RE: 210533
Lot 109 MN

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

Site Information:

Customer: Project Name: 210533
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: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 75 individual, dated Truss Design Drawings and 0 Additional Drawings.

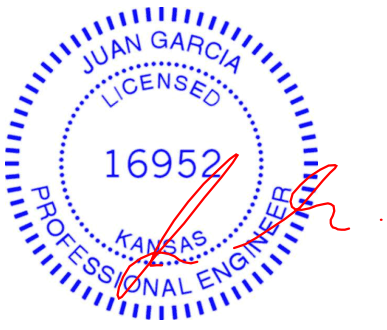
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45820619	A1	4/26/2021	21	I45820639	D4	4/26/2021
2	I45820620	A2	4/26/2021	22	I45820640	D5	4/26/2021
3	I45820621	A3	4/26/2021	23	I45820641	D6	4/26/2021
4	I45820622	A4	4/26/2021	24	I45820642	D7	4/26/2021
5	I45820623	A5	4/26/2021	25	I45820643	D8	4/26/2021
6	I45820624	B1	4/26/2021	26	I45820644	D9	4/26/2021
7	I45820625	B2	4/26/2021	27	I45820645	E1	4/26/2021
8	I45820626	B3	4/26/2021	28	I45820646	E2	4/26/2021
9	I45820627	C1	4/26/2021	29	I45820647	E3	4/26/2021
10	I45820628	C2	4/26/2021	30	I45820648	E4	4/26/2021
11	I45820629	C3	4/26/2021	31	I45820649	G1	4/26/2021
12	I45820630	C4	4/26/2021	32	I45820650	G2	4/26/2021
13	I45820631	C5	4/26/2021	33	I45820651	J1	4/26/2021
14	I45820632	C6	4/26/2021	34	I45820652	J2	4/26/2021
15	I45820633	C7	4/26/2021	35	I45820653	J3	4/26/2021
16	I45820634	C8	4/26/2021	36	I45820654	J4	4/26/2021
17	I45820635	C9	4/26/2021	37	I45820655	J5	4/26/2021
18	I45820636	D1	4/26/2021	38	I45820656	J6	4/26/2021
19	I45820637	D2	4/26/2021	39	I45820657	J7	4/26/2021
20	I45820638	D3	4/26/2021	40	I45820658	J8	4/26/2021

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.

April 26, 2021

Garcia, Juan

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

RE: 210533 - Lot 109 MN

Site Information:

Project Customer: Project Name: 210533
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I45820659	J9	4/26/2021
42	I45820660	J10	4/26/2021
43	I45820661	J11	4/26/2021
44	I45820662	J12	4/26/2021
45	I45820663	J13	4/26/2021
46	I45820664	J14	4/26/2021
47	I45820665	J15	4/26/2021
48	I45820666	J16	4/26/2021
49	I45820667	J17	4/26/2021
50	I45820668	J18	4/26/2021
51	I45820669	J19	4/26/2021
52	I45820670	J20	4/26/2021
53	I45820671	J21	4/26/2021
54	I45820672	J22	4/26/2021
55	I45820673	J23	4/26/2021
56	I45820674	J24	4/26/2021
57	I45820675	J25	4/26/2021
58	I45820676	J26	4/26/2021
59	I45820677	J27	4/26/2021
60	I45820678	J28	4/26/2021
61	I45820679	LAY1	4/26/2021
62	I45820680	LAY2	4/26/2021
63	I45820681	LAY3	4/26/2021
64	I45820682	LAY4	4/26/2021
65	I45820683	LAY5	4/26/2021
66	I45820684	LAY6	4/26/2021
67	I45820685	R1	4/26/2021
68	I45820686	V1	4/26/2021
69	I45820687	V2	4/26/2021
70	I45820688	V3	4/26/2021
71	I45820689	V4	4/26/2021
72	I45820690	V5	4/26/2021
73	I45820691	V6	4/26/2021
74	I45820692	V7	4/26/2021
75	I45820693	V8	4/26/2021

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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: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 75 individual, dated Truss Design Drawings and 0 Additional Drawings.

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9	I45820627	C1	4/26/2021	29	I45820647	E3	4/26/2021
10	I45820628	C2	4/26/2021	30	I45820648	E4	4/26/2021
11	I45820629	C3	4/26/2021	31	I45820649	G1	4/26/2021
12	I45820630	C4	4/26/2021	32	I45820650	G2	4/26/2021
13	I45820631	C5	4/26/2021	33	I45820651	J1	4/26/2021
14	I45820632	C6	4/26/2021	34	I45820652	J2	4/26/2021
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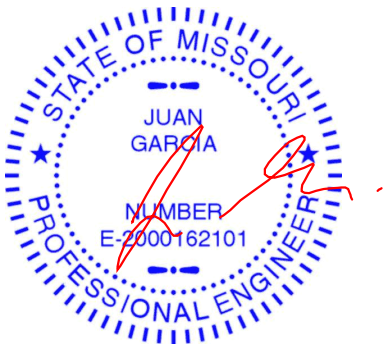
20	I45820638	D3	4/26/2021	40	I45820658	J8	4/26/2021

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

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193



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

April 26, 2021

Garcia, Juan

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

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65	I45820683	LAY5	4/26/2021
66	I45820684	LAY6	4/26/2021
67	I45820685	R1	4/26/2021
68	I45820686	V1	4/26/2021
69	I45820687	V2	4/26/2021
70	I45820688	V3	4/26/2021
71	I45820689	V4	4/26/2021
72	I45820690	V5	4/26/2021
73	I45820691	V6	4/26/2021
74	I45820692	V7	4/26/2021
75	I45820693	V8	4/26/2021

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	A1	Hip Girder	1	4	I45820619
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:12 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-IxqI8BMLZJHe_XJhy1OBWoOaosEfhGZwEVbfvDzMuxr

3-3-8	7-3-14	14-4-3	21-4-8	27-1-5	32-11-9	38-8-2	46-0-0	46-10-8
3-3-8	4-0-6	7-0-5	7-0-5	5-8-13	5-10-5	5-8-9	7-3-14	0-10-8

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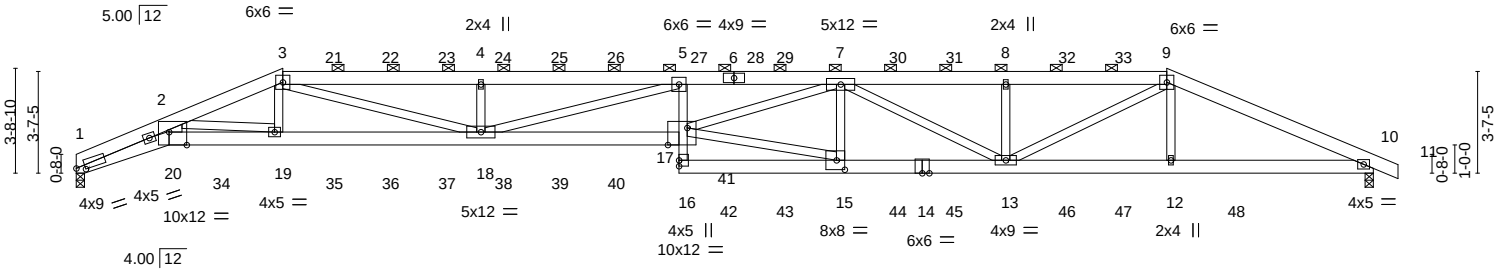


3-3-8	7-3-14	14-4-3	21-4-8	27-1-5	32-11-9	38-8-2	46-0-0
3-3-8	4-0-6	7-0-5	7-0-5	5-8-13	5-10-5	5-8-9	7-3-14

Plate Offsets (X,Y)-- [1:0-3-13,0-1-9], [15:0-3-8,0-4-0], [17:0-8-4,Edge], [20:0-7-8,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	0.35	Vert(LL)	-0.58	17	>948	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-1.04	17-18	>528	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.29	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.38	17	>999	240	Weight: 1139 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
5-16: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-20: 2x6 SPF No.2

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

REACTIONS. (size) 1=0-3-8, 10=0-3-8
Max Horz 1=-37(LC 11)
Max Uplift 1=-389(LC 5), 10=-407(LC 5)
Max Grav 1=3967(LC 1), 10=4052(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-17869/1830, 2-3=-12721/1283, 3-4=-18583/1824, 4-5=-18580/1822, 5-7=-23069/2269, 7-8=-11976/1195, 8-9=-11978/1196, 9-10=-8891/908
BOT CHORD 1-20=-1653/16359, 19-20=-1405/14049, 18-19=-1149/11901, 17-18=-2244/23581, 16-17=0/262, 5-17=0/1021, 15-16=-169/1692, 13-15=-1338/14302, 12-13=-777/8019, 10-12=-779/8058
WEBS 2-20=-514/4829, 2-19=-2076/315, 3-19=-103/1576, 3-18=-633/7111, 4-18=-1108/318, 5-18=-5255/507, 15-17=-1198/12924, 7-17=-911/9258, 7-15=-2716/420, 7-13=-2688/242, 8-13=-788/240, 9-13=-402/4632, 9-12=-56/856

NOTES-
1) 4-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 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=389, 10=407.

April 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 115 lb down and 76 lb up at 9-0-0, 115 lb down and 76 lb up at 11-0-0, 115 lb down and 76 lb up at 13-0-0, 115 lb down and 76 lb up at 15-0-0, 115 lb down and 76 lb up at 17-0-0, 115 lb down and 76 lb up at 19-0-0, 115 lb down and 76 lb up at 21-0-0, 114 lb down and 75 lb up at 23-0-0, 114 lb down and 75 lb up at 25-0-0, 114 lb down and 75 lb up at 27-0-0, 114 lb down and 75 lb up at 29-0-0, 114 lb down and 75 lb up at 31-0-0, 114 lb down and 75 lb up at 33-0-0, and 114 lb down and 75 lb up at 35-0-0, and 114 lb down and 75 lb up at 37-0-0 on top chord, and 451 lb down and 141 lb up at 5-0-0, 230 lb down and 46 lb up at 7-0-0, 70 lb down at 9-0-0, 70 lb down at 11-0-0, 70 lb down at 13-0-0, 70 lb down at 15-0-0, 70 lb down at 17-0-0, 70 lb down at 19-0-0, 70 lb down at 21-0-0, 70 lb down at 23-0-0, 70 lb down at 25-0-0, 70 lb down at 27-0-0, 70 lb down at 29-0-0, 70 lb down at 31-0-0, 70 lb down at 33-0-0, 70 lb down at 35-0-0, 70 lb down at 37-0-0, and 232 lb down and 44 lb up at 39-0-0, and 463 lb down and 143 lb up at 41-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

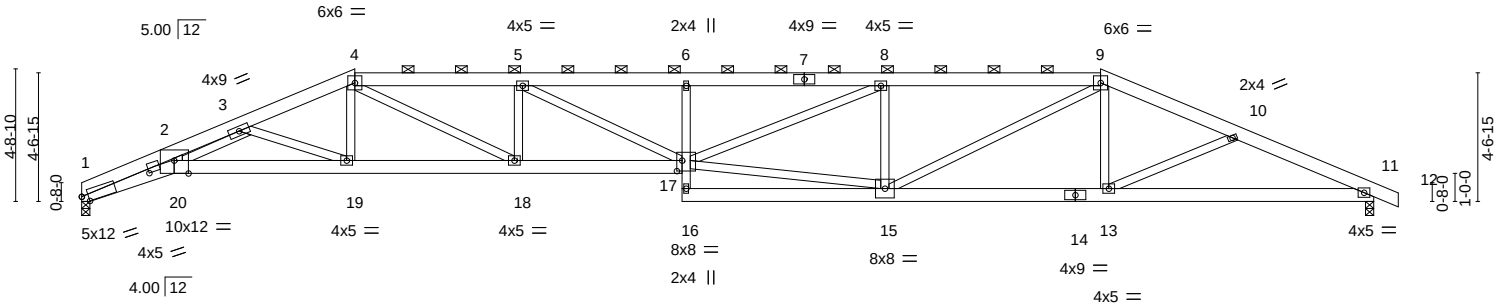
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-9=-70, 9-11=-70, 1-20=-20, 17-20=-20, 10-16=-20
   Concentrated Loads (lb)
   Vert: 19=-230(F) 15=-50(F) 7=-114(F) 8=-114(F) 13=-50(F) 12=-232(F) 21=-115(F) 22=-115(F) 23=-115(F) 24=-115(F) 25=-115(F) 26=-115(F) 27=-115(F) 28=-114(F) 29=-114(F) 30=-114(F) 31=-114(F) 32=-114(F) 33=-114(F) 34=-451(F) 35=-49(F) 36=-49(F) 37=-49(F) 38=-49(F) 39=-49(F) 40=-49(F) 41=-49(F) 42=-50(F) 43=-50(F) 44=-50(F) 45=-50(F) 46=-50(F) 47=-50(F) 48=-463(F)

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	
210533	A2	HIP	1	2	Job Reference (optional)	I45820620

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:13 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-m7OgMXNzKdPVchutWlwQ2?xfrFYiQoI4S9LDRfzMuxq

3-3-8	5-9-12	9-8-11	15-6-10	28-7-2	28-11-10	36-3-5	40-11-10	46-0-0	46-10-8
3-3-8	2-6-4	3-10-15	5-9-14	13-0-9	0-4-8	7-3-10	4-8-5	5-0-6	0-10-8

Scale = 1:82.0



3-3-8	9-8-11	15-6-10	21-4-8	28-7-2	36-3-5	46-0-0
3-3-8	6-5-3	5-9-14	5-9-14	7-2-10	7-8-2	9-8-11

Plate Offsets (X,Y)-- [1:0-2-13,0-2-13], [1:2-6-9,0-0-7], [17:0-2-4,0-4-8], [20:0-6-2,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	0.72	Vert(LL)	-0.41	17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.74	17	>738	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.28	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.31	17	>999	240	Weight: 486 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins, except 2-0-0 oc purlins (5-7-1 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 1-20.

REACTIONS. (size) 1=0-3-8, 11=0-3-8
Max Horz 1=-79(LC 13)
Max Uplift 1=-273(LC 4), 11=-305(LC 5)
Max Grav 1=2055(LC 1), 11=2128(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8828/1182, 2-3=-7598/1071, 3-4=-5449/836, 4-5=-6736/1127, 5-6=-7496/1278, 6-8=-7425/1272, 8-9=-5437/943, 9-10=-4127/640, 10-11=-4303/658
BOT CHORD 1-20=-1059/8034, 19-20=-886/6362, 18-19=-676/4969, 17-18=-1011/6733, 15-16=-40/290, 13-15=-488/3781, 11-13=-541/3842
WEBS 6-17=-412/174, 2-20=-198/1843, 4-19=-21/774, 4-18=-394/2123, 5-18=-951/277, 5-17=-184/966, 15-17=-788/5194, 8-17=-366/2177, 9-15=-381/1989, 9-13=0/345, 3-19=-1445/264, 3-20=-123/1049, 8-15=-1481/389

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.
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) 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=273, 11=305.
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.

April 26,2021

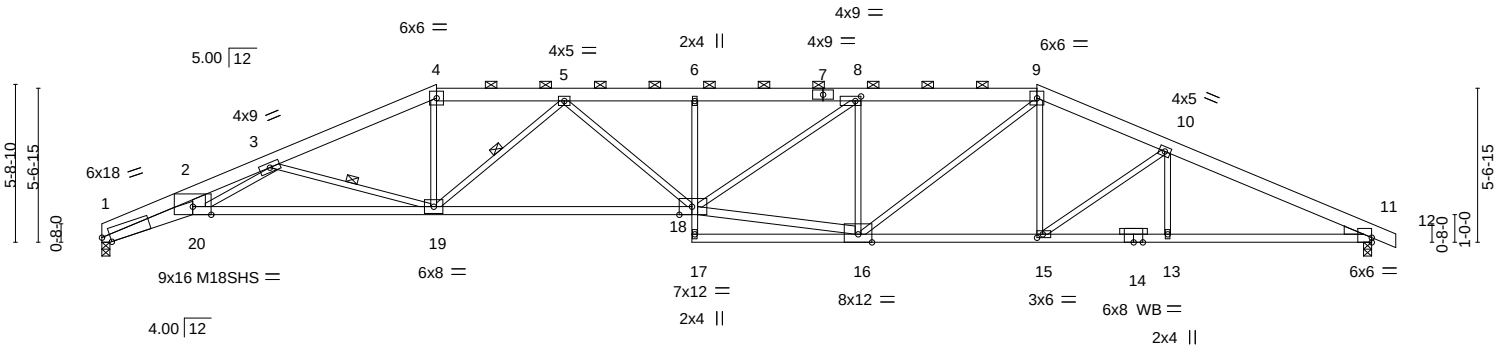
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820621
210533	A3	Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:21 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Xgti1GT_R4PMZwVQ_Q3INhG?vUHCIMZFIPHejBzMuxi

3-3-8	6-2-15	12-1-8	16-9-0	27-4-12	27-8-12	33-10-8	38-7-5	46-0-0	46-10-8
3-3-8	2-11-7	5-10-9	4-7-8	10-7-12	0-4-0	6-1-12	4-8-13	7-4-11	0-10-8

Scale = 1:83.5



3-3-8	12-1-8	21-4-8	27-4-12	33-10-8	38-7-5	46-0-0
3-3-8	8-10-0	9-3-0	6-0-4	6-5-12	4-8-13	7-4-11

Plate Offsets (X,Y)-- [1:0-3-9,Edge], [8:0-2-8,0-2-0], [11:0-0-0,0-2-1], [15:0-2-8,0-1-8], [18:0-5-8,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	0.84	Vert(LL)	-0.60	18	>913	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-1.19	18-19	>461	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.53	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.43	18	>999	240	Weight: 211 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except*
	1-4: 2x6 SP DSS
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	1-20: 2x6 SPF 1650F 1.4E, 14-17: 2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	2-20: 2x6 SPF No.2, 16-18: 2x4 SPF 2100F 1.8E
OTHERS	2x3 SPF No.2
WEDGE	
Right: 2x4 SP No.3	

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-0-0 oc purlins, except 2-0-0 oc purlins (2-10-6 max.): 4-9.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 3-19, 5-19

REACTIONS. (size) 1=0-3-8, 11=0-3-8
Max Horz 1=-97(LC 9)
Max Uplift 1=-243(LC 4), 11=-275(LC 5)
Max Grav 1=2055(LC 1), 11=2128(LC 1)

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

TOP CHORD	1-2=-8935/1046, 2-3=-7516/943, 3-4=-4781/664, 4-5=-4325/635, 5-6=-5564/894, 6-8=-5561/896, 8-9=-4404/727, 9-10=-3824/585, 10-11=-4266/557
BOT CHORD	1-20=-937/8136, 19-20=-756/5978, 18-19=-701/5146, 15-16=-400/3474, 13-15=-436/3803, 11-13=-436/3803
WEBS	6-18=-350/144, 2-20=-171/1936, 3-20=-123/1374, 3-19=-1690/379, 4-19=-131/1420, 5-19=-1235/294, 5-18=-81/676, 16-18=-581/4409, 8-18=-215/1434, 9-16=-232/1315, 9-15=-49/357, 10-15=-412/187, 10-13=0/252, 8-16=-1343/330

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=243, 11=275.
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

April 26,2021

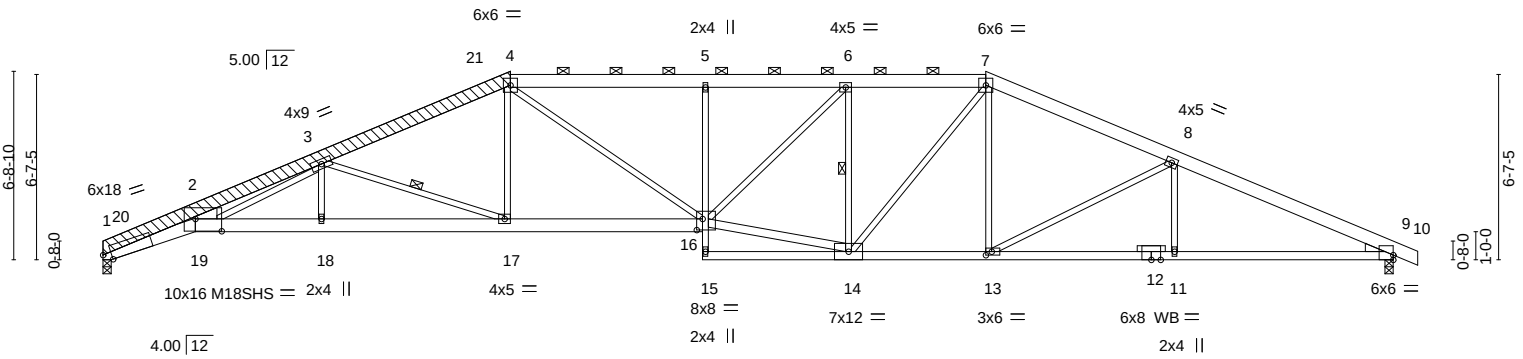
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	
210533	A4	Hip	1	1	Job Reference (optional)	I45820622

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:24 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-yEYqfHVsk?nxQNE?fZc??KuahhJlVheh_NVIKWzMuxf

3-3-8	7-9-7	14-6-5	21-4-8	26-7-0	31-5-11	38-2-7	46-0-0	46-10-8
3-3-8	4-5-15	6-8-13	6-10-3	5-2-8	4-10-12	6-8-12	7-9-9	0-10-8

Scale = 1:82.1



3-3-8	7-9-7	14-6-5	21-4-8	26-7-0	31-5-11	38-2-7	46-0-0
3-3-8	4-5-15	6-8-13	6-10-3	5-2-8	4-10-12	6-8-12	7-9-9

Plate Offsets (X,Y)-- [1:0-3-9,Edge], [9:0-0-0,0-2-1], [13:0-2-8,0-1-8], [16:0-2-8,0-4-12], [19:0-11-4,0-5-4]

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	0.61	Vert(LL)	-0.47	16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.84	16-17	>650	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.45	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.32	16	>999	240	Weight: 269 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except*
	1-4: 2x6 SP 2400F 2.0E
BOT CHORD	2x6 SP 2400F 2.0E *Except*
	16-19: 2x6 SPF 1650F 1.4E, 12-15: 2x4 SPF No.2
	9-12: 2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2 *Except*
	2-19: 2x10 SP DSS, 14-16: 2x4 SPF No.2
OTHERS	2x6 SP 2400F 2.0E *Except*
	12-12: 2x3 SPF No.2
LBR SCAB	1-4 2x6 SP 2400F 2.0E one side
WEDGE	
Right: 2x4 SP No.3	

BRACING-

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

REACTIONS. (size) 1=0-3-8, 9=0-3-8
Max Horz 1=-115(LC 9)
Max Uplift 1=-214(LC 4), 9=-246(LC 5)
Max Grav 1=2055(LC 1), 9=2128(LC 1)

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

TOP CHORD	1-2=-7967/820, 2-3=-6151/717, 3-4=-4376/579, 4-5=-4565/687, 5-6=-4567/689,
	6-7=-3696/573, 7-8=-3619/510, 8-9=-4277/490
BOT CHORD	1-19=-723/7179, 18-19=-569/5478, 17-18=-569/5478, 16-17=-390/3947, 13-14=-306/3250,
	11-13=-375/3817, 9-11=-375/3817
WEBS	5-16=-478/193, 2-19=-154/2151, 3-19=-137/402, 3-18=0/288, 3-17=-1616/346,
	4-17=-26/724, 4-16=-179/967, 14-16=-403/3738, 6-16=-173/1245, 6-14=-1246/264,
	7-14=-146/876, 7-13=-45/419, 8-13=-653/234, 8-11=0/314

NOTES-

1) Attached 15-11-2 scab 1 to 4, front face(s) 2x6 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-9 from end at joint 1, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 7-5-4 from end at joint 1, nail 2 row(s) at 7" o.c. for 2-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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.

Continued on page 2

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=214, 9=246.
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.

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	A5	Hip	1	1	I45820623

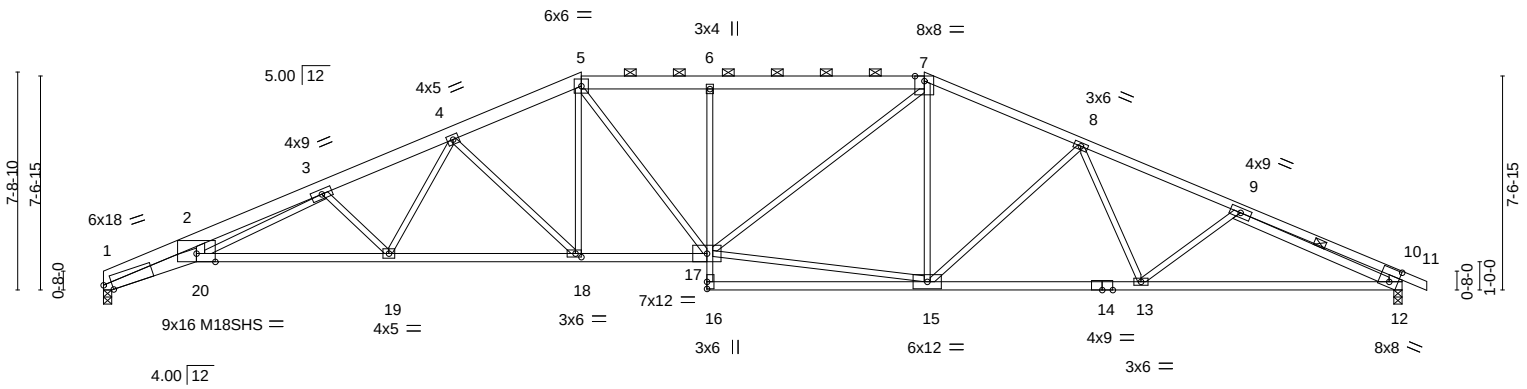
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:26 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-udgb4zX7Gc1fghONn_fT4lzrkV_NzaI_Sh_PPPzMuxd

3-3-8	7-10-1	12-4-9	16-11-2	29-0-14	34-7-7	40-1-15	46-0-0	46-10-8
3-3-8	4-6-9	4-6-9	4-6-9	12-1-13	5-6-9	5-6-9	5-10-1	0-10-8

Scale = 1:81.6



3-3-8	10-1-5	16-11-2	21-4-8	29-0-14	36-9-0	46-0-0
3-3-8	6-9-13	6-9-13	4-5-6	7-8-6	7-8-2	9-3-0

Plate Offsets (X,Y)-- [1:0-3-9,Edge], [12:0-3-9,0-5-11], [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)	-0.49	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.94	Vert(CT)	-0.90	19-20	>606	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr YES	WB	0.97	Horz(CT)	0.49	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.33	19-20	>999	240	Weight: 215 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP DSS *Except*
5-7: 2x6 SPF No.2, 7-11: 2x4 SPF No.2

BOT CHORD 2x4 SPF 2100F 1.8E *Except*
1-20: 2x6 SPF 1650F 1.4E, 6-16: 2x3 SPF No.2, 14-16: 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*
2-20,9-12: 2x4 SPF No.2, 10-12: 2x6 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-0-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-9 max.): 5-7.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-1-3 oc bracing: 1-20
2-2-0 oc bracing: 13-15.

WEBS 1 Row at midpt 9-12

REACTIONS. (size) 1=0-3-8, 12=0-3-8
Max Horz 1=-121(LC 9)
Max Uplift 1=-212(LC 8), 12=-237(LC 9)
Max Grav 1=2052(LC 1), 12=2131(LC 1)

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

TOP CHORD 1-2=-8601/917, 2-3=-7569/903, 3-4=-5107/531, 4-5=-3821/478, 5-6=-3787/524, 6-7=-3783/526, 7-8=-3312/431, 8-9=-3875/407, 9-10=-1046/162, 10-12=-675/163

BOT CHORD 1-20=-922/7801, 19-20=-578/5404, 18-19=-340/4138, 17-18=-256/3496, 6-17=-585/224, 13-15=-270/3417, 12-13=-329/3604

WEBS 5-18=-97/763, 5-17=-131/683, 7-15=-50/307, 8-15=-584/218, 8-13=-6/328, 7-17=-154/1129, 15-17=-219/2829, 4-18=-889/242, 4-19=-120/1055, 3-19=-1110/273, 3-20=-326/1939, 2-20=-60/1532, 9-12=-3041/342

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=212, 12=237.
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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	B1	Hip	1	1	I45820624

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:27 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-MpEzIJYl1w9WIrzaLhAidyW?wvMni6c8gLkyxrzMuxc

-0-10-8 3-3-8 7-5-5 14-2-4 19-3-14 26-8-2 31-10-2 38-0-0

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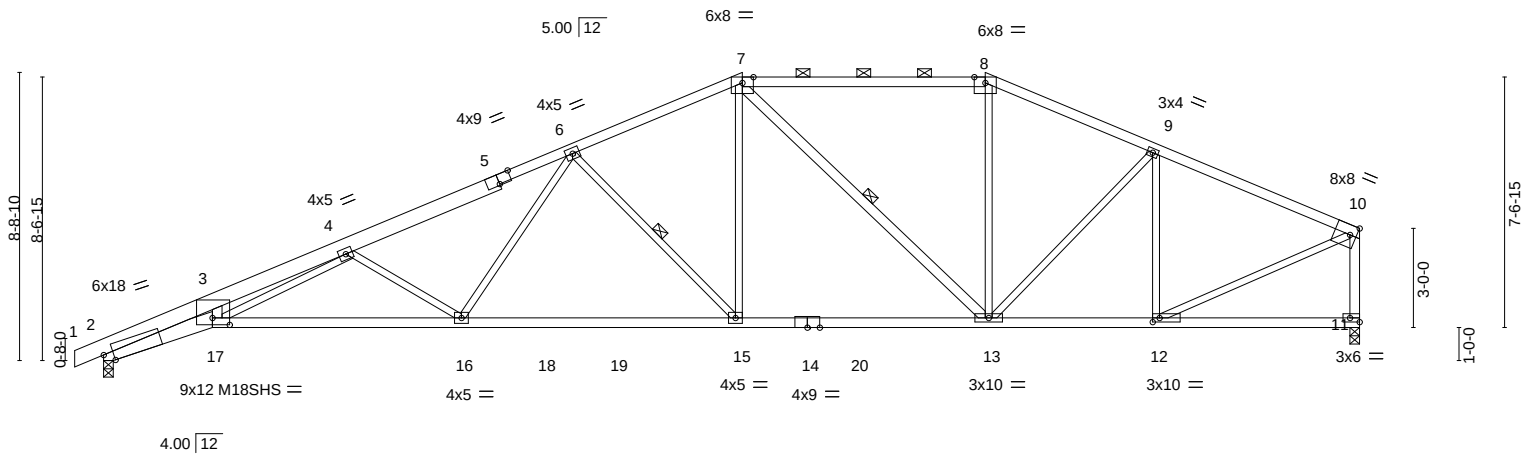
Scale = 1:69.7



3-3-8 10-9-15 19-3-14 26-8-2 31-10-2 38-0-0

3-3-8 7-6-7 8-6-0 7-4-3 5-2-0 6-1-14

Plate Offsets (X,Y)-- [2:0-3-9,Edge], [5:0-4-8,Edge], [10:0-2-5,Edge], [11:Edge,0-1-8], [12:0-2-8,0-1-8], [17:0-6-4,0-2-8]

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	0.93	Vert(LL)	-0.49	16-17	>919	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.88	16-17	>514	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.35	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.32	16-17	>999	240	Weight: 162 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-8: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SPF 1650F 1.4E

BOT CHORD 2x4 SPF No.2 *Except*
2-17: 2x6 SPF 1650F 1.4E, 14-17: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
3-17,7-13,10-11: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-4 max.): 7-8.

BOT CHORD Rigid ceiling directly applied or 8-4-14 oc bracing.

