RE: 210458
Lot 78 RR

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

Site Information:

Customer: Project Name: 210458
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: ASCE716LowRise Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 59 individual, dated Truss Design Drawings and 0 Additional Drawings.

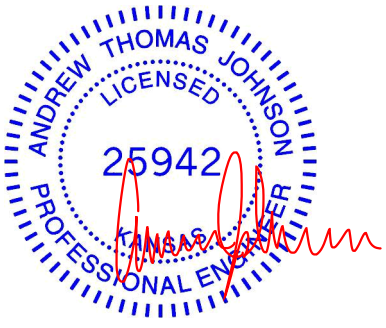
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I46672329	B1	6/23/2021	21	I46672349	E5	6/23/2021
2	I46672330	B2	6/23/2021	22	I46672350	E6	6/23/2021
3	I46672331	B3	6/23/2021	23	I46672351	E7	6/23/2021
4	I46672332	B4	6/23/2021	24	I46672352	E8	6/23/2021
5	I46672333	B5	6/23/2021	25	I46672353	E9	6/23/2021
6	I46672334	B6	6/23/2021	26	I46672354	G1	6/23/2021
7	I46672335	B7	6/23/2021	27	I46672355	G2	6/23/2021
8	I46672336	B8	6/23/2021	28	I46672356	G3	6/23/2021
9	I46672337	B9	6/23/2021	29	I46672357	G4	6/23/2021
10	I46672338	C1	6/23/2021	30	I46672358	G5	6/23/2021
11	I46672339	C2	6/23/2021	31	I46672359	J4A	6/23/2021
12	I46672340	D1	6/23/2021	32	I46672360	J5A	6/23/2021
13	I46672341	D2	6/23/2021	33	I46672361	J8	6/23/2021
14	I46672342	D3	6/23/2021	34	I46672362	J9	6/23/2021
15	I46672343	D4	6/23/2021	35	I46672363	J10	6/23/2021
16	I46672344	D5	6/23/2021	36	I46672364	J11	6/23/2021
17	I46672345	E1	6/23/2021	37	I46672365	J12	6/23/2021
18	I46672346	E2	6/23/2021	38	I46672366	J13	6/23/2021
19	I46672347	E3	6/23/2021	39	I46672367	J14	6/23/2021
20	I46672348	E4	6/23/2021	40	I46672368	J14A	6/23/2021

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: Johnson, Andrew

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.

June 23, 2021

Johnson, Andrew

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

RE: 210458 - Lot 78 RR

Site Information:

Project Customer: Project Name: 210458
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I46672369	J15A	6/23/2021
42	I46672370	J16	6/23/2021
43	I46672371	J17A	6/23/2021
44	I46672372	J18	6/23/2021
45	I46672373	J19	6/23/2021
46	I46672374	J20	6/23/2021
47	I46672375	J21	6/23/2021
48	I46672376	J22	6/23/2021
49	I46672377	J23	6/23/2021
50	I46672378	J24	6/23/2021
51	I46672379	J25	6/23/2021
52	I46672380	J26	6/23/2021
53	I46672381	J27	6/23/2021
54	I46672382	LAY2	6/23/2021
55	I46672383	LAY3	6/23/2021
56	I46672384	LAY4	6/23/2021
57	I46672385	V1	6/23/2021
58	I46672386	V2	6/23/2021
59	I46672387	V3	6/23/2021

RE: 210458
Lot 78 RR

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

Site Information:

Customer: Project Name: 210458
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: ASCE716LowRise Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 59 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I46672329	B1	6/23/2021	21	I46672349	E5	6/23/2021
2	I46672330	B2	6/23/2021	22	I46672350	E6	6/23/2021
3	I46672331	B3	6/23/2021	23	I46672351	E7	6/23/2021
4	I46672332	B4	6/23/2021	24	I46672352	E8	6/23/2021
5	I46672333	B5	6/23/2021	25	I46672353	E9	6/23/2021
6	I46672334	B6	6/23/2021	26	I46672354	G1	6/23/2021
7	I46672335	B7	6/23/2021	27	I46672355	G2	6/23/2021
8	I46672336	B8	6/23/2021	28	I46672356	G3	6/23/2021
9	I46672337	B9	6/23/2021	29	I46672357	G4	6/23/2021
10	I46672338	C1	6/23/2021	30	I46672358	G5	6/23/2021
11	I46672339	C2	6/23/2021	31	I46672359	J4A	6/23/2021
12	I46672340	D1	6/23/2021	32	I46672360	J5A	6/23/2021
13	I46672341	D2	6/23/2021	33	I46672361	J8	6/23/2021
14	I46672342	D3	6/23/2021	34	I46672362	J9	6/23/2021
15	I46672343	D4	6/23/2021	35	I46672363	J10	6/23/2021
16	I46672344	D5	6/23/2021	36	I46672364	J11	6/23/2021
17	I46672345	E1	6/23/2021	37	I46672365	J12	6/23/2021
18	I46672346	E2	6/23/2021	38	I46672366	J13	6/23/2021
19	I46672347	E3	6/23/2021	39	I46672367	J14	6/23/2021
20	I46672348	E4	6/23/2021	40	I46672368	J14A	6/23/2021

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: Johnson, Andrew

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

Missouri COA: 001193

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

June 23, 2021

Johnson, Andrew

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

RE: 210458 - Lot 78 RR

Site Information:

Project Customer: Project Name: 210458
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I46672369	J15A	6/23/2021
42	I46672370	J16	6/23/2021
43	I46672371	J17A	6/23/2021
44	I46672372	J18	6/23/2021
45	I46672373	J19	6/23/2021
46	I46672374	J20	6/23/2021
47	I46672375	J21	6/23/2021
48	I46672376	J22	6/23/2021
49	I46672377	J23	6/23/2021
50	I46672378	J24	6/23/2021
51	I46672379	J25	6/23/2021
52	I46672380	J26	6/23/2021
53	I46672381	J27	6/23/2021
54	I46672382	LAY2	6/23/2021
55	I46672383	LAY3	6/23/2021
56	I46672384	LAY4	6/23/2021
57	I46672385	V1	6/23/2021
58	I46672386	V2	6/23/2021
59	I46672387	V3	6/23/2021

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B1	GABLE	1	1	I46672329

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:29:51 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-BjF3h0UDdgYnRhkfkheCLeII8LTyiEebOpFvo6z4?gk

0-10-8 10-0-0 20-0-0 20-10-8
0-10-8 10-0-0 10-0-0 0-10-8

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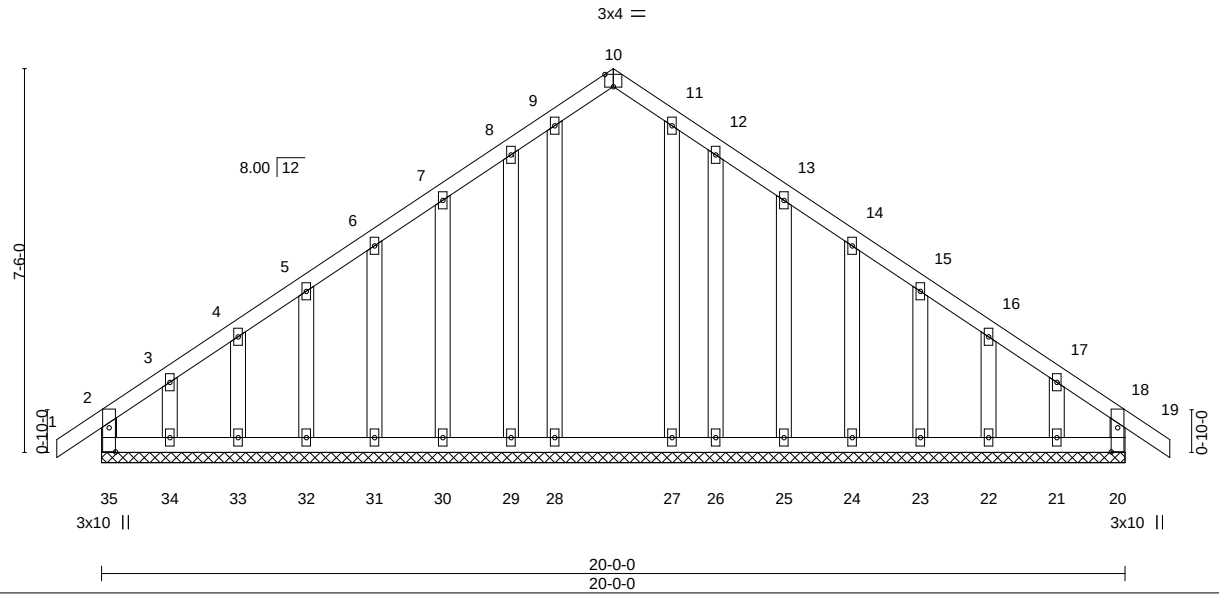

Plate Offsets (X,Y)-- [10:0-2-0,Edge], [20:0-5-10,0-1-8], [35:0-5-10,0-1-8]

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	0.08	Vert(LL)	-0.00	19	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	19	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 115 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 35=213(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 35, 20, 33, 32, 31, 30, 29, 26, 25, 24, 23, 22 except 34=-155(LC 8), 21=-145(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 35, 20, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21

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 1-4-0 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, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 20, 33, 32, 31, 30, 29, 26, 25, 24, 23, 22 except (jt=lb) 34=155, 21=145.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B2	Common	1	1	I46672330
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:29:52 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-fwpRvMVsOzge3rJsIP9RusIJ9lf?RfTkdS?SLYz4?gj

0-10-8	5-2-0	10-0-0	14-9-15	20-0-0	20-10-8
0-10-8	5-2-0	4-9-15	4-10-0	5-2-1	0-10-8

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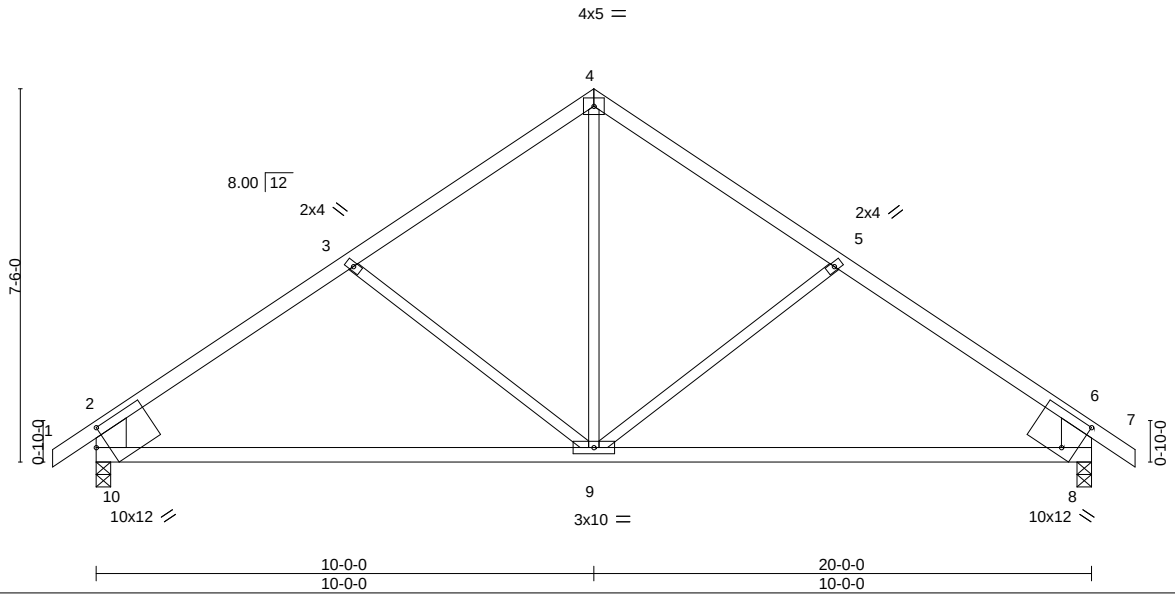

10-0-0	20-0-0
10-0-0	10-0-0

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

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	0.77	Vert(LL)	-0.17	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.34	8-9	>677	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	9	>999	240	Weight: 72 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,6-8: 2x8 SP DSS

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

REACTIONS. (size) 10=0-3-8, 8=0-3-8
Max Horz 10=217(LC 7)
Max Uplift 10=-125(LC 8), 8=-125(LC 9)
Max Grav 10=955(LC 1), 8=955(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1079/161, 3-4=-828/155, 4-5=-828/154, 5-6=-1079/161, 2-10=-853/175, 6-8=-853/175
BOT CHORD 9-10=-143/819, 8-9=-40/783
WEBS 4-9=-46/479, 5-9=-255/212, 3-9=-254/211

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=125, 8=125.
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
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B3	Common	2	1	I46672331
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:29:53 2021 Page 1
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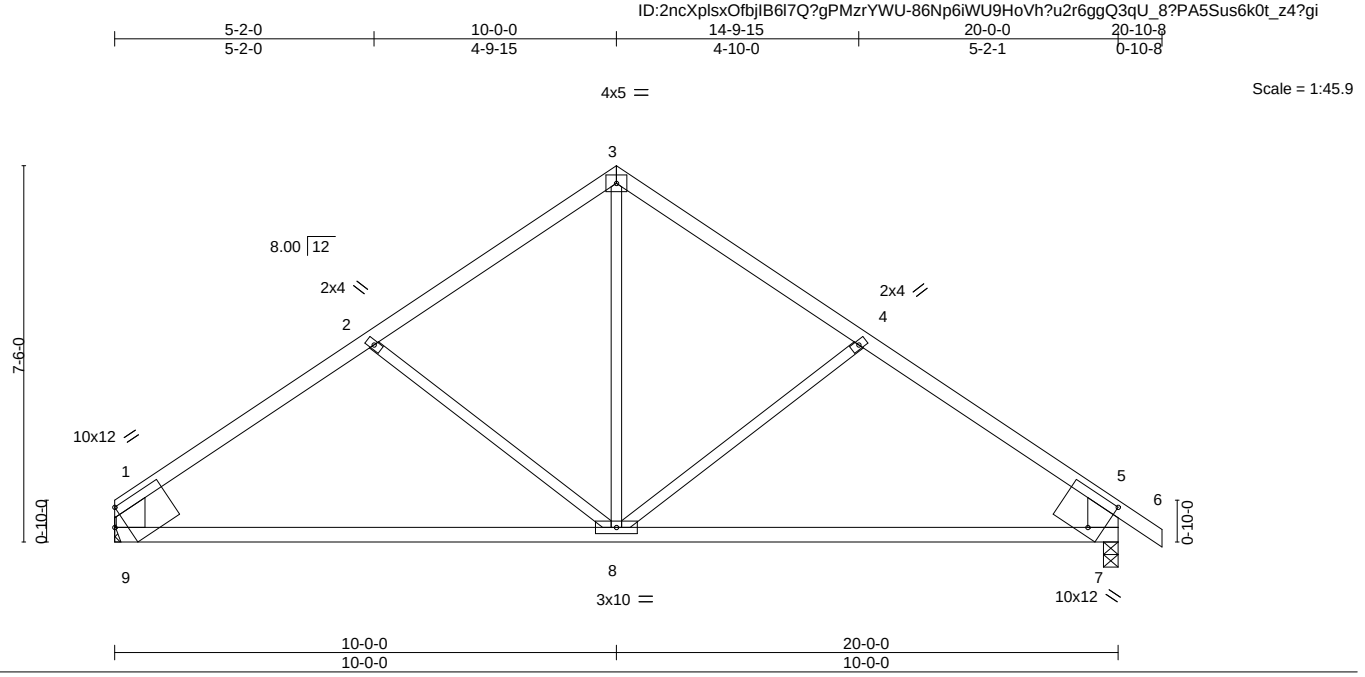

Plate Offsets (X,Y)-- [1:Edge,0-4-0], [7:0-3-6,0-8-1]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.17	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.36	7-8	>651	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	8	>999	240	Weight: 71 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-9,5-7: 2x8 SP DSS

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

REACTIONS. (size) 9=Mechanical, 7=0-3-8
Max Horz 9=-210(LC 4)
Max Uplift 9=-98(LC 8), 7=-125(LC 9)
Max Grav 9=870(LC 1), 7=958(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1087/162, 2-3=-830/154, 3-4=-829/154, 4-5=-1080/160, 1-9=-761/145, 5-7=-853/174
BOT CHORD 8-9=-146/833, 7-8=-40/784
WEBS 3-8=-46/479, 4-8=-256/212, 2-8=-272/215

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 7=125.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B4	ROOF SPECIAL GIRDER	1	2	I46672332
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:29:55 2021 Page 1
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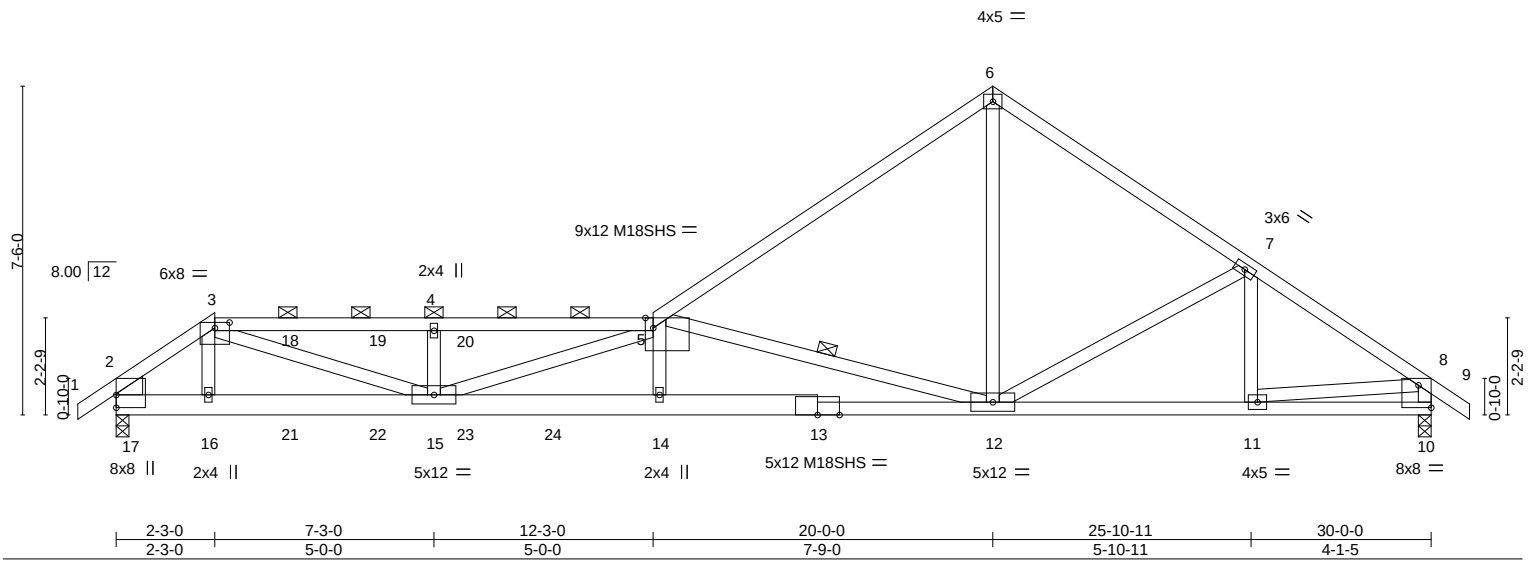
-0-10-8 2-3-0 7-3-0 12-3-0 20-0-0 25-10-11 30-0-0 30-10-8
0-10-8 2-3-0 5-0-0 5-0-0 7-9-0 5-10-11 4-1-5 0-10-8

Scale = 1:52.6



2-3-0 7-3-0 12-3-0 20-0-0 25-10-11 30-0-0
2-3-0 5-0-0 5-0-0 7-9-0 5-10-11 4-1-5

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

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	0.91	Vert(LL)	-0.39	14-15	>907	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.69	14-15	>511	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.30	14-15	>999	240	Weight: 273 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.4E *Except*
10-13: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
2-17: 2x8 SP DSS

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

REACTIONS. (size) 17=0-3-8, 10=0-3-8
Max Horz 17=213(LC 7)
Max Uplift 17=-516(LC 8), 10=-234(LC 9)
Max Grav 17=2628(LC 1), 10=1826(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2927/546, 3-4=-7731/1381, 4-5=-7731/1381, 5-6=-2347/346, 6-7=-2302/404, 7-8=-2425/318, 2-17=-1824/353, 8-10=-1779/251
BOT CHORD 16-17=-511/2360, 15-16=-525/2405, 14-15=-1490/8859, 12-14=-1490/8908, 11-12=-200/1957
WEBS 3-16=-592/174, 3-15=-954/5688, 4-15=-722/331, 5-15=-1209/233, 5-14=-12/647, 5-12=-7305/1335, 6-12=-237/1943, 7-12=-293/222, 8-11=-176/1782

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=516, 10=234.
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.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
PROFESSIONAL ENGINEER
USA

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 158 lb down and 98 lb up at 3-11-4, and 158 lb down and 98 lb up at 5-11-4, and 158 lb down and 98 lb up at 7-11-4 on top chord, and 199 lb down and 86 lb up at 2-3-0, 66 lb down at 3-11-4, 66 lb down at 5-11-4, and 66 lb down at 7-11-4, and 1017 lb down and 175 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

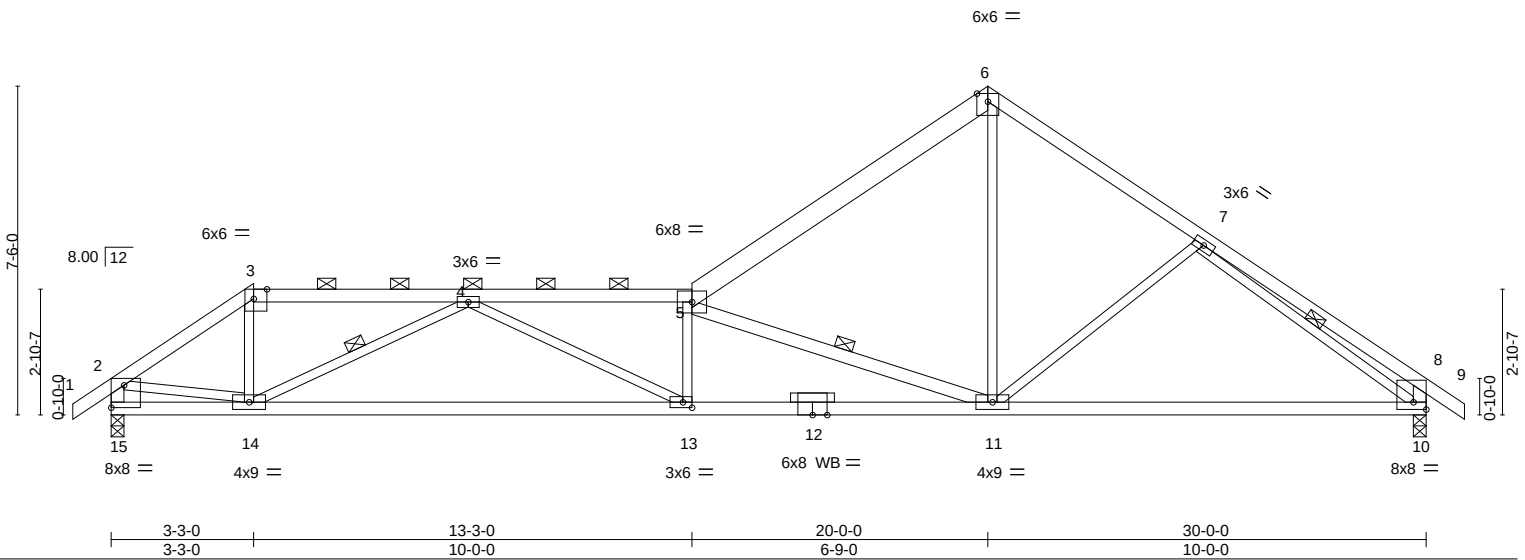
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-8=-70, 8-9=-70, 10-17=-20
   Concentrated Loads (lb)
   Vert: 16=-199(F) 18=-108(F) 19=-108(F) 20=-108(F) 21=-33(F) 22=-33(F) 23=-33(F) 24=-1017(F)

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B5	Roof Special	1	1	I46672333
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:29:56 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Yh2ykjYMRCB4YScdXFDN2iS0wM3vNLTKY4zgUJz4?gf

-0-10-8 3-3-0 8-1-12 13-3-0 20-0-0 24-10-0 30-0-0 30-10-8
0-10-8 3-3-0 4-10-12 5-1-4 6-9-0 4-10-0 5-2-1 0-10-8

Scale = 1:52.6



3-3-0 13-3-0 20-0-0 30-0-0
3-3-0 10-0-0 6-9-0 10-0-0

Plate Offsets (X,Y)-- [3:0-3-10,Edge], [10:Edge,0-2-0], [13:0-2-8,0-1-8], [15:Edge,0-6-2]

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	0.65	Vert(LL)	-0.25	13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.57	13-14	>628	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	13	>999	240	Weight: 122 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2 *Except* 5-11,2-15,8-10: 2x4 SPF No.2
OTHERS	2x3 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 10=0-3-8
Max Horz 15=-213(LC 6)
Max Uplift 15=-230(LC 8), 10=-142(LC 9)
Max Grav 15=1408(LC 1), 10=1408(LC 1)

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

TOP CHORD	2-3=-1817/241, 3-4=-1442/232, 4-5=-3826/524, 5-6=-1609/209, 6-7=-1612/267, 7-8=-624/121, 2-15=-1421/212, 8-10=-546/147
BOT CHORD	13-14=-538/3028, 11-13=-538/3836, 10-11=-128/1402
WEBS	3-14=-22/724, 4-14=-1787/334, 4-13=-22/897, 5-13=-257/110, 5-11=-2762/498, 6-11=-114/1256, 2-14=-80/1380, 7-10=-1235/190

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=230, 10=142.
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.

