.04	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08	9	>999	240	Weight: 75 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,6-7: 2x6 SP DSS

BRACING-

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

REACTIONS.

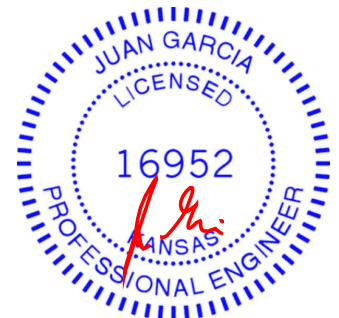
(size) 11=0-3-8, 7=Mechanical
Max Horz 11=-75(LC 4)
Max Uplift 11=-9(LC 8), 7=-9(LC 9)
Max Grav 11=909(LC 1), 7=909(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1332/68, 2-3=-1043/23, 3-4=-881/38, 4-5=-1046/23, 5-6=-1332/68, 1-11=-792/58, 6-7=-791/59
BOT CHORD 10-11=-64/1093, 9-10=0/884, 7-9=-28/1093
WEBS 2-10=-276/133, 3-10=-13/364, 5-9=-272/132

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 11 and 9 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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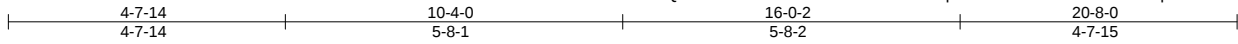
Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578941
W2 50	G6	Common	2	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:02 2020 Page 1

ID:wwQ0cVuS969af?GecLrtCNzdmNG-Vu5pLs77ab5lMB0lMGXYJKR6hpttFlhHBY9P?ayKKll

Job Reference (optional)



4x9 =

Scale = 1:38.8

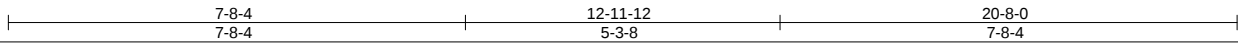
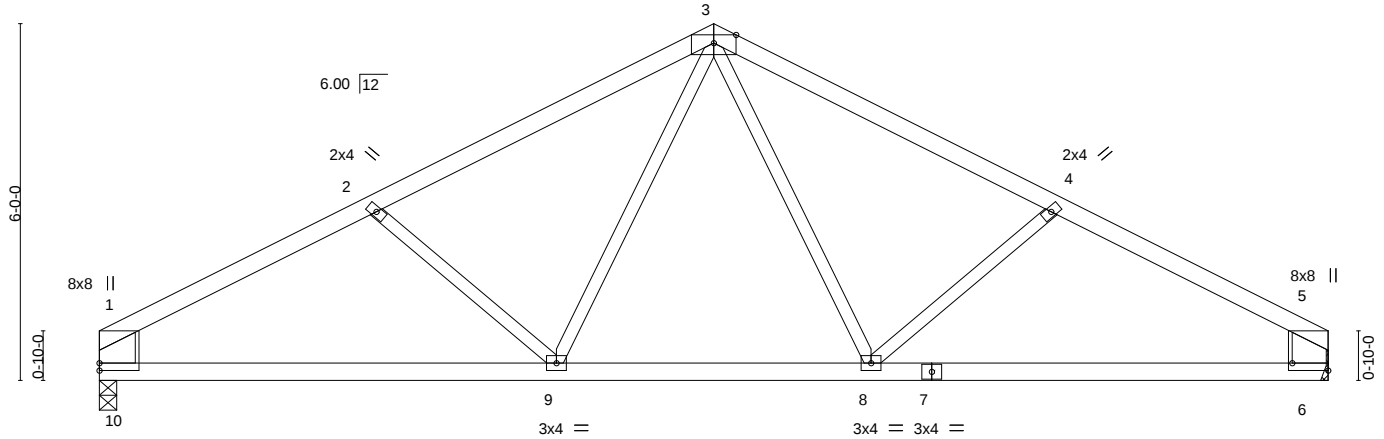


Plate Offsets (X,Y)-- [5:Edge,0-7-4]

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 0.79	Vert(LL)	-0.23	8-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.36	8-9	>669	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.03	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10	8-9	>999	240	Weight: 70 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

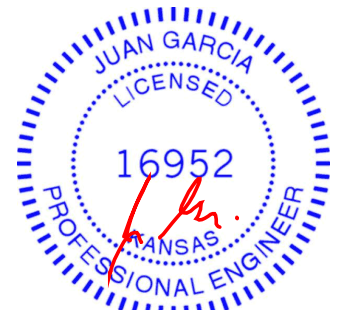
(size) 10=0-3-8, 6=Mechanical
Max Horz 10=-77(LC 4)
Max Uplift 10=-10(LC 8), 6=-10(LC 9)
Max Grav 10=903(LC 1), 6=903(LC 1)

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

TOP CHORD 1-2=-1318/57, 2-3=-1086/42, 3-4=-1086/42, 4-5=-1318/57, 1-10=-788/50, 5-6=-788/50
BOT CHORD 9-10=-56/1079, 8-9=0/809, 6-8=-19/1079
WEBS 3-8=-2/287, 4-8=-263/125, 3-9=-2/287, 2-9=-263/125

NOTES-

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



November 11,2020

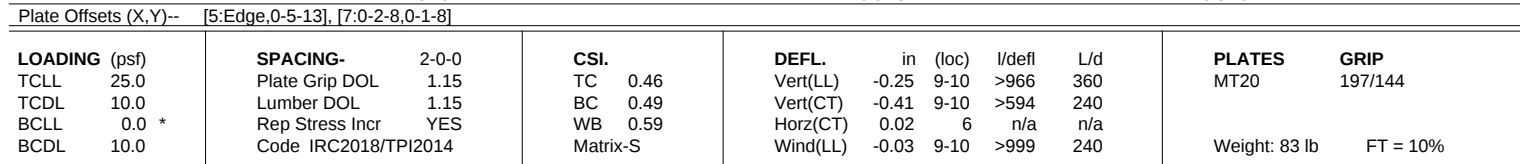
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
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Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:03 2020 Page 1
ID:wWQ0cVuS969af?GecLrCNzdmNG-z4fBYC7lLuDc_Kbxwz2nsY_MZDHMOgQfQCvzX0yKKlk
4-6-8 8-10-7 15-2-6 20-8-0
4-6-8 4-4-0 6-3-15 5-5-10
Scale = 1:39.6



REACTIONS. (size) 10=0-3-8, 6=Mechanical
 Max Horz 10=-206(LC 4)
 Max Uplift 10=-51(LC 4), 6=-13(LC 9)
 Max Grav 10=984(LC 2), 6=955(LC 2)

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

TOP CHORD	2-3=-825/59, 3-4=-1009/37, 4-5=-1433/38, 5-6=-859/42
BOT CHORD	9-10=-0/548, 7-9=0/1230, 6-7=-10/254
WEBS	2-10=-882/86, 2-9=-1/551, 4-9=-481/107, 5-7=0/982

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 10 and 13 lb uplift at joint 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



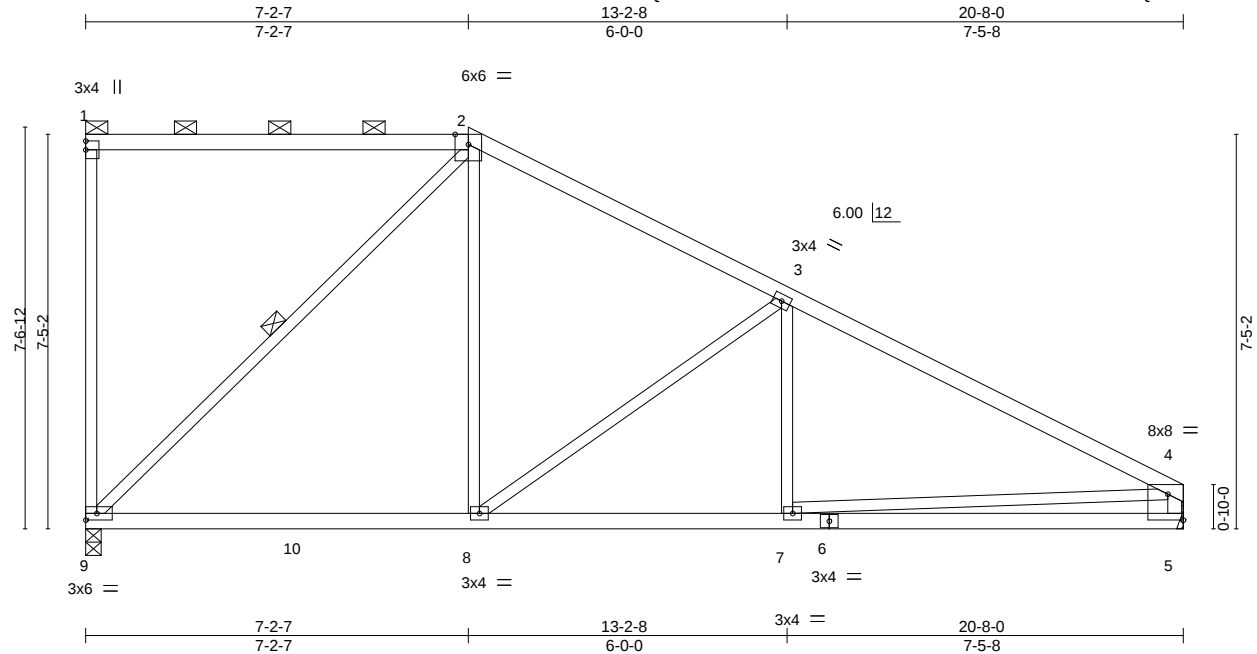
November 11.2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578943
W2 50	G8	Half Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:04 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-RGDZlY8N6CLTbUA7UhZ0OIWQXcbB73FaeseW3TyKKlj



Scale = 1:43.4

Plate Offsets (X,Y)-- [4: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	0.83	Vert(LL)	-0.14	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.23	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.03	8-9	>999	240	Weight: 83 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-2 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 2-9

REACTIONS.

(size) 9=0-3-8, 5=Mechanical
 Max Horz 9=-233(LC 4)
 Max Uplift 9=-51(LC 4), 5=-16(LC 9)
 Max Grav 9=981(LC 2), 5=958(LC 2)

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

TOP CHORD 2-3=-846/58, 3-4=-1374/40, 4-5=-845/57
 BOT CHORD 8-9=0/701, 7-8=0/1150, 5-7=-36/432
 WEBS 2-9=-940/46, 2-8=0/649, 3-8=-604/104, 4-7=0/730

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 9 and 16 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578944
W2 50	G9	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:06 2020 Page 1

ID:WWQ0cVuS969af?GecLrtCNzdMNG-NfKJAEadpbBroKWb6cUTAbolQlxb_Bs6A7d8LyKKlh

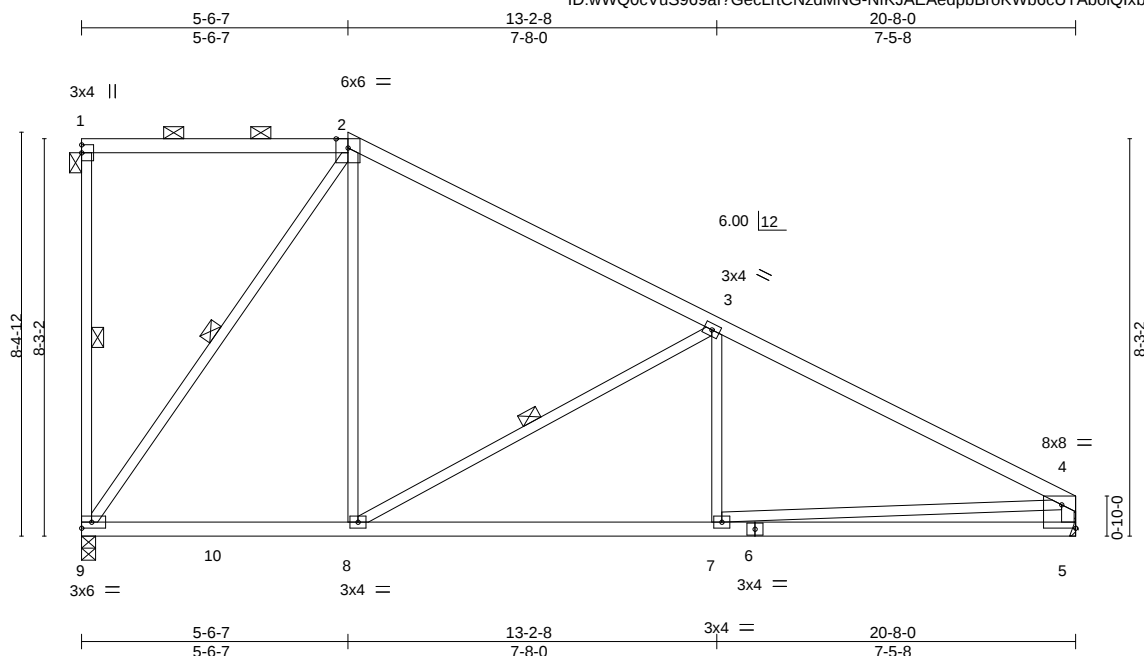


Plate Offsets (X,Y)-- [4:Edge,0-5-13]

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 0.73	Vert(LL)	-0.07	7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.15	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	-0.03	8-9	>999	240	Weight: 86 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-8 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 1-9, 2-9, 3-8

REACTIONS.

(size) 9=0-3-8, 5=Mechanical
Max Horz 9=-260(LC 4)
Max Uplift 9=-52(LC 4), 5=-17(LC 9)
Max Grav 9=979(LC 2), 5=953(LC 2)

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

TOP CHORD 2-3=-718/60, 3-4=-1392/44, 4-5=-849/55
BOT CHORD 8-9=0/573, 7-8=0/1172, 5-7=-31/382
WEBS 2-9=-919/45, 2-8=0/659, 3-8=-767/118, 3-7=0/276, 4-7=0/807

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 9 and 17 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578945
W2 50	H1	Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:08 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-K2S4bvBu9Rrv46UujXeyZbh8_Evl3uV9ZUckCEyKklf
0-10-8 6-3-12 11-10-13 18-8-14 22-8-4 29-0-0 29-10-8
0-10-8 6-3-12 5-7-1 6-10-1 3-11-6 6-3-12 0-10-8
Scale = 1:50.9

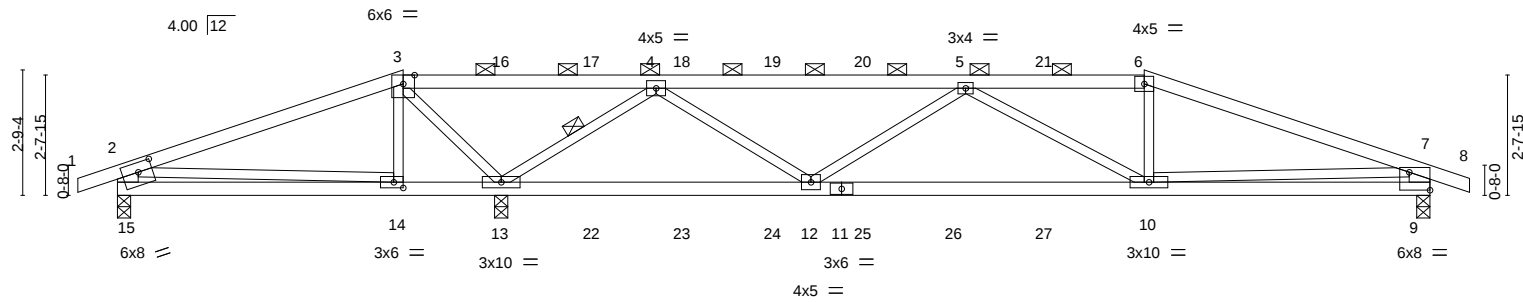


Plate Offsets (X,Y)--	9:Edge,0-4-12], [14:0-2-8,0-1-8], [15:0-3-12,0-2-8]
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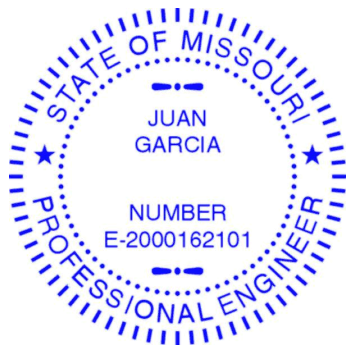
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.12 10-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.27 10-12	>909	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.80	Horz(CT)	0.04 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10 10-12	>999	240	Weight: 99 lb	FT = 10%

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

REACTIONS. (size) 15=0-3-8, 13=0-3-8 (req. 0-4-0), 9=0-3-8
Max Horz 15=-26(LC 13)
Max Uplift 15=-220(LC 29), 13=-630(LC 4), 9=-311(LC 5)
Max Grav 15=177(LC 16), 13=2561(LC 1), 9=1159(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-177/806, 3-4=-385/1626, 4-5=-1409/339, 5-6=-2054/556, 6-7=-2254/561,
2-15=-125/256, 7-9=-1103/337
BOT CHORD 14-15=-238/306, 13-14=-762/226, 12-13=-134/346, 10-12=-565/2133, 9-10=-237/780
WEBS 3-14=-54/408, 3-13=-1426/412, 4-13=-2377/723, 4-12=-158/1294, 5-12=-882/385,
6-10=-33/429, 2-14=-921/264, 7-10=-261/1375

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) WARNING: Required bearing size at joint(s) 13 greater than input bearing size.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 15, 630 lb uplift at joint 13 and 311 lb uplift at joint 9.
 - 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) 85 lb down and 75 lb up at 6-3-12, 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, 85 lb down and 75 lb up at 16-6-0, 85 lb down and 75 lb up at 18-6-0, and 85 lb down and 75 lb up at 20-6-0, and 85 lb down and 75 lb up at 22-8-4 on top chord, and 244 lb down and 101 lb up at 6-3-12, 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, 29 lb down at 16-6-0, 29 lb down at 18-6-0, 29 lb down at 20-6-0, and 29 lb down at 22-6-0, and 244 lb down and 101 lb up at 22-8-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Continue to Page 2



November 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578945
W2 50	H1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:08 2020 Page 2
ID:wWQ0cVuS969af?GecLrtCNzdMNG-K2S4bvBu9Rrv46UujXeyZbh8_Evl3uV9ZUckCEyKKlf

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, 3-6=-70, 6-7=-70, 7-8=-70, 9-15=-20

Concentrated Loads (lb)

Vert: 3=-42(B) 6=-42(B) 14=-267(B) 13=-23(B) 5=-42(B) 10=-267(B) 16=-42(B) 17=-42(B) 18=-42(B) 19=-42(B) 20=-42(B) 21=-42(B) 22=-23(B) 23=-23(B)
24=-23(B) 25=-23(B) 26=-23(B) 27=-23(B)

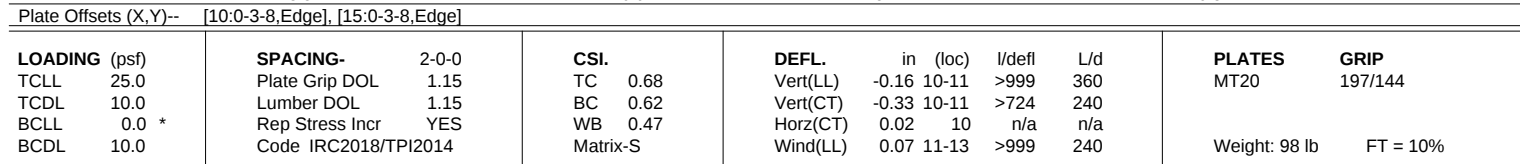
 **WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:09 2020 Page 1
 ID:wwQ0cVuS969af?GecLrCNZdMNG-oE0SpFCWwkzmiF35GE9B5pDKldlmoQvJo8MHlgyKkle
 -0-10-8 3-9-13 9-3-12 14-6-0 19-8-4 25-7-2 29-0-0 29-10-8
 0-10-8 3-9-13 5-5-15 5-2-4 5-2-4 5-10-14 3-4-14 0-10-8
 Scale = 1:50.9



REACTIONS. (size) 15=0-3-8, 14=0-3-8, 10=0-3-8
 Max Horz 15=43(LC 8)
 Max Uplift 15=-65(LC 22), 14=-329(LC 4), 10=-187(LC 5)
 Max Grav 15=198(LC 21), 14=1736(LC 1), 10=891(LC 22)

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

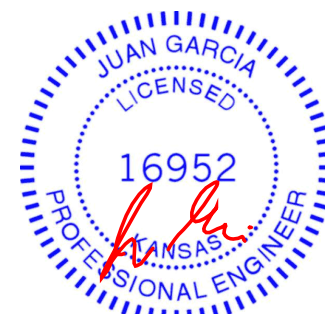
TOP CHORD 2-3=-85/381, 3-4=-240/929, 4-5=-767/154, 5-6=-767/154, 6-7=-1224/193,
7-8=-1478/323, 8-10=-796/234

BOT CHORD 14-15=-327/139, 13-14=-500/218, 11-13=-83/1113, 10-11=-255/1320

WEBS 3-14=-688/270, 4-14=-1394/354, 4-13=-286/1353, 5-13=-415/163, 6-13=-479/87,
6-11=0/322

 **JUAN GARCIA**

- 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 65 lb uplift at joint 15, 329 lb uplift at joint 14 and 187 lb uplift at joint 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11.2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	143578947
W2 50	H3	Hip	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:10 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-GQaq0bD8h25cJPdHqygQe0mS_1cYXpsS1o5qH6yKKld

0-10-8 4-11-14 12-3-12 16-8-4 23-3-11 29-0-0 29-10-8
0-10-8 4-11-14 7-3-14 4-4-8 6-7-7 5-8-5 0-10-8

Scale = 1:50.9

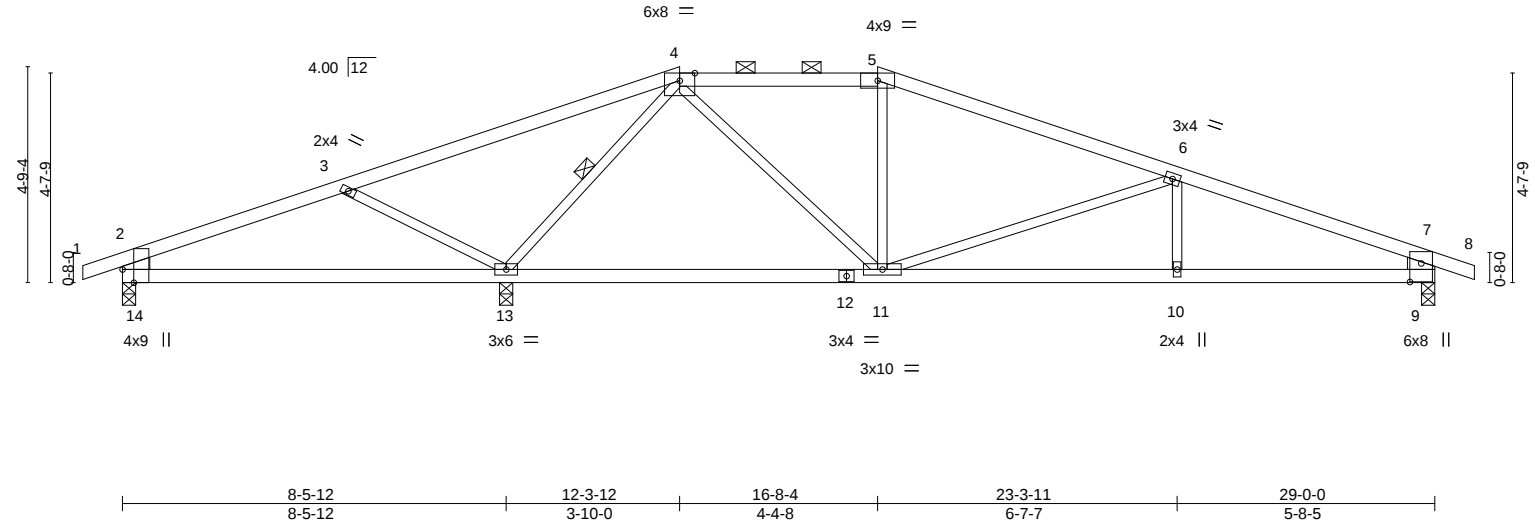


Plate Offsets (X,Y)-- [9:0-4-14,0-3-0], [14:0-3-8,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.13 10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.25 10-11	>977	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.03 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10 10-11	>999	240	Weight: 95 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14,7-9: 2x8 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 13-14.
WEBS 1 Row at midpt 4-13

REACTIONS.

