



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

Re: 400567
Lot 20 RT

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

Pages or sheets covered by this seal: I42760533 thru I42760625

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

Missouri COA: Engineering 001193



September 11, 2020

Sevier, Scott ,Engineer

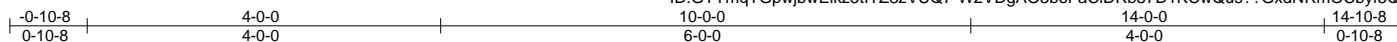
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO 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.

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760533
400567	A1	Hip Girder	1	1		
Job Reference (optional)						

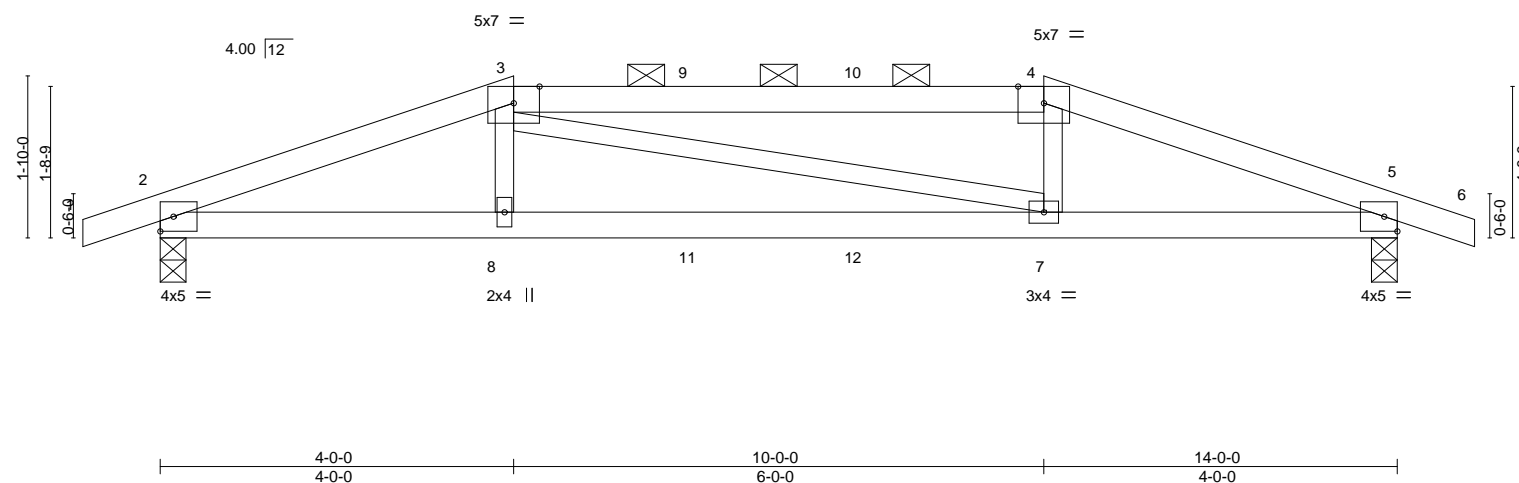
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:24 2020 Page 1

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Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	A1	Hip Girder	1	1	I42760533
Job Reference (optional)					

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-53(F) 4=-53(F) 8=-212(F) 7=-212(F) 9=-53(F) 10=-53(F) 11=-18(F) 12=-18(F)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760534
400567	A2	Hip	1	1	Job Reference (optional)	

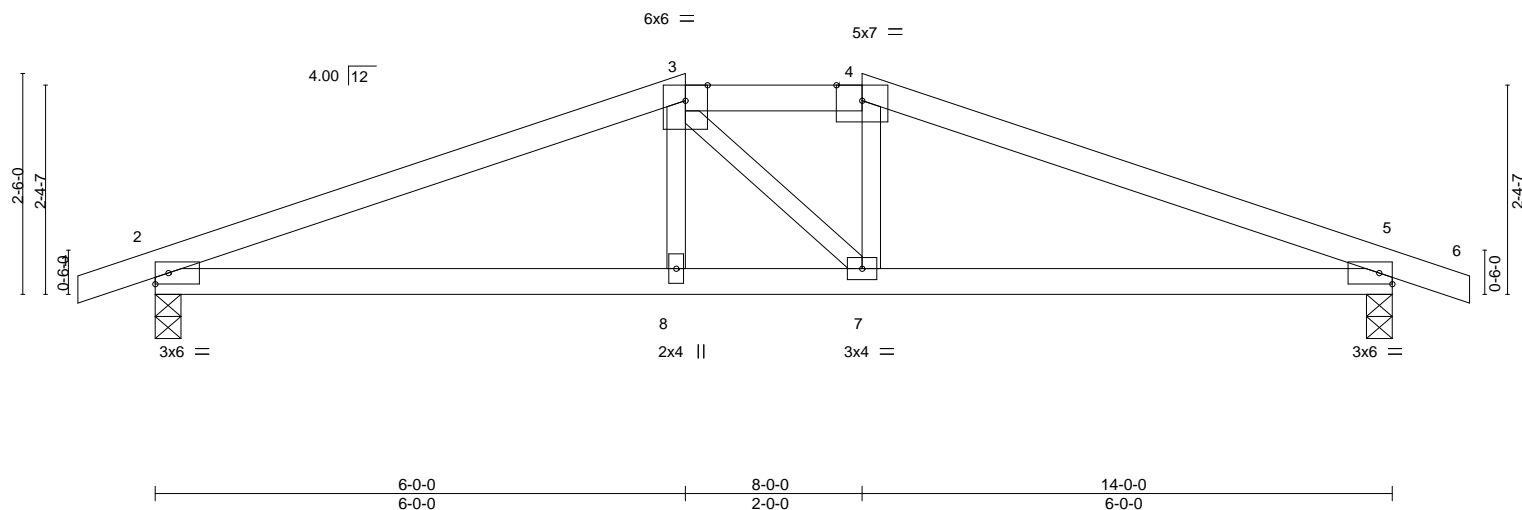
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5ITZ8zVUQ7-W2VDgAO5boFaCIdRb57D1KCyeux3?ISdNRmOCbyf5QT

-0-10-8	6-0-0	8-0-0	14-0-0	14-10-8
0-10-8	6-0-0	2-0-0	6-0-0	0-10-8

Scale = 1:26.1



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 0.55	Vert(LL)	-0.04	2-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.10	2-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	2-8	>999	240	Weight: 40 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 4-3-1 oc purlins, except 2-0-0 oc purlins (5-7-1 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 5=0-3-8
Max Horz 2=39(LC 8)
Max Uplift 2=-141(LC 4), 5=-141(LC 5)
Max Grav 2=688(LC 1), 5=688(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1163/158, 3-4=-1022/182, 4-5=-1164/157
BOT CHORD 2-8=-117/1026, 7-8=-119/1021, 5-7=-88/1027

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) except (jt=lb) 2=141, 5=141.
- This truss 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.



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

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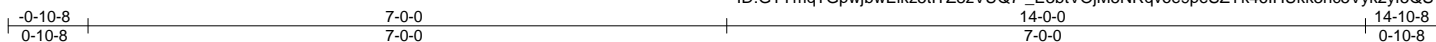
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760535
400567	A3	Common	3	1		

Wheeler Lumber, Waverly, KS 66871

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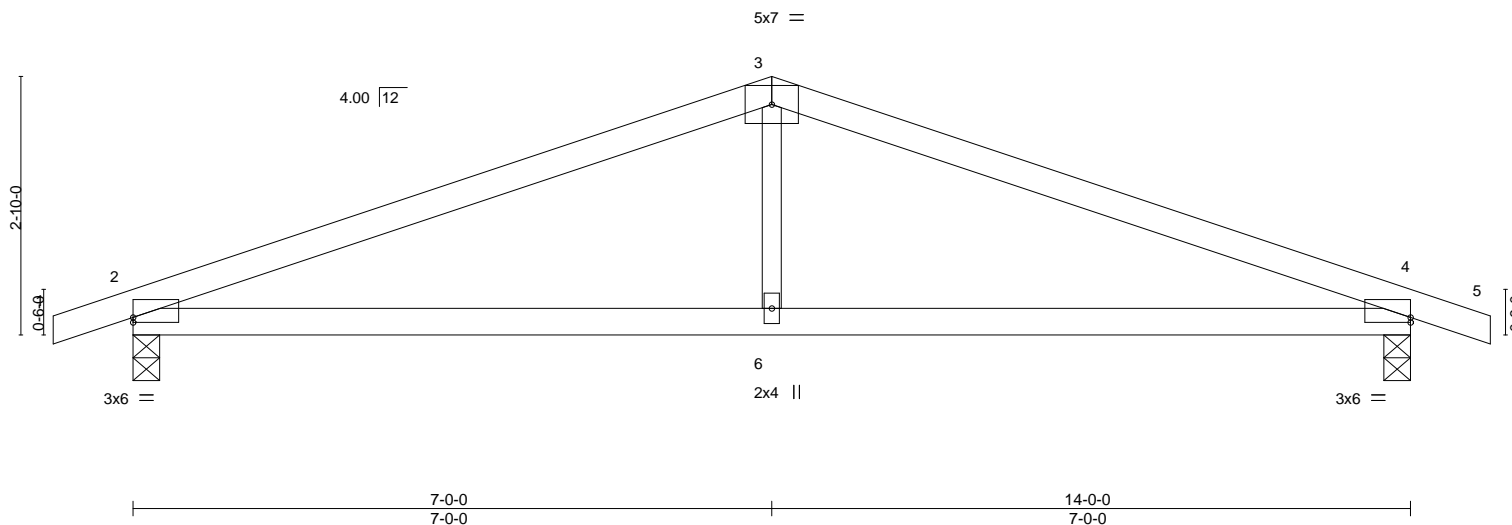


Plate Offsets (X,Y)-- [2:0-0-0,0-0-10], [4:0-0-0,0-0-10]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.06 2-6	>999	360
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.14 2-6	>999	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.02 4	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05 2-6	>999	240
				PLATES	GRIP		
				MT20	197/144		
				Weight: 37 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 3-2-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

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

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

TOP CHORD 2-3=-1095/130, 3-4=-1095/130
BOT CHORD 2-6=-72/952, 4-6=-72/952
WEBS 3-6=0/331

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=134, 4=134.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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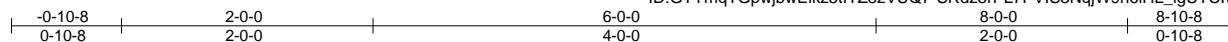
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760536
400567	B1	Hip Girder	1	1		

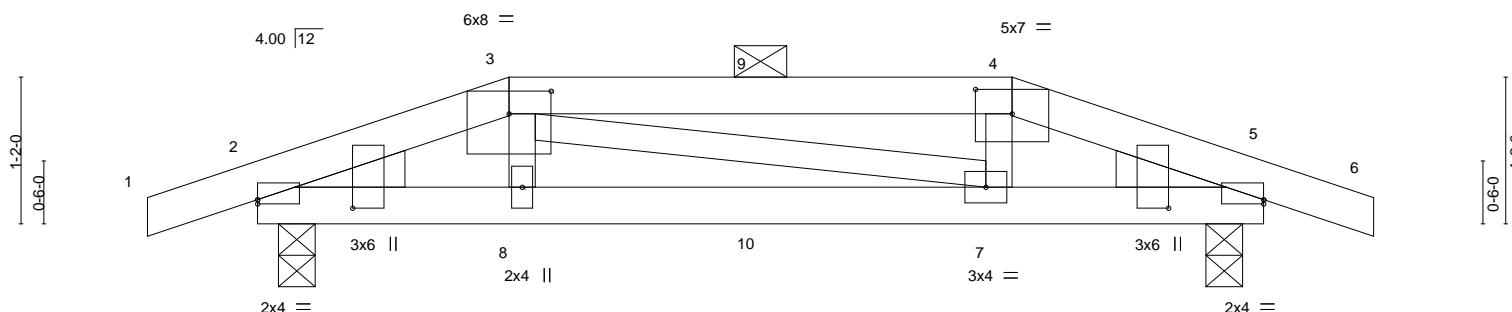
Wheeler Lumber, Waverly, KS 66871

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Scale = 1:18.3



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

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.36	Vert(LL)	-0.01	7-8	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.03	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.01	7-8	>999	Weight: 27 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
 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, 5=0-3-8
 Max Horz 2=17(LC 29)
 Max Uplift 2=-114(LC 4), 5=-114(LC 5)
 Max Grav 2=418(LC 1), 5=418(LC 1)

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

TOP CHORD 2-3=-613/108, 3-4=-531/99, 4-5=-615/107
 BOT CHORD 2-8=-71/521, 7-8=-66/529, 5-7=-78/524

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) except (it=lb) 2=114, 5=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) 107 lb down and 89 lb up at 2-0-0, and 54 lb down and 33 lb up at 4-0-0, and 107 lb down and 89 lb up at 6-0-0 on top chord, and 8 lb down at 2-0-0, and 8 lb down at 4-0-0, and 8 lb down at 5-11-4 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, 2-5=-20



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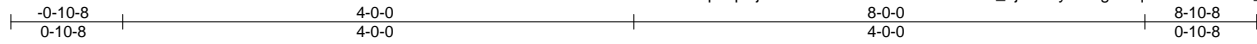
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760537
400567	B2	Common	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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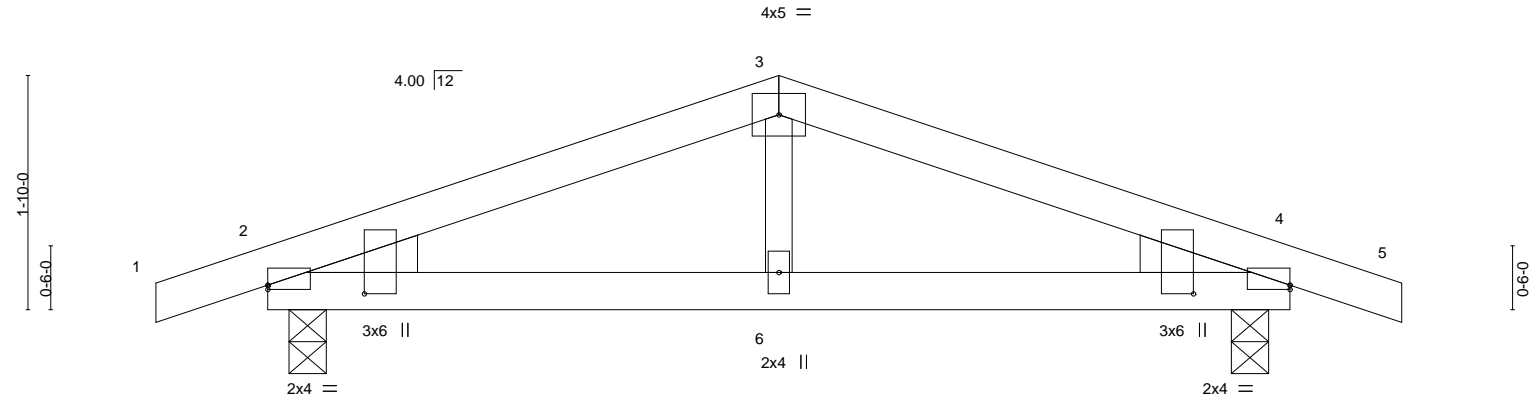


Plate Offsets (X,Y)--	0:2-0 0:2-0	4-0-0 3-10-0	7-10-0 3-10-0	8:0-0 0:2-0
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.01	2-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.02	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.01	6	>999	240	Weight: 24 lb	FT = 10%

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=29(LC 8)
Max Uplift 2=-96(LC 4), 4=-96(LC 5)
Max Grav 2=418(LC 1), 4=418(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-513/41, 3-4=-513/41
BOT CHORD 2-6=-8/427, 4-6=-8/427

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) 2, 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.



