



RE: 400361
Lot 51 H4

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 8.2

Wind Speed: 115 mph

Floor Load: N/A psf

This package includes 49 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41214282	A1	6/17/2020	27	I41214308	D1	6/17/2020
2	I41214283	A2	6/17/2020	28	I41214309	D2	6/17/2020
3	I41214284	A3	6/17/2020	29	I41214310	E1	6/17/2020
4	I41214285	A4	6/17/2020	30	I41214311	E2	6/17/2020
5	I41214286	B1	6/17/2020	31	I41214312	E3	6/17/2020
6	I41214287	B2	6/17/2020	32	I41214313	J1	6/17/2020
7	I41214288	B3	6/17/2020	33	I41214314	J2	6/17/2020
8	I41214289	B4	6/17/2020	34	I41214315	J3	6/17/2020
9	I41214290	B5	6/17/2020	35	I41214316	J4	6/17/2020
10	I41214291	B6	6/17/2020	36	I41214317	J5	6/17/2020
11	I41214292	B7	6/17/2020	37	I41214318	J6	6/17/2020
12	I41214293	B8	6/17/2020	38	I41214319	J7	6/17/2020
13	I41214294	B9	6/17/2020	39	I41214320	J8	6/17/2020
14	I41214295	B10	6/17/2020	40	I41214321	LAY1	6/17/2020
15	I41214296	B11	6/17/2020	41	I41214322	V1	6/17/2020
16	I41214297	B12	6/17/2020	42	I41214323	V2	6/17/2020
17	I41214298	C1	6/17/2020	43	I41214324	V3	6/17/2020
18	I41214299	C2	6/17/2020	44	I41214325	V4	6/17/2020
19	I41214300	C3	6/17/2020	45	I41214326	V5	6/17/2020
20	I41214301	C4	6/17/2020	46	I41214327	V6	6/17/2020
21	I41214302	C5	6/17/2020	47	I41214328	V7	6/17/2020
22	I41214303	C5A	6/17/2020	48	I41214329	V8	6/17/2020
23	I41214304	C6	6/17/2020	49	I41214330	V9	6/17/2020
24	I41214305	C7	6/17/2020				
25	I41214306	C8	6/17/2020				
26	I41214307	C9	6/17/2020				

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.



June 17, 2020



RE: 400361
Lot 51 H4

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16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

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Design Code: IRC2018/TPI2014

Wind Code: N/A

Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.2

Wind Speed: 115 mph

Floor Load: N/A psf

This package includes 49 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41214282	A1	6/17/2020	27	I41214308	D1	6/17/2020
2	I41214283	A2	6/17/2020	28	I41214309	D2	6/17/2020
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4	I41214285	A4	6/17/2020	30	I41214311	E2	6/17/2020
5	I41214286	B1	6/17/2020	31	I41214312	E3	6/17/2020
6	I41214287	B2	6/17/2020	32	I41214313	J1	6/17/2020
7	I41214288	B3	6/17/2020	33	I41214314	J2	6/17/2020
8	I41214289	B4	6/17/2020	34	I41214315	J3	6/17/2020
9	I41214290	B5	6/17/2020	35	I41214316	J4	6/17/2020
10	I41214291	B6	6/17/2020	36	I41214317	J5	6/17/2020
11	I41214292	B7	6/17/2020	37	I41214318	J6	6/17/2020
12	I41214293	B8	6/17/2020	38	I41214319	J7	6/17/2020
13	I41214294	B9	6/17/2020	39	I41214320	J8	6/17/2020
14	I41214295	B10	6/17/2020	40	I41214321	LAY1	6/17/2020
15	I41214296	B11	6/17/2020	41	I41214322	V1	6/17/2020
16	I41214297	B12	6/17/2020	42	I41214323	V2	6/17/2020
17	I41214298	C1	6/17/2020	43	I41214324	V3	6/17/2020
18	I41214299	C2	6/17/2020	44	I41214325	V4	6/17/2020
19	I41214300	C3	6/17/2020	45	I41214326	V5	6/17/2020
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21	I41214302	C5	6/17/2020	47	I41214328	V7	6/17/2020
22	I41214303	C5A	6/17/2020	48	I41214329	V8	6/17/2020
23	I41214304	C6	6/17/2020	49	I41214330	V9	6/17/2020
24	I41214305	C7	6/17/2020				
25	I41214306	C8	6/17/2020				
26	I41214307	C9	6/17/2020				

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.



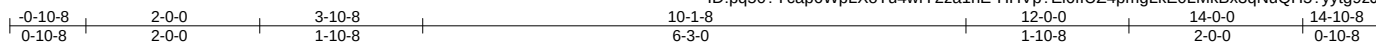
June 17, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214282
400361	A1	Hip Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-HHVP?El6ffUZ4pmgLEOLMkBX3qNuQH5?yytg9zJG?V



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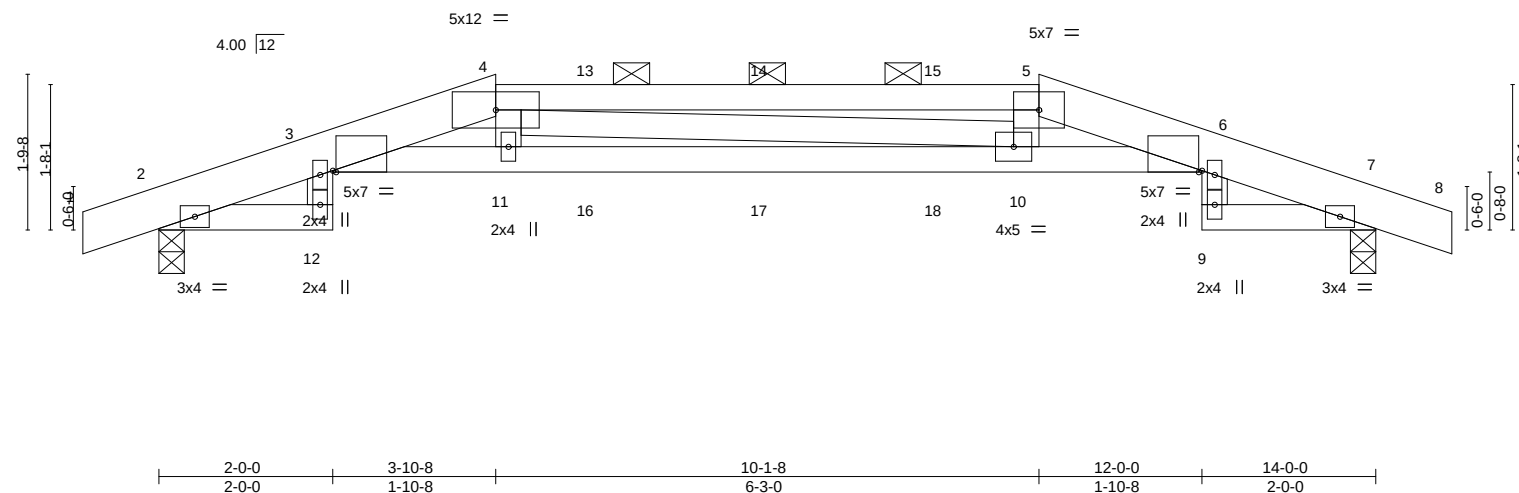


Plate Offsets (X,Y)--		[3:0-0-7,Edge], [6:0-0-7,Edge]									
		2-0-0	3-10-8	10-1-8	12-0-0	14-0-0		2-0-0			
		2-0-0	1-10-8	6-3-0	1-10-8	2-0-0					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL 25.0	Plate Grip DOL	1.15	TC 0.80	Vert(LL)	-0.18 10-11	>925	360	MT20	197/144		
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.34 10-11	>490	240				
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.03	Horz(CT)	0.18 7	n/a	n/a				
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16 10-11	>999	240				
								Weight: 100 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 (4-6-12 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 30)
Max Uplift 2=-261(LC 4), 7=-261(LC 5)
Max Grav 2=1052(LC 1), 7=1052(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-431/118, 3-4=-4367/973, 4-5=-4350/946, 5-6=-4321/939, 6-7=-431/115
BOT CHORD 3-11=-947/4352, 10-11=-938/4395, 6-10=-900/4304
WEBS 4-11=0/283, 5-10=0/294

NOTES-

- 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.
- 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=261, 7=261.
- This truss 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 97 lb down and 60 lb up at 3-10-8, 97 lb down and 60 lb up at 5-0-0, 97 lb down and 60 lb up at 7-0-0, and 97 lb down and 60 lb up at 9-0-0, and 97 lb down and 60 lb up at 10-1-8 on top chord, and 195 lb down and 68 lb up at 3-10-8, 12 lb down at 5-0-0, 12 lb down at 7-0-0, and 12 lb down at 9-0-0, and 195 lb down and 68 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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Continued on page 2

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4
400361	A1	Hip Girder	1	2	I41214282

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-HHVp?EI6ffUZ4pmgLkEOLMkBX3qNuQH5?yytg9zJG?V

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=-65(F) 5=-65(F) 11=-195(F) 10=-195(F) 13=-65(F) 14=-65(F) 15=-65(F) 16=-4(F) 17=-4(F) 18=-4(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214283
400361	A2	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-mU3BCamlQzcQhzLsvSmFtaHNaTBodtHFECiRCczJG?U

Job Reference (optional)

1-11-8	5-10-0	8-1-0	11-11-8	13-11-8	14-10-0
1-11-8	3-10-8	2-3-0	3-10-8	2-0-0	0-10-8

Scale = 1:25.0

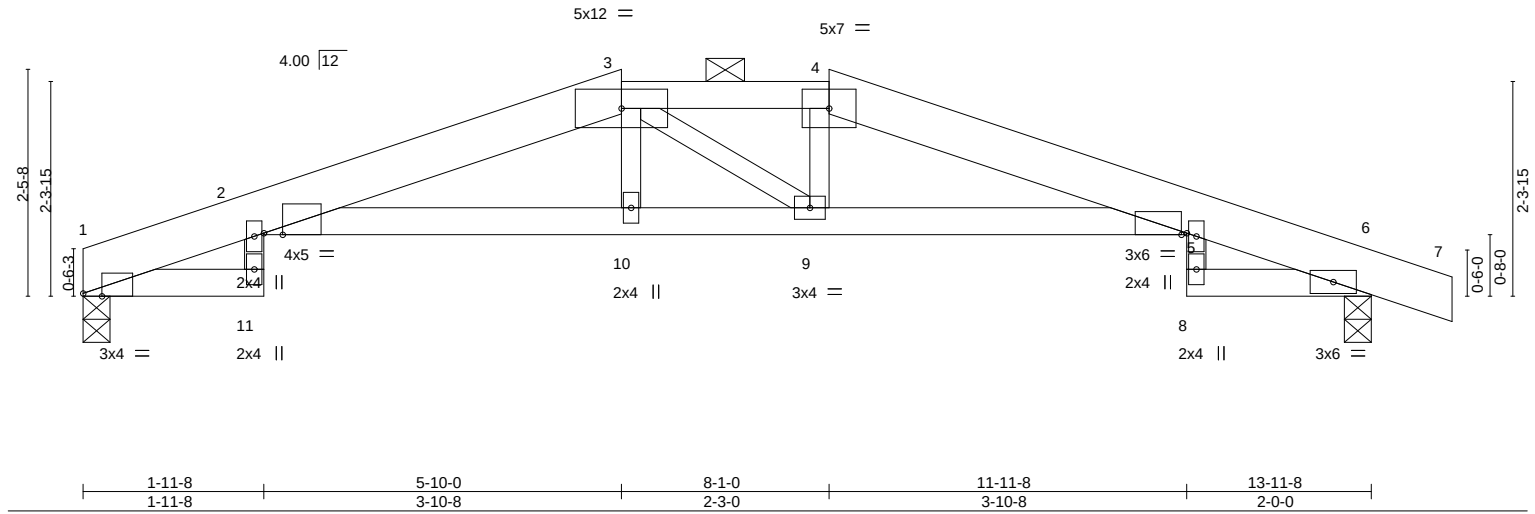


Plate Offsets (X,Y)--		[1:0-2-7,Edge], [2:0-2-7,Edge], [5:0-0-11,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.16 5-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.29 5-9	>570	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.21 6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12 2-10	>999	240	Weight: 47 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
3-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-11,5-8: 2x3 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-6 oc purlins, except
2-0-0 oc purlins (4-7-14 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 6=0-3-8
Max Horz 1=-42(LC 13)
Max Uplift 1=-97(LC 4), 6=-142(LC 5)
Max Grav 1=612(LC 1), 6=689(LC 1)

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

TOP CHORD 1-2=-263/69, 2-3=-1587/227, 3-4=-1534/215, 4-5=-1586/203, 5-6=-260/61
BOT CHORD 2-10=-184/1531, 9-10=-182/1536, 5-9=-146/1529

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 6=142.
- This truss 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.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214284
400361	A3	Roof Special	1	1		

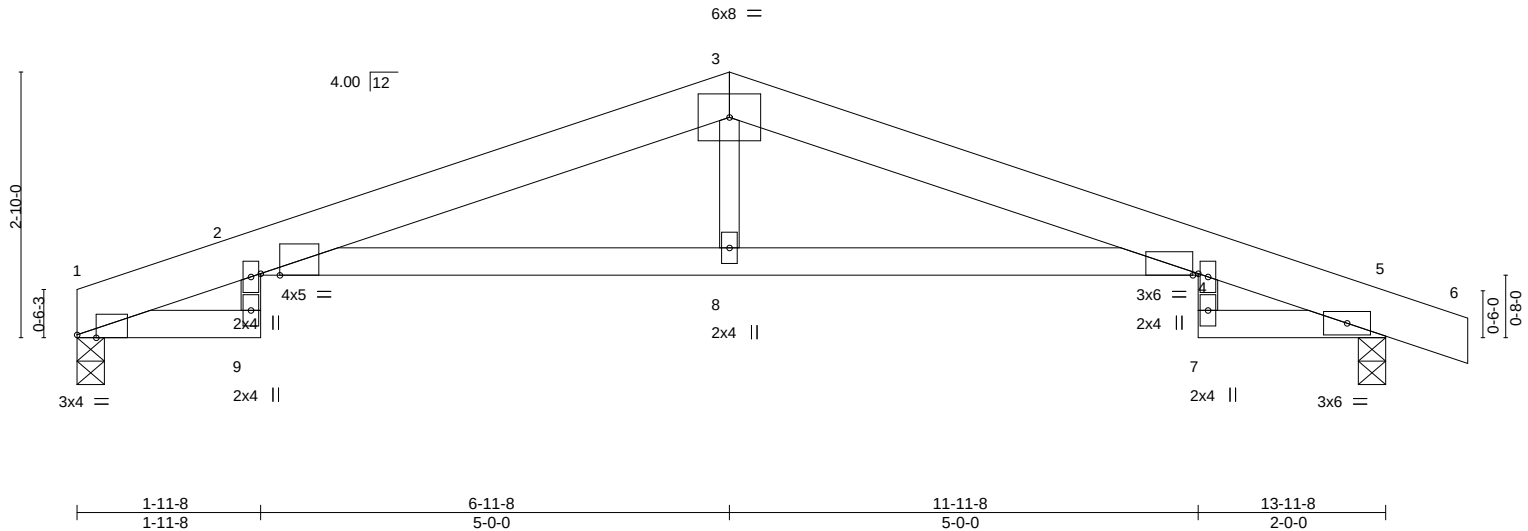
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:27 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-mU3BCamIQzcQhzLsvSmFtaHNETBWdsqFEciRCczJG?U

11-11-8 13-11-8 14-10-0
5-0-0 2-0-0 0-10-8

Scale = 1:24.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.17	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.32				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.22				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	Weight: 46 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=-49(LC 13)
Max Uplift 1=-89(LC 4), 5=-135(LC 5)
Max Grav 1=612(LC 1), 5=689(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-263/70, 2-3=-1458/159, 3-4=-1458/174, 4-5=-260/58
BOT CHORD 2-8=-114/1394, 4-8=-114/1394

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 except (jt=lb) 5=135.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214285
400361	A4	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-EgcZQwnNBGkHJ7w3T9HUQnpXOtZGMJgOTGR_I2zJG?T

Job Reference (optional)

6-11-8	13-11-8	14-10-0
6-11-8	7-0-0	0-10-8

Scale = 1:24.4

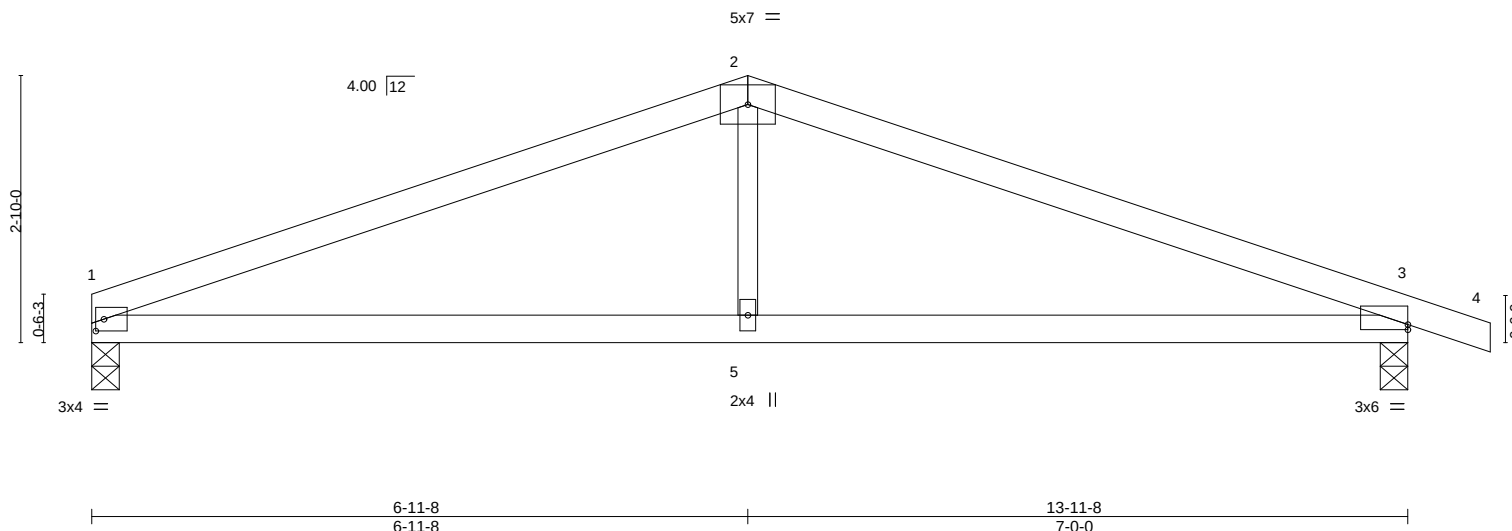


Plate Offsets (X,Y)--		[1:0-1-1,0-1-8], [3:0-0-0,0-0-10]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.80
TCDL 10.0	Lumber DOL	1.15	BC 0.50
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.06	3-5	>999
Vert(CT)	-0.14	3-5	>999
Horz(CT)	0.02	3	n/a
Wind(LL)	0.05	3-5	>999
PLATES	GRIP		
MT20	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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 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=-48(LC 13)
Max Uplift 1=-89(LC 4), 3=-135(LC 5)
Max Grav 1=612(LC 1), 3=689(LC 1)

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

TOP CHORD 1-2=-1096/130, 2-3=-1097/134
BOT CHORD 1-5=-76/955, 3-5=-76/955
WEBS 2-5=0/332

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 except (jt=lb) 3=135.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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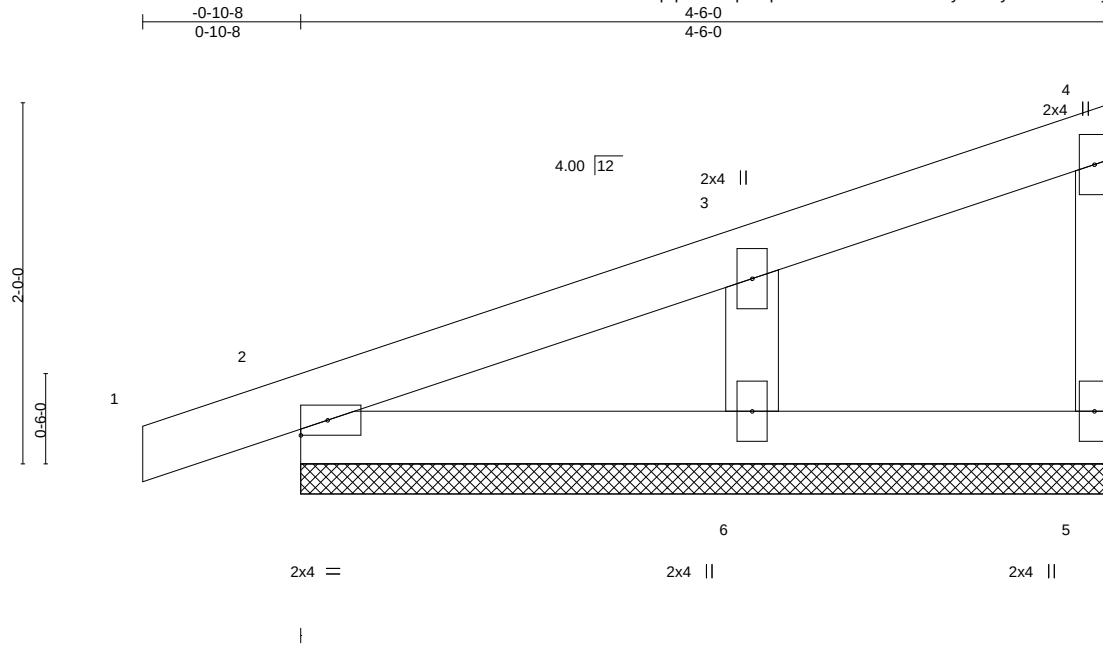


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214286
400361	B1	Monopitch Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:29 2020 Page 1
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-isAydGo?yas8xGVF1tojy?MtYH0g5nBYiwBXHUzJG?S



Scale = 1:12.8

LOADING (psf)	SPACING-	2'-0'-0'	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	1	n/r	120		
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: 14 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 4'-6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0'-0" oc bracing.

