RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/07/2021

RE: 210321
Lot 103 MN

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

Site Information:

Customer: Project Name: 210321
Lot/Block: Model:
Address: Subdivision:
City: State:

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

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

This package includes 87 individual, dated Truss Design Drawings and 0 Additional Drawings.

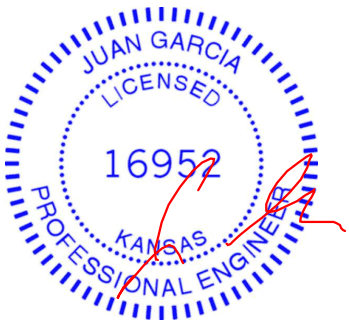
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45097618	A1	3/9/2021	21	I45097638	C3	3/9/2021
2	I45097619	A2	3/9/2021	22	I45097639	C4	3/9/2021
3	I45097620	A3	3/9/2021	23	I45097640	C5	3/9/2021
4	I45097621	A4	3/9/2021	24	I45097641	D1	3/9/2021
5	I45097622	B1	3/9/2021	25	I45097642	D2	3/9/2021
6	I45097623	B2	3/9/2021	26	I45097643	D3	3/9/2021
7	I45097624	B3	3/9/2021	27	I45097644	D4	3/9/2021
8	I45097625	B4	3/9/2021	28	I45097645	D5	3/9/2021
9	I45097626	B5	3/9/2021	29	I45097646	D6	3/9/2021
10	I45097627	B6	3/9/2021	30	I45097647	D7	3/9/2021
11	I45097628	B7	3/9/2021	31	I45097648	D8	3/9/2021
12	I45097629	B8	3/9/2021	32	I45097649	D9	3/9/2021
13	I45097630	B9	3/9/2021	33	I45097650	E5	3/9/2021
14	I45097631	B10	3/9/2021	34	I45097651	E6	3/9/2021
15	I45097632	B11	3/9/2021	35	I45097652	E7	3/9/2021
16	I45097633	B12	3/9/2021	36	I45097653	E8	3/9/2021
17	I45097634	B13	3/9/2021	37	I45097654	J1	3/9/2021
18	I45097635	B14	3/9/2021	38	I45097655	J2	3/9/2021
19	I45097636	C1	3/9/2021	39	I45097656	J3	3/9/2021
20	I45097637	C2	3/9/2021	40	I45097657	J4	3/9/2021

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

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943



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

March 09, 2021

Garcia, Juan

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No.	Seal#	Truss Name	Date
41	I45097658	J5	3/9/2021
42	I45097659	J6	3/9/2021
43	I45097660	J7	3/9/2021
44	I45097661	J8	3/9/2021
45	I45097662	J9	3/9/2021
46	I45097663	J10	3/9/2021
47	I45097664	J11	3/9/2021
48	I45097665	J12	3/9/2021
49	I45097666	J13	3/9/2021
50	I45097667	J14	3/9/2021
51	I45097668	J15	3/9/2021
52	I45097669	J16	3/9/2021
53	I45097670	J17	3/9/2021
54	I45097671	J18	3/9/2021
55	I45097672	J19	3/9/2021
56	I45097673	J20A	3/9/2021
57	I45097674	J21	3/9/2021
58	I45097675	J22A	3/9/2021
59	I45097676	J23	3/9/2021
60	I45097677	J24	3/9/2021
61	I45097678	J25	3/9/2021
62	I45097679	J26	3/9/2021
63	I45097680	J27	3/9/2021
64	I45097681	J28	3/9/2021
65	I45097682	J29	3/9/2021
66	I45097683	J30	3/9/2021
67	I45097684	J31	3/9/2021
68	I45097685	J32	3/9/2021
69	I45097686	J33	3/9/2021
70	I45097687	J34	3/9/2021
71	I45097688	J35	3/9/2021
72	I45097689	J36	3/9/2021
73	I45097690	LAY1	3/9/2021
74	I45097691	LAY3	3/9/2021
75	I45097692	LAY4	3/9/2021
76	I45097693	LAY5	3/9/2021
77	I45097694	LAY6	3/9/2021
78	I45097695	LAY7	3/9/2021
79	I45097696	LAY8	3/9/2021
80	I45097697	V1	3/9/2021
81	I45097698	V2	3/9/2021
82	I45097699	V3	3/9/2021
83	I45097700	V4	3/9/2021
84	I45097701	V5	3/9/2021
85	I45097702	V8	3/9/2021
86	I45097703	V9	3/9/2021
87	I45097704	V10	3/9/2021

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

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7	I45097624	B3	3/9/2021	27	I45097644	D4	3/9/2021
8	I45097625	B4	3/9/2021	28	I45097645	D5	3/9/2021
9	I45097626	B5	3/9/2021	29	I45097646	D6	3/9/2021
10	I45097627	B6	3/9/2021	30	I45097647	D7	3/9/2021
11	I45097628	B7	3/9/2021	31	I45097648	D8	3/9/2021
12	I45097629	B8	3/9/2021	32	I45097649	D9	3/9/2021
13	I45097630	B9	3/9/2021	33	I45097650	E5	3/9/2021
14	I45097631	B10	3/9/2021	34	I45097651	E6	3/9/2021
15	I45097632	B11	3/9/2021	35	I45097652	E7	3/9/2021
16	I45097633	B12	3/9/2021	36	I45097653	E8	3/9/2021
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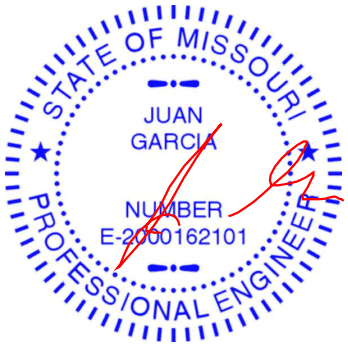
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193



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March 09, 2021

Garcia, Juan

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55	I45097672	J19	3/9/2021
56	I45097673	J20A	3/9/2021
57	I45097674	J21	3/9/2021
58	I45097675	J22A	3/9/2021
59	I45097676	J23	3/9/2021
60	I45097677	J24	3/9/2021
61	I45097678	J25	3/9/2021
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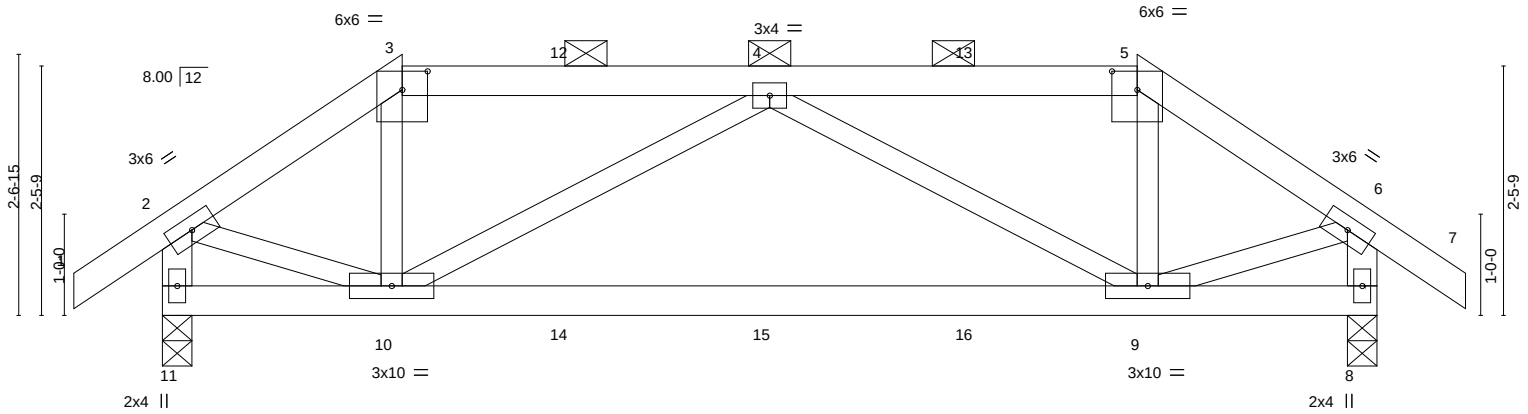
85	I45097702	V8	3/9/2021
86	I45097703	V9	3/9/2021
87	I45097704	V10	3/9/2021

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	A1	Hip Girder	1	1	I45097618
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:02 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-tpXFIrHH1KXY7JRewKNhkv748IDQ_azXpnCb_ozd_BZ

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

Scale = 1:22.8



2-4-7	9-7-9	12-0-0
2-4-7	7-3-2	2-4-7

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.09	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.20	9-10	>703	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 46 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-11,6-8: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 11=0-3-8, 8=0-3-8
Max Horz 11=85(LC 7)
Max Uplift 11=-195(LC 8), 8=-195(LC 9)
Max Grav 11=890(LC 1), 8=890(LC 1)

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

TOP CHORD	2-3=-959/177, 3-4=-757/160, 4-5=-757/160, 5-6=-959/178, 2-11=-931/165, 6-8=-931/165
BOT CHORD	9-10=-326/1124
WEBS	3-10=-29/315, 4-9=-445/225, 5-9=-28/315, 2-10=-125/818, 6-9=-128/818, 4-10=-445/225

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 195 lb uplift at joint 11 and 195 lb uplift at joint 8.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 90 lb down and 76 lb up at 4-0-0, and 90 lb down and 76 lb up at 6-0-0, and 90 lb down and 76 lb up at 8-0-0 on top chord, and 157 lb down and 87 lb up at 2-4-7, 39 lb down at 4-0-0, 39 lb down at 6-0-0, and 39 lb down at 8-0-0, and 157 lb down and 87 lb up at 9-7-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

March 9,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

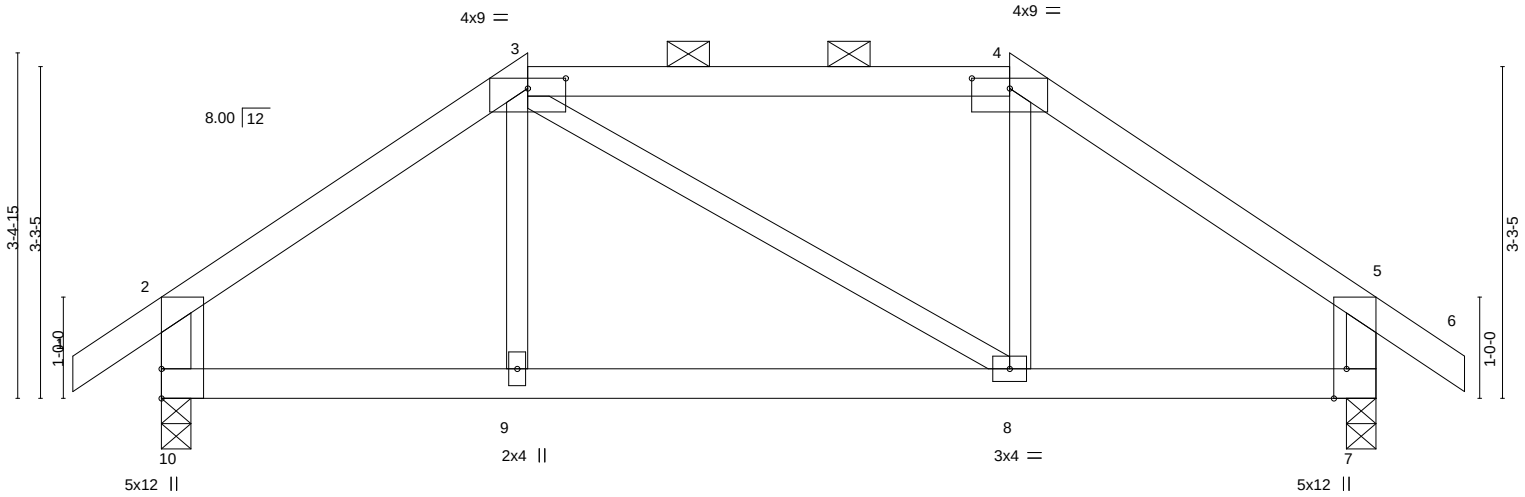
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-11=-20
   Concentrated Loads (lb)
   Vert: 10=-157(B) 4=-60(B) 9=-157(B) 12=-60(B) 13=-60(B) 14=-30(B) 15=-30(B) 16=-30(B)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	A2	Hip	1	1	I45097619
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:03 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-L?5dVAIvoefPkS0qU2uwH6gCVicWj5ug1Rx8WEzd_BY

-0-10-8 / 0-10-8 | 3-7-7 / 3-7-7 | 8-4-9 / 4-9-2 | 12-0-0 / 3-7-7 | 12-10-8 / 0-10-8

Scale = 1:22.8



3-7-7 / 3-7-7 | 8-4-9 / 4-9-2 | 12-0-0 / 3-7-7

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.05	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.11	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 42 lb	FT = 10%

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

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

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=-106(LC 6)
Max Uplift 10=-65(LC 8), 7=-65(LC 9)
Max Grav 10=598(LC 1), 7=598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-599/44, 3-4=-420/76, 4-5=-599/43, 2-10=-522/89, 5-7=-522/89
BOT CHORD 9-10=-69/421, 8-9=-70/420, 7-8=-20/421

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

March 9,2021

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Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
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					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:03 2021 Page 1
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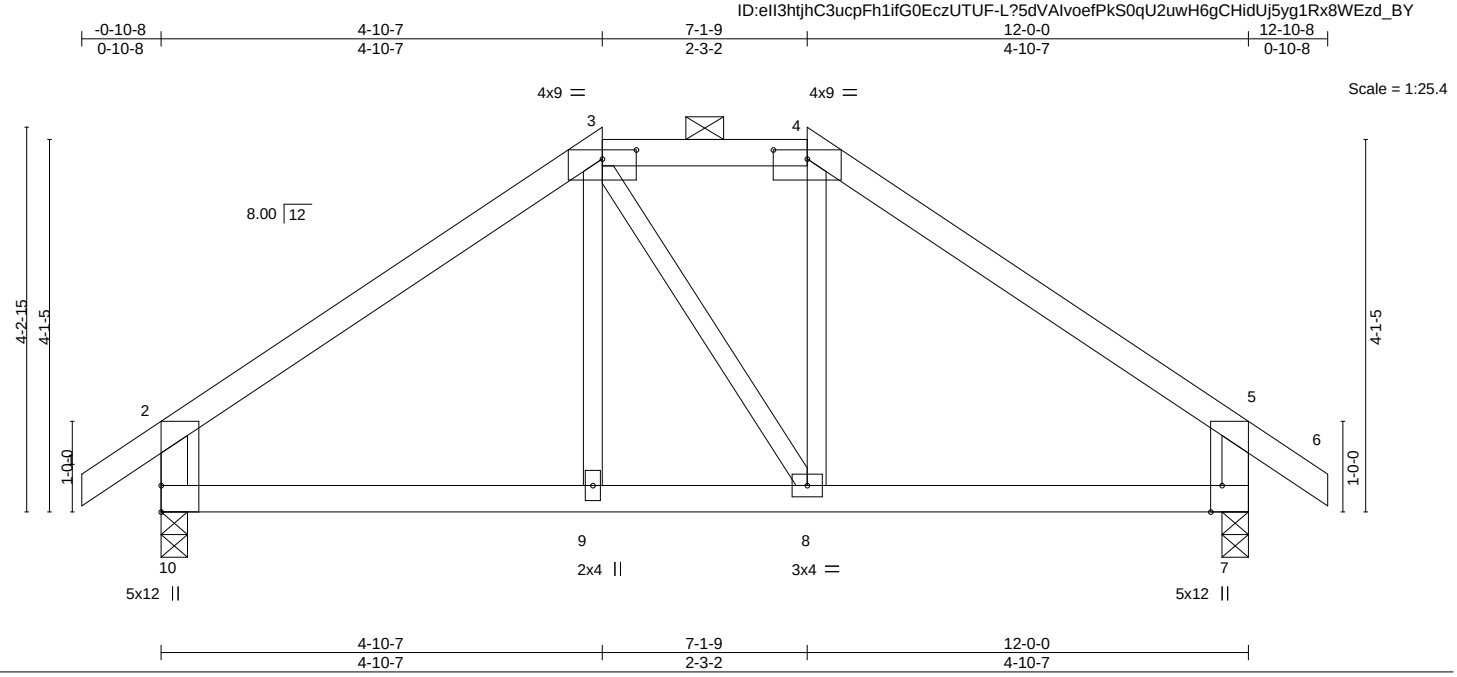

Plate Offsets (X,Y)-- [3:0-4-8,0-1-3], [4:0-4-8,0-1-3], [7:0-3-8,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.03	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.06	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	8	>999	240	Weight: 43 lb	FT = 10%

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

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

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=128(LC 7)
Max Uplift 10=-75(LC 8), 7=-75(LC 9)
Max Grav 10=598(LC 1), 7=598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-568/63, 3-4=-378/104, 4-5=-568/63, 2-10=-529/115, 5-7=-529/115
BOT CHORD 9-10=-38/379, 8-9=-39/378, 7-8=0/379

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 75 lb uplift at joint 10 and 75 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	A4	Common	1	1	I45097621

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:04 2021 Page 1

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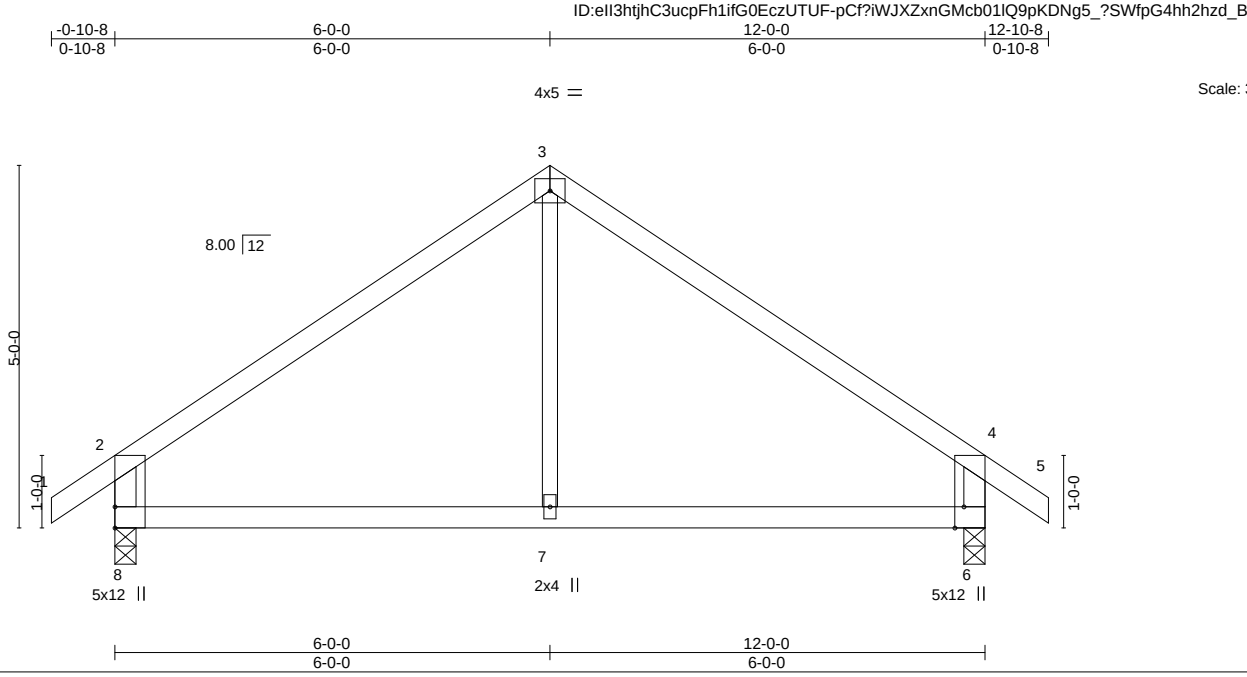


Plate Offsets (X,Y)-- [6:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.03	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.03	7-8	>999	240	Weight: 38 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=149(LC 7)
Max Uplift 8=-81(LC 8), 6=-81(LC 9)
Max Grav 8=598(LC 1), 6=598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-551/100, 3-4=-551/100, 2-8=-537/128, 4-6=-537/128
BOT CHORD 7-8=0/361, 6-7=0/361

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 81 lb uplift at joint 8 and 81 lb uplift at joint 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

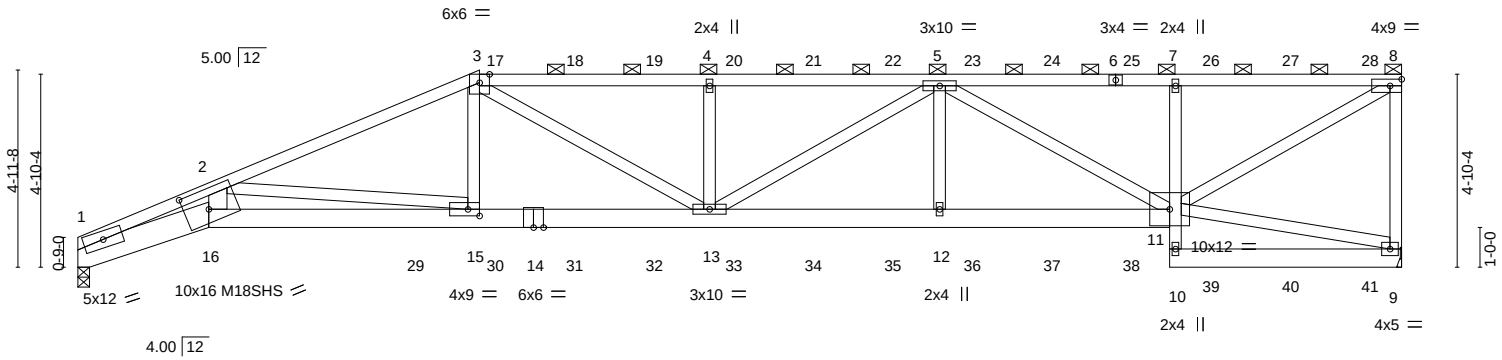
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B1	Half Hip Girder	1	2	I45097622
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:07 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-DnL8LYLQss9qD4JbjtzsRyrmaJvSfmjGy2vMf0zd_BU

3-3-8	10-1-3	15-10-10	21-8-1	27-5-8	33-3-8
3-3-8	6-9-11	5-9-7	5-9-7	5-9-7	5-10-0

Scale = 1:57.9



3-3-8	10-1-3	15-10-10	21-8-1	27-5-8	33-3-8
3-3-8	6-9-11	5-9-7	5-9-7	5-9-7	5-10-0

Plate Offsets (X,Y)-- [15:0-3-8,0-2-0], [16:0-7-4,0-6-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.30	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.54	15-16	>729	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.57	Horz(CT)	0.25	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25	15-16	>999	240	Weight: 366 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
1-16: 2x8 SP DSS, 7-10: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-16: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 1=0-3-8, 9=Mechanical
Max Horz 1=149(LC 26)
Max Uplift 1=-481(LC 8), 9=-529(LC 5)
Max Grav 1=2733(LC 1), 9=2963(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11894/2299, 2-3=-7024/1434, 3-4=-7130/1414, 4-5=-7127/1413, 5-7=-3985/757, 7-8=-3969/768, 8-9=-2808/602
BOT CHORD 1-16=-2242/10879, 15-16=-1979/9563, 13-15=-1387/6387, 12-13=-1281/6527, 11-12=-1281/6527, 7-11=-655/200
WEBS 2-16=-610/3172, 2-15=-3135/632, 3-15=-343/1618, 3-13=-116/1048, 4-13=-772/266, 5-13=-218/700, 5-12=0/531, 5-11=-2947/580, 8-11=-886/4635

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 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 481 lb uplift at joint 1 and 529 lb uplift at joint 9.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 114 lb down and 78 lb up at 10-5-7, 116 lb down and 78 lb up at 12-5-7, 116 lb down and 78 lb up at 14-5-7, 116 lb down and 78 lb up at 16-5-7, 116 lb down and 78 lb up at 18-5-7, 116 lb down and 78 lb up at 20-5-7, 116 lb down and 79 lb up at 22-5-7, 76 lb down and 24 lb up at 24-5-7, 76 lb down and 24 lb up at 26-5-7, 124 lb down and 94 lb up at 28-5-7, and 124 lb down and 94 lb up at 30-5-7, and 129 lb down and 91 lb up at 32-5-7 on top chord, and 731 lb down and 297 lb up at 8-5-7, 71 lb down and 21 lb up at 10-5-7, 71 lb down and 21 lb up at 12-5-7, 71 lb down and 21 lb up at 14-5-7, 71 lb down and 21 lb up at 16-5-7, 71 lb down and 21 lb up at 18-5-7, 71 lb down and 21 lb up at 20-5-7, 91 lb down at 22-5-7, 142 lb down and 73 lb up at 24-5-7, 142 lb down and 73 lb up at 26-5-7, 71 lb down at 28-5-7, and 71 lb down at 30-5-7, and 77 lb down at 32-5-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

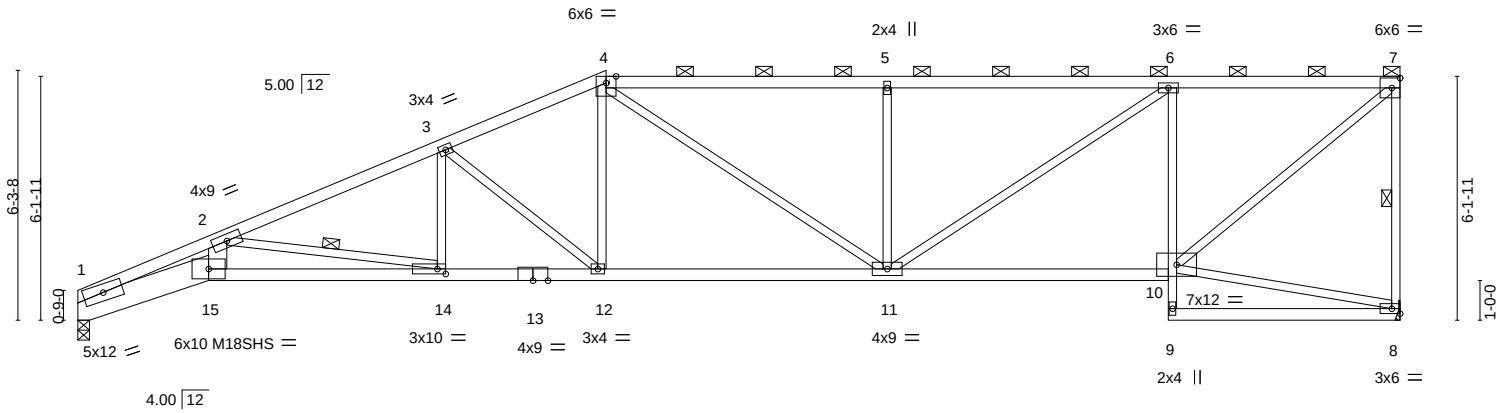
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-8=-70, 1-16=-20, 11-16=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 17=-93(F) 18=-93(F) 19=-93(F) 20=-93(F) 21=-93(F) 22=-93(F) 23=-100(F) 24=-24(F) 25=-24(F) 26=-114(F) 27=-114(F) 28=-125(F) 29=-731(F) 30=-71(F) 31=-71(F) 32=-71(F) 33=-71(F) 34=-71(F) 35=-71(F) 36=-75(F) 37=-142(F) 38=-142(F) 39=-50(F) 40=-50(F) 41=-53(F)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B2	Half Hip	1	1	I45097623
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:14 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-W7GnpxRpC02rZ9MxdrbVDRd0i7G_ovfIZe6DP6zd_BN

3-3-8	9-1-14	13-3-10	20-4-9	27-5-8	33-3-8
3-3-8	5-10-6	4-1-12	7-0-15	7-0-15	5-10-0

Scale = 1:58.0



3-3-8	9-1-14	13-3-10	20-4-9	27-5-8	33-3-8
3-3-8	5-10-6	4-1-12	7-0-15	7-0-15	5-10-0

Plate Offsets (X,Y)-- [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	0.72	Vert(LL)	-0.32	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.59	14-15	>668	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.30	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	14-15	>999	240	Weight: 137 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* 1-15: 2x8 SP DSS, 13-15: 2x4 SPF 2100F 1.8E, 6-9: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-15: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 1=0-3-8, 8=Mechanical
Max Horz 1=194(LC 7)
Max Uplift 1=-4(LC 8), 8=-70(LC 5)
Max Grav 1=1487(LC 1), 8=1487(LC 1)

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

TOP CHORD	1-2=-6369/165, 2-3=-3378/56, 3-4=-2686/79, 4-5=-2496/115, 5-6=-2493/113, 6-7=-1536/98, 7-8=-1430/106
BOT CHORD	1-15=-331/5810, 14-15=-304/5071, 12-14=-171/3082, 11-12=-150/2422, 10-11=-126/1546, 6-10=-1120/141
WEBS	2-15=-38/1835, 4-12=0/615, 4-11=-39/311, 5-11=-565/130, 6-11=-40/1144, 7-10=-118/1989, 3-12=-832/83, 3-14=0/409, 2-14=-2014/134

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1 and 70 lb uplift at joint 8.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

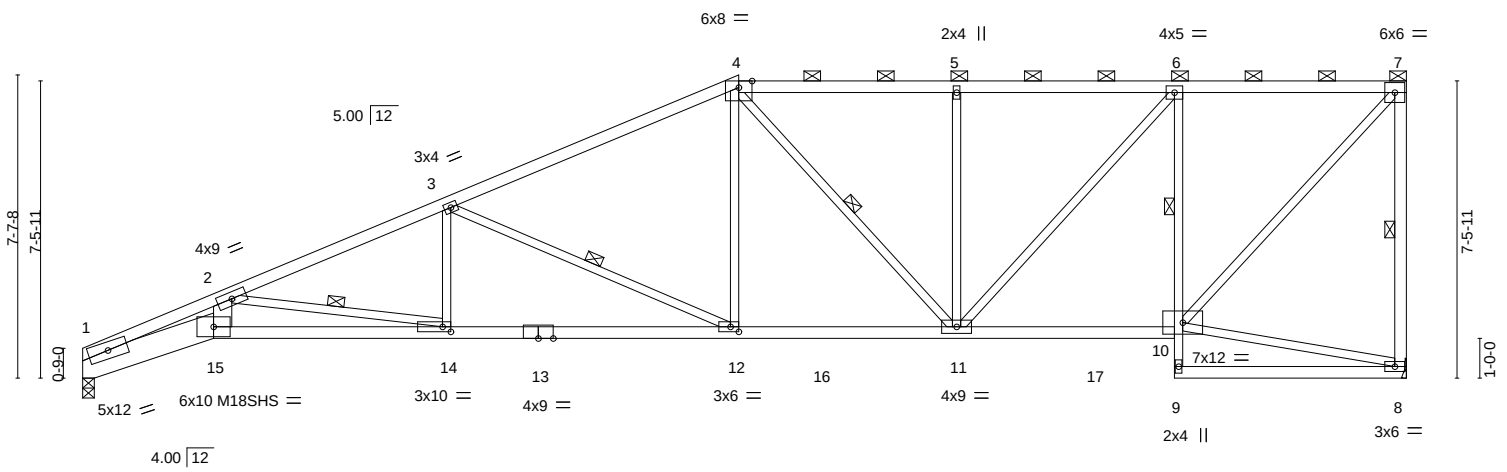
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B3	Half Hip	1	1	I45097624
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:15 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-_Jq90HRRzKAiBIw8BZ6kmeAB0XZWXLqRoIrnxYzd_BM

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

Scale = 1:57.9



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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.36	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.62	14-15	>635	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.30	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	14-15	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-7: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
1-15: 2x8 SP DSS, 13-15: 2x4 SPF 2100F 1.8E, 6-9: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-8: 2x4 SPF No.2, 2-15: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 1=0-3-8, 8=Mechanical
Max Horz 1=239(LC 7)
Max Uplift 1=-19(LC 8), 8=-68(LC 5)
Max Grav 1=1548(LC 2), 8=1569(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6574/158, 2-3=-3564/58, 3-4=-2377/61, 4-5=-1918/91, 5-6=-1916/90, 6-7=-1246/87, 7-8=-1470/107
BOT CHORD 1-15=-340/6003, 14-15=-309/5219, 12-14=-168/3273, 11-12=-135/2106, 10-11=-113/1254, 6-10=-1121/129
WEBS 2-15=-50/1956, 2-14=-1971/143, 3-14=0/539, 3-12=-1266/122, 4-12=0/765, 4-11=-288/52, 5-11=-424/95, 6-11=-30/993, 7-10=-101/1814

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1 and 68 lb uplift at joint 8.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B4	Half Hip	1	1	I45097625
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:16 2021 Page 1
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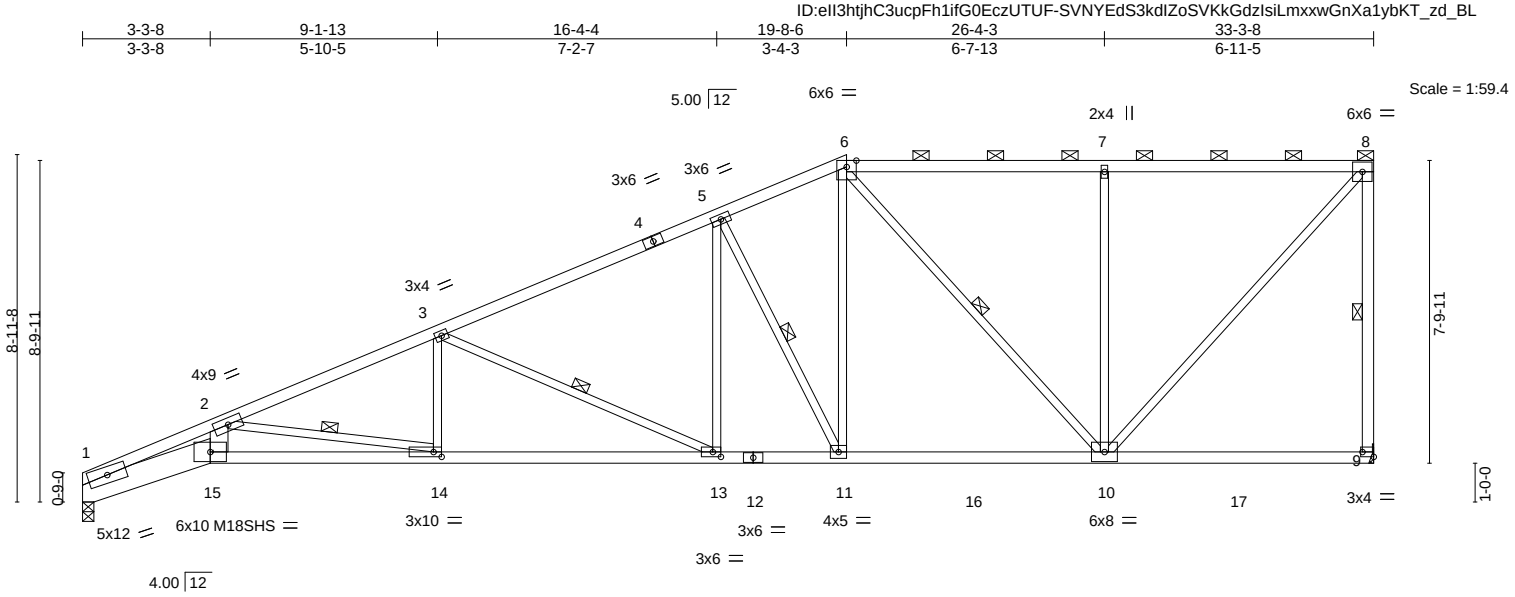


Plate Offsets (X,Y)-- [9:Edge,0-1-8], [13:0-2-8,0-1-8], [14:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.35	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.62	14-15	>643	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	14-15	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
1-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
8-9: 2x4 SPF No.2, 2-15: 2x6 SPF No.2

BRACING-

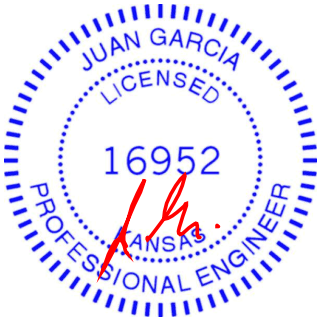
TOP CHORD Structural wood sheathing directly applied or 2-6-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-7 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-9, 2-14, 3-13, 5-11, 6-10

REACTIONS. (size) 9=Mechanical, 1=0-3-8
Max Horz 1=270(LC 5)
Max Uplift 9=-66(LC 5), 1=-30(LC 8)
Max Grav 9=1606(LC 2), 1=1547(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6571/255, 2-3=-3559/98, 3-5=-2361/73, 5-6=-1862/84, 6-7=-1199/87, 7-8=-1197/85, 8-9=-1469/95
BOT CHORD 1-15=-335/6001, 14-15=-304/5218, 13-14=-150/3267, 11-13=-119/2099, 10-11=-111/1677
WEBS 2-15=-48/1952, 2-14=-1976/184, 3-14=0/549, 3-13=-1283/118, 5-13=0/686, 5-11=-887/102, 6-11=-36/997, 6-10=-729/50, 7-10=-562/136, 8-10=-72/1760

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 9 and 30 lb uplift at joint 1.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B5	Half Hip	1	1	I45097626
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:17 2021 Page 1
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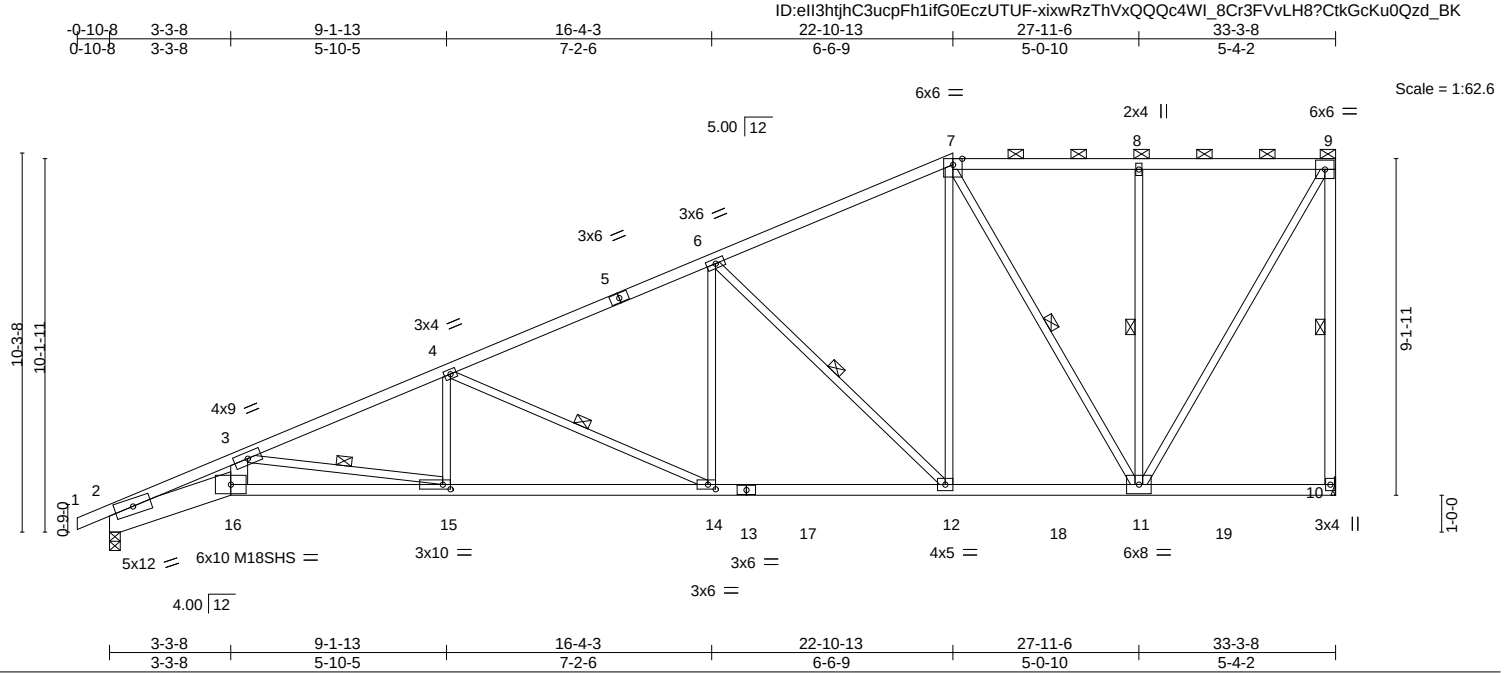