June 22,2021

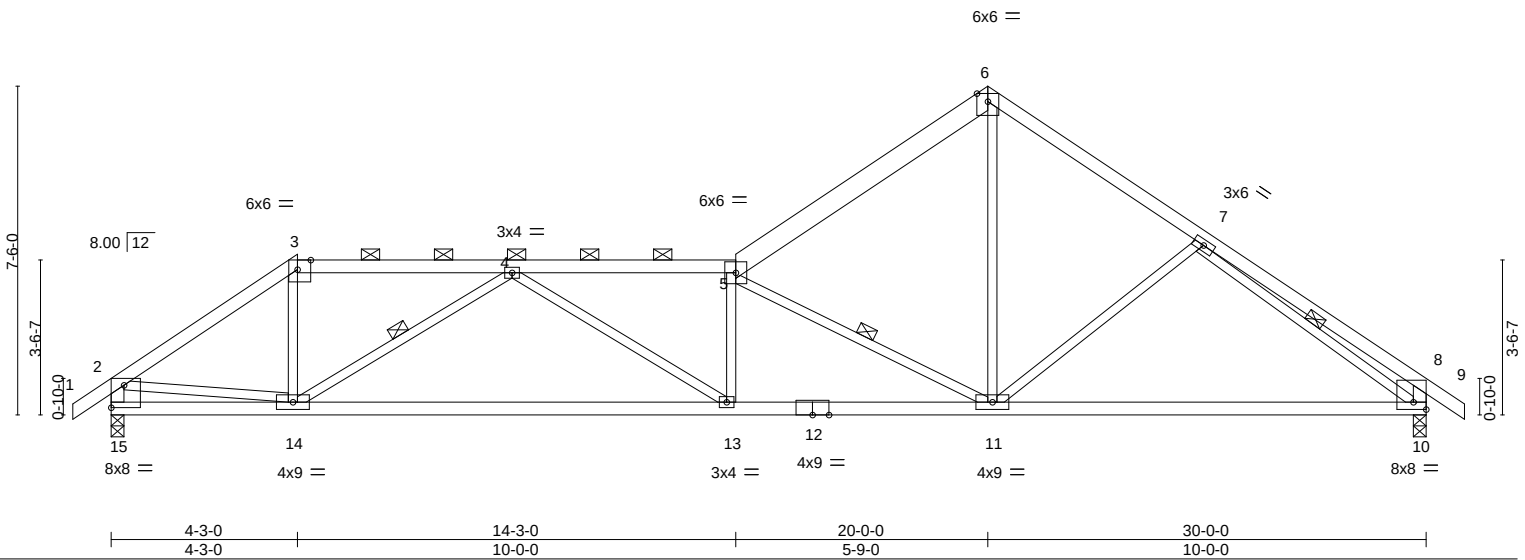
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B6	Roof Special	1	1	I46672334
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:29:57 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-0tcKy3Z_CWJx9cBp4ykcbv?EtmJ66lATmkiD0lz4?ge

-0-10-8	4-3-0	9-1-12	14-3-0	20-0-0	24-10-0	30-0-0	30-10-8
0-10-8	4-3-0	4-10-12	5-1-4	5-9-0	4-10-0	5-2-1	0-10-8

Scale = 1:52.6



4-3-0	14-3-0	20-0-0	30-0-0
4-3-0	10-0-0	5-9-0	10-0-0

Plate Offsets (X,Y)-- [3:0-3-10,Edge], [10:Edge,0-2-0], [15:Edge,0-6-2]

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	0.51	Vert(LL)	-0.29	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.64	13-14	>554	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	13	>999	240	Weight: 120 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* 2-15,8-10: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 10=0-3-8
Max Horz 15=-213(LC 6)
Max Uplift 15=-230(LC 8), 10=-142(LC 9)
Max Grav 15=1408(LC 1), 10=1408(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1858/260, 3-4=-1460/256, 4-5=-3080/432, 5-6=-1612/221, 6-7=-1610/267, 7-8=-620/116, 2-15=-1399/229, 8-10=-544/145
BOT CHORD 14-15=-218/325, 13-14=-448/2585, 11-13=-418/3085, 10-11=-129/1401
WEBS 3-14=-20/711, 4-14=-1344/250, 4-13=-18/590, 5-11=-2102/397, 6-11=-140/1291, 2-14=-37/1301, 7-10=-1238/198

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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=230, 10=142.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B7	Roof Special	1	1	I46672335
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:29:58 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-U4Ai9PaczpRonmm0efGr77XQu9g0rGed?OSmYCz4?gd

-0-10-8	5-3-0	10-1-12	15-3-0	20-0-0	24-10-0	30-0-0	30-10-8
0-10-8	5-3-0	4-10-12	5-1-4	4-9-0	4-10-0	5-2-1	0-10-8

Scale = 1:56.3

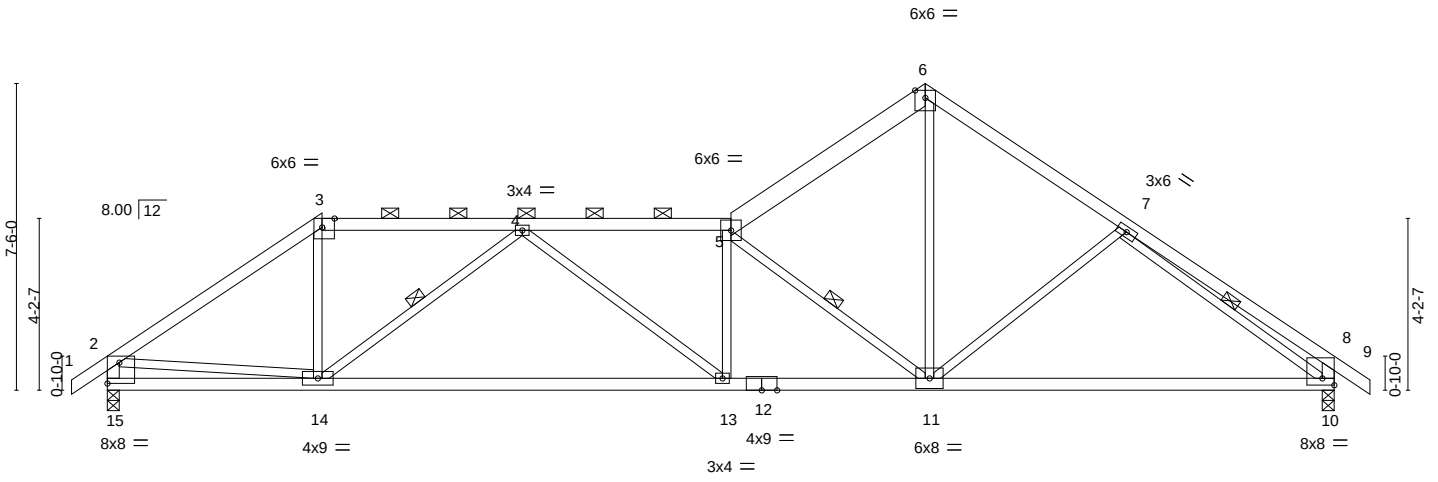


Plate Offsets (X,Y)-- [3:0-3-10,Edge], [10:Edge,0-2-0], [15:Edge,0-6-2]

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	0.43	Vert(LL)	-0.28	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.61	13-14	>585	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	13	>999	240	Weight: 121 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*
	2-15,8-10: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 10=0-3-8
Max Horz 15=-213(LC 6)
Max Uplift 15=-230(LC 8), 10=-142(LC 9)
Max Grav 15=1408(LC 1), 10=1408(LC 1)

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

TOP CHORD	2-3=-1868/270, 3-4=-1452/274, 4-5=-2564/373, 5-6=-1590/232, 6-7=-1608/267, 7-8=-620/115, 2-15=-1381/241, 8-10=-543/144
BOT CHORD	14-15=-252/439, 13-14=-379/2269, 11-13=-330/2566, 10-11=-129/1402
WEBS	3-14=-10/675, 4-14=-1039/191, 4-13=-16/384, 5-11=-1699/335, 6-11=-164/1327, 2-14=-56/1169, 7-10=-1237/201

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=230, 10=142.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B8	Roof Special	1	1	I46672336

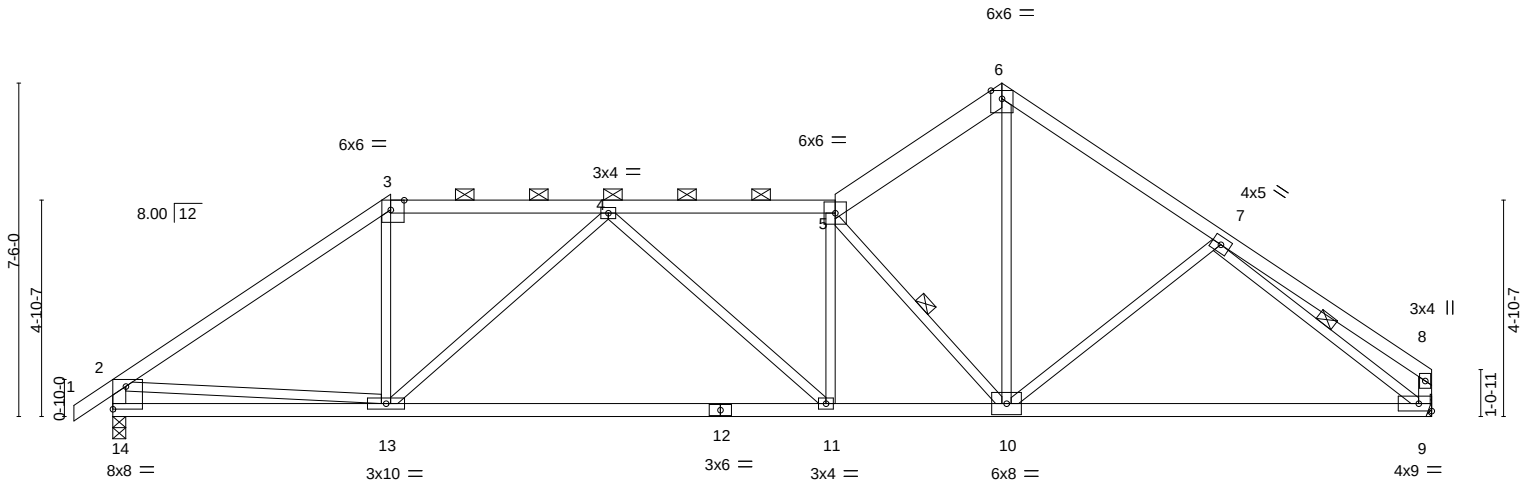
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:00 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-QSITa5btVRhV04wOm4IJCYdj4zM8J6AwTixtd4z4?gb

-0-10-8	6-3-0	11-1-12	16-3-0	20-0-0	24-10-0	29-8-0
0-10-8	6-3-0	4-10-12	5-1-4	3-9-0	4-10-0	4-10-0

Scale = 1:51.8



6-3-0	16-3-0	20-0-0	29-8-0
6-3-0	10-0-0	3-9-0	9-8-0

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

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	0.51	Vert(LL)	-0.26	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.57	11-13	>619	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	11-13	>999	240	Weight: 120 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* 2-14,8-9: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 14=0-3-8, 9=Mechanical
Max Horz 14=208(LC 5)
Max Uplift 14=-228(LC 8), 9=-121(LC 8)
Max Grav 14=1395(LC 1), 9=1321(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1839/273, 3-4=-1413/286, 4-5=-2131/326, 5-6=-1522/240, 6-7=-1561/263, 7-8=-370/53, 2-14=-1352/251, 8-9=-310/76
BOT CHORD 13-14=-325/566, 11-13=-331/1992, 10-11=-268/2131, 9-10=-133/1318
WEBS 3-13=0/612, 4-13=-788/168, 5-10=-1442/296, 6-10=-185/1313, 2-13=-96/990, 7-9=-1417/227

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=228, 9=121.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	B9	Half Hip	1	1	I46672337
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:01 2021 Page 1
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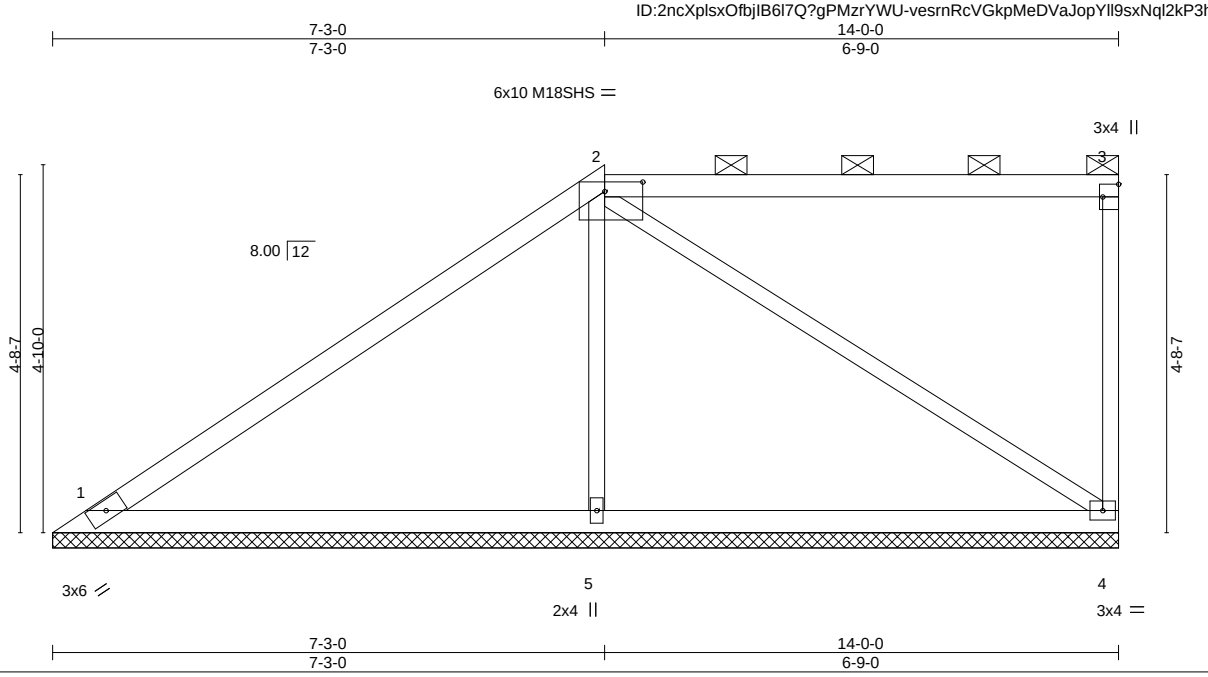


Plate Offsets (X,Y)-- [2:0-6-0,0-1-8], [3:Edge,0-2-8]

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	0.70	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	n/a	-	n/a	999	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 46 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, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=14-0-0, 4=14-0-0, 5=14-0-0
Max Horz 1=175(LC 5)
Max Uplift 1=-52(LC 8), 4=-85(LC 5), 5=-54(LC 5)
Max Grav 1=310(LC 1), 4=314(LC 1), 5=583(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-402/148

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

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	C1	GABLE	1	1	I46672338
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:02 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-NrQD?nd712xDGN4ntVKnIziASnECnEKCw0Q_hzz4?gZ

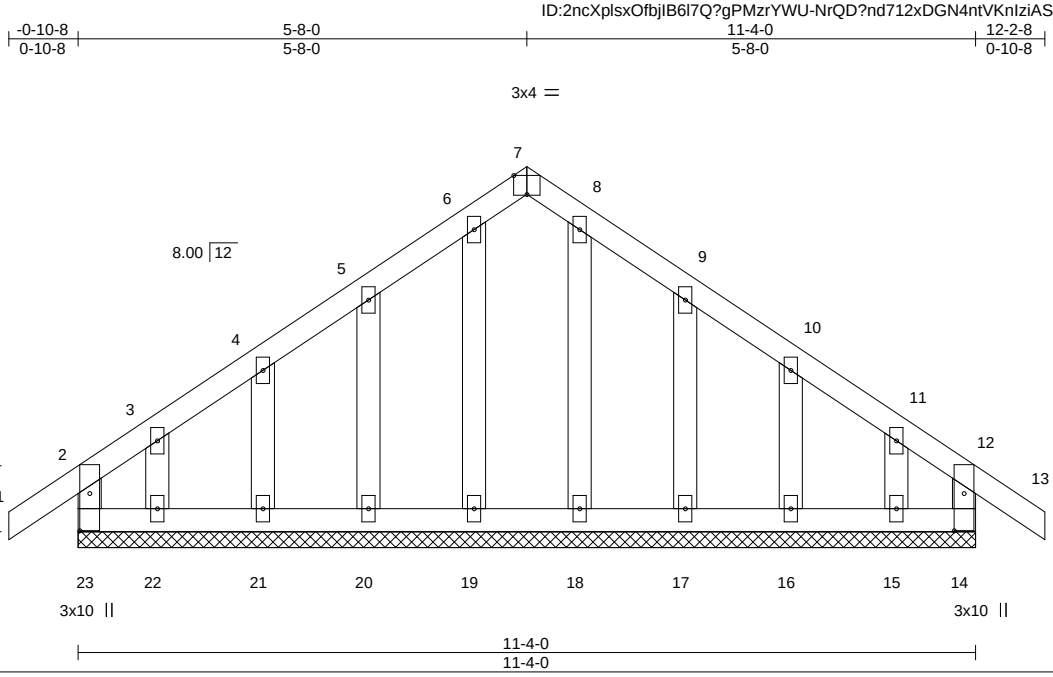


Plate Offsets (X,Y)-- [7:0-2-0,Edge], [14:0-5-10,0-1-8], [23:0-5-10,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 53 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 11-4-0.
(lb) - Max Horz 23=-137(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 23, 14, 22, 21, 20, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 23, 14, 22, 21, 20, 19, 18, 17, 16, 15

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 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 14, 22, 21, 20, 17, 16, 15.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	C2	Common Girder	1	2	I46672339
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:03 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-r1_bC6eloM34tXfzRDr0qAFEpAT_WaYM9g9XEPz4?gY

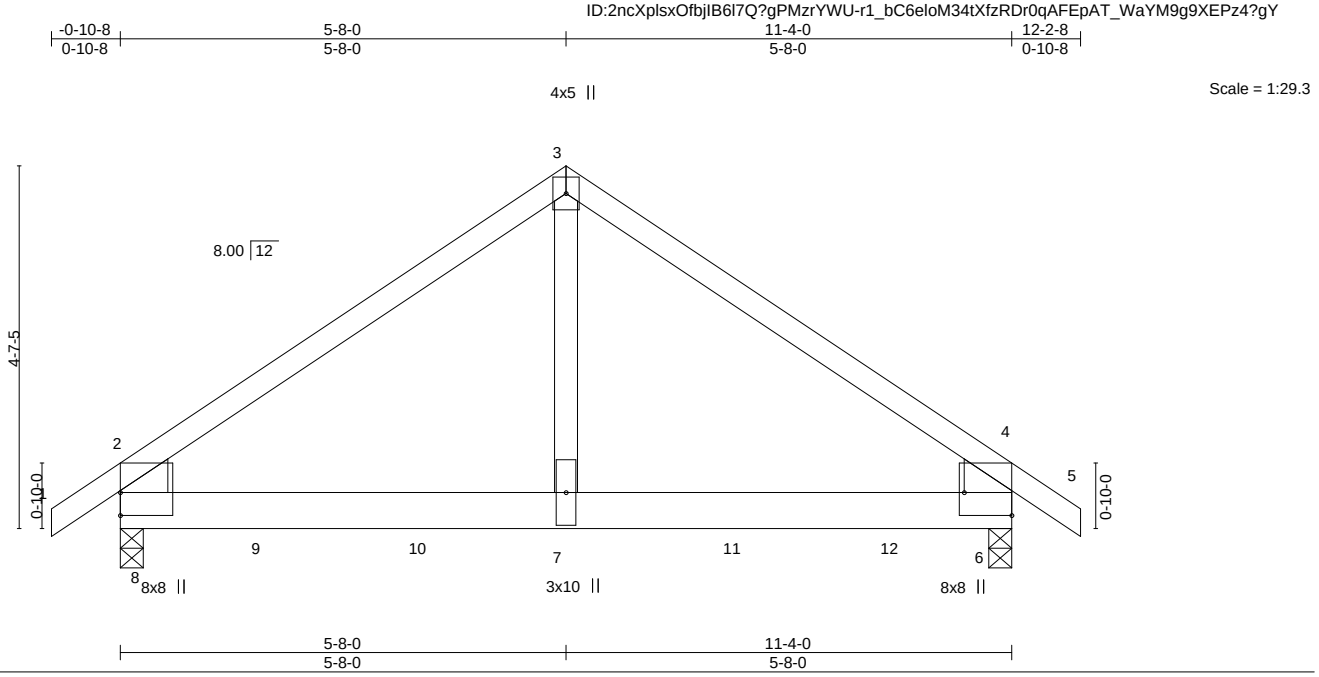


Plate Offsets (X,Y)-- [6:Edge,0-7-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.06	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.10	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	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: 104 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x8 SP 2400F 2.0E *Except*
3-7: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-9 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=-138(LC 6)
Max Uplift 8=-145(LC 8), 6=-148(LC 9)
Max Grav 8=3949(LC 2), 6=4125(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3784/158, 3-4=-3784/158, 2-8=-2336/174, 4-6=-2336/174
BOT CHORD 7-8=-49/3047, 6-7=-49/3047
WEBS 3-7=-41/3886

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=145, 6=148.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1421 lb down and 34 lb up at 1-10-0, 1421 lb down and 34 lb up at 3-10-0, 1421 lb down and 34 lb up at 5-10-0, and 1421 lb down and 34 lb up at 7-10-0, and 1421 lb down and 34 lb up at 9-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

June 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

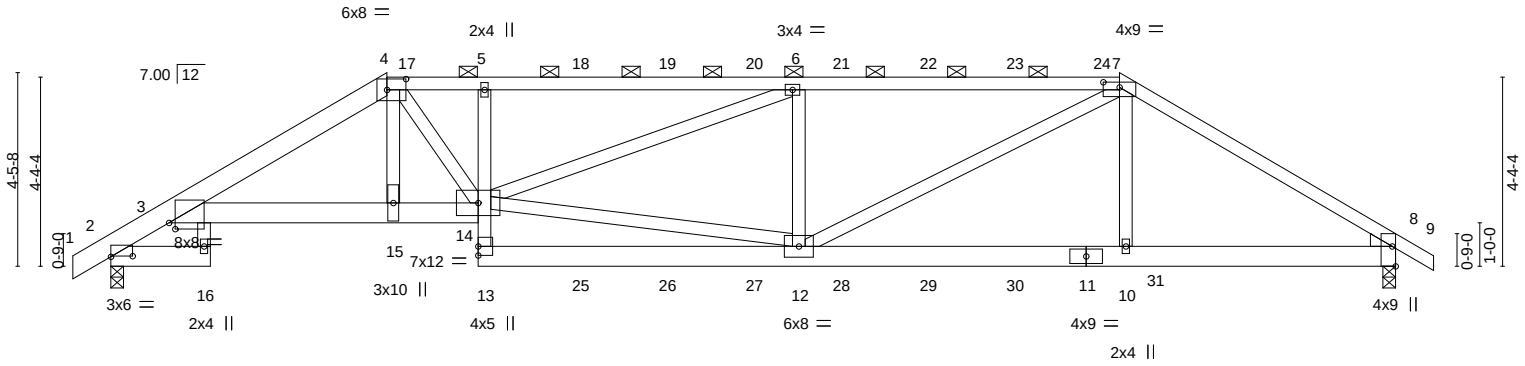
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20
   Concentrated Loads (lb)
   Vert: 7=-1373(B) 9=-1373(B) 10=-1373(B) 11=-1373(B) 12=-1373(B)