REACTIONS.

(size) 5=4'-6'-0, 2=4'-6'-0, 6=4'-6'-0
Max Horz 2=76(LC 5)
Max Uplift 5=-9(LC 5), 2=-49(LC 4), 6=-58(LC 8)
Max Grav 5=59(LC 1), 2=165(LC 1), 6=233(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) 5, 2, 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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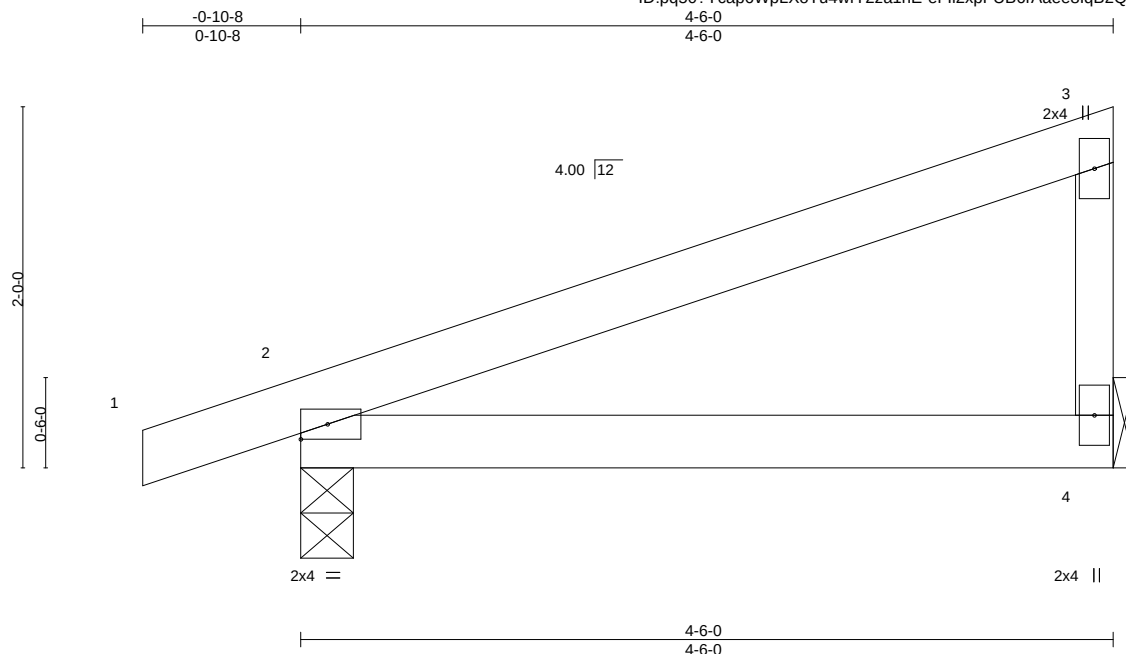
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214287
400361	B2	Monopitch	7	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:12.8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	-0.02	2-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.04	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240		
									Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-0 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=76(LC 5)
Max Uplift 4=40(LC 8), 2=-78(LC 4)
Max Grav 4=183(LC 1), 2=271(LC 1)

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

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214288
400361	B3	Monopitch	7	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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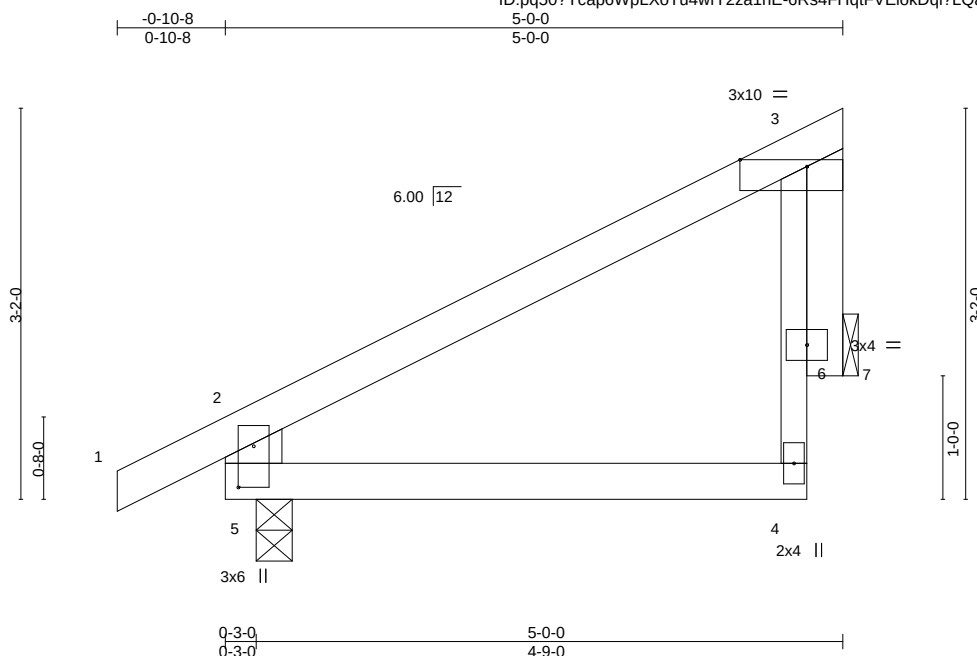


Plate Offsets (X,Y)-- [3:0-6-8,Edge], [5:0-4-0,0-1-8]

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 0.18	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 0.16	Horz(CT)	-0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 18 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 7=Mechanical
Max Horz 5=90(LC 5)
Max Uplift 5=-39(LC 8), 7=-60(LC 8)
Max Grav 5=297(LC 1), 7=174(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-265/80

- 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.



May 6, 2020

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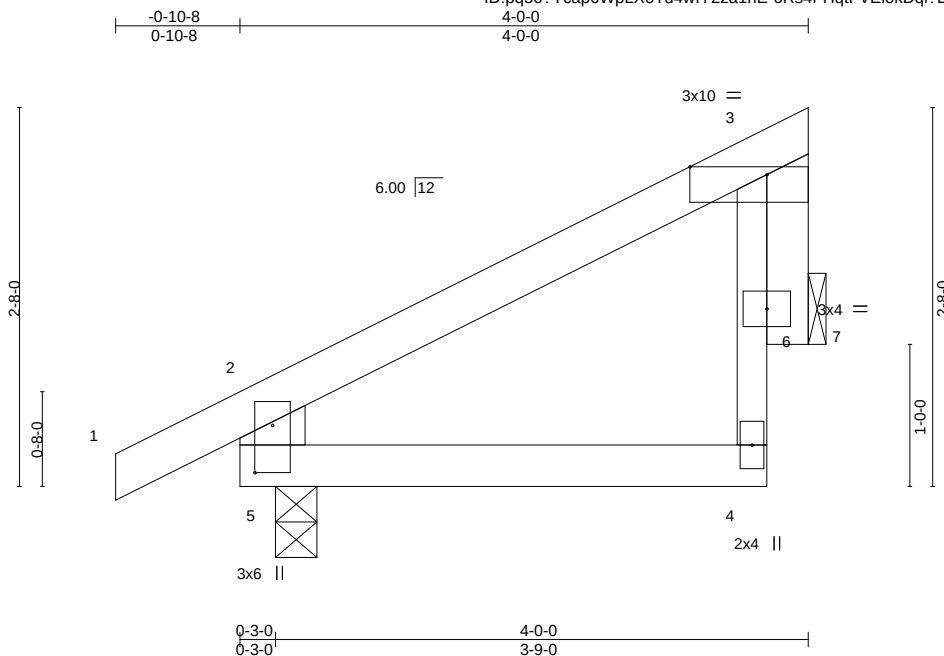
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400361	Truss B4	Truss Type Monopitch	Qty 1	Ply 1	Lot 51 H4 Job Reference (optional)	I41214289
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Wheeler Lumber, Waverly, KS 66871

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Scale = 1:16.2

Plate Offsets (X,Y)-- [3:0-6-8,Edge], [5:0-4-0,0-1-8]									
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	0.11	Vert(LL)	-0.00 4-5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01 4-5 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00 4-5 >999 240	Weight: 14 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 7=Mechanical
Max Horz 5=77(LC 5)
Max Uplift 5=-37(LC 8), 7=-45(LC 8)
Max Grav 5=254(LC 1), 7=127(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.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214290
400361	B5	Roof Special Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-adQSTdrW0pMZPuo0Gjsf7rXWfuf1ZT7cY9IQFzJG?O

-0-10-8	3-6-0	5-6-0	7-6-0
0-10-8	3-6-0	2-0-0	2-0-0

Scale = 1:16.8

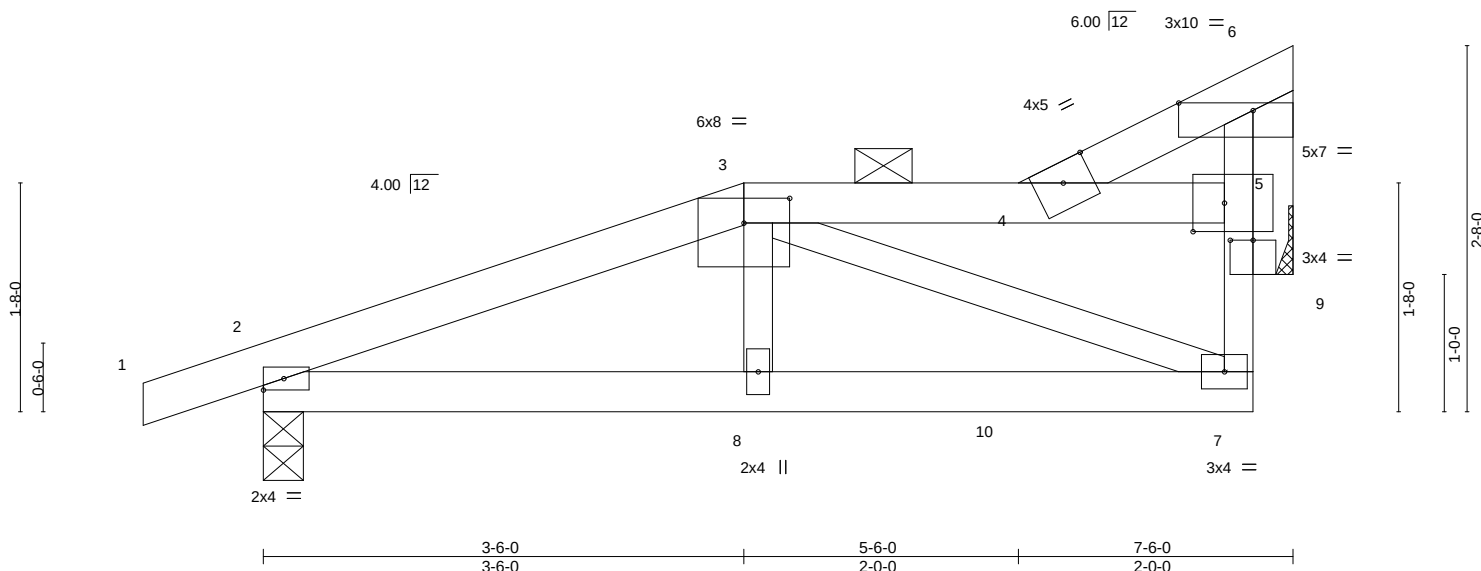


Plate Offsets (X,Y)-- [3:0-4-0,0-2-3], [5:0-2-12,0-2-8], [6:0-6-8,Edge], [9:0-2-0,0-0-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01 8 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02 2-8 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.01 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01 8 >999 240	Weight: 27 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
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.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 9=Mechanical
Max Horz 2=98(LC 24)
Max Uplift 2=-114(LC 4), 9=-99(LC 8)
Max Grav 2=388(LC 1), 9=364(LC 1)

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

TOP CHORD 2-3=-490/106
BOT CHORD 2-8=-133/412, 7-8=-129/417
WEBS 3-7=-358/109

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
- 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 except (jt=lb) 2=114.
- This truss 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 141 lb down and 115 lb up at 3-6-0, and 59 lb down and 43 lb up at 5-6-7, and 42 lb down and 45 lb up at 7-2-8 on top chord, and 15 lb down and 5 lb up at 3-6-0, and 9 lb down at 5-4-8, and 22 lb down at 7-1-4 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: 1-3=-70, 3-4=-70, 4-6=-70, 2-7=-20



May 6, 2020

Continued on page 2

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4
400361	B5	Roof Special Girder	1	1	I41214290
Job Reference (optional)					

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 5=-33(B) 7=-15(B) 8=5(B) 10=-3(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214292
400361	B7	Monopitch	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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-0-10-8
0-10-8

7-6-0
7-6-0

3x12 MT18H =
3

Scale = 1:18.2

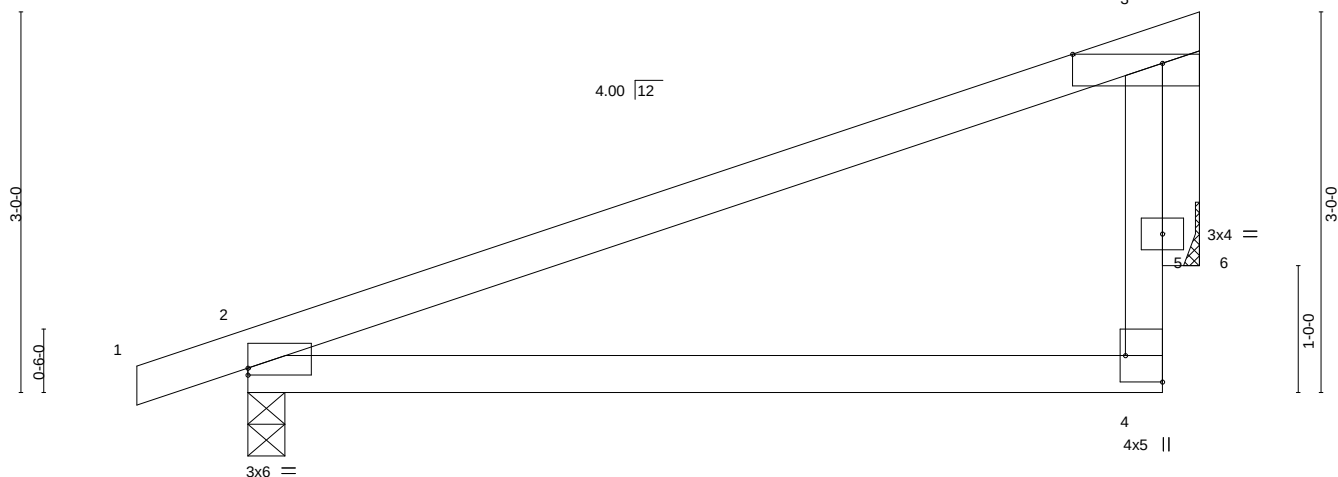


Plate Offsets (X,Y)--	[2:0-0-0,0-0-10], [3:0-8-8,Edge], [4:Edge,0-3-8]
-----------------------	--

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 0.56	Vert(LL)	-0.05	2-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.12	2-4	>726	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	-0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.04	2-4	>999	240	Weight: 23 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
Max Horz 2=91(LC 4)
Max Uplift 2=-90(LC 4), 6=-71(LC 8)
Max Grav 2=404(LC 1), 6=290(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-315/23, 3-5=-285/223

NOTES-

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



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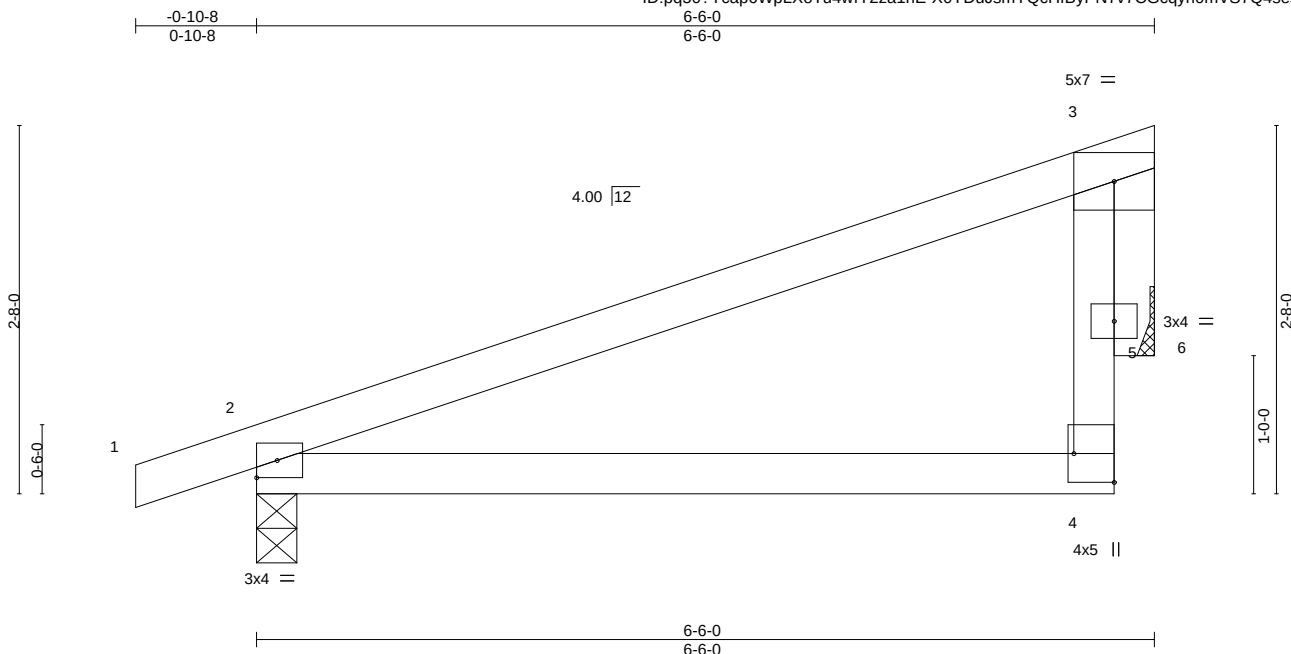
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214293
400361	B8	Monopitch	8	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:35 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-X0YDuJsmYQcHfByPN7v7CGcqyh0mVS7Q4sesU8zJG?M