Plate Offsets (X,Y)-- [14:0-2-8,0-1-8], [15:0-2-8,0-1-8]

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	0.79	Vert(LL)	-0.36	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.63	15-16	>632	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.26	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	15-16	>999	240	Weight: 153 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
2-16: 2x8 SP DSS, 13-16: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
9-10: 2x4 SPF No.2, 3-16: 2x6 SPF No.2

BRACING-

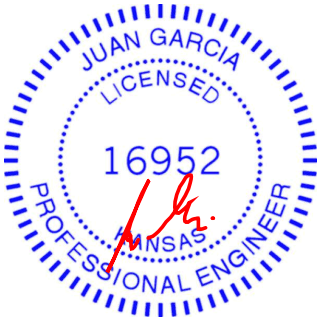
TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-10, 3-15, 4-14, 6-12, 7-11, 8-11

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=315(LC 5)
Max Uplift 10=-63(LC 5), 2=-48(LC 8)
Max Grav 10=1620(LC 2), 2=1618(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6600/305, 3-4=-3572/122, 4-6=-2412/96, 6-7=-1482/91, 7-8=-830/85, 8-9=-827/84, 9-10=-1510/80
BOT CHORD 2-16=-398/6025, 15-16=-360/5235, 14-15=-162/3277, 12-14=-117/2152, 11-12=-101/1287
WEBS 3-16=-66/1968, 3-15=-1982/200, 4-15=0/533, 4-14=-1236/117, 6-14=0/781, 6-12=-1188/121, 7-12=-15/1065, 7-11=-949/57, 8-11=-425/108, 9-11=-62/1603

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 10 and 48 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B6	Hip	1	1	I45097627
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:18 2021 Page 1
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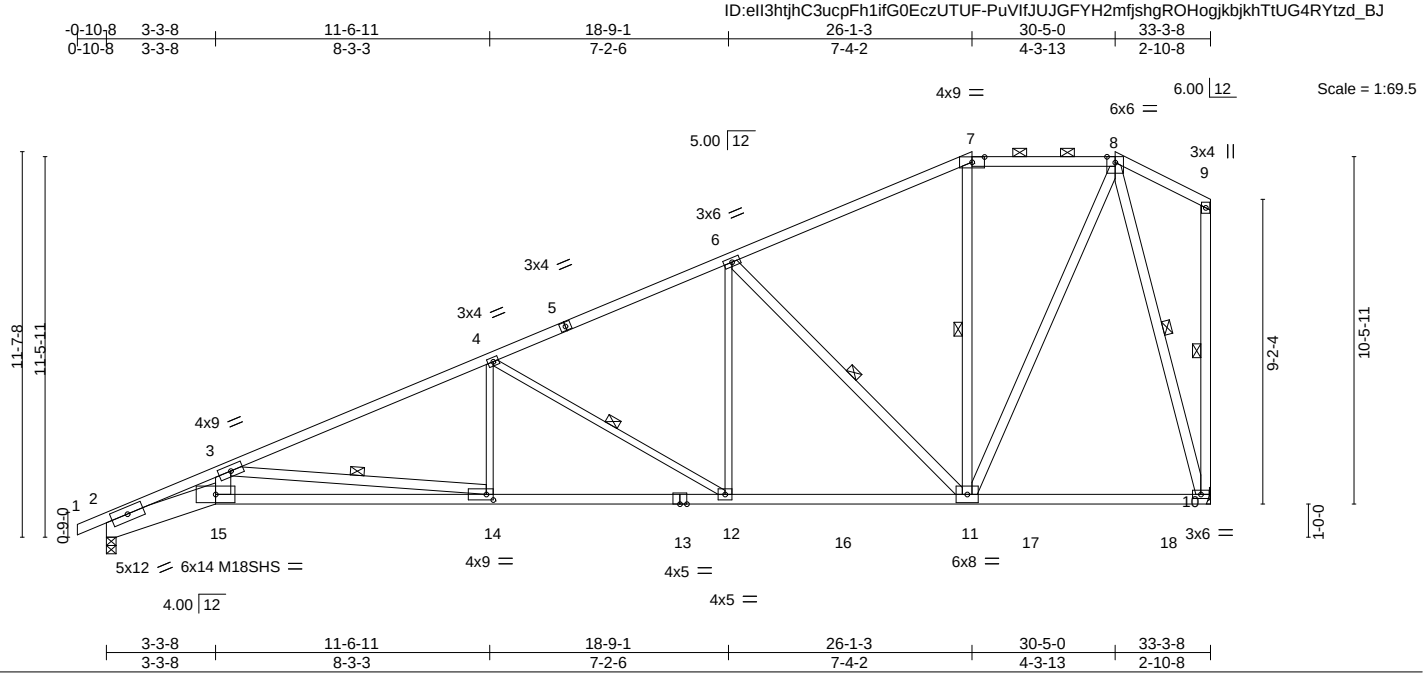

Plate Offsets (X,Y)-- [7:0-4-8,0-1-15], [14:0-2-8,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.47	14-15	>851	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.84	14-15	>470	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.30	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	14-15	>999	240	Weight: 170 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
2-15: 2x8 SP DSS, 13-15: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
3-15: 2x6 SPF No.2, 4-14,4-12,6-12: 2x3 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=Mechanical
Max Horz 2=335(LC 5)
Max Uplift 2=-52(LC 8), 10=-30(LC 8)
Max Grav 2=1612(LC 2), 10=1613(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6888/375, 3-4=-3171/120, 4-6=-2059/110, 6-7=-1071/100, 7-8=-910/117
BOT CHORD 2-15=-483/6319, 14-15=-447/5479, 12-14=-153/2877, 11-12=-98/1822, 10-11=-75/381
WEBS 3-15=-61/2106, 3-14=-2617/295, 4-14=0/568, 4-12=-1226/117, 6-12=0/883, 6-11=-1295/137, 8-11=-59/1333, 8-10=-1447/86

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 2 and 30 lb uplift at joint 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B7	Roof Special	2	1	I45097628
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:19 2021 Page 1
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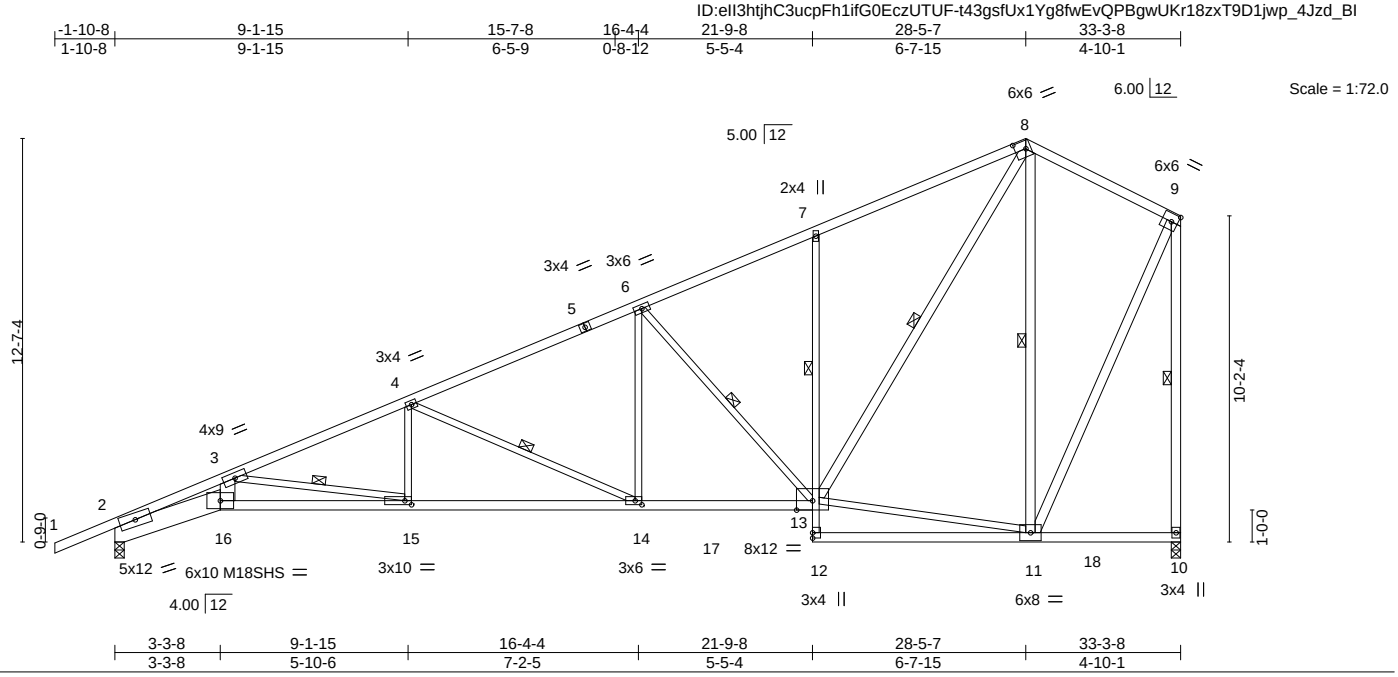

Plate Offsets (X,Y)-- [8:0-4-2,0-3-0], [14:0-2-8,0-1-8], [15:0-2-8,0-1-8]

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	0.81	Vert(LL)	-0.34	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.61	15-16	>653	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.27	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.29	15-16	>999	240	Weight: 179 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except*
	8-9: 2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	2-16: 2x8 SP DSS, 7-12: 2x3 SPF No.2, 10-12: 2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	3-16: 2x6 SPF No.2, 8-13,9-10,9-11,8-11: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=458(LC 8)
Max Uplift 2=-246(LC 8), 10=-272(LC 8)
Max Grav 2=1663(LC 2), 10=1579(LC 2)

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

TOP CHORD	2-3=-6414/1292, 3-4=-3510/538, 4-6=-2355/335, 6-7=-1541/251, 7-8=-1555/370,
	8-9=-631/147, 9-10=-1497/289
BOT CHORD	2-16=-1601/5848, 15-16=-1422/5090, 14-15=-816/3221, 13-14=-505/2096, 7-13=-447/228
WEBS	3-16=-422/1892, 3-15=-1892/613, 6-13=-1103/273, 11-13=-106/475, 8-13=-447/1668,
	9-11=-231/1231, 4-15=-6/521, 4-14=-1235/342, 6-14=-56/776, 8-11=-996/309

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) 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 246 lb uplift at joint 2 and 272 lb uplift at joint 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B8	Roof Special	1	1	I45097629
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:20 2021 Page 1
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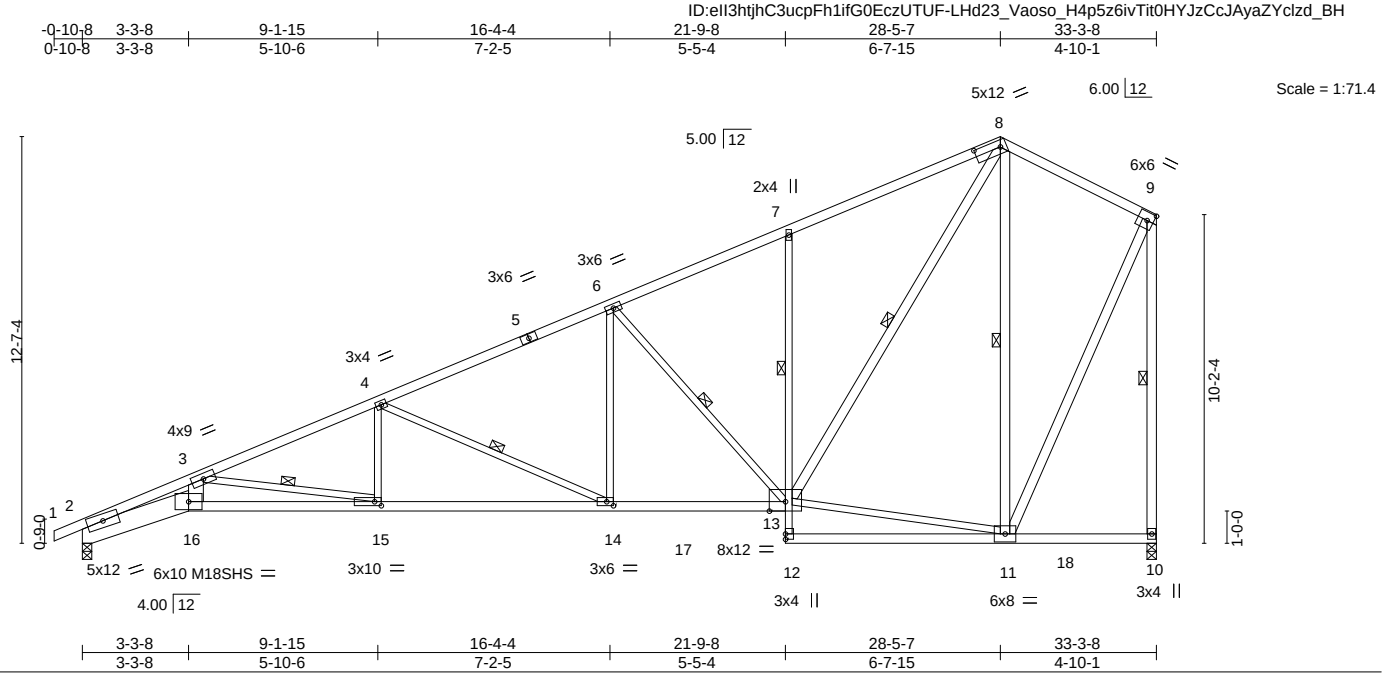

Plate Offsets (X,Y)-- [8:0-9-11,0-2-8], [14:0-2-8,0-1-8], [15:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.35	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.62	15-16	>641	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.28	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.30	15-16	>999	240	Weight: 178 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* 2-16: 2x8 SP DSS, 13-16: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-16: 2x6 SPF No.2, 8-13,8-11,9-10,9-11: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=444(LC 8)
Max Uplift 2=-222(LC 8), 10=-274(LC 8)
Max Grav 2=1603(LC 2), 10=1582(LC 2)

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

TOP CHORD	2-3=-6527/1341, 3-4=-3533/548, 4-6=-2362/338, 6-7=-1544/252, 7-8=-1560/372, 8-9=-632/147, 9-10=-1500/290
BOT CHORD	2-16=-1651/5957, 15-16=-1459/5175, 14-15=-826/3243, 13-14=-507/2102, 7-13=-449/229
WEBS	3-16=-446/1948, 3-15=-1957/641, 4-15=-10/531, 4-14=-1252/350, 6-14=-59/783, 6-13=-1106/274, 11-13=-107/475, 8-13=-449/1673, 8-11=-999/311, 9-11=-233/1234

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) 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 222 lb uplift at joint 2 and 274 lb uplift at joint 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B9	Hip	1	1	I45097630
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:21 2021 Page 1

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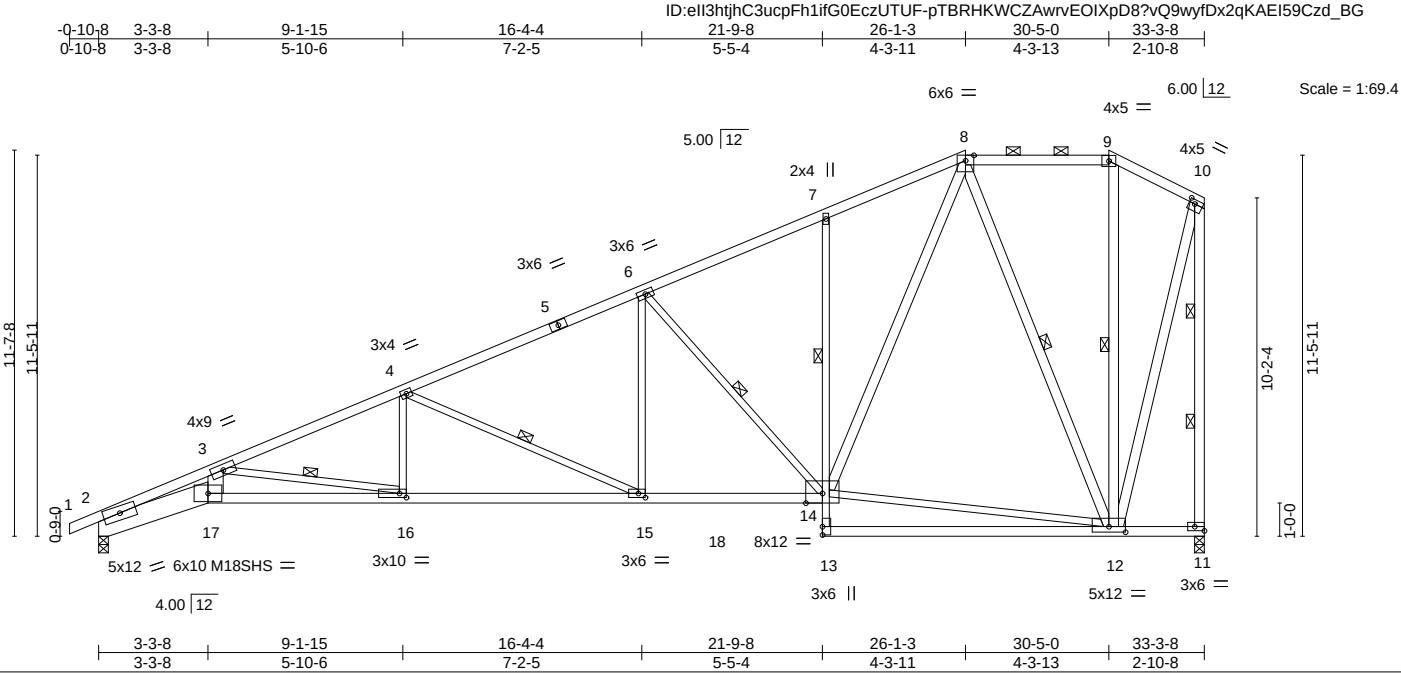

Plate Offsets (X,Y)-- [10:0-2-0,0-1-8], [11:Edge,0-1-8], [12:0-6-0,0-2-0], [15:0-2-8,0-1-8], [16:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.35	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.62	16-17	>643	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.28	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27	16-17	>999	240	Weight: 188 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
2-17: 2x8 SP DSS, 14-17: 2x4 SPF 2100F 1.8E, 7-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
3-17: 2x6 SPF No.2, 8-14,8-12,9-12,10-11,10-12: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.

BOT CHORD Rigid ceiling directly applied or 7-4-7 oc bracing. Except:
1 Row at midpt 7-14

WEBS 1 Row at midpt 3-16, 4-15, 6-14, 8-12, 9-12
2 Rows at 1/3 pts 10-11

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=453(LC 7)
Max Uplift 2=-250(LC 8), 11=-204(LC 8)
Max Grav 2=1601(LC 2), 11=1543(LC 2)

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

TOP CHORD 2-3=-6522/1186, 3-4=-3526/568, 4-6=-2360/386, 6-7=-1535/305, 7-8=-1504/387, 8-9=-389/158, 9-10=-478/179, 10-11=-1571/227

BOT CHORD 2-17=-1285/5952, 16-17=-1137/5171, 15-16=-626/3236, 14-15=-335/2101, 7-14=-311/169

WEBS 3-17=-335/1947, 3-16=-1959/517, 4-16=0/531, 4-15=-1246/320, 6-15=-46/782, 6-14=-1126/275, 12-14=-207/669, 8-14=-332/1502, 8-12=-1172/266, 10-12=-142/1382

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 250 lb uplift at joint 2 and 204 lb uplift at joint 11.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN	I45097631
210321	B10	Half Hip	1	1	Job Reference (optional)	

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ID:eII3htjhC3ucpFh1ifG0EczUTUF-hzvWYuM2dAlhrEuoGbU5_AN?7iDnO7bPBifvBSzd_BT

-0-10-8	6-9-0	13-11-7	17-10-8	21-9-8	22-10-13	27-11-6	33-3-8
0-10-8	6-9-0	7-2-7	3-11-1	3-11-0	1-1-5	5-0-10	5-4-2

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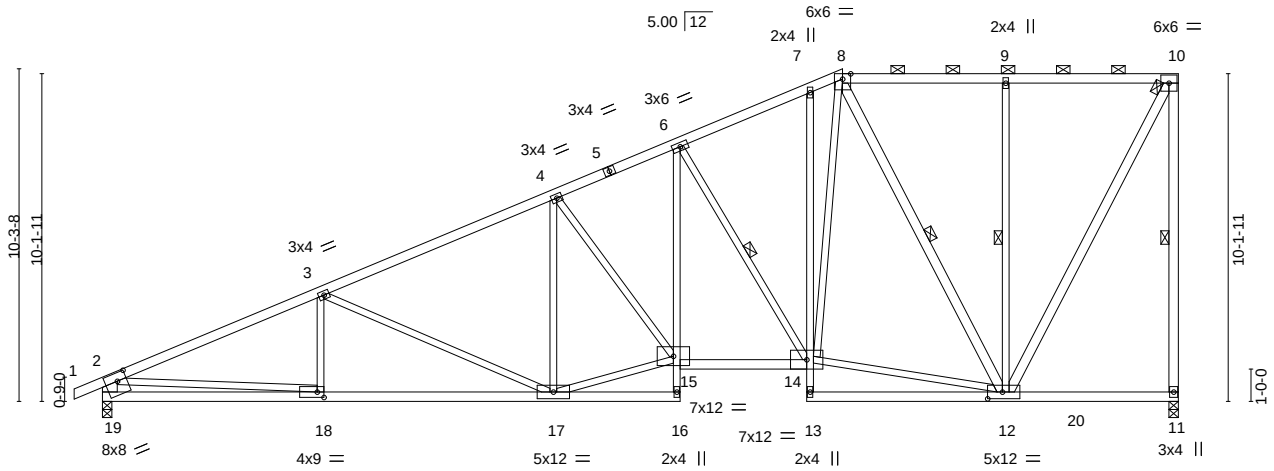

6-9-0	13-11-7	17-10-8	21-9-8	27-11-6	33-3-8
6-9-0	7-2-7	3-11-1	3-11-0	6-1-14	5-4-2

Plate Offsets (X,Y)-- [12:0-5-8,0-2-8], [18:0-2-8,0-2-0], [19:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.20	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.38	17-18	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	17-18	>999	240	Weight: 181 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 6-16,7-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 10-11,8-12,10-12: 2x4 SPF No.2, 2-19: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.

BOT CHORD Rigid ceiling directly applied or 7-5-3 oc bracing.

WEBS 1 Row at midpt 10-11, 6-14, 8-12, 9-12

REACTIONS. (size) 11=0-3-8, 19=0-3-8
Max Horz 19=388(LC 8)
Max Uplift 11=-230(LC 4), 19=-214(LC 8)
Max Grav 11=1566(LC 2), 19=1589(LC 2)

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

TOP CHORD 2-3=-2823/340, 3-4=-2245/276, 4-6=-2089/319, 6-7=-1482/229, 7-8=-1363/256, 8-9=-716/102, 9-10=-718/103, 10-11=-1460/253, 2-19=-1488/248

BOT CHORD 18-19=-496/648, 17-18=-628/2536, 6-15=-180/956, 14-15=-395/1882

WEBS 3-17=-590/200, 15-17=-444/2050, 6-14=-1074/281, 12-14=-215/1143, 8-14=-277/1111, 8-12=-1059/263, 9-12=-416/173, 10-12=-217/1512, 2-18=-132/1894

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 230 lb uplift at joint 11 and 214 lb uplift at joint 19.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B11	Half Hip	1	1	I45097632
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:09 2021 Page 1

ID:eIl3htjhC3ucpFh1ifG0EczUTUF-A9SumENgOUQYTNT_qI?KWNw8z6ao7a4YQMOSkuzd_BS

-0-10-8 2-3-8 9-1-13 16-4-5 19-8-6 21-9-8 27-5-4 33-3-8

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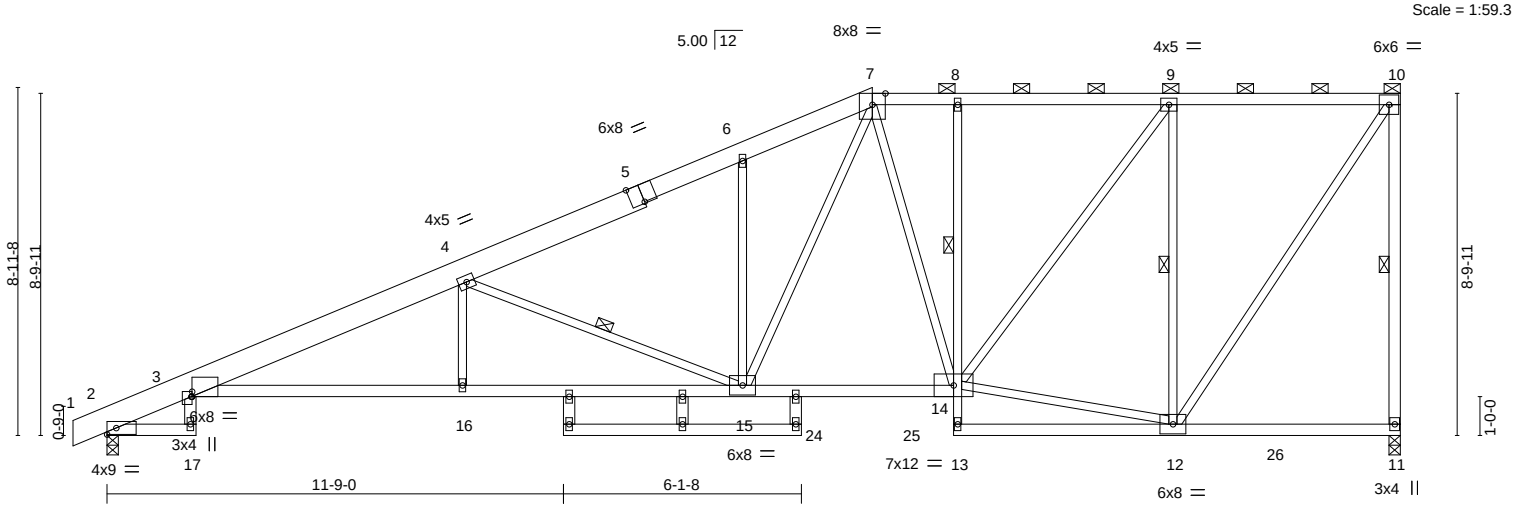

2-3-8 9-1-13 13-10-12 19-8-6 21-9-8 27-5-4 33-3-8

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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.35	3-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.62	3-16	>637	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.33	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25	3-16	>999	240	Weight: 193 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
7-10: 2x4 SPF No.2, 1-5: 2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except*
3-14: 2x4 SPF 2100F 1.8E, 8-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
10-11,18-20,19-21,22-23: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-11 max.): 7-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
1 Row at midpt 8-14

WEBS 1 Row at midpt 10-11, 4-15, 9-12

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=374(LC 5)
Max Uplift 11=-245(LC 5), 2=-229(LC 8)
Max Grav 11=1592(LC 2), 2=1607(LC 2)

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

TOP CHORD 2-3=-935/20, 3-4=-3743/519, 4-6=-2411/326, 6-7=-2306/405, 7-8=-1559/272, 8-9=-1555/272, 9-10=-904/212, 10-11=-1474/262

BOT CHORD 3-16=-574/3551, 15-16=-573/3550, 14-15=-319/1646, 8-14=-302/129

WEBS 4-16=0/281, 4-15=-1567/382, 7-15=-262/1143, 7-14=-314/129, 12-14=-200/882, 9-14=-169/1097, 9-12=-1286/334, 10-12=-245/1606

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 11 and 229 lb uplift at joint 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B12	Half Hip	1	1	I45097633
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:10 2021 Page 1
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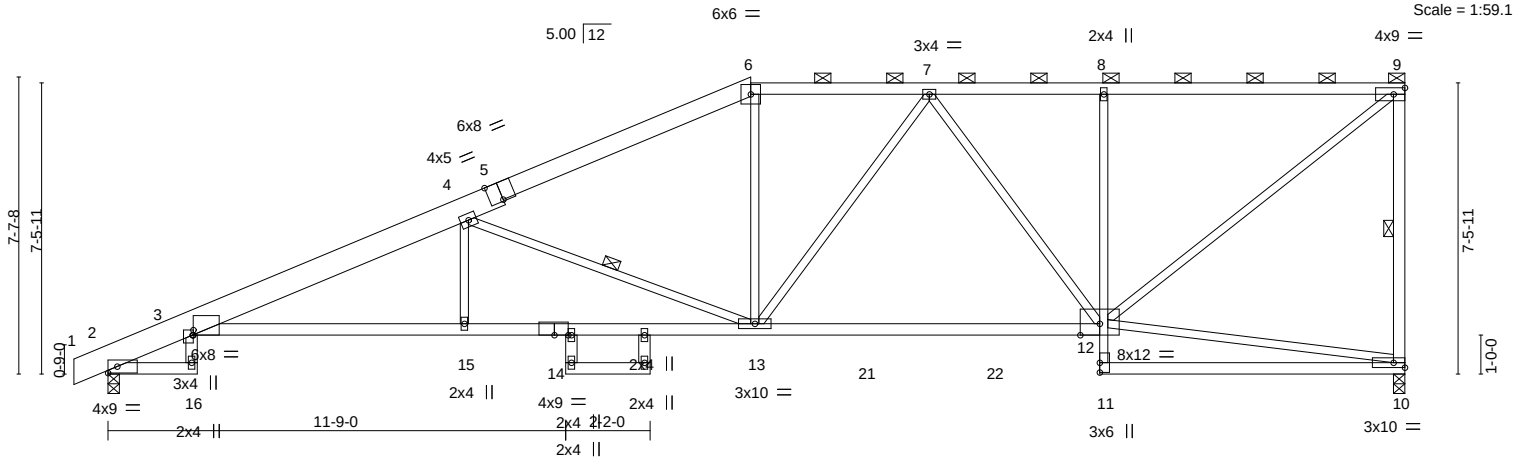
-0-10-8 2-3-8 9-1-13 16-6-0 21-1-0 25-5-8 33-3-8
0-10-8 2-3-8 6-10-5 7-4-4 4-7-0 4-4-8 7-10-0

Scale = 1:59.1



2-3-8 9-1-13 16-6-0 25-5-8 33-3-8
2-3-8 6-10-5 7-4-4 8-11-8 7-10-0

Plate Offsets (X,Y)-- [3:0-1-9,0-0-3], [3:0-0-3,0-0-0], [5:0-4-0,Edge], [14:0-4-4,0-0-0]

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	0.78	Vert(LL)	-0.36	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.64	12-13	>621	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.34	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	3-15	>999	240	Weight: 164 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
6-9: 2x4 SPF 2100F 1.8E, 1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-14,12-14: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
9-10,17-19,18-20: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-4 max.): 6-9.
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 9-10, 4-13

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=315(LC 5)
Max Uplift 10=-255(LC 5), 2=-210(LC 8)
Max Grav 10=1557(LC 2), 2=1607(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-899/39, 3-4=-3678/455, 4-6=-2413/318, 6-7=-2128/317, 7-8=-1540/290, 8-9=-1537/293, 9-10=-1429/304
BOT CHORD 3-15=-551/3481, 13-15=-550/3480, 12-13=-384/1916, 8-12=-505/218
WEBS 4-15=0/264, 4-13=-1475/389, 6-13=-2/619, 7-13=-69/360, 7-12=-641/120, 9-12=-339/1952

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 255 lb uplift at joint 10 and 210 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	B13	Half Hip	1	1	I45097634
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:11 2021 Page 1
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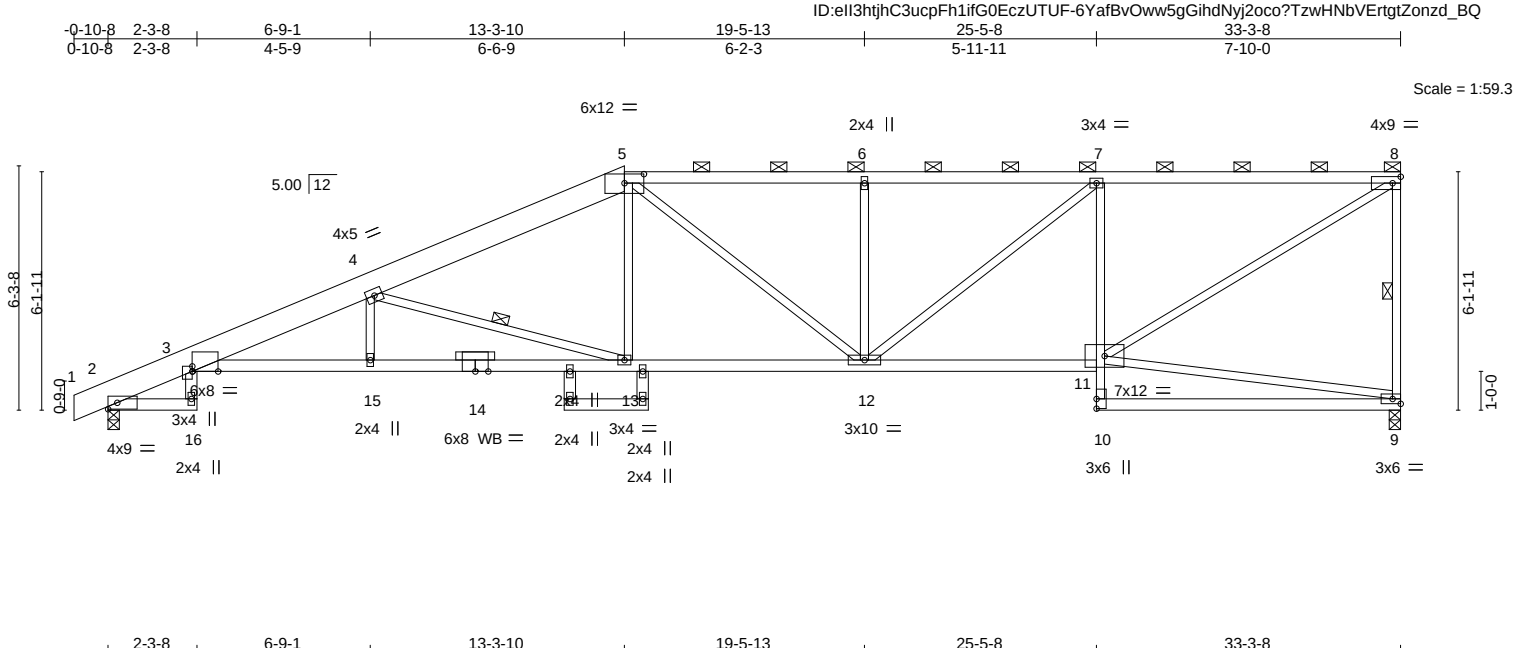

Plate Offsets (X,Y)-- [3:0-1-9,0-0-1], [3:0-7-15,0-0-0], [5:0-6-0,0-2-13]

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	0.88	Vert(LL)	-0.27	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.51	13-15	>776	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.30	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.21	13-15	>999	240	Weight: 163 lb	FT = 10%

LUMBER-

TOP CHORD	2x8 SP DSS *Except*
	5-8: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except*
	3-14,11-14: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	17-19,18-20: 2x4 SPF No.2
OTHERS	2x3 SPF No.2

BRACING-

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

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=258(LC 5)
Max Uplift 9=-264(LC 5), 2=-184(LC 4)
Max Grav 9=1486(LC 1), 2=1561(LC 1)

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

TOP CHORD	2-3=-768/59, 3-4=-4023/473, 4-5=-2765/405, 5-6=-2508/443, 6-7=-2507/443, 7-8=-1932/381, 8-9=-1406/314
BOT CHORD	3-15=-646/3861, 13-15=-644/3859, 12-13=-459/2478, 11-12=-415/1933, 7-11=-1002/289
WEBS	4-13=-1461/338, 5-13=-26/575, 6-12=-408/173, 7-12=-94/738, 8-11=-433/2248

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 264 lb uplift at joint 9 and 184 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN	
210321	B14	Half Hip Girder	1	2	Job Reference (optional)	I45097635

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:13 2021 Page 1
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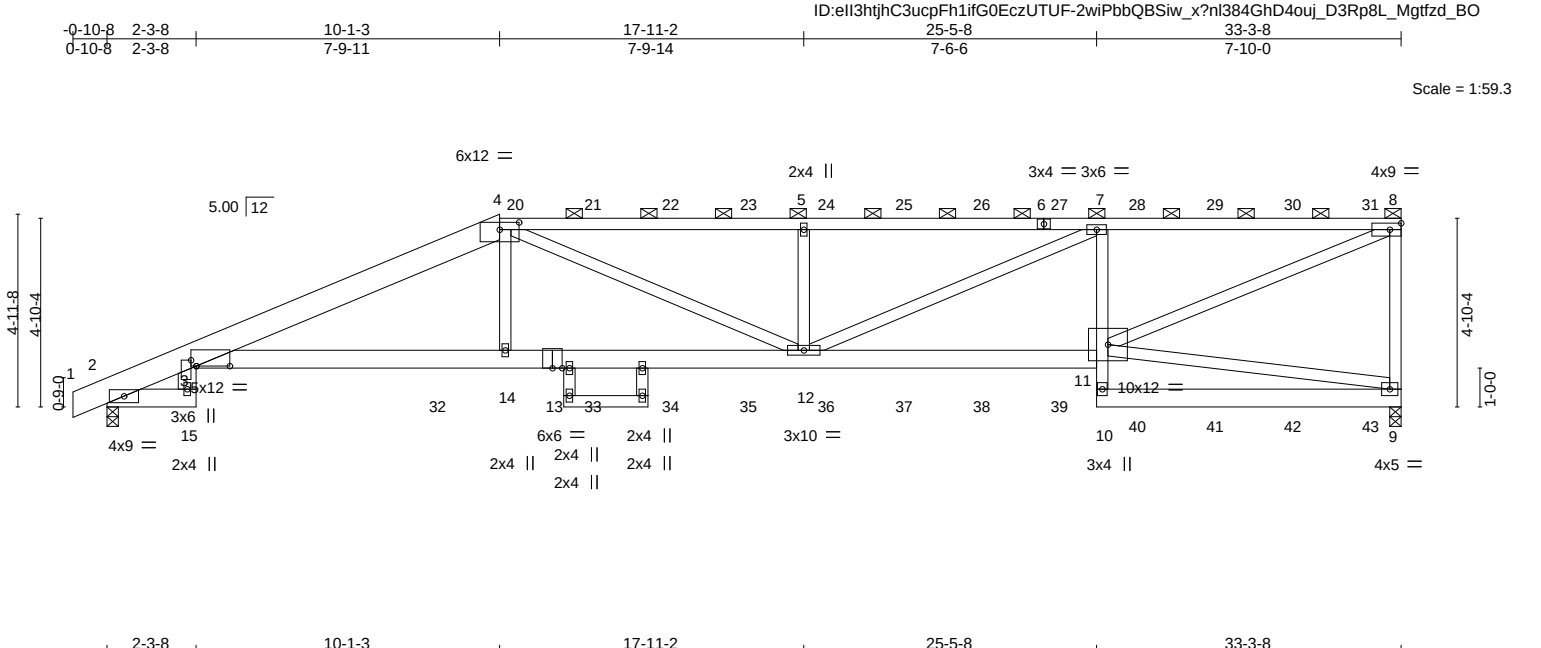

Plate Offsets (X,Y)-- [3:0-1-13,0-1-10], [3:0-10-6,0-0-0], [4:0-6-0,0-2-4]

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	0.92	Vert(LL)	-0.39	3-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.71	3-14	>558	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.37	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.32	3-14	>999	240	Weight: 393 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 1-4: 2x8 SP DSS
BOT CHORD 2x6 SP 2400F 2.0E *Except* 7-10,16-17: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 3-15: 2x6 SPF No.2