September 11, 2020

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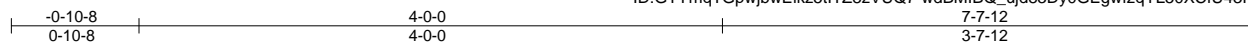


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760538
400567	B3	Common	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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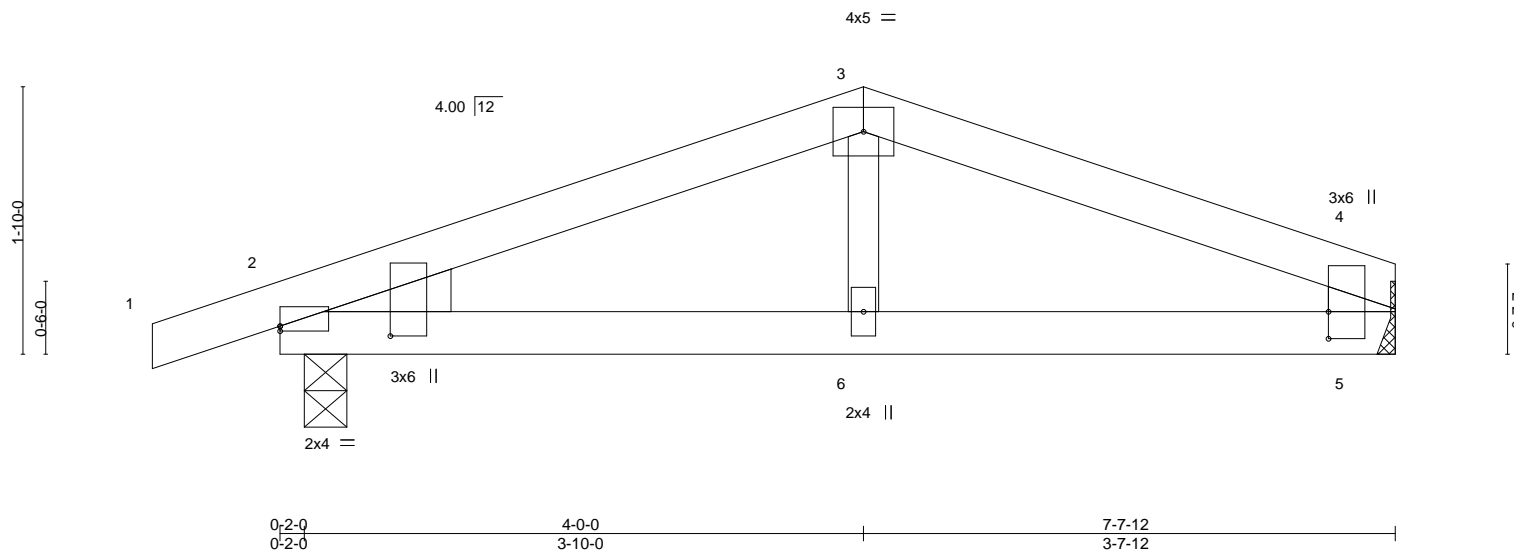


Plate Offsets (X,Y)-- [2:0-0-13,0-9-1], [2:0-0-0,0-0-6], [4:0-2-4,0-0-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01 2-6 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.03 2-6 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00 5 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01 2-6 >999 240	Weight: 21 lb	FT = 10%

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

WEDGE
Left: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 5=Mechanical
Max Horz 2=32(LC 8)
Max Uplift 2=-95(LC 4), 5=-46(LC 5)
Max Grav 2=404(LC 1), 5=322(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-479/60, 3-4=-462/59, 4-5=-269/64
BOT CHORD 2-6=-29/398, 5-6=-29/398

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



September 11, 2020

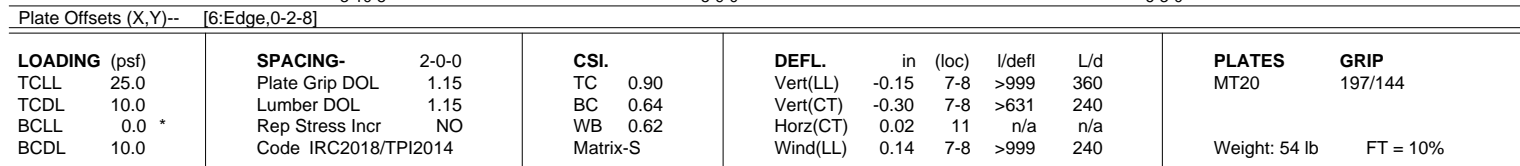
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:28 2020 Page 1
ID:GTYmqTGpwbwEikz5tITZ8zVUQ7-OplkWXRcf0m?hNXCqx9B9BAMY5VF3xzhDl3kcLnYf5QP
-1-10-8 3-10-8 9-7-8 15-10-8
1-10-8 3-10-8 5-9-0 6-3-0
Scale = 1:31.1



REACTIONS. (size) 9=0-3-8, 11=Mechanical
 Max Horz 9=73(LC 26)
 Max Uplift 9=-279(LC 4), 11=-176(LC 5)
 Max Grav 9=992(LC 1), 11=799(LC 22)

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

TOP CHORD	2-3=-1374/297, 3-4=-2012/447, 4-5=-2009/446, 2-9=-833/260
BOT CHORD	8-9=-297/1232, 7-8=-304/1232, 6-7=-74/264
WEBS	3-7=-179/816, 4-7=-581/271, 5-7=-403/1818, 5-11=-899/206

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=279, 11=176.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 167 lb down and 129 lb up at 3-10-8, 76 lb down and 57 lb up at 5-11-4, 76 lb down and 57 lb up at 7-11-4, 76 lb down and 57 lb up at 9-11-4, and 76 lb down and 57 lb up at 11-11-4, and 76 lb down and 57 lb up at 13-11-4 on top chord, and 69 lb down at 3-10-8, 28 lb down at 5-11-4, 28 lb down at 7-11-4, 28 lb down at 9-11-4, and 28 lb down at 11-11-4, and 28 lb down at 13-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2



September 11, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	C1	Half Hip Girder	1	1	I42760539
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:GTYmqTGpwjBwEikz5tITZ8zVUQ7-s?J6jtREQKusJX6POfiOkOvirvblgQxMWJT9tpyf5QO

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 3-5=-70, 6-9=-20
 - Concentrated Loads (lb)
 - Vert: 3=-50(F) 8=-22(F) 12=-27(F) 13=-27(F) 14=-27(F) 15=-27(F) 16=-27(F) 17=-13(F) 18=-13(F) 19=-13(F) 20=-13(F) 21=-13(F)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760540
400567	C2	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:29 2020 Page 1

ID:GTYmqTGpwbwEikz5tITZ8zVUQ7-s?J6jtREQKusJX6POfiOkOvn9ve5gPiMWJT9tpy5QO

-1-10-8	5-10-8	10-7-8	15-10-8
1-10-8	5-10-8	4-9-0	5-3-0

Scale = 1:31.1

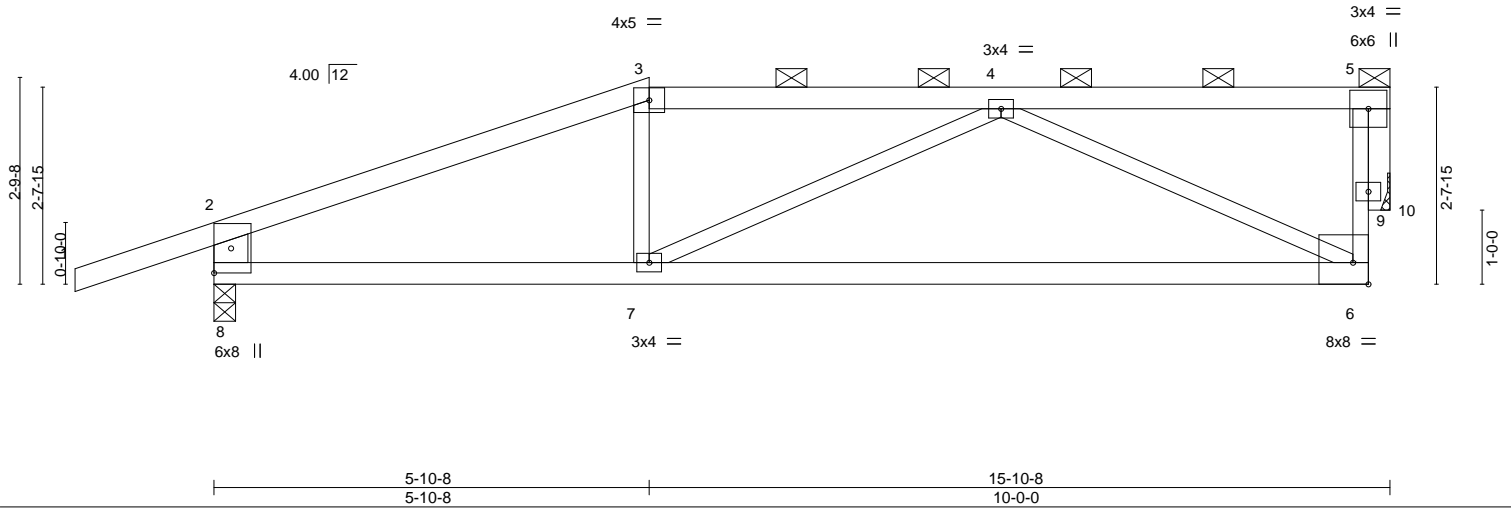


Plate Offsets (X,Y)--		[6:Edge,0-3-8]									
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		PLATES	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.62	in (loc)	l/defl	L/d	MT20
TCDL	10.0	Lumber DOL		1.15		BC	0.46	-0.23	6-7	>814	197/144
BCLL	0.0 *	Rep Stress Incr		YES		WB	0.70	-0.49	6-7	>383	
BCDL	10.0	Code IRC2018/TPI2014				Matrix-S		Horz(CT)	-0.02	10	n/a
								Wind(LL)	0.07	6-7	>999
											Weight: 53 lb
											FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 10=Mechanical
Max Horz 8=91(LC 5)
Max Uplift 8=-219(LC 4), 10=-126(LC 4)
Max Grav 8=858(LC 1), 10=662(LC 1)

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

TOP CHORD 2-3=-1168/155, 3-4=-1022/172, 6-9=-67/516, 5-9=-67/516, 2-8=-775/231
BOT CHORD 7-8=-149/1025, 6-7=-244/1008
WEBS 4-6=-946/267, 5-10=-684/132

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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=219, 10=126.
- This truss 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.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760541
400567	C3	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-KCtUwDSsBe0jwggbyMEdGbSs2J_iPugWINDjPFy5QN



Scale = 1:31.4

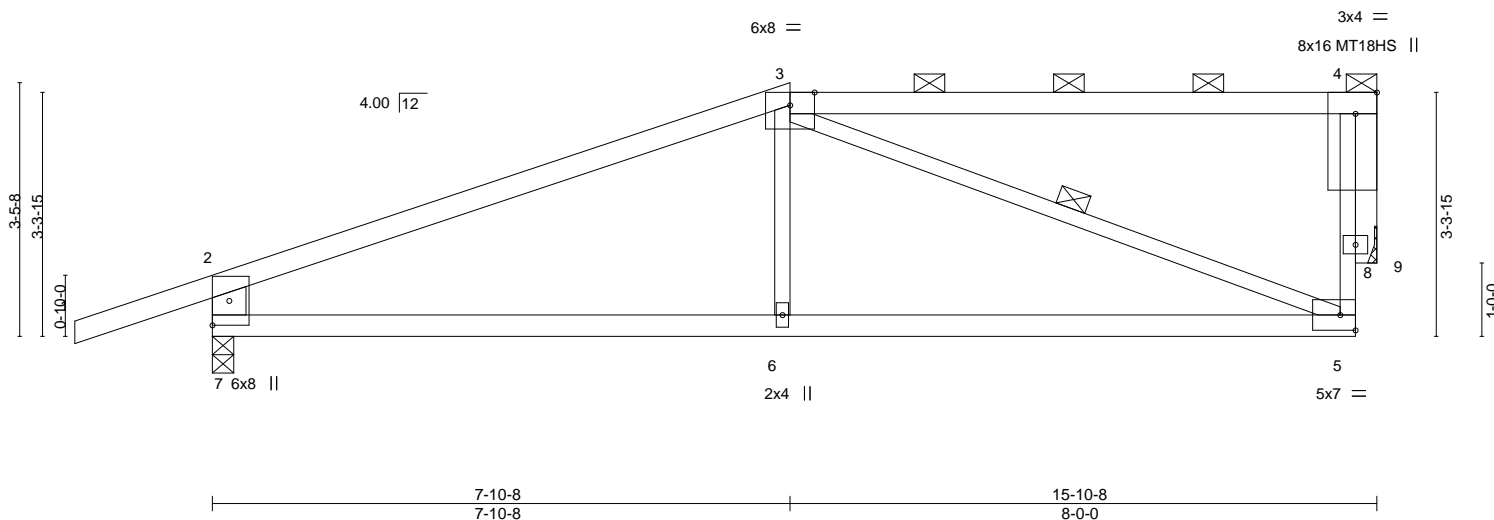


Plate Offsets (X,Y)--		[4:0-3-8,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 1.00		Vert(LL)	-0.11 5-6	>999	360
TCDL 10.0		Lumber DOL	1.15	BC 0.50		Vert(CT)	-0.24 5-6	>779	240
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.53		Horz(CT)	0.04 9	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05 6	>999	240
						PLATES		GRIP	
						MT20		197/144	
						MT18HS		197/144	
						Weight: 53 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 9=Mechanical
 Max Horz 7=110(LC 5)
 Max Uplift 7=-214(LC 4), 9=-131(LC 4)
 Max Grav 7=858(LC 1), 9=662(LC 1)

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

TOP CHORD 2-3=-1076/161, 5-8=-24/390, 4-8=-24/390, 2-7=-770/254
 BOT CHORD 6-7=-166/929, 5-6=-170/924
 WEBS 3-6=0/322, 3-5=-822/162, 4-9=-680/136

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=214, 9=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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 11, 2020

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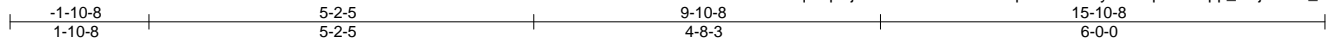
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760542
400567	C4	Half Hip	1	1	Job Reference (optional)	

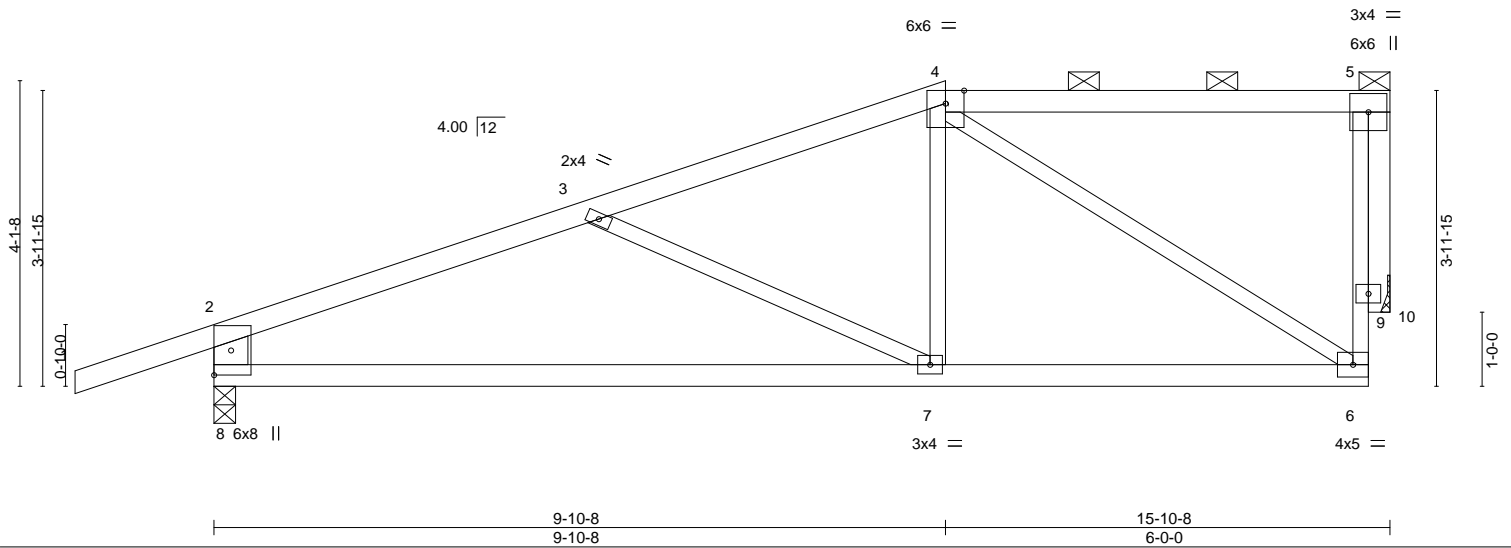
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:31 2020 Page 1

ID:GTymqTGpwbwEikz5tITZ8zVUQ7-pORs8ZTUyx8aYqFnV3lsp_2Qjlo8Grf_1yGxhyf5QM



Scale = 1:31.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCCL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.20	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.41				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.03				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	Weight: 58 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 10=Mechanical
 Max Horz 8=136(LC 4)
 Max Uplift 8=-209(LC 4), 10=-137(LC 4)
 Max Grav 8=858(LC 1), 10=662(LC 1)

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

TOP CHORD 2-3=-1093/213, 3-4=-796/116, 6-9=-59/472, 5-9=-59/472, 2-8=-751/257
 BOT CHORD 7-8=-257/951, 6-7=-117/721
 WEBS 4-7=0/371, 4-6=-755/132, 5-10=-669/139

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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=209, 10=137.
- This truss 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.



