RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/05/2021

RE: 210289
Lot 89 W0

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

Site Information:

Customer: Project Name: 210289
Lot/Block: Model:
Address: Subdivision:
City: State:

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

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

This package includes 82 individual, dated Truss Design Drawings and 0 Additional Drawings.

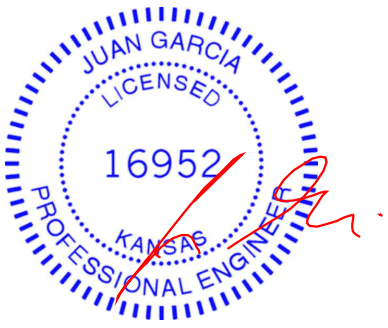
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45041959	A6	3/3/2021	21	I45041979	D5	3/3/2021
2	I45041960	A7	3/3/2021	22	I45041980	D6	3/3/2021
3	I45041961	A8	3/3/2021	23	I45041981	E1	3/3/2021
4	I45041962	A9	3/3/2021	24	I45041982	E2	3/3/2021
5	I45041963	A10	3/3/2021	25	I45041983	E3	3/3/2021
6	I45041964	B1	3/3/2021	26	I45041984	E4	3/3/2021
7	I45041965	B2	3/3/2021	27	I45041985	G1	3/3/2021
8	I45041966	B3	3/3/2021	28	I45041986	G2	3/3/2021
9	I45041967	B4	3/3/2021	29	I45041987	H1	3/3/2021
10	I45041968	C1	3/3/2021	30	I45041988	H2	3/3/2021
11	I45041969	C2	3/3/2021	31	I45041989	H3	3/3/2021
12	I45041970	C3	3/3/2021	32	I45041990	H4	3/3/2021
13	I45041971	C4	3/3/2021	33	I45041991	H5	3/3/2021
14	I45041972	C5	3/3/2021	34	I45041992	H6	3/3/2021
15	I45041973	C6	3/3/2021	35	I45041993	J1	3/3/2021
16	I45041974	C7	3/3/2021	36	I45041994	J2	3/3/2021
17	I45041975	D1	3/3/2021	37	I45041995	J3	3/3/2021
18	I45041976	D2	3/3/2021	38	I45041996	J4	3/3/2021
19	I45041977	D3	3/3/2021	39	I45041997	J5	3/3/2021
20	I45041978	D4	3/3/2021	40	I45041998	J6	3/3/2021

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

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943



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

March 03, 2021

Garcia, Juan

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
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City, County: State:

No.	Seal#	Truss Name	Date
41	I45041999	J7	3/3/2021
42	I45042000	J8	3/3/2021
43	I45042001	J9	3/3/2021
44	I45042002	J10	3/3/2021
45	I45042003	J11	3/3/2021
46	I45042004	J12	3/3/2021
47	I45042005	J13	3/3/2021
48	I45042006	J15	3/3/2021
49	I45042007	J16	3/3/2021
50	I45042008	J17	3/3/2021
51	I45042009	J18	3/3/2021
52	I45042010	J19	3/3/2021
53	I45042011	J20	3/3/2021
54	I45042012	J21	3/3/2021
55	I45042013	J22	3/3/2021
56	I45042014	J23	3/3/2021
57	I45042015	J24	3/3/2021
58	I45042016	J25	3/3/2021
59	I45042017	J26	3/3/2021
60	I45042018	J27	3/3/2021
61	I45042019	K1	3/3/2021
62	I45042020	K2	3/3/2021
63	I45042021	K3	3/3/2021
64	I45042022	K4	3/3/2021
65	I45042023	LAY1A	3/3/2021
66	I45042024	LAY2	3/3/2021
67	I45042025	LAY3	3/3/2021
68	I45042026	LAY4	3/3/2021
69	I45042027	LAY5	3/3/2021
70	I45042028	LAY6	3/3/2021
71	I45042029	LAY7	3/3/2021
72	I45042030	LAY8	3/3/2021
73	I45042031	V1A	3/3/2021
74	I45042032	V2	3/3/2021
75	I45042033	V3	3/3/2021
76	I45042034	V4	3/3/2021
77	I45042035	V5	3/3/2021
78	I45042036	V6	3/3/2021
79	I45042037	V7	3/3/2021
80	I45042038	V8	3/3/2021
81	I45042039	V9	3/3/2021
82	I45042040	V10	3/3/2021

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

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

This package includes 82 individual, dated Truss Design Drawings and 0 Additional Drawings.

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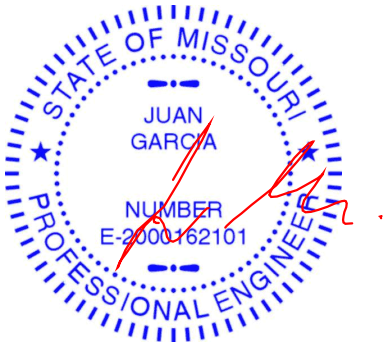
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193



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

March 03, 2021

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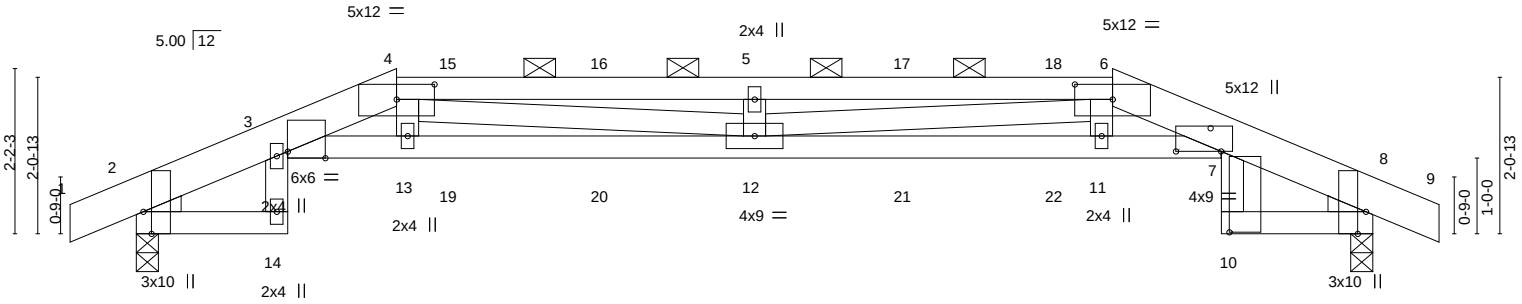
75	I45042033	V3	3/3/2021
76	I45042034	V4	3/3/2021
77	I45042035	V5	3/3/2021
78	I45042036	V6	3/3/2021
79	I45042037	V7	3/3/2021
80	I45042038	V8	3/3/2021
81	I45042039	V9	3/3/2021
82	I45042040	V10	3/3/2021

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	A6	Hip Girder	1	2	I45041959
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:11 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-IyCuUhmQeVDoB4G_n_BHGMusAYbX04QYX8_LqszecCc

-0-10-8	2-0-0	3-5-4	8-2-0	12-10-12	14-4-0	16-4-0	17-2-8
0-10-8	2-0-0	1-5-4	4-8-12	4-8-12	1-5-4	2-0-0	0-10-8

Scale = 1:30.4



2-0-0	3-5-4	8-2-0	12-10-12	14-4-0	16-4-0
2-0-0	1-5-4	4-8-12	4-8-12	1-5-4	2-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.22	12	>864	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.42	12	>457	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.27	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.21	12	>904	240	Weight: 122 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except* 4-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2 , Right: 2x3 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=31(LC 12)
Max Uplift 2=-222(LC 4), 8=-225(LC 5)
Max Grav 2=1032(LC 1), 8=1028(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-554/138, 3-4=-3587/792, 4-5=-4935/1151, 5-6=-4935/1151, 6-7=-3524/790, 7-8=-560/132
BOT CHORD 3-13=-756/3604, 12-13=-747/3620, 11-12=-759/3628, 7-11=-787/3693
WEBS 4-12=-360/1350, 5-12=-338/160, 6-12=-352/1341

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 2 and 225 lb uplift at joint 8.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 3,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 165 lb down and 103 lb up at 3-5-4, 74 lb down and 47 lb up at 4-2-0, 75 lb down and 47 lb up at 6-2-0, 75 lb down and 47 lb up at 8-2-0, 75 lb down and 47 lb up at 10-2-0, and 74 lb down and 47 lb up at 12-2-0, and 165 lb down and 103 lb up at 12-10-12 on top chord, and 76 lb down and 23 lb up at 3-5-4, 32 lb down and 23 lb up at 4-2-0, 32 lb down and 23 lb up at 6-2-0, 32 lb down and 23 lb up at 8-2-0, 32 lb down and 23 lb up at 10-2-0, and 32 lb down and 23 lb up at 12-2-0, and 76 lb down and 23 lb up at 12-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

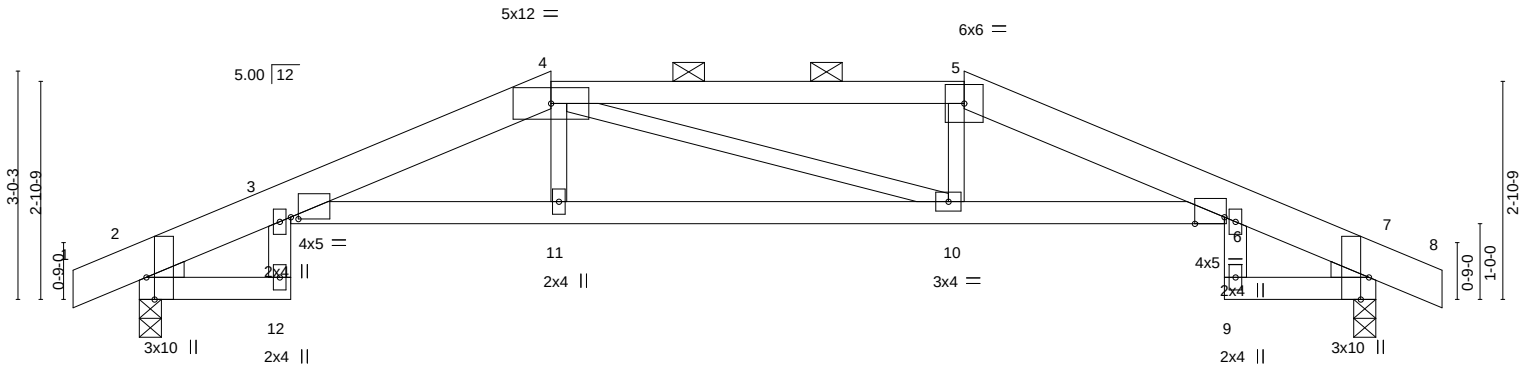
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-6=-70, 6-9=-70, 2-14=-20, 3-7=-20, 8-10=-20
   Concentrated Loads (lb)
   Vert: 4=-41(F) 6=-41(F) 13=-76(F) 12=-32(F) 5=-17(F) 11=-76(F) 15=-17(F) 16=-17(F) 17=-17(F) 18=-17(F) 19=-32(F) 20=-32(F) 21=-32(F) 22=-32(F)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	A7	Hip	1	1	I45041960
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:12 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-m9mGh1m3PpLfpDrAKijWpaQ02yxnlYRhmojuMIzecCb

-0-10-8 | 2-0-0 | 5-5-4 | 10-10-12 | 14-4-0 | 16-4-0 | 17-2-8
0-10-8 | 2-0-0 | 3-5-4 | 5-5-8 | 3-5-4 | 2-0-0 | 0-10-8

Scale = 1:30.4



2-0-0 | 5-5-4 | 10-10-12 | 14-4-0 | 16-4-0
2-0-0 | 3-5-4 | 5-5-8 | 3-5-4 | 2-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.17	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.32	10-11	>606	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.33	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	11	>999	240	Weight: 59 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except* 4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 3-12,6-9: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2 , Right: 2x3 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-46(LC 9)
Max Uplift 2=-104(LC 4), 7=-104(LC 5)
Max Grav 2=793(LC 1), 7=793(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-412/62, 3-4=-1747/205, 4-5=-1680/206, 5-6=-1748/200, 6-7=-412/60
BOT CHORD 3-11=-145/1675, 10-11=-141/1680, 6-10=-138/1675

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 2 and 104 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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March 3,2021

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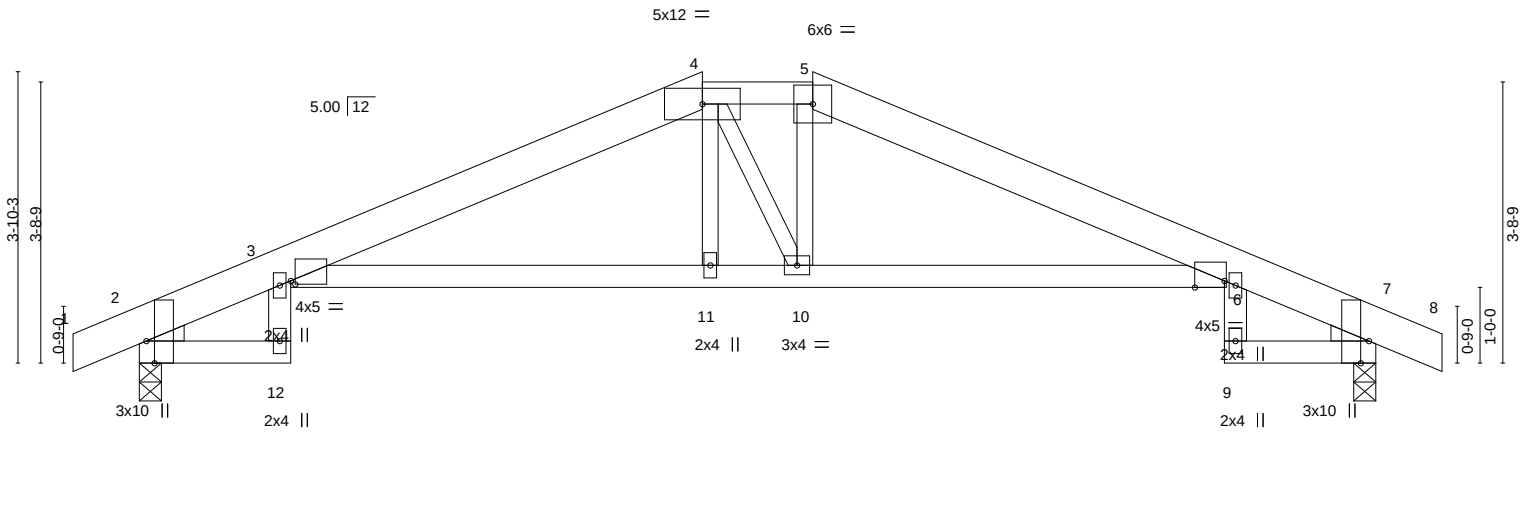
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	A8	Hip	1	1	I45041961
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:13 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ELKevNnhA7TWQNQMuPElnzAzMHWU_Lr_STSulzecCa

-0-10-8 | 2-0-0 | 7-5-4 | 8-10-12 | 14-4-0 | 16-4-0 | 17-2-8
0-10-8 | 2-0-0 | 5-5-4 | 1-5-8 | 5-5-4 | 2-0-0 | 0-10-8

Scale = 1:30.4



2-0-0 | 7-5-4 | 8-10-12 | 14-4-0 | 16-4-0
2-0-0 | 5-5-4 | 1-5-8 | 5-5-4 | 2-0-0

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-0-11,0-0-9], [6:0-4-11,Edge], [7:0-3-8,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.23	3-11	>854	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.43	3-11	>452	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.43	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	3-11	>999	240	Weight: 61 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-12,6-9: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2 , Right: 2x3 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=61(LC 12)
Max Uplift 2=-110(LC 8), 7=-110(LC 9)
Max Grav 2=793(LC 1), 7=793(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-412/83, 3-4=-1377/118, 4-5=-1277/120, 5-6=-1378/104, 6-7=-412/68
BOT CHORD 3-11=-74/1273, 10-11=-72/1276, 6-10=-33/1274

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2 and 110 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	A9	Roof Special	2	1	I45041962
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:14 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-iXu16joJxQbN2X?ZS7l_u?WPslavDRt_D6C?RBzecCZ

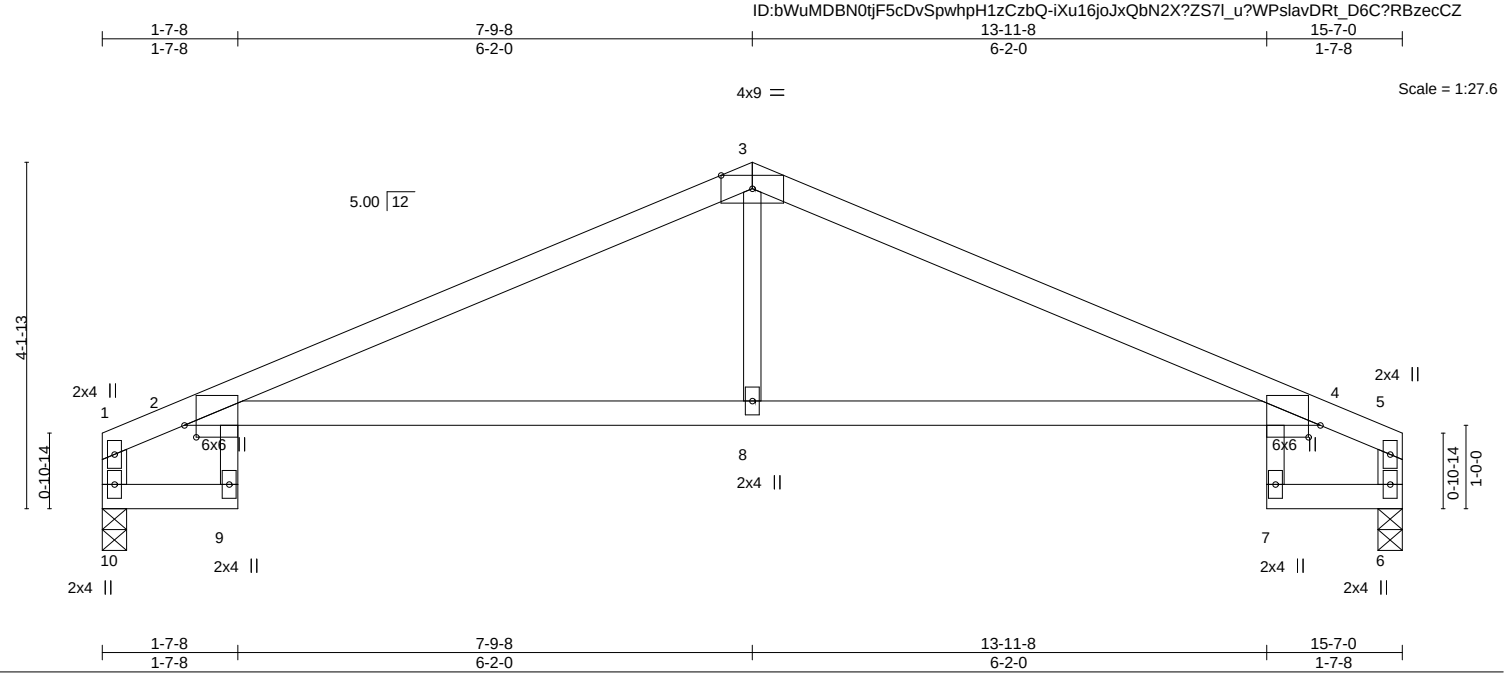


Plate Offsets (X,Y)-- [2:0-1-11,0-1-11], [4:0-1-11,0-1-11]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.20	7	>896	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.39	4-8	>476	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.55	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.18	9	>994	240	Weight: 43 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,5-6: 2x4 SPF No.2

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

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=-34(LC 13)
Max Uplift 10=-80(LC 8), 6=-80(LC 9)
Max Grav 10=699(LC 1), 6=699(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-252/66, 2-3=-1245/119, 3-4=-1245/134, 4-5=-252/34, 1-10=-702/98, 5-6=-702/91
BOT CHORD 2-8=-58/1113, 4-8=-58/1113
WEBS 3-8=0/377

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 10 and 80 lb uplift at joint 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	A10	Common	1	1	I45041963
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:09 2021 Page 1
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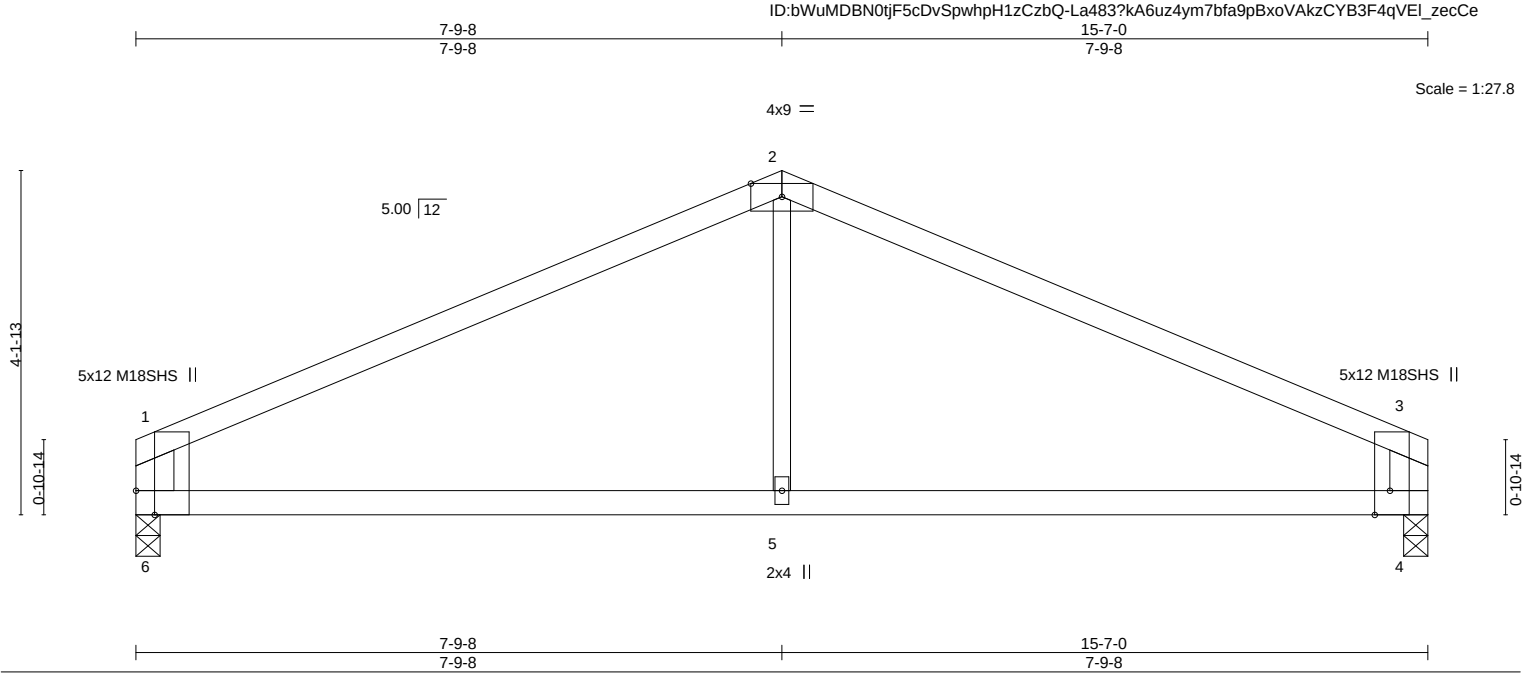


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [3:0-3-8,Edge]

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)	-0.09	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.18	4-5	>989	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	5-6	>999	240	Weight: 42 lb	FT = 10%

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

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

REACTIONS. (size) 6=0-3-8, 4=0-3-8
Max Horz 6=-32(LC 13)
Max Uplift 6=-86(LC 8), 4=-86(LC 9)
Max Grav 6=681(LC 1), 4=681(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-886/113, 2-3=-886/113, 1-6=-583/134, 3-4=-583/134
BOT CHORD 5-6=-40/717, 4-5=-40/717
WEBS 2-5=0/292

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 6 and 86 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

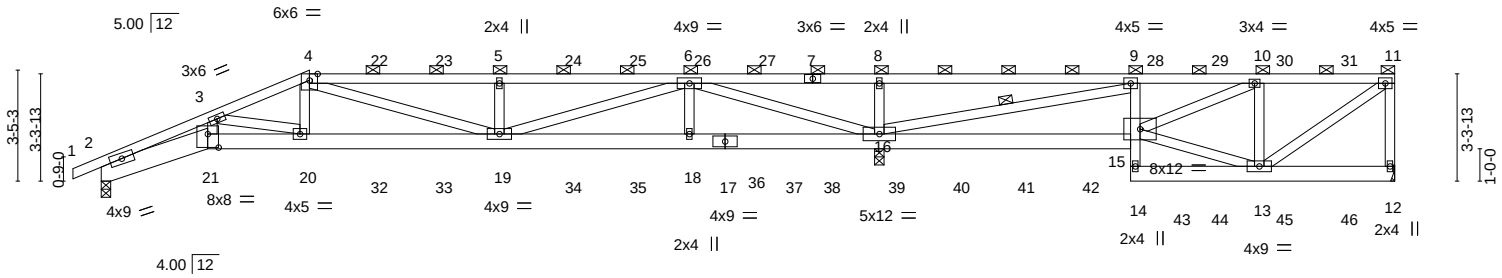
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	B1	Half Hip Girder	1	2	I45041964
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:18 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-bI7Xy4rp?f6oX8JKhzqw2rg1oN1p93ja8kADayzecCV

-0-10-8	3-3-8	6-5-4	12-3-12	18-2-4	24-0-12	31-10-0	35-9-12	40-0-0
0-10-8	3-3-8	3-1-12	5-10-8	5-10-8	5-10-8	7-9-4	3-11-12	4-2-4

Scale = 1:71.3



3-3-8	6-5-4	12-3-12	18-2-4	24-0-12	31-10-0	35-9-12	40-0-0
3-3-8	3-1-12	5-10-8	5-10-8	5-10-8	7-9-4	3-11-12	4-2-4

Plate Offsets (X,Y)-- [21:0-4-0,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.20	19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.36	19-20	>798	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.13	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	19	>999	240	Weight: 413 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except*
2-21: 2x8 SP DSS, 9-14: 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 12=Mechanical, 2=0-3-8, 16=0-3-8 (req. 0-3-12)
Max Horz 2=99(LC 26)
Max Uplift 12=-83(LC 4), 2=-102(LC 4), 16=-311(LC 5)
Max Grav 12=966(LC 20), 2=1813(LC 1), 16=4796(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6550/430, 3-4=-5177/324, 4-5=-5099/188, 5-6=-5096/187, 6-8=-167/3123, 8-9=-167/3123, 9-10=-1414/214, 10-11=-941/113, 11-12=-872/117
BOT CHORD 2-21=-472/5902, 20-21=-431/5452, 19-20=-342/4715, 18-19=-41/2182, 16-18=-41/2182, 15-16=-243/1520, 9-15=0/597
WEBS 3-21=-93/1278, 3-20=-674/109, 4-20=-55/1266, 4-19=0/553, 5-19=-788/173, 6-19=-192/3069, 6-18=0/272, 6-16=-5588/181, 8-16=-594/127, 9-16=-4688/383, 13-15=-86/877, 10-15=-134/516, 10-13=-759/207, 11-13=-100/1120

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 12, 102 lb uplift at joint 2 and 311 lb uplift at joint 16.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and reference standard ANSI/TPI 1.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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) 121 lb down and 51 lb up at 6-5-4, 103 lb down and 51 lb up at 8-6-0, 103 lb down and 51 lb up at 10-6-0, 103 lb down and 51 lb up at 12-6-0, 103 lb down and 51 lb up at 14-6-0, 103 lb down and 51 lb up at 16-6-0, 103 lb down and 51 lb up at 18-6-0, 103 lb down and 51 lb up at 20-6-0, 122 lb down and 70 lb up at 32-6-0, 122 lb down and 70 lb up at 34-6-0, and 122 lb down and 70 lb up at 36-6-0, and 122 lb down and 70 lb up at 38-6-0 on top chord, and 515 lb down and 123 lb up at 6-5-4, 89 lb down at 8-6-0, 89 lb down at 10-6-0, 89 lb down at 12-6-0, 89 lb down at 14-6-0, 89 lb down at 16-6-0, 89 lb down at 18-6-0, 89 lb down at 20-6-0, 255 lb down and 44 lb up at 22-6-0, 255 lb down and 44 lb up at 24-6-0, 255 lb down and 44 lb up at 26-6-0, 255 lb down and 44 lb up at 28-6-0, 255 lb down and 44 lb up at 30-6-0, 75 lb down at 32-6-0, 75 lb down at 34-6-0, and 75 lb down at 36-6-0, and 75 lb down at 38-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

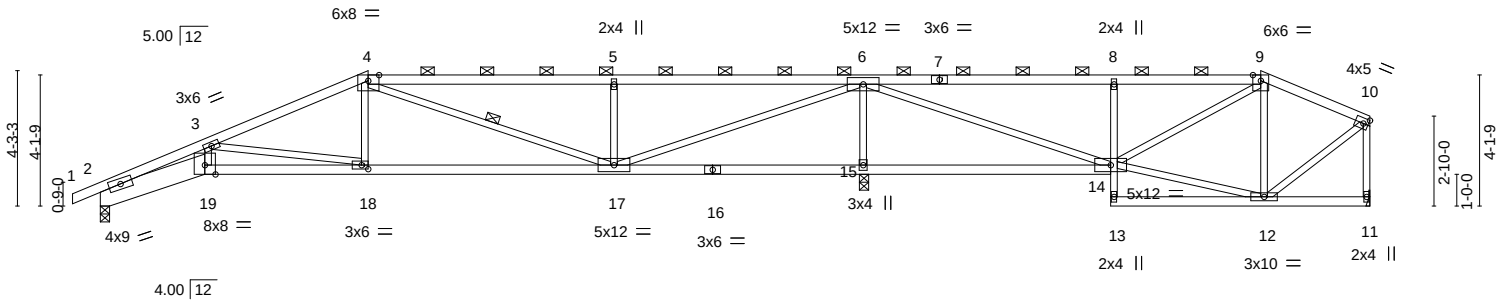
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-11=-70, 2-21=-20, 15-21=-20, 12-14=-20
   Concentrated Loads (lb)
   Vert: 4=-98(F) 20=-515(F) 19=-89(F) 5=-98(F) 22=-98(F) 23=-98(F) 24=-98(F) 25=-98(F) 26=-98(F) 27=-98(F) 28=-122(F) 29=-122(F) 30=-122(F) 31=-122(F) 32=-89(F) 33=-89(F) 34=-89(F) 35=-89(F) 36=-89(F) 37=-89(F) 38=-255(F) 39=-255(F) 40=-255(F) 41=-255(F) 42=-255(F) 43=-58(F) 44=-58(F) 45=-58(F) 46=-58(F)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	B2	Hip	1	1	I45041965
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:19 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3Vhw9QsSmzEf8IuWFgL9b2DDumGAuWMjNOwm6OzecCU

-0-10-8	3-3-8	8-5-4	16-2-3	24-0-7	31-10-0	36-6-12	40-0-0
0-10-8	3-3-8	5-1-12	7-8-15	7-10-3	7-9-9	4-8-12	3-5-4

Scale = 1:72.6



3-3-8	8-5-4	16-2-3	24-0-12	31-10-0	36-6-12	40-0-0
3-3-8	5-1-12	7-8-15	7-10-9	7-9-4	4-8-12	3-5-4

Plate Offsets (X,Y)-- [4:0-4-2,Edge], [18:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.20	18-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.38	17-18	>759	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.13	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	18-19	>999	240	Weight: 150 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-19: 2x8 SP DSS, 8-13: 2x3 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 11=Mechanical, 15=0-3-8
Max Horz 2=86(LC 7)
Max Uplift 2=-22(LC 4), 11=-11(LC 4), 15=-100(LC 5)
Max Grav 2=984(LC 19), 11=509(LC 20), 15=2199(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3580/80, 3-4=-1804/44, 4-5=-1218/95, 5-6=-1216/93, 6-8=-525/74, 8-9=-505/76, 9-10=-385/43, 10-11=-484/25
BOT CHORD 2-19=-140/3239, 18-19=-129/2963, 17-18=-59/1624, 15-17=-1176/52, 14-15=-1176/52, 8-14=-471/113
WEBS 3-19=0/1012, 3-18=-1345/128, 4-18=0/422, 4-17=-438/34, 5-17=-581/137, 6-17=-113/2539, 6-15=-2008/199, 6-14=-88/1679, 12-14=0/308, 10-12=0/398

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 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 22 lb uplift at joint 2, 11 lb uplift at joint 11 and 100 lb uplift at joint 15.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

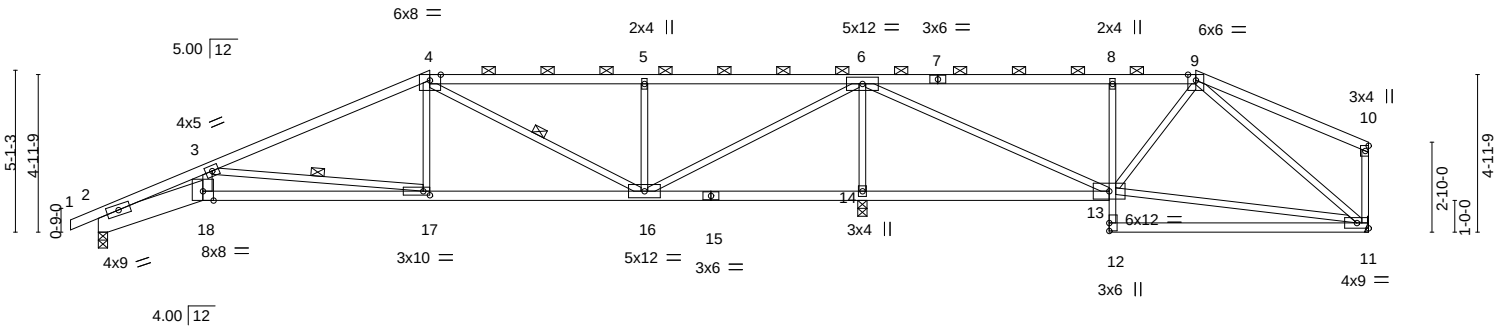
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	B3	Hip	1	1	I45041966
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:20 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-XhFINmt4XGMWmSSjoNsO7GmNmAbEd_Jtc2fJerzecCT

-0-10-8	3-3-8	10-5-4	17-2-6	24-0-12	31-10-0	34-6-12	40-0-0
0-10-8	3-3-8	7-1-12	6-9-2	6-10-6	7-9-4	2-8-12	5-5-4

Scale = 1:72.6



3-3-8	10-5-4	17-2-6	24-0-12	31-10-0	34-6-12	40-0-0
3-3-8	7-1-12	6-9-2	6-10-6	7-9-4	2-8-12	5-5-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.23	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.45	17-18	>632	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.15	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	17-18	>999	240	Weight: 156 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-18: 2x8 SP DSS, 8-12: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	3-18: 2x4 SPF No.2

BRACING-

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

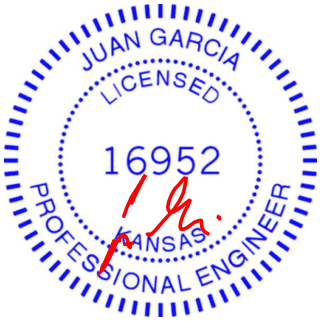
REACTIONS. (size) 2=0-3-8, 14=0-3-8 (req. 0-3-11), 11=Mechanical
Max Horz 2=87(LC 7)
Max Uplift 2=-19(LC 8), 14=-92(LC 5), 11=-13(LC 9)
Max Grav 2=931(LC 19), 14=2341(LC 1), 11=473(LC 20)

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

TOP CHORD	2-3=-3575/100, 3-4=-1357/42, 4-5=-580/88, 5-6=-577/87, 6-8=-331/75, 8-9=-314/76
BOT CHORD	2-18=-124/3261, 17-18=-125/2932, 16-17=-26/1164, 14-16=-1293/49, 13-14=-1293/49, 8-13=-442/105
WEBS	3-18=0/1042, 3-17=-1771/188, 4-17=0/438, 4-16=-767/36, 5-16=-493/115, 6-16=-76/2018, 6-14=-2161/188, 6-13=-65/1565, 9-11=-333/25

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) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
7) Refer to girder(s) for truss to truss connections.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 92 lb uplift at joint 14 and 13 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.