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	D1	HIP GIRDER	1	2	I46672340
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:06 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Fcfkr8ge5HRfk?NY6LPjSptkLOPDjxCoreOCqkz4?gV

-0-10-8 2-3-8 6-4-5 8-5-8 15-10-2 23-2-11 29-7-0 30-5-8
0-10-8 2-3-8 4-0-13 2-1-3 7-4-10 7-4-10 6-4-5 0-10-8

Scale = 1:53.1



2-3-8 6-4-5 8-5-8 15-10-2 23-2-11 29-7-0
2-3-8 4-0-13 2-1-3 7-4-10 7-4-10 6-4-5

Plate Offsets (X,Y)-- [2:0-6-0,0-0-3], [3:0-1-11,0-1-11], [4:0-5-4,0-3-0], [7:0-4-8,0-1-7], [8:Edge,0-0-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.15	14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.27	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.18	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	14	>999	240	Weight: 299 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP DSS *Except*
4-7: 2x4 SPF 2100F 1.8E, 7-9: 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
5-13: 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-9 oc purlins, except
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: 2-16.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=112(LC 7)
Max Uplift 2=-477(LC 8), 8=-446(LC 9)
Max Grav 2=2363(LC 1), 8=2366(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1493/334, 3-4=-4908/1070, 4-5=-4952/1087, 5-6=-4958/1095, 6-7=-4701/906, 7-8=-3918/731
BOT CHORD 3-15=-990/4315, 14-15=-1002/4368, 5-14=-535/269, 12-13=-118/808, 10-12=-547/3168, 8-10=-549/3192
WEBS 4-15=-254/1074, 4-14=-281/1071, 12-14=-799/3927, 6-14=-214/316, 6-12=-1105/496, 7-12=-418/1831, 7-10=-57/639

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) 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) except (jt=lb) 2=477, 8=446.
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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June 22,2021

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) 122 lb down and 99 lb up at 6-9-7, 125 lb down and 77 lb up at 8-9-7, 125 lb down and 77 lb up at 10-9-7, 125 lb down and 77 lb up at 12-9-7, 125 lb down and 77 lb up at 14-9-7, 125 lb down and 77 lb up at 16-9-8, 125 lb down and 77 lb up at 18-9-8, and 125 lb down and 77 lb up at 20-9-8, and 120 lb down and 77 lb up at 22-9-8 on top chord, and 351 lb down and 184 lb up at 6-4-5, 53 lb down and 28 lb up at 6-9-7, 60 lb down at 8-7-4, 60 lb down at 10-9-7, 60 lb down at 12-9-7, 60 lb down at 14-9-7, 60 lb down at 16-9-8, 60 lb down at 18-9-8, 60 lb down at 20-9-8, and 60 lb down at 22-9-8, and 357 lb down and 168 lb up at 23-2-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

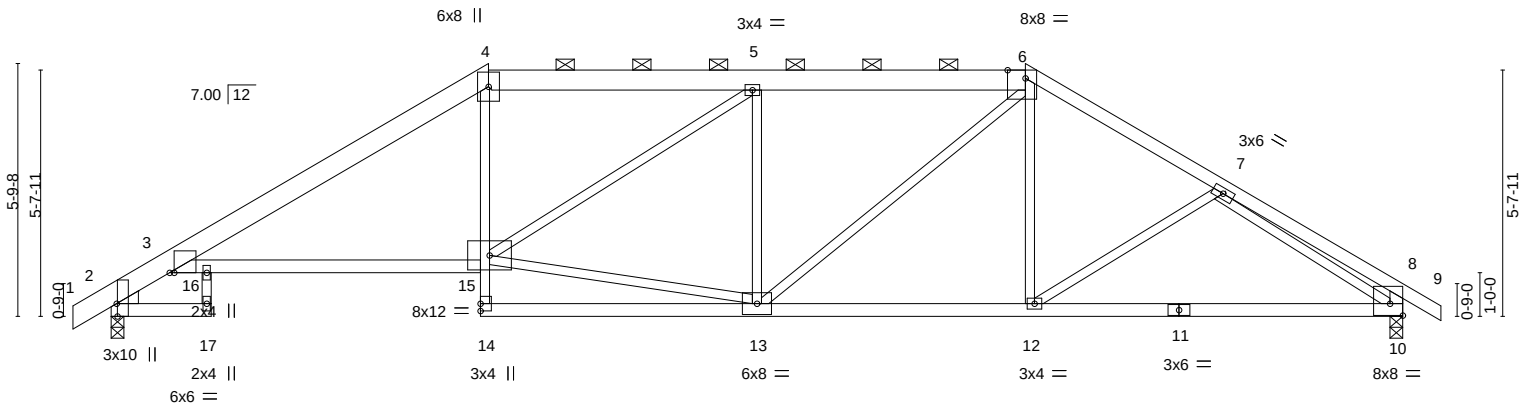
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-7=-70, 7-9=-70, 2-16=-20, 3-14=-20, 8-13=-20
   Concentrated Loads (lb)
   Vert: 14=-45(F) 5=-93(F) 15=-395(F) 10=-357(F) 17=-73(F) 18=-93(F) 19=-93(F) 20=-93(F) 21=-93(F) 22=-93(F) 23=-93(F) 24=-93(F) 25=-45(F) 26=-45(F) 27=-45(F) 28=-45(F) 29=-45(F) 30=-45(F) 31=-45(F)

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	D2	Hip	1	1	I46672341
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:07 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-joD62UhGsaZWM8ykg2wy?0PvMooqSINy4l7INAz4?gU

-0-10-8	2-3-8	8-7-11	14-9-8	20-11-5	25-4-6	29-7-0	30-5-8
0-10-8	2-3-8	6-4-3	6-1-13	6-1-13	4-5-2	4-2-10	0-10-8

Scale = 1:52.8



2-3-8	8-5-8	14-9-8	20-11-5	29-7-0
2-3-8	6-2-0	6-4-0	6-1-13	8-7-11

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-1-4,0-0-0], [6:0-4-15,Edge], [10:Edge,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.27	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.53	15-16	>664	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.30	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.21	15-16	>999	240	Weight: 135 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SP DSS *Except*
4-6: 2x6 SPF No.2, 6-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-15: 2x4 SPF 2100F 1.8E, 4-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-10: 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=156(LC 7)
Max Uplift 2=-131(LC 8), 10=-131(LC 9)
Max Grav 2=1390(LC 1), 10=1390(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-876/97, 3-4=-2344/196, 4-5=-1981/207, 5-6=-1875/177, 6-7=-1808/142, 7-8=-552/61, 8-10=-468/99
BOT CHORD 3-16=-227/2017, 15-16=-228/2021, 4-15=-28/563, 12-13=-51/1508, 10-12=-95/1579
WEBS 13-15=-191/1891, 5-13=-579/232, 6-13=-184/582, 6-12=0/295, 7-10=-1441/135

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=131, 10=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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	D3	Hip	1	1	I46672342

Job Reference (optional)

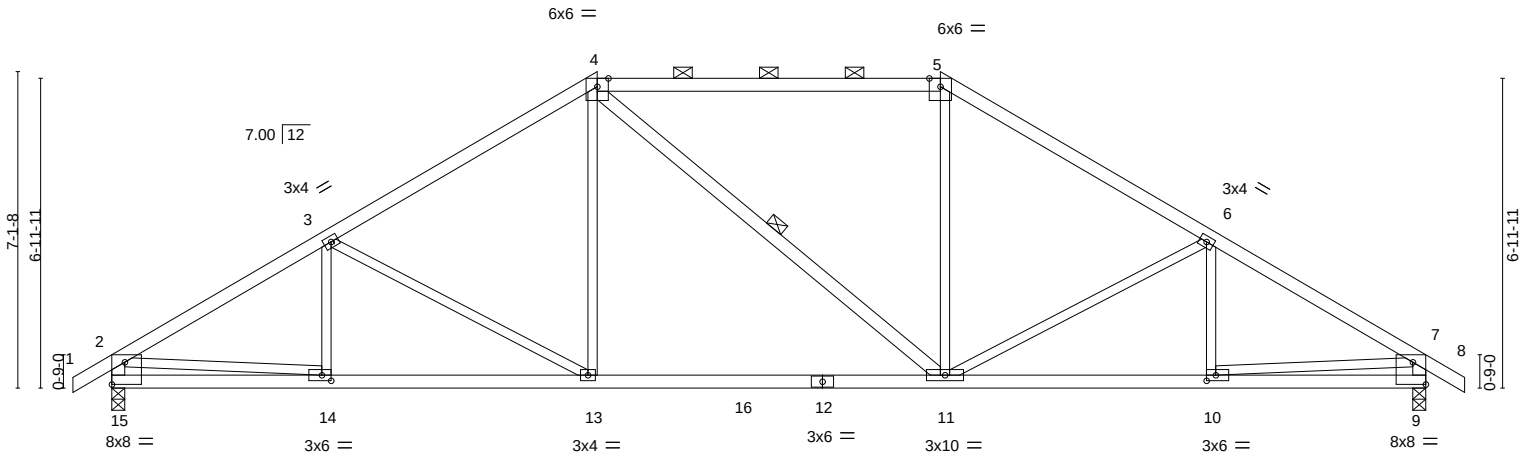
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:08 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-B?nUFqiucuhN_IXxEmRBXEy3HB7pBqn5lytIvdz4?gT

-0-10-8 4-10-0 10-11-2 18-7-14 24-9-0 29-7-0 30-5-8

0-10-8 4-10-0 6-1-2 7-8-11 6-1-2 4-10-0 0-10-8

Scale = 1:51.9



4-10-0 10-11-2 18-7-14 24-9-0 29-7-0

4-10-0 6-1-2 7-8-11 6-1-2 4-10-0

Plate Offsets (X,Y)-- [9:Edge,0-6-0], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:Edge,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	0.69	Vert(LL)	-0.16	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.29	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	13-14	>999	240	Weight: 120 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except* 4-11,2-15,7-9: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-9-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-14 max.): 4-5.

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

WEBS 1 Row at midpt 4-11

REACTIONS. (size) 15=0-3-8, 9=0-3-8

Max Horz 15=198(LC 7)

Max Uplift 15=-153(LC 8), 9=-153(LC 9)

Max Grav 15=1443(LC 2), 9=1435(LC 2)

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

TOP CHORD 2-3=-2063/199, 3-4=-1774/172, 4-5=-1445/200, 5-6=-1758/172, 6-7=-2051/199, 2-15=-1352/177, 7-9=-1345/177

BOT CHORD 14-15=-174/476, 13-14=-201/1798, 11-13=-83/1458, 10-11=-99/1712, 9-10=-43/343

WEBS 3-13=-409/190, 4-13=-3/505, 5-11=0/466, 6-11=-412/190, 2-14=-64/1386, 7-10=-56/1378

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=153, 9=153.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

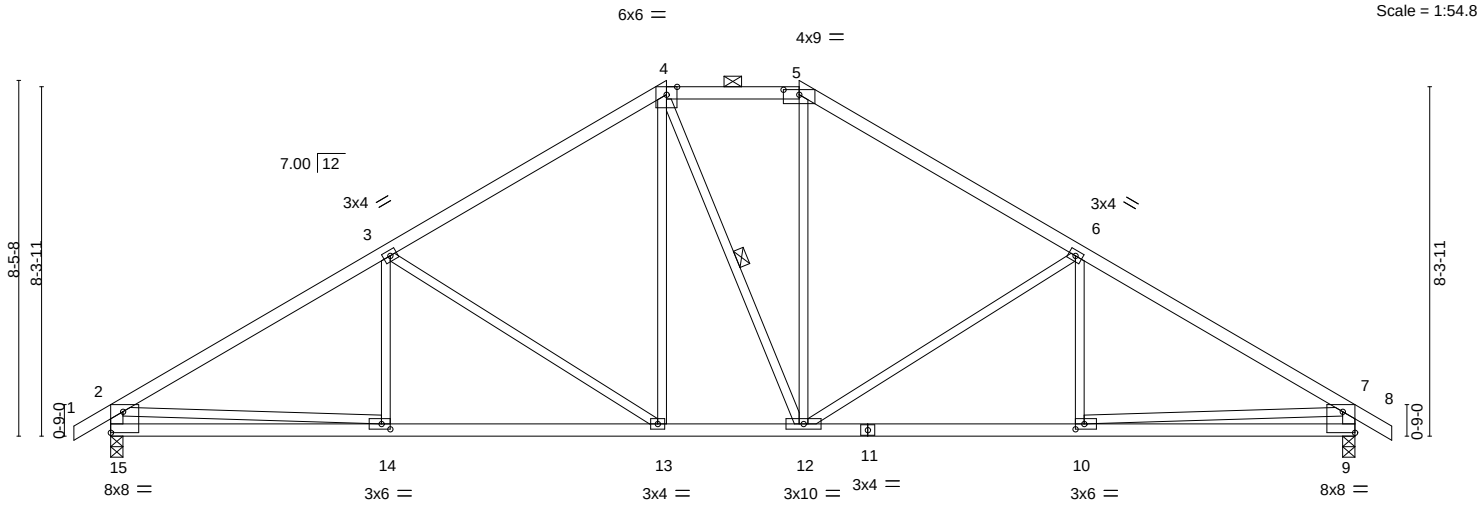
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	D4	Hip	1	1	I46672343
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:10 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-8NvFgWj88Vx5DchJLBTfcf1QW?szef0OmGMPzVz4?gR

-0-10-8 6-6-8 13-2-9 16-4-7 23-0-8 29-7-0 30-5-8
0-10-8 6-6-8 6-8-1 3-1-14 6-8-1 6-6-8 0-10-8

Scale = 1:54.8



6-6-8 13-2-9 16-4-7 23-0-8 29-7-0
6-6-8 6-8-1 3-1-14 6-8-1 6-6-8

Plate Offsets (X,Y)-- [5:0-4-8,0-1-7], [9:Edge,0-6-0], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:Edge,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	0.58	Vert(LL)	-0.08	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.49	Vert(CT)	-0.18	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.81	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	13-14	>999	240	Weight: 124 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-15,7-9: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 15=233(LC 7)
Max Uplift 15=-171(LC 8), 9=-171(LC 9)
Max Grav 15=1390(LC 1), 9=1390(LC 1)

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

TOP CHORD	2-3=-1985/221, 3-4=-1512/204, 4-5=-1196/229, 5-6=-1513/204, 6-7=-1985/221, 2-15=-1325/205, 7-9=-1324/205
BOT CHORD	14-15=-250/637, 13-14=-216/1620, 12-13=-32/1195, 10-12=-90/1620, 9-10=-135/506
WEBS	3-13=-544/218, 4-13=-62/389, 5-12=-52/379, 6-12=-541/218, 2-14=0/1120, 7-10=0/1118

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=171, 9=171.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
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KANSAS
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	D5	Roof Special	1	1	I46672344
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:11 2021 Page 1
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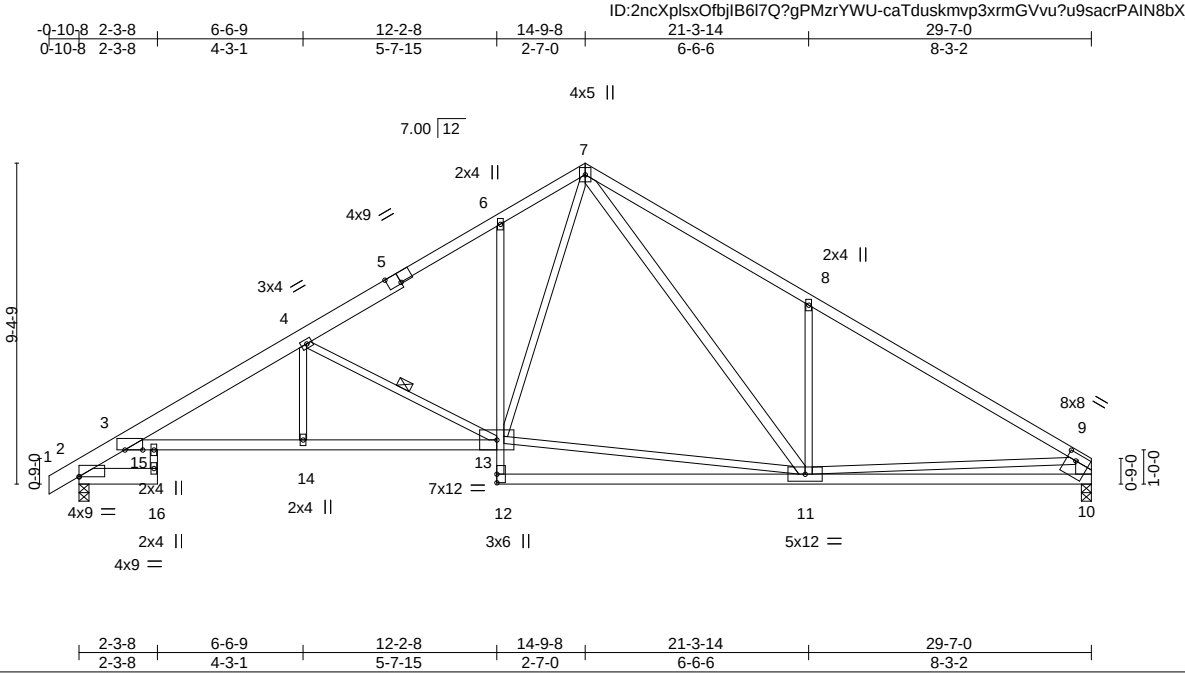


Plate Offsets (X,Y)-- [2:0-0-0,0-0-1], [3:0-6-4,0-0-0], [5:0-4-8,Edge], [9:0-3-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.18	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.41	11-12	>849	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.19	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14	14-15	>999	240	Weight: 142 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-9: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-16: 2x6 SPF No.2, 3-13: 2x4 SPF 2100F 1.8E, 6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-11: 2x4 SPF No.2, 9-10: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-13

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=248(LC 7)
Max Uplift 2=-181(LC 8), 10=-156(LC 9)
Max Grav 2=1387(LC 1), 10=1313(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-892/166, 3-4=-2567/333, 4-6=-1784/254, 6-7=-1653/347, 7-8=-1912/427, 8-9=-1929/220, 9-10=-1238/198
BOT CHORD 3-15=-363/2248, 14-15=-363/2248, 13-14=-363/2249, 10-11=-152/541
WEBS 4-14=0/315, 4-13=-982/287, 11-13=-56/1029, 7-13=-233/922, 7-11=-301/760, 8-11=-582/351, 9-11=-27/1013

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=181, 10=156.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

June 22,2021

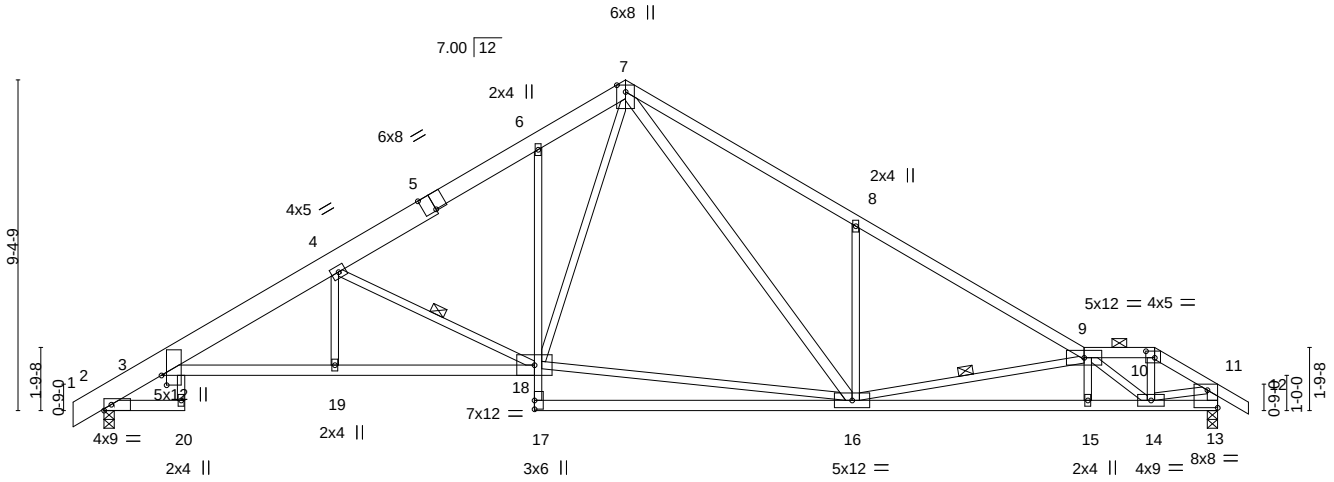
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E1	Roof Special Girder	1	1	I46672345
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:13 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-YyaNJXm1RQKf43Qu0J1NEHftOCpNr1CqSEa3aqz4?gO

-0-10-8	2-3-8	6-6-9	12-2-8	14-9-8	21-3-14	27-9-9	29-9-9	31-7-0	32-5-8
0-10-8	2-3-8	4-3-1	5-7-15	2-7-0	6-6-6	6-5-12	2-0-0	1-9-7	0-10-8

Scale = 1:65.3



2-3-8	6-6-9	12-2-8	21-3-14	27-9-9	29-9-9	31-7-0
2-3-8	4-3-1	5-7-15	9-1-6	6-5-12	2-0-0	1-9-7

Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [10:0-3-0,0-2-4], [13:Edge,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	0.86	Vert(LL)	-0.18	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.43	16-17	>875	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.22	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	18-19	>999	240	Weight: 163 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x6 SPF No.2, 1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
6-17: 2x3 SPF No.2, 13-17: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
7-16,11-13: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=252(LC 7)
Max Uplift 2=-179(LC 8), 13=-213(LC 9)
Max Grav 2=1493(LC 1), 13=1476(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-887/192, 3-4=-2751/335, 4-6=-2004/263, 6-7=-1864/359, 7-8=-2303/462, 8-9=-2294/277, 9-10=-1521/224, 10-11=-1752/239, 11-13=-1424/221
BOT CHORD 3-19=-364/2481, 18-19=-362/2481, 15-16=-358/3024, 14-15=-354/3027
WEBS 4-18=-1019/281, 16-18=-62/1218, 7-18=-230/965, 7-16=-326/1019, 8-16=-518/308, 9-16=-1151/262, 9-14=-1914/243, 10-14=-139/815, 11-14=-154/1358

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=179, 13=213.
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) 131 lb down and 68 lb up at 29-9-9 on top chord, and 12 lb down and 10 lb up at 29-8-13 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

June 22,2021

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: 1-7=-70, 7-9=-70, 9-10=-70, 10-11=-70, 11-12=-70, 2-20=-20, 3-18=-20, 13-17=-20
   Concentrated Loads (lb)
   Vert: 14=4(F)

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR	I46672346
210458	E2	Roof Special	1	1	Job Reference (optional)	

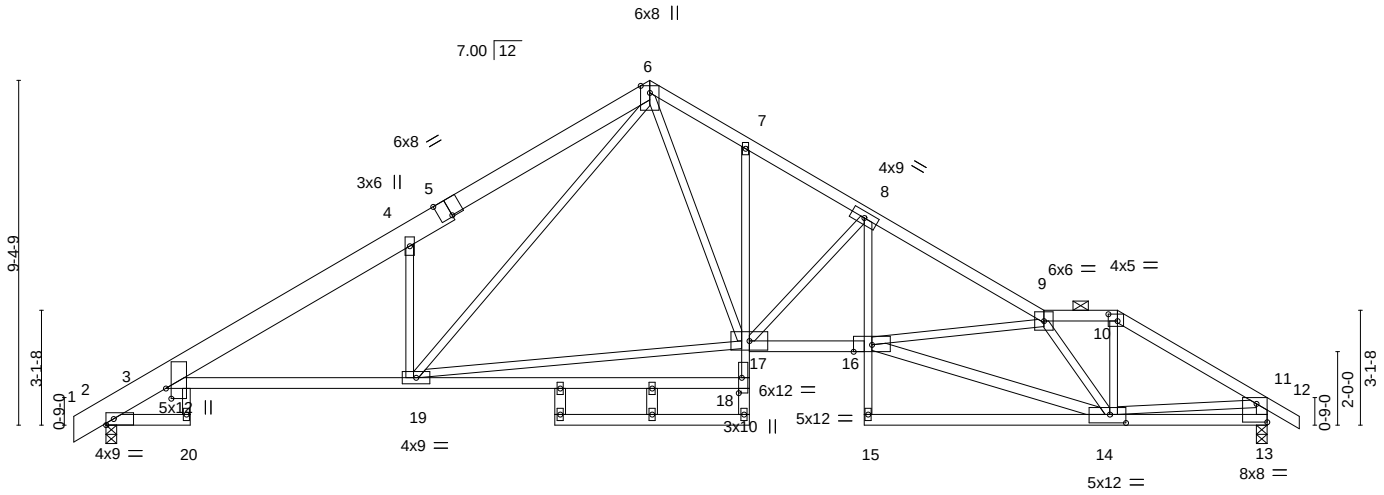
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:14 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-098lWtmfCkSWiD_4a1YcnVC6cc9IaRezhuKd6Gz4?gN

-0-10-8 2-3-8 8-3-2 14-9-8 17-6-0 20-7-8 25-6-2 27-6-2 31-7-0 32-5-8

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

Scale = 1:62.7



2-3-8 8-6-8 14-9-8 17-6-0 20-7-8 27-6-2 31-7-0

2-3-8 6-3-0 6-3-0 2-8-8 3-1-8 6-10-10 4-0-14

Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [10:0-3-0,0-2-4], [13:Edge,0-6-0], [14:0-5-4,0-2-12], [18:0-5-0,0-1-0]

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	0.64	Vert(LL)	-0.24	18-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.57	18-19	>661	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.33	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	3-19	>999	240	Weight: 174 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2, 1-5: 2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except*
7-18,8-15: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
14-16,11-13,21-23,18-22,24-25: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-10 max.): 9-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-20.

