



RE: 400509
Lot 17 HT

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

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

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

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

This package includes 55 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I42478393	A1	8/19/2020	27	I42478419	G1	8/19/2020
2	I42478394	A2	8/19/2020	28	I42478420	G2	8/19/2020
3	I42478395	A3	8/19/2020	29	I42478421	G3	8/19/2020
4	I42478396	A4	8/19/2020	30	I42478422	H1	8/19/2020
5	I42478397	B1	8/19/2020	31	I42478423	H2	8/19/2020
6	I42478398	B2	8/19/2020	32	I42478424	J1	8/19/2020
7	I42478399	C1	8/19/2020	33	I42478425	J2	8/19/2020
8	I42478400	C2	8/19/2020	34	I42478426	J3	8/19/2020
9	I42478401	C3	8/19/2020	35	I42478427	J4	8/19/2020
10	I42478402	C4	8/19/2020	36	I42478428	J5	8/19/2020
11	I42478403	C5	8/19/2020	37	I42478429	J6	8/19/2020
12	I42478404	C6	8/19/2020	38	I42478430	J7	8/19/2020
13	I42478405	C7	8/19/2020	39	I42478431	J8	8/19/2020
14	I42478406	D1	8/19/2020	40	I42478432	J9	8/19/2020
15	I42478407	D2	8/19/2020	41	I42478433	J10	8/19/2020
16	I42478408	D3	8/19/2020	42	I42478434	K1	8/19/2020
17	I42478409	D4	8/19/2020	43	I42478435	K2	8/19/2020
18	I42478410	D5	8/19/2020	44	I42478436	K3	8/19/2020
19	I42478411	D6	8/19/2020	45	I42478437	LAY1	8/19/2020
20	I42478412	D7	8/19/2020	46	I42478438	LAY2	8/19/2020
21	I42478413	D8	8/19/2020	47	I42478439	R1	8/19/2020
22	I42478414	D9	8/19/2020	48	I42478440	V1	8/19/2020
23	I42478415	D10	8/19/2020	49	I42478441	V2	8/19/2020
24	I42478416	D11	8/19/2020	50	I42478442	V3	8/19/2020
25	I42478417	E1	8/19/2020	51	I42478443	V4	8/19/2020
26	I42478418	E2	8/19/2020	52	I42478444	V5	8/19/2020

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





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Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
53	I42478445	V6	8/19/2020
54	I42478446	V7	8/19/2020
55	I42478447	V8	8/19/2020



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

Design Code: IRC2018/TPI2014

Wind Code: N/A

Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.4

Wind Speed: 115 mph

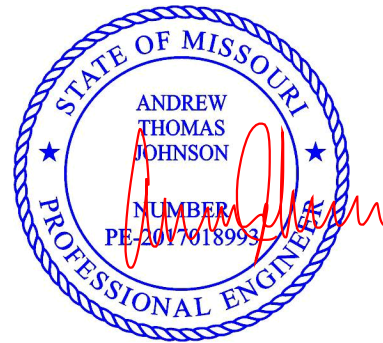
Floor Load: N/A psf

This package includes 55 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I42478393	A1	8/19/2020	27	I42478419	G1	8/19/2020
2	I42478394	A2	8/19/2020	28	I42478420	G2	8/19/2020
3	I42478395	A3	8/19/2020	29	I42478421	G3	8/19/2020
4	I42478396	A4	8/19/2020	30	I42478422	H1	8/19/2020
5	I42478397	B1	8/19/2020	31	I42478423	H2	8/19/2020
6	I42478398	B2	8/19/2020	32	I42478424	J1	8/19/2020
7	I42478399	C1	8/19/2020	33	I42478425	J2	8/19/2020
8	I42478400	C2	8/19/2020	34	I42478426	J3	8/19/2020
9	I42478401	C3	8/19/2020	35	I42478427	J4	8/19/2020
10	I42478402	C4	8/19/2020	36	I42478428	J5	8/19/2020
11	I42478403	C5	8/19/2020	37	I42478429	J6	8/19/2020
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13	I42478405	C7	8/19/2020	39	I42478431	J8	8/19/2020
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15	I42478407	D2	8/19/2020	41	I42478433	J10	8/19/2020
16	I42478408	D3	8/19/2020	42	I42478434	K1	8/19/2020
17	I42478409	D4	8/19/2020	43	I42478435	K2	8/19/2020
18	I42478410	D5	8/19/2020	44	I42478436	K3	8/19/2020
19	I42478411	D6	8/19/2020	45	I42478437	LAY1	8/19/2020
20	I42478412	D7	8/19/2020	46	I42478438	LAY2	8/19/2020
21	I42478413	D8	8/19/2020	47	I42478439	R1	8/19/2020
22	I42478414	D9	8/19/2020	48	I42478440	V1	8/19/2020
23	I42478415	D10	8/19/2020	49	I42478441	V2	8/19/2020
24	I42478416	D11	8/19/2020	50	I42478442	V3	8/19/2020
25	I42478417	E1	8/19/2020	51	I42478443	V4	8/19/2020
26	I42478418	E2	8/19/2020	52	I42478444	V5	8/19/2020

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





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Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

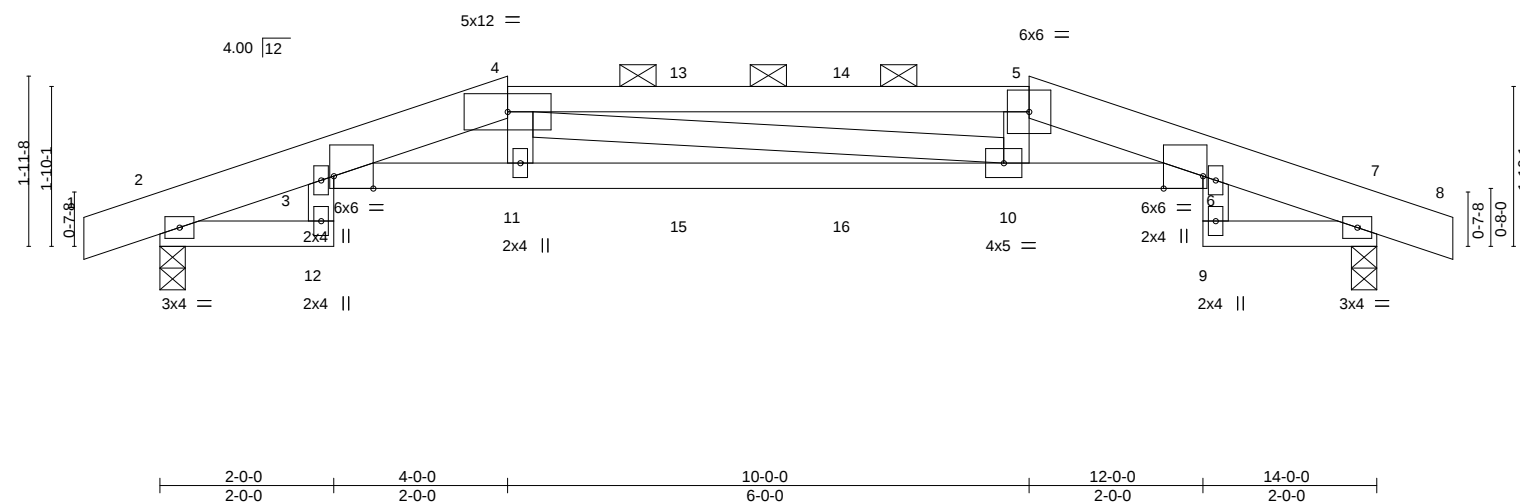
No.	Seal#	Truss Name	Date
53	I42478445	V6	8/19/2020
54	I42478446	V7	8/19/2020
55	I42478447	V8	8/19/2020

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ID:Lek3CAANj_gYbKvCtQHtmQzKvNM-fkU10N1NdfQoKpyKQg_9ntYls9xnaLusG5Q4V8ymZZT

0-10-8 2-0-0 4-0-0 10-0-0 12-0-0 14-10-8
0-10-8 2-0-0 2-0-0 6-0-0 2-0-0 2-0-0 0-10-8

Scale = 1:26.5



LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.14 10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.27 10-11	>619	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.17 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11 10-11	>999	240	Weight: 101 lb	FT = 10%

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

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8
 Max Horz 2=-28(LC 34)
 Max Uplift 2=-217(LC 4), 7=-217(LC 5)
 Max Grav 2=1028(LC 1), 7=1028(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-471/103, 3-4=-3588/621, 4-5=-3574/603, 5-6=-3553/597, 6-7=-471/100
 BOT CHORD 3-11=-601/3592, 10-11=-584/3608, 6-10=-559/3555

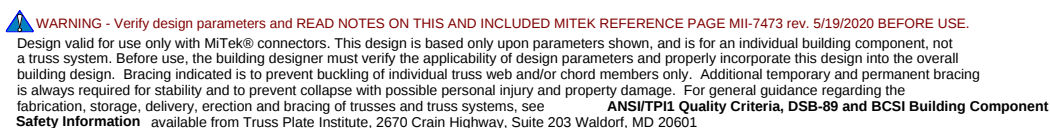
NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRL (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=217, 7=217.
- 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.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 52 lb up at 4-0-0, 81 lb down and 52 lb up at 6-0-12, and 81 lb down and 52 lb up at 7-11-4, and 81 lb down and 52 lb up at 10-0-0 on top chord, and 231 lb down and 65 lb up at 4-0-0, 34 lb down at 6-0-12, and 34 lb down at 7-11-4, and 231 lb down and 65 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
Continued on page 2



August 19, 2020



Job	Truss	Truss Type	Qty	Ply	Lot 17 HT
400509	A1	Hip Girder	1	2	I42478393
					Job Reference (optional)

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 6-8=-70, 2-12=-20, 3-6=-20, 7-9=-20

Concentrated Loads (lb)

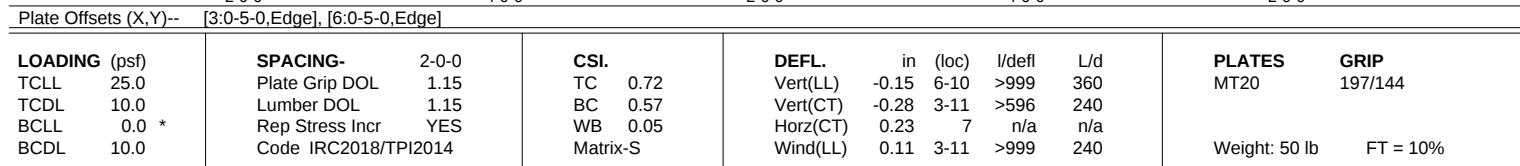
Vert: 4=-37(F) 5=-37(F) 11=-231(F) 10=-231(F) 13=-37(F) 14=-37(F) 15=-34(F) 16=-34(F)

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-7w2PDj?OzYfxzXWYNVQJ45V3ZJ5Jnr0VIAe1bymZZS

0-10-8 2-0-0 6-0-0 8-0-0 12-0-0 14-0-8
0-10-8 2-0-0 4-0-0 2-0-0 4-0-0 2-0-0 0-10-8

Scale = 1:26.5



REACTIONS. (size) 2=0-3-8, 7=0-3-8
 Max Horz 2=-40(LC 13)
 Max Uplift 2=-141(LC 4), 7=-141(LC 5)
 Max Grav 2=688(LC 1), 7=688(LC 1)

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

TOP CHORD	2-3=-284/69, 3-4=-1439/199, 4-5=-1387/198, 5-6=-1440/185, 6-7=-284/62
BOT CHORD	3-11=-156/1386, 10-11=-152/1387, 6-10=-124/1386

NOTES- ★ JOHNSON ★

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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=141, 7=141.
- 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.



August 19, 2020



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	142478395
400509	A3	Roof Special	1	1	Job Reference (optional)	

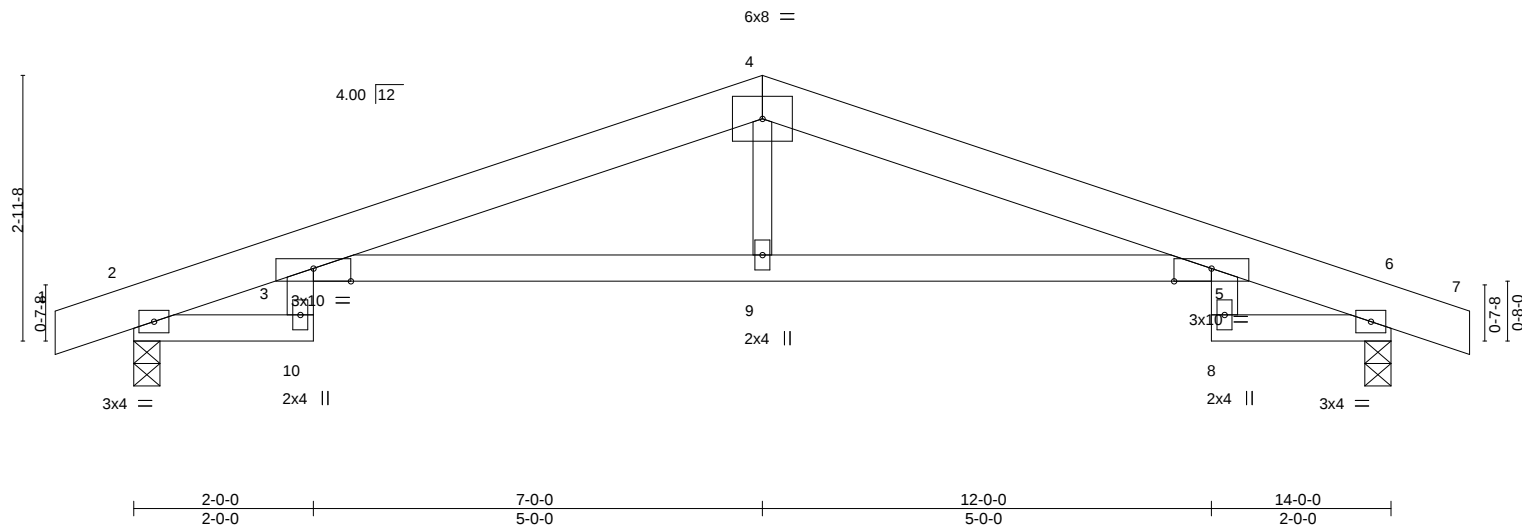
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-b7bnR23e9HhWZ76jW50dsldgVzeK2Dm9kPvBa1ymZZR

0-10-8	2-0-0	7-0-0	12-0-0	14-0-0	14-10-8
0-10-8	2-0-0	5-0-0	5-0-0	2-0-0	0-10-8

Scale = 1:25.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.16	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.30				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.24				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	Weight: 49 lb		FT = 10%	

LUMBER-
 TOP CHORD 2x6 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2 *Except*
 4-9: 2x3 SPF No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=-46(LC 9)
 Max Uplift 2=-134(LC 4), 6=-134(LC 5)
 Max Grav 2=688(LC 1), 6=688(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-284/70, 3-4=-1365/147, 4-5=-1365/161, 5-6=-284/59
 BOT CHORD 3-9=-102/1304, 5-9=-102/1304

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



August 19,2020

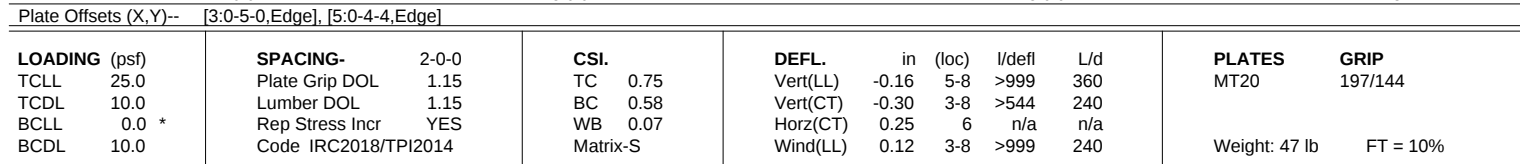
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



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 Chesterfield, MO 63017

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ID:Lek3CAANj_yYbKvtCQHtmQzKvNM-3J99eO4GwapNBHhv4oXsPvAr6M_Wng0Jy3f6TymZZQ
-0-10-8 2-0-0 7-0-0 12-0-0 13-11-8
0-10-8 2-0-0 5-0-0 5-0-0 1-11-8
Scale: 1/2"=1'



BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 3-8-11 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-284/68, 3-4=-1368/154, 4-5=-1368/163, 5-6=-288/57
 BOT CHORD 3-8=-105/1307, 5-8=-105/1307

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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) 6 except (jt=lb) 2=135.
- 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.



August 19, 2020



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478398
400509	B2	MONOPITCH	6	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-YVjYrk4uhuxEoRG5dv25xjjAzmR4W8ZSBjOlevymZZP

0-4-8 3-4-0
0-4-8 3-4-0

Scale = 1:13.9

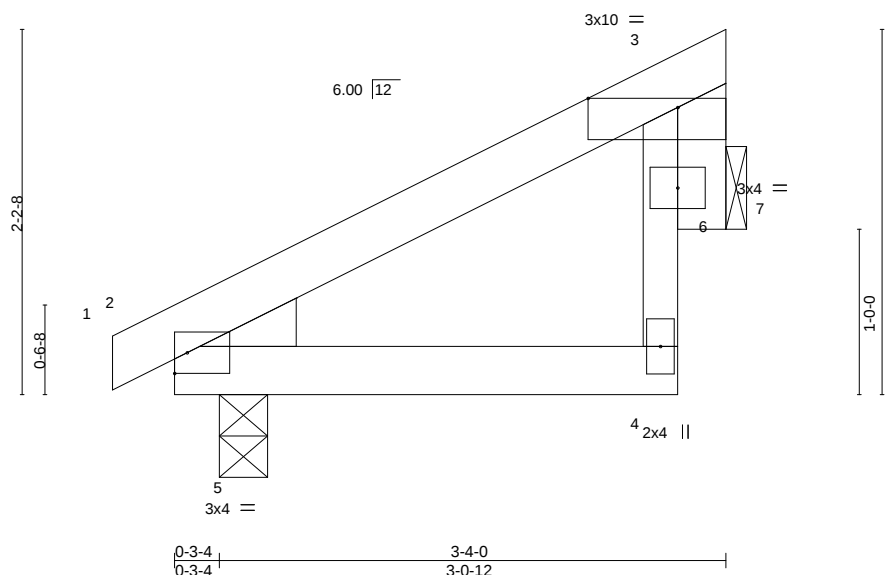


Plate Offsets (X,Y)--		[3:0-6-8,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.10		Vert(LL)	-0.00 4-5	>999	360
TCDL 10.0		Lumber DOL	1.15	BC 0.11		Vert(CT)	-0.00 4-5	>999	240
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.05		Horz(CT)	0.00 7	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.00 5	>999	240
						PLATES		GRIP	
						MT20		197/144	
						Weight: 11 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 7=Mechanical
Max Horz 5=56(LC 5)
Max Uplift 5=23(LC 8), 7=35(LC 8)
Max Grav 5=199(LC 1), 7=92(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) 5, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478399
400509	C1	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-0iHw345WSC35QaqHBDZKUwFL5AoSFaUbQN8rAMymZZO

0-10-8 10-2-11 20-3-8
0-10-8 10-2-11 10-0-13

Scale = 1:39.9

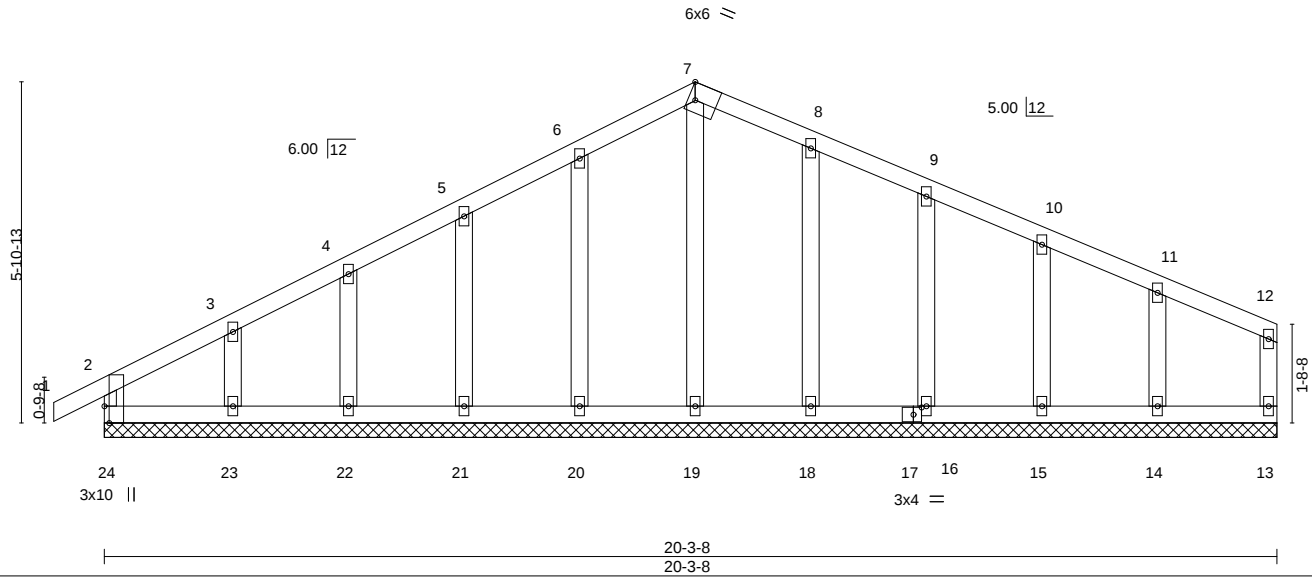


Plate Offsets (X, Y)-- [7:Edge,0-3-8], [17:0-1-11,0-1-8], [24:0-3-8,Edge]