WEBS 1 Row at midpt 6-15, 7-13

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=182(LC 8)
Max Uplift 2=-243(LC 8), 11=-147(LC 5)
Max Grav 2=1848(LC 2), 11=1785(LC 2)

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

TOP CHORD 2-3=-7555/1025, 3-4=-6647/977, 4-6=-4047/492, 6-7=-2628/315, 7-8=-1956/276, 8-9=-2175/278, 9-10=-1976/206, 10-11=-1682/178

BOT CHORD 2-17=-1079/6874, 16-17=-733/4624, 15-16=-354/3023, 13-15=-197/2374, 12-13=-171/1767

WEBS 3-17=-111/1358, 4-17=-309/1862, 4-16=-1214/374, 6-16=-119/1134, 6-15=-918/283, 7-15=-104/1009, 7-13=-681/138, 8-13=-16/442, 9-13=-12/389, 9-12=-641/136, 10-12=-157/1884

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=243, 11=147.
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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	B2	Hip	1	1	I45820625
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:29 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-ICMji?Z?ZXQDX96yS6CAiNbLEi0tAx?Q8fD3?kzMuxa

-0-10-8 3-3-8 7-5-5 14-2-4 21-8-11 24-3-5 31-10-1 38-0-0
0-10-8 3-3-8 4-1-13 6-8-15 7-6-7 2-6-10 7-6-13 6-1-15

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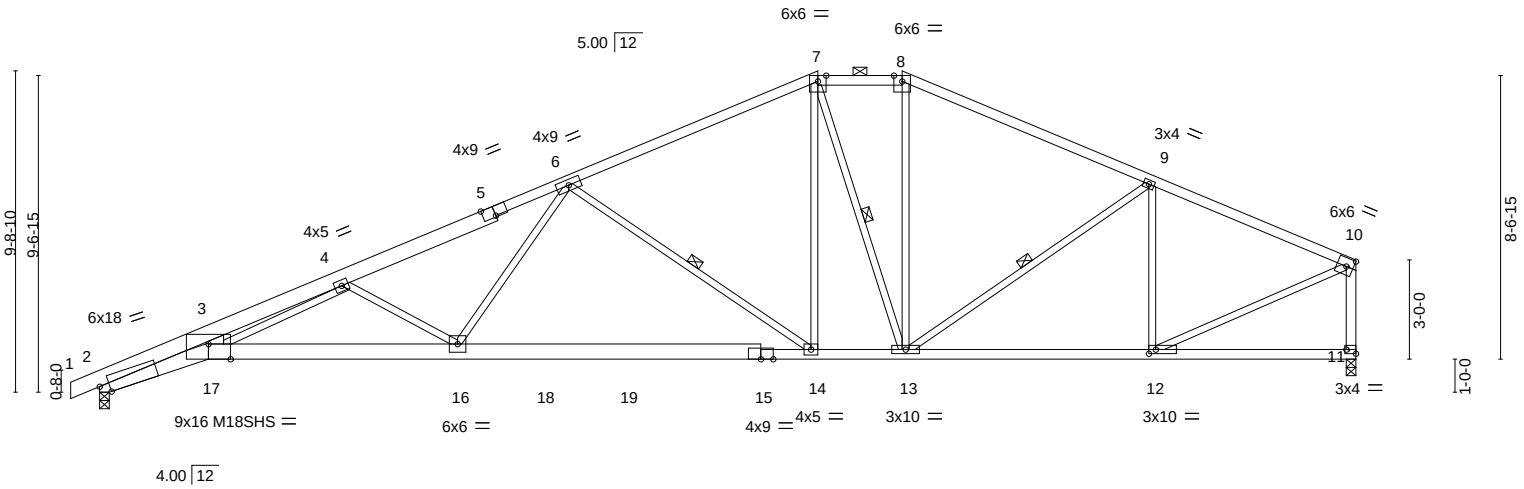


3-3-8 7-5-5 10-9-15 14-2-4 21-8-11 24-3-5 31-10-1 38-0-0
3-3-8 4-1-13 3-4-10 3-4-5 7-6-7 2-6-10 7-6-13 6-1-15

Plate Offsets (X,Y)-- [2:0-3-9,Edge], [5:0-4-8,Edge], [11:Edge,0-1-8], [12:0-2-8,0-1-8], [17:0-8-0,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 0.94	Vert(LL) -0.45 16-17 >999 360	MT20 197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.95	Vert(CT) -0.80 14-16 >568 240	M18SHS 197/144
BCLL 0.0	*	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.34 11 n/a n/a	
BCDL 10.0		Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.33 16-17 >999 240	Weight: 172 lb FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SPF 1650F 1.4E *Except*
11-15: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17: 2x6 SPF No.2, 10-11: 2x4 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=200(LC 8)
Max Uplift 2=-259(LC 8), 11=-170(LC 9)
Max Grav 2=1827(LC 2), 11=1758(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7398/1128, 3-4=-6334/1053, 4-6=-4120/542, 6-7=-2240/312, 7-8=-1860/288, 8-9=-2107/293, 9-10=-1973/196, 10-11=-1669/197
BOT CHORD 2-17=-1191/6736, 16-17=-795/4628, 14-16=-438/3015, 13-14=-145/1981, 12-13=-165/1773
WEBS 3-17=-134/1405, 4-16=-1124/362, 6-14=-1251/357, 7-14=-119/919, 7-13=-532/140, 8-13=-69/536, 9-13=-84/277, 9-12=-625/157, 10-12=-151/1906, 6-16=-89/1285, 4-17=-336/1514

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=259, 11=170.
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

April 26,2021

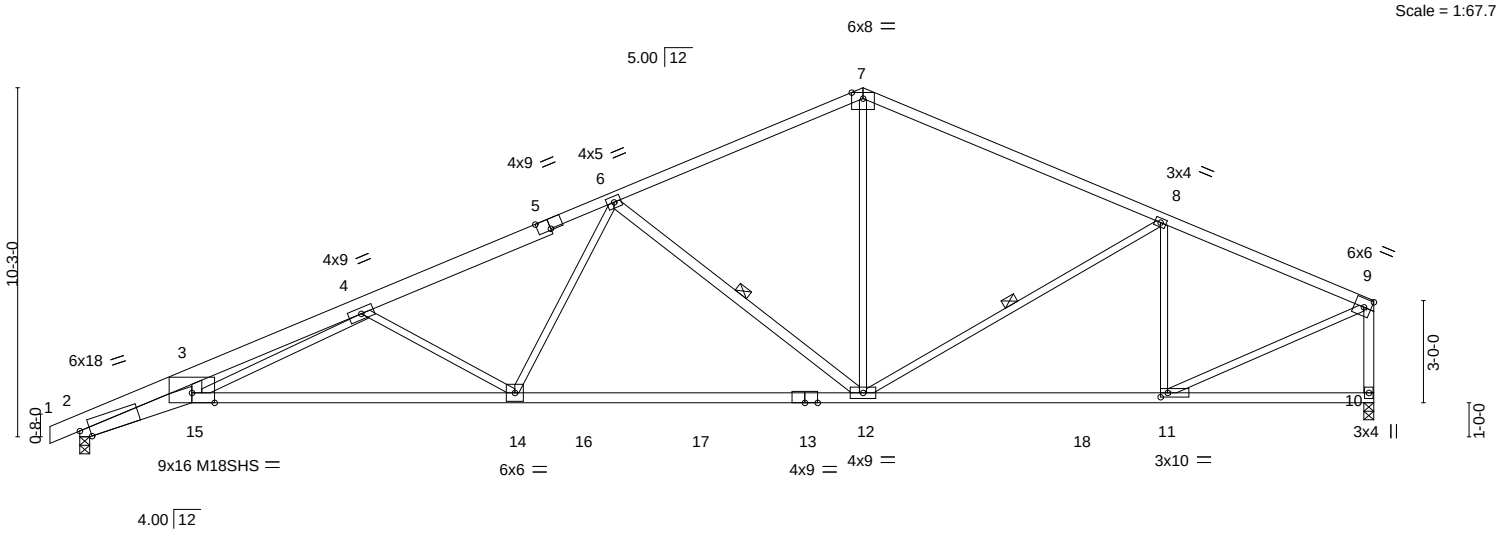
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	B3	Roof Special	2	1	I45820626
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:30 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-mOw5wLadKrY49Ih90pjPEb8VN6MivQLaNJycYAzMuxZ

-0-10-8 3-3-8 8-4-11 15-8-4 23-0-0 31-10-2 38-0-0
0-10-8 3-3-8 5-1-3 7-3-9 7-3-12 8-10-2 6-1-15

Scale = 1:67.7



3-3-8 12-9-5 20-6-8 23-0-0 31-10-2 38-0-0
3-3-8 9-5-13 7-9-3 2-5-8 8-10-2 6-1-15

Plate Offsets (X,Y)-- [2:0-3-9,Edge], [5:0-4-8,Edge], [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 0.98	Vert(LL)	-0.58	14-15	>784	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.91	Vert(CT)	-1.08	14-15	>419	240	M18SHS	197/144
BCLL 0.0	*	Rep Stress Incr YES	WB 0.84	Horz(CT)	0.36	10	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.38	14-15	>999	240	Weight: 157 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
7-9: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SPF 1650F 1.4E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-15: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
3-15,6-12,9-10: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-10-9 oc bracing.
WEBS 1 Row at midpt 6-12, 8-12

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=210(LC 8)
Max Uplift 2=-265(LC 8), 10=-182(LC 9)
Max Grav 2=1840(LC 2), 10=1796(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7564/1152, 3-4=-6704/1117, 4-6=-3695/502, 6-7=-2101/307, 7-8=-2124/328, 8-9=-2034/216, 9-10=-1712/207
BOT CHORD 2-15=-1224/6883, 14-15=-779/4313, 12-14=-400/2812, 11-12=-188/1835
WEBS 3-15=-94/1274, 4-15=-415/2217, 4-14=-1213/397, 6-14=-82/1120, 6-12=-1221/350, 8-11=-628/172, 9-11=-181/1983, 7-12=-87/1109

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=265, 10=182.
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.

April 26,2021

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820627
210533	C1	ROOF SPECIAL	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:32 2021 Page 1
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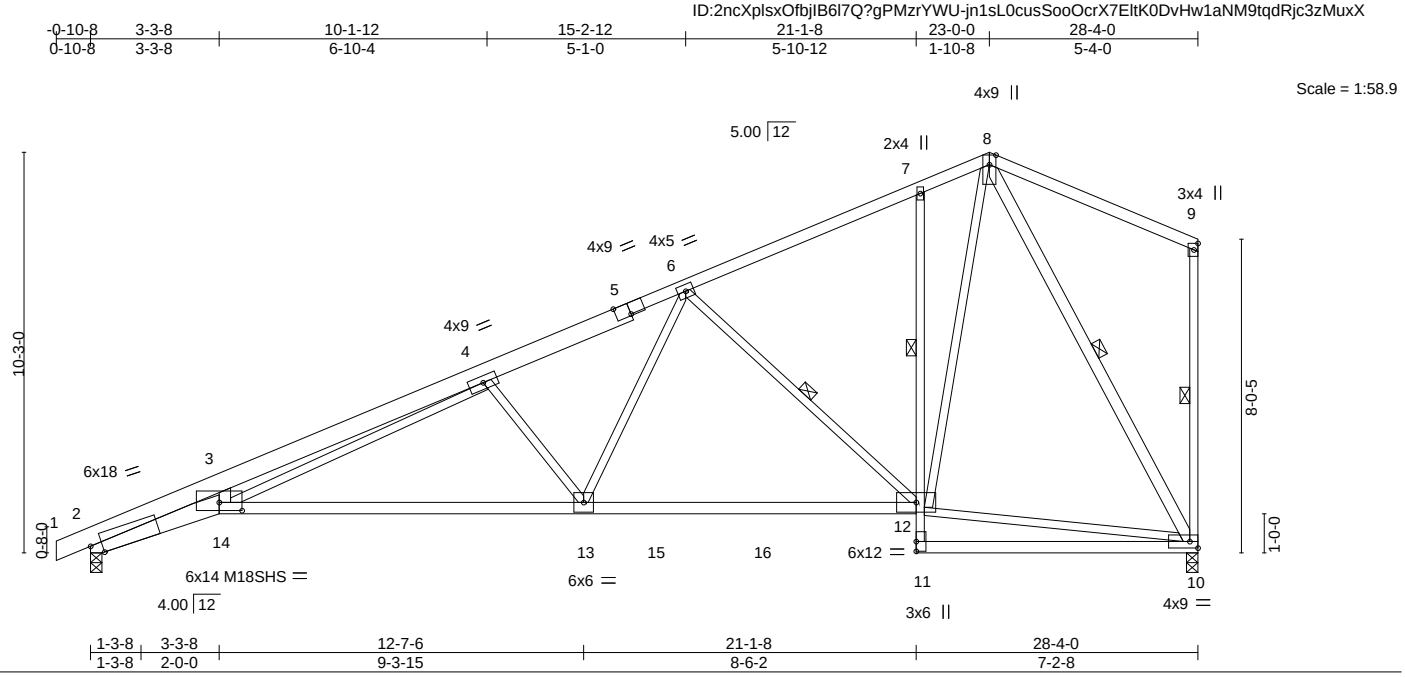

Plate Offsets (X,Y)-- [2:0-3-9,Edge], [5:0-4-8,Edge], [14:0-7-0,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.47	13-14	>719	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.88	13-14	>382	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.30	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.33	13-14	>999	240	Weight: 141 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SPF 1650F 1.4E
BOT CHORD 2x4 SPF No.2 *Except*
2-14: 2x6 SPF No.2, 12-14: 2x4 SPF 2100F 1.8E, 7-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-14,8-10: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=336(LC 7)
Max Uplift 2=-217(LC 8), 10=-186(LC 8)
Max Grav 2=1377(LC 2), 10=1321(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5399/941, 3-4=-4870/983, 4-6=-2392/402, 6-7=-1012/214, 7-8=-965/290
BOT CHORD 2-14=-1027/4904, 13-14=-510/2586, 12-13=-266/1643, 7-12=-339/179
WEBS 3-14=0/724, 4-14=-532/2146, 4-13=-831/307, 6-13=-138/1134, 6-12=-1060/283, 8-12=-299/1359, 10-12=-143/567, 8-10=-1292/171

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=217, 10=186.
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.

April 26,2021

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820628
210533	C2	HIP	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:33 2021 Page 1
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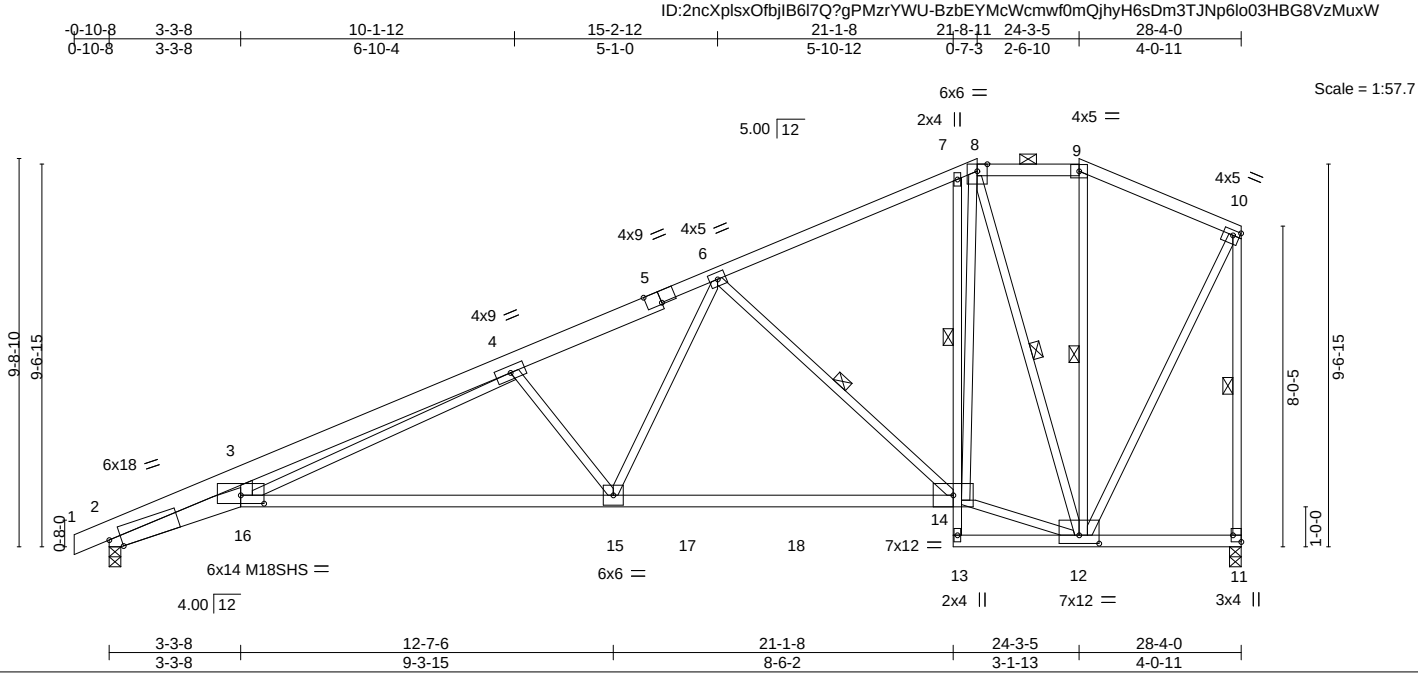


Plate Offsets (X,Y)-- [2:0-3-9,Edge], [5:0-4-8,Edge], [10:0-2-0,0-1-8], [11:Edge,0-2-8], [12:0-6-0,0-2-8], [16:0-7-0,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.48	15-16	>709	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.89	15-16	>377	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.31	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.35	15-16	>960	240	Weight: 147 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x6 SPF 1650F 1.4E
BOT CHORD	2x4 SPF No.2 *Except* 2-16: 2x6 SPF No.2, 14-16: 2x4 SPF 2100F 1.8E, 7-13: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-16: 2x4 SPF No.2

BRACING-

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

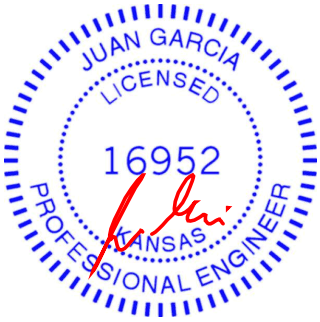
REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=349(LC 8)
Max Uplift 2=-194(LC 8), 11=-186(LC 8)
Max Grav 2=1377(LC 2), 11=1321(LC 2)

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

TOP CHORD	2-3=-5401/1022, 3-4=-4872/1047, 4-6=-2391/370, 6-7=-1010/168, 7-8=-901/231, 8-9=-500/115, 9-10=-568/111, 10-11=-1263/206
BOT CHORD	2-16=-1250/4906, 15-16=-633/2585, 14-15=-377/1645
WEBS	3-16=-6/723, 4-16=-626/2149, 4-15=-827/320, 6-15=-150/1130, 6-14=-1070/295, 10-12=-167/1078, 12-14=-104/862, 8-14=-343/1261, 8-12=-1144/251

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=194, 11=186.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820629
210533	C3	HIP	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:34 2021 Page 1
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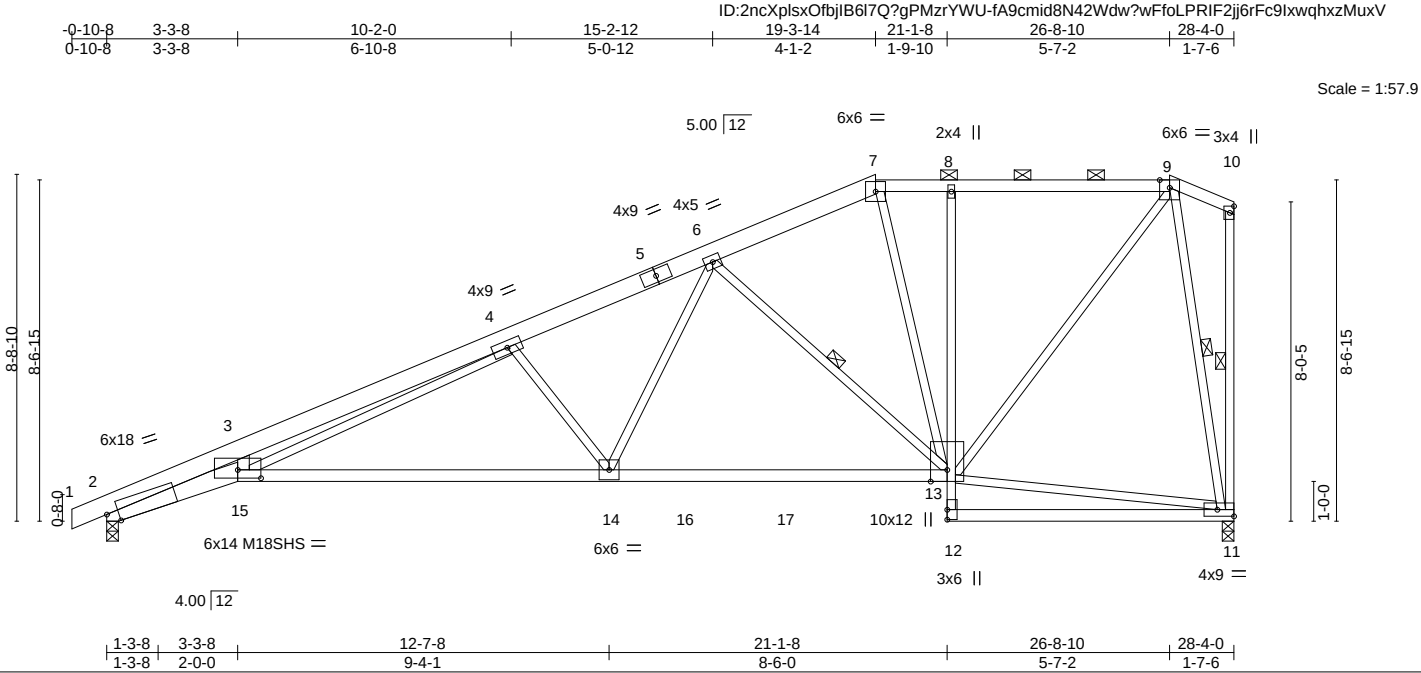


Plate Offsets (X,Y)-- [2:0-3-9,Edge], [11:Edge,0-2-0], [15:0-7-0,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.47	14-15	>725	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.88	14-15	>385	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.29	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.31	14-15	>999	240	Weight: 144 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x6 SPF No.2, 1-5: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SPF No.2 *Except*
13-15: 2x4 SPF 2100F 1.8E, 8-12: 2x3 SPF No.2
11-12: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-15: 2x4 SPF No.2

BRACING-

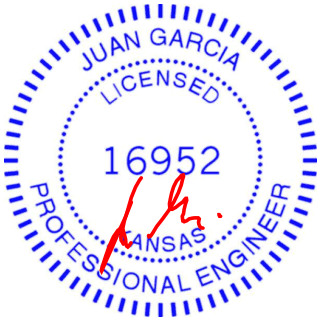
TOP CHORD Structural wood sheathing directly applied or 2-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-11 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 2-15.
WEBS 1 Row at midpt 6-13, 10-11, 9-11

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=341(LC 7)
Max Uplift 2=-210(LC 8), 11=-175(LC 5)
Max Grav 2=1375(LC 2), 11=1319(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5379/869, 3-4=-4841/917, 4-6=-2397/373, 6-7=-1024/186, 7-8=-982/198, 8-9=-983/201
BOT CHORD 2-15=-931/4884, 14-15=-456/2597, 13-14=-277/1643, 8-13=-363/149
WEBS 3-15=0/738, 4-15=-492/2108, 4-14=-841/308, 6-14=-139/1141, 6-13=-992/250, 9-11=-1237/300, 9-13=-159/1267

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=210, 11=175.
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.



April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	C4	HALF HIP	1	1	I45820630
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:35 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-7Mj_z2em8NANF4a6pNJaxerPk731ahoJWagNDNzMuxU

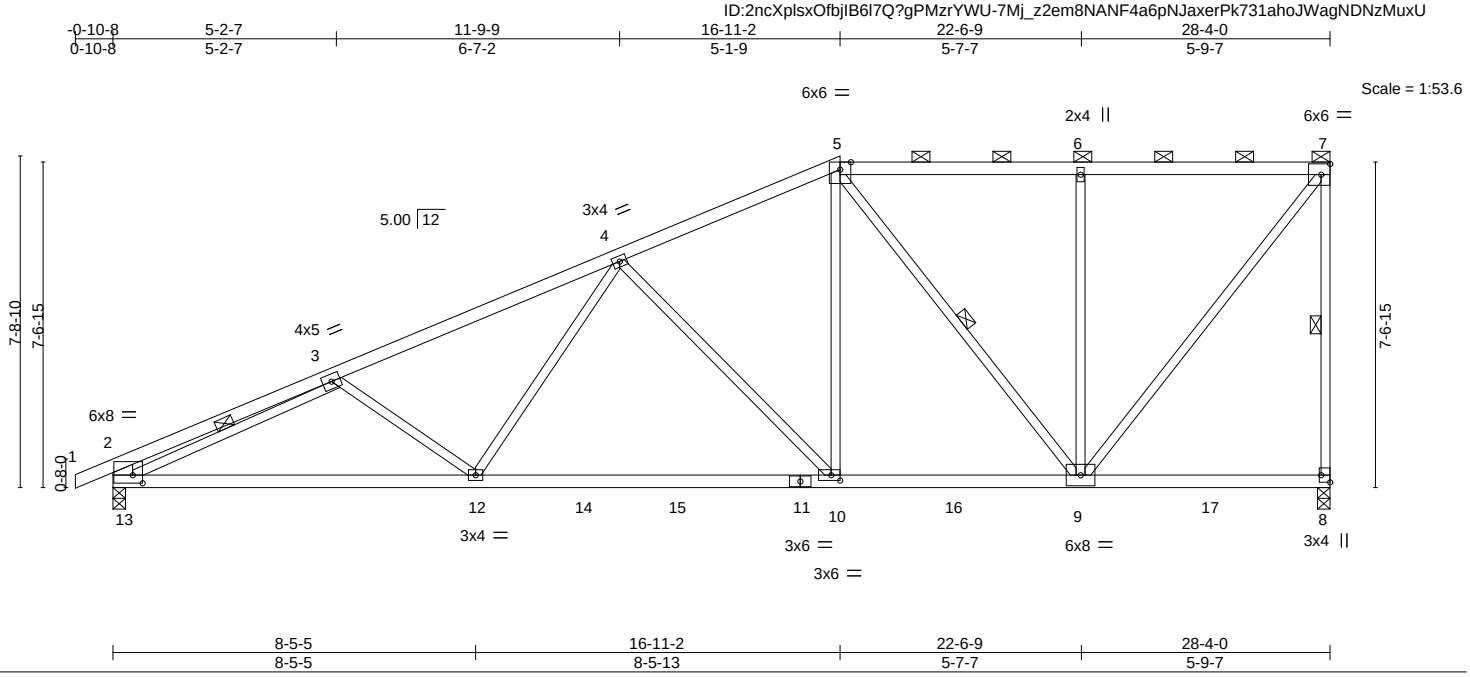


Plate Offsets (X,Y)-- [2:0-2-12,0-2-4], [8:Edge,0-2-8], [10:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.21	10-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.37	10-12	>897	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	10-12	>999	240	Weight: 118 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 8=0-3-8, 13=0-3-8
Max Horz 13=289(LC 8)
Max Uplift 8=-205(LC 4), 13=-182(LC 8)
Max Grav 8=1372(LC 2), 13=1395(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-735/100, 3-4=-2263/248, 4-5=-1453/171, 5-6=-887/134, 6-7=-885/132, 7-8=-1256/233, 2-13=-488/121
BOT CHORD 12-13=-526/2165, 10-12=-348/1751, 9-10=-180/1275
WEBS 3-12=-262/210, 4-12=-15/510, 4-10=-677/242, 5-10=-92/787, 5-9=-644/146, 6-9=-478/195, 7-9=-213/1426, 3-13=-1731/227

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=205, 13=182.
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.