(size) 14=0-3-8, 13=0-3-8, 9=0-3-8
Max Horz 14=-60(LC 9)
Max Uplift 14=-52(LC 4), 13=-281(LC 4), 9=-189(LC 5)
Max Grav 14=233(LC 21), 13=1698(LC 1), 9=890(LC 22)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-48/341, 3-4=-201/934, 4-5=-784/191, 5-6=-891/167, 6-7=-1518/268, 7-9=-787/209
BOT CHORD 13-14=-291/119, 11-13=0/253, 10-11=-194/1365, 9-10=-194/1365
WEBS 3-13=-720/306, 4-13=-1556/325, 4-11=-118/745, 6-11=-633/208

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 14, 281 lb uplift at joint 13 and 189 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578948
W2 50	H4	COMMON GIRDER	1	3	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:12 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-CpiaRHEPDfLKZjngyMjvRrqrK7?mFIU6axL?yKkIib

0-10-8	4-4-2	8-5-12	14-6-0	21-7-12	29-0-0
0-10-8	4-4-2	4-1-10	6-0-4	7-1-12	7-4-4

Scale = 1:49.3

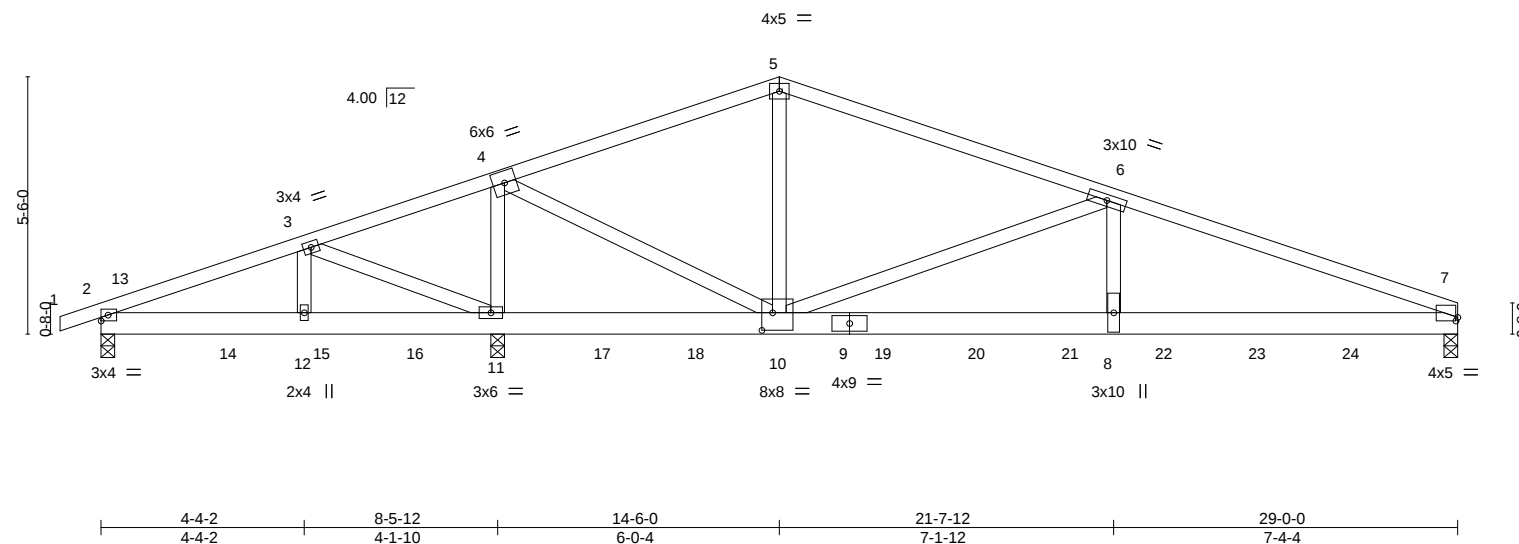


Plate Offsets (X,Y)-- [7:0-0-8,0-0-14], [10:0-2-12,0-4-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.14	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.25	7-8	>993	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	8-10	>999	240	Weight: 411 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 7=0-3-8, 2=0-3-8, 11=0-3-8 (req. 0-4-5)
Max Horz 2=54(LC 8)
Max Uplift 2=-338(LC 20)
Max Grav 7=4957(LC 1), 2=209(LC 16), 11=8202(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-72/1867, 3-4=0/2742, 4-5=-3824/113, 5-6=-3841/105, 6-7=-9800/0
BOT CHORD 2-12=-1701/110, 11-12=-1701/110, 10-11=-2550/0, 8-10=0/9117, 7-8=0/9117
WEBS 3-12=0/345, 3-11=-1079/0, 4-11=-5590/0, 4-10=0/6877, 5-10=0/2042, 6-10=-5966/0, 6-8=0/3807

NOTES-

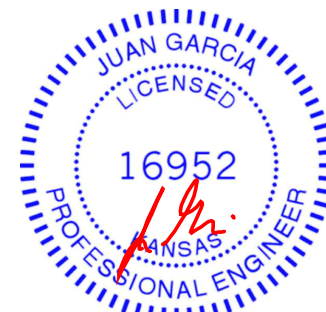
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 11 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 338 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 240 lb down at 0-9-0 on top chord, and 240 lb down at 2-9-0, 240 lb down at 4-9-0, 240 lb down at 6-9-0, 933 lb down and 37 lb up at 8-9-0, 938 lb down and 36 lb up at 10-9-0, 935 lb down and 33 lb up at 12-9-0, 883 lb down and 30 lb up at 14-9-0, 883 lb down and 30 lb up at 16-9-0, 889 lb down and 29 lb up at 18-9-0, 889 lb down and 21 lb up at 20-9-0, 889 lb down at 22-9-0, 889 lb down at 24-9-0, and 1356 lb down and 130 lb up at 26-9-0, and 55 lb down at 28-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S)

Standard

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

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November 11, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	H4	COMMON GIRDER	1	3	I43578948

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:12 2020 Page 2
ID:wWQ0cVuS969af?GecLrtCNzdMNG-CpiaRHEPDfLKZjngyMjvjRrqorK7?mFIU6axL?yKKIb

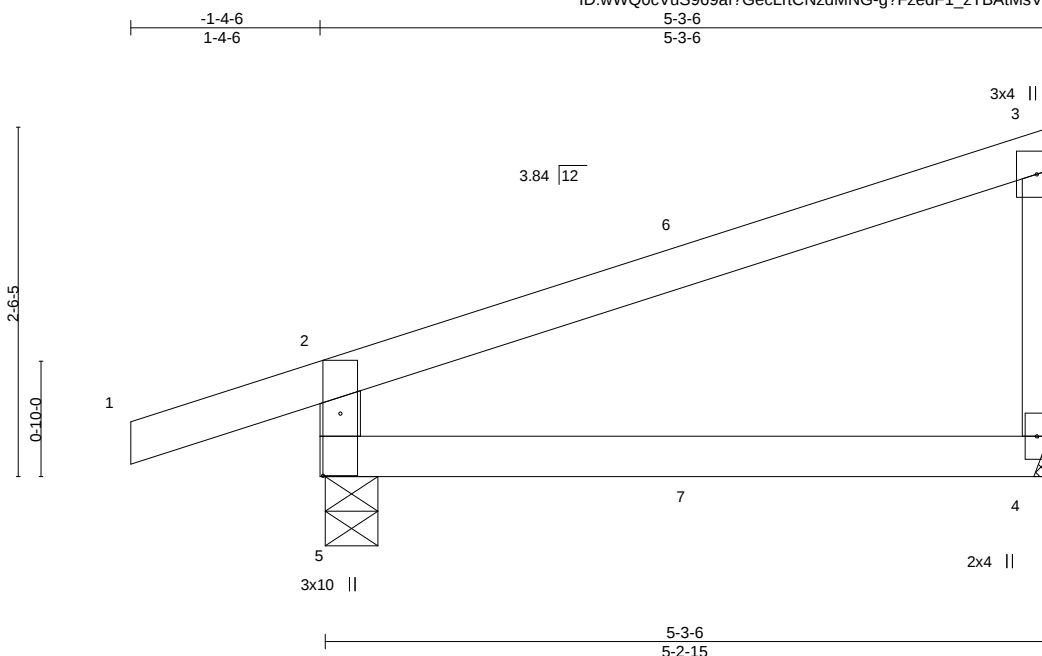
LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-5=-70, 5-7=-70, 2-7=-20
 - Concentrated Loads (lb)
 - Vert: 7=-55(F) 11=-899(F) 10=-883(F) 13=-190(F) 14=-240(F) 15=-240(F) 16=-240(F) 17=-899(F) 18=-899(F) 19=-883(F) 20=-889(F) 21=-889(F) 22=-889(F) 23=-889(F) 24=-1356(F)

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578949
W2 50	J1	Diagonal Hip Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:13 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-g?FzedF1_zTBAItMsV4E8GfO5sFmtkLHujmKVuRyKKla



Scale = 1:16.6

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]												
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	0.35	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.05	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 5-3-6 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=104(LC 5)
Max Uplift 5=-107(LC 4), 4=-46(LC 8)
Max Grav 5=348(LC 1), 4=210(LC 1)

FORCES.

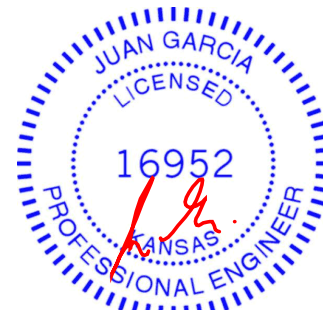
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-307/143

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 5 and 46 lb uplift at joint 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) 64 lb down and 32 lb up at 2-9-2, and 76 lb down and 44 lb up at 2-11-10 on top chord, and 4 lb down and 2 lb up at 2-9-2, and 5 lb down at 2-11-10 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=1(F=2, B=-1)



November 11, 2020

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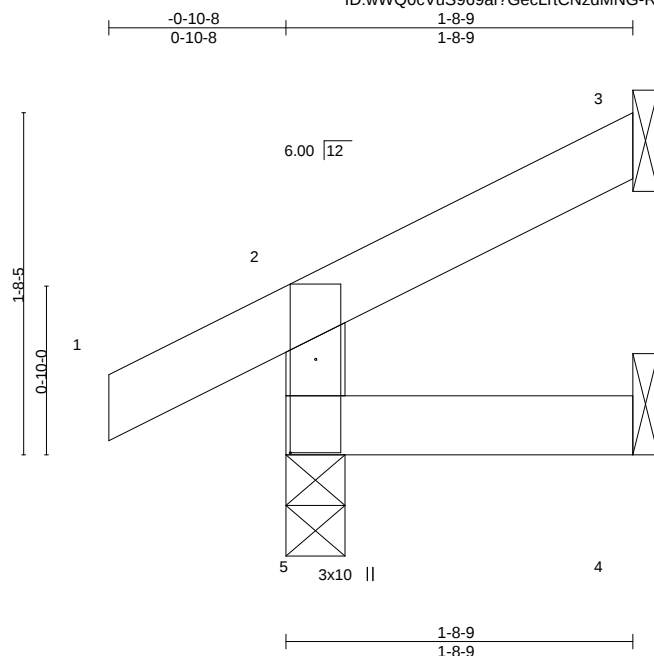
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578950
W2 50	J2	Jack-Open	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:21 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-RYk_KML25QU385zOzIN0aLjWATXxcyG4Z?Gwa_yKKIS



Scale = 1:11.4

Plate Offsets (X,Y)--	[5:0-5-9,0-1-8]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 6 lb	FT = 10%

LUMBER-

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 1-8-9 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=42(LC 5)
Max Uplift 5=-22(LC 8), 3=-29(LC 8)
Max Grav 5=165(LC 1), 3=36(LC 1), 4=28(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 22 lb uplift at joint 5 and 29 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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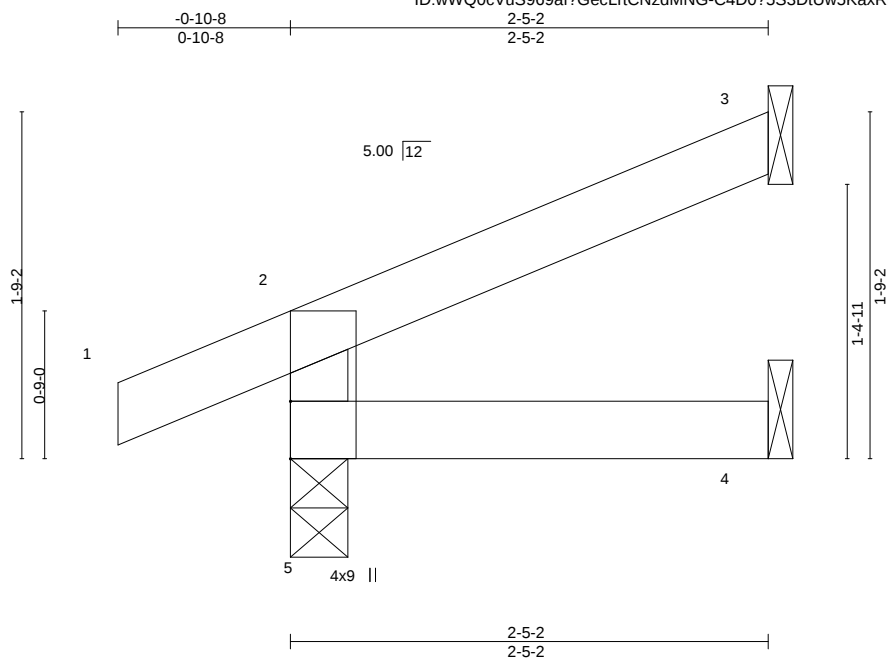
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578951
W2 50	J3	Jack-Open	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:29 2020 Page 1

ID:WWQ0cVuS969af?GecLrtCNzdMNG-C4D0?5S3DtUw5KaxRRWuv12uAhGVUaEFOFCLSWyKKIK



Scale = 1:11.7

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

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 8)
Max Uplift 5=-31(LC 4), 3=-36(LC 8)
Max Grav 5=188(LC 1), 3=62(LC 1), 4=41(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 31 lb uplift at joint 5 and 36 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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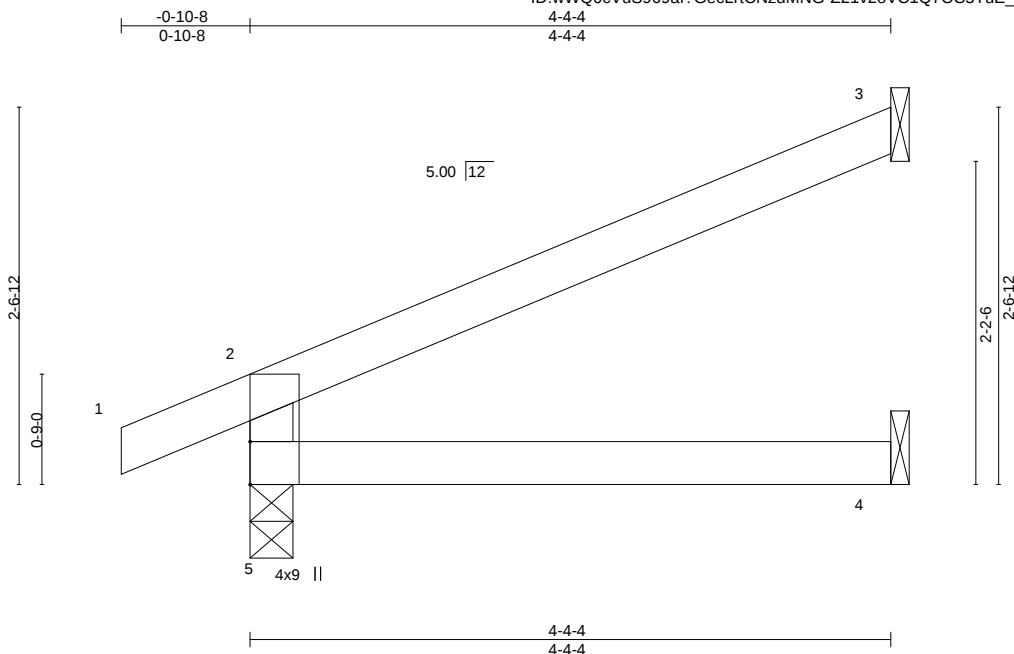
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578952
W2 50	J4	Jack-Open	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:34 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-Z21v2oVC1Q7CC5TuE_63c4mj3ixs9rU_YXv67jyKKIF



Scale = 1:15.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.03	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-4 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=78(LC 8)
Max Uplift 5=-37(LC 8), 3=-66(LC 8)
Max Grav 5=267(LC 1), 3=128(LC 1), 4=78(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 37 lb uplift at joint 5 and 66 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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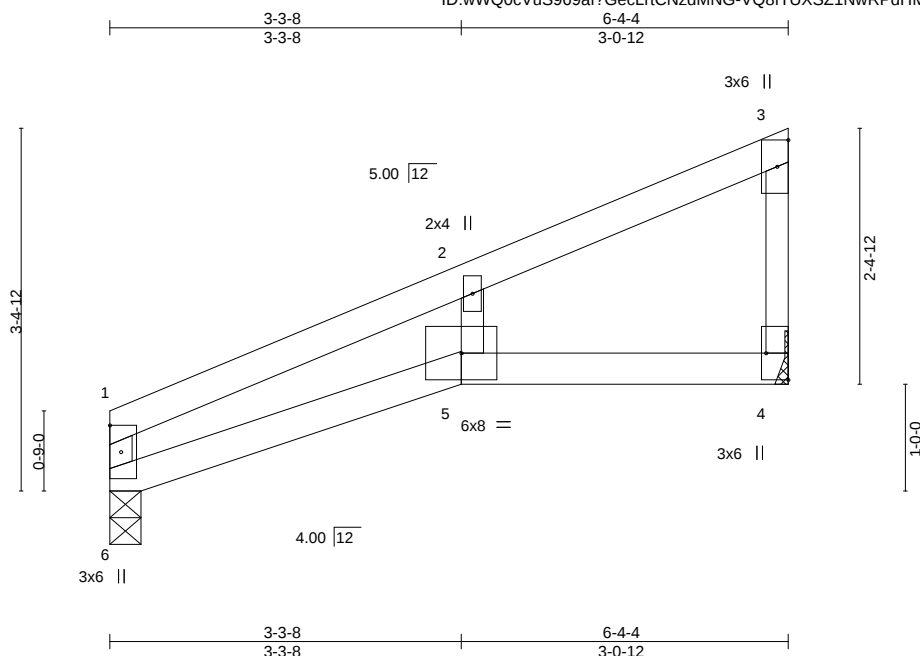
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578953
W2 50	J5	Jack-Closed	2	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:36 2020 Page 1

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Scale = 1:21.6

Plate Offsets (X,Y)--		[4:Edge,0-2-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.46
TCDL 10.0	Lumber DOL	1.15	BC 0.33
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.11 5 >678 360
			Vert(CT) -0.19 5 >387 240
			Horz(CT) 0.06 4 n/a n/a
			Wind(LL) 0.11 5 >676 240
			PLATES
			MT20
			GRIP
			197/144
			Weight: 18 lb FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 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=Mechanical
Max Horz 6=115(LC 5)
Max Uplift 6=-35(LC 8), 4=-69(LC 8)
Max Grav 6=277(LC 1), 4=277(LC 1)

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

NOTES-

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



November 11, 2020

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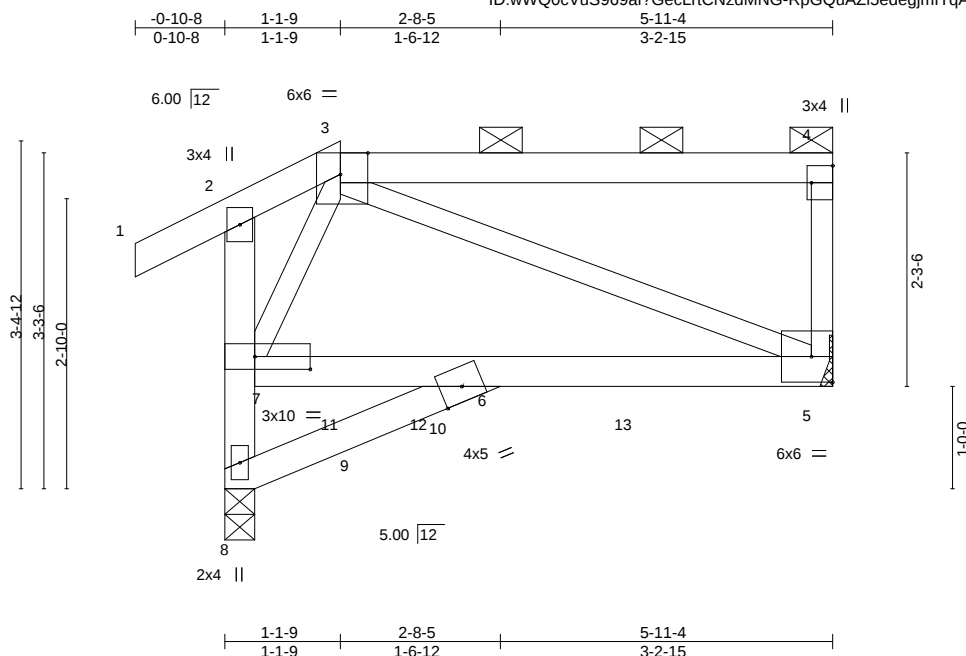
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578955
W2 50	J7	Half Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:38 2020 Page 1

ID:WVQ0cVuS969af?GecLrtCNzdMNG-RpGQuAZi5edegjmfTqA?mwwF?K9D5cSaT9tJGVyKKIB



Scale = 1:22.5

Plate Offsets (X,Y)-- [3:0-3-3,Edge], [4:Edge,0-2-8], [7:0-6-8,0-1-8]												
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	0.83	Vert(LL)	-0.10	5-6	>687	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.19	5-6	>352	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	5-6	>588	240	Weight: 28 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 8=0-3-8
 Max Horz 8=109(LC 5)
 Max Uplift 5=-170(LC 5), 8=-185(LC 4)
 Max Grav 5=507(LC 22), 8=588(LC 1)

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

TOP CHORD 2-3=-344/138, 7-8=-384/106, 2-7=-265/84
 BOT CHORD 6-8=-304/127, 6-7=-124/485, 5-6=-150/271

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=170, 8=185.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 34 lb up at 1-1-9 on top chord, and 36 lb down and 51 lb up at 1-1-9, and 257 lb down and 89 lb up at 2-0-0, and 257 lb down and 89 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