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 0.08	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 86 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
12-13: 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 20-3-8.
(lb) - Max Horz 24=91(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 24, 13, 20, 21, 22, 23, 18, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 24, 13, 19, 20, 21, 22, 23, 18, 16, 15, 14

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 13, 20, 21, 22, 23, 18, 16, 15, 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	C2	Roof Special	1	1		I42478400
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-UurlGQ68DVBy2kPULw4Z08oKYazb_zPle1tPjoymZZN

0-10-8	5-6-8	10-2-11	15-10-0	20-3-8
0-10-8	5-6-8	4-8-3	5-7-5	4-5-8

Scale = 1:39.0

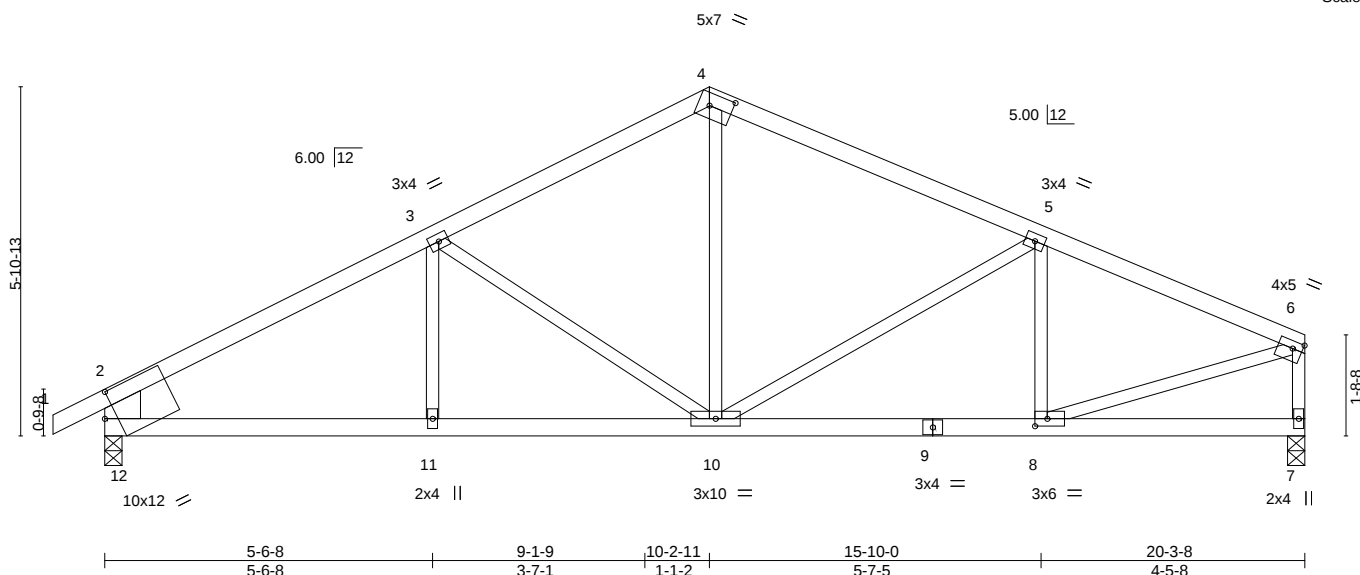


Plate Offsets (X,Y)--		[4:0-4-11,0-2-8], [6:0-2-0,0-1-8], [8:0-2-8,0-1-8], [12:0-2-7,0-4-14]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.86	Vert(LL)	-0.09	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.74	Vert(CT)	-0.17	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.35	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	10-11	>999	240	Weight: 75 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 12=0-3-8, 7=0-3-8
Max Horz 12=-90(LC 6)
Max Uplift 12=-137(LC 8), 7=-112(LC 9)
Max Grav 12=980(LC 1), 7=892(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1285/161, 3-4=-965/158, 4-5=-974/155, 5-6=-1121/147, 2-12=-874/167, 6-7=-850/131
BOT CHORD 11-12=-156/1041, 10-11=-156/1041, 8-10=-118/992
WEBS 3-10=-327/150, 4-10=-26/388, 5-10=-269/127, 6-8=-106/1005

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 12=137, 7=112.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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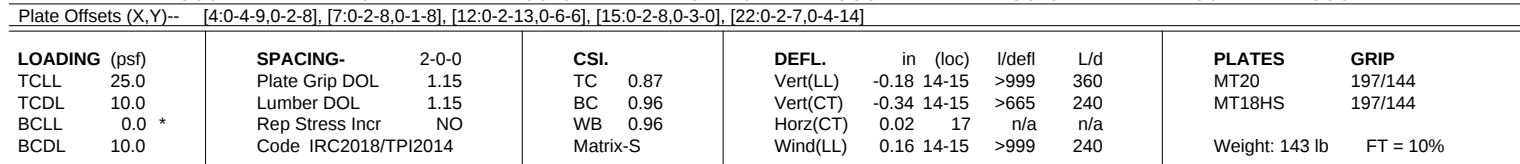
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:01:28 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHmQzKvNM-QHz2h67Ok7RfH2ZssL716Ztg0NbcSkL26KMNhymZZL

0-10-8 5-6-9 10-2-11 16-9-8 20-3-8 25-8-14 31-3-7 35-10-0 39-4-0 40-2-8
0-10-8 5-6-9 4-8-2 6-6-13 3-6-0 5-5-6 5-6-10 4-6-9 3-6-0 0-10-8

Scale = 1:70.9



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

REACTIONS. (size) 22=0-3-8, 12=0-3-8, 17=0-3-8
 Max Horiz 22=100(LC 29)
 Max Uplift 22=-166(LC 29), 12=-248(LC 9), 17=-384(LC 9)
 Max Grav 22=877(LC 1), 12=1073(LC 22), 17=2172(LC 1)

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

TOP CHORD 2-3 = 1104/212, 3-4 = 793/202, 4-5 = 773/208, 5-6 = 50/663, 6-7 = 1813/483,
7-8 = 2553/633, 8-9 = 2553/633, 9-10 = 1653/377, 2-22 = 781/194, 10-12 = 931/238

BOT CHORD 21-22 = 211/885, 20-21 = 211/885, 18-20 = 221/439, 17-18 = 218/444, 16-17 = 1365/320,
6-16 = 1267/350, 15-16 = 903/143, 14-15 = 431/1813, 13-14 = 304/1445, 12-13 = 299/1444

WEBS 3-20 = 334/153, 4-20 = 59/264, 5-20 = 54/391, 5-18 = 0/263, 5-17 = 1299/122,
7-15 = 707/282, 7-14 = 157/802, 8-14 = 484/228, 9-14 = 299/1189, 6-15 = 594/2788

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=166, 12=248, 17=384.
- 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) 83 lb down and 62 lb up at 21-9-4, 83 lb down and 62 lb up at 23-9-4, 83 lb down and 62 lb up at 25-9-4, 83 lb down and 62 lb up at 27-9-4, 83 lb down and 62 lb up at 29-9-4, 83 lb down and 62 lb up at 31-9-4, and 83 lb down and 62 lb up at 33-9-4, and 195 lb down and 136 lb up at 35-10-0 on top chord, and 23 lb down at 21-9-4, 23 lb down at 23-9-4, 23 lb down at 25-9-4, 23 lb down at 27-9-4, 23 lb down at 29-9-4, 23 lb down at 31-9-4, and 23 lb down at 33-9-4, and 56 lb down at 35-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



August 19, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478401
400509	C3	Roof Special Girder	1	1	Job Reference (optional)	

NOTES-
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-9=-70, 9-10=-70, 10-11=-70, 17-22=-20, 12-16=-20
Concentrated Loads (lb)
Vert: 9=-74(F) 7=-33(F) 15=-17(F) 13=-40(F) 23=-33(F) 24=-33(F) 25=-33(F) 26=-33(F) 27=-33(F) 28=-33(F) 29=-17(F) 30=-17(F) 31=-17(F) 32=-17(F) 33=-17(F) 34=-17(F)

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	C4	Roof Special	1	1		I42478402
Job Reference (optional)						

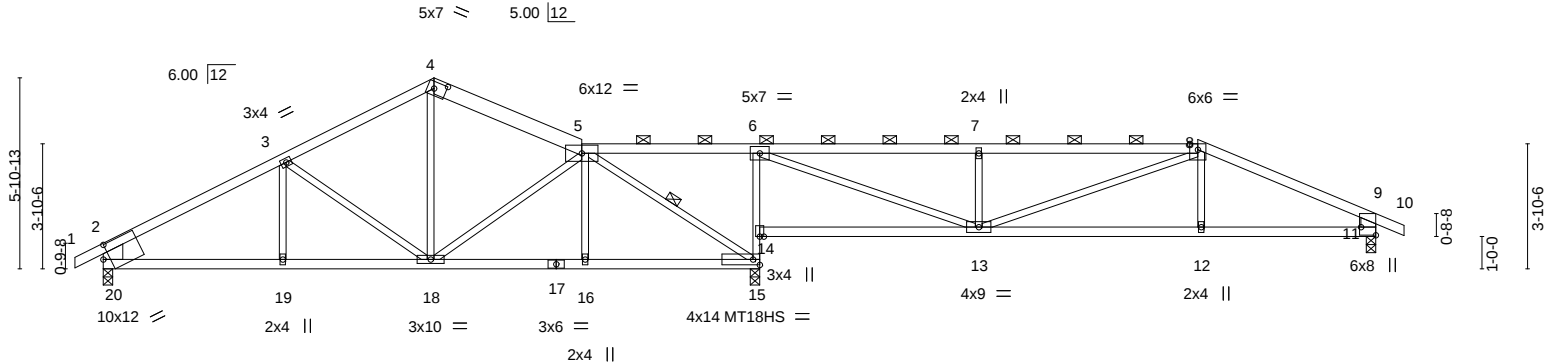
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-uTWQvS81VQZWvC83Q3eGemQsin?yBGUBL_63J7ymZZK

0-10-8	5-6-9	10-2-11	14-9-8	20-3-8	27-0-12	33-10-0	39-4-0	40-2-8
0-10-8	5-6-9	4-8-2	4-6-13	5-6-0	6-9-4	6-9-4	5-6-0	0-10-8

Scale = 1:71.2



	5-6-9	10-2-11	14-9-8	20-1-12	20-3-8	27-0-12	33-10-0	39-4-0
	5-6-9	4-8-2	4-6-13	5-4-4	0-1-12	6-9-4	6-9-4	5-6-0
Plate Offsets (X,Y)--	[4:0-4-9,0-2-8], [11:Edge,0-5-8], [20:0-2-7,0-4-14]							

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.81	Vert(LL)	-0.12 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.26 12-13	>883	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.03 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10 12-13	>999	240		
								Weight: 141 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-20: 2x8 SP DSS, 9-11: 2x6 SP 2400F 2.0E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-9 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
3-6-8 oc bracing: 14-15
6-0-0 oc bracing: 13-14.
WEBS 1 Row at midpt 5-15

REACTIONS.

(size) 20=0-3-8, 11=0-3-8, 15=0-3-8
Max Horz 20=101(LC 8)
Max Uplift 20=-141(LC 8), 11=-181(LC 9), 15=-277(LC 9)
Max Grav 20=926(LC 1), 11=879(LC 22), 15=1852(LC 1)

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

TOP CHORD 2-3=-1191/167, 3-4=-881/152, 4-5=-848/166, 6-7=-1343/326, 7-8=-1345/328,
8-9=-1327/263, 2-20=-825/170, 9-11=-793/205
BOT CHORD 19-20=-172/960, 18-19=-172/960, 16-18=-59/785, 15-16=-57/788, 14-15=-1140/253,
6-14=-1066/287, 13-14=-268/32, 12-13=-179/1139, 11-12=-176/1142
WEBS 3-18=-323/144, 4-18=-36/334, 5-15=-1222/95, 6-13=-283/1691, 7-13=-526/215

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=141, 11=181, 15=277.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	C5	Roof Special	1	1		I42478403
Job Reference (optional)						

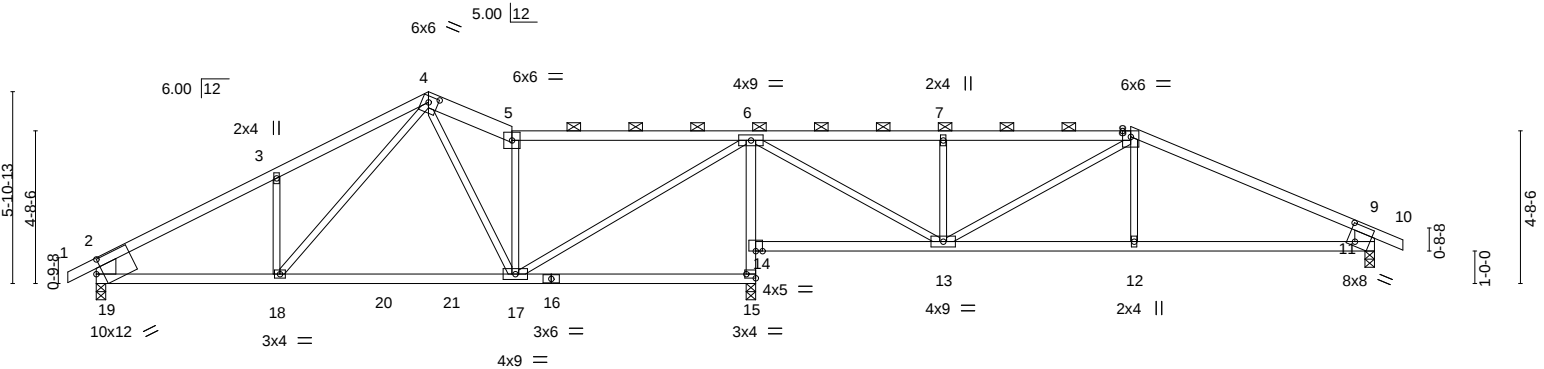
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:01:30 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Mf4p6o9fGkhNWMjF_m9VB_z18BMZwlgLZercsZymZZJ

0-10-8	5-6-9	10-2-11	12-9-8	20-3-8	26-0-12	31-10-0	39-4-0	40-2-8
0-10-8	5-6-9	4-8-2	2-6-13	7-6-0	5-9-4	5-9-4	7-6-0	0-10-8

Scale = 1:70.9



	5-6-9	10-2-11	12-9-8	20-1-12	20-3-8	26-0-12	31-10-0	39-4-0
	5-6-9	4-8-2	2-6-13	7-4-4	0-1-12	5-9-4	5-9-4	7-6-0
Plate Offsets (X,Y)--	[4:0-3-8,0-2-4], [11:0-2-13,0-6-6], [15:Edge,0-1-8], [19:0-2-7,0-4-14]							
LOADING (psf)	SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.82	Vert(LL) -0.16 17-18 >999 360		MT20	197/144	
TCDL 10.0	Lumber DOL 1.15		BC 0.61	Vert(CT) -0.28 17-18 >842 240				
BCLL 0.0 *	Rep Stress Incr YES		WB 0.46	Horz(CT) -0.02 11 n/a n/a				
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL) 0.06 17-18 >999 240		Weight: 142 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*
2-19,9-11: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 19=0-3-8, 15=0-3-8, 11=0-3-8
Max Horz 19=101(LC 8)
Max Uplift 19=-142(LC 8), 15=-275(LC 9), 11=-184(LC 9)
Max Grav 19=920(LC 2), 15=1973(LC 2), 11=863(LC 24)

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

TOP CHORD 2-3=-1212/165, 3-4=-1144/282, 4-5=-932/214, 5-6=-808/154, 6-7=-803/252,
7-8=-805/256, 8-9=-1183/252, 2-19=-809/169, 9-11=-782/229
BOT CHORD 18-19=-171/999, 17-18=-64/691, 15-17=-295/34, 14-15=-1875/312, 6-14=-1780/343,
13-14=-379/50, 12-13=-147/1000, 11-12=-144/1007
WEBS 3-18=-275/206, 4-18=-167/498, 4-17=-111/365, 5-17=-663/230, 6-17=-66/1290,
6-13=-198/1330, 7-13=-413/170, 8-12=0/261

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=142, 15=275, 11=184.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478404
400509	C6	Roof Special	1	1		

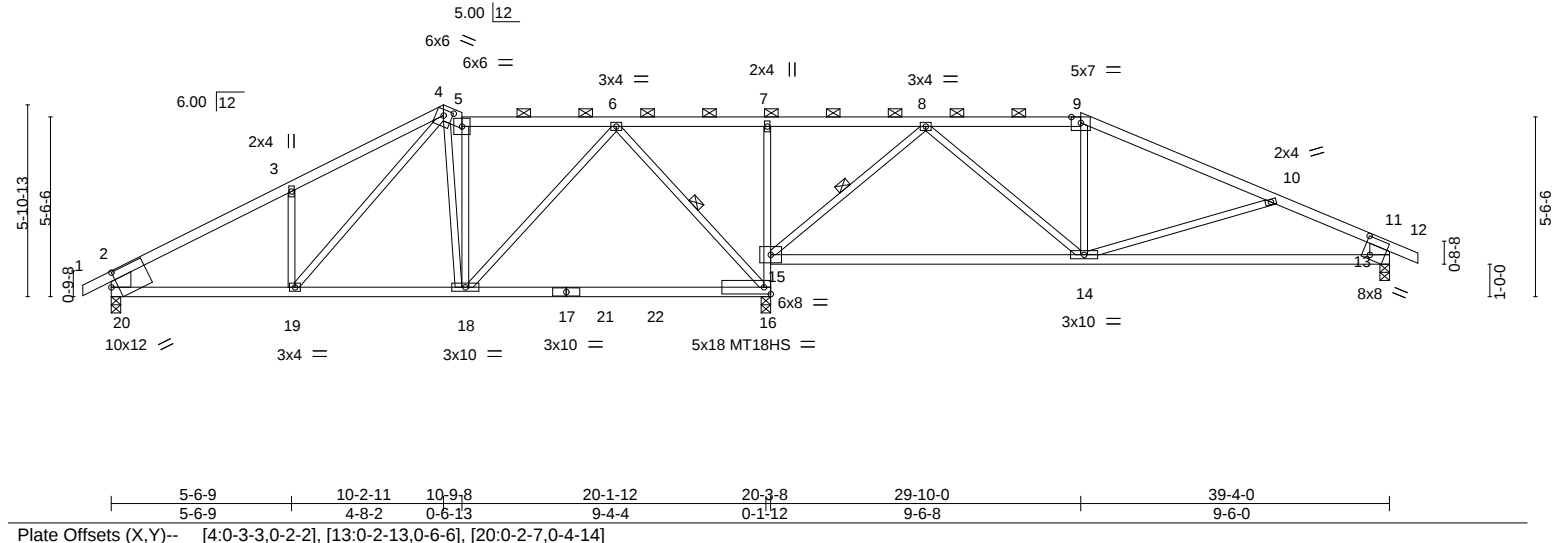
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHmQzKvNM-J2CZXTBvoLx5mfe5BBzGP2Js?_NOFGd1yKjwSymZZH

0-10-8	5-6-9	10-2-11	10-9-8	15-6-8	20-3-8	25-0-12	29-10-0	35-8-3	39-4-0	40-2-8
0-10-8	5-6-9	4-8-2	0-6-13	4-9-0	4-9-0	4-9-4	4-9-4	5-10-3	3-7-13	0-10-8

Scale = 1:70.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 1.00	Vert(LL)	-0.25 16-18	>959	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.44 16-18	>539	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.45	Horz(CT)	-0.04 13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 14	>999	240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
4-5: 2x6 SPF No.2	2-0-0 oc purlins (5-11-7 max.): 5-9.
BOT CHORD 2x4 SPF 2100F 1.8E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
7-16: 2x3 SPF No.2, 13-15: 2x4 SPF No.2	2-10-13 oc bracing: 15-16.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 8-15, 6-16
2-20,11-13: 2x8 SP DSS	