Scale = 1:16.7

Plate Offsets (X,Y)--		[4:Edge,0-3-8]													
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 0.40		Vert(LL)	-0.03 2-4	>999	360	MT20		197/144			
TCDL 10.0		Lumber DOL	1.15	BC 0.25		Vert(CT)	-0.06 2-4	>999	240						
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.25		Horz(CT)	-0.00 6	n/a	n/a						
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02 2-4	>999	240						
										Weight: 20 lb		FT = 10%			

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
Max Horz 2=78(LC 5)
Max Uplift 2=-85(LC 4), 6=-60(LC 8)
Max Grav 2=359(LC 1), 6=245(LC 1)

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

TOP CHORD 2-3=-271/20

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214294
400361	B9	Roof Special Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-?C5b5ftOJk8GLXbrQMKT92Y5NkExEaJWNP1azJG?L

-0-10-8	3-6-0	5-6-0	6-6-0
0-10-8	3-6-0	2-0-0	1-0-0

Scale = 1:14.7

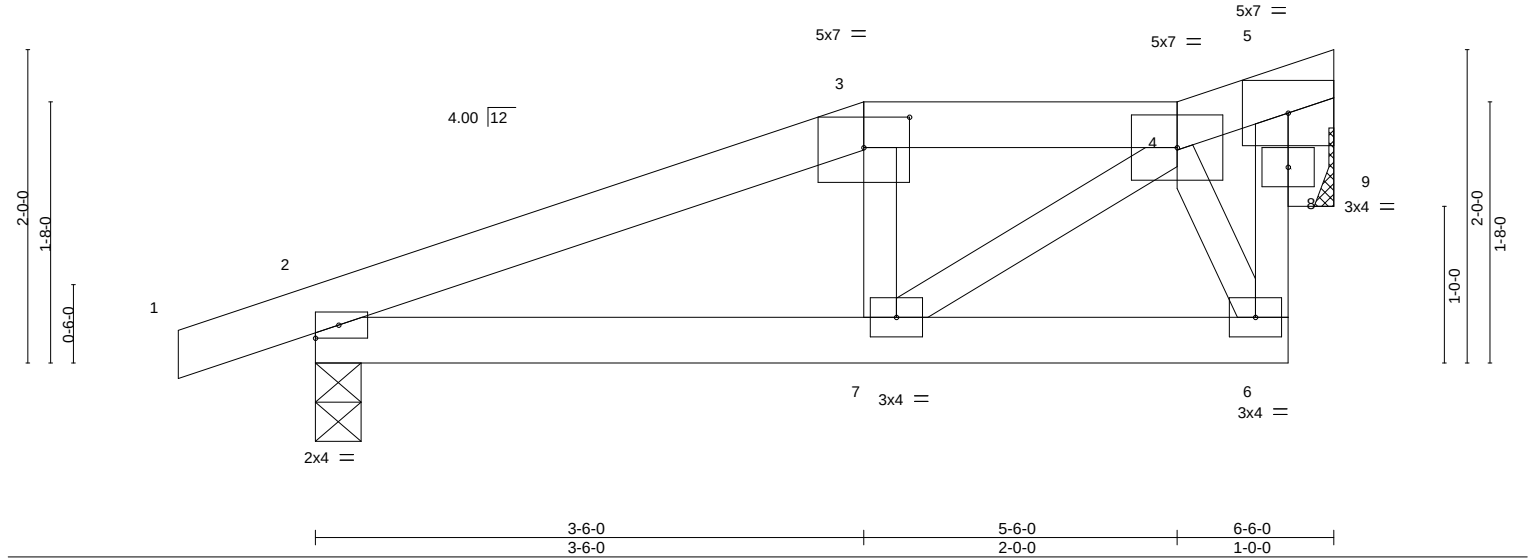


Plate Offsets (X,Y)-- [3:0-3-8,0-2-5]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	2-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	2-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	7	>999	240	Weight: 21 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 9=Mechanical
Max Horz 2=60(LC 5)
Max Uplift 2=-101(LC 4), 9=-62(LC 8)
Max Grav 2=357(LC 1), 9=246(LC 1)

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

TOP CHORD 2-3=-384/62, 3-4=-307/73, 6-8=-62/280, 5-8=-62/280
BOT CHORD 2-7=-71/311
WEBS 4-6=-284/77, 5-9=-265/69

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
- 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 except (jt=lb) 2=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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 78 lb up at 3'-6-0 on top chord, and 7 lb down and 5 lb up at 3'-6-0 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: 1-3=-70, 3-4=-70, 4-5=-70, 2-6=-20



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Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4
400361	B9	Roof Special Girder	1	1	I41214294
Job Reference (optional)					

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=5(F)

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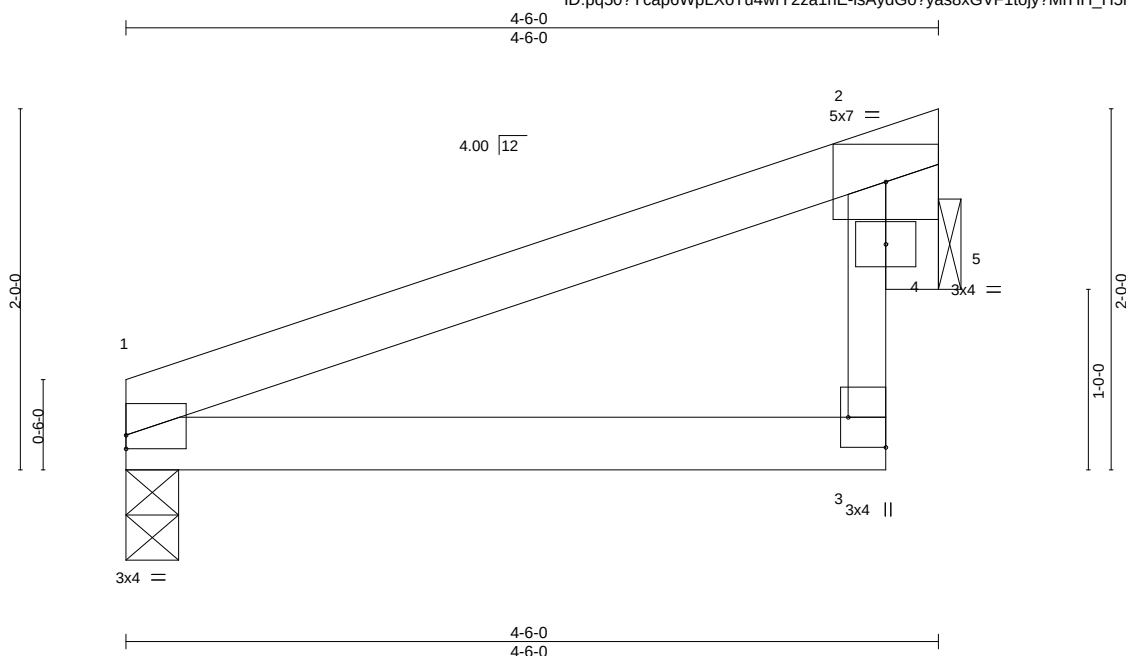
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400361	Truss B10	Truss Type Monopitch	Qty 1	Ply 1	Lot 51 H4	I41214295
Job Reference (optional)						

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ID:pq50?Ycap6WpLXoTu4wY2za1nE-isAydGo?yas8xGVF1toiy?MrHH_H5IMYiwBXHUzJG?S



Scale = 1:12.8

Plate Offsets (X,Y)-- [1:0-0,0-0-14], [3:Edge,0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	1-3	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	1-3	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	1-3	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 5=Mechanical
Max Horz 1=58(LC 5)
Max Uplift 1=-26(LC 4), 5=-41(LC 8)
Max Grav 1=192(LC 1), 5=164(LC 1)

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

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



May 6, 2020

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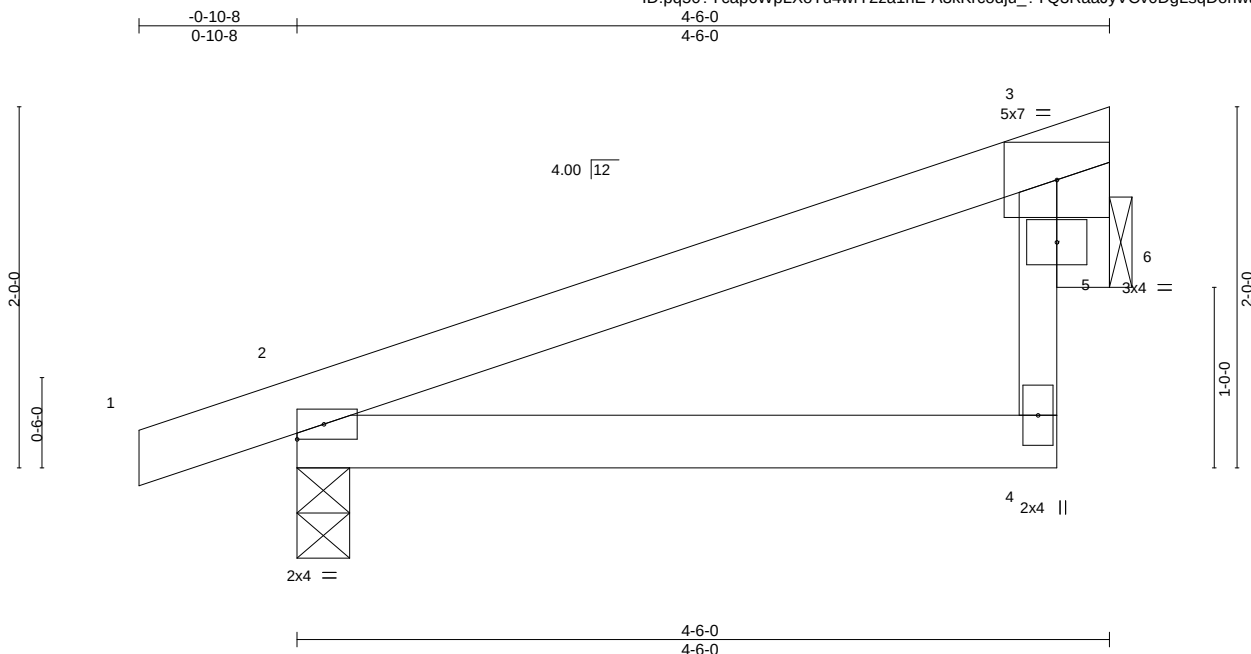
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214296
400361	B11	Monopitch	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:30 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-A3kKrcodju_?YQ3RaaJyVCv0DgLSqDohwaw5pwzJG?R



LOADING (psf)	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	2-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	2-4	>999	240	Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
Max Horz 2=60(LC 5)
Max Uplift 2=-74(LC 4), 6=-38(LC 8)
Max Grav 2=272(LC 1), 6=156(LC 1)

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

NOTES-

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



May 6, 2020

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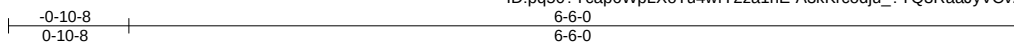
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214297
400361	B12	Monopitch Supported Gable	1	1		
Job Reference (optional)						

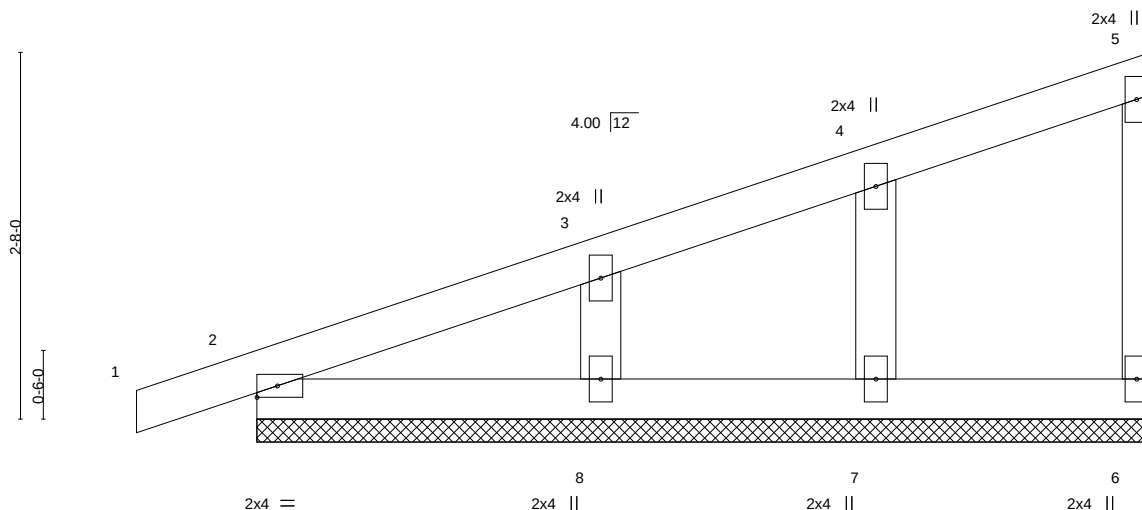
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:30 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-A3kKrcodju_?YQ3RaaJyVCv2OgMyqEThwaw5pwzJG?R



Scale = 1:16.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 21 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 6-6-0.
(lb) - Max Horz 2=106(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7, 8

FORCES.

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

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
- 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.
- Gable requires continuous bottom chord bearing.
- 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) 6, 2, 7, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214298
400361	C1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:37 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-TPfzJ?u041s?uV6nVYxbHhESVWzN4jXA7yZ0zJG?K

0-10-8 14-6-0 29-0-0 29-10-8
0-10-8 14-6-0 14-6-0 0-10-8

Scale = 1:52.5

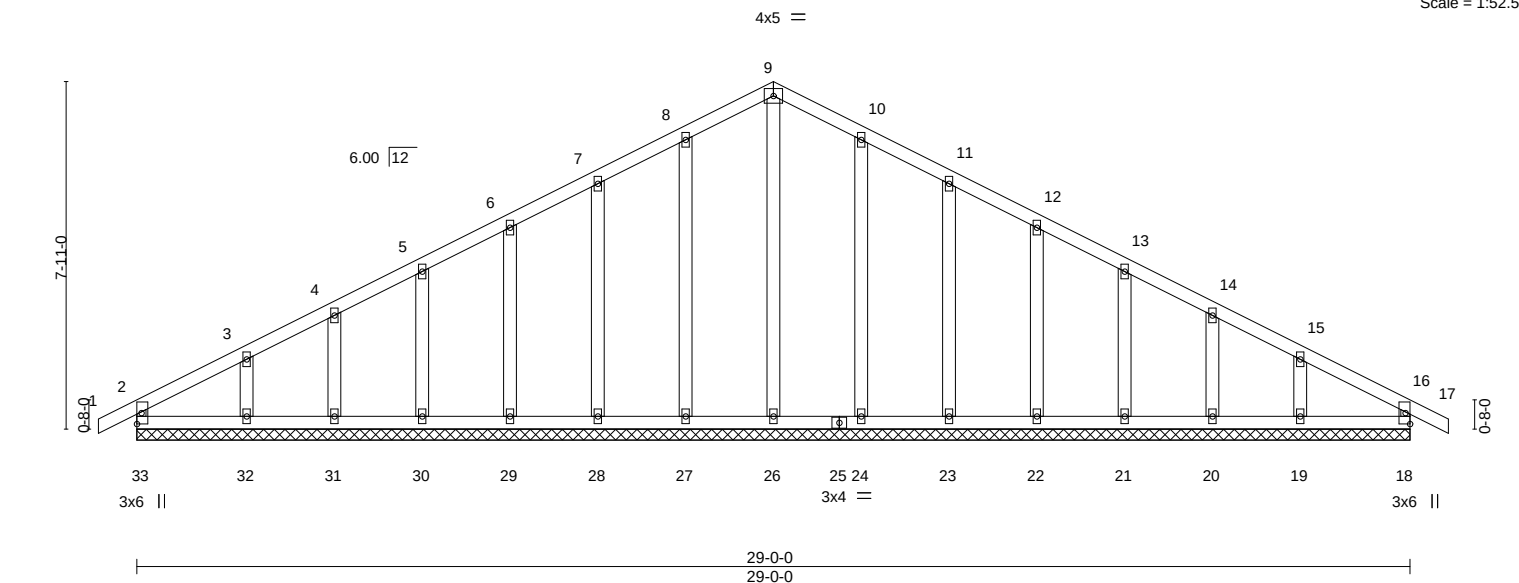


Plate Offsets (X,Y)-- [2:0-0-10,0-1-4], [16:0-0-10,0-1-4], [18:0-0-0,0-1-4], [33:0-0-0,0-1-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00 16 n/r 120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00 17 n/r 120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00 18 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R				Weight: 134 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 29-0-0.
(lb) - Max Horz 33=122(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 33, 18, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19
Max Grav All reactions 250 lb or less at joint(s) 33, 18, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19

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) 33, 18, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400361	Truss C2	Truss Type Common	Qty 6	Ply 1	Lot 51 H4	I41214299
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-xbDLWLverL_sWfh_2GSqquEEbvmieYtmqsW5TzJG?J

0-10-8 7-9-9 14-6-0 21-2-7 29-0-0 29-10-8
0-10-8 7-9-9 6-8-7 6-8-7 7-9-9 0-10-8

5x7 =

Scale = 1:54.6

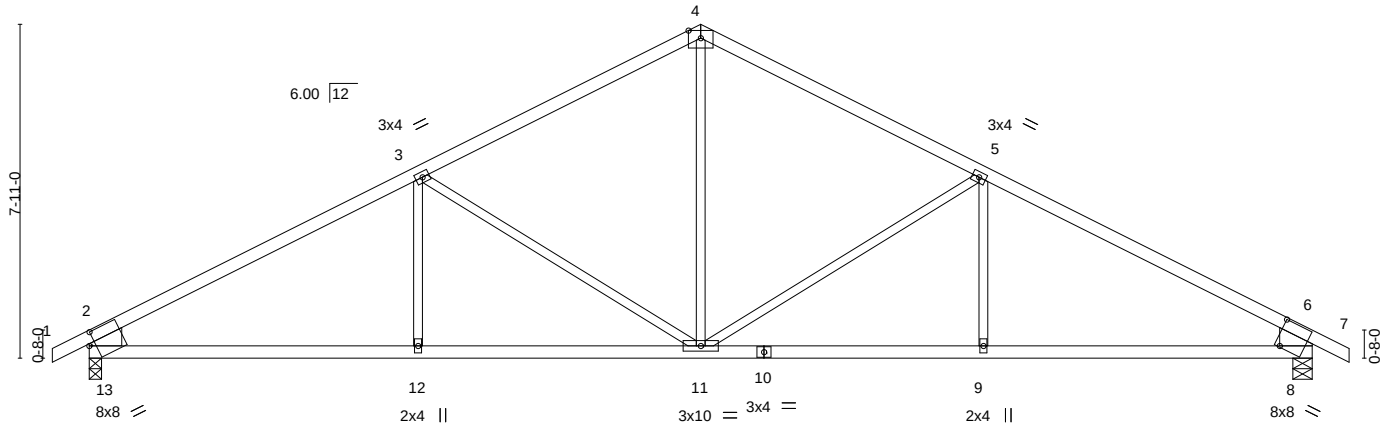


Plate Offsets (X,Y)--	7-9-9 7-9-9	14-6-0 6-8-7	21-2-7 6-8-7	29-0-0 7-9-9
	[2:0-5-3,0-0-0], [6:0-5-3,0-0-0], [8:0-4-2,0-2-1], [8:0-1-8,0-7-10], [13:0-4-2,0-2-1], [13:0-1-13,0-3-8]			

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	-0.18	9-11	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	-0.35	9-11	>975	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.08	8	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10	9-11	>999	240	
								Weight: 101 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: 2x10 SP DSS

BRACING-

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

REACTIONS.