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

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=153(LC 5)
Max Uplift 9=-470(LC 5), 2=-376(LC 8)
Max Grav 9=2972(LC 1), 2=2804(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1658/217, 3-4=-7028/1029, 4-5=-7184/1128, 5-7=-7181/1129, 7-8=-5479/943, 8-9=-2773/570
BOT CHORD 3-14=-1072/6657, 12-14=-1071/6699, 11-12=-969/5526, 10-11=0/299, 7-11=-1742/436
WEBS 3-15=-72/531, 4-14=-49/1068, 4-12=-149/626, 5-12=-815/249, 7-12=-233/1828, 8-11=-1017/5879

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 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
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 470 lb uplift at joint 9 and 376 lb uplift at joint 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 115 lb down and 81 lb up at 10-5-7, 111 lb down and 63 lb up at 12-5-7, 111 lb down and 63 lb up at 14-5-7, 111 lb down and 63 lb up at 16-5-7, 111 lb down and 63 lb up at 18-5-7, 111 lb down and 63 lb up at 20-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 24-5-7, 125 lb down and 94 lb up at 26-5-7, 125 lb down and 94 lb up at 28-5-7, and 125 lb down and 94 lb up at 30-5-7, and 131 lb down and 92 lb up at 32-5-7 on top chord, and 107 lb down at 12-5-7, 726 lb down and 272 lb up at 8-5-7, 82 lb down at 10-5-7, 80 lb down and 34 lb up at 14-5-7, 80 lb down and 34 lb up at 16-5-7, 80 lb down and 34 lb up at 18-5-7, 80 lb down and 34 lb up at 20-5-7, 80 lb down and 34 lb up at 22-5-7, 80 lb down and 34 lb up at 24-5-7, 72 lb down at 26-5-7, 72 lb down at 28-5-7, and 72 lb down at 30-5-7, and 78 lb down at 32-5-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-8=-70, 2-15=-20, 3-11=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 14=-69(B) 20=-102(B) 21=-81(B) 22=-81(B) 23=-81(B) 24=-81(B) 25=-81(B) 26=-81(B) 27=-81(B) 28=-118(B) 29=-118(B) 30=-118(B) 31=-129(B) 32=-726(B) 33=-107(B) 34=-80(B) 35=-80(B) 36=-80(B) 37=-80(B) 38=-80(B) 39=-80(B) 40=-52(B) 41=-52(B) 42=-52(B) 43=-55(B)
2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-57, 4-8=-58, 2-15=-20, 3-11=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 14=-63(B) 20=-85(B) 21=-70(B) 22=-70(B) 23=-70(B) 24=-70(B) 25=-70(B) 26=-70(B) 27=-70(B) 28=-98(B) 29=-98(B) 30=-98(B) 31=-106(B) 32=-617(B) 33=-107(B) 34=-69(B) 35=-69(B) 36=-69(B) 37=-69(B) 38=-69(B) 39=-69(B) 40=-49(B) 41=-49(B) 42=-49(B) 43=-52(B)
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-20, 4-8=-20, 2-15=-40, 3-11=-40, 9-10=-40
   Concentrated Loads (lb)
   Vert: 14=-82(B) 20=-44(B) 21=-55(B) 22=-55(B) 23=-55(B) 24=-55(B) 25=-55(B) 26=-55(B) 27=-55(B) 28=-41(B) 29=-41(B) 30=-41(B) 31=-44(B) 32=-417(B) 33=-107(B) 34=-55(B) 35=-55(B) 36=-55(B) 37=-55(B) 38=-55(B) 39=-55(B) 40=-72(B) 41=-72(B) 42=-72(B) 43=-78(B)
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=22, 2-4=9, 4-8=16, 2-15=-12, 3-11=-12, 9-10=-12
   Horz: 1-2=-34, 2-4=-21, 8-9=18
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 14=-27(B) 20=53(B) 21=33(B) 22=33(B) 23=33(B) 24=33(B) 25=33(B) 26=33(B) 27=33(B) 28=63(B) 29=63(B) 30=63(B) 31=66(B) 32=264(B) 33=-107(B) 34=26(B) 35=26(B) 36=26(B) 37=26(B) 38=26(B) 39=26(B) 40=-23(B) 41=-23(B) 42=-23(B) 43=-25(B)
5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=3, 2-4=9, 4-8=16, 2-15=-12, 3-11=-12, 9-10=-12
   Horz: 1-2=-15, 2-4=-21, 8-9=-12
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 14=-27(B) 20=53(B) 21=33(B) 22=33(B) 23=33(B) 24=33(B) 25=33(B) 26=33(B) 27=33(B) 28=63(B) 29=63(B) 30=63(B) 31=66(B) 32=264(B) 33=-107(B) 34=26(B) 35=26(B) 36=26(B) 37=26(B) 38=26(B) 39=26(B) 40=-23(B) 41=-23(B) 42=-23(B) 43=-25(B)
6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-5, 2-4=-11, 4-8=-3, 2-15=-20, 3-11=-20, 9-10=-20
   Horz: 1-2=-15, 2-4=-9, 8-9=6
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 14=-19(B) 20=73(B) 21=52(B) 22=52(B) 23=52(B) 24=52(B) 25=52(B) 26=52(B) 27=52(B) 28=83(B) 29=83(B) 30=83(B) 31=83(B) 32=272(B) 33=-107(B) 34=34(B) 35=34(B) 36=34(B) 37=34(B) 38=34(B) 39=34(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)
7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-5, 2-4=-11, 4-8=-3, 2-15=-20, 3-11=-20, 9-10=-20
   Horz: 1-2=-15, 2-4=-9, 8-9=-24
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 14=-19(B) 20=72(B) 21=52(B) 22=52(B) 23=52(B) 24=52(B) 25=52(B) 26=52(B) 27=52(B) 28=83(B) 29=83(B) 30=83(B) 31=83(B) 32=272(B) 33=-107(B) 34=34(B) 35=34(B) 36=34(B) 37=34(B) 38=34(B) 39=34(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=11, 2-4=16, 4-8=6, 2-15=-12, 3-11=-12, 9-10=-12
   Horz: 1-2=-23, 2-4=-28, 8-9=15
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 14=-27(B) 20=57(B) 21=43(B) 22=43(B) 23=43(B) 24=43(B) 25=43(B) 26=43(B) 27=43(B) 28=74(B) 29=74(B) 30=74(B) 31=75(B) 32=264(B) 33=-107(B) 34=26(B) 35=26(B) 36=26(B) 37=26(B) 38=26(B) 39=26(B) 40=-23(B) 41=-23(B) 42=-23(B) 43=-25(B)
9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=0, 2-4=6, 4-8=6, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 1-2=-12, 2-4=-18, 8-9=-7
Drag: 4-5=-0

Concentrated Loads (lb)
Vert: 14=-27(B) 20=61(B) 21=43(B) 22=43(B) 23=43(B) 24=43(B) 25=43(B) 26=43(B) 27=43(B) 28=74(B) 29=74(B) 30=74(B) 31=75(B) 32=264(B) 33=-107(B) 34=26(B) 35=26(B) 36=26(B) 37=26(B) 38=26(B) 39=26(B) 40=-23(B) 41=-23(B) 42=-23(B) 43=-25(B)

10) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-4=-3, 4-8=-14, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-23, 2-4=-17, 8-9=4
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-19(B) 20=77(B) 21=63(B) 22=63(B) 23=63(B) 24=63(B) 25=63(B) 26=63(B) 27=63(B) 28=94(B) 29=94(B) 30=94(B) 31=92(B) 32=272(B) 33=-107(B) 34=34(B) 35=34(B) 36=34(B) 37=34(B) 38=34(B) 39=34(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)

11) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-8, 2-4=-14, 4-8=-14, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-12, 2-4=-6, 8-9=-19
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-19(B) 20=81(B) 21=63(B) 22=63(B) 23=63(B) 24=63(B) 25=63(B) 26=63(B) 27=63(B) 28=94(B) 29=94(B) 30=94(B) 31=92(B) 32=272(B) 33=-107(B) 34=34(B) 35=34(B) 36=34(B) 37=34(B) 38=34(B) 39=34(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)

12) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-4=-20, 4-8=-20, 2-15=-20, 3-11=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 14=-46(B) 20=-35(B) 21=-37(B) 22=-37(B) 23=-37(B) 24=-37(B) 25=-37(B) 26=-37(B) 27=-37(B) 28=-37(B) 29=-37(B) 30=-37(B) 31=-40(B) 32=-291(B) 33=-107(B) 34=-36(B) 35=-36(B) 36=-36(B) 37=-36(B) 38=-36(B) 39=-36(B) 40=-39(B) 41=-39(B) 42=-39(B) 43=-42(B)

13) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-46, 2-4=-51, 4-8=-45, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-11, 2-4=-7, 8-9=5
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-19(B) 20=51(B) 21=36(B) 22=36(B) 23=36(B) 24=36(B) 25=36(B) 26=36(B) 27=36(B) 28=59(B) 29=59(B) 30=59(B) 31=58(B) 32=163(B) 33=-107(B) 34=22(B) 35=22(B) 36=22(B) 37=22(B) 38=22(B) 39=22(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)

14) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-46, 2-4=-50, 4-8=-45, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-11, 2-4=-7, 8-9=-18
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-19(B) 20=51(B) 21=36(B) 22=36(B) 23=36(B) 24=36(B) 25=36(B) 26=36(B) 27=36(B) 28=59(B) 29=59(B) 30=59(B) 31=58(B) 32=163(B) 33=-107(B) 34=22(B) 35=22(B) 36=22(B) 37=22(B) 38=22(B) 39=22(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)

15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-41, 2-4=-45, 4-8=-53, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-17, 2-4=-12, 8-9=3
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-19(B) 20=55(B) 21=44(B) 22=44(B) 23=44(B) 24=44(B) 25=44(B) 26=44(B) 27=44(B) 28=67(B) 29=67(B) 30=67(B) 31=64(B) 32=163(B) 33=-107(B) 34=22(B) 35=22(B) 36=22(B) 37=22(B) 38=22(B) 39=22(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)

16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-48, 2-4=-53, 4-8=-53, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-9, 2-4=-5, 8-9=-14
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-19(B) 20=57(B) 21=44(B) 22=44(B) 23=44(B) 24=44(B) 25=44(B) 26=44(B) 27=44(B) 28=67(B) 29=67(B) 30=67(B) 31=64(B) 32=163(B) 33=-107(B) 34=22(B) 35=22(B) 36=22(B) 37=22(B) 38=22(B) 39=22(B) 40=-15(B) 41=-15(B) 42=-15(B) 43=-18(B)

17) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-4=-15, 4-8=-12, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 2-4=3
Concentrated Loads (lb)
Vert: 14=-27(B) 20=59(B) 21=44(B) 22=44(B) 23=44(B) 24=44(B) 25=44(B) 26=44(B) 27=44(B) 28=68(B) 29=68(B) 30=68(B) 31=66(B) 32=204(B) 33=-107(B) 34=16(B) 35=16(B) 36=16(B) 37=16(B) 38=16(B) 39=16(B) 40=-23(B) 41=-23(B) 42=-23(B) 43=-25(B)

18) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 4-8=-12, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 8-9=-16

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LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 14=-27(B) 20=58(B) 21=44(B) 22=44(B) 23=44(B) 24=44(B) 25=44(B) 26=44(B) 27=44(B) 28=68(B) 29=68(B) 30=68(B) 31=66(B) 32=204(B) 33=-107(B) 34=16(B) 35=16(B) 36=16(B) 37=16(B) 38=16(B) 39=16(B) 40=-23(B) 41=-23(B) 42=-23(B) 43=-25(B)

19) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=22, 2-4=9, 4-8=16, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 1-2=-34, 2-4=-21, 8-9=18
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-69(B) 20=-115(B) 21=-111(B) 22=-111(B) 23=-111(B) 24=-111(B) 25=-111(B) 26=-111(B) 27=-111(B) 28=-125(B) 29=-125(B) 30=-125(B) 31=-122(B) 32=-425(B) 33=-107(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-67(B) 38=-67(B) 39=-67(B) 40=-56(B) 41=-56(B) 42=-56(B) 43=-57(B)

20) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-4=9, 4-8=16, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 1-2=-15, 2-4=-21, 8-9=-12
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-69(B) 20=-115(B) 21=-111(B) 22=-111(B) 23=-111(B) 24=-111(B) 25=-111(B) 26=-111(B) 27=-111(B) 28=-125(B) 29=-125(B) 30=-125(B) 31=-122(B) 32=-425(B) 33=-107(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-67(B) 38=-67(B) 39=-67(B) 40=-56(B) 41=-56(B) 42=-56(B) 43=-57(B)

21) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-4=-11, 4-8=-3, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-15, 2-4=-9, 8-9=6
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-61(B) 20=-95(B) 21=-91(B) 22=-91(B) 23=-91(B) 24=-91(B) 25=-91(B) 26=-91(B) 27=-91(B) 28=-105(B) 29=-105(B) 30=-105(B) 31=-106(B) 32=-417(B) 33=-107(B) 34=-59(B) 35=-59(B) 36=-59(B) 37=-59(B) 38=-59(B) 39=-59(B) 40=-48(B) 41=-48(B) 42=-48(B) 43=-51(B)

22) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-4=-11, 4-8=-3, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-15, 2-4=-9, 8-9=-24
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-61(B) 20=-95(B) 21=-91(B) 22=-91(B) 23=-91(B) 24=-91(B) 25=-91(B) 26=-91(B) 27=-91(B) 28=-105(B) 29=-105(B) 30=-105(B) 31=-106(B) 32=-417(B) 33=-107(B) 34=-59(B) 35=-59(B) 36=-59(B) 37=-59(B) 38=-59(B) 39=-59(B) 40=-48(B) 41=-48(B) 42=-48(B) 43=-51(B)

23) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=11, 2-4=16, 4-8=6, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 1-2=-23, 2-4=-28, 8-9=15
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-69(B) 20=-110(B) 21=-100(B) 22=-100(B) 23=-100(B) 24=-100(B) 25=-100(B) 26=-100(B) 27=-100(B) 28=-114(B) 29=-114(B) 30=-114(B) 31=-114(B) 32=-425(B) 33=-107(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-67(B) 38=-67(B) 39=-67(B) 40=-56(B) 41=-56(B) 42=-56(B) 43=-57(B)

24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=0, 2-4=6, 4-8=6, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 1-2=-12, 2-4=-18, 8-9=-7
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-69(B) 20=-107(B) 21=-100(B) 22=-100(B) 23=-100(B) 24=-100(B) 25=-100(B) 26=-100(B) 27=-100(B) 28=-114(B) 29=-114(B) 30=-114(B) 31=-114(B) 32=-425(B) 33=-107(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-67(B) 38=-67(B) 39=-67(B) 40=-56(B) 41=-56(B) 42=-56(B) 43=-57(B)

25) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-4=-3, 4-8=-14, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-23, 2-4=-17, 8-9=4
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-61(B) 20=-90(B) 21=-81(B) 22=-81(B) 23=-81(B) 24=-81(B) 25=-81(B) 26=-81(B) 27=-81(B) 28=-95(B) 29=-95(B) 30=-95(B) 31=-97(B) 32=-417(B) 33=-107(B) 34=-59(B) 35=-59(B) 36=-59(B) 37=-59(B) 38=-59(B) 39=-59(B) 40=-48(B) 41=-48(B) 42=-48(B) 43=-51(B)

26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-8, 2-4=-14, 4-8=-14, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-12, 2-4=-6, 8-9=-19
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 14=-61(B) 20=-87(B) 21=-81(B) 22=-81(B) 23=-81(B) 24=-81(B) 25=-81(B) 26=-81(B) 27=-81(B) 28=-95(B) 29=-95(B) 30=-95(B) 31=-97(B) 32=-417(B) 33=-107(B) 34=-59(B) 35=-59(B) 36=-59(B) 37=-59(B) 38=-59(B) 39=-59(B) 40=-48(B) 41=-48(B) 42=-48(B) 43=-51(B)

27) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 5

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=-46, 2-4=-51, 4-8=-45, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-11, 2-4=-7, 8-9=5
Drag: 4-5=-0

Concentrated Loads (lb)
Vert: 14=-71(B) 20=-108(B) 21=-93(B) 22=-93(B) 23=-93(B) 24=-93(B) 25=-93(B) 26=-93(B) 27=-93(B) 28=-124(B) 29=-124(B) 30=-124(B) 31=-131(B) 32=-575(B) 33=-107(B) 34=-78(B) 35=-78(B) 36=-78(B) 37=-78(B) 38=-78(B) 39=-78(B) 40=-53(B) 41=-53(B) 42=-53(B) 43=-56(B)

28) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
Vert: 1-2=-46, 2-4=-50, 4-8=-45, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-11, 2-4=-7, 8-9=-18
Drag: 4-5=-0

Concentrated Loads (lb)
Vert: 14=-71(B) 20=-108(B) 21=-93(B) 22=-93(B) 23=-93(B) 24=-93(B) 25=-93(B) 26=-93(B) 27=-93(B) 28=-124(B) 29=-124(B) 30=-124(B) 31=-131(B) 32=-575(B) 33=-107(B) 34=-78(B) 35=-78(B) 36=-78(B) 37=-78(B) 38=-78(B) 39=-78(B) 40=-53(B) 41=-53(B) 42=-53(B) 43=-56(B)

29) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
Vert: 1-2=-41, 2-4=-45, 4-8=-53, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-17, 2-4=-12, 8-9=3
Drag: 4-5=-0

Concentrated Loads (lb)
Vert: 14=-71(B) 20=-105(B) 21=-85(B) 22=-85(B) 23=-85(B) 24=-85(B) 25=-85(B) 26=-85(B) 27=-85(B) 28=-116(B) 29=-116(B) 30=-116(B) 31=-125(B) 32=-575(B) 33=-107(B) 34=-78(B) 35=-78(B) 36=-78(B) 37=-78(B) 38=-78(B) 39=-78(B) 40=-53(B) 41=-53(B) 42=-53(B) 43=-56(B)

30) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
Vert: 1-2=-48, 2-4=-53, 4-8=-53, 2-15=-20, 3-11=-20, 9-10=-20
Horz: 1-2=-9, 2-4=-5, 8-9=-14
Drag: 4-5=-0

Concentrated Loads (lb)
Vert: 14=-71(B) 20=-102(B) 21=-85(B) 22=-85(B) 23=-85(B) 24=-85(B) 25=-85(B) 26=-85(B) 27=-85(B) 28=-116(B) 29=-116(B) 30=-116(B) 31=-125(B) 32=-575(B) 33=-107(B) 34=-78(B) 35=-78(B) 36=-78(B) 37=-78(B) 38=-78(B) 39=-78(B) 40=-53(B) 41=-53(B) 42=-53(B) 43=-56(B)

31) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
Vert: 1-2=-12, 2-4=-15, 4-8=-12, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 2-4=3

Concentrated Loads (lb)
Vert: 14=-62(B) 20=-67(B) 21=-65(B) 22=-65(B) 23=-65(B) 24=-65(B) 25=-65(B) 26=-65(B) 27=-65(B) 28=-73(B) 29=-73(B) 30=-73(B) 31=-75(B) 32=-364(B) 33=-107(B) 34=-57(B) 35=-57(B) 36=-57(B) 37=-57(B) 38=-57(B) 39=-57(B) 40=-52(B) 41=-52(B) 42=-52(B) 43=-53(B)

32) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
Vert: 1-4=-12, 4-8=-12, 2-15=-12, 3-11=-12, 9-10=-12
Horz: 8-9=-16

Concentrated Loads (lb)
Vert: 14=-62(B) 20=-68(B) 21=-65(B) 22=-65(B) 23=-65(B) 24=-65(B) 25=-65(B) 26=-65(B) 27=-65(B) 28=-73(B) 29=-73(B) 30=-73(B) 31=-75(B) 32=-364(B) 33=-107(B) 34=-57(B) 35=-57(B) 36=-57(B) 37=-57(B) 38=-57(B) 39=-57(B) 40=-52(B) 41=-52(B) 42=-52(B) 43=-53(B)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	C1	Common Supported Gable	1	1	I45097636

Job Reference (optional)

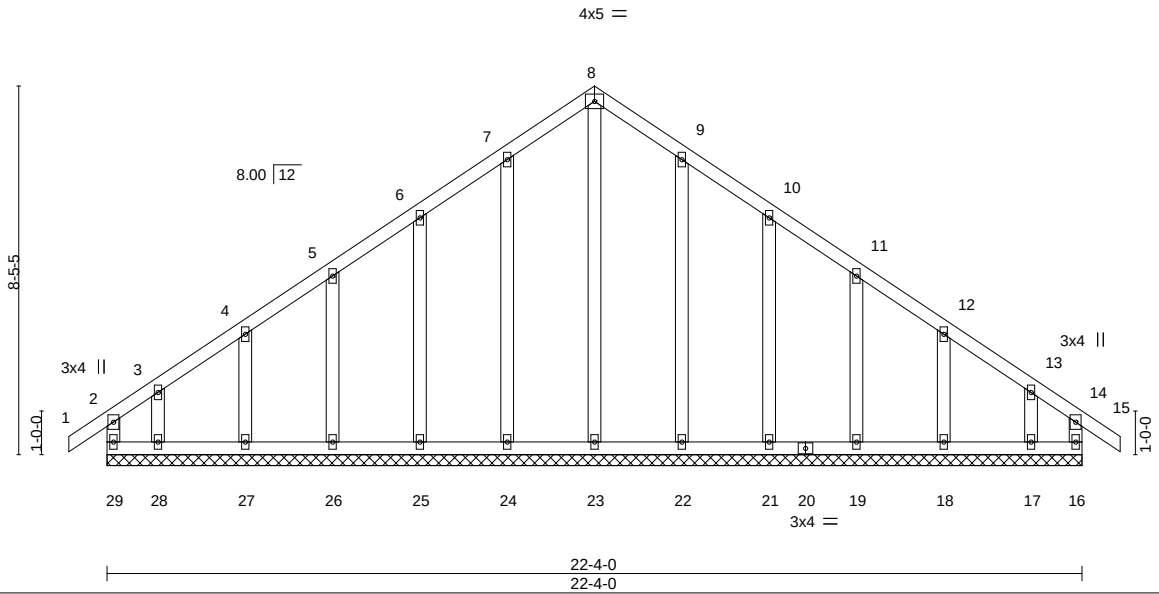
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:23 2021 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-lsJBi0YS5nAZ8XYgfEFc5KViKlV1P43ceYnCD4zd_BE

-0-10-8 11-2-0 22-4-0 23-2-8

0-10-8 11-2-0 11-2-0 0-10-8

Scale = 1:52.8



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	0.09	Vert(LL)	-0.00	15	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	15	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 114 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 6-0-0 oc bracing.

REACTIONS. All bearings 22-4-0.

(lb) - Max Horz 29=239(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 16, 24, 25, 26, 27, 22, 21, 19, 18 except 29=-151(LC 4), 28=-163(LC 8), 17=-146(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 29, 16, 23, 24, 25, 26, 27, 28, 22, 21, 19, 18, 17

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) 16, 24, 25, 26, 27, 22, 21, 19, 18 except (jt=lb) 29=151, 28=163, 17=146.
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.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	C2	Common	1	1	I45097637
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:24 2021 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-D2sZvMY4s5JQmh7sCynsdY2jC9ge8V7mtCXllXzd_BD

-0-10-8	5-8-4	11-2-0	16-7-12	22-4-0	23-2-8
0-10-8	5-8-4	5-5-12	5-5-12	5-8-4	0-10-8

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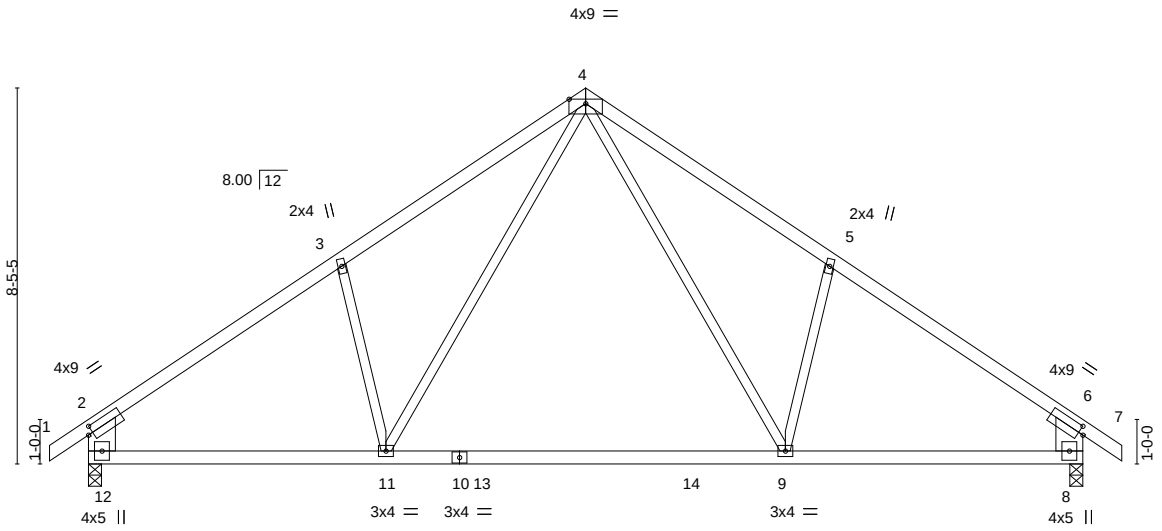


Plate Offsets (X,Y)-- [2:0-1-5,0-2-0], [6:0-1-5,0-2-0]

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	0.72	Vert(LL)	-0.40	9-11	>653	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.66	9-11	>396	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	9-11	>999	240	Weight: 85 lb	FT = 10%

LUMBER-

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

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) 12=0-3-8, 8=0-3-8
Max Horz 12=-243(LC 6)
Max Uplift 12=-136(LC 8), 8=-136(LC 9)
Max Grav 12=1153(LC 15), 8=1153(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1340/149, 3-4=-1232/275, 4-5=-1232/275, 5-6=-1340/149, 2-12=-1038/167, 6-8=-1038/167
BOT CHORD 11-12=-139/1127, 9-11=0/787, 8-9=-27/994
WEBS 4-9=-170/597, 5-9=-255/254, 4-11=-170/597, 3-11=-255/254

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=136, 8=136.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

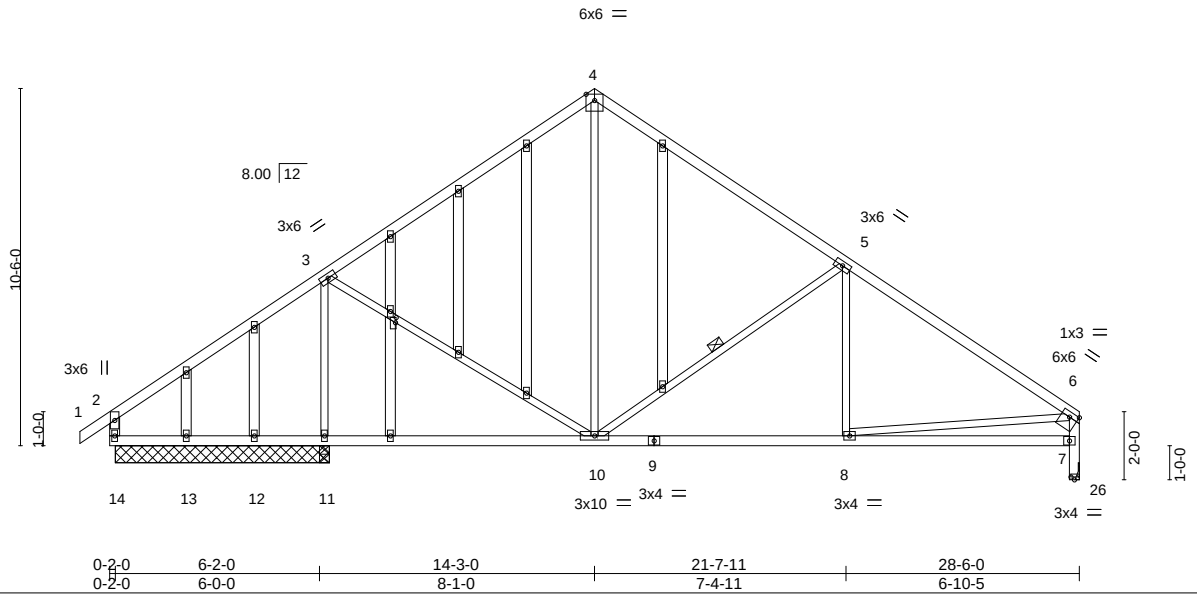
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	C3	GABLE	1	1	I45097638
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:25 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-iEQx7iZidORHNrh3mfI5Alat3Z5Kttsv5sGJIzzd_BC

-0-10-8	6-3-12	14-3-0	21-7-11	28-6-0
0-10-8	6-3-12	7-11-4	7-4-11	6-10-5

Scale = 1:67.7



0-2-0	6-2-0	14-3-0	21-7-11	28-6-0
0-2-0	6-0-0	8-1-0	7-4-11	6-10-5

Plate Offsets (X,Y)-- [6:Edge,0-1-12], [19:0-1-13,0-0-4], [26:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.07	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.14	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-10	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-14,6-26: 2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. All bearings 6-3-8 except (jt=length) 26=Mechanical.
(lb) - Max Horz 14=274(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 12, 11 except 14=-114(LC 8), 26=-136(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 13 except 14=324(LC 21), 11=1263(LC 1), 11=1263(LC 1), 26=991(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-796/235, 4-5=-784/222, 5-6=-1268/191, 2-14=-311/145, 7-26=-991/136, 6-7=-927/171
BOT CHORD 13-14=-234/259, 12-13=-234/259, 11-12=-234/259, 10-11=-234/259, 8-10=-62/962
WEBS 3-11=-1107/157, 4-10=-77/315, 3-10=0/537, 5-10=-585/260, 6-8=-32/735

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) 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 studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 11 except (jt=lb) 14=114, 26=136.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	C4	Roof Special	1	1	I45097639
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:25 2021 Page 1
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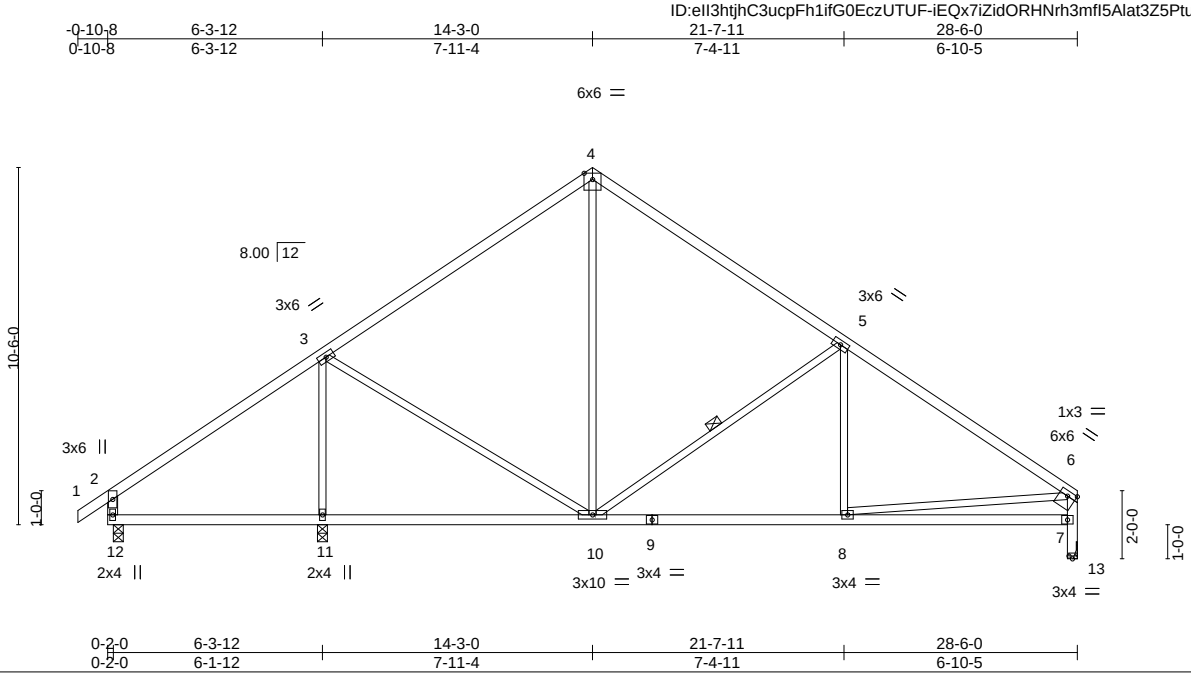

Plate Offsets (X,Y)-- [6:Edge,0-1-12], [13:0-1-4,0-1-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.06	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.13	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-10	>999	240	Weight: 111 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-13: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10

REACTIONS. (size) 12=0-3-8, 11=0-3-8, 13=Mechanical
Max Horz 12=274(LC 5)
Max Uplift 12=-117(LC 8), 11=-63(LC 8), 13=-134(LC 9)
Max Grav 12=373(LC 21), 11=1240(LC 1), 13=997(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-805/232, 4-5=-793/225, 5-6=-1277/188, 2-12=-326/150, 7-13=-997/134, 6-7=-933/169
BOT CHORD 11-12=-238/300, 10-11=-238/300, 8-10=-59/970
WEBS 3-11=-1083/150, 3-10=-18/524, 4-10=-74/333, 5-10=-585/260, 6-8=-34/742

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) 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) 11 except (jt=lb) 12=117, 13=134.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	C5	Roof Special	1	1	I45097640
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:26 2021 Page 1
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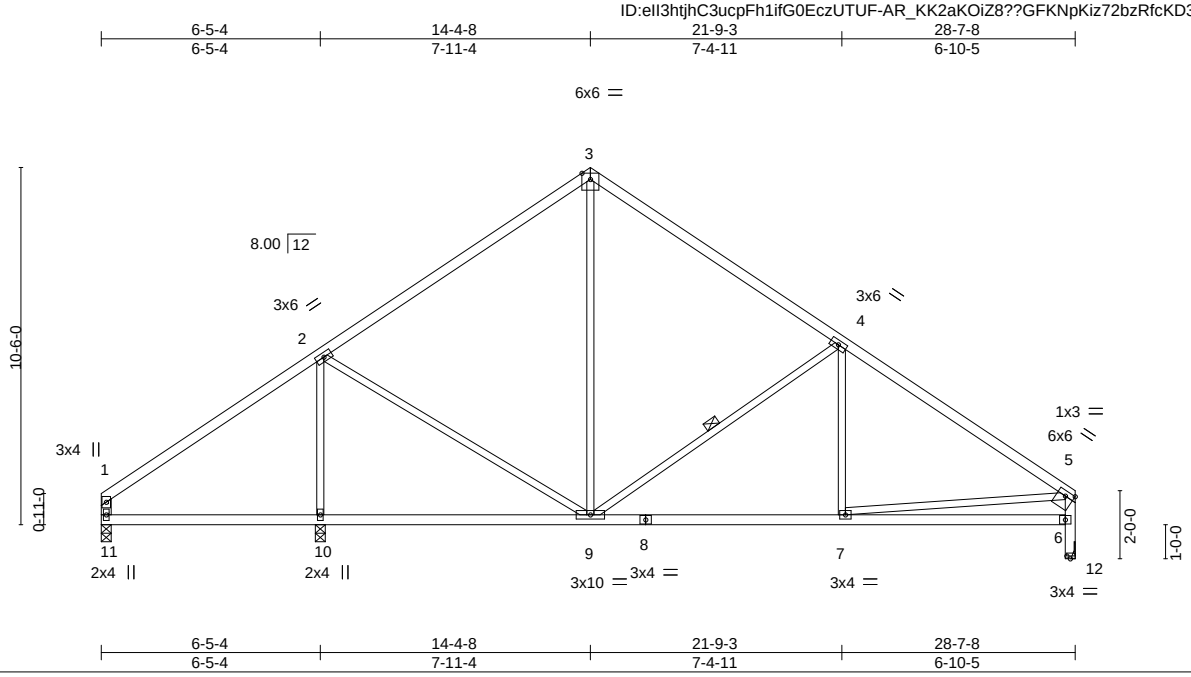

Plate Offsets (X,Y)-- [5:Edge,0-1-12], [12:0-1-4,0-1-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.06	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.13	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-9	>999	240	Weight: 110 lb	FT = 10%

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

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

REACTIONS. (size) 11=0-3-8, 10=0-3-8, 12=Mechanical
Max Horz 11=-266(LC 6)
Max Uplift 11=-77(LC 8), 10=-86(LC 8), 12=-131(LC 9)
Max Grav 11=302(LC 21), 10=1254(LC 1), 12=997(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-805/226, 3-4=-792/218, 4-5=-1276/183, 1-11=-252/111, 6-12=-997/131, 5-6=-932/166
BOT CHORD 10-11=-227/299, 9-10=-227/299, 7-9=-55/969
WEBS 2-10=-1096/175, 2-9=-20/520, 3-9=-68/336, 4-9=-585/260, 5-7=-29/742

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) 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) 11, 10 except (jt=lb) 12=131.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D1	Roof Special Girder	1	1	I45097641

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:28 2021 Page 1

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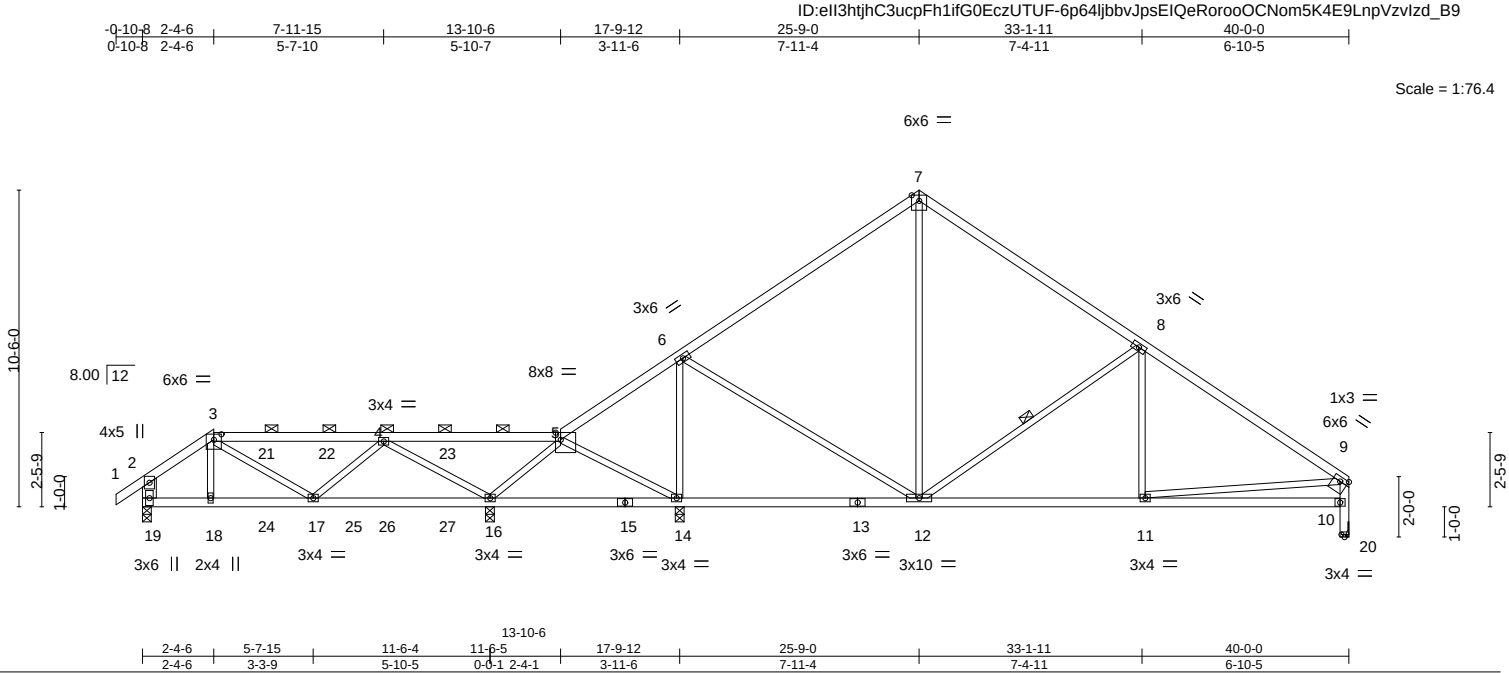