Continued on page 2

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578955
W2 50	J7	Half Hip Girder	1	1	Job Reference (optional)	

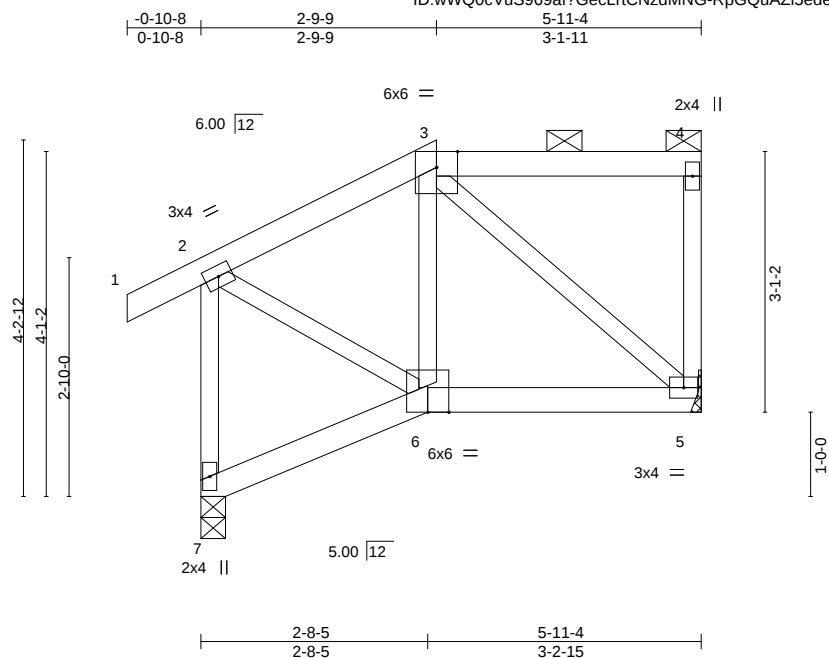
LOAD CASE(S) Standard
Uniform Loads (plf)
 Vert: 1-2=-70, 2-3=-70, 3-4=-70, 6-8=-20, 5-6=-20
Concentrated Loads (lb)
 Vert: 9=1(B) 10=-257(B) 13=-257(B)

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578956
W2 50	J8	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:38 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-RpGQuAZi5edegjmfTqA?mwwPKKKR5dKaT9tJGVyKKIB



Scale = 1:27.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	6	>999	240		
									Weight: 27 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 5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=114(LC 5)
Max Uplift 7=-13(LC 8), 5=-50(LC 5)
Max Grav 7=332(LC 1), 5=252(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-306/26

NOTES-

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



November 11, 2020

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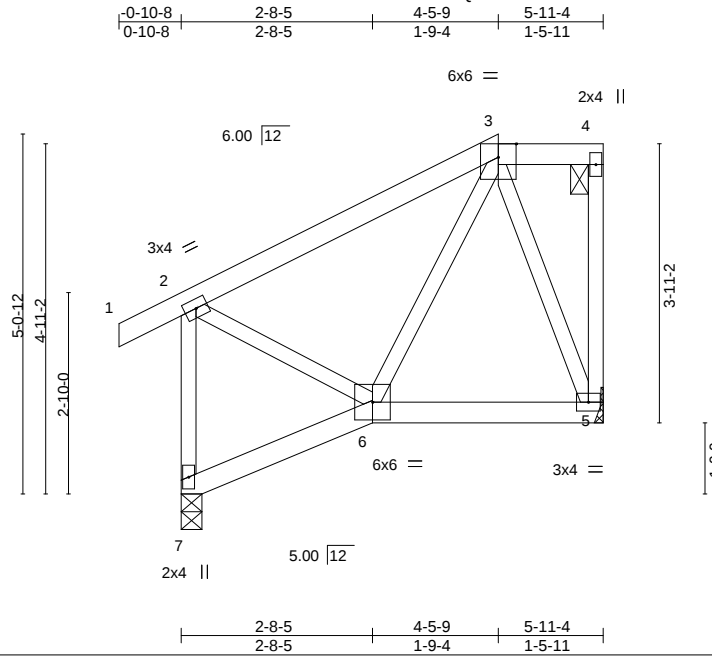
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578957
W2 50	J9	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:39 2020 Page 1

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Scale = 1:32.4

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 0.33	Vert(LL)	-0.01	5-6	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	5-6	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	-0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	6	>999	240	
									Weight: 29 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 5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-8, 5=Mechanical
Max Horz 7=141(LC 5)
Max Uplift 7=-12(LC 8), 5=-63(LC 5)
Max Grav 7=332(LC 1), 5=252(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-306/29

NOTES-

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



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	J10	Jack-Open	6	1	I43578958

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:14 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-8BpLszGfHb2o1x23nlNosxE1e2rToC2xQ32QuyKkIZ

0-10-8 2-8-5 5-11-4
0-10-8 2-8-5 3-2-15

Scale = 1:34.4

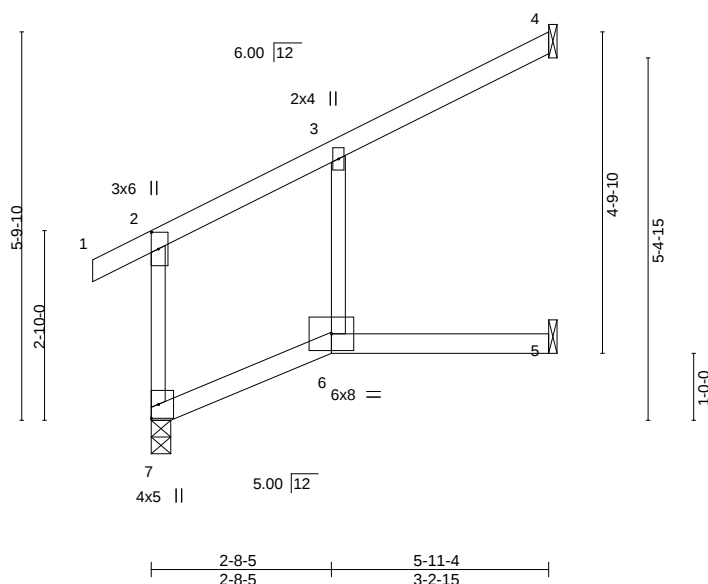


Plate Offsets (X,Y)-- [2:0-3-0,0-1-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.08	6	>839	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.15	6	>463	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.31	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.11	6	>610	240	
								Weight: 20 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 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=114(LC 5)
Max Uplift 4=58(LC 8), 5=12(LC 8)
Max Grav 7=334(LC 1), 4=158(LC 1), 5=99(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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 58 lb uplift at joint 4 and 12 lb uplift at joint 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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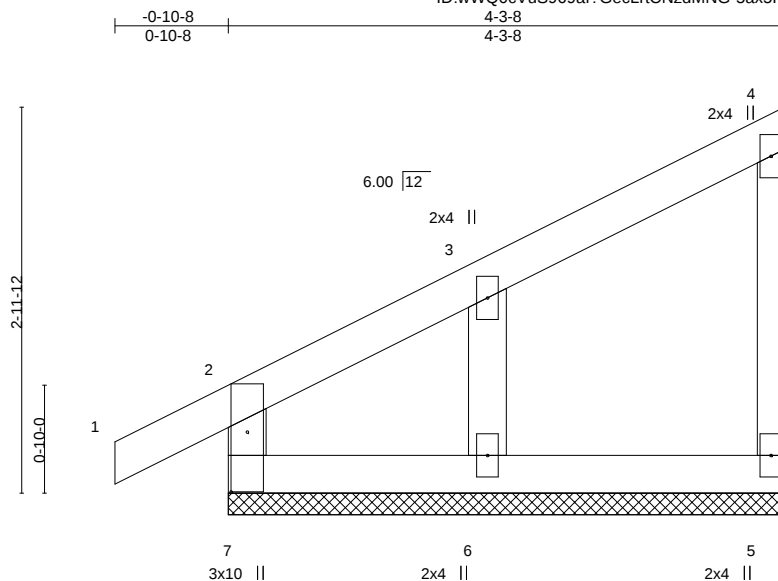
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578959
W2 50	J11	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:16 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-5ax5HeHvHusm1K5RBCnrtH0gRSqXxijLPkY9UmyKKIX



Scale = 1:17.8

Plate Offsets (X,Y)-- [7:0-5-9,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	2	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	1	n/r	120		
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-R						Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=4-3-8, 5=4-3-8, 6=4-3-8
 Max Horz 7=117(LC 7)
 Max Uplift 7=-15(LC 4), 5=-14(LC 5), 6=-84(LC 8)
 Max Grav 7=157(LC 1), 5=83(LC 1), 6=195(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 7, 14 lb uplift at joint 5 and 84 lb uplift at joint 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11,2020

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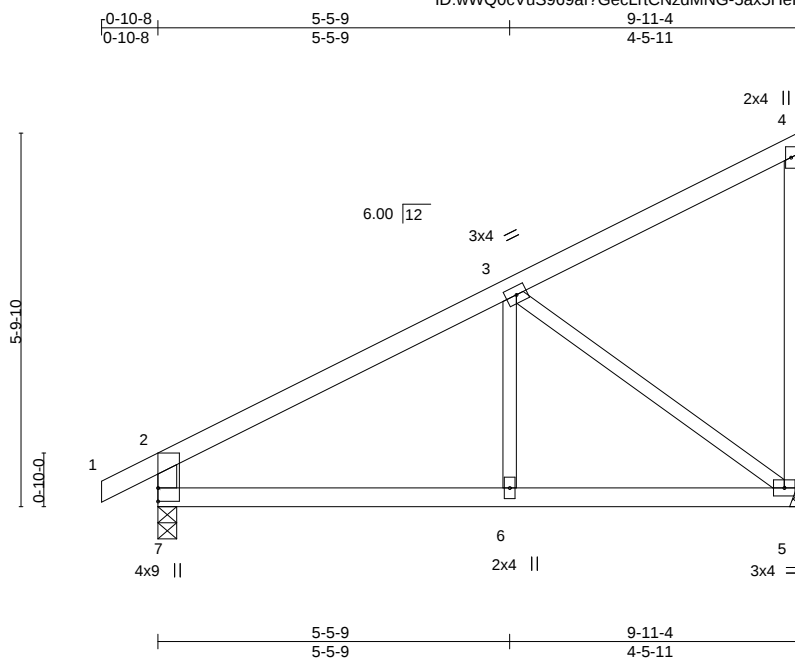
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578960
W2 50	J12	Jack-Closed	7	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:16 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-5ax5HeHvHusm1K5RBCnrtH0c9SnxxdrLPky9UmyKKIX



Scale = 1:35.8

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 0.34	Vert(LL)	-0.02	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.04	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.33	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	-0.01	5-6	>999	240		
									Weight: 37 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 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=Mechanical
Max Horz 7=234(LC 5)
Max Uplift 7=-74(LC 8), 5=-112(LC 8)
Max Grav 7=511(LC 1), 5=432(LC 1)

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

TOP CHORD 2-7=-452/111, 2-3=-500/58
BOT CHORD 6-7=-101/369, 5-6=-101/369
WEBS 3-5=-455/165

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) 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 74 lb uplift at joint 7 and 112 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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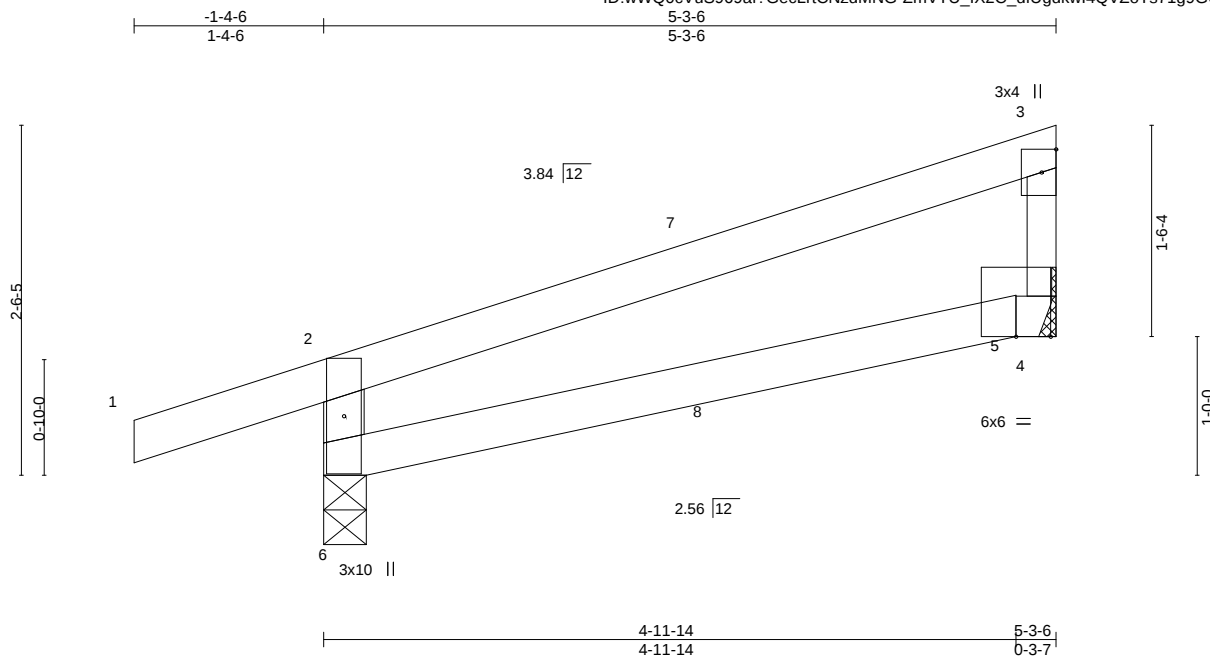
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578961
W2 50	J13	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:17 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-ZmVTU_IX2C_dfUgdkwI4QVZoTs71g9GUeNli1CyKKIW



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.05	5-6	>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)	0.00	5-6	>999	240	Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-6 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=0-3-11, 4=Mechanical
 Max Horz 6=88(LC 5)
 Max Uplift 6=-104(LC 4), 4=-49(LC 8)
 Max Grav 6=348(LC 1), 4=210(LC 1)

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

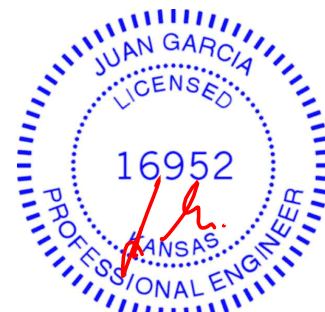
TOP CHORD 2-6=-324/144

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 6 and 49 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 33 lb up at 2-9-2, and 77 lb down and 44 lb up at 2-11-10 on top chord, and 4 lb down and 2 lb up at 2-9-2, and 5 lb down at 2-11-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

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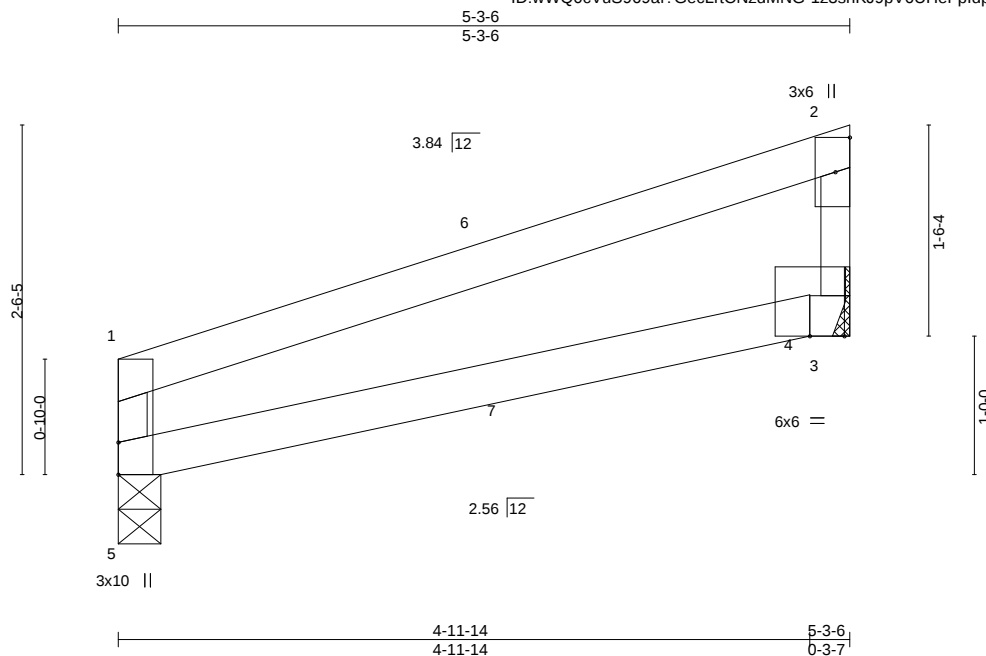


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578962
W2 50	J14	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:18 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdmNG-1z3shKJ9pV6UHeFpIdpJzi5xtGT6PcWds11GZfyKKIV



Scale = 1:16.6

Plate Offsets (X,Y)--		[5:0-2-13,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 0.39	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.05	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: 14 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 5-3-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-11, 3=Mechanical
Max Horz 5=78(LC 5)
Max Uplift 5=-33(LC 4), 3=-53(LC 8)
Max Grav 5=230(LC 1), 3=230(LC 1)

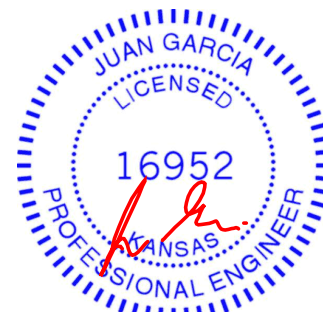
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 5 and 53 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 41 lb up at 2-9-2, and 77 lb down and 44 lb up at 2-11-10 on top chord, and 4 lb down at 2-9-2, and 5 lb down at 2-11-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

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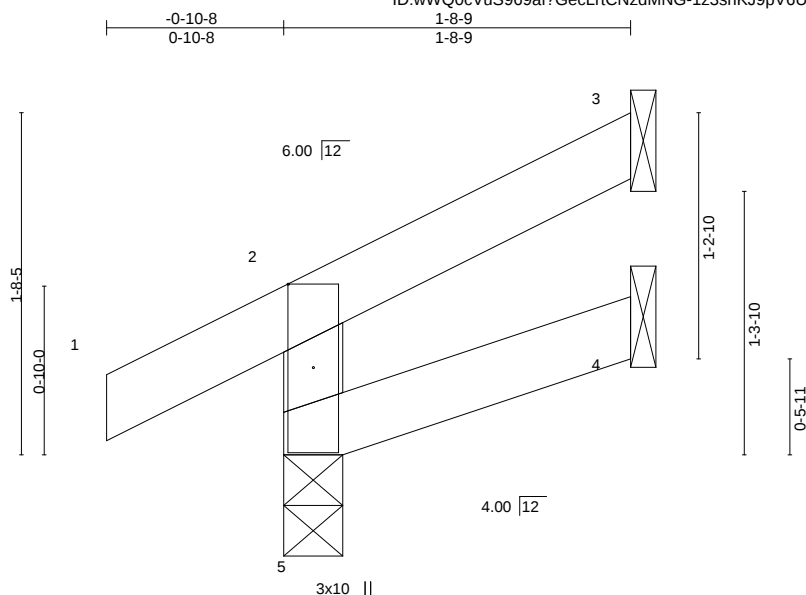
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578963
W2 50	J15	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:18 2020 Page 1

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Scale = 1:11.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	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 1-8-9 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=43(LC 5)
Max Uplift 5=-21(LC 8), 3=-29(LC 8)
Max Grav 5=165(LC 1), 3=36(LC 1), 4=28(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 21 lb uplift at joint 5 and 29 lb uplift at joint 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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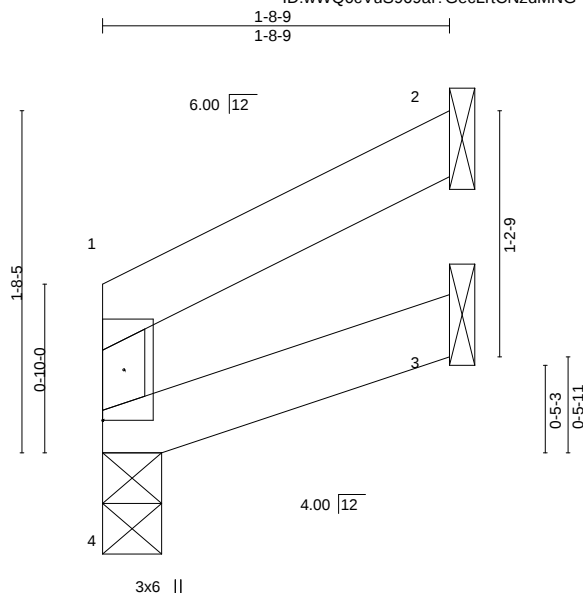
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578964
W2 50	J16	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:19 2020 Page 1

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Scale = 1:11.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.04	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 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-8-9 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=34(LC 5)
Max Uplift 2=35(LC 8)
Max Grav 4=72(LC 1), 2=54(LC 1), 3=31(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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 35 lb uplift at joint 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.