March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

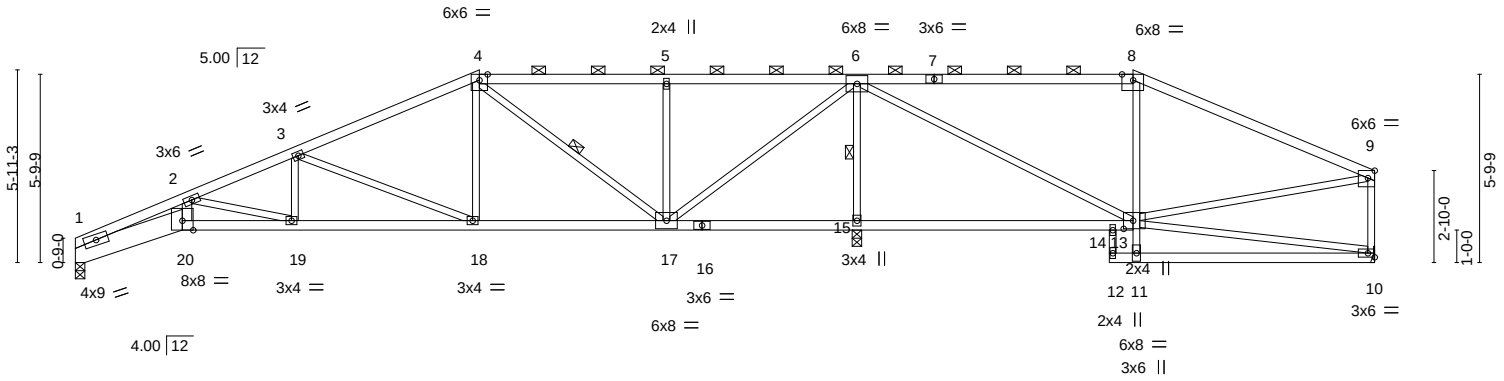
Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	B4	Hip	1	1	I45041967
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:21 2021 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-?tpga6tiIaUNOc1vM5NdgTIX8az_MQQ0qiPtBHzecCS

3-3-8	6-9-2	12-5-4	18-2-6	24-0-12	31-10-0	32-6-12	40-0-0
3-3-8	3-5-9	5-8-2	5-9-2	5-10-6	7-9-4	0-8-12	7-5-4

Scale = 1:70.9



3-3-8	6-9-2	12-5-4	18-2-6	24-0-12	31-10-0	32-6-12	40-0-0
3-3-8	3-5-9	5-8-2	5-9-2	5-10-6	7-9-4	0-8-12	7-5-4

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.15	19-20	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.27	19-20	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.11	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	19-20	>999	240	Weight: 159 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
1-20: 2x8 SP DSS, 12-14: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
2-20: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-14 max.): 4-8.

BOT CHORD Rigid ceiling directly applied or 5-4-12 oc bracing.

WEBS 1 Row at midpt 4-17, 6-15

REACTIONS. (size) 1=0-3-8, 10=Mechanical, 15=0-3-8 (req. 0-3-11)
Max Horz 1=86(LC 7)
Max Uplift 1=-16(LC 8), 10=-29(LC 9), 15=-72(LC 5)
Max Grav 1=849(LC 19), 10=485(LC 20), 15=2360(LC 1)

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

TOP CHORD 1-2=-3259/106, 2-3=-1857/57, 3-4=-989/55, 4-5=-294/87, 5-6=-292/85, 6-8=-325/67, 8-9=-441/72, 9-10=-429/64

BOT CHORD 1-20=-133/2940, 19-20=-121/2643, 18-19=-42/1708, 17-18=-12/833, 15-17=-1087/59, 14-15=-1087/59, 13-14=-1062/88, 12-14=-343/0

WEBS 2-20=-7/934, 2-19=-966/81, 3-18=-933/100, 4-18=0/472, 4-17=-823/35, 5-17=-384/89, 6-17=-35/1607, 6-15=-2198/157, 6-13=-6/1387, 11-13=0/544, 8-13=-492/105, 9-13=-54/271, 3-19=0/339

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) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
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 16 lb uplift at joint 1, 29 lb uplift at joint 10 and 72 lb uplift at joint 15.
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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

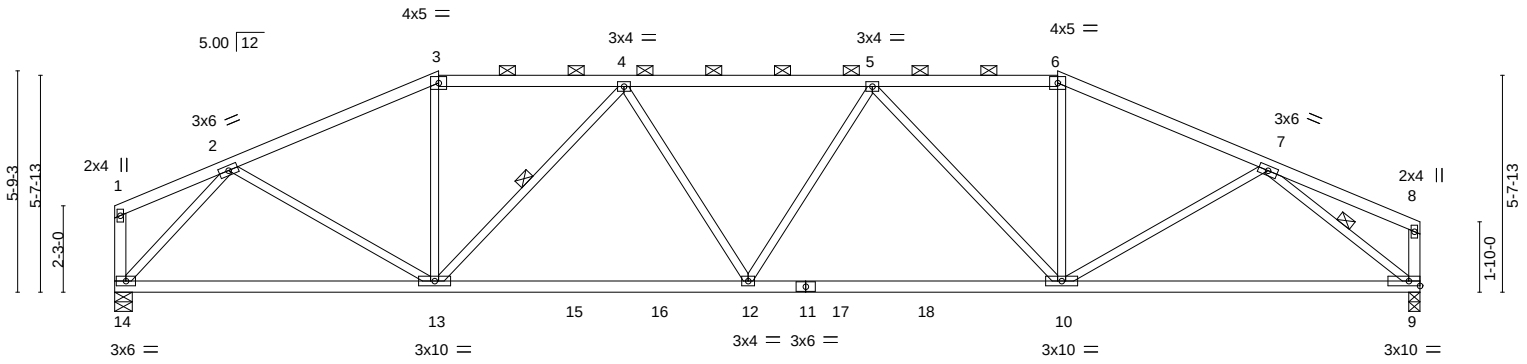
Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	C1	Hip	1	1	I45041968
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:23 2021 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-xGwQ?nvypBk5dwBHUWP5luOzYOdoqIpJI0u_FAzecCQ

3-1-1	8-5-4	13-3-3	19-8-13	24-6-12	29-11-0	34-0-0
3-1-1	5-4-4	4-9-15	6-5-10	4-9-15	5-4-5	4-1-0

Scale = 1:60.0



8-5-4	16-6-0	24-6-12	34-0-0
8-5-4	8-0-12	8-0-12	9-5-4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.20	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.36	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.10	12	>999	240	Weight: 129 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 9-11: 2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2 *Except* 1-14,8-9: 2x4 SPF No.2

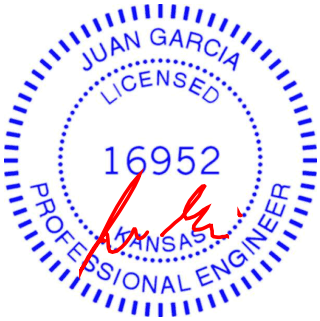
BRACING-

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

REACTIONS. (size) 14=0-5-8, 9=0-3-8
Max Horz 14=-71(LC 4)
Max Uplift 14=-184(LC 4), 9=-178(LC 5)
Max Grav 14=1593(LC 2), 9=1591(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2122/303, 3-4=-1898/298, 4-5=-2545/401, 5-6=-2046/318, 6-7=-2283/323
BOT CHORD 13-14=-186/1284, 12-13=-341/2421, 10-12=-349/2480, 9-10=-246/1672
WEBS 2-13=-35/765, 3-13=-17/550, 4-13=-843/190, 4-12=0/283, 5-10=-738/177, 6-10=-22/597, 7-10=0/538, 2-14=-1858/303, 7-9=-2039/327

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 14 and 178 lb uplift at joint 9.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	C2	Hip	1	1	I45041969
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:24 2021 Page 1
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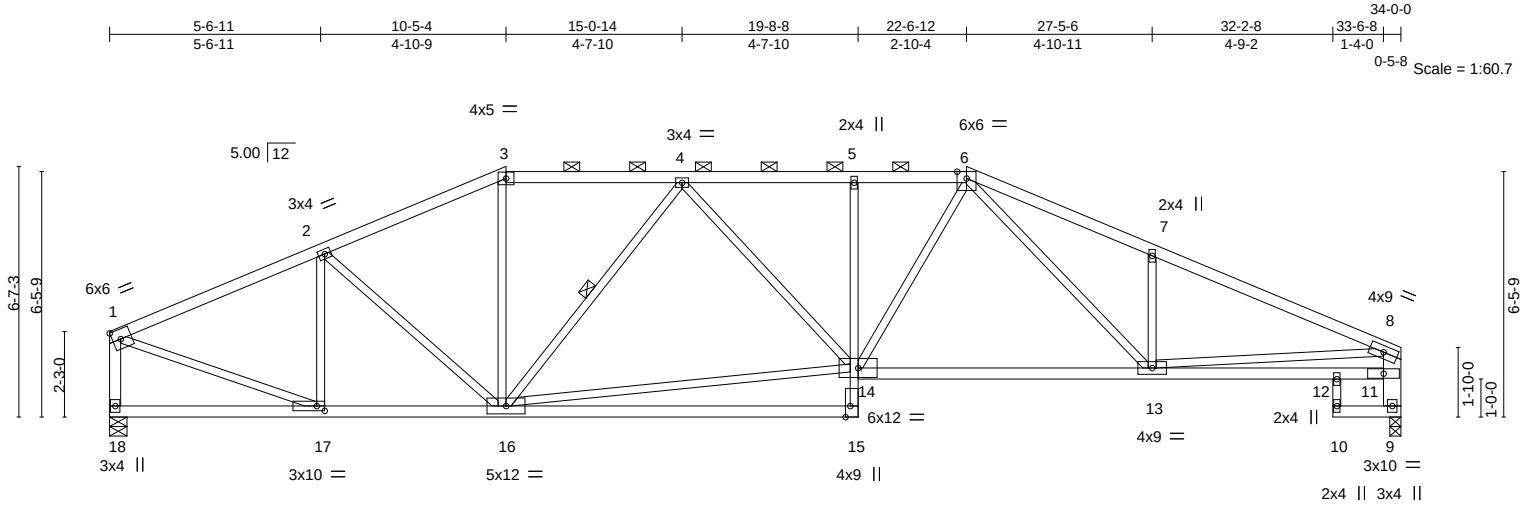

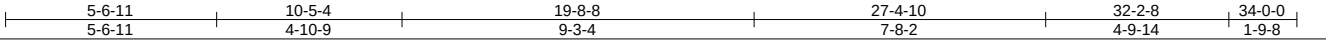

Plate Offsets (X,Y)-- [15:0-3-8,Edge], [17:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.25	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.55	15-16	>739	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	13-14	>999	240	Weight: 145 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 5-15,10-12: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 1-18: 2x4 SPF No.2, 8-9: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 18=0-5-8, 9=0-3-8
Max Horz 18=-69(LC 4)
Max Uplift 18=-158(LC 4), 9=-154(LC 5)
Max Grav 18=1513(LC 1), 9=1513(LC 1)

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

TOP CHORD	1-2=-1861/228, 2-3=-1974/288, 3-4=-1764/282, 4-5=-2403/384, 5-6=-2418/385, 6-7=-2730/387, 7-8=-2751/313, 1-18=-1452/189, 9-11=-1445/169, 8-11=-1431/185
BOT CHORD	16-17=-177/1657, 5-14=-309/116, 13-14=-245/2149, 12-13=-94/574, 11-12=-86/651
WEBS	2-17=-516/116, 2-16=0/295, 3-16=-17/439, 4-16=-813/183, 14-16=-286/2086, 4-14=-24/358, 6-14=-75/651, 6-13=-166/483, 7-13=-397/226, 8-13=-188/1896, 1-17=-190/1696

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 158 lb uplift at joint 18 and 154 lb uplift at joint 9.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	C3	Hip	1	1	I45041970
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:25 2021 Page 1
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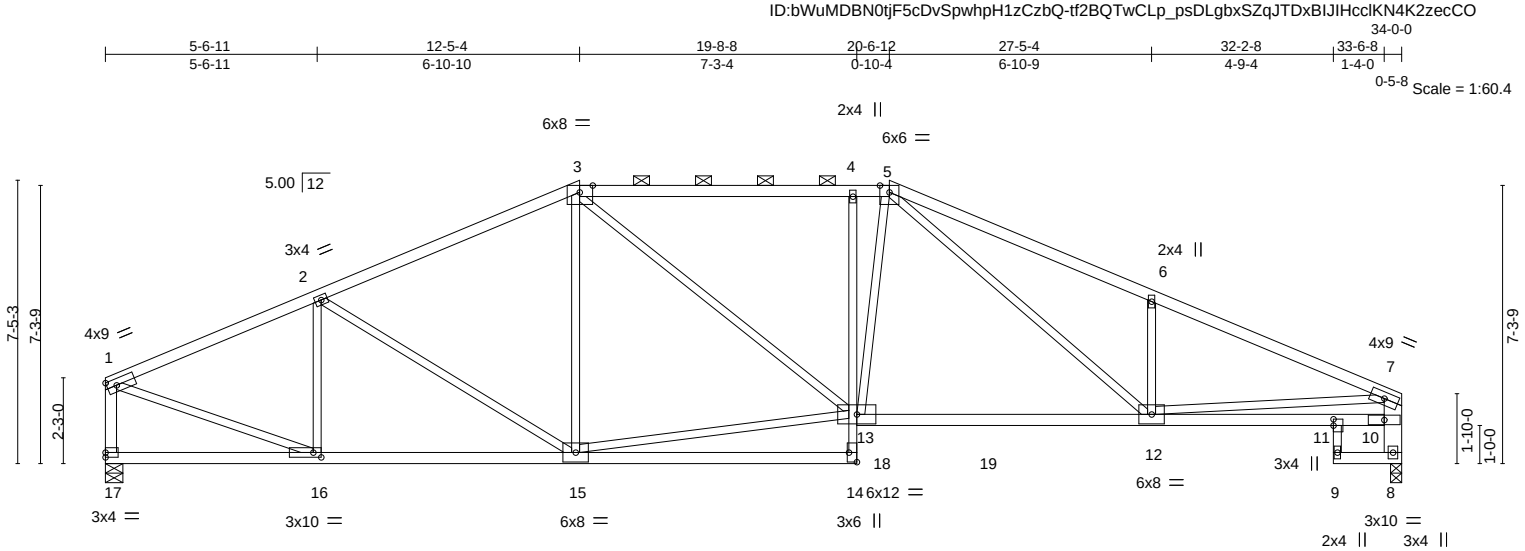


Plate Offsets (X,Y)-- [3:0-4-2,Edge], [11:0-2-0,0-0-0], [14:Edge,0-2-8], [16:0-2-8,0-1-8]

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	0.92	Vert(LL)	-0.29	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.52	12-13	>771	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	12-13	>999	240	Weight: 144 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-14,9-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-17: 2x4 SPF No.2, 7-8: 2x6 SPF No.2

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

REACTIONS. (size) 17=0-5-8, 8=0-3-8
Max Horz 17=-68(LC 4)
Max Uplift 17=-153(LC 8), 8=-162(LC 9)
Max Grav 17=1571(LC 2), 8=1603(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1944/196, 2-3=-2010/258, 3-4=-2220/323, 4-5=-2225/319, 5-6=-2895/408, 6-7=-2900/280, 1-17=-1484/179, 8-10=-1509/177, 7-10=-1459/193
BOT CHORD 15-16=-180/1750, 4-13=-545/213, 12-13=-172/2142, 11-12=-88/602, 10-11=-83/695
WEBS 2-16=-490/132, 13-15=-123/1770, 3-13=-93/651, 5-13=-111/713, 5-12=-225/661, 6-12=-462/259, 7-12=-162/2024, 1-16=-158/1808

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 17 and 162 lb uplift at joint 8.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

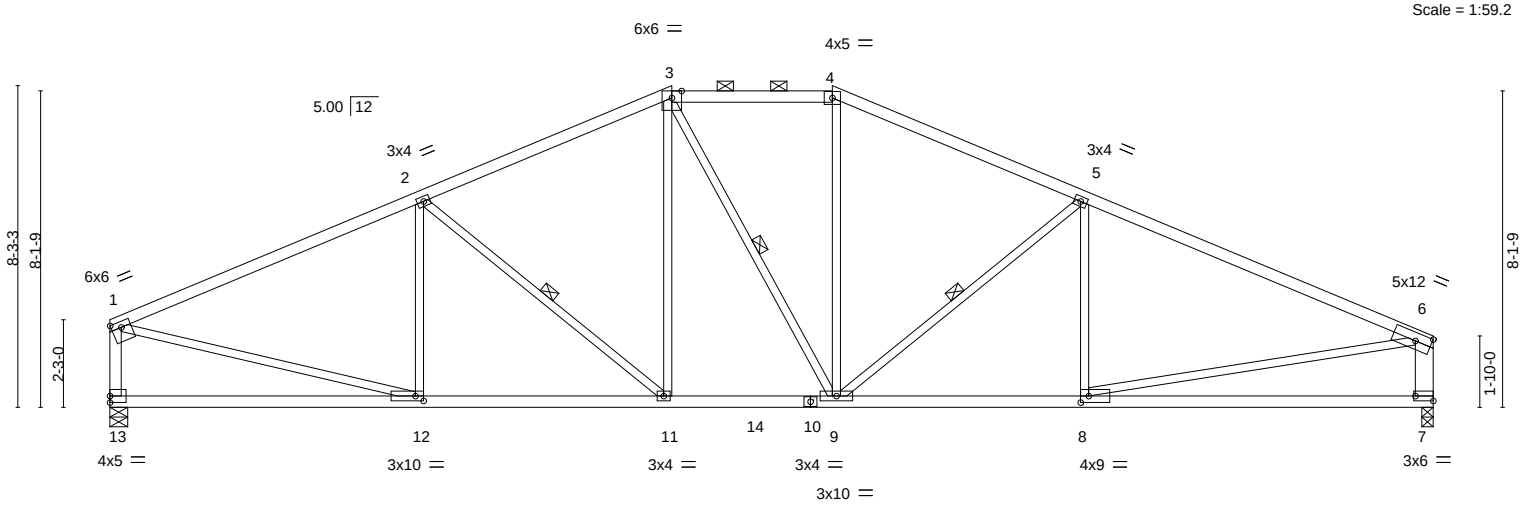
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	C4	Hip	1	1	I45041971
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:26 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-MrcZdpxr666gUNws9ezoNX0NXbh71lsl__6esUzecCN

7-11-7	14-5-4	18-6-12	25-0-8	34-0-0
7-11-7	6-5-13	4-1-8	6-5-13	8-11-8

Scale = 1:59.2



7-11-7	14-5-4	18-6-12	25-0-8	34-0-0
7-11-7	6-5-13	4-1-8	6-5-13	8-11-8

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

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	0.99	Vert(LL)	-0.16	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.33	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	11-12	>999	240	Weight: 139 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-13: 2x4 SPF No.2, 6-7: 2x6 SPF No.2

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

REACTIONS. (size) 13=0-5-8, 7=0-3-8
Max Horz 13=-65(LC 4)
Max Uplift 13=-171(LC 8), 7=-179(LC 9)
Max Grav 13=1573(LC 2), 7=1570(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2124/231, 2-3=-1890/228, 3-4=-1685/253, 4-5=-1912/242, 5-6=-2298/258, 1-13=-1444/212, 6-7=-1426/227
BOT CHORD 11-12=-199/1888, 9-11=-71/1668, 8-9=-173/2037
WEBS 2-12=-284/129, 2-11=-356/174, 3-11=-52/412, 4-9=-30/428, 5-9=-499/199, 1-12=-125/1819, 6-8=-112/1838

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 13 and 179 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	C5	Hip	1	1	I45041972
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:27 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-q1Axr9yTtQEX6XV3jMU1wkYbw?3gmBDvDesBOxzecCM

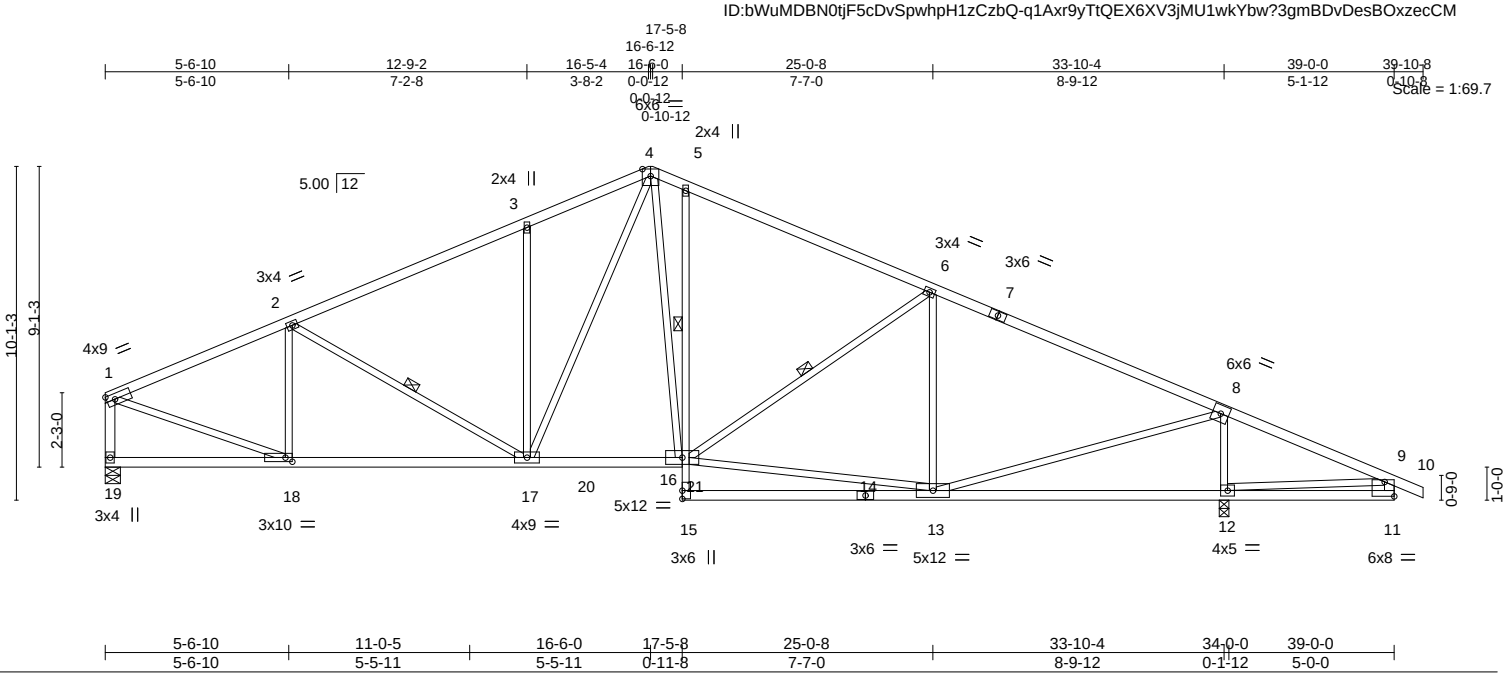


Plate Offsets (X,Y)-- [11:Edge,0-5-4], [18:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.15	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.29	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	16-17	>999	240	Weight: 169 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-19,9-11: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 12-13,11-12.
1 Row at midpt 5-16
WEBS 1 Row at midpt 2-17, 6-16

REACTIONS. (size) 19=0-5-8, 12=0-3-8
Max Horz 19=-190(LC 9)
Max Uplift 19=-186(LC 8), 12=-311(LC 9)
Max Grav 19=1535(LC 2), 12=2141(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1901/238, 2-3=-1922/258, 3-4=-1898/361, 4-5=-1708/336, 5-6=-1744/257, 6-8=-1785/238, 8-9=-177/513, 1-19=-1453/210
BOT CHORD 17-18=-215/1711, 16-17=-27/1436, 5-16=-423/222, 12-13=-385/187
WEBS 2-18=-462/150, 3-17=-434/223, 4-17=-221/718, 4-16=-268/778, 6-13=-568/162, 8-13=-161/2003, 8-12=-1879/389, 1-18=-186/1771, 9-12=-326/189, 13-16=-49/1464

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 186 lb uplift at joint 19 and 311 lb uplift at joint 12.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

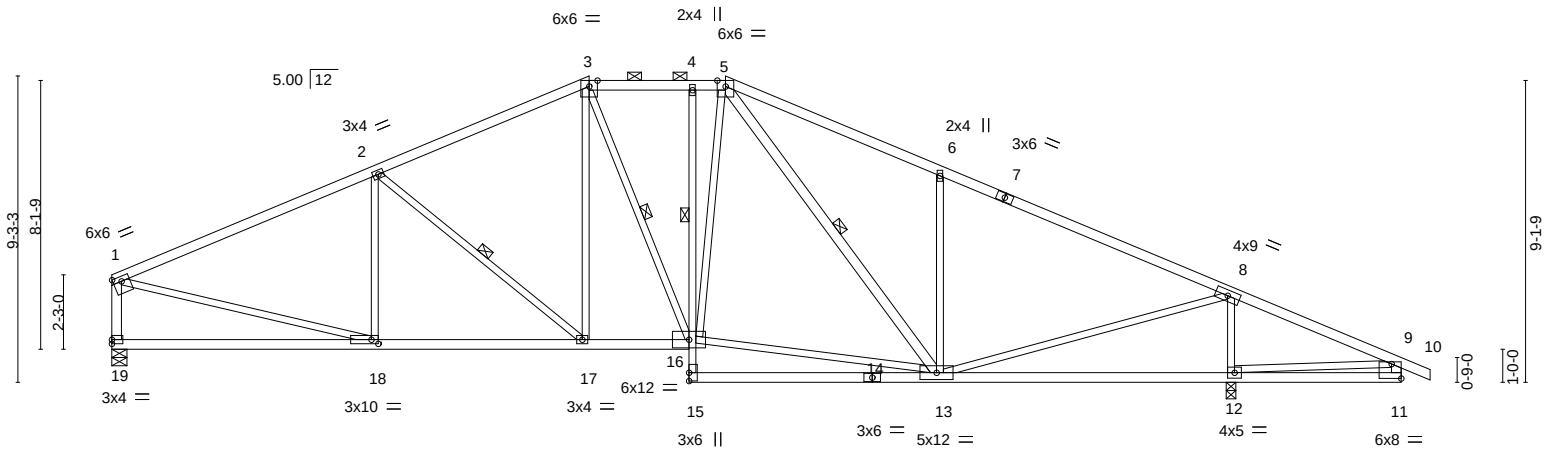
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	C6	Hip	1	1	I45041973
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:29 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-mQliFr_jP1UFLrfRqmWV?9duFomOE54BgyLITpzecCK

7-11-7	14-5-4	17-5-8	18-6-12	25-0-9	33-10-4	39-0-0	39-10-8
7-11-7	6-5-13	3-0-4	1-1-4	6-5-14	8-9-11	5-1-12	0-10-8

Scale = 1:69.7



7-11-7	14-5-4	17-5-8	25-0-9	33-10-4	34-0-0	39-0-0
7-11-7	6-5-13	3-0-4	7-7-1	8-9-11	0-1-12	5-0-0

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.11	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.24	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	17	>999	240	Weight: 175 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	4-15: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	5-13,1-19,9-11: 2x4 SPF No.2

BRACING-

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

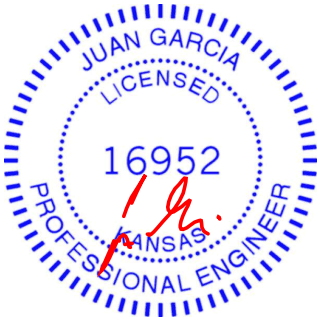
REACTIONS. (size) 19=0-5-8, 12=0-3-8
Max Horz 19=-173(LC 9)
Max Uplift 19=-171(LC 8), 12=-296(LC 9)
Max Grav 19=1472(LC 1), 12=2083(LC 1)

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

TOP CHORD	1-2=-1992/230, 2-3=-1743/226, 3-4=-1525/226, 4-5=-1520/226, 5-6=-1693/356, 6-8=-1718/214, 8-9=-176/510, 1-19=-1395/211
BOT CHORD	17-18=-163/1751, 16-17=-28/1515, 12-13=-381/185
WEBS	2-18=-270/129, 2-17=-363/174, 3-17=-52/345, 13-16=-19/1379, 5-16=-17/444, 6-13=-561/296, 8-13=-168/1935, 8-12=-1881/375, 1-18=-124/1681, 9-12=-316/185

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 19 and 296 lb uplift at joint 12.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 3,2021

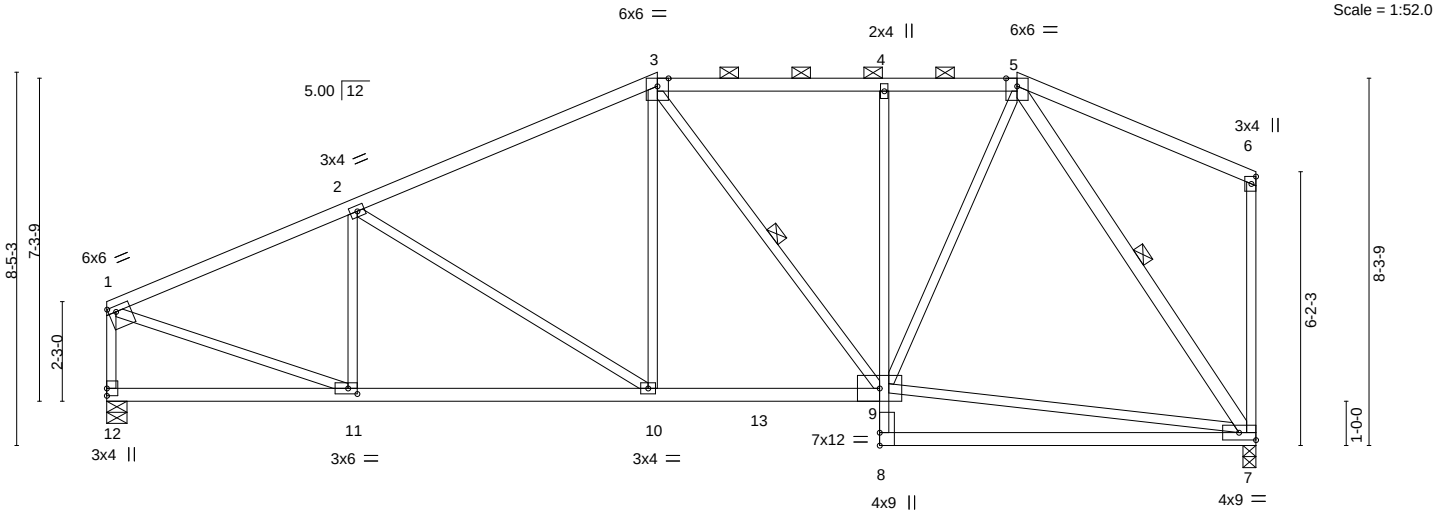
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	C7	Hip	1	1	I45041974
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:30 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Ecr4TB_LALc5z_DeOU1kXNAAOC5PzaaLvc4r?GzecCJ