Plate Offsets (X,Y)-- [3:0-3-0,0-2-3], [5:0-2-0,Edge], [9:Edge,0-1-12], [20:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.07	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.14	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.02	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	17-18	>999	240	Weight: 155 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-19: 2x6 SPF No.2, 9-20: 2x4 SPF No.2

BRACING-

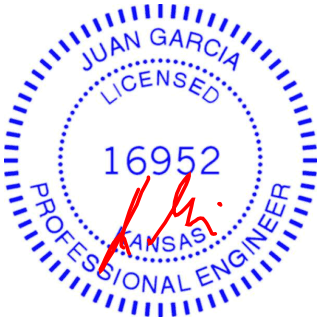
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-16,12-14.
WEBS 1 Row at midpt 8-12

REACTIONS. All bearings 0-3-8 except (jt=length) 20=Mechanical.
(lb) - Max Horz 19=275(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) except 19=-149(LC 8), 16=-241(LC 4), 14=-267(LC 29), 20=-128(LC 30)
Max Grav All reactions 250 lb or less at joint(s) except 19=600(LC 21), 16=1126(LC 21), 14=1205(LC 1), 20=969(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-533/151, 3-4=-556/155, 4-5=-205/530, 6-7=-757/220, 7-8=-747/182, 8-9=-1234/178, 2-19=-470/135, 10-20=-969/128, 9-10=-905/163
BOT CHORD 18-19=-311/487, 17-18=-313/489, 16-17=-306/497, 11-12=-51/934
WEBS 4-16=-1202/449, 5-16=-515/182, 6-14=-1156/276, 6-12=0/595, 7-12=-60/290, 8-12=-585/261, 9-11=0/707

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 19, 241 lb uplift at joint 16, 267 lb uplift at joint 14 and 128 lb uplift at joint 20.
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 84 lb up at 2-4-6, 82 lb down and 69 lb up at 4-0-0, 82 lb down and 69 lb up at 6-0-0, and 82 lb down and 69 lb up at 8-0-0, and 82 lb down and 69 lb up at 10-0-0 on top chord, and 29 lb down at 2-4-6, 24 lb down at 4-0-0, 24 lb down at 6-0-0, and 24 lb down at 8-0-0, and 24 lb down at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



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LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

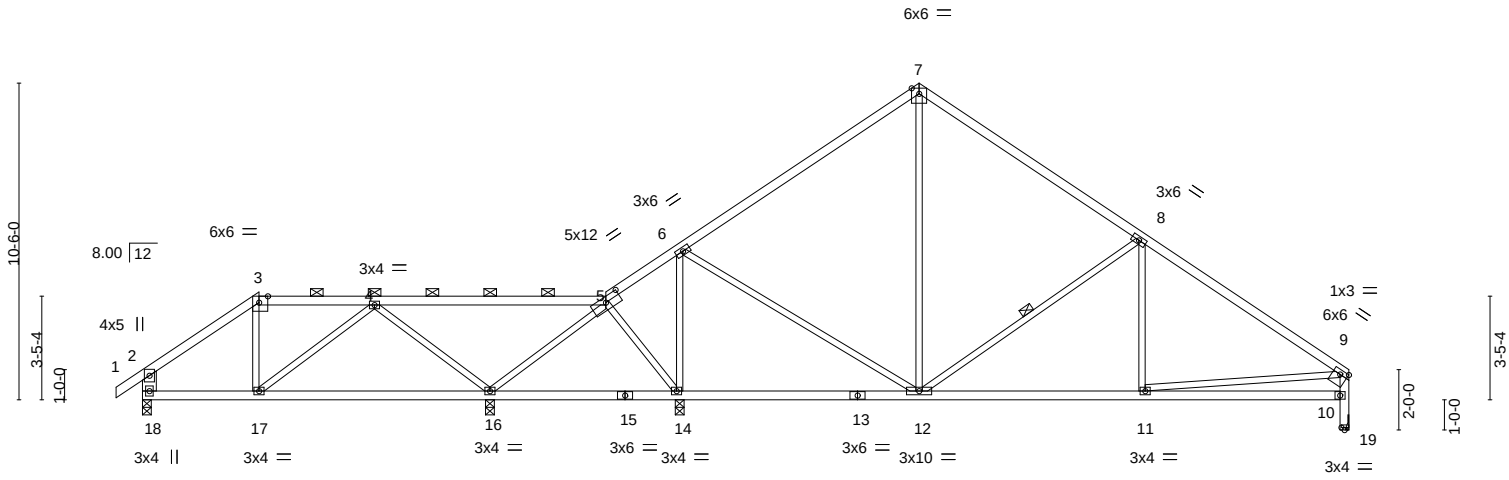
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-7=-70, 7-9=-70, 10-19=-20
   Concentrated Loads (lb)
   Vert: 3=-18(F) 18=-16(F) 4=-32(F) 21=-32(F) 22=-32(F) 23=-32(F) 24=-17(F) 25=-17(F) 26=-17(F) 27=-17(F)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D2	Roof Special	1	1	I45097642
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:29 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-a?gSy3cDgdxjsS?q?VM1KblZhASFphPV0TEWRkzd_B8

-0-10-8	3-10-6	7-8-5	15-4-6	17-9-12	25-9-0	33-1-11	40-0-0
0-10-8	3-10-6	3-9-15	7-8-1	2-5-6	7-11-4	7-4-11	6-10-5

Scale = 1:76.4



3-10-6	11-6-4	15-4-6	17-9-12	25-9-0	33-1-11	40-0-0
3-10-6	7-7-14	3-10-2	2-5-6	7-11-4	7-4-11	6-10-5

Plate Offsets (X,Y)-- [3:0-3-8,Edge], [5:0-6-0,0-2-2], [9:Edge,0-1-12], [19:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.08	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.17	16-17	>804	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	11-12	>999	240	Weight: 155 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-18: 2x6 SPF No.2, 9-19: 2x4 SPF No.2

BRACING-

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

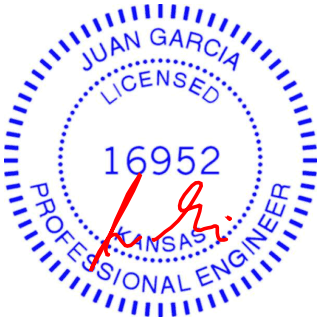
REACTIONS. All bearings 0-3-8 except (jt=length) 19=Mechanical.
(lb) - Max Horz 18=-221(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 18, 14, 19
Max Grav All reactions 250 lb or less at joint(s) except 18=497(LC 19), 16=961(LC 19), 14=1248(LC 1), 19=961(LC 1)

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

TOP CHORD	2-3=-450/42, 3-4=-290/60, 4-5=0/392, 6-7=-742/118, 7-8=-733/97, 8-9=-1221/51, 2-18=-456/58, 10-19=-961/17, 9-10=-897/53
BOT CHORD	17-18=-154/369, 16-17=-190/294, 11-12=0/923
WEBS	4-16=-852/113, 5-16=-427/76, 6-14=-1155/108, 6-12=0/627, 7-12=-17/281, 8-12=-568/137, 9-11=0/697

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 14, 19.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D3	Roof Special	1	1	I45097643

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:30 2021 Page 1

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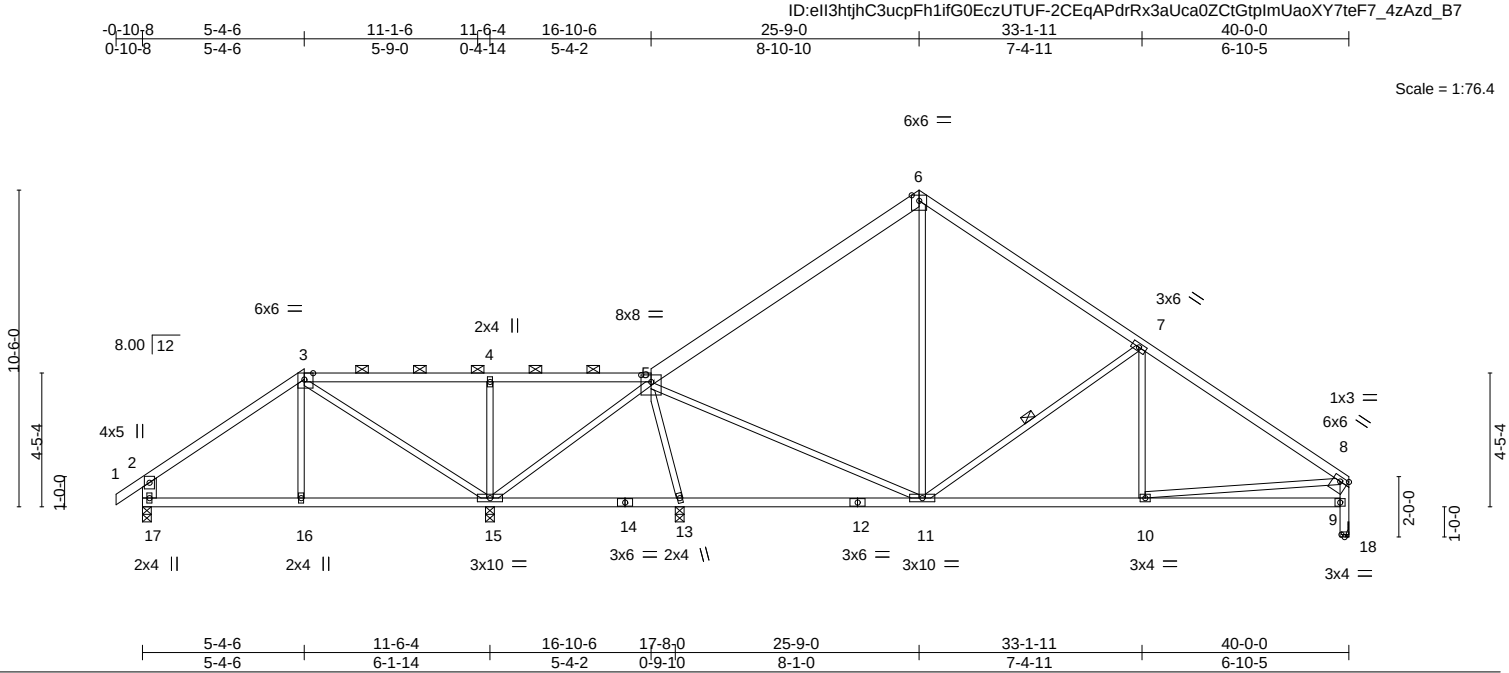

Plate Offsets (X,Y)-- [3:0-3-8,Edge], [5:0-4-0,0-2-12], [8:Edge,0-1-12], [18:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.07	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.15	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	10-11	>999	240	Weight: 163 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17: 2x6 SPF No.2, 8-18: 2x4 SPF No.2

BRACING-

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

REACTIONS. All bearings 0-3-8 except (jt=length) 18=Mechanical.
(lb) - Max Horz 17=-221(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 17, 15, 13, 18
Max Grav All reactions 250 lb or less at joint(s) except 17=498(LC 19), 15=1086(LC 1), 13=1067(LC 1), 18=998(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-417/80, 5-6=-821/124, 6-7=-801/108, 7-8=-1277/61, 2-17=-447/88, 9-18=-998/24, 8-9=-934/60
BOT CHORD 16-17=-172/363, 15-16=-173/360, 10-11=0/969
WEBS 3-15=-529/0, 4-15=-436/122, 5-15=-370/58, 5-11=0/723, 6-11=-16/300, 7-11=-553/133, 8-10=0/739, 5-13=-945/142

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 15, 13, 18.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D4	ROOF SPECIAL	1	1	I45097644
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:31 2021 Page 1

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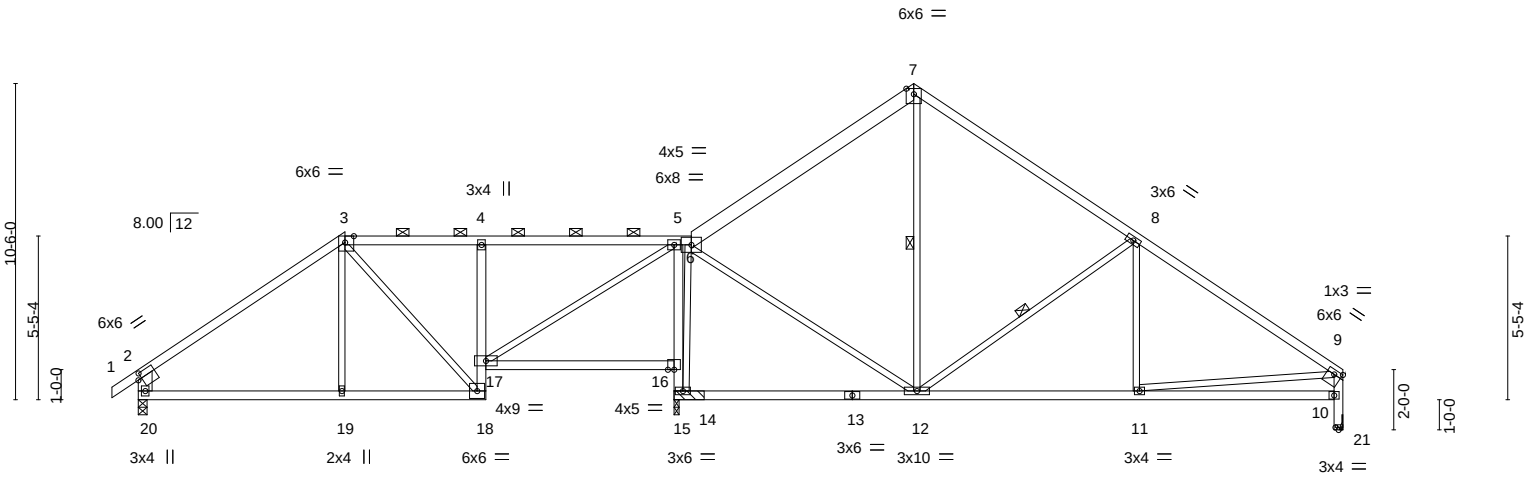
-0-10-8	6-10-6	11-6-8	17-9-8	18-4-6	25-9-0	33-1-11	40-0-0
0-10-8	6-10-6	4-8-2	6-3-0	0-6-14	7-4-10	7-4-11	6-10-5

Scale = 1:76.5



6-10-6	11-6-8	17-9-8	17-10-8	25-9-0	33-1-11	40-0-0
6-10-6	4-8-2	6-3-0	0-1-0	7-10-8	7-4-11	6-10-5

Plate Offsets (X,Y)-- [2:0-1-9,0-2-4], [3:0-3-8,Edge], [9:Edge,0-1-12], [21:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.11	12-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.22	12-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	21	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	18-19	>999	240	Weight: 172 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-20: 2x6 SPF No.2, 9-21: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 20=0-3-8, 15=(0-2-0 + bearing block) (req. 0-3-1), 21=Mechanical
Max Horz 20=-221(LC 6)
Max Uplift 20=-39(LC 8), 15=-36(LC 8), 21=-47(LC 9)
Max Grav 20=781(LC 19), 15=1961(LC 1), 21=906(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-786/61, 3-4=-477/111, 4-5=-564/92, 5-6=-64/323, 6-7=-643/166, 7-8=-649/146, 8-9=-1135/98, 2-20=-702/87, 10-21=-906/47, 9-10=-840/83
BOT CHORD 19-20=-85/533, 18-19=-86/531, 4-17=-387/118, 16-17=-326/4, 15-16=-1200/71, 5-16=-1104/114, 11-12=-7/852
WEBS 5-17=-60/1041, 6-15=-735/78, 6-12=0/771, 8-12=-562/131, 9-11=0/628

NOTES-

1) 2x4 SPF No.2 bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
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); cantilever left and right exposed ; end vertical left 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15, 21.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

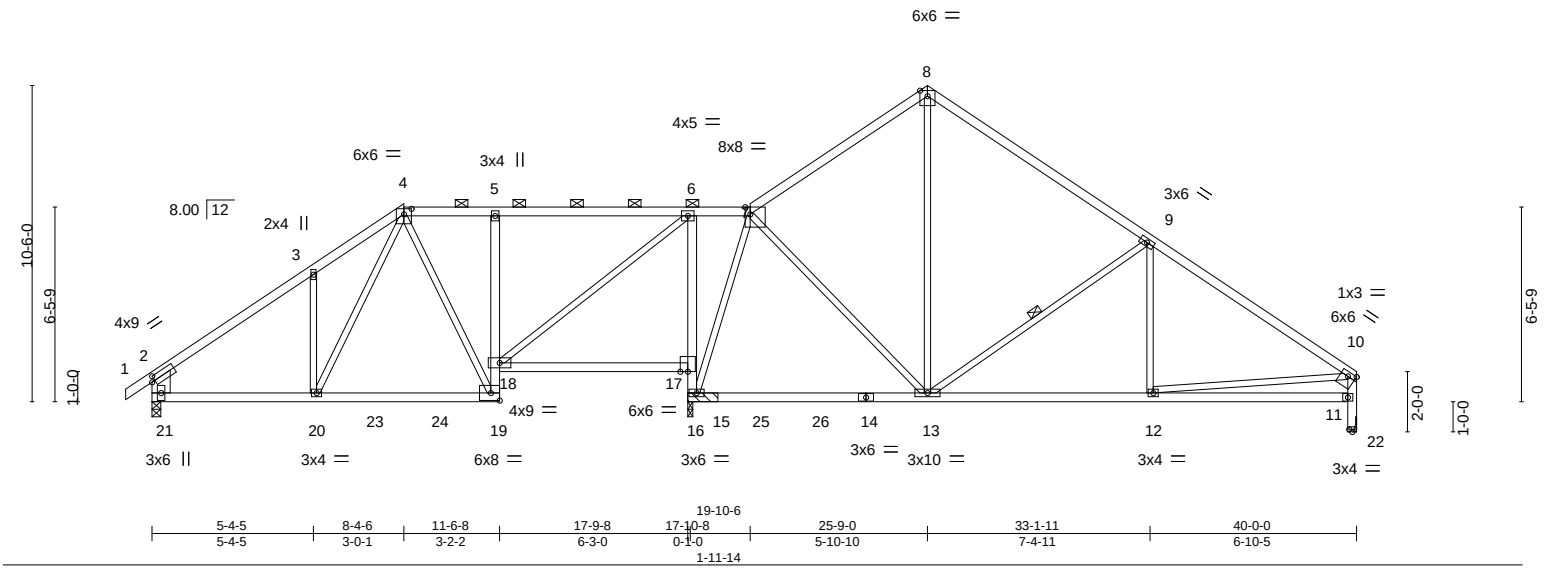
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN	I45097645
210321	D5	ROOF SPECIAL	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:33 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-TnvzoRfjksR8L4JbELRzVRvGJno5lQu5x5CkaVzd_B4

-0-10-8 5-4-5 8-4-6 11-6-8 17-9-8 19-10-6 25-9-0 33-1-11 40-0-0
0-10-8 5-4-5 3-0-1 3-2-2 6-3-0 2-0-14 5-10-10 7-4-11 6-10-5

Scale = 1:76.5



5-4-5 8-4-6 11-6-8 17-9-8 17-10-8 25-9-0 33-1-11 40-0-0
5-4-5 3-0-1 3-2-2 6-3-0 0-1-0 5-10-10 7-4-11 6-10-5
19-10-6
1-11-14

Plate Offsets (X,Y)-- [2:0-1-5,0-2-0], [4:0-3-0,0-2-3], [7:0-2-0,Edge], [10:Edge,0-1-12], [22:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.13	13-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.23	13-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.02	22	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	17-18	>999	240	Weight: 175 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
14-16: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-21: 2x8 SP DSS, 10-22: 2x4 SPF No.2

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

REACTIONS. (size) 21=0-3-8, 16=(0-2-0 + bearing block) (req. 0-3-5), 22=Mechanical
Max Horz 21=-222(LC 6)
Max Uplift 21=-37(LC 8), 16=-41(LC 8), 22=-54(LC 9)
Max Grav 21=790(LC 21), 16=2093(LC 2), 22=1010(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-827/52, 3-4=-731/149, 4-5=-422/119, 5-6=-465/107, 6-7=-59/379, 7-8=-688/183, 8-9=-692/158, 9-10=-1231/108, 2-21=-686/68, 11-22=-1010/54, 10-11=-900/89
BOT CHORD 20-21=-93/678, 19-20=-71/492, 18-19=-18/315, 5-18=-361/99, 17-18=-329/7, 16-17=-1072/65, 6-17=-953/103, 12-13=-15/931, 11-12=-29/266
WEBS 6-18=-60/990, 7-16=-958/19, 7-13=0/643, 8-13=-92/261, 9-13=-655/133, 10-12=0/670, 4-20=-82/427

NOTES-
1) 2x4 SPF 2100F 1.8E bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
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); cantilever left and right exposed ; end vertical left 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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 16, 22.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

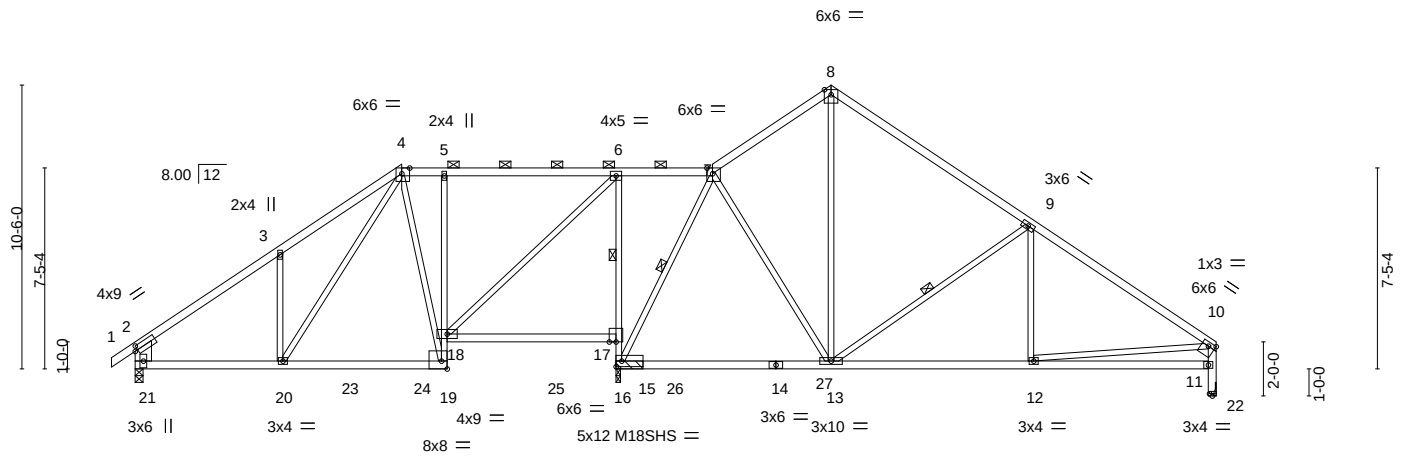
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D6	ROOF SPECIAL	1	1	I45097646
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:34 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-xzTL?ngMV9Z?zDtno2yC1fSR4B1UUzFEAlyH6xzd_B3

-0-10-8 0-10-8 | 5-4-5 5-4-5 | 9-10-6 4-6-0 | 11-6-8 1-8-2 | 17-9-8 6-3-0 | 21-4-6 3-6-14 | 25-9-0 4-4-10 | 33-1-11 7-4-11 | 40-0-0 6-10-5

Scale = 1:85.3



5-4-5 5-4-5 | 9-10-6 4-6-0 | 11-6-8 1-8-2 | 17-9-8 6-3-0 | 17-10-8 0-1-0 | 21-4-6 3-5-14 | 25-9-0 4-4-10 | 33-1-11 7-4-11 | 40-0-0 6-10-5

Plate Offsets (X,Y)-- [2:0-1-5,0-2-0], [4:0-3-8,Edge], [7:0-2-8,Edge], [10:Edge,0-1-12], [19:Edge,0-3-8], [22:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.16	13-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.26	13-16	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.03	22	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	17-18	>999	240	Weight: 176 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-19,6-16: 2x3 SPF No.2, 14-16: 2x4 SPF 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
2-21: 2x8 SP DSS, 10-22: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 21=0-3-8, 16=(0-2-0 + bearing block) (req. 0-3-6), 22=Mechanical
Max Horz 21=-222(LC 6)
Max Uplift 21=-39(LC 8), 16=-36(LC 8), 22=-65(LC 9)
Max Grav 21=783(LC 21), 16=2153(LC 2), 22=1017(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-836/71, 3-4=-774/174, 4-5=-368/142, 5-6=-383/135, 6-7=-50/376, 7-8=-653/205, 8-9=-705/176, 9-10=-1241/125, 2-21=-675/69, 11-22=-1017/65, 10-11=-906/100
BOT CHORD 20-21=-86/688, 19-20=-54/411, 18-19=-29/396, 5-18=-326/115, 17-18=-294/9, 16-17=-1142/87, 6-17=-984/124, 12-13=-30/940, 11-12=-29/266
WEBS 6-18=-50/930, 7-16=-980/0, 3-20=-278/159, 4-20=-102/522, 7-13=0/546, 8-13=-119/305, 9-13=-653/132, 10-12=-1/678

NOTES-

1) 2x4 SPF 2400F 2.0E bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
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); cantilever left and right exposed ; end vertical left 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, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 16, 22.
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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

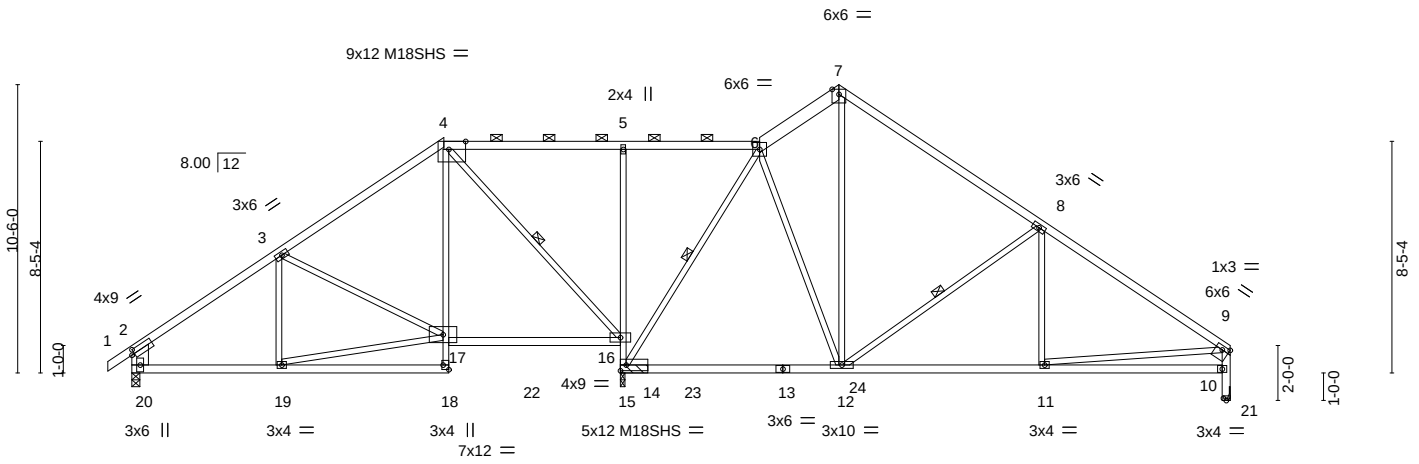
Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D7	ROOF SPECIAL	1	1	I45097647
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:35 2021 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-P91jD7h_GThsaNS_MmTRas?cEbSODNyNOPhqeOzd_B2

-0-10-8	5-4-4	11-4-6	17-9-8	22-10-6	25-9-0	33-1-10	40-0-0
0-10-8	5-4-4	6-0-1	6-5-2	5-0-14	2-10-10	7-4-10	6-10-6

Scale = 1:83.9



5-4-4	11-6-8	17-9-8	17-10-8	22-10-6	25-9-0	33-1-10	40-0-0
5-4-4	6-2-4	6-3-0	0-1-0	4-11-14	2-10-10	7-4-10	6-10-6

Plate Offsets (X,Y)-- [2:0-1-5,0-2-0], [4:0-7-6,Edge], [9:Edge,0-1-12], [18:Edge,0-2-8], [21:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.18	12-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.29	12-15	>925	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	-0.06	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	18-19	>999	240	Weight: 180 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 4-18,5-15: 2x3 SPF No.2, 13-15: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except* 2-20: 2x8 SP DSS, 9-21: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19 3-6-12 oc bracing: 15-16.

WEBS 1 Row at midpt 4-16, 6-15, 8-12

REACTIONS. (size) 20=0-3-8, 15=(0-2-0 + bearing block) (req. 0-3-4), 21=Mechanical
Max Horz 20=-222(LC 6)
Max Uplift 20=-43(LC 8), 15=-30(LC 8), 21=-58(LC 9)
Max Grav 20=829(LC 13), 15=2064(LC 2), 21=1047(LC 14)

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

TOP CHORD 2-3=-874/65, 3-4=-558/115, 6-7=-687/194, 7-8=-762/165, 8-9=-1284/114, 2-20=-710/71, 10-21=-1047/58, 9-10=-934/94

BOT CHORD 19-20=-96/759, 4-17=0/551, 16-17=-58/458, 15-16=-1115/97, 5-16=-470/117, 12-15=0/339, 11-12=-20/974, 10-11=-30/274

WEBS 17-19=-96/753, 3-17=-349/88, 4-16=-889/37, 6-15=-972/0, 6-12=0/386, 7-12=-105/381, 8-12=-634/129, 9-11=0/705

NOTES-

1) 2x4 SPF 2100F 1.8E bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
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); cantilever left and right exposed ; end vertical left 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, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15, 21.
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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

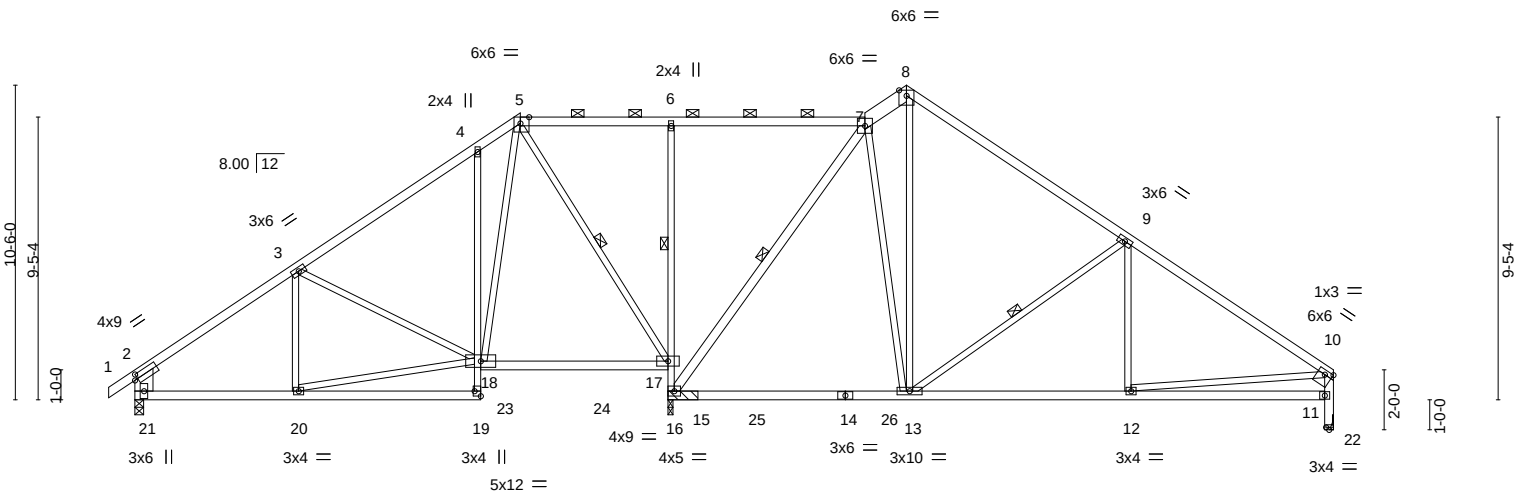
Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D8	ROOF SPECIAL	1	1	I45097648
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:36 2021 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-tMb5QTic1npjCX1AvT_g64Xn3?ngys?Xd3ROBqzd_B1

-0-10-8	5-4-5	11-6-8	12-10-6	17-9-8	24-4-6	25-9-0	33-1-11	40-0-0
0-10-8	5-4-5	6-2-3	1-3-14	4-11-2	6-6-14	1-4-10	7-4-11	6-10-5

Scale = 1:76.9



5-4-5	11-6-8	12-10-6	17-9-8	17-10-8	24-4-6	25-9-0	33-1-11	40-0-0
5-4-5	6-2-3	1-3-14	4-11-2	0-1-0	6-5-14	1-4-10	7-4-11	6-10-5

Plate Offsets (X,Y)-- [2:0-1-5,0-2-0], [5:0-3-8,Edge], [10:Edge,0-1-12], [19:Edge,0-2-8], [22:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.17	13-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.27	13-16	>985	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	-0.06	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	19-20	>999	240	Weight: 192 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-8: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
4-19,6-16: 2x3 SPF No.2, 14-16: 2x4 SPF 2400F 2.0E

WEBS 2x3 SPF No.2 *Except*
7-16,10-22: 2x4 SPF No.2, 2-21: 2x8 SP DSS

BRACING-

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

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 19-20
3-3-12 oc bracing: 16-17.
1 Row at midpt 6-17

WEBS 1 Row at midpt 5-17, 7-16, 9-13

REACTIONS. (size) 21=0-3-8, 16=(0-2-0 + bearing block) (req. 0-3-5), 22=Mechanical
Max Horz 21=-221(LC 6)
Max Uplift 21=-46(LC 8), 16=-24(LC 8), 22=-65(LC 9)
Max Grav 21=813(LC 13), 16=2115(LC 2), 22=1034(LC 14)

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

TOP CHORD 2-3=-841/70, 3-4=-512/135, 4-5=-478/193, 5-6=-16/267, 6-7=-20/263, 7-8=-633/200, 8-9=-741/177, 9-10=-1264/124, 2-21=-696/74, 11-22=-1034/65, 10-11=-921/100

BOT CHORD 20-21=-97/737, 4-18=-360/128, 17-18=-53/262, 16-17=-1168/102, 6-17=-473/110, 13-16=0/389, 12-13=-29/958, 11-12=-31/273

WEBS 18-20=-96/729, 3-18=-362/85, 5-18=-112/897, 5-17=-826/35, 7-16=-1020/0, 8-13=-109/393, 9-13=-635/127, 10-12=0/690, 7-13=0/385

NOTES-

1) 2x4 SPF 2400F 2.0E bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
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); cantilever left and right exposed ; end vertical left 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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 16, 22.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	D9	HALF HIP GIRDER	1	3	I45097649
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:37 2021 Page 1
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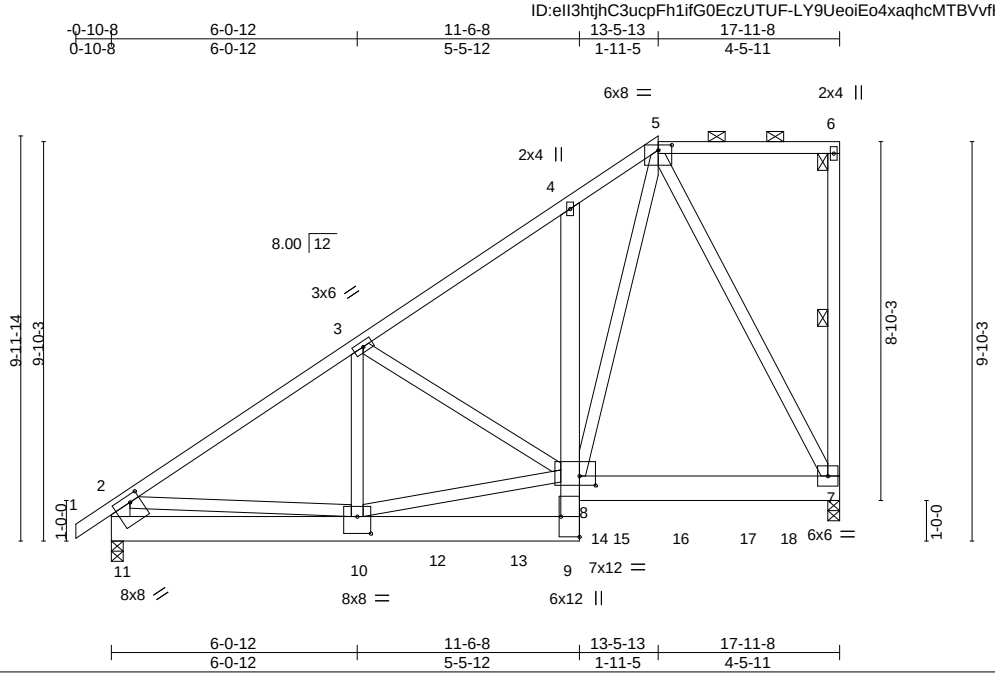


Plate Offsets (X,Y)-- [5:0-4-0,0-1-9], [8:0-4-12,0-2-12], [9:Edge,0-5-8], [10:0-4-0,0-5-0], [11:0-3-0,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.09	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.16	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	7-8	>999	240	Weight: 440 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS *Except*
4-9: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-11: 2x6 SPF No.2

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

REACTIONS. (size) 7=0-3-8 (req. 0-3-9), 11=0-3-8
Max Horz 11=300(LC 5)
Max Uplift 7=-486(LC 5), 11=-501(LC 8)
Max Grav 7=6786(LC 2), 11=5260(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7681/753, 3-4=-5215/431, 4-5=-5094/498, 2-11=-5050/510
BOT CHORD 10-11=-410/1573, 9-10=-174/1056, 8-9=-99/1976, 7-8=-268/2447
WEBS 3-10=-405/2466, 8-10=-568/5319, 3-8=-2457/450, 5-8=-663/7404, 5-7=-5312/465, 2-10=-426/4759

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 oc, 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); 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, with BCDL = 10.0psf.
8) WARNING: Required bearing size at joint(s) 7 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=486, 11=501.
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) 2943 lb down and 549 lb up at 6-0-13, 1467 lb down and 90 lb up at 8-0-0, 1534 lb down and 88 lb up at 10-0-0, 1567 lb down and 86 lb up at 12-0-0, and 1569 lb down and 83 lb up at 14-0-0, and 1573 lb down and 50 lb up at 16-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

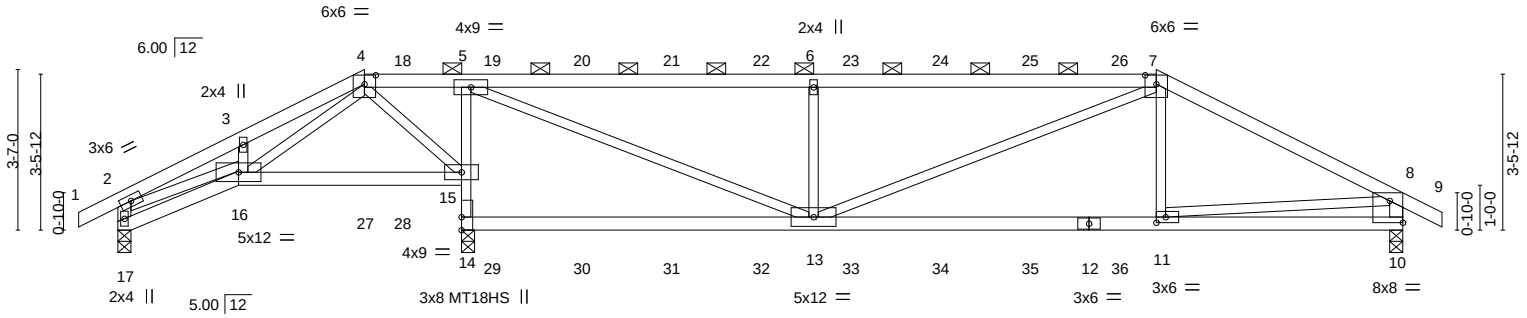
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-5=-70, 5-6=-70, 9-11=-20, 7-8=-20
   Concentrated Loads (lb)
   Vert: 10=-2943(B) 12=-1467(B) 13=-1465(B) 14=-1465(B) 16=-1464(B) 18=-1464(B)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	E5	Hip Girder	1	1	I45097650
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:39 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-HxGE3UkUKiBI3?mlbbYNki9GGCnC9AKzJ1f2n9zd_B_