REACTIONS. (size) 20=0-3-8, 13=0-3-8, 16=0-3-8
Max Horz 20=101(LC 8)
Max Uplift 20=-144(LC 8), 13=-187(LC 9), 16=-267(LC 9)
Max Grav 20=941(LC 2), 13=887(LC 24), 16=1931(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1203/174, 3-4=-1140/290, 4-5=-883/178, 5-6=-827/152, 8-9=-929/245,
9-10=-1051/222, 10-11=-1279/337, 2-20=-808/175, 11-13=-784/229
BOT CHORD 19-20=-178/998, 18-19=-54/789, 16-18=-53/451, 15-16=-1080/225, 7-15=-346/138,
14-15=-90/542, 13-14=-256/1093
WEBS 3-19=-282/202, 4-19=-194/391, 4-18=-93/458, 6-18=-15/571, 8-15=-971/204,
5-18=-438/146, 6-16=-950/141, 8-14=0/518

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 20=144, 13=187, 16=267.
- 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.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478405
400509	C7	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-J2CZXTBvLx5mfte5BBzGP2Oh?4DOb6d1yKjwSymZZH

Job Reference (optional)

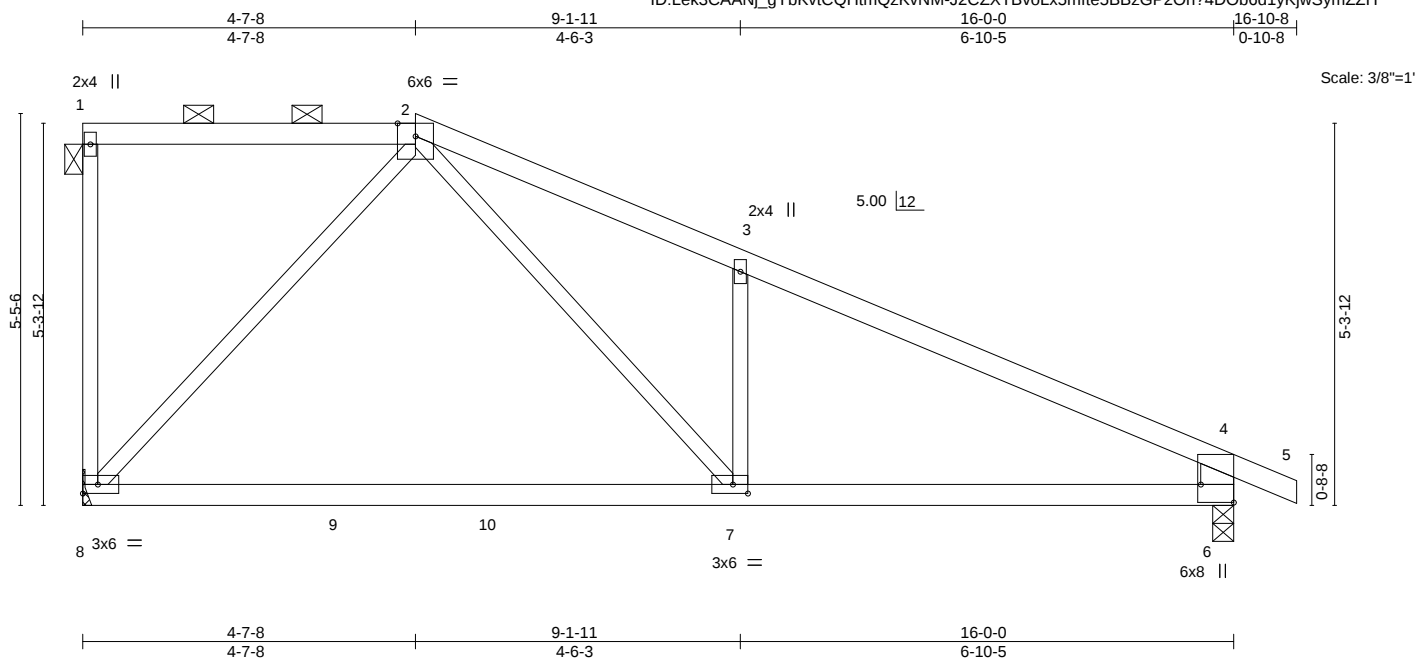


Plate Offsets (X,Y)-- [6:Edge,0-5-8], [7:0-2-8,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.25	7-8	>758	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.44	7-8	>432	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-8	>999	240	Weight: 56 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
4-6: 2x6 SP DSS

BRACING-

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

REACTIONS.

(size) 8=Mechanical, 6=0-3-8
Max Horz 8=-225(LC 4)
Max Uplift 8=-112(LC 4), 6=-129(LC 9)
Max Grav 8=745(LC 2), 6=799(LC 2)

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

TOP CHORD 2-3=-1091/247, 3-4=-1135/141, 4-6=-720/165
BOT CHORD 7-8=0/465, 6-7=-53/965
WEBS 2-8=-633/136, 2-7=-165/797, 3-7=-356/226

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=112, 6=129.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	142478406
400509	D1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-FQKJy9C9KzBp?z00DcERLq7rSorGseCwUGpq?KymZZF

0-10-8 16-6-0 33-0-0 33-10-8
0-10-8 16-6-0 16-6-0 0-10-8

4x5 =

Scale = 1:58.1

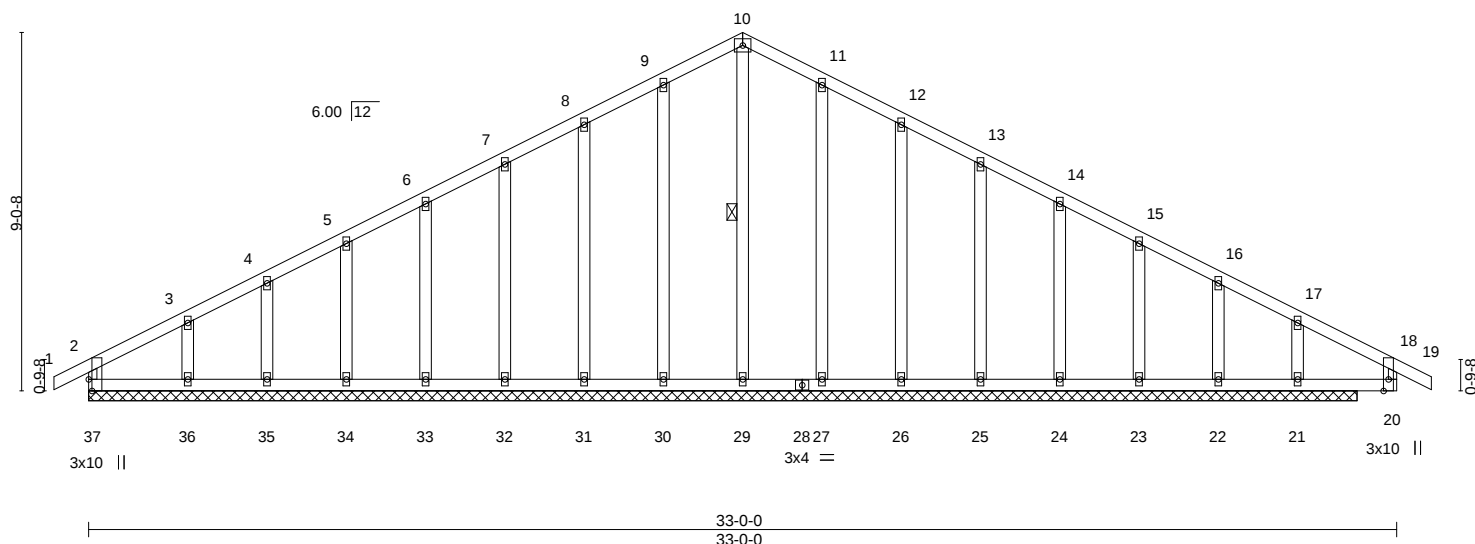


Plate Offsets (X,Y)--		[37:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.23	Vert(LL)	-0.01 18-19 n/r 120	MT20		197/144	
TCDL	10.0	Lumber DOL 1.15		BC	0.18	Vert(CT)	-0.02 18-19 n/r 120				
BCLL	0.0 *	Rep Stress Incr YES		WB	0.17	Horz(CT)	-0.01 21 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R				Weight: 164 lb	FT = 10%		

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 10-29

REACTIONS.

All bearings 32-0-0.
(lb) - Max Horz 37=135(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 37, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, 22, 21 except 36=-120(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 37, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, 22 except 29=332(LC 18), 36=265(LC 1), 21=399(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=0/256, 7-8=0/265, 8-9=0/277, 9-10=0/277, 10-11=0/269, 11-12=0/255
WEBS 10-29=-292/0, 17-21=-251/98

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Truss to be fully sheathed on one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, 22, 21 except (it=lb) 36=120.
- Non Standard bearing condition. Review required.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	142478407
400509	D2	Common	7	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvCQHtmQzKvNM-YnFzQYHYh64pL23M7as57lwxld4e?fy5s0hlQymZZ8

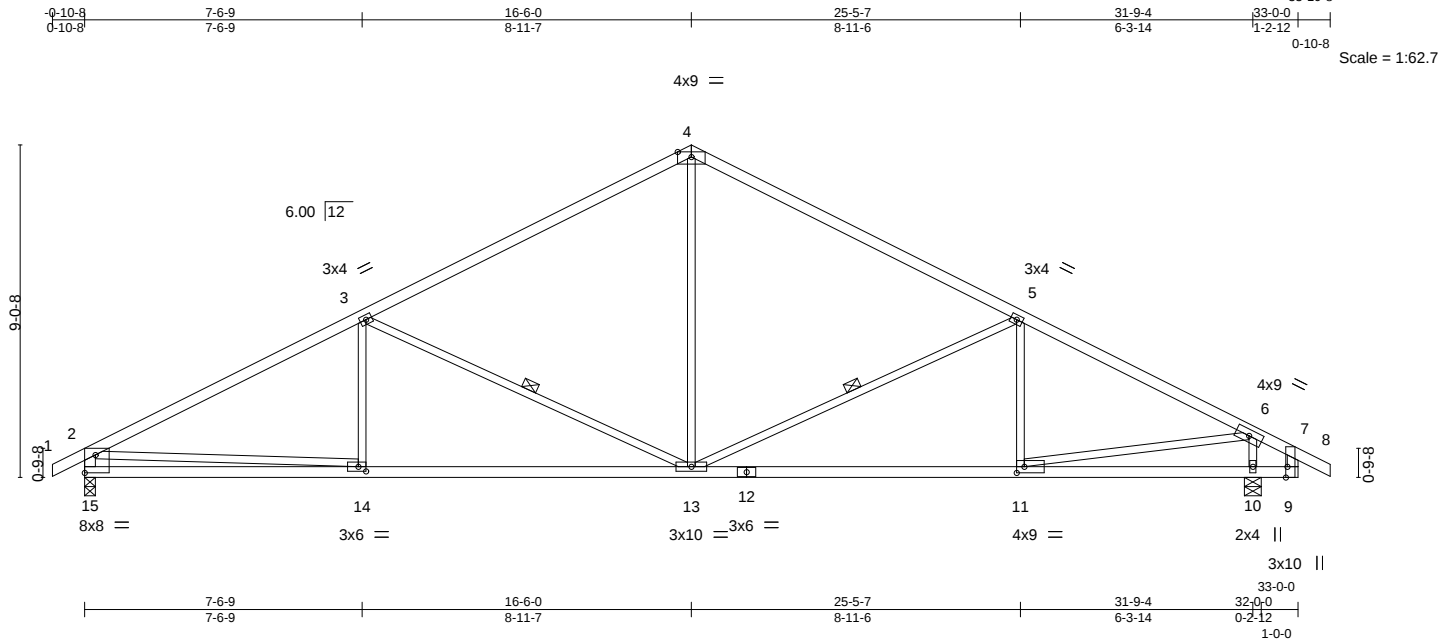


Plate Offsets (X,Y)-- [9:0-3-8,Edge], [11:0-2-8,0-2-0], [14:0-2-8,0-1-8], [15:Edge,0-5-13]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	-0.14 11-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.77	Vert(CT)	-0.31 11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.06 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 13-14	>999	240	Weight: 124 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-15,7-9: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-13, 5-13

REACTIONS.

(size) 15=0-3-8, 10=0-5-8
 Max Horz 15=134(LC 12)
 Max Uplift 15=-203(LC 8), 10=-213(LC 9)
 Max Grav 15=1490(LC 1), 10=1596(LC 1)

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

TOP CHORD 2-3=-2348/300, 3-4=-1629/246, 4-5=-1628/254, 5-6=-2064/262, 2-15=-1418/241
 BOT CHORD 14-15=-257/605, 13-14=-308/2004, 11-13=-135/1775
 WEBS 3-14=0/264, 3-13=-803/287, 4-13=-25/732, 5-13=-583/253, 6-11=-155/1734, 6-10=-1452/268, 2-14=-51/1403

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 15=203, 10=213.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478408
400509	D3	Roof Special	5	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvCQHtmQzKvNM-MwcEgcMJGyqz3zWWUrzVNZAYl18hPNVrToT0y4ymZZ2

Job Reference (optional)

0-10-8 7-6-9 16-6-0 21-10-0 25-5-8 30-1-12 32-0-0
0-10-8 7-6-9 8-11-7 5-4-0 3-7-8 4-8-4 1-10-4

Scale: 3/16"=1'

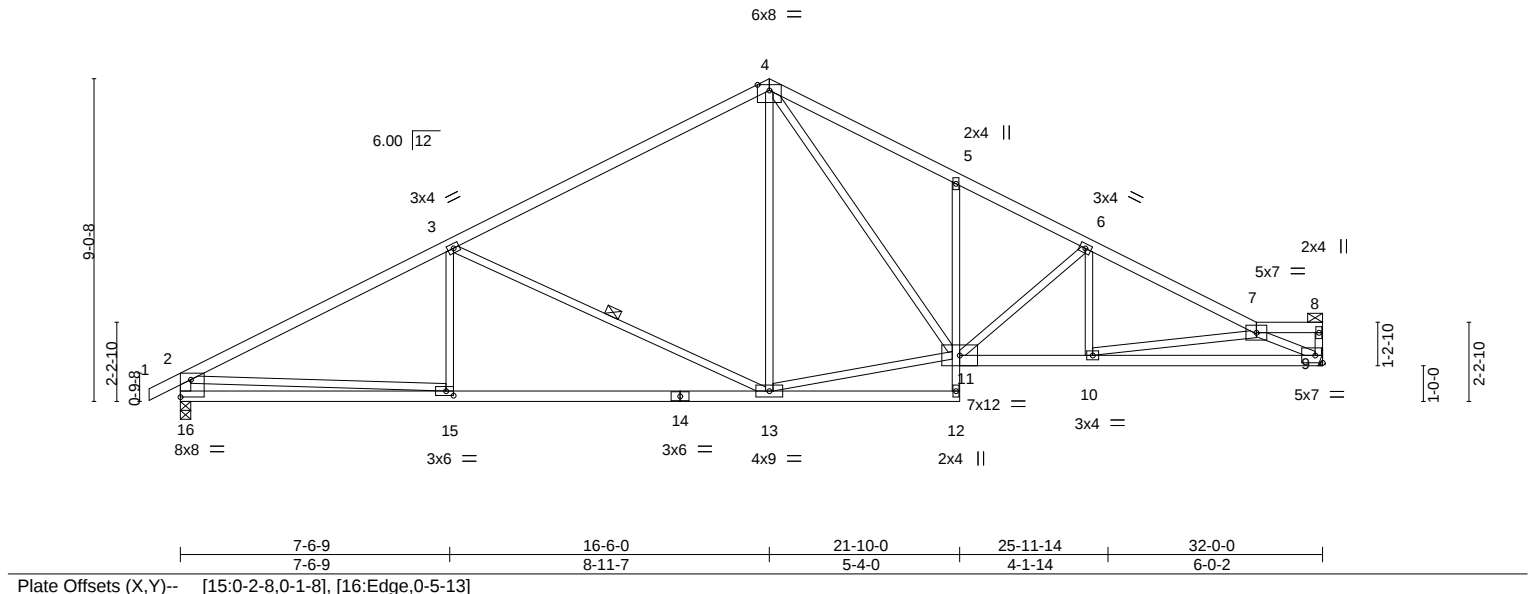


Plate Offsets (X,Y)--		[15:0-2-8,0-1-8], [16:Edge,0-5-13]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.73		Vert(LL)	-0.16 13-15	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.73		Vert(CT)	-0.38 13-15	>999	240		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.74		Horz(CT)	0.10 9	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07 11	>999	240	Weight: 131 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
5-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16: 2x4 SPF 2100F 1.8E

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.
WEBS 1 Row at midpt 3-13

REACTIONS.

(size) 9=Mechanical, 16=0-3-8
Max Horz 16=134(LC 5)
Max Uplift 9=-15(LC 9), 16=-29(LC 8)
Max Grav 9=1428(LC 1), 16=1501(LC 1)

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

TOP CHORD 2-3=-2376/48, 3-4=-1642/71, 4-5=-2233/129, 5-6=-2229/52, 6-7=-2620/22, 2-16=-1430/66
BOT CHORD 15-16=-145/590, 13-15=-74/2031, 5-11=-318/107, 10-11=0/2303, 9-10=-71/2515
WEBS 3-15=0/275, 3-13=-811/135, 4-13=0/375, 11-13=0/1282, 4-11=-104/1073, 6-11=-486/44, 6-10=0/261, 7-9=-2773/102, 2-15=0/1445

NOTES-

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



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478409
400509	D4	Common	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-JJk_5HOZoZ4hIHgVbF?zS_FH7roUtHA8x6y71zymZZ0

0-10-8 7-6-9 16-6-0 25-5-7 33-0-0 33-10-8
0-10-8 7-6-9 8-11-7 8-11-7 7-6-9 0-10-8

Scale = 1:62.7

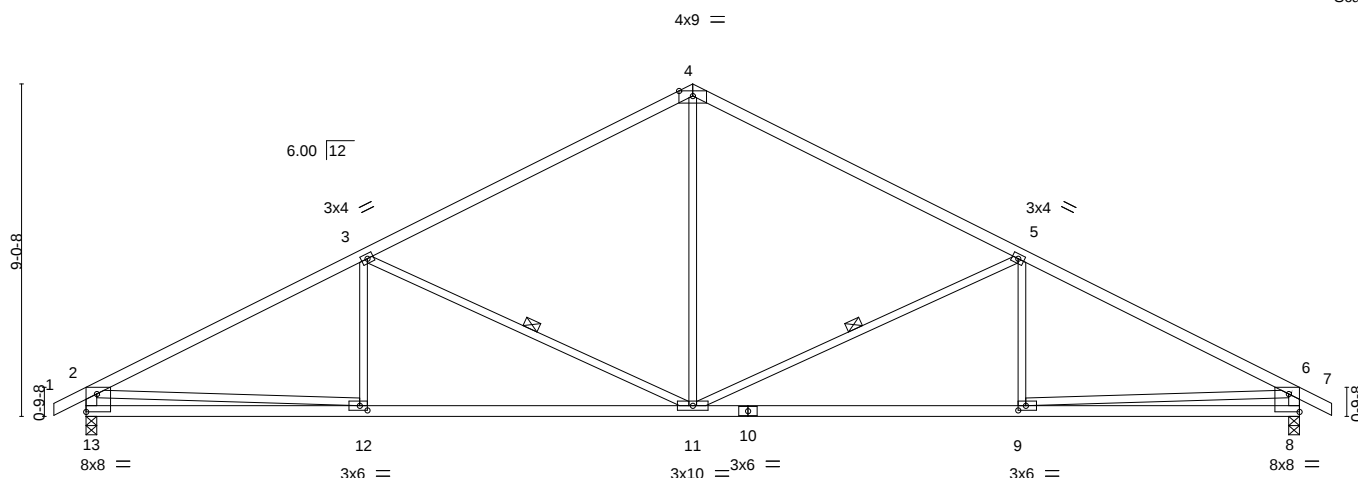


Plate Offsets (X,Y)--	[8:Edge,0-5-13], [9:0-2-8,0-1-8], [12:0-2-8,0-1-8], [13:Edge,0-5-13]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.71	Vert(LL)	-0.13 11-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.77	Vert(CT)	-0.31 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.08 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 11-12	>999	240	Weight: 124 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,6-8: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-11, 3-11

REACTIONS.