April 26,2021

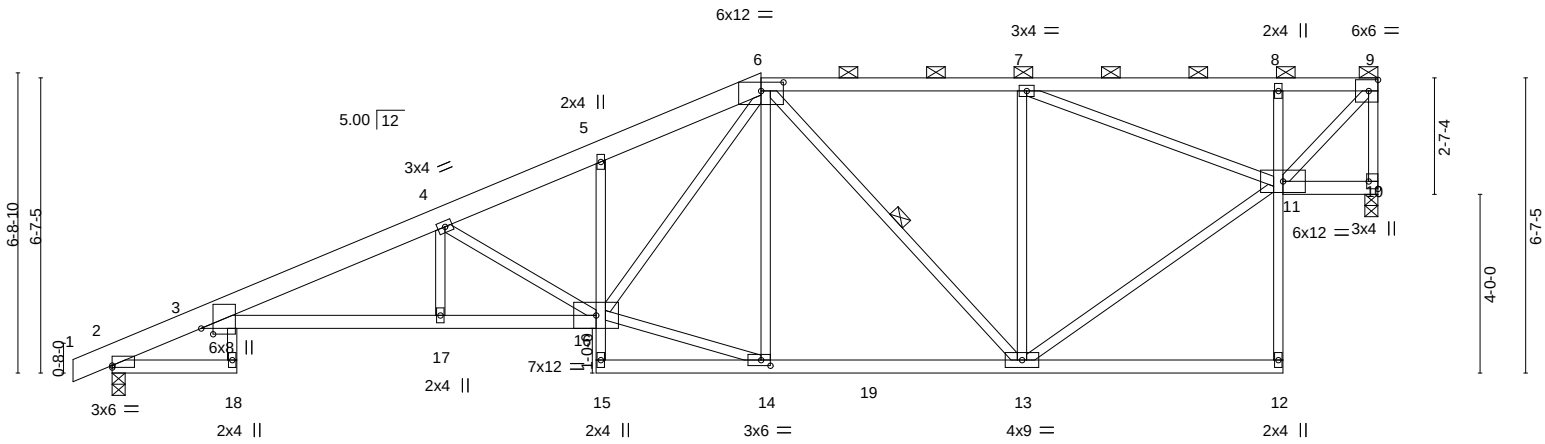
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820631
210533	C5	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:37 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-3lrlOkg0g?Q5UNkVwnL213wjTxp82f6c_u9UHGzMuxS

-0-10-8	2-9-8	7-5-7	10-10-0	14-6-5	20-4-6	26-2-8	28-4-0
0-10-8	2-9-8	4-7-15	3-4-10	3-8-5	5-10-2	5-10-2	2-1-8

Scale = 1:51.6



2-9-8	7-5-7	10-10-0	14-6-5	20-4-6	26-2-8	28-4-0
2-9-8	4-7-15	3-4-10	3-8-5	5-10-2	5-10-2	2-1-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.34	18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.59	18	>570	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.25	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27	18	>999	240	Weight: 141 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SP 2400F 2.0E *Except* 6-9: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 3-16: 2x4 SPF 2100F 1.8E, 5-15,8-12: 2x3 SPF No.2
WEBS	2x3 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 (4-11-6 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-18.
WEBS	1 Row at midpt 6-13

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=215(LC 8)
Max Uplift 10=-211(LC 5), 2=-172(LC 8)
Max Grav 10=1319(LC 2), 2=1399(LC 2)

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

TOP CHORD	2-3=-666/0, 3-4=-3491/447, 4-5=-2557/322, 5-6=-2437/367, 6-7=-1238/221, 7-8=-1149/218, 8-9=-1135/212, 9-10=-1256/217
BOT CHORD	3-17=-557/3332, 16-17=-557/3332, 13-14=-216/1508, 8-11=-298/129
WEBS	4-16=-1287/285, 14-16=-215/1477, 6-16=-279/1313, 6-14=-270/116, 6-13=-398/110, 7-13=-446/193, 11-13=-239/1494, 9-11=-283/1660

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=211, 2=172.
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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	C6	Half Hip	1	1	I45820632

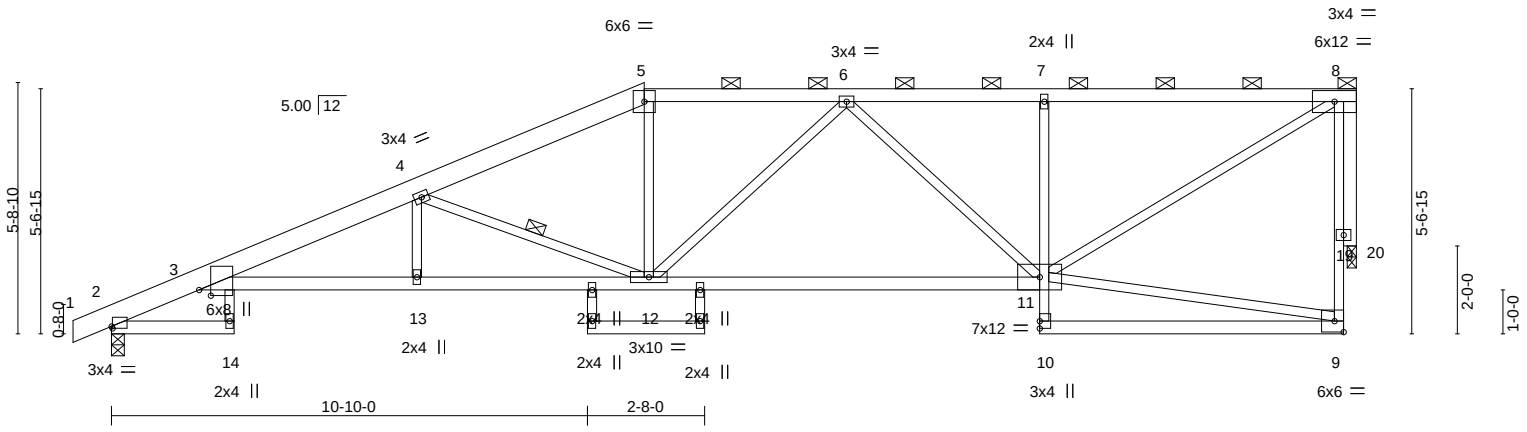
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:38 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-XxP7b4geRIYy6XIhUVsHZHTvHK8kn6olCYu1qizMuxR

-0-10-8	2-9-8	6-11-7	12-1-8	16-8-12	21-1-8	28-4-0
0-10-8	2-9-8	4-1-15	5-2-2	4-7-4	4-4-12	7-2-8

Scale = 1:52.4



2-9-8	6-11-7	12-1-8	21-1-8	28-4-0
2-9-8	4-1-15	5-2-2	9-0-0	7-2-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.31	14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.56	14	>604	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.39	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24	14	>999	240	Weight: 132 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SP 2400F 2.0E *Except*
	5-8: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	3-11: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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 (3-2-6 max.): 5-8.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-12

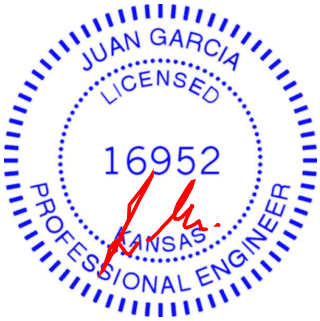
REACTIONS. (size) 2=0-3-8, 20=0-2-8
Max Horz 2=182(LC 8)
Max Uplift 2=-151(LC 8), 20=-214(LC 4)
Max Grav 2=1351(LC 1), 20=1238(LC 1)

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

TOP CHORD	2-3=-625/0, 3-4=-3385/392, 4-5=-2310/307, 5-6=-2061/301, 6-7=-1615/273, 7-8=-1615/279
BOT CHORD	3-13=-472/3222, 12-13=-472/3222, 11-12=-371/1997, 7-11=-448/186
WEBS	4-12=-1271/324, 5-12=-16/589, 6-11=-527/112, 8-11=-309/1797, 8-20=-1244/215

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.
6) Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=151, 20=214.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 26,2021

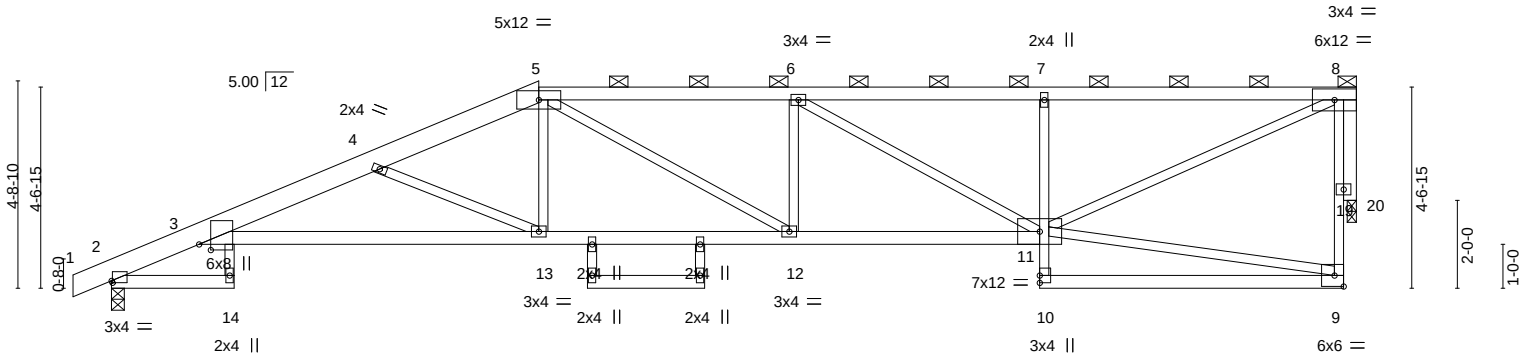
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	C7	Half Hip	1	1	I45820633
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:39 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-?7yVpQhHCcgpkhtt2CNW6U04bkVmWWTvRCebM9zMuxQ

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

Scale = 1:52.4



2-9-8 9-8-11 15-6-6 21-1-8 28-4-0
2-9-8 6-11-3 5-9-10 5-7-2 7-2-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.29	3-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.60	3-13	>557	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.38	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	3-13	>999	240	Weight: 125 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
5-8: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-11: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

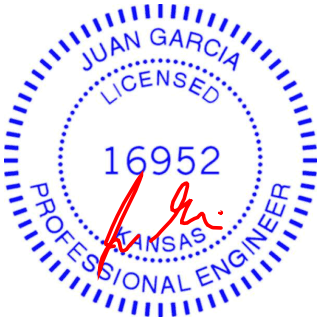
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-14.

REACTIONS. (size) 2=0-3-8, 20=0-2-8
Max Horz 2=148(LC 5)
Max Uplift 2=-160(LC 4), 20=-219(LC 4)
Max Grav 2=1351(LC 1), 20=1238(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-625/21, 3-4=-3629/511, 4-5=-2735/395, 5-6=-2737/467, 6-7=-2096/377, 7-8=-2095/383
BOT CHORD 3-13=-580/3504, 12-13=-402/2483, 11-12=-492/2736, 7-11=-474/196
WEBS 4-13=-1135/290, 5-13=-27/608, 5-12=-104/458, 6-11=-739/103, 8-11=-406/2194, 8-20=-1251/223

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=160, 20=219.
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.



April 26,2021

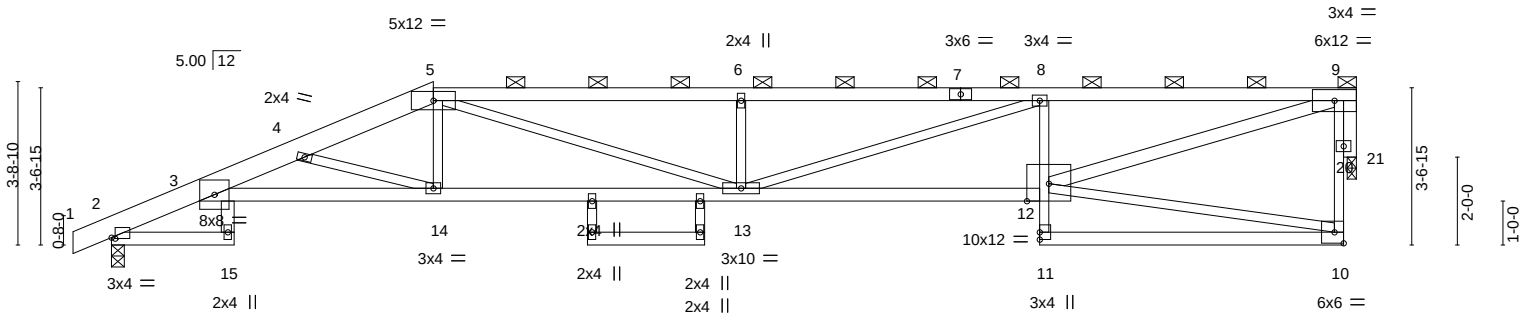
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	C8	Half Hip	1	1	I45820634
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:41 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-yW4GE5jXkDwWz?1G9dQ_Bv5R1YBo_QqBvW7hQ1zMuxO

-0-10-8 2-9-8 7-3-14 14-3-15 21-1-8 28-4-0
0-10-8 2-9-8 4-6-6 7-0-1 6-9-9 7-2-8

Scale = 1:52.4



2-9-8 7-3-14 14-3-15 21-1-8 28-4-0
2-9-8 4-6-6 7-0-1 6-9-9 7-2-8

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

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	0.83	Vert(LL)	-0.38	13	>892	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.68	12-13	>493	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.35	21	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.30	13	>999	240	Weight: 120 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except* 1-5: 2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 3-12: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-15,9-12: 2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 21=0-2-8
Max Horz 2=121(LC 5)
Max Uplift 2=-184(LC 4), 21=-224(LC 5)
Max Grav 2=1350(LC 1), 21=1237(LC 1)

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

TOP CHORD	2-3=-626/58, 3-4=-4258/644, 4-5=-3264/509, 5-6=-4008/704, 6-8=-4007/704, 8-9=-3230/613
BOT CHORD	3-14=-710/4178, 13-14=-522/3041, 12-13=-639/3265, 8-12=-761/244
WEBS	5-14=0/484, 5-13=-224/1163, 6-13=-507/210, 8-13=-107/784, 9-12=-624/3227, 4-14=-1210/229, 9-21=-1274/233

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=184, 21=224.
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.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	C9	Half Hip Girder	1	2	I45820635
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:43 2021 Page 1
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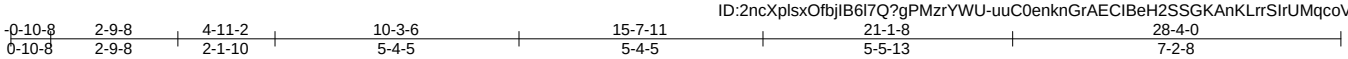

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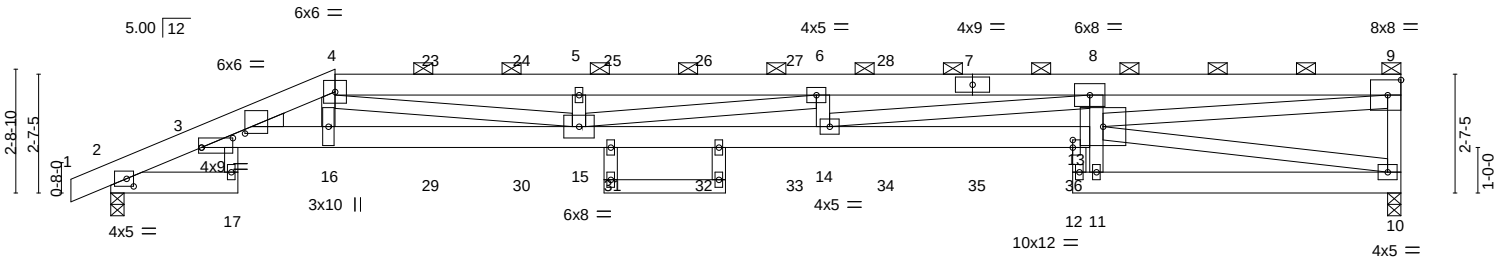

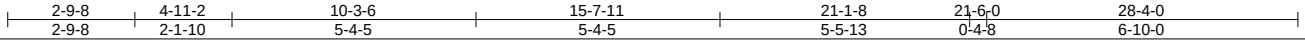

Plate Offsets (X,Y)-- [2:0-1-14,0-2-0], [3:0-8-4,0-2-8], [3:0-11-7,0-3-11], [22:0-2-0,0-0-0]

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	0.71	Vert(LL)	-0.48	14-15	>698	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.88	14-15	>384	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.31	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.44	14-15	>766	240	Weight: 369 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SP 2400F 2.0E *Except*
1-4: 2x6 SP DSS
BOT CHORD 2x6 SP 2400F 2.0E *Except*
8-11,18-19: 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-17.
10-0-0 oc bracing: 11-13

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=98(LC 5)
Max Uplift 10=-398(LC 5), 2=-387(LC 4)
Max Grav 10=1751(LC 1), 2=1958(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-863/180, 3-4=-7596/1597, 4-5=-10130/2273, 5-6=-10130/2273, 6-8=-10794/2516, 8-9=-7288/1750, 9-10=-1583/414
BOT CHORD 3-16=-1591/7300, 15-16=-1578/7176, 14-15=-2552/10794, 13-14=-1993/8216, 8-13=-902/310, 10-11=-172/792
WEBS 3-17=-39/285, 4-16=-107/990, 4-15=-759/3118, 5-15=-393/228, 6-15=-748/263, 6-14=-360/220, 8-14=-569/2625, 10-13=-620/151, 9-13=-1757/7219

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=398, 2=387.
10) 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.

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NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 63 lb up at 4-11-2, 86 lb down and 63 lb up at 7-0-0, 86 lb down and 63 lb up at 9-0-0, 86 lb down and 77 lb up at 11-0-0, 86 lb down and 77 lb up at 13-0-0, 87 lb down and 78 lb up at 15-0-0, and 87 lb down and 78 lb up at 17-0-0, and 87 lb down and 78 lb up at 19-0-0 on top chord, and 263 lb down and 77 lb up at 4-11-2, 51 lb down at 7-0-0, 51 lb down at 9-0-0, 32 lb down at 11-0-0, 32 lb down at 13-0-0, 32 lb down at 15-0-0, 32 lb down at 17-0-0, and 32 lb down at 19-0-0, and 262 lb down and 101 lb up at 21-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-9=-70, 2-17=-20, 3-13=-20, 11-12=-20, 10-11=-20
   Concentrated Loads (lb)
   Vert: 4=-39(B) 7=-48(B) 16=-263(B) 23=-39(B) 24=-39(B) 25=-48(B) 26=-48(B) 27=-48(B) 28=-48(B) 29=-46(B) 30=-46(B) 31=-23(B) 32=-23(B) 33=-22(B) 34=-22(B) 35=-22(B) 36=-262(B)

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	D1	Common Supported Gable	1	1	I45820636

Job Reference (optional)

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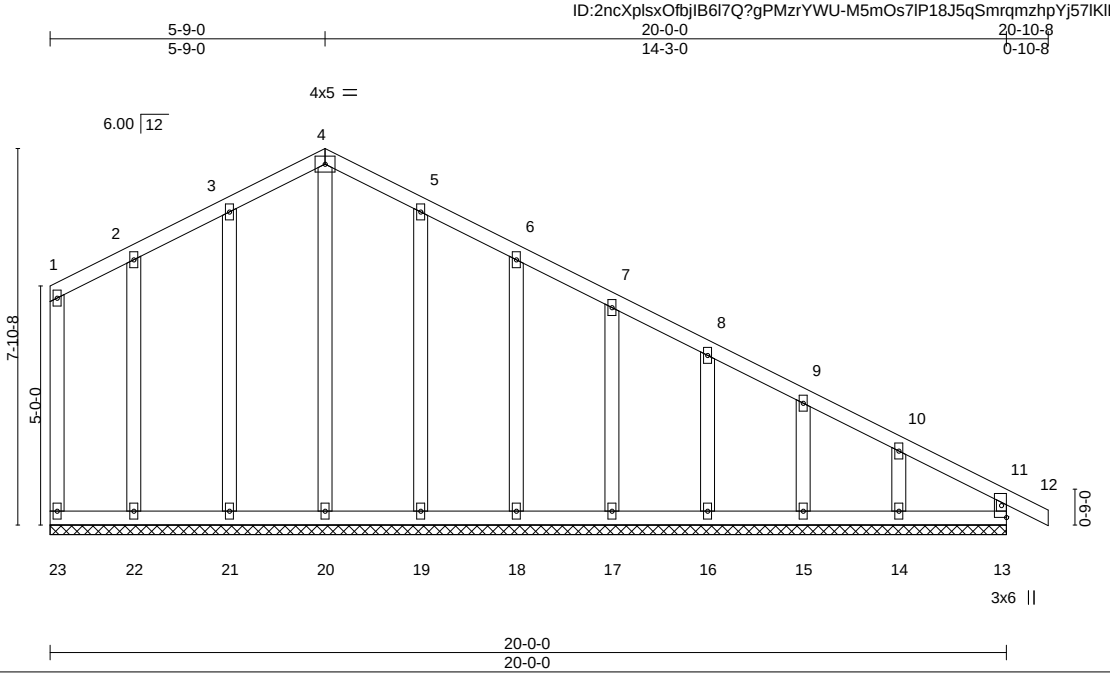

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 103 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* 11-13: 2x3 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. All bearings 20-0-0.

(lb) - Max Horz 23=-242(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 23, 13, 21, 22, 19, 18, 17, 16, 15 except 14=-123(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 23, 13, 20, 21, 22, 19, 18, 17, 16, 15, 14

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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 13, 21, 22, 19, 18, 17, 16, 15 except (jt=lb) 14=123.
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.

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Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	D2	Common	1	1	I45820637
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:46 2021 Page 1
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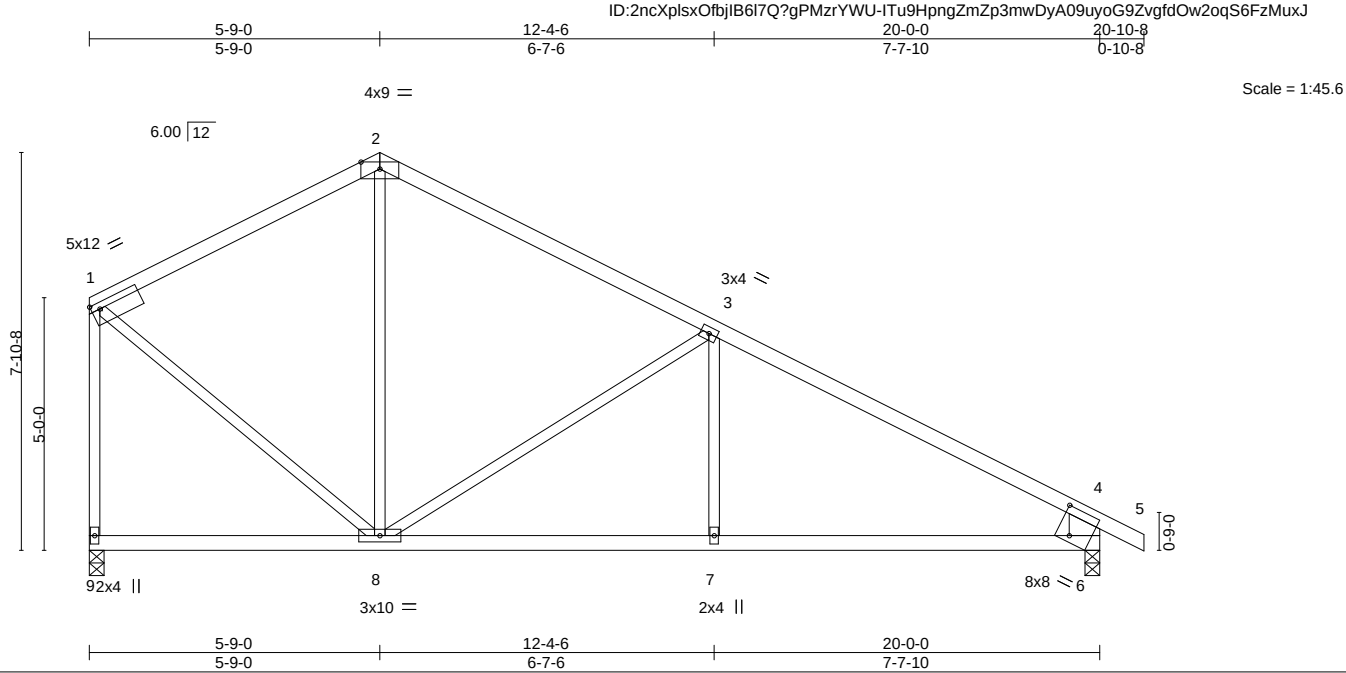

Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [6:0-3-2,0-6-8]

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)	-0.07	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.14	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7	>999	240	Weight: 76 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-6: 2x8 SP DSS

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) 9=0-3-8, 6=0-3-8
Max Horz 9=-243(LC 4)
Max Uplift 9=-106(LC 9), 6=-151(LC 9)
Max Grav 9=879(LC 1), 6=967(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-617/161, 2-3=-665/137, 3-4=-1258/182, 1-9=-833/137, 4-6=-877/197
BOT CHORD 7-8=-63/1010, 6-7=-63/1010
WEBS 3-8=-631/232, 3-7=0/273, 1-8=-67/632

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=106, 6=151.
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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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	D3	Common	2	1	I45820638
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:46 2021 Page 1
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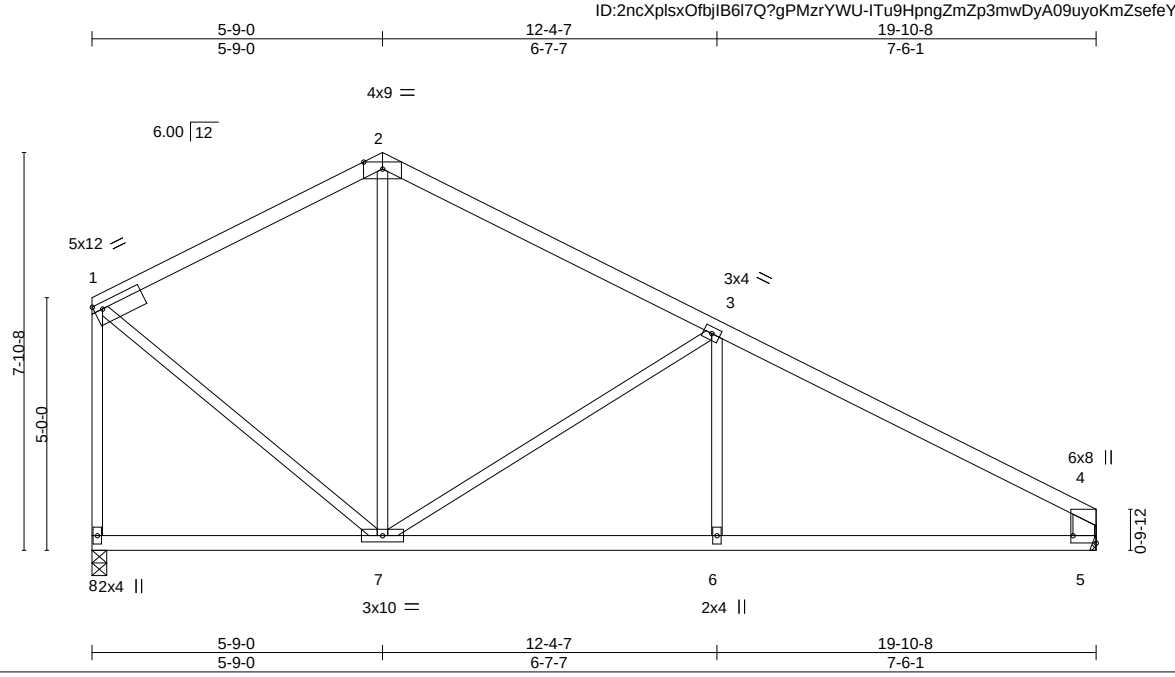

Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [4:Edge,0-5-8]

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	0.64	Vert(LL)	-0.12	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.22	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	6-7	>999	240	Weight: 74 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-5: 2x6 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-7 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=-232(LC 4)
Max Uplift 8=-106(LC 9), 5=-123(LC 9)
Max Grav 8=879(LC 1), 5=879(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-619/162, 2-3=-668/137, 3-4=-1242/180, 1-8=-836/137, 4-5=-769/163
BOT CHORD 6-7=-84/1004, 5-6=-84/1004
WEBS 3-7=-624/230, 3-6=0/256, 1-7=-68/634

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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=106, 5=123.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	D4	Roof Special Girder	1	2	I45820639
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:48 2021 Page 1
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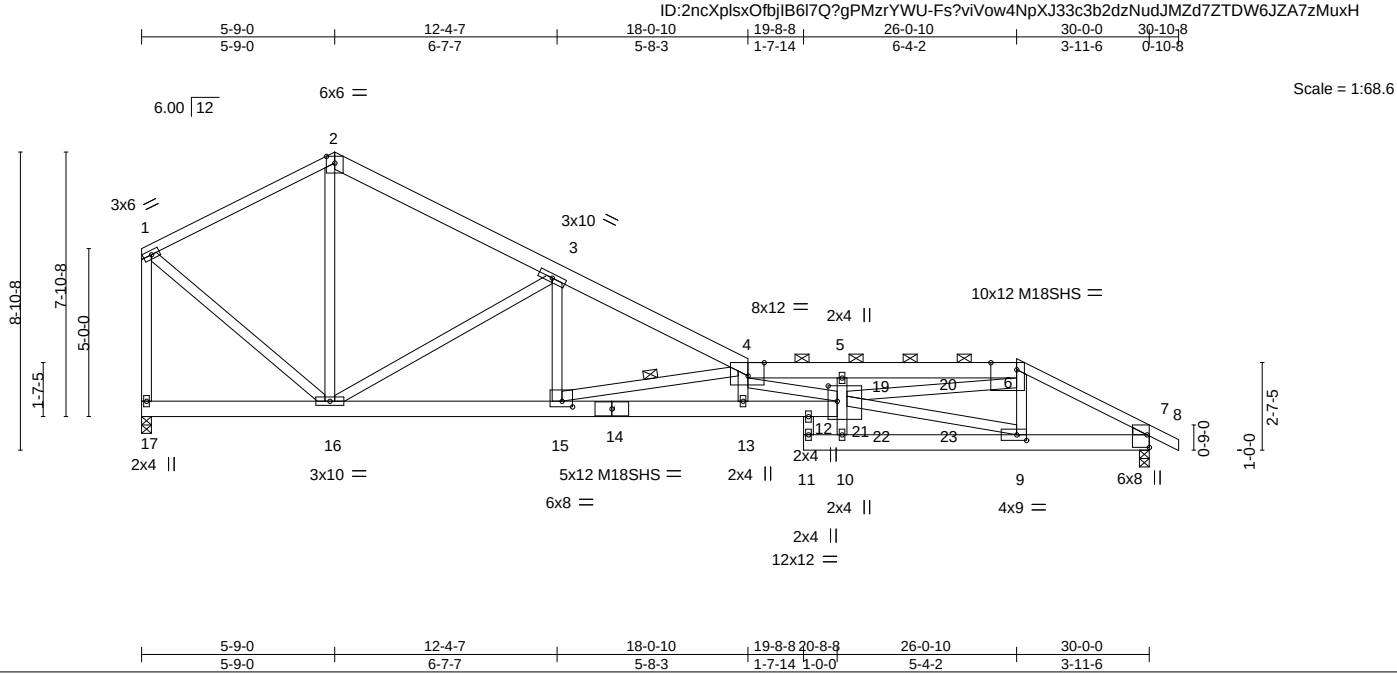


Plate Offsets (X,Y)-- [4:0-5-12,Edge], [6:0-9-4,Edge], [7:Edge,0-0-13], [9:0-3-8,0-2-0], [12:0-3-4,0-5-8], [15:0-3-12,0-2-0]

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	0.83	Vert(LL)	-0.55	11	>649	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.98	11	>363	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.16	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.44	11	>802	240	Weight: 372 lb	FT = 10%

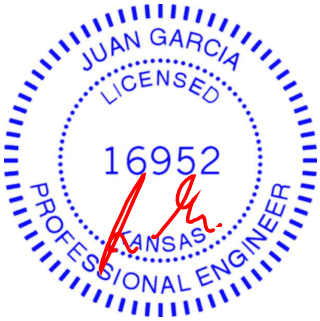
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 2-4,4-6: 2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except* 6-12: 2x4 SPF 2100F 1.8E
WEDGE
Right: 2x3 SPF No.2

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

REACTIONS. (size) 17=0-3-8, 7=0-3-8
Max Horz 17=-257(LC 4)
Max Uplift 17=-262(LC 9), 7=-494(LC 9)
Max Grav 17=1729(LC 1), 7=2458(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1319/284, 2-3=-1352/257, 3-4=-4193/728, 4-5=-13044/2468, 5-6=-12389/2363, 6-7=-4371/843, 1-17=-1664/288
BOT CHORD 15-16=-500/3717, 13-15=-2251/12943, 12-13=-2265/12986, 9-10=-148/850, 7-9=-660/3678
WEBS 10-12=0/276, 5-12=-402/214, 2-16=-117/767, 3-16=-3059/671, 3-15=-336/2336, 4-15=-9413/1786, 4-13=-341/116, 4-12=-613/496, 9-12=-526/2880, 6-12=-1649/8950, 1-16=-215/1432

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, 2x6 - 2 rows staggered 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) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=262, 7=494.