(size) 13=0-3-8, 8=0-5-8
Max Horz 13=-120(LC 6)
Max Uplift 13=-186(LC 8), 8=-186(LC 9)
Max Grav 13=1359(LC 1), 8=1359(LC 1)

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

TOP CHORD 2-3=-2002/246, 3-4=-1456/229, 4-5=-1456/229, 5-6=-2002/246, 2-13=-1252/230, 6-8=-1252/230
BOT CHORD 12-13=-232/1657, 11-12=-232/1657, 9-11=-116/1657, 8-9=-116/1657
WEBS 4-11=-63/735, 5-11=-586/227, 5-9=0/261, 3-11=-586/227, 3-12=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
- 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) 13=186, 8=186.
- This truss 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 51 H4	I41214300
400361	C3	Common	6	1	Job Reference (optional)	

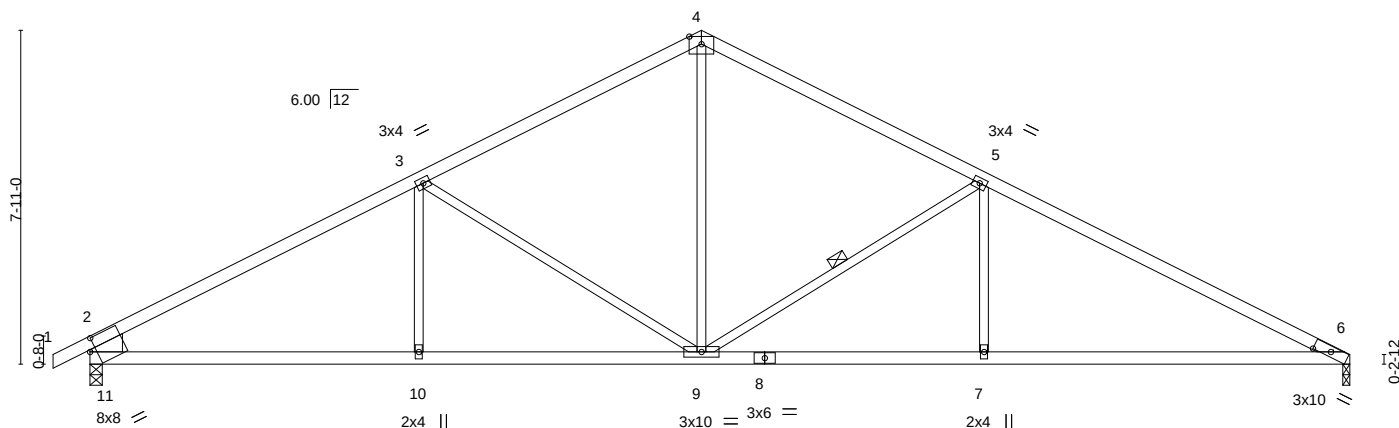
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:39 2020 Page 1
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-PnnjihvGcf6j7pFACzz3M6nOCJE4R5k0?Uc3evzJG?I

-0-10-8	7-9-9	14-6-0	21-2-6	29-10-8
0-10-8	7-9-9	6-8-7	6-8-6	8-8-2

5x7 =

Scale = 1:54.6



	7-9-9	14-6-0	21-2-6	29-10-8
	7-9-9	6-8-7	6-8-6	8-8-2

Plate Offsets (X,Y)-- [2:0-5-3,0-0-0], [6:0-5-0,0-1-7], [11:0-1-13,0-3-8], [11:0-4-2,0-2-1]

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 0.89	Vert(LL)	-0.18	6-7	>999	360	MT20	197/144
TCCL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.42	6-7	>833	240		
BCCL 0.0 *	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.09	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11	6-7	>999	240	Weight: 100 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11: 2x10 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-9

REACTIONS.

(size) 6=0-2-0 (req. 0-2-1), 11=0-3-8
Max Horz 11=126(LC 12)
Max Uplift 6=170(LC 9), 11=189(LC 8)
Max Grav 6=1321(LC 1), 11=1413(LC 1)

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

TOP CHORD 2-3=-2111/251, 3-4=-1561/244, 4-5=-1581/237, 5-6=-2348/286, 2-11=-1304/233
BOT CHORD 10-11=-246/1752, 9-10=-246/1752, 7-9=-157/2026, 6-7=-157/2026
WEBS 3-10=0/265, 3-9=-588/226, 4-9=-89/883, 5-9=-873/270, 5-7=0/348

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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.
- WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 6=170, 11=189.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214301
400361	C4	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-t_L6x0wvMyEalzqMAhVivJJZSiZWAYz9D8LdALzJG?H

0-10-8	7-9-9	14-6-0	21-2-6	29-8-14
0-10-8	7-9-9	6-8-7	6-8-6	8-6-8

5x7 =

Scale = 1:54.5

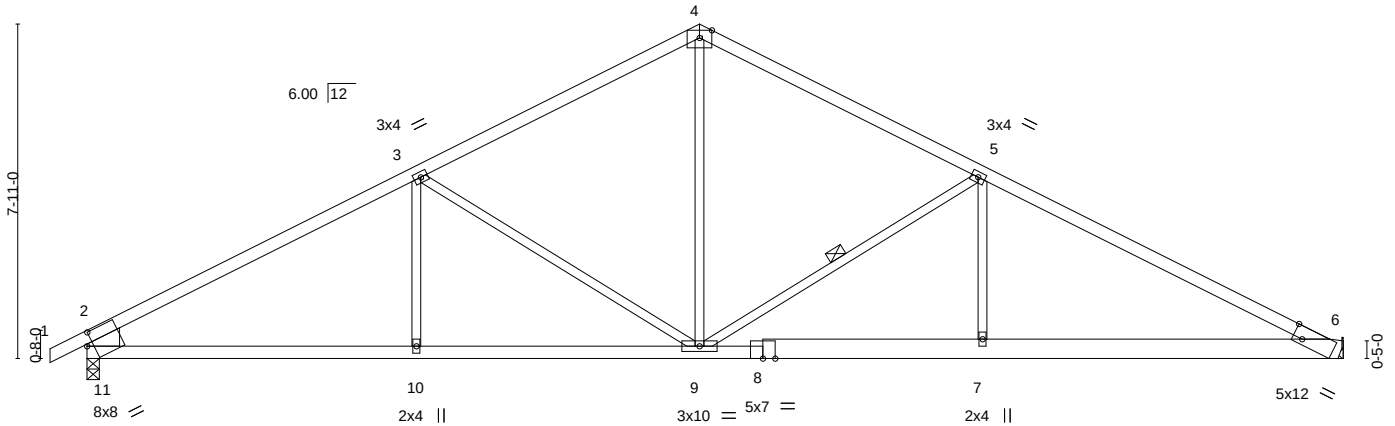


Plate Offsets (X,Y)--	2:0-5-3,0-0-0]	[6:0-2-11,Edge],	[11:0-1-13,0-3-8],	[11:0-4-2,0-2-1]
-----------------------	----------------	------------------	--------------------	------------------

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 0.86	Vert(LL)	-0.17	9-10	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.34	9-10	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.07	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07	9-10	>999	240	

Weight: 108 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
6-8: 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11: 2x10 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-9

REACTIONS.

(size) 6=Mechanical, 11=0-3-8
Max Horz 11=-95(LC 6)
Max Uplift 6=-19(LC 9), 11=-27(LC 8)
Max Grav 6=1316(LC 1), 11=1408(LC 1)

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

TOP CHORD 2-3=-2101/37, 3-4=-1550/73, 4-5=-1568/68, 5-6=-2373/41, 2-11=-1300/72
BOT CHORD 10-11=-32/1743, 9-10=-32/1743, 7-9=0/2025, 6-7=0/2023
WEBS 3-10=0/267, 3-9=-589/112, 4-9=0/867, 5-9=-877/116, 5-7=0/363

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) 6, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214302
400361	C5	Roof Special	3	1		

Wheeler Lumber, Waverly, KS 66871

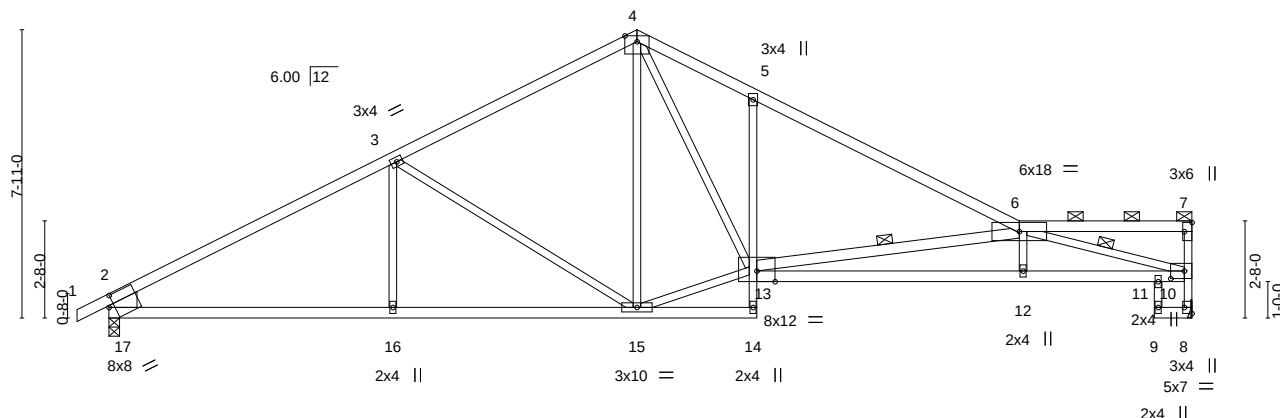
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:40 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-t_L6x0vvMyEalzqMAhVivJJZViZTAXs9D8LdALzJG?H

0-10-8 7-9-9 14-6-0 17-9-8 25-0-0 28-8-8 29-8-14
0-10-8 7-9-9 6-8-7 3-3-8 7-2-8 3-8-8 1-0-6

6x8 =

Scale = 1:63.3



7-9-9 14-6-0 17-9-8 25-0-0 28-8-8 29-8-14
7-9-9 6-8-7 3-3-8 7-2-8 3-8-8 1-0-6

Plate Offsets (X,Y)-- [2:0-5-3,0-0-0], [7:Edge,0-2-8], [8:Edge,0-2-8], [10:0-4-8,0-2-8], [17:0-4-2,0-2-1], [17:0-1-13,0-3-8]

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 0.86	Vert(LL)	-0.28 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.57 12-13	>612	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.99	Horz(CT)	0.21 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14 12-13	>999	240	Weight: 119 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
6-7: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-14: 2x3 SPF No.2, 10-13: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
6-13: 2x4 SPF No.2, 2-17: 2x10 SP DSS

BRACING-

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

REACTIONS.

(size) 8=Mechanical, 17=0-3-8
Max Horz 17=145(LC 5)
Max Uplift 8=-22(LC 9), 17=-26(LC 8)
Max Grav 8=1314(LC 1), 17=1406(LC 1)

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

TOP CHORD 2-3=-2097/36, 3-4=-1548/65, 4-5=-2196/122, 5-6=-2249/37, 8-10=-1288/28, 2-17=-1297/72
BOT CHORD 16-17=-37/1741, 15-16=-37/1741, 5-13=-460/157, 12-13=-49/3758, 11-12=-42/3763, 10-11=-42/3763
WEBS 3-16=0/266, 3-15=-585/112, 13-15=0/1355, 4-13=-103/1416, 6-13=-1867/66, 6-10=-3768/23

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) 8, 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.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214303
400361	C5A	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:42 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-pMTsMiy9uaVI_G_IH6Xm_kPv?WGUErXShSqjEEzJG?F

0-10-8 7-9-10 13-1-8 14-6-0 15-10-0 21-2-6 25-0-0 28-8-8 29-8-14
0-10-8 7-9-10 5-3-15 1-4-8 1-4-0 5-4-6 3-9-10 3-8-8 1-0-6

Scale = 1:56.5

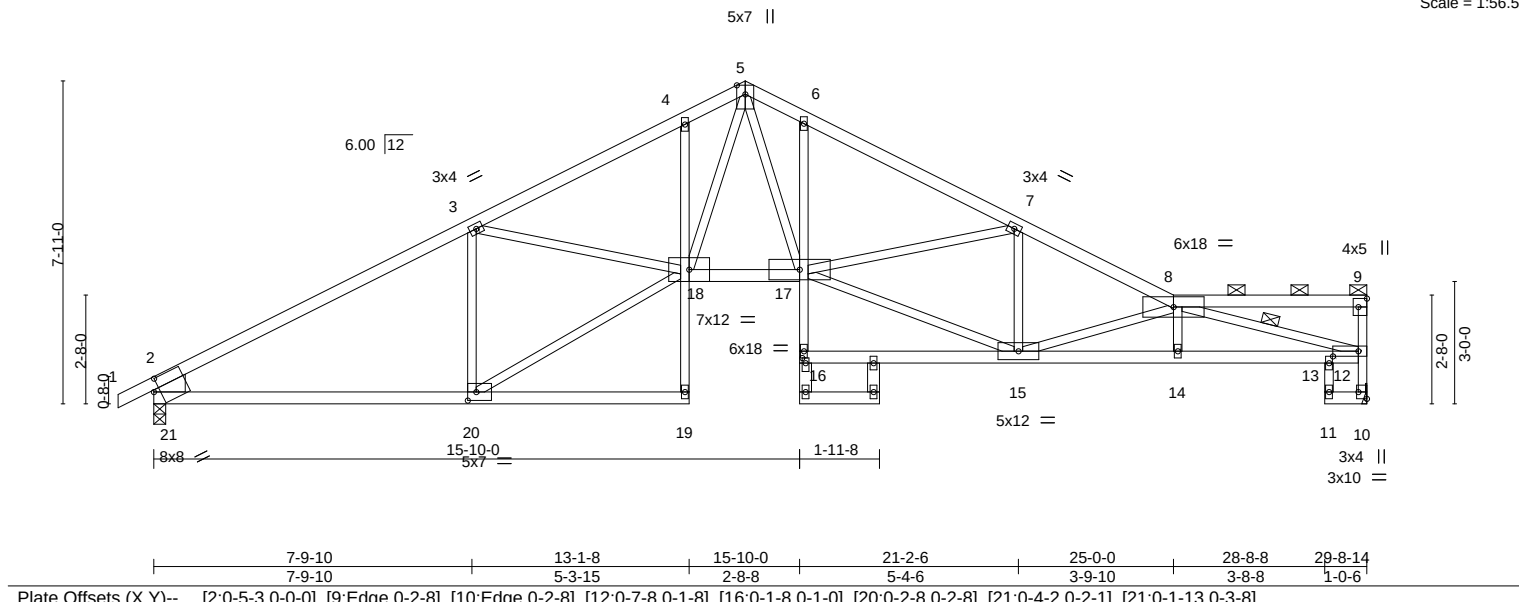


Plate Offsets (X,Y)--		[2:0-5-3,0-0-0], [9:Edge,0-2-8], [10:Edge,0-2-8], [12:0-7-8,0-1-8], [16:0-1-8,0-1-0], [20:0-2-8,0-2-8], [21:0-4-2,0-2-1], [21:0-1-13,0-3-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.86	Vert(LL) -0.30 6 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.54 17-18 >653 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.95	Horz(CT) 0.30 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.14 6 >999 240	Weight: 130 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
4-19,6-16: 2x3 SPF No.2, 12-16: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-21: 2x10 SP DSS, 16-22,23-24: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=Mechanical, 21=0-3-8
Max Horz 21=145(LC 5)
Max Uplift 10=-22(LC 9), 21=-26(LC 8)
Max Grav 10=1314(LC 1), 21=1406(LC 1)

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

TOP CHORD 2-3=-2082/34, 3-4=-2824/28, 4-5=-2773/66, 5-6=-2790/74, 6-7=-2850/22, 7-8=-2801/34,
10-12=-1286/28, 2-21=-1299/74
BOT CHORD 20-21=-34/1722, 4-18=-256/70, 17-18=0/2081, 6-17=-256/105, 14-15=-53/3648,
13-14=-49/3647, 12-13=-49/3647
WEBS 3-20=-892/101, 18-20=-40/1966, 3-18=0/752, 5-18=-75/1210, 5-17=-89/1302,
15-17=-20/2615, 7-15=-366/55, 8-15=-1240/39, 8-12=-3623/33

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.
- 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, 21.
- This truss 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.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214304
400361	C6	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

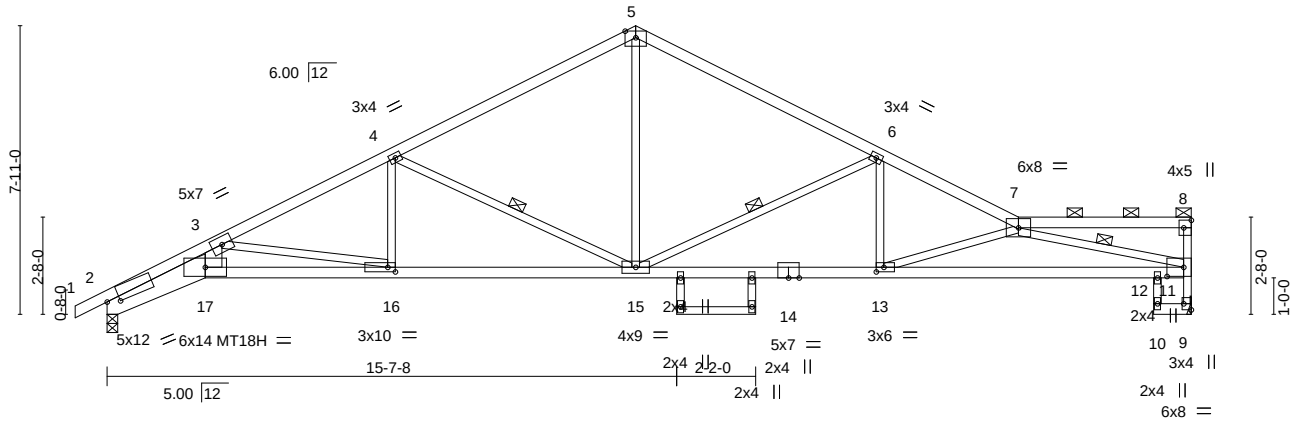
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:43 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-lZ1EZ2ynfd8cQZxp2?Yyx49wdbNtOcw6aHngzJG?E

0-10-8 2-8-5 7-9-10 14-6-0 21-2-7 25-0-0 28-8-8 29-8-14
0-10-8 2-8-5 5-1-5 6-8-6 6-8-7 3-9-9 3-8-8 1-0-6

5x7 =

Scale = 1:63.2



2-8-5 7-9-10 14-6-0 21-2-7 25-0-0 28-8-8 29-8-14
2-8-5 5-1-5 6-8-6 6-8-7 3-9-9 3-8-8 1-0-6

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.89	Vert(LL)	-0.29 13-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.52 13-15	>683	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 1.00	Horz(CT)	0.34 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.15 16-17	>999	240	Weight: 119 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-17: 2x8 SP DSS, 9-10: 2x4 SPF No.2, 18-19: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-1-2 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 4-15, 6-15, 7-11

REACTIONS.