November 11, 2020

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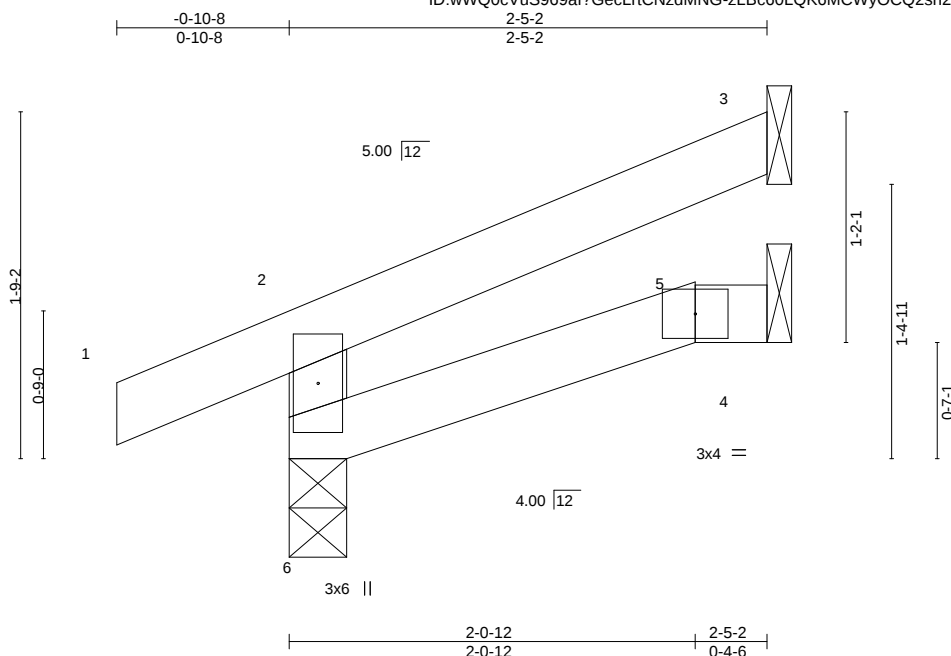
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578965
W2 50	J17	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:20 2020 Page 1

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Scale = 1:11.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	5-6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-5-2 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=46(LC 5)
Max Uplift 6=-31(LC 4), 3=-37(LC 8)
Max Grav 6=188(LC 1), 3=62(LC 1), 4=41(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 31 lb uplift at joint 6 and 37 lb uplift at joint 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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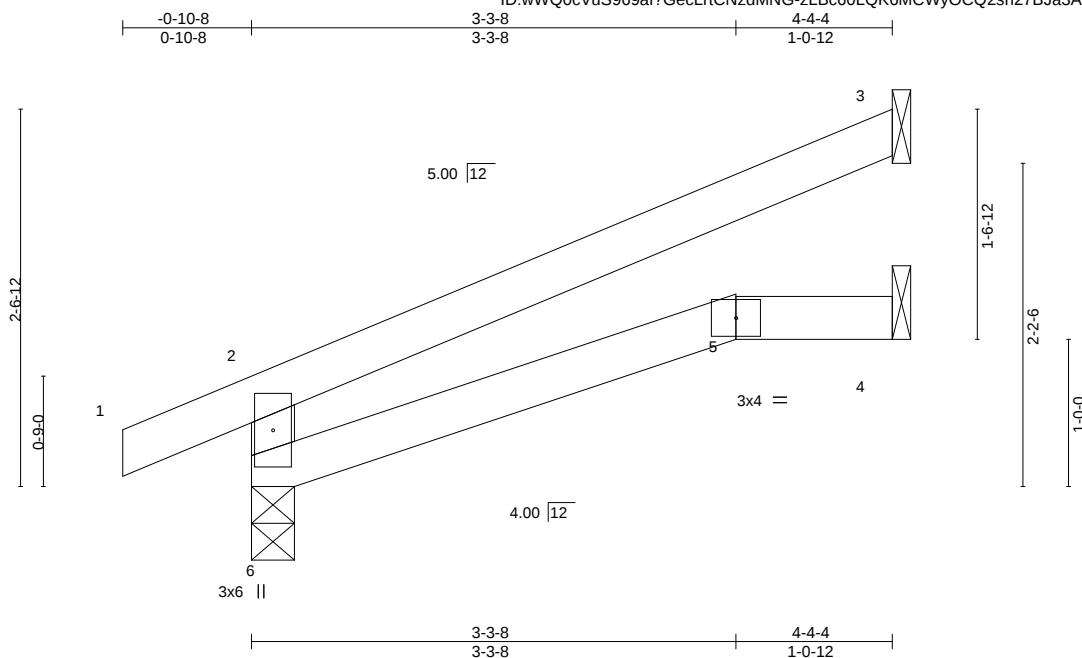
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578966
W2 50	J18	Jack-Open	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:20 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-zLBc60LQK6MCWyOCQ2sn27BJa3AgtV0wKLWMDXyKKIT



Scale = 1:15.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.03	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)	0.02	5-6	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-4 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=78(LC 8)
Max Uplift 6=36(LC 8), 3=67(LC 8)
Max Grav 6=267(LC 1), 3=129(LC 1), 4=78(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 36 lb uplift at joint 6 and 67 lb uplift at joint 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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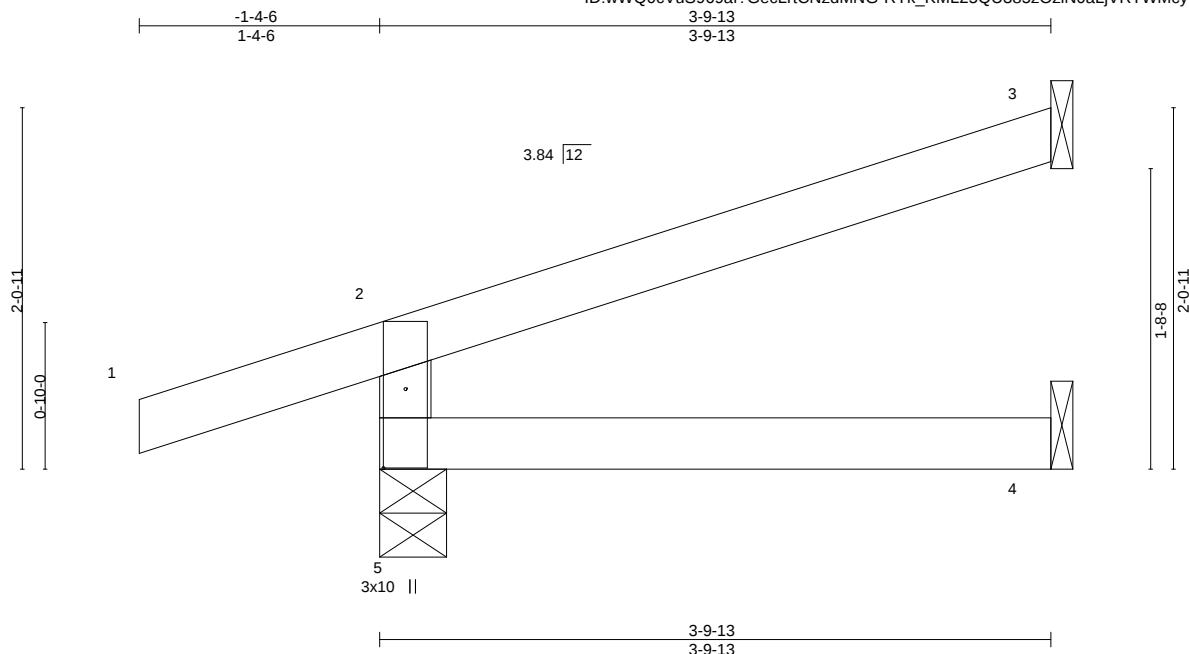
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578967
W2 50	J19	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:21 2020 Page 1

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Scale = 1:13.1

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]												
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	0.18	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	NO	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 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 3-9-13 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 4)
Max Uplift 5=91(LC 4), 3=67(LC 8)
Max Grav 5=290(LC 1), 3=117(LC 1), 4=78(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-255/120

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 5 and 67 lb uplift at joint 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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 47 lb up at 3-9-1 on top chord, and 17 lb down at 3-9-1 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: 3=-13(F) 4=-9(F)



November 11, 2020

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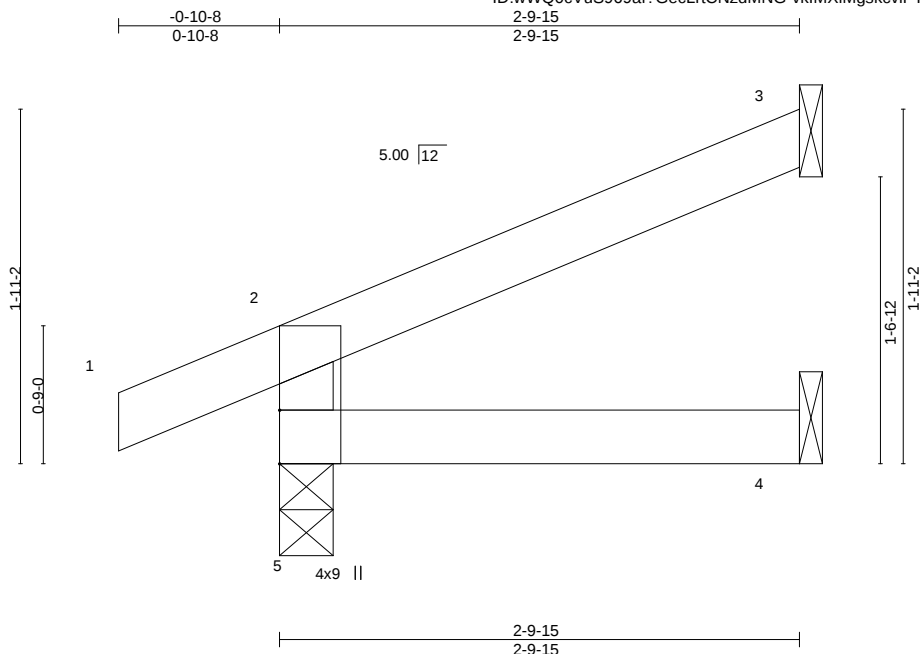


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578968
W2 50	J20	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:22 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-vkIMXiMgskcvlFYbXTuF7YGhktaLPWDnf?TiQyKKIR



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-15 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=52(LC 8)
Max Uplift 5=31(LC 8), 3=43(LC 8)
Max Grav 5=203(LC 1), 3=77(LC 1), 4=48(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 31 lb uplift at joint 5 and 43 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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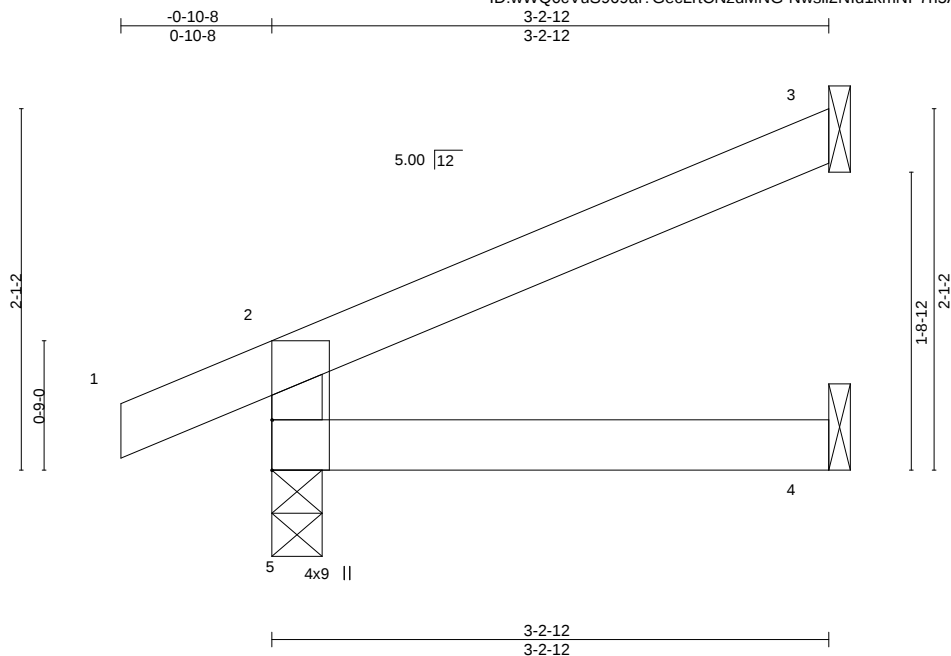
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578969
W2 50	J21	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:23 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-Nwsll2Nld1kmNP7n5APUgmpswHCU4slN0Jl0EsyKKlQ



Scale = 1:13.4

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 0.12	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.01	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	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-

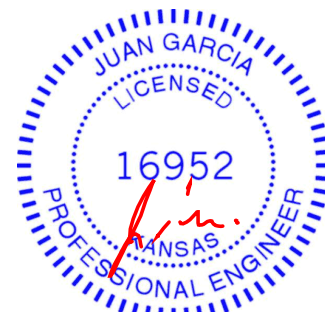
TOP CHORD Structural wood sheathing directly applied or 3-2-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=59(LC 8)
Max Uplift 5=-33(LC 8), 3=-49(LC 8)
Max Grav 5=219(LC 1), 3=91(LC 1), 4=56(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 33 lb uplift at joint 5 and 49 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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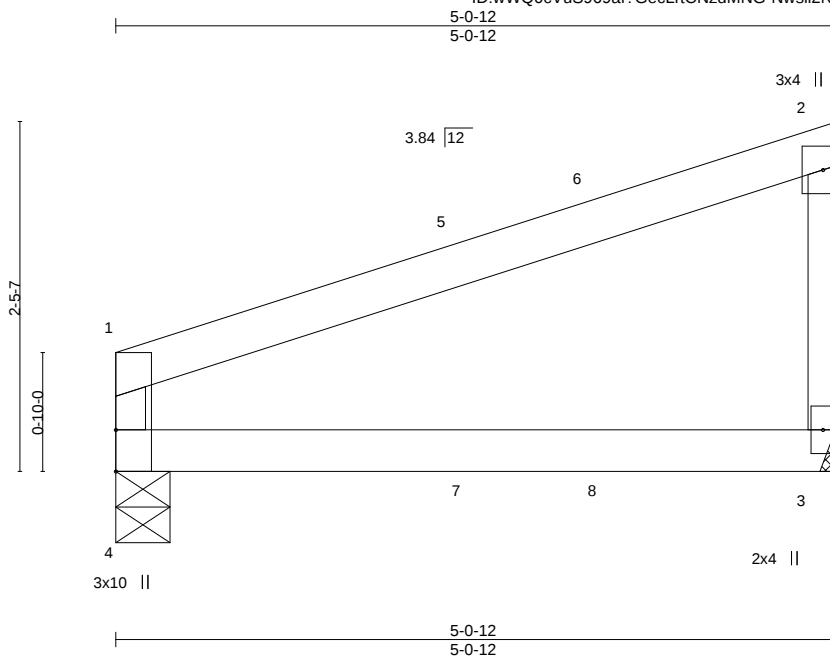
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578970
W2 50	J22	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:23 2020 Page 1

ID:wwQ0cVuS969af?GecLrtCNzdMNG-Nwsll2Nld1kmNP7n5APUgmpneHAK4slN0Jl0EsyKKlQ



Scale: 3/4"=1'

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.39	Vert(LL)	-0.02	3-4	>999	360	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.05	3-4	>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)	0.01	3-4	>999	240	Weight: 14 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 5-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-4-9, 3=Mechanical
Max Horz 4=90(LC 5)
Max Uplift 4=-34(LC 4), 3=-49(LC 8)
Max Grav 4=220(LC 1), 3=221(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 4 and 49 lb uplift at joint 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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 37 lb up at 2-6-8, and 81 lb down and 52 lb up at 3-5-15 on top chord, and 4 lb down at 2-6-8, and 10 lb down at 3-5-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578971
W2 50	J23	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:24 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-s7Q7yNwOLsd?ZizfuwjCzL_dgWmpJ?WFzUanlyKKIP

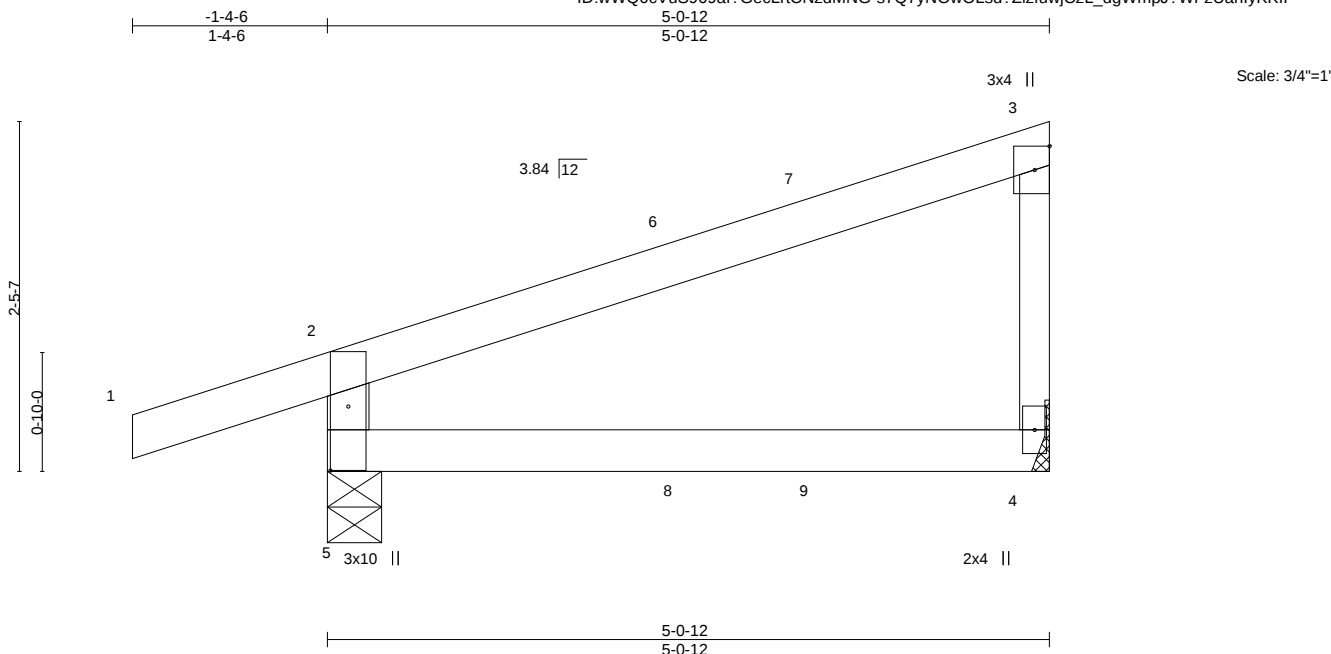


Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.02 4-5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04 4-5 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	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: 15 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 5-0-12 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=101(LC 5)
Max Uplift 5=-106(LC 4), 4=-44(LC 8)
Max Grav 5=341(LC 1), 4=203(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-299/140

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 106 lb uplift at joint 5 and 44 lb uplift at joint 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) 64 lb down and 37 lb up at 2-6-8, and 81 lb down and 52 lb up at 3-5-15 on top chord, and 4 lb down at 2-6-8, and 10 lb down at 3-5-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

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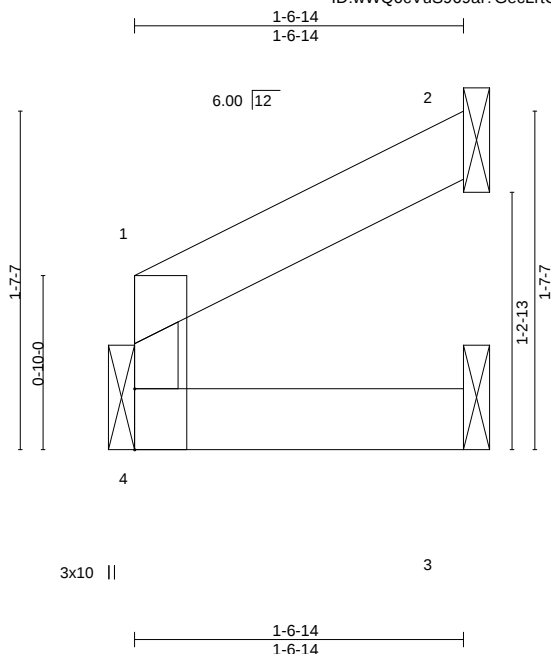
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	J24	Jack-Open	1	1	I43578972
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:25 2020 Page 1

ID:WWQ0cVuS969af?GecLrtCNzdMNG-KJ_V9jOZ9f_UcjHACbSylBuDn4vtYmFfTdE7JlyKKIO



Scale = 1:11.0

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 0.03	Vert(LL)	-0.00	4	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	4	>999	240	197/144
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: 4 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-6-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

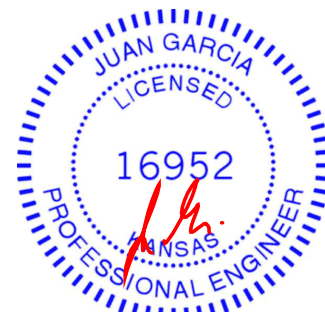
(size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=31(LC 5)
Max Uplift 2=32(LC 8)
Max Grav 4=66(LC 1), 2=49(LC 1), 3=29(LC 3)

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 32 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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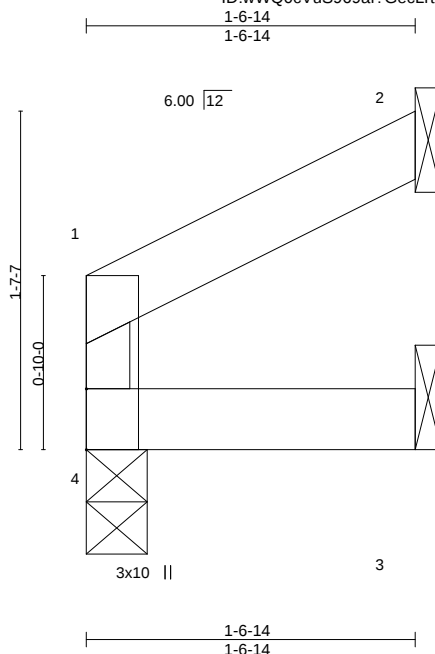
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578973
W2 50	J25	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:26 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-oVYtN3PBwy6LEtsMmJzBHOQOXUF6HDVpiHzhrByKKIN



Scale = 1:11.0

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 0.03	Vert(LL)	-0.00	4	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	4	>999	240	197/144
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: 4 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-6-14 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=31(LC 5)
Max Uplift 2=32(LC 8)
Max Grav 4=66(LC 1), 2=49(LC 1), 3=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 32 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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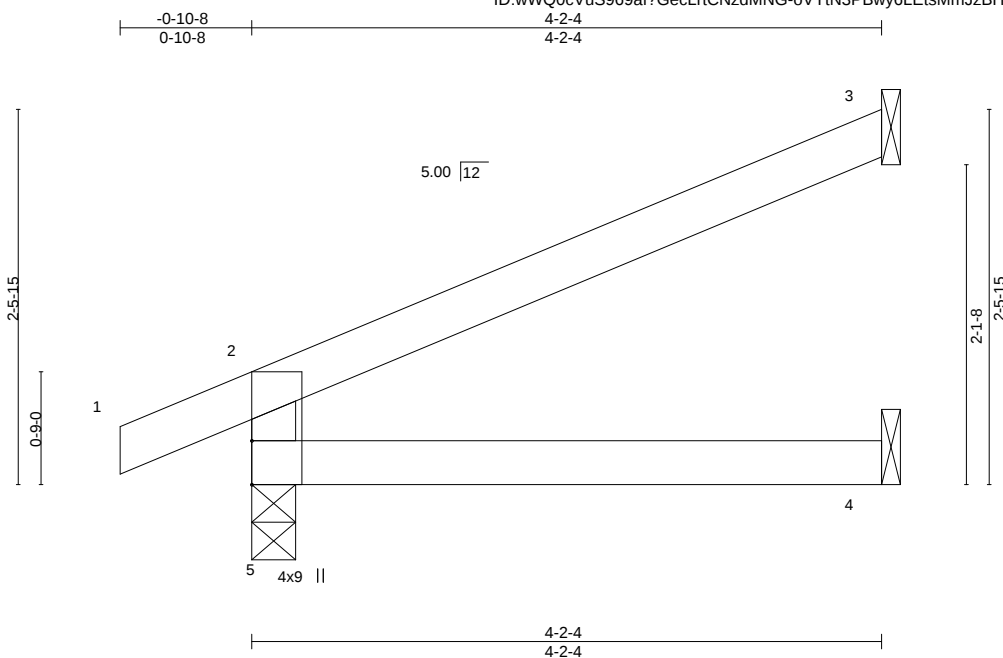
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578974
W2 50	J26	Jack-Open	7	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:26 2020 Page 1

ID: wWQ0cVuS969af?GecLrtCNzdMNG-oVYtN3PBwy6LEtsMmJzBHOQLSUDBDHVpiHzhrByKKIN



Scale = 1:15.3

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 0.23	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-4 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=53(LC 8)
Max Uplift 5=-7(LC 4), 3=-38(LC 8)
Max Grav 5=260(LC 1), 3=123(LC 1), 4=75(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 5 and 38 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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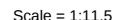
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:28 2020 Page 1

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TOP CHORD	Structural wood sheathing directly applied or 3-2-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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 62 lb uplift at joint 5 and 43 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11.2020