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=252(LC 7)
Max Uplift 2=-178(LC 8), 13=-203(LC 9)
Max Grav 2=1493(LC 1), 13=1480(LC 1)

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

TOP CHORD 2-3=-886/191, 3-4=-2524/283, 4-6=-2689/508, 6-7=-2263/336, 7-8=-2342/272, 8-9=-3378/341, 9-10=-1866/260, 10-11=-2103/256, 11-13=-1430/218

BOT CHORD 3-19=-287/2216, 16-17=-120/2877, 8-16=-68/1179, 13-14=-87/343

WEBS 4-19=-880/395, 6-19=-348/1148, 6-17=-209/1339, 8-17=-1347/238, 14-16=-301/3023, 9-14=-2152/268, 10-14=-51/855, 11-14=-58/1407, 17-19=-81/1358

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) except (jt=lb) 2=178, 13=203.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

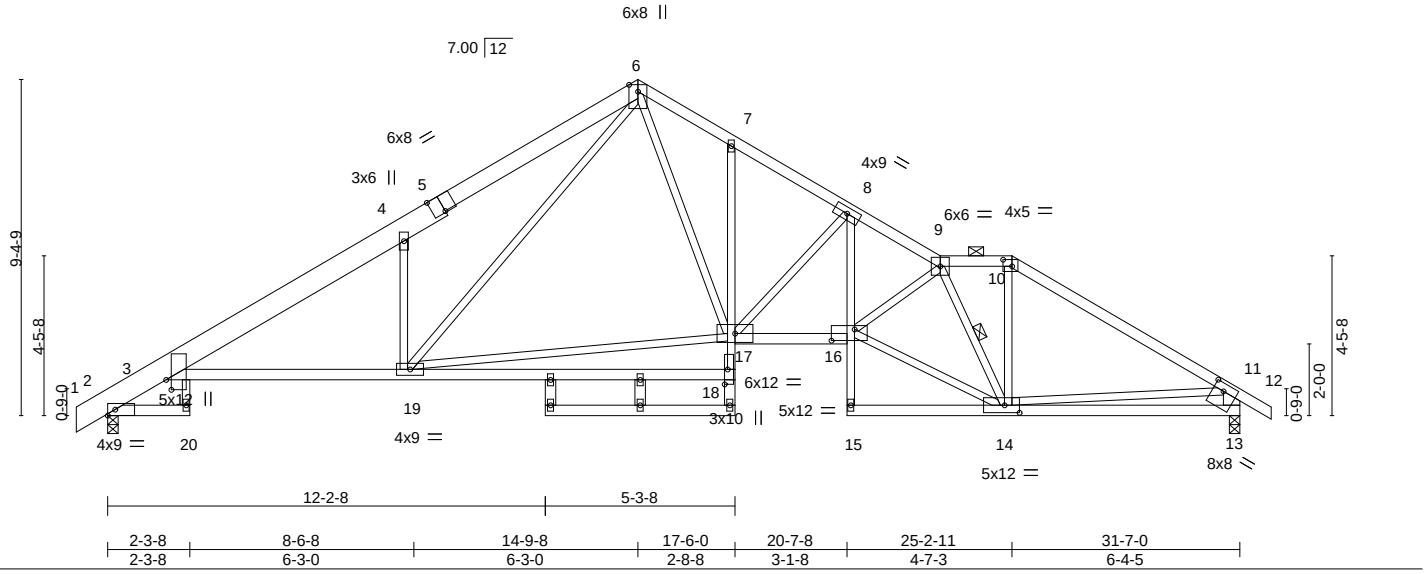
Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E3	Roof Special	1	1	I46672347
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:16 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-yXGWxZovkLiExX8TiRa4swHRxQqn2K0G8BpjB9z4?gL

-0-10-8	2-3-8	8-3-2	14-9-8	17-6-0	20-7-8	23-2-11	25-2-11	31-7-0	32-5-8
0-10-8	2-3-8	5-11-10	6-6-6	2-8-8	3-1-8	2-7-3	2-0-0	6-4-5	0-10-8

Scale: 3/16"=1'



2-3-8	8-6-8	14-9-8	17-6-0	20-7-8	25-2-11	31-7-0
2-3-8	6-3-0	6-3-0	2-8-8	3-1-8	4-7-3	6-4-5

Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [10:0-3-0,0-2-4], [13:0-3-8,0-2-8], [14:0-5-0,0-2-8], [16:0-7-12,0-3-12], [18:0-5-0,0-1-0]

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	0.58	Vert(LL)	-0.24	18-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.57	18-19	>661	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.34	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	3-19	>999	240	Weight: 173 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2, 1-5: 2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except*
7-18,8-15: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
11-13: 2x6 SPF No.2, 21-23,18-22,24-25: 2x4 SPF No.2

BRACING-

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

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-20.

WEBS 1 Row at midpt 9-14

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=253(LC 7)
Max Uplift 2=-177(LC 8), 13=-204(LC 9)
Max Grav 2=1489(LC 1), 13=1483(LC 1)

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

TOP CHORD 2-3=-884/190, 3-4=-2516/283, 4-6=-2681/507, 6-7=-2265/339, 7-8=-2320/268, 8-9=-3343/345, 9-10=-1734/273, 10-11=-2083/260, 11-13=-1413/241

BOT CHORD 3-19=-285/2208, 16-17=-113/2893, 8-16=-103/1290, 13-14=-192/581

WEBS 4-19=-880/395, 6-19=-348/1149, 6-17=-213/1335, 8-17=-1378/221, 14-16=-189/2831, 9-16=-6/418, 9-14=-2136/154, 10-14=-13/671, 11-14=0/1112, 17-19=-80/1349

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) except (jt=lb) 2=177, 13=204.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

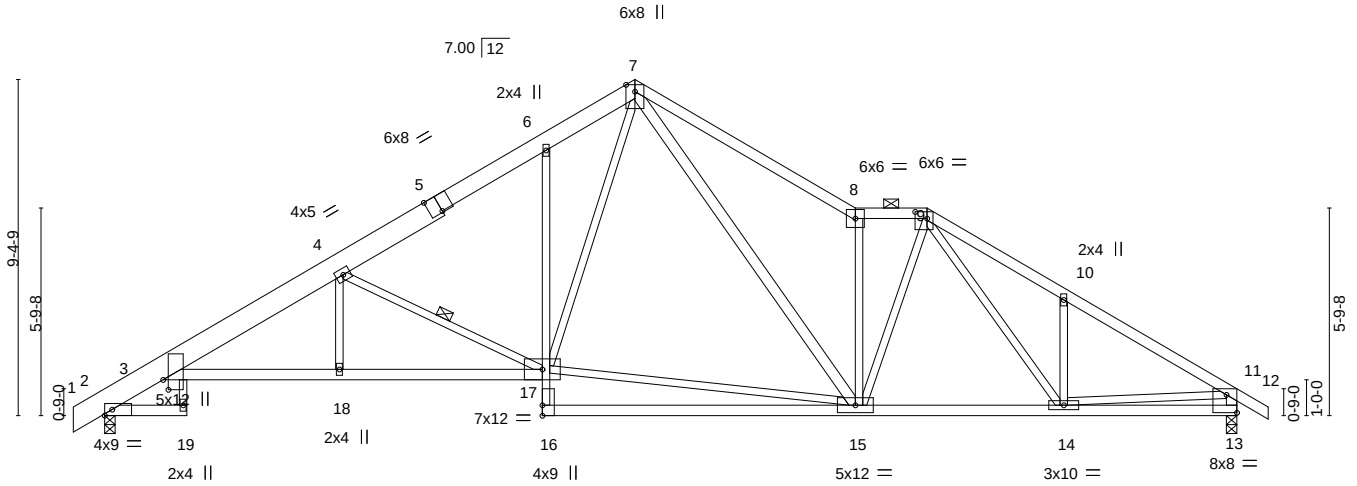
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E4	Roof Special	1	1	I46672348
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:17 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-Rjqu8vpXVfq5ZhjfF95JP7qZSpBUnnqQNrYHjbz4?gK

-0-10-8	2-3-8	6-6-9	12-2-8	14-9-8	20-11-5	22-11-5	26-9-1	31-7-0	32-5-8
0-10-8	2-3-8	4-3-1	5-7-15	2-7-0	6-1-13	2-0-0	3-9-12	4-9-15	0-10-8

Scale: 3/16"=1'



2-3-8	6-6-9	12-2-8	20-11-5	26-9-1	31-7-0
2-3-8	4-3-1	5-7-15	8-8-13	5-9-12	4-9-15

Plate Offsets (X,Y)-- [3:0-3-5,0-1-12], [5:0-4-0,Edge], [9:0-4-0,0-2-4], [13:Edge,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	0.79	Vert(LL)	-0.20	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.46	15-16	>814	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.21	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	17-18	>999	240	Weight: 168 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x6 SPF No.2, 1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
6-16: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-15,11-13: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=252(LC 7)
Max Uplift 2=-178(LC 8), 13=-203(LC 9)
Max Grav 2=1493(LC 1), 13=1480(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-886/191, 3-4=-2752/332, 4-6=-2005/260, 6-7=-1860/354, 7-8=-2198/424, 8-9=-1821/282, 9-10=-2087/393, 10-11=-2107/272, 11-13=-1421/228
BOT CHORD 3-18=-361/2482, 17-18=-359/2482, 14-15=-62/1591, 13-14=-91/401
WEBS 4-17=-1019/281, 15-17=-62/1222, 7-17=-226/956, 7-15=-285/914, 8-15=-1334/339, 9-15=-59/669, 9-14=-160/313, 10-14=-304/196, 11-14=-63/1346

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=178, 13=203.
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.

June 22,2021

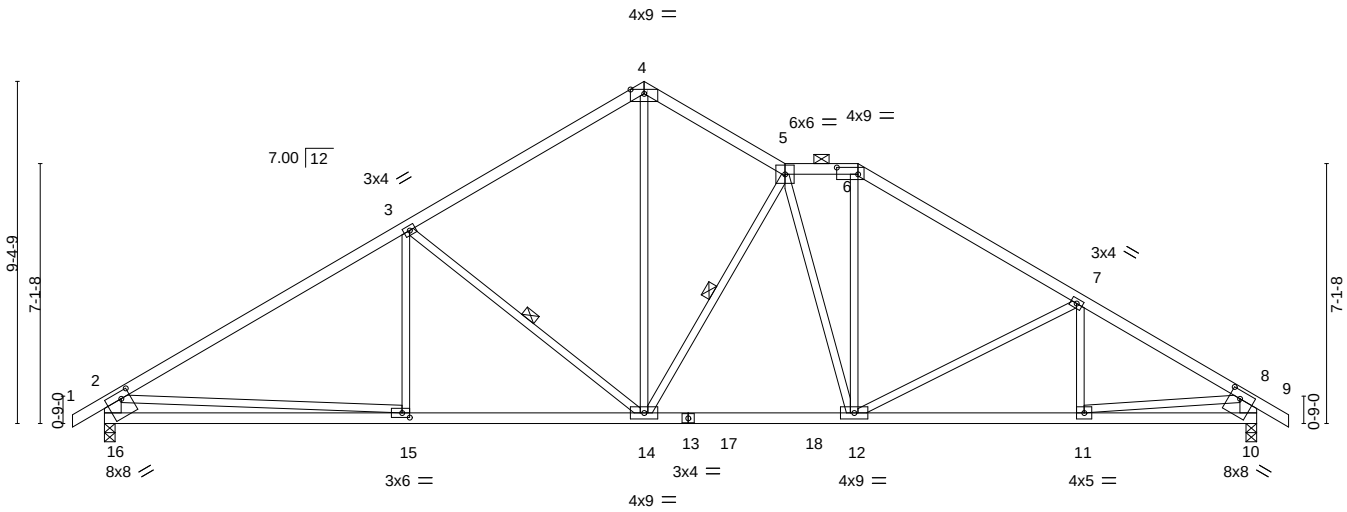
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E5	Roof Special	1	1	I46672349
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:18 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-vwOGMFp9GzyyBrIspsdYxLMkSDYmWLXZbVIqG1z4?gJ

-0-10-8	8-3-2	14-9-8	18-7-14	20-7-14	26-9-0	31-7-0	32-5-8
0-10-8	8-3-2	6-6-6	3-10-6	2-0-0	6-1-2	4-10-0	0-10-8

Scale = 1:63.2



8-3-2	14-9-8	20-7-14	26-9-0	31-7-0
8-3-2	6-6-6	5-10-6	6-1-2	4-10-0

Plate Offsets (X,Y)-- [6:0-7-0,0-2-4], [10:0-3-8,0-2-8], [15:0-2-8,0-1-8], [16:0-3-0,0-2-4]

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	0.77	Vert(LL)	-0.13	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.25	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	12	>999	240	Weight: 134 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-16,8-10: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 16=0-3-8, 10=0-3-8
Max Horz 16=260(LC 7)
Max Uplift 16=-186(LC 8), 10=-204(LC 9)
Max Grav 16=1585(LC 15), 10=1569(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2172/234, 3-4=-1582/269, 4-5=-1532/261, 5-6=-1553/278, 6-7=-1873/263, 7-8=-2204/275, 2-16=-1450/233, 8-10=-1485/224
BOT CHORD 15-16=-387/1038, 14-15=-213/1925, 12-14=-53/1673, 11-12=-164/1819, 10-11=-46/313
WEBS 3-15=0/268, 3-14=-706/238, 4-14=-158/1183, 5-14=-742/224, 5-12=-307/94, 6-12=-35/654, 7-12=-407/175, 2-15=0/1028, 8-11=-118/1523

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=186, 10=204.
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.

June 22,2021

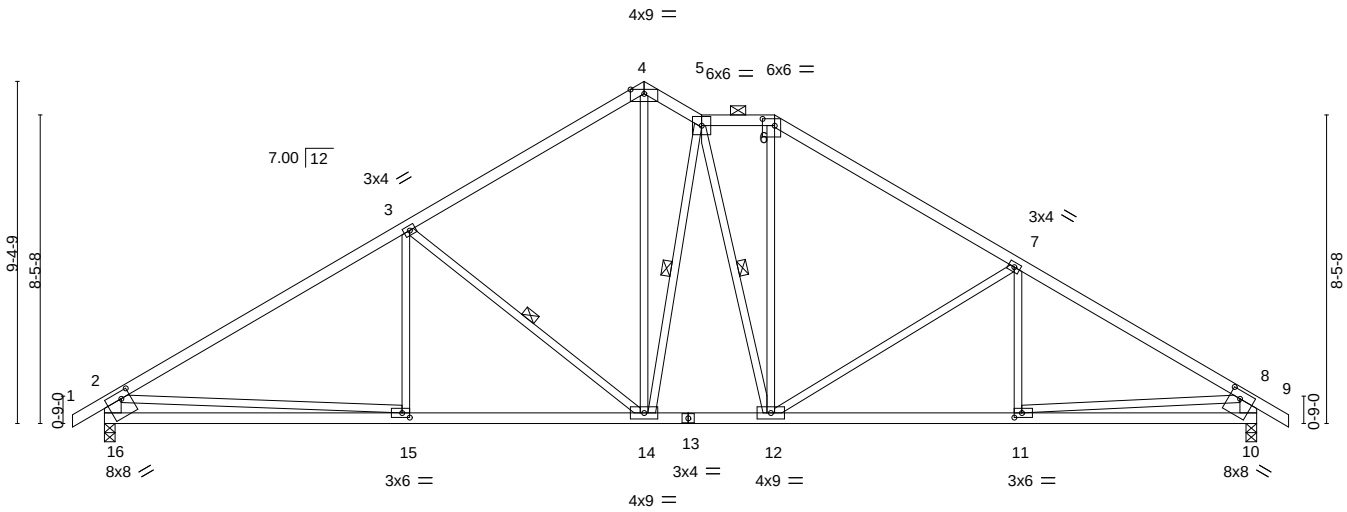
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E6	Roof Special	1	1	I46672350
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:19 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-N6xeZbqn1G4po_t2Na8nUYvv8dvhFk3jq91OoUz4?gI

-0-10-8	8-3-2	14-9-8	16-4-7	18-4-7	25-0-8	31-7-0	32-5-8
0-10-8	8-3-2	6-6-6	1-6-15	2-0-0	6-8-1	6-6-8	0-10-8

Scale = 1:63.2



8-3-2	14-9-8	18-4-7	25-0-8	31-7-0
8-3-2	6-6-6	3-6-15	6-8-1	6-6-8

Plate Offsets (X,Y)-- [6:0-4-0,0-2-4], [10:0-3-8,0-2-8], [11:0-2-8,0-1-8], [15:0-2-8,0-1-8], [16:0-3-0,0-2-4]

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	0.78	Vert(LL)	-0.11	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.24	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	11-12	>999	240	Weight: 140 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-16,8-10: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 16=0-3-8, 10=0-3-8
Max Horz 16=-260(LC 6)
Max Uplift 16=-186(LC 8), 10=-204(LC 9)
Max Grav 16=1478(LC 1), 10=1478(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2068/233, 3-4=-1532/271, 4-5=-1360/265, 5-6=-1318/279, 6-7=-1649/259, 7-8=-2105/273, 2-16=-1400/233, 8-10=-1414/237
BOT CHORD 15-16=-389/936, 14-15=-213/1660, 12-14=-33/1321, 11-12=-134/1723, 10-11=-134/482
WEBS 3-15=0/275, 3-14=-614/235, 4-14=-181/1021, 5-14=-627/204, 6-12=-32/381, 7-12=-526/212, 2-15=0/891, 8-11=-13/1246

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=186, 10=204.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E7	Hip	1	1	I46672351
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:20 2021 Page 1
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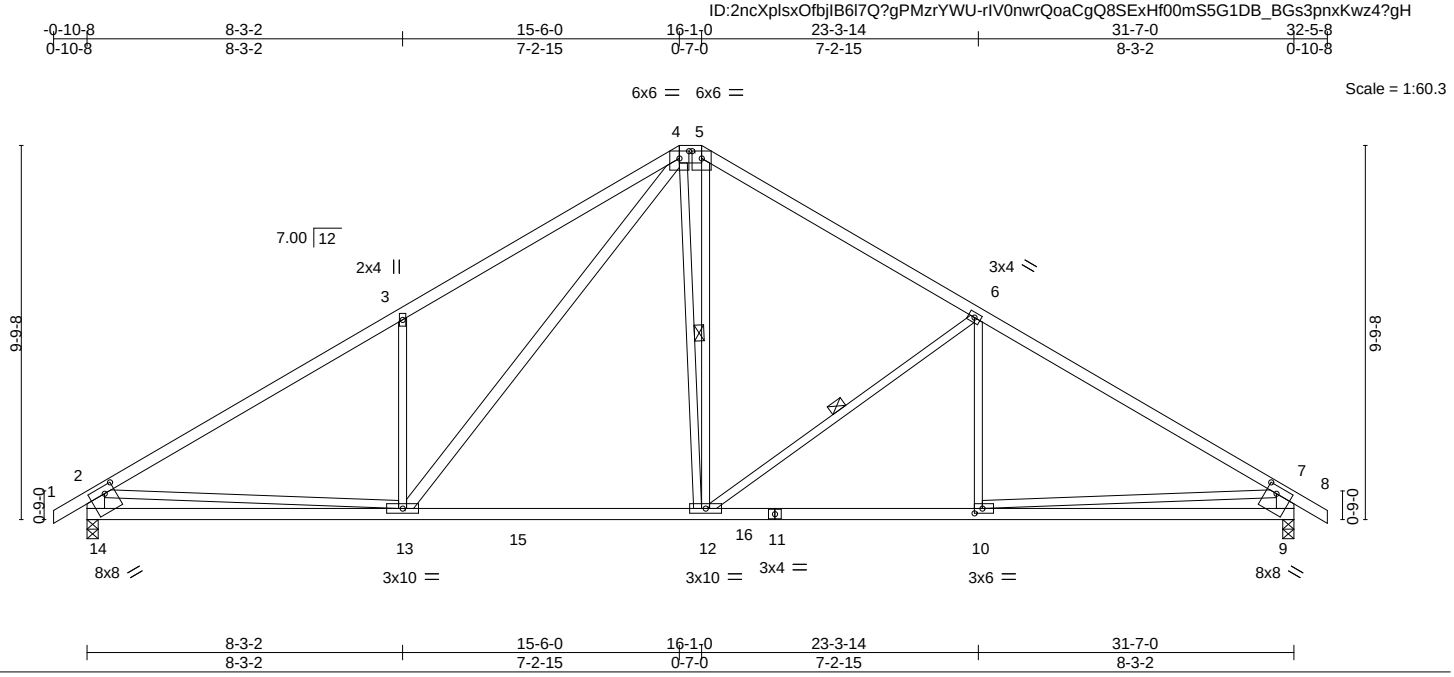

Plate Offsets (X,Y)-- [4:0-3-0,0-2-5], [5:0-3-0,0-2-5], [9:0-3-4,0-2-4], [10:0-2-8,0-1-8], [14:0-3-4,0-2-4]

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	0.75	Vert(LL)	-0.20	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.32	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	13	>999	240	Weight: 138 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-13: 2x4 SPF No.2, 2-14,7-9: 2x6 SPF No.2

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

REACTIONS. (size) 14=0-3-8, 9=0-3-8
Max Horz 14=-271(LC 6)
Max Uplift 14=-191(LC 8), 9=-191(LC 9)
Max Grav 14=1609(LC 15), 9=1600(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2231/240, 3-4=-2290/461, 4-5=-1285/258, 5-6=-1605/253, 6-7=-2201/244, 2-14=-1483/235, 7-9=-1463/237
BOT CHORD 13-14=-389/1012, 12-13=-29/1354, 10-12=-81/1771, 9-10=-245/842
WEBS 3-13=-579/351, 4-13=-327/1042, 4-12=-200/418, 5-12=-123/579, 6-12=-726/251, 6-10=0/268, 2-13=0/1120, 7-10=0/1091

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=191, 9=191.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E8	Common	1	1	I46672352
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:21 2021 Page 1
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-0-10-8 8-3-2 15-9-8 23-3-14 31-7-0 32-5-8
0-10-8 8-3-2 7-6-6 7-6-6 8-3-2 0-10-8

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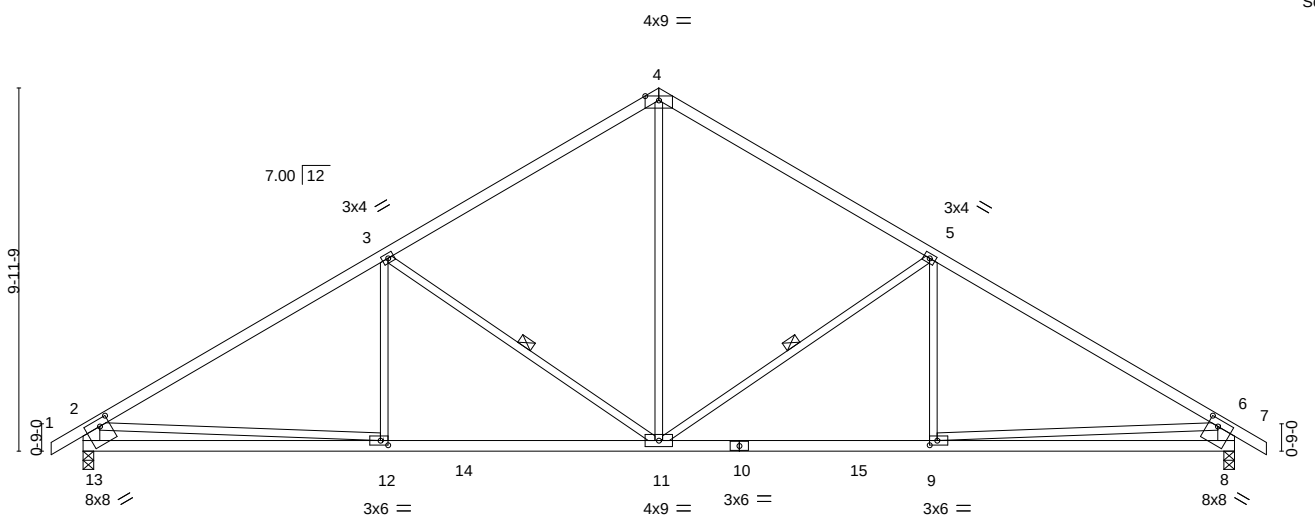


8-3-2 15-9-8 23-3-14 31-7-0
8-3-2 7-6-6 7-6-6 8-3-2

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

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 0.74	Vert(LL) -0.14 11-12 >999 360	MT20 197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.74	Vert(CT) -0.24 11-12 >999 240	
BCLL 0.0	*	Rep Stress Incr YES	WB 0.61	Horz(CT) 0.06 8 n/a n/a	
BCDL 10.0		Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06 11-12 >999 240	Weight: 125 lb FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,6-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-5-14 oc bracing.
WEBS 1 Row at midpt 5-11, 3-11

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=-276(LC 6)
Max Uplift 13=-192(LC 8), 8=-192(LC 9)
Max Grav 13=1608(LC 15), 8=1608(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2226/247, 3-4=-1574/262, 4-5=-1574/262, 5-6=-2226/247, 2-13=-1477/238, 6-8=-1477/237
BOT CHORD 12-13=-377/1006, 11-12=-238/1988, 9-11=-86/1795, 8-9=-237/816
WEBS 4-11=-94/1046, 5-11=-798/261, 5-9=0/312, 3-11=-799/262, 3-12=0/312, 2-12=0/1111, 6-9=0/1128

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) 13=192, 8=192.
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.