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NOTES-

10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 127 lb down and 83 lb up at 21-11-4, and 127 lb down and 83 lb up at 23-11-4, and 127 lb down and 83 lb up at 26-1-4 on top chord, and 852 lb down and 193 lb up at 19-8-8, 49 lb down at 21-11-4, and 49 lb down at 23-11-4, and 262 lb down and 72 lb up at 25-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 4-6=-70, 6-8=-70, 12-17=-20, 7-11=-20
   Concentrated Loads (lb)
   Vert: 6=-77(F) 9=-262(F) 19=-77(F) 20=-77(F) 21=-852(F) 22=-38(F) 23=-38(F)

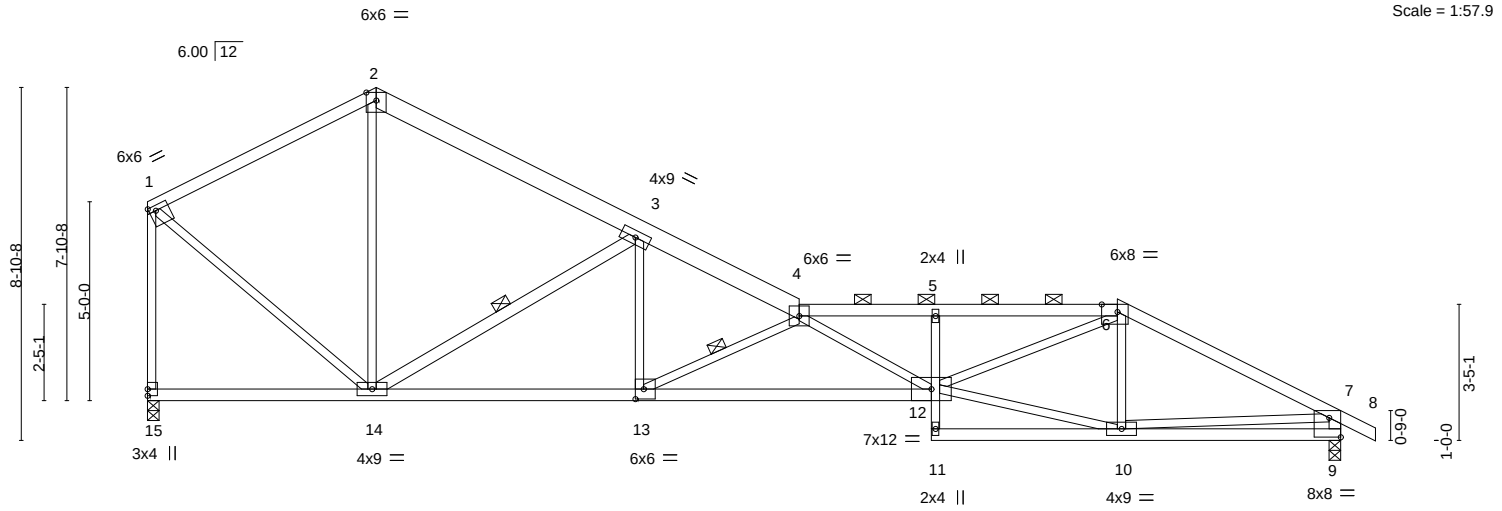
Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820640
210533	D5	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:50 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-BF7f6AqAc_3FYND?B0452ozx5AFCbT4WzQogF0zMuxF

5-9-0	12-4-7	16-4-10	19-8-8	24-4-10	30-0-0	30-10-8
5-9-0	6-7-7	4-0-3	3-3-14	4-8-2	5-7-6	0-10-8

Scale = 1:57.9



5-9-0	10-8-12	19-8-8	23-6-0	24-4-10	30-0-0
5-9-0	4-11-12	8-11-12	3-9-8	0-10-10	5-7-6

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.31	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.61	12-13	>581	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.14	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24	12-13	>999	240	Weight: 131 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
12-15: 2x4 SPF 2100F 1.8E, 5-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-14,7-9: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 15=-266(LC 4)
Max Uplift 15=-177(LC 9), 9=-247(LC 9)
Max Grav 15=1338(LC 1), 9=1411(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-990/219, 2-3=-1038/190, 3-4=-2695/419, 4-5=-4198/689, 5-6=-4150/691, 6-7=-2206/365, 1-15=-1290/208, 7-9=-1350/274
BOT CHORD 13-14=-220/2388, 12-13=-624/4529, 5-12=-378/138, 9-10=-158/532
WEBS 2-14=-51/463, 3-14=-1836/402, 3-13=-123/1301, 4-13=-2426/458, 4-12=-391/62, 10-12=-220/1797, 6-12=-357/2484, 6-10=-418/127, 1-14=-136/1080, 7-10=-88/1369

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=177, 9=247.
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.

April 26,2021

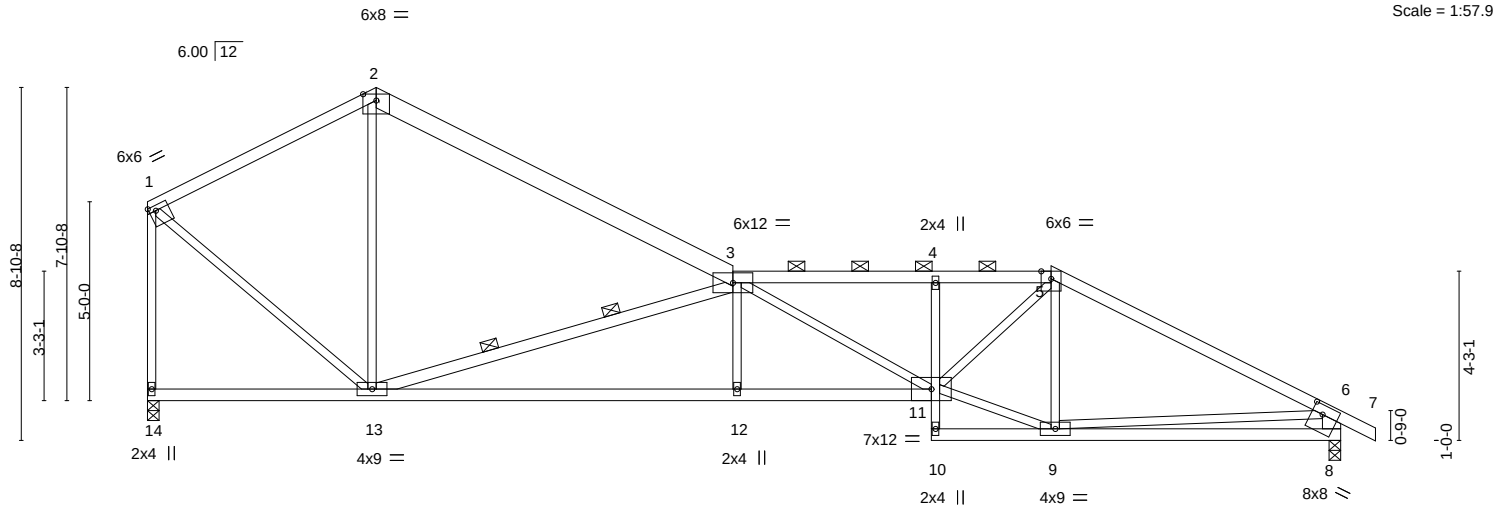
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820641
210533	D6	Roof Special	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:51 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-fRh2KWqoNIB6AXoBlkbKb0W6Kad4KwhgC4YDnSzMuxE

5-9-0	14-8-10	19-8-8	22-8-10	30-0-0	30-10-8
5-9-0	8-11-10	4-11-14	3-0-2	7-3-6	0-10-8

Scale = 1:57.9



5-9-0	14-8-10	19-8-8	22-8-10	30-0-0
5-9-0	8-11-10	4-11-14	3-0-2	7-3-6

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.23	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.45	12-13	>786	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.17	11-12	>999	240	Weight: 130 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
11-14: 2x4 SPF 2100F 1.8E, 4-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-13: 2x4 SPF No.2, 6-8: 2x6 SPF No.2

BRACING-

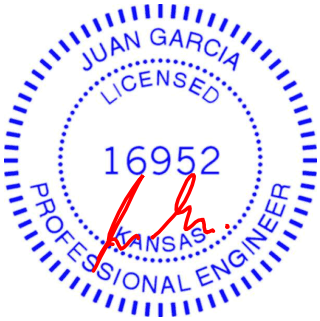
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-3 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 Rows at 1/3 pts 3-13

REACTIONS. (size) 14=0-3-8, 8=0-3-8
Max Horz 14=-267(LC 4)
Max Uplift 14=-176(LC 9), 8=-248(LC 9)
Max Grav 14=1334(LC 1), 8=1414(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1000/216, 2-3=-1084/164, 3-4=-2990/526, 4-5=-2969/522, 5-6=-2148/358, 1-14=-1299/201, 6-8=-1342/288
BOT CHORD 12-13=-394/3391, 11-12=-391/3397, 4-11=-319/141, 8-9=-254/764
WEBS 2-13=0/415, 3-13=-2682/541, 3-12=0/323, 3-11=-471/18, 9-11=-211/1828, 5-11=-218/1642, 5-9=-554/141, 1-13=-137/1102, 6-9=-42/1053

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=176, 8=248.
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.



April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820642
210533	D7	Roof Special	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:52 2021 Page 1
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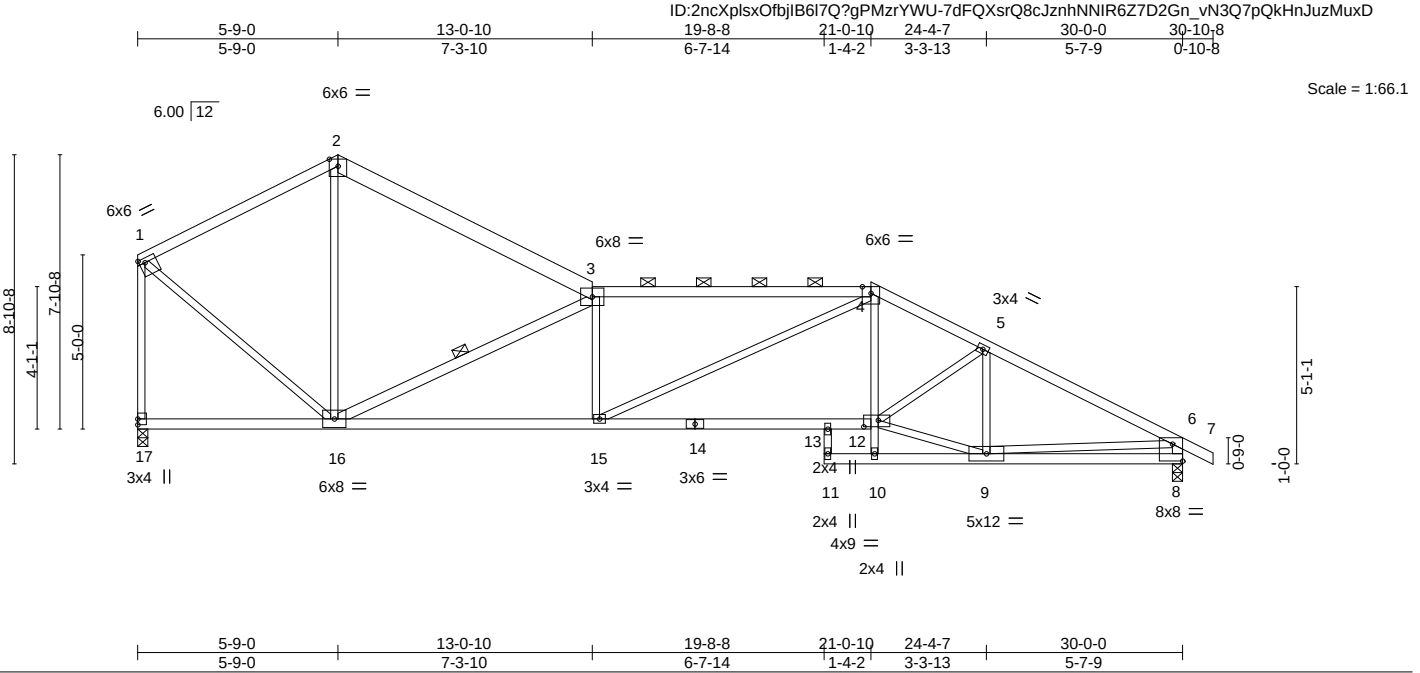

Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [8:Edge,0-5-13], [12:0-5-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.16	15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.34	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	15	>999	240	Weight: 131 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x6 SPF No.2, 3-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-16: 2x4 SPF No.2, 6-8: 2x4 SPF 2100F 1.8E

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

REACTIONS. (size) 17=0-3-8, 8=0-3-8
Max Horz 17=-266(LC 4)
Max Uplift 17=-177(LC 9), 8=-247(LC 9)
Max Grav 17=1338(LC 1), 8=1411(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-993/218, 2-3=-1053/181, 3-4=-2647/445, 4-5=-2503/438, 5-6=-2172/372, 1-17=-1294/206, 6-8=-1345/278
BOT CHORD 15-16=-260/2647, 13-15=-232/2214, 12-13=-232/2215, 8-9=-144/559
WEBS 2-16=-29/436, 3-16=-2041/429, 4-15=-28/479, 5-12=-53/449, 5-9=-645/134, 1-16=-137/1085, 4-12=-19/462, 6-9=-107/1299, 9-12=-260/1923

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) The Fabrication Tolerance at joint 6 = 6%
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=177, 8=247.
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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820643
210533	D8	Roof Special	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:53 2021 Page 1
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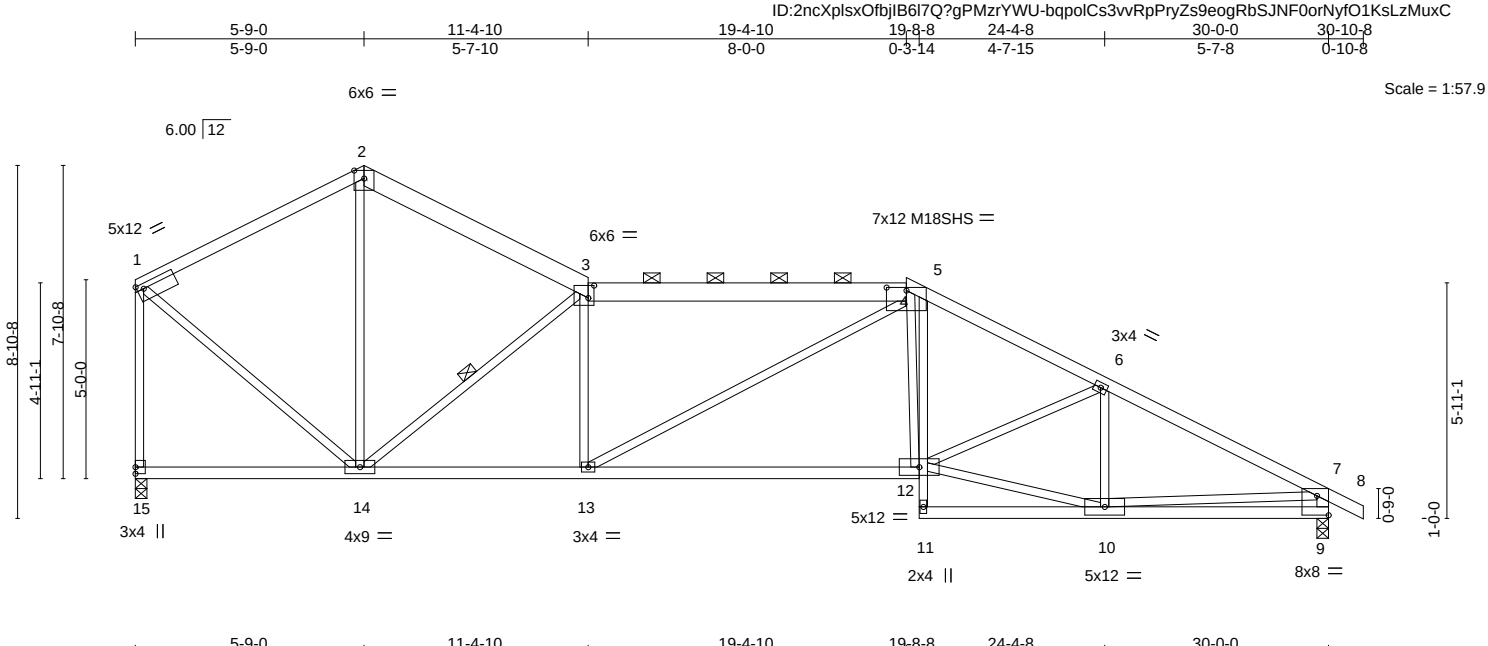


Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [3:0-1-12,0-3-12], [4:0-6-0,0-0-15], [9:Edge,0-5-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.19	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.43	12-13	>821	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	12-13	>999	240	Weight: 137 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 2-3,3-4: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 5-11: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 7-9: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 15=-266(LC 4)
Max Uplift 15=-177(LC 9), 9=-247(LC 9)
Max Grav 15=1338(LC 1), 9=1411(LC 1)

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

TOP CHORD	1-2=-986/220, 2-3=-1019/196, 3-4=-2097/371, 4-5=-2076/407, 5-6=-2287/409, 6-7=-2188/372, 1-15=-1286/210, 7-9=-1346/274
BOT CHORD	13-14=-147/2094, 12-13=-179/1957, 9-10=-132/508
WEBS	2-14=-66/495, 3-14=-1628/344, 3-13=0/256, 4-12=-11/380, 10-12=-222/1888, 6-10=-447/134, 1-14=-138/1073, 7-10=-121/1371

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=177, 9=247.
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.

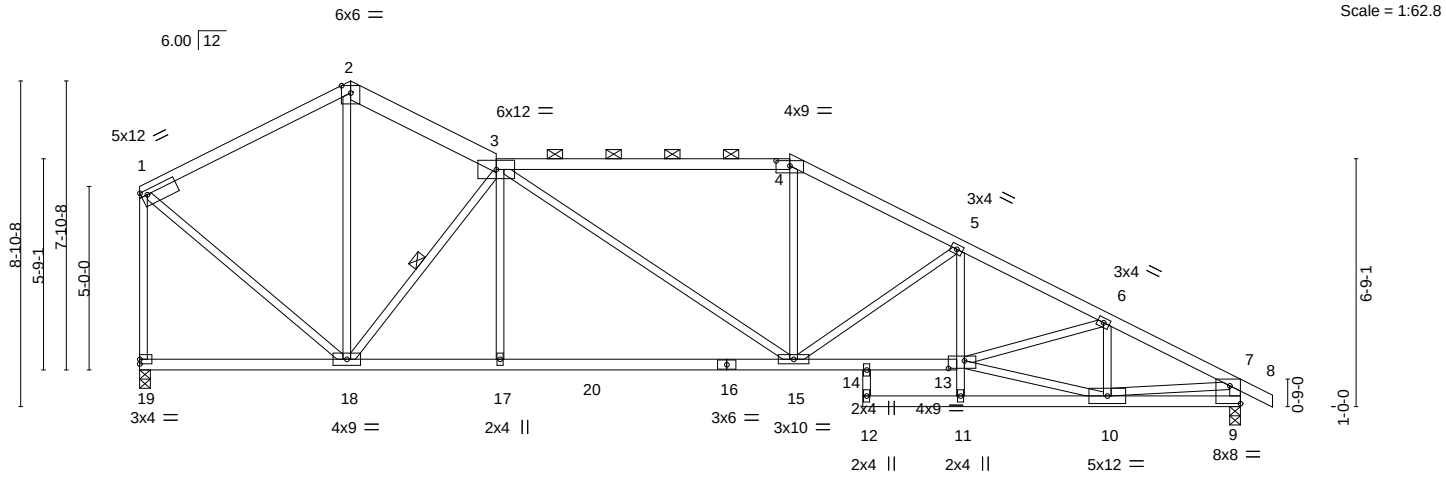
April 26,2021

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	D9	Roof Special	1	1	I45820644
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:54 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-30MAyYthgDZg1_XmQs91De7dznZlXKq6u2mtOnzMuxB

5-9-0	9-8-10	17-8-10	22-4-8	26-4-8	30-0-0	30-10-8
5-9-0	3-11-10	8-0-0	4-7-14	4-0-0	3-7-8	0-10-8

Scale = 1:62.8



5-9-0	9-8-10	17-8-10	19-8-8	22-4-8	26-4-8	30-0-0
5-9-0	3-11-10	8-0-0	1-11-14	2-7-15	4-0-0	3-7-8

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

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	0.94	Vert(LL)	-0.20	15-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.39	15-17	>926	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	15	>999	240	Weight: 135 lb	FT = 10%

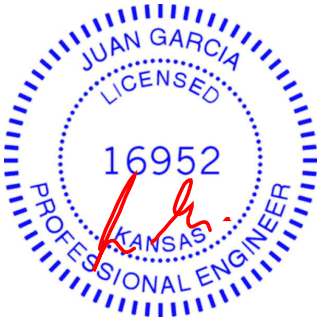
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x6 SPF No.2, 3-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-9: 2x4 SPF No.2

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

REACTIONS. (size) 9=0-3-8, 19=0-3-8
Max Horz 19=-266(LC 4)
Max Uplift 9=-247(LC 9), 19=-177(LC 9)
Max Grav 9=1476(LC 2), 19=1409(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1043/220, 2-3=-1036/213, 3-4=-1910/380, 4-5=-2186/382, 5-6=-2822/458, 6-7=-2231/357, 1-19=-1319/211, 7-9=-1400/260
BOT CHORD 17-18=-61/1751, 15-17=-60/1756, 14-15=-281/2492, 13-14=-281/2492, 9-10=-59/326
WEBS 2-18=-108/664, 3-18=-1481/308, 3-17=0/307, 10-13=-268/1973, 6-13=-16/564, 6-10=-625/152, 1-18=-137/1135, 7-10=-207/1634, 5-13=-24/472, 5-15=-704/192, 4-15=0/569

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=247, 19=177.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	E1	ROOF SPECIAL	1	1	I45820645

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:55 2021 Page 1
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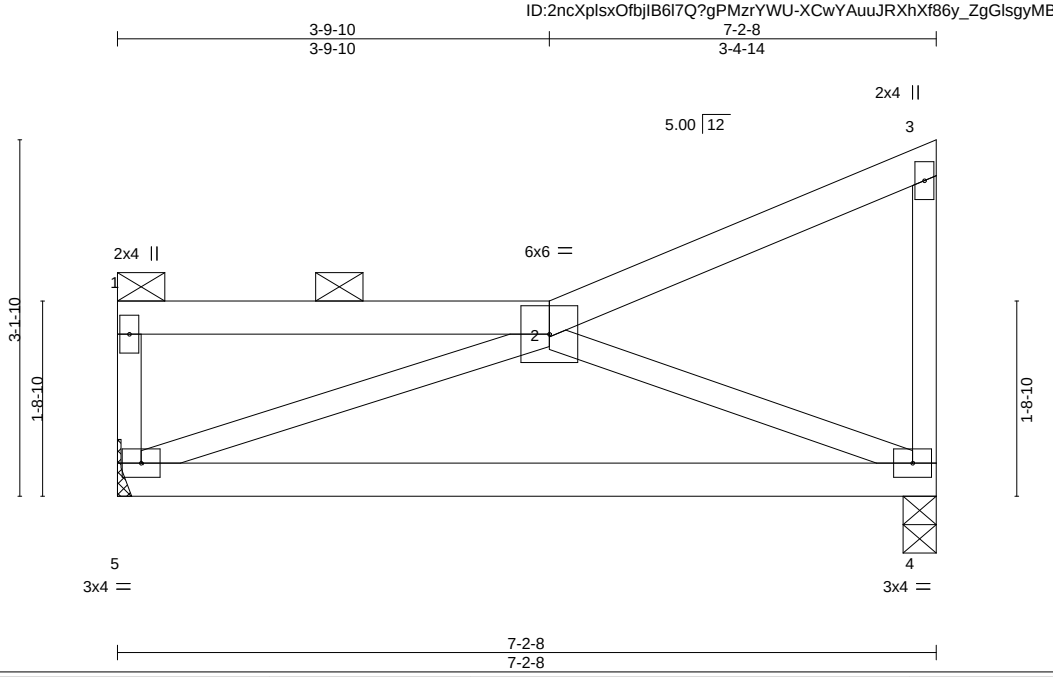

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.14	4-5	>583	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.29	4-5	>292	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	5	****	240	Weight: 26 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 7-2-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 4=0-3-8
Max Horz 5=114(LC 5)
Max Uplift 5=-55(LC 8), 4=-62(LC 8)
Max Grav 5=315(LC 1), 4=315(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 4-5=-104/301
WEBS 2-5=-322/122, 2-4=-327/144

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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) 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 109 MN
210533	E2	Monopitch	2	1	I45820646
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:56 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-0OUwNEuxCqpOGIh8XHBVI3D2abJg?F_PLMF_SfzMux9

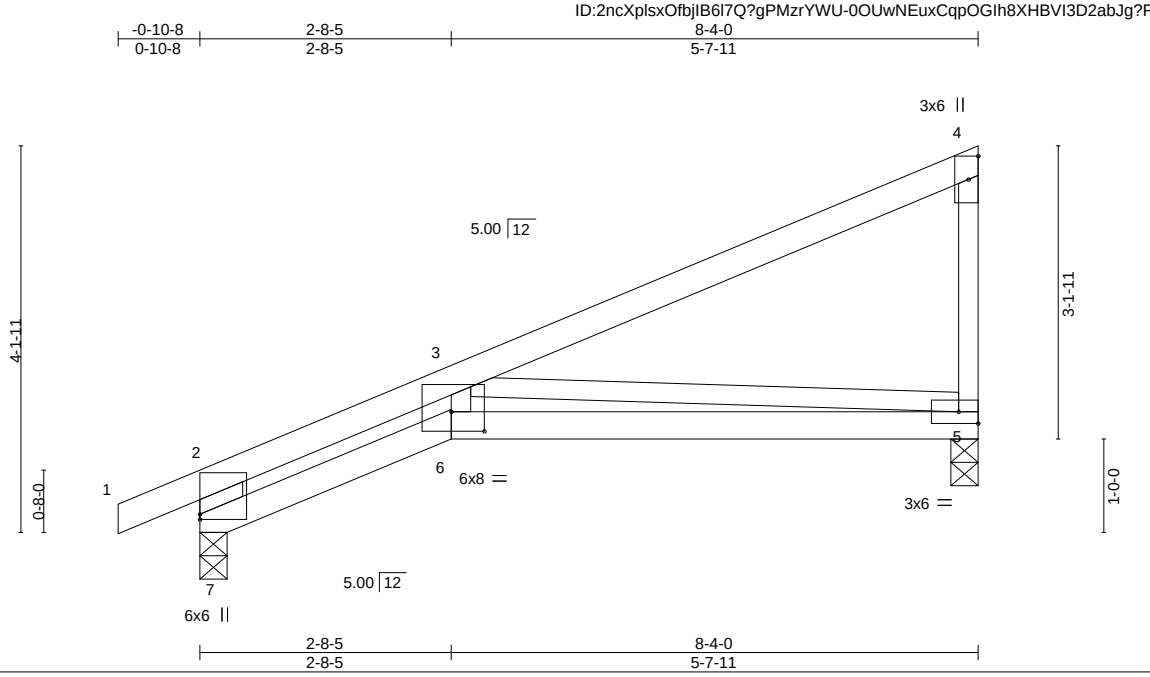

Plate Offsets (X,Y)-- [6:0-4-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.11	5-6	>882	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.21	5-6	>467	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.10	5-6	>950	240	Weight: 29 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-9 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=157(LC 5)
Max Uplift 7=-74(LC 8), 5=-85(LC 8)
Max Grav 7=443(LC 1), 5=355(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-697/170, 2-3=-1113/258
BOT CHORD 6-7=-302/992, 5-6=-282/881
WEBS 3-6=-26/364, 3-5=-841/301

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

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	E3	Half Hip	1	1	I45820647
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:57 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Ub2JbZvZz8xFuSFL5_ikqHlG8?f4kpnYa0?Y?6zMux8

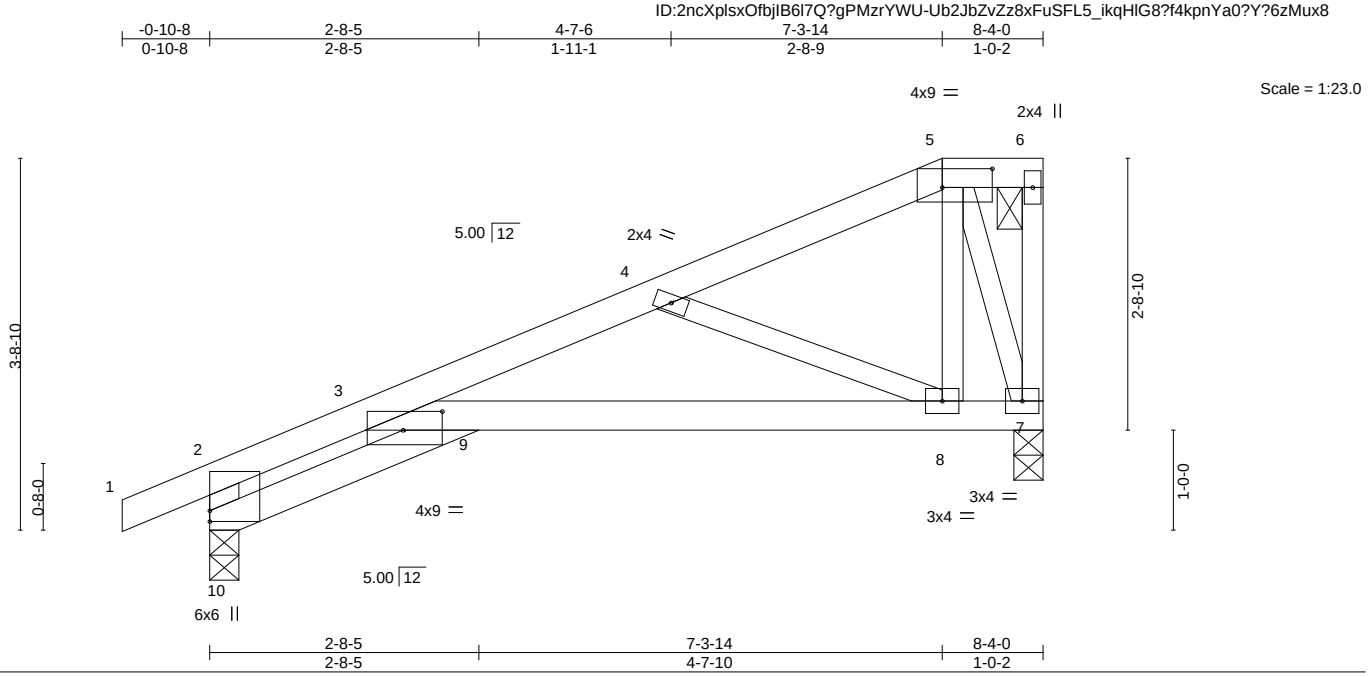

Plate Offsets (X,Y)-- [5:0-6-0,0-2-4], [9:0-4-11,0-2-4]

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	0.43	Vert(LL)	-0.07	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.16	8-9	>616	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	8-9	>999	240	Weight: 30 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10: 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.): 5-6.
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=141(LC 5)
Max Uplift 10=-75(LC 8), 7=-68(LC 8)
Max Grav 10=440(LC 1), 7=359(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-522/146, 2-3=-495/136, 3-4=-629/146
BOT CHORD 9-10=-177/375, 8-9=-161/583
WEBS 5-8=-35/455, 5-7=-509/71, 4-8=-453/174

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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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 109 MN
210533	E4	Half Hip Girder	1	1	I45820648

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:58 2021 Page 1
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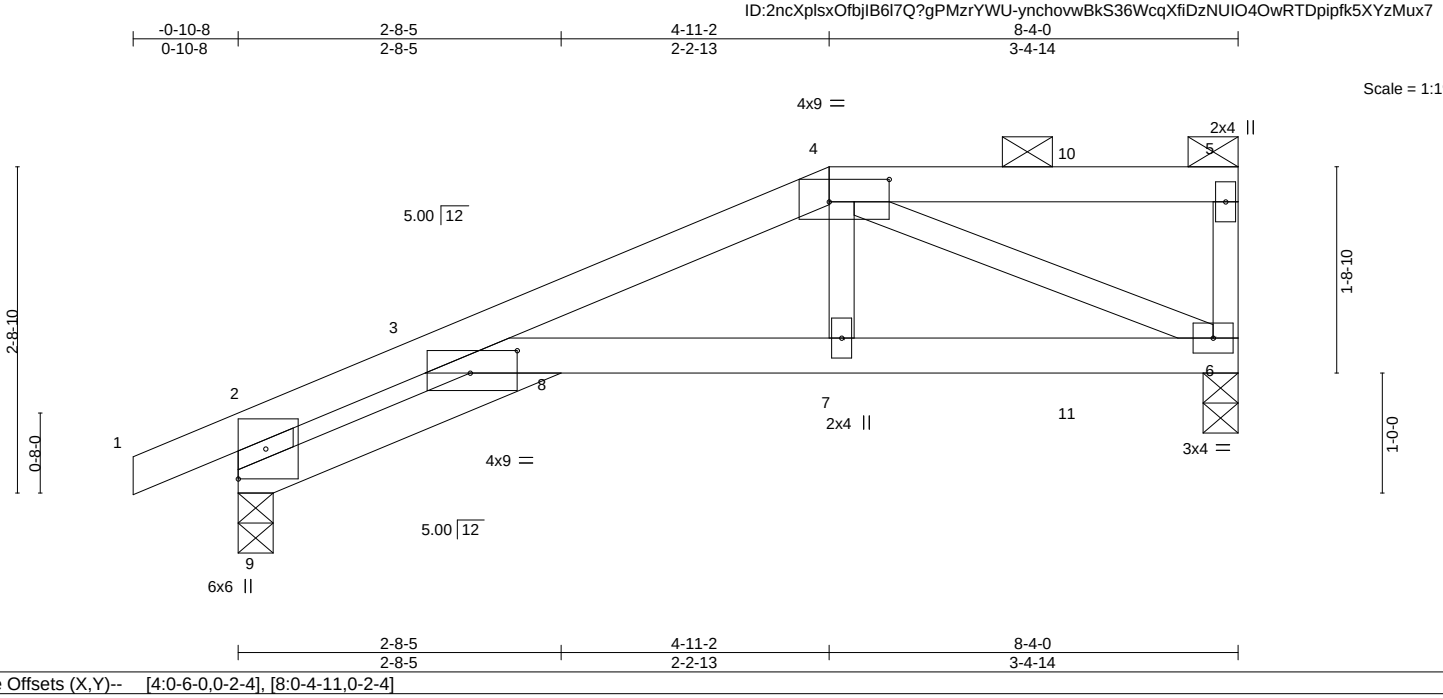