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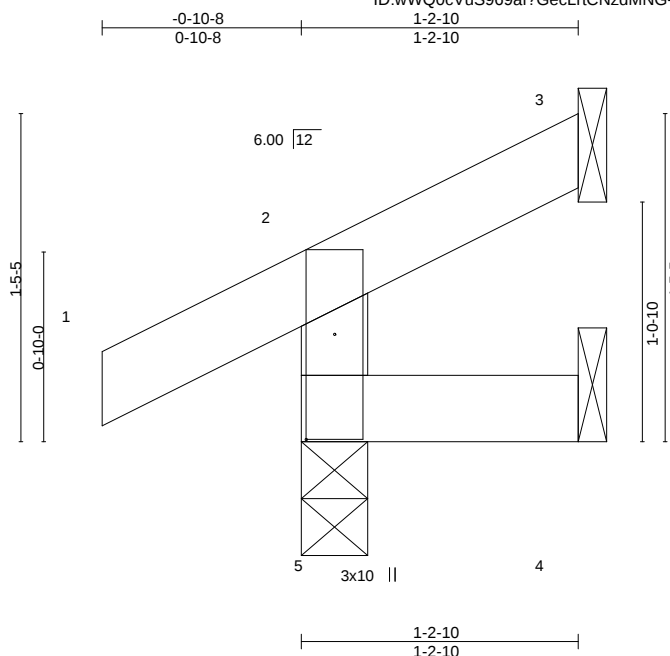
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578977
W2 50	J29	Jack-Open	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:28 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-kufeolRRSaM3TA?kuj?fnPwJPlwbl7?6AbSnn4yKkIL



Scale = 1:10.1

Plate Offsets (X,Y)--	[5:0-5-9,0-1-8]							PLATES	GRIP
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	MT20	197/144
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	5	>999		
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999		
								Weight: 5 lb	FT = 10%

LUMBER-

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 1-2-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=36(LC 5)
Max Uplift 5=23(LC 8), 3=18(LC 8), 4=2(LC 5)
Max Grav 5=154(LC 1), 3=12(LC 15), 4=18(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5, 18 lb uplift at joint 3 and 2 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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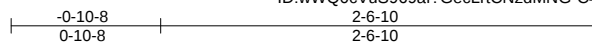
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578978
W2 50	J30	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:29 2020 Page 1

ID:WQ0cVuS969af?GecLrtCNzdMNG-C4D0?5S3DtUw5KaxRRWuv12u9hGPuaEFOFCLSWyKKIK



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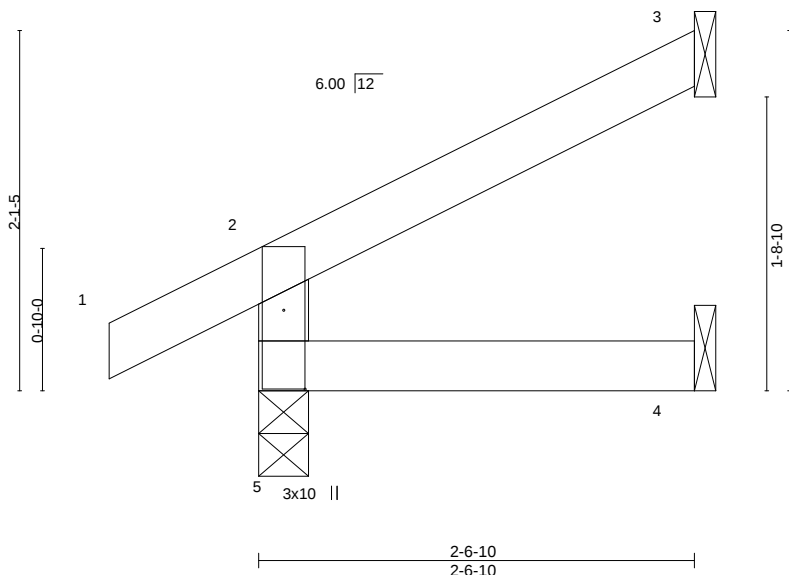


Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=57(LC 8)
Max Uplift 5=23(LC 8), 3=43(LC 8)
Max Grav 5=192(LC 1), 3=67(LC 1), 4=43(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 23 lb uplift at joint 5 and 43 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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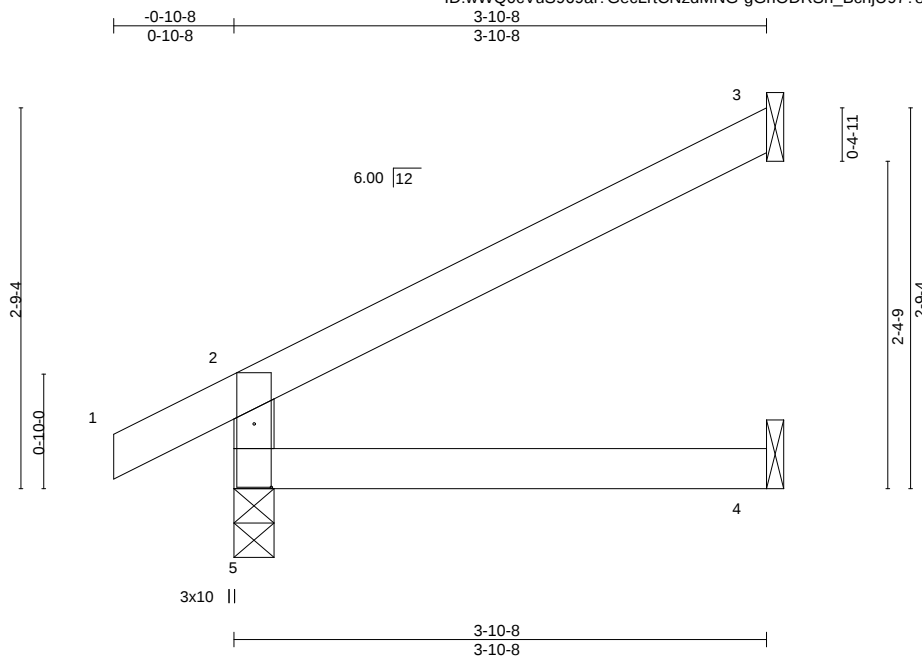
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578979
W2 50	J31	Jack-Open	9	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:30 2020 Page 1

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Scale = 1:16.8

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

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 0.19	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 26 lb uplift at joint 5 and 66 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578980
W2 50	J32	Jack-Open Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:30 2020 Page 1
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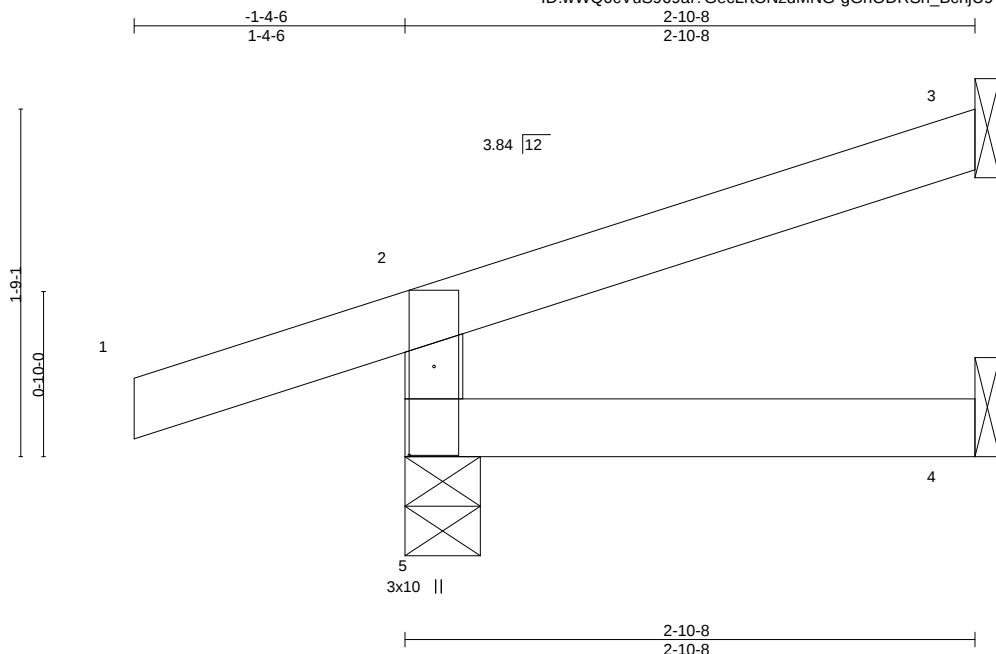


Plate Offsets (X,Y)--	[5:0-5-6,0-1-8]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.00 4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00 4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-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 2-10-8 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=65(LC 7)
Max Uplift 5=-106(LC 6), 3=-52(LC 12), 4=-5(LC 19)
Max Grav 5=112(LC 1), 3=29(LC 1), 4=34(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 5, 52 lb uplift at joint 3 and 5 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 25 lb down and 11 lb up at -1-4-6, and 25 lb down and 11 lb up at -1-4-6 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-36(F=-18, B=-18)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-2=-27(F=22, B=22), 2=-3(F=34, B=34)-to-3=-50(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)



November 11, 2020

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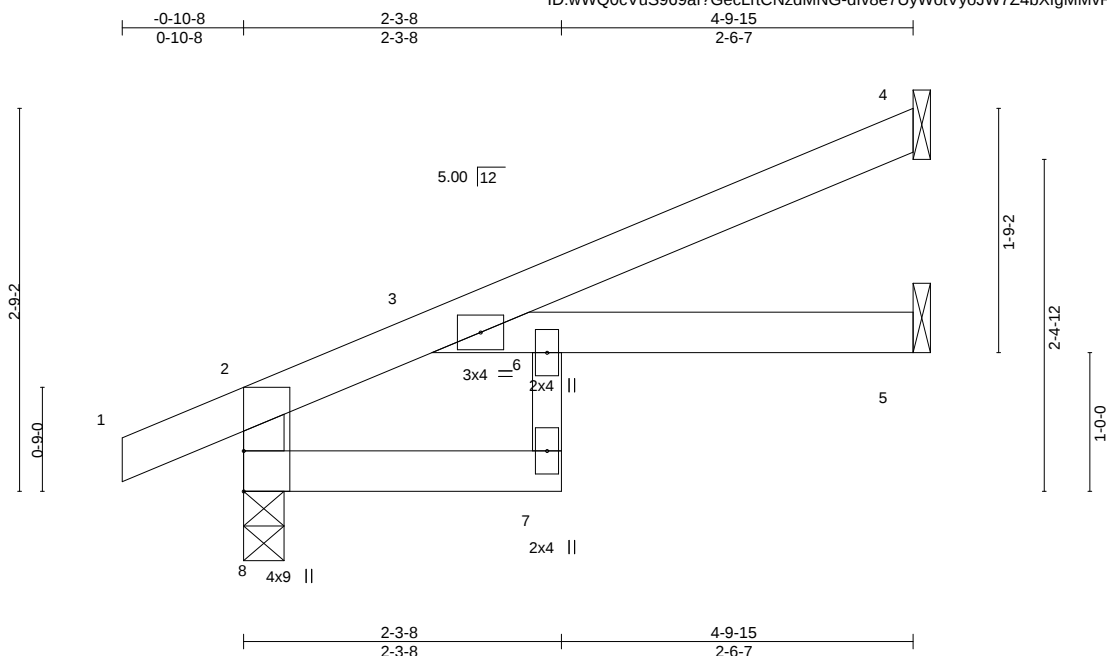
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578982
W2 50	J34	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:32 2020 Page 1

ID:WwQ0cVuS969af?GecLrtCNzdMNG-dfv8e7UyWotVyoJW7Z4bXfgMMvF2hxlh4DQ?3ryKKIH



Scale = 1:16.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.03	7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.06	6	>893	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.04	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.04	7	>999	240	Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=86(LC 8)
 Max Uplift 8=-33(LC 8), 4=-61(LC 8)
 Max Grav 8=298(LC 1), 4=134(LC 1), 5=89(LC 3)

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

TOP CHORD 2-8=-291/60

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 33 lb uplift at joint 8 and 61 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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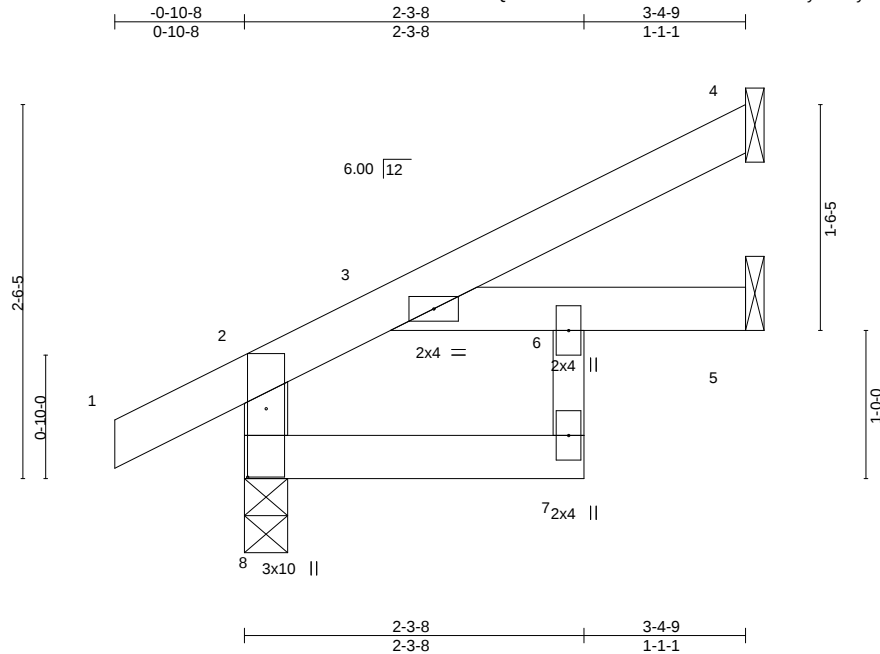
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578983
W2 50	J35	Jack-Open	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:32 2020 Page 1

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Scale = 1:15.6

Plate Offsets (X,Y)--	[8:0-5-9,0-1-8]								
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 0.11	Vert(LL)	-0.01	3	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	3-6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	-0.01	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01	3	>999	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=74(LC 8)
 Max Uplift 8=-16(LC 8), 4=-47(LC 8)
 Max Grav 8=239(LC 1), 4=90(LC 1), 5=73(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 8 and 47 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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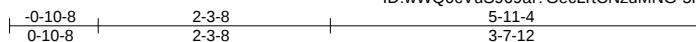


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578985
W2 50	J37	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:33 2020 Page 1
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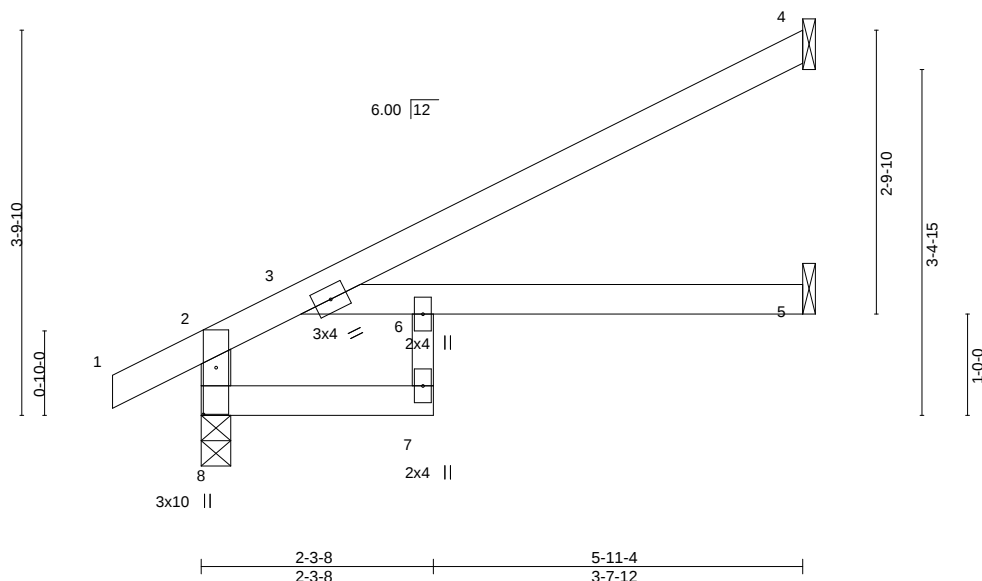


Plate Offsets (X,Y)-- [8:0-5-9,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.47	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.38	Vert(CT)	-0.14	5-6	>506	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.08	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06	5-6	>999	240	Weight: 18 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=89(LC 8)
Max Uplift 4=52(LC 8)
Max Grav 8=354(LC 1), 4=173(LC 1), 5=113(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-353/14

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 52 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578986
W2 50	J39	Jack-Open	4	1	Job Reference (optional)	

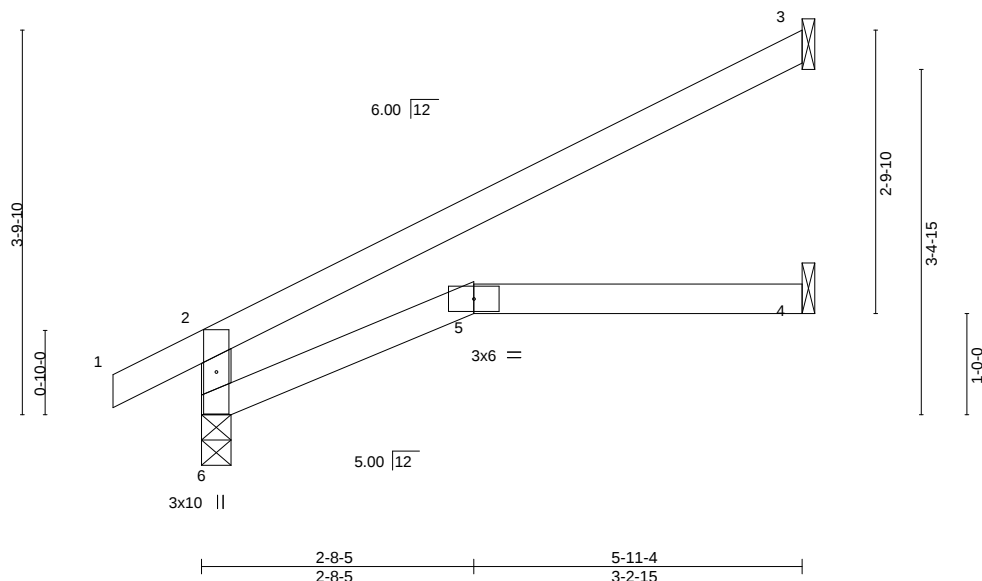
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:34 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-Z21v2oVC1Q7CC5TuE_63c4melivo9rU_YXv67jyKKIF



Scale = 1:22.8



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 0.53	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.12	4-5	>597	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	>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-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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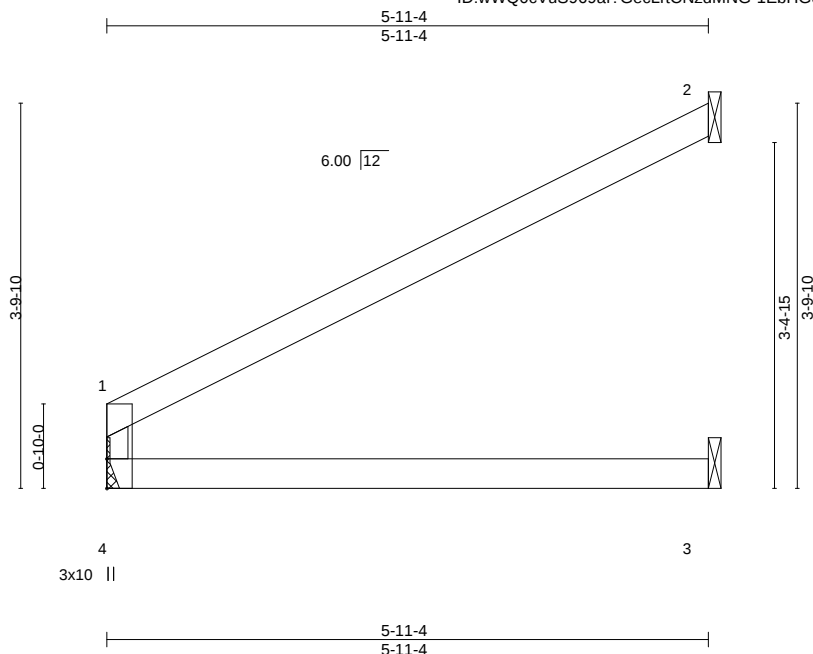


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578987
W2 50	J40	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:35 2020 Page 1
ID:WWQ0cVuS969af?GecLrtCNzdMNG-1EbHG8WqojF3pF25oidl9llpq6ELuik8nBfffAyKKIE



Scale = 1:22.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.05	3-4	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.12	3-4	>572	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.05	2	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.04	3-4	>999	240	
								Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

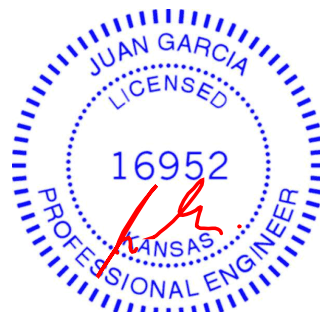
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=78(LC 8)
Max Uplift 2=62(LC 8)
Max Grav 4=260(LC 1), 2=188(LC 1), 3=111(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578988
W2 50	J41	GABLE	1	1	Job Reference (optional)	

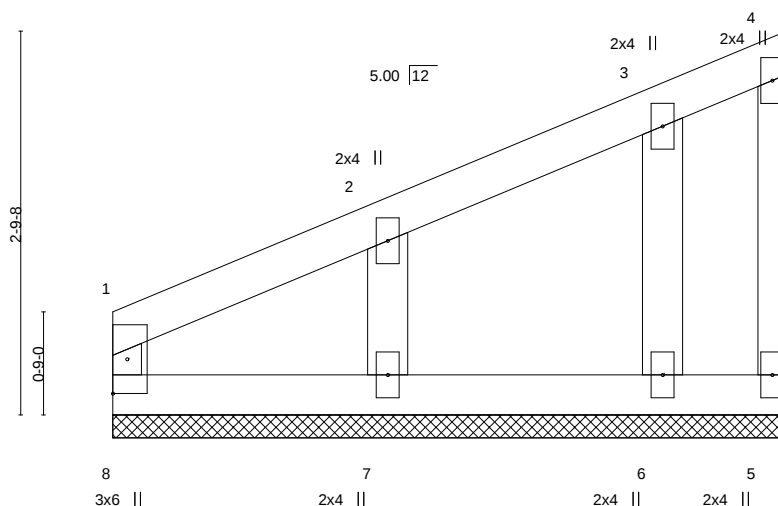
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:36 2020 Page 1

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4-10-13
4-10-13

Scale = 1:16.8



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 0.06	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-R						Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

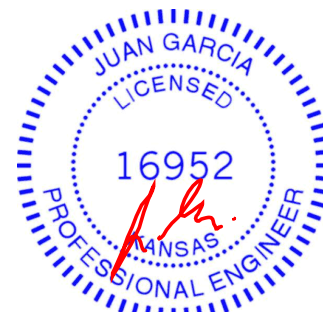
REACTIONS.