(size) 13=0-3-8, 8=0-3-8
Max Horz 13=134(LC 8)
Max Uplift 13=-206(LC 8), 8=-206(LC 9)
Max Grav 13=1543(LC 1), 8=1543(LC 1)

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

TOP CHORD 2-3=-2450/305, 3-4=-1739/261, 4-5=-1739/261, 5-6=-2450/305, 2-13=-1470/243, 6-8=-1470/243
BOT CHORD 12-13=-258/617, 11-12=-313/2095, 9-11=-179/2095, 8-9=-136/617
WEBS 4-11=-32/832, 5-11=-798/286, 5-9=0/261, 3-11=-798/286, 3-12=0/261, 2-12=-55/1482, 6-9=-43/1482

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=206, 8=206.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	D5	Common	1	1		I42478410
Job Reference (optional)						

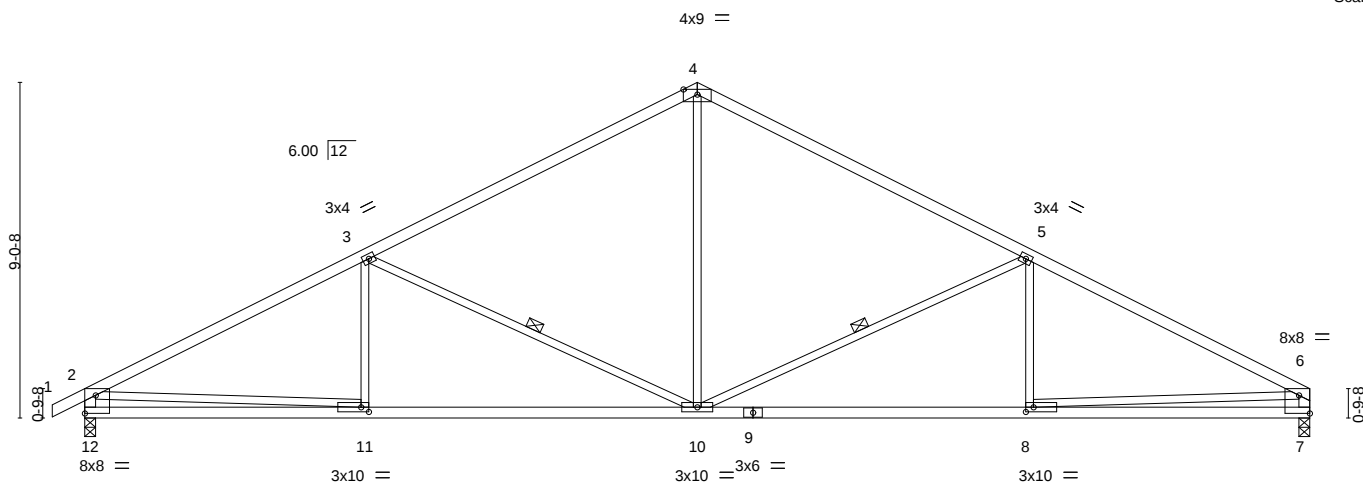
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:01:53 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-B4zVxfR4soa6nuzgq53vcqQz2SAPp5?jsjwK9kymZYy

-0-10-8	7-6-9	16-6-0	25-5-7	33-0-0
0-10-8	7-6-9	8-11-7	8-11-7	7-6-9

Scale = 1:62.1



	7-6-9	16-6-0	25-5-7	33-0-0
	7-6-9	8-11-7	8-11-7	7-6-9

Plate Offsets (X,Y)-- [6:Edge,0-5-13], [8:0-2-8,0-1-8], [11:0-2-8,0-1-8], [12:Edge,0-5-13]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.13	8-10	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.32	8-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.07	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08	10-11	>999	Weight: 123 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-12,6-7: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-10, 3-10

REACTIONS.

(size) 12=0-3-8, 7=0-3-8
 Max Horz 12=143(LC 8)
 Max Uplift 12=-206(LC 8), 7=-182(LC 9)
 Max Grav 12=1544(LC 1), 7=1471(LC 1)

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

TOP CHORD 2-3=-2452/305, 3-4=-1741/261, 4-5=-1743/261, 5-6=-2455/306, 2-12=-1471/243, 6-7=-1397/219
 BOT CHORD 11-12=-266/617, 10-11=-322/2098, 8-10=-200/2108, 7-8=-88/479
 WEBS 4-10=-34/837, 5-10=-810/290, 5-8=0/255, 3-10=-798/286, 3-11=0/261, 2-11=-56/1485, 6-8=-112/1634

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=206, 7=182.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478411
400509	D6	Roof Special	1	1		
Job Reference (optional)						

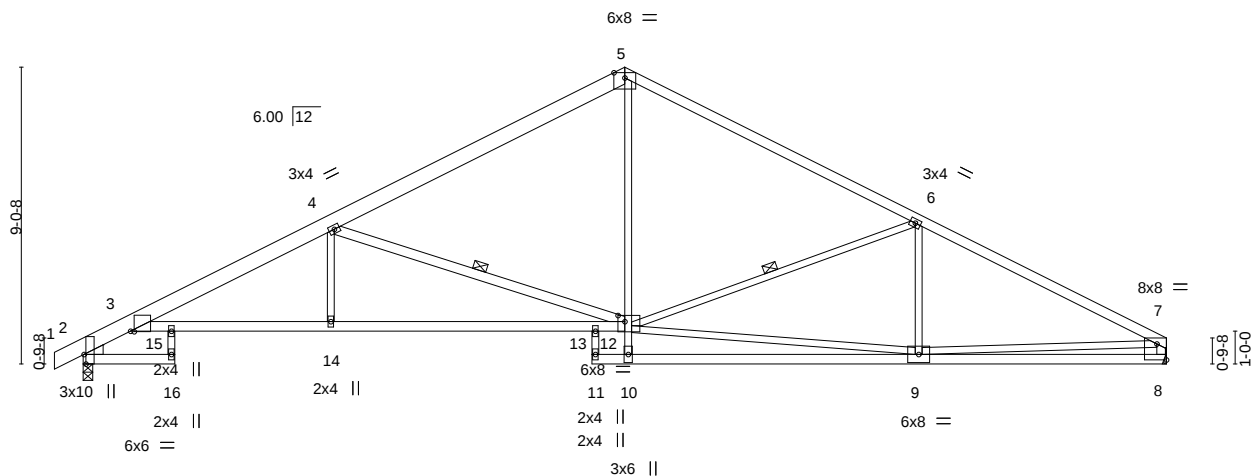
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-7T5GMLSKOPRq0C72yW6NiFVJjGsPH?t0J1PRDcymZYw

0-10-8 2-9-8 7-6-8 15-6-0 16-6-0 25-5-7 33-0-0
0-10-8 2-9-8 4-9-1 7-11-8 1-0-0 8-11-7 7-6-9

Scale = 1:70.2



2-9-8 7-6-8 15-6-0 16-6-0 25-5-7 33-0-0
2-9-8 4-9-1 7-11-8 1-0-0 8-11-7 7-6-9

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	-0.26 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.48 14-15	>826	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.31 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.15 14-15	>999	240	Weight: 153 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
5-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
3-12: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
4-12,7-8: 2x4 SPF No.2

WEDGE
Left: 2x4 SPF No.2

REACTIONS.

(size) 2=0-3-8, 8=Mechanical
Max Horz 2=111(LC 7)
Max Uplift 2=-28(LC 8), 8=-17(LC 9)
Max Grav 2=1544(LC 1), 8=1471(LC 1)

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

TOP CHORD 2-3=-921/47, 3-4=-3212/68, 4-5=-1969/55, 5-6=-1947/64, 6-7=-2455/47, 7-8=-1396/55
BOT CHORD 3-15=-80/2904, 14-15=-80/2904, 13-14=-80/2904, 12-13=-80/2904, 8-9=-24/474
WEBS 11-13=-270/0, 4-14=0/375, 4-12=-1368/169, 10-12=0/499, 5-12=0/1050, 6-12=-622/149,
7-9=0/1638, 9-12=0/2070

NOTES-

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



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478412
400509	D7	Roof Special	1	1		

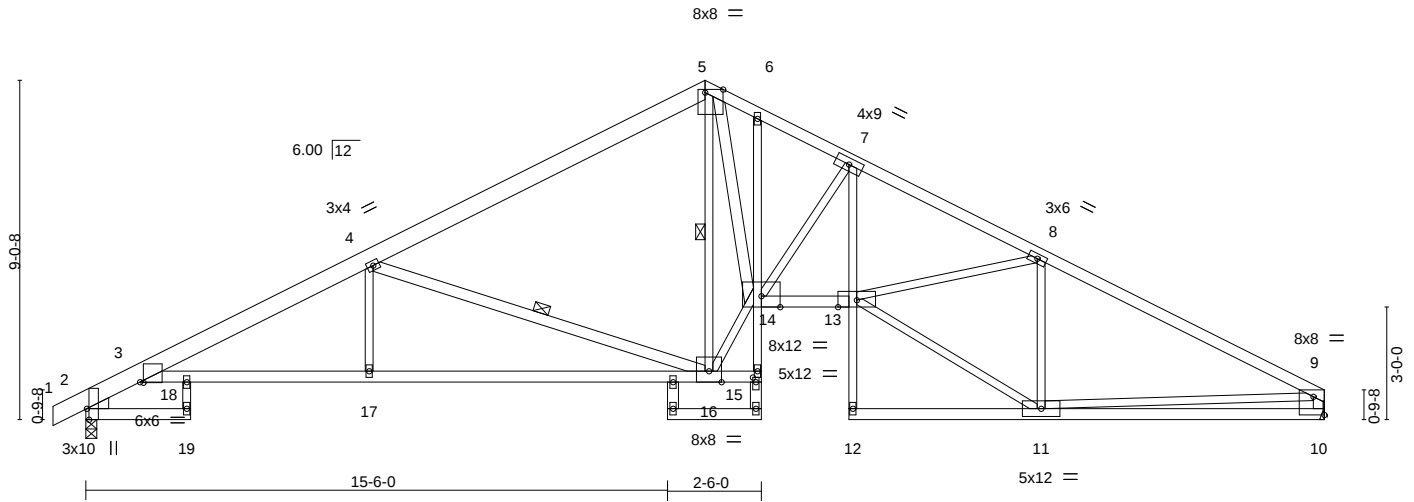
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:01:56 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-cffeZgTz8jzheLiFVEdcES2UNgACOD9Yh8_l3ymZYv

-0-10-8	2-9-8	7-6-9	16-6-0	18-0-0	20-4-0	25-5-8	33-0-0
0-10-8	2-9-8	4-9-2	8-11-7	1-6-0	2-4-0	5-1-8	7-6-9

Scale = 1:61.4



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LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
5-9: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
3-15: 2x4 SPF 2100F 1.8E, 6-15,7-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-16,5-14,20-22,15-21: 2x4 SPF No.2, 9-10: 2x4 SPF 2100F 1.8E
WEDGE
Left: 2x4 SPF No.2

REACTIONS.

(size) 2=0-3-8, 10=Mechanical
Max Horz 2=112(LC 7)
Max Uplift 2=-28(LC 8), 10=-17(LC 9)
Max Grav 2=1544(LC 1), 10=1471(LC 1)

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

TOP CHORD 2-3=-921/47, 3-4=-3222/68, 4-5=-1957/51, 5-6=-2537/30, 6-7=-2682/32, 7-8=-3578/0,
8-9=-2411/39, 9-10=-1392/58
BOT CHORD 3-18=-80/2917, 17-18=-80/2917, 16-17=-80/2917, 13-14=0/3119, 7-13=0/1255,
10-11=-42/568
WEBS 4-17=0/373, 4-16=-1399/168, 5-16=-1676/0, 14-16=0/2799, 5-14=0/3234, 7-14=-1377/42,
11-13=0/2397, 8-13=0/1083, 8-11=-1252/65, 9-11=0/1492

NOTES-

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



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	D8	Roof Special	1	1		I42478413
Job Reference (optional)						

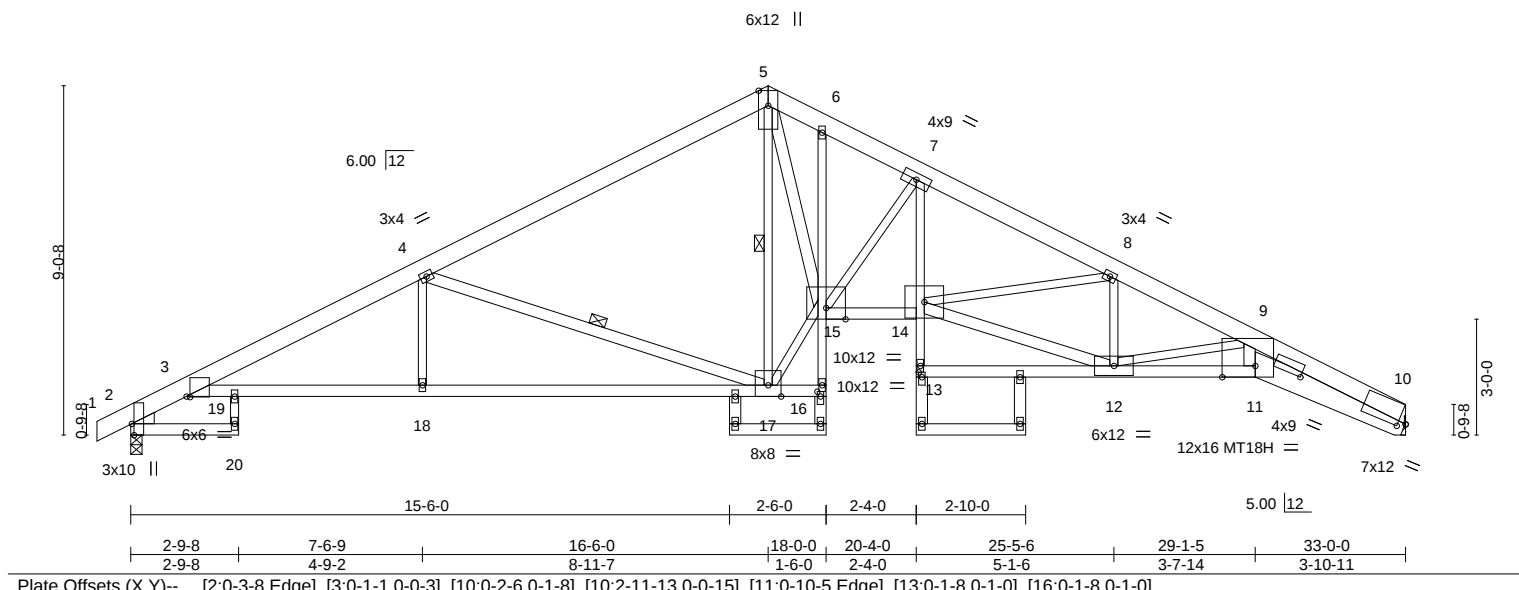
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:01:58 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Y2nO_MVDgKDPtfsddef4Jt7oITs3UlyS??d5qymZYt

0-10-8	2-9-8	7-6-9	16-6-0	18-0-0	20-4-0	25-5-6	29-1-5	33-0-0
0-10-8	2-9-8	4-9-2	8-11-7	1-6-0	2-4-0	5-1-6	3-7-14	3-10-11

Scale = 1:59.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.43 14-15 >906	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.78 14-15 >505	MT18H		197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.73 10 n/a n/a	Weight: 194 lb FT = 10%			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19 14-15 >999 240				

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
5-10: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-16,11-13: 2x4 SPF 2100F 1.8E, 6-16,7-13: 2x3 SPF No.2
10-11: 2x8 SP DSS
WEBS 2x4 SPF No.2 *Except*
19-20,4-18,5-17,15-17,7-15,8-14,8-12,9-12: 2x3 SPF No.2

WEDGE
Left: 2x4 SPF No.2

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=100(LC 5)
Max Uplift 10=-18(LC 9), 2=-28(LC 8)
Max Grav 10=1475(LC 1), 2=1548(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-923/60, 3-4=-3228/66, 4-5=-1984/49, 5-6=-2530/25, 6-7=-2729/32, 7-8=-3730/0,
8-9=-3644/19, 9-10=-6599/17
BOT CHORD 3-19=-77/2921, 18-19=-77/2921, 17-18=-77/2921, 6-15=-33/260, 14-15=0/3261,
7-14=0/1389, 11-12=0/5150, 10-11=0/5964
WEBS 4-18=0/372, 4-17=-1371/163, 5-17=-1601/0, 15-17=0/2752, 5-15=0/3070, 7-15=-1533/40,
12-14=0/3427, 8-12=-546/33, 9-12=-1901/63, 9-11=0/2284

NOTES-

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



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	D9	Roof Special	2	1		I42478414
Job Reference (optional)						

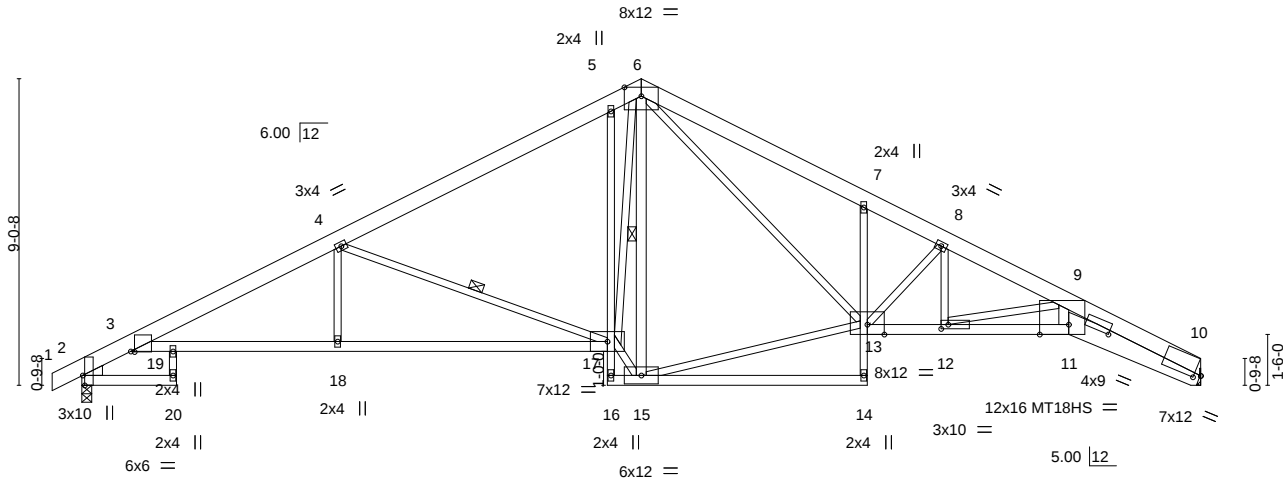
Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-URu9P2WTCyT77z00k3hYPIC8AHYVvCZITJ6CvqymZYr

0-10-8	2-9-8	7-6-8	15-6-0	16-6-0	23-2-0	25-5-6	29-1-5	33-0-0
0-10-8	2-9-8	4-9-1	7-11-8	1-0-0	6-8-0	2-3-6	3-7-15	3-10-11

Scale = 1:68.0



2-9-8	7-6-8	15-6-0	16-6-0	23-2-0	25-5-6	29-1-5	33-0-0
2-9-8	4-9-1	7-11-8	1-0-0	6-8-0	2-3-6	3-7-15	3-10-11

Plate Offsets (X,Y)--		[2:0-3-8,Edge], [3:0-1-5,0-0-3], [10:0-2-6,0-1-8], [10:2-11-13,0-0-15], [11:0-10-5,Edge], [12:0-2-8,0-1-8]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.37 13	>999	360
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.69 17-18	>567	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.63 10	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.17 17-18	>999	240
						Weight: 186 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
6-10: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-17,11-13: 2x4 SPF 2100F 1.8E, 5-16,7-14: 2x3 SPF No.2
10-11: 2x8 SP DSS
WEBS 2x3 SPF No.2 *Except*
6-15,9-11: 2x4 SPF No.2

WEDGE
Left: 2x4 SPF No.2

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=100(LC 5)
Max Uplift 10=-18(LC 9), 2=-28(LC 8)
Max Grav 10=1475(LC 1), 2=1548(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-924/60, 3-4=-3234/59, 4-5=-2028/54, 5-6=-1698/121, 6-7=-3000/135,
7-8=-3011/38, 8-9=-3647/18, 9-10=-6584/19
BOT CHORD 3-19=-69/2923, 18-19=-69/2923, 17-18=-69/2923, 5-17=-37/316, 12-13=0/3312,
11-12=0/5138, 10-11=0/5949
WEBS 4-18=0/385, 4-17=-1348/136, 15-17=0/2030, 6-17=-86/1752, 6-15=-1551/0,
13-15=0/1413, 6-13=-94/1732, 8-13=-1021/12, 8-12=0/576, 9-12=-1886/73, 9-11=0/2273

NOTES-

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



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478415
400509	D10	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-jdUI9VDn5GJgd7bCnJlhu1grlC15bzE4jwZNXnymZZE

0-10-8	7-6-9	16-6-0	23-2-0	26-3-12	29-5-8	33-0-0
0-10-8	7-6-9	8-11-7	6-8-0	3-1-12	3-1-12	3-6-8