September 11, 2020

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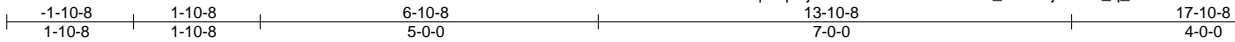
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760543
400567	C5	Roof Special Girder	1	1		
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:32 2020 Page 1
ID:GTymqTGpwbwEikz5tITZ8zVUQ7-Ha_FLvU6jFGRA_q_3nG5M0XDV6ZYthpDhipU8yf5QL



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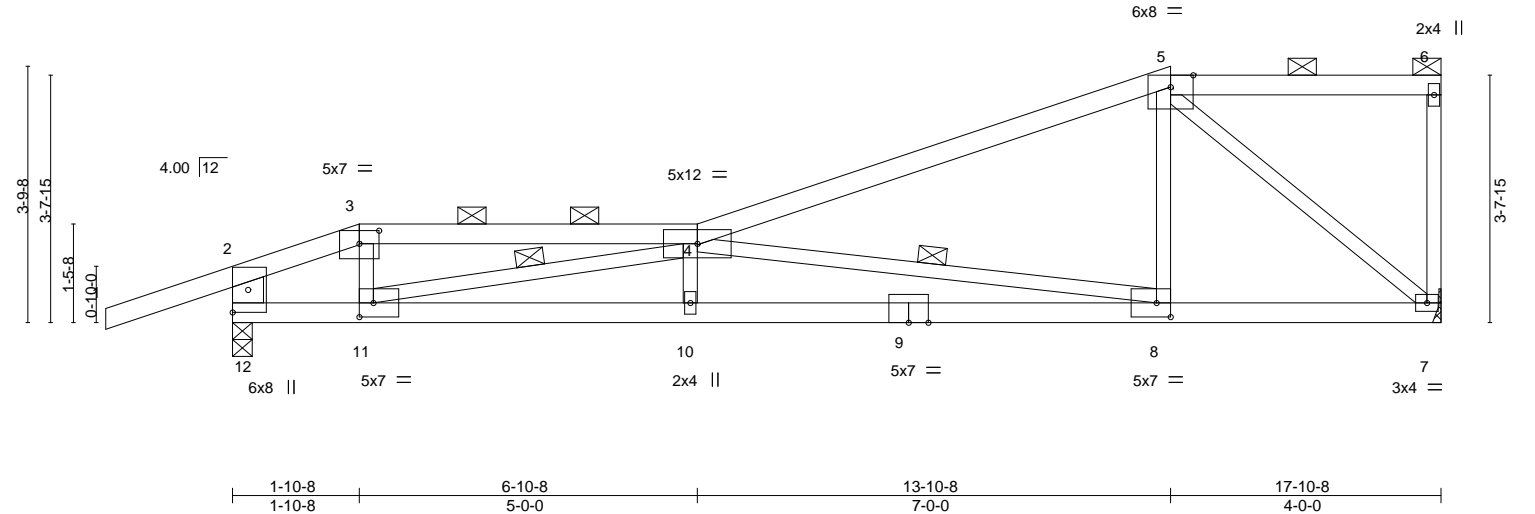


Plate Offsets (X,Y)-- [3:0-3-8,0-2-5], [8:0-2-8,0-2-8], [11:0-2-8,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.94	Vert(LL)	-0.23	8-10	>935	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.42	8-10	>502	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.97	Horz(CT)	0.06	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.18	10	>999	240	Weight: 64 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12: 2x6 SPF No.2

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

REACTIONS. (size) 7=Mechanical, 12=0-3-8
Max Horz 12=161(LC 5)
Max Uplift 7=152(LC 4), 12=272(LC 4)
Max Grav 7=776(LC 1), 12=905(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-989/214, 3-4=-877/197, 4-5=-885/160, 2-12=-738/234
BOT CHORD 11-12=-220/845, 10-11=-513/2742, 8-10=-520/2733, 7-8=-111/758
WEBS 3-11=-29/375, 4-11=-1961/373, 4-8=-1988/422, 5-8=-3/498, 5-7=-1004/195

- 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
 - 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) except (jt=lb) 7=152, 12=272.
 - This truss 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) 125 lb down and 185 lb up at 1-10-8 on top chord, and 25 lb down and 47 lb up at 1-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-12=-20



September 11, 2020

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760543
400567	C5	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:32 2020 Page 2
ID:GTYmqTGpwbwEikz5tITZ8zVUQ7-Ha_FLvU6jFGRA_q_3nG5M0XDV6ZYthlpDhipU8yf5QL

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=38(F) 11=8(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760544
400567	C6	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:34.1

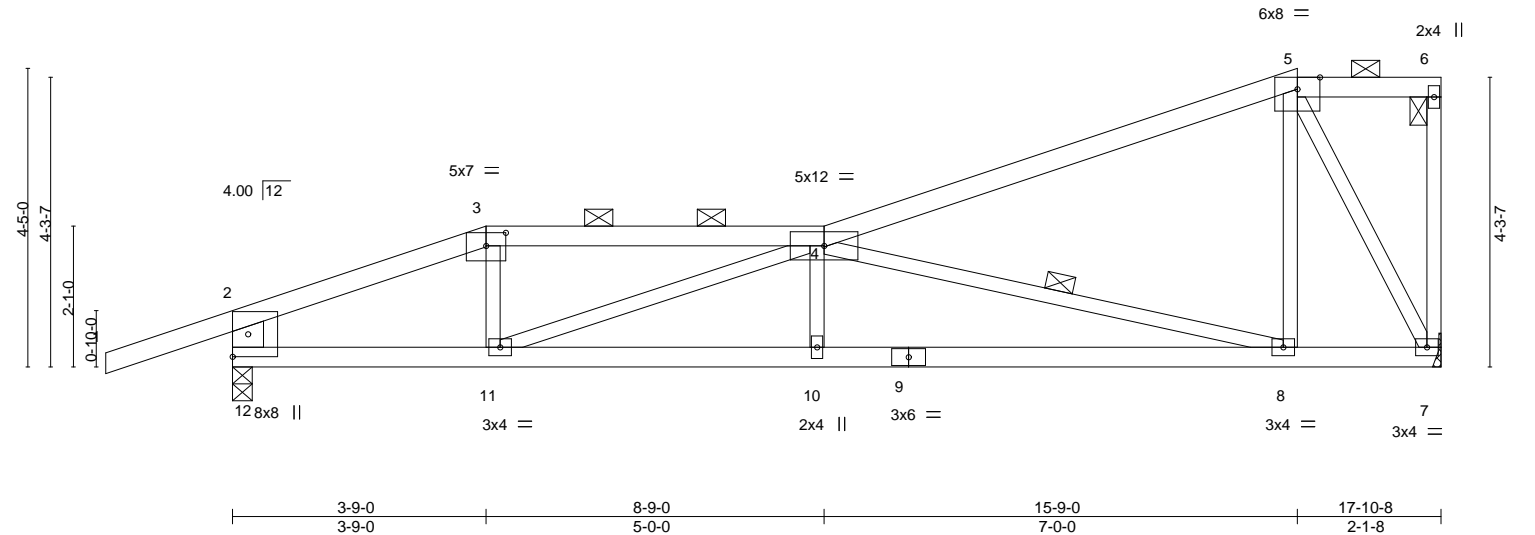


Plate Offsets (X,Y)-- [3:0-3-8,0-2-5]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.16 10-11	>999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.28 10-11	>742	GRIP
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.05 7	n/a	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13 10-11	>999	Weight: 66 lb
							FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 4-10-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-11 max.): 3-4, 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 9-10-6 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-12: 2x6 SP 2400F 2.0E	WEBS 1 Row at midpt 4-8

REACTIONS. (size) 7=Mechanical, 12=0-3-8
Max Horz 12=188(LC 5)
Max Uplift 7=-151(LC 4), 12=-233(LC 4)
Max Grav 7=781(LC 1), 12=946(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1270/215, 3-4=-1132/211, 4-5=-511/92, 2-12=-815/234
BOT CHORD 11-12=-224/1116, 10-11=-348/1999, 8-10=-352/1991, 7-8=-62/402
WEBS 3-11=0/296, 4-11=-923/154, 4-10=0/263, 4-8=-1628/333, 5-8=-19/540, 5-7=-900/170

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
- 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) except (jt=lb) 7=151, 12=233.
- This truss 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.



September 11, 2020

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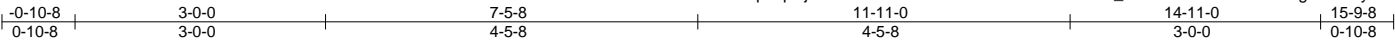
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760545
400567	D1	HIP GIRDER	1	1		

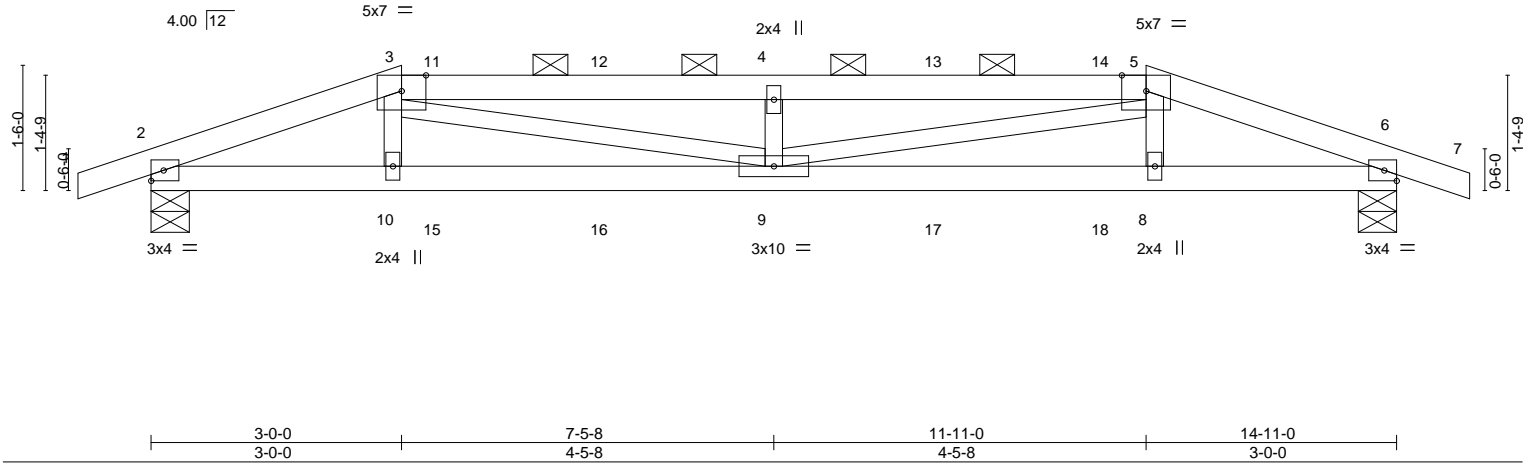
Wheeler Lumber, Waverly, KS 66871

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Scale = 1:27.6



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 0.42	Vert(LL)	-0.10	9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.18	9	>939	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.30	Horz(CT)	0.03	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09	9	>999	240	Weight: 46 lb	FT = 10%

LUMBER-										
TOP CHORD	2x4 SPF No.2									
BOT CHORD	2x4 SPF No.2									
WEBS	2x3 SPF No.2									
REACTIONS.	(size) 2=0-5-8, 6=0-5-8									
	Max Horz 2=21(LC 40)									
	Max Uplift 2=210(LC 4), 6=210(LC 5)									
	Max Grav 2=666(LC 1), 6=666(LC 1)									

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.									
TOP CHORD	2-3=-1374/361, 3-4=-1985/508, 4-5=-1985/508, 5-6=-1373/361									
BOT CHORD	2-10=-319/1269, 9-10=-321/1259, 8-9=-304/1258, 6-8=-302/1267									
WEBS	3-9=-180/864, 4-9=-334/144, 5-9=-181/864									

- 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) except (jt=lb) 2=210, 6=210.
 - This truss 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) 117 lb down and 133 lb up at 3-0-0, 53 lb down and 12 lb up at 3-5-8, 53 lb down and 12 lb up at 5-5-8, 53 lb down and 12 lb up at 7-5-8, 53 lb down and 12 lb up at 9-5-8, and 53 lb down and 12 lb up at 11-5-8, and 117 lb down and 133 lb up at 11-11-0 on top chord, and 26 lb down and 49 lb up at 3-0-0, 8 lb down and 7 lb up at 3-5-8, 8 lb down and 7 lb up at 5-5-8, 8 lb down and 7 lb up at 7-5-8, 8 lb down and 7 lb up at 9-5-8, and 8 lb down and 7 lb up at 11-5-8, and 26 lb down and 49 lb up at 11-10-4 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									
1) Dead + Roof Live (balanced):	Lumber Increase=1.15, Plate Increase=1.15									
	Uniform Loads (plf)									
	Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20									

Continued on page 2

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September 11,2020

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	D1	HIP GIRDER	1	1	I42760545
Job Reference (optional)					

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 3=37(F) 5=37(F) 10=7(F) 9=7(F) 8=7(F) 15=7(F) 16=7(F) 17=7(F) 18=7(F)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760546
400567	D2	HIP GIRDER	1	1		

Wheeler Lumber, Waverly, KS 66871

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Job Reference (optional)

-0-10-8	4-10-8	10-0-8	14-11-0	15-9-8
0-10-8	4-10-8	5-2-0	4-10-8	0-10-8

Scale = 1:27.6

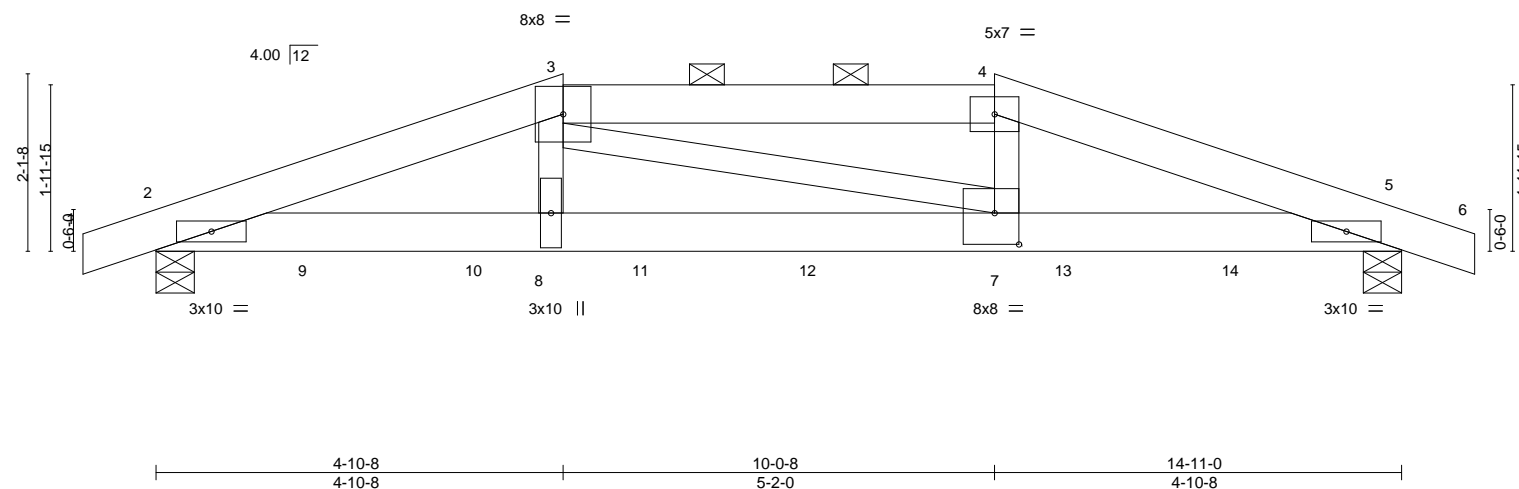


Plate Offsets (X,Y)-- [7:0-3-8,0-4-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.13 7-8 >999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.23 7-8 >766	240	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.05 5 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08 7-8 >999	240	Weight: 67 lb FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.4E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-11 oc purlins, except
2-0-0 oc purlins (3-7-1 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-5-8, 5=0-5-8
Max Horz 2=-33(LC 9)
Max Uplift 2=-234(LC 4), 5=-247(LC 5)
Max Grav 2=1678(LC 1), 5=1666(LC 1)

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

TOP CHORD 2-3=-3896/413, 3-4=-3563/422, 4-5=-3897/422
BOT CHORD 2-8=-367/3663, 7-8=-368/3584, 5-7=-343/3647
WEBS 3-8=0/831, 4-7=-22/980

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) except (jt=lb) 2=234, 5=247.
- This truss 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) 283 lb down and 30 lb up at 1-10-12, 283 lb down and 30 lb up at 3-10-12, 283 lb down and 30 lb up at 5-10-12, 283 lb down and 30 lb up at 7-10-12, 283 lb down and 30 lb up at 9-10-12, and 283 lb down and 30 lb up at 10-11-8, and 191 lb down and 42 lb up at 12-11-8 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, 2-5=-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 20 RT
400567	D2	HIP GIRDER	1	1	I42760546
Job Reference (optional)					

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=-283(B) 9=-283(B) 10=-283(B) 11=-283(B) 12=-283(B) 13=-283(B) 14=-191(B)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760547
400567	E1	Hip Girder	1	4	Job Reference (optional)	