All bearings 4-10-13.
(lb) - Max Horz 8=104(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 5, 7, 6
Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

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

NOTES-

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



November 11, 2020

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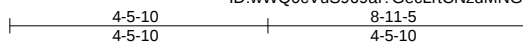
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578989
W2 50	LAY1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

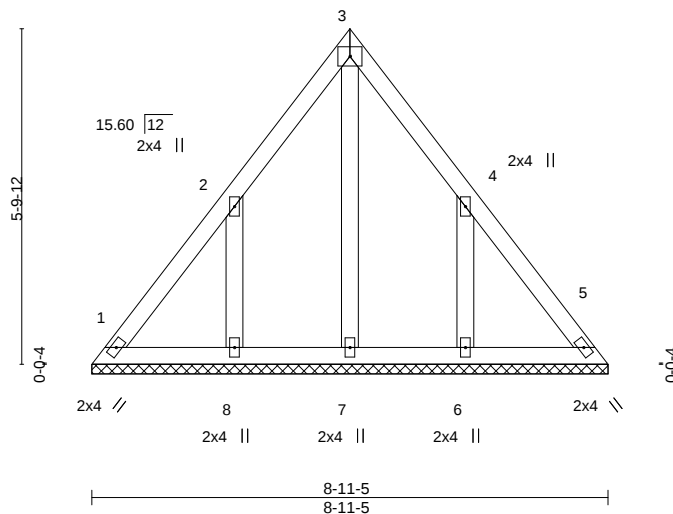
8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:40 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdmNG-OCOAJsazdGtMw0w2bFDTsL0mE707ZYCtwSMQLNyKKI9



4x5 =

Scale = 1:39.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 38 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 8-11-5.
(lb) - Max Horz 1=-153(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-223(LC 8), 6=-223(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=286(LC 15), 6=286(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-238/252, 4-6=-238/252

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=223, 6=223.
- This truss 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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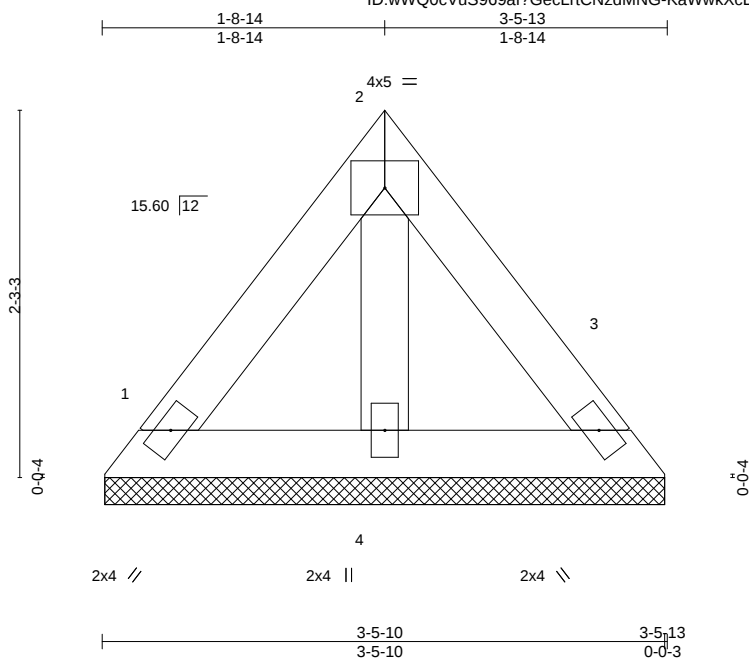
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578990
W2 50	LAY2	Lay-In Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:42 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-KaWwKxCd9t749K4RigFxm57Qxiq1SLAOmrXPGyKKI7



Scale = 1:14.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-5-7, 3=3-5-7, 4=3-5-7
Max Horz 1=-53(LC 6)
Max Uplift 1=-25(LC 9), 3=-21(LC 8)
Max Grav 1=84(LC 1), 3=84(LC 1), 4=92(LC 1)

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

NOTES-

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



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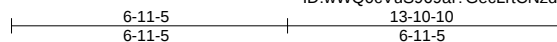
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578991
W2 50	LAY3	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

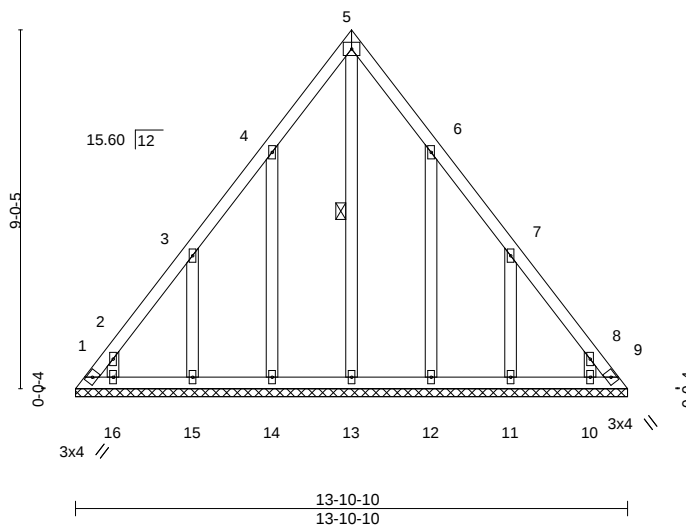
8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:43 2020 Page 1

ID:WWQ0cVuS969af?GecLrtCNzdMNG-on3JxtcrwBFxnUfdGNmAT_eHjL2hmrJcQb4yiyKKI6



4x5 =

Scale = 1:58.0



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 0.06	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 0.12	Horz(CT)	0.00	9	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
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

REACTIONS.

All bearings 13-10-10.
(lb) - Max Horz 1=-243(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-191(LC 6), 9=-158(LC 7), 14=-175(LC 8), 15=-178(LC 8),
16=-143(LC 8), 12=-173(LC 9), 11=-178(LC 9), 10=-142(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 13, 14, 15, 16, 12, 11, 10 except 1=323(LC 8), 9=302(LC 9)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-402/244, 2-3=-271/191, 8-9=-376/203

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 191 lb uplift at joint 1, 158 lb uplift at joint 9, 175 lb uplift at joint 14, 178 lb uplift at joint 15, 143 lb uplift at joint 16, 173 lb uplift at joint 12, 178 lb uplift at joint 11 and 142 lb uplift at joint 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.



November 11, 2020

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

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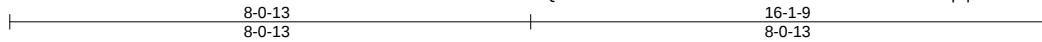
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578992
W2 50	LAY4	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

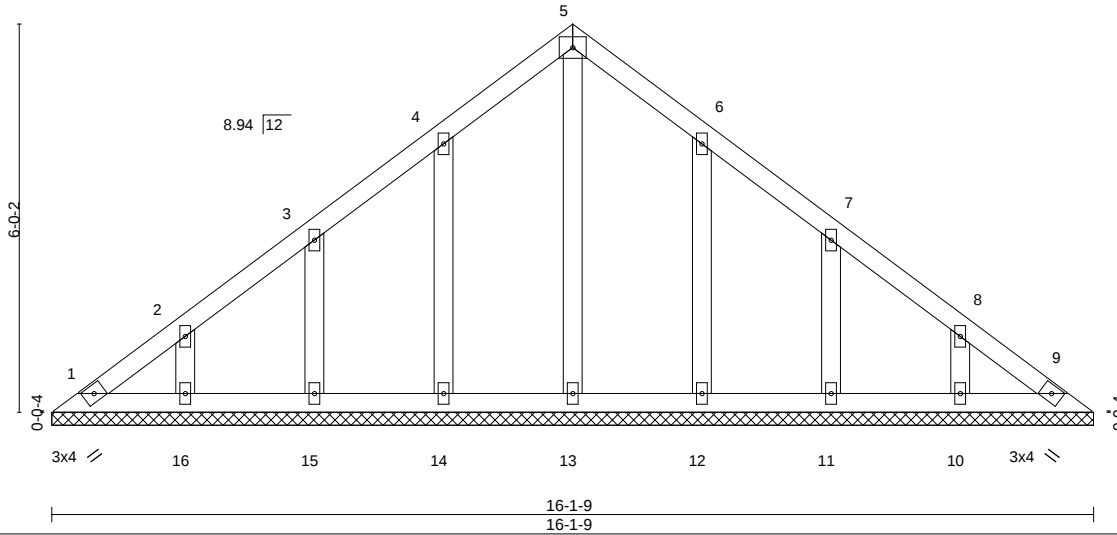
8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:44 2020 Page 1

ID:WVQ0cVuS969af?GecLrtCNzdMNG-GzdH9DdThUNoOeEpg5HP0BATmkODVLsSr4KeU8yKKI5



4x5 =

Scale = 1:35.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 63 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 16-1-9.
(lb) - Max Horz 1=-148(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 14, 15, 16, 12, 11, 10
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.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 14, 15, 16, 12, 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.



November 11, 2020

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

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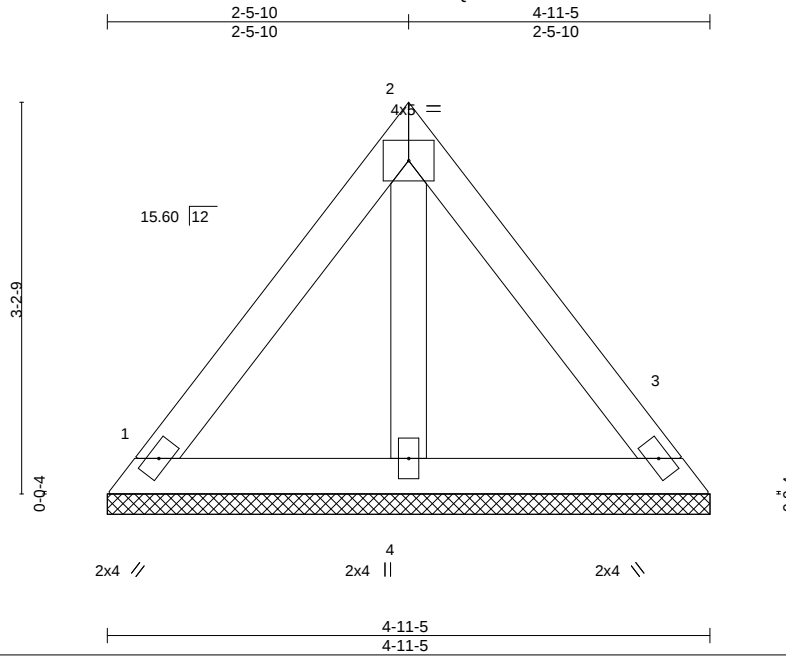
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	LAY5	GABLE	1	1	143578993
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:45 2020 Page 1

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Scale = 1:18.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	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 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-11-5, 3=4-11-5, 4=4-11-5
Max Horz 1=79(LC 5)
Max Uplift 1=-38(LC 9), 3=-31(LC 8)
Max Grav 1=127(LC 1), 3=127(LC 1), 4=138(LC 1)

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

NOTES-

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



November 11, 2020

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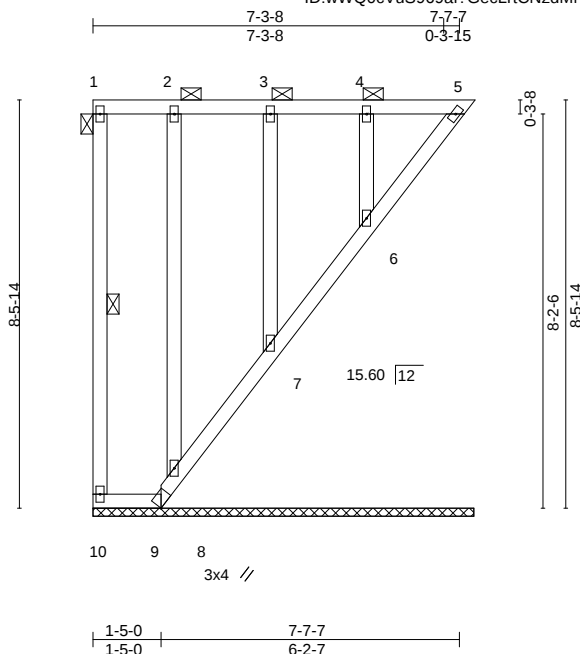
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2
W2 50	LAY6	GABLE	1	1	I43578994
Job Reference (optional)					

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:45 2020 Page 1

ID:WVQ0cVuS969af?GecLrtCNzdMNG-k9B3MZe5SoVf0np0NooeZPjXo8k7En2c4k4B0byKKI4



Scale: 1/4"=1'

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
									Weight: 48 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 7-11-1.
(lb) - Max Horz 10=-230(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 10, 8, 7, 6 except 5=-129(LC 5), 9=-190(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 10, 5, 9, 8, 7, 6

FORCES.

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 8, 7, 6 except (jt=lb) 5=129, 9=190.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 8, 7, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

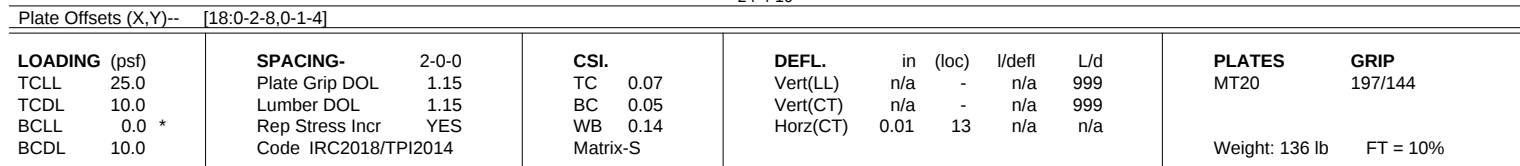
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:46 2020 Page 1
ID:wWQ0cVuS969af?GecLrCNzndMNG-CLIRavfkD6dWexOCxVKt5cFoyY3GzEDlIOpkY1yKKI3
12-2-5 24-4-10 12-2-5
4x5 = Scale = 1:67.9



REACTIONS. All bearings 24-4-10.
(lb) - Max Horz 1=-288(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 13, 21, 19 except 1=-115(LC 6), 22=-109(LC 8), 23=-104(LC 8),
24=-103(LC 8), 25=-112(LC 8), 17=-110(LC 9), 16=-104(LC 9), 15=-103(LC 9), 14=-112(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 21, 22, 23, 24, 25, 19, 17, 16, 15, 14 except
20=274(LC 9)

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

TOP CHORD 1-2=-369/239, 2-3=-265/199, 12-13=-317/162

BOT CHORD 1-25=-118/257, 24-25=-118/257, 23-24=-118/257, 22-23=-118/257, 21-22=-118/257,
20-21=-118/257, 19-20=-118/257, 17-19=-118/257, 16-17=-118/257, 15-16=-118/257,
14-15=-118/257, 13-14=-118/257

WEBS 7-20=-250/35

The seal of the State of Missouri is located in the top right corner. It is a circular emblem with a blue border containing the words "STATE OF MISSOURI" and two stars. In the center, there is a shield with a blue field containing a white anchor and a red field containing a white plow. Below the shield, the name "JUAN GARCIA" is written in blue capital letters.

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) 13, 21, 19 except (jt=lb) 1=115, 22=109, 23=104, 24=103, 25=112, 17=110, 16=104, 15=103, 14=112.
- 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.



November 11.2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578996
W2 50	LAY8	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber,
Waverly, KS - 66871,
8.420 s Oct 9 2020
MiTek Industries, Inc.
Wed Nov 11 07:17:47 2020
Page 1
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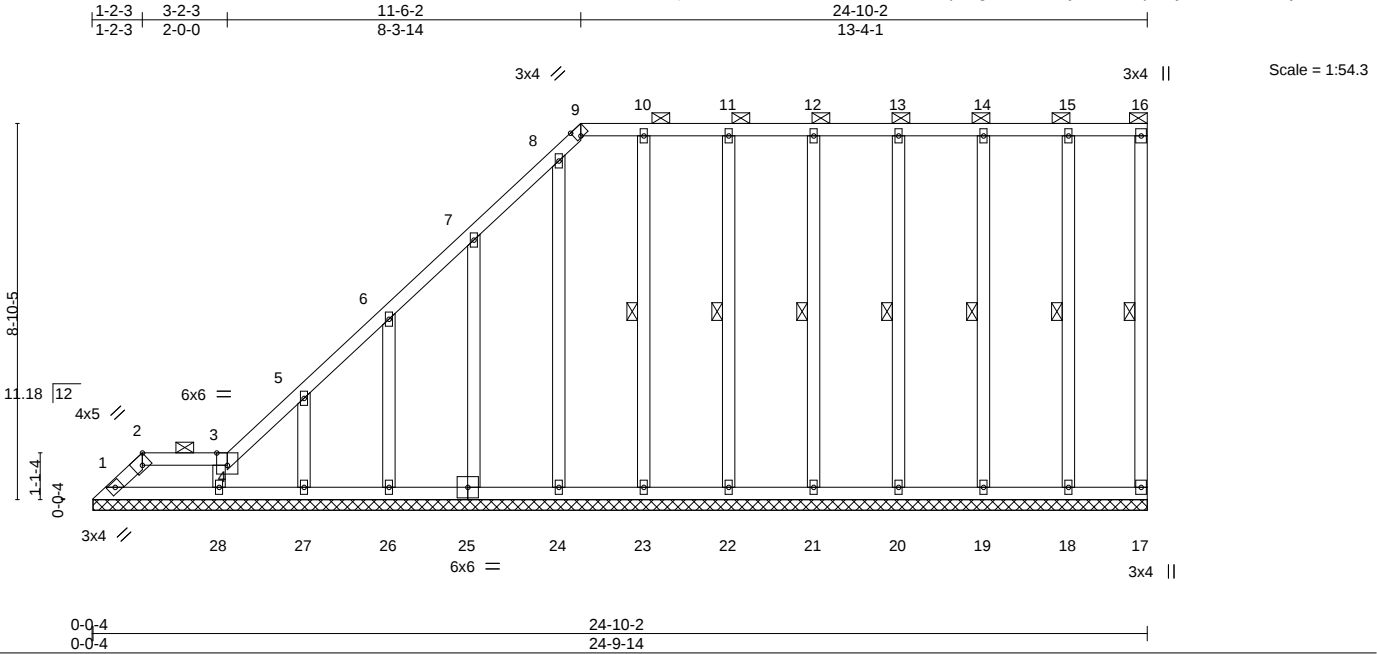


Plate Offsets (X,Y)--		[2:0-2-6,Edge], [4:0-3-0,Edge], [9:0-1-10,Edge]	
LOADING (psf)		SPACING-	
TCLL 25.0		2-0-0	
TCDL 10.0		Plate Grip DOL 1.15	
BCLL 0.0 *		Lumber DOL 1.15	
BCDL 10.0		Rep Stress Incr YES	
		Code IRC2018/TPI2014	
		CSI.	
		TC 0.33	
		BC 0.14	
		WB 0.18	
		Matrix-S	
		DEFL.	
		in (loc) l/defl L/d	
		Vert(LL) n/a - n/a 999	
		Vert(CT) n/a - n/a 999	
		Horz(CT) -0.00 17 n/a n/a	
		PLATES	
		MT20	
		GRIP	
		197/144	
		Weight: 150 lb	
		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	
BOT CHORD 2x4 SPF No.2			
WEBS 2x4 SPF No.2		BOT CHORD	
OTHERS 2x4 SPF No.2		WEBS	
		1 Row at midpt	
		16-17, 10-23, 11-22, 12-21, 13-20, 14-19, 15-18	

REACTIONS. All bearings 24-9-14.
 (lb) - Max Horz 1=341(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 17, 28, 27, 24, 23, 22, 21, 20, 19, 18 except 25=115(LC 8), 26=122(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 1, 17, 25, 28, 27, 26, 24, 23, 22, 21, 20, 19, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-251/158, 3-4=-251/158, 4-5=-297/198, 5-6=-276/182

- NOTES-**
 1) Unbalanced roof live loads have been considered for this design.
 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 3) 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) 1, 17, 28, 27, 24, 23, 22, 21, 20, 19, 18 except (jt=lb) 25=115, 26=122.
 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

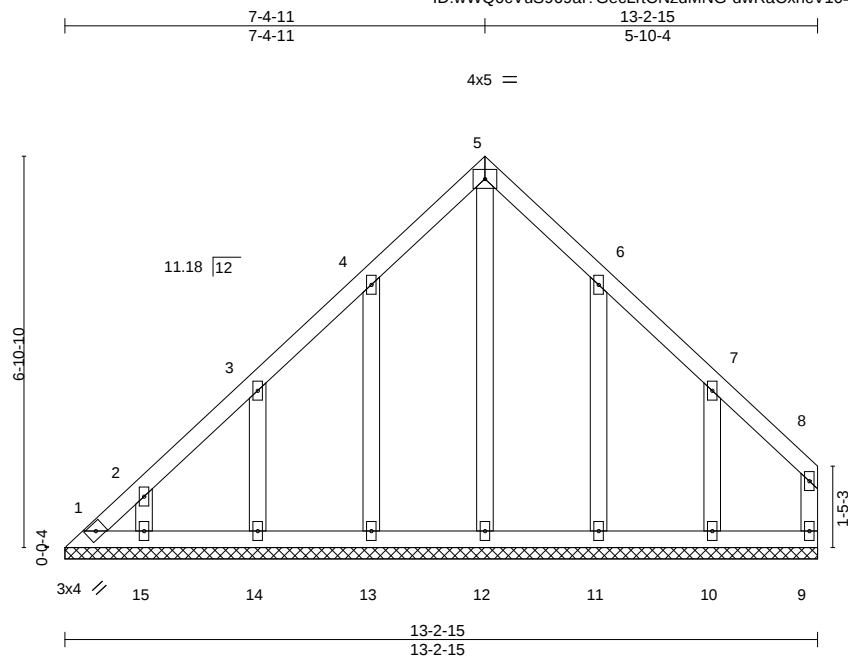


November 11,2020

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578997
W2 50	LAY9	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:49 2020 Page 1
ID:WVQ0cVuS969af?GecLrtCNzdMNG-dwRaCxhcV104VP6ncetajFtKJl5FABUB?M2P9MyKKl0



LOADING (psf)	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	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 61 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.

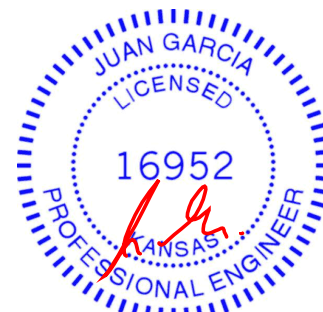
REACTIONS.