5-6-11	12-5-4	17-5-8	20-6-12	25-11-8
5-6-11	6-10-10	5-0-4	3-1-4	5-4-12

Scale = 1:52.0



5-6-11	12-5-4	17-5-8	20-6-12	25-11-8
5-6-11	6-10-10	5-0-4	3-1-4	5-4-12

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

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	0.55	Vert(LL)	-0.20	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.40	7-8	>776	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	10	>999	240	Weight: 123 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-8: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-7: 2x4 SPF No.2

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

REACTIONS. (size) 12=0-5-8, 7=0-3-8
Max Horz 12=228(LC 7)
Max Uplift 12=-140(LC 8), 7=-140(LC 5)
Max Grav 12=1208(LC 2), 7=1210(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1459/177, 2-3=-1324/198, 3-4=-993/208, 4-5=-988/208, 1-12=-1127/164
BOT CHORD 10-11=-244/1303, 9-10=-206/1145, 4-9=-336/135
WEBS 2-11=-318/127, 3-10=-2/368, 3-9=-286/81, 7-9=-198/550, 5-9=-87/865, 1-11=-130/1348, 5-7=-1177/215

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 12 and 140 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

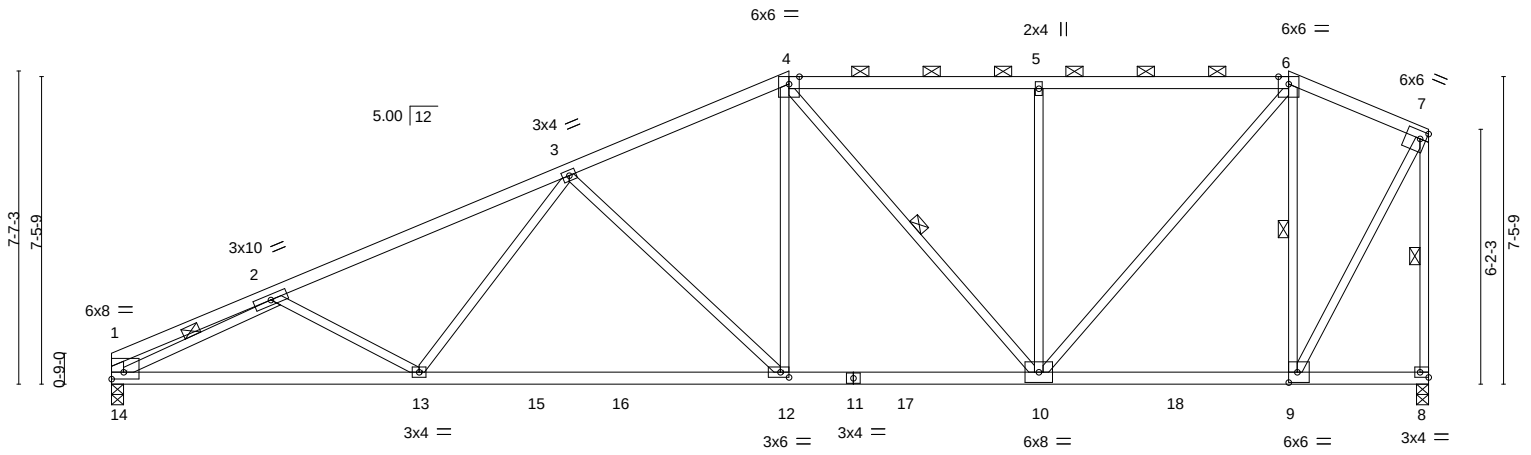
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	D1	Hip	1	1	I45041975
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:31 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ioPSgX?zxfkya8oqyBYz4ajIJcMviyoU7GqPXizecCl

3-11-14	11-1-4	16-5-4	22-6-0	28-6-12	31-11-8
3-11-14	7-1-6	5-4-0	6-0-12	6-0-12	3-4-12

Scale = 1:55.9



7-5-9	16-5-4	22-6-0	28-6-12	31-11-8
7-5-9	8-11-11	6-0-12	6-0-12	3-4-12

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

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	0.73	Vert(LL)	-0.28	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.49	12-13	>771	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	12-13	>999	240	Weight: 134 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 14=0-3-8, 8=0-3-8
Max Horz 14=253(LC 5)
Max Uplift 14=-184(LC 8), 8=-197(LC 5)
Max Grav 14=1512(LC 2), 8=1539(LC 2)

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

TOP CHORD	1-2=-438/23, 2-3=-2701/308, 3-4=-1941/279, 4-5=-1461/277, 5-6=-1461/277, 6-7=-710/165, 7-8=-1514/203
BOT CHORD	13-14=-452/2458, 12-13=-335/2182, 10-12=-266/1724, 9-10=-141/653
WEBS	3-13=0/414, 3-12=-640/246, 4-12=-80/763, 4-10=-422/103, 5-10=-516/208, 6-10=-186/1265, 6-9=-975/239, 2-14=-2385/382, 7-9=-184/1343

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 14 and 197 lb uplift at joint 8.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	D2	Hip	1	1	I45041976
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:32 2021 Page 1
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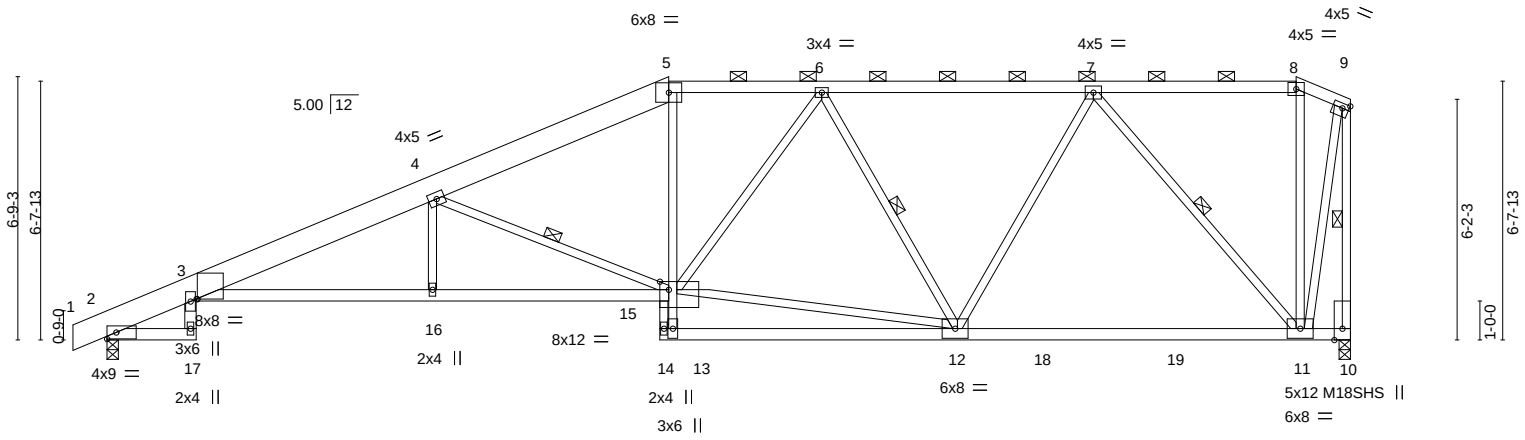
-0-10-8	2-3-8	8-4-6	14-5-4	18-4-7	25-4-3	30-6-12	31-11-8
0-10-8	2-3-8	6-0-14	6-0-14	3-11-3	6-11-12	5-2-9	1-4-12

Scale = 1:59.2



2-3-8	8-4-6	14-2-8	14-5-4	21-10-5	30-6-12	31-11-8
2-3-8	6-0-14	5-10-2	0-2-12	7-5-1	8-8-7	1-4-12

Plate Offsets (X,Y)-- [3:0-0-5,0-0-0], [9:0-2-0,0-1-8], [15:0-2-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.34	3-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.60	3-16	>630	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)	0.24	3-16	>999	240	Weight: 166 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x8 SP DSS
BOT CHORD	2x4 SPF No.2 *Except* 3-15: 2x4 SPF 2100F 1.8E, 14-15: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-17: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=261(LC 7)
Max Uplift 2=-196(LC 8), 10=-231(LC 5)
Max Grav 2=1528(LC 2), 10=1508(LC 2)

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

TOP CHORD	2-3=-807/47, 3-4=-3643/406, 4-5=-2483/345, 5-6=-2186/338, 6-7=-1632/281, 7-8=-327/103, 8-9=-372/112, 9-10=-1665/192
BOT CHORD	3-16=-551/3522, 15-16=-549/3516, 14-15=-529/0, 11-12=-270/1235
WEBS	4-15=-1454/327, 12-15=-382/1803, 6-15=-77/367, 6-12=-774/203, 7-12=-27/813, 7-11=-1442/285, 9-11=-176/1555, 13-15=0/667, 5-15=-55/752

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 2 and 231 lb uplift at joint 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

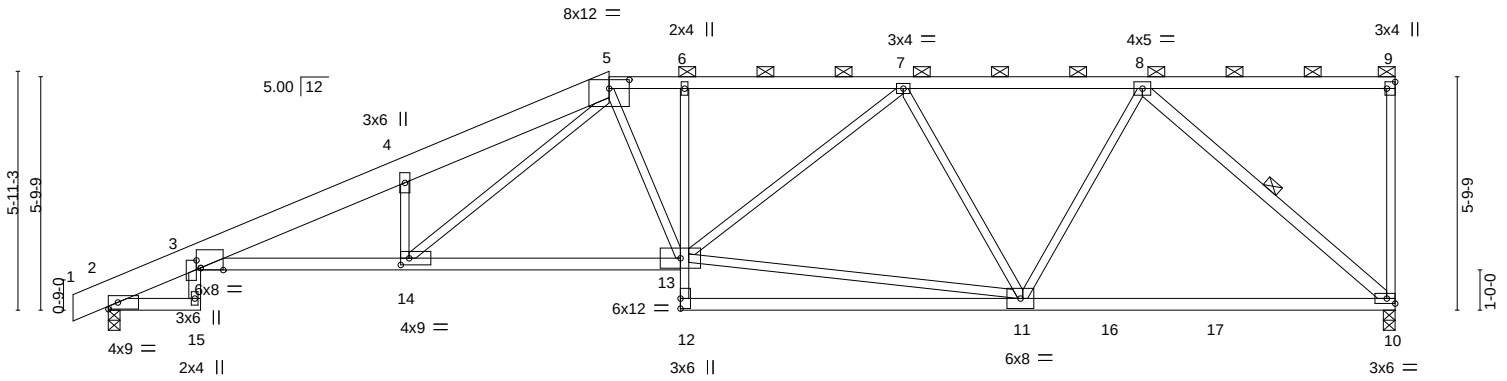
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	D3	Half Hip	1	1	I45041977
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:33 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fBXC5C1ETG?gqSyC3cbR9?odvP77AssnbZJVcbzecCG

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

Scale = 1:57.2



2-2-2	2-3-8	7-4-6	12-5-4	14-2-8	22-8-9	31-11-8
2-2-2	0-1-7	5-0-14	5-0-14	1-9-4	8-6-1	9-2-15

Plate Offsets (X,Y)-- [3:0-2-4,0-1-4], [3:0-6-12,Edge], [5:0-6-0,0-2-10], [9:Edge,0-2-8], [14:0-2-8,0-2-0]

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	0.73	Vert(LL)	-0.31	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.56	13-14	>682	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.31	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.20	13-14	>999	240	Weight: 155 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
5-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-15: 2x4 SPF No.2, 6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-15,8-10: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=243(LC 7)
Max Uplift 10=-254(LC 5), 2=-182(LC 4)
Max Grav 10=1498(LC 2), 2=1533(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-805/59, 3-4=-3845/444, 4-5=-4079/542, 5-6=-2592/420, 6-7=-2578/422, 7-8=-1813/310
BOT CHORD 3-14=-603/3695, 13-14=-456/2456, 6-13=-259/122, 10-11=-301/1365
WEBS 4-14=-975/295, 5-14=-305/1644, 5-13=-63/371, 11-13=-404/2043, 7-13=-75/535, 7-11=-824/232, 8-11=-28/929, 8-10=-1804/341

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 10 and 182 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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

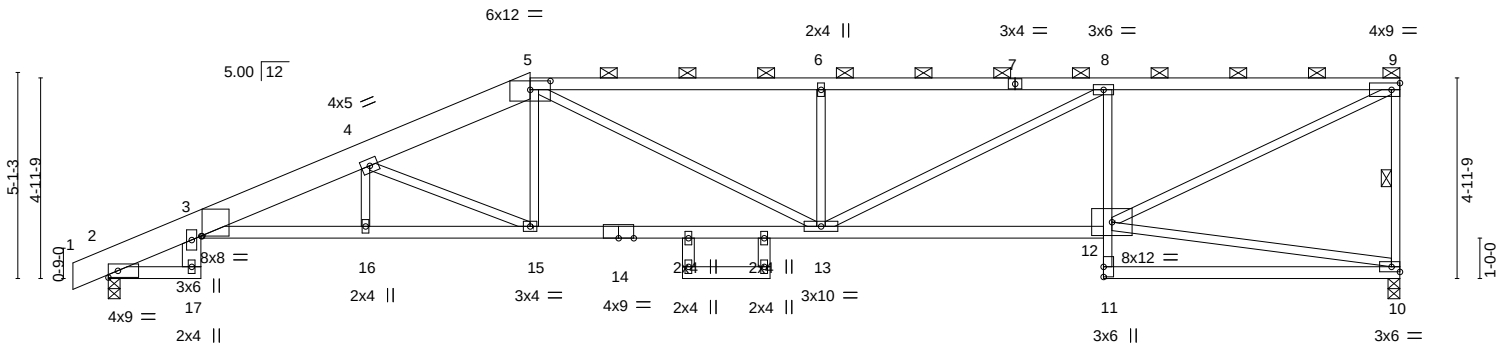
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	D4	Half Hip	1	1	I45041978
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:35 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-bafzWu2U?tFO3m6bB1dvEQtztDmlel742tocgTzecCE

-0-10-8	2-3-8	6-4-6	10-5-4	17-7-10	24-7-8	31-11-8
0-10-8	2-3-8	4-0-14	4-0-14	7-2-6	6-11-14	7-4-0

Scale = 1:57.0



2-3-8	6-4-6	10-5-4	17-7-10	24-7-8	31-11-8
2-3-8	4-0-14	4-0-14	7-2-6	6-11-14	7-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.30	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.58	13-15	>659	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.35	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24	13-15	>999	240	Weight: 147 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-14: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17: 2x6 SPF No.2, 18-20,19-21: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=206(LC 5)
Max Uplift 10=-259(LC 5), 2=-202(LC 4)
Max Grav 10=1425(LC 1), 2=1492(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-719/73, 3-4=-3846/519, 4-5=-3049/472, 5-6=-3145/559, 6-8=-3145/559, 8-9=-2330/454, 9-10=-1351/305
BOT CHORD 3-16=-672/3789, 15-16=-668/3777, 13-15=-518/2773, 12-13=-489/2341, 8-12=-956/288
WEBS 4-15=-1123/240, 5-15=-30/595, 5-13=-117/417, 6-13=-505/212, 8-13=-133/908, 9-12=-504/2575

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 259 lb uplift at joint 10 and 202 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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

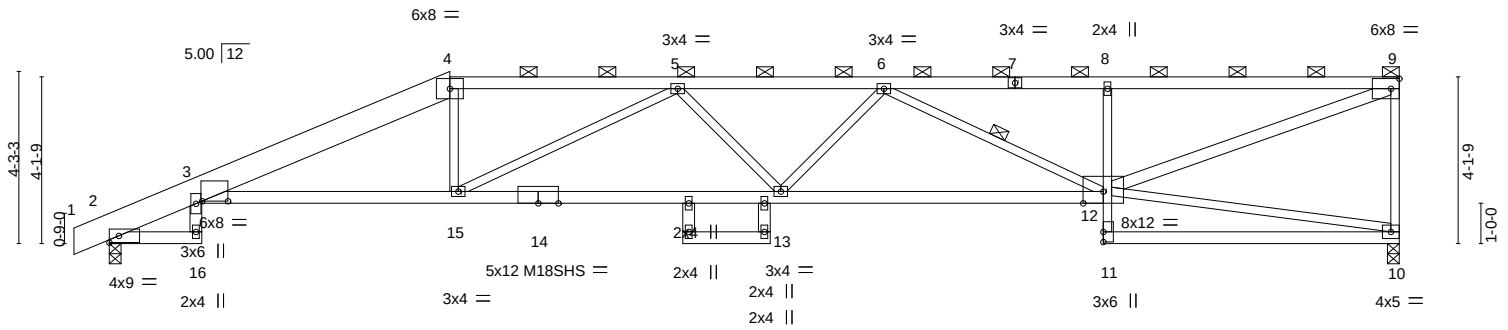
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	D5	Half Hip	1	1	I45041979
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:36 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3mDLjE36mBNFhwhnkk88ndQ7udA6NDNDHXXACvzecCD

-0-10-8	2-3-8	8-5-4	14-1-0	19-2-5	24-7-8	31-11-8
0-10-8	2-3-8	6-1-12	5-7-12	5-1-5	5-5-4	7-4-0

Scale = 1:57.1



2-3-8	8-5-4	16-7-10	24-7-8	31-11-8
2-3-8	6-1-12	8-2-6	7-11-14	7-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.41	13-15	>932	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.76	13-15	>504	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.43	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.33	13-15	>999	240	Weight: 138 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
4-7: 2x4 SPF No.2, 7-9: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
3-14,12-14: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-16,9-12,17-19,18-20: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=170(LC 5)
Max Uplift 10=-262(LC 5), 2=-218(LC 4)
Max Grav 10=1425(LC 1), 2=1494(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-713/87, 3-4=-3351/509, 4-5=-3210/524, 5-6=-3967/671, 6-8=-2883/549, 8-9=-2873/557, 9-10=-1351/307
BOT CHORD 3-15=-591/3198, 13-15=-777/3955, 12-13=-759/3829, 8-12=-507/214
WEBS 4-15=-1/438, 5-15=-838/228, 6-13=0/293, 6-12=-1064/198, 9-12=-599/3061

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
4) 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 262 lb uplift at joint 10 and 218 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

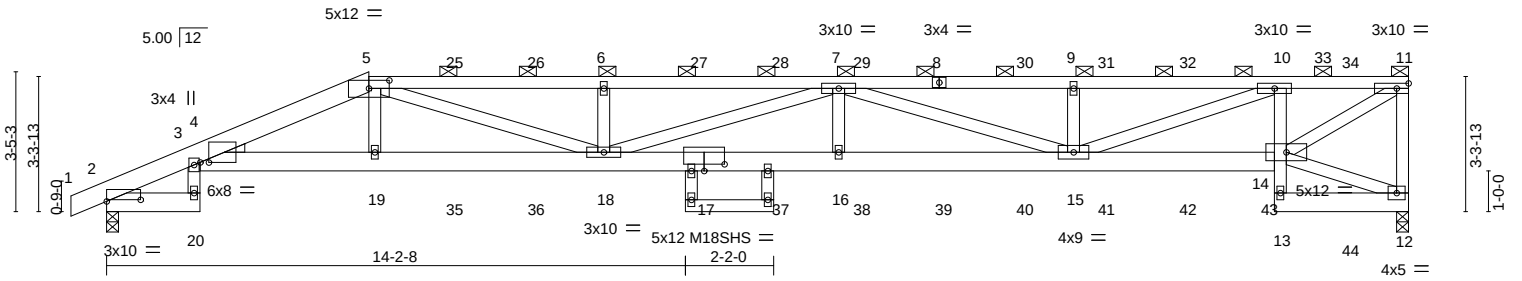
Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	D6	Half Hip Girder	1	3	I45041980
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Mar 3 14:41:51 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Re4pN9WFIlgzWYzRZ8zmWngycI?NlMbsHPNvkdzebnj

-0-10-8	2-3-8	6-5-4	12-2-7	17-11-10	23-8-13	29-6-0	31-11-8
0-10-8	2-3-8	4-1-12	5-9-3	5-9-3	5-9-3	5-9-3	2-5-8

Scale = 1:56.6



2-3-8	6-5-4	12-2-7	17-11-10	23-8-13	28-8-0	31-11-8
2-3-8	4-1-12	5-9-3	5-9-3	5-9-3	4-11-3	3-3-8

Plate Offsets (X,Y)-- [2:0-10-0,0-0-8], [4:0-2-9,0-0-0], [5:0-6-0,0-2-6], [17:0-6-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.43	16-18	>888	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.77	16-18	>493	240	M18SHS	244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.33	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.25	16-18	>999	240	Weight: 511 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SP DSS
BOT CHORD 2x6 SP 2400F 2.0E *Except*
10-13,21-22: 2x4 SPF No.2
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 (5-9-15 max.): 5-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

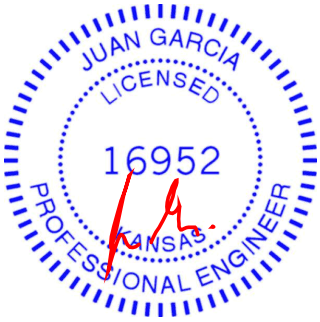
REACTIONS. (lb/size) 12=2890/0-3-8, 2=2860/0-3-8
Max Horz 2=100(LC 24)
Max Uplift 12=-114(LC 5), 2=-197(LC 4)

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

TOP CHORD 2-3=-1667/116, 3-4=-183/1933, 4-5=-9050/681, 5-25=-11239/676, 25-26=-11239/676, 6-26=-11240/676, 6-27=-11239/675, 27-28=-11239/675, 7-28=-11239/675, 7-29=-8981/345, 8-29=-8981/345, 8-30=-8981/345, 9-30=-8981/345, 9-31=-8981/345, 31-32=-8981/345, 32-33=-8981/345, 10-33=-8981/345, 10-34=-4357/178, 11-34=-4357/178, 11-12=-2787/146
BOT CHORD 4-19=-694/8481, 19-35=-700/8602, 35-36=-700/8602, 18-36=-700/8602, 17-18=-608/11990, 17-37=-608/11990, 16-37=-608/11990, 16-38=-608/11990, 38-39=-608/11990, 39-40=-608/11990, 15-40=-608/11990, 15-41=-215/4604, 41-42=-214/4607, 42-43=-213/4610, 14-43=-212/4613, 10-14=-2194/190
WEBS 3-20=-36/560, 5-19=-93/1623, 5-18=-31/2904, 6-18=-722/192, 7-18=-857/0, 7-16=0/538, 7-15=-3175/241, 9-15=-608/146, 10-15=-179/4686, 11-14=-214/5057

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 12 and 197 lb uplift at joint 2.



March 3,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 140 lb down and 62 lb up at 6-5-4, 117 lb down and 62 lb up at 8-6-0, 117 lb down and 62 lb up at 10-6-0, 117 lb down and 62 lb up at 12-6-0, 117 lb down and 62 lb up at 14-6-0, 103 lb down and 51 lb up at 16-6-0, 103 lb down and 51 lb up at 18-6-0, 103 lb down and 51 lb up at 20-6-0, 103 lb down and 51 lb up at 22-6-0, 103 lb down and 51 lb up at 24-6-0, 103 lb down and 51 lb up at 26-6-0, and 103 lb down and 51 lb up at 28-6-0, and 122 lb down and 70 lb up at 30-6-0 on top chord, and 536 lb down and 145 lb up at 6-5-4, 79 lb down at 8-6-0, 79 lb down at 10-6-0, 79 lb down at 12-6-0, 89 lb down at 16-6-0, 89 lb down at 18-6-0, 89 lb down at 20-6-0, 89 lb down at 22-6-0, 89 lb down at 24-6-0, 89 lb down at 26-6-0, and 89 lb down at 28-6-0, and 75 lb down at 30-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

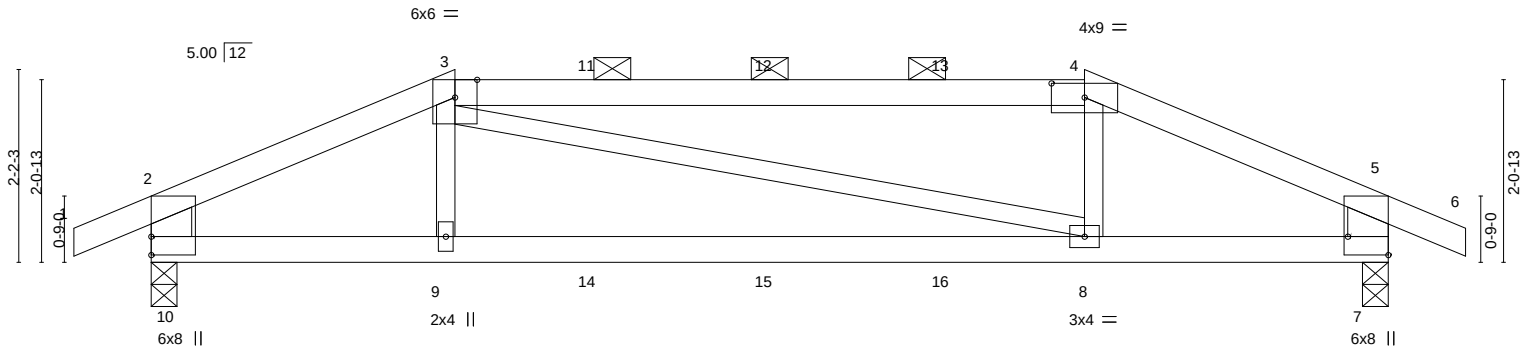
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-70, 5-11=-70, 2-20=-20, 4-14=-20, 12-13=-20
   Concentrated Loads (lb)
   Vert: 5=-117(B) 8=-98(B) 19=-536(B) 18=-74(B) 6=-117(B) 25=-117(B) 26=-117(B) 27=-117(B) 28=-98(B) 29=-98(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-98(B) 34=-122(B) 35=-74(B) 36=-74(B) 37=-89(B) 38=-89(B) 39=-89(B) 40=-89(B) 41=-89(B) 42=-89(B) 43=-89(B) 44=-58(B)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	E1	Hip Girder	1	1	I45041981
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:41 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Qk0Enx7Faj?YnhZIXIkJUh7y_en_2f1yRpFxu7zecC8

-0-10-8 | 3-5-4 | 10-6-12 | 14-0-0 | 14-10-8
0-10-8 | 3-5-4 | 7-1-8 | 3-5-4 | 0-10-8

Scale = 1:26.1



3-5-4 | 10-6-12 | 14-0-0
3-5-4 | 7-1-8 | 3-5-4

Plate Offsets (X,Y)-- [4:0-4-8,0-1-15], [7: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	0.91	Vert(LL)	-0.15	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.35	8-9	>466	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	8-9	>999	240	Weight: 45 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x6 SP 2400F 2.0E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-7 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=17(LC 28)
Max Uplift 10=-183(LC 4), 7=-183(LC 5)
Max Grav 10=858(LC 1), 7=858(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1359/274, 3-4=-1168/268, 4-5=-1339/269, 2-10=-750/160, 5-7=-755/161
BOT CHORD 9-10=-220/1197, 8-9=-228/1192, 7-8=-209/1171
WEBS 3-9=0/275, 4-8=0/285

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 10 and 183 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 164 lb down and 131 lb up at 3-5-4, 76 lb down and 61 lb up at 5-0-0, 76 lb down and 61 lb up at 7-0-0, and 76 lb down and 61 lb up at 9-0-0, and 164 lb down and 131 lb up at 10-6-12 on top chord, and 55 lb down at 3-5-4, 23 lb down at 5-0-0, 23 lb down at 7-0-0, and 23 lb down at 9-0-0, and 55 lb down at 10-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20

Concentrated Loads (lb)

Vert: 3=-64(F) 4=-64(F) 9=-37(F) 8=-37(F) 11=-31(F) 12=-31(F) 13=-31(F) 14=-16(F) 15=-16(F) 16=-16(F)

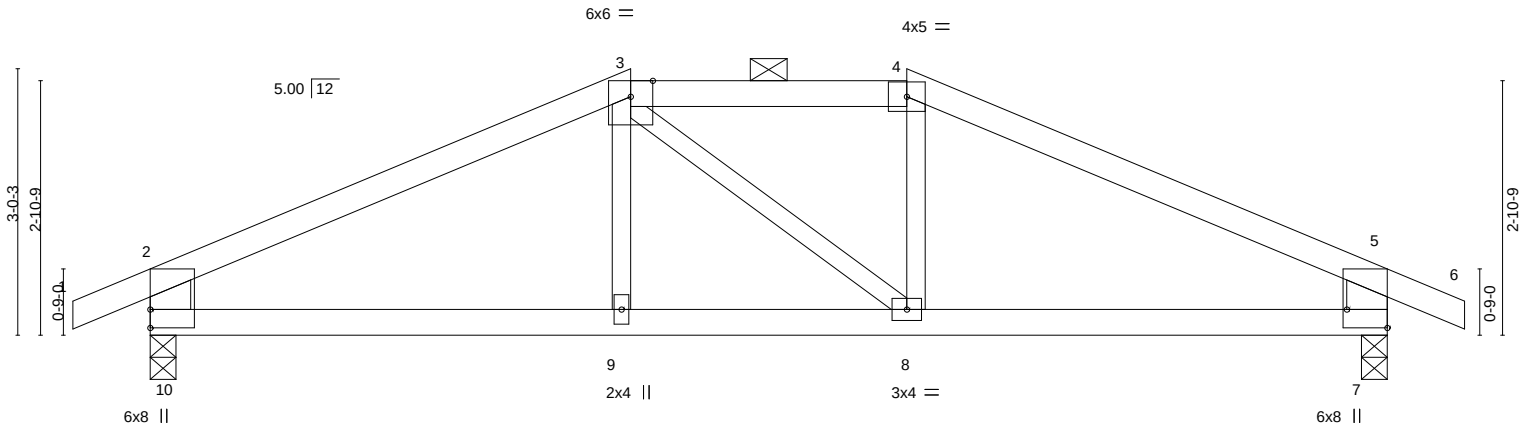
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	E2	Hip	1	1	I45041982
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:42 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-uwac_H8tL17OPr8x5?FY0ugC?2Gkn7w6fT_UQZzecC7

-0-10-8 / 0-10-8 | 5-5-4 / 5-5-4 | 8-6-12 / 3-1-8 | 14-0-0 / 5-5-4 | 14-10-8 / 0-10-8

Scale = 1:26.1



5-5-4 / 5-5-4 | 8-6-12 / 3-1-8 | 14-0-0 / 5-5-4

Plate Offsets (X,Y)-- [7: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	0.58	Vert(LL)	-0.05	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.10	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	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: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-12 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=-27(LC 13)
Max Uplift 10=-90(LC 8), 7=-90(LC 9)
Max Grav 10=687(LC 1), 7=687(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-877/96, 3-4=-727/108, 4-5=-877/96, 2-10=-612/128, 5-7=-612/128
BOT CHORD 9-10=-32/729, 8-9=-34/727, 7-8=-34/729

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 10 and 90 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	E3	Common	3	1	I45041983
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:43 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-M68_Cd8V6LFF1_j7fjmnZ6DMXRb7WZZFu7k1y?zecC6

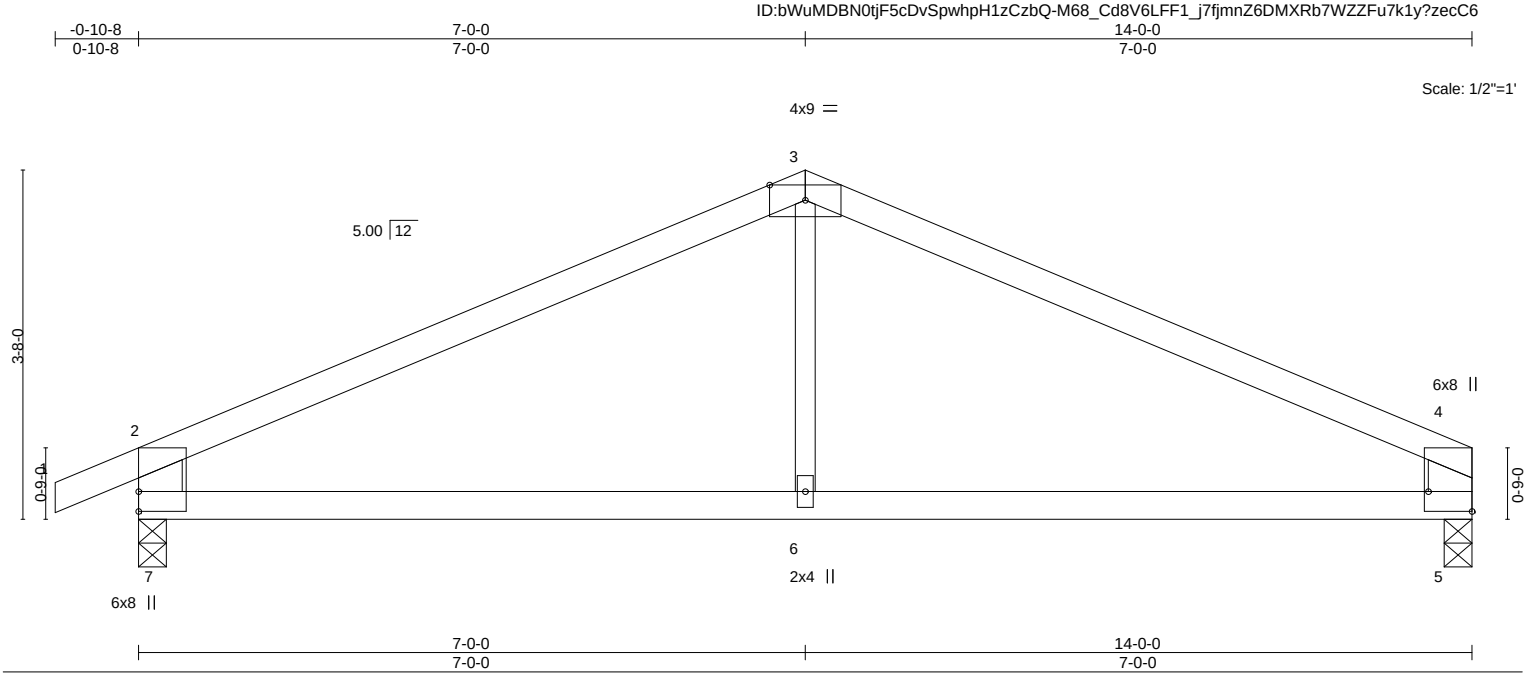

Plate Offsets (X,Y)-- [4:Edge,0-5-8]

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	0.65	Vert(LL)	-0.05	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.11	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6-7	>999	240	Weight: 38 lb	FT = 10%

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

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

REACTIONS. (size) 7=0-3-8, 5=0-3-8
Max Horz 7=47(LC 12)
Max Uplift 7=-103(LC 8), 5=-77(LC 9)
Max Grav 7=690(LC 1), 5=606(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-820/104, 3-4=-815/102, 2-7=-620/149, 4-5=-529/120
BOT CHORD 6-7=-38/662, 5-6=-38/662
WEBS 3-6=0/276

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 7 and 77 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.