Plate Offsets (X,Y)-- [4:0-6-0,0-2-4], [8:0-4-11,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.07	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.13	7-8	>712	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	7-8	>999	240	Weight: 27 lb	FT = 10%

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

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

REACTIONS. (size) 9=0-3-8, 6=0-3-8
Max Horz 9=97(LC 5)
Max Uplift 9=-132(LC 8), 6=-162(LC 5)
Max Grav 9=574(LC 1), 6=594(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-732/217, 2-3=-799/229, 3-4=-1097/289
BOT CHORD 8-9=-231/630, 3-8=-99/403, 7-8=-287/999, 6-7=-292/1035
WEBS 4-7=-73/484, 4-6=-1091/302

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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=132, 6=162.
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) 82 lb down and 78 lb up at 4-11-2, and 87 lb down and 78 lb up at 7-0-0 on top chord, and 251 lb down and 96 lb up at 4-11-2, and 32 lb down at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-70, 8-9=-20, 6-8=-20

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=-251(B) 4=-48(B) 10=-48(B) 11=-22(B)

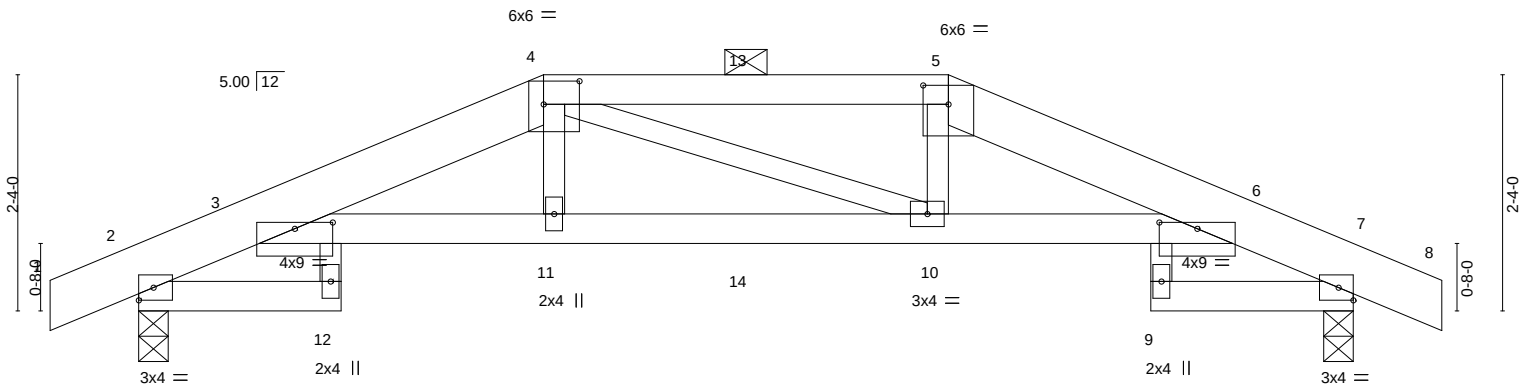
Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	G1	Hip Girder	1	1	I45820649

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:37:59 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-QzA3?FxpVlBz7mPjDPkCwirWOoITCkrr1JUe3_zMux6

-0-10-8 | 2-0-0 | 4-0-0 | 8-0-0 | 10-0-0 | 12-0-0 | 12-10-8
0-10-8 | 2-0-0 | 2-0-0 | 4-0-0 | 2-0-0 | 2-0-0 | 0-10-8

Scale = 1:22.8



2-0-0 | 4-0-0 | 8-0-0 | 10-0-0 | 12-0-0
2-0-0 | 2-0-0 | 4-0-0 | 2-0-0 | 2-0-0

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.09	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.16	10-11	>863	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.15	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	10-11	>999	240	Weight: 45 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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-10-14 oc purlins, except 2-0-0 oc purlins (3-9-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-37(LC 9)
Max Uplift 2=-166(LC 8), 7=-166(LC 9)
Max Grav 2=935(LC 1), 7=935(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-495/115, 3-4=-2137/388, 4-5=-2041/379, 5-6=-2139/386, 6-7=-495/111
BOT CHORD 3-11=-327/2015, 10-11=-326/2040, 6-10=-324/2017
WEBS 4-11=0/317, 5-10=-8/338

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=166, 7=166.
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) 80 lb down and 61 lb up at 4-0-0, and 85 lb down and 61 lb up at 6-0-0, and 80 lb down and 61 lb up at 8-0-0 on top chord, and 236 lb down and 72 lb up at 4-0-0, and 39 lb down at 6-0-0, and 236 lb down and 72 lb up at 7-11-4 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: 1-4=-70, 4-5=-70, 5-8=-70, 2-12=-20, 3-6=-20, 7-9=-20

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 4=-44(F) 5=-44(F) 11=-236(F) 10=-236(F) 13=-44(F) 14=-37(F)

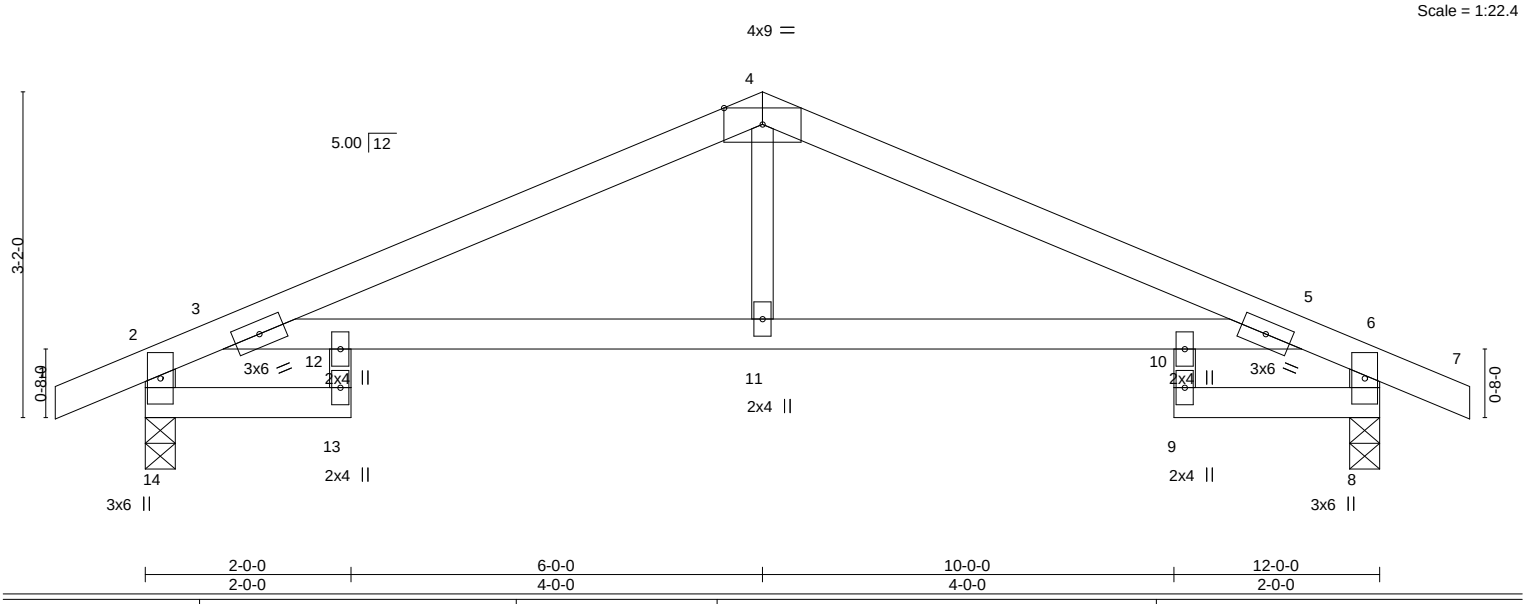
Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	G2	Roof Special	3	1	I45820650

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:00 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-uAkRDbxSG3Kqlw_wm7GRSvNlaCfdxAM_GzDCbRzMux5

-0-10-8 | 2-0-0 | 6-0-0 | 10-0-0 | 12-0-0 | 12-10-8
0-10-8 | 2-0-0 | 4-0-0 | 4-0-0 | 2-0-0 | 0-10-8

Scale = 1:22.4



2-0-0 | 6-0-0 | 10-0-0 | 12-0-0
2-0-0 | 4-0-0 | 4-0-0 | 2-0-0

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	0.49	Vert(LL)	-0.08	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.16	10-11	>889	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.15	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.07	11-12	>999	240	Weight: 36 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 14=0-3-8, 8=0-3-8
Max Horz 14=-36(LC 9)
Max Uplift 14=-91(LC 8), 8=-91(LC 9)
Max Grav 14=598(LC 1), 8=598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-936/87, 4-5=-936/102, 2-14=-621/117, 6-8=-621/112
BOT CHORD 3-12=-37/824, 11-12=-37/824, 10-11=-37/824, 5-10=-37/824
WEBS 4-11=0/312

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 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 109 MN
210533	J1	Diagonal Hip Girder	2	1	I45820651

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:01 2021 Page 1
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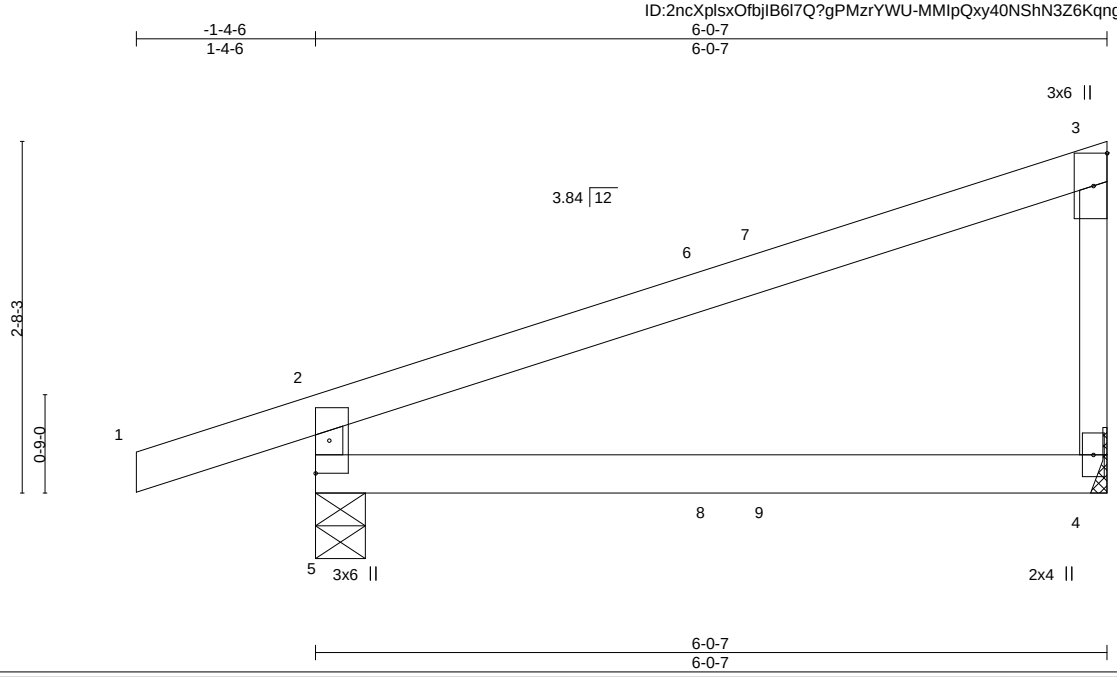

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10	4-5	>713	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 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) 5=0-4-9, 4=Mechanical
Max Horz 5=111(LC 5)
Max Uplift 5=-110(LC 4), 4=-54(LC 8)
Max Grav 5=379(LC 1), 4=250(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-332/152

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=110.
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) 78 lb down and 46 lb up at 3-0-14, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-0-14, and 6 lb down at 3-6-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 8=-1(F) 9=-0(B)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J2	Jack-Open	1	1	I45820652
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:10 2021 Page 1
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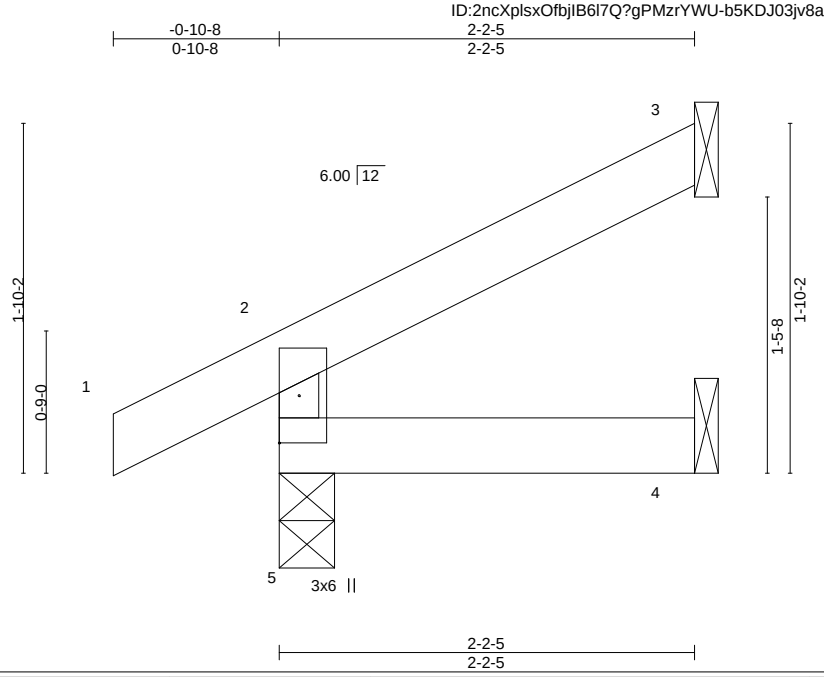


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

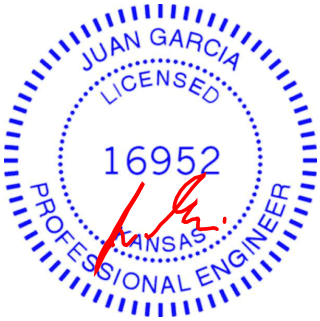
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-5 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=51(LC 8)
Max Uplift 5=-23(LC 8), 3=-37(LC 8)
Max Grav 5=176(LC 1), 3=55(LC 1), 4=38(LC 3)

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

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



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J3	Jack-Closed Girder	1	1	I45820653

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:19 2021 Page 1
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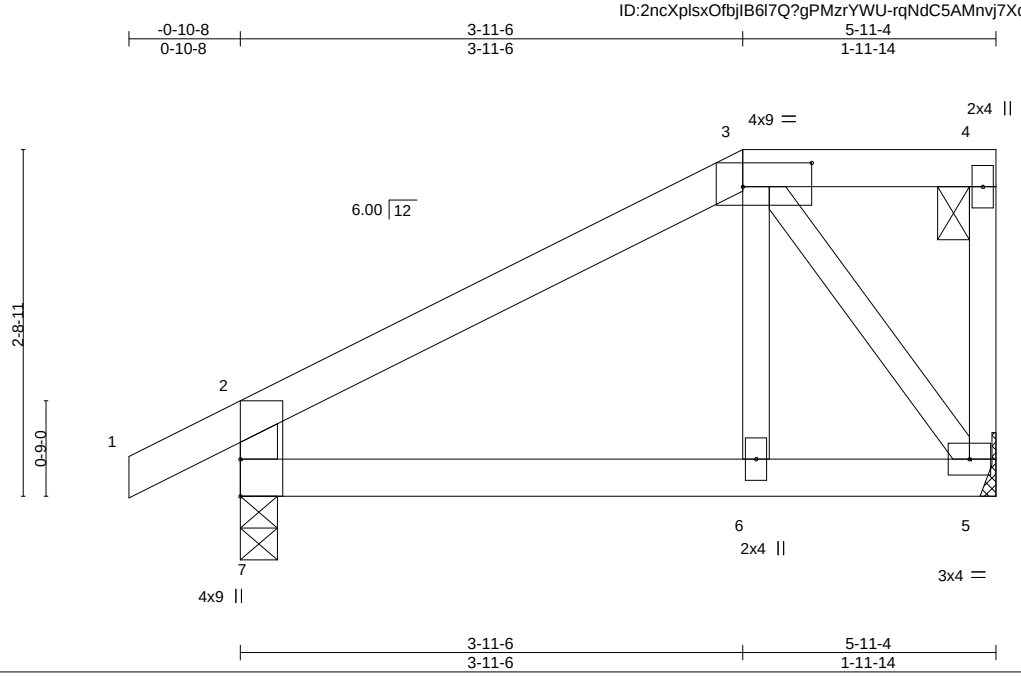

Plate Offsets (X,Y)-- [3:0-6-8,0-2-4]

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	0.28	Vert(LL)	-0.01	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	6	>999	240	Weight: 21 lb	FT = 10%

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

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

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=109(LC 7)
Max Uplift 7=-93(LC 8), 5=-123(LC 5)
Max Grav 7=442(LC 1), 5=483(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-388/118, 2-3=-411/89
BOT CHORD 6-7=-101/301, 5-6=-101/313
WEBS 3-6=-16/294, 3-5=-502/137

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=123.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 85 lb up at 3-11-6 on top chord, and 261 lb down and 72 lb up at 3-11-6 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, 5-7=-20

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6=-261(F) 3=-81(F)

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J4	Jack-Closed	1	1	I45820654

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:19 2021 Page 1

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0-10-8 5-7-6 0-3-14

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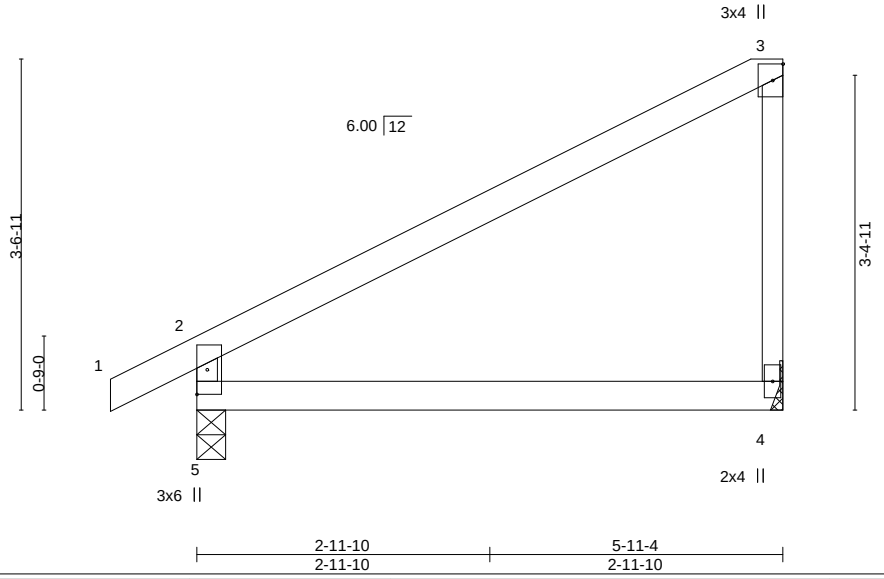

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.10	4-5	>700	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	4-5	>999	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 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Horz 5=116(LC 7)
Max Uplift 5=-11(LC 8), 4=-24(LC 8)
Max Grav 5=332(LC 1), 4=252(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-289/52

NOTES-

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

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J5	Jack-Open	8	1	I45820655
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:20 2021 Page 1

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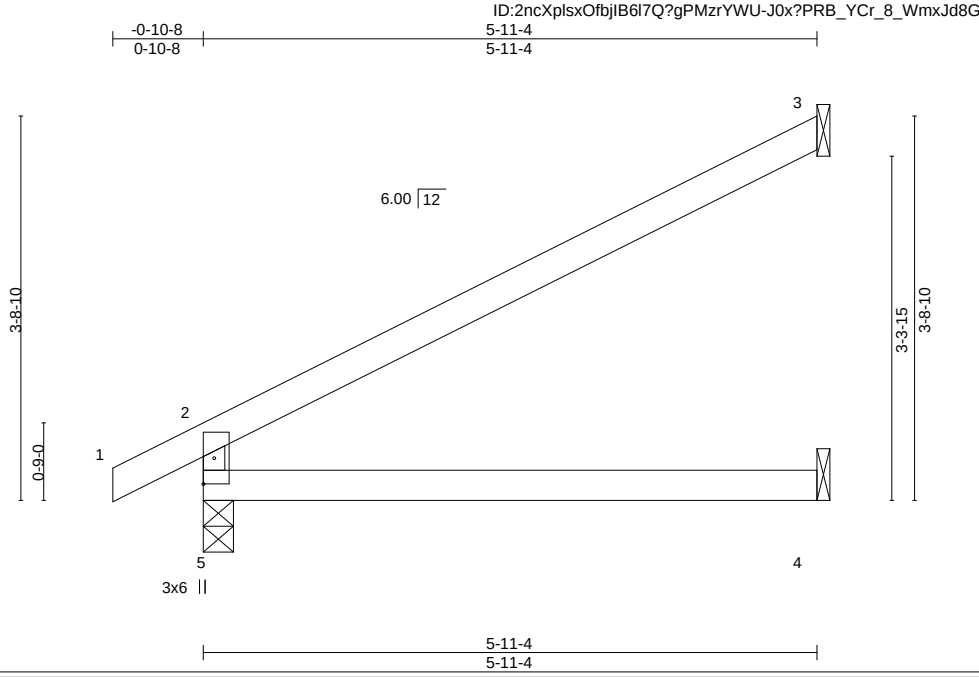

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.12	4-5	>583	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=89(LC 8)
Max Uplift 3=-61(LC 8)
Max Grav 5=334(LC 1), 3=184(LC 1), 4=110(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-289/44

NOTES-

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

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J6	Jack-Open	7	1	I45820656
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:21 2021 Page 1
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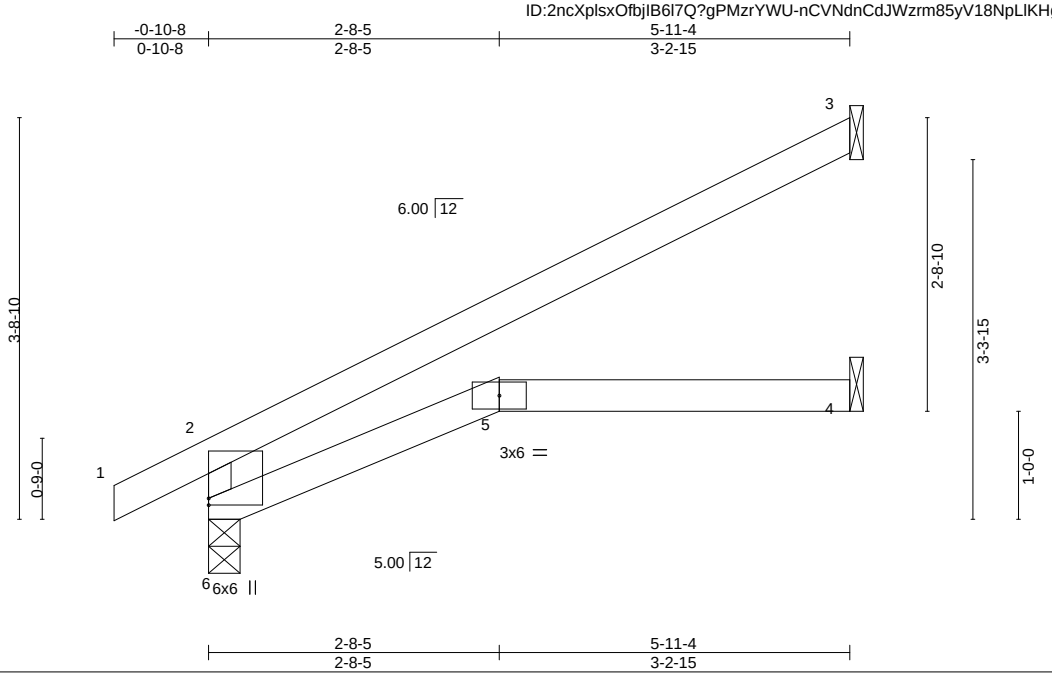


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.12	4-5	>569	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.04	5	>999	240	Weight: 16 lb	FT = 10%

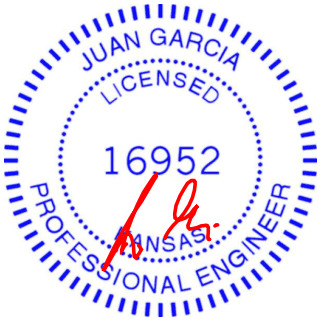
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=89(LC 8)
Max Uplift 3=-62(LC 8)
Max Grav 6=334(LC 1), 3=185(LC 1), 4=110(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-288/43

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



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J7	Jack-Closed	1	1	I45820657

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:22 2021 Page 1

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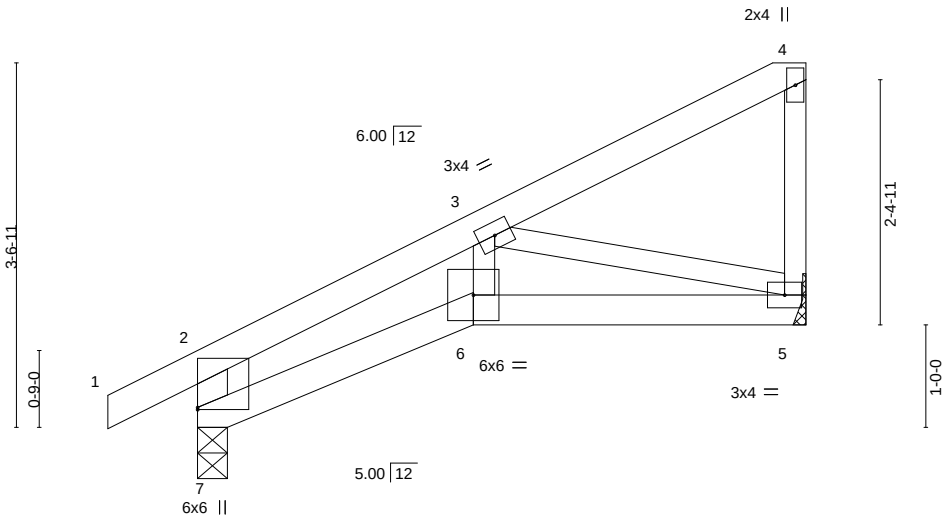

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	6	>999	240	Weight: 21 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=105(LC 5)
Max Uplift 7=-10(LC 8), 5=-26(LC 8)
Max Grav 7=334(LC 1), 5=250(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-406/46, 2-3=-463/40
BOT CHORD 6-7=-86/370, 5-6=-74/332
WEBS 3-5=-330/77

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 100 lb uplift at joint(s) 7, 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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J8	Jack-Closed Girder	1	1	I45820658
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:23 2021 Page 1
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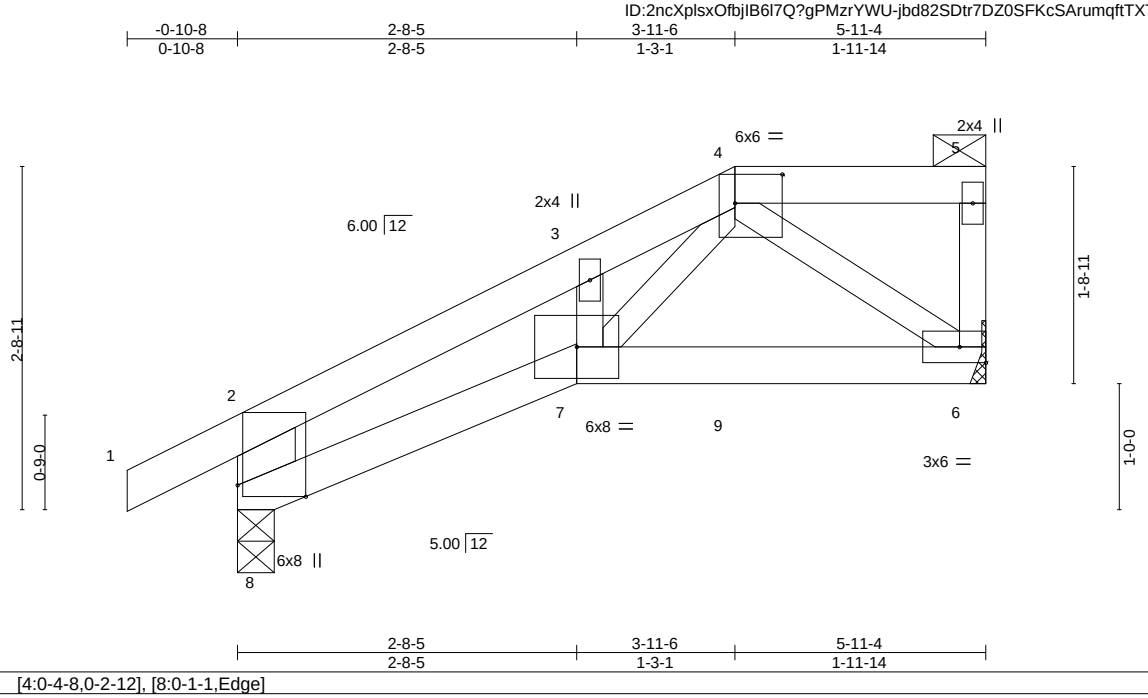

Plate Offsets (X,Y)-- [4:0-4-8,0-2-12], [8:0-1-1,Edge]

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	0.61	Vert(LL)	-0.04	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.07	6-7	>977	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	6-7	>999	240	Weight: 21 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 6=Mechanical
Max Horz 8=94(LC 22)
Max Uplift 8=-95(LC 8), 6=-121(LC 5)
Max Grav 8=452(LC 1), 6=471(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-617/169, 2-3=-751/184, 3-4=-555/201
BOT CHORD 7-8=-189/608, 6-7=-136/387
WEBS 4-6=-432/147

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) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 6=121.
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) 93 lb down and 87 lb up at 3-11-6 on top chord, and 256 lb down and 72 lb up at 3-11-6 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

April 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-5=-70, 7-8=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 4=-86(B) 9=-256(B)