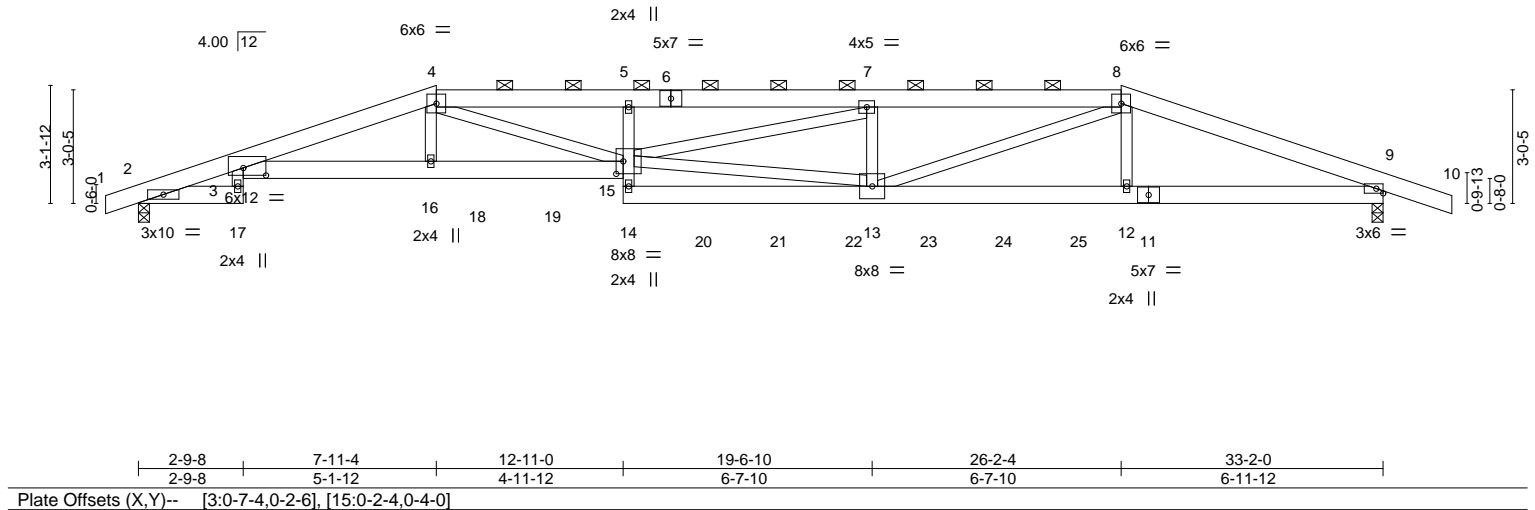
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-dYo8OcYFXnukGljxsKsG34E3r7LRY?mYMzQa9Lyf5QG

-0-10-8	2-9-8	7-11-4	12-11-0	19-6-10	26-2-4	33-2-0	35-0-0
0-10-8	2-9-8	5-1-12	4-11-12	6-7-10	6-7-10	6-11-12	1-10-0

Scale = 1:61.4



LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.96	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.62	Vert(LL) -0.43 15 >928 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.76	Vert(CT) -0.74 15 >534 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.26 9 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.27 15 >999 240	Weight: 768 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP DSS *Except*
4-6,6-8: 2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
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 (6-0-0 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 9=0-3-8
Max Horz 2=30(LC 29)
Max Uplift 2=-426(LC 4), 9=-447(LC 5)
Max Grav 2=3534(LC 1), 9=3678(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1399/187, 3-4=-13451/1611, 4-5=-16061/1831, 5-7=-15456/1768, 7-8=-12453/1374,
8-9=-9224/1033
BOT CHORD 3-16=-1523/13040, 15-16=-1510/12946, 13-14=-197/1857, 12-13=-893/8452,
9-12=-900/8527
WEBS 3-17=-61/673, 14-15=-44/727, 5-15=-260/162, 4-16=-192/1514, 4-15=-325/3542,
13-15=-1124/10647, 7-15=-410/3157, 7-13=-1536/249, 8-13=-454/4414, 8-12=-124/1342

NOTES-

- 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
- 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); 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=426, 9=447.
- This truss 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.



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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 20 RT
400567	E1	Hip Girder	1	4	I42760547
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 841 lb down and 220 lb up at 7-11-4, 262 lb down and 40 lb up at 9-0-12, 262 lb down and 40 lb up at 11-0-12, 262 lb down and 39 lb up at 13-0-12, 283 lb down and 42 lb up at 15-0-12, 283 lb down and 42 lb up at 17-0-12, 283 lb down and 42 lb up at 19-0-12, 283 lb down and 42 lb up at 21-0-12, 283 lb down and 42 lb up at 23-0-12, and 283 lb down and 42 lb up at 25-0-12, and 722 lb down and 171 lb up at 26-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-8=-70, 8-10=-70, 2-17=-20, 3-15=-20, 9-14=-20
Concentrated Loads (lb)
Vert: 15=-262(F) 16=-841(F) 12=-722(F) 18=-262(F) 19=-262(F) 20=-283(F) 21=-283(F) 22=-283(F) 23=-283(F) 24=-283(F) 25=-283(F)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760548
400567	E2	Hip	1	1		

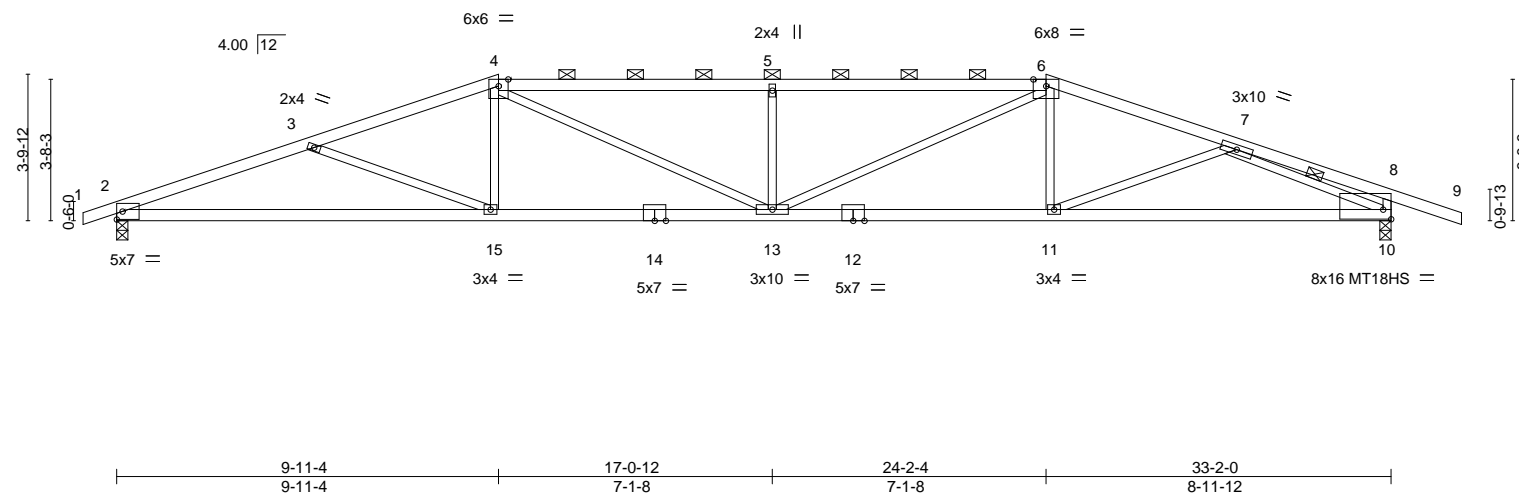
Wheeler Lumber, Waverly, KS 66871

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0-10-8	5-1-10	9-11-4	17-0-12	24-2-4	28-11-13	33-2-0	35-0-0
0-10-8	5-1-10	4-9-10	7-1-8	7-1-8	4-9-9	4-2-3	1-10-0

Scale = 1:60.0



LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.				in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.66	Vert(LL)	-0.28	13	>999		360				MT20	197/144			
TCDL	10.0	Lumber DOL		1.15		BC	0.75	Vert(CT)	-0.52	2-15	>757		240				MT18HS	197/144			
BCLL	0.0 *	Rep Stress Incr		YES		WB	0.64	Horz(CT)	0.13	10	n/a		n/a								
BCDL	10.0	Code IRC2018/TPI2014				Matrix-S		Wind(LL)	0.22	13	>999		240				Weight: 112 lb	FT = 10%			

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
12-14: 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 10=0-3-8
Max Horz 2=55(LC 8)
Max Uplift 2=302(LC 4), 10=340(LC 5)
Max Grav 2=1550(LC 1), 10=1620(LC 1)

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

TOP CHORD 2-3=-3517/679, 3-4=-3221/555, 4-5=-3685/680, 5-6=-3685/680, 6-7=-3010/507,
7-8=-402/21, 8-10=-419/142
BOT CHORD 2-15=-620/3245, 13-15=-447/3007, 11-13=-366/2816, 10-11=-444/2657
WEBS 3-15=-262/234, 4-15=0/386, 4-13=-227/920, 5-13=-628/246, 6-13=-257/1097,
6-11=0/267, 7-11=0/387, 7-10=-2589/567

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=302, 10=340.
- This truss 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.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760549
400567	E3	Roof Special Girder	1	2	Job Reference (optional)	

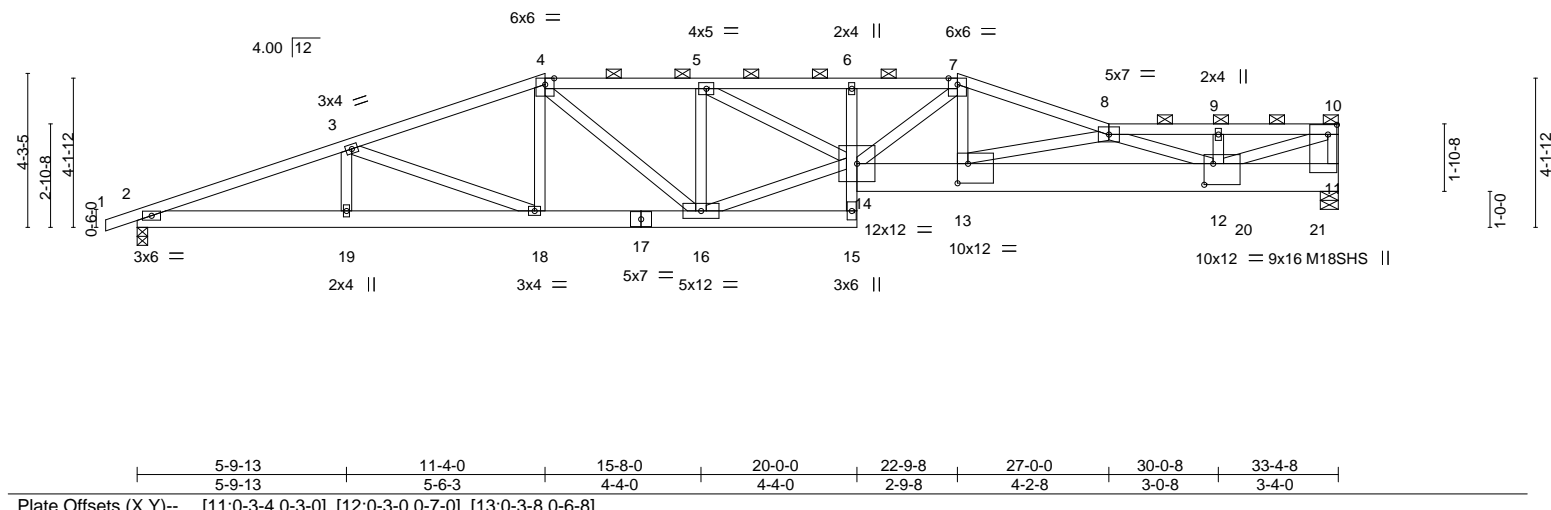
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tTZ8zVUQ7-axvuplZV3P8RV3tKzlkuk8VKVXx_S0y5rqHvhDEyf5QE

-0-10-8	5-9-13	11-4-0	15-8-0	20-0-0	22-9-8	27-0-0	30-0-8	33-4-8
0-10-8	5-9-13	5-6-3	4-4-0	4-4-0	2-9-8	4-2-8	3-0-8	3-4-0

Scale: 3/16"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.31	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.55	M18SHS		197/144	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.09				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	Weight: 368 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x6 SPF No.2 *Except*
 6-15: 2x4 SPF No.2, 11-14: 2x10 SP DSS
 WEBS 2x4 SPF No.2 *Except*
 8-12,10-12: 2x4 SPF 2100F 1.8E

BRACING-

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

REACTIONS.

(size) 11=0-6-0, 2=0-3-8
 Max Horz 2=105(LC 29)
 Max Uplift 11=1015(LC 5), 2=342(LC 4)
 Max Grav 11=6587(LC 1), 2=1948(LC 1)

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

TOP CHORD 2-3=-4811/750, 3-4=-4315/685, 4-5=-4849/768, 5-6=-7178/1096, 6-7=-7182/1096,
 7-8=-7747/1127, 8-9=-9181/1224, 9-10=-9181/1224, 10-11=-3905/549
 BOT CHORD 2-19=-744/4462, 18-19=-744/4462, 16-18=-609/4034, 15-16=-113/788, 6-14=-357/119,
 13-14=-1050/7231, 12-13=-1751/11827, 11-12=-74/411
 WEBS 3-18=-467/244, 4-18=-22/346, 4-16=-204/1239, 5-16=-1857/371, 14-16=-615/4211,
 5-14=-424/2748, 7-14=-542/516, 7-13=-240/2251, 8-13=-4710/724, 8-12=-2891/551,
 10-12=-1272/9517

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x10 - 2 rows staggered at 0-2-0 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.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=1015, 2=342.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Contr to standard ANSI/TPI 1.



September 11, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	E3	Roof Special Girder	1	2	I42760549
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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- NOTES-**
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5086 lb down and 617 lb up at 30-8-15, and 401 lb down and 201 lb up at 32-9-12 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, 4-7=-70, 7-8=-70, 8-10=-70, 2-15=-20, 11-14=-20
- Concentrated Loads (lb)
 - Vert: 20=-5086(F) 21=-401(F)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760550
400567	E4	Roof Special	1	1		

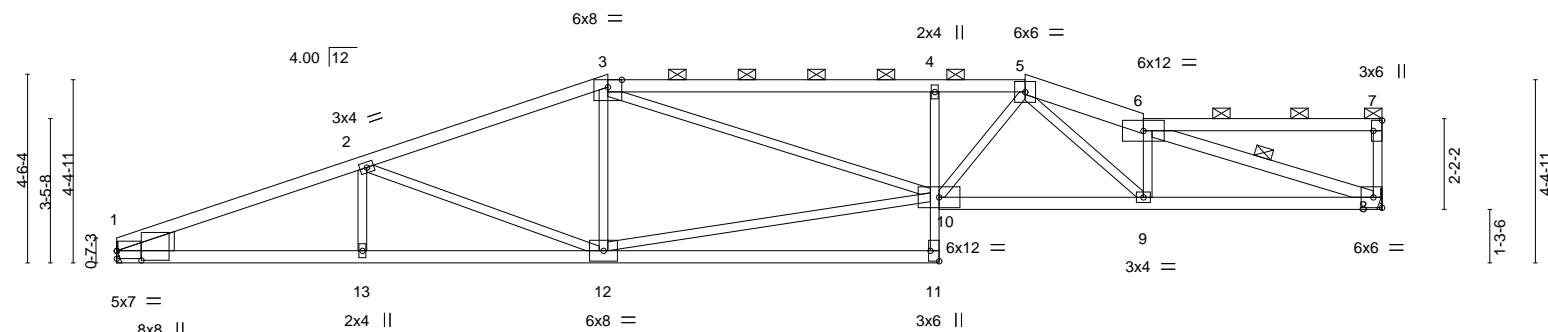
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tTZ8zVUQ7-27TG1ea7qIGI7DRWXSPPzgisbaLHWILO_2xeEmgyf5QD

5-10-11	11-9-4	19-8-8	21-9-4	24-7-4	30-3-14
5-10-11	5-10-9	7-11-4	2-0-12	2-10-0	5-8-10

Scale = 1:55.2



5-10-11	11-9-4	19-8-8	21-9-4	24-7-4	30-3-14
5-10-11	5-10-9	7-11-4	2-0-12	2-10-0	5-8-10

Plate Offsets (X,Y)-- [1:0-2,12,0-7-1], [1:0-0-0,0-2-4], [7:Edge,0-2-8], [11: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 0.93	Vert(LL)	-0.27	9-10	>999	360	MT20
TCCL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.55	11-12	>657	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.16	8	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.15	10	>999	240	
									Weight: 115 lb FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x4 SPF 2100F 1.8E, 5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-8: 2x4 SPF No.2

WEDGE
Left: 2x6 SPF No.2

REACTIONS. (size) 8=Mechanical, 1=Mechanical
Max Horz 1=83(LC 5)
Max Uplift 8=-54(LC 5), 1=-53(LC 4)
Max Grav 8=1357(LC 1), 1=1357(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3183/139, 2-3=-2592/120, 3-4=-3402/162, 4-5=-3412/155, 5-6=-3551/137
BOT CHORD 1-13=-151/2923, 12-13=-151/2923, 4-10=-588/131, 9-10=-120/2874, 8-9=-127/3313
WEBS 2-12=-574/101, 10-12=-94/2309, 3-10=-102/1165, 5-10=-82/954, 5-9=-20/645,
6-9=-340/90, 6-8=-3420/116