All bearings 13-2-15.
(lb) - Max Horz 1=188(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 9, 12, 15, 11 except 1=116(LC 6), 13=106(LC 8), 14=109(LC 8), 10=140(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 11, 10 except 12=259(LC 9)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 12, 15, 11 except (jt=lb) 1=116, 13=106, 14=109, 10=140.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578998
W2 50	LAY10	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:40 2020 Page 1
ID:WWQ0cVuS969af?GecLrtCNzdmNG-OCOAJsazdGtMw0w2bFDTSL0mR70nZYFtwSMQLNyKKI9

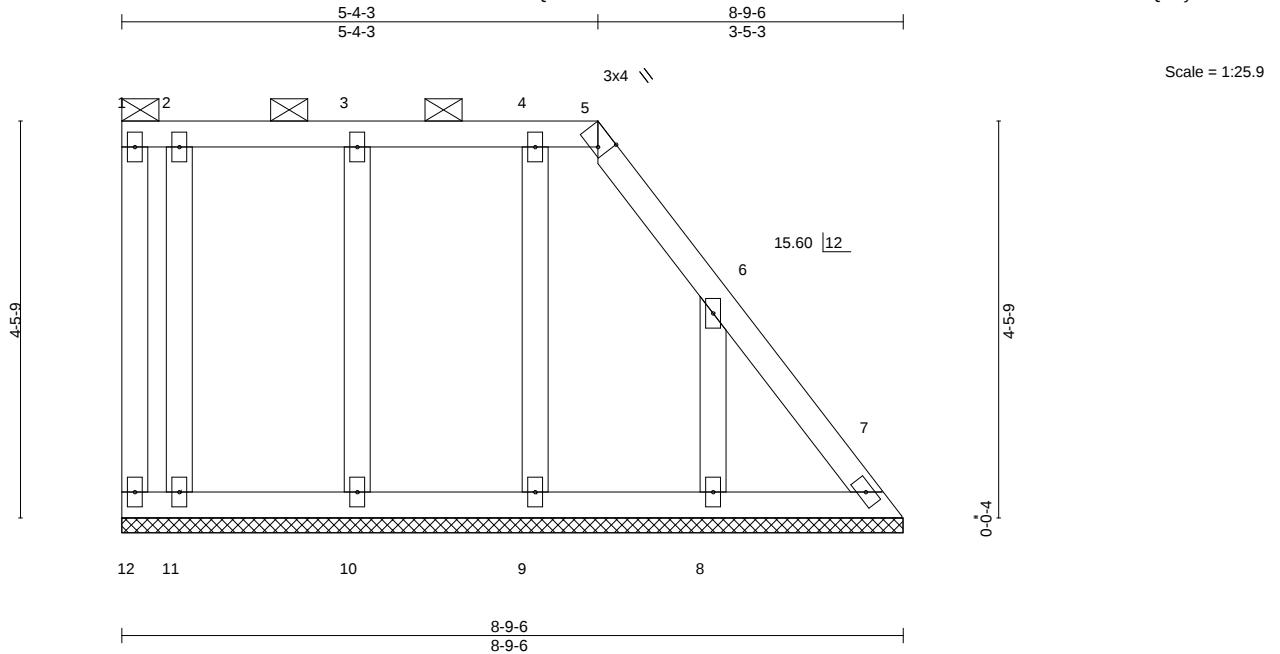


Plate Offsets (X,Y)--		[5:0-1-4,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.07		Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.06		Vert(CT)	n/a	-	n/a		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.05		Horz(CT)	0.00	7	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S						Weight: 42 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.): 1-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 8-9-6.
(lb) - Max Horz 12=-165(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 12, 7, 11, 10, 9 except 8=-165(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 12, 7, 11, 10, 9, 8

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 7, 11, 10, 9 except (jt=lb) 8=165.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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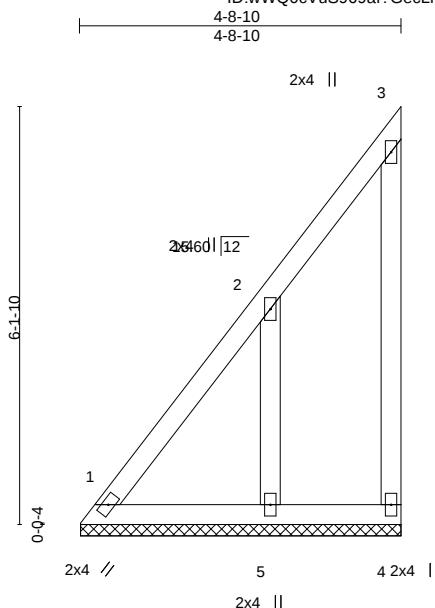
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43578999
W2 50	LAY11	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:42 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-KaWwkXcD9t749K4RigFxxm54axiT1SkAOmrXPGyKKI7



Scale = 1:33.8

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 0.22	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 23 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 4-8-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-8-7, 4=4-8-7, 5=4-8-7

Max Horz 1=220(LC 5)
Max Uplift 1=-77(LC 4), 4=-97(LC 7), 5=-231(LC 8)
Max Grav 1=194(LC 7), 4=98(LC 4), 5=304(LC 15)

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

WEBS 2-5=-249/264

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=231.
- 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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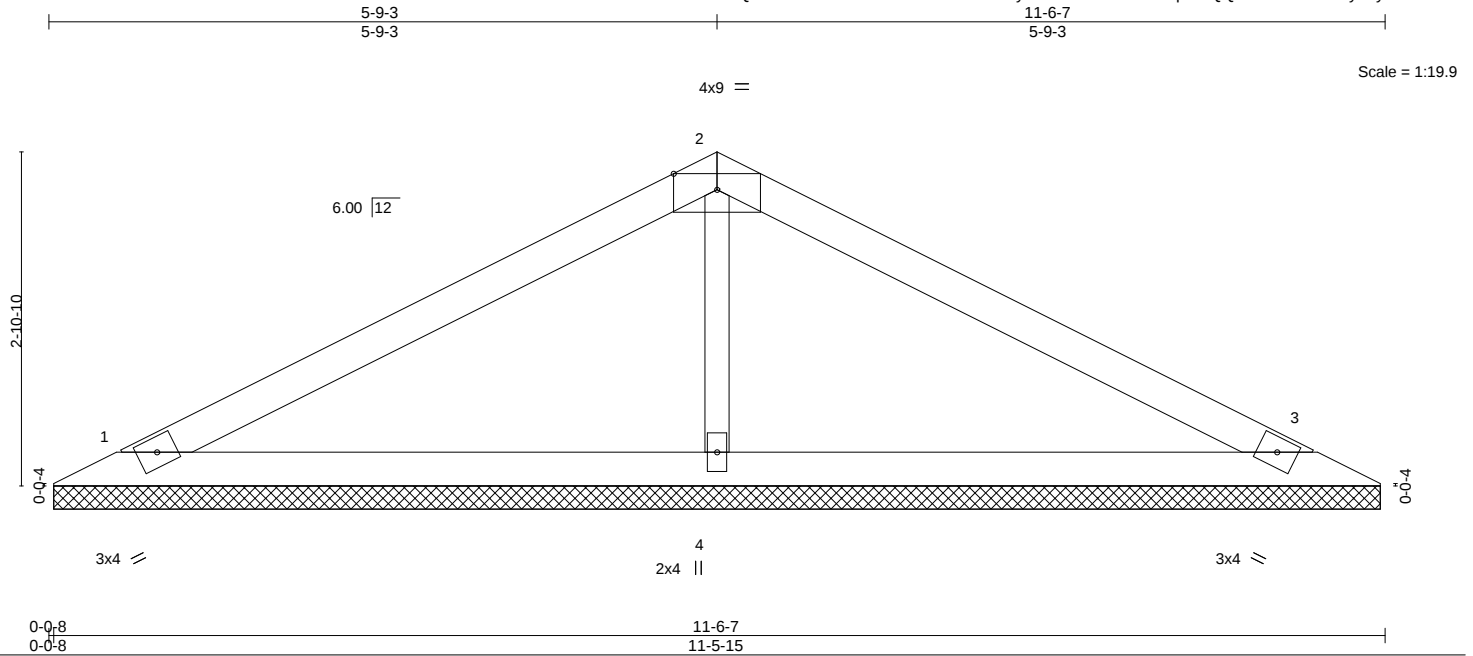
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579000
W2 50	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:50 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-57?yPGiEGK8x6ZhzALopGSQQ99OYv3GLD0nyhoyKKI?



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	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: 28 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=11-5-7, 3=11-5-7, 4=11-5-7
Max Horz 1=45(LC 8)
Max Uplift 1=44(LC 8), 3=53(LC 9), 4=27(LC 8)
Max Grav 1=218(LC 21), 3=218(LC 22), 4=491(LC 1)

FORCES.

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

WEBS

2-4=-335/88

NOTES-

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



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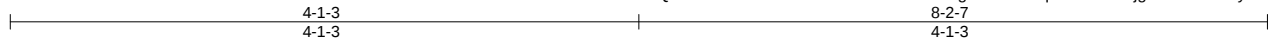
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579001
W2 50	V2	Valley	1	1	Job Reference (optional)	

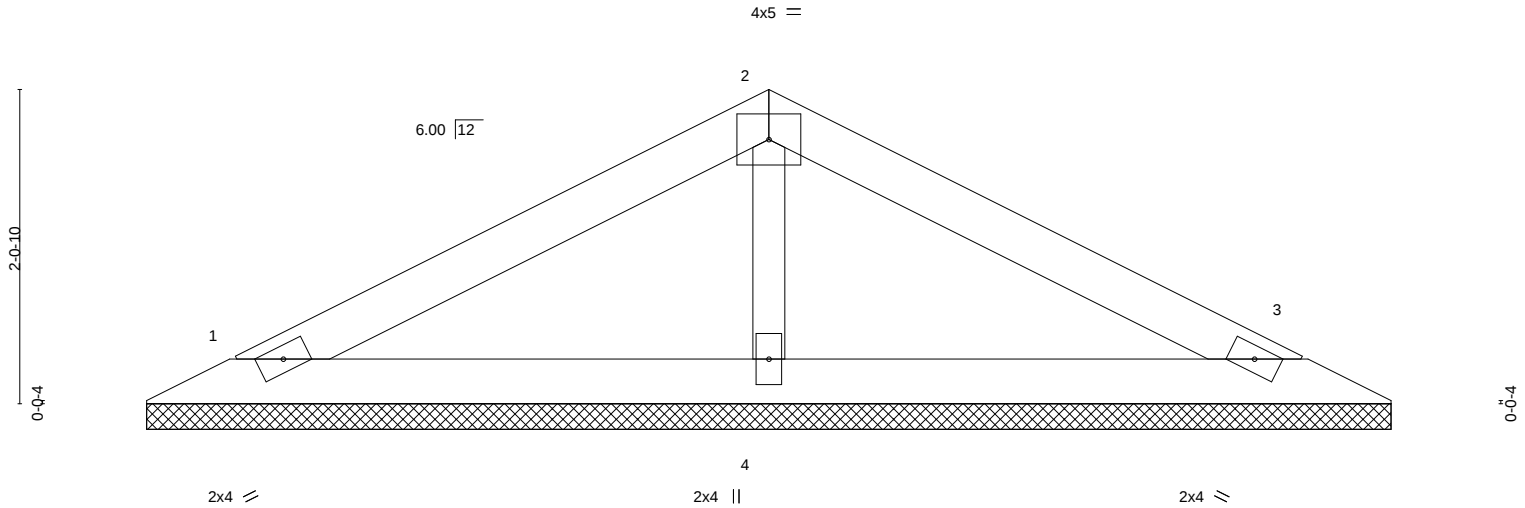
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:56 2020 Page 1

ID: wWQ0cVuS969af?GecLrtCNzdMNG-wHMDgKm?sAu5qU87XcVDVjgT0aToJnlDcyEGuSyKKHv



Scale = 1:15.0



0-0-8				8-2-7									
0-0-8				8-1-15									
LOADING	(psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0		Plate Grip DOL	1.15	TC	0.22	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	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0		Code IRC2018/TPI2014		Matrix-P							Weight: 19 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=8-1-7, 3=8-1-7, 4=8-1-7
Max Horz 1=31(LC 8)
Max Uplift 1=-37(LC 8), 3=-43(LC 9), 4=-4(LC 8)
Max Grav 1=163(LC 1), 3=163(LC 1), 4=299(LC 1)

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

NOTES-

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



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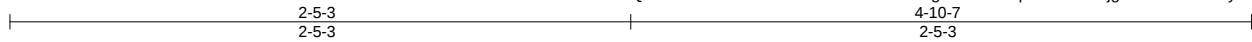
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579002
W2 50	V3	Valley	1	1	Job Reference (optional)	

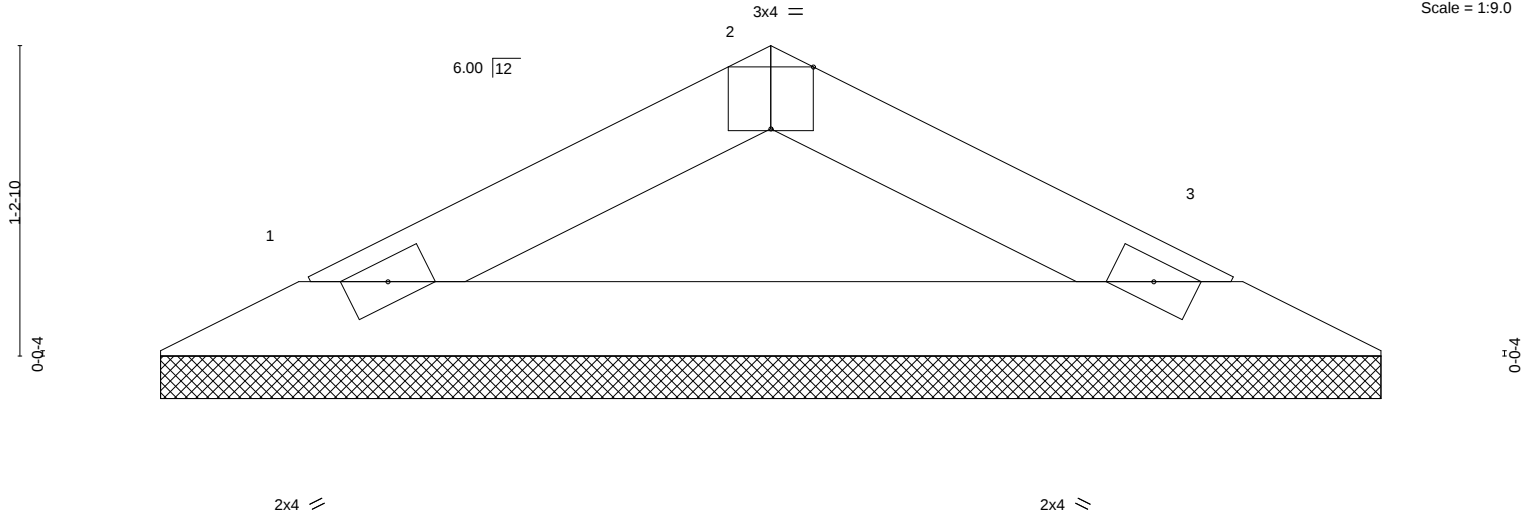
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:56 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-wHMDgKm?sAu5qU87XcVDVjgWcaSGJnwDcyEGuSyKKHv



Scale = 1:9.0



0-0-8						4-10-7						
0-0-8						4-9-15						
Plate Offsets (X,Y)--		[2:0-2-0,Edge]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-9-7, 3=4-9-7
Max Horz 1=16(LC 12)
Max Uplift 1=-20(LC 8), 3=-20(LC 9)
Max Grav 1=162(LC 1), 3=162(LC 1)

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

NOTES-

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



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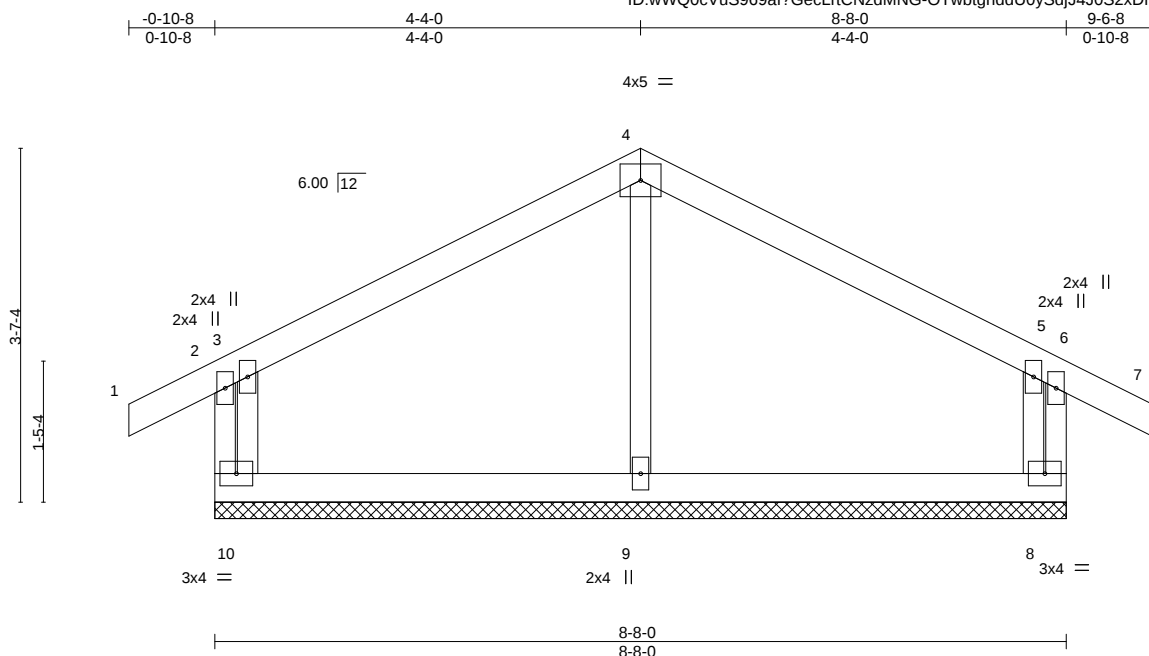
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579003
W2 50	V4	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:57 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-OTwbtgnddU0ySdjJ4J0S2x2K_oX2DANqc_qQuyKKHu



Scale = 1:23.5

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)	0.01	7	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	0.01	7	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 29 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

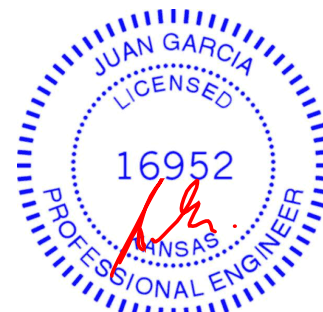
(size) 10=8-8-0, 8=8-8-0, 9=8-8-0
Max Horz 10=-79(LC 6)
Max Uplift 10=-97(LC 8), 8=-97(LC 9)
Max Grav 10=297(LC 1), 8=297(LC 1), 9=300(LC 1)

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

WEBS 3-10=-359/153, 5-8=-359/153

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579004
W2 50	V5	Valley	1	1	Job Reference (optional)	

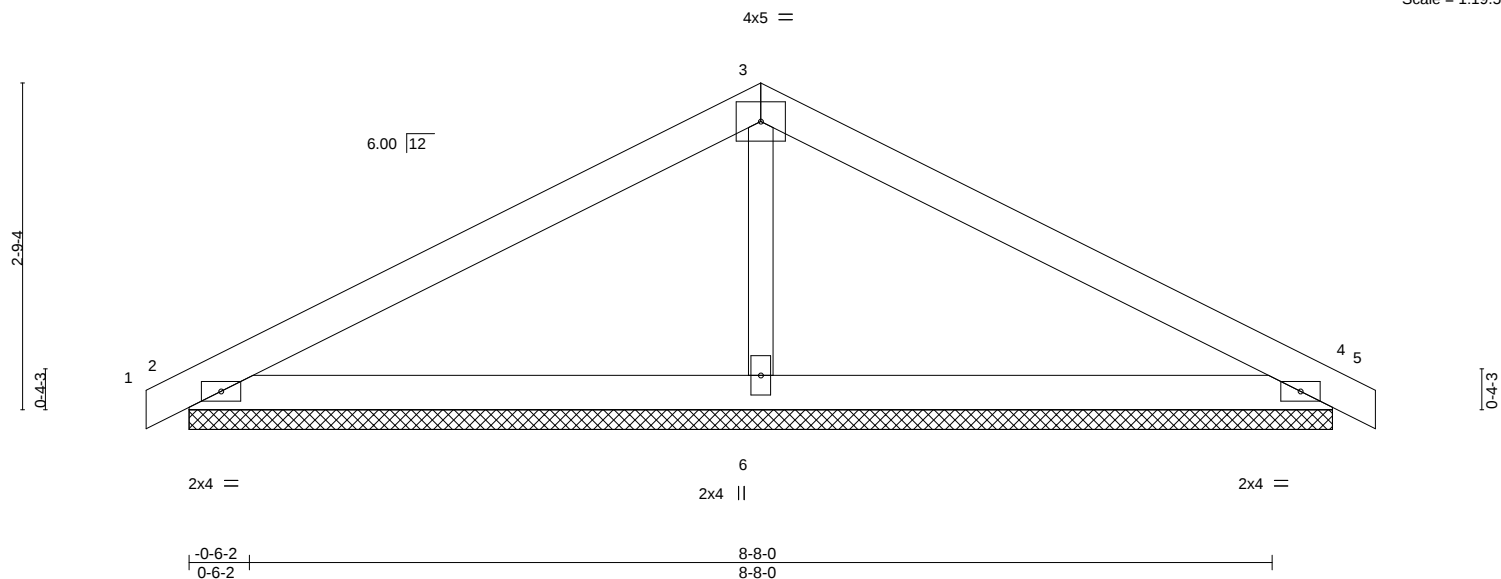
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:58 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-sfTz50oFOo8p4nlVe1Xha8lmyO7mnhRW3GjNyKyKKHt

-0-10-8	4-4-0	8-8-0	9-6-8
0-10-8	4-4-0	4-4-0	0-10-8

Scale = 1:19.5



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 0.45	Vert(LL)	0.02	5	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	0.03	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 26 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.