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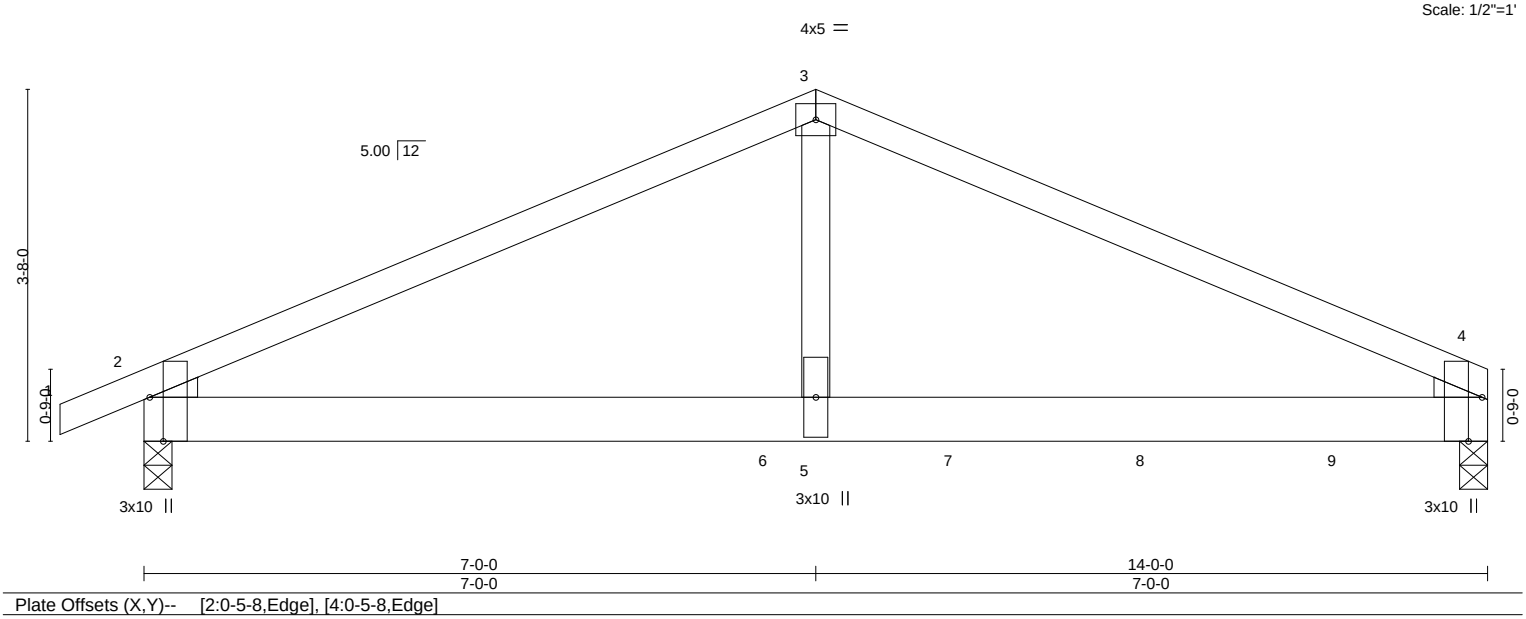
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	E4	Common Girder	1	2	I45041984
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:44 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-qJiNPz97teN6e8IKCQH06JlXMrwqF_IP7nTbVSzecC5

-0-10-8 0-10-8 | 7-0-0 7-0-0 | 14-0-0 7-0-0

Scale: 1/2"=1'



7-0-0 7-0-0 | 14-0-0 7-0-0

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.08	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.13	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	4-5	>999	240	Weight: 111 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2 , Right: 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=0-3-8, 4=0-3-8
Max Horz 2=58(LC 33)
Max Uplift 2=-172(LC 8), 4=-192(LC 9)
Max Grav 2=1542(LC 1), 4=2117(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3009/271, 3-4=-2997/269
BOT CHORD 2-5=-190/2615, 4-5=-190/2615
WEBS 3-5=-77/2023

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 172 lb uplift at joint 2 and 192 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 946 lb down and 103 lb up at 6-6-13, 489 lb down and 31 lb up at 8-6-0, and 453 lb down and 33 lb up at 10-6-0, and 465 lb down and 49 lb up at 12-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

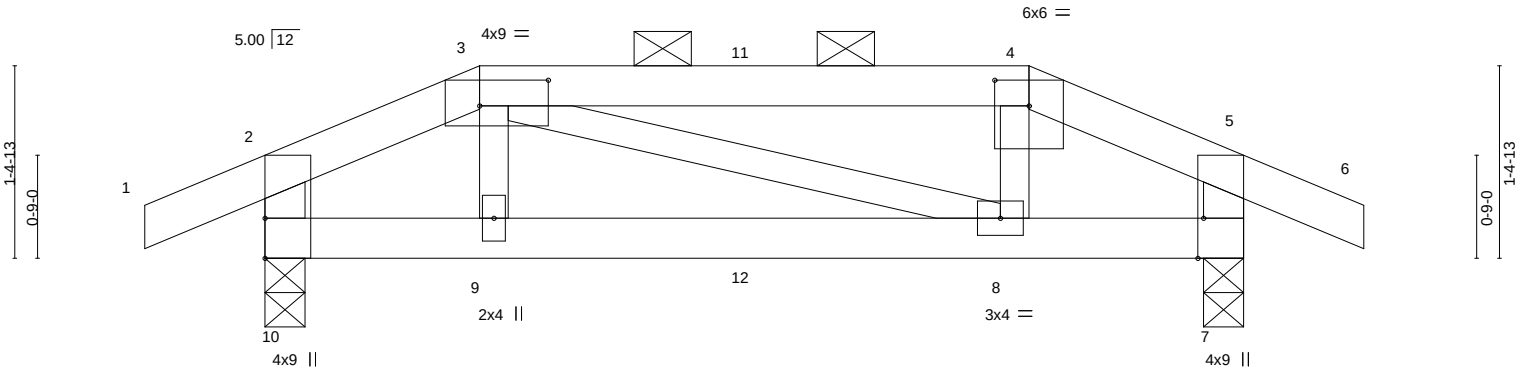
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-4=-70, 2-4=-20
   Concentrated Loads (lb)
   Vert: 6=-946(B) 7=-489(B) 8=-453(B) 9=-465(B)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	G1	Hip Girder	1	1	I45041985
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:45 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-IVFlcJAleyVzGItWm7pFeXloyFJg_U_YLRD81uzecC4

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

Scale = 1:16.8



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

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

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15	TC	0.27	Vert(LL)	-0.01	8-9	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC	0.22	Vert(CT)	-0.03	8-9	>999	240		
BCLL 0.0	*	Rep Stress Incr NO	WB	0.03	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	8-9	>999	240	Weight: 24 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=-17(LC 27)
Max Uplift 10=-74(LC 4), 7=-74(LC 5)
Max Grav 10=375(LC 1), 7=375(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-368/60, 3-4=-299/56, 4-5=-368/59, 2-10=-308/66, 5-7=-308/65
BOT CHORD 9-10=-34/300, 8-9=-30/299, 7-8=-27/300

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 10 and 74 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 64 lb up at 1-6-12, and 50 lb down and 23 lb up at 3-6-12, and 57 lb down and 64 lb up at 5-6-12 on top chord, and 7 lb down and 3 lb up at 1-6-12, and 3 lb down and 1 lb up at 3-6-12, and 7 lb down and 3 lb up at 5-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 3,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=3(F) 8=3(F) 12=1(F)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	G2	Common	2	1	I45041986
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:46 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-mhp7qfBOPGdquSSiKrKUBkr_hfgEjx3ia5yhZKzecC3

-0-10-8 / 0-10-8 | 3-6-12 / 3-6-12 | 7-1-8 / 3-6-12 | 8-0-0 / 0-10-8

Scale = 1:17.0

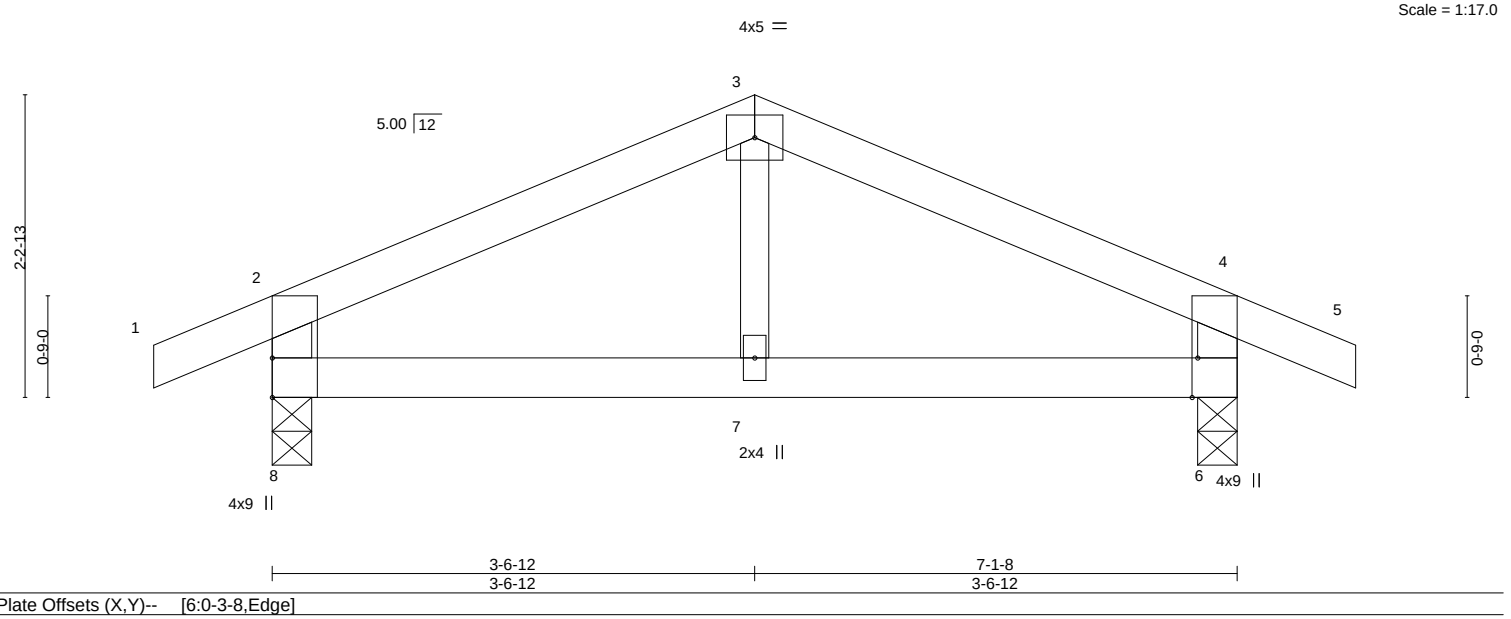


Plate Offsets (X,Y)-- [6:0-3-8,Edge]

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	0.21	Vert(LL)	-0.01	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	7	>999	240	Weight: 21 lb	FT = 10%

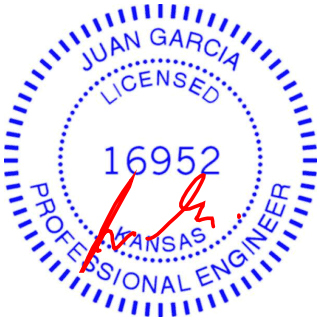
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-15(LC 13)
Max Uplift 8=-63(LC 8), 6=-63(LC 9)
Max Grav 8=379(LC 1), 6=379(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-333/49, 3-4=-333/48, 2-8=-328/85, 4-6=-328/85
BOT CHORD 7-8=-4/254, 6-7=-4/254

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 8 and 63 lb uplift at joint 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3,2021

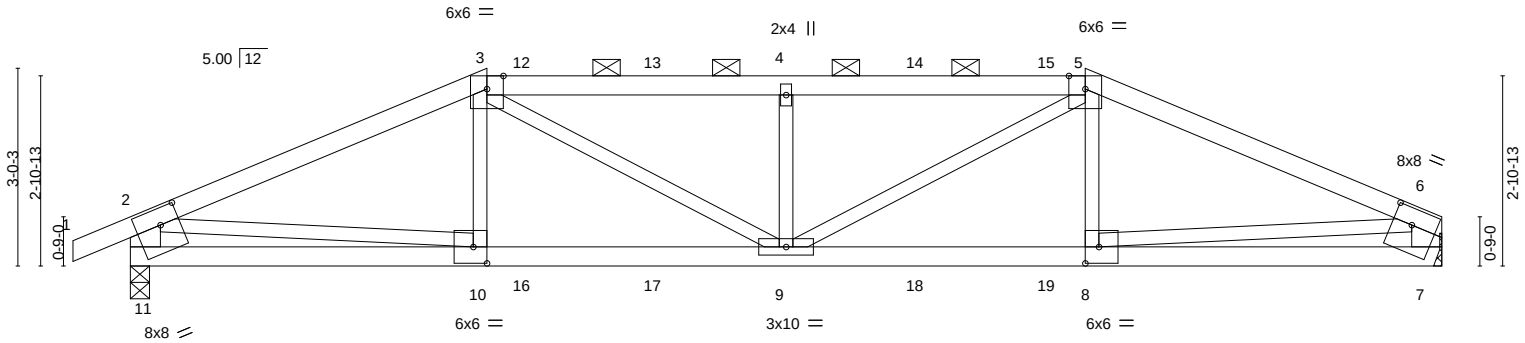
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	H1	Hip Girder	1	1	I45041987
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:48 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-i4xtFLCextuY7mb5RGMyG9w9lSB2BfQ_2PRoeDzecC1

-0-10-8	5-5-4	10-0-0	14-6-12	20-0-0
0-10-8	5-5-4	4-6-12	4-6-12	5-5-4

Scale = 1:35.1



5-5-4	10-0-0	14-6-12	20-0-0
5-5-4	4-6-12	4-6-12	5-5-4

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.16	9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.28	8-9	>826	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	9	>999	240	Weight: 71 lb	FT = 10%

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

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

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Horz 11=24(LC 5)
Max Uplift 11=-184(LC 4), 7=-168(LC 9)
Max Grav 11=1753(LC 1), 7=1671(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3138/360, 3-4=-3608/416, 4-5=-3608/416, 5-6=-3142/359, 2-11=-1687/207, 6-7=-1604/191
BOT CHORD 10-11=-109/604, 9-10=-308/2819, 8-9=-307/2833, 7-8=-62/480
WEBS 3-10=0/338, 3-9=-85/975, 4-9=-706/186, 5-9=-83/967, 5-8=0/329, 2-10=-246/2289, 6-8=-265/2374

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 11 and 168 lb uplift at joint 7.
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) 121 lb down and 64 lb up at 5-5-4, 109 lb down and 64 lb up at 6-0-0, 98 lb down and 64 lb up at 8-0-0, 98 lb down and 64 lb up at 10-0-0, 98 lb down and 64 lb up at 12-0-0, and 109 lb down and 64 lb up at 14-0-0, and 121 lb down and 64 lb up at 14-6-12 on top chord, and 344 lb down and 99 lb up at 5-5-4, 60 lb down at 6-0-0, 60 lb down at 8-0-0, 60 lb down at 10-0-0, 60 lb down at 12-0-0, and 60 lb down at 14-0-0, and 344 lb down and 99 lb up at 14-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

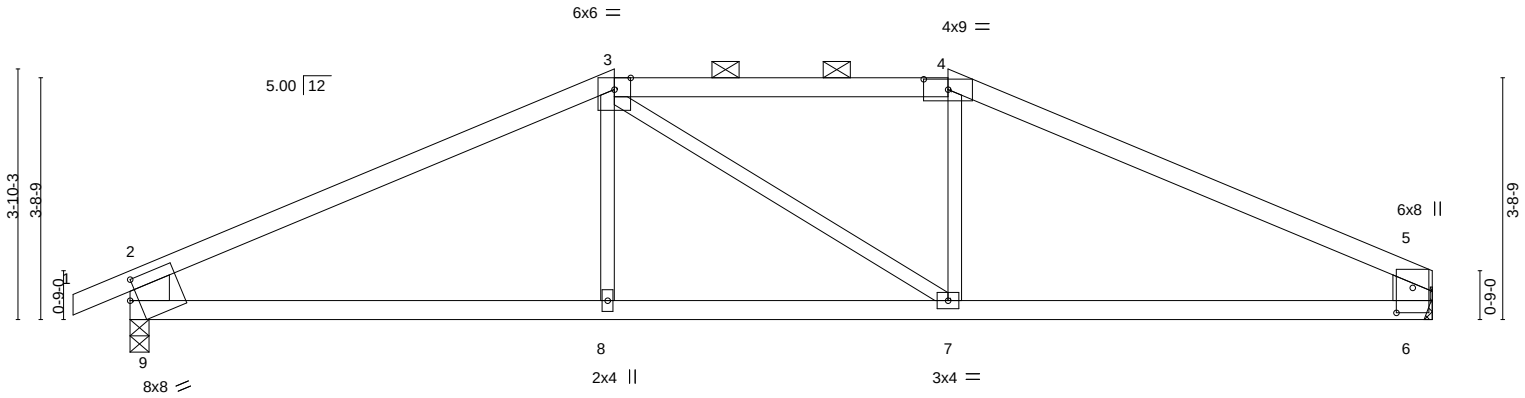
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 7-11=-20
   Concentrated Loads (lb)
   Vert: 3=-98(F) 5=-98(F) 10=-344(F) 9=-43(F) 4=-98(F) 8=-344(F) 12=-98(F) 13=-98(F) 14=-98(F) 15=-98(F) 16=-43(F) 17=-43(F) 18=-43(F) 19=-43(F)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	H2	Hip	1	1	I45041988
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:49 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BGVFSgDGiB0PlvAH?ztBpNSIusYZwGs8G3BMAfzecC0

-0-10-8 7-5-4 12-6-12 20-0-0
0-10-8 7-5-4 5-1-8 7-5-4

Scale = 1:35.4



7-5-4 12-6-12 20-0-0
7-5-4 5-1-8 7-5-4

Plate Offsets (X,Y)-- [4:0-4-8,0-1-15], [5:0-4-10,0-3-0], [9:0-1-8,0-3-9]

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	0.98	Vert(LL)	-0.15	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.29	7-8	>809	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	7-8	>999	240	Weight: 61 lb	FT = 10%

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

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

REACTIONS. (size) 9=0-3-8, 6=Mechanical
Max Horz 9=29(LC 10)
Max Uplift 9=-16(LC 4)
Max Grav 9=958(LC 1), 6=870(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1368/21, 3-4=-1147/35, 4-5=-1351/18, 2-9=-869/62, 5-6=-759/47
BOT CHORD 8-9=0/1156, 7-8=0/1153, 6-7=0/1149

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

March 3,2021

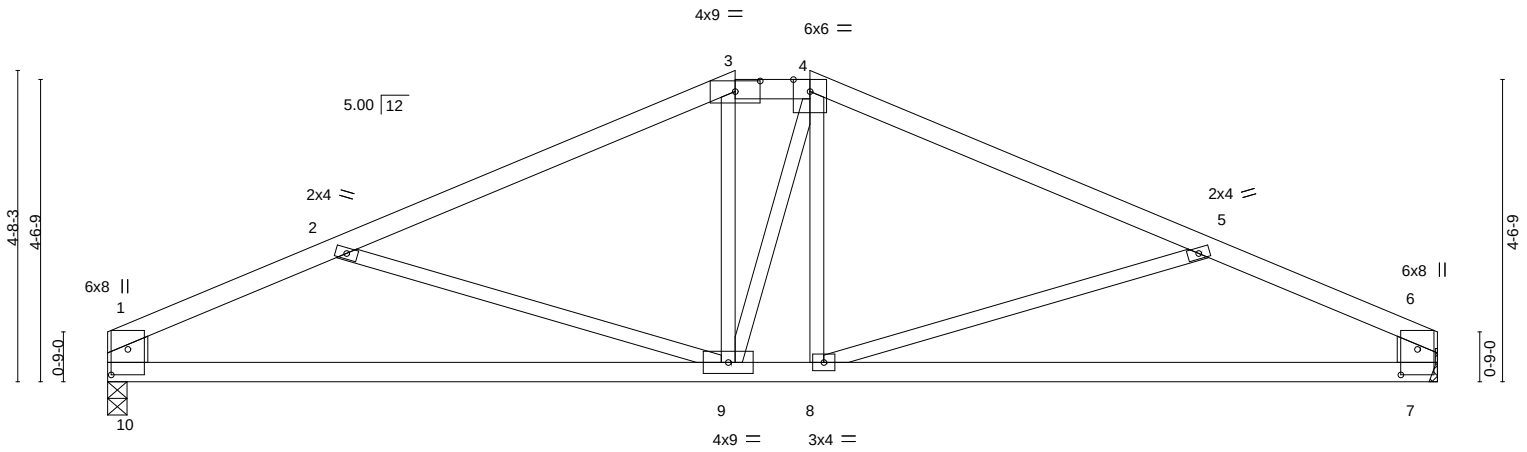
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	H3	Hip	1	1	I45041989
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:50 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fS3eg0EuTU8GM3lUZhOQLa?TeGvhfhsHVjwvi5zecC?

3-7-2 | 9-5-4 | 10-6-12 | 16-4-14 | 20-0-0
3-7-2 | 5-10-2 | 1-1-8 | 5-10-2 | 3-7-2

Scale = 1:34.7



9-5-4 | 10-6-12 | 20-0-0
9-5-4 | 1-1-8 | 9-5-4

Plate Offsets (X,Y)-- [1:0-4-10,0-3-0], [3:0-4-8,0-1-15], [6:0-4-10,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.17	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.34	7-8	>680	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	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: 70 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,6-7: 2x8 SP DSS

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

REACTIONS. (size) 10=0-3-8, 7=Mechanical
Max Horz 10=26(LC 10)
Max Uplift 10=-10(LC 8), 7=-10(LC 9)
Max Grav 10=873(LC 1), 7=873(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1414/77, 2-3=-1161/4, 3-4=-1021/26, 4-5=-1160/4, 5-6=-1414/77, 1-10=-763/57, 6-7=-762/57
BOT CHORD 9-10=-75/1214, 8-9=0/1020, 7-8=-49/1214
WEBS 2-9=-258/133, 3-9=-25/269, 5-8=-259/133

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 3,2021

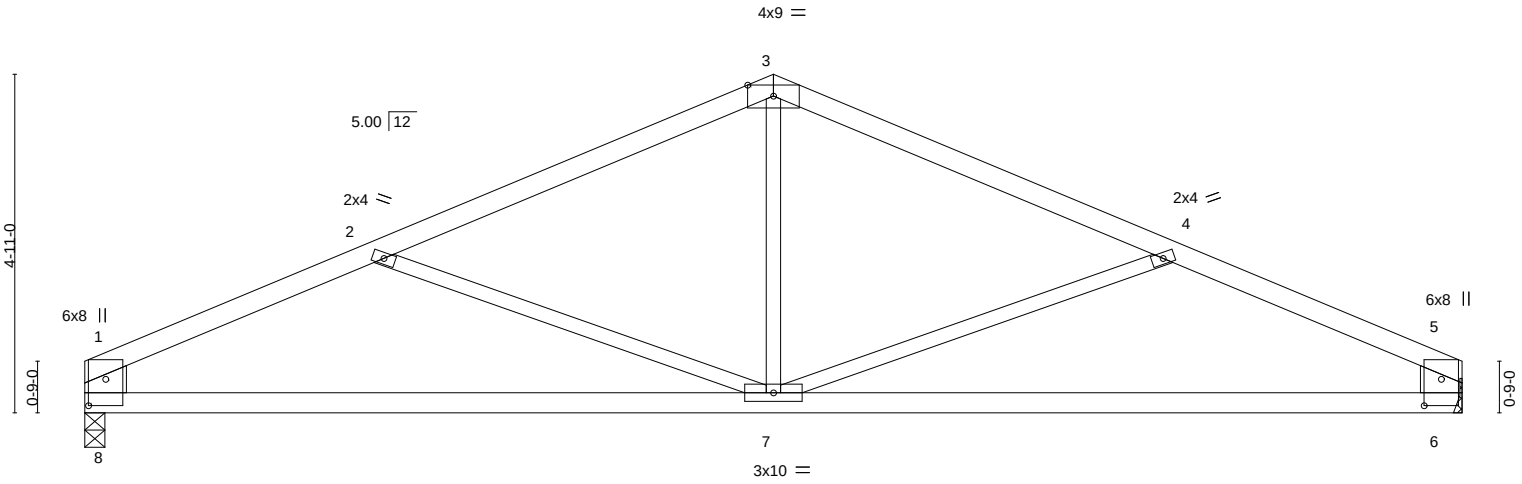
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	H4	Common	4	1	I45041990
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:50 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fS3eg0EuTU8GM3lUZhOQLa?WLGulfgnHVjwvi5zecC?

4-4-2 | 10-0-0 | 15-7-14 | 20-0-0
4-4-2 | 5-7-14 | 5-7-14 | 4-4-2

Scale = 1:33.5



10-0-0 | 20-0-0
10-0-0 | 10-0-0

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.19	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.37	6-7	>628	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	7	>999	240	Weight: 64 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-8,5-6: 2x8 SP DSS

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

REACTIONS. (size) 8=0-3-8, 6=Mechanical
Max Horz 8=29(LC 10)
Max Uplift 8=-12(LC 8), 6=-12(LC 9)
Max Grav 8=873(LC 1), 6=873(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1414/76, 2-3=-1103/14, 3-4=-1103/14, 4-5=-1414/77, 1-8=-758/60, 5-6=-758/60
BOT CHORD 7-8=-72/1216, 6-7=-43/1216
WEBS 3-7=0/434, 4-7=-331/139, 2-7=-331/139

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

March 3,2021

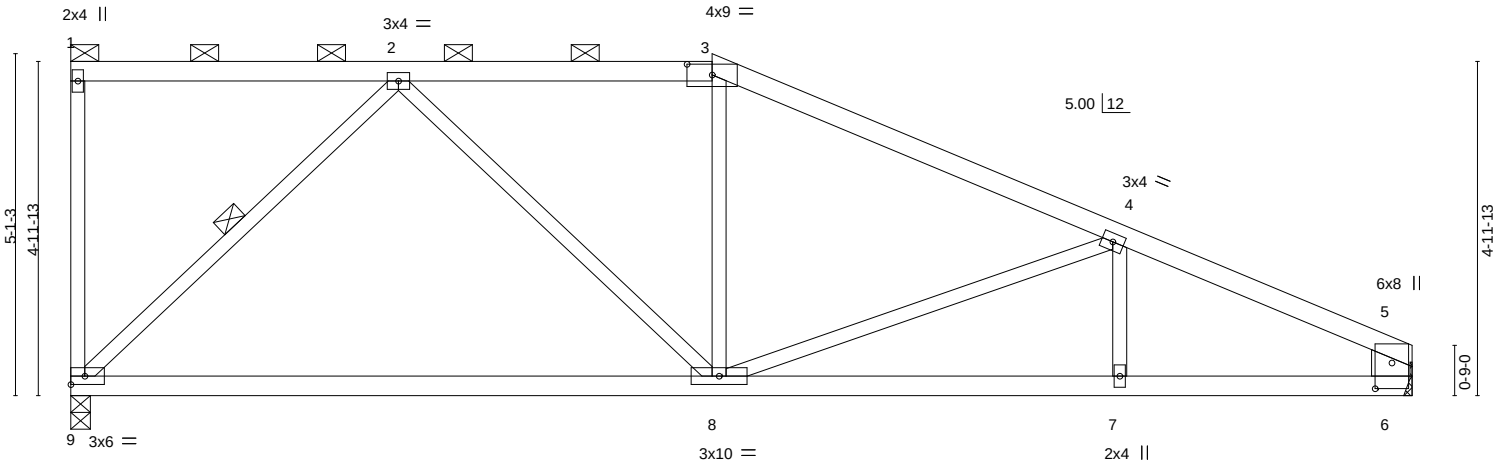
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	H5	Half Hip	1	1	I45041991
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:51 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7fd0tMFWDoG7_DKg6OvfuoYkJgF1O5SRkNgSEYzecC_

4-10-10 | 9-6-12 | 15-7-11 | 20-0-0
4-10-10 | 4-8-2 | 6-0-15 | 4-4-5

Scale = 1:34.4



9-6-12 | 15-7-11 | 20-0-0
9-6-12 | 6-0-15 | 4-4-5

Plate Offsets (X,Y)-- [3:0-4-8,0-1-15], [5:0-4-10,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.20	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.41	8-9	>569	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	7-8	>999	240	Weight: 72 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-9 max.): 1-3.
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, 6=Mechanical
Max Horz 9=-155(LC 6)
Max Uplift 9=-43(LC 4), 6=-12(LC 9)
Max Grav 9=882(LC 1), 6=882(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-979/34, 3-4=-1135/23, 4-5=-1406/40, 5-6=-704/33
BOT CHORD 8-9=-2/687, 7-8=-13/1230, 6-7=-13/1230
WEBS 2-9=-944/90, 2-8=0/406, 4-8=-270/104

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 9 and 12 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	H6	Half Hip	1	1	I45041992
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:52 2021 Page 1
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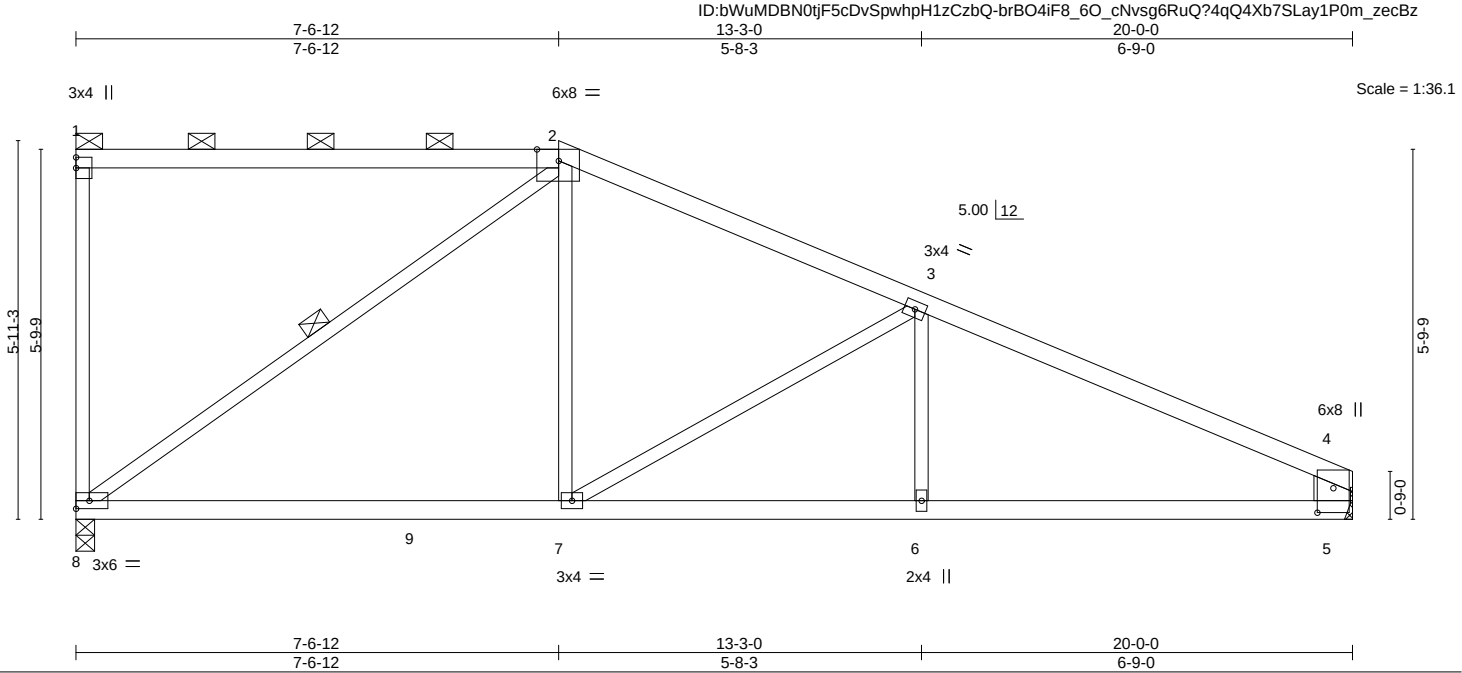

Plate Offsets (X,Y)-- [2:0-4-2,Edge], [4:0-4-10,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.15	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.26	7-8	>888	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	6-7	>999	240	Weight: 72 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	4-5: 2x8 SP DSS