-0-10-8	2-8-5	5-6-0	7-8-0	15-6-4	23-2-0	28-8-0	29-6-8
0-10-8	2-8-5	2-9-11	2-2-0	7-10-4	7-7-12	5-6-0	0-10-8

Scale = 1:51.4



2-8-5	5-6-0	7-8-0	7-9-12	15-6-4	23-2-0	28-8-0
2-8-5	2-9-11	2-2-0	0-1-12	7-8-8	7-7-12	5-6-0

Plate Offsets (X,Y)-- [4:0-3-0,0-2-7], [7:0-3-0,0-2-7], [10:Edge,0-5-13], [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	0.79	Vert(LL)	-0.14	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.30	13-14	>826	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.84	Horz(CT)	-0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	11-13	>999	240	Weight: 103 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	4-7: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except*
	5-14: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	2-17,8-10: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 17=0-3-8, 14=0-3-8, 10=0-3-8
Max Horz 17=64(LC 7)
Max Uplift 17=-93(LC 8), 14=-501(LC 5), 10=-279(LC 9)
Max Grav 17=390(LC 21), 14=2038(LC 1), 10=1339(LC 22)

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

TOP CHORD	2-3=-740/202, 3-4=-726/267, 5-6=-2104/466, 6-7=-2107/467, 7-8=-2050/439, 2-17=-410/134, 8-10=-1294/298
BOT CHORD	14-15=-1930/560, 5-15=-1520/465, 11-13=-328/1755, 10-11=-133/345
WEBS	4-16=-235/720, 4-15=-297/123, 5-13=-489/2392, 6-13=-795/358, 7-13=-69/469, 7-11=-4/331, 2-16=-125/564, 8-11=-314/1444

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) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 14=501, 10=279.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 105 lb down and 97 lb up at 6-4-0, 100 lb down and 63 lb up at 8-4-0, 100 lb down and 63 lb up at 10-4-0, 100 lb down and 63 lb up at 12-4-0, 100 lb down and 63 lb up at 14-4-0, 100 lb down and 63 lb up at 16-4-0, 100 lb down and 63 lb up at 18-4-0, and 100 lb down and 63 lb up at 20-4-0, and 98 lb down and 63 lb up at 22-4-0 on top chord, and 227 lb down and 143 lb up at 5-6-0, 33 lb down at 6-4-0, 32 lb down at 8-4-0, 32 lb down at 10-4-0, 32 lb down at 12-4-0, 32 lb down at 14-4-0, 32 lb down at 16-4-0, 32 lb down at 18-4-0, 32 lb down at 20-4-0, and 32 lb down at 22-4-0, and 229 lb down and 140 lb up at 23-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) 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

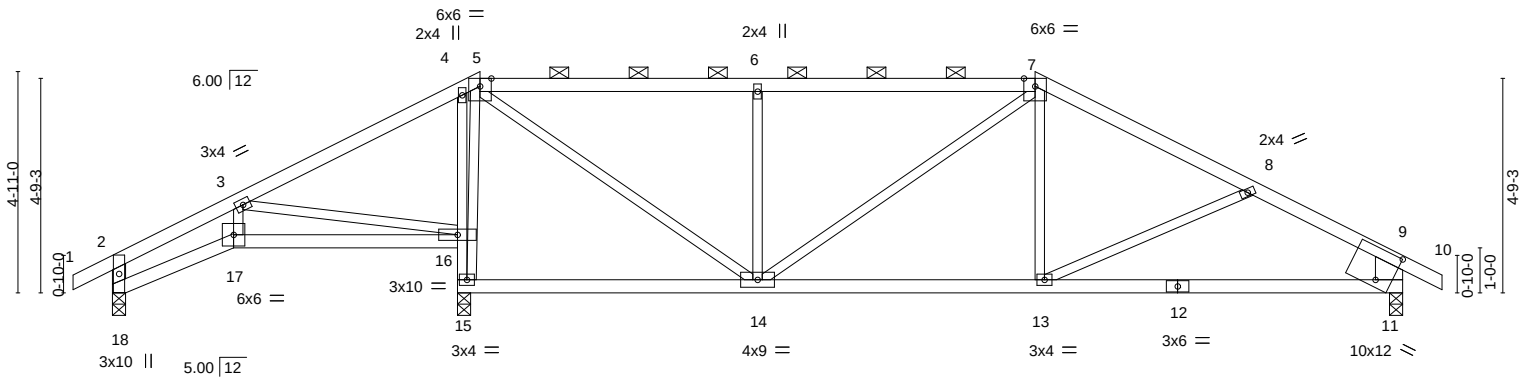
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 4-7=-70, 7-8=-70, 8-9=-70, 16-17=-20, 15-16=-20, 10-14=-20
   Concentrated Loads (lb)
   Vert: 11=-229(B) 18=-46(B) 19=-46(B) 20=-46(B) 21=-46(B) 22=-46(B) 23=-46(B) 24=-46(B) 25=-46(B) 26=-46(B) 27=-227(B) 28=-21(B) 29=-22(B) 30=-22(B) 31=-22(B) 32=-22(B) 33=-22(B) 34=-22(B) 35=-22(B) 36=-22(B)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	E6	Hip	1	1	I45097651
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:40 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-l7qcGql65?K9h8Lx8J3cHwiSscCjujJ6YhPbJbzd_Az

-0-10-8	2-8-5	7-8-0	8-2-0	14-4-0	20-6-0	25-2-11	28-8-0	29-6-8
0-10-8	2-8-5	4-11-11	0-6-0	6-2-0	6-2-0	4-8-10	3-5-5	0-10-8

Scale = 1:51.2



2-8-5	7-8-0	7-9-12	14-4-0	20-6-0	28-8-0
2-8-5	4-11-11	0-1-12	6-6-4	6-2-0	8-2-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.09	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.19	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	-0.03	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	13-14	>999	240	Weight: 107 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
5-7: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-18: 2x4 SPF No.2, 9-11: 2x8 SP DSS

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

REACTIONS. (size) 18=0-3-8, 15=0-3-8, 11=0-3-8
Max Horz 18=-85(LC 6)
Max Uplift 18=-64(LC 8), 15=-146(LC 5), 11=-140(LC 9)
Max Grav 18=305(LC 21), 15=1435(LC 1), 11=984(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-381/125, 3-4=-19/305, 5-6=-919/247, 6-7=-917/246, 7-8=-1131/186, 8-9=-1248/205, 2-18=-358/114, 9-11=-895/180
BOT CHORD 17-18=-137/308, 16-17=-129/270, 15-16=-755/239, 4-16=-602/229, 13-14=-68/975, 11-13=-124/988
WEBS 3-16=-439/186, 5-15=-785/150, 5-14=-151/1203, 6-14=-512/210, 7-13=0/257

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) 18 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) 18 except (jt=lb) 15=146, 11=140.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

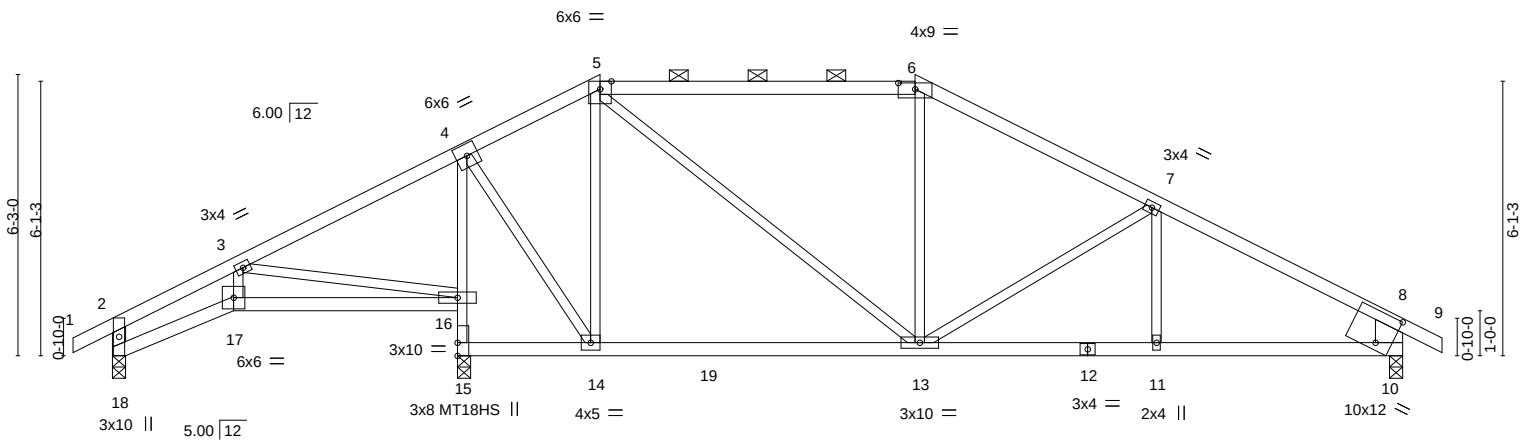
Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	E7	Hip	1	1	I45097652
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:42 2021 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-iWyNhWmNcdatwSVKGk54MLnm7QpZMcJP??uiNUzd_Ax

-0-10-8	2-8-5	7-8-0	10-10-0	17-10-0	23-2-6	28-8-0	29-6-8
0-10-8	2-8-5	4-11-11	3-2-0	7-0-0	5-4-6	5-5-10	0-10-8

Scale = 1:51.2



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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.11	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.19	11-13	>999	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	-0.03	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	11-13	>999	240	Weight: 109 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
4-15: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
2-18: 2x4 SPF No.2, 8-10: 2x8 SP DSS

BRACING-

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

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
3-2-5 oc bracing: 15-16
6-0-0 oc bracing: 14-15.

REACTIONS. (size) 18=0-3-8, 15=0-3-8, 10=0-3-8
Max Horz 18=-100(LC 6)
Max Uplift 18=-68(LC 9), 15=-128(LC 8), 10=-167(LC 9)
Max Grav 18=297(LC 21), 15=1530(LC 2), 10=982(LC 24)

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

TOP CHORD 2-3=-379/138, 3-4=-15/410, 4-5=-382/173, 5-6=-815/210, 6-7=-950/192, 7-8=-1281/215, 2-18=-344/121, 8-10=-860/192

BOT CHORD 17-18=-171/335, 16-17=-161/285, 15-16=-1553/137, 4-16=-1350/125, 13-14=-15/336, 11-13=-116/1049, 10-11=-116/1049

WEBS 3-16=-528/196, 4-14=-12/978, 5-14=-596/85, 5-13=-58/633, 7-13=-305/153

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) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 15=128, 10=167.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 9,2021

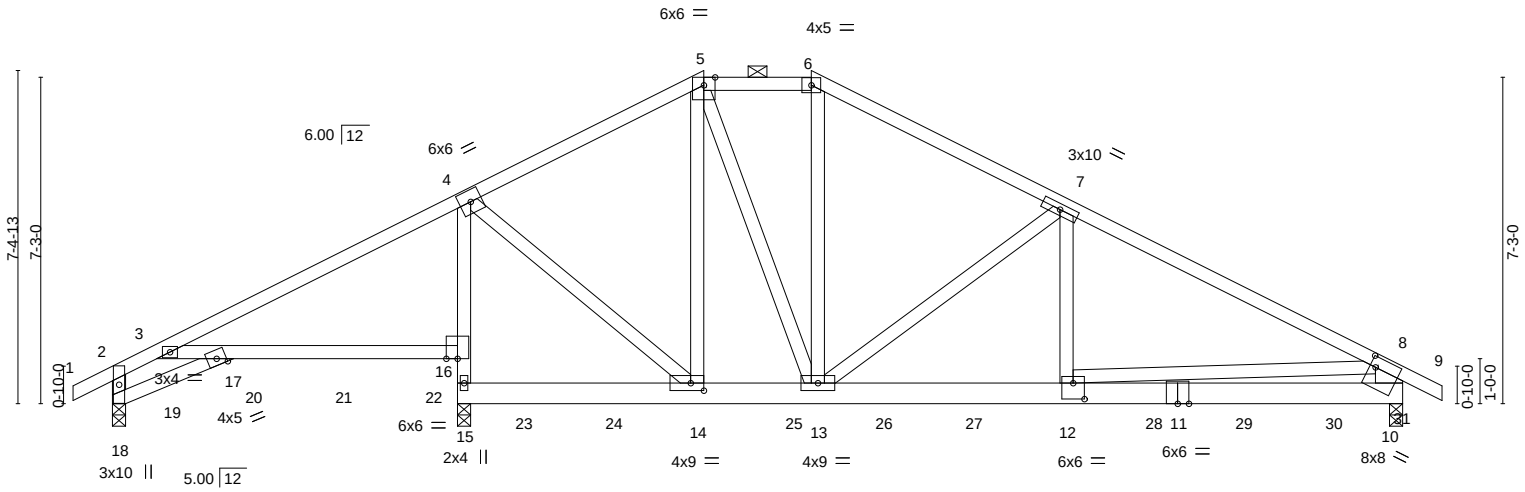
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	E8	Hip Girder	1	3	I45097653
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:44 2021 Page 1
ID:eIl3htjhC3ucpFh1ifG0EczUTUF-eu476Cod8Eqa9meiN97YRmtCHDZAqXXiTJNpSMzd_Av

-0-10-8	2-8-5	7-8-0	13-1-11	15-6-5	21-2-6	28-8-0	29-6-8
0-10-8	2-8-5	4-11-11	5-5-11	2-4-11	5-8-1	7-5-10	0-10-8

Scale = 1:51.2



7-8-0	7-9-12	13-1-11	15-6-5	21-2-6	28-8-0
7-8-0	0-1-12	5-3-15	2-4-11	5-8-1	7-5-10

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.10	16-17	>949	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.20	16-17	>469	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	10-12	>999	240	Weight: 464 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
11-15,10-11: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except*
8-10: 2x8 SP DSS

BRACING-

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

REACTIONS. (size) 18=0-3-8, 15=0-3-8 (req. 0-3-11), 10=0-3-8
Max Horz 18=-98(LC 6)
Max Uplift 15=-89(LC 8), 10=-726(LC 9)
Max Grav 18=384(LC 14), 15=7017(LC 1), 10=6465(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=0/1139, 4-5=-3325/472, 5-6=-3671/459, 6-7=-4217/491, 7-8=-7588/735, 8-10=-3944/399
BOT CHORD 3-17=-918/0, 16-17=-887/0, 15-16=-6165/32, 4-16=-5571/187, 14-15=-846/0, 13-14=-251/2904, 12-13=-580/6677, 10-12=-503/3678
WEBS 4-14=-54/4872, 5-14=-862/0, 5-13=-76/2257, 6-13=-161/1543, 7-13=-3727/385, 7-12=-232/3351, 8-12=-84/3009

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
9) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 10=726.
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.

March 9,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 260 lb down at 0-11-13, 240 lb down at 3-1-7, 240 lb down at 5-1-7, 240 lb down at 7-1-7, 919 lb down and 85 lb up at 9-1-7, 935 lb down and 78 lb up at 11-1-7, 900 lb down and 85 lb up at 13-1-7, 900 lb down and 74 lb up at 15-1-7, 882 lb down and 67 lb up at 17-1-7, 978 lb down and 44 lb up at 19-1-7, 941 lb down and 37 lb up at 21-1-7, 949 lb down and 148 lb up at 23-1-7, 977 lb down and 151 lb up at 25-1-7, and 977 lb down and 154 lb up at 27-1-7, and 971 lb down and 156 lb up at 27-5-4 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, 2-5=-70, 5-6=-70, 6-8=-70, 8-9=-70, 17-18=-20, 16-17=-20, 10-15=-20
   Concentrated Loads (lb)
   Vert: 14=-868(F) 12=-941(F) 19=-260(F) 20=-240(F) 21=-240(F) 22=-240(F) 23=-877(F) 24=-894(F) 25=-869(F) 26=-882(F) 27=-978(F) 28=-949(F) 29=-977(F) 30=-977(F) 31=-971(F)
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-57, 2-5=-58, 5-6=-58, 6-8=-58, 8-9=-57, 17-18=-20, 16-17=-20, 10-15=-20
   Concentrated Loads (lb)
   Vert: 14=-900(F) 12=-807(F) 19=-260(F) 20=-204(F) 21=-204(F) 22=-204(F) 23=-919(F) 24=-935(F) 25=-900(F) 26=-757(F) 27=-838(F) 28=-814(F) 29=-838(F) 30=-838(F) 31=-833(F)
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-20, 2-5=-20, 5-6=-20, 6-8=-20, 8-9=-20, 17-18=-40, 16-17=-40, 10-15=-40
   Concentrated Loads (lb)
   Vert: 14=-551(F) 12=-594(F) 19=-260(F) 20=-133(F) 21=-133(F) 22=-133(F) 23=-561(F) 24=-572(F) 25=-551(F) 26=-558(F) 27=-611(F) 28=-599(F) 29=-623(F) 30=-622(F) 31=-612(F)
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=11, 2-5=-3, 5-6=16, 6-8=8, 8-9=3, 17-18=-12, 16-17=-12, 10-15=-12
   Horz: 1-2=-23, 2-5=-9, 6-8=20, 8-9=15, 2-18=12, 8-10=18
   Concentrated Loads (lb)
   Vert: 14=77(F) 12=29(F) 19=-260(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=77(F) 24=70(F) 25=66(F) 26=59(F) 27=36(F) 28=140(F) 29=143(F) 30=146(F) 31=148(F)
5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=3, 2-5=8, 5-6=16, 6-8=-3, 8-9=11, 17-18=-12, 16-17=-12, 10-15=-12
   Horz: 1-2=-15, 2-5=-20, 6-8=9, 8-9=23, 2-18=-18, 8-10=-12
   Concentrated Loads (lb)
   Vert: 14=77(F) 12=29(F) 19=-260(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=77(F) 24=70(F) 25=66(F) 26=59(F) 27=36(F) 28=140(F) 29=143(F) 30=146(F) 31=148(F)
6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-17, 2-5=-23, 5-6=-3, 6-8=-11, 8-9=-5, 17-18=-20, 16-17=-20, 10-15=-20
   Horz: 1-2=-3, 2-5=3, 6-8=9, 8-9=15, 2-18=24, 8-10=6
   Concentrated Loads (lb)
   Vert: 14=85(F) 12=37(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=85(F) 24=78(F) 25=74(F) 26=67(F) 27=44(F) 28=148(F) 29=151(F) 30=154(F) 31=156(F)
7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-5, 2-5=-11, 5-6=-3, 6-8=-23, 8-9=-17, 17-18=-20, 16-17=-20, 10-15=-20
   Horz: 1-2=-15, 2-5=-9, 6-8=-3, 8-9=3, 2-18=-6, 8-10=-24
   Concentrated Loads (lb)
   Vert: 14=85(F) 12=37(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=85(F) 24=78(F) 25=74(F) 26=67(F) 27=44(F) 28=148(F) 29=151(F) 30=154(F) 31=156(F)
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=11, 2-5=16, 5-6=6, 6-8=6, 8-9=0, 17-18=-12, 16-17=-12, 10-15=-12
   Horz: 1-2=-23, 2-5=-28, 6-8=18, 8-9=12, 2-18=7, 8-10=15
   Concentrated Loads (lb)
   Vert: 14=77(F) 12=29(F) 19=-260(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=77(F) 24=70(F) 25=66(F) 26=59(F) 27=36(F) 28=140(F) 29=143(F) 30=146(F) 31=148(F)
9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=0, 2-5=6, 5-6=6, 6-8=16, 8-9=11, 17-18=-12, 16-17=-12, 10-15=-12
   Horz: 1-2=-12, 2-5=-18, 6-8=28, 8-9=23, 2-18=-15, 8-10=-7
   Concentrated Loads (lb)
   Vert: 14=77(F) 12=29(F) 19=-260(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=77(F) 24=70(F) 25=66(F) 26=59(F) 27=36(F) 28=140(F) 29=143(F) 30=146(F) 31=148(F)
10) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=3, 2-5=-3, 5-6=-14, 6-8=-14, 8-9=-8, 17-18=-20, 16-17=-20, 10-15=-20
   Horz: 1-2=-23, 2-5=-17, 6-8=6, 8-9=12, 2-18=19, 8-10=4
   Concentrated Loads (lb)
   Vert: 14=85(F) 12=37(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=85(F) 24=78(F) 25=74(F) 26=67(F) 27=44(F) 28=148(F) 29=151(F) 30=154(F) 31=156(F)
11) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=-8, 2-5=-14, 5-6=-14, 6-8=-3, 8-9=3, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-12, 2-5=-6, 6-8=17, 8-9=23, 2-18=-4, 8-10=-19
Concentrated Loads (lb)
Vert: 14=85(F) 12=37(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=85(F) 24=78(F) 25=74(F) 26=67(F) 27=44(F) 28=148(F) 29=151(F) 30=154(F) 31=156(F)

12) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-2=-20, 2-5=-20, 5-6=-20, 6-8=-20, 8-9=-20, 17-18=-20, 16-17=-20, 10-15=-20
Concentrated Loads (lb)
Vert: 14=-581(F) 12=-404(F) 19=-260(F) 20=-95(F) 21=-95(F) 22=-95(F) 23=-601(F) 24=-611(F) 25=-581(F) 26=-380(F) 27=-418(F) 28=-408(F) 29=-422(F) 30=-422(F) 31=-417(F)

13) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-55, 2-5=-59, 5-6=-45, 6-8=-51, 8-9=-47, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-2, 2-5=2, 6-8=7, 8-9=11, 2-18=18, 8-10=5
Concentrated Loads (lb)
Vert: 14=9(F) 12=-31(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=9(F) 24=2(F) 25=1(F) 26=-5(F) 27=-28(F) 28=52(F) 29=52(F) 30=55(F) 31=57(F)

14) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-5=-51, 5-6=-45, 6-8=-59, 8-9=-55, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-11, 2-5=-7, 6-8=-2, 8-9=2, 2-18=-5, 8-10=-18
Concentrated Loads (lb)
Vert: 14=9(F) 12=-31(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=9(F) 24=2(F) 25=1(F) 26=-5(F) 27=-28(F) 28=52(F) 29=52(F) 30=55(F) 31=57(F)

15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-41, 2-5=-45, 5-6=-53, 6-8=-53, 8-9=-48, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-17, 2-5=-12, 6-8=5, 8-9=9, 2-18=14, 8-10=3
Concentrated Loads (lb)
Vert: 14=9(F) 12=-31(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=9(F) 24=2(F) 25=1(F) 26=-5(F) 27=-28(F) 28=52(F) 29=52(F) 30=55(F) 31=57(F)

16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-48, 2-5=-53, 5-6=-53, 6-8=-45, 8-9=-41, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-9, 2-5=-5, 6-8=12, 8-9=17, 2-18=-3, 8-10=-14
Concentrated Loads (lb)
Vert: 14=9(F) 12=-31(F) 19=-260(F) 20=-49(F) 21=-49(F) 22=-49(F) 23=9(F) 24=2(F) 25=1(F) 26=-5(F) 27=-28(F) 28=52(F) 29=52(F) 30=55(F) 31=57(F)

17) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-5=-16, 5-6=-12, 6-8=-12, 8-9=-12, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 2-5=4, 2-18=16
Concentrated Loads (lb)
Vert: 14=13(F) 12=-32(F) 19=-260(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=11(F) 24=5(F) 25=4(F) 26=-3(F) 27=-30(F) 28=78(F) 29=76(F) 30=79(F) 31=81(F)

18) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-5=-12, 5-6=-12, 6-8=-16, 8-9=-12, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 6-8=-4, 8-10=-16
Concentrated Loads (lb)
Vert: 14=13(F) 12=-32(F) 19=-260(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=11(F) 24=5(F) 25=4(F) 26=-3(F) 27=-30(F) 28=78(F) 29=76(F) 30=79(F) 31=81(F)

19) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-5=-70, 5-6=-70, 6-8=-20, 8-9=-20, 17-18=-20, 16-17=-20, 10-15=-20
Concentrated Loads (lb)
Vert: 14=-868(F) 12=-941(F) 19=-260(F) 20=-240(F) 21=-240(F) 22=-240(F) 23=-877(F) 24=-894(F) 25=-869(F) 26=-882(F) 27=-978(F) 28=-949(F) 29=-977(F) 30=-977(F) 31=-971(F)

20) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-20, 2-5=-20, 5-6=-70, 6-8=-70, 8-9=-70, 17-18=-20, 16-17=-20, 10-15=-20
Concentrated Loads (lb)
Vert: 14=-868(F) 12=-941(F) 19=-260(F) 20=-240(F) 21=-240(F) 22=-240(F) 23=-877(F) 24=-894(F) 25=-869(F) 26=-882(F) 27=-978(F) 28=-949(F) 29=-977(F) 30=-977(F) 31=-971(F)

21) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-57, 2-5=-58, 5-6=-58, 6-8=-20, 8-9=-20, 17-18=-20, 16-17=-20, 10-15=-20
Concentrated Loads (lb)
Vert: 14=-900(F) 12=-807(F) 19=-260(F) 20=-204(F) 21=-204(F) 22=-204(F) 23=-919(F) 24=-935(F) 25=-900(F) 26=-757(F) 27=-838(F) 28=-814(F) 29=-838(F) 30=-838(F) 31=-833(F)

22) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-20, 2-5=-20, 5-6=-58, 6-8=-58, 8-9=-57, 17-18=-20, 16-17=-20, 10-15=-20
Concentrated Loads (lb)
Vert: 14=-900(F) 12=-807(F) 19=-260(F) 20=-204(F) 21=-204(F) 22=-204(F) 23=-919(F) 24=-935(F) 25=-900(F) 26=-757(F) 27=-838(F) 28=-814(F) 29=-838(F) 30=-838(F) 31=-833(F)

23) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=11, 2-5=-3, 5-6=16, 6-8=8, 8-9=3, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 1-2=-23, 2-5=-9, 6-8=20, 8-9=15, 2-18=12, 8-10=18

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LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 14=-507(F) 12=-510(F) 19=-260(F) 20=-116(F) 21=-116(F) 22=-116(F) 23=-510(F) 24=-512(F) 25=-497(F) 26=-494(F) 27=-529(F) 28=-514(F) 29=-531(F) 30=-532(F) 31=-526(F)

24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-5=8, 5-6=16, 6-8=-3, 8-9=11, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 1-2=-15, 2-5=-20, 6-8=9, 8-9=23, 2-18=-18, 8-10=-12
Concentrated Loads (lb)
Vert: 14=-507(F) 12=-510(F) 19=-260(F) 20=-116(F) 21=-116(F) 22=-116(F) 23=-510(F) 24=-512(F) 25=-497(F) 26=-494(F) 27=-529(F) 28=-514(F) 29=-531(F) 30=-532(F) 31=-526(F)

25) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-17, 2-5=-23, 5-6=-3, 6-8=-11, 8-9=-5, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-3, 2-5=3, 6-8=9, 8-9=15, 2-18=24, 8-10=6
Concentrated Loads (lb)
Vert: 14=-499(F) 12=-502(F) 19=-260(F) 20=-108(F) 21=-108(F) 22=-108(F) 23=-502(F) 24=-504(F) 25=-489(F) 26=-486(F) 27=-521(F) 28=-506(F) 29=-523(F) 30=-524(F) 31=-518(F)

26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-5=-11, 5-6=-3, 6-8=-23, 8-9=-17, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-15, 2-5=-9, 6-8=-3, 8-9=3, 2-18=-6, 8-10=-24
Concentrated Loads (lb)
Vert: 14=-499(F) 12=-502(F) 19=-260(F) 20=-108(F) 21=-108(F) 22=-108(F) 23=-502(F) 24=-504(F) 25=-489(F) 26=-486(F) 27=-521(F) 28=-506(F) 29=-523(F) 30=-524(F) 31=-518(F)

27) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=11, 2-5=16, 5-6=6, 6-8=6, 8-9=0, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 1-2=-23, 2-5=-28, 6-8=18, 8-9=12, 2-18=7, 8-10=15
Concentrated Loads (lb)
Vert: 14=-507(F) 12=-510(F) 19=-260(F) 20=-116(F) 21=-116(F) 22=-116(F) 23=-510(F) 24=-512(F) 25=-497(F) 26=-494(F) 27=-529(F) 28=-514(F) 29=-531(F) 30=-532(F) 31=-526(F)

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=0, 2-5=6, 5-6=6, 6-8=16, 8-9=11, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 1-2=-12, 2-5=-18, 6-8=28, 8-9=23, 2-18=-15, 8-10=-7
Concentrated Loads (lb)
Vert: 14=-507(F) 12=-510(F) 19=-260(F) 20=-116(F) 21=-116(F) 22=-116(F) 23=-510(F) 24=-512(F) 25=-497(F) 26=-494(F) 27=-529(F) 28=-514(F) 29=-531(F) 30=-532(F) 31=-526(F)

29) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-5=-3, 5-6=-14, 6-8=-14, 8-9=-8, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-23, 2-5=-17, 6-8=6, 8-9=12, 2-18=19, 8-10=4
Concentrated Loads (lb)
Vert: 14=-499(F) 12=-502(F) 19=-260(F) 20=-108(F) 21=-108(F) 22=-108(F) 23=-502(F) 24=-504(F) 25=-489(F) 26=-486(F) 27=-521(F) 28=-506(F) 29=-523(F) 30=-524(F) 31=-518(F)

30) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-8, 2-5=-14, 5-6=-14, 6-8=-3, 8-9=3, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-12, 2-5=-6, 6-8=17, 8-9=23, 2-18=-4, 8-10=-19
Concentrated Loads (lb)
Vert: 14=-499(F) 12=-502(F) 19=-260(F) 20=-108(F) 21=-108(F) 22=-108(F) 23=-502(F) 24=-504(F) 25=-489(F) 26=-486(F) 27=-521(F) 28=-506(F) 29=-523(F) 30=-524(F) 31=-518(F)

31) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-55, 2-5=-59, 5-6=-45, 6-8=-51, 8-9=-47, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-2, 2-5=2, 6-8=7, 8-9=11, 2-18=18, 8-10=5
Concentrated Loads (lb)
Vert: 14=-862(F) 12=-779(F) 19=-260(F) 20=-186(F) 21=-186(F) 22=-186(F) 23=-875(F) 24=-886(F) 25=-855(F) 26=-742(F) 27=-810(F) 28=-787(F) 29=-810(F) 30=-810(F) 31=-805(F)

32) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-47, 2-5=-51, 5-6=-45, 6-8=-59, 8-9=-55, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-11, 2-5=-7, 6-8=-2, 8-9=2, 2-18=-5, 8-10=-18
Concentrated Loads (lb)
Vert: 14=-862(F) 12=-779(F) 19=-260(F) 20=-186(F) 21=-186(F) 22=-186(F) 23=-875(F) 24=-886(F) 25=-855(F) 26=-742(F) 27=-810(F) 28=-787(F) 29=-810(F) 30=-810(F) 31=-805(F)

33) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-41, 2-5=-45, 5-6=-53, 6-8=-53, 8-9=-48, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-17, 2-5=-12, 6-8=5, 8-9=9, 2-18=14, 8-10=3
Concentrated Loads (lb)
Vert: 14=-862(F) 12=-779(F) 19=-260(F) 20=-186(F) 21=-186(F) 22=-186(F) 23=-875(F) 24=-886(F) 25=-855(F) 26=-742(F) 27=-810(F) 28=-787(F) 29=-810(F) 30=-810(F) 31=-805(F)

Continued on page 5

LOAD CASE(S) Standard

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-48, 2-5=-53, 5-6=-53, 6-8=-45, 8-9=-41, 17-18=-20, 16-17=-20, 10-15=-20
Horz: 1-2=-9, 2-5=-5, 6-8=12, 8-9=17, 2-18=-3, 8-10=-14
Concentrated Loads (lb)
Vert: 14=-862(F) 12=-779(F) 19=-260(F) 20=-186(F) 21=-186(F) 22=-186(F) 23=-875(F) 24=-886(F) 25=-855(F) 26=-742(F) 27=-810(F) 28=-787(F) 29=-810(F) 30=-810(F) 31=-805(F)

35) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-5=-16, 5-6=-12, 6-8=-12, 8-9=-12, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 2-5=4, 2-18=16
Concentrated Loads (lb)
Vert: 14=-444(F) 12=-449(F) 19=-260(F) 20=-110(F) 21=-110(F) 22=-110(F) 23=-445(F) 24=-447(F) 25=-435(F) 26=-432(F) 27=-463(F) 28=-453(F) 29=-464(F) 30=-464(F) 31=-459(F)

36) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-5=-12, 5-6=-12, 6-8=-16, 8-9=-12, 17-18=-12, 16-17=-12, 10-15=-12
Horz: 6-8=-4, 8-10=-16
Concentrated Loads (lb)
Vert: 14=-444(F) 12=-449(F) 19=-260(F) 20=-110(F) 21=-110(F) 22=-110(F) 23=-445(F) 24=-447(F) 25=-435(F) 26=-432(F) 27=-463(F) 28=-453(F) 29=-464(F) 30=-464(F) 31=-459(F)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J1	Diagonal Hip Girder	2	1	I45097654

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:45 2021 Page 1
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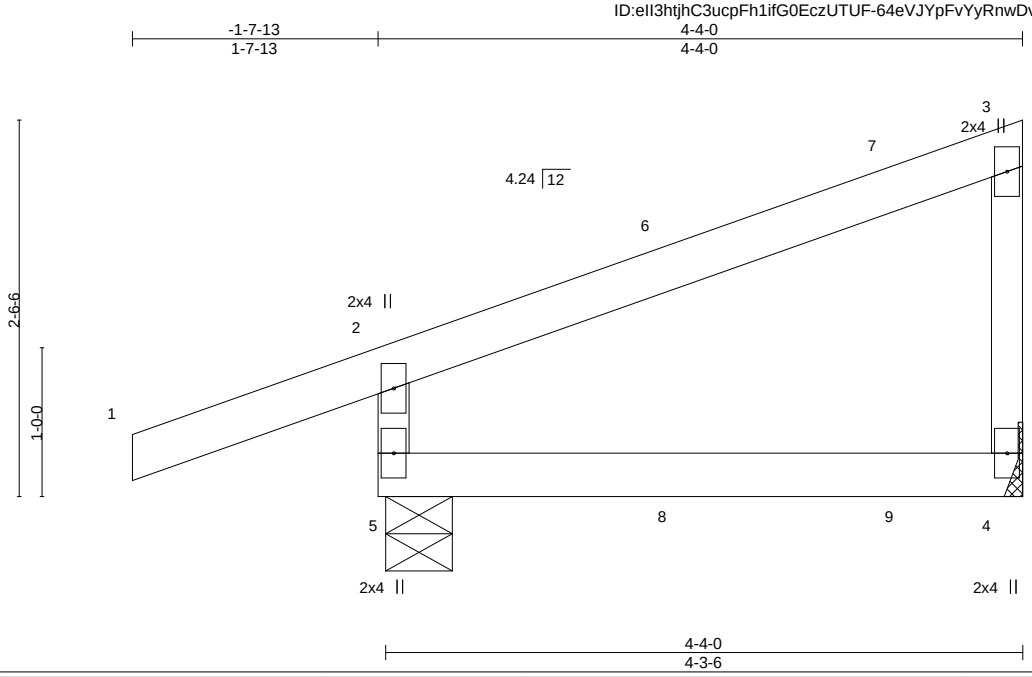

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 14 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-5-6, 4=Mechanical
Max Horz 5=107(LC 24)
Max Uplift 5=-124(LC 4), 4=-64(LC 5)
Max Grav 5=338(LC 1), 4=181(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-298/146

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=124.
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 19 lb up at 2-0-9, and 86 lb down and 62 lb up at 3-6-14 on top chord, and 11 lb down and 14 lb up at 2-0-9, and 21 lb down at 3-6-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=-14(B) 8=2(F) 9=-13(B)

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J2	Jack-Open	3	1	I45097655
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:53 2021 Page 1
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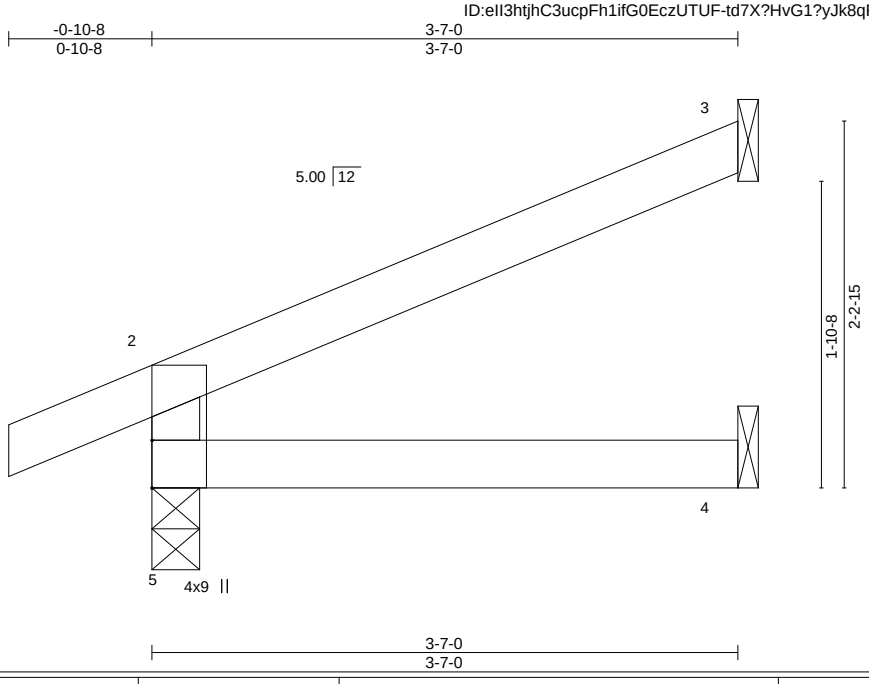

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-0 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=65(LC 8)
Max Uplift 5=-34(LC 8), 3=-54(LC 8)
Max Grav 5=234(LC 1), 3=103(LC 1), 4=63(LC 3)

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

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J3	Jack-Open	3	1	I45097656
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:01 2021 Page 1
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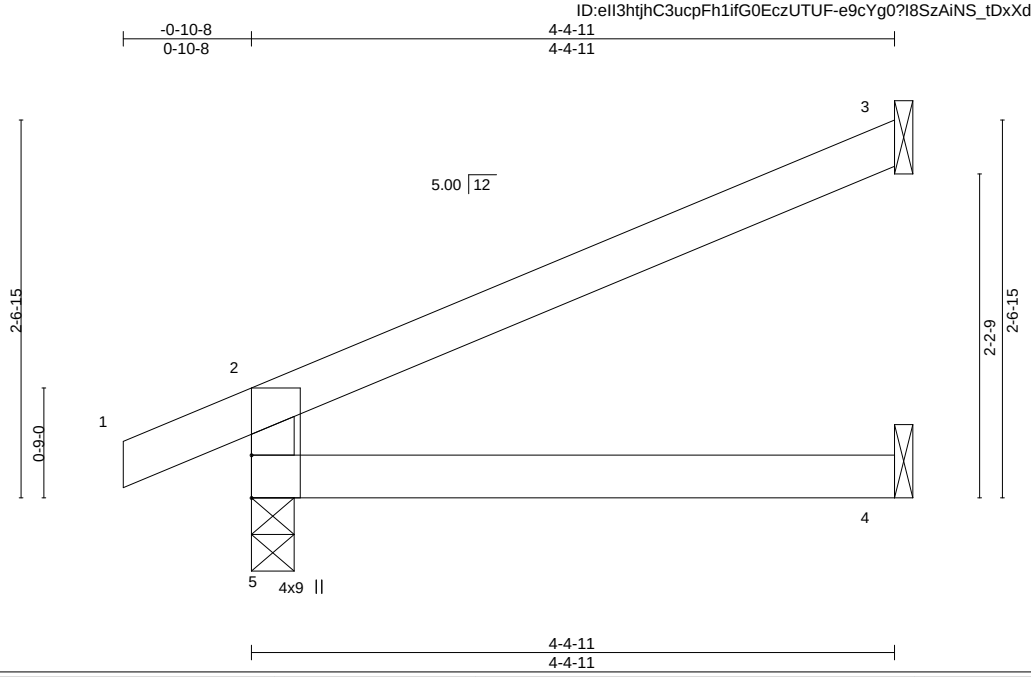