Scale = 1:63.3

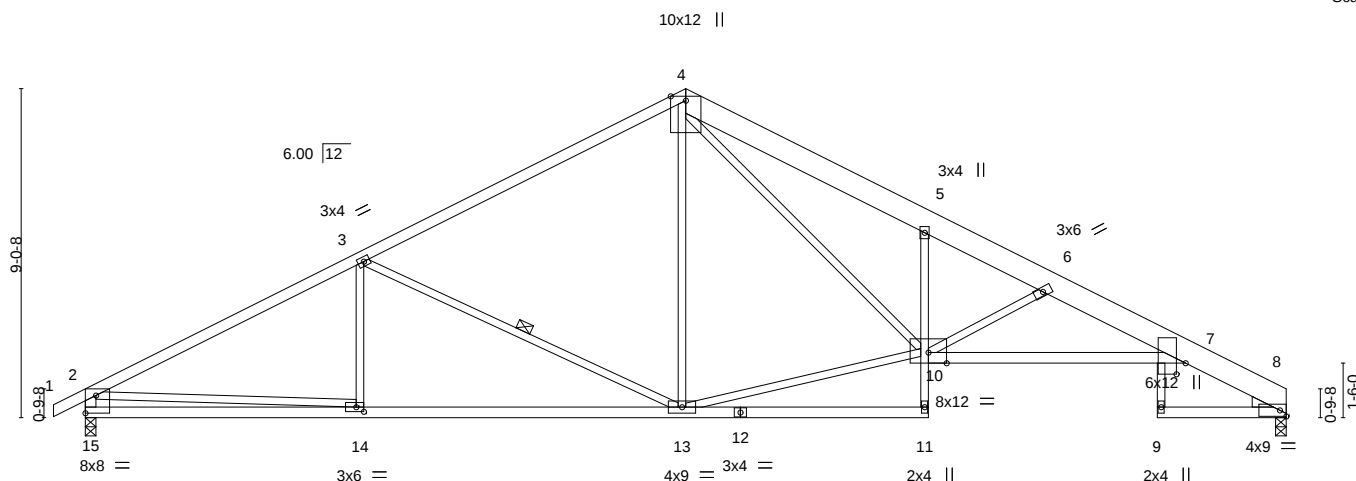


Plate Offsets (X,Y)--	7-0-3-10,0-3-0, [14:0-2-8,0-1-8], [15:Edge,0-5-13]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.90	Vert(LL)	-0.33	9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.66	7-10	>592	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.42	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.22	9	>999	240	Weight: 164 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-8: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
5-11: 2x3 SPF No.2, 7-10: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-15: 2x4 SPF 2100F 1.8E
WEDGE
Right: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 15=0-3-8
Max Horz 15=-145(LC 9)
Max Uplift 8=-174(LC 9), 15=-206(LC 8)
Max Grav 8=1485(LC 1), 15=1546(LC 1)

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

TOP CHORD 2-3=-2456/302, 3-4=-1755/258, 4-5=-3024/473, 5-6=-3094/340, 6-7=-4033/454,
7-8=-773/131, 2-15=-1474/243
BOT CHORD 14-15=-271/616, 13-14=-315/2101, 7-10=-328/3951
WEBS 3-14=0/264, 3-13=-769/274, 4-13=-4/331, 10-13=-62/1448, 4-10=-314/1771,
2-14=-44/1489, 6-10=-1492/243

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=174, 15=206.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	142478416
400509	D11	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-f??SaBE2duZOsRlbukn9zSlHj0oj3sbMAE2UcfymZZC

Job Reference (optional)

9-10-8 16-6-0 18-1-12 23-2-0 26-3-12 29-5-8 33-0-0 33-10-8
0-10-8 16-6-0 1-7-12 5-0-4 3-1-12 3-1-12 3-6-8 0-10-8

6x6 =

Scale = 1:59.6

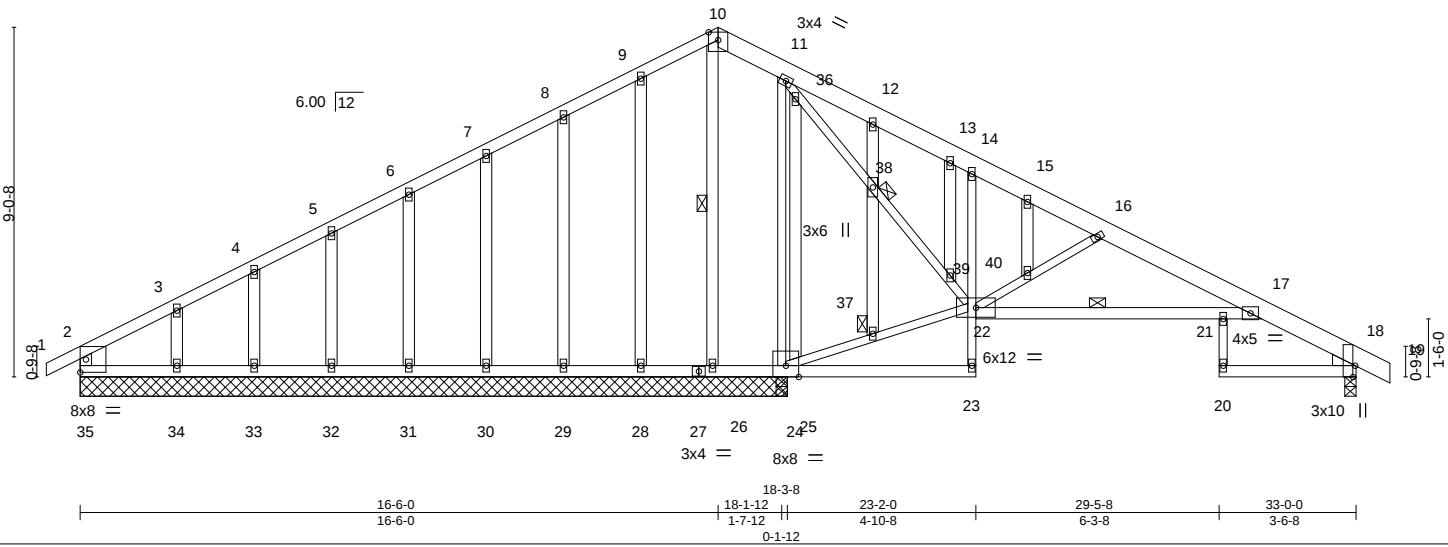


Plate Offsets (X,Y)-- [18-0-3-8,Edge]

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 0.55	Vert(LL)	-0.11 21-22	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.25 21-22	>691	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(CT)	0.08 18	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 21-22	>999	240	Weight: 187 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
10-19: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
14-23: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-35: 2x4 SPF 2100F 1.8E
OTHERS 2x4 SPF No.2
WEDGE
Right: 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, Except:
10-0-0 oc bracing: 22-23,18-20.
6-0-0 oc bracing: 21-22
WEBS 1 Row at midpt 10-26
JOINTS 1 Brace at Jt(s): 37, 38

REACTIONS.

All bearings 18-3-8 except (jt=length) 18=0-3-8, 25=0-3-8.
(lb) - Max Horz 35=-148(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 18, 28, 29, 30, 31, 32, 33 except
35=-435(LC 22), 24=-215(LC 9), 34=-127(LC 8), 25=-321(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 35, 28, 29, 30, 31, 32, 33 except
18=371(LC 1), 24=1153(LC 22), 34=450(LC 1), 26=634(LC 1)

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

TOP CHORD 2-3=-173/779, 3-4=-105/709, 4-5=-65/730, 5-6=-18/725, 6-7=0/726, 7-8=0/725, 8-9=0/731, 9-10=0/699, 10-11=0/660, 11-12=0/472, 12-13=0/463, 13-14=0/376, 14-15=-0/414, 15-16=-15/375, 2-35=-41/378
BOT CHORD 34-35=-622/251, 33-34=-622/251, 32-33=-622/251, 31-32=-622/251, 30-31=-622/251, 29-30=-622/251, 28-29=-622/251, 26-28=-622/251, 25-26=-613/252, 24-25=-613/252, 11-24=-533/160, 24-37=-658/291, 22-37=-622/275, 11-36=-100/434, 36-38=-119/453, 38-39=-109/429, 22-39=-121/473, 22-40=-524/175, 16-40=-515/170, 3-34=-298/126, 10-26=-590/0

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- The Fabrication Tolerance at joint 2 = 2%
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2



August 19,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478416
400509	D11	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-f??SaBE2duZOsRlbukn9zSIHj0oj3sbMAE2UcfymZZC

- NOTES-**
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 28, 29, 30, 31, 32, 33 except (jt=lb) 35=435, 24=215, 34=127, 25=321.
- 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.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	E1	Roof Special	1	1		I42478417
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-ydSXcOX5zFb_k7bClnDnxWIMJht_hsjvzslRGymZYq

-0-10-8	5-2-0	7-6-0	11-5-8	15-0-0	15-10-8
0-10-8	5-2-0	2-4-0	3-11-8	3-6-8	0-10-8

Scale = 1:30.5

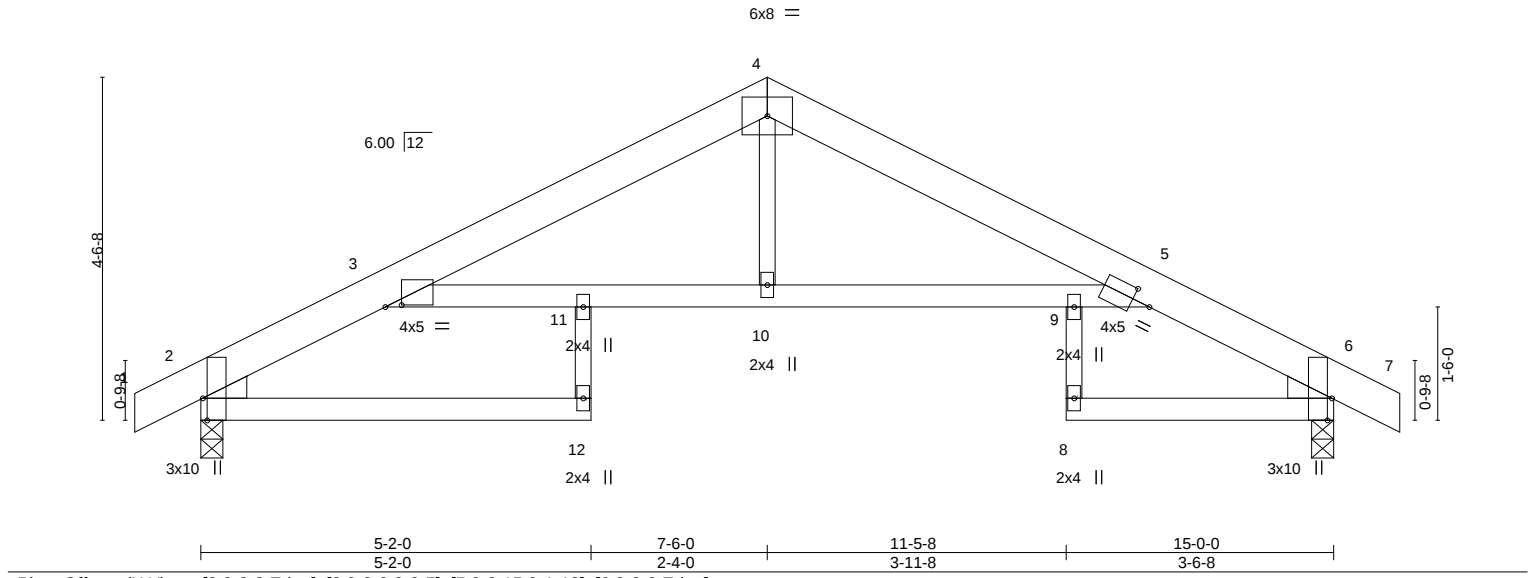


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [3:0-2-9,0-0-5], [5:0-2-15,0-1-13], [6:0-3-8,Edge]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.70		Vert(LL) -0.28 9-10 >629 360		MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.86		Vert(CT) -0.51 9-10 >347 240			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.11		Horz(CT) 0.55 6 n/a n/a			
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL) 0.21 3-11 >857 240		Weight: 61 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.4E
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 10-0-0 oc bracing: 9-10

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
 Max Horz 2=74(LC 8)
 Max Uplift 2=-105(LC 8), 6=-105(LC 9)
 Max Grav 2=733(LC 1), 6=733(LC 1)

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

TOP CHORD 2-3=-348/116, 3-4=-1226/104, 4-5=-1224/140, 5-6=-363/76
 BOT CHORD 3-11=-53/1119, 10-11=-53/1119, 9-10=-53/1119, 5-9=-53/1119
 WEBS 4-10=0/354

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=105, 6=105.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Scale = 1:30.7

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478419
400509	G1	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:04 2020 Page 1

ID:p4_c7DvQapVS5sHzVsjKN5yiJAW-NC8fFQZ_GaZbaJnzvmUZ8N0nu6fuEhLOx4P2bymZYn

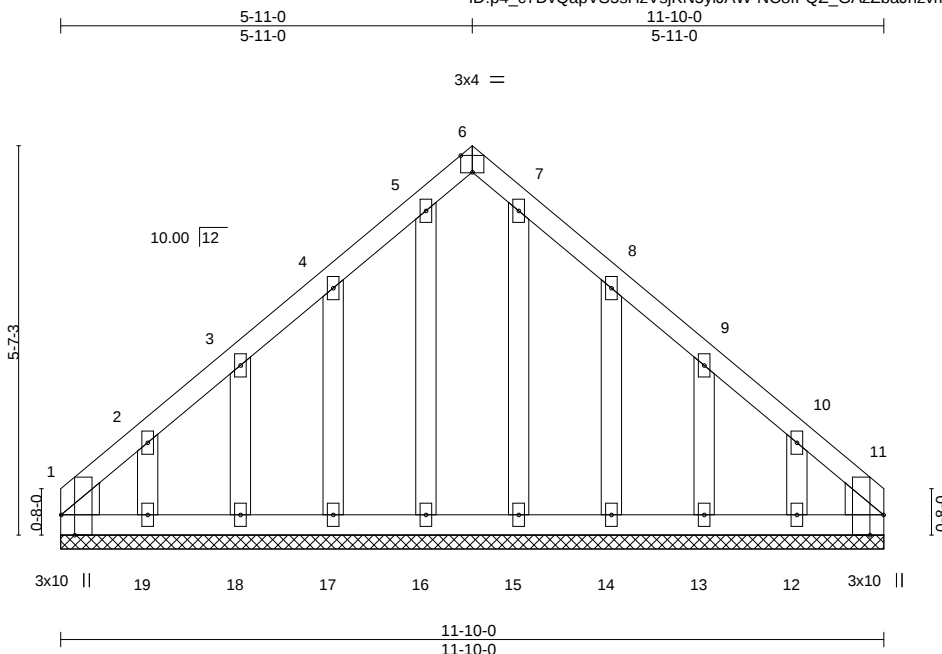


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [6:0-2-0,Edge], [11:0-3-8,Edge]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a - n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a - n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00 11 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 59 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 WEDGE
 Left: 2x6 SPF No.2 , Right: 2x6 SPF No.2

BRACING-

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

REACTIONS.

All bearings 11-10-0.
 (lb) - Max Horz 1=-137(LC 4)
 Max Uplift All uplift 100 lb or less at joint(s) 18, 17, 16, 1, 11, 14, 13 except 19=-105(LC 8), 12=-101(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 19, 18, 17, 16, 1, 11, 15, 14, 13, 12

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 17, 16, 1, 11, 14, 13 except (jt=lb) 19=105, 12=101.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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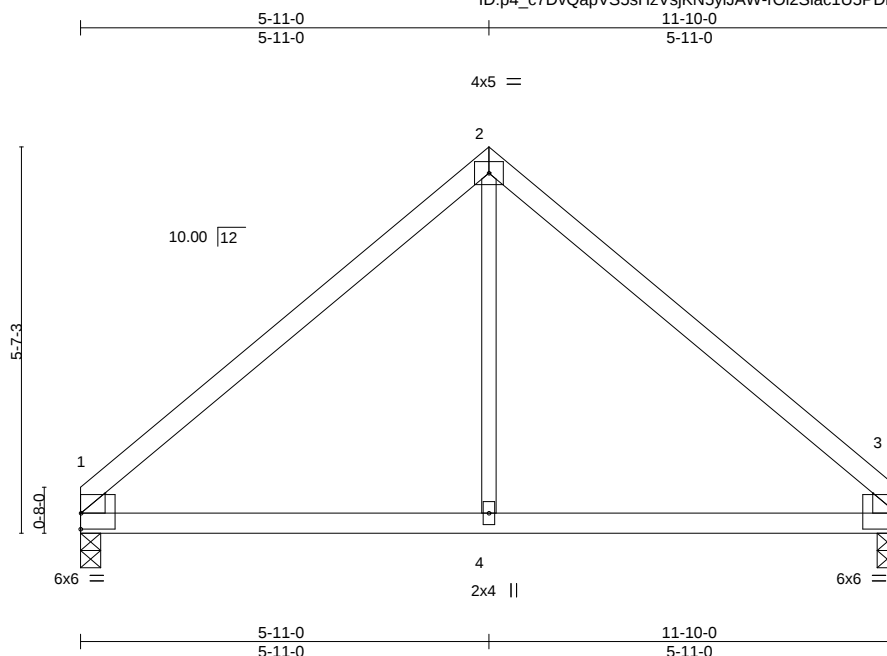
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	G2	COMMON	5	1		I42478420
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:05 2020 Page 1

ID:p4_c7DvQapVS5sHzVsjiKN5yiJAW-rOi2Slac1U5PDkuzXdHj5Mv32IOOdg2Ucbqza1ymZYm



4x5 =

Scale = 1:33.4

Plate Offsets (X, Y)--		[1:Edge,0-2-12], [3:Edge,0-2-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.52
TCDL 10.0	Lumber DOL	1.15	BC 0.32
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.03 3-4 >999 360
			Vert(CT) -0.06 3-4 >999 240
			Horz(CT) 0.01 3 n/a n/a
			Wind(LL) 0.03 1-4 >999 240
			PLATES
			MT20
			GRIP
			197/144
			Weight: 36 lb FT = 10%

LUMBER-

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

BRACING-

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

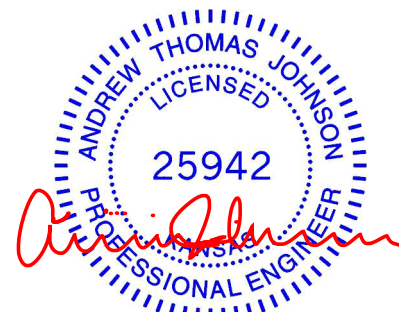
REACTIONS. (size) 1=0-3-8, 3=0-3-8
 Max Horz 1=137(LC 5)
 Max Uplift 1=-50(LC 8), 3=-50(LC 9)
 Max Grav 1=519(LC 1), 3=519(LC 1)

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

TOP CHORD 1-2=-578/101, 2-3=-578/101
 BOT CHORD 1-4=-1/341, 3-4=-1/341
 WEBS 2-4=0/286

NOTES-

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



August 19,2020

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

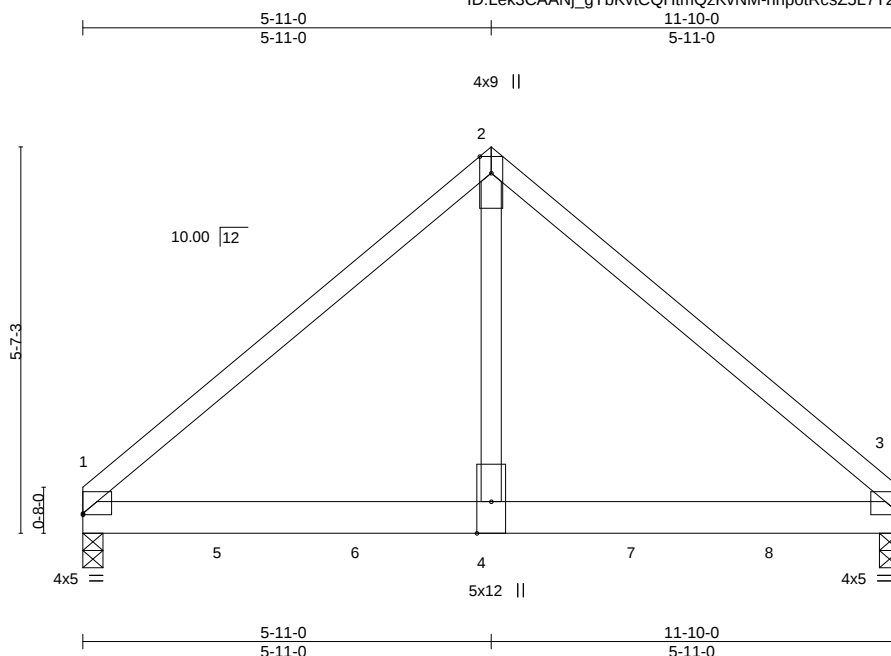
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT
400509	G3	COMMON GIRDER	1	2	
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)

I42478421

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:07 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-nnpotRcsZ5L7T22Mf1KBbN?Ny5_p5Ryn4vJ4ewymZYk

Scale = 1:33.4

Plate Offsets (X,Y)--		[1:0-0-0,0-0-4], [3:0-0-0,0-0-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0		Plate Grip DOL 1.15		TC 0.69		Vert(LL) -0.08	1-4	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.64		Vert(CT) -0.14	1-4	>999	240		
BCLL 0.0 *		Rep Stress Incr NO		WB 0.64		Horz(CT) 0.01	3	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL) 0.04	1-4	>999	240	Weight: 102 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 3=0-3-8
 Max Horz 1=-135(LC 27)
 Max Uplift 1=-123(LC 8), 3=-127(LC 9)
 Max Grav 1=4066(LC 1), 3=4238(LC 1)