BRACING-

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

REACTIONS. (size) 8=0-3-8, 5=Mechanical
Max Horz 8=-182(LC 4)
Max Uplift 8=-42(LC 4), 5=-18(LC 9)
Max Grav 8=930(LC 2), 5=918(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-251/62, 2-3=-973/40, 3-4=-1431/45, 4-5=-759/57
BOT CHORD 7-8=0/843, 6-7=0/1240, 5-6=0/1240
WEBS 2-8=-1020/36, 2-7=0/552, 3-7=-460/93

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 8 and 18 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J1	Diagonal Hip Girder	2	1	I45041993
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:53 2021 Page 1
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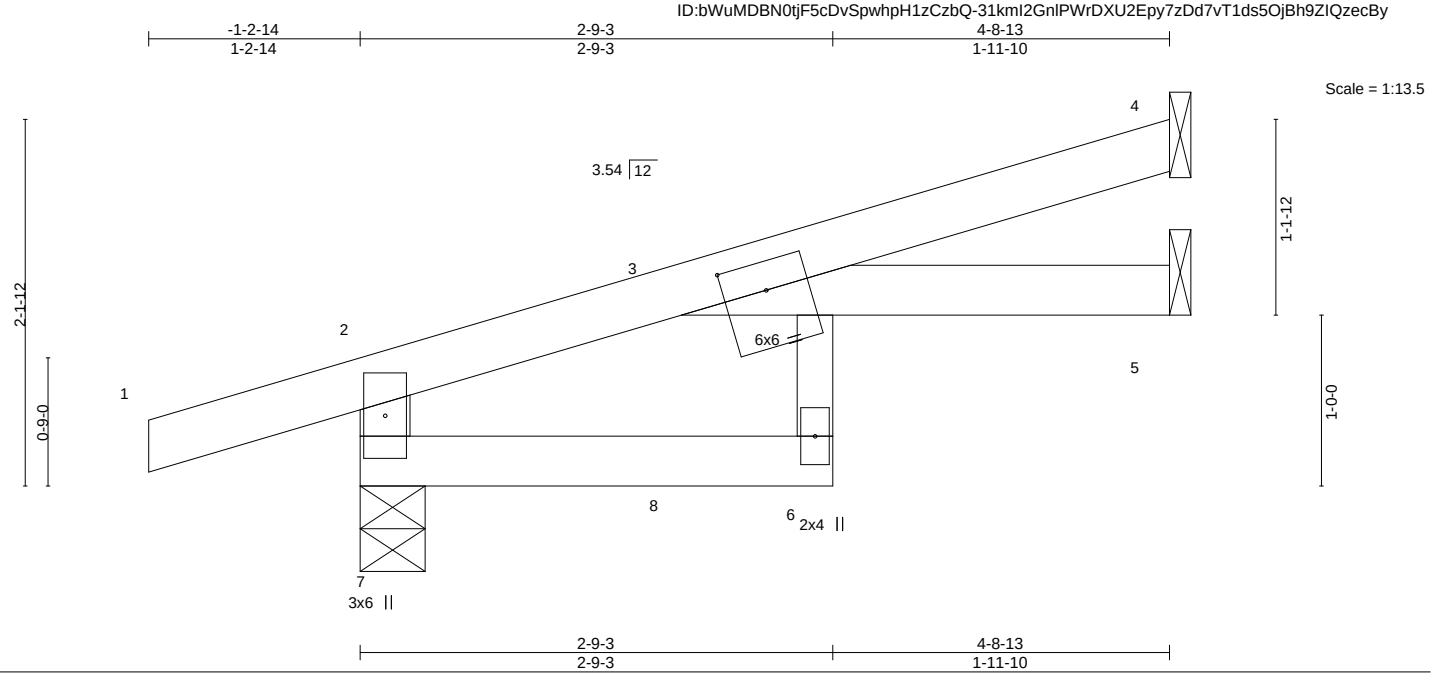

Plate Offsets (X,Y)-- [3:0-3-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.09	6	>604	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	6	>999	240	Weight: 14 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-4-9, 4=Mechanical, 5=Mechanical
Max Horz 7=68(LC 4)
Max Uplift 7=-85(LC 4), 4=-45(LC 8)
Max Grav 7=322(LC 1), 4=123(LC 1), 5=85(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-308/105

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 85 lb uplift at joint 7 and 45 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) 66 lb down and 20 lb up at 1-11-15, and 66 lb down and 20 lb up at 1-11-15 on top chord, and 3 lb down and 2 lb up at 1-10-5, and 3 lb down and 2 lb up at 1-10-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 6-7=-20, 3-5=-20
Concentrated Loads (lb)
Vert: 8=4(F=2, B=2)

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J2	Jack-Open	7	1	I45041994
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:01 2021 Page 1
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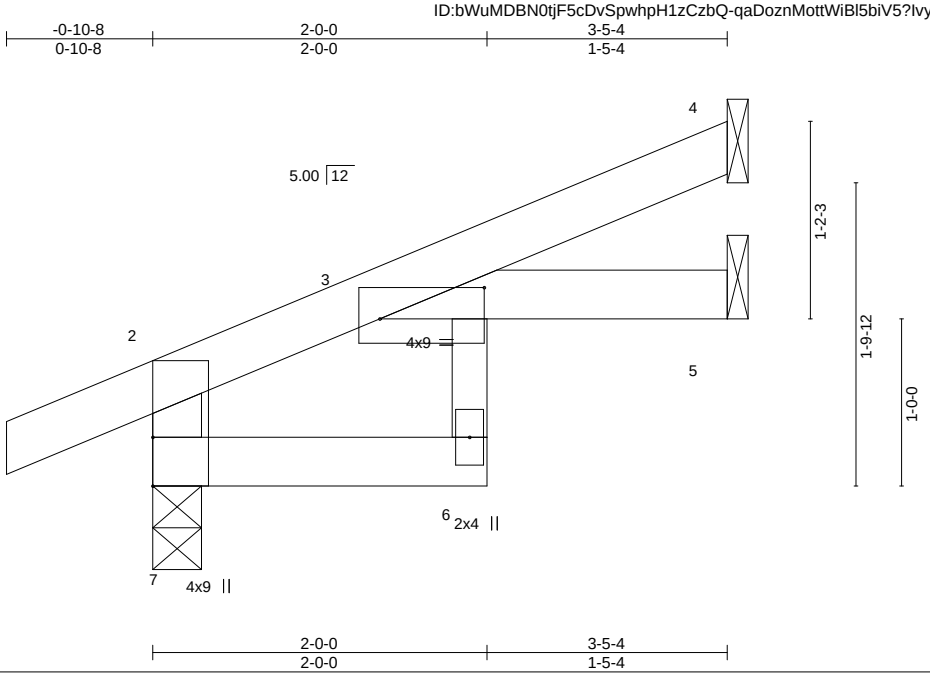

Plate Offsets (X,Y)-- [3:0-7-8,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	6	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-4 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=63(LC 8)
Max Uplift 7=-30(LC 8), 4=-38(LC 8), 5=-3(LC 8)
Max Grav 7=234(LC 1), 4=87(LC 1), 5=61(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 30 lb uplift at joint 7, 38 lb uplift at joint 4 and 3 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J3	Jack-Open	12	1	I45041995
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:07 2021 Page 1
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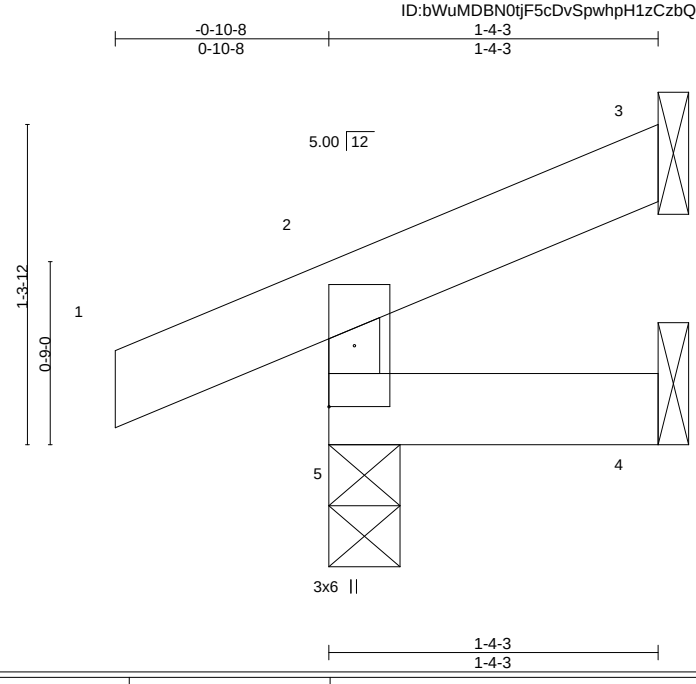

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 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 1-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=33(LC 5)
Max Uplift 5=-34(LC 4), 3=-18(LC 8)
Max Grav 5=151(LC 1), 3=20(LC 1), 4=22(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 34 lb uplift at joint 5 and 18 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J4	Diagonal Hip Girder	1	1	I45041996
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:08 2021 Page 1
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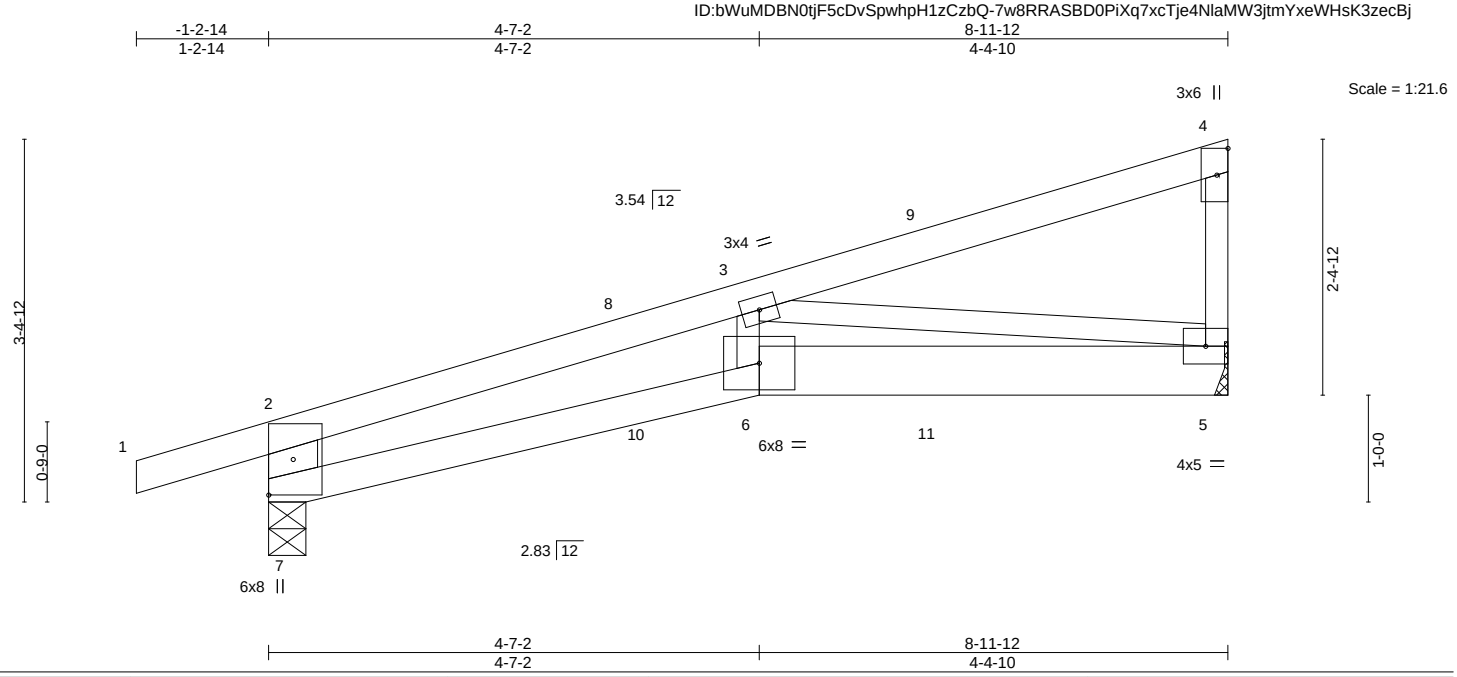

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.12	6	>889	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.21	6	>503	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	6	>975	240	Weight: 32 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-7: 2x6 SP DSS

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) 7=0-4-3, 5=Mechanical
Max Horz 7=123(LC 5)
Max Uplift 7=-141(LC 4), 5=-112(LC 8)
Max Grav 7=533(LC 1), 5=454(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-650/210, 2-3=-1088/263
BOT CHORD 6-7=-295/994, 5-6=-282/1005
WEBS 3-6=0/289, 3-5=-959/280

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 7 and 112 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.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 44 lb up at 3-4-15, 72 lb down and 44 lb up at 3-4-15, and 103 lb down and 78 lb up at 6-2-14, and 103 lb down and 78 lb up at 6-2-14 on top chord, and 6 lb down at 3-4-15, 6 lb down at 3-4-15, and 28 lb down at 6-2-14, and 28 lb down at 6-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

March 3,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J4	Diagonal Hip Girder	1	1	I45041996 Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=-66(F=-33, B=-33) 10=-1(F=-1, B=-1) 11=-40(F=-20, B=-20)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J5	Jack-Open	15	1	I45041997
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:08 2021 Page 1
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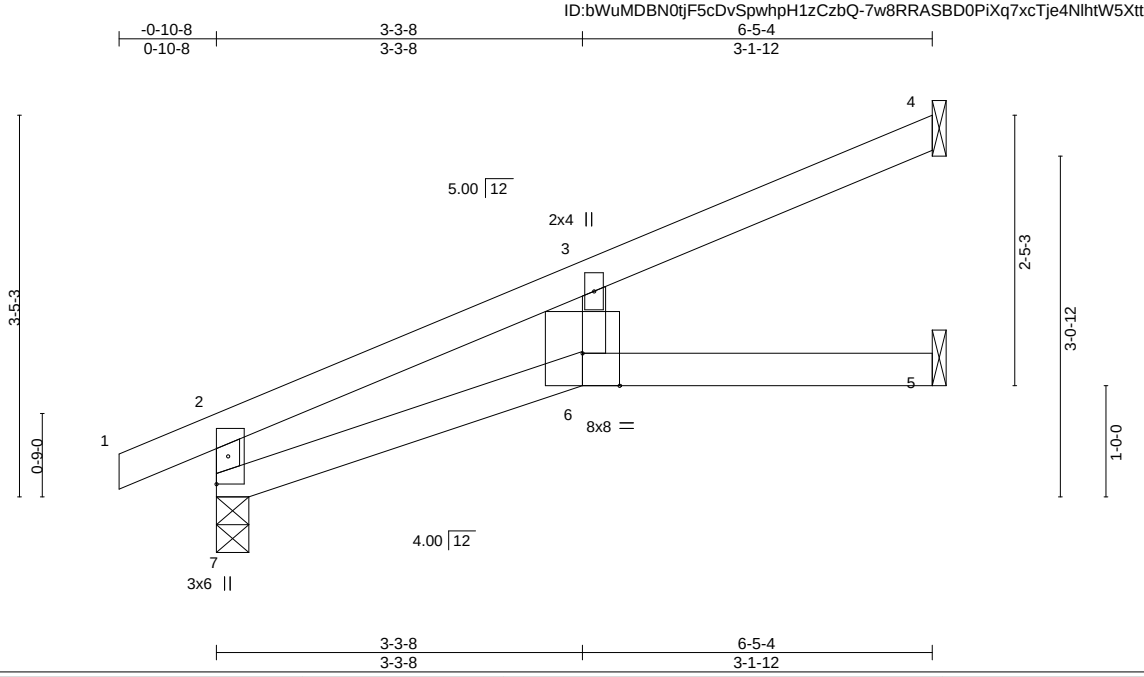

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.12	6	>654	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.21	6	>362	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.09	6	>833	240	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 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=79(LC 8)
Max Uplift 7=-3(LC 8), 4=-37(LC 8)
Max Grav 7=356(LC 1), 4=168(LC 1), 5=109(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); 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 3 lb uplift at joint 7 and 37 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J6	Jack-Open	2	1	I45041998
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:09 2021 Page 1
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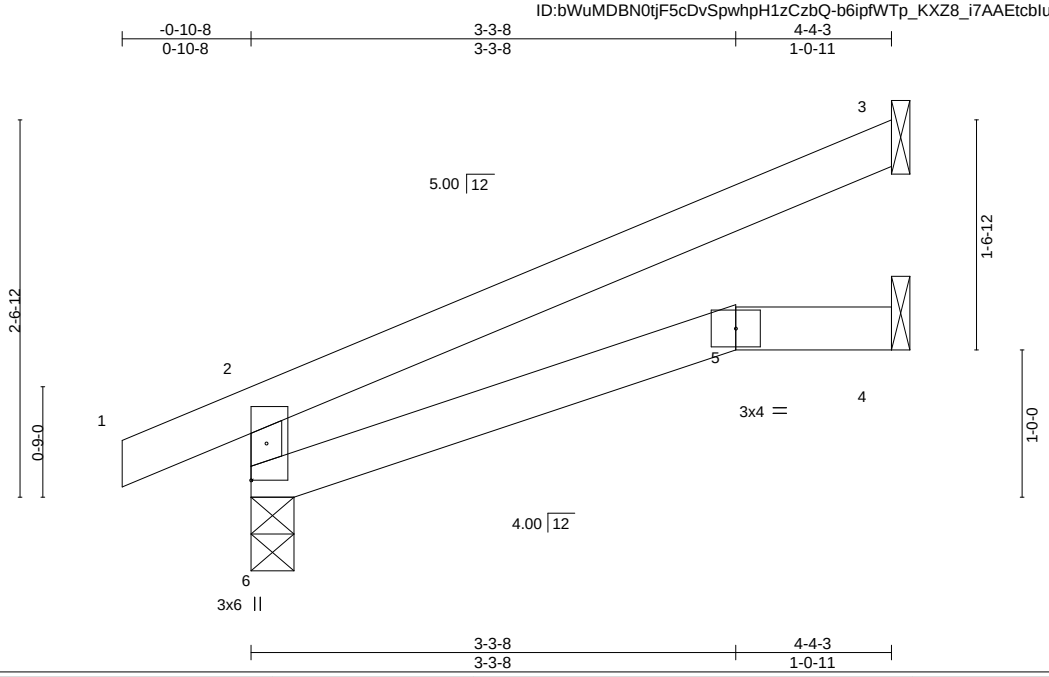

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	Weight: 12 lb	FT = 10%

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

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=78(LC 8)
Max Uplift 6=-35(LC 8), 3=-70(LC 8)
Max Grav 6=265(LC 1), 3=132(LC 1), 4=80(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 35 lb uplift at joint 6 and 70 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J7	Jack-Open	2	1	I45041999
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:10 2021 Page 1
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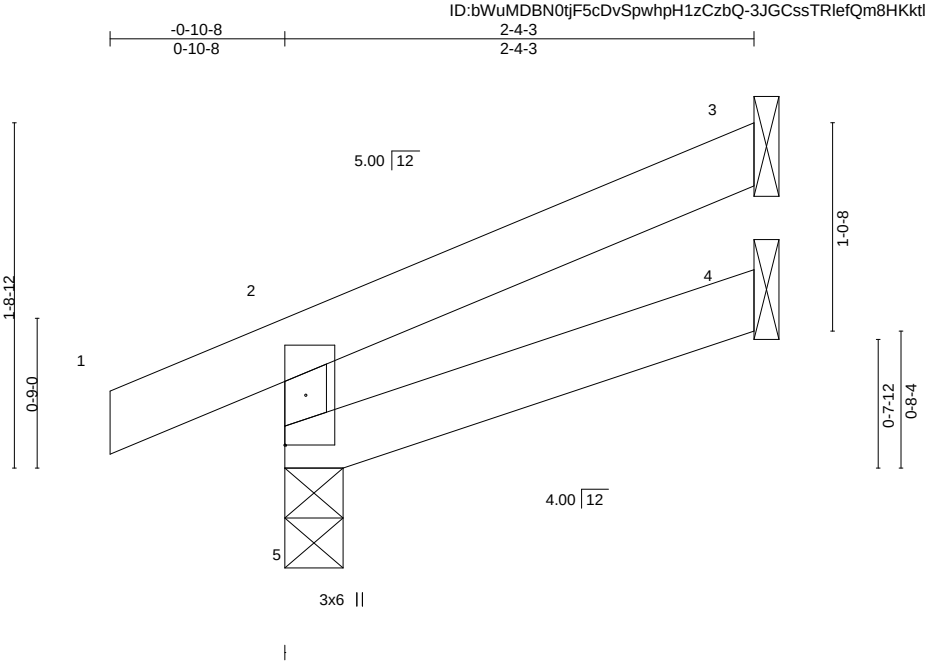

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 2x3 SPF No.2

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 5)
Max Uplift 5=-29(LC 4), 3=-37(LC 8)
Max Grav 5=182(LC 1), 3=61(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) 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 29 lb uplift at joint 5 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J8	Jack-Open	5	1	I45042000
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:10 2021 Page 1
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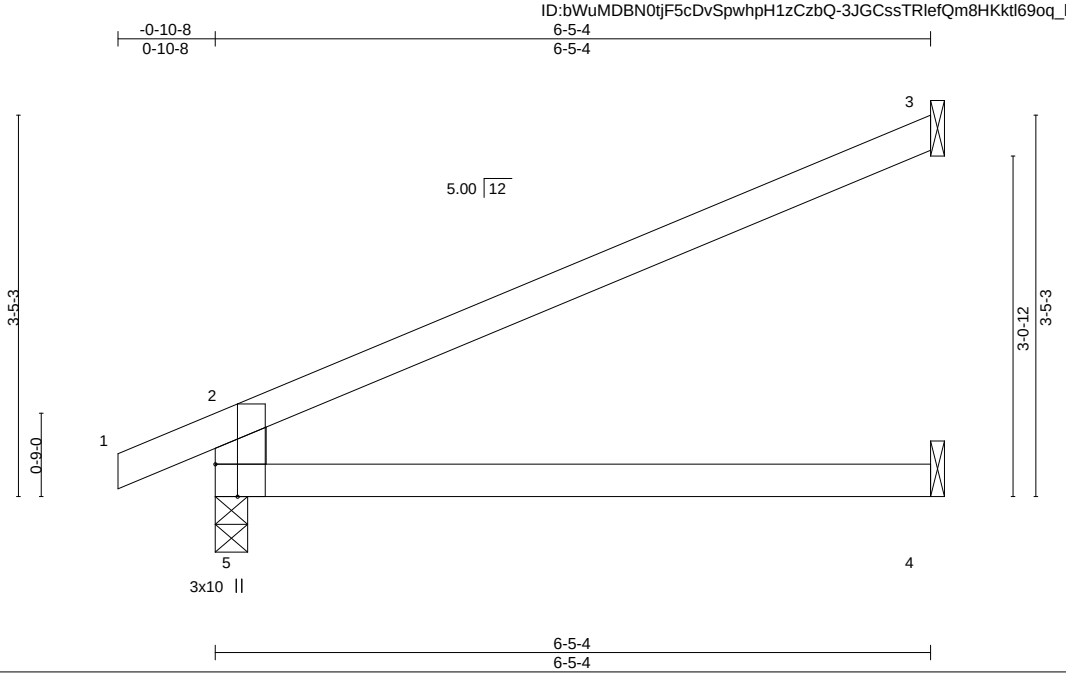

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.06	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.15	4-5	>505	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)	0.05	4-5	>999	240	Weight: 17 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=79(LC 8)
Max Uplift 5=-4(LC 8), 3=-56(LC 8)
Max Grav 5=361(LC 1), 3=192(LC 1), 4=115(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-316/57

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 4 lb uplift at joint 5 and 56 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J9	Jack-Closed	5	1	I45042001
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:11 2021 Page 1
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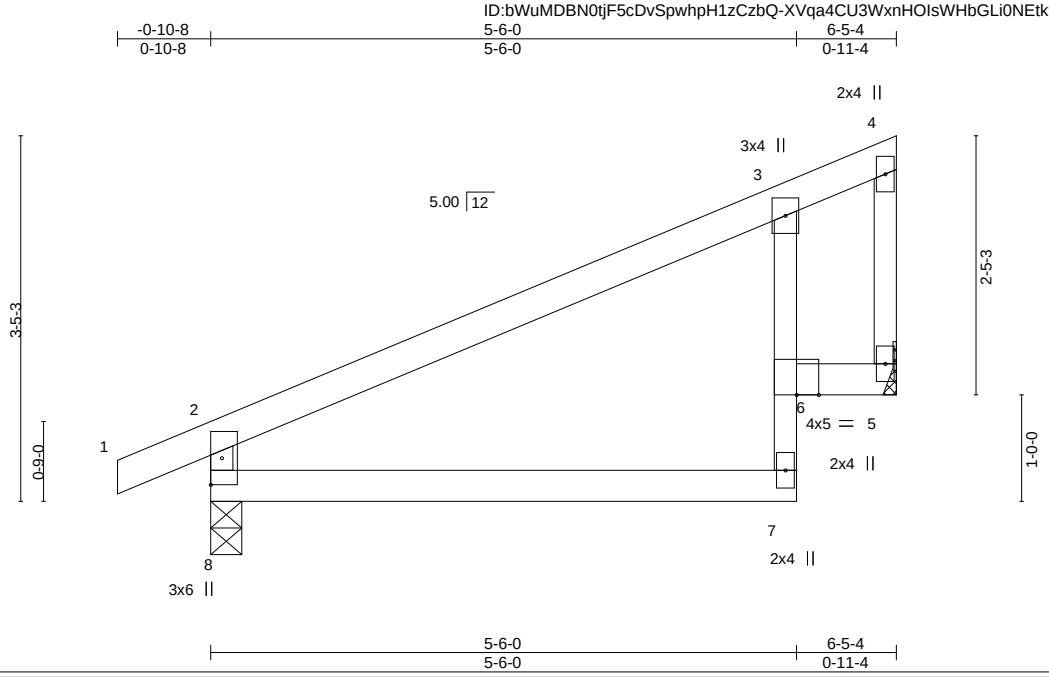

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.03	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.07	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	6	>999	240	Weight: 20 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 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) 8=0-3-8, 5=Mechanical
Max Horz 8=96(LC 5)
Max Uplift 8=-14(LC 8), 5=-24(LC 8)
Max Grav 8=354(LC 1), 5=275(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-309/50

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 14 lb uplift at joint 8 and 24 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J10	Diagonal Hip Girder	1	1	I45042002

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:54 2021 Page 1

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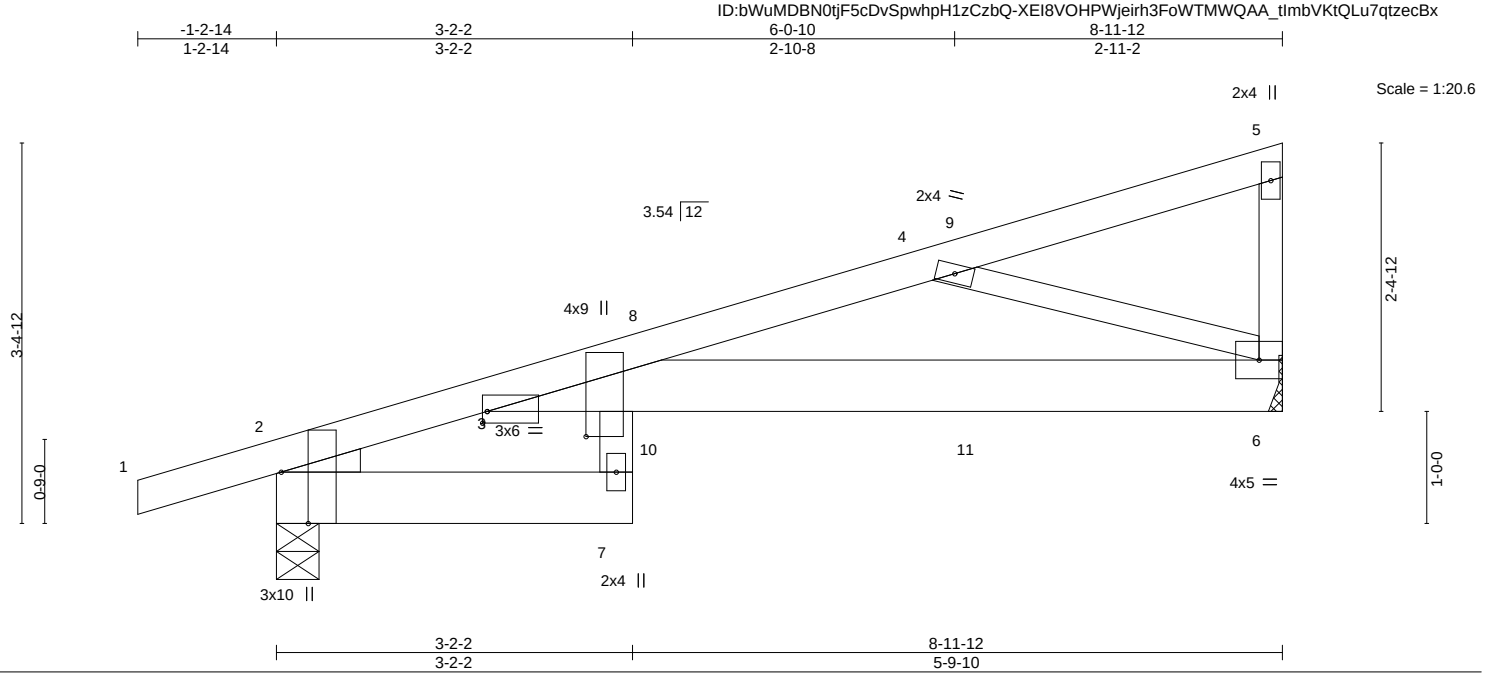

Plate Offsets (X,Y)-- [2:0-5-8,Edge], [3:0-2-11,0-10-9], [3:0-0-8,0-1-4]

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	0.96	Vert(LL)	-0.21	7	>504	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.41	7	>257	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.15	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	7	>447	240	Weight: 36 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-7: 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.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 2=0-4-9
Max Horz 2=114(LC 22)
Max Uplift 6=-136(LC 8), 2=-166(LC 4)
Max Grav 6=490(LC 1), 2=582(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-786/255
BOT CHORD 3-6=-269/762
WEBS 4-6=-771/299

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 136 lb uplift at joint 6 and 166 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 25 lb up at 3-4-15, 63 lb down and 25 lb up at 3-4-15, and 97 lb down and 59 lb up at 6-2-14, and 97 lb down and 59 lb up at 6-2-14 on top chord, and 31 lb down and 29 lb up at 3-4-15, 31 lb down and 29 lb up at 3-4-15, and 45 lb down and 31 lb up at 6-2-14, and 45 lb down and 31 lb up at 6-2-14 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: 1-5=-70, 2-7=-20, 3-6=-20

March 3,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-29(F=-14, B=-14) 10=-53(F=-27, B=-27) 11=-90(F=-45, B=-45)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J11	Jack-Open	5	1	I45042003
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:55 2021 Page 1
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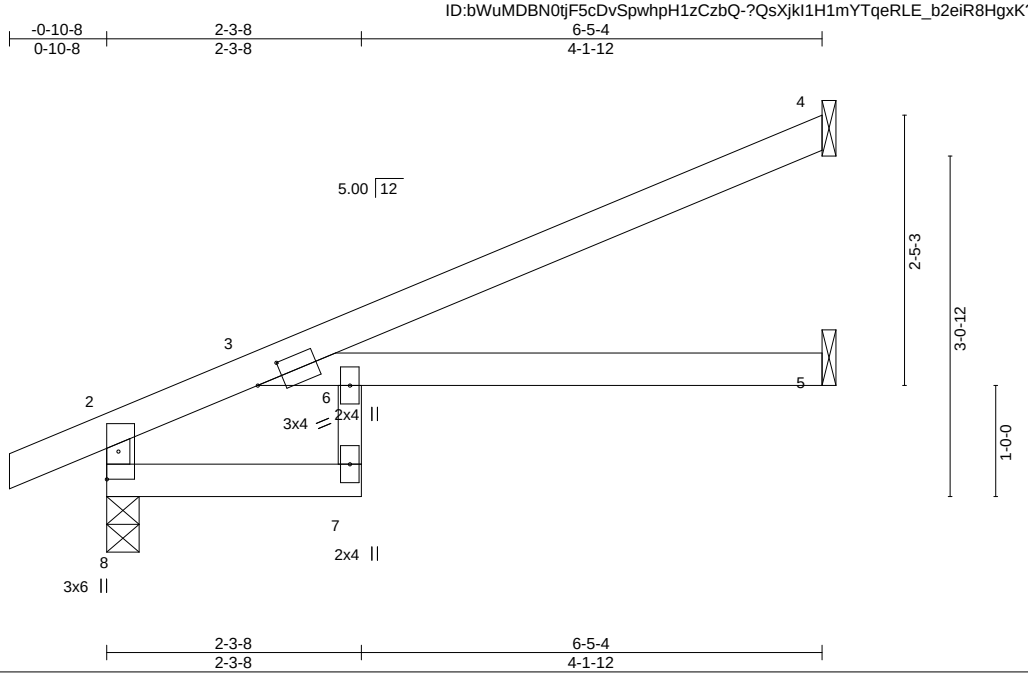

Plate Offsets (X,Y)-- [3:0-2-13,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.10	5-6	>732	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.21	5-6	>367	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.11	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	5-6	>918	240	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) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=80(LC 8)
Max Uplift 4=-48(LC 8)
Max Grav 8=368(LC 1), 4=187(LC 1), 5=119(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-364/21

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 48 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J12	Jack-Open	2	1	I45042004
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:55 2021 Page 1
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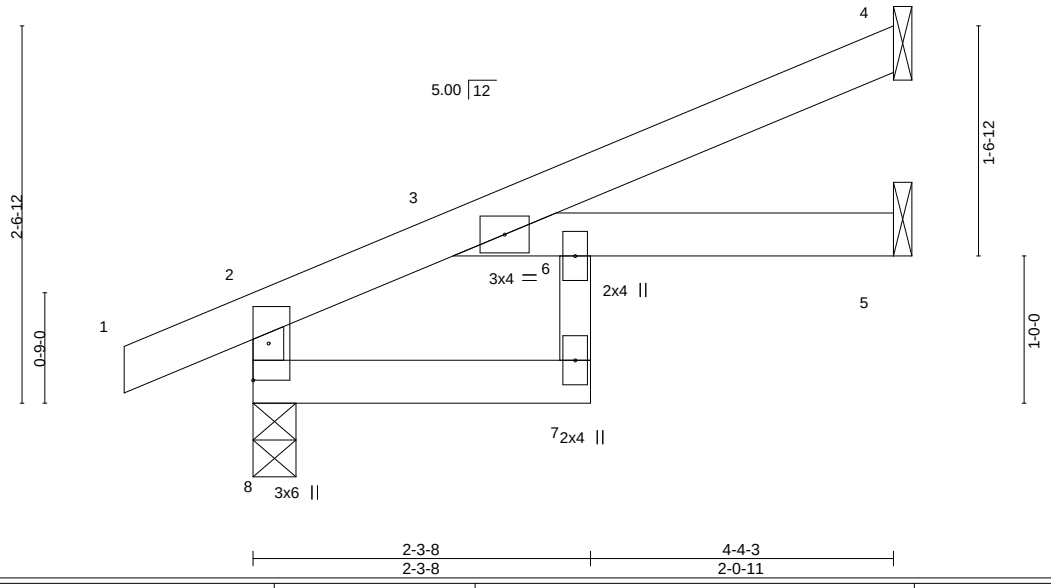

2-3-8 / 2-3-8 | 4-4-3 / 2-0-11

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.02	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	7	>999	240	Weight: 13 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=78(LC 8)
Max Uplift 8=-31(LC 8), 4=-50(LC 8), 5=-2(LC 8)
Max Grav 8=275(LC 1), 4=113(LC 1), 5=87(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-259/55

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 8, 50 lb uplift at joint 4 and 2 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J13	Jack-Open	2	1	I45042005
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:56 2021 Page 1
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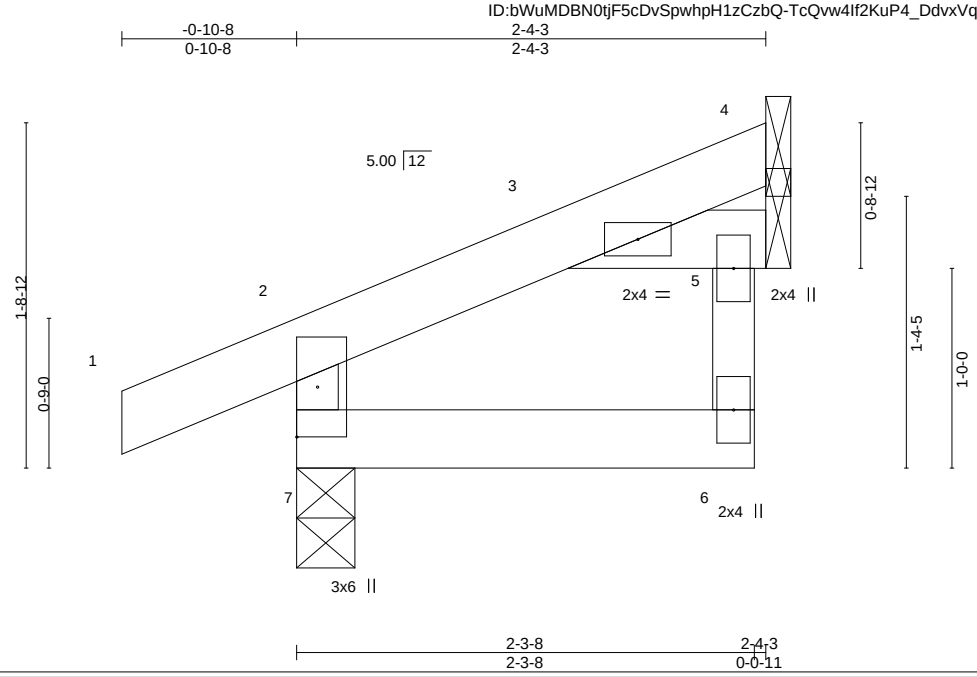


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	3	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	3	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3	>999	240	Weight: 9 lb	FT = 10%

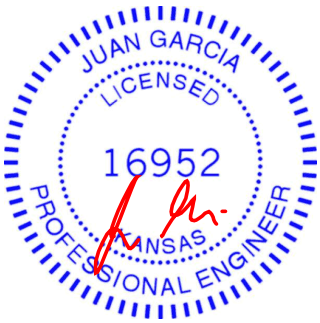
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-6: 2x3 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=44(LC 8)
Max Uplift 7=-28(LC 4), 4=-18(LC 8), 5=-6(LC 8)
Max Grav 7=183(LC 1), 4=41(LC 1), 5=71(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 7, 18 lb uplift at joint 4 and 6 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.