(size) 9=Mechanical, 2=0-3-8
Max Horz 2=139(LC 7)
Max Uplift 9=22(LC 9), 2=-25(LC 8)
Max Grav 9=1326(LC 1), 2=1400(LC 1)

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

TOP CHORD 2-3=-5461/135, 3-4=-2724/49, 4-5=-1803/53, 5-6=-1800/56, 6-7=-2846/27, 9-11=-1300/32
BOT CHORD 2-17=-181/4887, 16-17=-160/4030, 15-16=-38/2416, 13-15=-13/2534, 12-13=-95/3680, 11-12=-95/3680
WEBS 3-17=-21/1841, 3-16=-1637/123, 4-16=0/425, 4-15=-1005/116, 5-15=0/1073, 6-15=-1136/92, 6-13=0/552, 7-13=-1219/87, 7-11=-3673/110

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.
- 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214305
400361	C7	Roof Special	1	1		
Job Reference (optional)						

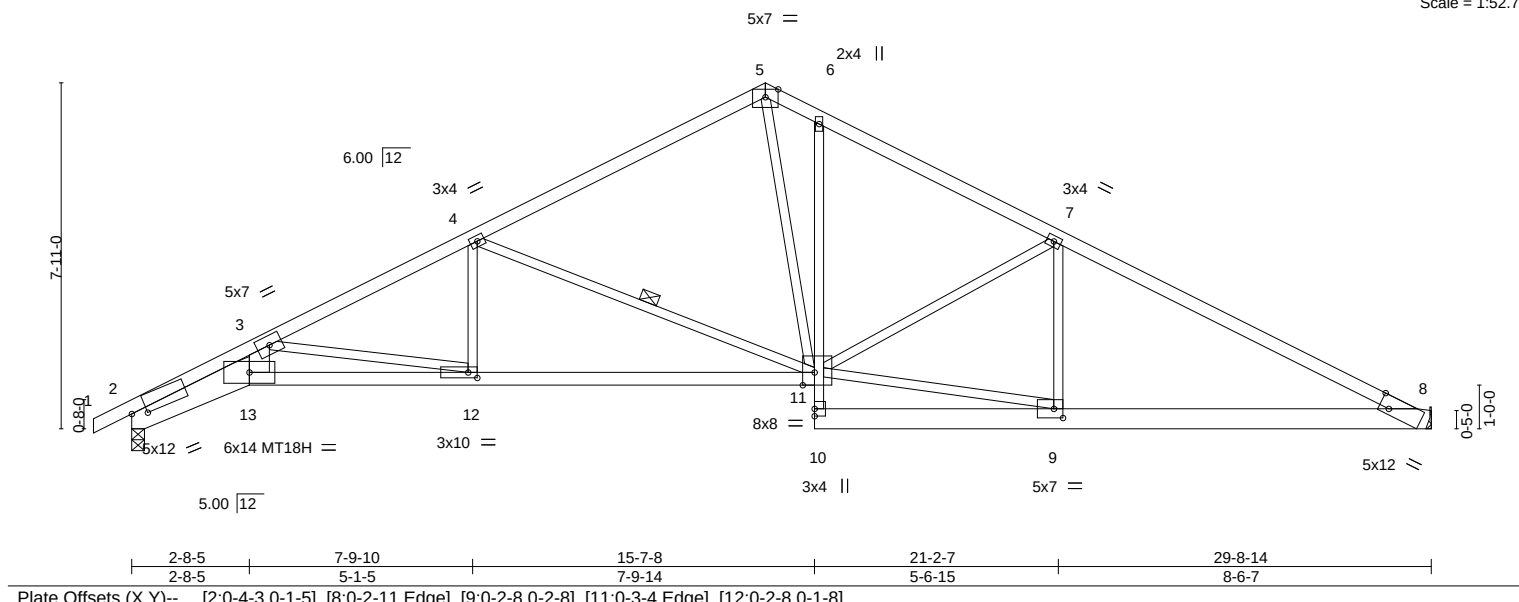
Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wY2za1nE-mlacnOzPQBI?Ea88PWZE39UFuKza6LKl8mJqJ6zJG?D

0-10-8	2-8-5	7-9-10	14-6-0	15-7-8	21-2-7	29-8-14
0-10-8	2-8-5	5-1-5	6-8-6	1-1-8	5-6-15	8-6-7

Scale = 1:52.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.25 12-13 >999	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.47 11-12 >759	MT18H	197/144		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.25 8 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14 12-13 >999			Weight: 125 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-8: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-13: 2x8 SP DSS, 6-10: 2x3 SPF No.2, 8-10: 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-13: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 8=Mechanical, 2=0-3-8
Max Horz 2=88(LC 7)
Max Uplift 8=-19(LC 9), 2=-25(LC 8)
Max Grav 8=1328(LC 1), 2=1402(LC 1)

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

TOP CHORD 2-3=-5450/138, 3-4=-2744/40, 4-5=-1698/60, 5-6=-1785/68, 6-7=-1937/45,
7-8=-2400/39
BOT CHORD 2-13=-180/4875, 12-13=-156/4027, 11-12=-25/2434, 8-9=0/2047
WEBS 3-13=-28/1821, 3-12=-1615/132, 4-12=0/480, 4-11=-1100/102, 5-11=-14/1161,
9-11=0/1993, 7-11=-549/118

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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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.



May 6, 2020

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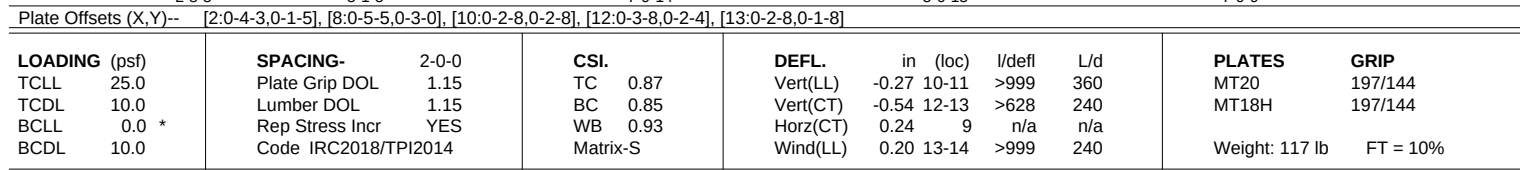
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:44 2020 Page 1

ID:pg50?Ycap6WpLXoTu4wfY2za1nE-mlacnOzPQBI?Ea88PWZE39UFMKxZ6Lm8lJqJ6ZJG?D

0-10-8 2-8-5 7-9-10 14-6-0 15-7-8 21-2-7 29-0-0
0-10-8 2-8-5 5-1-5 6-8-6 1-1-8 5-6-15 7-9-9

Scale = 1:52.3



REACTIONS. (size) 2=0-3-8, 9=0-3-8
 Max Horz 2=139(LC 12)
 Max Uplift 2=-184(LC 8), 9=-158(LC 9)
 Max Grav 2=1354(LC 1), 9=1280(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5236/785, 3-4=-2619/333, 4-5=-1582/228, 5-6=-1695/275, 6-7=-1792/236,
7-8=-1998/243, 8-9=-1131/198
BOT CHORD 2-14=-811/4683, 13-14=-679/3867, 12-13=-310/2321, 9-10=-136/1669
WEBS 3-14=-258/1752, 3-13=-1567/374, 4-13=0/475, 4-12=-1090/278, 5-12=-167/1135,
10-12=-112/1624, 7-12=-278/185, 7-10=-268/112



ANDREW
THOMAS
JOHNSON

NOTES-

- 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) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=184, 9=158.
- 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.



May 6, 2020

Job Reference (optional)

Scale = 1:53.7

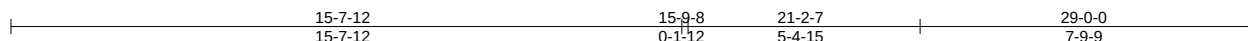


Plate Offsets (X,Y)-- [2:0-0-10,0-1-4], [17:0-4-1,0-2-8], [29:0-0-0,0-1-4]

BRACING- TOP CHORD	Structural wood sheathing directly applied or 5-11-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 19-20,18-19,17-18.
JOINTS	1 Brace at Jt(s): 31

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

TOP CHORD	8-9=35/250, 9-10=43/259, 14-15=703/226, 15-17=600/220
BOT CHORD	19-20=97/525, 18-19=97/525, 17-18=97/525
WEBS	20-30=685/222, 30-31=661/212, 31-32=635/197, 14-32=706/235, 14-18=0/325

- 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2'-0" 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" tall by 2'-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) 29, 21, 23, 24, 25, 26, 27, 28 except (jt=lb) 20=185, 17=172.
- 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.



May 6, 2020



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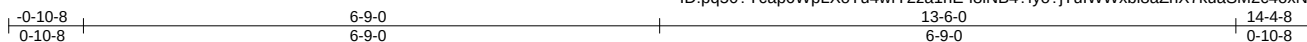
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214308
400361	D1	Common	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-i8iNB4?fyo?jTulWWxbi8aZhX7kuaSM2c4oxN?zJG?B



5x7 =

Scale = 1:27.0

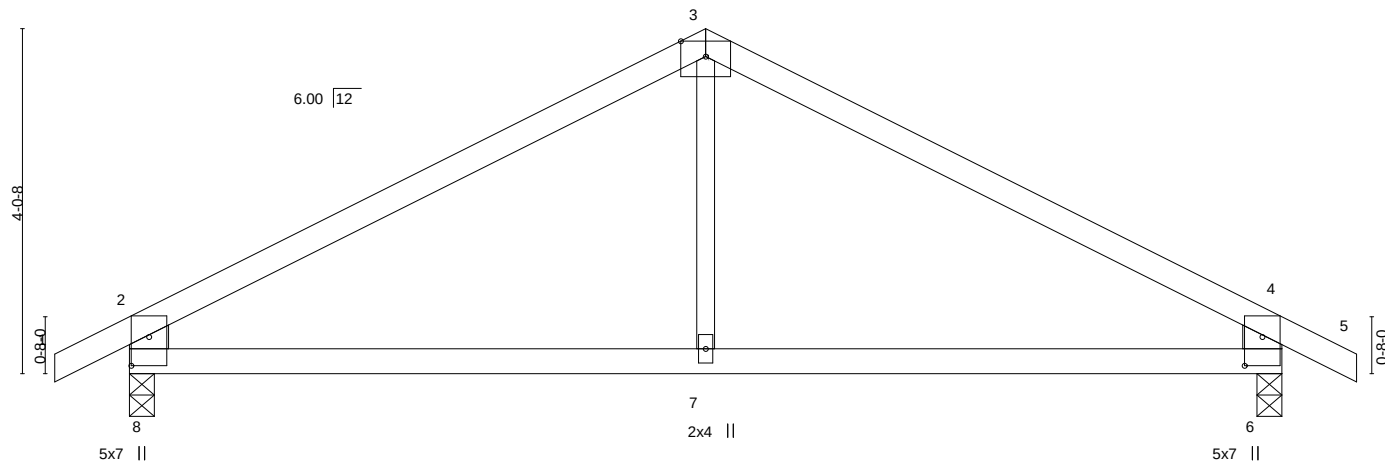


Plate Offsets (X,Y)--	[6:0-4-1,0-2-8], [8:0-4-1,0-2-8]
-----------------------	----------------------------------

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.04	7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.08	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	7-8	>999	240	Weight: 39 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x6 SPF No.2 *Except*
 3-7: 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
 Max Horz 8=-67(LC 6)
 Max Uplift 8=-98(LC 8), 6=-98(LC 9)
 Max Grav 8=664(LC 1), 6=664(LC 1)

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

TOP CHORD 2-3=-738/101, 3-4=-738/101, 2-8=-609/145, 4-6=-609/145
 BOT CHORD 7-8=-19/560, 6-7=-19/560
 WEBS 3-7=0/283

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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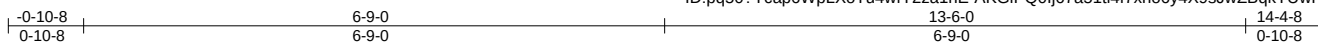


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214309
400361	D2	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:47 2020 Page 1
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-AKGIPQ0lj67a51ti4f7xho6y4X9sJwZBqkYUwRzJG?A



4x5 =

Scale = 1:26.8

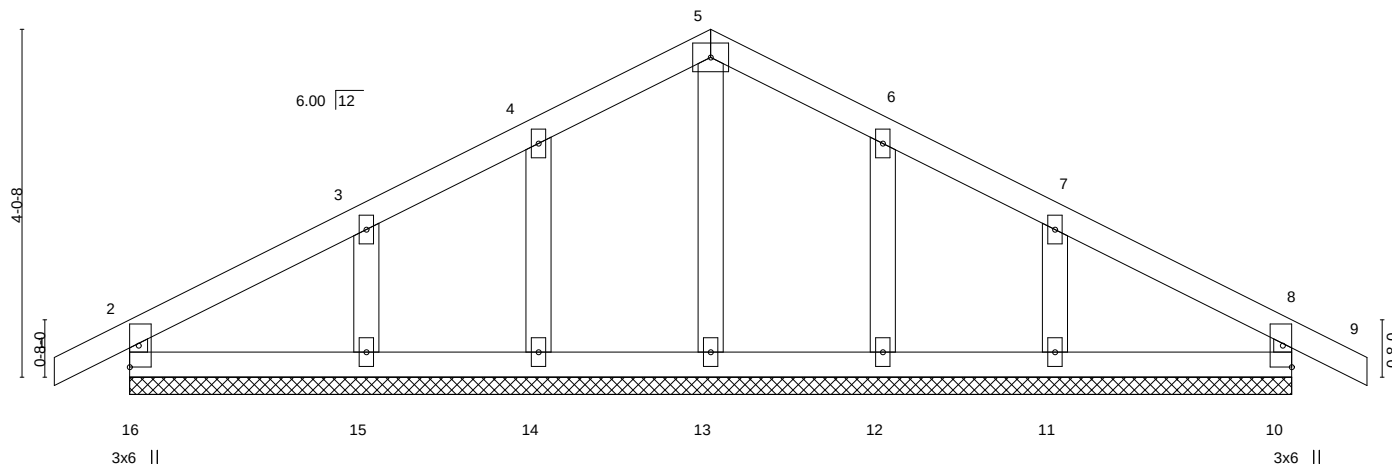


Plate Offsets (X,Y)--	[2:0-0-10,0-1-4], [8:0-0-10,0-1-4], [10:0-0-0,0-1-4], [16:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	8	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	8	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 48 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 13-6-0.
(lb) - Max Horz 16=-65(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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) 16, 10, 14, 15, 12, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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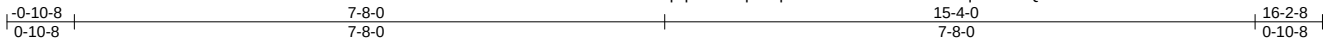
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214310
400361	E1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-eWq7cl0wUQFRiBSveMeAE?e7rxVR2NbL3OH2SuzJG?9



Scale = 1:29.9

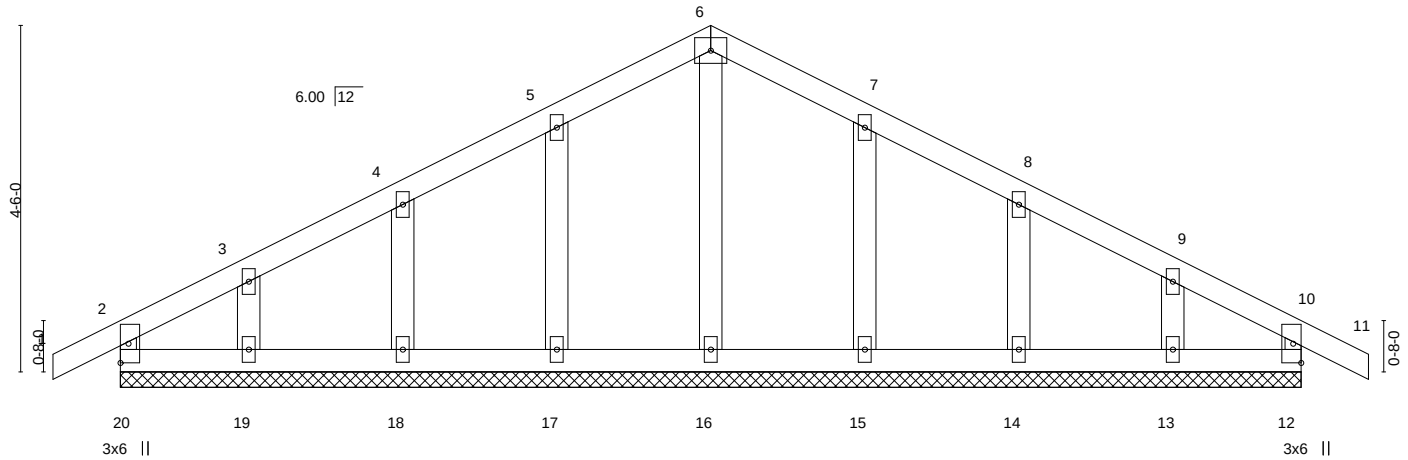


Plate Offsets (X,Y)--	[2:0-0-10,0-1-4], [10:0-0-10,0-1-4], [12:0-0-0,0-1-4], [20:0-0-0,0-1-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	11	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 58 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.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 15-4-0.
(lb) - Max Horz 20=-71(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13
Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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) 20, 12, 17, 18, 19, 15, 14, 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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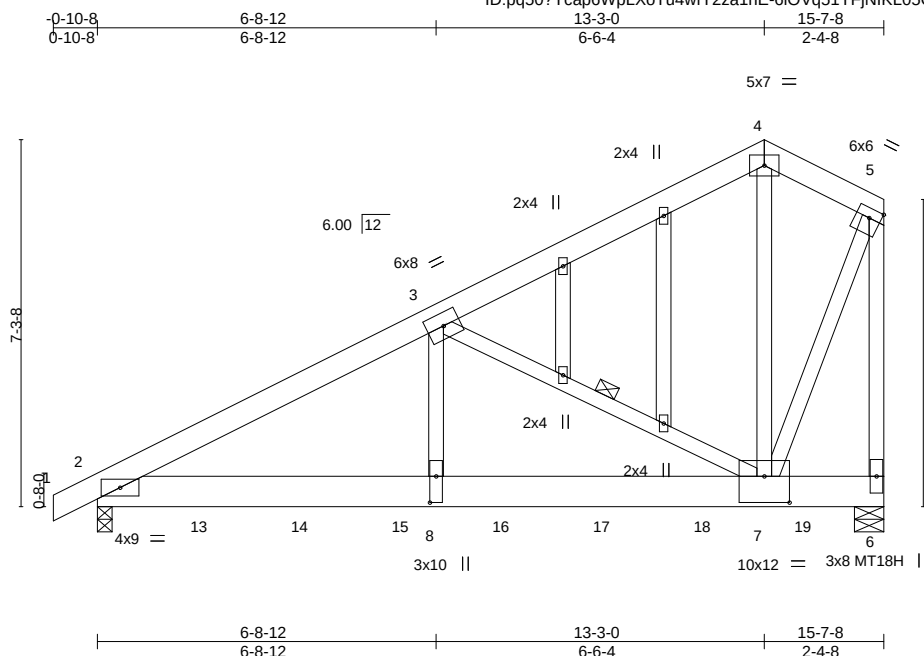
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214311
400361	E2	GABLE	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-6iOVq51YFjNKL05C49PmDB9kLjmnH5U11b_KzJG?8



Scale = 1:45.8

Plate Offsets (X,Y)-- [5:Edge,0-2-4], [7:0-6-0,0-6-4], [8:0-6-4,0-1-8]									
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	0.70	Vert(LL)	-0.09 7-8 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.16 7-8 >999 240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.03 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05 2-8 >999 240	Weight: 240 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS.