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

TOP CHORD 1-2=-4344/180, 2-3=-4344/179
 BOT CHORD 1-4=-60/3168, 3-4=-60/3168
 WEBS 2-4=-55/5221

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=123, 3=127.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1451 lb down and 37 lb up at 2-1-0, 1451 lb down and 37 lb up at 4-1-0, 1455 lb down and 38 lb up at 6-1-0, and 1455 lb down and 38 lb up at 8-1-0, and 1455 lb down and 38 lb up at 10-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



August 19, 2020

Continued on page 2

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT
400509	G3	COMMON GIRDER	1	2	I42478421
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

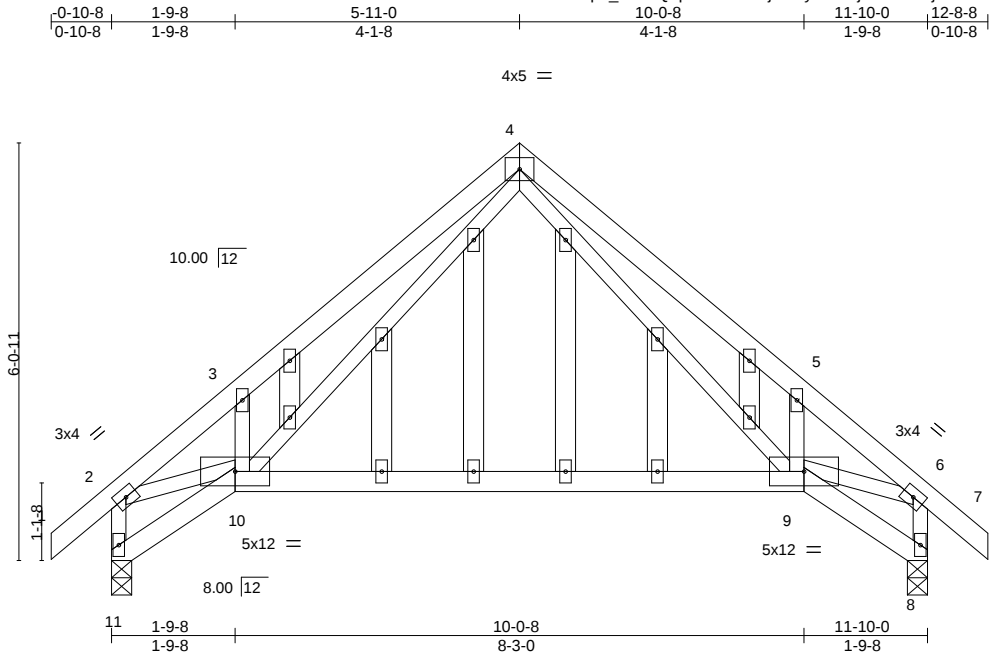
8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:07 2020 Page 2
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LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 4=-1455(B) 5=-1451(B) 6=-1451(B) 7=-1455(B) 8=-1455(B)

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478422
400509	H1	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:09 2020 Page 1
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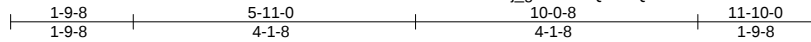


Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478423
400509	H2	Roof Special Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:10 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-BMvVwTelr0kiKvnxKAtuoPdZiJ2_lqxDMtXkFFymZYh



4x9 ||

Scale = 1:33.7

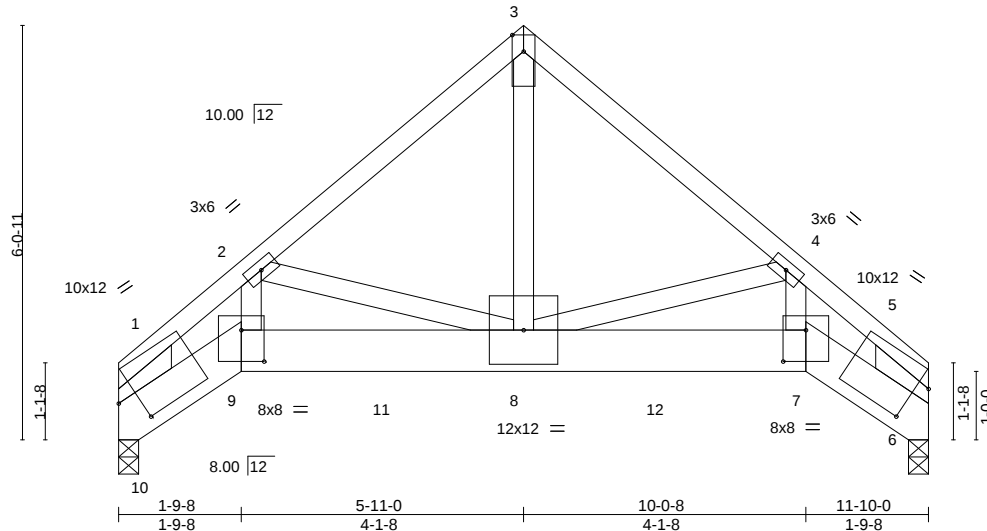


Plate Offsets (X,Y)-- [1:0-3-7,0-5-1], [5:0-2-0,0-7-3], [7:0-4-0,0-5-8], [9:0-4-0,0-5-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.06	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.10	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.56	Horz(CT)	0.10	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	8-9	>999		
								Weight: 161 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SPF No.2 *Except*
1-10,5-6: 2x10 SP 2400F 2.0E

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

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=-152(LC 25)
Max Uplift 10=-115(LC 8), 6=-115(LC 9)
Max Grav 10=4017(LC 1), 6=4017(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5102/188, 2-3=-3912/158, 3-4=-3912/173, 4-5=-5102/150, 1-10=-3420/113, 5-6=-3420/89
BOT CHORD 9-10=-211/2878, 8-9=-203/3677, 7-8=-124/3677, 6-7=-85/2878
WEBS 3-8=-106/4575, 4-8=-763/159, 4-7=-47/1041, 2-8=-762/173, 2-9=-86/1041

- NOTES-**
- 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, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=115, 6=115.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1408 lb down and 35 lb up at 1-9-8, 1408 lb down and 35 lb up at 3-11-0, 1408 lb down and 35 lb up at 5-11-0, and 1408 lb down and 35 lb up at 7-11-0, and 1408 lb down and 35 lb up at 10-0-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



August 19,2020

Continued on page 2

LOAD CASE(S) Standard

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT
400509	H2	Roof Special Girder	1	2	I42478423
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:10 2020 Page 2
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-BMVwVTelr0kiKVnxKAtwoPdZiJ2_lqxDmtXkFFymZYh

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-70, 3-5=-70, 9-10=-20, 7-9=-20, 6-7=-20
- Concentrated Loads (lb)
 - Vert: 9=-1408(B) 7=-1408(B) 8=-1408(B) 11=-1408(B) 12=-1408(B)

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478424
400509	J1	Diagonal Hip Girder	2	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:12 2020 Page 1

ID:Lek3CAAnj_gYbKvtCQHtmQzKvNM-8kdhw9f?Ne_QZpwKRbvMuqjJR6nomsBWDB0qK7ymZYf

Job Reference (optional)



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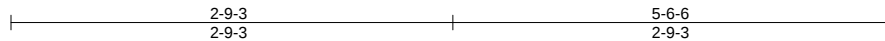
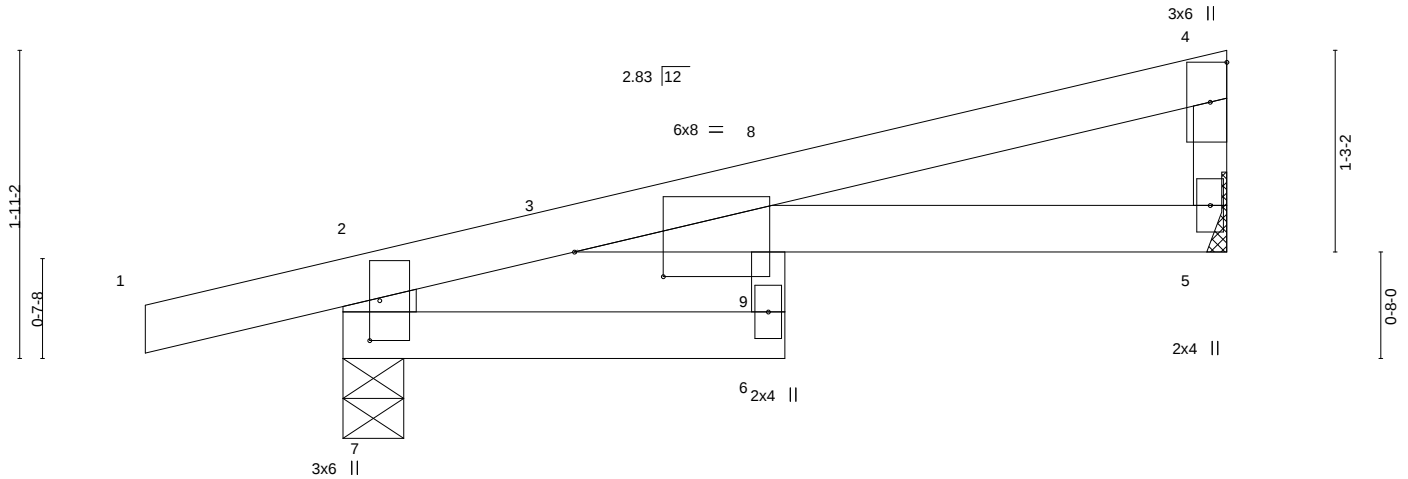


Plate Offsets (X,Y)-- [3:0-6-11,0-1-14], [7:0-3-0,0-0-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.06	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.14	6	>433	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.07	6	>891	240	Weight: 17 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 3-6: 2x3 SPF No.2
 WEBS 2x6 SPF No.2 *Except*
 4-5: 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 7=0-4-9, 5=Mechanical
 Max Horz 7=63(LC 5)
 Max Uplift 7=99(LC 4), 5=-40(LC 8)
 Max Grav 7=364(LC 1), 5=225(LC 1)

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

TOP CHORD 2-7=-342/112

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) 7, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 27 lb up at 2-9-8, and 66 lb down and 27 lb up at 2-9-8 on top chord, and 4 lb down and 3 lb up at 2-7-15, and 4 lb down and 3 lb up at 2-7-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



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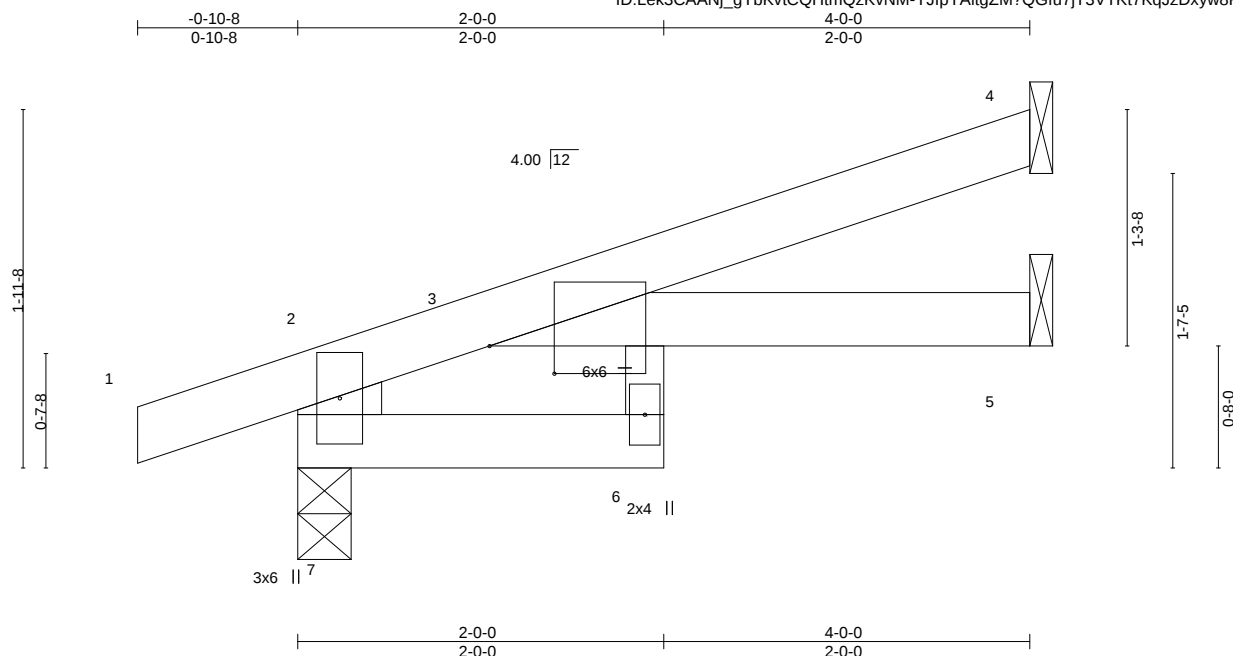
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478425
400509	J2	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHmQzKvNM-YJlpYAitgZM?QGfu7jT3VTKt7KqJzDxyw8FVwSymZYc



Scale = 1:12.6

Plate Offsets (X,Y)-- [3:0-4-4,0-1-13]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	6	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 7=64(LC 4)
 Max Uplift 7=63(LC 4), 4=-44(LC 8)
 Max Grav 7=267(LC 1), 4=107(LC 1), 5=71(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-252/75

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) 7, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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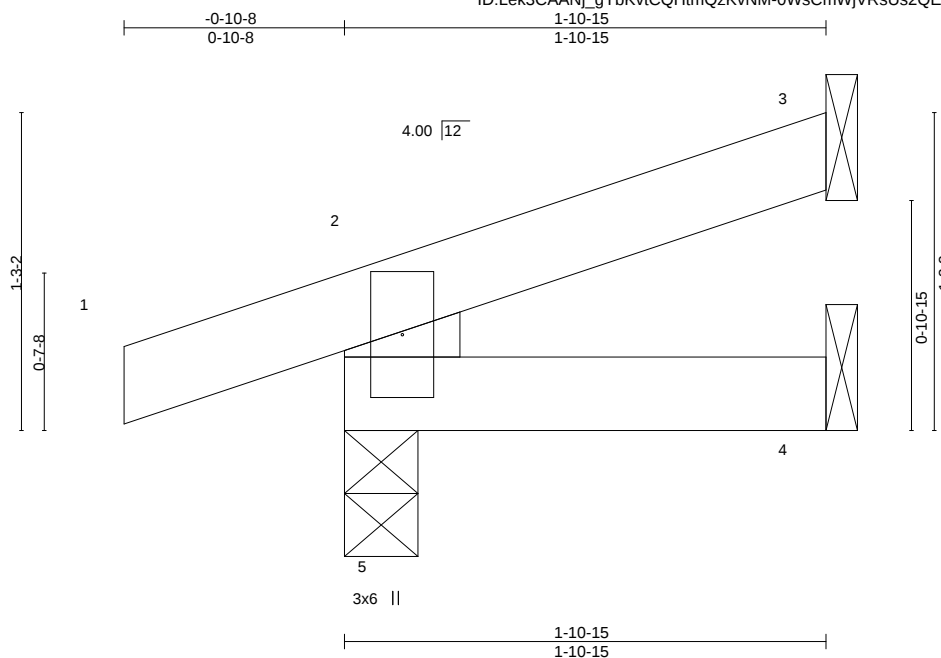
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478426
400509	J3	Jack-Open	4	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-0WsCmWjVRsUs2QE5gQ_l2gt3AkCZifB68o_2TvymZYb



Scale = 1:9.1

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 0.08	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 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=36(LC 4)
Max Uplift 5=65(LC 4), 3=22(LC 8)
Max Grav 5=178(LC 1), 3=40(LC 1), 4=28(LC 3)

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

NOTES-

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



August 19, 2020

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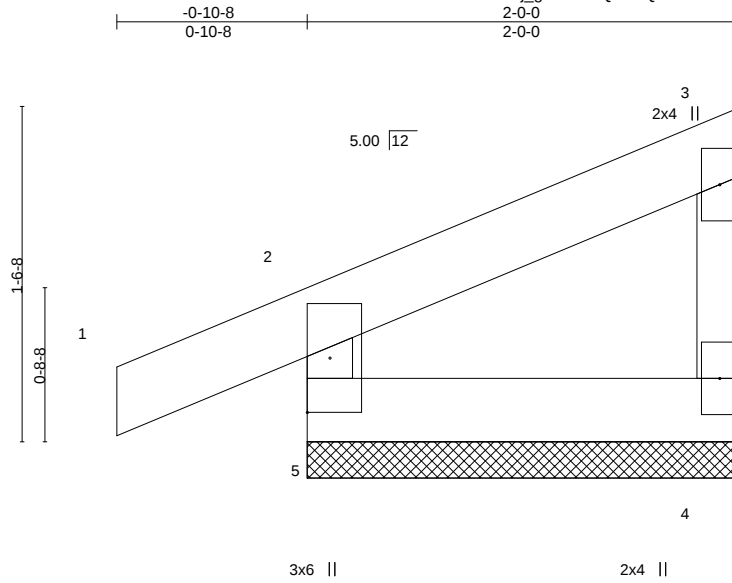
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478427
400509	J4	Jack-Closed Supported Gable	1	1	Job Reference (optional)	

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ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-UiQazsj8CacifapHE8VXbuPE97YnR6QFNSkb?LymZYa



Scale = 1:10.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	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-R						Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=2-0-0, 4=2-0-0
Max Horz 5=58(LC 5)
Max Uplift 5=40(LC 4), 4=-19(LC 5)
Max Grav 5=168(LC 1), 4=62(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 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.



August 19, 2020

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478428
400509	J5	Jack-Closed	5	1	Job Reference (optional)	

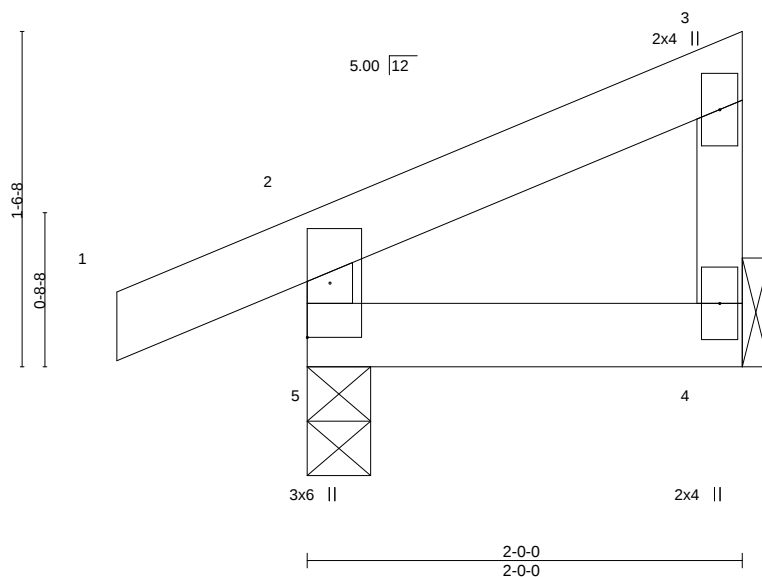
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:17 2020 Page 1

ID:Lek3CAANj_gYbKvTCQHtmQzKvNM-UiQazsj8CacifapHE8VXbuPE97YnR6QFNSkb?LymZYa

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

Scale = 1:10.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

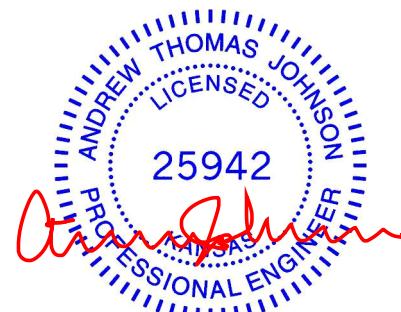
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Horz 5=58(LC 5)
Max Uplift 5=40(LC 4), 4=-19(LC 5)
Max Grav 5=168(LC 1), 4=62(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) 5, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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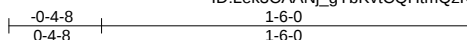
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT
400509	J6	JACK-CLOSED SUPPORTE	2	1	I42478429
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvCQHtmQzKvNM-vH6icum0V5_HW1XsvG2ECW1I?LZaeTAi3QyGcgymZYX



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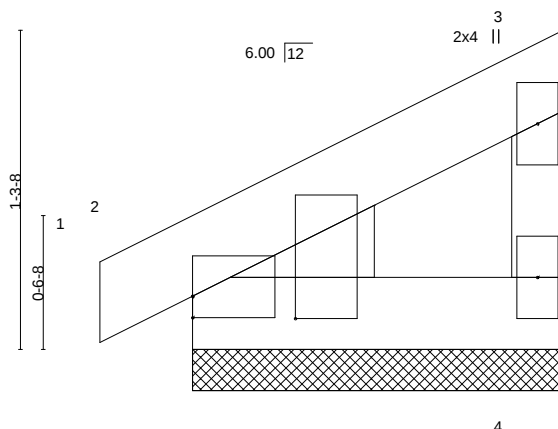


Plate Offsets (X,Y)-- [2:0-0-0,0-1-1], [2:0-1-1,0-5-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		L/defl L/d		PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress 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
WEDGE
Left: 2x4 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=38(LC 5)
Max Uplift 4=17(LC 8), 2=15(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.