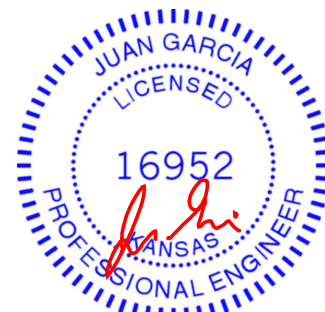
(size) 2=9-8-4, 4=9-8-4, 6=9-8-4
Max Horz 2=46(LC 12)
Max Uplift 2=61(LC 8), 4=70(LC 9), 6=4(LC 8)
Max Grav 2=254(LC 1), 4=254(LC 1), 6=414(LC 1)

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

WEBS 3-6=-293/76

NOTES-

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



November 11, 2020

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

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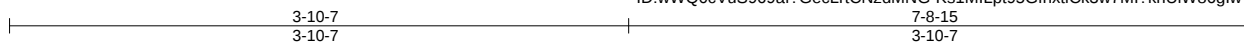
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579005
W2 50	V6	Valley	1	1	Job Reference (optional)	

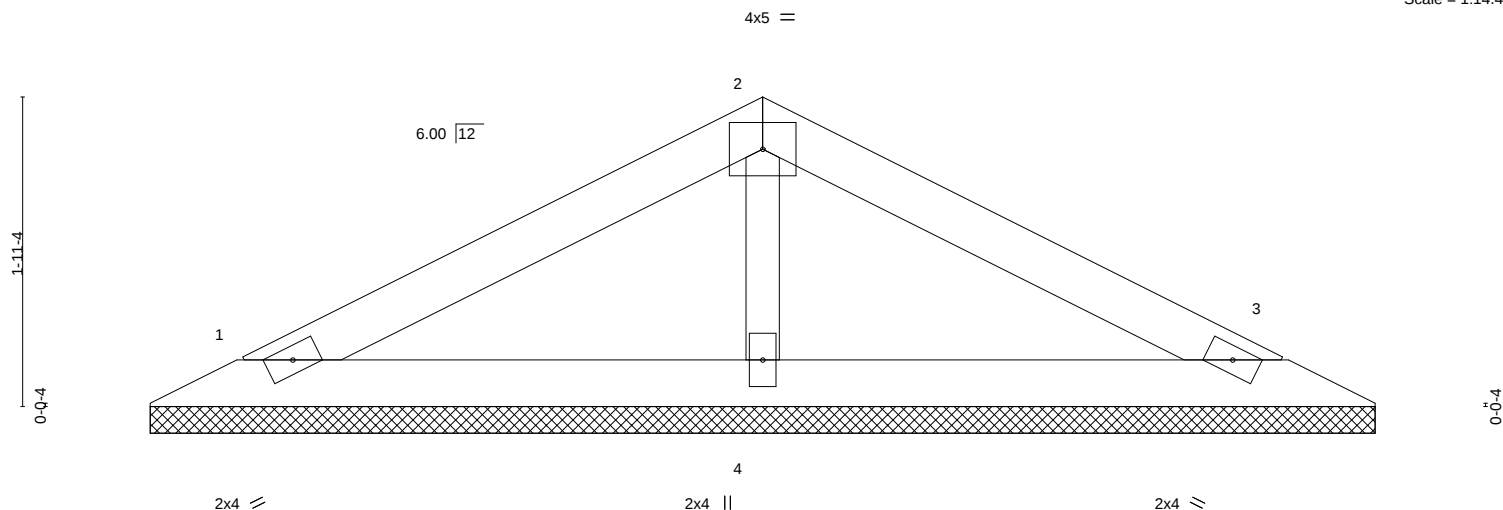
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:59 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-Ks1MILpt95GfhxtiCk3w7MI?knUiW86glwTwVnyKKHs



Scale = 1:14.4



0-0-8				7-8-15						
0-0-8				7-8-7						
LOADING (psf)		SPACING- 2-0-0		CSI.		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 0.04		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=7-7-15, 3=7-7-15, 4=7-7-15
Max Horz 1=29(LC 12)
Max Uplift 1=35(LC 8), 3=40(LC 9), 4=40(LC 8)
Max Grav 1=152(LC 1), 3=152(LC 1), 4=279(LC 1)

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

NOTES-

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



November 11, 2020

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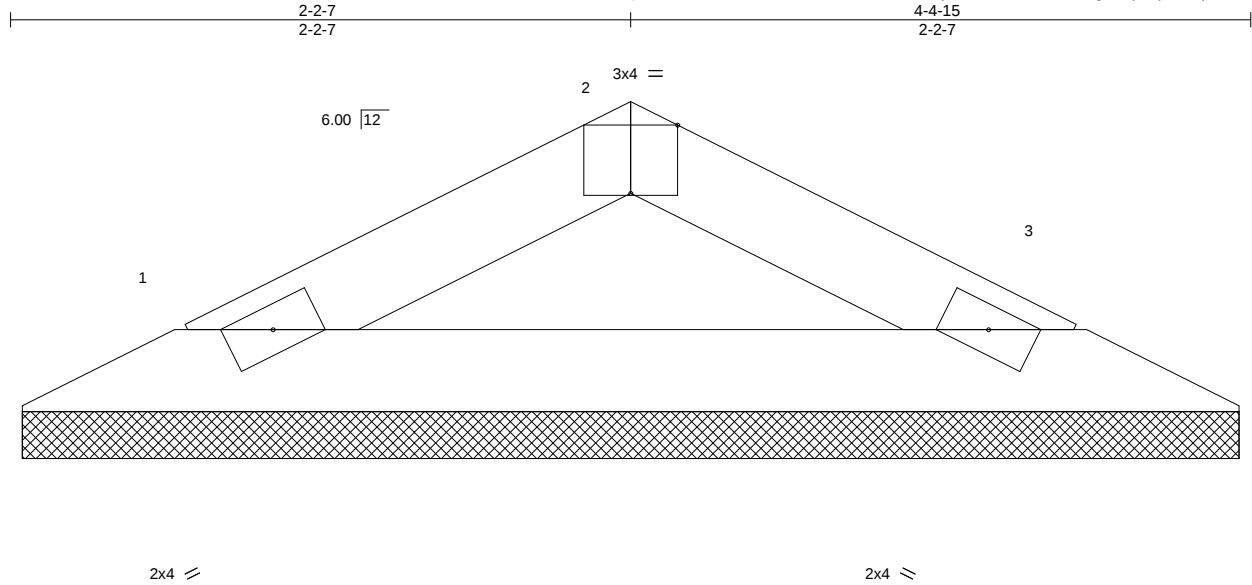
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579006
W2 50	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:18:00 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdmNG-o2bkWhqWwPOWJ5SumSa9gZrCpBqkFbwpWaCU1DyKKHr



Scale = 1:8.2

Plate Offsets (X,Y)--		[2:0-2:0,Edge]		4-4-15		4-4-7	
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P			
						PLATES	
						MT20	
						GRIP	
						197/144	
						Weight: 9 lb	
						FT = 10%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

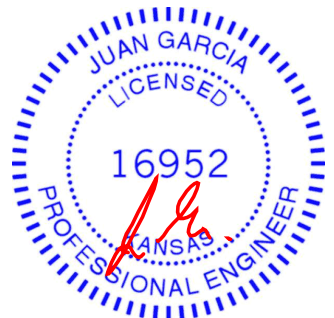
REACTIONS.

(size) 1=4-3-15, 3=4-3-15
Max Horz 1=14(LC 12)
Max Uplift 1=-18(LC 8), 3=-18(LC 9)
Max Grav 1=142(LC 1), 3=142(LC 1)

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

NOTES-

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



November 11, 2020

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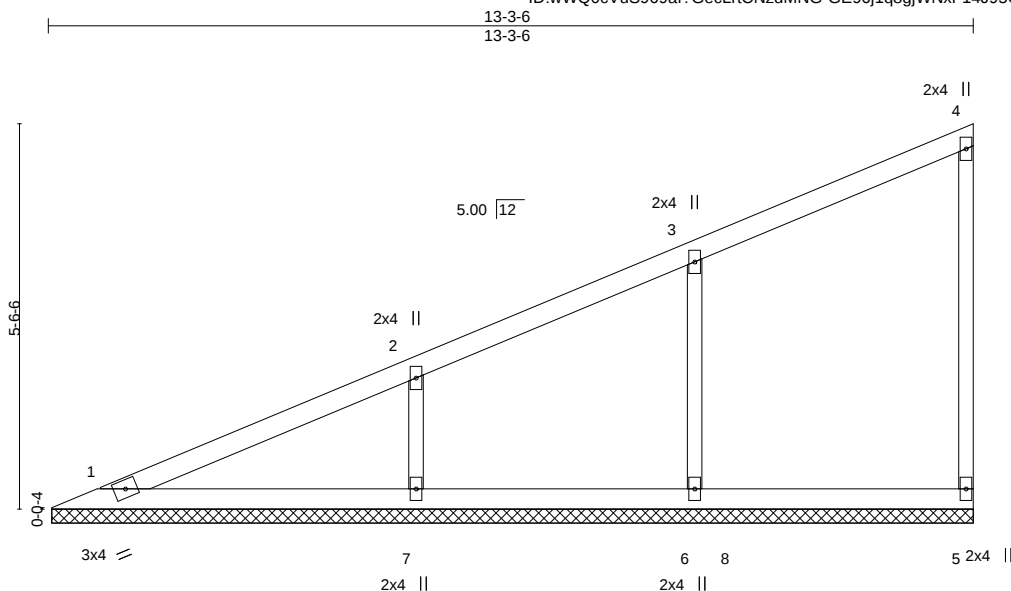
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579007
W2 50	V8	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:18:01 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-GE96j1q8gjWNxF14J95OCnNKGb9H_1dzIEy1ZfyKKHq



LOADING (psf)	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)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 39 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-2-12.
(lb) - Max Horz 1=227(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-116(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=408(LC 2), 7=443(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-291/141, 2-7=-329/168

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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=116.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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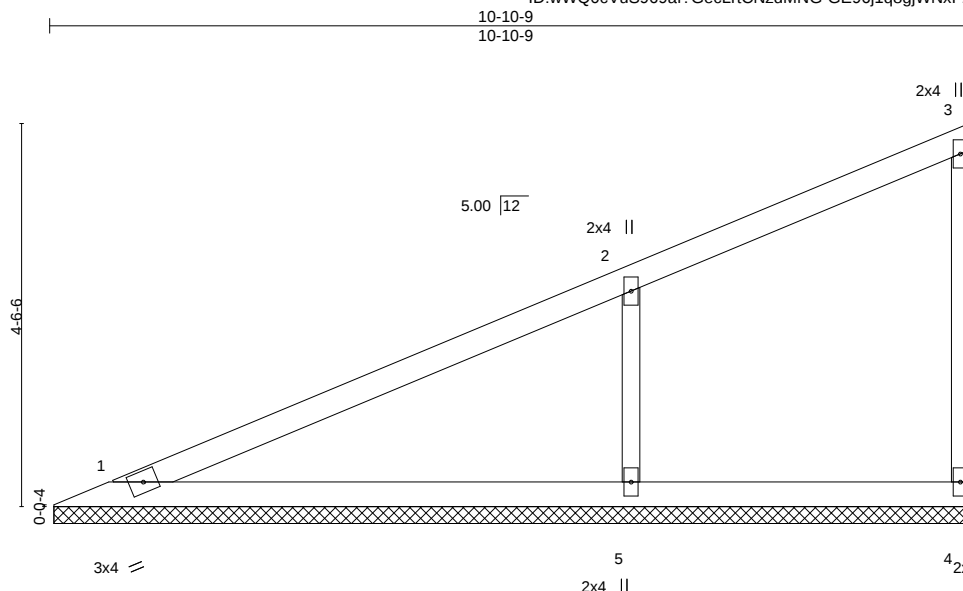
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579008
W2 50	V9	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:18:01 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-GE96j1q8gjWNxF14J95OCnNGob8a_1czIEy1ZfyKKHq



Scale = 1:27.3

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 0.47	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 30 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

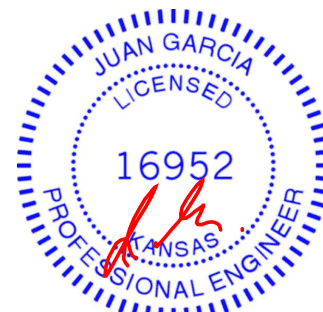
(size) 1=10-9-15, 4=10-9-15, 5=10-9-15
Max Horz 1=183(LC 5)
Max Uplift 1=-5(LC 8), 4=-23(LC 5), 5=-156(LC 8)
Max Grav 1=223(LC 1), 4=93(LC 1), 5=586(LC 1)

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

WEBS 2-5=-441/215

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=156.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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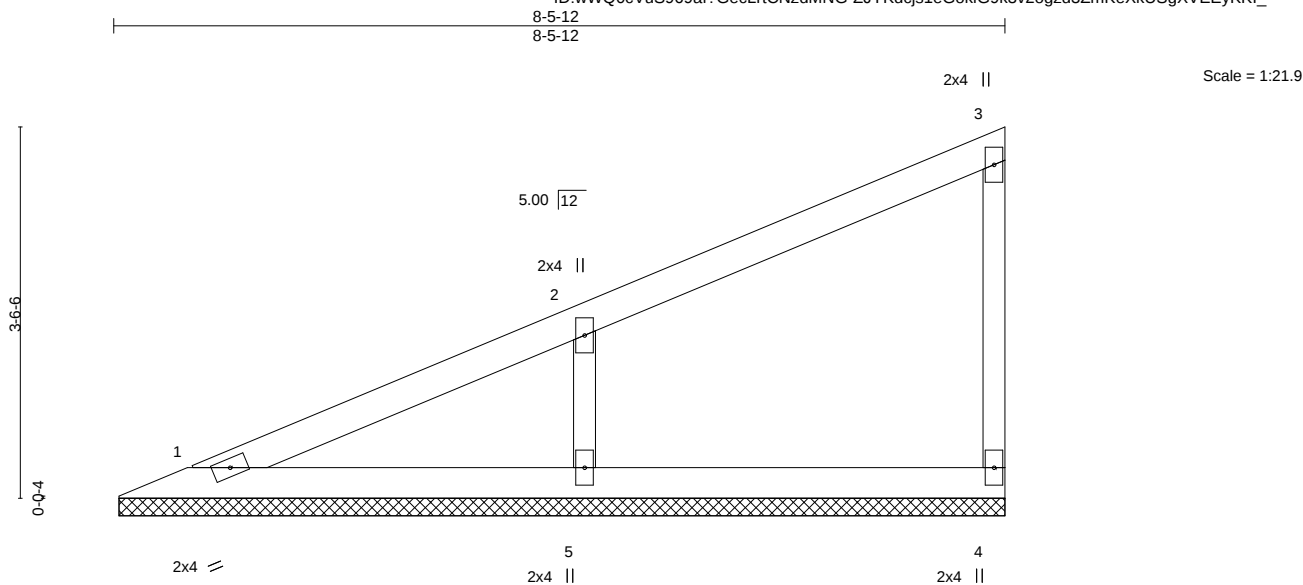
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579009
W2 50	V10	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:51 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-ZJYKdcjs1eGokiG9k3v2ogzd3ZmKeXkUSgXVEEyKKI_



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 23 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=8-5-2, 4=8-5-2, 5=8-5-2
Max Horz 1=139(LC 5)
Max Uplift 4=-23(LC 5), 5=-114(LC 8)
Max Grav 1=124(LC 1), 4=134(LC 1), 5=428(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-333/171

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=114.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579011
W2 50	V12	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

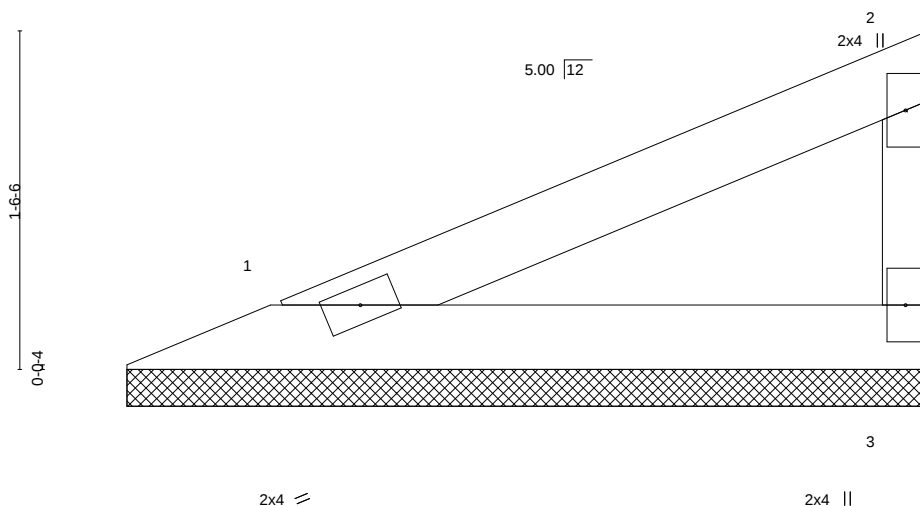
8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:52 2020 Page 1

ID:WQ0cVuS969af?GecLrtCNzdmNG-1V6iqyUoyOfMsrMImRHLtVoHz5HN_xehKG3lhyKKHz

3-8-2

3-8-2

Scale = 1:10.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 9 lb	FT = 10%

LUMBER-

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

REACTIONS. (size) 1=3-7-9, 3=3-7-9
Max Horz 1=52(LC 5)
Max Uplift 1=-18(LC 8), 3=-29(LC 8)
Max Grav 1=127(LC 1), 3=127(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.



November 11, 2020

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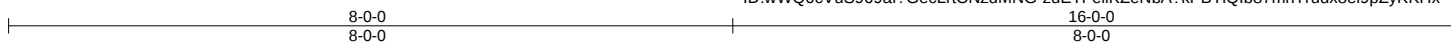
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579013
W2 50	V14	Valley	1	1	Job Reference (optional)	

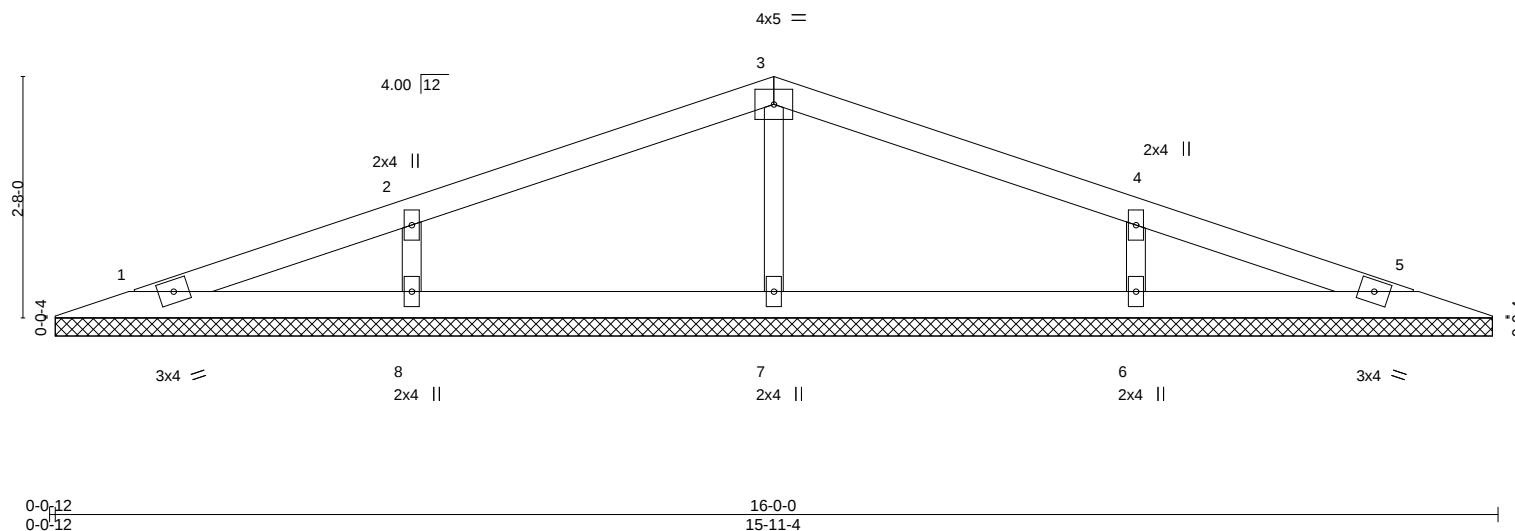
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:54 2020 Page 1

ID:WWQ0cVuS969af?GecLrtCNzdMNG-zuETfElKZeNbA?kPBTlQlb87mnTrudx8el9pZyKKHx



Scale = 1:25.5



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 0.09		Vert(CT) n/a - n/a 999			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.05		Horz(CT) 0.00 5 n/a n/a			
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S				Weight: 38 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15-10-8.
(lb) - Max Horz 1=42(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=324(LC 1), 8=378(LC 21), 6=378(LC 22)

FORCES.

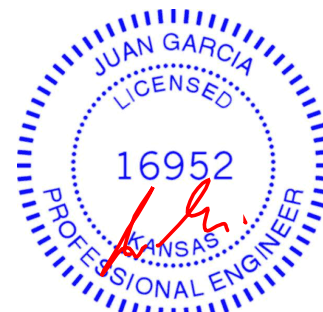
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS

2-8=-297/139, 4-6=-297/139

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7, 8, 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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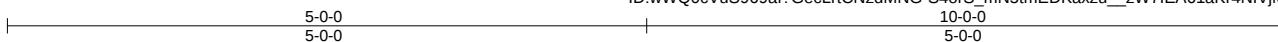
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 50 W2	I43579014
W2 50	V15	Valley	1	1	Job Reference (optional)	

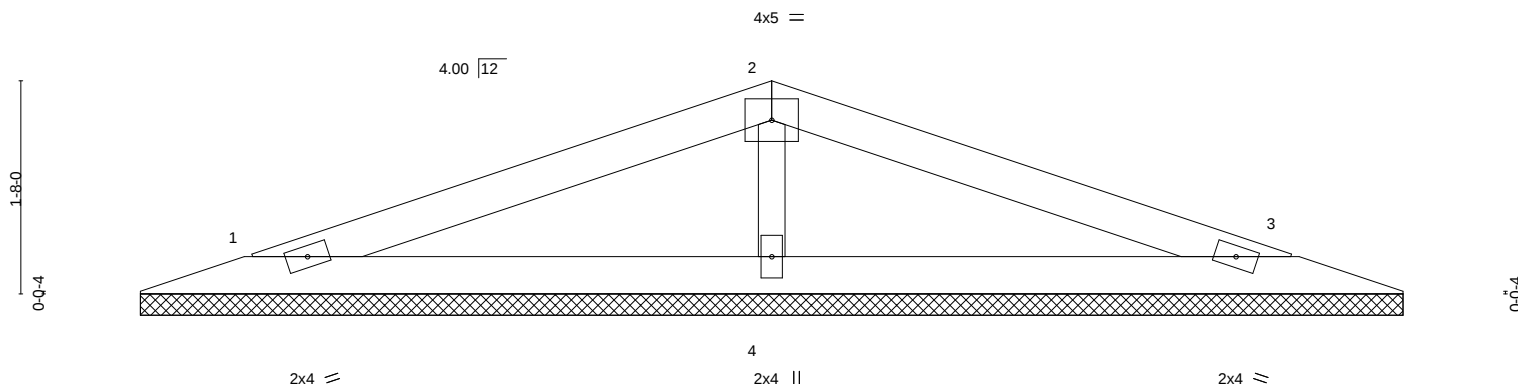
Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 11 07:17:55 2020 Page 1

ID:WVQ0cVuS969af?GecLrCNzdMNG-S4orS_mN5tmEDKaxzu__zW7IEA61aKr4NIVJM?yKKhW



Scale = 1:18.0



										9-11-4		10-0-0	
										9-11-4		0-0-12	
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 0.22		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 0.05		Horz(CT) 0.00 3 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 22 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=9-10-8, 3=9-10-8, 4=9-10-8
Max Horz 1=24(LC 12)
Max Uplift 1=-35(LC 4), 3=-38(LC 9), 4=-38(LC 4)
Max Grav 1=164(LC 21), 3=164(LC 22), 4=413(LC 1)

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

WEBS 2-4=-291/86

NOTES-

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



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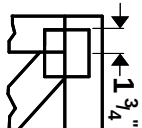
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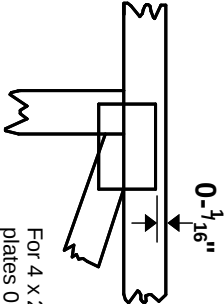
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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- $\frac{1}{16}$ " from outside edge of truss.

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

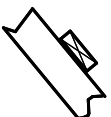
*** Plate location details available in MITek 20120 software or upon request.**

PLATE SIZE

4 X 4

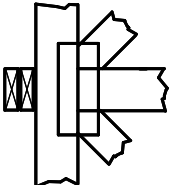
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



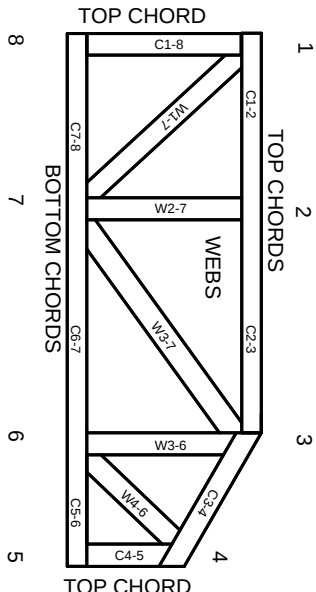
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.