(size) 2=0-3-8 (req. 0-4-1), 6=0-7-0
Max Horz 2=254(LC 28)
Max Uplift 2=-232(LC 8), 6=-240(LC 8)
Max Grav 2=5166(LC 1), 6=5372(LC 1)

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

TOP CHORD 2-3=-7790/312, 3-4=-2135/123, 4-5=-2044/160, 5-6=-5471/257
BOT CHORD 2-8=-331/6846, 7-8=-331/6846
WEBS 3-8=-45/4834, 3-7=-5705/356, 4-7=-70/1560, 5-7=-196/4864

NOTES-

- 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: 2x8 - 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; 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 MT20 plates unless otherwise indicated.
- 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.
- WARNING: Required bearing size at joint(s) 2 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=232, 6=240.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4
400361	E2	GABLE	1	2	I41214311
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1308 lb down and 39 lb up at 2-0-12, 1306 lb down and 42 lb up at 4-0-12, 1294 lb down and 42 lb up at 6-0-12, 1294 lb down and 42 lb up at 8-0-12, 1294 lb down and 42 lb up at 10-0-12, and 1294 lb down and 42 lb up at 12-0-12, and 1296 lb down and 39 lb up at 14-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-4=-70, 4-5=-70, 2-6=-20
 - Concentrated Loads (lb)
 - Vert: 13=-1308(F) 14=-1306(F) 15=-1294(F) 16=-1294(F) 17=-1294(F) 18=-1294(F) 19=-1296(F)

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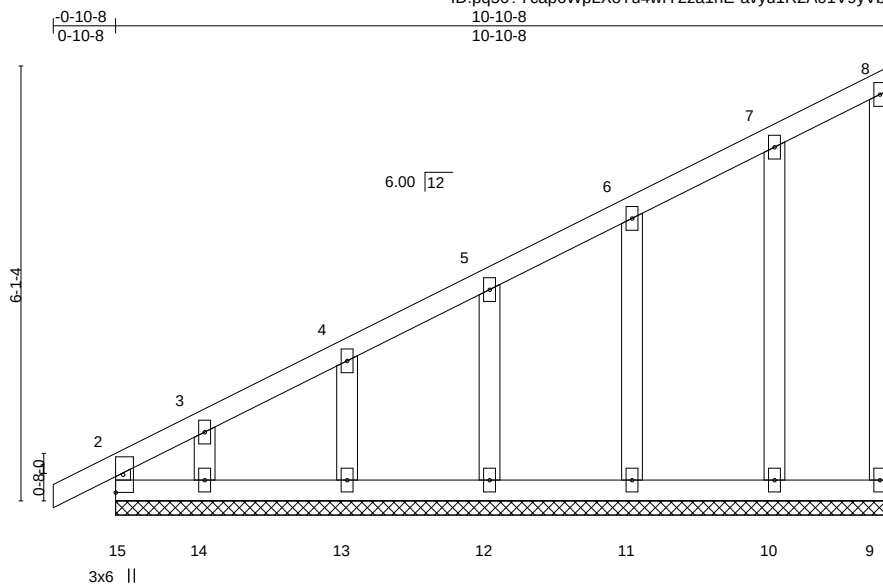
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214312
400361	E3	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:50 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wFY2za1nE-avyu1R2A01V9yVbHIngeJQkS9kBKWHreXhm9WmzJG?7



Scale = 1:32.3

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	0.00	2	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 50 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 8-9: 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 10-10-8.
 (lb) - Max Horz 15=246(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 15, 9, 10, 11, 12, 13 except 14=-112(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 15, 9, 10, 11, 12, 13, 14

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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9, 10, 11, 12, 13 except (it=lb) 14=112.
- 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.



May 6, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

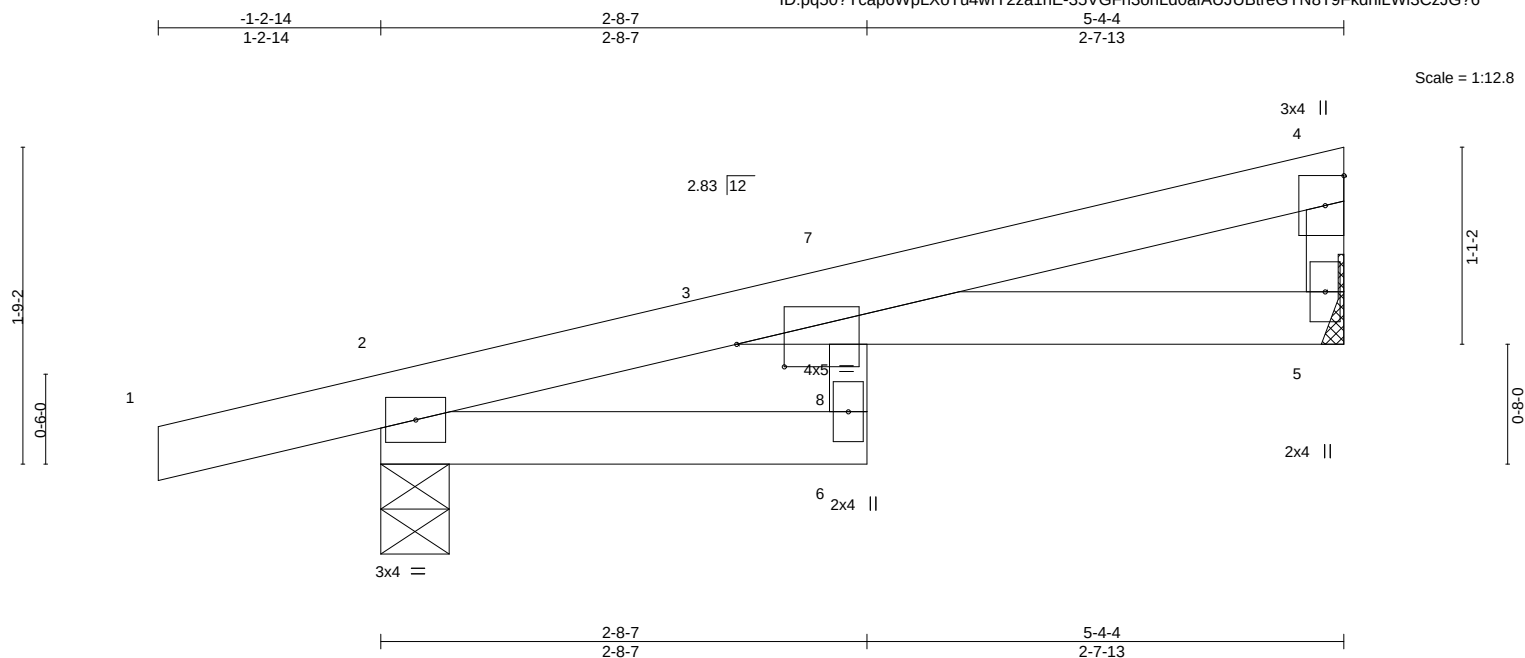


Plate Offsets (X,Y)-- [3:0-3-3,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.06 6 >944 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.13 6 >475 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.04 5 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06 6 >999 240	Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 2=0-4-9
Max Horz 2=52(LC 5)
Max Uplift 5=-40(LC 8), 2=-102(LC 4)
Max Grav 5=219(LC 1), 2=349(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; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=102.
- 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) 67 lb down and 31 lb up at 2-7-6, and 67 lb down and 31 lb up at 2-7-6 on top chord, and 0 lb down at 2-7-3, and 0 lb down at 2-7-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



May 6, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400361	Truss J2	Truss Type Jack-Open	Qty 5	Ply 1	Lot 51 H4 Job Reference (optional)	I41214314
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Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:52 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-XH3eS73QYeltBplgtCi6OrpnwYtu_B1w_?FFbfzJG?5

-0-10-8	2-0-0	3-10-8
0-10-8	2-0-0	1-10-8

Scale = 1:11.7

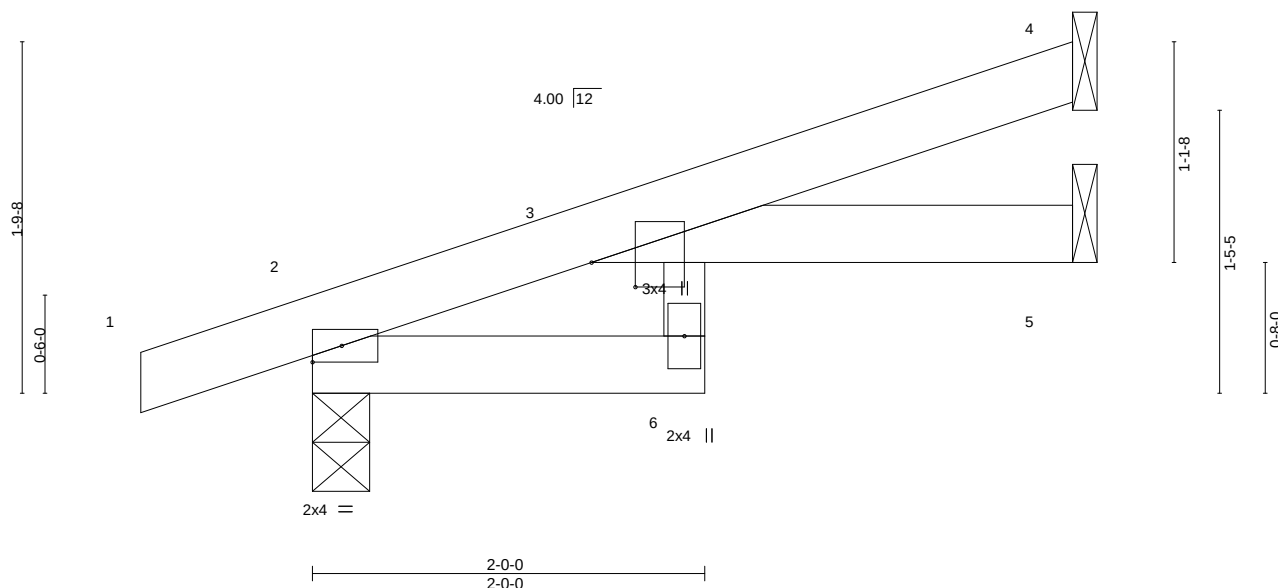


Plate Offsets (X,Y)-- [3:0-1-8,0-2-11]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.05	6	>820	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.03	6	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=65(LC 4)
Max Uplift 4=-52(LC 8), 2=-65(LC 4)
Max Grav 4=135(LC 1), 2=252(LC 1), 5=48(LC 3)

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

NOTES-

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



May 6, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

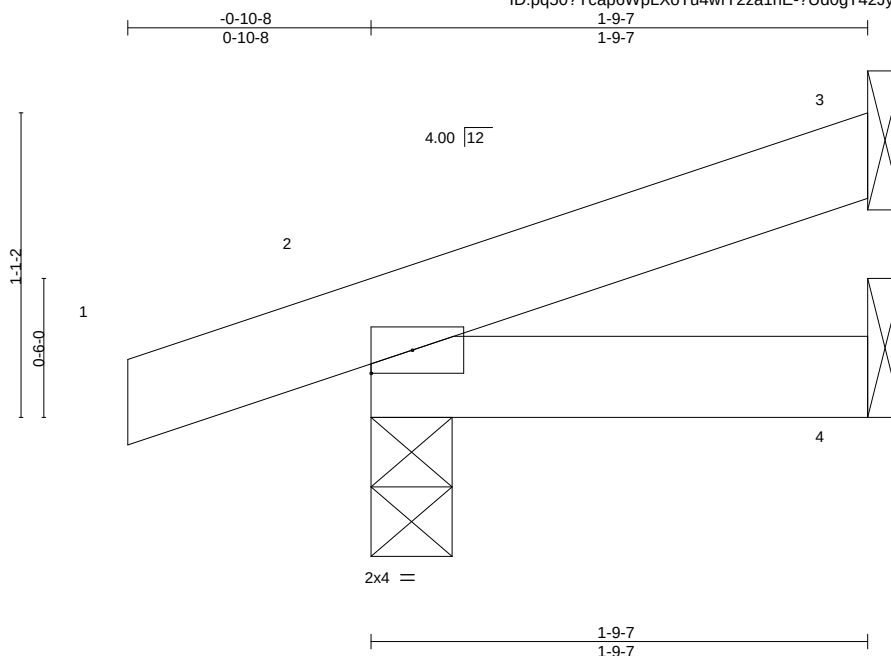


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214315
400361	J3	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:53 2020 Page 1
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-?Ud0gT42JytkpyKsRvDLx3M_pyCYjeU4Df?p75zJG?4



Scale = 1:8.3

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 0.05	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 5 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 1-9-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=37(LC 4)
Max Uplift 3=-27(LC 8), 2=-56(LC 4)
Max Grav 3=45(LC 1), 2=158(LC 1), 4=35(LC 3)

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

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) 3, 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.



May 6, 2020

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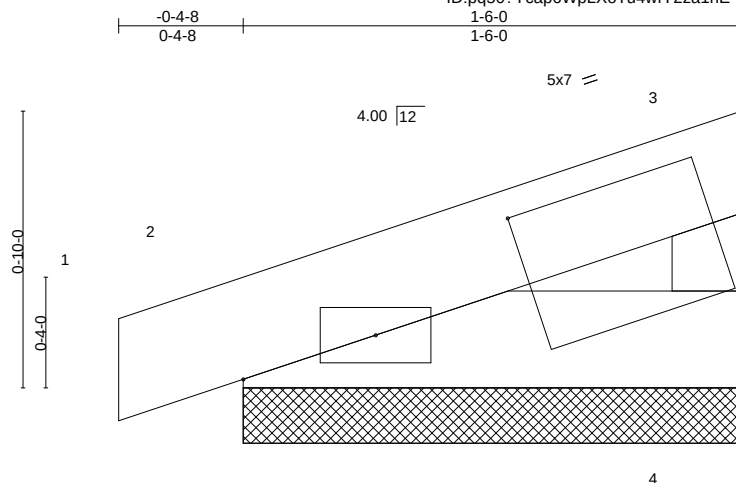


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400361	Truss J4	Truss Type JACK-CLOSED SUPPORTE	Qty 2	Ply 1	Lot 51 H4 Job Reference (optional)
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I41214316

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:53 2020 Page 1
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-?Ud0gT42JytkpyKsRvDLx3M_CyCijeU4Df?p75zJG?4

Scale = 1:6.9

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

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 0.03	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: 4 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-6-0 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=24(LC 5)
 Max Uplift 4=12(LC 8), 2=28(LC 4)
 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.



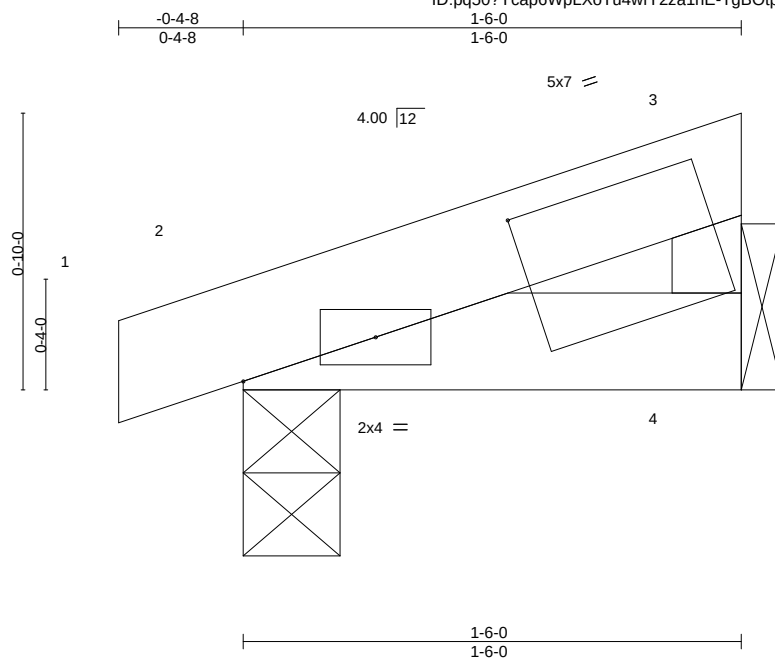
May 6, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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 Chesterfield, MO 63017



Scale = 1:6.9

Plate Offsets (X,Y)-- [3:0-1-5,0-0-0], [3:0-10-14,0-2-8], [4:0-1-3,0-0-6]												
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	0.02	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 4 lb	FT = 10%

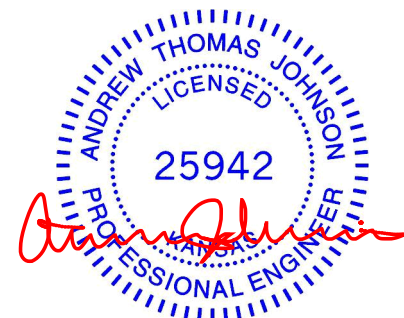
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-6-0 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2		
WEBS	2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=24(LC 5)
Max Uplift 4=-12(LC 8), 2=-30(LC 4)
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; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400361	Truss J6	Truss Type Jack-Open Girder	Qty 2	Ply 1	Lot 51 H4 Job Reference (optional)	I41214318
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Wheeler Lumber, Waverly, KS 66871