March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J15	Diagonal Hip Girder	2	1	I45042006
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:57 2021 Page 1
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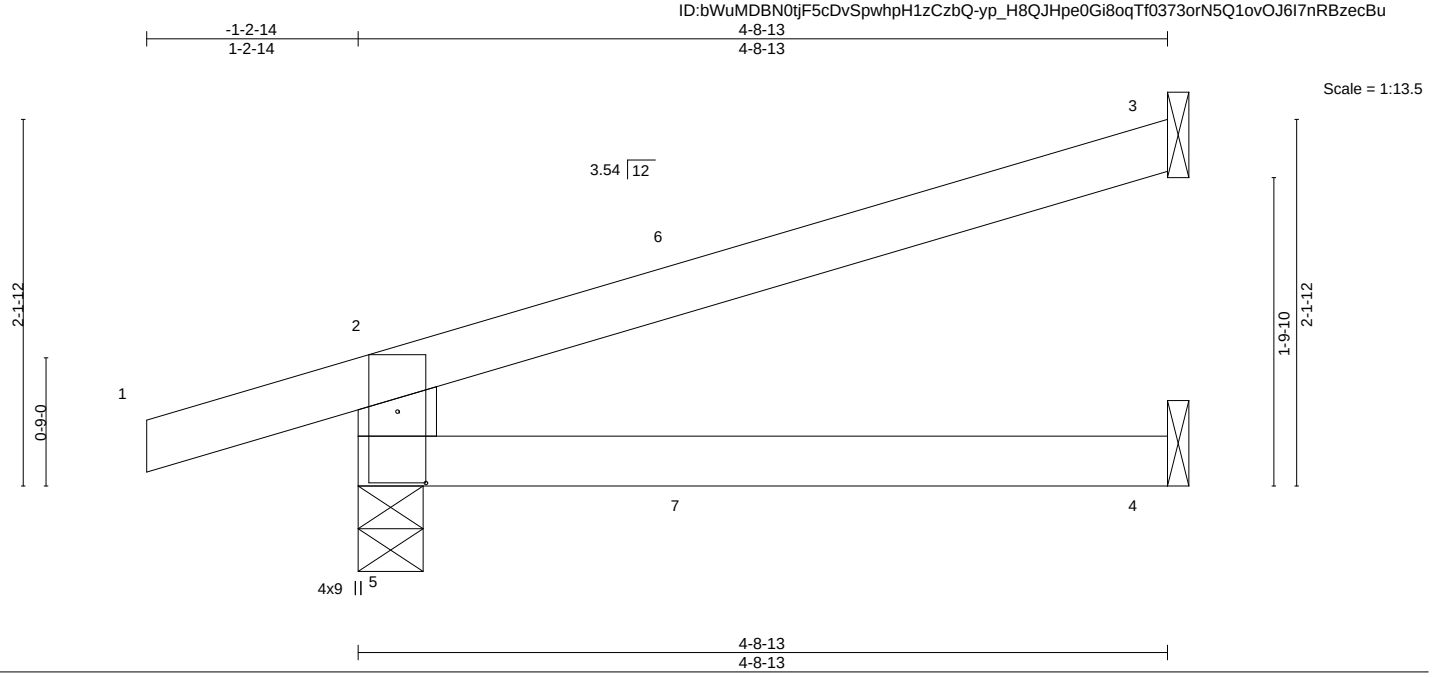

Plate Offsets (X,Y)-- [5:0-5-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.04	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: 13 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-13 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=68(LC 4)
Max Uplift 5=-94(LC 4), 3=-60(LC 8)
Max Grav 5=317(LC 1), 3=133(LC 1), 4=82(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-281/132

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 94 lb uplift at joint 5 and 60 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) 66 lb down and 20 lb up at 1-11-15, and 66 lb down and 20 lb up at 1-11-15 on top chord, and 3 lb down and 2 lb up at 1-11-15, and 3 lb down and 2 lb up at 1-11-15 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: 7=4(F=2, B=2)

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J16	Jack-Open	5	1	I45042007
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:58 2021 Page 1
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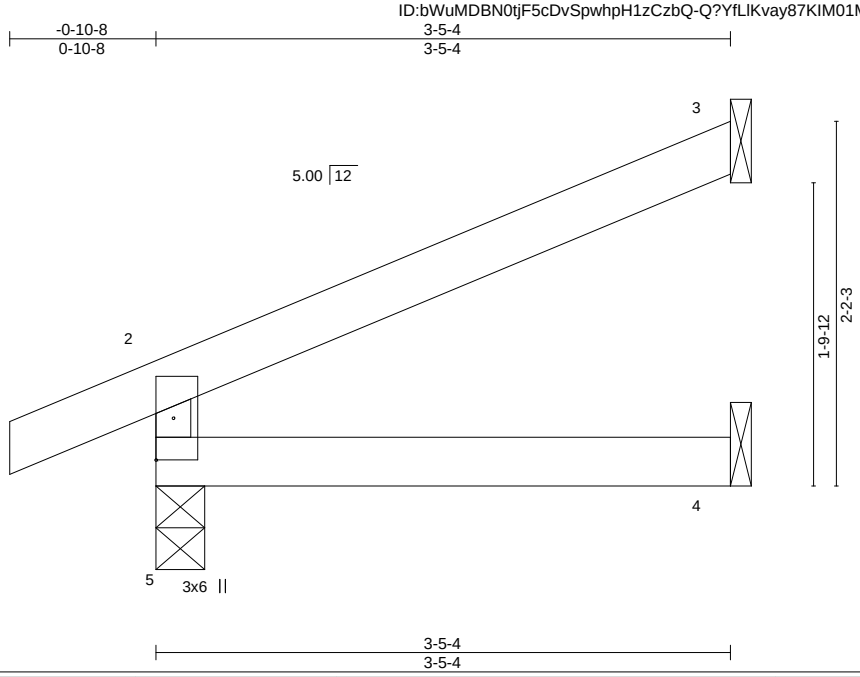

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 10 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 8)
Max Uplift 5=-33(LC 8), 3=-54(LC 8)
Max Grav 5=226(LC 1), 3=101(LC 1), 4=62(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 54 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J17	Diagonal Hip Girder	2	1	I45042008
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:59 2021 Page 1
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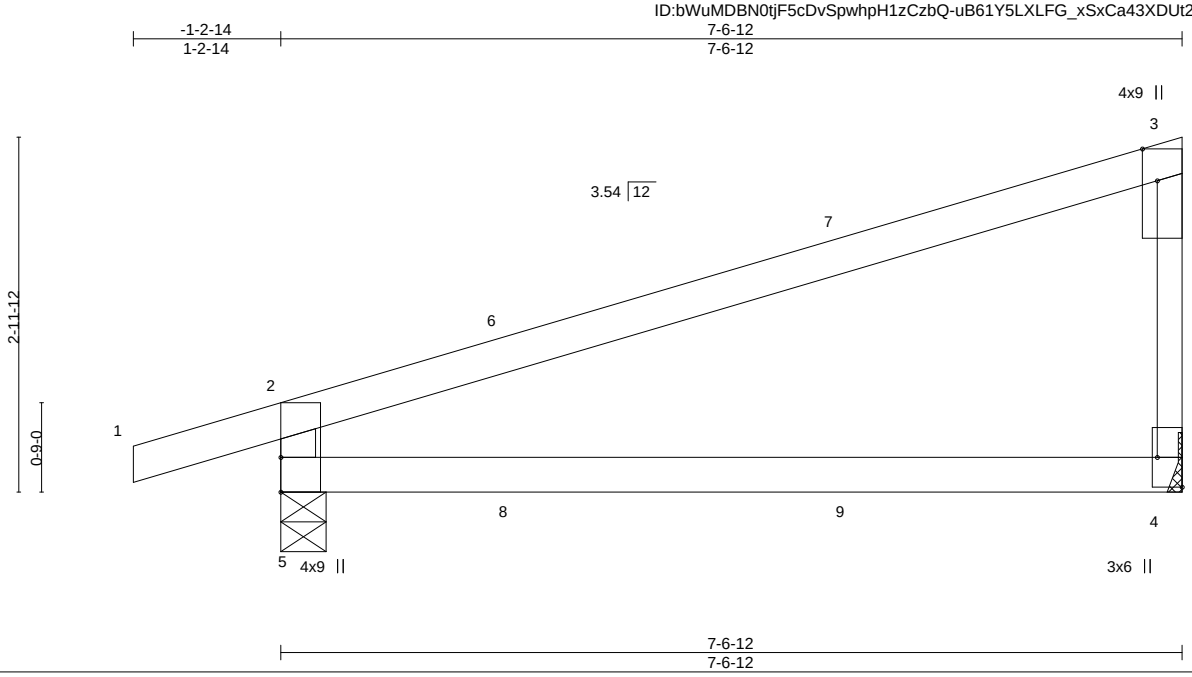

Plate Offsets (X,Y)-- [3:0-3-3,Edge], [4:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.11	4-5	>765	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.25	4-5	>355	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)	0.05	4-5	>999	240	Weight: 21 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-4-9, 4=Mechanical
Max Horz 5=122(LC 5)
Max Uplift 5=-124(LC 4), 4=-82(LC 8)
Max Grav 5=438(LC 1), 4=329(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-383/182

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 124 lb uplift at joint 5 and 82 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) 66 lb down and 20 lb up at 1-11-15, 66 lb down and 20 lb up at 1-11-15, and 87 lb down and 62 lb up at 4-9-14, and 87 lb down and 62 lb up at 4-9-14 on top chord, and 3 lb down and 2 lb up at 1-11-15, 3 lb down and 2 lb up at 1-11-15, and 17 lb down at 4-9-14, and 17 lb down at 4-9-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=-3(F=-1, B=-1) 8=4(F=2, B=2) 9=-13(F=-7, B=-7)

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J18	Jack-Open	7	1	I45042009
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:13:59 2021 Page 1
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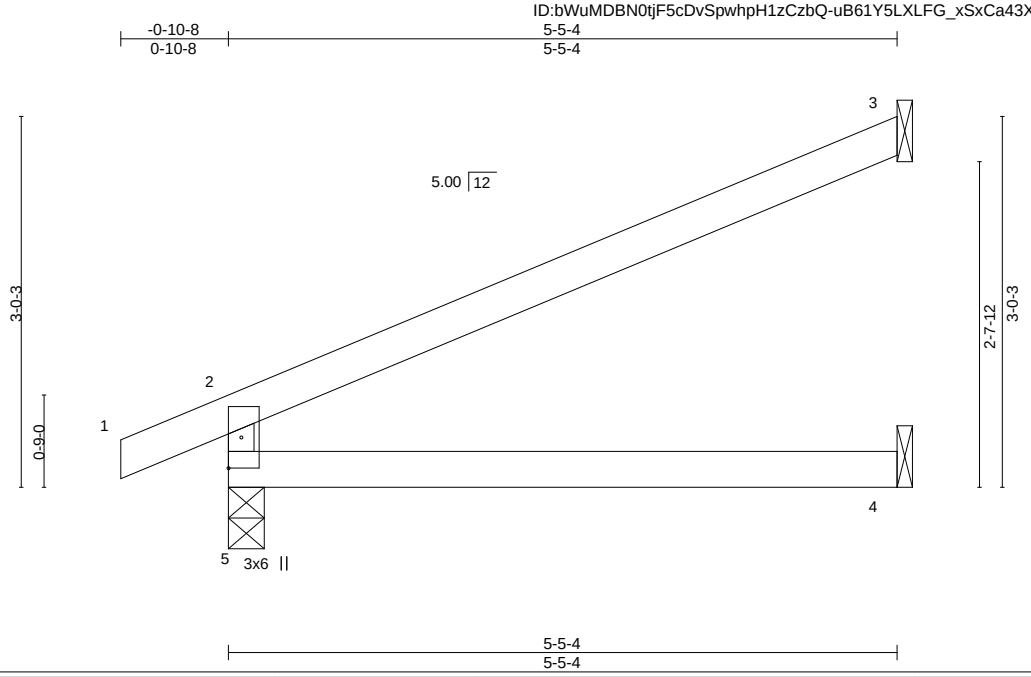

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.08	4-5	>769	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	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 5-5-4 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=68(LC 8)
Max Uplift 5=-4(LC 8), 3=-50(LC 8)
Max Grav 5=312(LC 1), 3=168(LC 1), 4=100(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-270/46

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 5 and 50 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J19	Jack-Open	3	1	I45042010
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:00 2021 Page 1
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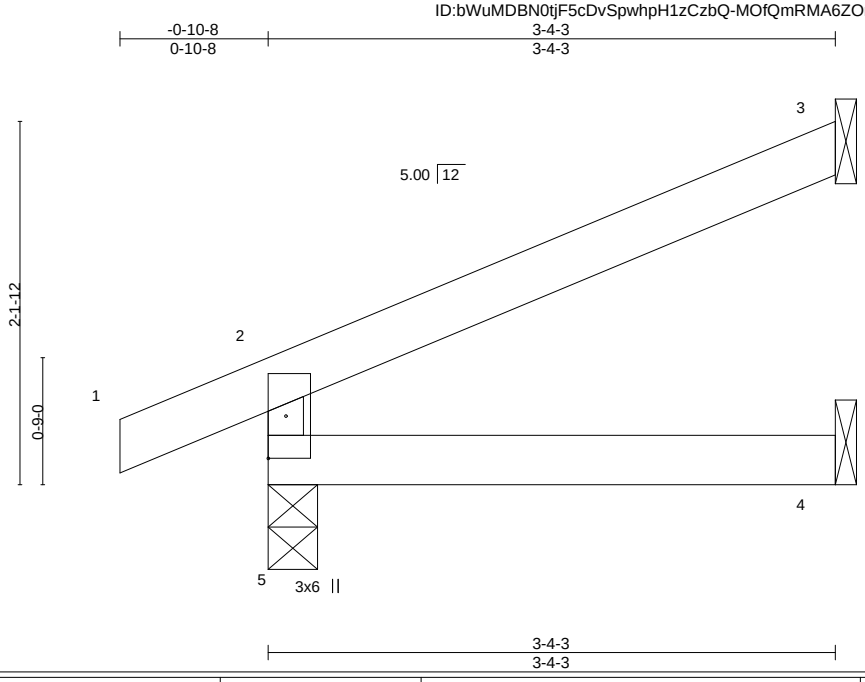

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	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 3-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=61(LC 8)
Max Uplift 5=-32(LC 8), 3=-53(LC 8)
Max Grav 5=222(LC 1), 3=98(LC 1), 4=60(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 5 and 53 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J20	Jack-Open	1	1	I45042011
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:01 2021 Page 1
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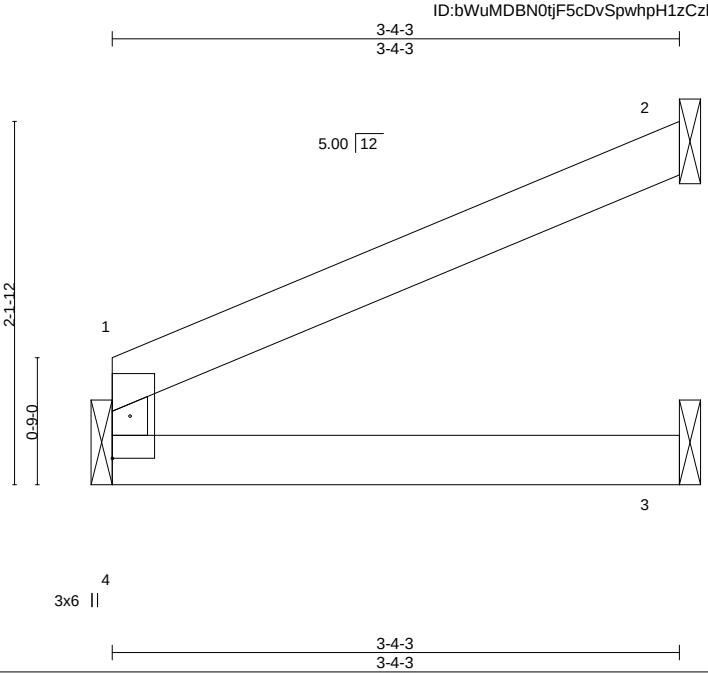

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 8 lb	FT = 10%

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

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

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=47(LC 8)
Max Uplift 4=-8(LC 8), 2=-55(LC 8)
Max Grav 4=143(LC 1), 2=105(LC 1), 3=61(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 8 lb uplift at joint 4 and 55 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J21	Diagonal Hip Girder	2	1	I45042012
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:02 2021 Page 1
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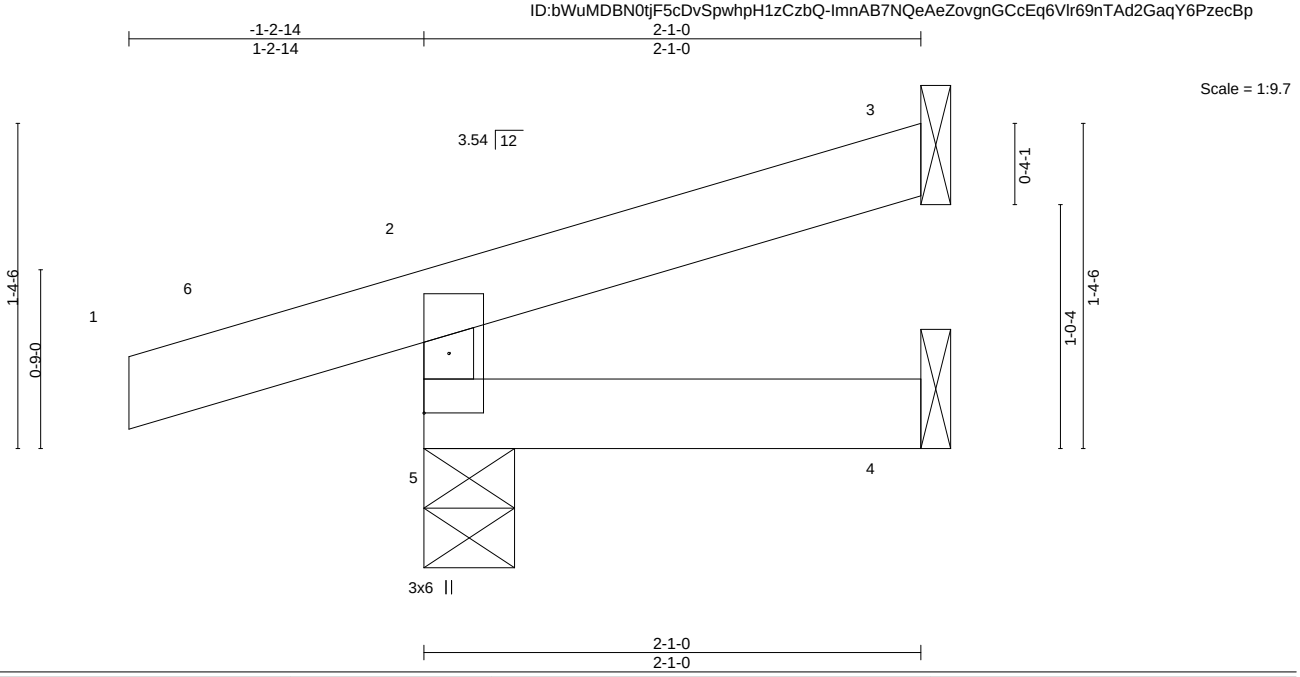

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-0 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=42(LC 7)
Max Uplift 5=-97(LC 6), 3=-24(LC 12)
Max Grav 5=83(LC 1), 3=22(LC 1), 4=27(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 97 lb uplift at joint 5 and 24 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) 14 lb down and 5 lb up at -1-2-14, and 14 lb down and 5 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-21(F=-11, B=-11)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-6=-18(F=26, B=26), 6=0(F=35, B=35)-to-2=-15(F=27, B=27), 2=-15(F=27, B=27)-to-3=-50(F=10, B=10), 5=-4(F=8, B=8)-to-4=-14(F=3, B=3)

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J22	Jack-Open	3	1	I45042013

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:02 2021 Page 1

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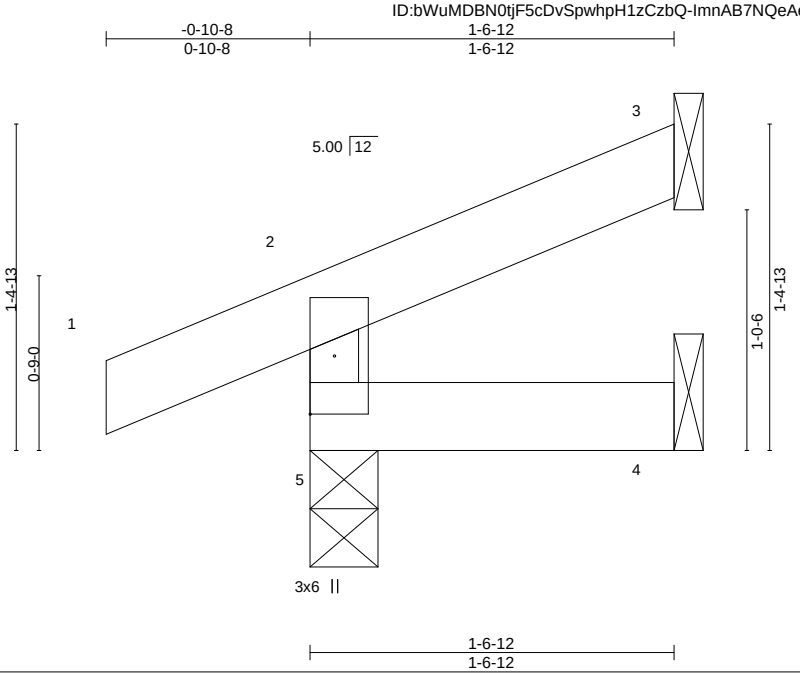

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 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 1-6-12 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=35(LC 5)
Max Uplift 5=-33(LC 4), 3=-23(LC 8)
Max Grav 5=157(LC 1), 3=31(LC 1), 4=27(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 23 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J23	Diagonal Hip Girder	2	1	I45042014

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:03 2021 Page 1

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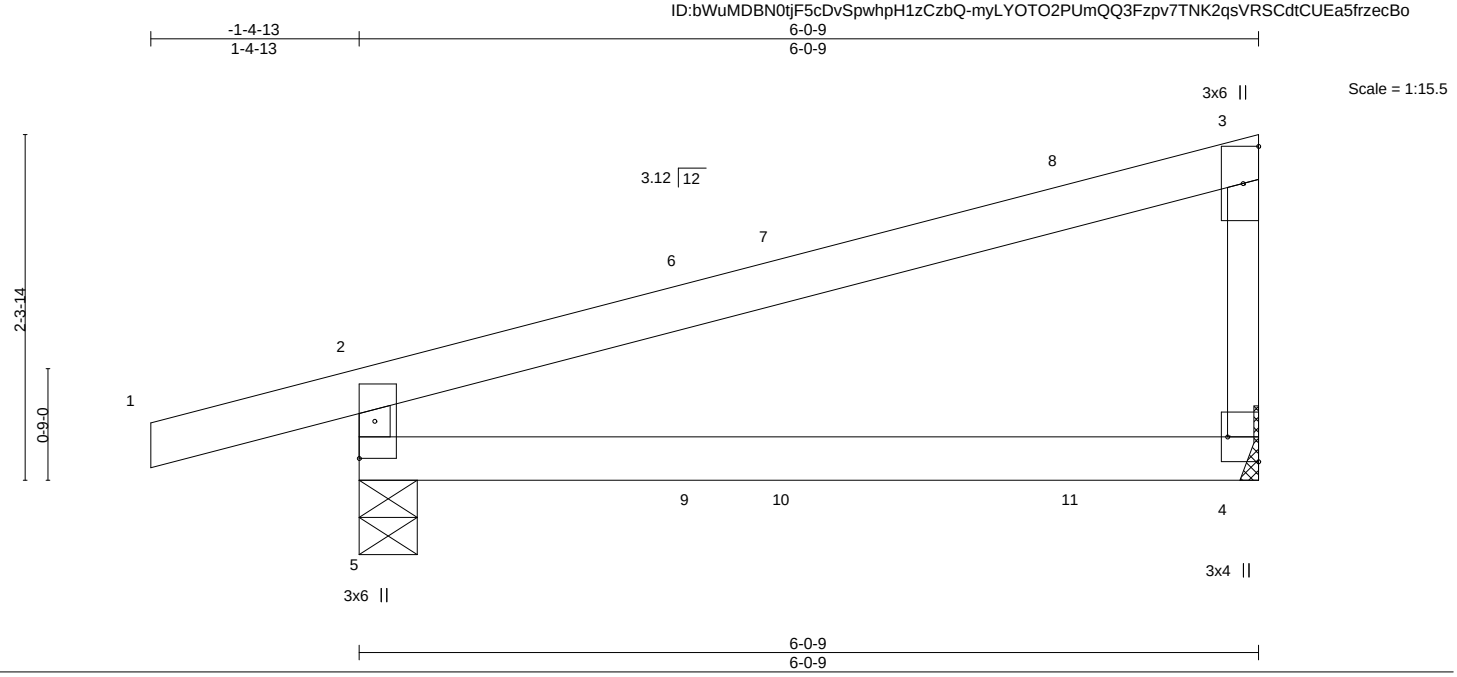

Plate Offsets (X,Y)-- [4:Edge,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10	4-5	>714	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-4-11, 4=Mechanical
Max Horz 5=92(LC 24)
Max Uplift 5=-117(LC 4), 4=-61(LC 8)
Max Grav 5=383(LC 1), 4=258(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-335/158

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 117 lb uplift at joint 5 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 21 lb up at 2-3-15, and 77 lb down and 42 lb up at 2-11-5, and 75 lb down and 54 lb up at 4-10-10 on top chord, and 3 lb down and 2 lb up at 2-3-15, and 5 lb down at 2-11-5, and 16 lb down at 4-10-10 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: 8=-4(B) 9=2(B) 10=-1(F) 11=-7(B)

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J24	Jack-Open	2	1	I45042015
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:04 2021 Page 1
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0-10-8 3-0-1

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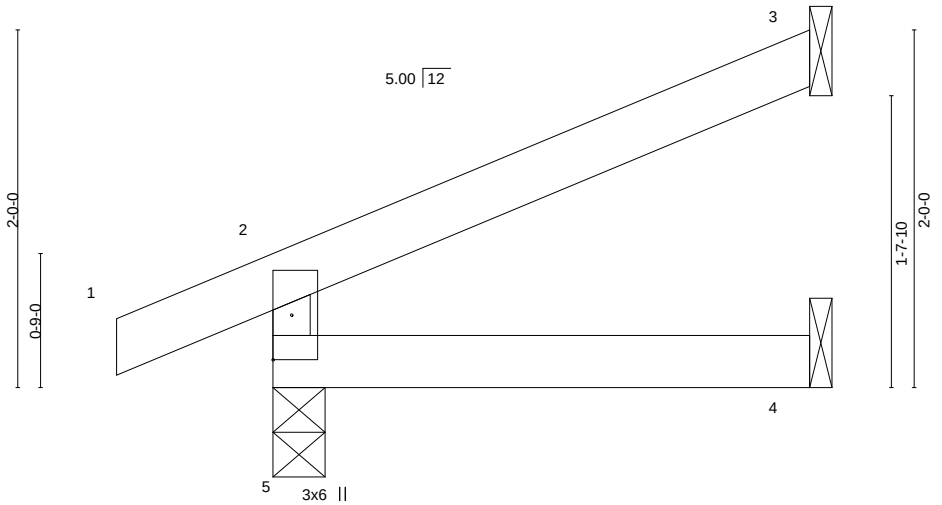


3-0-1
3-0-1

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	0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	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%

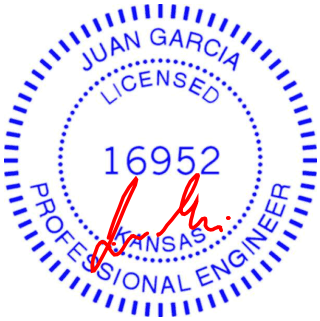
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-1 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=56(LC 8)
Max Uplift 5=-31(LC 8), 3=-47(LC 8)
Max Grav 5=208(LC 1), 3=85(LC 1), 4=54(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 47 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.