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J9	Diagonal Hip Girder	1	1	I45820659
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:24 2021 Page 1
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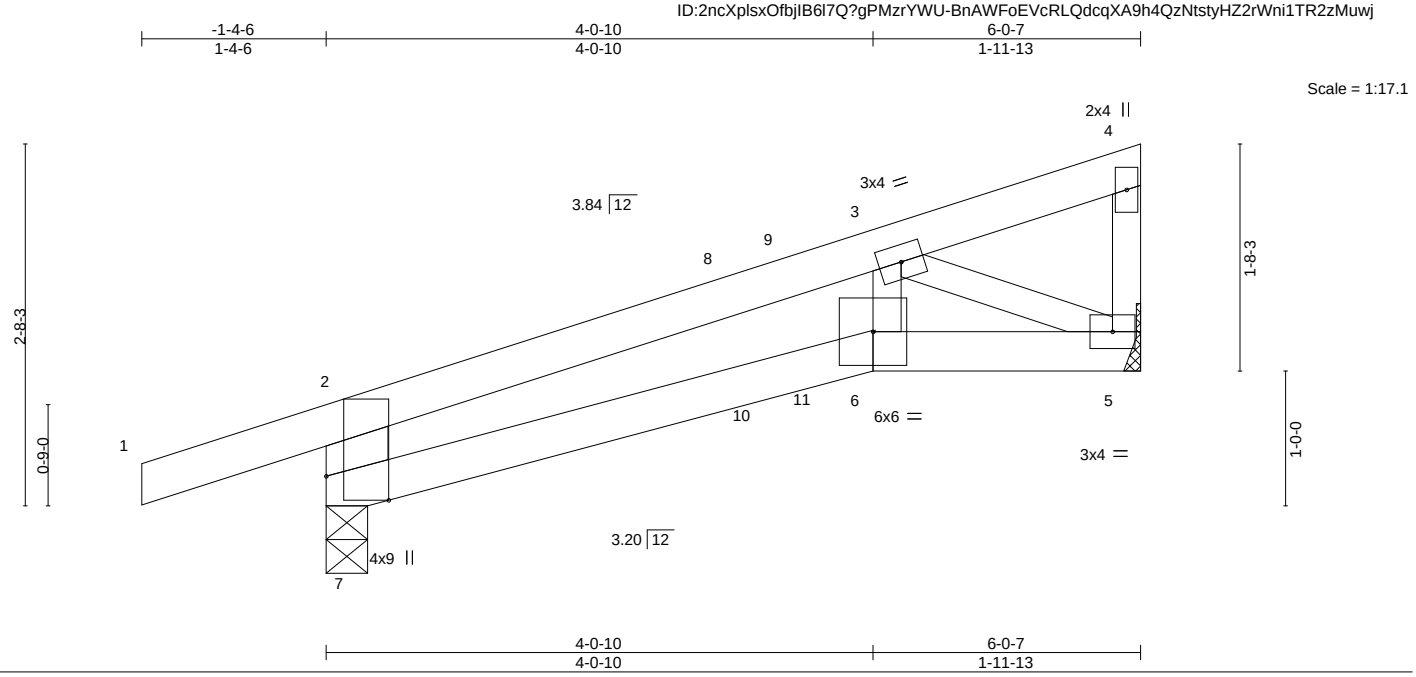

Plate Offsets (X,Y)-- [7:0-2-2,Edge]

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	0.40	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.03	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	6	>999	240	Weight: 19 lb	FT = 10%

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

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

REACTIONS. (size) 7=0-3-11, 5=Mechanical
Max Horz 7=96(LC 22)
Max Uplift 7=-114(LC 4), 5=-55(LC 8)
Max Grav 7=386(LC 1), 5=243(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-409/152, 2-3=-401/80
BOT CHORD 6-7=-112/340, 5-6=-104/312
WEBS 3-5=-327/113

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=114.
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) 81 lb down and 51 lb up at 3-0-13, and 68 lb down and 44 lb up at 3-6-3 on top chord, and 7 lb down at 3-0-13, and 7 lb down at 3-6-3 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

April 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J9	Diagonal Hip Girder	1	1	I45820659
					Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 10=-4(B) 11=-0(F)

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J10	Jack-Open	1	1	I45820660

Job Reference (optional)

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0-10-8 2-2-6

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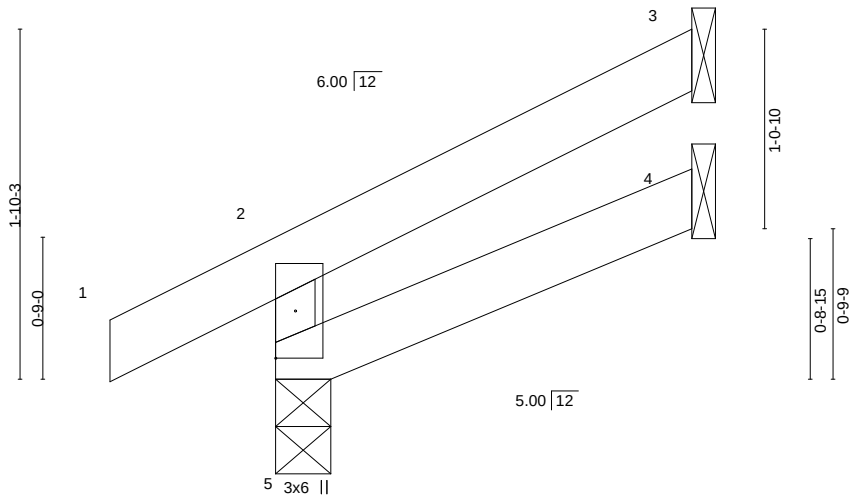

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	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 2-2-6 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=51(LC 8)
Max Uplift 5=-22(LC 8), 3=-38(LC 8)
Max Grav 5=177(LC 1), 3=56(LC 1), 4=38(LC 3)

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

NOTES-

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J11	Jack-Open	1	1	I45820661
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:03 2021 Page 1
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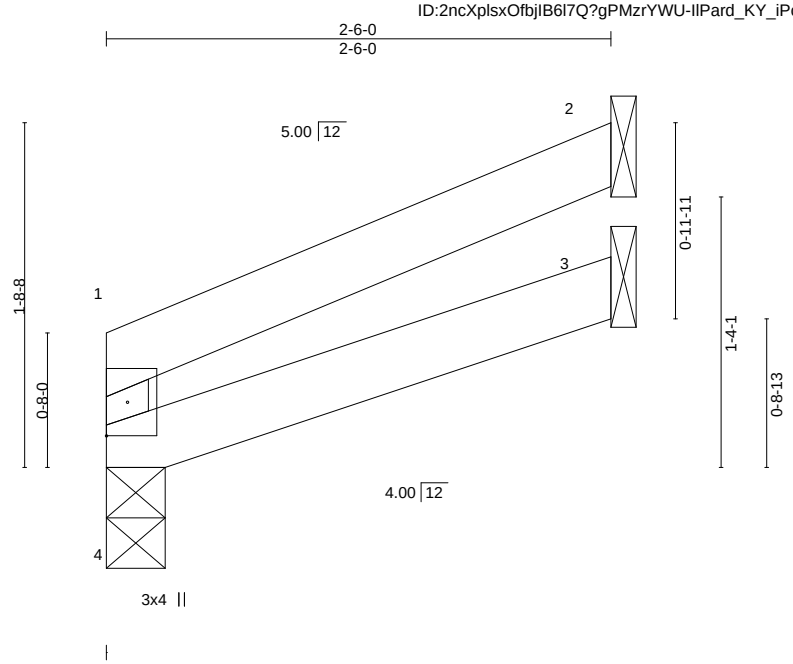

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 6 lb	FT = 10%

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

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

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=36(LC 5)
Max Uplift 4=-4(LC 8), 2=-42(LC 8)
Max Grav 4=105(LC 1), 2=77(LC 1), 3=45(LC 3)

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

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J12	Jack-Open	1	1	I45820662
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:03 2021 Page 1
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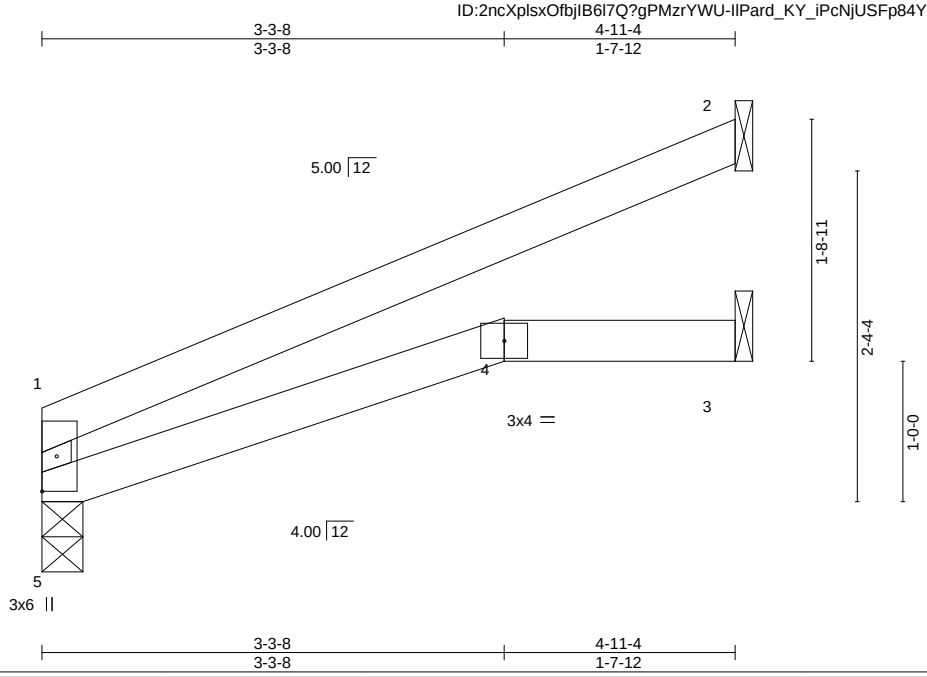

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.06	4-5	>985	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	4-5	>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 4-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 5=75(LC 8)
Max Uplift 5=-16(LC 8), 2=-79(LC 8)
Max Grav 5=215(LC 1), 2=156(LC 1), 3=91(LC 3)

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

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J13	Jack-Open	2	1	I45820663
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:04 2021 Page 1
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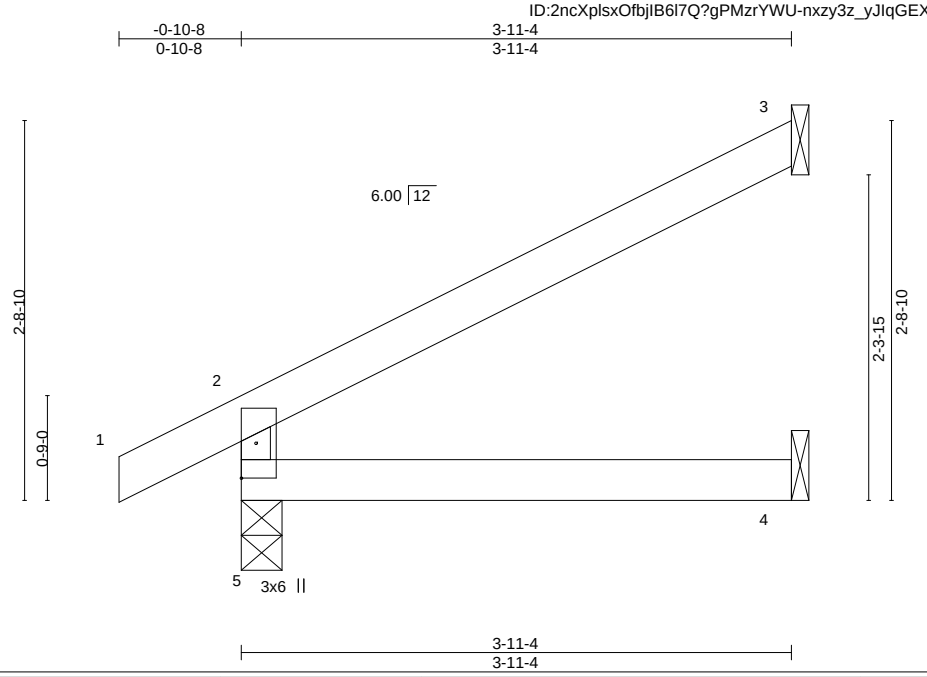

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=87(LC 8)
Max Uplift 5=-27(LC 8), 3=-68(LC 8)
Max Grav 5=247(LC 1), 3=118(LC 1), 4=72(LC 3)

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

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J14	Jack-Closed Girder	1	1	I45820664
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:05 2021 Page 1
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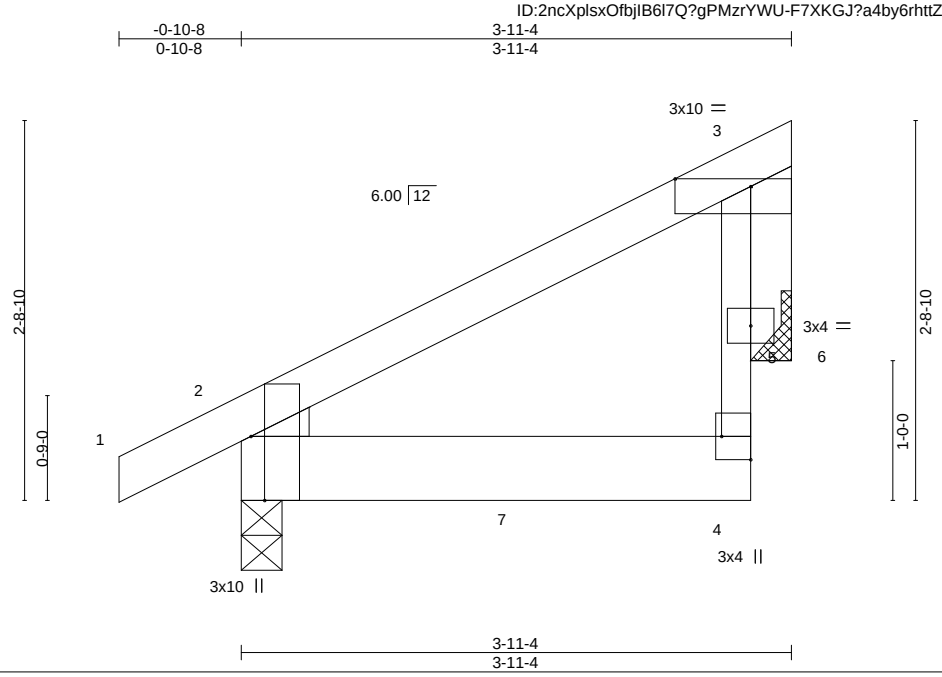

Plate Offsets (X,Y)-- [2:0-5-8,Edge], [3:0-6-8,Edge], [4:Edge,0-2-8]

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	0.30	Vert(LL)	-0.01	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	2-4	>999	240	Weight: 16 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=74(LC 8)
Max Uplift 2=-66(LC 8), 6=-81(LC 8)
Max Grav 2=390(LC 1), 6=282(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 295 lb down and 75 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 2-4=-20
Concentrated Loads (lb)
Vert: 7=-295(B)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J15	DIAGONAL HIP GIRDER	1	1	I45820665

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:06 2021 Page 1
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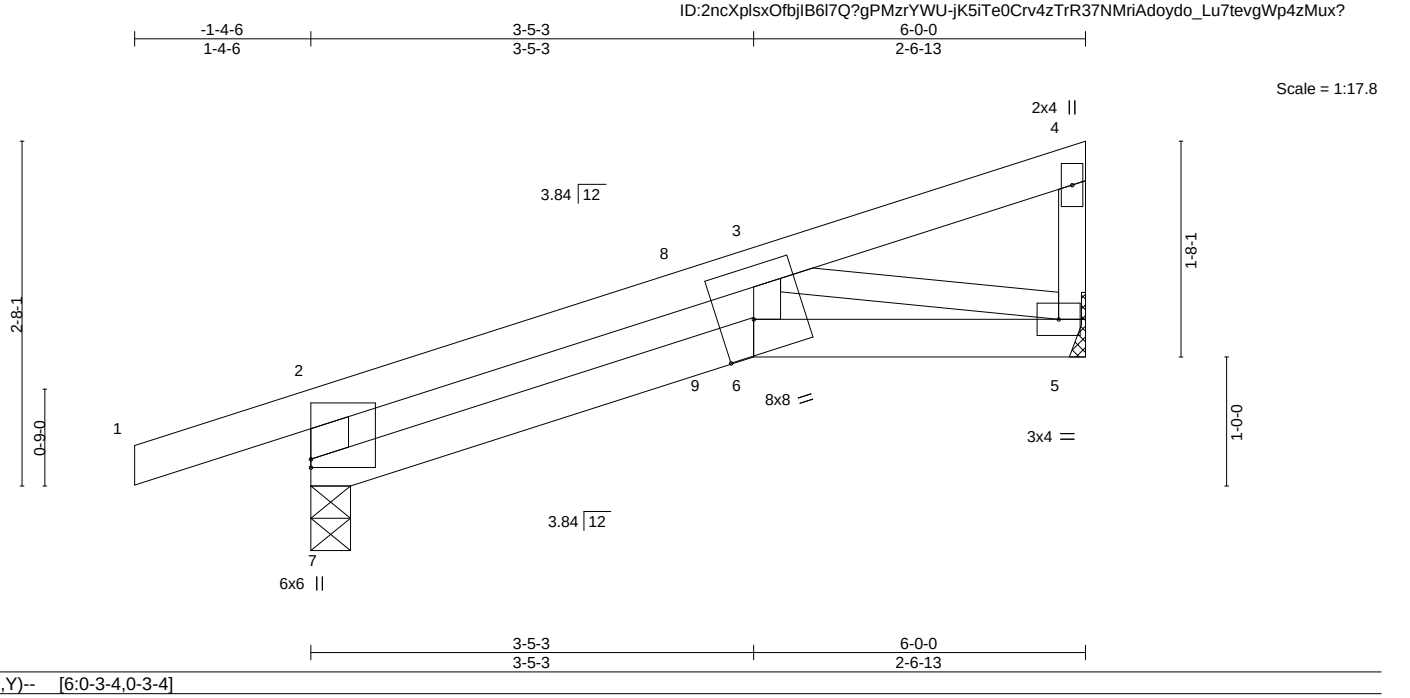

Plate Offsets (X,Y)-- [6:0-3-4,0-3-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.06	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	6	>999	240	Weight: 19 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=0-3-11, 5=Mechanical
Max Horz 7=95(LC 5)
Max Uplift 7=-121(LC 4), 5=-67(LC 8)
Max Grav 7=394(LC 1), 5=260(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-443/165, 2-3=-495/128
BOT CHORD 6-7=-146/435, 5-6=-136/387
WEBS 3-5=-366/147

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=121.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 26 lb up at 2-11-11, and 68 lb down and 44 lb up at 3-6-3 on top chord, and 34 lb down and 30 lb up at 2-11-11, and 7 lb down at 3-5-3 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

April 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6=-0(B) 9=-30(F)

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J16	Jack-Open	5	1	I45820666
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:07 2021 Page 1
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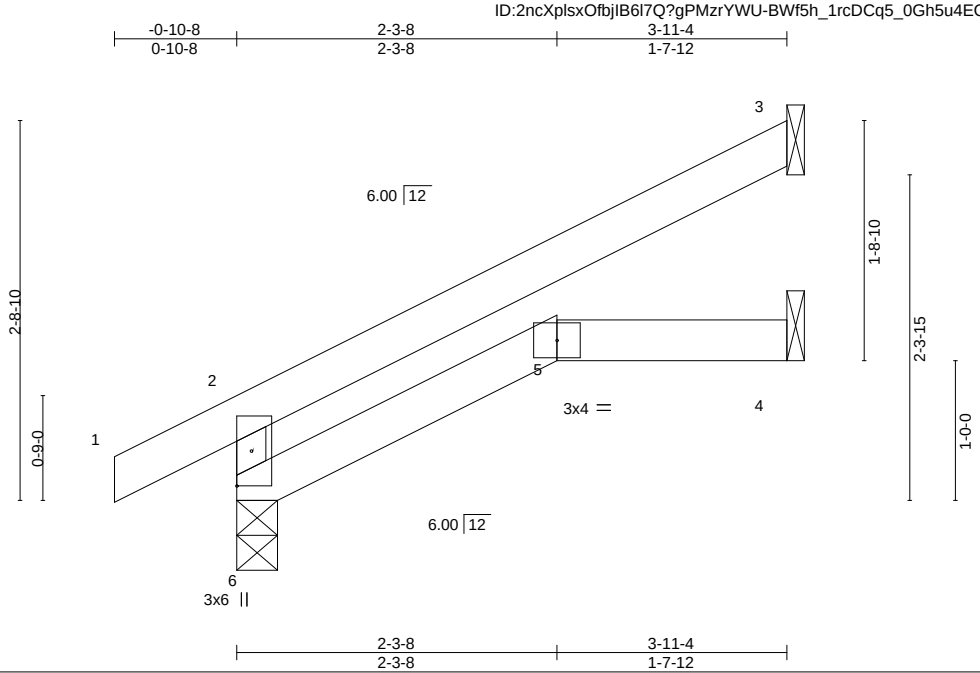

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>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 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=86(LC 8)
Max Uplift 6=-25(LC 8), 3=-70(LC 8)
Max Grav 6=247(LC 1), 3=118(LC 1), 4=72(LC 3)

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

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

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J17	Jack-Open	1	1	I45820667
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:07 2021 Page 1
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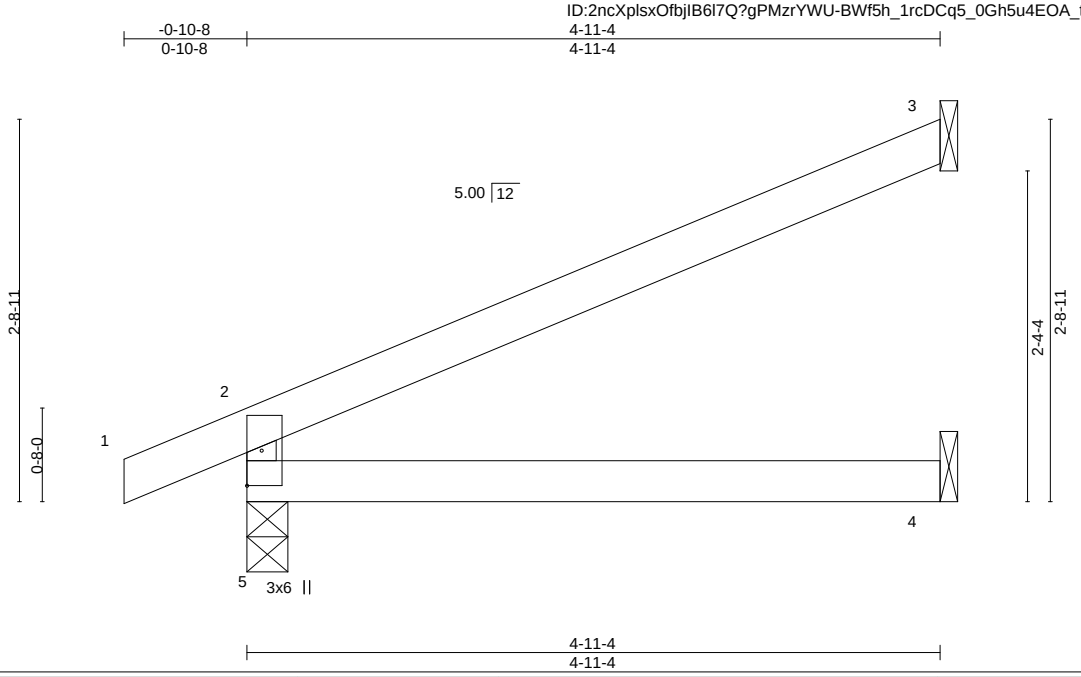

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 13 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=90(LC 8)
Max Uplift 5=-41(LC 8), 3=-77(LC 8)
Max Grav 5=290(LC 1), 3=151(LC 1), 4=91(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-252/83

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) The Fabrication Tolerance at joint 5 = 2%, joint 5 = 2%
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 100 lb uplift at joint(s) 5, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J18	Jack-Open	3	1	I45820668
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:08 2021 Page 1
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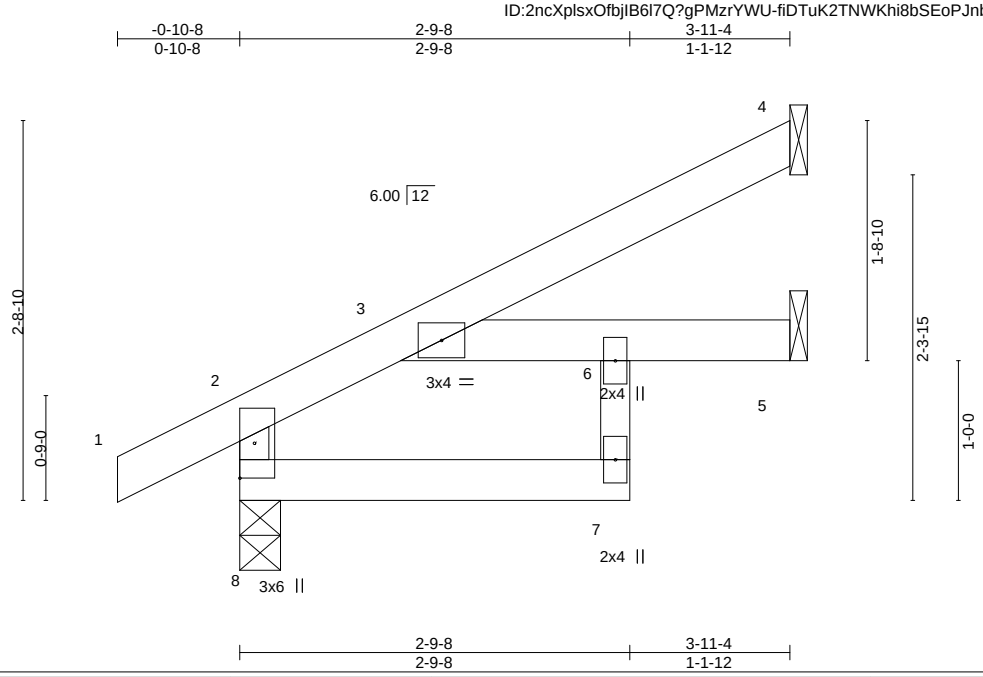

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	3-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	3-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	3-6	>999	240	Weight: 13 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=87(LC 8)
Max Uplift 8=-18(LC 8), 4=-54(LC 8)
Max Grav 8=263(LC 1), 4=109(LC 1), 5=91(LC 3)

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

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J19	JACK-OPEN	2	1	I45820669
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:09 2021 Page 1
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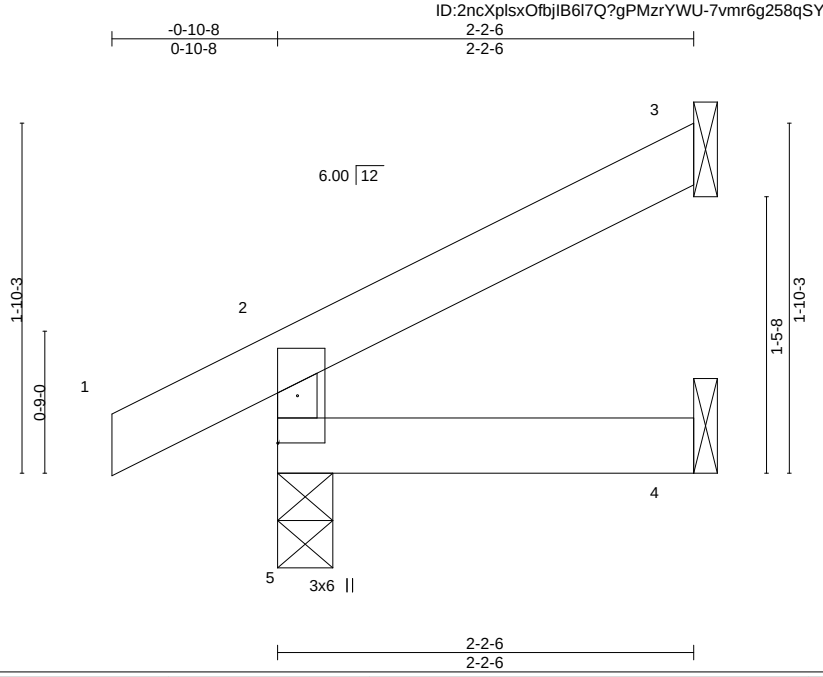

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=52(LC 8)
Max Uplift 5=-23(LC 8), 3=-37(LC 8)
Max Grav 5=176(LC 1), 3=56(LC 1), 4=38(LC 3)

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

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J20	JACK-OPEN	3	1	I45820670
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:11 2021 Page 1
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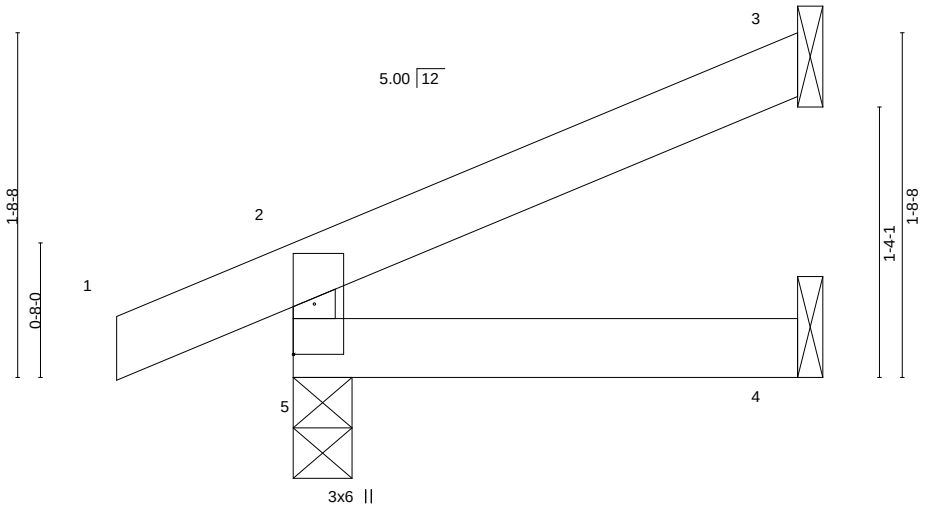

2-6-0
2-6-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	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 2-6-0 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=48(LC 8)
Max Uplift 5=-31(LC 4), 3=-38(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 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J21	Diagonal Hip Girder	1	1	I45820671

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:12 2021 Page 1
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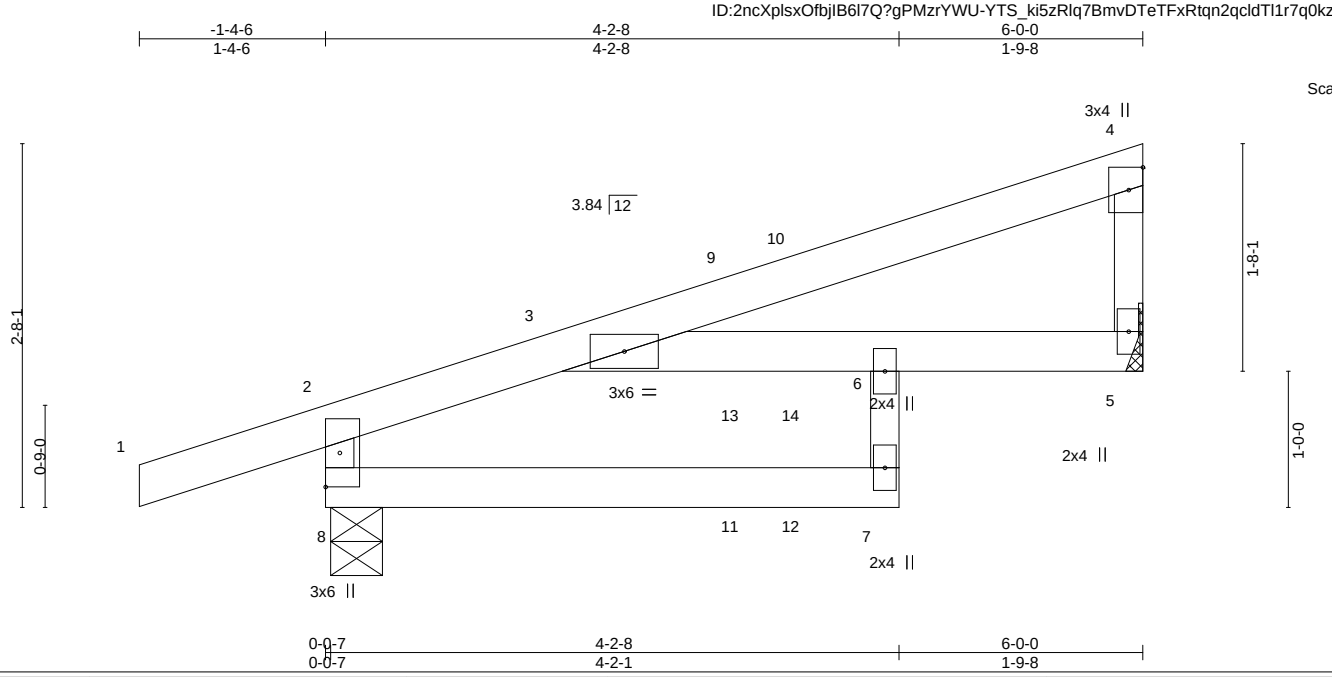