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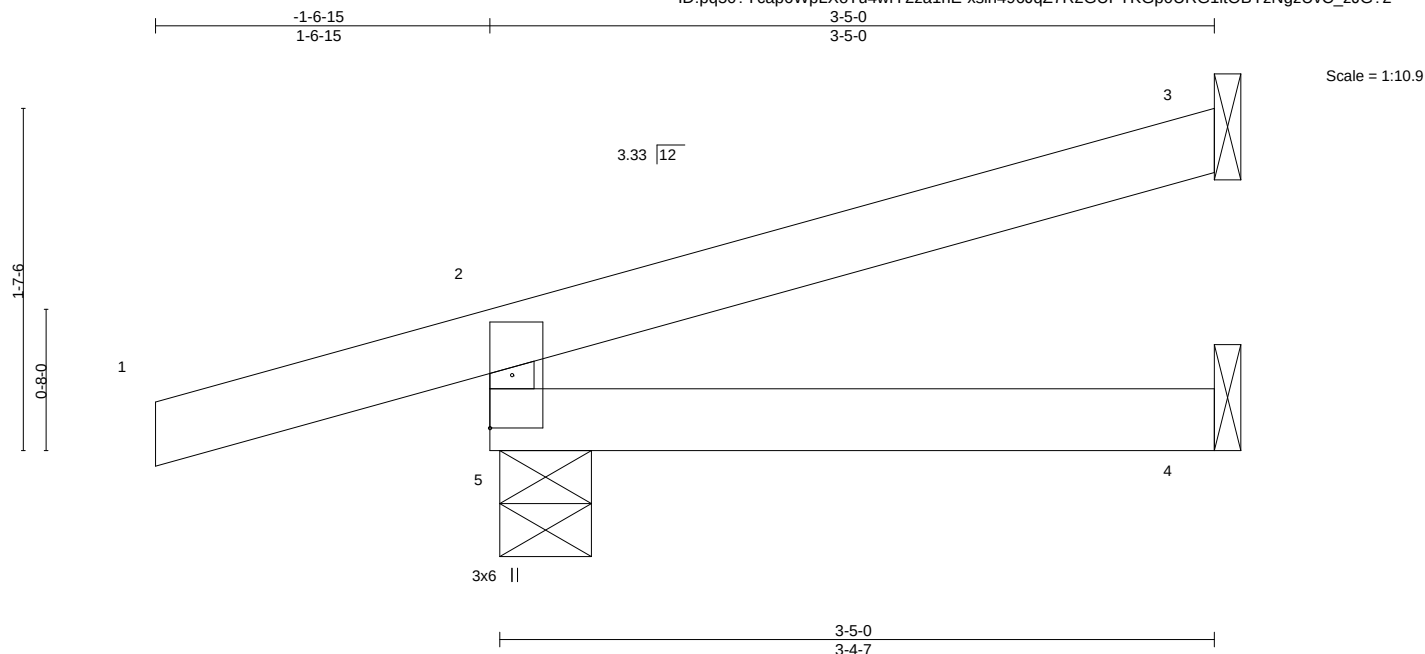


Plate Offsets (X,Y)-- [2:0-0-6,0-1-4], [5:0-0-0,0-1-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01 4-5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01 4-5 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00 3 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00 4-5 >999 240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-5-3, 3=Mechanical, 4=Mechanical
Max Horz 5=58(LC 12)
Max Uplift 5=83(LC 4), 3=53(LC 12), 4=2(LC 19)
Max Grav 5=176(LC 1), 3=38(LC 1), 4=45(LC 3)

FORCES.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 14 lb up at -1-6-15, and 39 lb down and 14 lb up at -1-6-15 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Concentrated Loads (lb)
Vert: 1=-60(F=-30, B=-30)
- Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-42(F=14, B=14), 2=-2(F=34, B=34)-to-3=-60(F=5, B=5), 5=-0(F=10, B=10)-to-4=-17(F=1, B=1)



May 6, 2020

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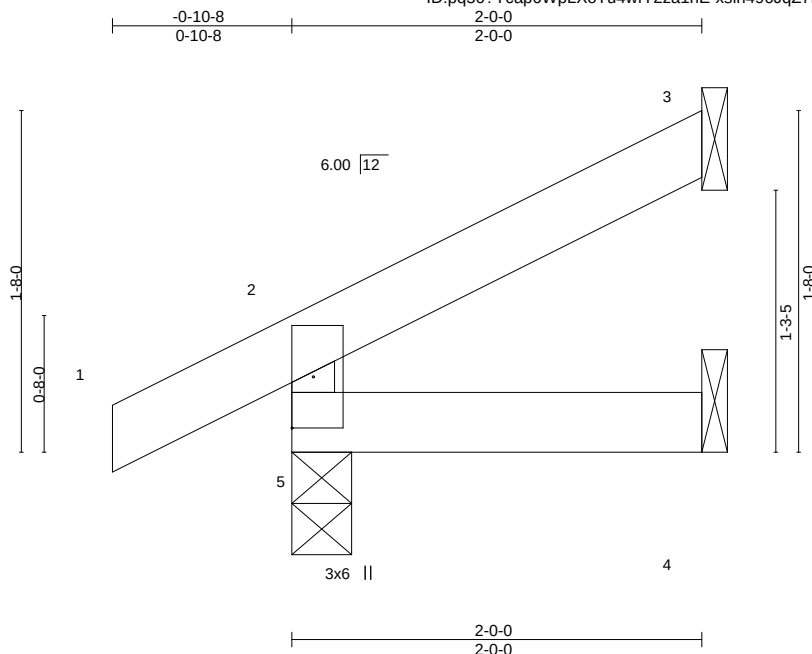
Job 400361	Truss J7	Truss Type Jack-Open	Qty 1	Ply 1	Lot 51 H4 Job Reference (optional)
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I41214319

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:55 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-xsln496JqZ7R2GUFYKp0URJ4lu?BYzNgzUvC_zJG?2



Scale = 1:11.2

Plate Offsets (X,Y)--	[2:0-0-10,0-1-4], [5:0-0-0,0-1-4]	
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
	CSI.	
	TC 0.07	
	BC 0.03	
	WB 0.00	
	Matrix-R	
	DEFL.	
	in (loc)	l/defl L/d
	Vert(LL) -0.00 5	>999 360
	Vert(CT) -0.00 4-5	>999 240
	Horz(CT) -0.00 3	n/a n/a
	Wind(LL) 0.00 5	>999 240
	PLATES	GRIP
	MT20	197/144
	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 2-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=50(LC 8)
 Max Uplift 5=25(LC 8), 3=33(LC 8)
 Max Grav 5=171(LC 1), 3=50(LC 1), 4=35(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.



May 6, 2020

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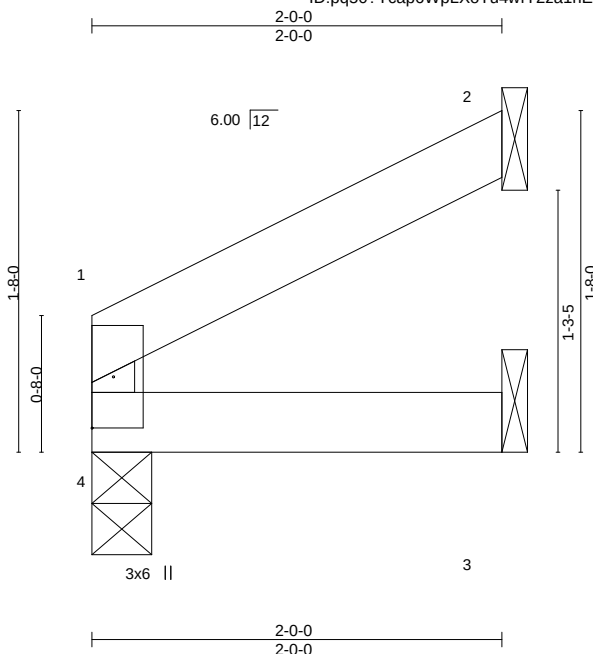
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400361	Truss J8	Truss Type Jack-Open	Qty 2	Ply 1	Lot 51 H4 I41214320
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:56 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-P3J9IV7xbtGlgQ3R62n2Yh_V19ECw?DWvdDTkQzJG?1



Scale = 1:11.2

Plate Offsets (X,Y)--		[1:0-0-10,0-1-4], [4:0-0-0,0-1-4]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.05		Vert(LL) -0.00	4	>999	360	MT20 197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.03		Vert(CT) -0.00	3-4	>999	240	
BCLL 0.0 *		Rep Stress Incr YES		WB 0.00		Horz(CT) -0.00	2	n/a	n/a	
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL) 0.00	4	>999	240	Weight: 5 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=33(LC 8)
Max Uplift 2=37(LC 8)
Max Grav 4=85(LC 1), 2=62(LC 1), 3=37(LC 3)

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

NOTES-

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



May 6, 2020

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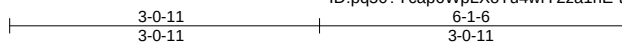
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214321
400361	LAY1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

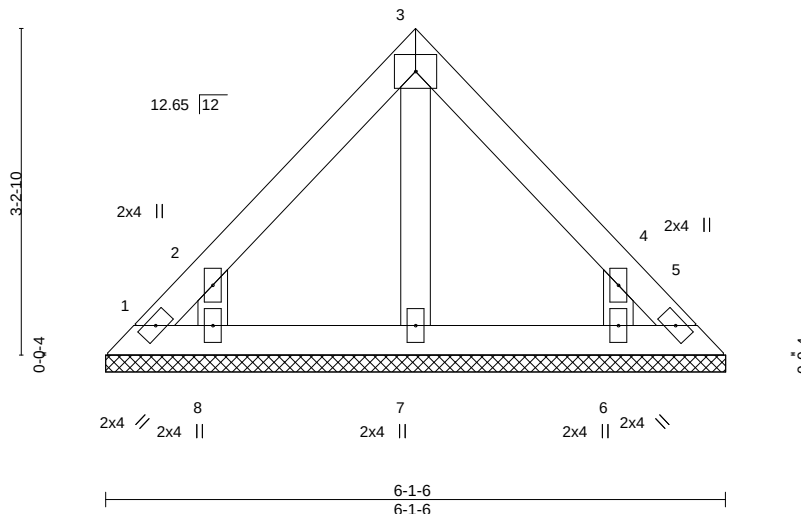
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:39:57 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-tfXVq7ZMBO9laedgllH5vWgpZaUfS3g8Hz0GszJG?0



4x5 =

Scale = 1:22.7



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 0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 20 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 6-1-6.
(lb) - Max Horz 1=-76(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-132(LC 8), 6=-131(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- 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, 5 except (jt=lb) 8=132, 6=131.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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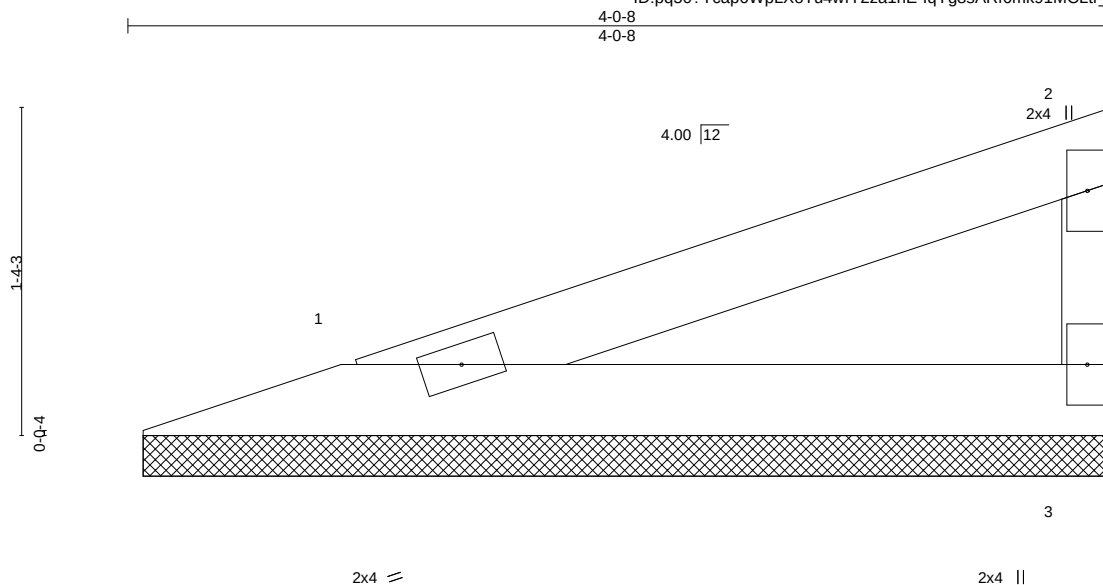
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214322
400361	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:40:00 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-lqYg8sARf6mk91MCLtr_jX89NmaFspD6qFCgsBzJG_z



Scale = 1:9.5

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 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	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: 9 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=3-11-12, 3=3-11-12
Max Horz 1=45(LC 5)
Max Uplift 1=-22(LC 4), 3=-29(LC 8)
Max Grav 1=135(LC 1), 3=135(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.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400361	Truss V2	Truss Type Valley	Qty 1	Ply 1	Lot 51 H4 Job Reference (optional)	I41214323
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Wheeler Lumber, Waverly, KS 66871

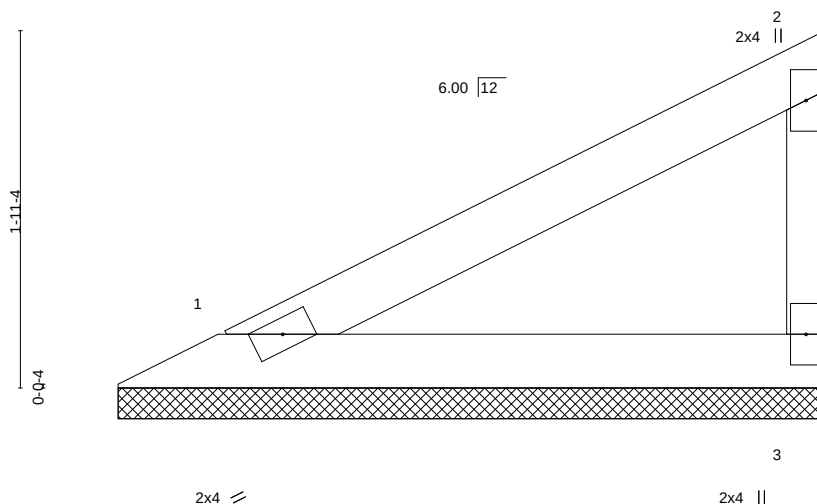
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:40:01 2020 Page 1

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3-10-8

3-10-8

Scale = 1:12.5



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 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	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

WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=3-10-0, 3=3-10-0

Max Horz 1=66(LC 5)

Max Uplift 1=-18(LC 8), 3=-35(LC 8)

Max Grav 1=141(LC 1), 3=141(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.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214324
400361	V3	Valley	1	1	Job Reference (optional)	

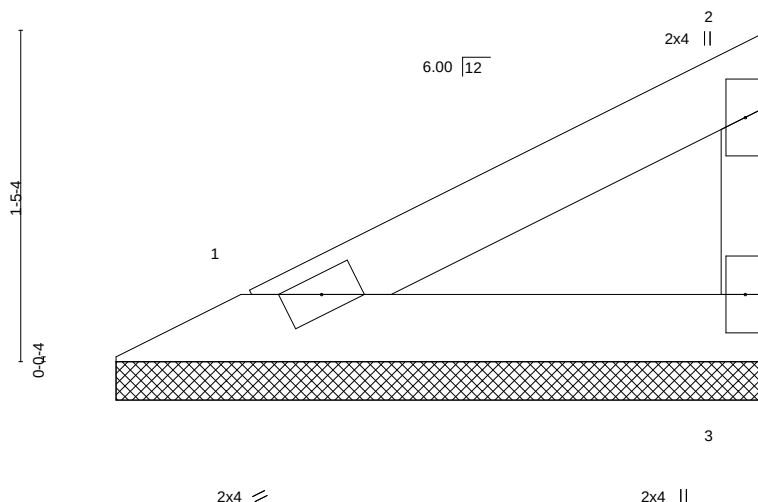
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:40:03 2020 Page 1

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-iPEomuCKy18J0V5n00PiLAmht_de39yYWDQLTWzJG_w

2-10-8
2-10-8

Scale = 1:10.0



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 0.08	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: 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 2-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-10-0, 3=2-10-0
Max Horz 1=45(LC 5)
Max Uplift 1=-12(LC 8), 3=-24(LC 8)
Max Grav 1=96(LC 1), 3=96(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.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214325
400361	V4	Valley	1	1	Job Reference (optional)	

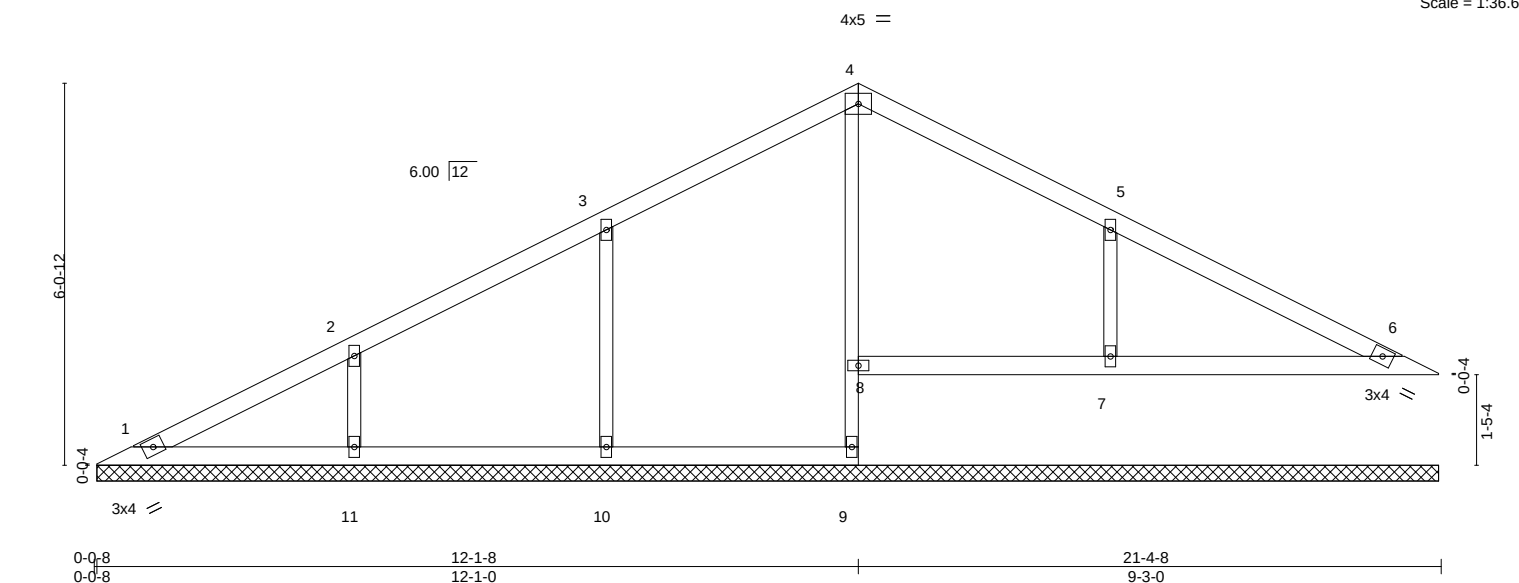
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:40:04 2020 Page 1
ID:pq50?Ycap6WpLXoTu4wfY2za1nE-AboAzEDyjKGAdfg_ajwxtNJpVOx2obUhlAu?yzJG_v

12-1-8
12-1-8

21-4-8
9-3-0

Scale = 1:36.6



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 0.28	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 60 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-9: 2x3 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-

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

REACTIONS.