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, 1.
- This truss 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.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	E5	ROOF SPECIAL	1	1	I42760551
Job Reference (optional)					

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-8=-70, 8-9=-70, 9-11=-70, 2-16=-20, 12-14=-20
Concentrated Loads (lb)
Vert: 22=-281(F)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760552
400567	E6	Roof Special Girder	1	1		

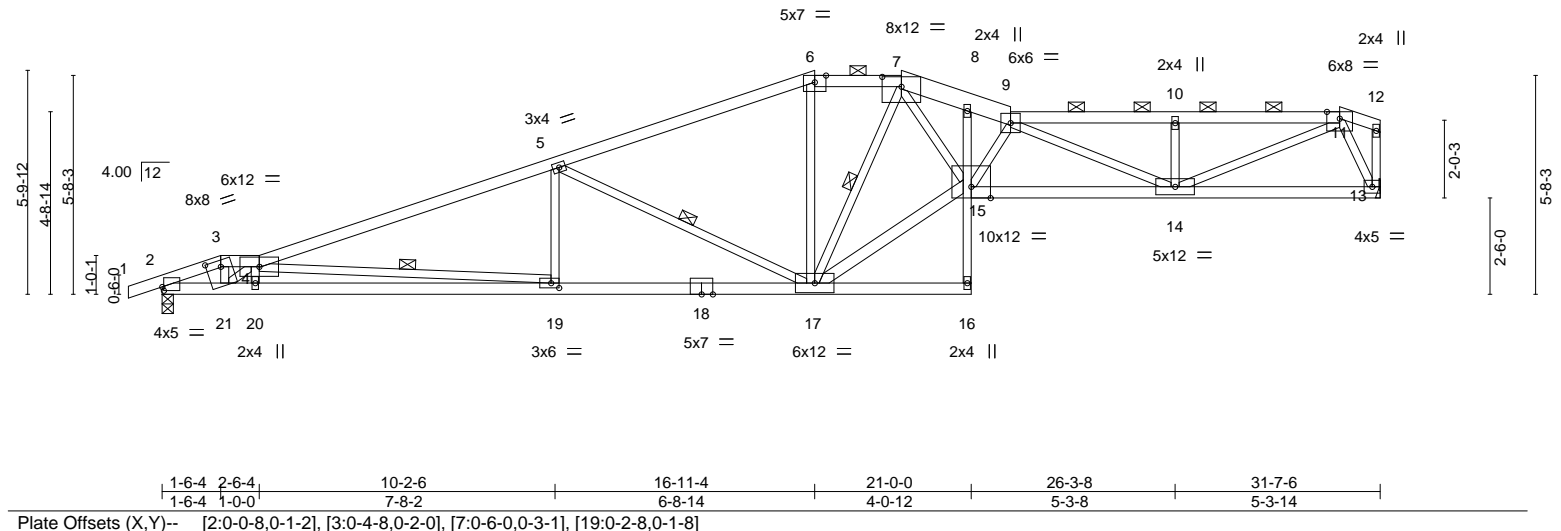
Wheeler Lumber, Waverly, KS 66871

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0-10-8 1-6-4 2-6-4	10-2-6	16-11-4	19-2-4	21-0-0	22-0-4	26-3-8	30-6-12	31-7-6
0-10-8 1-6-4 1-0-0	7-8-2	6-8-14	2-3-0	1-9-12	1-0-4	4-3-4	4-3-4	1-0-10

Scale = 1:59.8



LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.92	Vert(LL) -0.34 16 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.61 16 >614 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.97	Horz(CT) 0.17 13 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.18 16 >999 240	Weight: 126 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-6: 2x4 SPF 2100F 1.8E, 7-9: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-10-5 max.): 3-4, 6-7, 9-11.
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 8-16: 2x3 SPF No.2, 16-18: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 15-17: 2x4 SPF No.2	WEBS 1 Row at midpt 4-19, 5-17, 7-17

REACTIONS.	(size) 2=0-3-8, 13=Mechanical Max Horz 2=108(LC 8) Max Uplift 2=-72(LC 4), 13=-43(LC 5) Max Grav 2=1484(LC 1), 13=1410(LC 1)
-------------------	---

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2766/61, 3-4=-2613/65, 4-5=-3327/97, 5-6=-2239/75, 6-7=-2046/86, 7-8=-4253/108, 8-9=-4416/96, 9-10=-3208/77, 10-11=-3210/78
BOT CHORD	2-21=-133/2426, 20-21=-142/4207, 19-20=-162/4207, 17-19=-122/3106, 8-15=0/358, 14-15=-132/4722, 13-14=-43/670
WEBS	3-21=-72/1293, 4-21=-2035/7, 4-20=-3/267, 4-19=-1106/48, 5-19=0/405, 5-17=-1179/105, 6-17=0/381, 7-17=-1510/70, 15-17=-67/3068, 7-15=-77/2834, 9-15=-1260/73, 9-14=-1667/74, 10-14=-387/81, 11-14=-55/2804, 11-13=-1502/85

- 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); 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) 2, 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.
 - 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) 46 lb down and 19 lb up at 1-6-4 on top chord, and at 1-6-4 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
Continued on page 2



September 11, 2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	E6	Roof Special Girder	1	1	I42760552
Job Reference (optional)					

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-7=-70, 7-9=-70, 9-11=-70, 11-12=-70, 2-16=-20, 13-15=-20

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760553
400567	E7	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

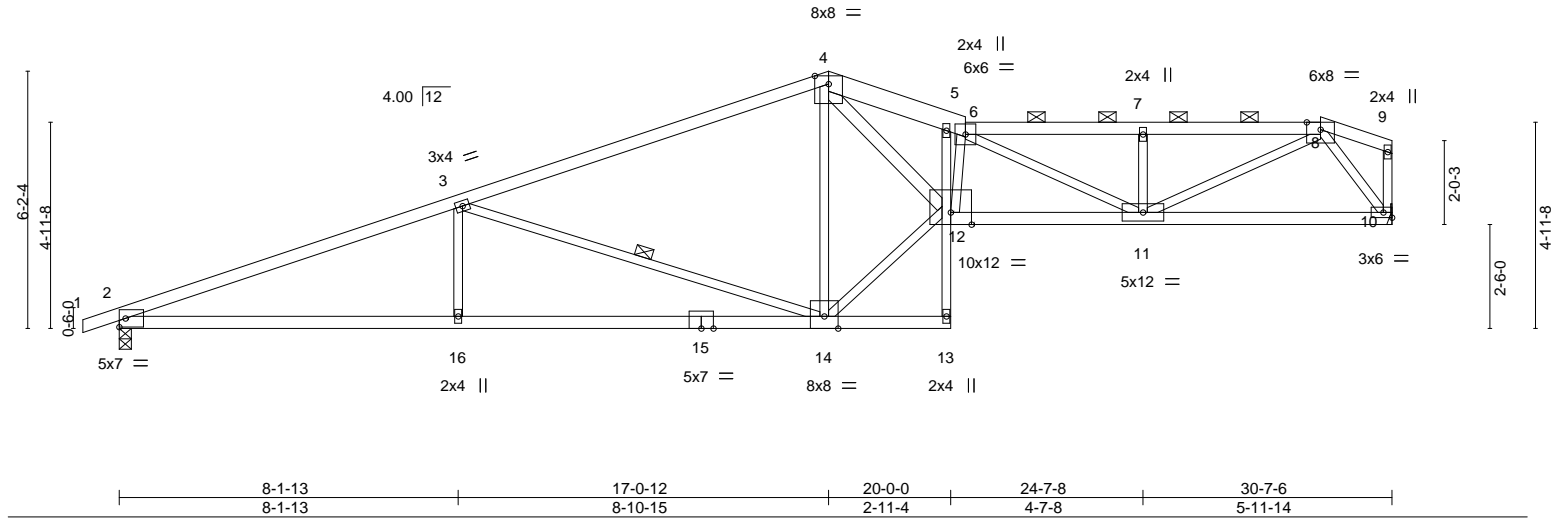
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Job Reference (optional)

-0-10-8	8-1-13	17-0-12	20-0-0	20-4-4	24-7-8	28-10-12	30-7-6
0-10-8	8-1-13	8-10-15	2-11-4	0-4-4	4-3-4	4-3-4	1-8-10

Scale = 1:55.4



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 0.62	Vert(LL)	-0.29 13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.57 14-16	>642	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.99	Horz(CT)	0.17 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.15 13	>999	240		
								Weight: 114 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x4 SPF 2100F 1.8E, 4-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-13: 2x3 SPF No.2, 10-12: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
4-12: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=Mechanical, 2=0-3-8
Max Horz 2=113(LC 8)
Max Uplift 10=-39(LC 5), 2=-64(LC 4)
Max Grav 10=1365(LC 1), 2=1439(LC 1)

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

TOP CHORD 2-3=-3235/77, 3-4=-2019/50, 4-5=-4161/99, 5-6=-4328/88, 6-7=-3049/69, 7-8=-3051/71
BOT CHORD 2-16=-119/2966, 14-16=-119/2966, 5-12=-34/365, 11-12=-97/4230, 10-11=-53/941
WEBS 3-16=0/370, 3-14=-1240/124, 4-14=-1006/105, 12-14=-25/2369, 4-12=-93/3249,
6-12=-1301/72, 6-11=-1325/56, 7-11=-384/81, 8-11=-29/2378, 8-10=-1556/82

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



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760554
400567	E8	Roof Special	1	1		

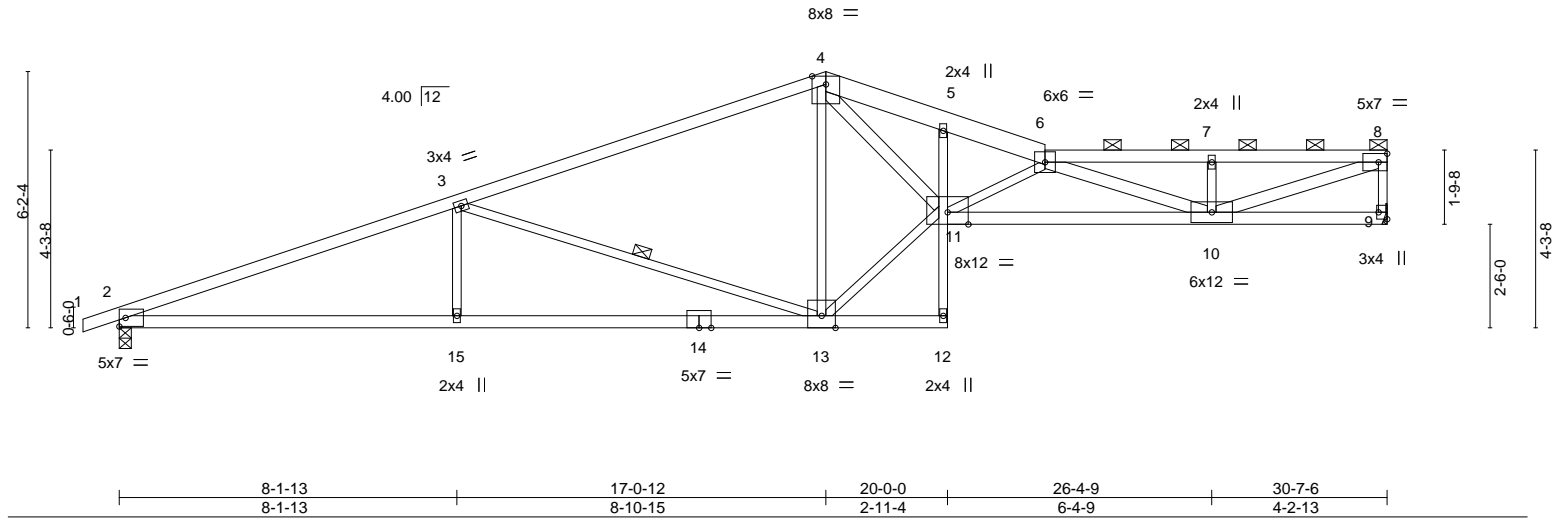
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:45 2020 Page 1

ID:GTymqTGpwbwEikz5tITZ8zVUQ7-O4H94LeGfFvD_KUK079NmZWAMzZQZ7jCCM?Rtyf5Q8

-0-10-8	8-1-13	17-0-12	20-0-0	22-4-4	26-4-9	30-7-6
0-10-8	8-1-13	8-10-15	2-11-4	2-4-4	4-0-5	4-2-13

Scale = 1:55.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.62	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(LL) -0.35 12 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.99	Vert(CT) -0.64 13-15 >568 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.19 9 n/a n/a		
			Wind(LL) 0.18 12 >999 240	Weight: 115 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-6: 2x6 SPF No.2, 6-8: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-12: 2x3 SPF No.2, 9-11: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
4-11,6-10,8-10: 2x4 SPF No.2

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

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=112(LC 8)
Max Uplift 9=38(LC 5), 2=66(LC 4)
Max Grav 9=1365(LC 1), 2=1439(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3235/82, 3-4=-2019/55, 4-5=-4109/97, 5-6=-4191/69, 6-7=-3291/61, 7-8=-3290/60, 8-9=-1311/52
BOT CHORD 2-15=-124/2966, 13-15=-124/2966, 10-11=-143/5284
WEBS 3-15=0/370, 3-13=-1239/124, 4-13=-1012/98, 11-13=-13/2379, 4-11=-84/3189, 6-11=-1594/89, 6-10=-2131/79, 7-10=-329/78, 8-10=-69/3435

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



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760555
400567	E9	Roof Special	1	1		

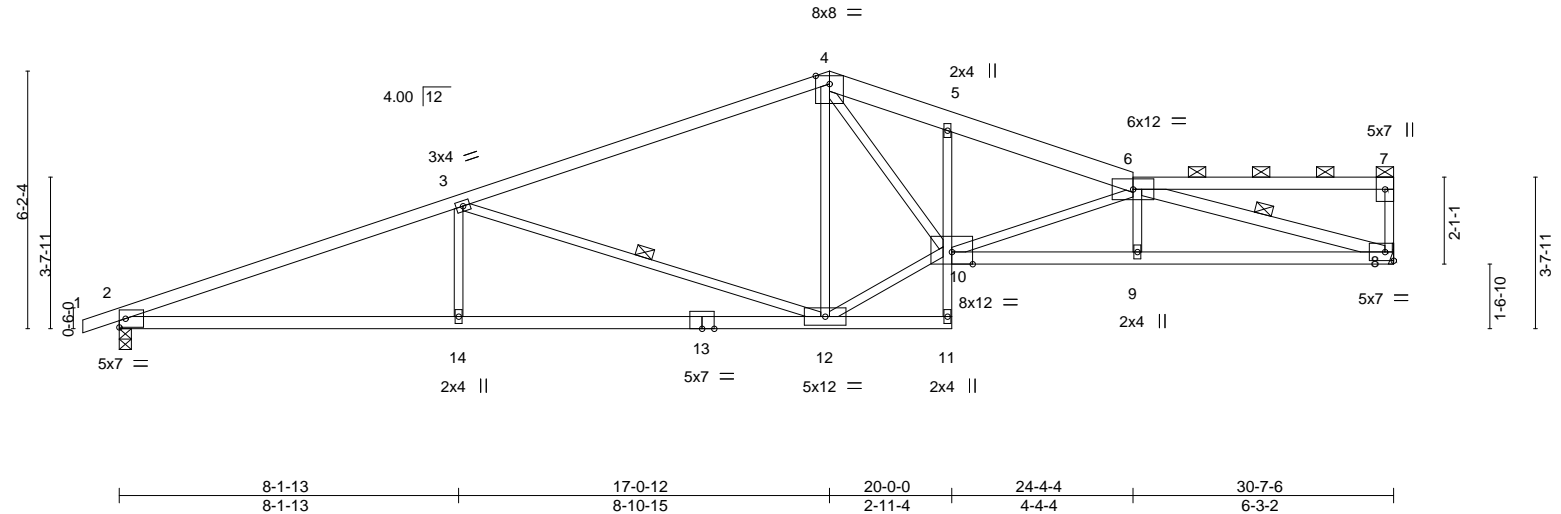
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-sHrXHfuQY1Sr8vgujWOwz6hvmJn90NtRs5ZzKyf5Q7

-0-10-8	8-1-13	17-0-12	20-0-0	24-4-4	30-7-6
0-10-8	8-1-13	8-10-15	2-11-4	4-4-4	6-3-2

Scale = 1:55.3



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 0.62	Vert(LL)	-0.26 9-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.53 12-14	>694	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.99	Horz(CT)	0.16 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.18 9-10	>999	240		
								Weight: 115 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-6: 2x6 SPF No.2, 6-7: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-11: 2x3 SPF No.2, 8-10: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
6-8: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 8=Mechanical, 2=0-3-8
Max Horz 2=148(LC 8)
Max Uplift 8=197(LC 5), 2=248(LC 4)
Max Grav 8=1365(LC 1), 2=1439(LC 1)