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.06	3-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.11	3-6	>628	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.06	3-6	>999	240	Weight: 20 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-4-9, 5=Mechanical
Max Horz 8=94(LC 5)
Max Uplift 8=-108(LC 4), 5=-56(LC 8)
Max Grav 8=377(LC 1), 5=248(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-345/139

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 8=108.
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) 78 lb down and 46 lb up at 3-0-14, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-0-14, and 6 lb down at 3-6-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 11=-1(F) 12=-0(B)

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J22	JACK-OPEN	3	1	I45820672
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:13 2021 Page 1
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0-10-8 4-11-4

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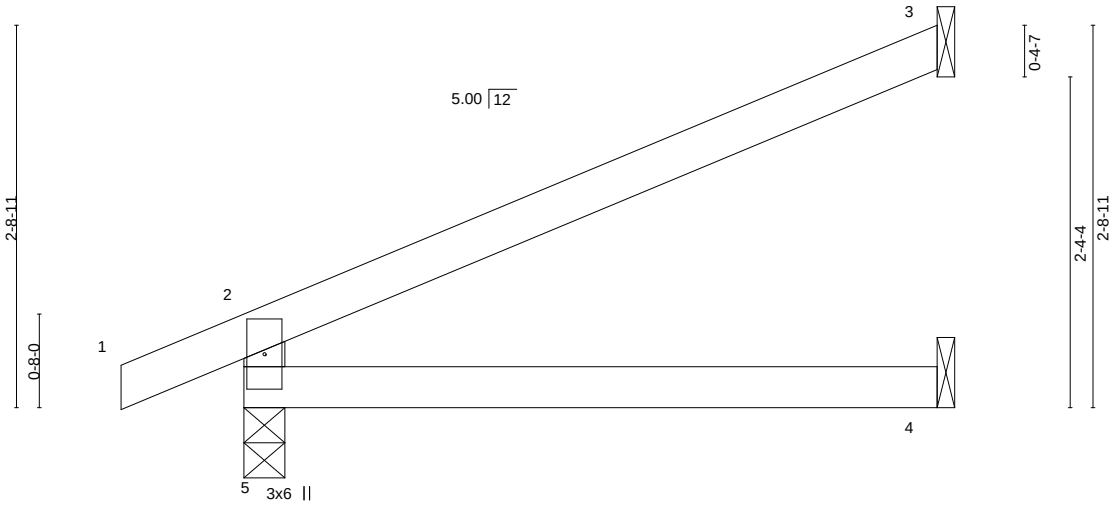

4-11-4
4-11-4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.05	4-5	>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)	0.02	4-5	>999	240	Weight: 13 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=89(LC 8)
Max Uplift 5=-41(LC 8), 3=-74(LC 8)
Max Grav 5=292(LC 1), 3=147(LC 1), 4=89(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-255/85

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J23	Jack-Closed Girder	1	1	I45820673
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:14 2021 Page 1
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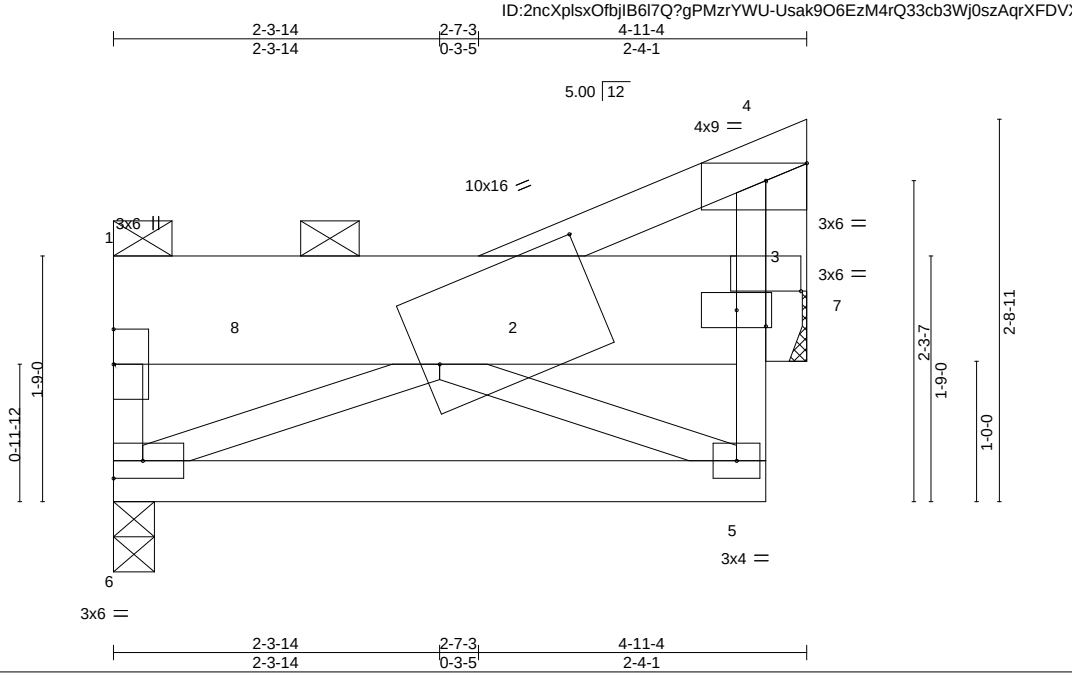

Plate Offsets (X,Y)-- [2:1-2-8,0-6-0], [3:0-3-0,0-3-0], [4:Edge,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.05	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	5	>999	240	Weight: 33 lb	FT = 10%

LUMBER-

TOP CHORD	2x10 SP DSS *Except*
	2-4: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 6=0-3-8, 7=Mechanical
Max Horz 6=76(LC 5)
Max Uplift 6=-224(LC 4), 7=-173(LC 8)
Max Grav 6=1279(LC 15), 7=875(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-932/194, 3-5=-85/560, 3-4=-156/955
BOT CHORD 5-6=-143/720
WEBS 2-6=-774/150, 2-5=-833/183, 4-7=-895/177

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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=224, 7=173.
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) 945 lb down and 161 lb up at 1-0-0, and 943 lb down and 160 lb up at 2-11-12 on top 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, 2-4=-70, 5-6=-20

April 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 2=-859(B) 8=-860(B)

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J24	JACK-OPEN	1	1	I45820674

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:14 2021 Page 1

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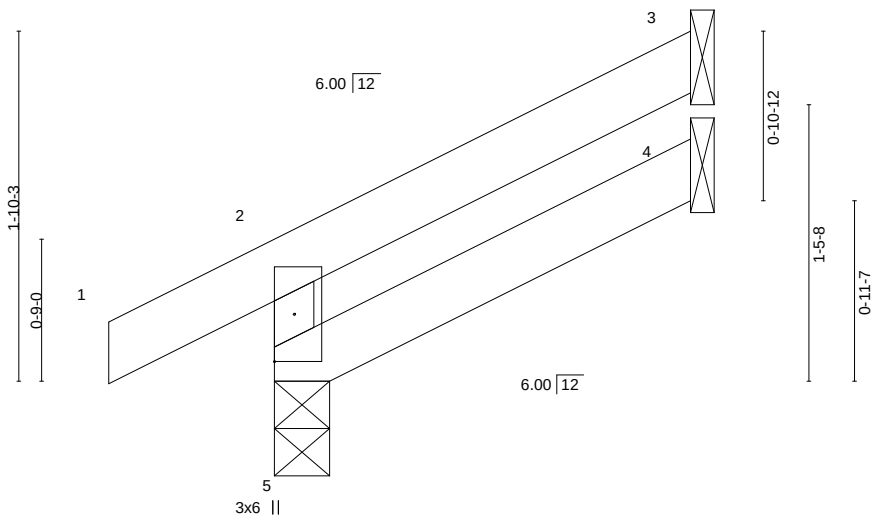

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	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 2-2-6 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=51(LC 8)
Max Uplift 5=-21(LC 8), 3=-39(LC 8)
Max Grav 5=176(LC 1), 3=56(LC 1), 4=38(LC 3)

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

NOTES-

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J25	Jack-Open	1	1	I45820675
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:15 2021 Page 1
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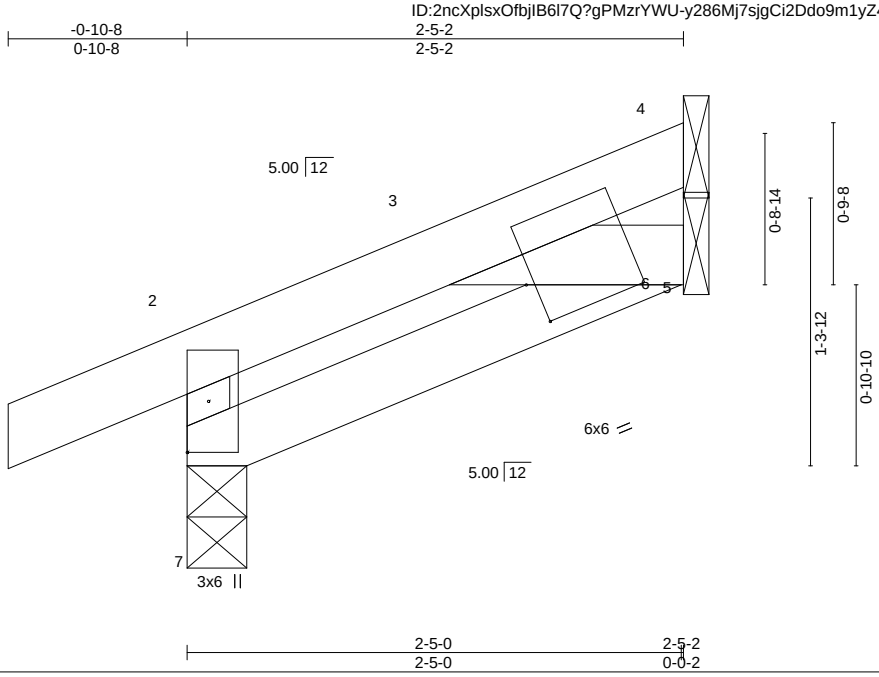

Plate Offsets (X,Y)-- [6:0-0-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	3	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3	>999	240	Weight: 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 2-5-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 6=Mechanical
Max Horz 7=46(LC 8)
Max Uplift 7=-27(LC 4), 4=-17(LC 8), 6=-4(LC 8)
Max Grav 7=191(LC 1), 4=43(LC 1), 6=81(LC 3)

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

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J26	Diagonal Hip Girder	2	1	I45820676

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:16 2021 Page 1
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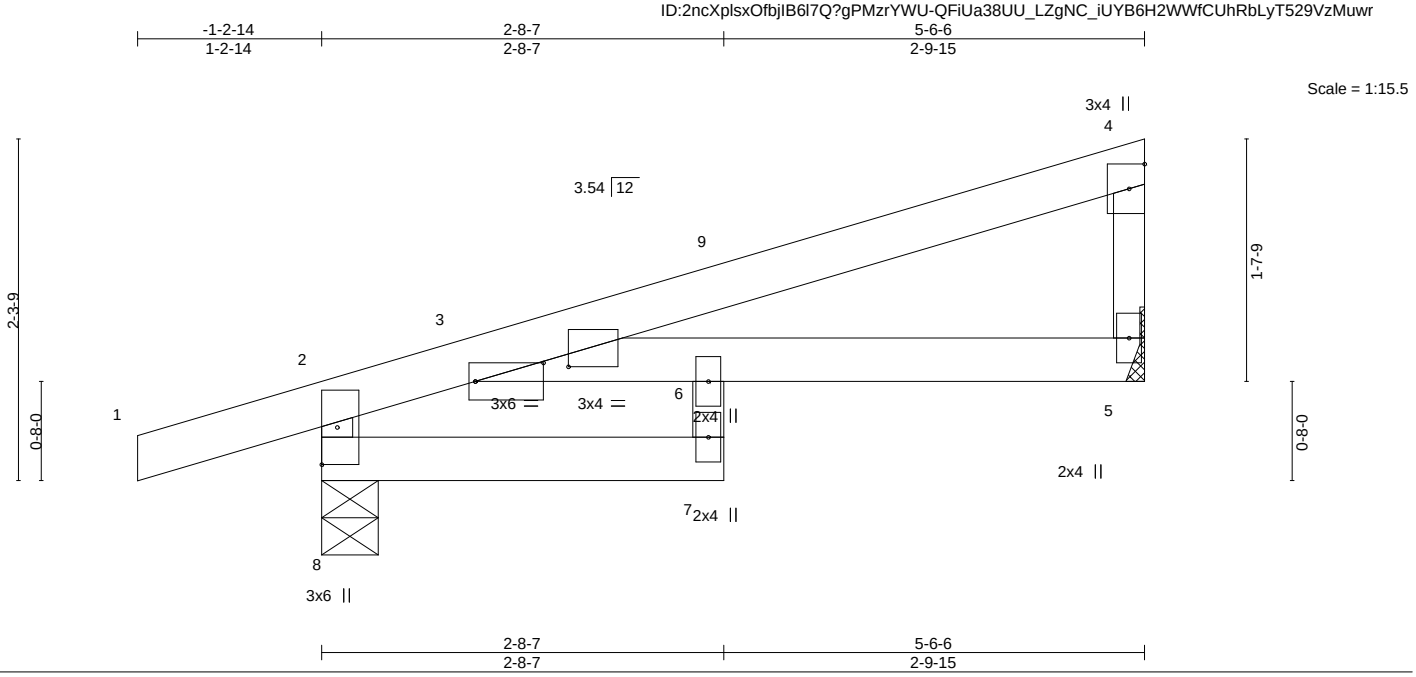

Plate Offsets (X,Y)-- [3:0-7-8,0-1-3], [3:0-5-8,0-1-8]

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	0.36	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.07	6	>915	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	6	>999	240	Weight: 18 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-4-9, 5=Mechanical
Max Horz 8=81(LC 5)
Max Uplift 8=-101(LC 4), 5=-49(LC 8)
Max Grav 8=345(LC 1), 5=227(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-328/122

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 8=101.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 34 lb up at 2-9-8, and 68 lb down and 34 lb up at 2-9-8 on top chord, and 2 lb down and 0 lb up at 2-7-3, and 2 lb down and 0 lb up at 2-7-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 7=1(F=0, B=0)

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J27	Jack-Open	4	1	I45820677

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:17 2021 Page 1

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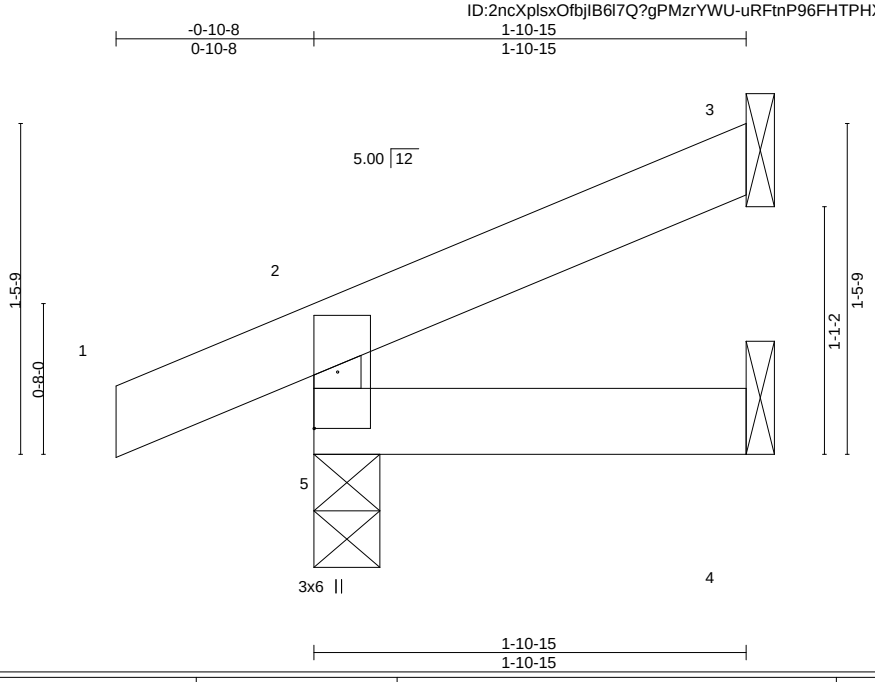

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 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 1-10-15 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=39(LC 8)
Max Uplift 5=-33(LC 4), 3=-28(LC 8)
Max Grav 5=168(LC 1), 3=46(LC 1), 4=33(LC 3)

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

NOTES-

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	J28	Jack-Open	3	1	I45820678
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:18 2021 Page 1
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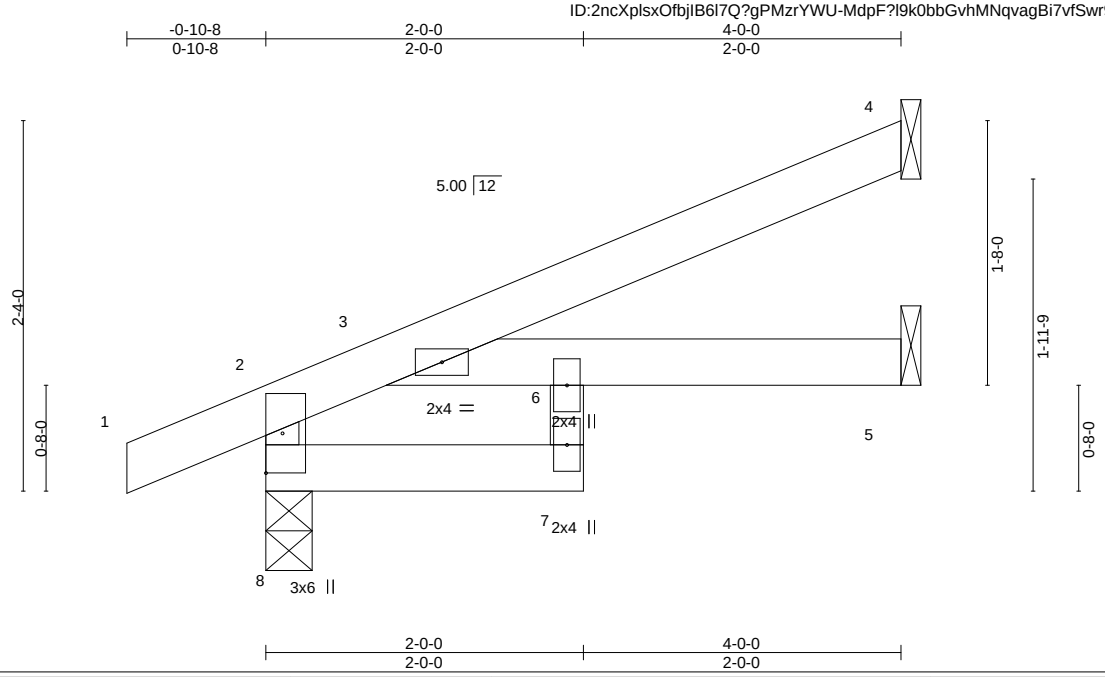

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	6	>999	240	Weight: 13 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 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=74(LC 8)
Max Uplift 8=-27(LC 8), 4=-53(LC 8)
Max Grav 8=265(LC 1), 4=114(LC 1), 5=79(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-254/49

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

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	LAY1	GABLE	1	1	I45820679
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:26 2021 Page 1
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7-1-5 | 24-0-8 | 31-1-13
7-1-5 | 16-11-4 | 7-1-5

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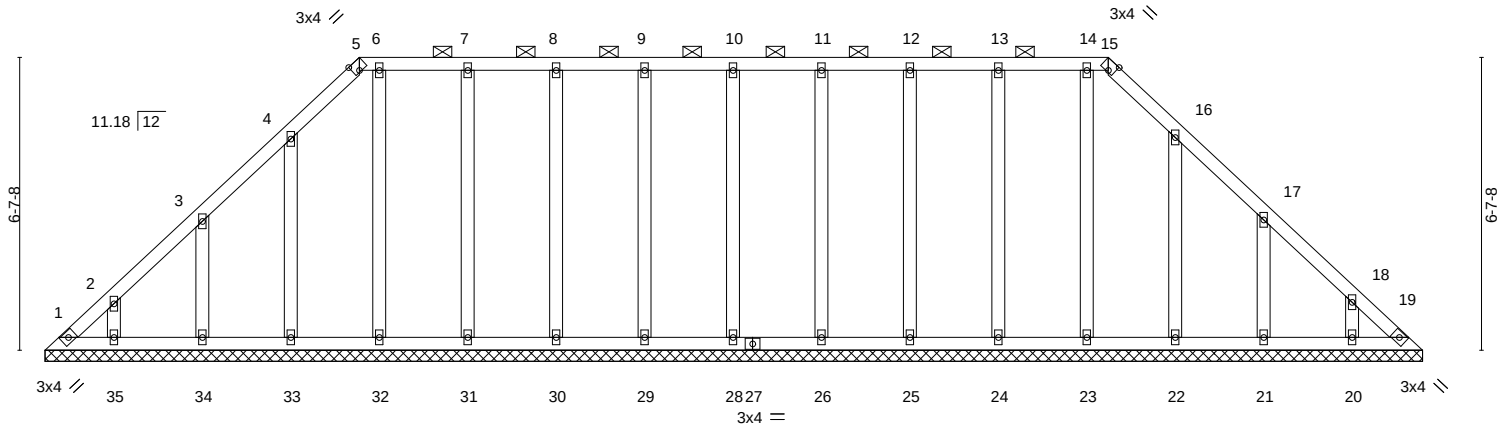


31-1-13
31-1-13

Plate Offsets (X,Y)-- [5:0-1-10,Edge], [15:0-1-10,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	0.05	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	0.10	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 157 lb	FT = 10%

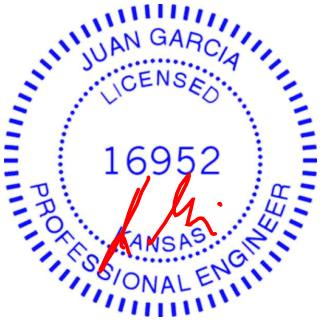
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. All bearings 31-1-13.
(lb) - Max Horz 1=-165(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 19, 35, 33, 32, 31, 30, 29, 28, 26, 25, 24, 22, 20 except 34=-112(LC 8), 21=-114(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 19, 35, 34, 33, 32, 31, 30, 29, 28, 26, 25, 24, 23, 22, 21, 20

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) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 19, 35, 33, 32, 31, 30, 29, 28, 26, 25, 24, 22, 20 except (jt=lb) 34=112, 21=114.
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.



April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	LAY2	GABLE	1	1	I45820680

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:28 2021 Page 1
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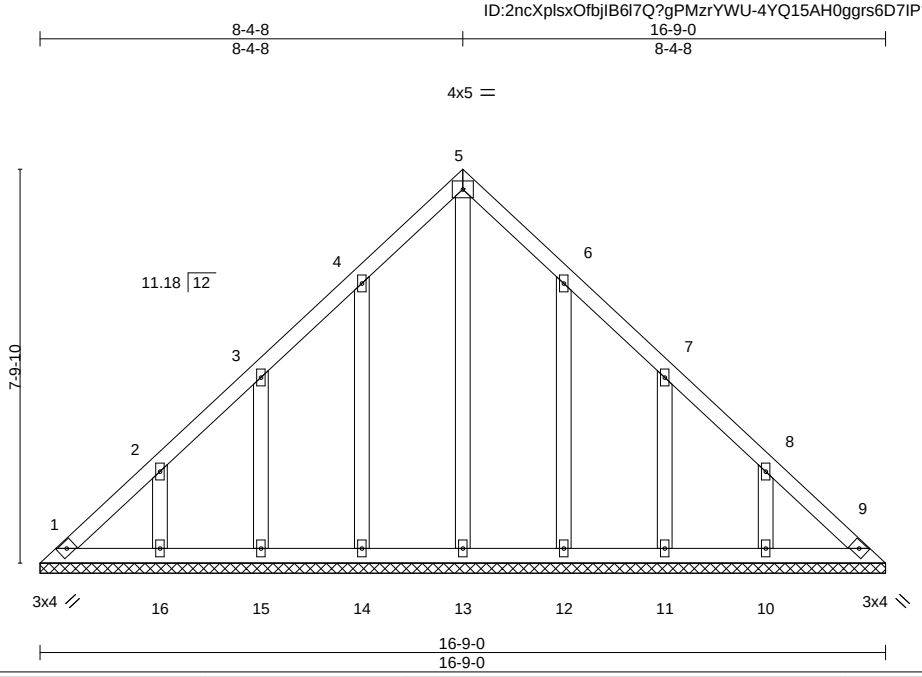

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 76 lb	FT = 10%

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

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

REACTIONS. All bearings 16-9-0.
(lb) - Max Horz 1=-195(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-107(LC 8), 15=-102(LC 8), 16=-118(LC 8), 12=-106(LC 9), 11=-103(LC 9), 10=-118(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.

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=107, 15=102, 16=118, 12=106, 11=103, 10=118.
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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	LAY3	GABLE	1	1	I45820681
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:30 2021 Page 1
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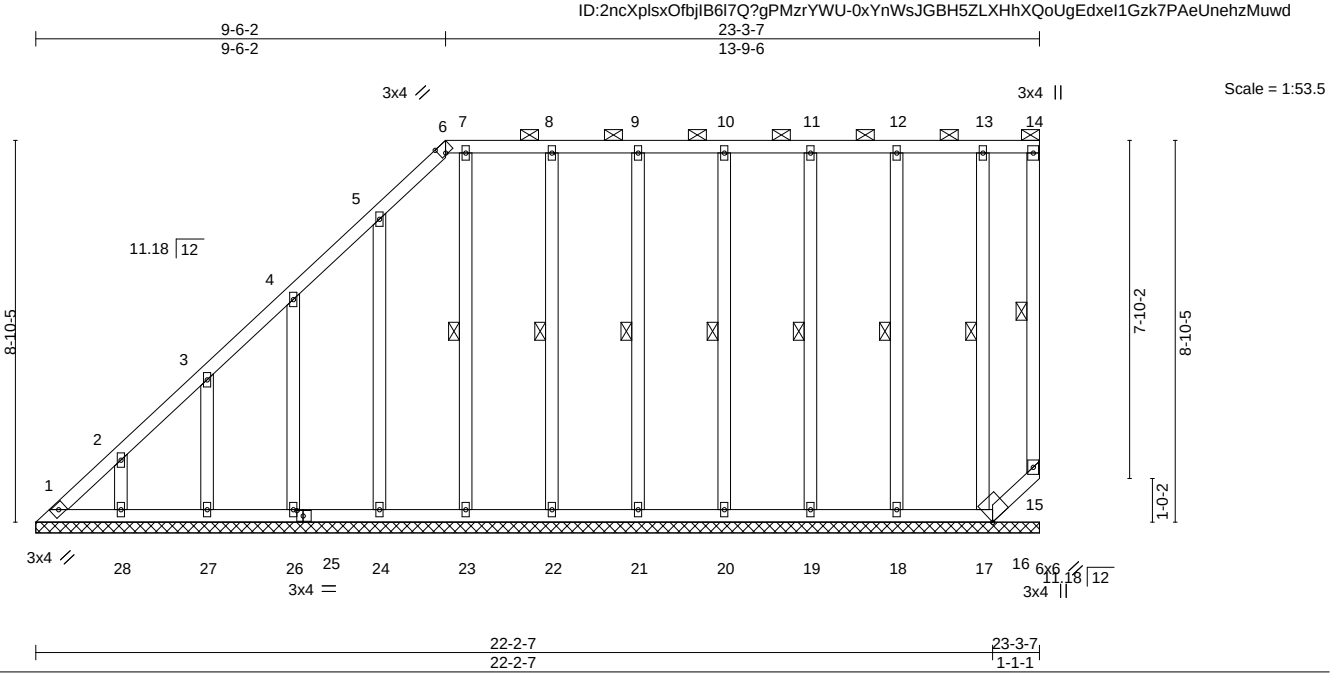

Plate Offsets (X,Y)-- [6:0-1-10,Edge], [25:0-1-12,0-1-8]

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	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 150 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.): 6-14.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16.	
WEBS	1 Row at midpt	14-15, 7-23, 8-22, 9-21, 10-20, 11-19, 12-18, 13-17

REACTIONS. All bearings 23-3-7.
(lb) - Max Horz 1=326(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 24, 23, 22, 21, 20, 19, 18 except 1=-112(LC 6), 15=-137(LC 7), 16=-233(LC 4), 28=-105(LC 8), 27=-104(LC 8), 26=-109(LC 8), 17=-133(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 28, 27, 26, 24, 23, 22, 21, 20, 19, 18, 17 except 16=291(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-344/224, 2-3=-290/188

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) 24, 23, 22, 21, 20, 19, 18 except (jt=lb) 1=112, 15=137, 16=233, 28=105, 27=104, 26=109, 17=133.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	LAY4	GABLE	1	1	I45820682

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:31 2021 Page 1

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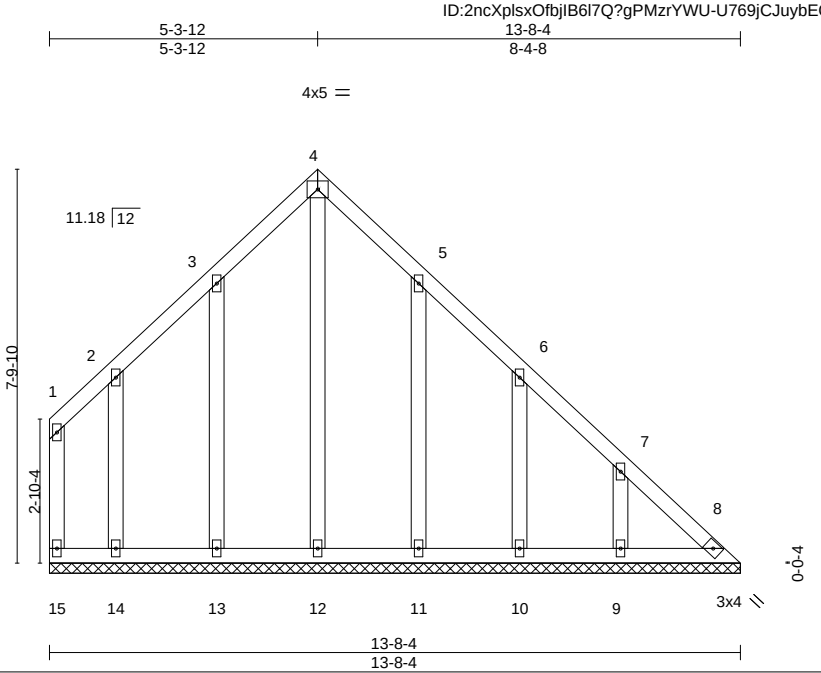

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 70 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 13-8-4.