June 22,2021

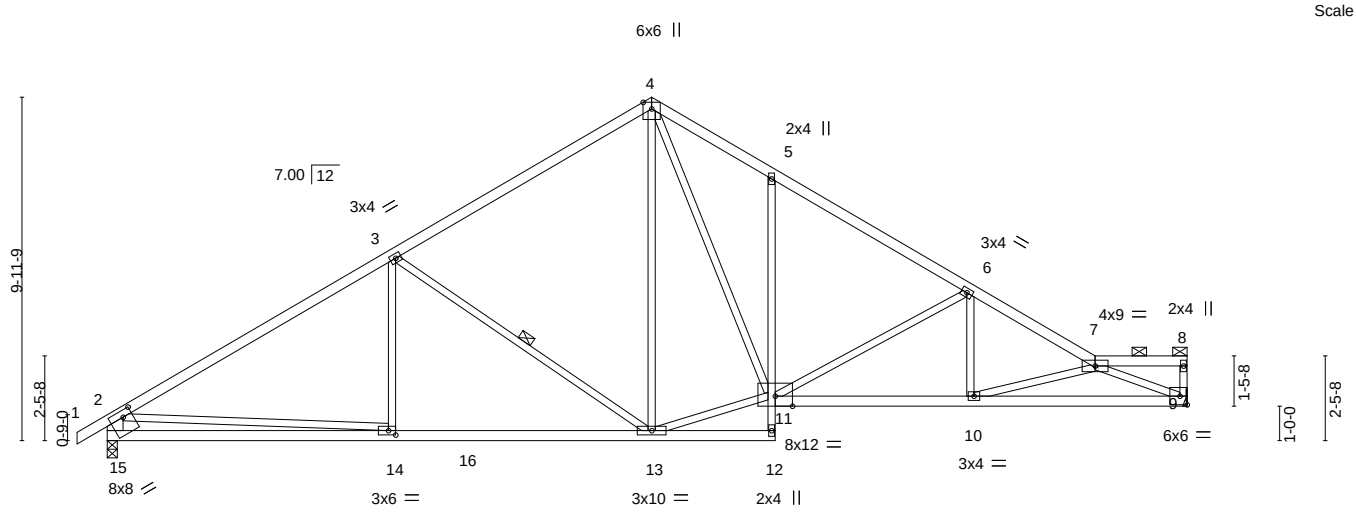
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	E9	Roof Special	5	1	I46672353
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:22 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-nhdnCcsgJBSOfScd2ihU6BXR?qs3S479W7G2Ppz4?gF

-0-10-8	8-3-2	15-9-8	19-4-8	25-0-7	28-7-14	31-3-14
0-10-8	8-3-2	7-6-6	3-7-0	5-7-15	3-7-7	2-8-0

Scale = 1:66.8



8-3-2	15-9-8	19-4-8	24-0-3	31-3-14
8-3-2	7-6-6	3-7-0	4-7-11	7-3-11

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

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	0.74	Vert(LL)	-0.17	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.31	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	10-11	>999	240	Weight: 133 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 5-12: 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 2-2-0 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: 6-0-0 oc bracing: 12-13.
WEBS	1 Row at midpt 3-13

REACTIONS. (size) 9=Mechanical, 15=0-3-8
Max Horz 15=222(LC 5)
Max Uplift 9=-14(LC 9), 15=-24(LC 8)
Max Grav 9=1450(LC 14), 15=1591(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2208/39, 3-4=-1542/91, 4-5=-1984/135, 5-6=-2008/52, 6-7=-2708/20, 2-15=-1461/69
BOT CHORD 14-15=-221/935, 13-14=-54/1923, 5-11=-340/128, 10-11=0/2301, 9-10=-52/2859
WEBS 3-14=0/322, 3-13=-793/128, 4-13=-18/348, 11-13=0/1313, 4-11=-99/1241, 6-11=-814/75, 6-10=0/410, 7-10=-594/61, 7-9=-3066/64, 2-14=0/1098

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

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	G1	Hip	1	1	I46672354

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:23 2021 Page 1

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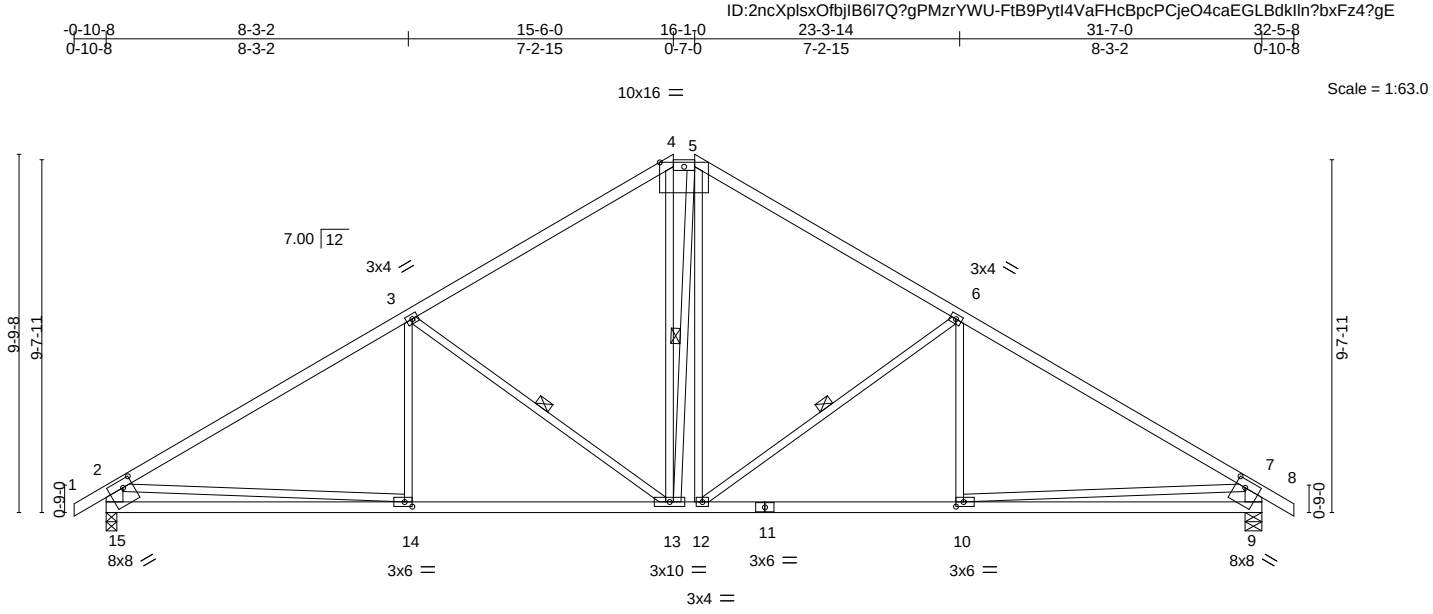


Plate Offsets (X,Y)-- [4:0-8-0,0-1-7], [9:0-3-4,0-2-8], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-3-4,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.11	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.23	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	10-12	>999	240	Weight: 139 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-15,7-9: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 9=0-5-8
Max Horz 15=-271(LC 6)
Max Uplift 15=-191(LC 8), 9=-191(LC 9)
Max Grav 15=1478(LC 1), 9=1478(LC 1)

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

TOP CHORD	2-3=-2072/244, 3-4=-1506/255, 4-5=-1181/251, 5-6=-1502/254, 6-7=-2076/245, 2-15=-1399/237, 7-9=-1401/237
BOT CHORD	14-15=-382/918, 13-14=-230/1666, 12-13=-20/1180, 10-12=-82/1670, 9-10=-246/738
WEBS	3-14=0/275, 3-13=-640/249, 4-13=-151/575, 5-13=-278/260, 5-12=-75/382, 6-12=-644/249, 6-10=0/281, 2-14=0/920, 7-10=0/935

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=191, 9=191.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	G2	Hip	1	1	I46672355

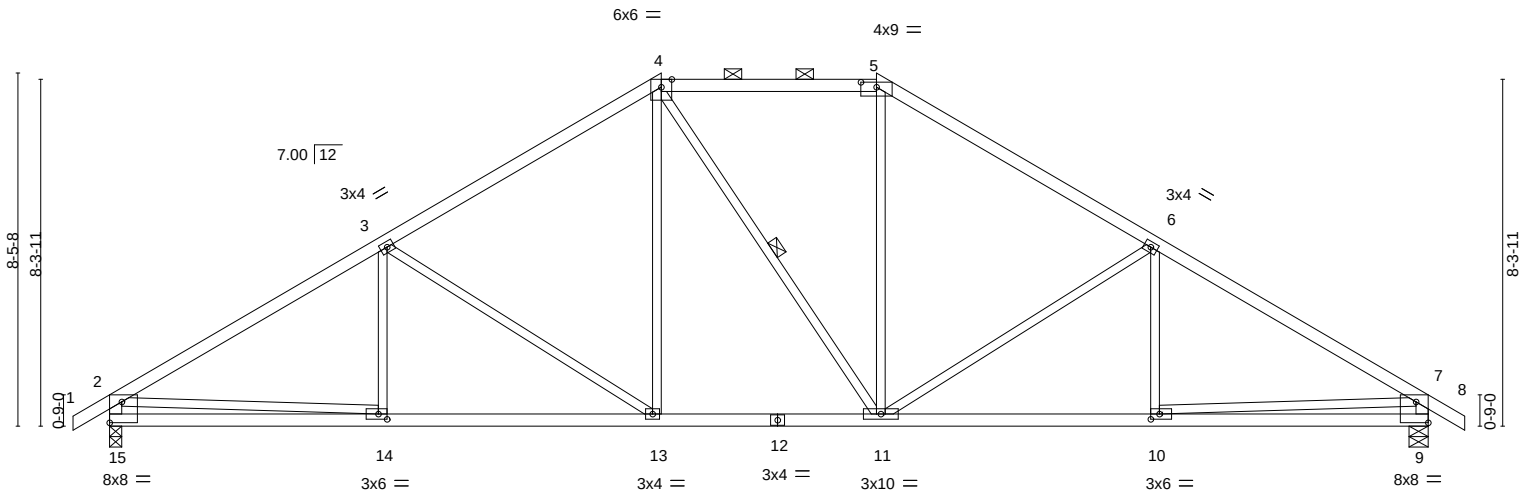
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:24 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-j4IXcIuwrpi5vml?A7jyBccpUecDwz4S_RI9Thz4?gD

-0-10-8	6-6-8	13-2-9	18-4-7	25-0-8	31-7-0	32-5-8
0-10-8	6-6-8	6-8-1	5-1-14	6-8-1	6-6-8	0-10-8

Scale = 1:55.2



6-6-8	13-2-9	18-4-7	25-0-8	31-7-0
6-6-8	6-8-1	5-1-14	6-8-1	6-6-8

Plate Offsets (X,Y)-- [5:0-4-8,0-1-7], [9:Edge,0-6-0], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:Edge,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	0.61	Vert(LL)	-0.11	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.22	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	13-14	>999	240	Weight: 129 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-15,7-9: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 15=0-3-8, 9=0-5-8
Max Horz 15=233(LC 7)
Max Uplift 15=-175(LC 8), 9=-175(LC 9)
Max Grav 15=1550(LC 15), 9=1547(LC 16)

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

TOP CHORD	2-3=-2219/228, 3-4=-1751/209, 4-5=-1418/234, 5-6=-1745/209, 6-7=-2213/228, 2-15=-1442/209, 7-9=-1438/209
BOT CHORD	14-15=-250/734, 13-14=-222/1964, 11-13=-37/1450, 10-11=-96/1831, 9-10=-134/575
WEBS	3-13=-603/219, 4-13=-50/568, 5-11=-30/533, 6-11=-603/219, 2-14=0/1306, 7-10=0/1301

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=175, 9=175.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

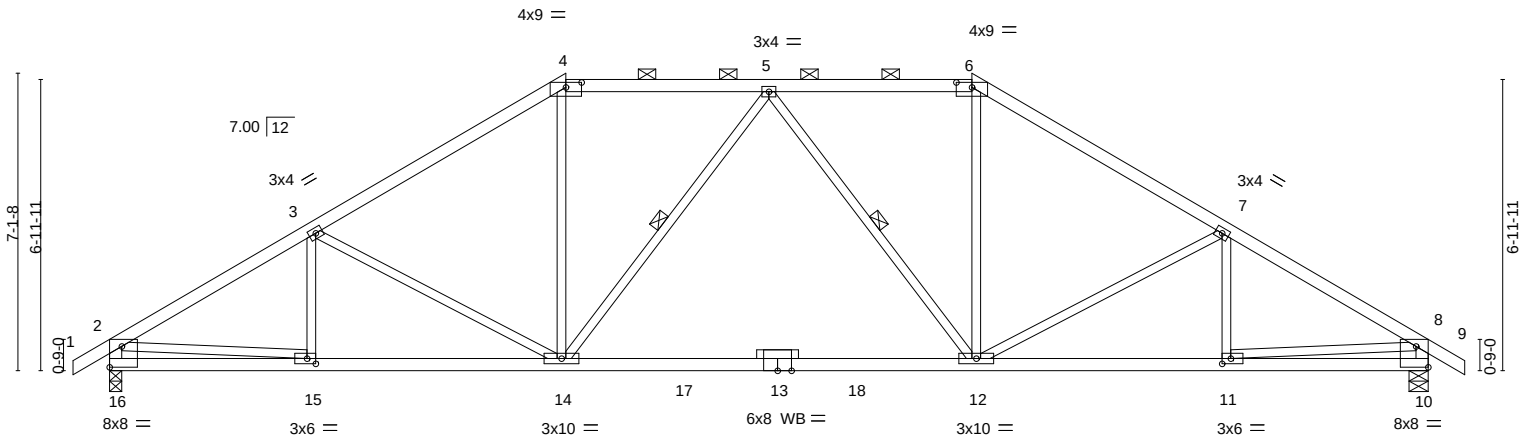
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	G3	Hip	1	1	I46672356
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:25 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-CGJvqevYc6qyWvKCjqFBjp9_42y5fXWbC5Ui?7z4?gC

-0-10-8	4-10-0	10-11-2	15-9-8	20-7-14	26-9-0	31-7-0	32-5-8
0-10-8	4-10-0	6-1-2	4-10-6	4-10-6	6-1-2	4-10-0	0-10-8

Scale = 1:55.2



4-10-0	10-11-2	20-7-14	26-9-0	31-7-0
4-10-0	6-1-2	9-8-11	6-1-2	4-10-0

Plate Offsets (X,Y)-- [4:0-4-8,0-1-7], [6:0-4-8,0-1-7], [10:Edge,0-6-0], [11:0-2-8,0-1-8], [15:0-2-8,0-1-8], [16:Edge,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	0.62	Vert(LL)	-0.31	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.53	12-14	>713	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	14	>999	240	Weight: 127 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2 *Except*
	2-16,8-10: 2x4 SPF No.2
OTHERS	2x3 SPF No.2

BRACING-

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

REACTIONS. (size) 16=0-3-8, 10=0-5-8
Max Horz 16=198(LC 7)
Max Uplift 16=-155(LC 8), 10=-155(LC 9)
Max Grav 16=1537(LC 2), 10=1537(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2210/206, 3-4=-1962/171, 4-5=-1615/198, 5-6=-1615/198, 6-7=-1962/171, 7-8=-2210/206, 2-16=-1433/181, 8-10=-1433/180
BOT CHORD 15-16=-170/520, 14-15=-208/1898, 12-14=-117/1736, 11-12=-105/1851, 10-11=-42/387
WEBS 3-14=-371/199, 4-14=0/648, 5-14=-372/192, 5-12=-372/192, 6-12=0/648, 7-12=-371/199, 2-15=-71/1474, 8-11=-64/1474

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=155, 10=155.
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.

June 22,2021

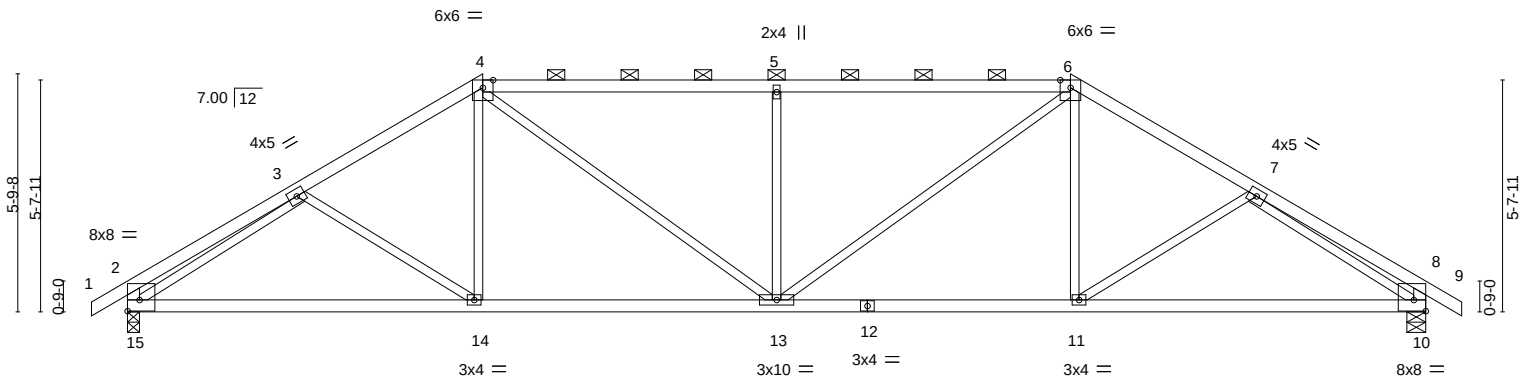
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	G4	Hip	1	1	I46672357
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:27 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-8fQgFKwp8k4gmDUarFHfpEEGsrdT7J7ugPzp40z4?gA

-0-10-8	4-2-10	8-7-11	15-9-8	22-11-5	27-4-6	31-7-0	32-5-8
0-10-8	4-2-10	4-5-2	7-1-13	7-1-13	4-5-2	4-2-10	0-10-8

Scale = 1:56.1



8-7-11	15-9-8	22-11-5	31-7-0
8-7-11	7-1-13	7-1-13	8-7-11

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.13	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.27	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	13	>999	240	Weight: 121 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-15,8-10: 2x4 SPF No.2

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

REACTIONS. (size) 15=0-3-8, 10=0-5-8
Max Horz 15=163(LC 7)
Max Uplift 15=-132(LC 8), 10=-132(LC 9)
Max Grav 15=1480(LC 1), 10=1480(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-578/63, 3-4=-1969/176, 4-5=-2136/226, 5-6=-2136/226, 6-7=-1969/176, 7-8=-578/63, 2-15=-486/100, 8-10=-486/100
BOT CHORD 14-15=-237/1702, 13-14=-191/1644, 11-13=-77/1644, 10-11=-96/1702
WEBS 4-14=0/313, 4-13=-209/711, 5-13=-610/245, 6-13=-209/711, 6-11=0/313, 3-15=-1567/140, 7-10=-1567/141

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=132, 10=132.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	G5	Hip Girder	1	1	I46672358
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:28 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-cr_2SgxRv1DXNN3nPzouLSnQGFvSsp11v3jMcSz4?g9

-0-10-8	6-4-5	12-7-6	18-11-10	25-2-11	31-7-0	32-5-8
0-10-8	6-4-5	6-3-1	6-4-5	6-3-1	6-4-5	0-10-8

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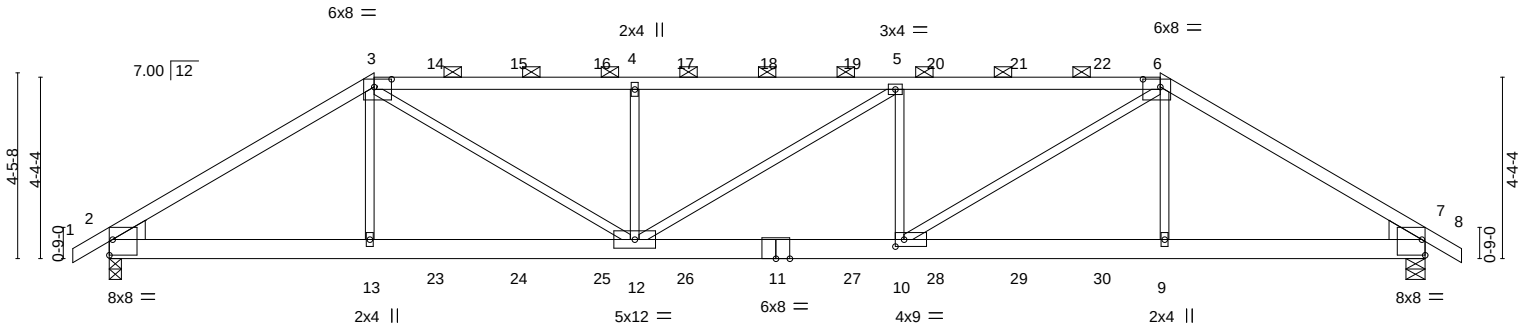

6-4-5	12-7-6	18-11-10	25-2-11	31-7-0
6-4-5	6-3-1	6-4-5	6-3-1	6-4-5

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

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	0.94	Vert(LL)	-0.25	10-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.46	10-12	>819	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.20	10-12	>999	240	Weight: 130 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 3-6: 2x4 SPF 2400F 2.0E
BOT CHORD 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2
WEDGE
Left: 2x6 SPF No.2 , Right: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-5 oc purlins, except 2-0-0 oc purlins (2-8-6 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-11-7 oc bracing: 10-12.

REACTIONS. (size) 2=0-3-8 (req. 0-3-15), 7=0-5-8
Max Horz 2=109(LC 7)
Max Uplift 2=-484(LC 8), 7=-487(LC 9)
Max Grav 2=2524(LC 1), 7=2537(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4194/815, 3-4=-5055/968, 4-5=-5052/967, 5-6=-5052/966, 6-7=-4170/811
BOT CHORD 2-13=-725/3422, 12-13=-722/3405, 10-12=-947/5050, 9-10=-610/3372, 7-9=-613/3389
WEBS 3-13=-128/664, 3-12=-412/2042, 4-12=-815/342, 5-10=-845/363, 6-10=-418/2076, 6-9=-127/657

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) WARNING: Required bearing size at joint(s) 2 greater than input bearing size.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=484, 7=487.
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) 125 lb down and 77 lb up at 7-9-7, 125 lb down and 77 lb up at 9-9-7, 125 lb down and 77 lb up at 11-9-7, 125 lb down and 77 lb up at 13-9-7, 125 lb down and 77 lb up at 15-9-8, 125 lb down and 77 lb up at 17-9-8, 125 lb down and 77 lb up at 19-9-8, and 125 lb down and 77 lb up at 21-9-8, and 125 lb down and 77 lb up at 23-9-8 on top chord, and 429 lb down and 221 lb up at 6-4-5, 60 lb down at 7-9-7, 60 lb down at 9-9-7, 60 lb down at 11-9-7, 60 lb down at 13-9-7, 60 lb down at 15-9-8, 60 lb down at 17-9-8, 60 lb down at 19-9-8, 60 lb down at 21-9-8, and 60 lb down at 23-9-8, and 429 lb down and 221 lb up at 25-2-11 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).