March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J25	Jack-Open	5	1	I45042016
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:05 2021 Page 1
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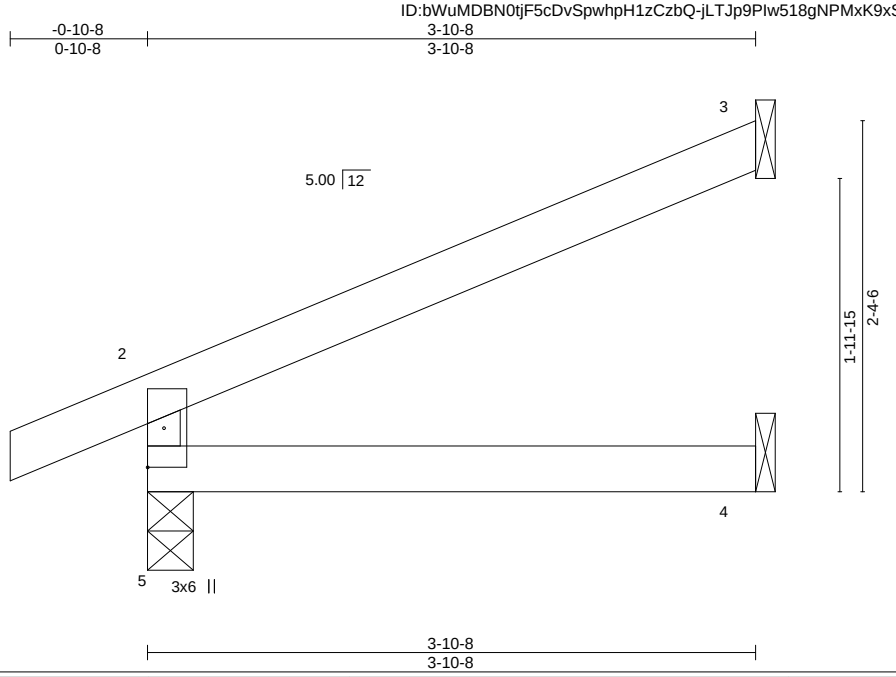

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=70(LC 8)
Max Uplift 5=-34(LC 8), 3=-61(LC 8)
Max Grav 5=244(LC 1), 3=116(LC 1), 4=71(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 5 and 61 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J26	Jack-Open	2	1	I45042017
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:05 2021 Page 1
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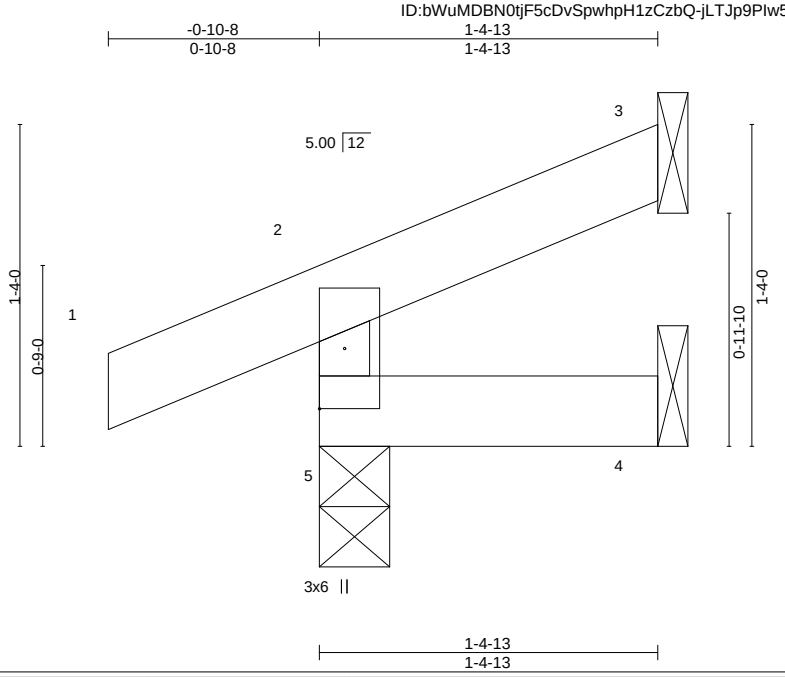

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 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 1-4-13 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=34(LC 5)
Max Uplift 5=-34(LC 4), 3=-19(LC 8)
Max Grav 5=153(LC 1), 3=23(LC 1), 4=24(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 34 lb uplift at joint 5 and 19 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.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	J27	Jack-Open	2	1	I45042018
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:06 2021 Page 1
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0-10-8 2-5-15

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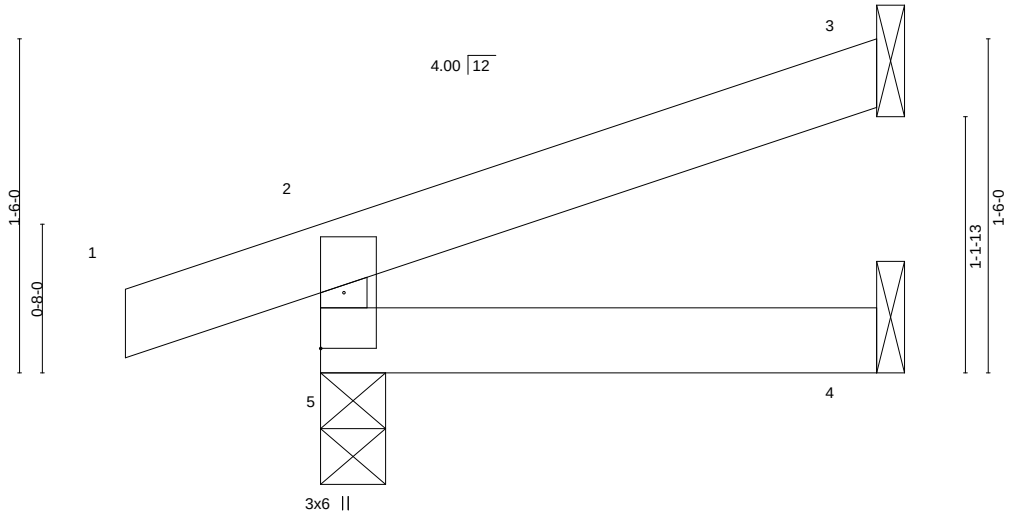


2-5-15
2-5-15

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	0.06	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	5	>999	240	Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-15 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=43(LC 4)
Max Uplift 5=-58(LC 4), 3=-34(LC 8)
Max Grav 5=188(LC 1), 3=67(LC 1), 4=44(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 5 and 34 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.

March 3,2021

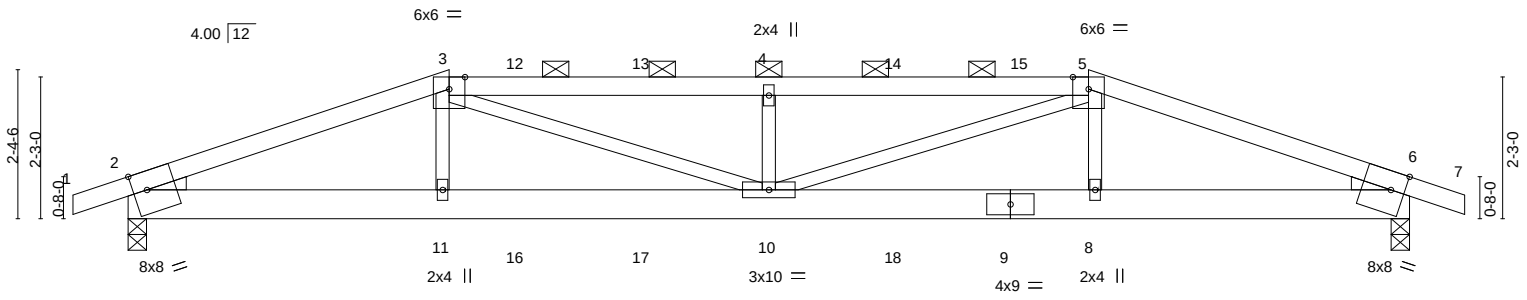
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	K1	Hip Girder	1	1	I45042019
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:12 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-?hOyHYVhHFv8?SRirIoaEDvFf8NrpcFWZ8F4TqzecBf

0-10-8	5-1-2	10-2-0	15-2-14	20-4-0	21-2-8
0-10-8	5-1-2	5-0-14	5-0-14	5-1-2	0-10-8

Scale = 1:36.6



5-1-2	10-2-0	15-2-14	20-4-0
5-1-2	5-0-14	5-0-14	5-1-2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.19	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.35	10	>694	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.17	10	>999	240	Weight: 76 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2
WEDGE
Left: 2x3 SPF No.2 , Right: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins, except
2-0-0 oc purlins (2-2-12 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 9-2-14 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=34(LC 33)
Max Uplift 2=-340(LC 4), 6=-340(LC 5)
Max Grav 2=1369(LC 1), 6=1369(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3066/704, 3-4=-3699/879, 4-5=-3699/879, 5-6=-3066/705
BOT CHORD 2-11=-630/2796, 10-11=-629/2775, 8-10=-604/2774, 6-8=-605/2796
WEBS 3-11=-20/400, 3-10=-262/1090, 4-10=-599/277, 5-10=-262/1090, 5-8=-21/400

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 340 lb uplift at joint 2 and 340 lb uplift at joint 6.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 83 lb down and 70 lb up at 6-2-0, 83 lb down and 70 lb up at 8-2-0, 83 lb down and 70 lb up at 10-2-0, and 83 lb down and 70 lb up at 12-2-0, and 83 lb down and 70 lb up at 14-2-0 on top chord, and 226 lb down and 93 lb up at 5-1-2, 31 lb down at 6-2-0, 31 lb down at 8-2-0, 31 lb down at 10-2-0, 31 lb down at 12-2-0, and 31 lb down at 14-2-0, and 226 lb down and 93 lb up at 15-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

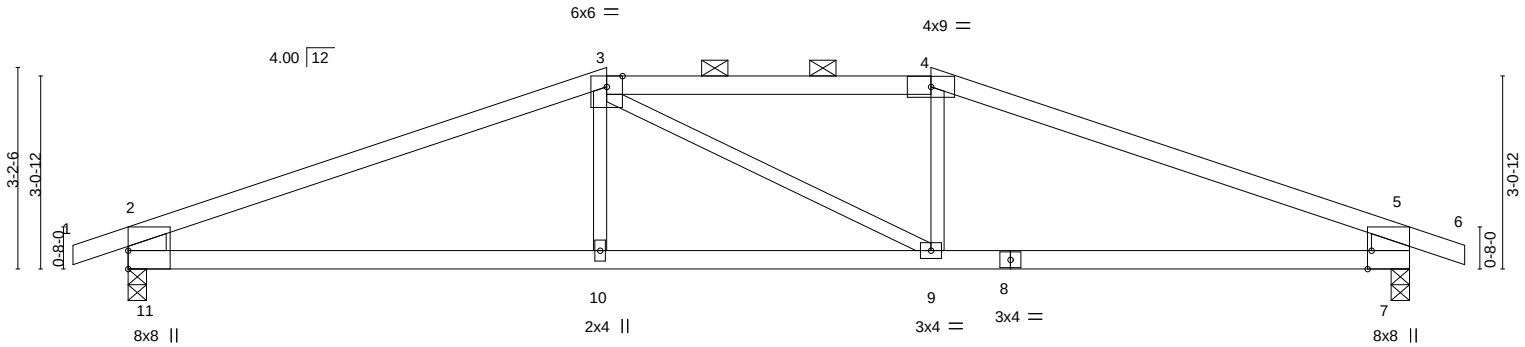
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
   Concentrated Loads (lb)
   Vert: 9=-22(B) 11=-226(B) 10=-22(B) 4=-46(B) 8=-226(B) 12=-46(B) 13=-46(B) 14=-46(B) 15=-46(B) 16=-22(B) 17=-22(B) 18=-22(B)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	K2	Hip	1	1	I45042020
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:13 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-UuyKUuWJ2Z1?db0uP0JpnRSUzXnPY6lgno?d?GzecBe

0-10-8 7-7-2 12-8-14 20-4-0 21-2-8
0-10-8 7-7-2 5-1-12 7-7-2 0-10-8

Scale = 1:36.6



7-7-2 12-8-14 20-4-0
7-7-2 5-1-12 7-7-2

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.12	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	9-10	>990	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	9-10	>999	240	Weight: 60 lb	FT = 10%

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

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

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=33(LC 8)
Max Uplift 11=-197(LC 4), 7=-197(LC 5)
Max Grav 11=970(LC 1), 7=970(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1639/256, 3-4=-1460/278, 4-5=-1639/255, 2-11=-881/241, 5-7=-882/241
BOT CHORD 10-11=-190/1464, 9-10=-193/1460, 7-9=-164/1464

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 11 and 197 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	K3	Common	1	1	I45042021

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:14 2021 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-y4WiiEWyps9sFlb5zjq2Je?dLx74Hamp0SkAXizecBd

-0-10-8	4-0-3	10-2-0	16-3-13	20-4-0	21-2-8
0-10-8	4-0-3	6-1-13	6-1-13	4-0-3	0-10-8

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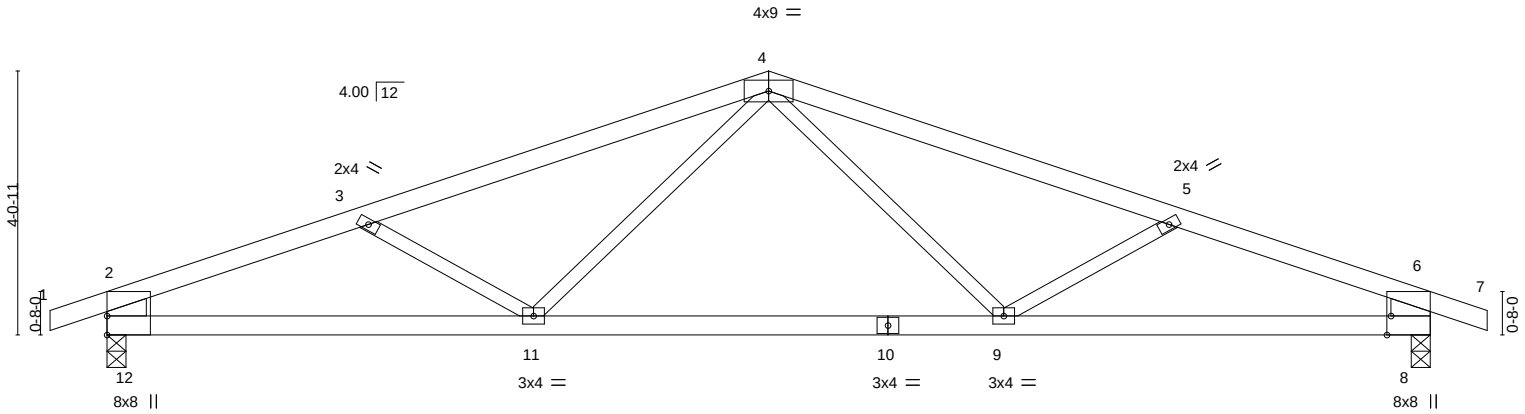

6-6-10	13-9-6	20-4-0
6-6-10	7-2-11	6-6-10

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.17	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.32	9-11	>730	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	9-11	>999	240	Weight: 65 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-8: 2x8 SP 2400F 2.0E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=49(LC 8)
Max Uplift 12=-180(LC 4), 8=-180(LC 5)
Max Grav 12=970(LC 1), 8=970(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1713/290, 3-4=-1502/196, 4-5=-1502/196, 5-6=-1713/290, 2-12=-888/206, 6-8=-888/206
BOT CHORD 11-12=-263/1537, 9-11=-105/1179, 8-9=-226/1537
WEBS 4-9=-12/348, 5-9=-255/195, 4-11=-11/348, 3-11=-255/195

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 12 and 180 lb uplift at joint 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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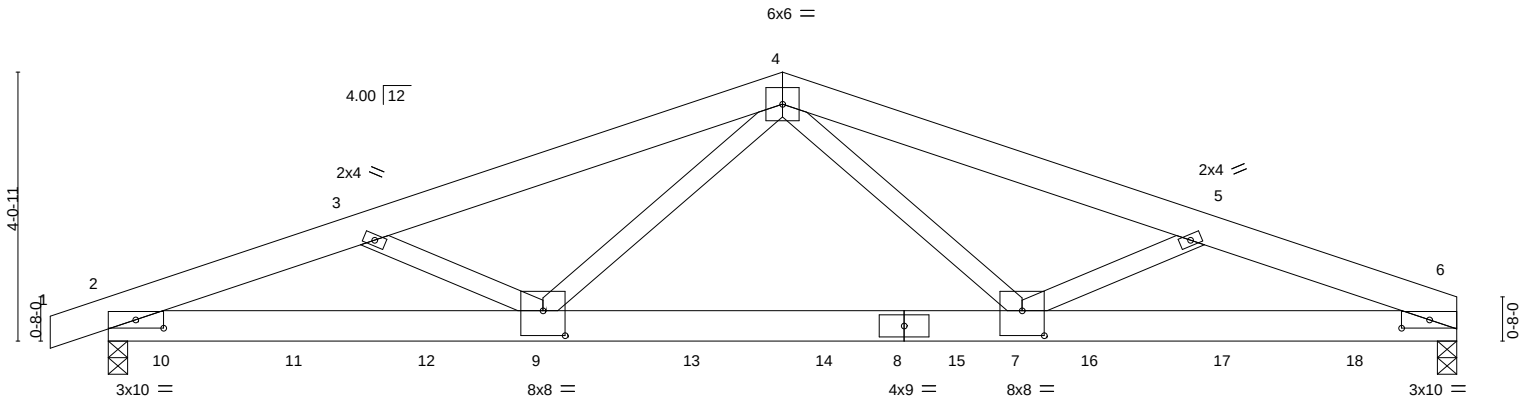
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	K4	COMMON GIRDER	1	3	I45042022
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:15 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-QG35vZXaaAHjsvAHWRLHssXwvLTQ0ykzF6Uk49zecBc

-0-10-8	4-0-3	10-2-0	16-3-13	20-4-0
0-10-8	4-0-3	6-1-13	6-1-13	4-0-3

Scale = 1:34.7



6-6-10	13-9-6	20-4-0
6-6-10	7-2-11	6-6-10

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

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	0.31	Vert(LL)	-0.13	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.23	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	7-9	>999	240	Weight: 317 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2

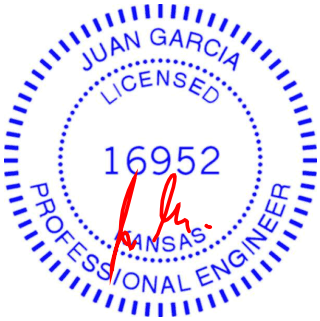
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=67(LC 29)
Max Uplift 6=-192(LC 5), 2=-264(LC 4)
Max Grav 6=4994(LC 1), 2=5496(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-10646/477, 3-4=-10820/354, 4-5=-11181/234, 5-6=-10961/376
BOT CHORD 2-9=-459/9872, 7-9=-171/7192, 6-7=-323/10155
WEBS 4-7=0/4792, 5-7=-183/795, 4-9=-141/4308, 3-9=-197/719

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 6 and 264 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 901 lb down and 35 lb up at 0-10-0, 862 lb down and 32 lb up at 2-10-0, 853 lb down and 32 lb up at 4-10-0, 853 lb down and 32 lb up at 6-10-0, 853 lb down and 32 lb up at 8-10-0, 853 lb down and 32 lb up at 10-10-0, 853 lb down and 30 lb up at 12-10-0, 850 lb down at 14-10-0, and 1651 lb down and 188 lb up at 16-10-0, and 123 lb down and 28 lb up at 18-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-6=-70, 2-6=-20
   Concentrated Loads (lb)
   Vert: 9=-853(F) 10=-865(F) 11=-862(F) 12=-853(F) 13=-853(F) 14=-853(F) 15=-853(F) 16=-850(F) 17=-1651(F) 18=-123(F)

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY1A	GABLE	1	1	I45042023
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:16 2021 Page 1
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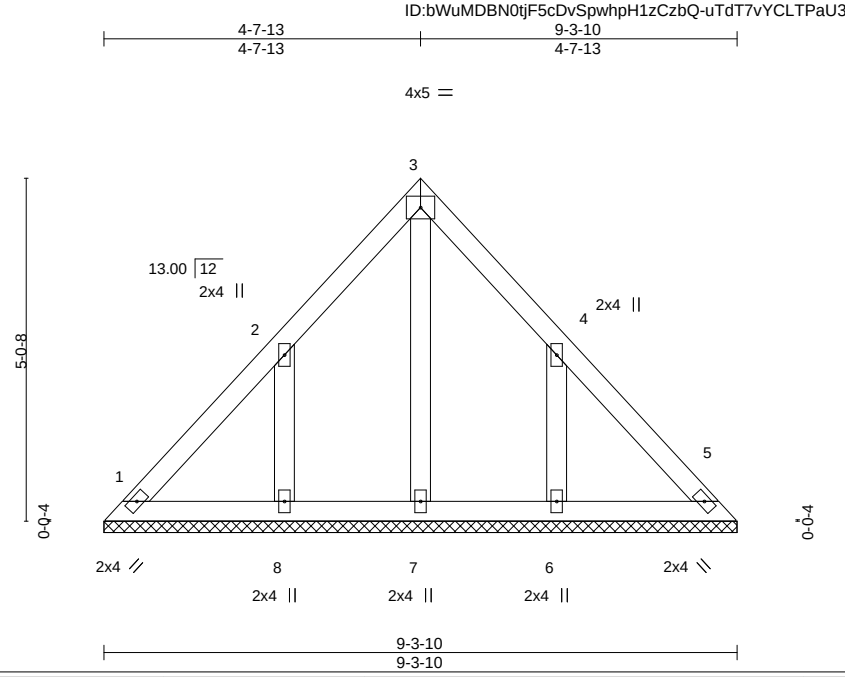

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 35 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 9-3-10.
(lb) - Max Horz 1=-125(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-169(LC 8), 6=-168(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=268(LC 15), 6=268(LC 16)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=169, 6=168.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY2	GABLE	1	1	I45042024
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:17 2021 Page 1
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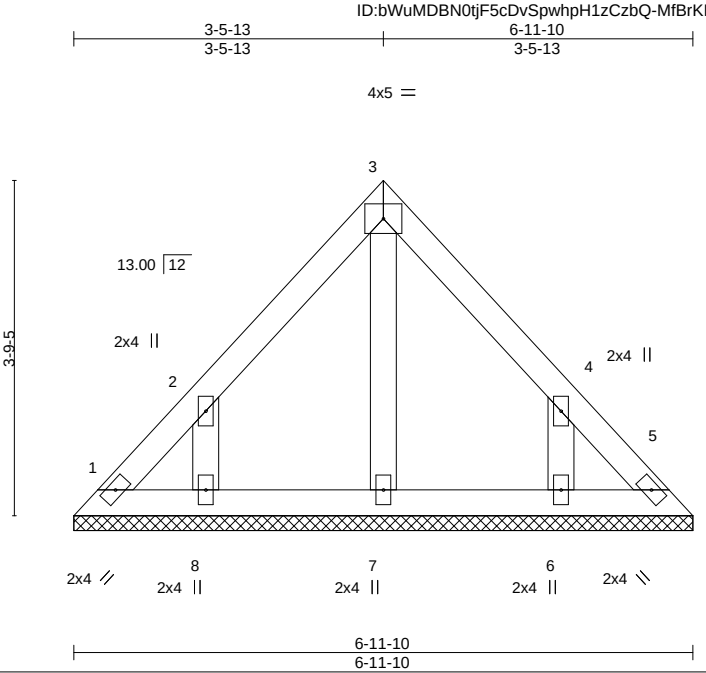

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 10%

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

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

REACTIONS. All bearings 6-11-10.
(lb) - Max Horz 1=91(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-137(LC 8), 6=-137(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

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

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY3	GABLE	1	1	I45042025
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:18 2021 Page 1
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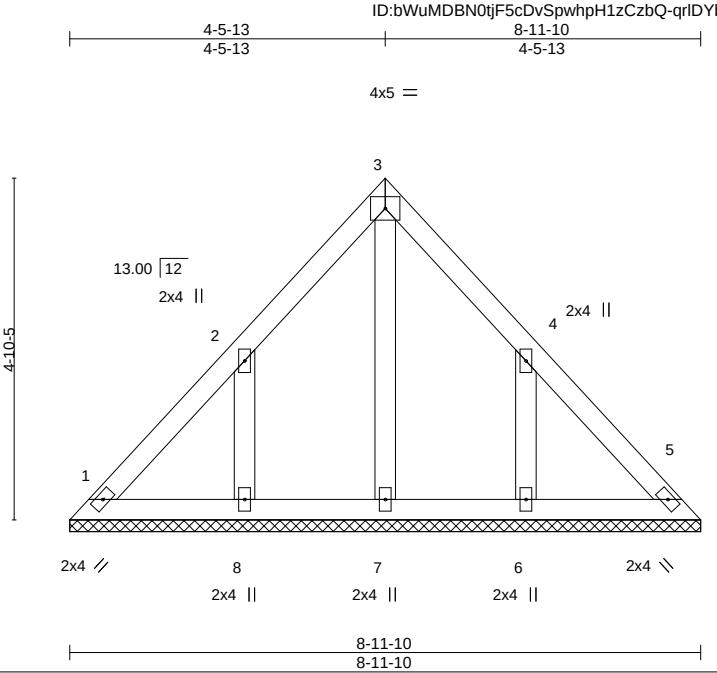

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 34 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 8-11-10.
(lb) - Max Horz 1=-120(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-168(LC 8), 6=-168(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 15), 6=261(LC 16)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=168, 6=168.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY4	GABLE	1	1	I45042026
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:30 2021 Page 1
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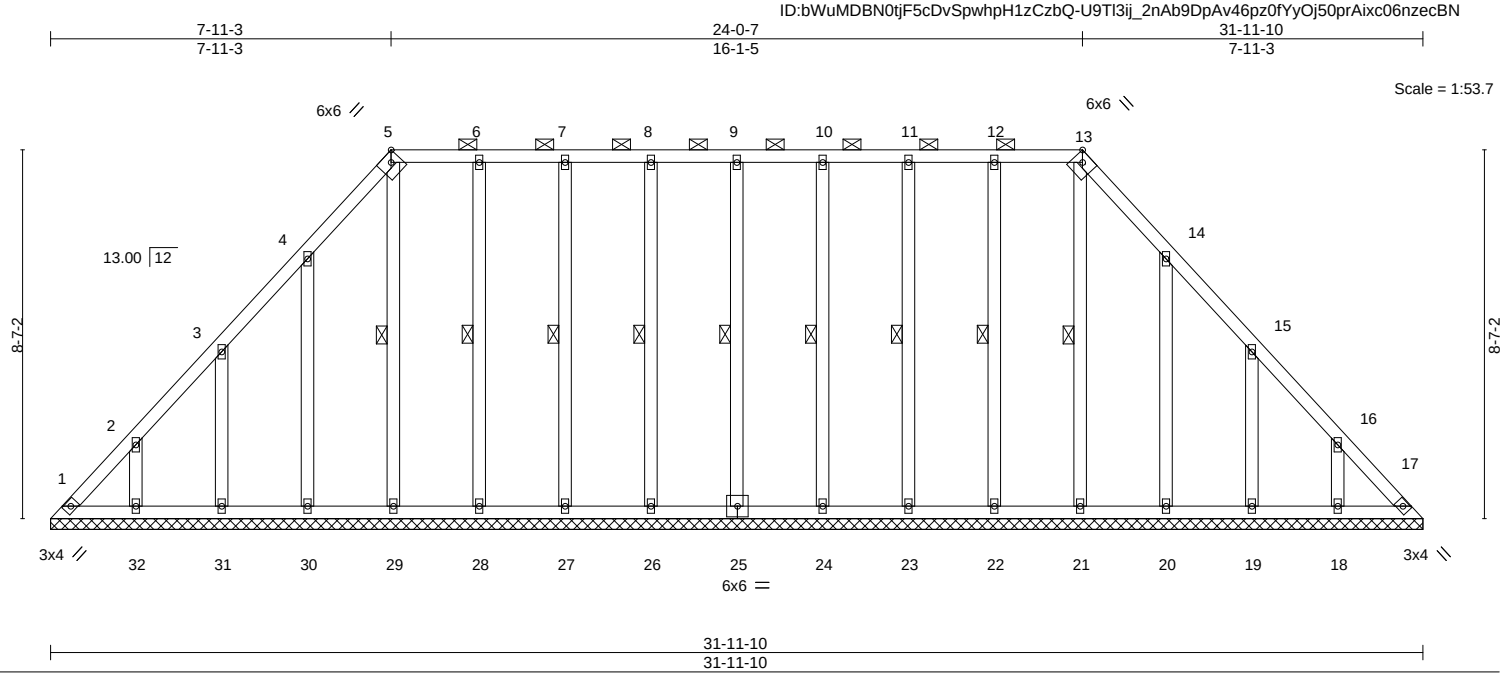

Plate Offsets (X,Y)-- [5:0-2-9,Edge], [13:0-2-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 188 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, except 2-0-0 oc purlins (6-0-0 max.): 5-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-25, 8-26, 7-27, 6-28, 5-29, 10-24, 11-23, 12-22, 13-21

REACTIONS. All bearings 31-11-10.
(lb) - Max Horz 1=221(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 17, 25, 26, 27, 28, 29, 24, 23, 22 except 1=-114(LC 6), 30=-135(LC 8), 31=-130(LC 8), 32=-131(LC 8), 20=-134(LC 9), 19=-130(LC 9), 18=-131(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 17, 25, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-284/215

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 17, 25, 26, 27, 28, 29, 24, 23, 22 except (jt=lb) 1=114, 30=135, 31=130, 32=131, 20=134, 19=130, 18=131.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY5	GABLE	2	1	I45042027
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:36 2021 Page 1

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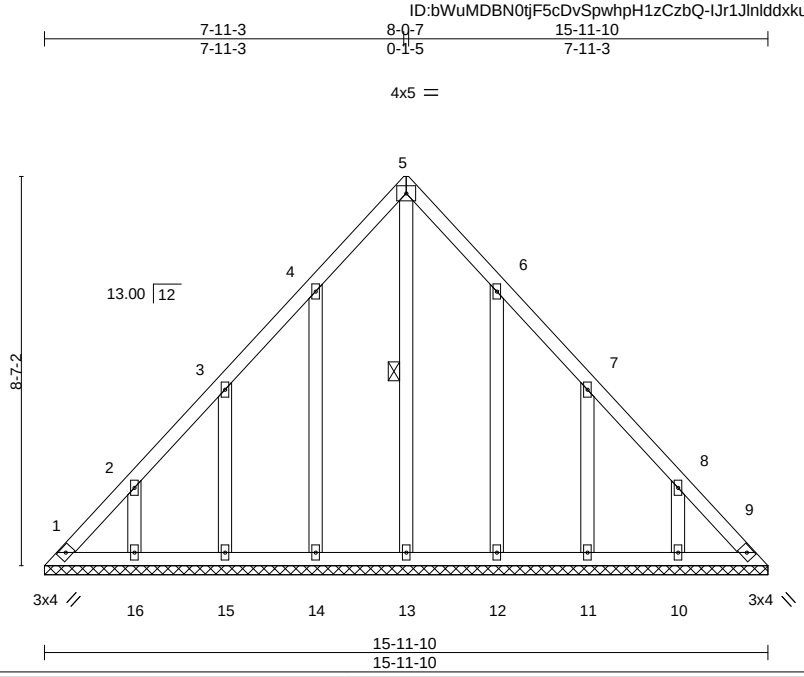

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 79 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 15-11-10.
(lb) - Max Horz 1=-222(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-132(LC 8), 15=-131(LC 8), 16=-131(LC 8), 12=-130(LC 9), 11=-132(LC 9), 10=-131(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-295/189, 8-9=-262/140

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=132, 15=131, 16=131, 12=130, 11=132, 10=131.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY6	GABLE	1	1	I45042028
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:37 2021 Page 1
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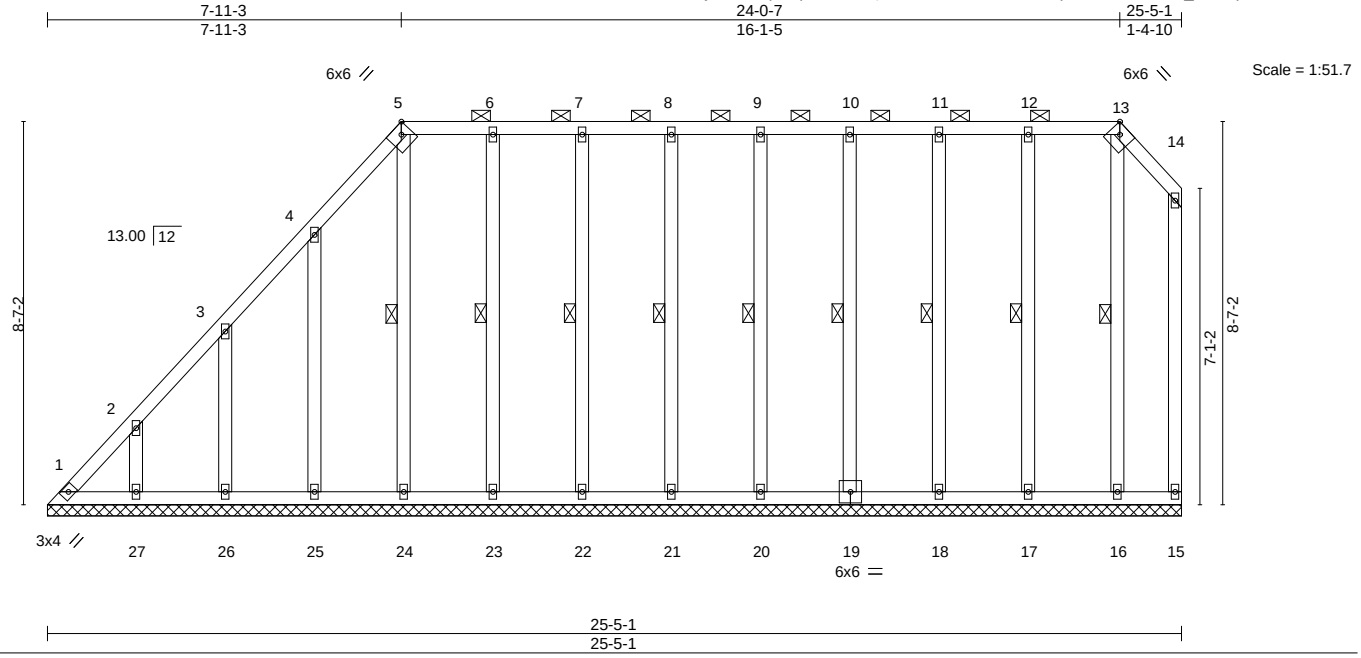