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 12 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=79(LC 8)
Max Uplift 5=-37(LC 8), 3=-67(LC 8)
Max Grav 5=268(LC 1), 3=130(LC 1), 4=79(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J4	Jack-Open	3	1	I45097657
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:06 2021 Page 1
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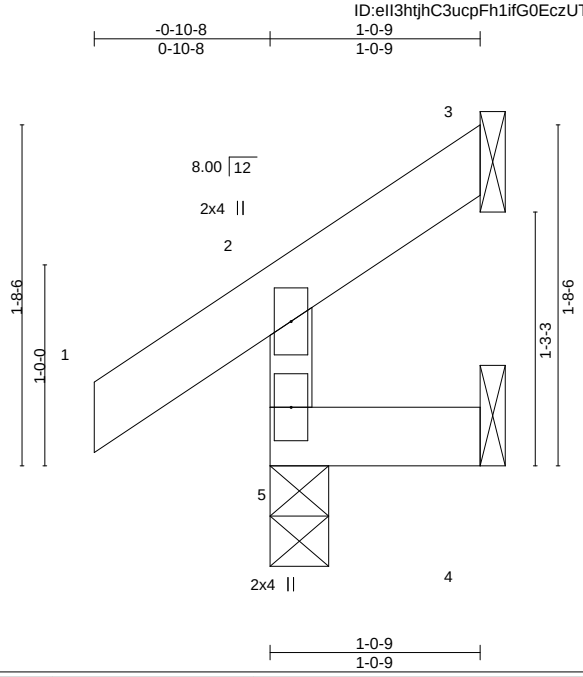

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 4 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=42(LC 5)
Max Uplift 5=-7(LC 8), 3=-21(LC 8), 4=-10(LC 8)
Max Grav 5=146(LC 1), 3=13(LC 6), 4=19(LC 6)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J5	Diagonal Hip Girder	1	1	I45097658
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:07 2021 Page 1
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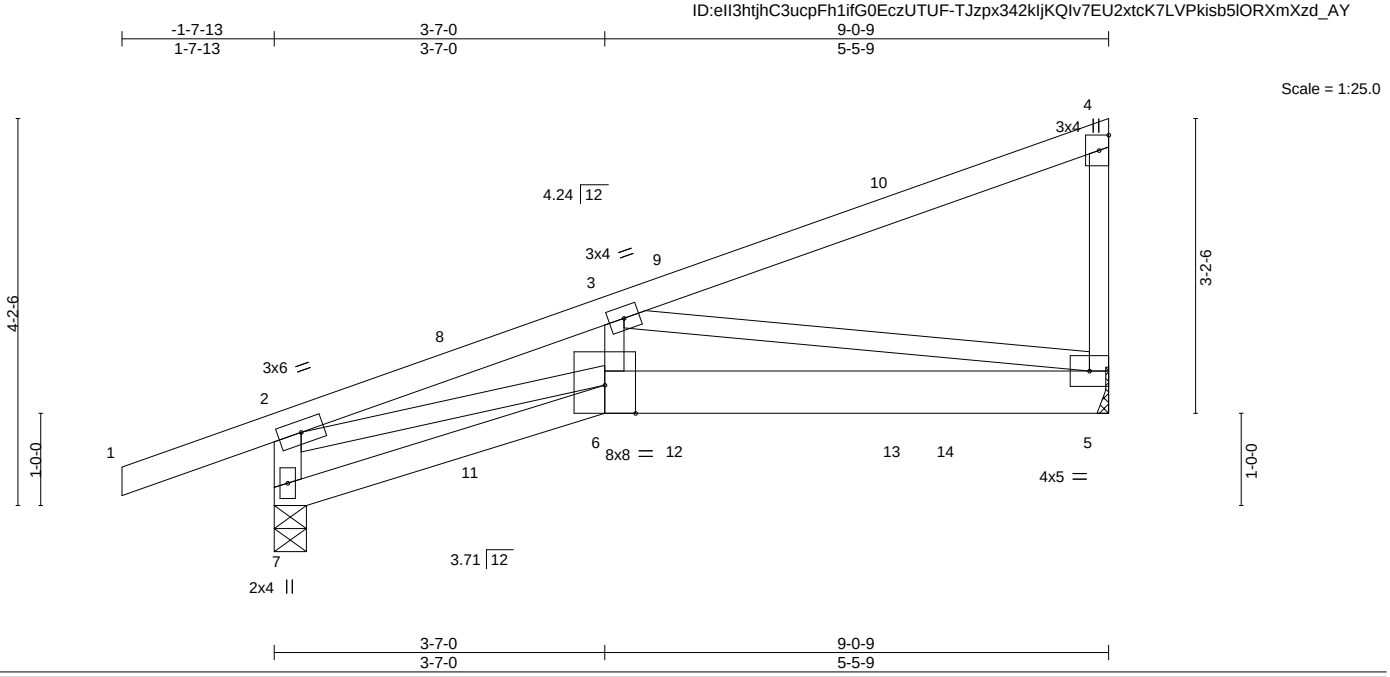


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.05	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.09	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	5-6	>999	240	Weight: 37 lb	FT = 10%

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

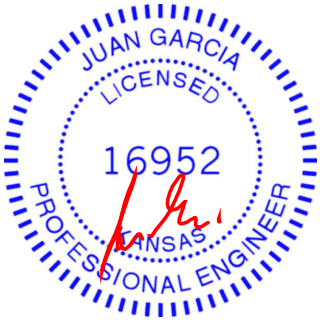
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-4-3, 5=Mechanical
Max Horz 7=165(LC 5)
Max Uplift 7=-198(LC 4), 5=-217(LC 8)
Max Grav 7=593(LC 1), 5=625(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-553/219, 2-3=-1213/422
BOT CHORD 5-6=-487/1091
WEBS 2-6=-375/1092, 3-6=-44/273, 3-5=-1065/459

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=198, 5=217.
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 20 lb up at 2-0-9, 107 lb down and 73 lb up at 3-6-14, and 80 lb down and 58 lb up at 4-4-14, and 105 lb down and 87 lb up at 6-9-3 on top chord, and 13 lb down and 16 lb up at 2-0-9, 15 lb down at 3-7-4, 15 lb down and 16 lb up at 4-4-14, and 28 lb down at 6-9-3, and 259 lb down and 107 lb up at 7-4-3 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



March 9,2021

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, 6-7=-20, 5-6=-20

Concentrated Loads (lb)

Vert: 6=-7(B) 10=-23(F) 11=2(F) 12=-0(F) 13=-13(F) 14=-259(B)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J6	Jack-Open	1	1	I45097659
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:10 2021 Page 1
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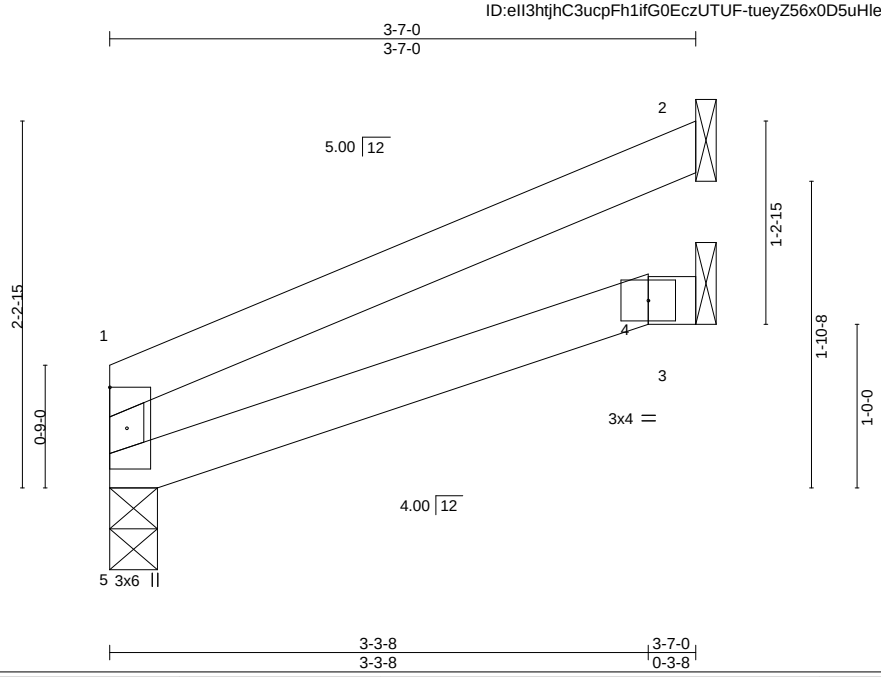


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 9 lb	FT = 10%

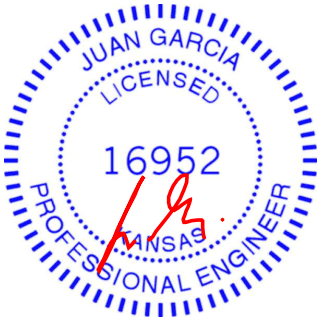
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-0 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=50(LC 8)
Max Uplift 5=-8(LC 8), 2=-59(LC 8)
Max Grav 5=154(LC 1), 2=113(LC 1), 3=66(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.



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J7	Jack-Closed	1	1	I45097660

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:11 2021 Page 1
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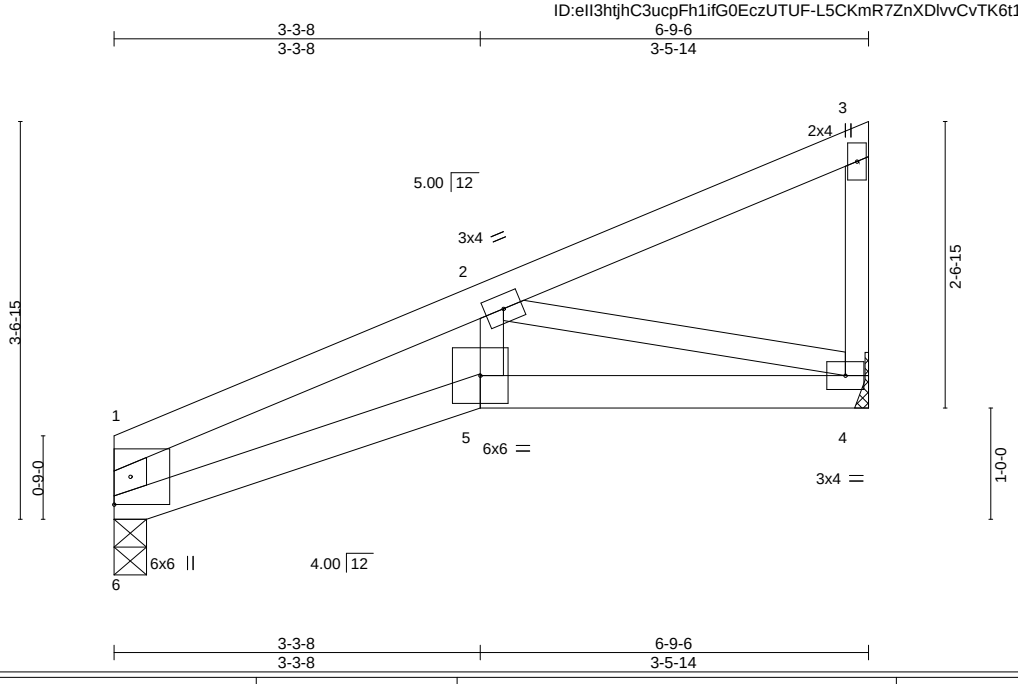

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.04	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.08	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.03	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	5	>999	240	Weight: 22 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 6=0-3-8, 4=Mechanical
Max Horz 6=122(LC 5)
Max Uplift 6=-37(LC 8), 4=-72(LC 8)
Max Grav 6=294(LC 1), 4=294(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-364/93, 1-2=-580/121
BOT CHORD 5-6=-152/494, 4-5=-143/459
WEBS 2-4=-453/167

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J8	Jack-Open	1	1	I45097661
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:12 2021 Page 1
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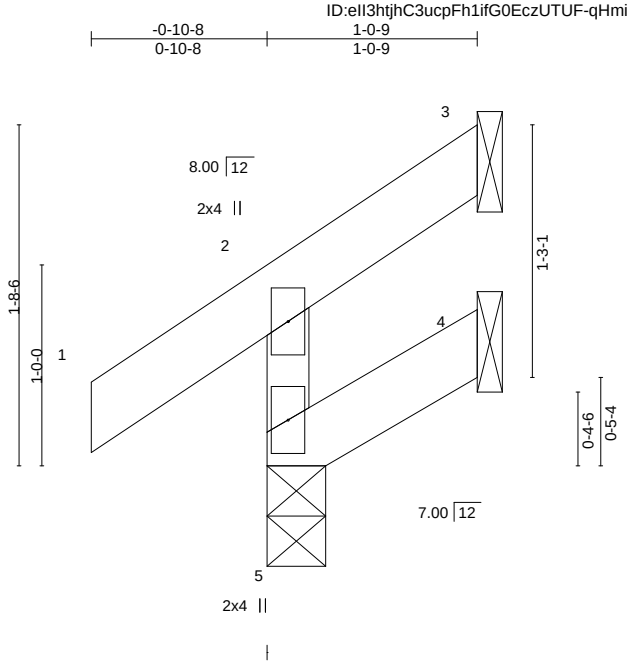

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 5 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=44(LC 5)
Max Uplift 5=-4(LC 8), 3=-23(LC 8), 4=-11(LC 8)
Max Grav 5=146(LC 1), 3=15(LC 6), 4=21(LC 6)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) 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, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J9	Jack-Open	1	1	I45097662

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:13 2021 Page 1

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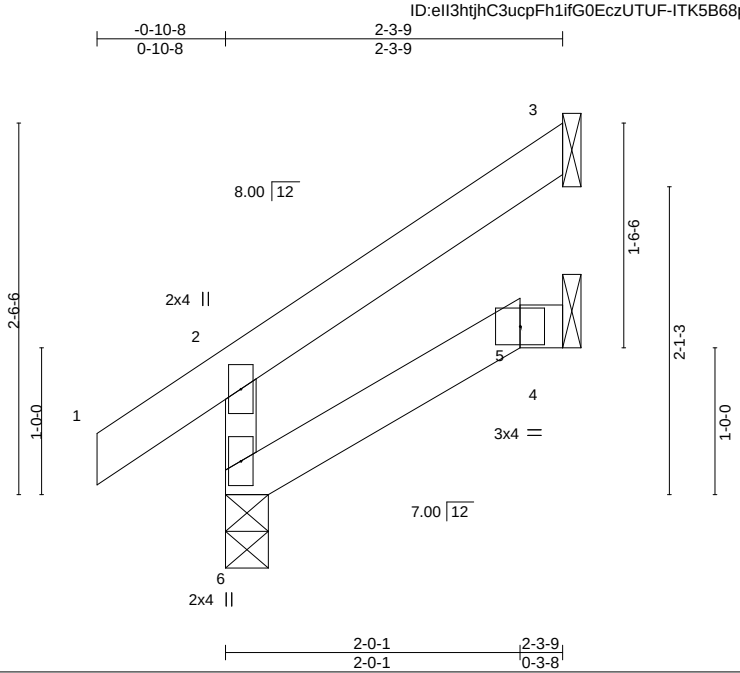

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5-6	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-3-9 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=69(LC 8)
Max Uplift 3=-55(LC 8), 4=-3(LC 8)
Max Grav 6=180(LC 1), 3=69(LC 15), 4=41(LC 3)

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

NOTES-

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J10	Jack-Open	1	1	I45097663
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:45 2021 Page 1
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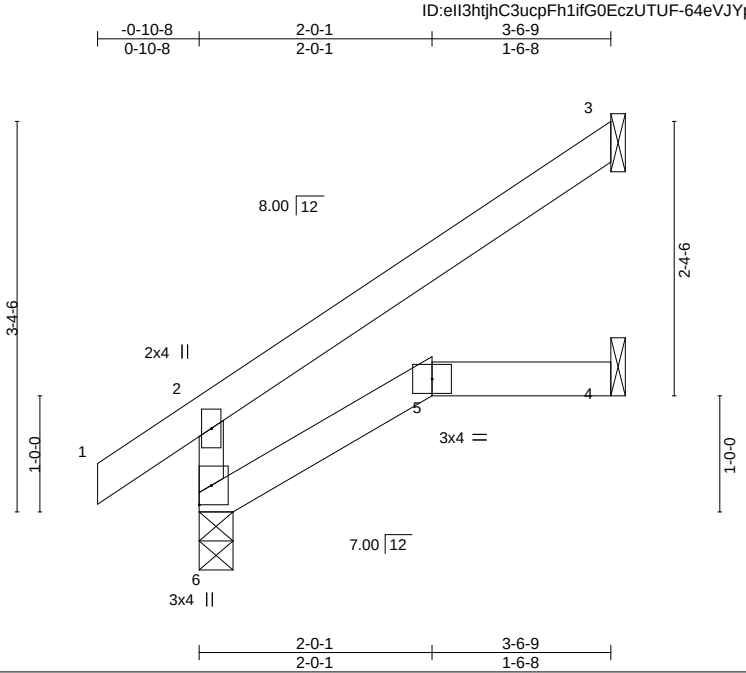

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	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 3-6-9 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=103(LC 8)
Max Uplift 3=-82(LC 8)
Max Grav 6=231(LC 1), 3=115(LC 15), 4=65(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J11	Jack-Closed Girder	1	1	I45097664

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:46 2021 Page 1

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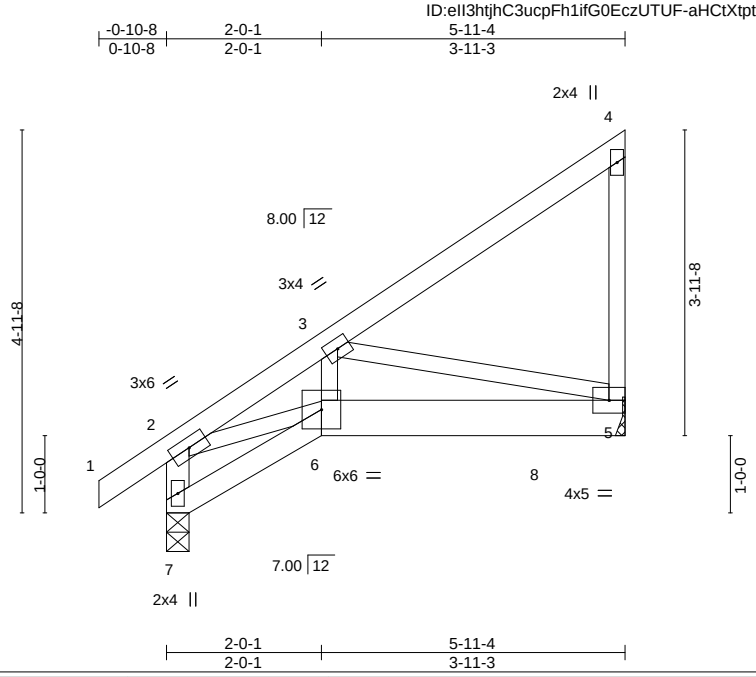


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.04	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.02	5-6	>999	240	Weight: 28 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-7: 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=176(LC 5)
Max Uplift 7=-72(LC 8), 5=-277(LC 8)
Max Grav 7=436(LC 1), 5=751(LC 1)

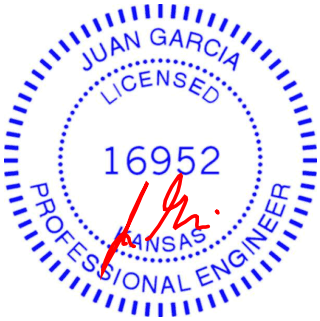
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-417/143, 2-3=-692/226
BOT CHORD 5-6=-243/580
WEBS 2-6=-146/556, 3-6=-130/298, 3-5=-583/285

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 except (jt=lb) 5=277.
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) 603 lb down and 238 lb up at 4-10-7 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
Concentrated Loads (lb)
Vert: 8=-603(B)



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J12	Jack-Open	6	1	I45097665
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:47 2021 Page 1
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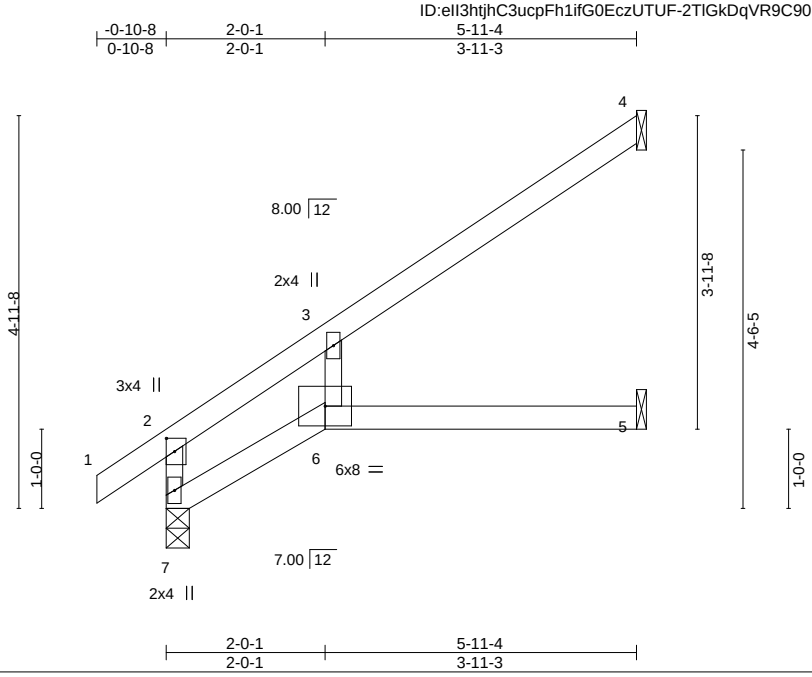

Plate Offsets (X,Y)-- [2:0-2-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.08	5-6	>857	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.15	5-6	>462	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.09	5-6	>739	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 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=118(LC 8)
Max Uplift 4=-64(LC 8), 5=-1(LC 8)
Max Grav 7=334(LC 1), 4=170(LC 13), 5=103(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J13	Jack-Open	1	1	I45097666
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:48 2021 Page 1
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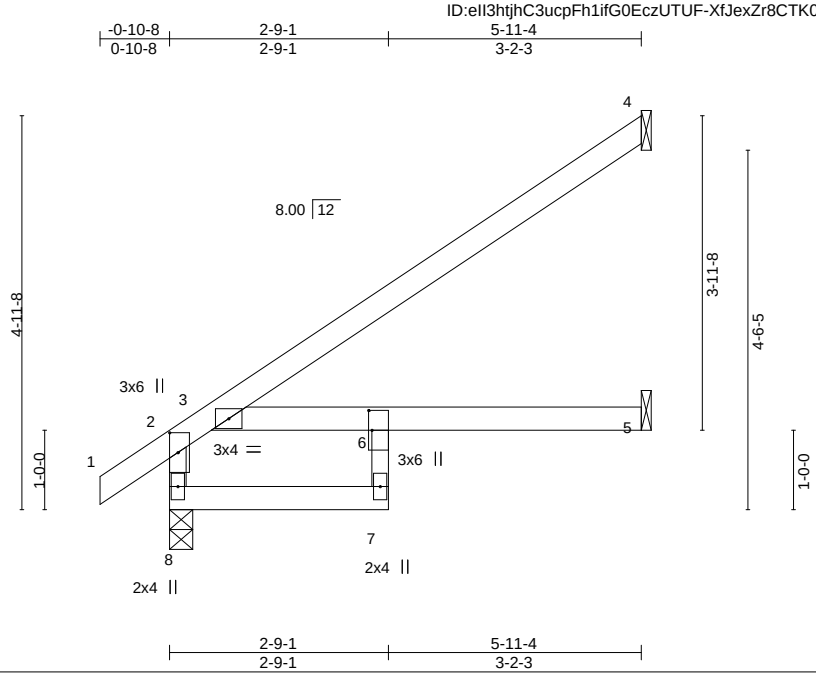

Plate Offsets (X,Y)-- [2:0-3-0,0-1-4], [6:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.14	5-6	>506	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.06	5-6	>999	240	Weight: 20 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=119(LC 8)
Max Uplift 4=-66(LC 8)
Max Grav 8=366(LC 1), 4=174(LC 13), 5=131(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-343/0

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J14	Jack-Open	2	1	I45097667
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:49 2021 Page 1
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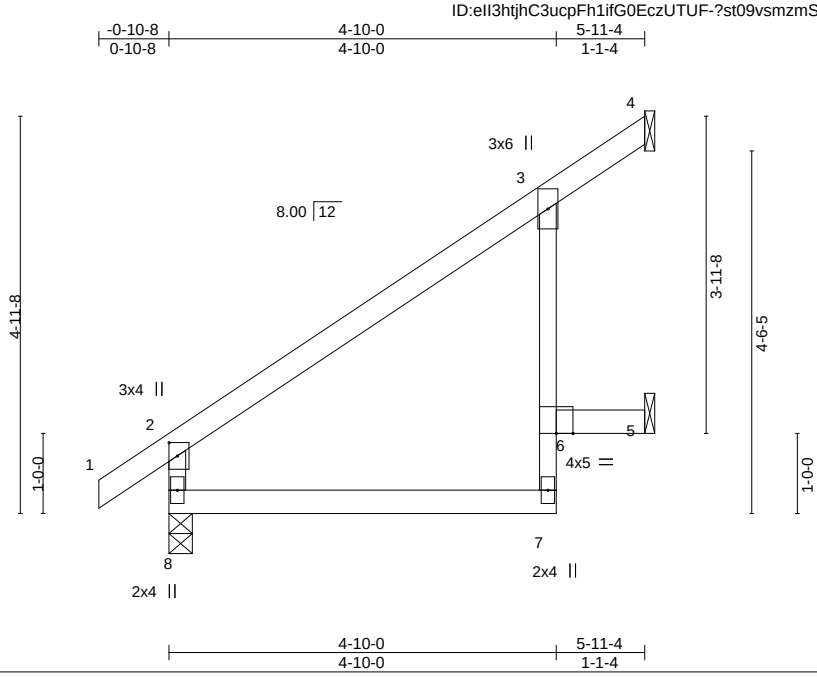

Plate Offsets (X,Y)-- [2:0-2-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.06	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6	>999	240	Weight: 20 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=119(LC 8)
Max Uplift 4=-10(LC 8), 5=-53(LC 8)
Max Grav 8=334(LC 1), 4=92(LC 13), 5=172(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-290/11

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J15	Jack-Open	3	1	I45097668
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:50 2021 Page 1
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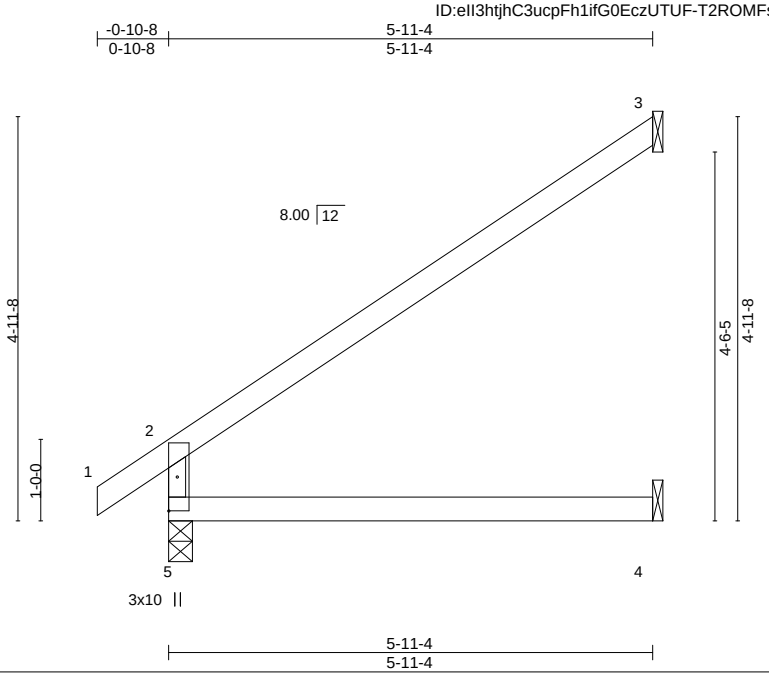

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.12	4-5	>569	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 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=119(LC 8)
Max Uplift 3=-80(LC 8)
Max Grav 5=334(LC 1), 3=191(LC 13), 4=111(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-288/25

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J16	Diagonal Hip Girder	1	1	I45097669

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:51 2021 Page 1
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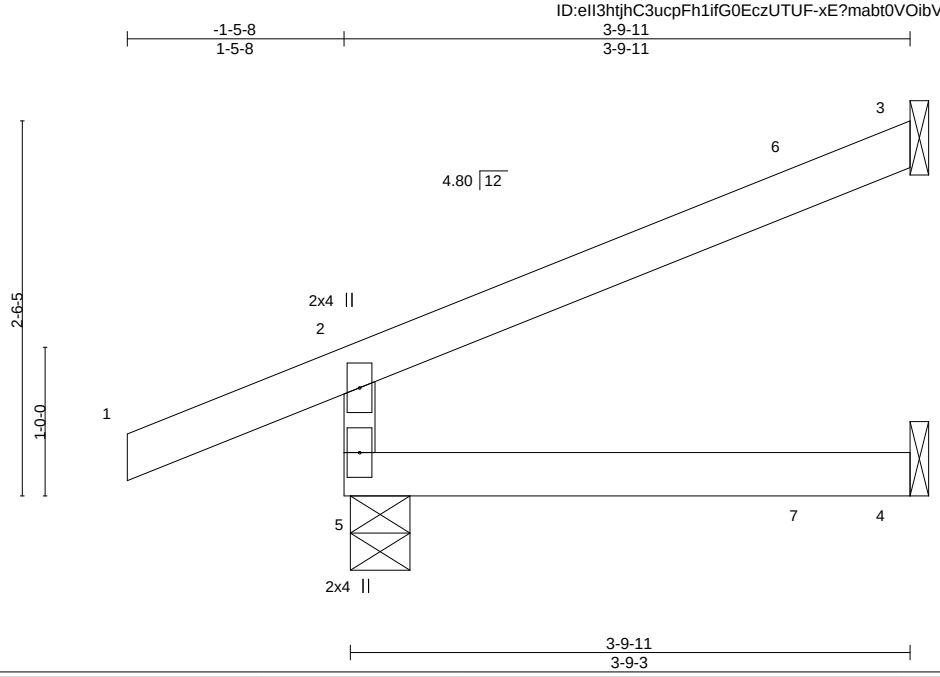

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-13, 3=Mechanical, 4=Mechanical
Max Horz 5=71(LC 8)
Max Uplift 5=-64(LC 4), 3=-73(LC 8)
Max Grav 5=298(LC 1), 3=105(LC 1), 4=73(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-260/95

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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 57 lb up at 3-2-0 on top chord, and 15 lb down at 3-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J17	Jack-Open	1	1	I45097670

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:51 2021 Page 1

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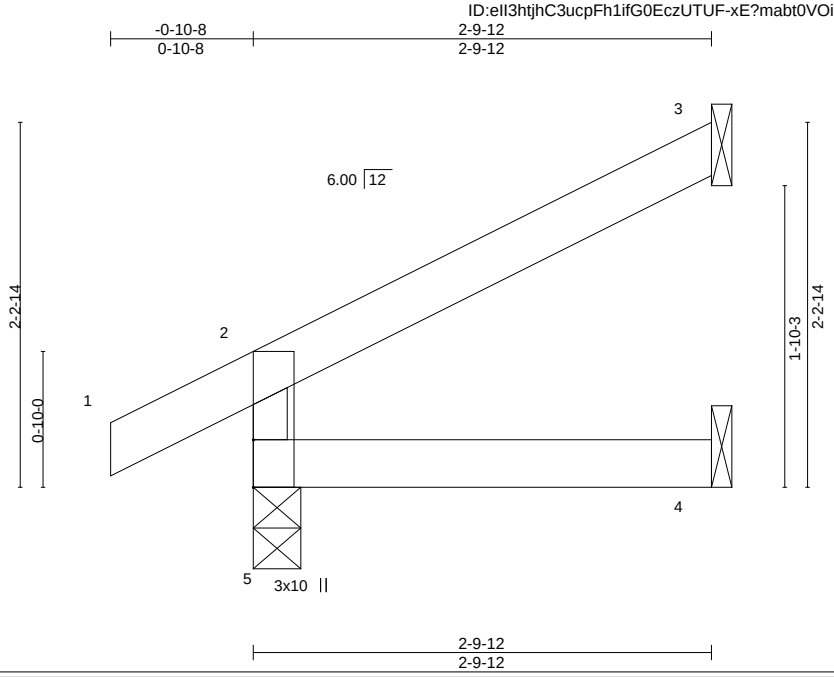

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 8)
Max Uplift 5=-22(LC 8), 3=-50(LC 8)
Max Grav 5=200(LC 1), 3=79(LC 1), 4=50(LC 3)

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

NOTES-

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J18	Jack-Open	4	1	I45097671
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:52 2021 Page 1
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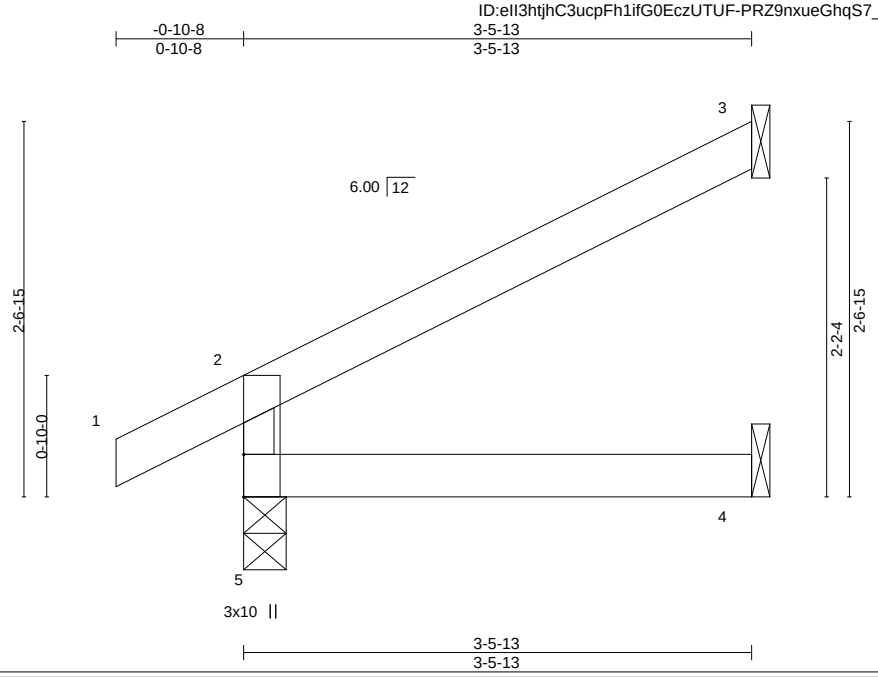

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=77(LC 8)
Max Uplift 5=-24(LC 8), 3=-62(LC 8)
Max Grav 5=228(LC 1), 3=102(LC 1), 4=63(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J19	Diagonal Hip Girder	1	1	I45097672

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:53 2021 Page 1

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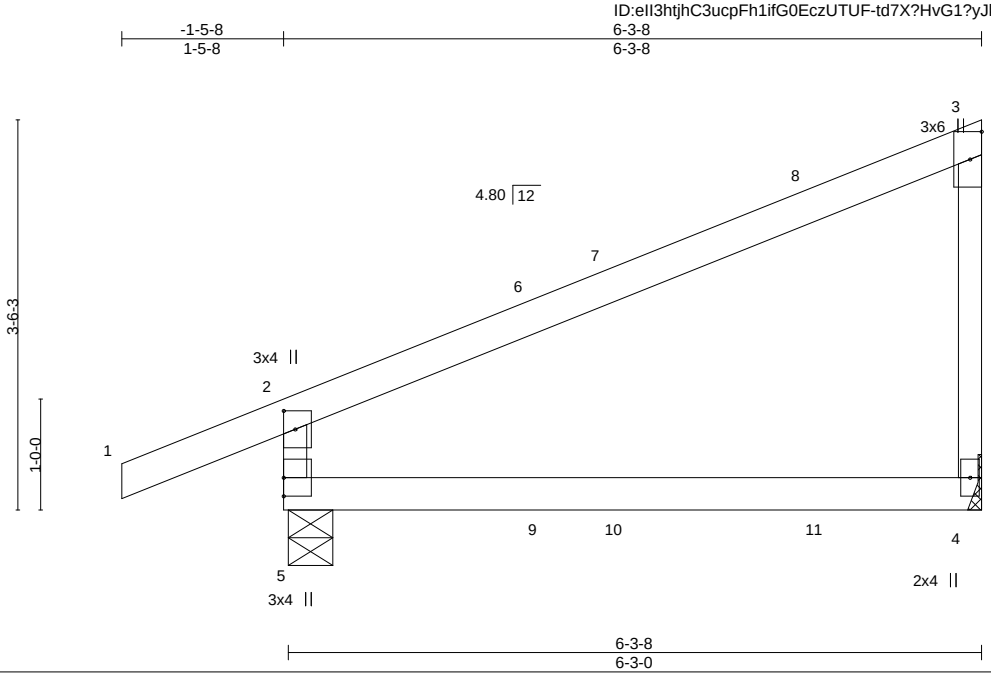

Plate Offsets (X,Y)-- [2:0-2-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.06	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.12	4-5	>600	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)	0.04	4-5	>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) 5=0-4-13, 4=Mechanical
Max Horz 5=149(LC 5)
Max Uplift 5=-103(LC 4), 4=-107(LC 5)
Max Grav 5=398(LC 1), 4=263(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-347/135

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=103, 4=107.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 32 lb up at 2-4-7, and 87 lb down and 57 lb up at 3-0-12, and 93 lb down and 72 lb up at 4-10-7 on top chord, and 9 lb down and 14 lb up at 2-4-7, and 8 lb down at 3-0-12, and 19 lb down and 16 lb up at 4-10-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 4-5=-20
   Concentrated Loads (lb)
   Vert: 9=2(F) 10=-2(B) 11=-4(F)

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J20A	Jack-Open	1	1	I45097673
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:54 2021 Page 1
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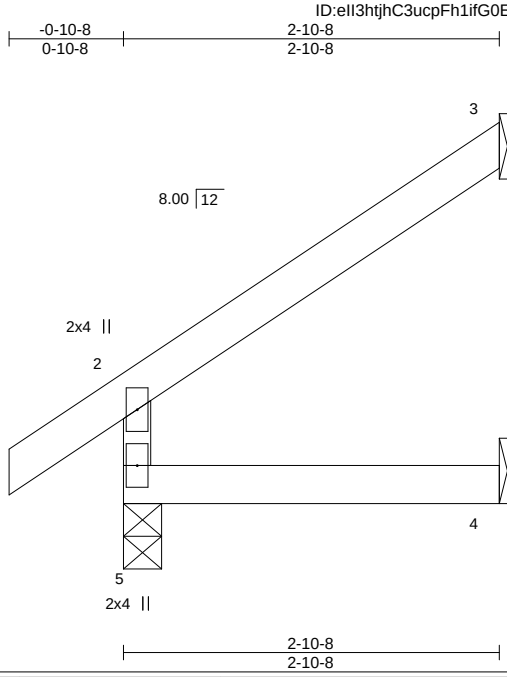