Continued on page 2

June 22,2021

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: 1-3=-70, 3-6=-70, 6-8=-70, 2-7=-20
   Concentrated Loads (lb)
      Vert: 11=-45(B) 13=-429(B) 9=-429(B) 14=-93(B) 15=-93(B) 16=-93(B) 17=-93(B) 18=-93(B) 19=-93(B) 20=-93(B) 21=-93(B) 22=-93(B) 23=-45(B) 24=-45(B) 25=-45(B) 26=-45(B) 27=-45(B) 28=-45(B) 29=-45(B) 30=-45(B)

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J4A	Jack-Closed Supported Gable	2	1	I46672359

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:43 2021 Page 1
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0-4-8 1-6-0

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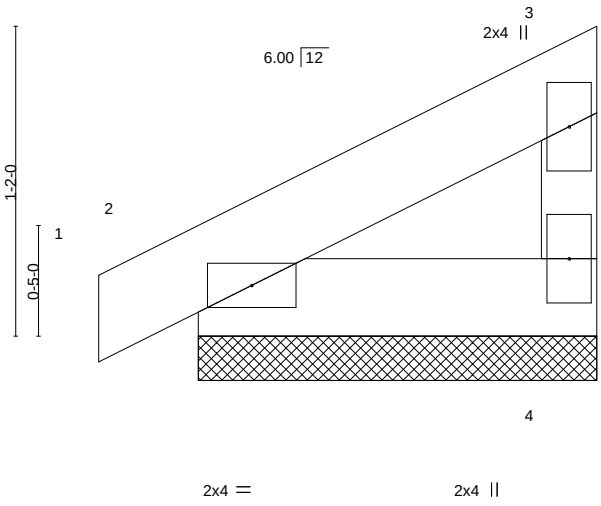

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-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 1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=1-6-0, 2=1-6-0
Max Horz 2=35(LC 5)
Max Uplift 4=-15(LC 8), 2=-17(LC 8)
Max Grav 4=59(LC 1), 2=93(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
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) 4, 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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
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25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J5A	Jack-Closed	2	1	I46672360
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:44 2021 Page 1
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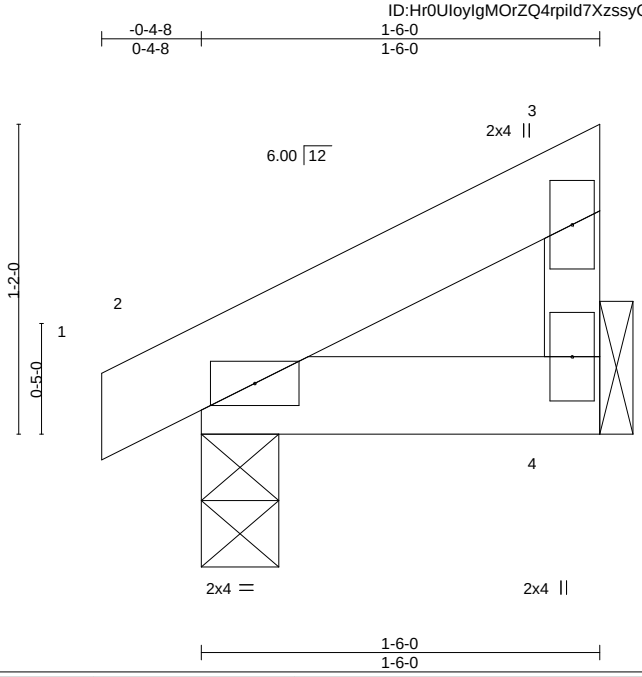

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=35(LC 5)
Max Uplift 4=-15(LC 8), 2=-17(LC 8)
Max Grav 4=57(LC 1), 2=94(LC 1)

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

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

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J8	Diagonal Hip Girder	1	1	I46672361

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:45 2021 Page 1
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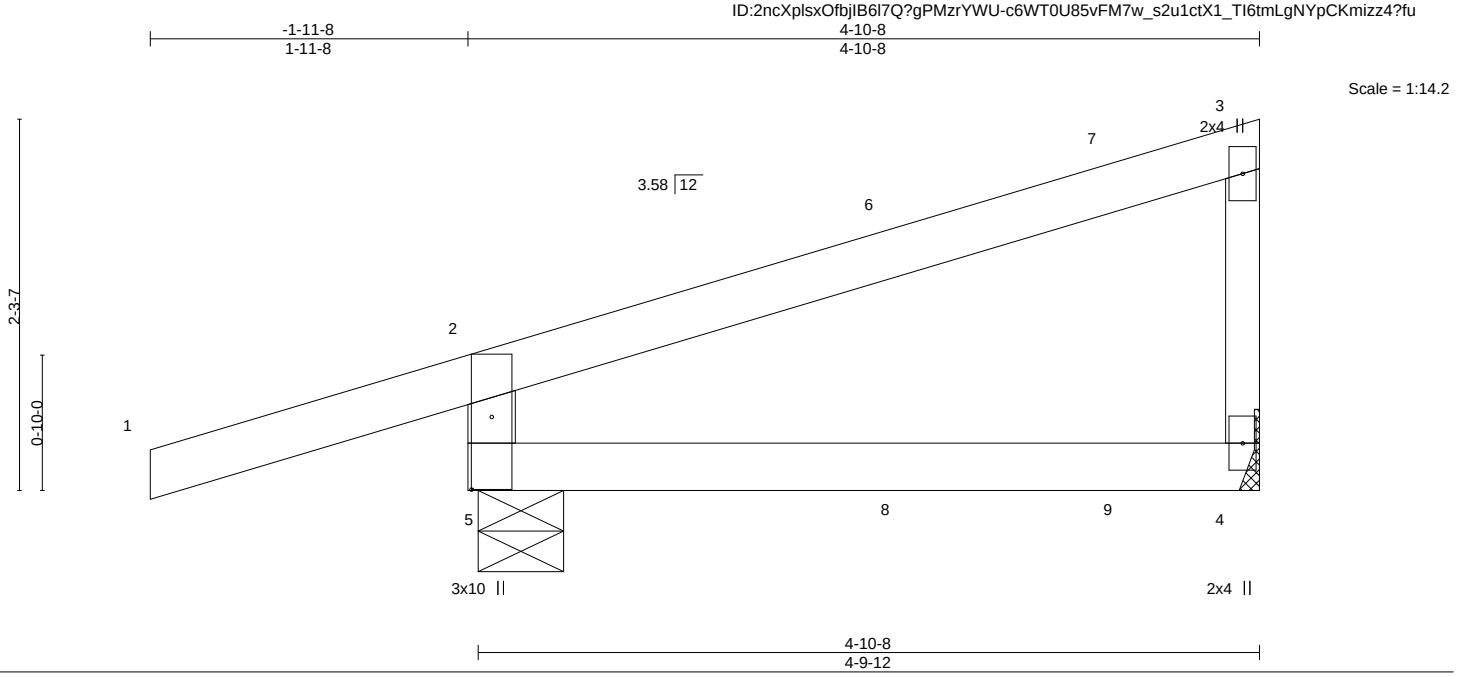

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-6-5, 4=Mechanical
Max Horz 5=96(LC 5)
Max Uplift 5=-148(LC 4), 4=-63(LC 5)
Max Grav 5=395(LC 1), 4=222(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-351/175

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=148.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 21 lb up at 2-8-8, and 105 lb down and 83 lb up at 4-1-0 on top chord, and 7 lb down and 10 lb up at 2-8-8, and 30 lb down at 4-1-0 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: 7=-43(F) 8=5(B) 9=-15(F)

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J9	Jack-Open	1	1	I46672362

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:45 2021 Page 1

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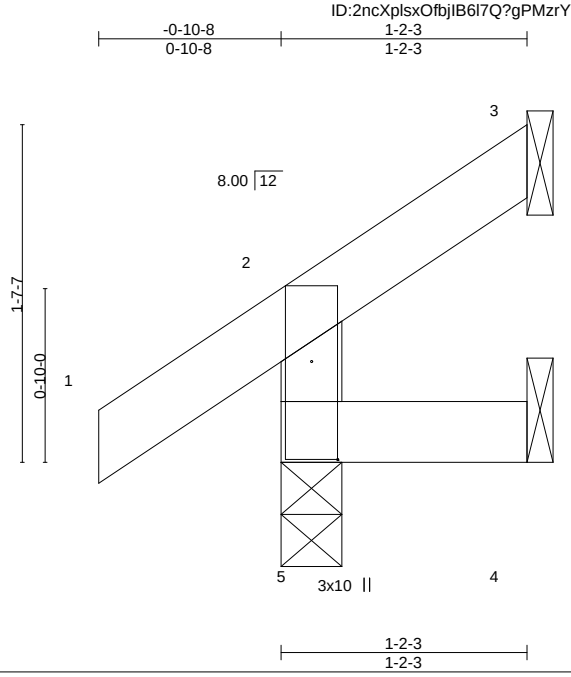

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	360	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		Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=43(LC 8)
Max Uplift 5=-14(LC 8), 3=-22(LC 8), 4=-5(LC 8)
Max Grav 5=153(LC 1), 3=17(LC 15), 4=17(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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J10	Jack-Open	1	1	I46672363
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:29 2021 Page 1
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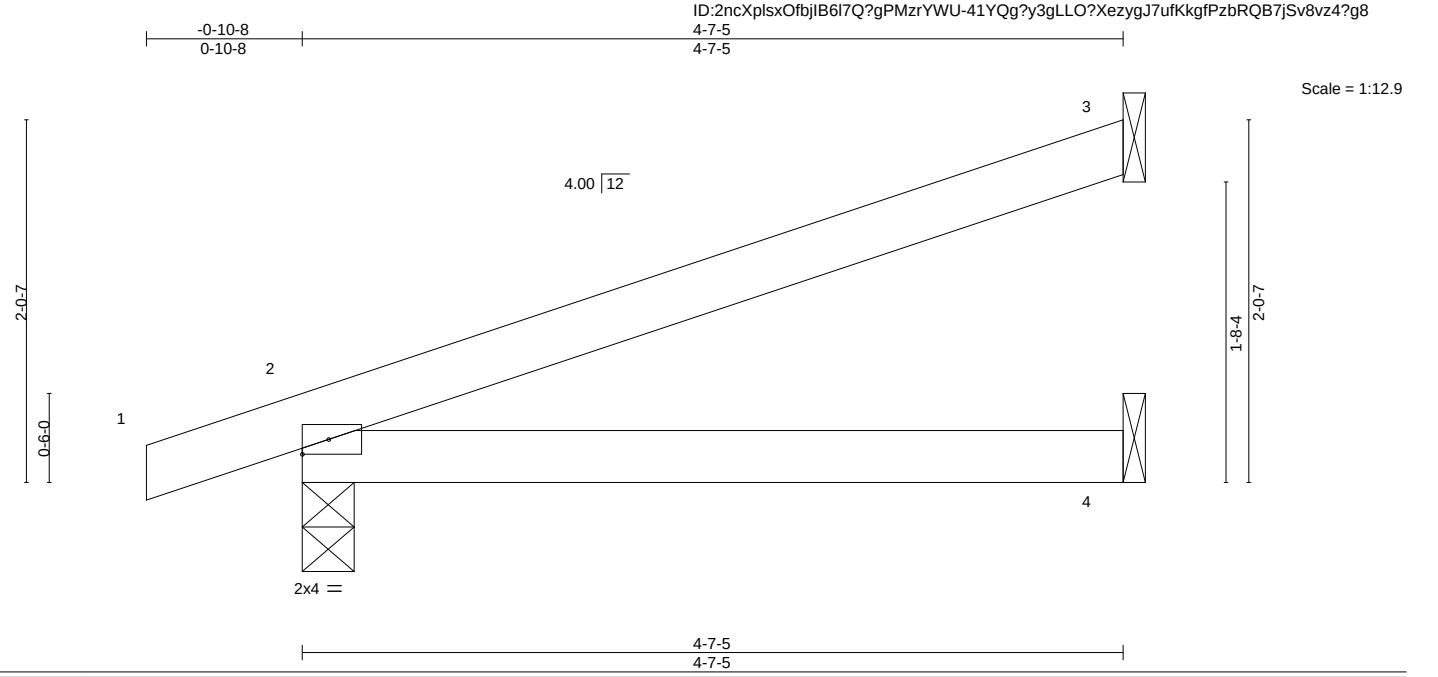

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.02	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.05	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 12 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=75(LC 4)
Max Uplift 3=-74(LC 8), 2=-72(LC 4)
Max Grav 3=146(LC 1), 2=278(LC 1), 4=88(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) 3, 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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J11	Jack-Open	3	1	I46672364

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:30 2021 Page 1

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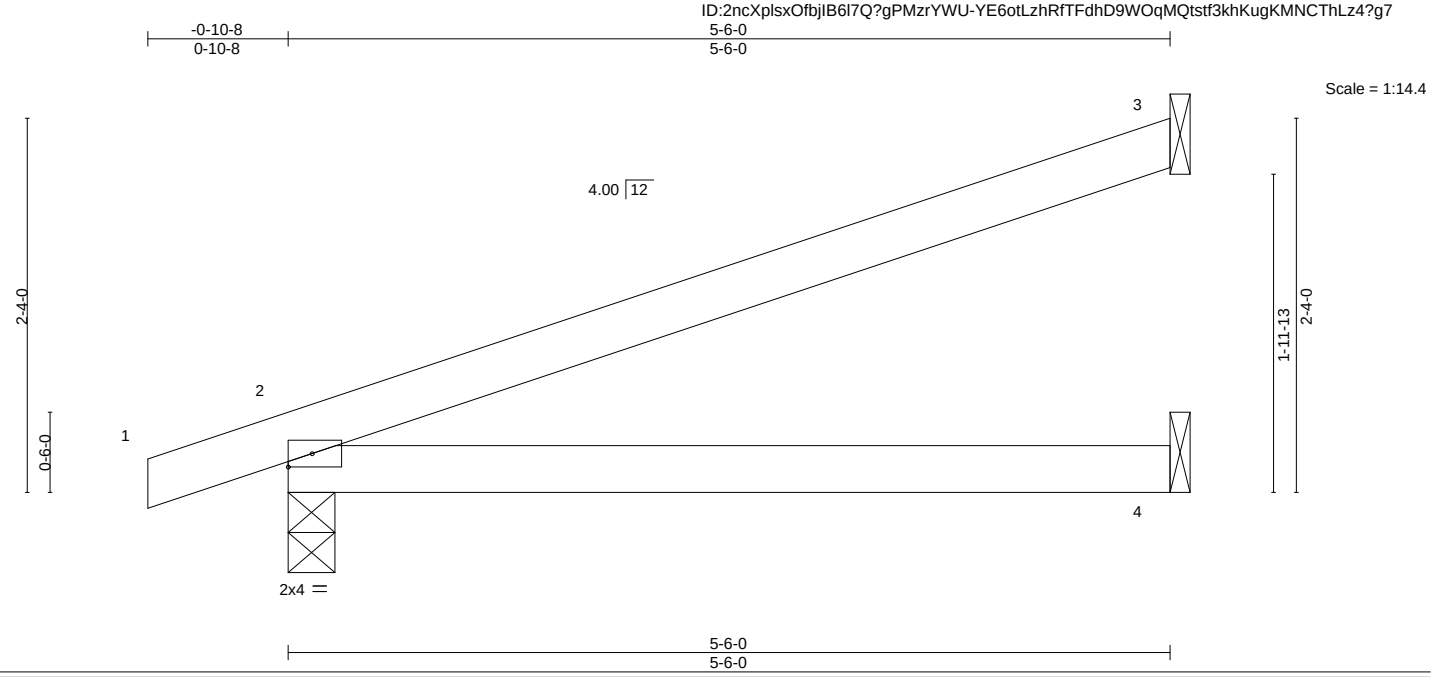

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.05	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.09	2-4	>675	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 14 lb	FT = 10%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=87(LC 4)
Max Uplift 3=-90(LC 8), 2=-76(LC 4)
Max Grav 3=178(LC 1), 2=316(LC 1), 4=106(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) 3, 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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J12	Jack-Closed Girder	1	1	I46672365

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:30 2021 Page 1

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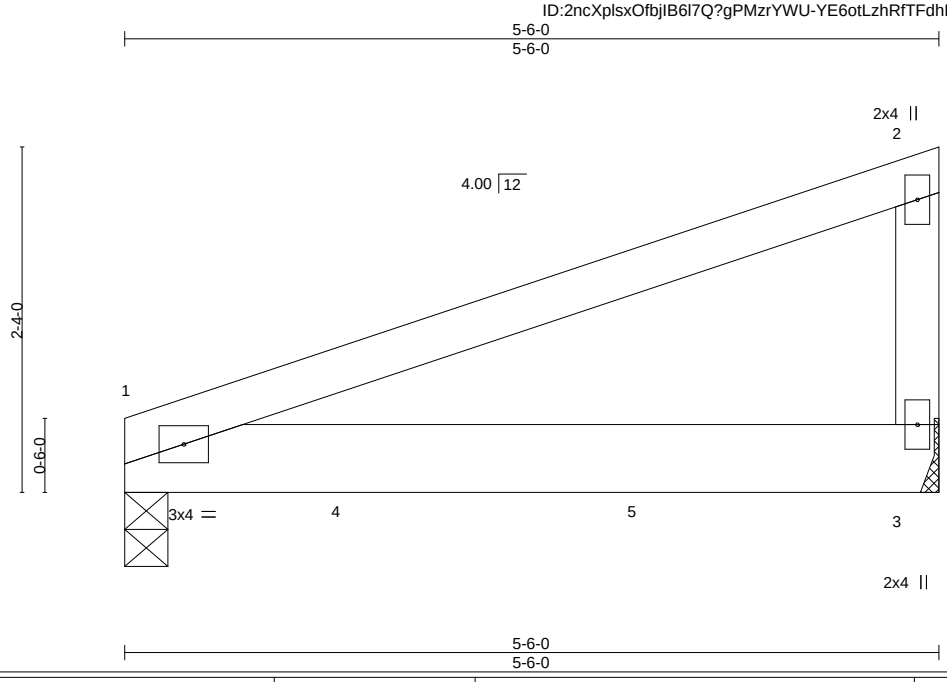

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.10	1-3	>616	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.19	1-3	>334	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.07	1-3	>901	240	Weight: 21 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-1-2 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=Mechanical
Max Horz 1=85(LC 5)
Max Uplift 1=-157(LC 4), 3=-155(LC 8)
Max Grav 1=1162(LC 1), 3=1037(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=157, 3=155.
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) 865 lb down and 120 lb up at 1-6-12, and 865 lb down and 120 lb up at 3-6-12 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, 1-3=-20
   Concentrated Loads (lb)
   Vert: 4=-865(F) 5=-865(F)

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J13	Diagonal Hip Girder	1	1	I46672366

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:32 2021 Page 1
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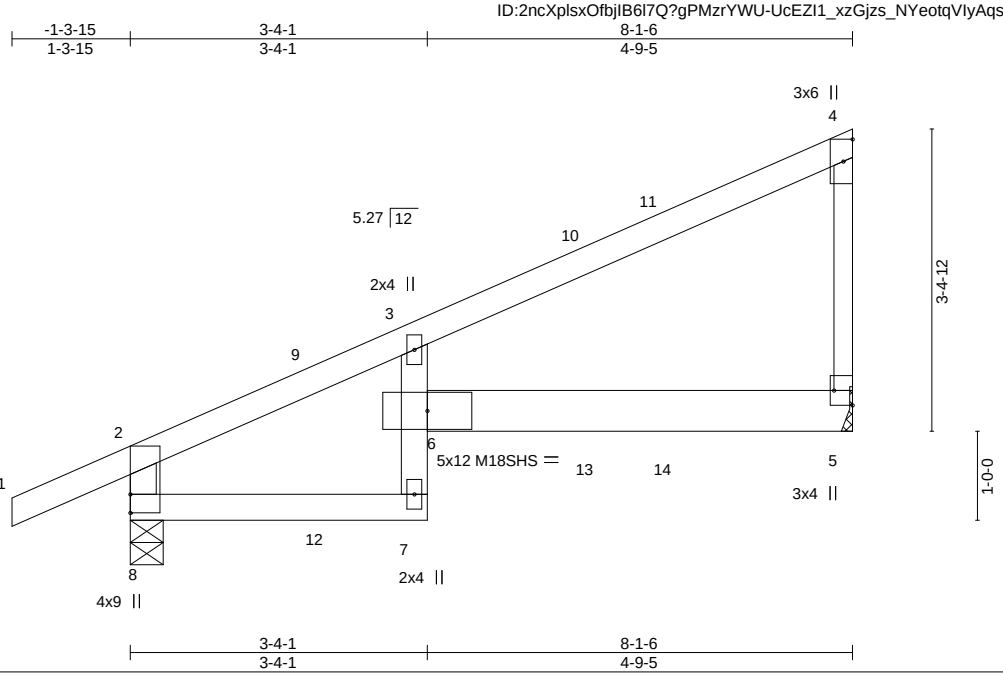

Plate Offsets (X,Y)-- [5:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.13	6	>725	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.23	6	>408	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.16	6	>580	240	Weight: 29 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-4-7, 5=Mechanical
Max Horz 8=167(LC 5)
Max Uplift 8=-115(LC 8), 5=-154(LC 5)
Max Grav 8=483(LC 1), 5=381(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-434/134, 2-3=-484/109
BOT CHORD 7-8=-165/331

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=115, 5=154.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 35 lb up at 2-1-10, 79 lb down and 50 lb up at 3-4-11, and 109 lb down and 65 lb up at 5-2-1, and 104 lb down and 63 lb up at 6-0-9 on top chord, and 6 lb down and 2 lb up at 2-1-10, 9 lb down and 12 lb up at 3-2-5, and 32 lb down and 36 lb up at 5-2-1, and 35 lb down and 31 lb up at 6-0-9 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

June 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J13	Diagonal Hip Girder	1	1	I46672366
					Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=0(F) 10=-7(B) 11=-7(F) 12=2(B) 13=-28(B) 14=-12(F)

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J14	Diagonal Hip Girder	2	1	I46672367

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:33 2021 Page 1
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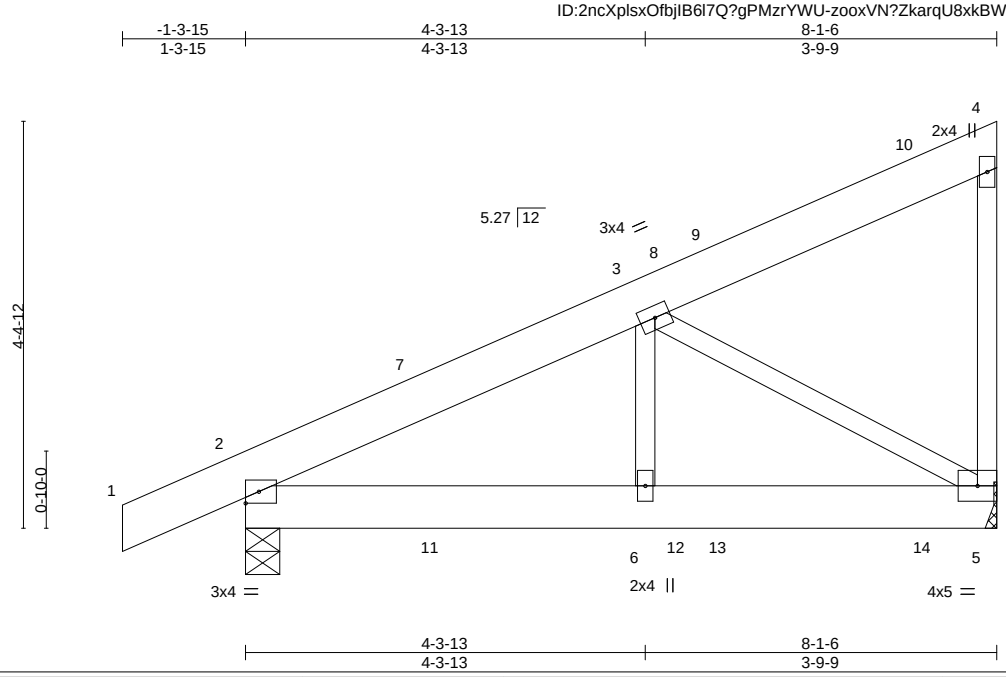

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.01	6	>999	240	Weight: 41 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 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=Mechanical, 2=0-4-7
Max Horz 2=172(LC 5)
Max Uplift 5=-190(LC 5), 2=-117(LC 8)
Max Grav 5=459(LC 1), 2=483(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-582/112
BOT CHORD 2-6=-166/402, 5-6=-166/402
WEBS 3-5=-454/191