August 19,2020

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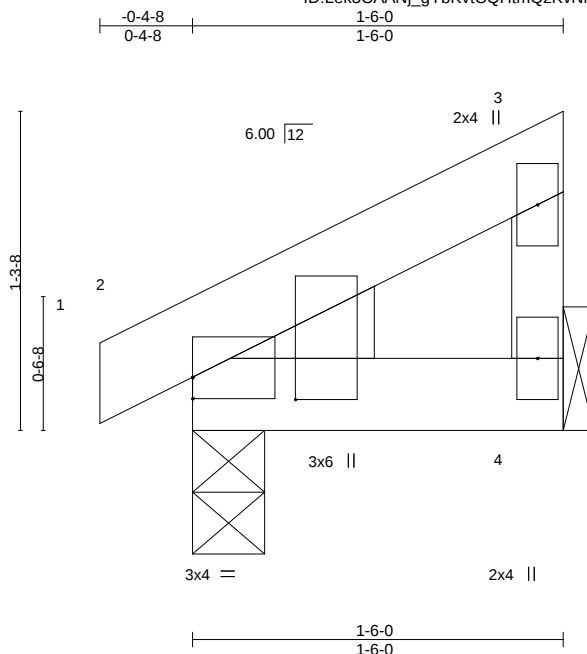
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ID:Lek3CAANI qYbKvtCOHtmOzKyNM-vH6icum0V5 HW1XsvG2ECWj1l1LZJeTAi3OvGcaymZYX



Scale = 1:9.3

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
WEDGE
Left: 2x4 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=38(LC 5)
Max Uplift 4=-17(LC 8), 2=-16(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.



August 19, 2020



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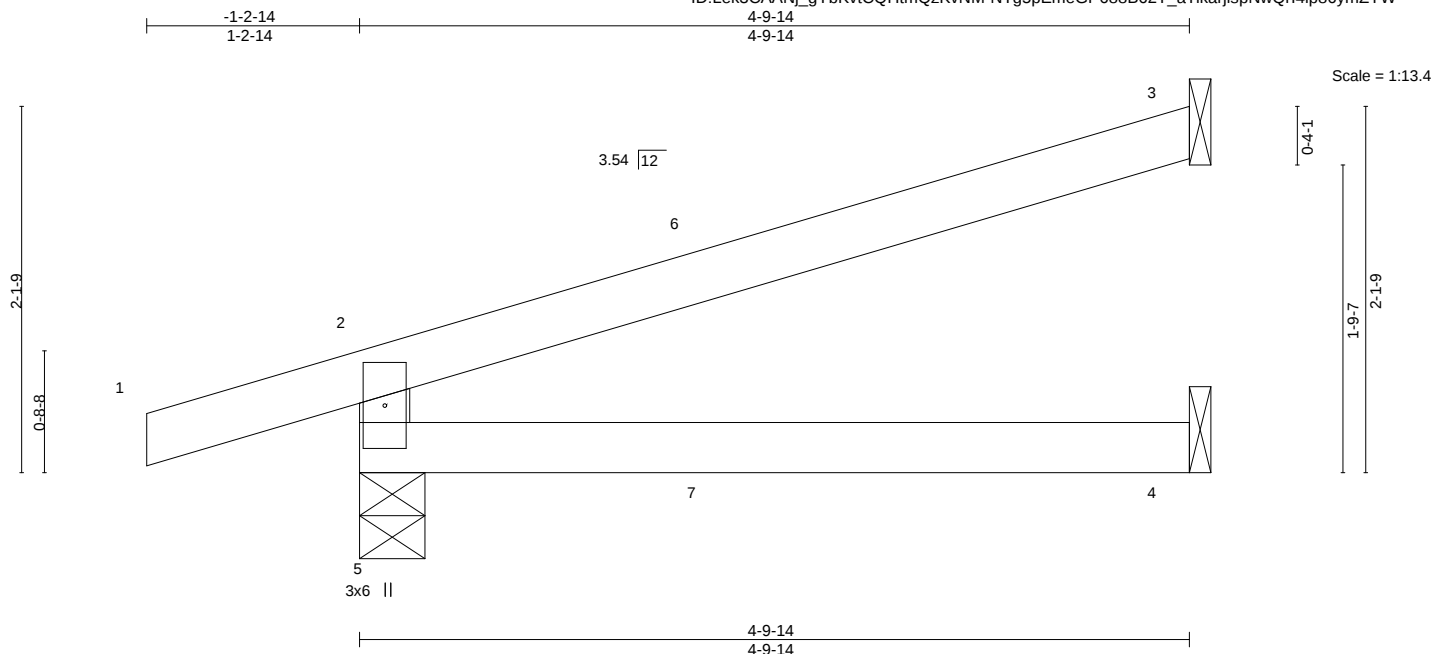


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478431
400509	J8	Diagonal Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:21 2020 Page 1
ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-NTg5pEmeGP688B62T_aTlkarjispNwQrl4ip86ymZYW



LOADING (psf)	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	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.05	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999		
								Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=70(LC 4)
Max Uplift 5=92(LC 4), 3=64(LC 8)
Max Grav 5=317(LC 1), 3=140(LC 1), 4=86(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-280/130

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 22 lb up at 2-1-0, and 66 lb down and 22 lb up at 2-1-0 on top chord, and 2 lb down and 2 lb up at 2-1-0, and 2 lb down and 2 lb up at 2-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



August 19, 2020

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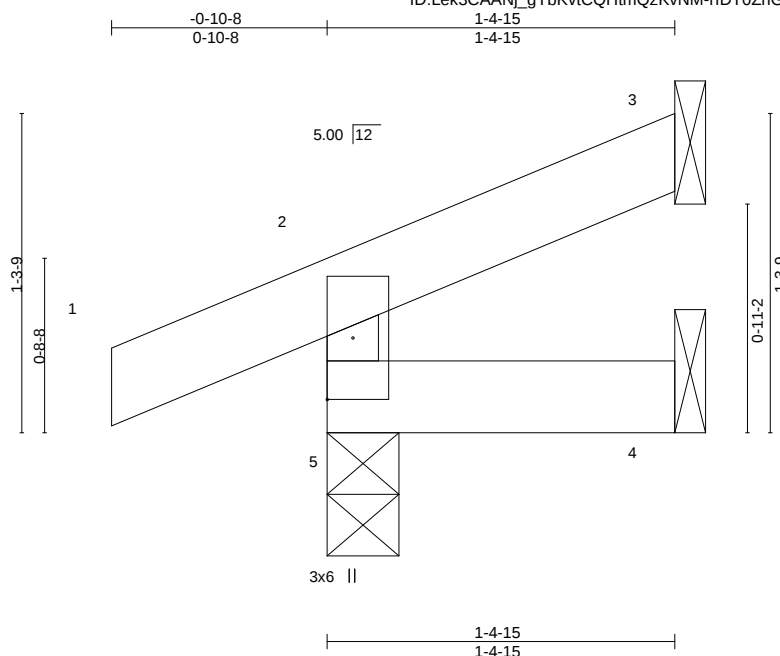
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478432
400509	J9	Jack-Open	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:22 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHmQzKvNM-rfDT0ZnG1E?mLhF1h5ilx64v8F76Ng_XkRMgYymZYV



Scale = 1:9.4

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

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-4-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=33(LC 5)
Max Uplift 5=-34(LC 4), 3=-19(LC 8)
Max Grav 5=153(LC 1), 3=23(LC 1), 4=24(LC 3)

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

NOTES-

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



August 19, 2020

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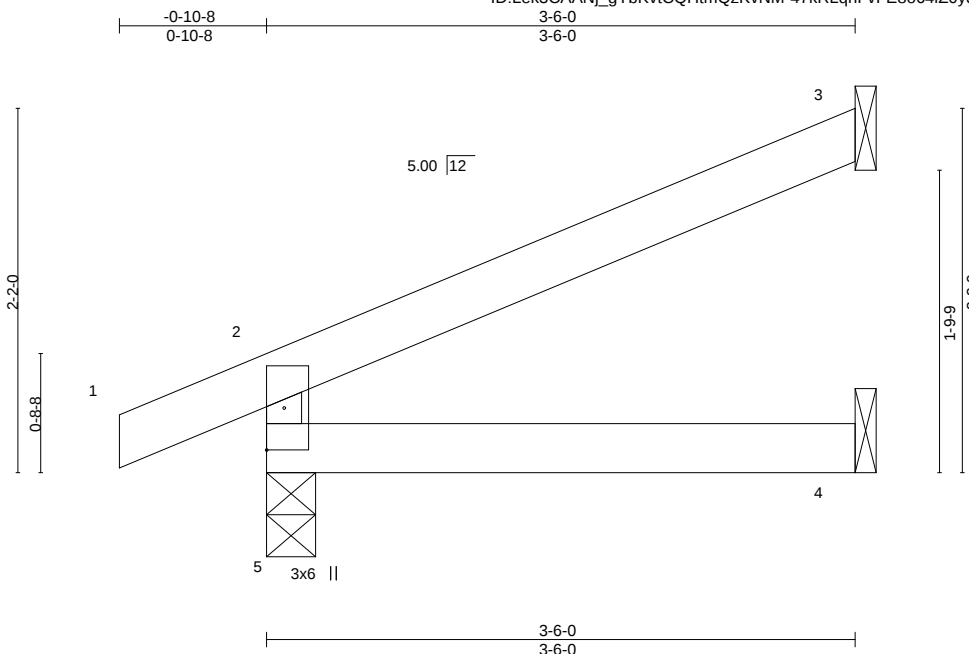
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478433
400509	J10	Jack-Open	8	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-47kRLqhFvFE8o64iZ0yqzFniVwVwEmhphUVxO0ymZYd



Scale = 1:13.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240		
									Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

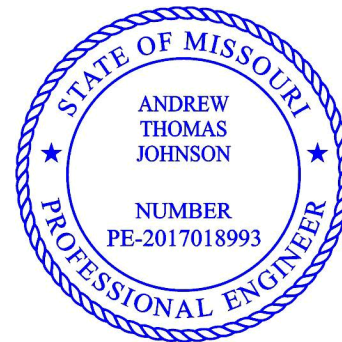
TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=65(LC 8)
Max Uplift 5=34(LC 8), 3=55(LC 8)
Max Grav 5=229(LC 1), 3=103(LC 1), 4=63(LC 3)

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

NOTES-

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



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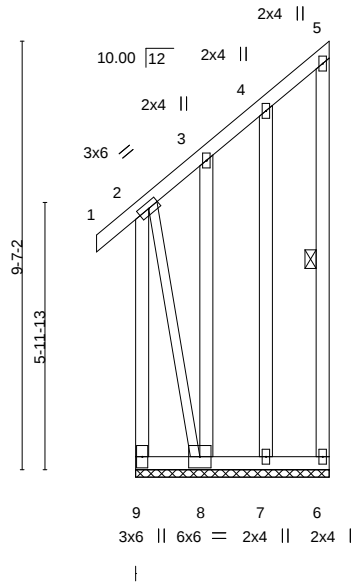
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT
400509	K1	GABLE	2	1	
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:22 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-rfDT0ZnG1iE?mLhF1h5ilx6zI8Fe6DF_XkRMgYymZYV



Scale = 1:51.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	-0.00	1-2	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	1-2	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 51 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-6

REACTIONS.

All bearings 4-4-0.
 (lb) - Max Horz 9=369(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 9=721(LC 6), 8=906(LC 5)
 Max Grav All reactions 250 lb or less at joint(s) 6, 7 except 9=1018(LC 5), 8=794(LC 6)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-9=-1011/733
 BOT CHORD 8-9=-341/246
 WEBS 2-8=-760/956

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=lb) 9=721, 8=906.
- 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.



August 19,2020

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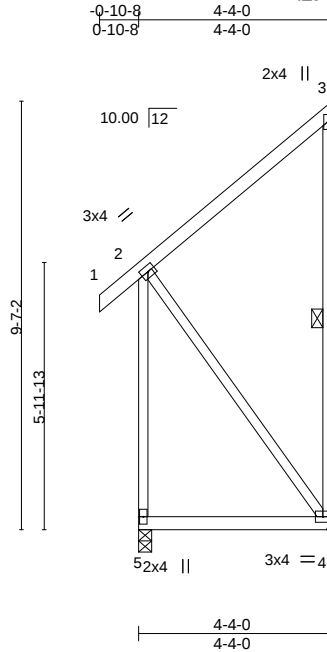
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478435
400509	K2	Monopitch	6	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:23 2020 Page 1

ID:Lek3CAAnj_gYbKvtCQHtmQzKvNM-JsnrEvoun0MsNVGRbOcxq9f9LYZrrmQ8IOBwD?ymZYU



Scale = 1:51.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.03	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.29	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	5	****	240		
									Weight: 30 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-4

REACTIONS.

(size) 4=Mechanical, 5=0-3-8
Max Horz 5=-221(LC 6)
Max Uplift 4=-266(LC 8), 5=-69(LC 6)
Max Grav 4=335(LC 15), 5=287(LC 16)

FORCES.

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

WEBS 2-4=-238/266

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=266.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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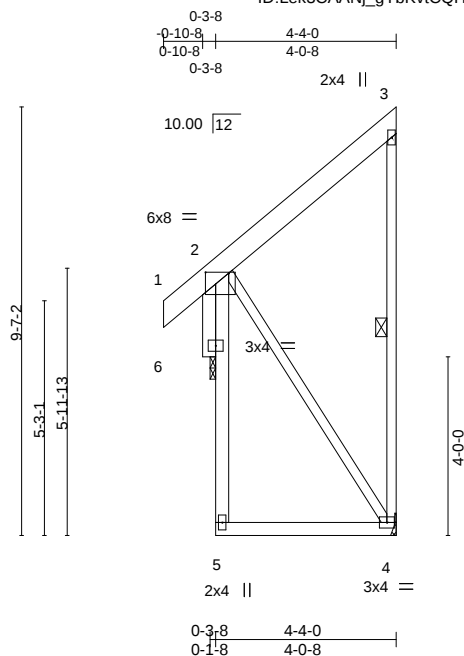
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478436
400509	K3	Monopitch	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:24 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHmQzKvNM-n2LDRFpXYKUj?frd867ANMCOKywuaHIH_2wTIRymZYT



Scale = 1:51.6

Plate Offsets (X,Y)-- [2:0-6-4,0-0-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	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	0.03	Horz(CT)	-0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.01	4-5	>999	240	Weight: 38 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-4

REACTIONS.

(size) 4=Mechanical, 6=0-1-8
 Max Horz 6=-223(LC 6)
 Max Uplift 4=-182(LC 8)
 Max Grav 4=156(LC 15), 6=278(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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 4=182.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2020

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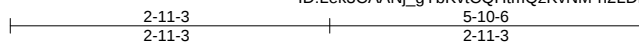
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	LAY1	GABLE	1	1		I42478437
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:24 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-n2LDRFpXYKUj?frd867ANMCRvYxQaHrH_2wTIRymZYT



3x4 =

Scale = 1:21.1

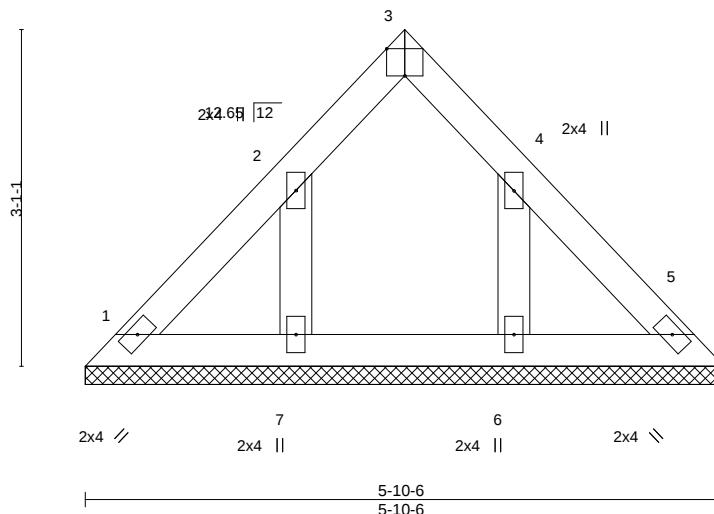


Plate Offsets (X,Y)-- [3:Edge,0-3-0], [4:0-0-1,0-0-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	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 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 5-10-6.
(lb) - Max Horz 1=-72(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 7, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478438
400509	LAY2	GABLE	1	1		

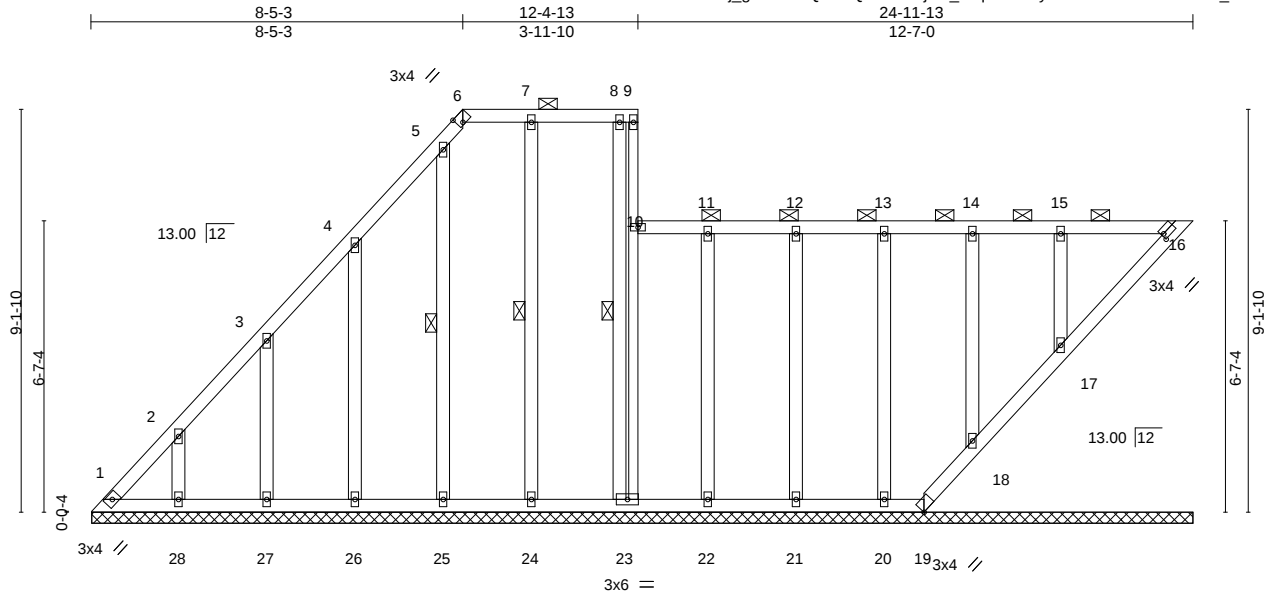
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:26 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-jRT_sxqn4xlREy?0GX9eSnHmemcR2A_aRMPapJymZYR

24-11-13
12-7-0

Scale = 1:52.2



		0-0-4		12-4-13		18-10-10		24-11-13															
		0-0-4		12-4-9		6-5-13		6-1-3															
Plate Offsets (X,Y)--		[6:0-1-7,Edge], [16:0-0-10,0-1-8]																					
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)		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 0.11				Horz(CT)		-0.00		16		n/a		n/a					
BCDL 10.0		Code IRC2018/TPI2014				Matrix-S														Weight: 142 lb		FT = 10%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9, 10-23, 10-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17.
WEBS 1 Row at midpt 5-25, 7-24, 8-23

REACTIONS.