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 9 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=86(LC 8)
Max Uplift 5=-2(LC 8), 3=-66(LC 8)
Max Grav 5=203(LC 1), 3=90(LC 15), 4=52(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J21	Jack-Open	8	1	I45097674
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:55 2021 Page 1

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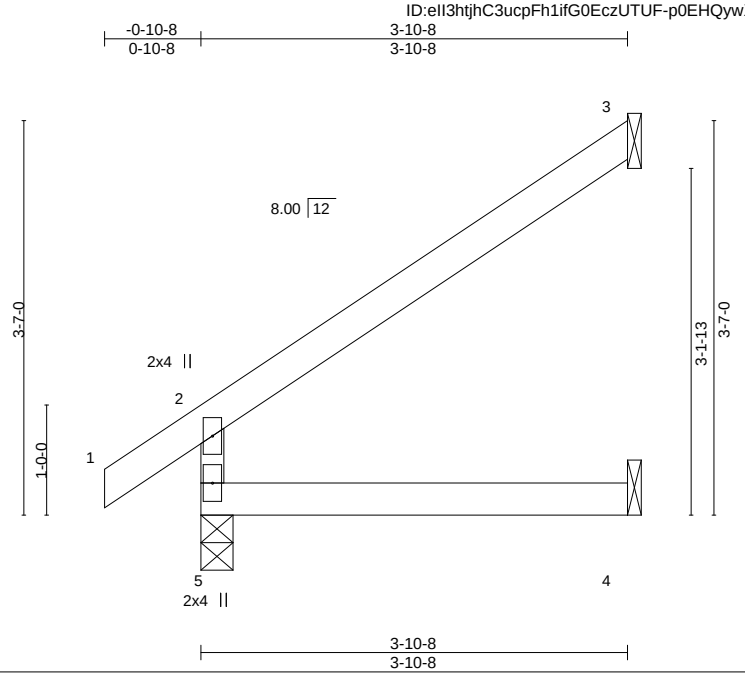

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=80(LC 8)
Max Uplift 3=-54(LC 8)
Max Grav 5=244(LC 1), 3=122(LC 13), 4=71(LC 3)

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

NOTES-

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J22A	Jack-Open	1	1	I45097675

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:55 2021 Page 1

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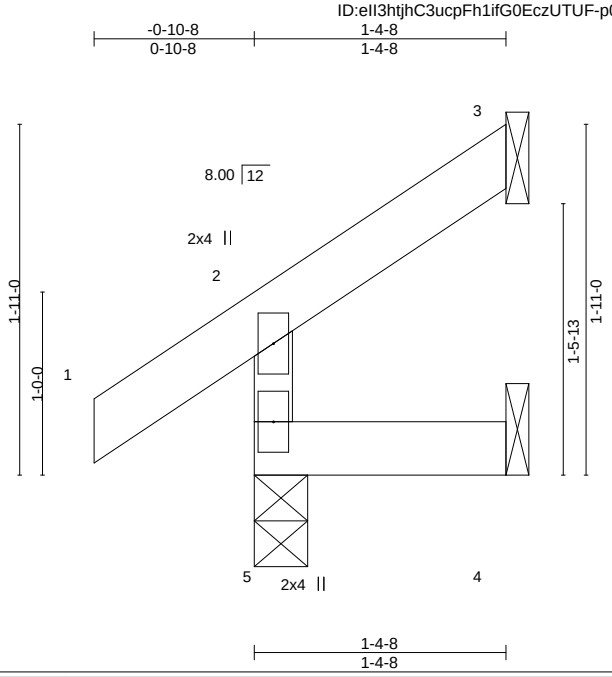

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-4-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=47(LC 5)
Max Uplift 5=-5(LC 8), 3=-31(LC 8), 4=-7(LC 8)
Max Grav 5=152(LC 1), 3=29(LC 15), 4=23(LC 3)

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

NOTES-

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J23	Jack-Open	1	1	I45097676
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:56 2021 Page 1
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-0-10-8 2-8-12
0-10-8 2-8-12

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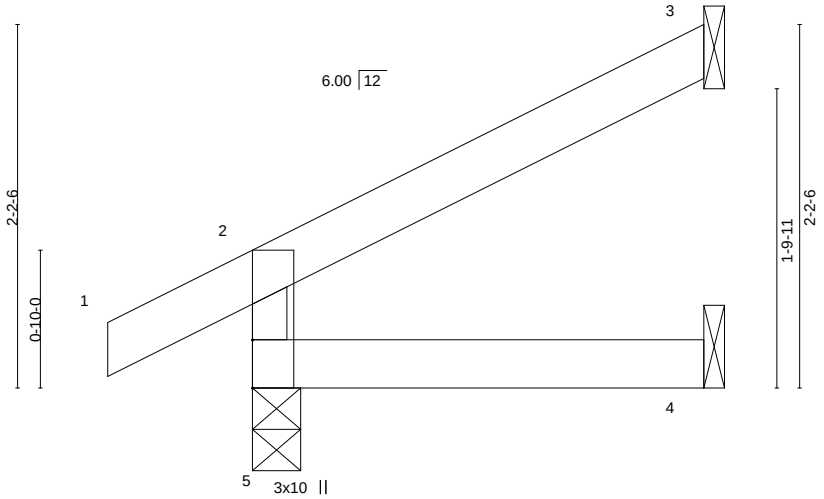

2-8-12
2-8-12

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	0.08	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=61(LC 8)
Max Uplift 5=-22(LC 8), 3=-48(LC 8)
Max Grav 5=197(LC 1), 3=76(LC 1), 4=49(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J24	Jack-Open	7	1	I45097677

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:57 2021 Page 1

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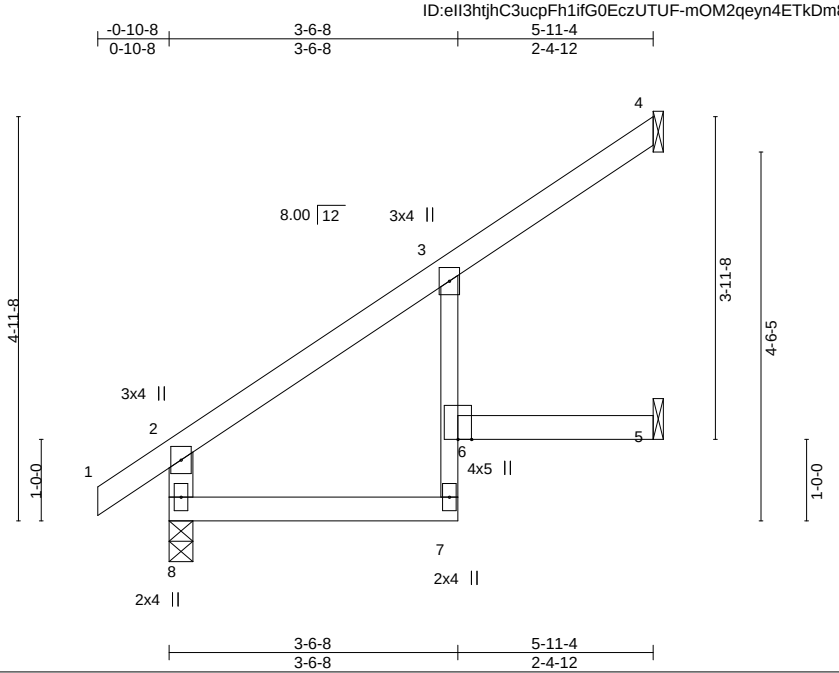

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.07	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.12	6	>578	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.07	6	>999	240	Weight: 19 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=118(LC 8)
Max Uplift 4=-49(LC 8), 5=-14(LC 8)
Max Grav 8=336(LC 1), 4=156(LC 13), 5=106(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-304/7

NOTES-

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J25	Jack-Open	1	1	I45097678
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:57 2021 Page 1
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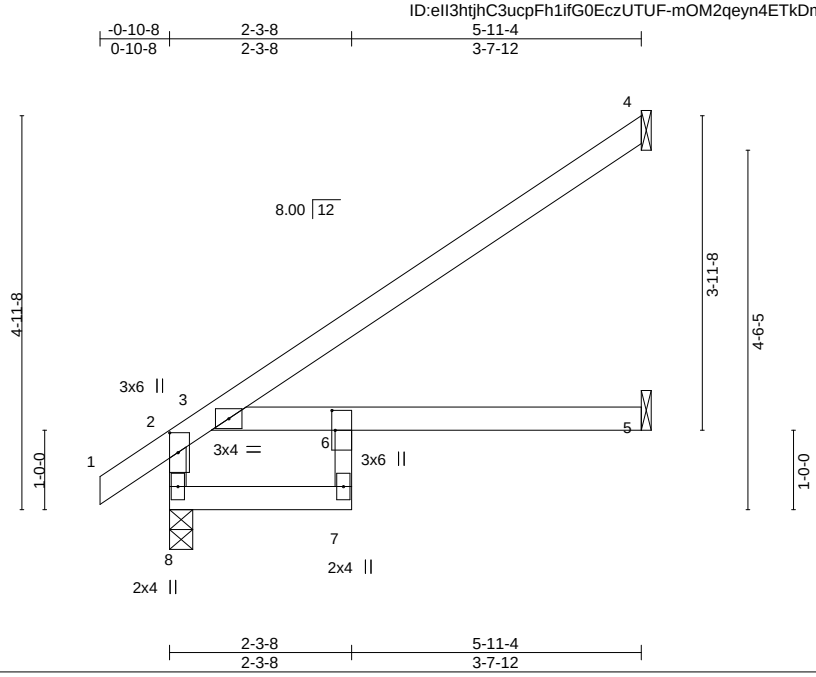

Plate Offsets (X,Y)-- [2:0-3-0,0-1-4], [6:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.13	5-6	>519	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.07	5-6	>999	240	Weight: 19 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=119(LC 8)
Max Uplift 4=-67(LC 8)
Max Grav 8=360(LC 1), 4=176(LC 13), 5=122(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-342/0

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J26	Diagonal Hip Girder	1	1	I45097679
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:58 2021 Page 1
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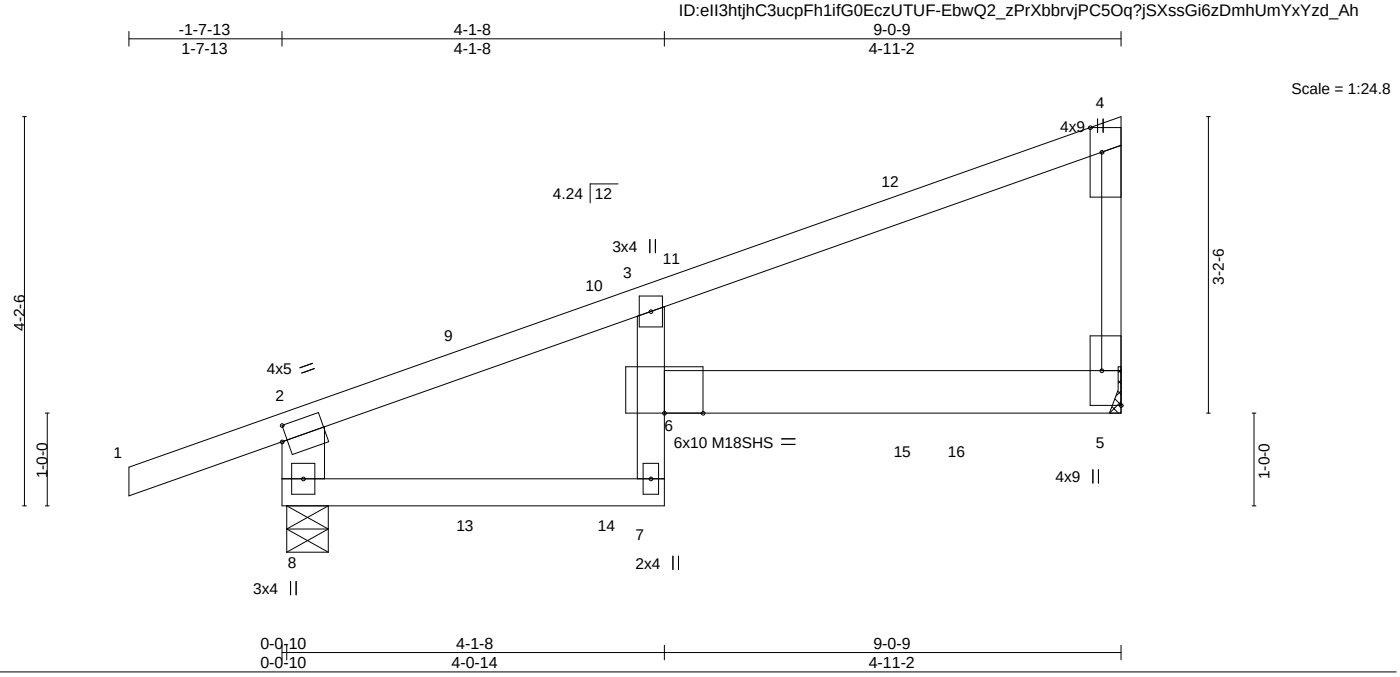

Plate Offsets (X,Y)-- [2:0-0-11,0-2-0], [4:0-3-3,Edge], [5:Edge,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.23	6	>464	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.39	6	>266	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.10	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.24	6	>438	240	Weight: 32 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
WEBS 2x6 SPF No.2 *Except*
4-5: 2x3 SPF No.2

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

REACTIONS. (size) 8=0-5-6, 5=Mechanical
Max Horz 8=165(LC 5)
Max Uplift 8=-189(LC 4), 5=-211(LC 8)
Max Grav 8=598(LC 1), 5=619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-533/199, 2-3=-546/128
BOT CHORD 7-8=-181/406

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) All plates are MT20 plates unless otherwise indicated.
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=189, 5=211.
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) 68 lb down and 19 lb up at 2-0-9, 103 lb down and 68 lb up at 3-6-14, and 85 lb down and 48 lb up at 4-4-14, and 91 lb down and 55 lb up at 6-9-3 on top chord, and 11 lb down and 14 lb up at 2-0-9, 13 lb down at 3-6-14, and 39 lb down and 49 lb up at 6-9-3, and 254 lb down and 106 lb up at 7-4-3 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, 7-8=-20, 5-6=-20

March 9,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J26	Diagonal Hip Girder	1	1	I45097679
					Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 11=-4(B) 12=-9(B) 13=2(B) 14=-6(F) 15=-31(B) 16=-254(F)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J27	Jack-Closed Girder	1	1	I45097680
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:34:59 2021 Page 1
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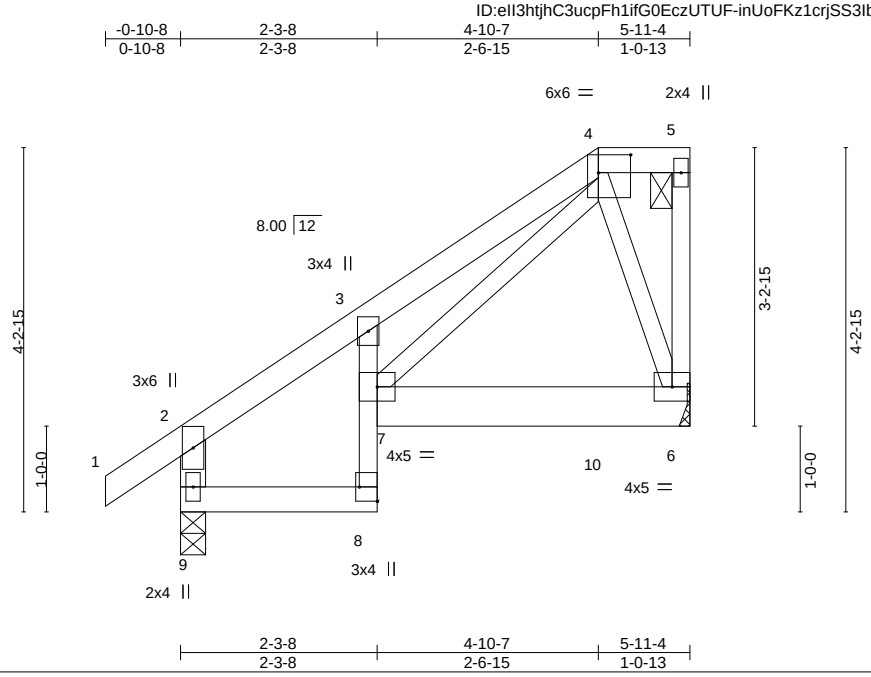

Plate Offsets (X,Y)-- [4:0-4-8,0-2-8], [8:Edge,0-2-8]

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	0.32	Vert(LL)	-0.03	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.06	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	6-7	>999	240	Weight: 28 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-8: 2x3 SPF No.2, 6-7: 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-9: 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: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-3-8, 6=Mechanical
Max Horz 9=150(LC 5)
Max Uplift 9=-80(LC 8), 6=-252(LC 5)
Max Grav 9=435(LC 1), 6=746(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-415/109, 2-3=-361/76, 3-4=-494/209
WEBS 4-7=-206/436, 4-6=-262/102

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) 9 except (jt=lb) 6=252.
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) 597 lb down and 232 lb up at 4-10-7 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, 6-7=-20
Concentrated Loads (lb)
Vert: 10=-597(F)

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J28	Jack-Open	1	1	I45097681
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:00 2021 Page 1
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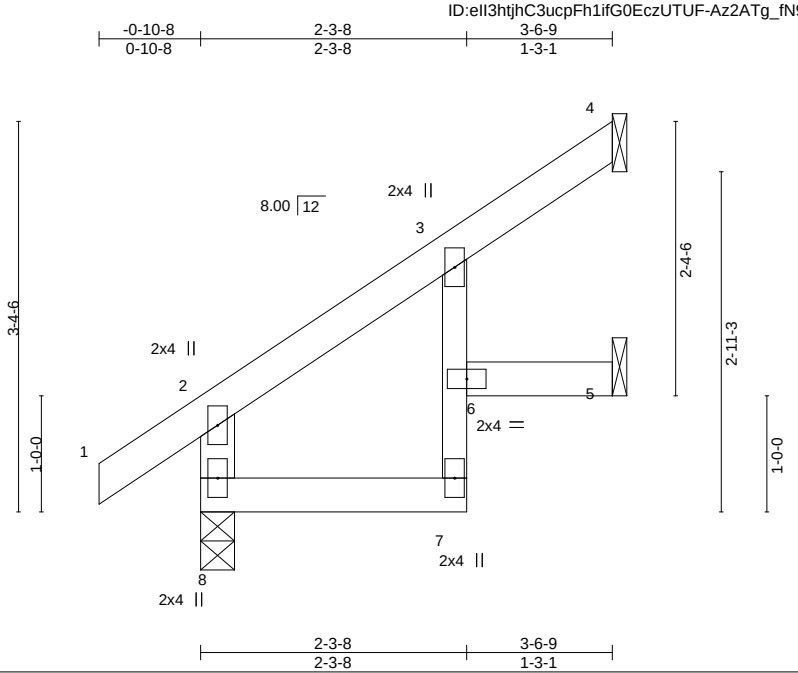


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	6	>999	240	Weight: 12 lb	FT = 10%

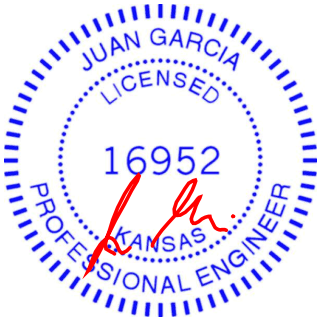
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=104(LC 8)
Max Uplift 8=-2(LC 8), 4=-48(LC 8), 5=-30(LC 8)
Max Grav 8=233(LC 1), 4=90(LC 15), 5=64(LC 15)

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

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



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J29	Jack-Open	1	1	I45097682

Job Reference (optional)

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-0-10-8 2-3-9
0-10-8 2-3-9

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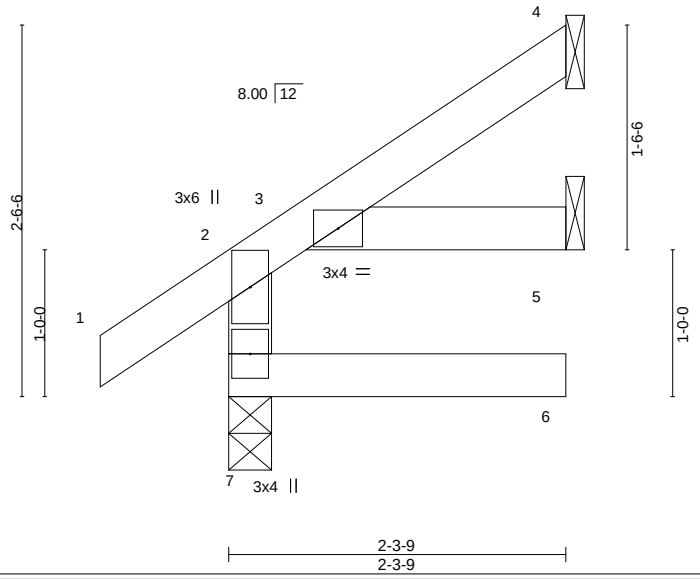

2-3-9
2-3-9

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.05	6	>552	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.09	6	>278	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6	>933	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-3-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=70(LC 8)
Max Uplift 4=-39(LC 8), 5=-3(LC 8)
Max Grav 7=197(LC 1), 4=71(LC 15), 5=60(LC 3)

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

NOTES-

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J30	Jack-Closed	1	1	I45097683
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:02 2021 Page 1
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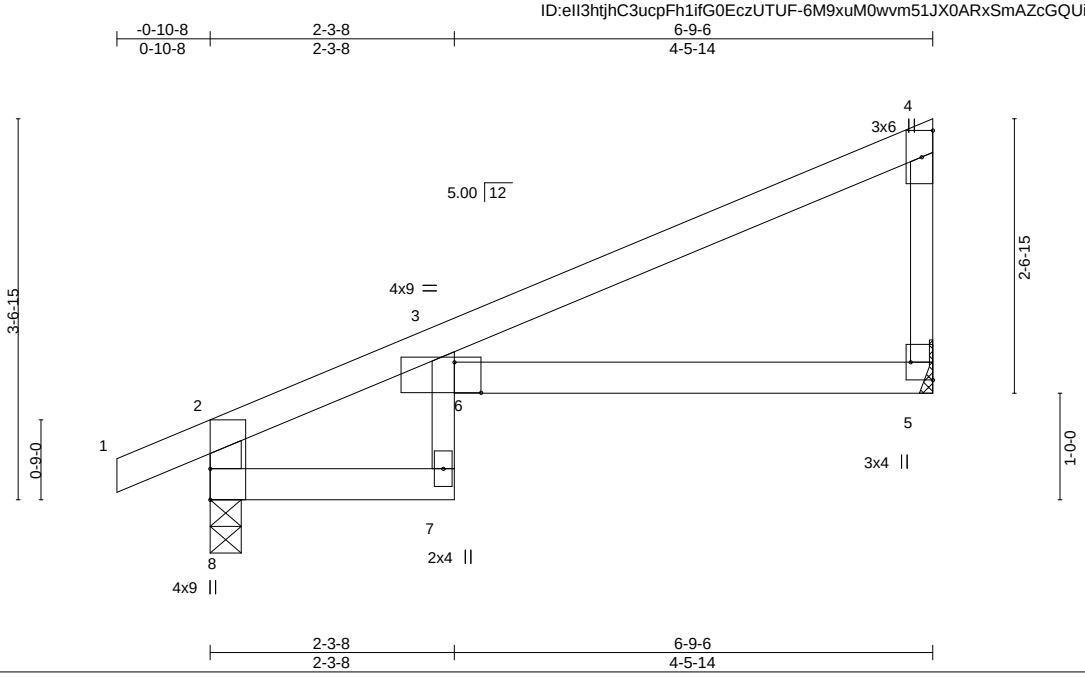

Plate Offsets (X,Y)-- [3:0-3-0,0-3-7], [5:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.11	5-6	>686	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.21	5-6	>380	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.10	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.12	5-6	>670	240	Weight: 20 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-5: 2x3 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 5=Mechanical
Max Horz 8=131(LC 5)
Max Uplift 8=-62(LC 8), 5=-71(LC 8)
Max Grav 8=371(LC 1), 5=288(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-359/86, 2-3=-284/36

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, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J31	Jack-Open	4	1	I45097684
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:02 2021 Page 1
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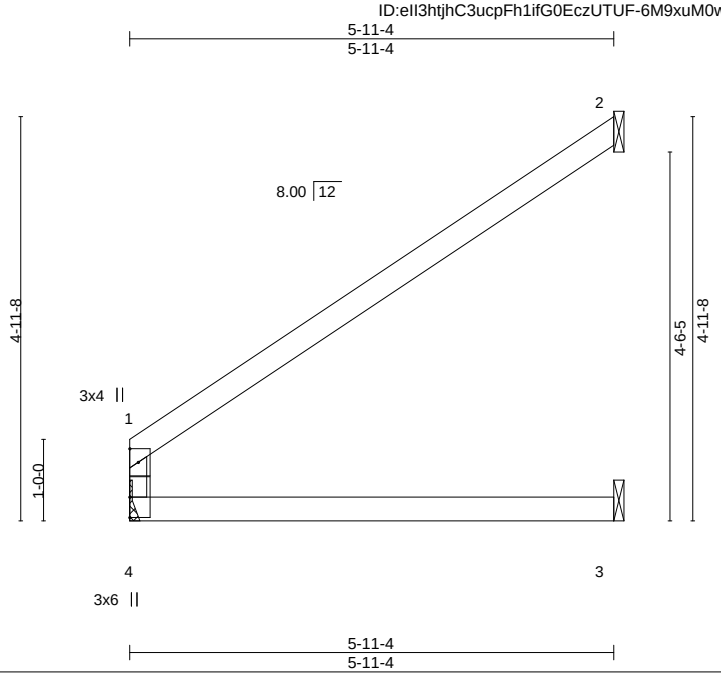

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.05	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.12	3-4	>562	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.07	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	3-4	>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) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=104(LC 8)
Max Uplift 2=-80(LC 8)
Max Grav 4=260(LC 1), 2=194(LC 13), 3=112(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J32	Diagonal Hip Girder	1	1	I45097685

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:03 2021 Page 1
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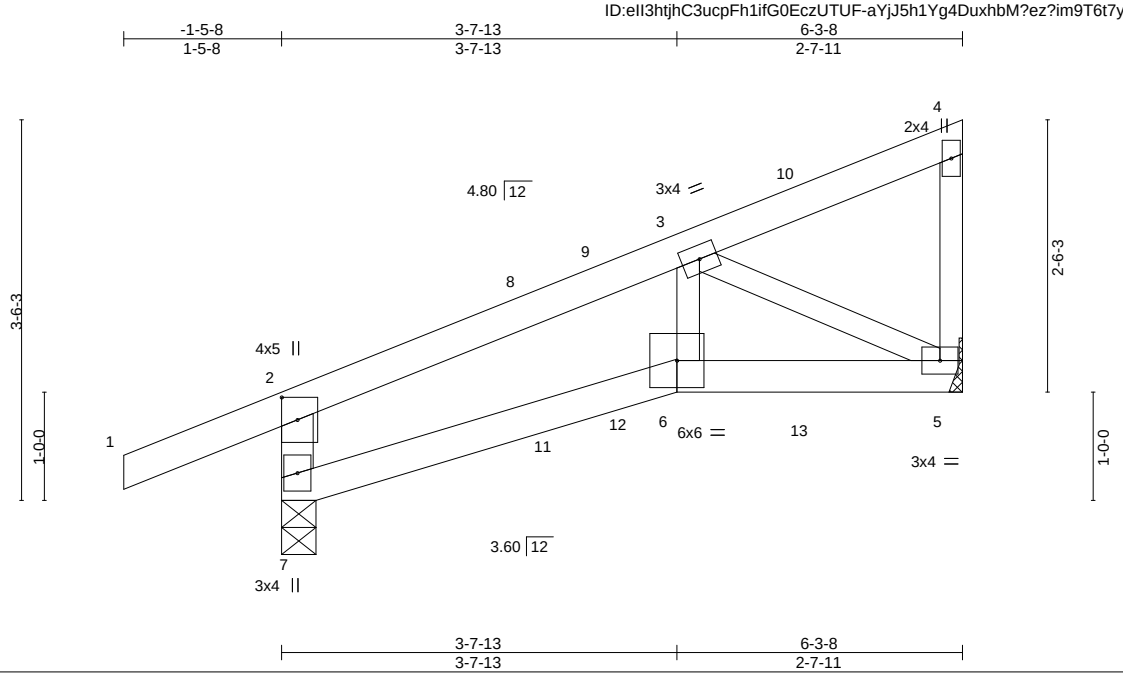

Plate Offsets (X,Y)-- [2:0-2-8,0-1-12]

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	0.41	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.04	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	6	>999	240	Weight: 22 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=0-3-13, 5=Mechanical
Max Horz 7=134(LC 22)
Max Uplift 7=-104(LC 4), 5=-110(LC 5)
Max Grav 7=400(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=-406/137, 2-3=-368/109
BOT CHORD 6-7=-165/276, 5-6=-155/256
WEBS 3-5=-264/149

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=104, 5=110.
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) 73 lb down and 33 lb up at 2-4-7, and 87 lb down and 58 lb up at 3-0-12, and 94 lb down and 73 lb up at 4-10-7 on top chord, and 11 lb down and 15 lb up at 2-4-7, and 8 lb down at 3-0-12, and 20 lb down and 17 lb up at 4-10-7 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

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 11=1(B) 12=-2(F) 13=-3(B)

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J33	Jack-Open	1	1	I45097686
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:04 2021 Page 1
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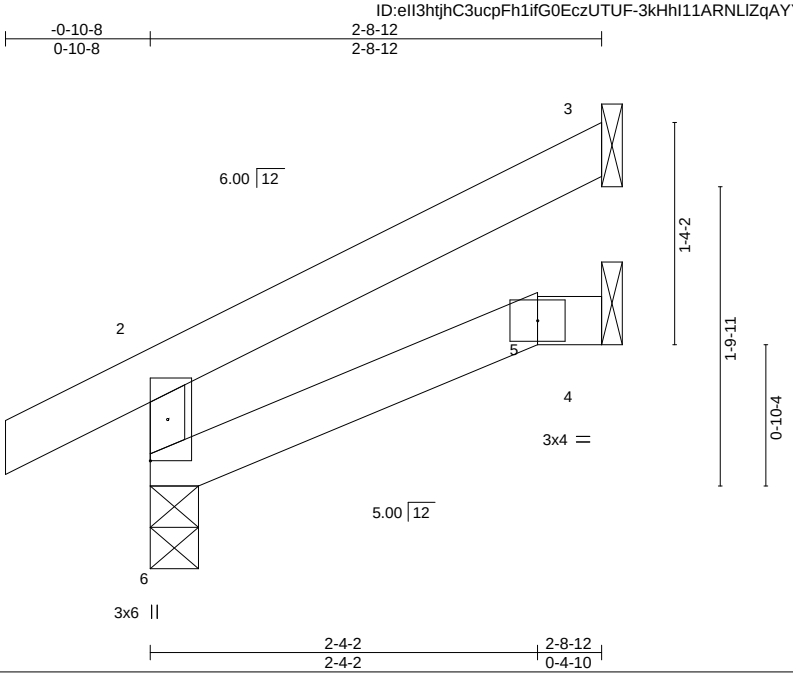

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5-6	>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 2-8-12 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=60(LC 8)
Max Uplift 6=-21(LC 8), 3=-50(LC 8)
Max Grav 6=197(LC 1), 3=76(LC 1), 4=49(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.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J34	Jack-Open	1	1	I45097687
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:04 2021 Page 1
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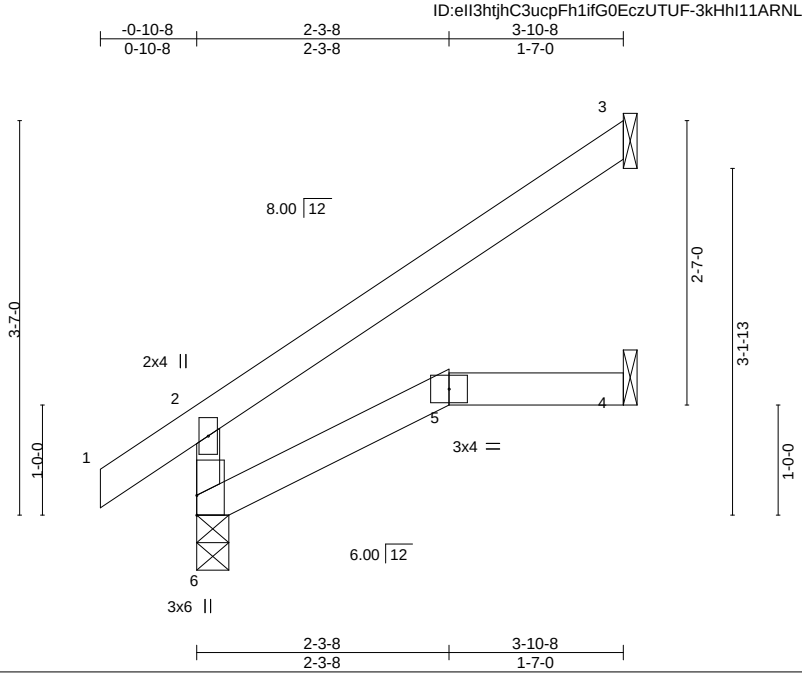

Plate Offsets (X,Y)-- [6:0-2-3,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	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)	-0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	5-6	>999	240	Weight: 12 lb	FT = 10%

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

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=112(LC 8)
Max Uplift 3=-89(LC 8)
Max Grav 6=244(LC 1), 3=127(LC 15), 4=71(LC 3)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J35	Jack-Open	1	1	I45097688

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:05 2021 Page 1

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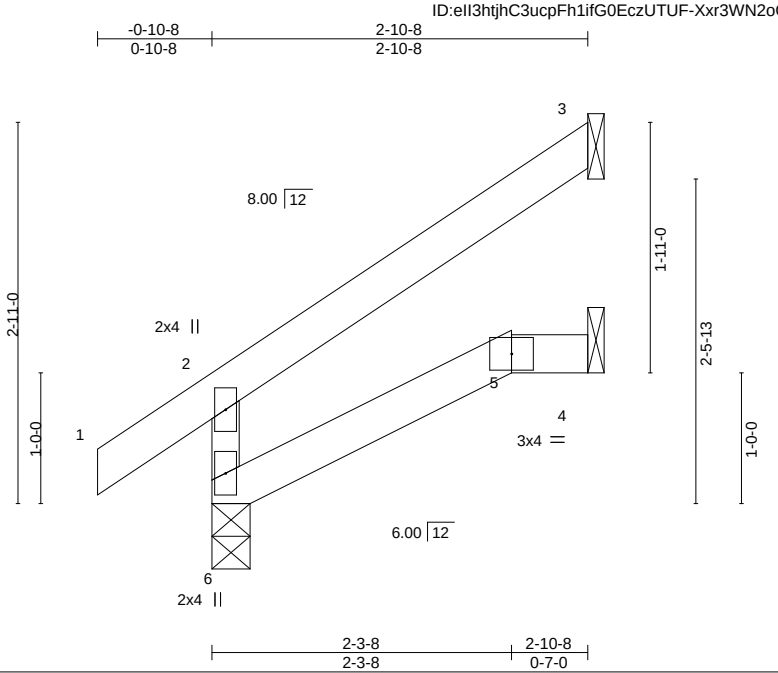

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-8 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=85(LC 8)
Max Uplift 3=-67(LC 8), 4=-1(LC 8)
Max Grav 6=203(LC 1), 3=91(LC 15), 4=52(LC 3)

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

NOTES-

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	J36	Jack-Open	1	1	I45097689

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:05 2021 Page 1

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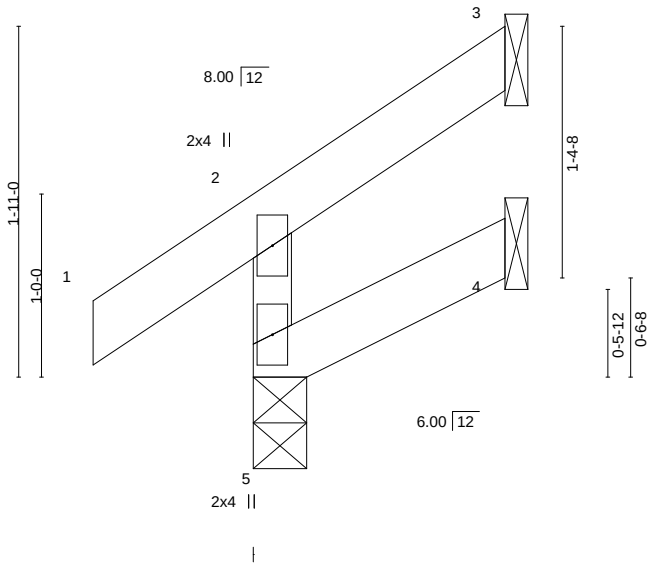

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							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 1-4-8 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=49(LC 5)
Max Uplift 5=-3(LC 8), 3=-33(LC 8), 4=-8(LC 8)
Max Grav 5=152(LC 1), 3=30(LC 15), 4=23(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, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	LAY1	GABLE	1	1	I45097690
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:13 2021 Page 1
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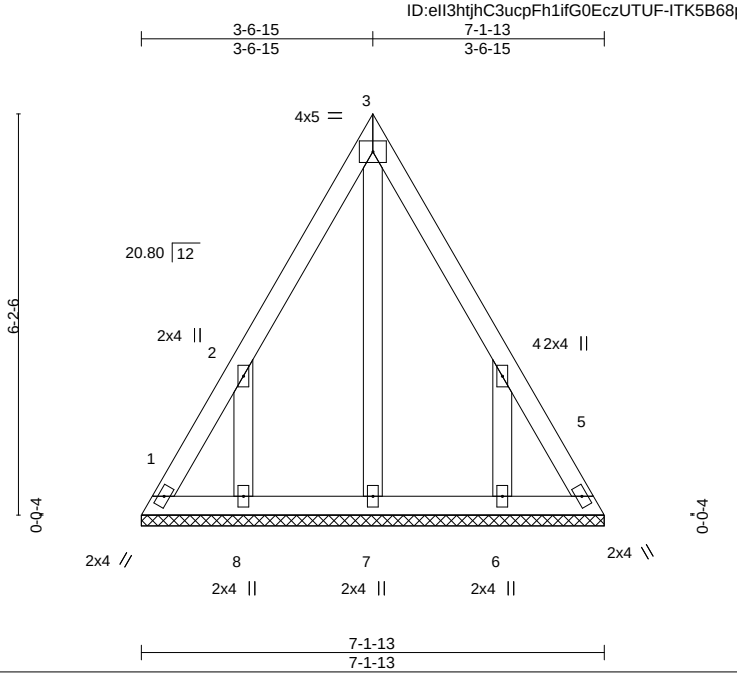

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 35 lb	FT = 10%

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

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

REACTIONS. All bearings 7-1-13.
(lb) - Max Horz 1=174(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-126(LC 6), 5=-111(LC 7), 8=-297(LC 8), 6=-297(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=281(LC 15), 6=281(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-268/190, 4-5=-258/172
WEBS 2-8=-245/319, 4-6=-244/319

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 126 lb uplift at joint 1, 111 lb uplift at joint 5, 297 lb uplift at joint 8 and 297 lb uplift at joint 6.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	LAY3	GABLE	2	1	I45097691
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:14 2021 Page 1

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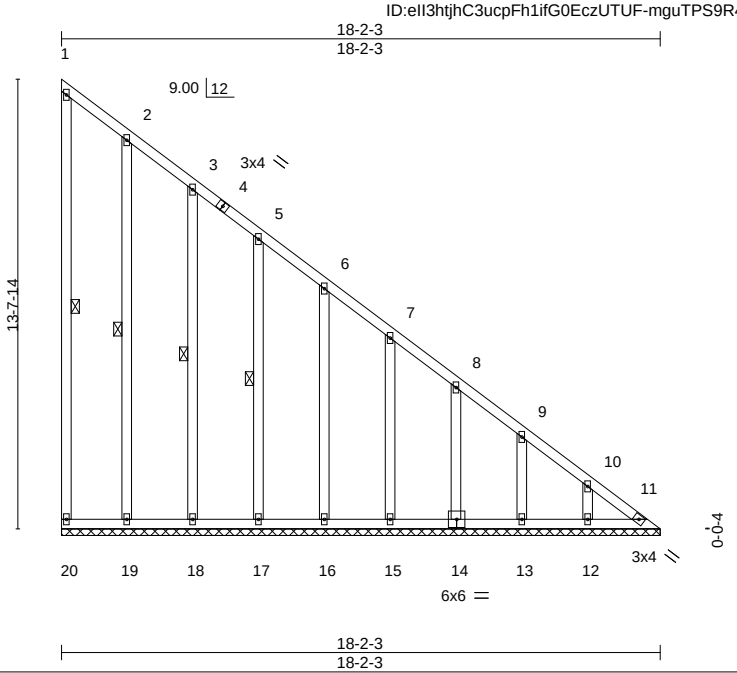

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 119 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 6-0-0 oc bracing.
WEBS	1 Row at midpt 1-20, 2-19, 3-18, 5-17

REACTIONS. All bearings 18-2-3.