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) 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=190, 2=117.
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 27 lb up at 2-0-12, 81 lb down and 35 lb up at 2-1-10, 96 lb down and 72 lb up at 4-8-10, and 115 lb down and 83 lb up at 5-2-1, and 127 lb down and 129 lb up at 7-4-8 on top chord, and 7 lb down and 9 lb up at 2-0-12, 6 lb down and 2 lb up at 2-1-10, 19 lb down at 4-8-10, and 26 lb down at 5-2-1, and 53 lb down at 7-4-8 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: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 9=-9(F) 10=-84(B) 11=6(F=2, B=4) 12=-4(B) 13=-14(F) 14=-26(B)

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J14A	Diagonal Hip Girder	1	1	I46672368

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:34 2021 Page 1
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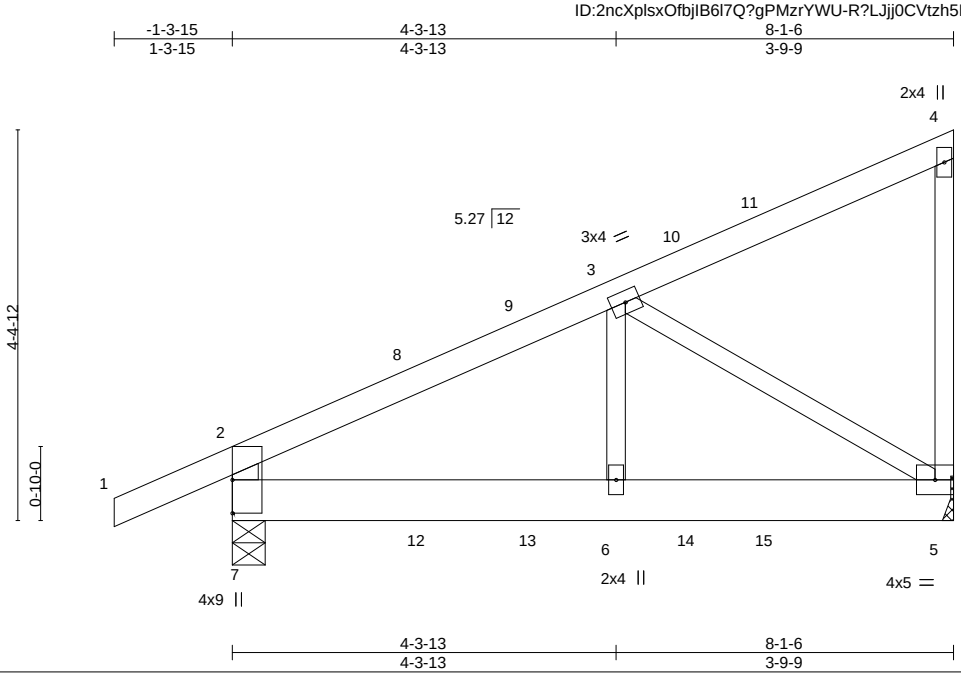

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	6	>999	240	Weight: 35 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	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 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-4-7, 5=Mechanical
Max Horz 7=182(LC 22)
Max Uplift 7=-109(LC 8), 5=-138(LC 5)
Max Grav 7=483(LC 1), 5=387(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-409/123, 2-3=-500/101
BOT CHORD 6-7=-164/357, 5-6=-164/357
WEBS 3-5=-399/173

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) 7=109, 5=138.
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) 81 lb down and 35 lb up at 2-1-10, 79 lb down and 50 lb up at 3-4-11, and 115 lb down and 83 lb up at 5-2-1, and 112 lb down and 87 lb up at 6-0-9 on top chord, and 6 lb down and 2 lb up at 2-1-10, 9 lb down and 12 lb up at 3-4-11, and 26 lb down at 5-2-1, and 29 lb down at 6-0-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-9(F) 11=-21(B) 12=2(F) 13=0(B) 14=-14(F) 15=-17(B)

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J15A	Jack-Open	1	1	I46672369
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:34 2021 Page 1
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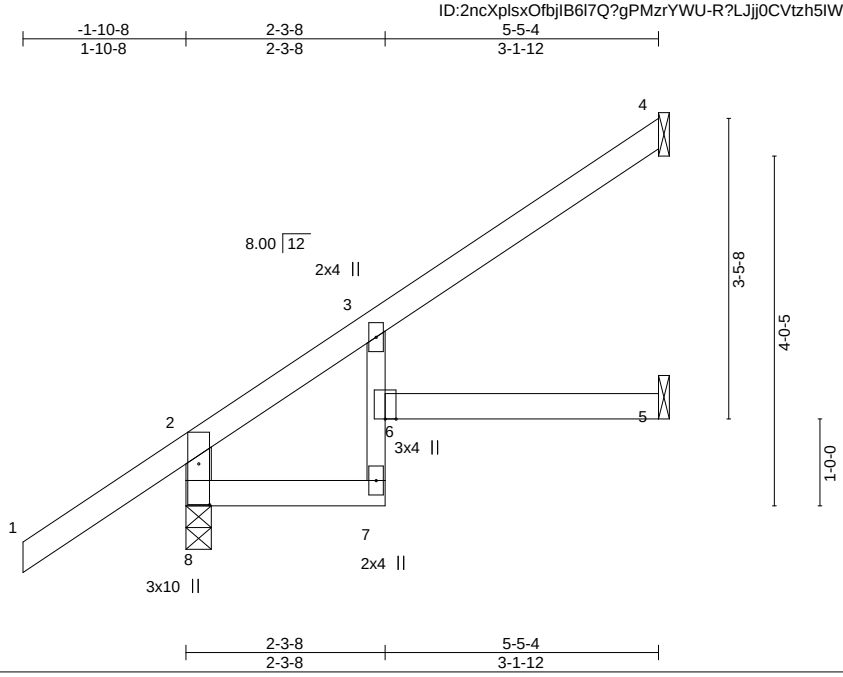

Plate Offsets (X,Y)-- [8:0-5-10,0-1-8]

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	0.30	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.08	6	>767	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.07	6	>881	240	Weight: 18 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-4 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=181(LC 8)
Max Uplift 8=-36(LC 8), 4=-90(LC 8), 5=-8(LC 8)
Max Grav 8=404(LC 1), 4=154(LC 15), 5=85(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-367/67

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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J16	Jack-Open	17	1	I46672370

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:35 2021 Page 1

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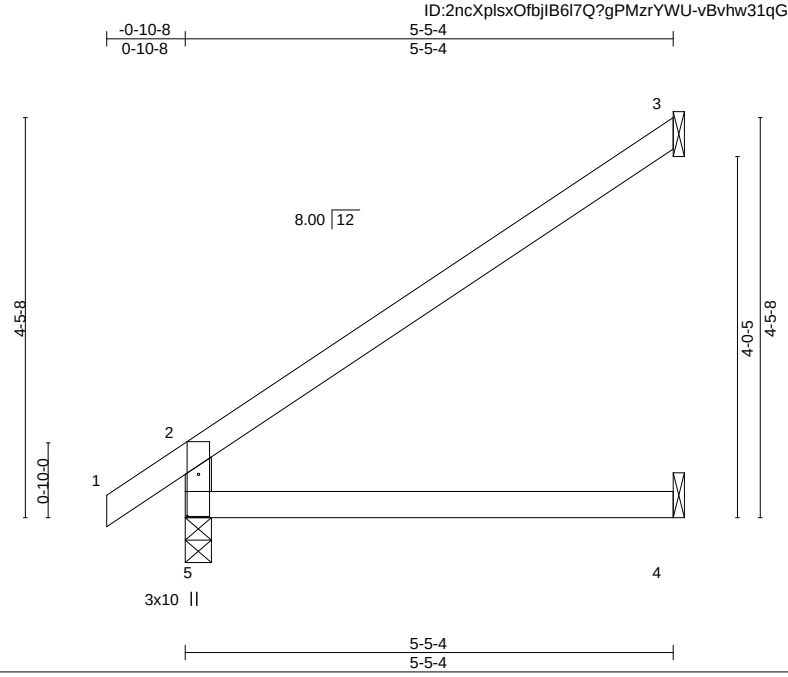

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

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	0.43	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.08	4-5	>791	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=110(LC 8)
Max Uplift 3=-69(LC 8)
Max Grav 5=314(LC 1), 3=168(LC 13), 4=100(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-275/28

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J17A	Jack-Open	1	1	I46672371
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:36 2021 Page 1
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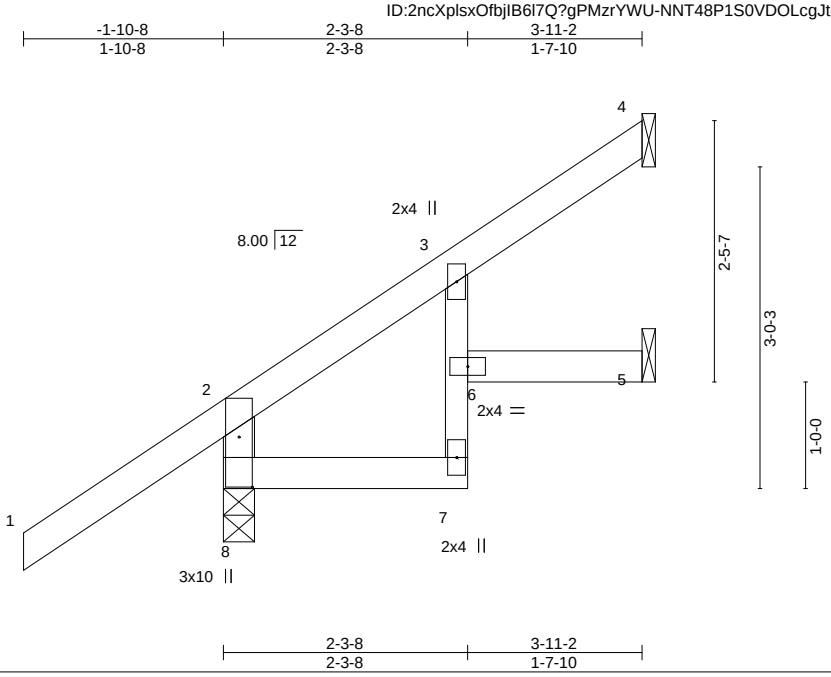

Plate Offsets (X,Y)-- [8:0-5-10,0-1-8]

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	0.29	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	6	>999	240	Weight: 14 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 3-11-2 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=140(LC 8)
Max Uplift 8=-41(LC 8), 4=-54(LC 8), 5=-13(LC 8)
Max Grav 8=347(LC 1), 4=97(LC 15), 5=55(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-311/67

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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J18	Jack-Open	2	1	I46672372
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:36 2021 Page 1
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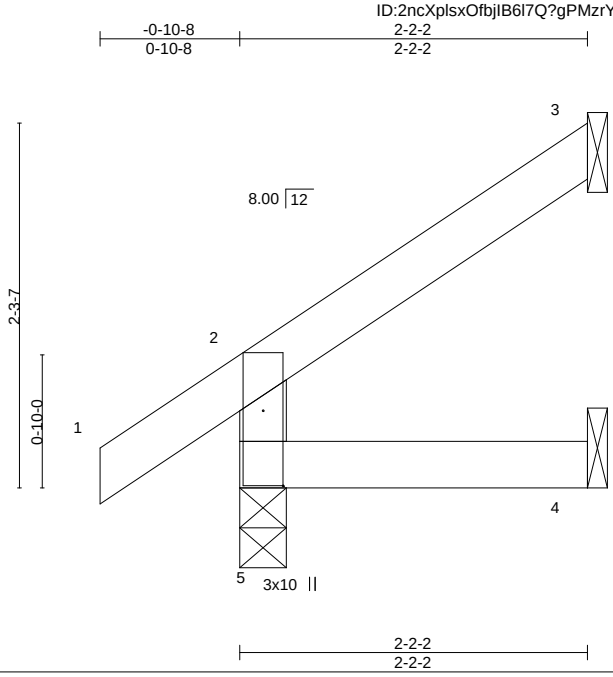

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

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

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=69(LC 8)
Max Uplift 5=-10(LC 8), 3=-45(LC 8), 4=-2(LC 8)
Max Grav 5=179(LC 1), 3=60(LC 15), 4=36(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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J19	Jack-Open	1	1	I46672373
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:37 2021 Page 1
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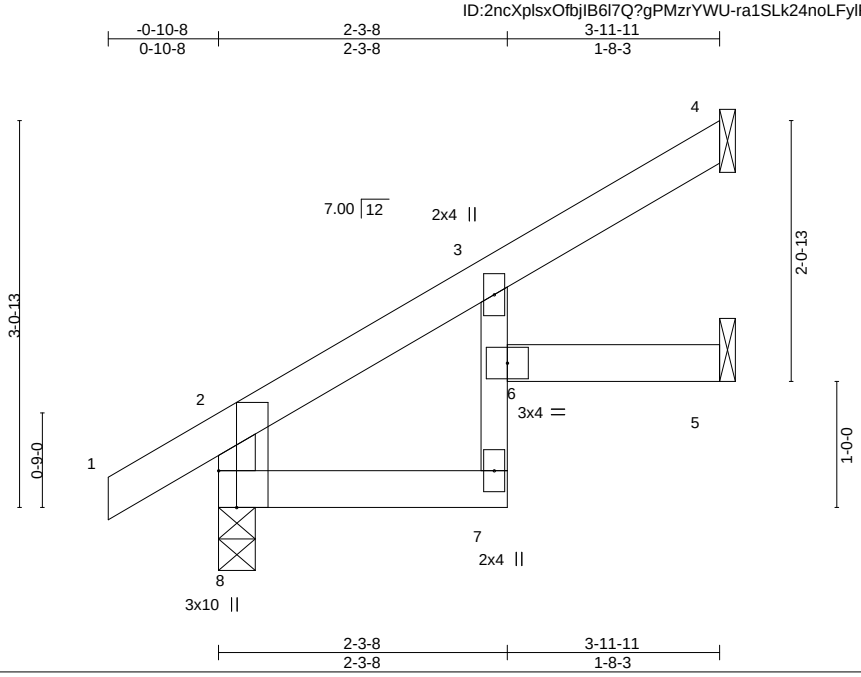

Plate Offsets (X,Y)-- [8:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	7	>999	240	Weight: 13 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 3-11-11 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=103(LC 8)
Max Uplift 8=-19(LC 8), 4=-52(LC 8), 5=-15(LC 8)
Max Grav 8=251(LC 1), 4=106(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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J20	Jack-Open	4	1	I46672374
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:38 2021 Page 1
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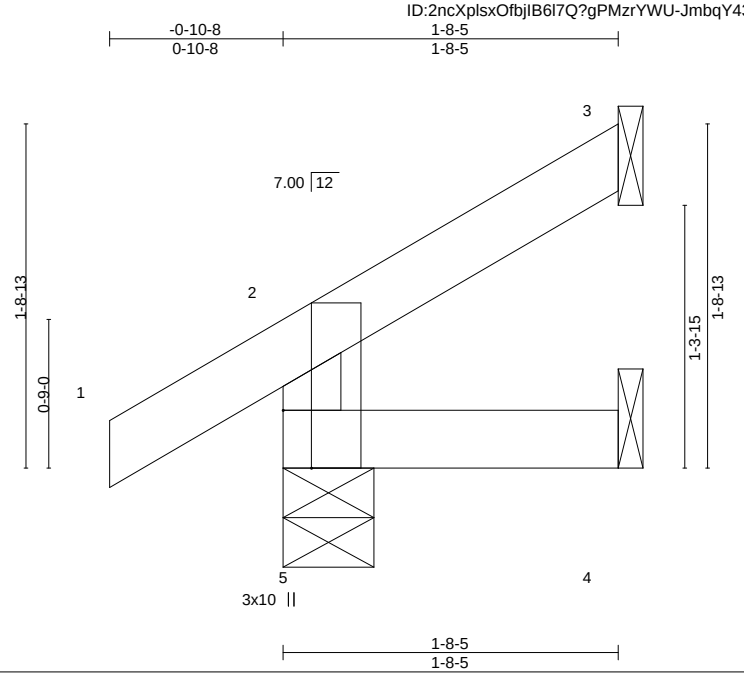

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 8)
Max Uplift 5=-19(LC 8), 3=-30(LC 8)
Max Grav 5=164(LC 1), 3=40(LC 15), 4=27(LC 3)

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

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

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J21	Jack-Open	1	1	I46672375
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:38 2021 Page 1
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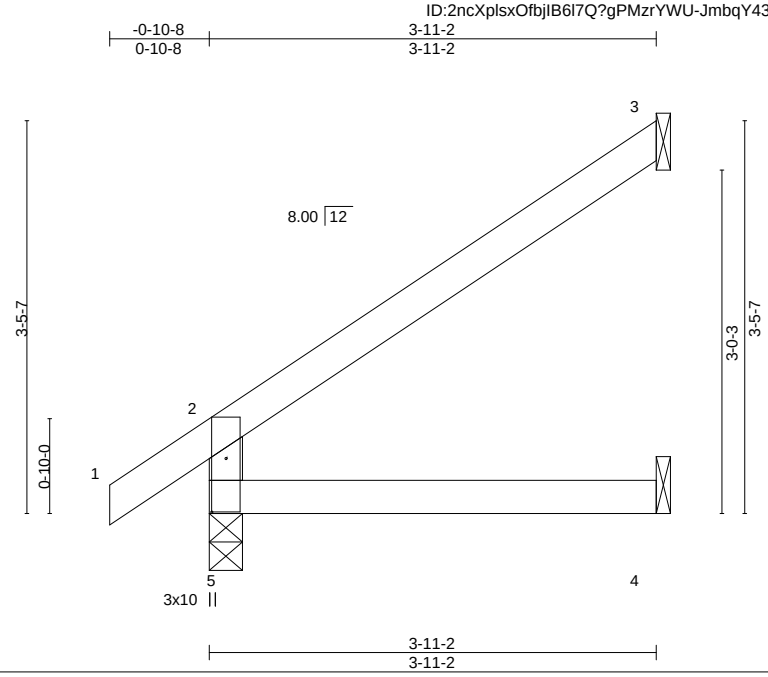

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

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	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	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 2x4 SPF No.2

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=116(LC 8)
Max Uplift 5=-7(LC 8), 3=-82(LC 8)
Max Grav 5=249(LC 1), 3=122(LC 15), 4=70(LC 3)

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

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

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J22	Jack-Open	3	1	I46672376
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:39 2021 Page 1
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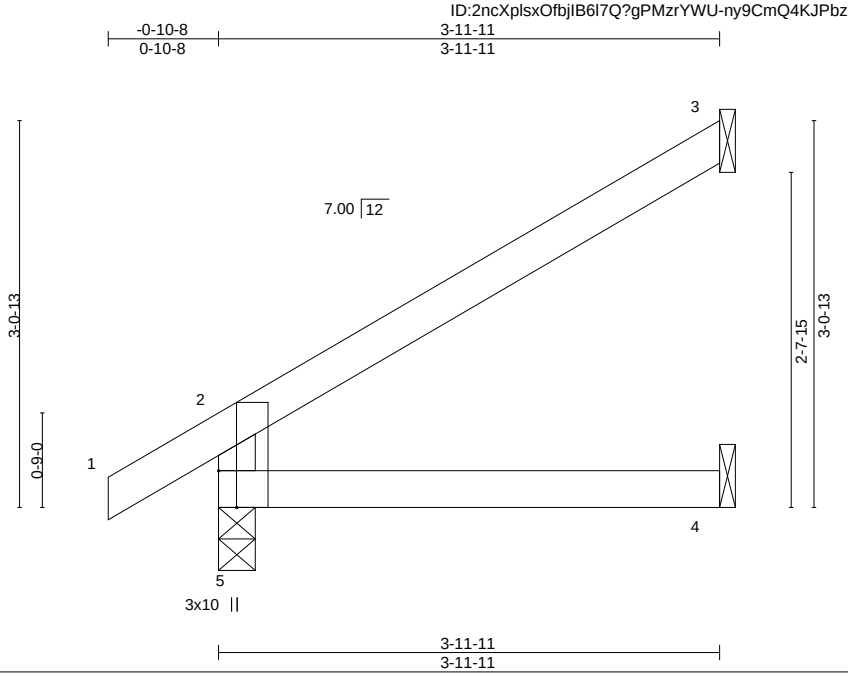

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	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)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-11 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=103(LC 8)
Max Uplift 5=-19(LC 8), 3=-73(LC 8)
Max Grav 5=251(LC 1), 3=122(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) 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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J23	Jack-Open	2	1	I46672377
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:40 2021 Page 1
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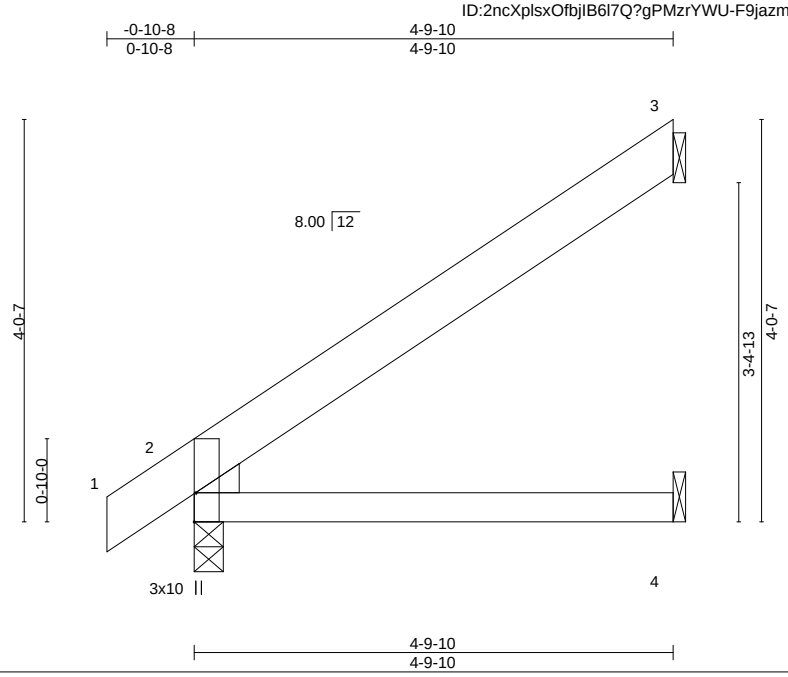

Plate Offsets (X,Y)-- [2:Edge,0-0-3]

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	0.16	Vert(LL)	-0.03	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.05	2-4	>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-P		Wind(LL)	0.00	2	****	240	Weight: 19 lb	FT = 10%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=152(LC 8)
Max Uplift 3=-120(LC 8), 2=-8(LC 8)
Max Grav 3=165(LC 15), 2=286(LC 1), 4=92(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 3=120.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J24	Jack-Open	2	1	I46672378
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:40 2021 Page 1
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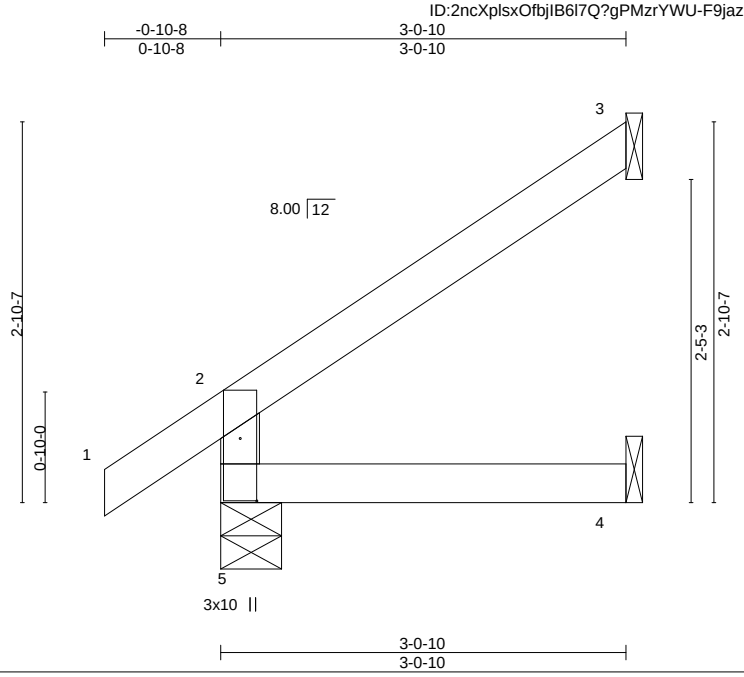