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

TOP CHORD 2-3=-3234/463, 3-4=-2019/282, 4-5=-2986/429, 5-6=-3054/388
BOT CHORD 2-14=-497/2966, 12-14=-497/2966, 9-10=-511/3736, 8-9=-506/3741
WEBS 3-14=0/370, 3-12=-1239/320, 4-12=-418/153, 10-12=-215/2030, 4-10=-295/1809,
6-10=-967/166, 6-8=-3795/490

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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=197, 2=248.
- This truss 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.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760556
400567	G1	Roof Special	1	1		
Job Reference (optional)						

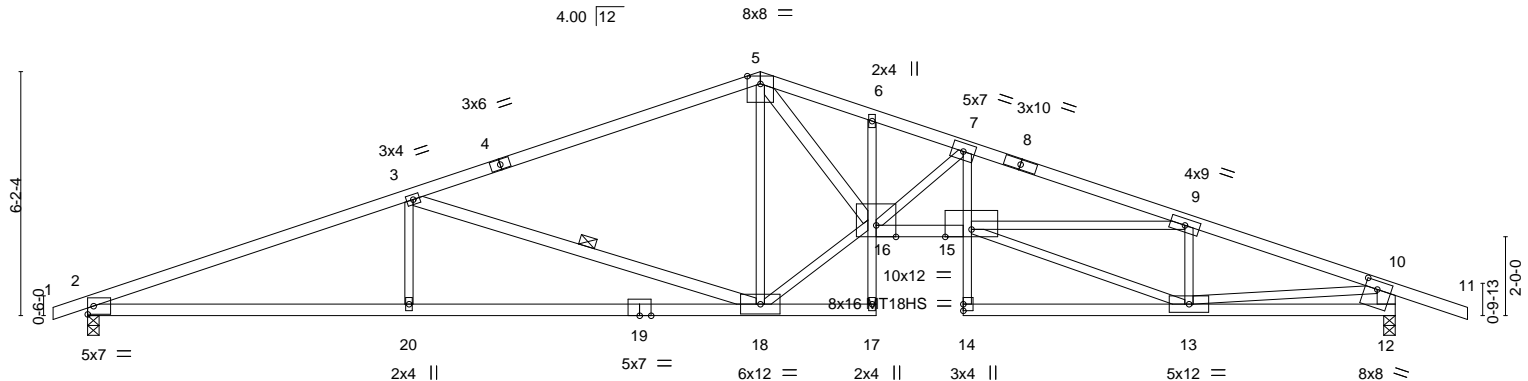
Wheeler Lumber, Waverly, KS 66871

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ID:zOKCXWmhF9AfmeAvSznKRizeXr3-LTOvV1fWBs9JTIUsRR1dSBfqw9gxuTo0fWr6Wmyf5Q6

-0-10-8	8-1-13	17-0-12	20-0-0	22-2-8	27-11-4	33-2-0	35-0-0
0-10-8	8-1-13	8-10-15	2-11-4	2-2-8	5-8-12	5-2-13	1-10-0

Scale = 1:58.4



	8-1-13	17-0-12	20-0-0	22-2-8	27-11-4	33-2-0	
	8-1-13	8-10-15	2-11-4	2-2-8	5-8-12	5-2-13	
Plate Offsets (X,Y)--	[12:0-3-12,0-2-8]						

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.41	15-16	>958	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.74	15-16	>532	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.98	Horz(CT) 0.33	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.27	15-16	>999	240	Weight: 130 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 2-8-6 oc purlins, except end verticals.
BOT CHORD 2x4 SPF 2100F 1.8E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
17-19,12-14: 2x4 SPF No.2, 6-17,7-14: 2x3 SPF No.2	2-2-0 oc bracing: 18-20
WEBS 2x3 SPF No.2 *Except*	6-0-0 oc bracing: 16-17.
3-18,5-16: 2x4 SPF No.2, 10-12: 2x6 SPF No.2	WEBS 1 Row at midpt 3-18

REACTIONS.	(size) 12=0-3-8, 2=0-3-8
	Max Horz 2=97(LC 12)
	Max Uplift 12=-302(LC 5), 2=-262(LC 4)
	Max Grav 12=1623(LC 1), 2=1544(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3544/505, 3-5=-2312/321, 5-6=-4069/505, 6-7=-4133/482, 7-9=-5581/647, 9-10=-2975/396, 10-12=-1555/322
BOT CHORD	2-20=-471/3256, 18-20=-471/3256, 15-16=-464/5243, 7-15=-94/1331, 12-13=-37/384
WEBS	3-20=0/375, 3-18=-1261/325, 5-18=-922/111, 16-18=-197/2518, 5-16=-299/3007, 7-16=-1806/273, 13-15=-322/2861, 9-15=-219/2474, 9-13=-1224/234, 10-13=-322/2393

- 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 MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=302, 2=262.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760557
400567	G2	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:zOKCXWmhF9AfmeAvSznKRizeXr3-l24273iPTnXukICR7ZaK4pHLxNhD5vvSLU3m65yf5Q3

-0-10-8	8-1-13	17-0-12	24-11-3	33-2-0	35-0-0
0-10-8	8-1-13	8-10-15	7-10-7	8-2-13	1-10-0

Scale = 1:57.5

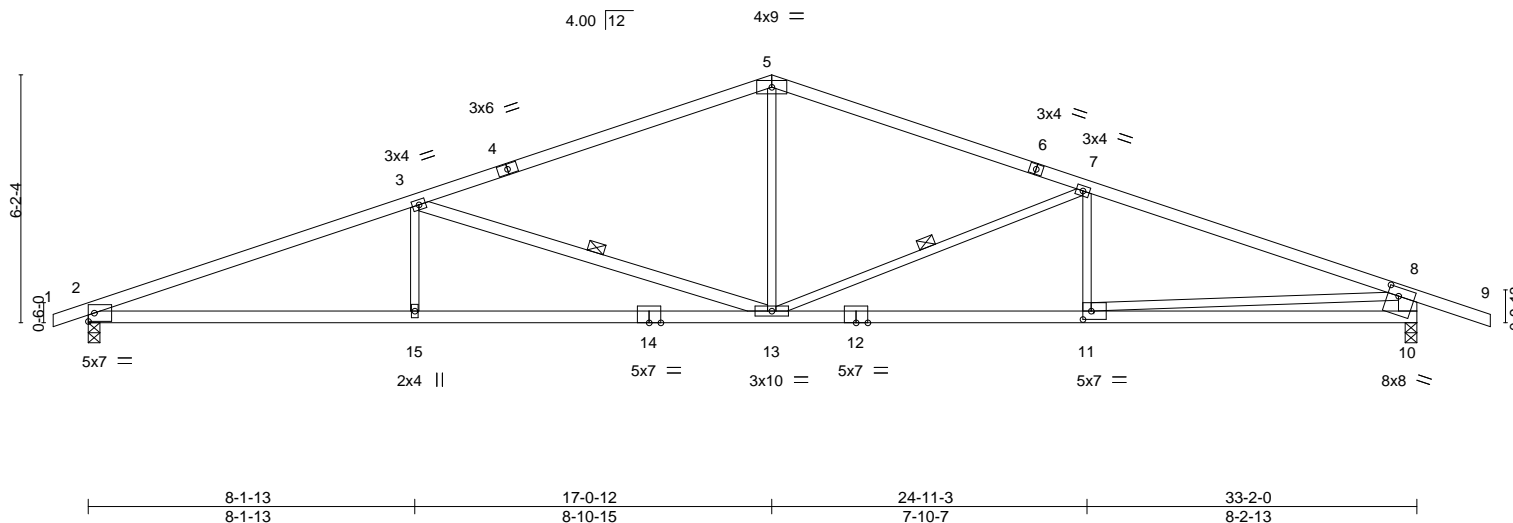


Plate Offsets (X,Y)--		[10:0-3-4,0-2-8], [11:0-2-8,0-2-8]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.75	in (loc) l/defl L/d	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(LL) -0.21 11-13 >999 360	GRIP 197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Vert(CT) -0.44 13-15 >889 240	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Horz(CT) 0.11 10 n/a n/a	
				Wind(LL) 0.15 15 >999 240	Weight: 114 lb FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
12-14: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-13: 2x4 SPF No.2, 8-10: 2x6 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=97(LC 8)
Max Uplift 2=262(LC 4), 10=302(LC 5)
Max Grav 2=1544(LC 1), 10=1623(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3539/506, 3-5=-2319/320, 5-7=-2302/337, 7-8=-3064/417, 8-10=-1533/344
BOT CHORD 2-15=-472/3251, 13-15=-472/3251, 11-13=-300/2817, 10-11=-137/777
WEBS 3-15=0/371, 3-13=-1265/330, 5-13=-24/853, 7-13=-872/251, 8-11=-213/2046

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=262, 10=302.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760558
400567	G3	Common	2	1		

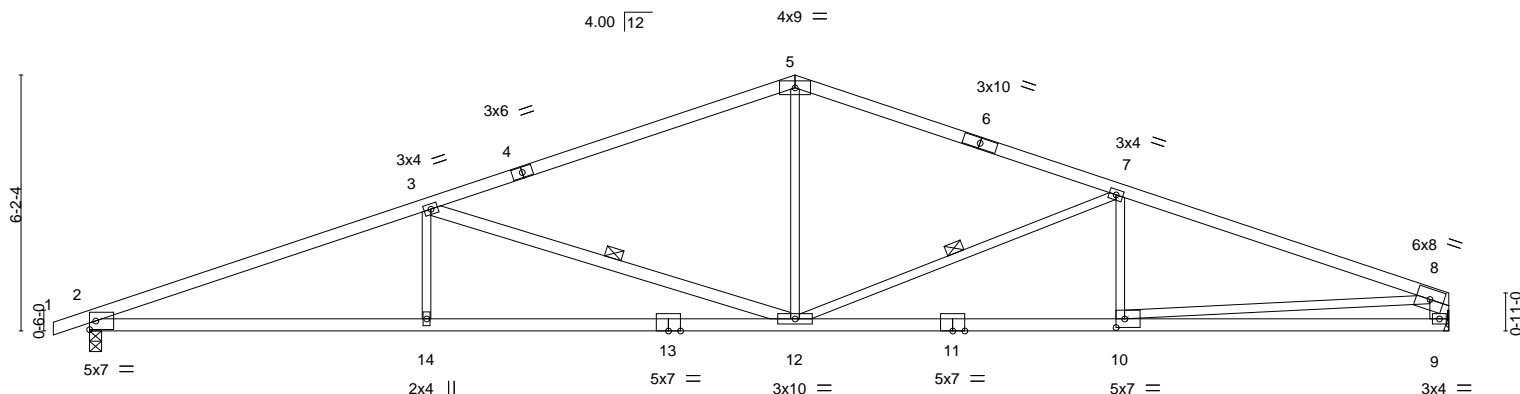
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-DEeQKOi1E5flxvndgG6Zd1pWkn2UqK_ca8pKfXyf5Q2

-0-10-8	8-1-13	17-0-12	24-11-3	32-10-8
0-10-8	8-1-13	8-10-15	7-10-7	7-11-6

Scale = 1:55.7



	8-1-13	17-0-12	24-11-3	32-10-8
	8-1-13	8-10-15	7-10-7	7-11-6

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.74	Vert(LL)	-0.21	10-12	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.44	12-14	>887	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.78	Horz(CT)	0.11	9	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11	14	>999	240	
								Weight: 111 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
 BOT CHORD 2x4 SPF No.2 *Except*
 2-13: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2 *Except*
 3-12: 2x4 SPF No.2, 8-9: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 9=Mechanical
 Max Horz 2=65(LC 8)
 Max Uplift 2=-72(LC 4), 9=-36(LC 5)
 Max Grav 2=1535(LC 1), 9=1461(LC 1)

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

TOP CHORD 2-3=-3515/100, 3-5=-2292/73, 5-7=-2277/80, 7-8=-2995/85, 8-9=-1377/78
 BOT CHORD 2-14=-86/3228, 12-14=-86/3228, 10-12=-41/2766, 9-10=-26/512
 WEBS 3-14=0/369, 3-12=-1265/131, 5-12=0/843, 7-12=-851/113, 8-10=-15/2263

NOTES-

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



September 11, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760559
400567	G5	Roof Special	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-hRCoyKjf?OnbZ3MqE_do9EMeIAPBzn8lpoYtB_yf5Q1

0-10-8	2-9-8	8-1-13	12-10-8	17-0-12	24-11-3	32-10-8
0-10-8	2-9-8	5-4-5	4-8-11	4-2-4	7-10-7	7-11-6

Scale = 1:55.2

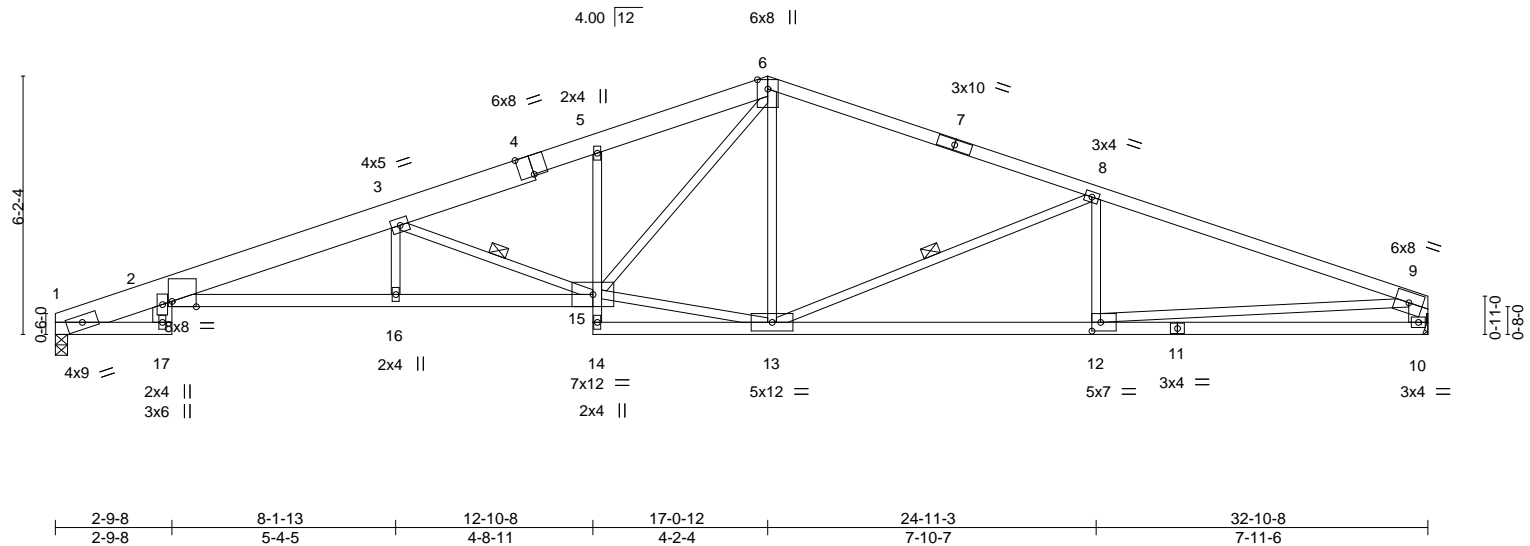


Plate Offsets (X,Y)--		[2:0-6-15,Edge], [4:0-4-0,Edge], [12:0-2-8,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.92	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.80	Vert(LL) -0.40 16 >985 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.78	Vert(CT) -0.71 2-16 >545 240
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.31 10 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) 0.21 16 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 143 lb FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
6-7: 2x4 SPF No.2, 7-9: 2x4 SPF 2100F 1.8E, 1-4: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
2-15: 2x4 SPF 2100F 1.8E, 5-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-17,9-10: 2x6 SPF No.2

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 3-15, 8-13

REACTIONS. (size) 1=0-3-8, 10=Mechanical
Max Horz 1=63(LC 8)
Max Uplift 1=41(LC 4), 10=36(LC 5)
Max Grav 1=1463(LC 1), 10=1463(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-501/31, 2-3=-4554/127, 3-5=-3254/99, 5-6=-3162/140, 6-8=-2285/82,
8-9=-3004/84, 9-10=-1380/77
BOT CHORD 2-16=-113/4454, 15-16=-111/4450, 12-13=-41/2775, 10-12=-27/504
WEBS 3-15=-1592/96, 13-15=0/1917, 6-15=-88/1443, 8-13=-835/107, 9-12=-15/2280

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



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760560
400567	G6	Hip	1	1	Job Reference (optional)	