All bearings 21-3-8.
(lb) - Max Horz 1=135(LC 8), 11=111(LC 8), 7=139(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6 except 10=115(LC 8), 11=111(LC 8), 7=139(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 9 except 8=264(LC 18), 10=433(LC 23), 11=375(LC 2),
7=490(LC 24)

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

WEBS 3-10=-302/168, 2-11=-282/155, 5-7=-359/195

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
- 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, with BCDL = 10.0psf.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6 except (jt=lb) 10=115, 11=111, 7=139.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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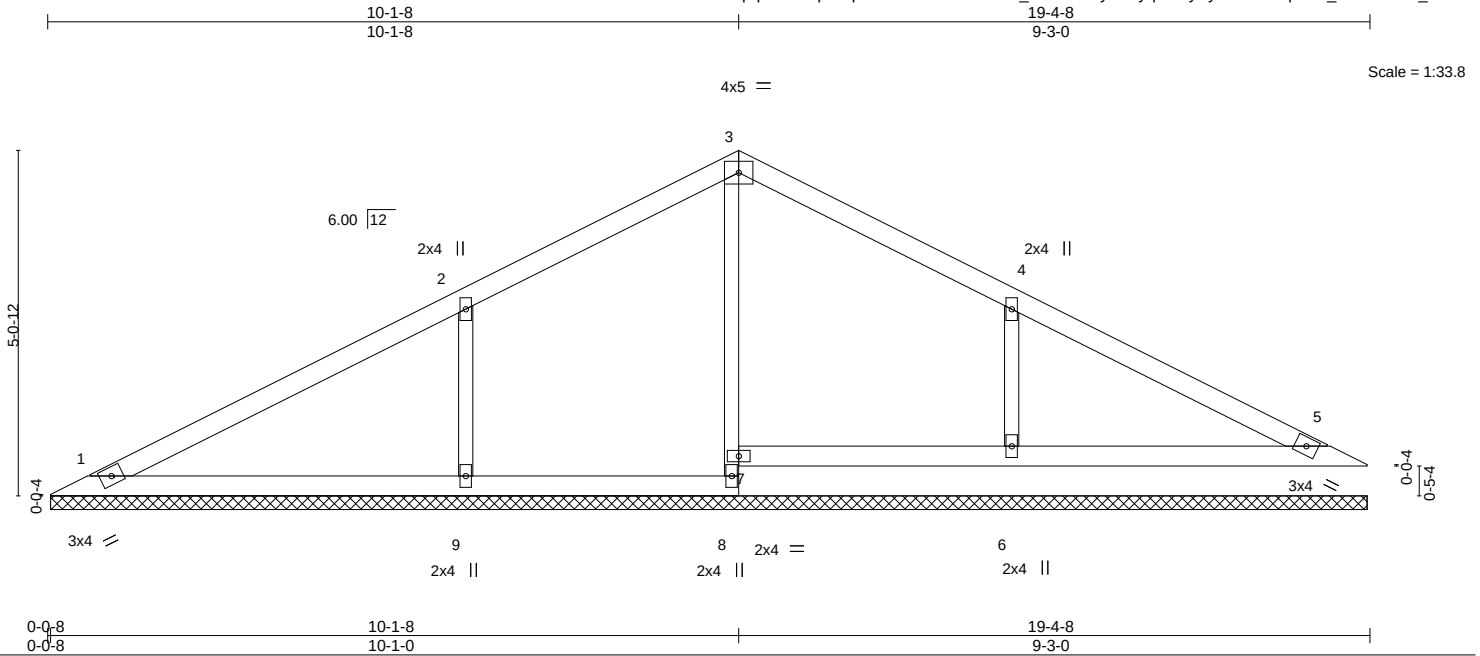
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214326
400361	V5	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:40:06 2020 Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	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	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 52 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 3-8: 2x3 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 6-0-0 oc bracing, Except:
 10-0-0 oc bracing: 7-8.

REACTIONS.

All bearings 19-3-8.
 (lb) - Max Horz 1=94(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-161(LC 8), 6=-139(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 8, 7 except 9=536(LC 21), 6=477(LC 22)

FORCES.

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

WEBS

2-9=-405/220, 4-6=-360/196

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.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=161, 6=139.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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.



May 6, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



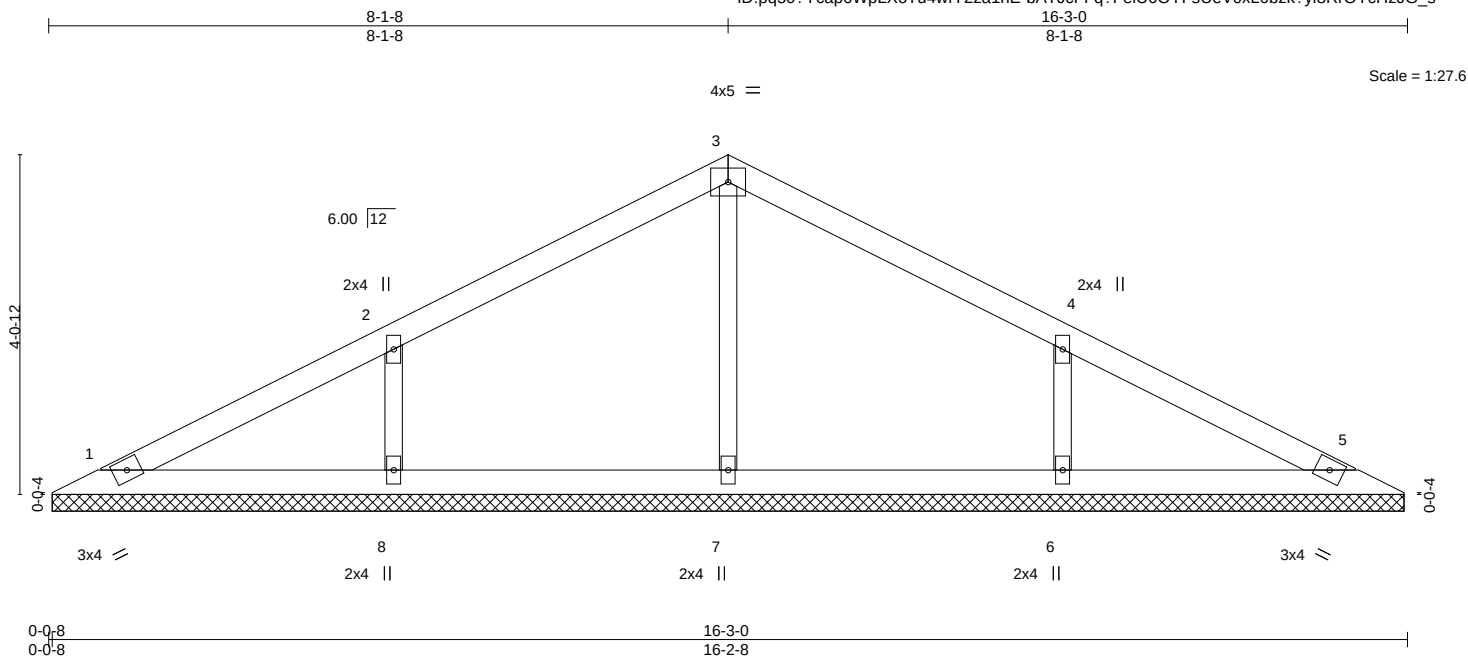
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214327
400361	V6	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-bATJcFFq?FeIU6OYFsUeV0xL0bzK?yi8RrOYcHzJG_s



LOADING (psf)	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)	n/a	-	n/a	999	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 43 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 16-2-0.
(lb) - Max Horz 1=-66(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-125(LC 8), 6=-125(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=293(LC 1), 8=401(LC 21), 6=401(LC 22)

FORCES.

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

WEBS

2-8=-312/170, 4-6=-312/170

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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, 5 except (jt=lb) 8=125, 6=125.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 6, 2020

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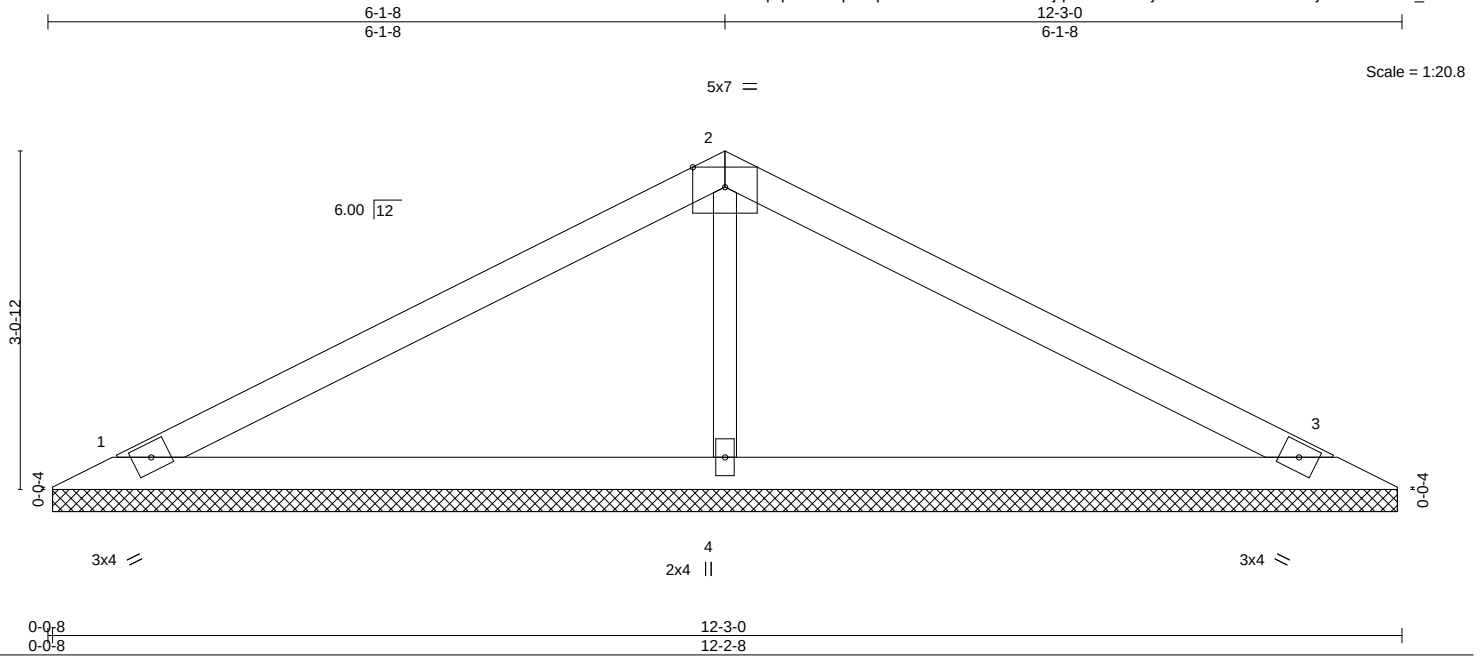


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214328
400361	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:pq50?Ycap6WpLXoTu4wfY2za1nE-TxjqRdIL3U8AzjKUhYafs5zLCJDxmbjMTMml2zJG_o



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.43	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 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=12-2-0, 3=12-2-0, 4=12-2-0
Max Horz 1=49(LC 12)
Max Uplift 1=-47(LC 8), 3=-56(LC 9), 4=-29(LC 8)
Max Grav 1=233(LC 21), 3=233(LC 22), 4=525(LC 1)

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

WEBS 2-4=-359/94

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.



May 6, 2020

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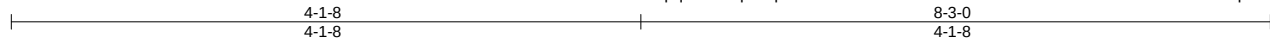
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214329
400361	V8	Valley	1	1	Job Reference (optional)	

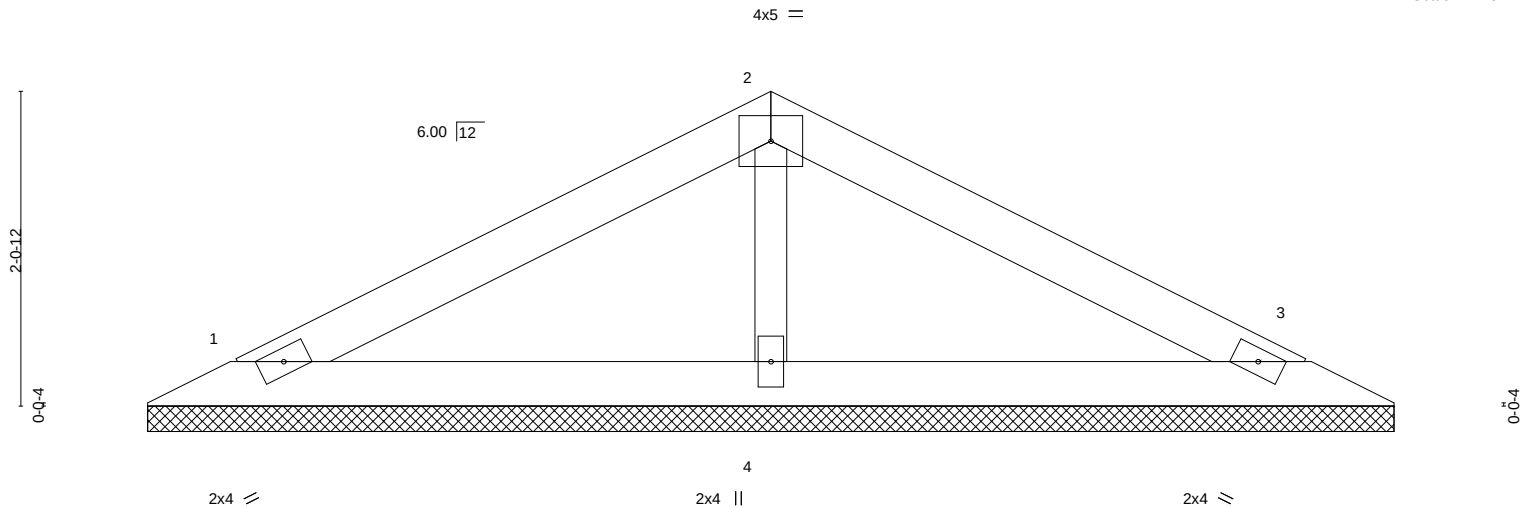
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 6 09:40:13 2020 Page 1

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Scale = 1:15.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							
								Weight: 19 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-2-0, 3=8-2-0, 4=8-2-0
Max Horz 1=-31(LC 13)
Max Uplift 1=-38(LC 8), 3=-43(LC 9), 4=-43(LC 8)
Max Grav 1=164(LC 1), 3=164(LC 1), 4=301(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.



May 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 51 H4	I41214330
400361	V9	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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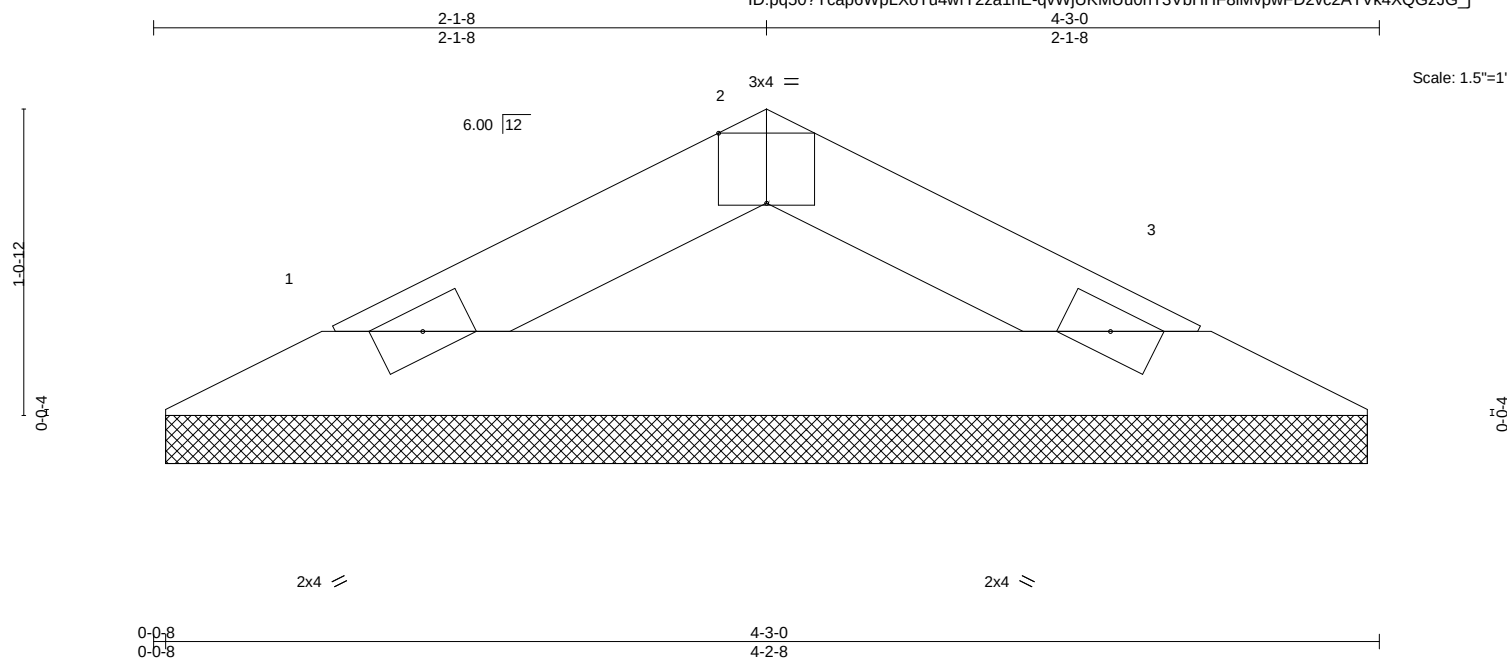


Plate Offsets (X,Y)--		[2:0-2-0,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.04		Vert(LL)	n/a -	n/a	999
TCDL 10.0		Lumber DOL	1.15	BC 0.09		Vert(CT)	n/a -	n/a	999
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.00 3	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 9 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-2-0, 3=4-2-0
Max Horz 1=13(LC 12)
Max Uplift 1=-17(LC 8), 3=-17(LC 9)
Max Grav 1=135(LC 1), 3=135(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.



May 6, 2020

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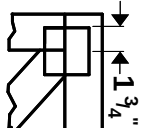
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



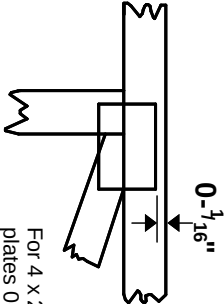
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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 2012 software or upon request.**

PLATE SIZE

4 X 4

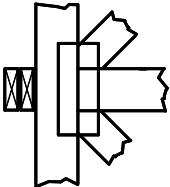
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



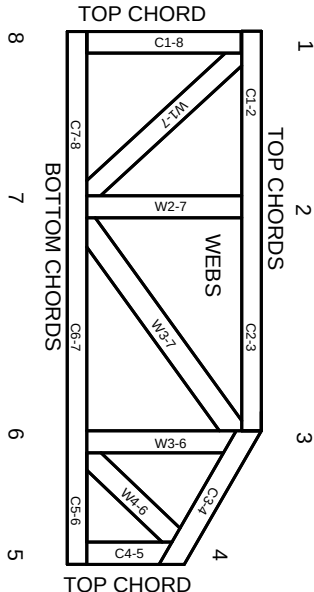
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI.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/TPI 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. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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