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

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	0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	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 3-0-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
Max Horz 5=93(LC 8)
Max Uplift 5=-8(LC 8), 3=-64(LC 8)
Max Grav 5=212(LC 1), 3=92(LC 15), 4=53(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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J25	Jack-Open	2	1	I46672379
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:41 2021 Page 1
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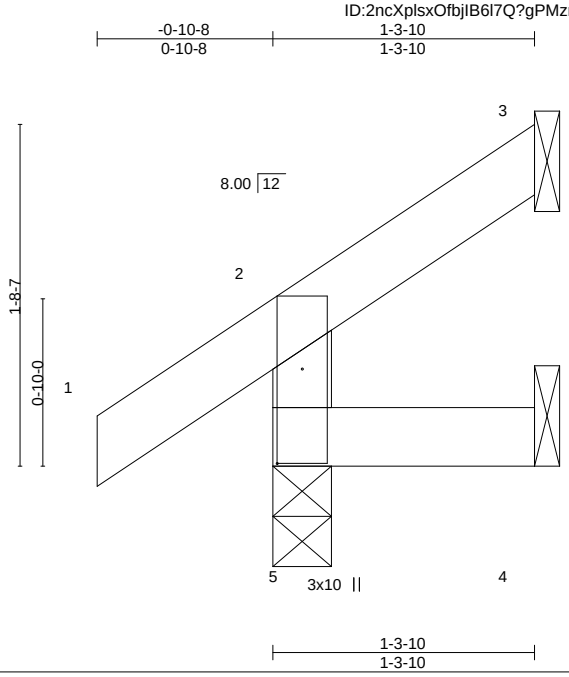

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	360	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		Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=46(LC 8)
Max Uplift 5=-13(LC 8), 3=-25(LC 8), 4=-4(LC 8)
Max Grav 5=155(LC 1), 3=24(LC 15), 4=19(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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J26	Jack-Open Girder	1	1	I46672380

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:42 2021 Page 1
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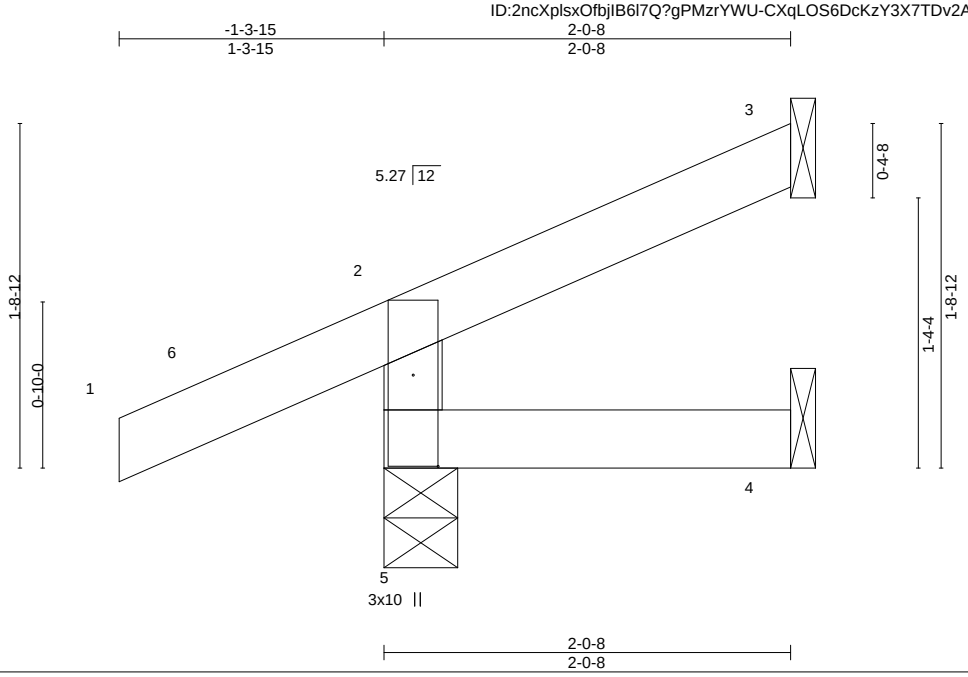

Plate Offsets (X,Y)-- [5:0-5-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-4-7, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 7)
Max Uplift 5=-112(LC 12), 3=-22(LC 12)
Max Grav 5=70(LC 1), 3=25(LC 1), 4=26(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) 3 except (jt=lb) 5=112.
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) 9 lb down and 3 lb up at -1-3-15 , and 9 lb down and 3 lb up at -1-3-15 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-13(F=-7, B=-7)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-6=-9(F=30, B=30), 6=0(F=35, B=35)-to-2=-17(F=27, B=27), 2=-17(F=27, B=27)-to-3=-49(F=10, B=10), 5=-5(F=8, B=8)-to-4=-14(F=3, B=3)

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

ANDREW THOMAS JOHNSON
LICENSED
25942
KANSAS
PROFESSIONAL ENGINEER

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	J27	Jack-Open	1	1	I46672381
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:42 2021 Page 1
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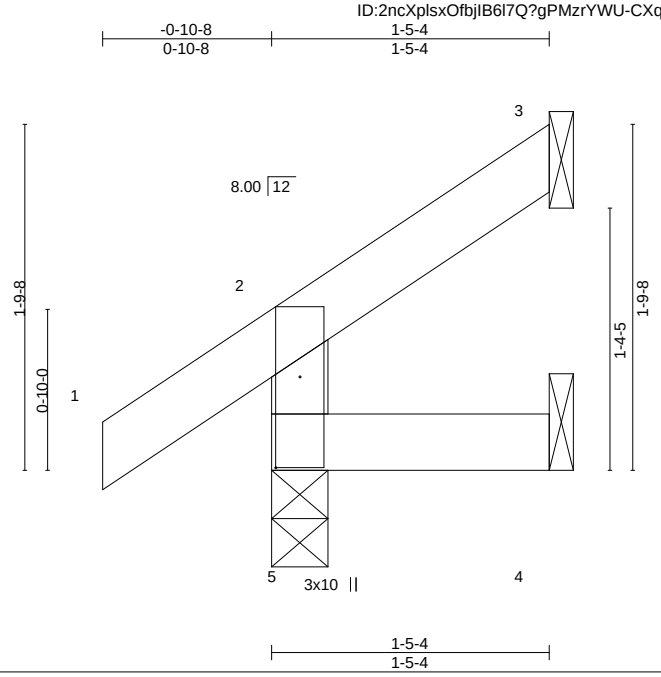

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	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 2x4 SPF No.2

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 8)
Max Uplift 5=-12(LC 8), 3=-29(LC 8), 4=-4(LC 8)
Max Grav 5=158(LC 1), 3=30(LC 15), 4=22(LC 3)

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

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

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	LAY2	GABLE	1	1	I46672382
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:46 2021 Page 1
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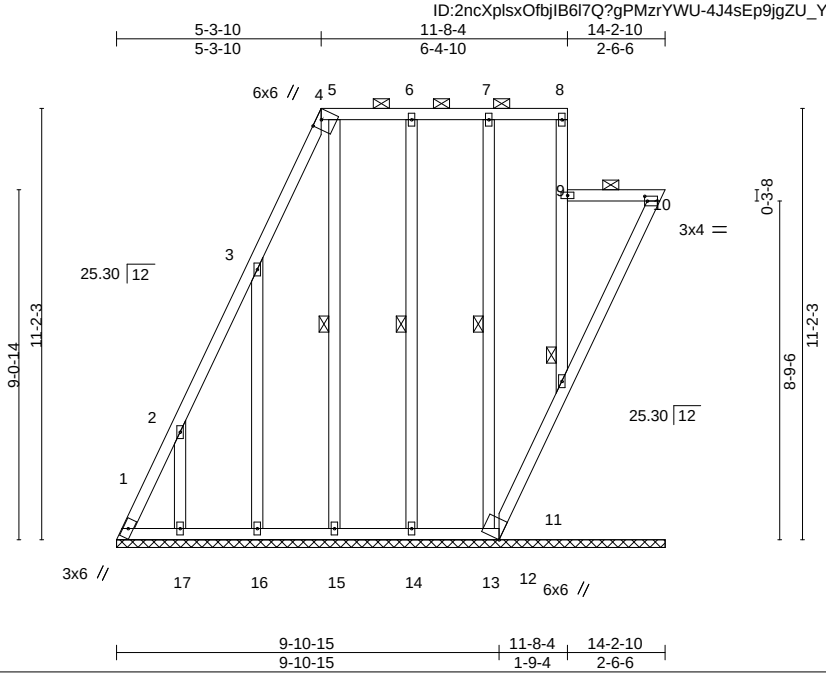

Plate Offsets (X,Y)-- [4:0-2-13,Edge], [10:0-0-13,0-1-8]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	-0.02	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 102 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 14-2-10.
(lb) - Max Horz 1=535(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 12, 14, 13 except 1=-424(LC 6), 10=-277(LC 8), 17=-371(LC 8), 16=-412(LC 8), 15=-191(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 10, 12, 15, 14, 13 except 1=860(LC 8), 11=283(LC 17), 17=305(LC 15), 16=334(LC 15)

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

TOP CHORD	1-2=-953/512, 2-3=-598/333
BOT CHORD	10-11=-296/177
WEBS	2-17=-257/376, 3-16=-295/440

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, 12, 14, 13 except (jt=lb) 1=424, 10=277, 17=371, 16=412, 15=191.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	LAY3	GABLE	1	1	I46672383
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:47 2021 Page 1
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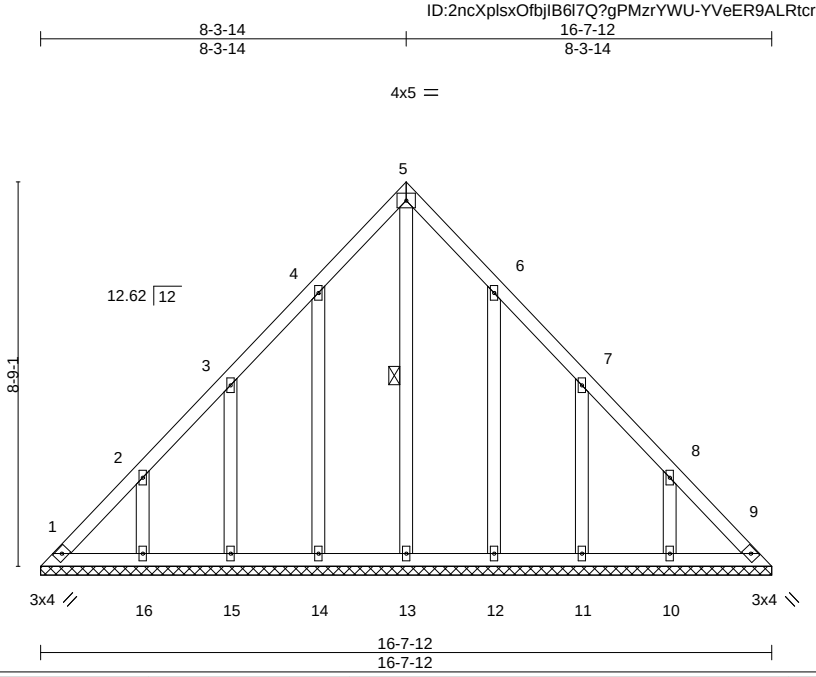

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 82 lb	FT = 10%

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

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

REACTIONS. All bearings 16-7-12.
(lb) - Max Horz 1=222(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-126(LC 8), 15=-122(LC 8), 16=-139(LC 8), 12=-125(LC 9), 11=-123(LC 9), 10=-139(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-285/187, 8-9=-250/135

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=126, 15=122, 16=139, 12=125, 11=123, 10=139.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	LAY4	GABLE	1	1	I46672384

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:49 2021 Page 1
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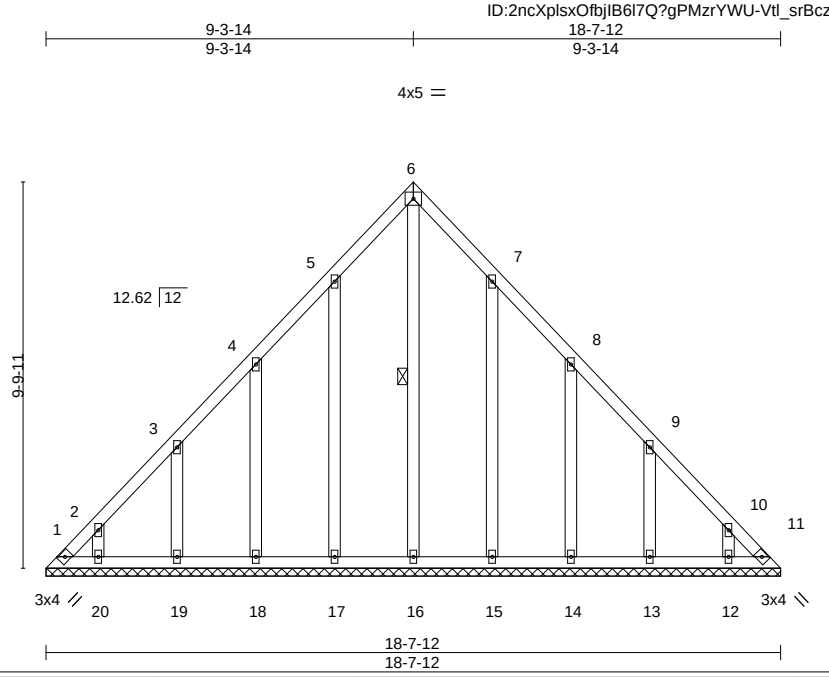

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 98 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-16

REACTIONS. All bearings 18-7-12.
(lb) - Max Horz 1=-250(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-139(LC 6), 17=-124(LC 8), 18=-126(LC 8), 19=-127(LC 8), 20=-106(LC 8), 15=-121(LC 9), 14=-127(LC 9), 13=-126(LC 9), 12=-106(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 11, 16, 17, 18, 19, 20, 15, 14, 13, 12 except 1=258(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-361/219, 2-3=-263/185, 10-11=-322/161

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 11 except (jt=lb) 1=139, 17=124, 18=126, 19=127, 20=106, 15=121, 14=127, 13=126, 12=106.
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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	V1	Valley	1	1	I46672385
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:50 2021 Page 1
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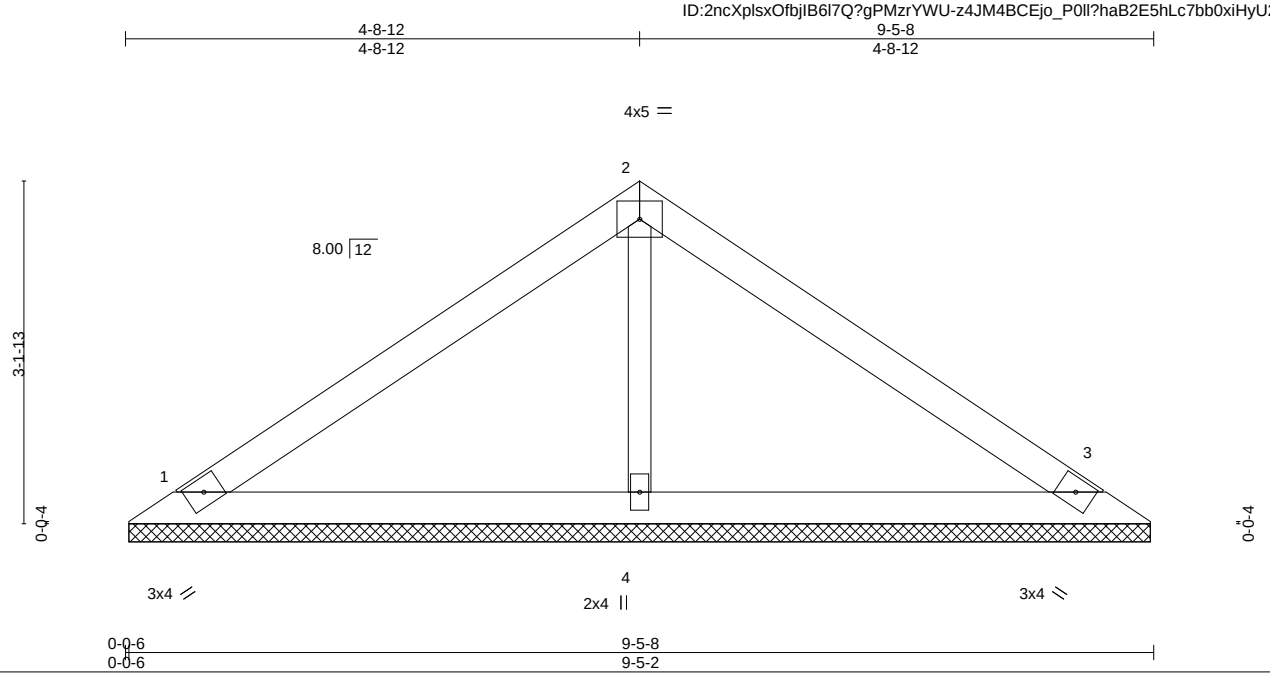

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 24 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=9-4-12, 3=9-4-12, 4=9-4-12
Max Horz 1=74(LC 5)
Max Uplift 1=-37(LC 8), 3=-46(LC 9), 4=-14(LC 8)
Max Grav 1=197(LC 1), 3=197(LC 1), 4=371(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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	V2	Valley	1	1	I46672386
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:50 2021 Page 1
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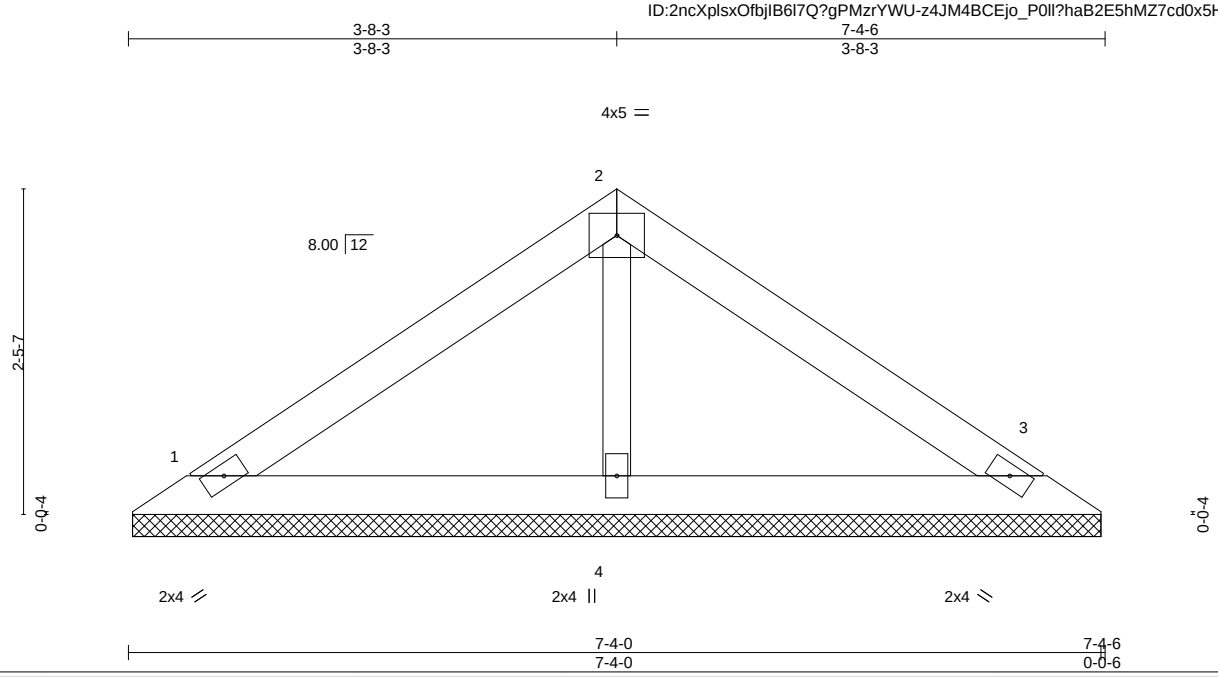

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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=7-3-10, 3=7-3-10, 4=7-3-10
Max Horz 1=-56(LC 4)
Max Uplift 1=-36(LC 8), 3=-43(LC 9)
Max Grav 1=162(LC 1), 3=162(LC 1), 4=252(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.

June 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 78 RR
210458	V3	Valley	1	1	I46672387
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Jun 2 2021 MiTek Industries, Inc. Mon Jun 21 16:30:51 2021 Page 1
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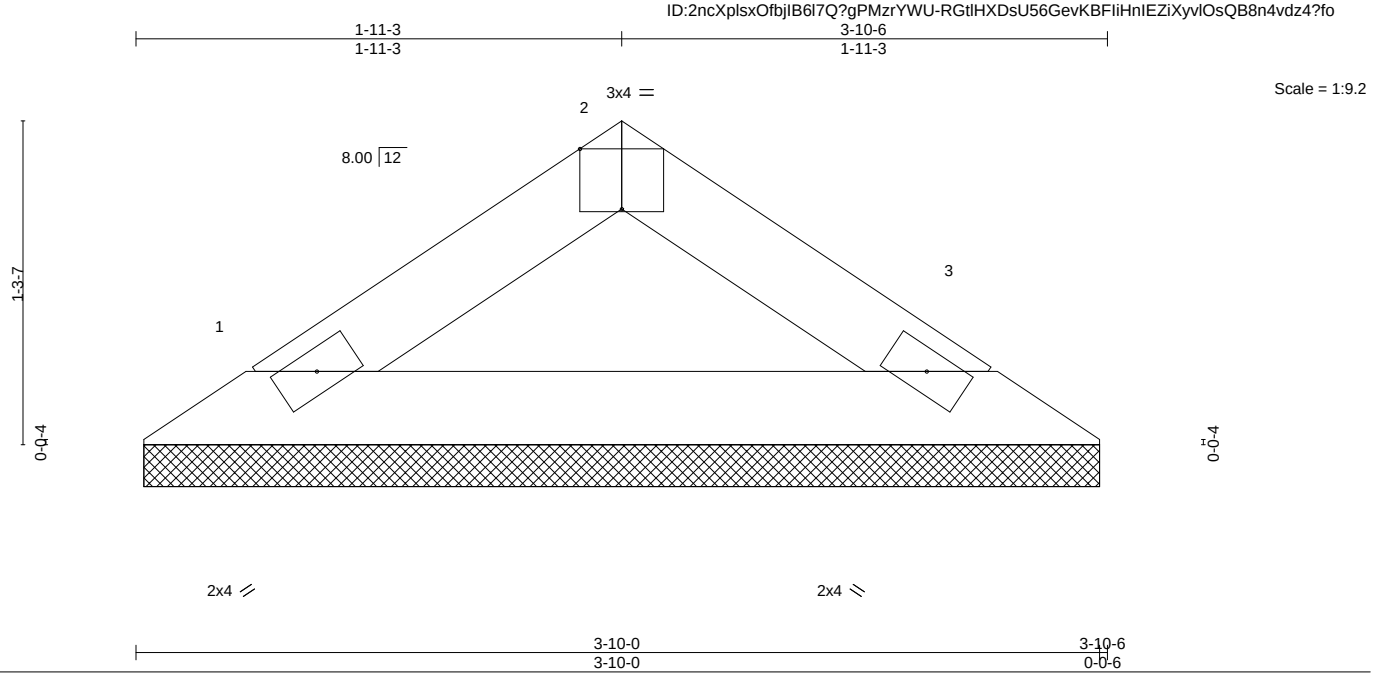


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 8 lb	FT = 10%

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

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

REACTIONS. (size) 1=3-9-10, 3=3-9-10
Max Horz 1=-25(LC 4)
Max Uplift 1=-15(LC 8), 3=-15(LC 9)
Max Grav 1=131(LC 1), 3=131(LC 1)

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

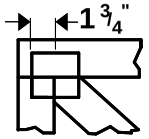
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed;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

June 22,2021

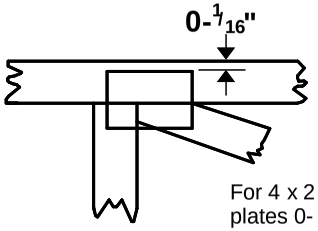
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

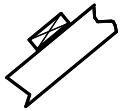
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

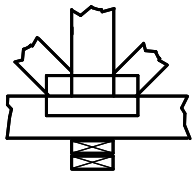
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

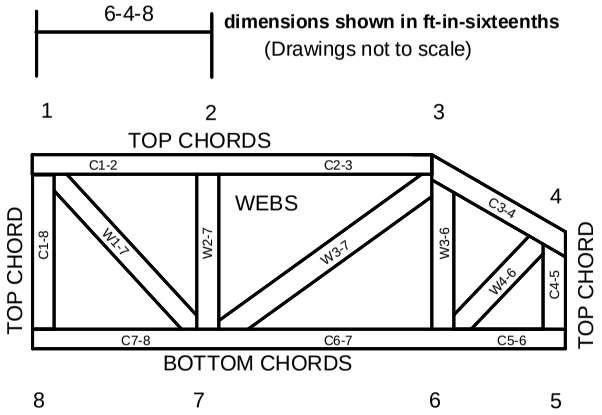


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.