Plate Offsets (X,Y)-- [5:0-2-9,Edge], [13:0-2-9,Edge]

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	0.25	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	0.11	Horz(CT)	-0.00	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 166 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 25-5-1.
(lb) - Max Horz 1=311(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 15, 23, 22, 21, 20, 19, 18, 17, 16 except 1=-144(LC 6), 27=-131(LC 8), 26=-129(LC 8), 25=-136(LC 8), 24=-100(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 15, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16 except 1=256(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-351/256, 2-3=-282/208

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) 15, 23, 22, 21, 20, 19, 18, 17, 16 except (jt=lb) 1=144, 27=131, 26=129, 25=136, 24=100.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY7	GABLE	1	1	I45042029
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:40 2021 Page 1
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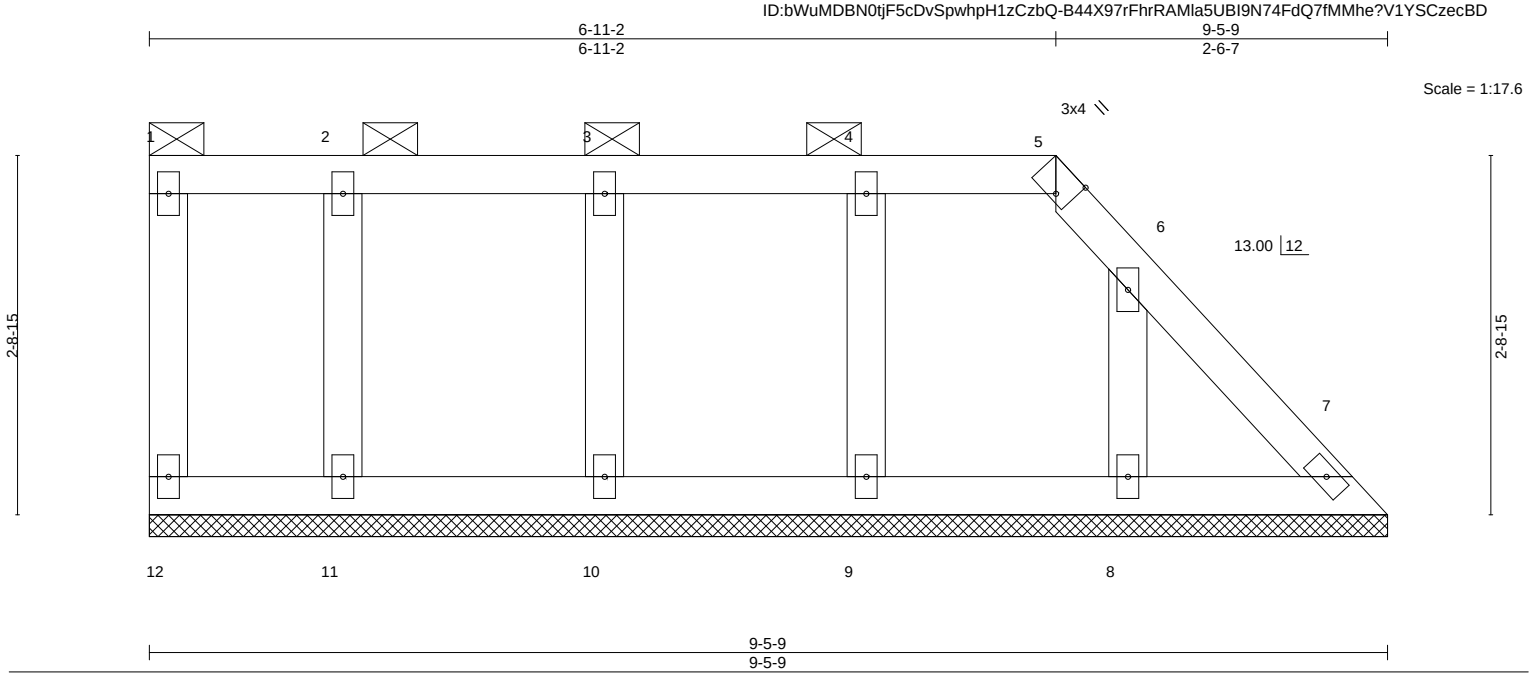

Plate Offsets (X,Y)-- [5:0-1-7,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 34 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 9-5-9.
(lb) - Max Horz 12=-98(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 12, 7, 11, 10, 9, 8
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-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 7, 11, 10, 9, 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	LAY8	GABLE	1	1	I45042030
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:42 2021 Page 1
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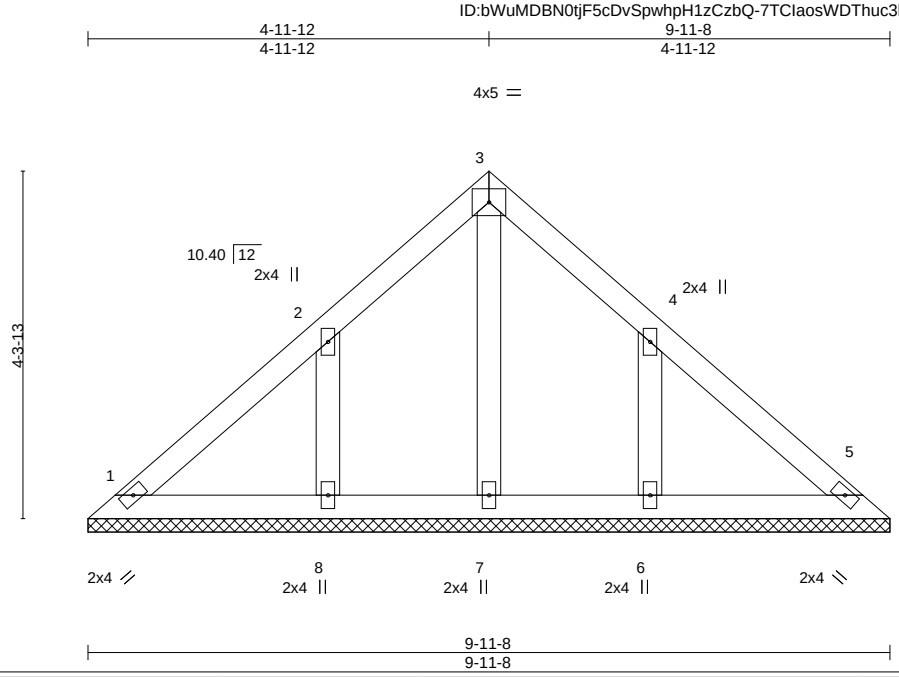

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 34 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 9-11-8.
(lb) - Max Horz 1=-104(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-134(LC 8), 6=-134(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=274(LC 15), 6=274(LC 16)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=134, 6=134.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V1A	Valley	2	1	I45042031
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:48 2021 Page 1
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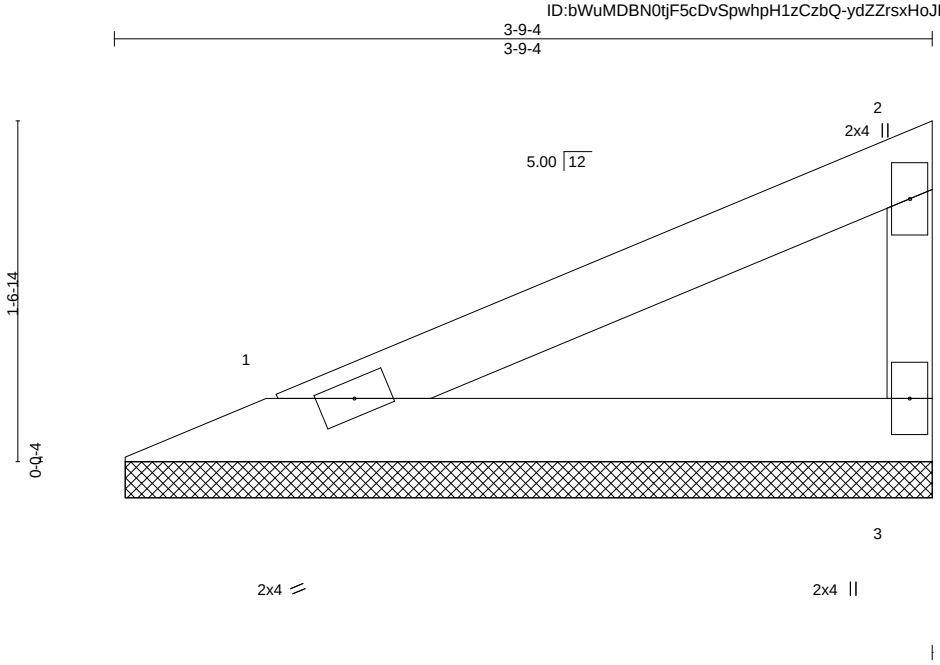

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 9 lb	FT = 10%

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

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

REACTIONS. (size) 1=3-8-10, 3=3-8-10
Max Horz 1=53(LC 5)
Max Uplift 1=-19(LC 8), 3=-30(LC 8)
Max Grav 1=131(LC 1), 3=131(LC 1)

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

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

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V2	Valley	1	1	I45042032
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:49 2021 Page 1
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3-5-4
3-5-4

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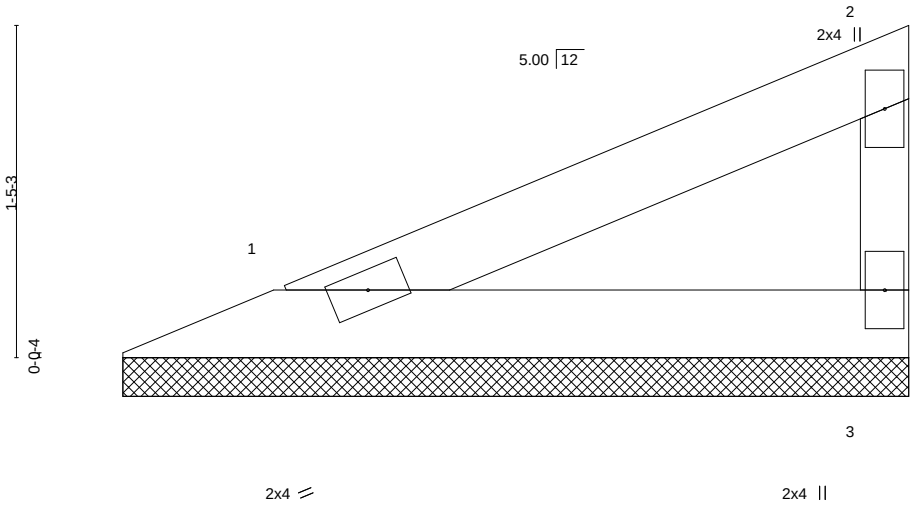

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014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

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

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

REACTIONS. (size) 1=3-4-10, 3=3-4-10
Max Horz 1=47(LC 5)
Max Uplift 1=-17(LC 8), 3=-26(LC 8)
Max Grav 1=116(LC 1), 3=116(LC 1)

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

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

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V3	Valley	1	1	I45042033
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:52 2021 Page 1
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0-10-8 3-6-12 3-6-12 0-10-8

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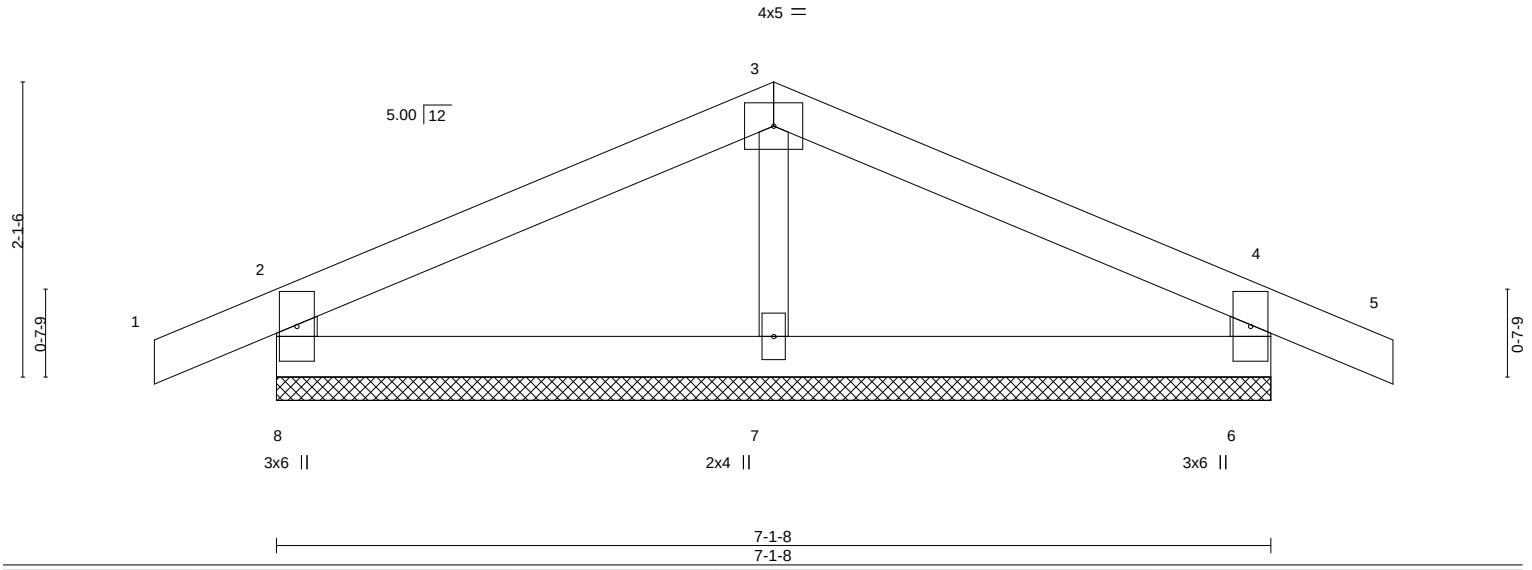

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 21 lb	FT = 10%

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

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

REACTIONS. (size) 8=7-1-8, 6=7-1-8, 7=7-1-8
Max Horz 8=-19(LC 13)
Max Uplift 8=-74(LC 8), 6=-76(LC 9)
Max Grav 8=265(LC 1), 6=265(LC 1), 7=227(LC 1)

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

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

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V4	Valley	1	1	I45042034
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:56 2021 Page 1
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3-0-14 6-1-13
3-0-14 3-0-14

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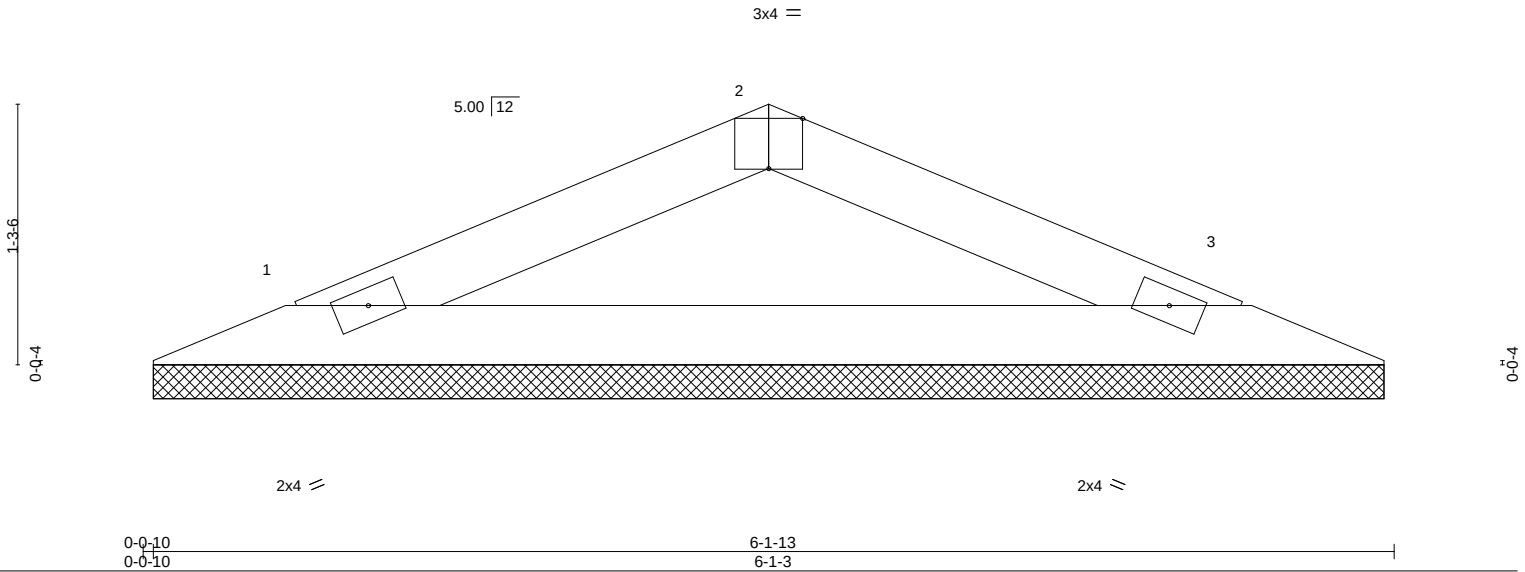

0-0-10 6-1-13
0-0-10 6-1-3

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 10%

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

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

REACTIONS. (size) 1=6-0-10, 3=6-0-10
Max Horz 1=17(LC 8)
Max Uplift 1=-27(LC 8), 3=-27(LC 9)
Max Grav 1=209(LC 1), 3=209(LC 1)

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

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

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V5	Valley	1	1	I45042035
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:57 2021 Page 1
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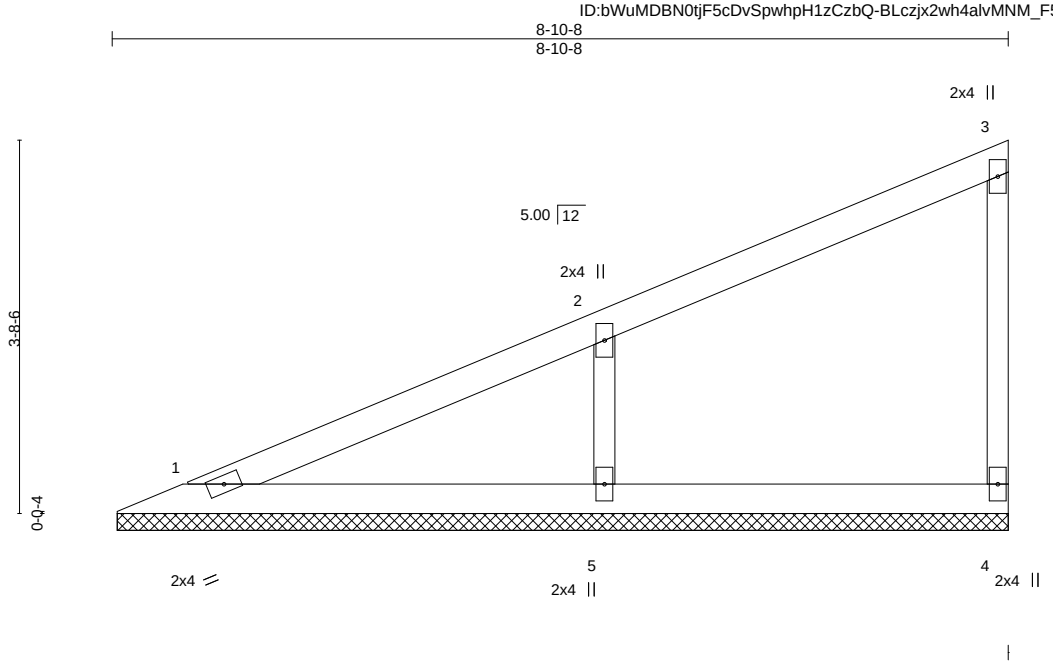


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 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-

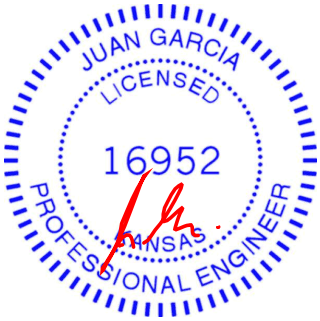
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-9-14, 4=8-9-14, 5=8-9-14
Max Horz 1=146(LC 5)
Max Uplift 4=-23(LC 5), 5=-120(LC 8)
Max Grav 1=142(LC 1), 4=129(LC 1), 5=451(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-351/180

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=120.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V6	Valley	1	1	I45042036
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:15:00 2021 Page 1
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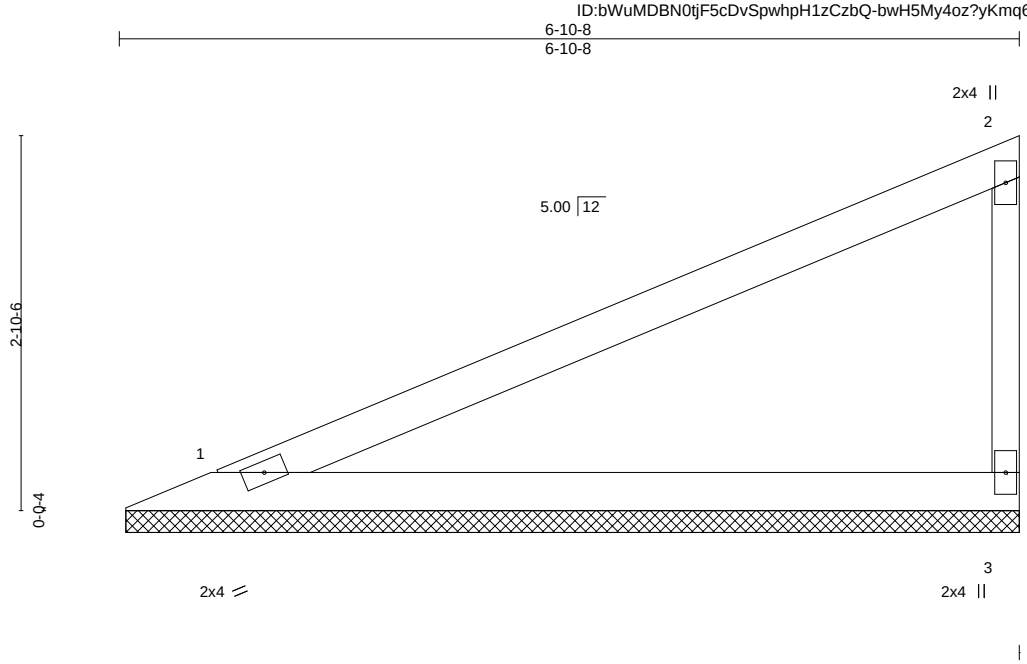

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-9-14, 3=6-9-14
Max Horz 1=110(LC 5)
Max Uplift 1=-40(LC 8), 3=-62(LC 8)
Max Grav 1=271(LC 1), 3=271(LC 1)

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

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

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V7	Valley	1	1	I45042037
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:15:01 2021 Page 1
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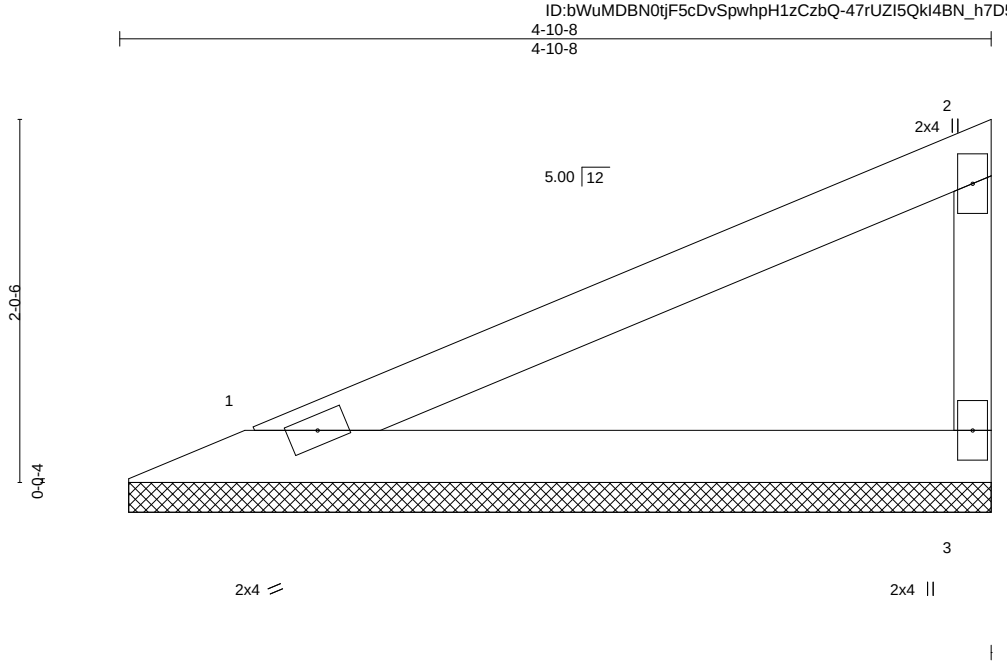

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 10%

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

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

REACTIONS. (size) 1=4-9-14, 3=4-9-14
Max Horz 1=74(LC 5)
Max Uplift 1=-26(LC 8), 3=-41(LC 8)
Max Grav 1=181(LC 1), 3=181(LC 1)

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

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

March 3,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V8	Valley	1	1	I45042038
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:15:03 2021 Page 1
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2-10-8
2-10-8

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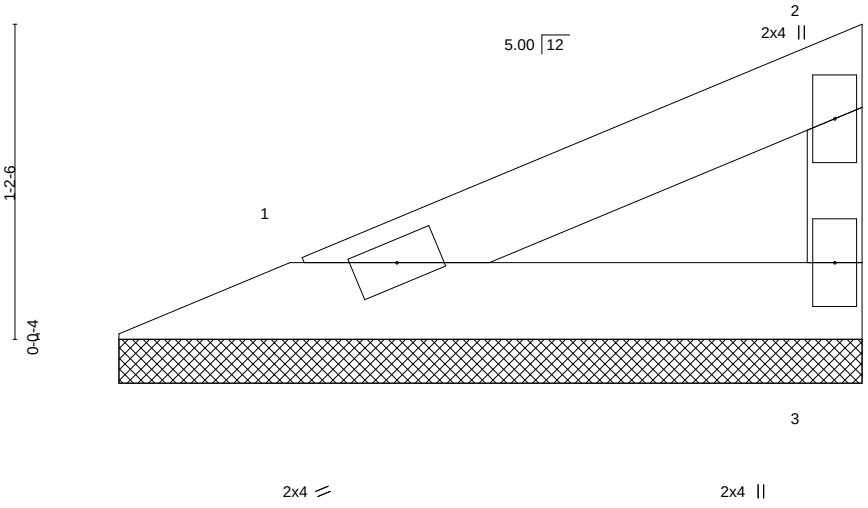


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-9-14, 3=2-9-14
Max Horz 1=37(LC 5)
Max Uplift 1=-13(LC 8), 3=-21(LC 8)
Max Grav 1=91(LC 1), 3=91(LC 1)

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

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

March 3,2021

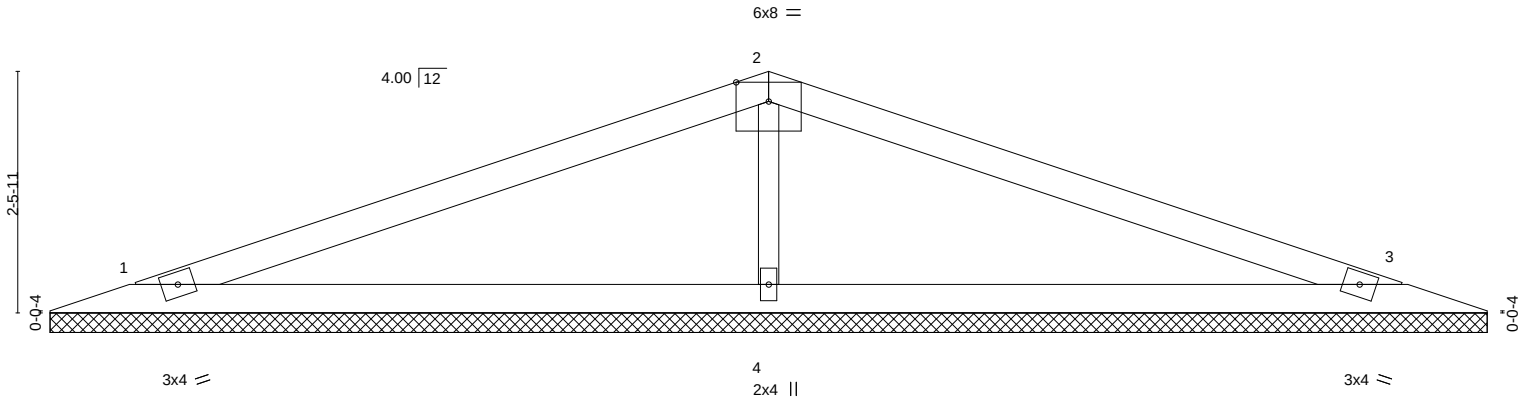
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V9	Valley	1	1	I45042039
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:15:05 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-yu5_Pg8xoXadsb_uSxE0uPcOWVbSjelKltbNqFzecAq

7-5-0 14-10-0
7-5-0 7-5-0

Scale = 1:23.6



0-0-12 14-10-0
0-0-12 14-9-4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 34 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=14-8-8, 3=14-8-8, 4=14-8-8
Max Horz 1=38(LC 8)
Max Uplift 1=-55(LC 4), 3=-60(LC 9), 4=-60(LC 4)
Max Grav 1=261(LC 21), 3=261(LC 22), 4=660(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-465/138

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

March 3,2021

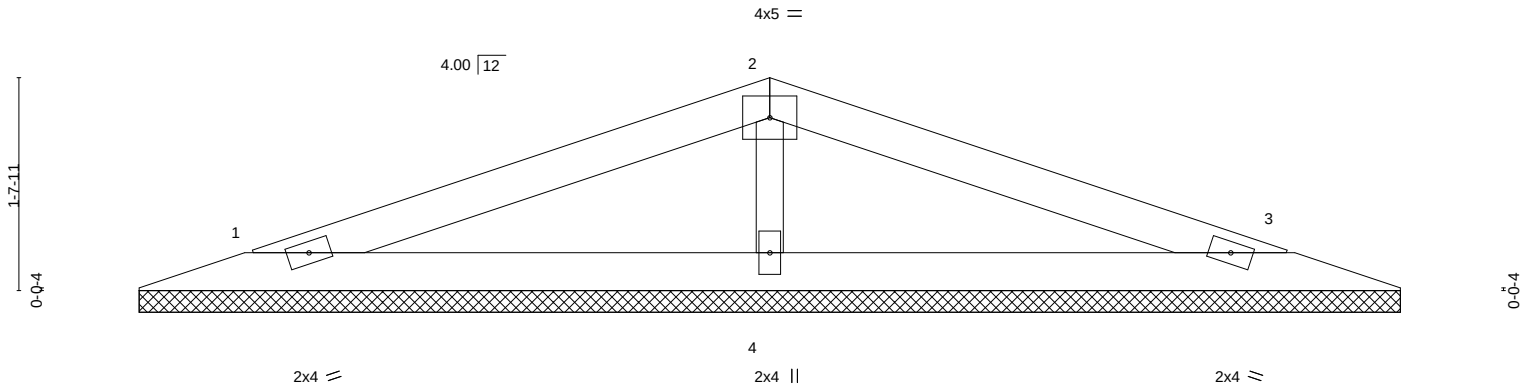
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 89 W0
210289	V10	Valley	1	1	I45042040
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Mar 3 14:14:44 2021 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3rK2?Uuml4xbrMtsj0M5XzEu11TuIADEw6?mbzzecB9

4-11-0 9-10-0
4-11-0 4-11-0

Scale = 1:17.7



0-0-12 9-10-0
0-0-12 9-9-4

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 21 lb	FT = 10%

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

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

REACTIONS. (size) 1=9-8-8, 3=9-8-8, 4=9-8-8
Max Horz 1=24(LC 8)
Max Uplift 1=-34(LC 4), 3=-37(LC 9), 4=-37(LC 4)
Max Grav 1=160(LC 21), 3=160(LC 22), 4=405(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-285/84

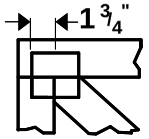
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed;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

March 3,2021

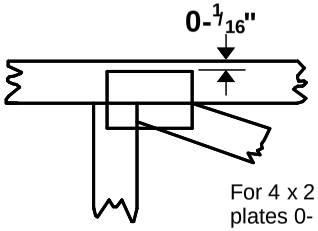
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

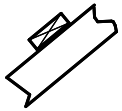
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

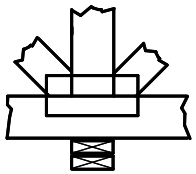
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

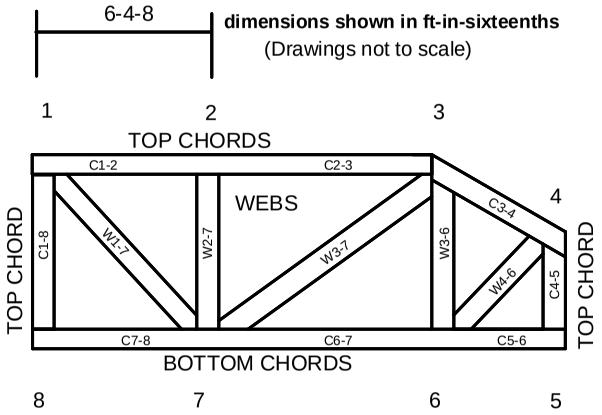


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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