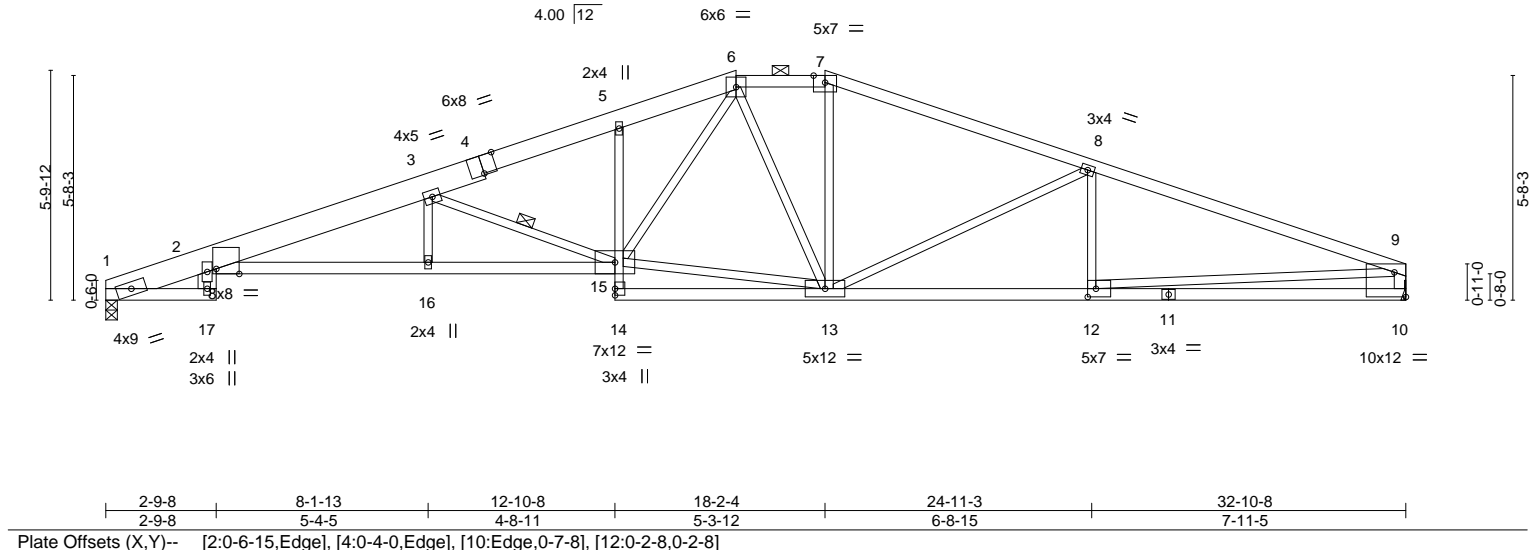
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-9dmBI4kHmivSBDx0oh81iSvq1amHIBXu2SIRjQyf5Q0

-0-10-8	2-9-8	8-1-13	12-10-8	15-11-4	18-2-4	24-11-3	32-10-8
0-10-8	2-9-8	5-4-5	4-8-11	3-0-12	2-3-0	6-8-15	7-11-5

Scale = 1:58.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.40	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.72				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.31				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22				

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 6-7: 2x4 SPF No.2, 7-9: 2x4 SPF 2100F 1.8E, 1-4: 2x8 SP DSS	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-10 max.): 6-7.
BOT CHORD	2x4 SPF No.2 *Except* 2-15: 2x4 SPF 2100F 1.8E, 5-14: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 2-17: 2x6 SPF No.2, 9-10: 2x4 SPF No.2	WEBS	1 Row at midpt 3-15

REACTIONS.	
(size)	1=0-3-8, 10=Mechanical
Max Horz	1=58(LC 8)
Max Uplift	1=45(LC 4), 10=41(LC 5)
Max Grav	1=1466(LC 1), 10=1466(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-503/26, 2-3=-4533/143, 3-5=-3260/114, 5-6=-3148/146, 6-7=-2195/98, 7-8=-2400/87, 8-9=-3019/95, 9-10=-1381/83
BOT CHORD	2-16=-126/4429, 15-16=-125/4426, 13-14=0/252, 12-13=-50/2786, 10-12=-30/537
WEBS	3-15=-1559/99, 13-15=-3/2084, 6-15=-67/1239, 6-13=-452/59, 7-13=0/437, 8-13=-715/98, 9-12=-20/2257

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



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760561
400567	G7	Hip	1	1		

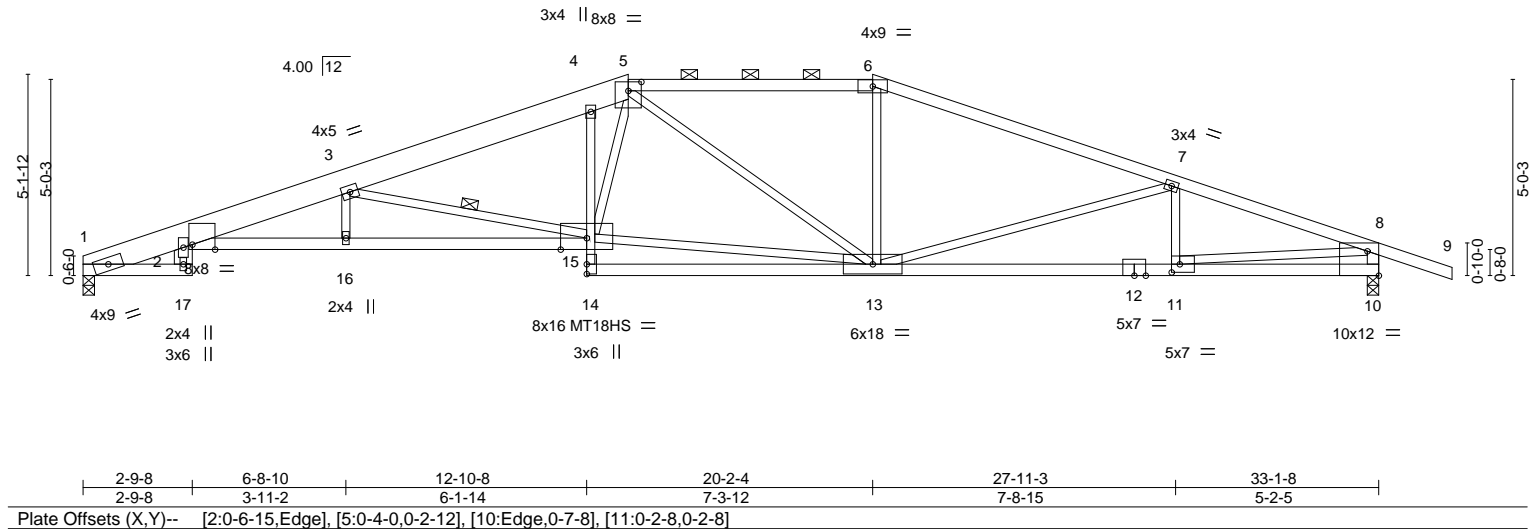
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tTZ8zVUQ7-dpJZzQlvX01JpMWCMPfGFfR?L_4o1eF2G61_Fsyf5Q?

0-10-8	2-9-8	6-8-10	12-10-8	13-11-4	20-2-4	27-11-3	33-1-8	35-0-0
0-10-8	2-9-8	3-11-2	6-1-14	1-0-12	6-3-0	7-8-15	5-2-5	1-10-8

Scale = 1:58.9



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.42 15-16 >947 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.78 15-16 >507 240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Horz(CT) 0.32 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.32 15-16 >999 240	Weight: 149 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x8 SP DSS *Except*	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-1 max.): 5-6.
5-6: 2x4 SPF No.2, 6-9: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 8-11-14 oc bracing.
BOT CHORD 2x4 SPF No.2 *Except*	WEBS 1 Row at midpt 3-15
2-15: 2x4 SPF 2100F 1.8E, 4-14: 2x3 SPF No.2	
WEBS 2x3 SPF No.2 *Except*	
2-17: 2x6 SPF No.2, 8-10: 2x4 SPF No.2	

REACTIONS.	(size) 1=0-3-8, 10=0-3-8
Max Horz 1=-76(LC 9)	
Max Uplift 1=-239(LC 4), 10=-322(LC 5)	
Max Grav 1=1473(LC 1), 10=1623(LC 1)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 1-2=-505/124, 2-3=-4872/782, 3-4=-3337/541, 4-5=-3260/584, 5-6=-2455/427, 6-7=-2669/413, 7-8=-3062/474, 8-10=-1559/340	
BOT CHORD 2-16=-765/4806, 15-16=-763/4800, 4-15=-271/157, 13-14=-34/333, 11-13=-384/2853, 10-11=-11/305	
WEBS 3-15=-1737/356, 13-15=-338/2509, 5-15=-188/1086, 5-13=-638/157, 6-13=0/412, 7-13=-486/214, 8-11=-422/2565	

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=239, 10=322.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 11, 2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760562
400567	G8	HIP	1	1		

Wheeler Lumber, Waverly, KS 66871

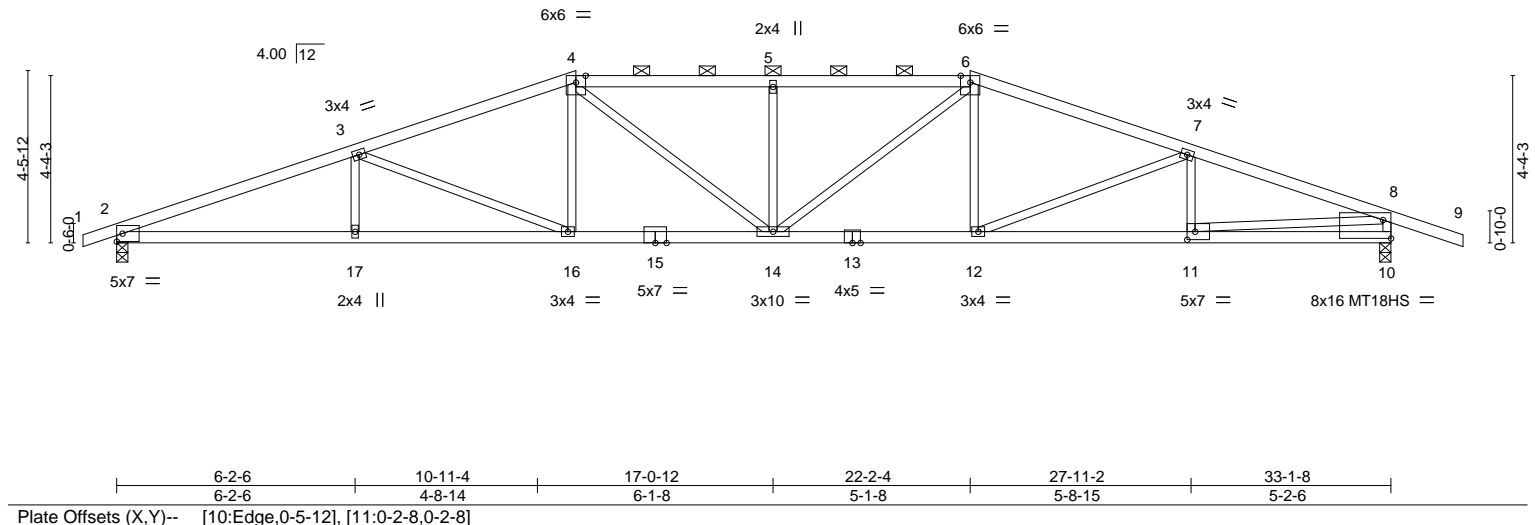
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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-60txAmmYIJ9AQW5Pv6AVnt_BCOOEm6kBVmnXolyf5Q_

Job Reference (optional)

0-10-8 6-2-6 11-11-4 17-0-12 22-2-4 27-11-2 33-1-8 35-0-0
0-10-8 6-2-6 5-8-14 5-1-8 5-1-8 5-8-15 5-2-6 1-10-8

Scale = 1:59.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.27 14-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.49 14-16	>801	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.14 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.21 14-16	>999	240	Weight: 117 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-1 max.): 4-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 2=0-3-8, 10=0-3-8
	Max Horz 2=66(LC 12)
	Max Uplift 2=293(LC 4), 10=332(LC 5)
	Max Grav 2=1548(LC 1), 10=1621(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3595/599, 3-4=-2948/515, 4-5=-3020/539, 5-6=-3020/539, 6-7=-2824/478, 7-8=-3025/487, 8-10=-1550/353
BOT CHORD	2-17=-548/3305, 16-17=-548/3305, 14-16=-389/2732, 12-14=-310/2623, 11-12=-392/2810, 10-11=-23/329
WEBS	3-16=-630/202, 4-16=-12/367, 4-14=-122/542, 5-14=-461/175, 6-14=-144/657, 6-12=0/279, 8-11=-397/2496

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=293, 10=332.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760563
400567	G9	HIP	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tTZ8zVUQ7-aCRJO6mA3dH12gggTphkK4XOooovVbjLkQW5Jlyf5Pz

Job Reference (optional)

0-10-8	5-1-10	9-11-4	17-0-12	24-2-4	28-3-14	33-1-8	35-0-0
0-10-8	5-1-10	4-9-10	7-1-8	7-1-8	4-1-10	4-9-10	1-10-8

Scale = 1:59.9

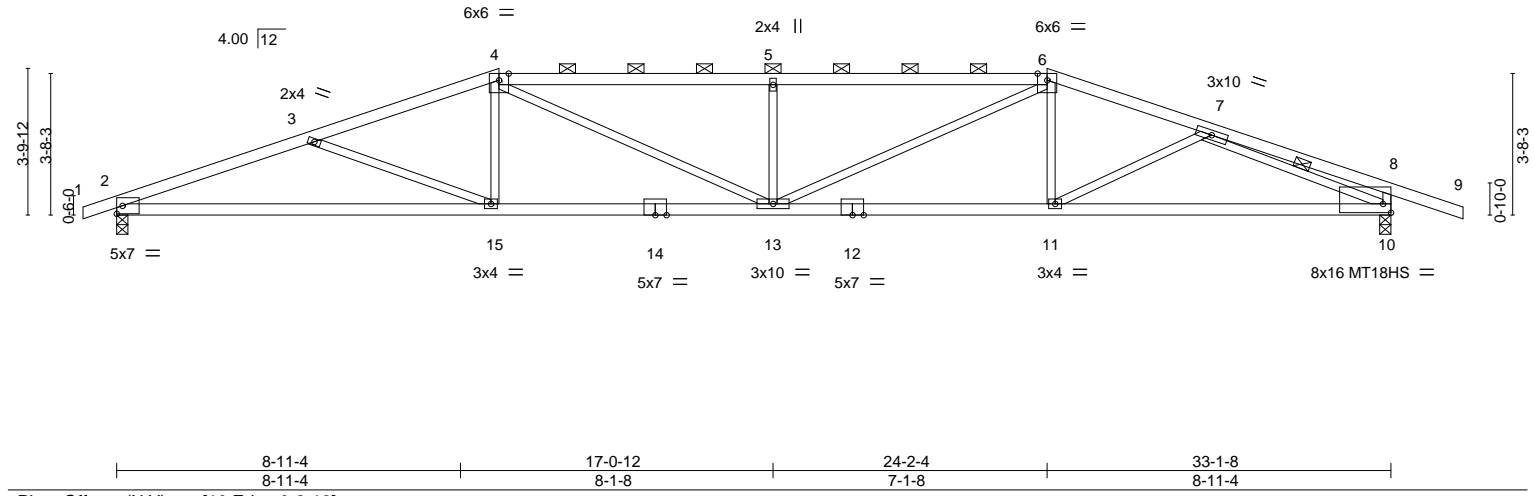


Plate Offsets (X,Y)--		[10:Edge,0-2-12]		8-11-4		17-0-12		24-2-4		33-1-8	
				8-11-4		8-1-8		7-1-8		8-11-4	
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.28 13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.52 2-15	>756	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.13 10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22 13	>999	240	Weight: 113 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
12-14: 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 10=0-3-8
Max Horz 2=54(LC 12)
Max Uplift 2=302(LC 4), 10=341(LC 5)
Max Grav 2=1548(LC 1), 10=1621(LC 1)

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

TOP CHORD 2-3=-3512/679, 3-4=-3215/555, 4-5=-3676/679, 5-6=-3676/679, 6-7=-2981/506,
7-8=-462/45, 8-10=-469/166
BOT CHORD 2-15=-619/3240, 13-15=-446/3001, 11-13=-361/2798, 10-11=-437/2694
WEBS 3-15=-263/234, 4-15=0/386, 4-13=-226/917, 5-13=-629/246, 6-13=-258/1101,
6-11=0/262, 7-11=0/326, 7-10=-2550/528

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=302, 10=341.
- This truss 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.