(lb) - Max Horz 20=-539(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 20, 19, 18, 17, 16, 15, 14, 13, 12 except 11=-103(LC 7)

Max Grav All reactions 250 lb or less at joint(s) 20, 19, 18, 17, 16, 15, 14, 13, 12 except 11=378(LC 9)

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

TOP CHORD 5-6=-269/106, 6-7=-345/134, 7-8=-422/161, 8-9=-499/189, 9-10=-576/217, 10-11=-651/246

BOT CHORD 19-20=-194/539, 18-19=-194/539, 17-18=-194/539, 16-17=-194/539, 15-16=-194/539, 14-15=-194/539, 13-14=-194/540, 12-13=-194/540, 11-12=-194/540

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 19, 18, 17, 16, 15, 14, 13, 12 except (jt=lb) 11=103.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	LAY4	GABLE	1	1	I45097692

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:15 2021 Page 1

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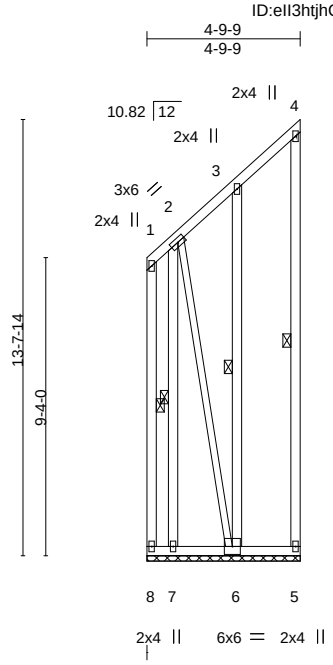

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 70 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 4-9-9.

(lb) - Max Horz 8=166(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 8, 5 except 7=-150(LC 6), 6=-821(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 8, 5 except 7=633(LC 8), 6=408(LC 15)

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

WEBS 2-7=-613/183, 2-6=-289/808

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 ; 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) 8, 5 except (jt=lb) 7=150, 6=821.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	LAY5	GABLE	1	1	I45097693
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:16 2021 Page 1
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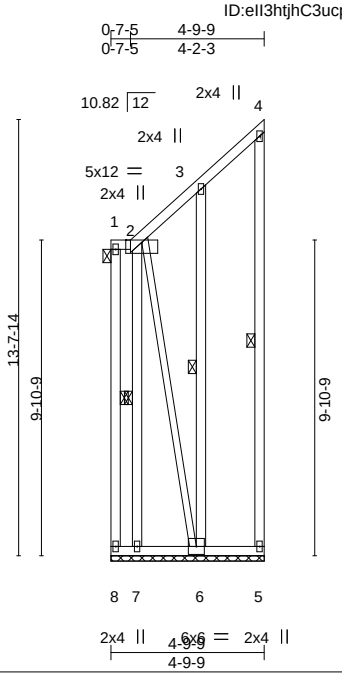


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 70 lb	FT = 10%

LUMBER-

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

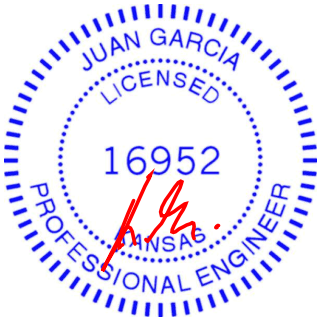
BRACING-

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

REACTIONS. All bearings 4-9-9.
(lb) - Max Horz 8=146(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 8, 5 except 7=-232(LC 6), 6=-814(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 8, 5 except 7=791(LC 8), 6=413(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-772/264, 2-6=-259/719

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 ; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5 except (jt=lb) 7=232, 6=814.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	LAY6	GABLE	1	1	I45097694
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:17 2021 Page 1
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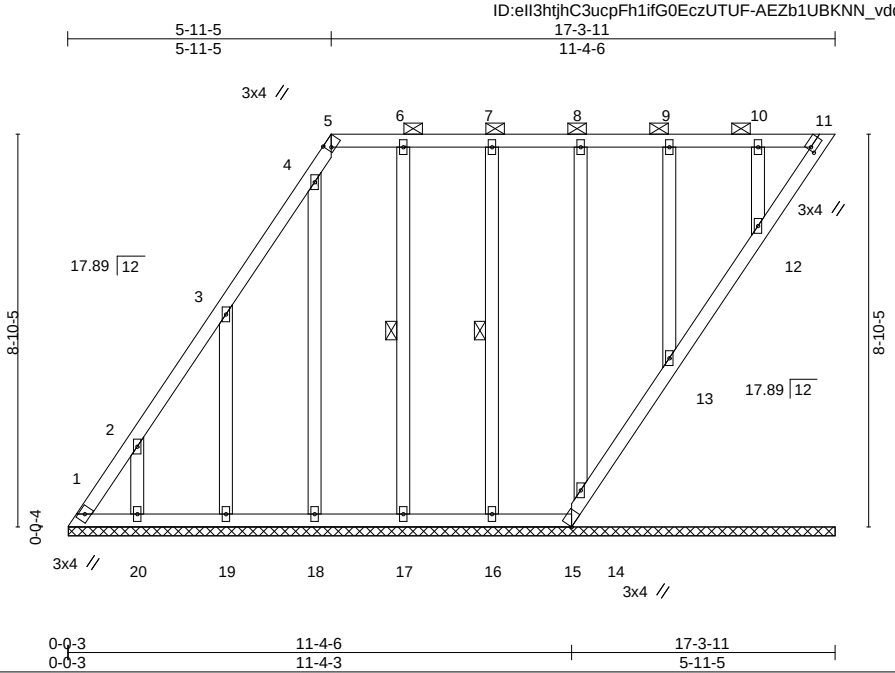

Plate Offsets (X,Y)-- [5:0-1-1,Edge], [11:0-0-13,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	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	0.16	Horz(CT)	-0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 101 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.): 5-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-17, 7-16

REACTIONS. All bearings 17-3-8.
(lb) - Max Horz 1=350(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 15, 18, 17, 16, 14, 13, 12 except 1=-158(LC 6), 20=-192(LC 8), 19=-240(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 20, 18, 17, 16, 14, 13, 12 except 1=398(LC 8), 19=260(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-487/232, 2-3=-304/152
WEBS 3-19=-220/265

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) 11, 15, 18, 17, 16, 14, 13, 12 except (jt=lb) 1=158, 20=192, 19=240.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 14, 13, 12.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	LAY7	GABLE	1	1	I45097695
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:18 2021 Page 1
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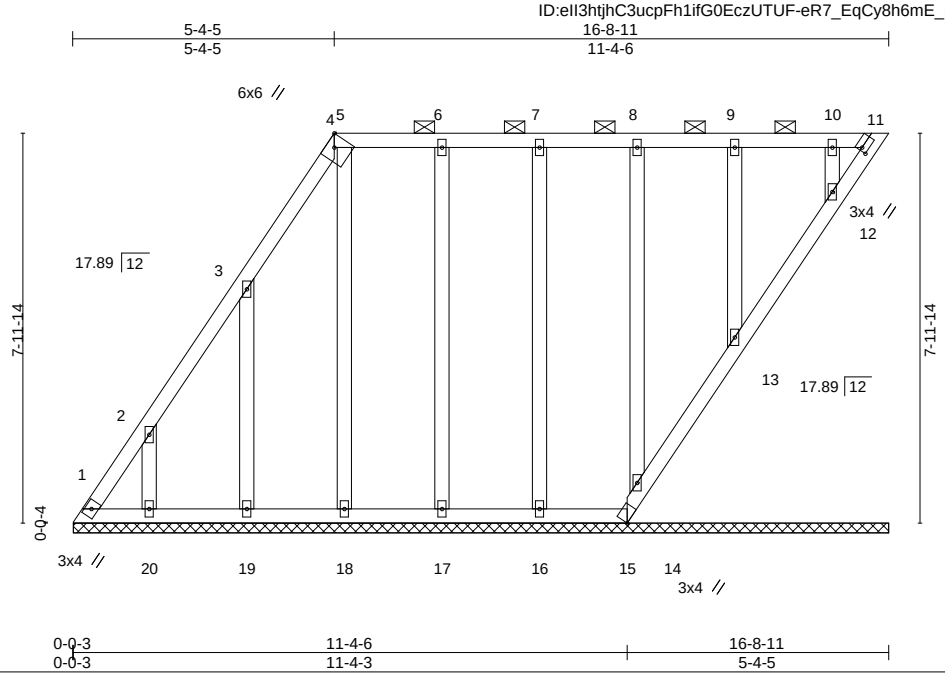

Plate Offsets (X,Y)-- [4:0-2-15,Edge], [11:0-0-13,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	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	0.16	Horz(CT)	-0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 94 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.): 4-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.

REACTIONS. All bearings 16-8-8.
(lb) - Max Horz 1=314(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 15, 18, 17, 16, 14, 13, 12 except 1=-119(LC 6), 20=-197(LC 8), 19=-224(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 20, 18, 17, 16, 14, 13, 12 except 1=327(LC 8), 19=251(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-402/185

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 15, 18, 17, 16, 14, 13, 12 except (jt=lb) 1=119, 20=197, 19=224.
8) Non Standard bearing condition. Review required.
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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	LAY8	GABLE	1	1	I45097696
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:19 2021 Page 1

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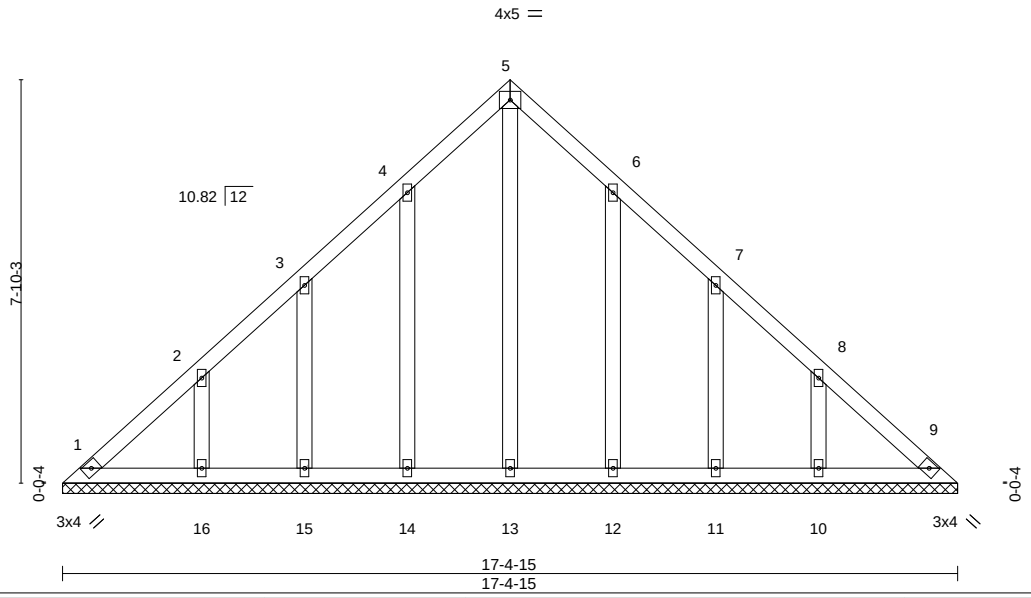
8-8-8 / 8-8-8 — 17-4-15 / 8-8-8

Scale = 1:44.8



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 79 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 17-4-15.
(lb) - Max Horz 1=-196(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 15, 11 except 14=-103(LC 8), 16=-125(LC 8), 12=-102(LC 9), 10=-125(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, 15, 11 except (jt=lb) 14=103, 16=125, 12=102, 10=125.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V1	Valley	1	1	I45097697
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:20 2021 Page 1
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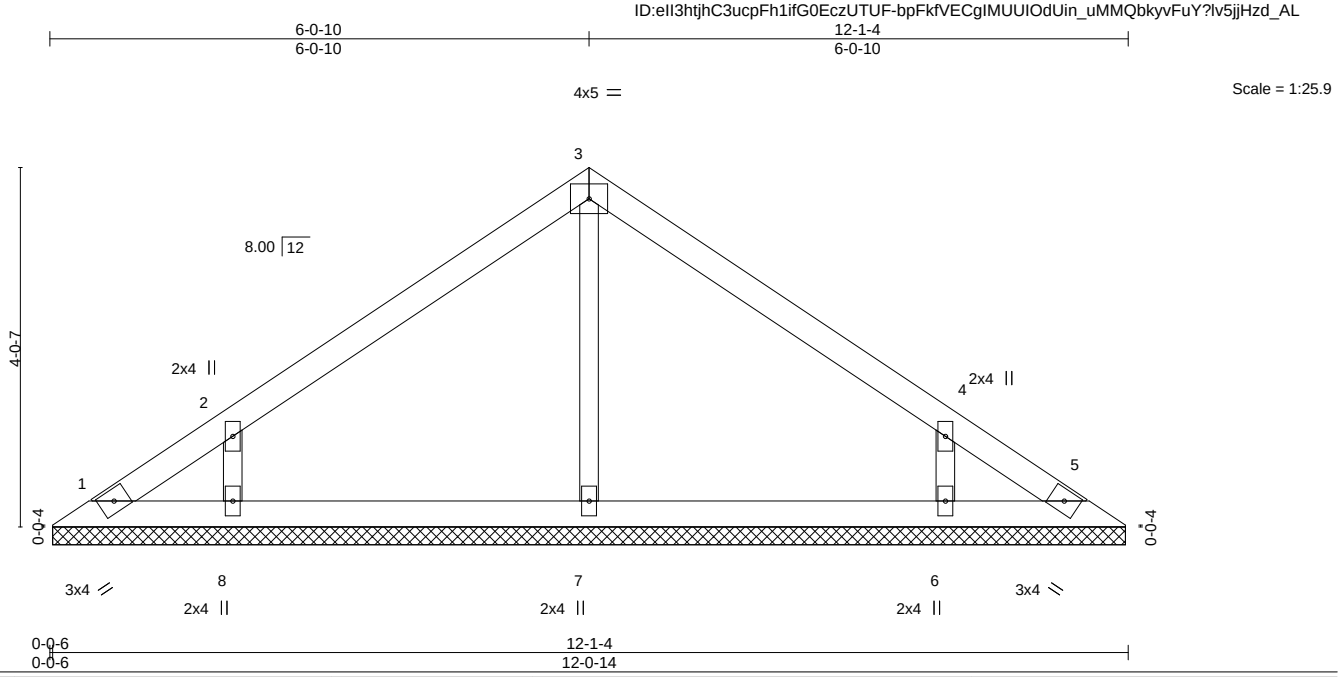


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 10%

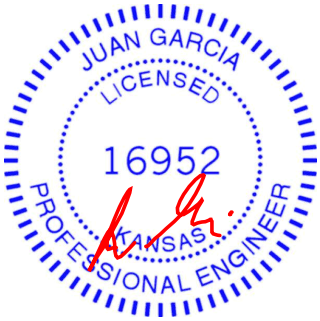
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. All bearings 12-0-8.
(lb) - Max Horz 1=-97(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-138(LC 8), 6=-138(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=285(LC 1), 8=342(LC 15), 6=342(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-281/182, 4-6=-281/182

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=138, 6=138.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V2	Valley	1	1	I45097698
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:21 2021 Page 1
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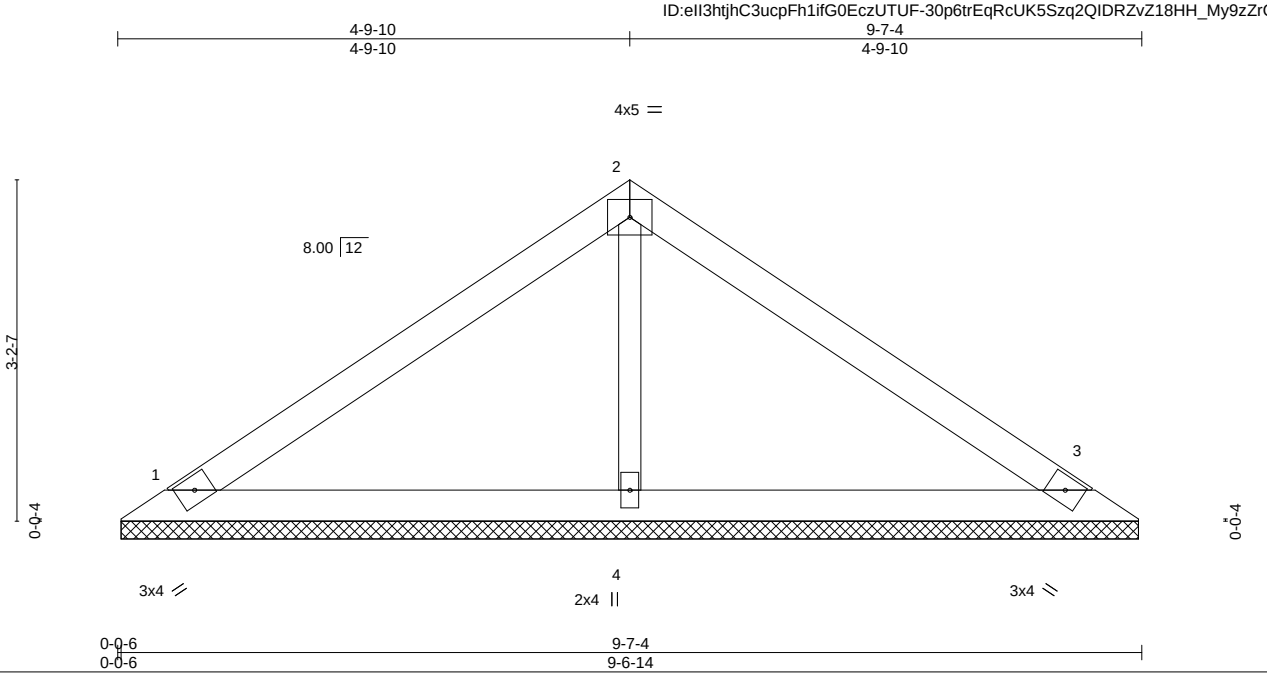


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 25 lb	FT = 10%

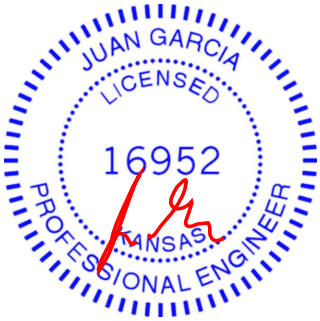
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. (size) 1=9-6-8, 3=9-6-8, 4=9-6-8
Max Horz 1=-75(LC 4)
Max Uplift 1=-38(LC 8), 3=-47(LC 9), 4=-15(LC 8)
Max Grav 1=200(LC 1), 3=200(LC 1), 4=378(LC 1)

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

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



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V3	Valley	1	1	I45097699
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:22 2021 Page 1
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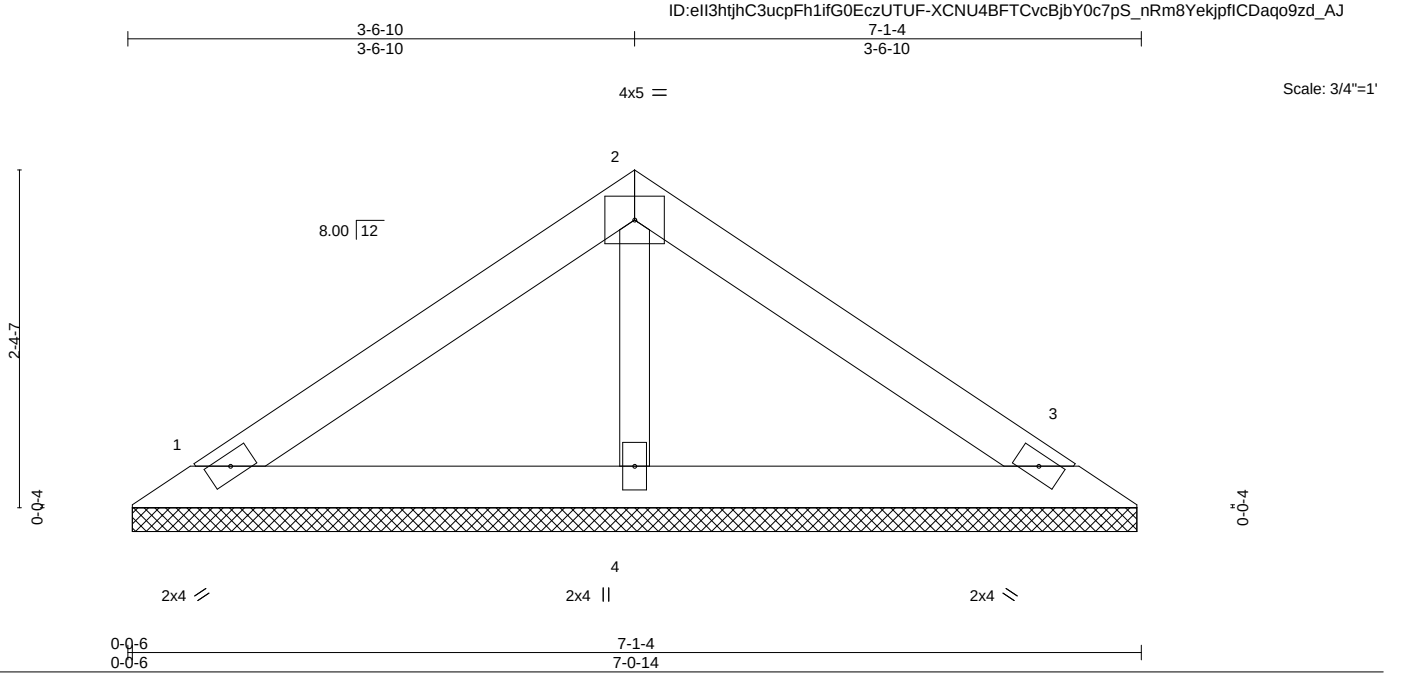

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 18 lb	FT = 10%

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

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

REACTIONS. (size) 1=7-0-8, 3=7-0-8, 4=7-0-8
Max Horz 1=-53(LC 4)
Max Uplift 1=-34(LC 8), 3=-41(LC 9)
Max Grav 1=156(LC 1), 3=156(LC 1), 4=242(LC 1)

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

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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V4	Valley	1	1	I45097700

Job Reference (optional)

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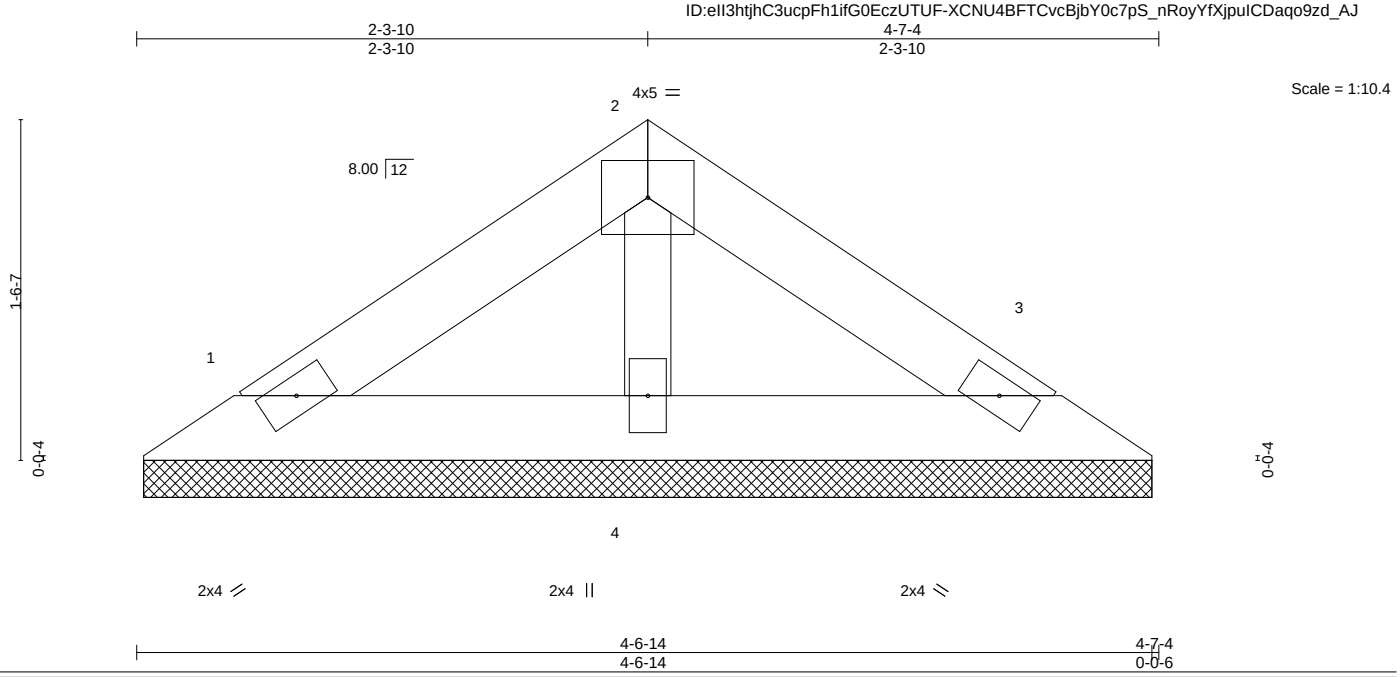


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=4-6-8, 3=4-6-8, 4=4-6-8
Max Horz 1=-32(LC 4)
Max Uplift 1=-20(LC 8), 3=-24(LC 9)
Max Grav 1=92(LC 1), 3=92(LC 1), 4=143(LC 1)

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

NOTES-

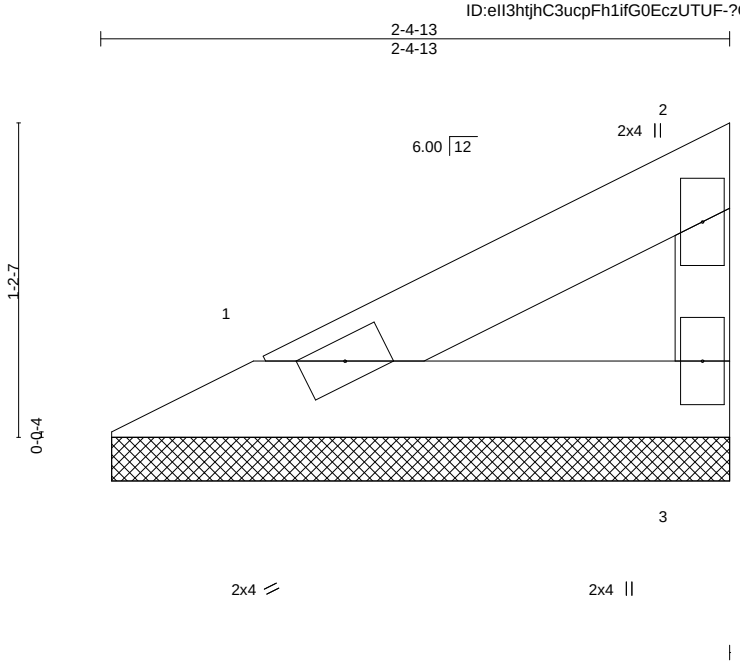
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber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

March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V5	Valley	1	1	I45097701
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:23 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-?OxtIXG5yDk2LI7CArKhW__zrx?rSGPSRtKNKczd_AI



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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-4-5, 3=2-4-5
Max Horz 1=35(LC 5)
Max Uplift 1=-10(LC 8), 3=-18(LC 8)
Max Grav 1=75(LC 1), 3=75(LC 1)

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

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

March 9,2021

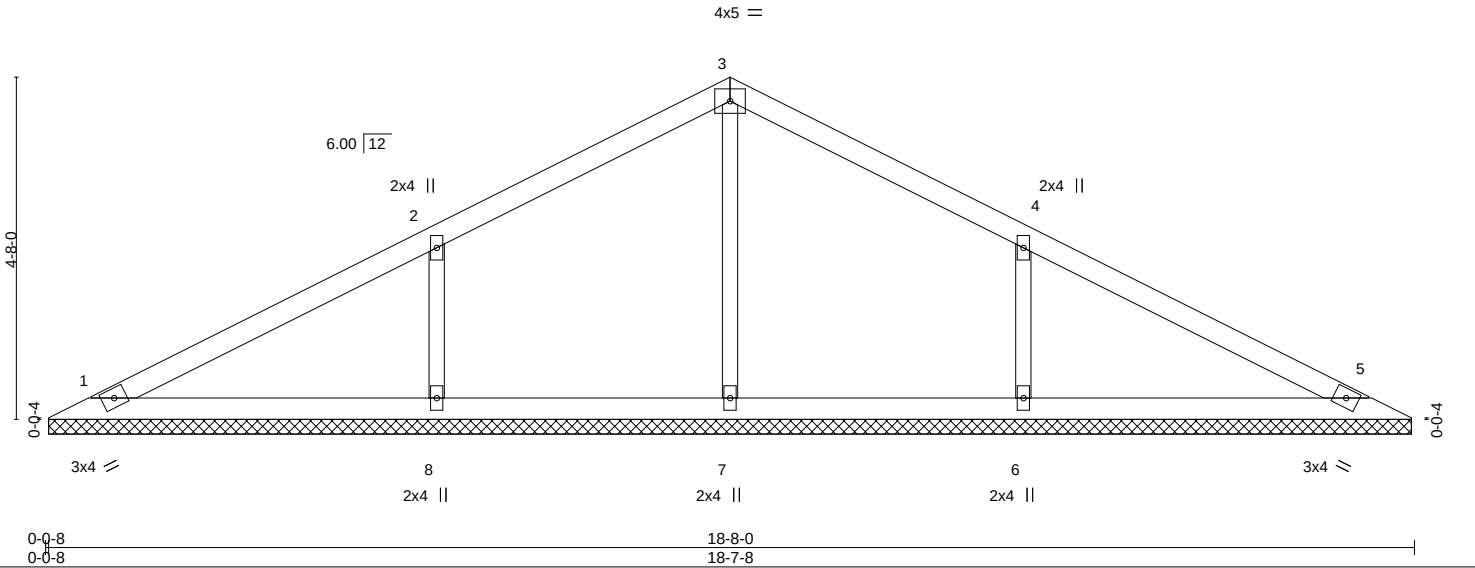
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V8	Valley	1	1	I45097702
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:24 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-TbUFVtHjjXsvyviOjYrw3CX43LJ9BiDbgX3ws2zd_AH

9-4-0 / 9-4-0 — 18-8-0 / 9-4-0

Scale = 1:31.4



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	0.27	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	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 50 lb	FT = 10%

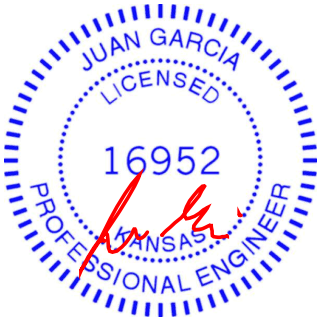
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. All bearings 18-7-0.
(lb) - Max Horz 1=77(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-147(LC 8), 6=-147(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=254(LC 1), 8=478(LC 21), 6=478(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-365/198, 4-6=-365/198

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=147, 6=147.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 9,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V9	Valley	1	1	I45097703
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:24 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-TbUFVtHjjXsvyviOjYrw3CX6fLKsBjjbgX3ws2zd_AH

6-8-0 13-4-0
6-8-0 6-8-0

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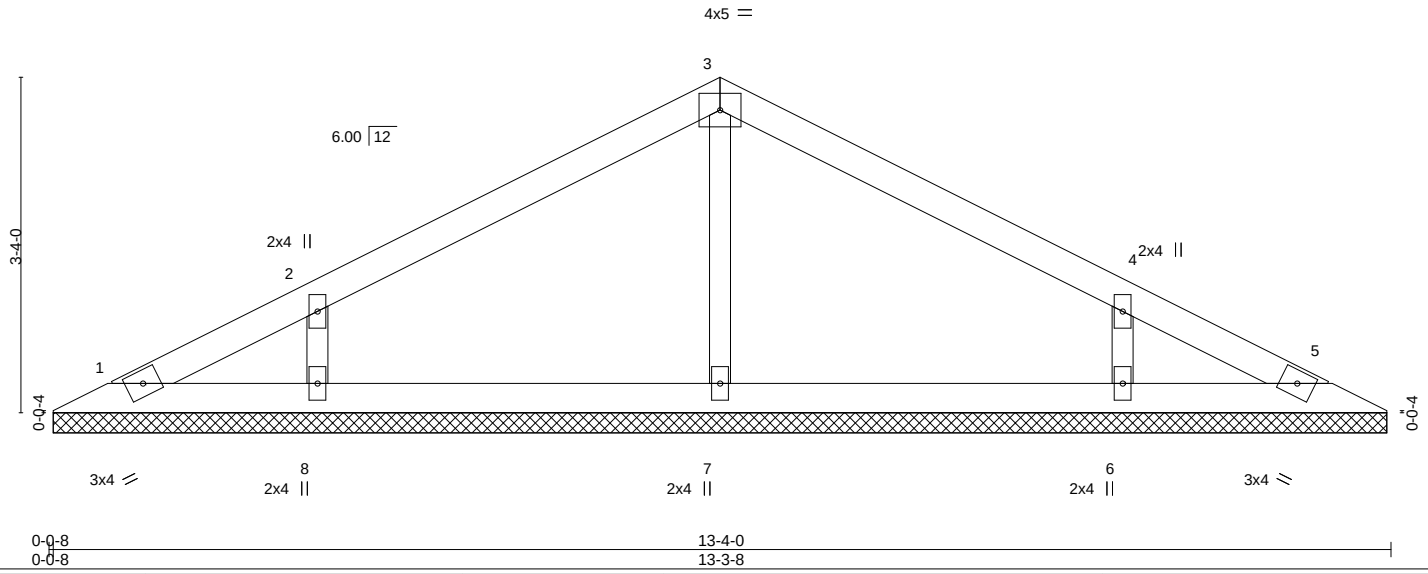


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 34 lb	FT = 10%

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

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

REACTIONS. All bearings 13-3-0.
(lb) - Max Horz 1=53(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-109(LC 8), 6=-109(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=313(LC 1), 8=339(LC 21), 6=339(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-273/151, 4-6=-273/150

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=109, 6=109.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

March 9,2021

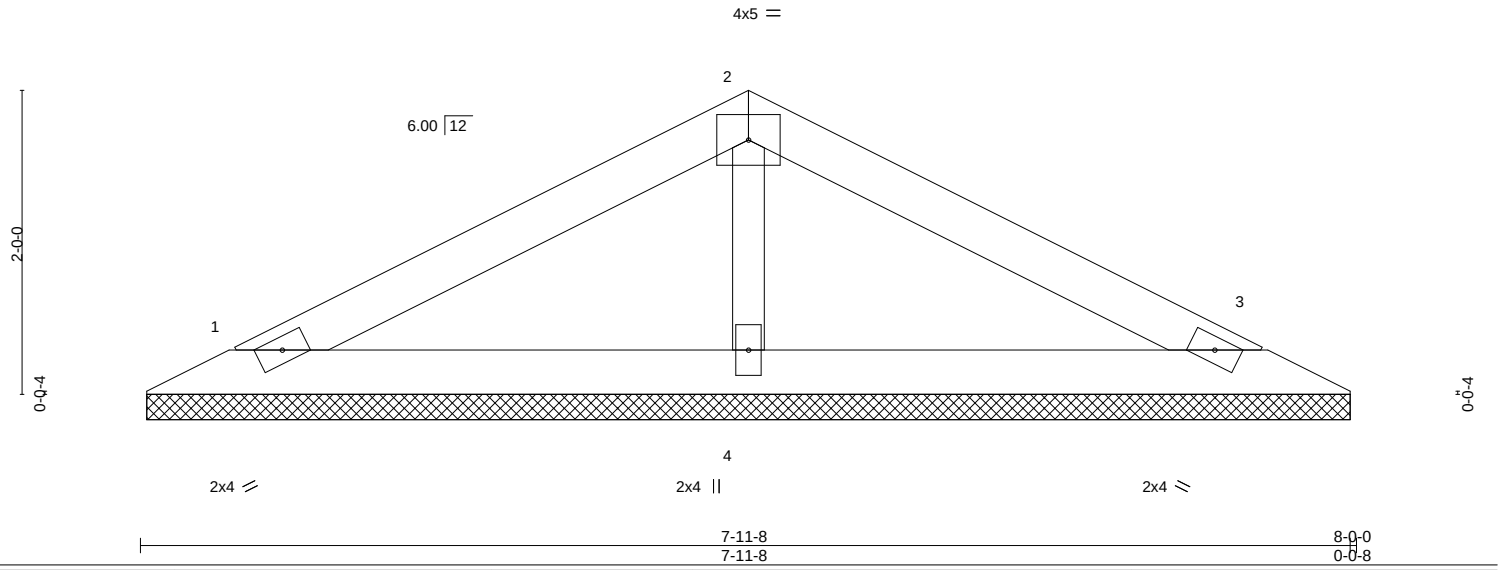
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 103 MN
210321	V10	Valley	1	1	I45097704
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Mar 8 12:35:20 2021 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-bpFkfVECgIMUUIOdUin_uMMP4ky0Fv3?lv5jjHzd_AL

4-0-0 8-0-0
4-0-0 4-0-0

Scale = 1:15.2



7-11-8 8-0-0
7-11-8 0-0-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 10%

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

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

REACTIONS. (size) 1=7-11-0, 3=7-11-0, 4=7-11-0
Max Horz 1=-30(LC 13)
Max Uplift 1=-36(LC 8), 3=-42(LC 9), 4=-4(LC 8)
Max Grav 1=158(LC 1), 3=158(LC 1), 4=290(LC 1)

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

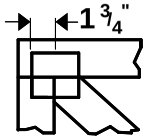
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed;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

March 9,2021

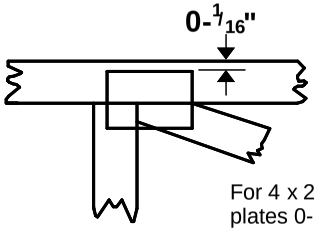
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

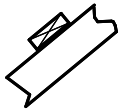
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

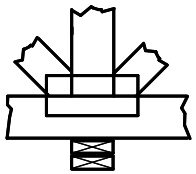
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

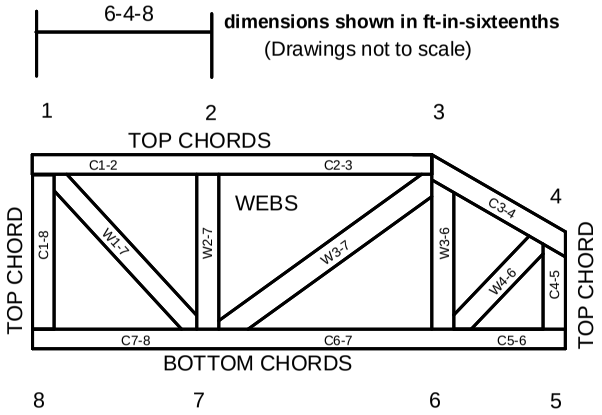


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.