All bearings 24-11-9.
(lb) - Max Horz 1=464(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 16, 19, 24, 23, 22, 21, 20, 18, 17 except 1=137(LC 6), 28=-131(LC 8), 27=-129(LC 8), 26=-131(LC 8), 25=-132(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 16, 19, 28, 27, 26, 25, 24, 23, 22, 21, 20, 18 except 1=398(LC 8), 17=252(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-557/247, 2-3=-434/199, 3-4=-303/150

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 19, 24, 23, 22, 21, 20, 18, 17 except (jt=lb) 1=137, 28=131, 27=129, 26=131, 25=132.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16, 18, 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2020

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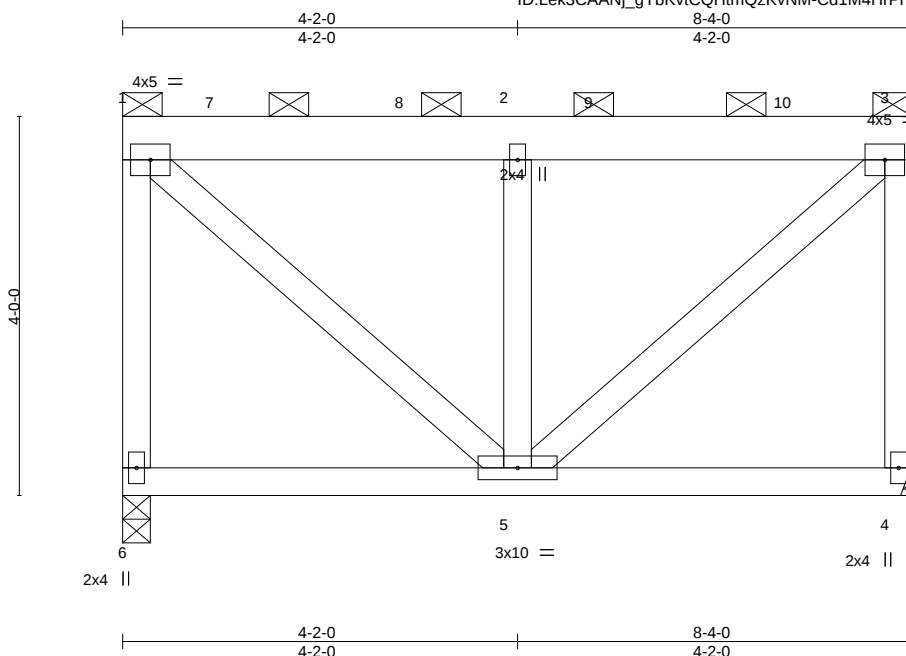
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400509	Truss R1	Truss Type Flat Girder	Qty 1	Ply 1	Lot 17 HT Job Reference (optional)	I42478439
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Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-Cd1M4HrPrFtlS6aCqEgt??qup9wOnbhjg097MmymZYQ



Scale = 1:24.3

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 0.31	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.21	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	5	>999	240	Weight: 47 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=0-3-8, 4=Mechanical
Max Horz 6=-138(LC 4)
Max Grav 6=792(LC 1), 4=768(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-759/10, 1-2=-531/0, 2-3=-531/0, 3-4=-735/16
WEBS 1-5=-107/14, 2-5=-863/12, 3-5=-107/14

NOTES-

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

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 4-6=-20
Concentrated Loads (lb)
Vert: 7=-211 8=-208 9=-208 10=-208



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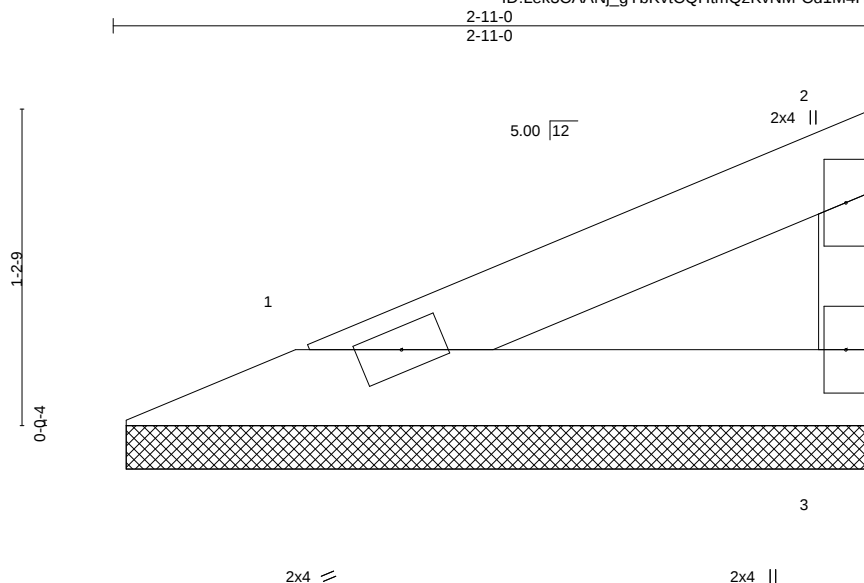
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478440
400509	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvCQHtmQzKvNM-Cd1M4HrPrFts6aCqEgt??qxY9ytnevjg097MmymZYQ



Scale = 1:8.8

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

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=2-10-6, 3=2-10-6
Max Horz 1=38(LC 7)
Max Uplift 1=-13(LC 8), 3=-21(LC 8)
Max Grav 1=93(LC 1), 3=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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19, 2020

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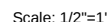
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Chesterfield, MO 63017

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ID:Lek3CAANj gYbKvtCOhtmOzKvNM-qpbkHds1cY?9UG9ONvC6XCM3VZGXW5GtvquhuCvmZYP



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.

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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.



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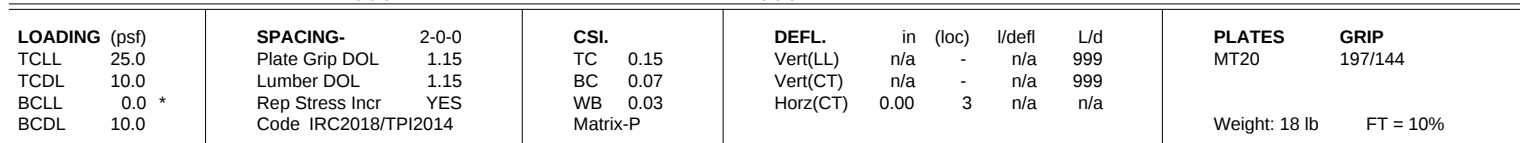


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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:29 2020 Page 1
ID:Lek3CAAN_gYbKvtCQHtmQzKvNM-8086VztfNs705QkxbfjL4QvGszdsFY_08KeEQeymZY0
3-2-14 6-5-13
3-2-14 3-2-14
4x5 = Scale = 1:18.4



REACTIONS. (size) 1=6-5-3, 3=6-5-3, 4=6-5-3
 Max Horz 1=62(LC 5)
 Max Uplift 1=-32(LC 8), 3=-39(LC 9)
 Max Grav 1=154(LC 1), 3=154(LC 1), 4=203(LC 1)

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.



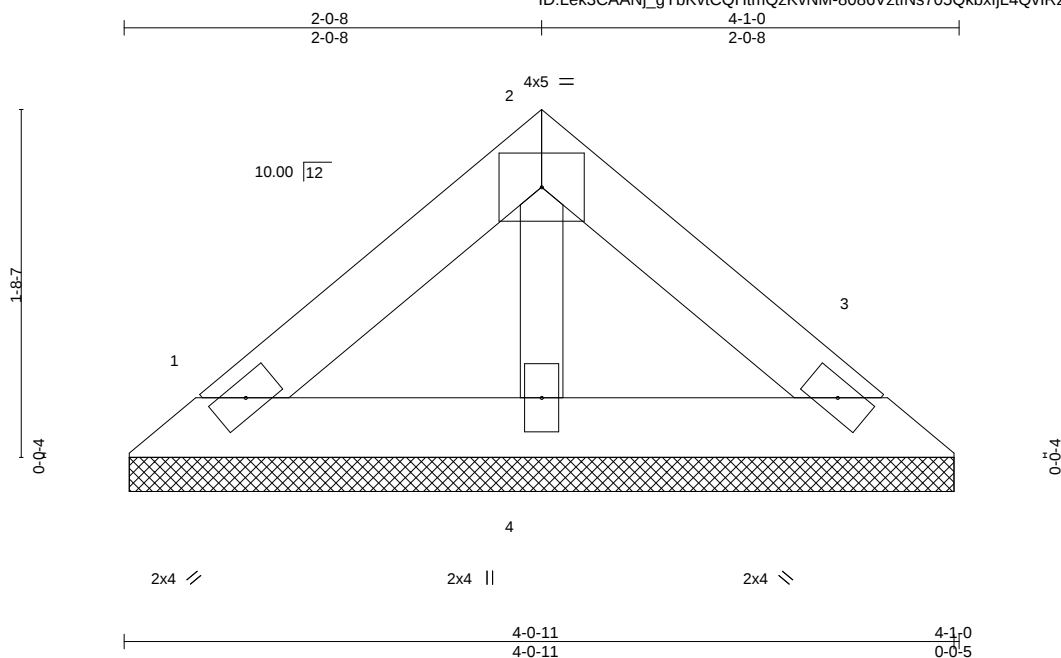
August 19, 2020

Job 400509	Truss V4	Truss Type Valley	Qty 1	Ply 1	Lot 17 HT Job Reference (optional)	I42478443
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Wheeler Lumber, Waverly, KS 66871

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ID:Lek3CAANj_gYbKvtCQHmQzKvNM-8086VztfNs705QkbfjL4QvIRzeaFYC08KeEQeYmZYO



Scale = 1:11.3

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 0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

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

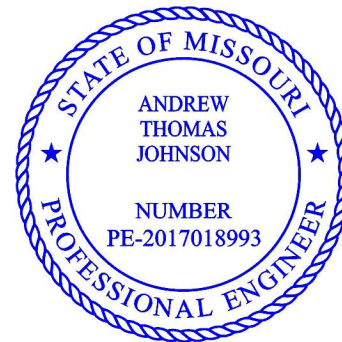
REACTIONS.

(size) 1=4-0-6, 3=4-0-6, 4=4-0-6
Max Horz 1=-36(LC 4)
Max Uplift 1=-18(LC 8), 3=-23(LC 9)
Max Grav 1=89(LC 1), 3=89(LC 1), 4=117(LC 1)

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

NOTES-

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



August 19, 2020

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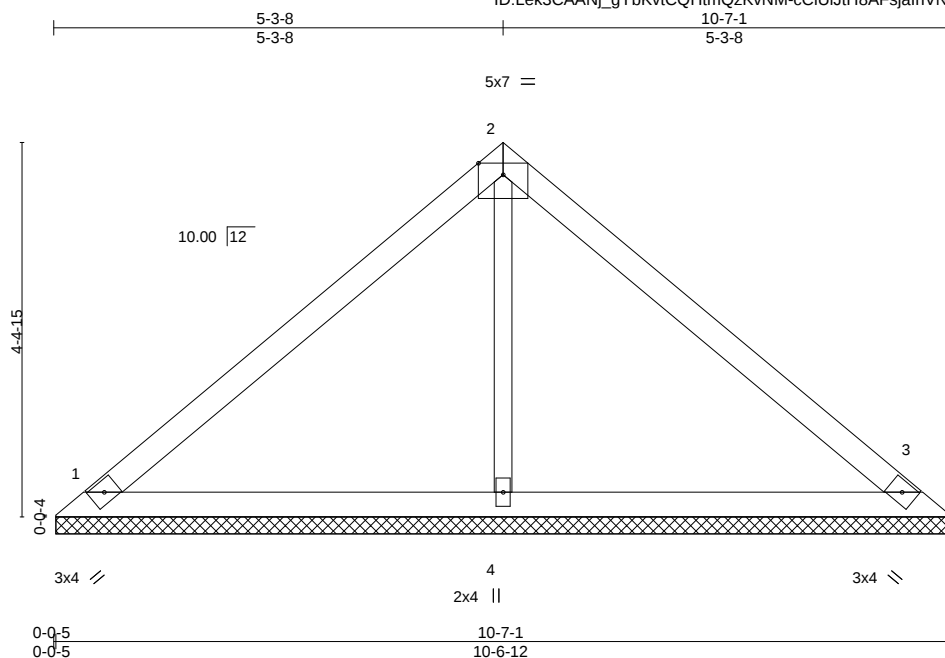
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	V5	Valley	1	1		I42478444
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:27.1

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 0.34	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 30 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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=10-6-7, 3=10-6-7, 4=10-6-7
Max Horz 1=-106(LC 4)
Max Uplift 1=-41(LC 8), 3=-53(LC 9), 4=-9(LC 8)
Max Grav 1=245(LC 1), 3=245(LC 1), 4=390(LC 1)

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

NOTES-

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



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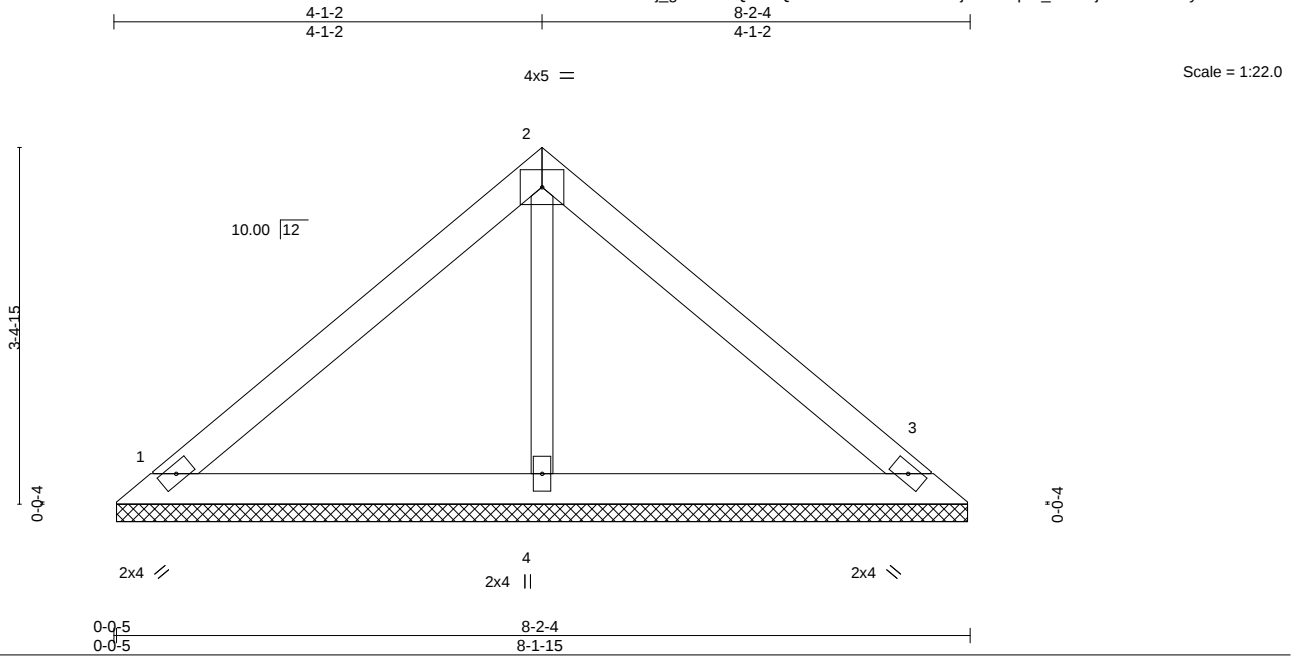
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	
400509	V6	Valley	1	1		I42478445
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:31 2020 Page 1

ID:Lek3CAANj_gYbKvtCQHtmQzKvNM-4OGtveuwvTNjLktz34lp9r_acnJbjSAJbe7LVXymZYM



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 23 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-1-10, 3=8-1-10, 4=8-1-10
Max Horz 1=80(LC 5)
Max Uplift 1=-41(LC 8), 3=-51(LC 9)
Max Grav 1=200(LC 1), 3=200(LC 1), 4=264(LC 1)

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

NOTES-

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



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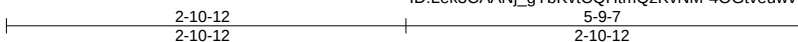
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 17 HT	I42478446
400509	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

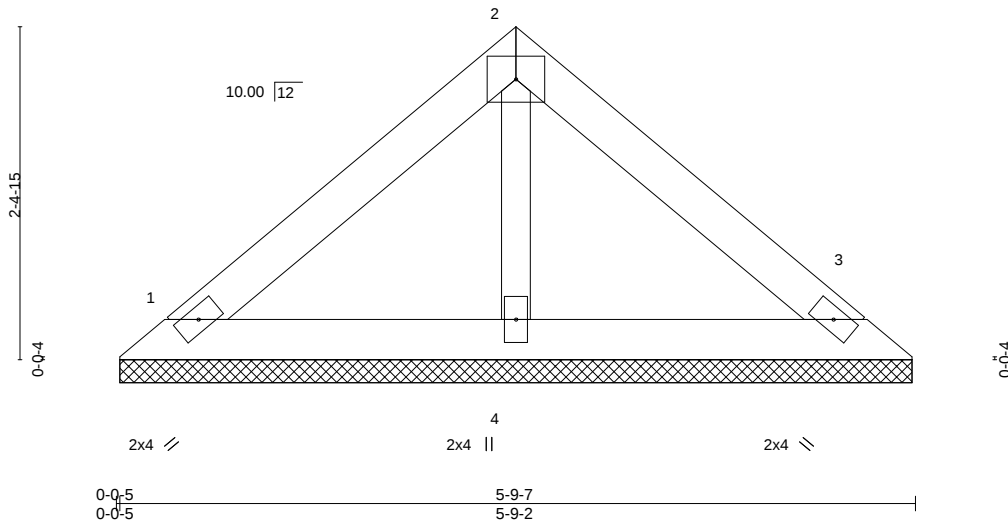
8.410 s May 22 2020 MiTek Industries, Inc. Tue Aug 18 16:02:31 2020 Page 1

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4x5 =

Scale = 1:16.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	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 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 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 5-9-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-8-14, 3=5-8-14, 4=5-8-14
Max Horz 1=54(LC 5)
Max Uplift 1=28(LC 8), 3=34(LC 9)
Max Grav 1=135(LC 1), 3=135(LC 1), 4=178(LC 1)

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

NOTES-

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



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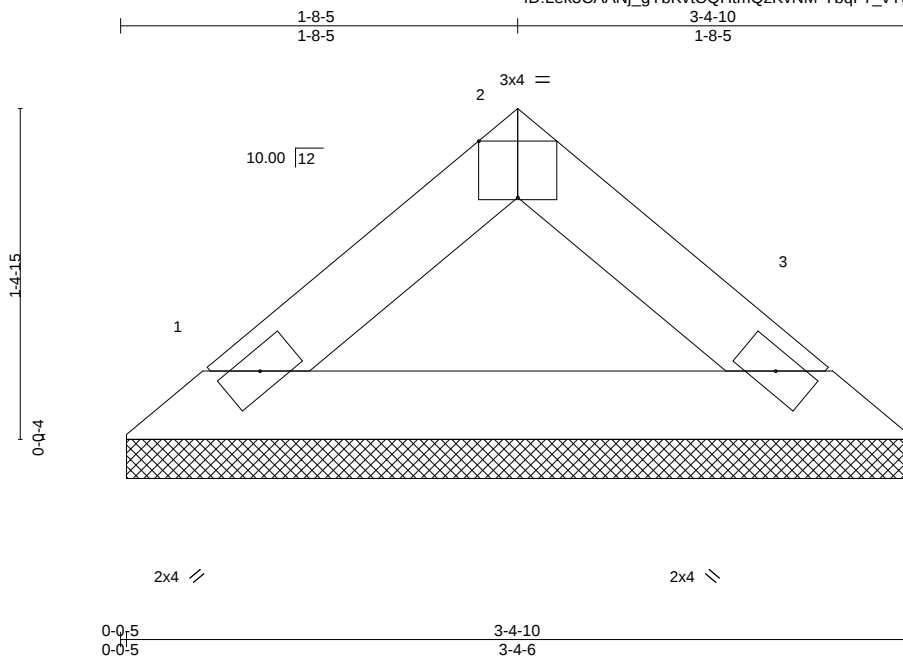
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400509	Truss V8	Truss Type Valley	Qty 1	Ply 1	Lot 17 HT Job Reference (optional)	I42478447
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Wheeler Lumber, Waverly, KS 66871

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Scale = 1:9.8

Plate Offsets (X,Y)-- [2:0-2-0,Edge]		2:0-2-0,Edge		3-4-10		3-4-6	
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.03		Vert(LL)	n/a - n/a 999
TCDL 10.0		Lumber DOL	1.15	BC 0.07		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			
						PLATES	GRIP
						MT20	197/144
						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 3-4-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-4-1, 3=3-4-1
Max Horz 1=28(LC 7)
Max Uplift 1=-12(LC 8), 3=-12(LC 9)
Max Grav 1=116(LC 1), 3=116(LC 1)

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

NOTES-

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



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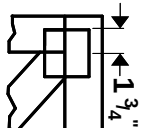
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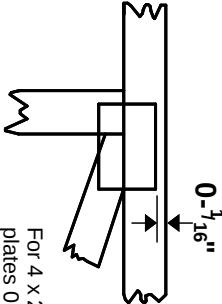
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

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

*** Plate location details available in MITek 20120 software or upon request.**

PLATE SIZE

4 X 4

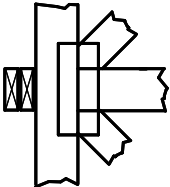
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



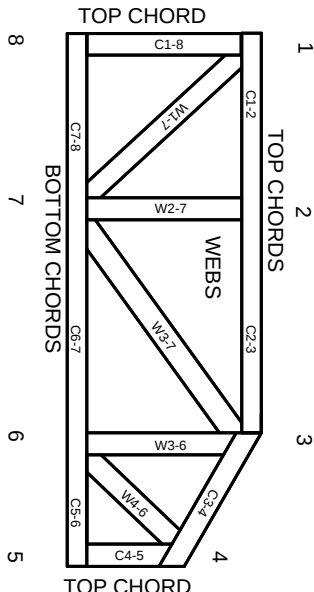
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.