(lb) - Max Horz 15=-231(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 15, 12 except 8=-119(LC 5), 13=-104(LC 8), 14=-110(LC 8), 11=-106(LC 9), 10=-103(LC 9), 9=-118(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 15, 8, 12, 13, 14, 11, 10, 9

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

TOP CHORD 7-8=-257/232

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) 15, 12 except (jt=lb) 8=119, 13=104, 14=110, 11=106, 10=103, 9=118.
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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN	I45820683
210533	LAY5	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:32 2021 Page 1
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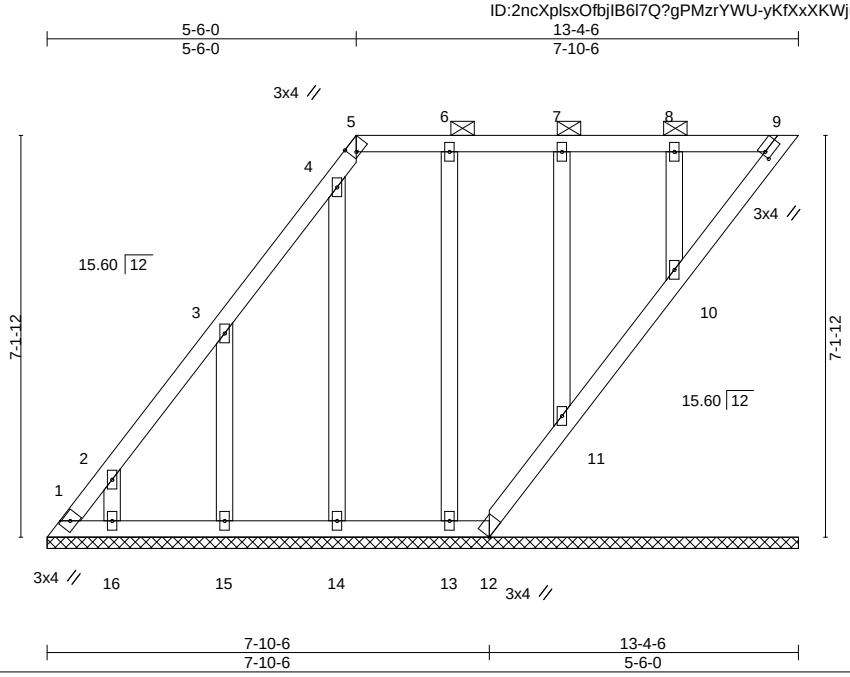

Plate Offsets (X,Y)-- [5:0-1-4,Edge], [9:0-0-12,0-1-8]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 65 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.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-4-6.
(lb) - Max Horz 1=280(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 9, 12, 14, 13, 11, 10 except 1=-119(LC 6), 16=-139(LC 8), 15=-193(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 9, 12, 16, 15, 14, 13, 11, 10 except 1=296(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-376/171

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) 9, 12, 14, 13, 11, 10 except (jt=lb) 1=119, 16=139, 15=193.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	LAY6	GABLE	1	1	I45820684
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:34 2021 Page 1
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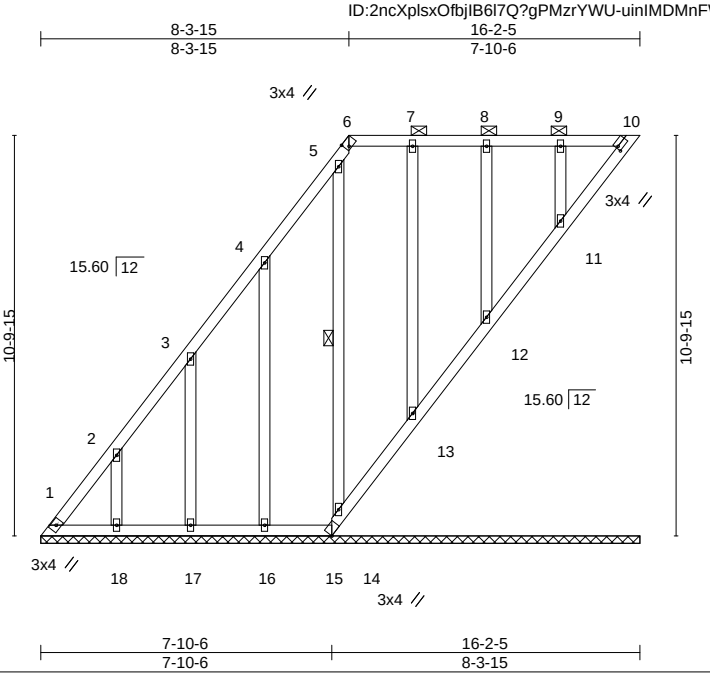

Plate Offsets (X,Y)-- [6:0-1-4,Edge], [10:0-0-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 92 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.): 6-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14

REACTIONS. All bearings 16-2-5.
(lb) - Max Horz 1=430(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 10, 15, 14, 13, 12, 11 except 1=-136(LC 6), 18=-180(LC 8), 17=-168(LC 8), 16=-188(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 10, 15, 18, 17, 16, 14, 13, 12, 11 except 1=404(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-525/234, 2-3=-353/161

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) 10, 15, 14, 13, 12, 11 except (jt=lb) 1=136, 18=180, 17=168, 16=188.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 14, 13, 12, 11.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	R1	Flat Girder	1	2	I45820685

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:35 2021 Page 1
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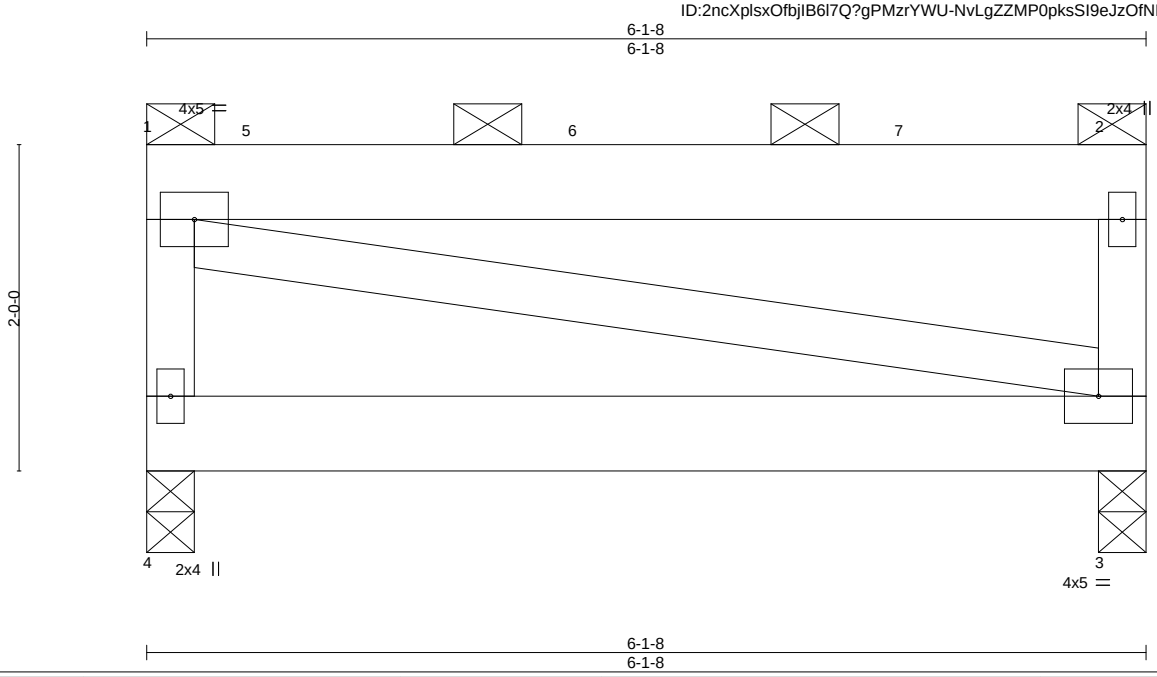

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.01	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.02	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	4	****	240	Weight: 68 lb	FT = 10%

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

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

REACTIONS. (size) 4=0-3-8, 3=0-3-8
Max Horz 4=-59(LC 4)
Max Uplift 4=-379(LC 4), 3=-308(LC 5)
Max Grav 4=2214(LC 1), 3=1828(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-4=-2155/414, 2-3=-1769/336

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, 2x6 - 2 rows staggered 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=379, 3=308.
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) 1181 lb down and 214 lb up at 0-9-0, and 1168 lb down and 210 lb up at 2-9-0, and 1168 lb down and 205 lb up at 4-9-0 on top 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: 1-2=-70, 3-4=-20

April 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 5=-1181 6=-1168 7=-1168

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V1	Valley	1	1	I45820686

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:35 2021 Page 1

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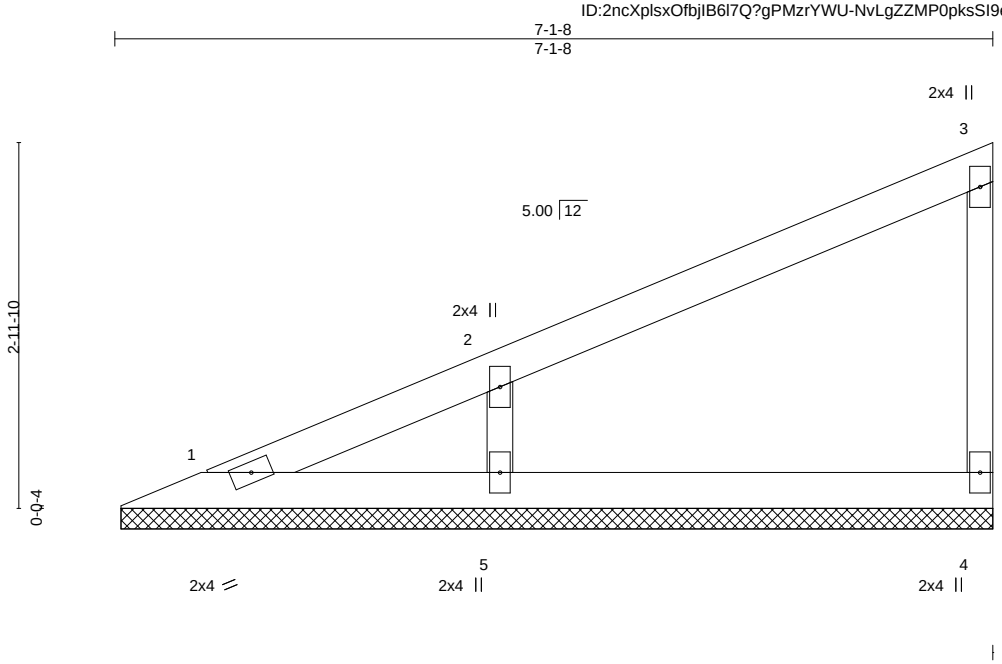


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 10%

LUMBER-

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

BRACING-

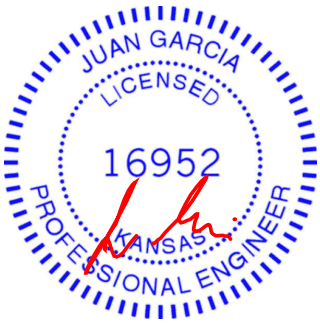
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-0-14, 4=7-0-14, 5=7-0-14
Max Horz 1=115(LC 5)
Max Uplift 4=-27(LC 8), 5=-98(LC 8)
Max Grav 1=61(LC 16), 4=142(LC 1), 5=370(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-288/148

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, 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.



April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V2	Valley	1	1	I45820687
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:37 2021 Page 1
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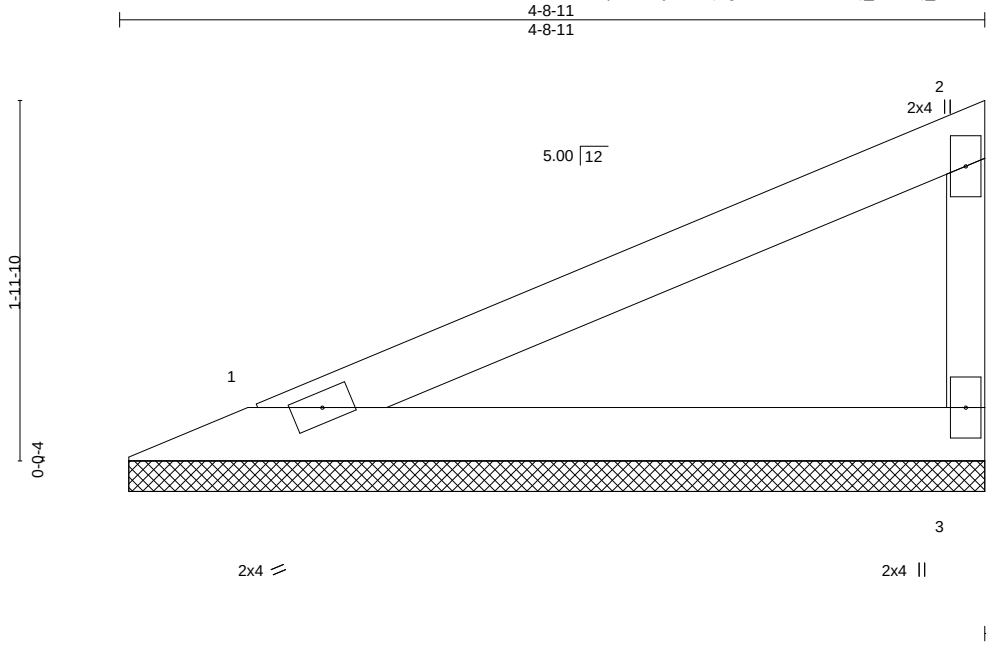


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

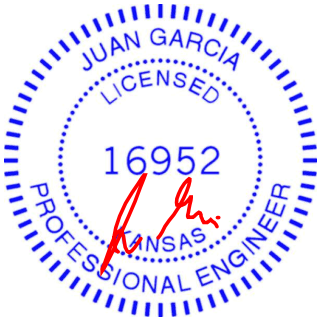
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-8-2, 3=4-8-2
Max Horz 1=71(LC 5)
Max Uplift 1=-25(LC 8), 3=-40(LC 8)
Max Grav 1=174(LC 1), 3=174(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.



April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V3	Valley	1	1	I45820688
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:37 2021 Page 1
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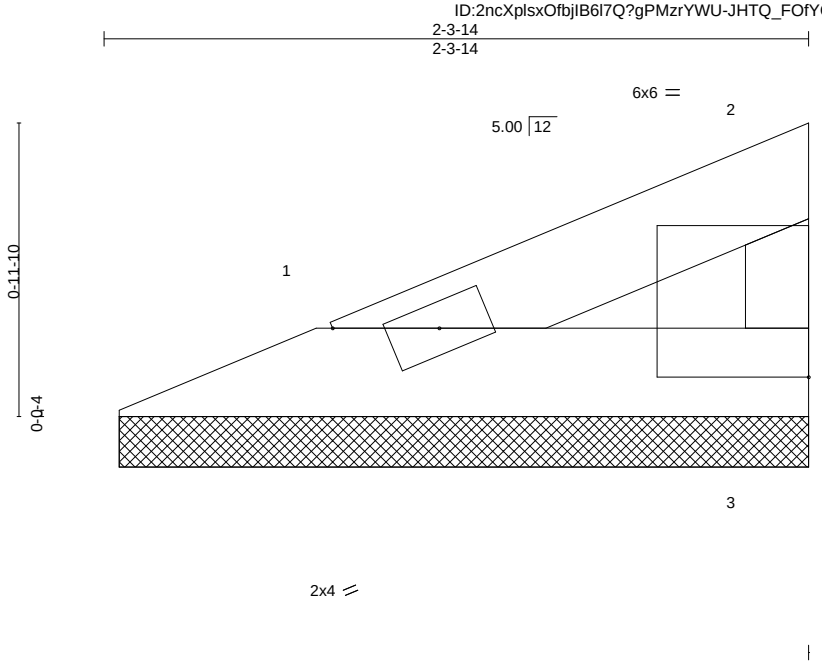

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Plate Offsets (X,Y)-- [2:Edge,0-1-15]

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-3-5, 3=2-3-5
Max Horz 1=27(LC 5)
Max Uplift 1=-10(LC 8), 3=-15(LC 8)
Max Grav 1=66(LC 1), 3=66(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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V4	Valley	1	1	I45820689
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:38 2021 Page 1
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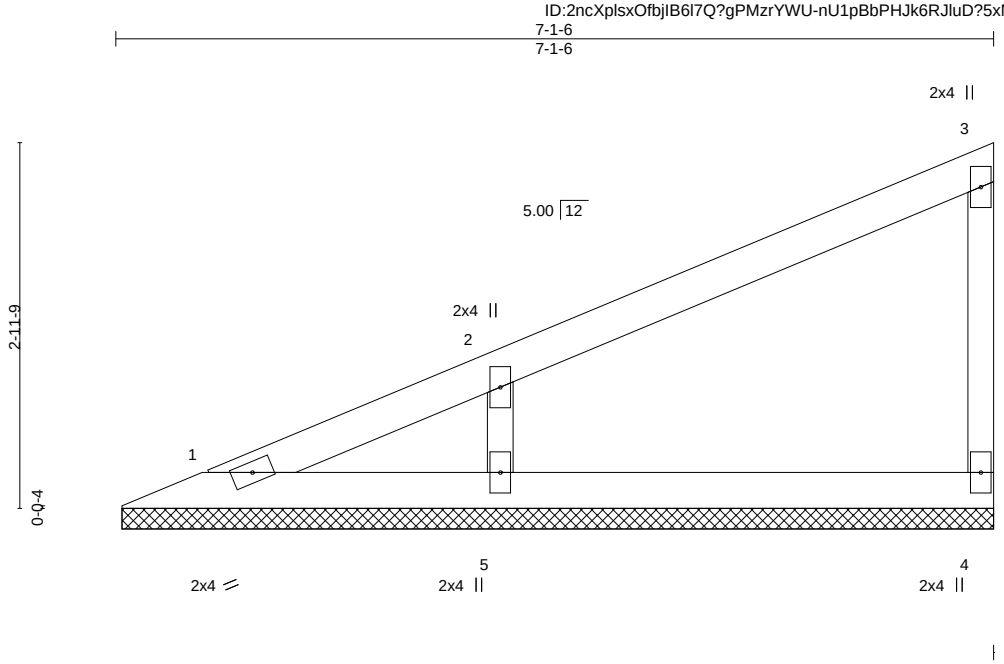

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 10%

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

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

REACTIONS. (size) 1=7-0-13, 4=7-0-13, 5=7-0-13
Max Horz 1=114(LC 5)
Max Uplift 4=-27(LC 8), 5=-98(LC 8)
Max Grav 1=61(LC 16), 4=142(LC 1), 5=370(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-287/148

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, 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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V5	Valley	1	1	I45820690
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:39 2021 Page 1
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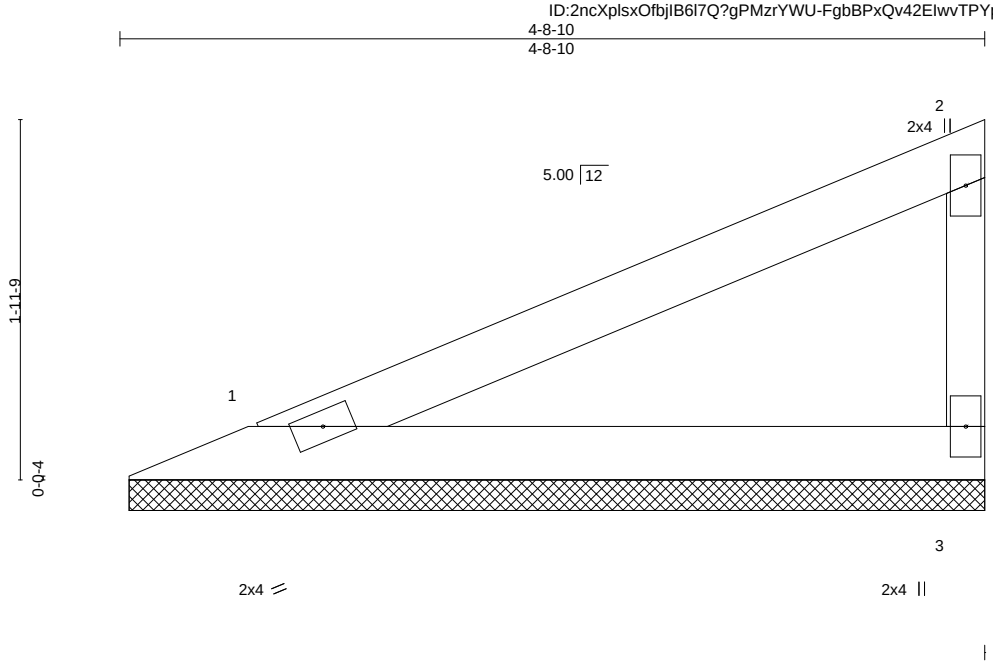

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

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

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

REACTIONS. (size) 1=4-8-0, 3=4-8-0
Max Horz 1=71(LC 5)
Max Uplift 1=-25(LC 8), 3=-40(LC 8)
Max Grav 1=174(LC 1), 3=174(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.

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V6	Valley	1	1	I45820691
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:39 2021 Page 1
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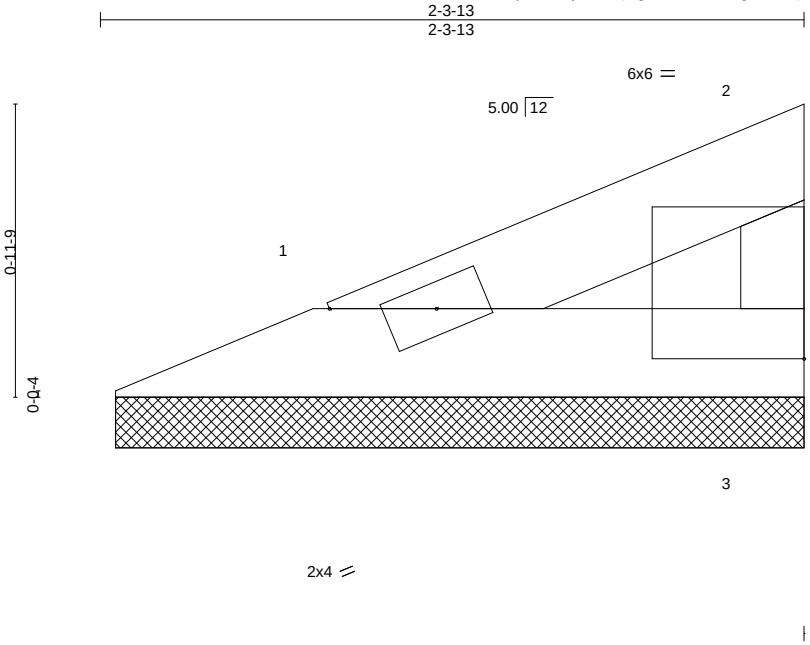


Scale = 1:7.6

Plate Offsets (X,Y)-- [2:Edge,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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 5 lb	FT = 10%

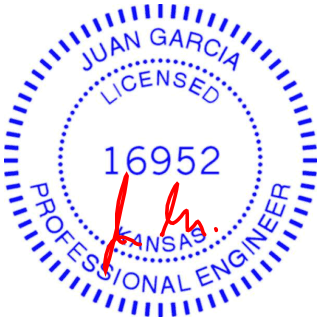
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-3-3, 3=2-3-3
Max Horz 1=27(LC 5)
Max Uplift 1=-10(LC 8), 3=-15(LC 8)
Max Grav 1=66(LC 1), 3=66(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.



April 26,2021

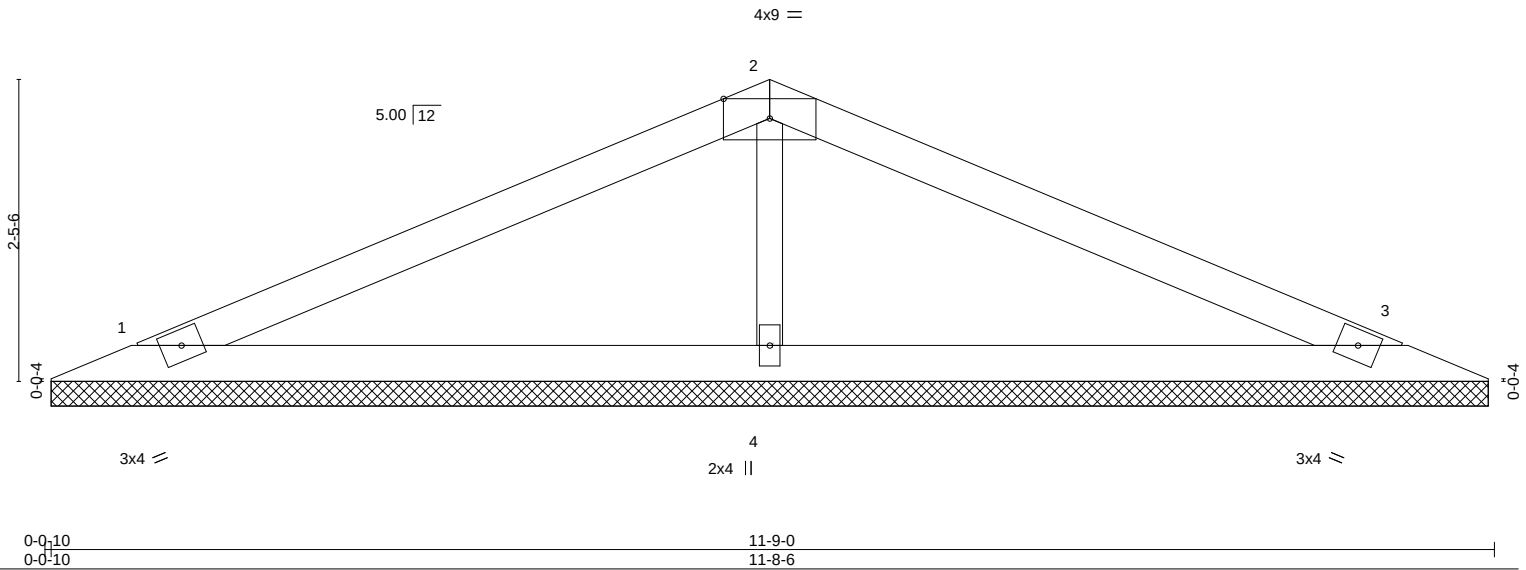
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V7	Valley	1	1	I45820692
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:40 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-js8ZcGQXrLM9Y32c6W_q4L1dKKQvJGgtTCvJ?6zMuwT

5-10-8 11-9-0
5-10-8 5-10-8

Scale = 1:18.7



0-0-10 11-9-0
0-0-10 11-8-6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 27 lb	FT = 10%

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

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

REACTIONS. (size) 1=11-7-13, 3=11-7-13, 4=11-7-13
Max Horz 1=-38(LC 9)
Max Uplift 1=-44(LC 8), 3=-50(LC 9), 4=-32(LC 8)
Max Grav 1=211(LC 21), 3=211(LC 22), 4=507(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-353/93

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 109 MN
210533	V8	Valley	1	1	I45820693
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Apr 20 2021 MiTek Industries, Inc. Mon Apr 26 08:38:41 2021 Page 1
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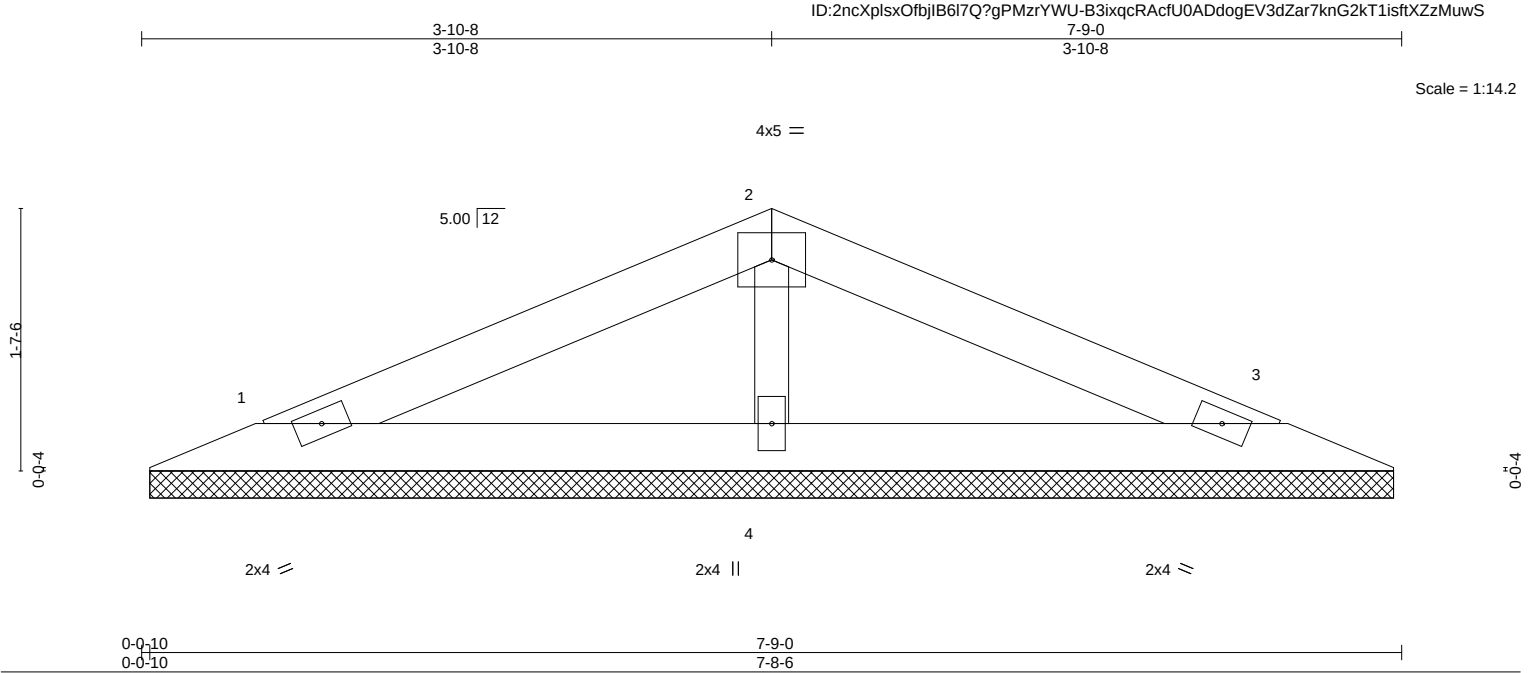


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 17 lb	FT = 10%

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

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

REACTIONS. (size) 1=7-7-13, 3=7-7-13, 4=7-7-13
Max Horz 1=-23(LC 9)
Max Uplift 1=-33(LC 8), 3=-37(LC 9), 4=-7(LC 8)
Max Grav 1=142(LC 1), 3=142(LC 1), 4=278(LC 1)

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

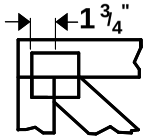
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed;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

April 26,2021

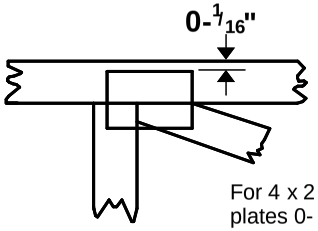
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

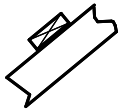
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

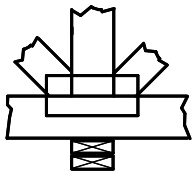
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

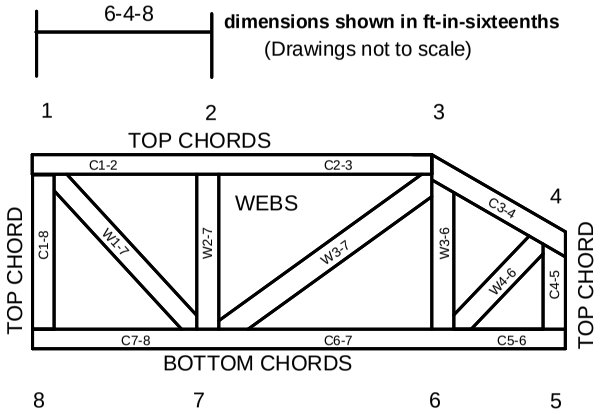


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.