September 11, 2020

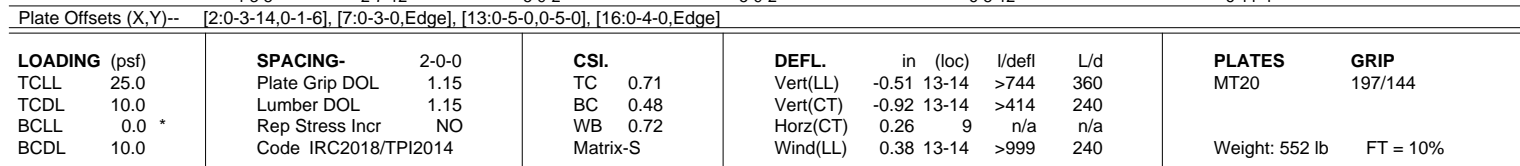
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:49 2020 Page 1
ID:GTymqTGpwbwEikz5tITZ8zVUQ7-HsWgwhjnP1ibdFzr35YckAnzTWMRMJ7qKDafYf5Q4
-1-10-8 4-3-8 6-11-4 12-8-6 18-5-8 25-2-4 32-1-8 34-0-0
1-10-8 4-3-8 2-7-12 5-9-2 5-9-2 6-8-12 6-11-4 1-10-8
Scale = 1:61.4



REACTIONS. (size) 2=0-3-8, 9=0-3-8
 Max Horz 2=50(LC 33)
 Max Uplift 2=-554(LC 4), 9=-586(LC 5)
 Max Grav 2=3163(LC 1), 9=3276(LC 1)


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

TOP CHORD	2-3=-13338/1963, 3-4=-12465/1846, 4-5=-15843/2259, 5-6=-16501/2406, 6-8=-15892/2328, 8-9=-8251/1246
BOT CHORD	2-16=-1815/12411, 15-16=-1724/11751, 14-15=-1707/11960, 13-14=-2182/15843, 11-12=-147/1076, 9-11=-1082/7638
WEBS	12-13=-32/552, 6-13=-391/152, 3-16=-262/2093, 3-15=-168/595, 4-15=-204/1385, 4-14=-554/4146, 5-14=-935/221, 5-13=-197/781, 11-13=-947/6608, 8-13=-1218/8499, 8-11=-176/446

NOTES-

- 1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=554, 9=586.
- 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.

On the plan and/or elevation representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 11, 2020



September 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	G10	Hip Girder	1	3	I42760564
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:49 2020 Page 2
ID:GTYmqTGpwbwEikz5tITZ8zVUQ7-HsWgwjhnjTP1ibdFZr35YckAnzTWMRMJ7qKDafyf5Q4

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 119 lb down and 35 lb up at 6-11-4, 116 lb down and 35 lb up at 8-0-12, 116 lb down and 35 lb up at 10-0-12, 116 lb down and 35 lb up at 12-0-12, 116 lb down and 35 lb up at 14-0-12, and 116 lb down and 35 lb up at 16-0-12, and 116 lb down and 35 lb up at 18-0-12 on top chord, and 445 lb down and 133 lb up at 6-11-4, 99 lb down and 22 lb up at 7-0-0, 99 lb down and 22 lb up at 8-0-12, 99 lb down and 22 lb up at 10-0-12, 99 lb down and 22 lb up at 12-0-12, 99 lb down and 22 lb up at 14-0-12, 99 lb down and 22 lb up at 16-0-12, 99 lb down and 22 lb up at 18-0-12, 262 lb down and 39 lb up at 20-0-12, 262 lb down and 39 lb up at 22-0-12, and 262 lb down and 39 lb up at 24-0-12, and 701 lb down and 168 lb up at 25-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

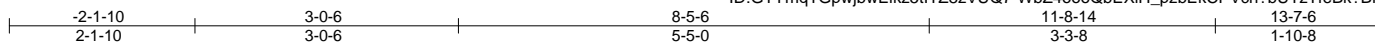
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-8=-70, 8-10=-70, 2-16=-20, 13-16=-20, 9-12=-20
Concentrated Loads (lb)
Vert: 15=-544(B=-445) 4=-95(B) 11=-701(B) 17=-95(B) 18=-95(B) 19=-95(B) 20=-95(B) 21=-95(B) 22=-95(B) 23=-99 24=-99 25=-99 26=-99 27=-99 28=-99 29=-262(B) 30=-262(B) 31=-262(B)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760565
400567	H1	Hip Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:58 2020 Page 1

ID:GTymqTGpwjwEikz5tTZ8zVUQ7-WbZ4oooQbEXIH_pzbEkCPVch?bUTzTfeBk?BNdyf5Px



Scale = 1:26.5

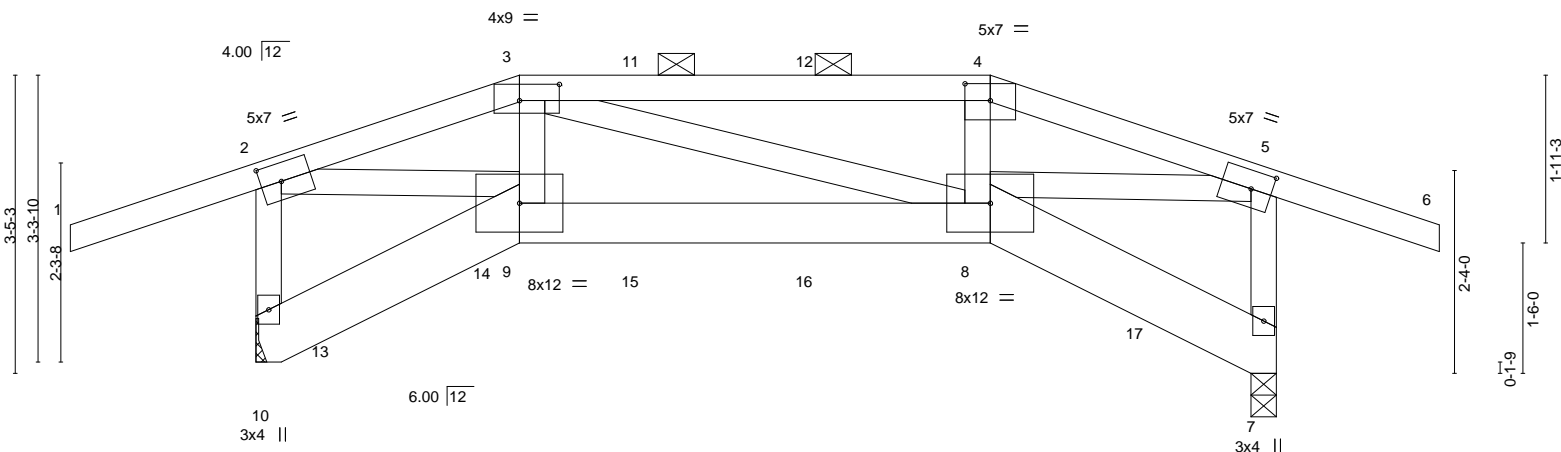


Plate Offsets (X,Y)--	[2:0-2-14,0-2-8], [3:0-5-8,0-2-4], [4:0-3-8,0-2-5], [5:0-2-14,0-2-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.87	Vert(LL)	-0.13	8-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.23	8-9	>589	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.85	Horz(CT)	0.13	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08	8-9	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x8 SP DSS *Except*
 8-9: 2x6 SP 2400F 2.0E
 WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=Mechanical, 7=0-3-8
 Max Horz 10=53(LC 7)
 Max Uplift 10=-597(LC 4), 7=-650(LC 5)
 Max Grav 10=5106(LC 21), 7=4392(LC 22)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-10=-3826/523, 2-3=-7224/845, 3-4=-7032/836, 4-5=-7260/862, 5-7=-3611/528
 BOT CHORD 9-10=-523/716, 8-9=-771/6856, 7-8=-254/331
 WEBS 2-9=-766/6895, 3-9=-48/1992, 4-8=-77/2074, 5-8=-788/6849

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc, 2x6 - 2 rows staggered at 0-8-0 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.
- Refer to girder(s) for truss to truss connections.
- 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) except (jt=lb) 10=597, 7=650.
- This truss 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.



September 11, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	H1	Hip Girder	1	2	I42760565
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:58 2020 Page 2
ID:GTYmqTGpwjBwEikz5tTZ8zVUQ7-WbZ4oooQbEXIH_pzbEkCPVch?bUTzTfeBk?BNdyf5Px

NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 174 lb down and 189 lb up at 3-0-6, 73 lb down and 55 lb up at 4-4-14, and 73 lb down and 55 lb up at 6-4-14, and 174 lb down and 189 lb up at 8-5-6 on top chord, and 1343 lb down and 68 lb up at 0-6-6, 1400 lb down and 70 lb up at 2-4-14, 89 lb down and 76 lb up at 3-0-6, 1390 lb down and 63 lb up at 4-4-14, 31 lb down and 24 lb up at 4-4-14, 1345 lb down and 59 lb up at 6-4-14, 31 lb down and 24 lb up at 6-4-14, 89 lb down and 76 lb up at 8-3-10, and 1345 lb down and 58 lb up at 8-3-10, and 1345 lb down and 217 lb up at 10-4-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 9-10=-20, 8-9=-20, 7-8=-20
Concentrated Loads (lb)
Vert: 3=28(F) 4=28(F) 9=-14(F) 8=-1359(F=-14, B=-1345) 11=-0(F) 12=-0(F) 13=-1343(B) 14=-1400(B) 15=-1398(F=-8, B=-1390) 16=-1353(F=-8, B=-1345) 17=-1345(B)

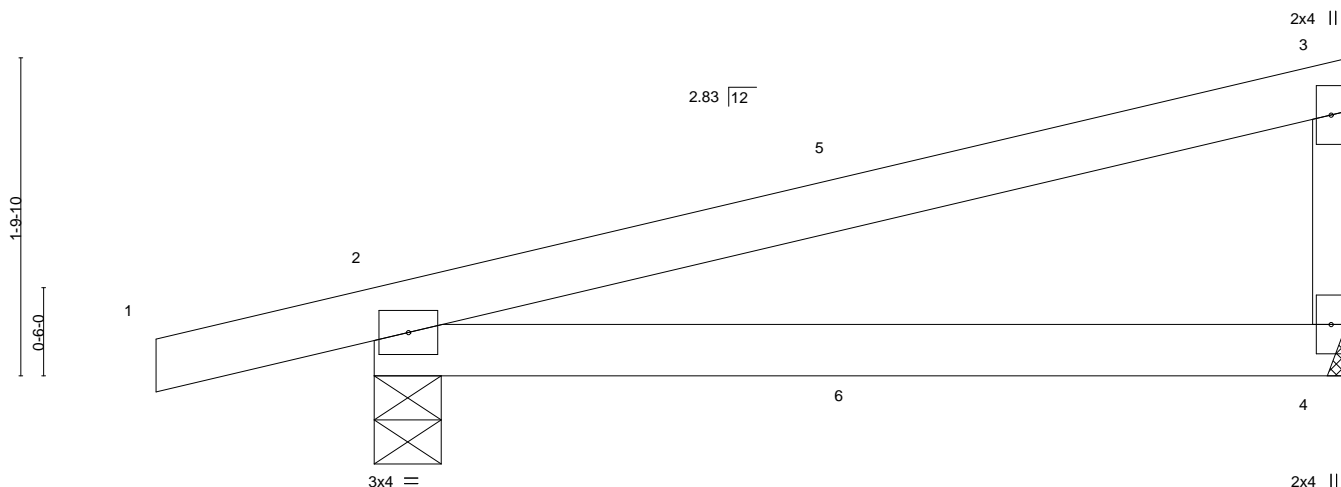
Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760566
400567	J1	Diagonal Hip Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:59 2020 Page 1
ID:GTymqTGpwjbwEikz5tITZ8zVUQ7-_n7S07p2MYfcv8OA8yFRyj9xC?wNi76nQOllw4yf5Pw



Scale = 1:13.1



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 0.52	Vert(LL)	-0.05	2-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.09	2-4	>696	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	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 5-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-4-9
Max Horz 2=65(LC 5)
Max Uplift 4=-44(LC 8), 2=-109(LC 4)
Max Grav 4=222(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; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=109.
- 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 34 lb up at 2-9-8, and 67 lb down and 34 lb up at 2-9-8 on top chord, and 2 lb down at 2-9-8, and 2 lb down at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



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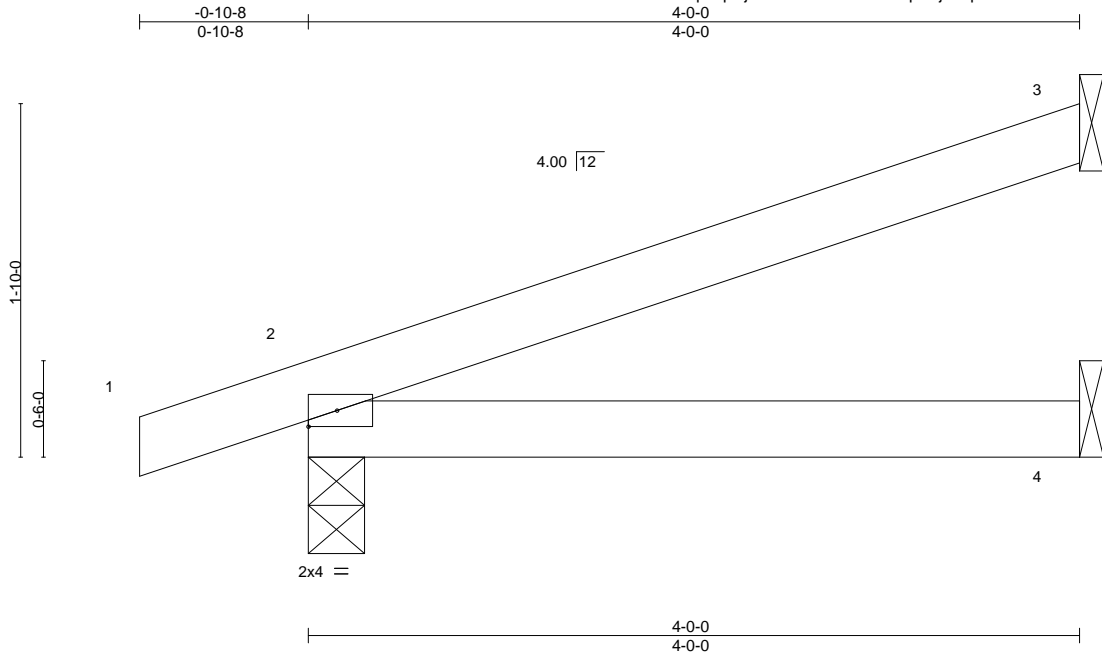
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400567	Truss J2	Truss Type Jack-Open	Qty 4	Ply 1	Lot 20 RT Job Reference (optional)	I42760567
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Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:05 2020 Page 1

ID:GTymqTGpwjwEikz5tTZ8zVUQ7-pxUjHBtpxOQld3sKVCmrB_P1HQ?U6rbgoKC37jyf5Pq



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.01	2-4	>999	360	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02	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: 11 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 4-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=67(LC 4)
Max Uplift 3=-64(LC 8), 2=-69(LC 4)
Max Grav 3=123(LC 1), 2=252(LC 1), 4=76(LC 3)

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

NOTES-

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



September 11, 2020

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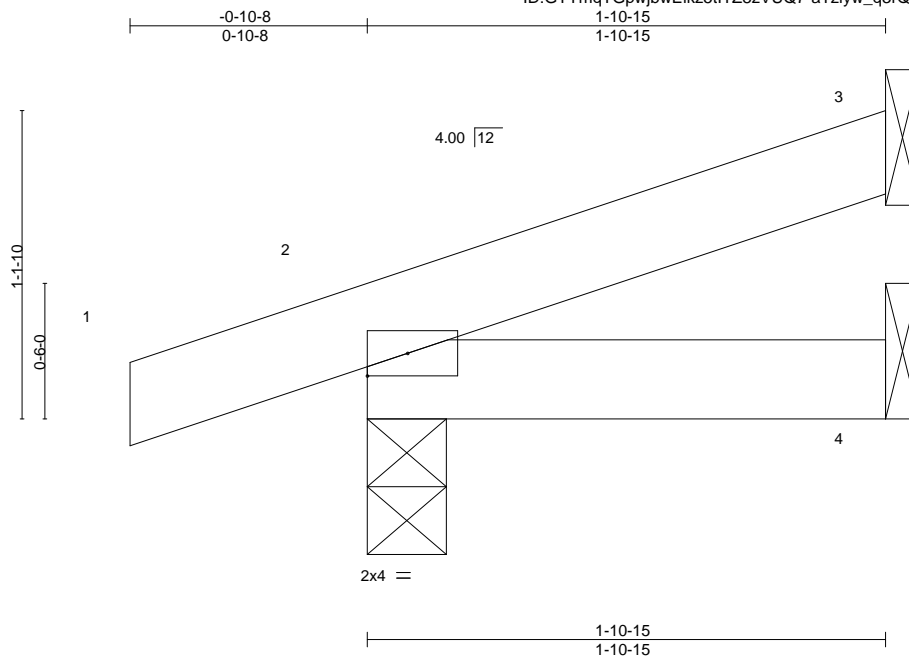


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760568
400567	J3	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:13 2020 Page 1
ID:GTYmqTGpwjwEikz5tTZ8zVUQ7-aTzlyw_q3rQdaHTszuVjWgkS7em7_SareZ8UPGyf5Pi



Scale = 1:8.5

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 0.05	Vert(LL)	-0.00	2	>999	360	MT20	197/144
BCDL 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: 6 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 1-10-15 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=39(LC 4)
Max Uplift 3=-29(LC 8), 2=-56(LC 4)
Max Grav 3=50(LC 1), 2=163(LC 1), 4=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; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



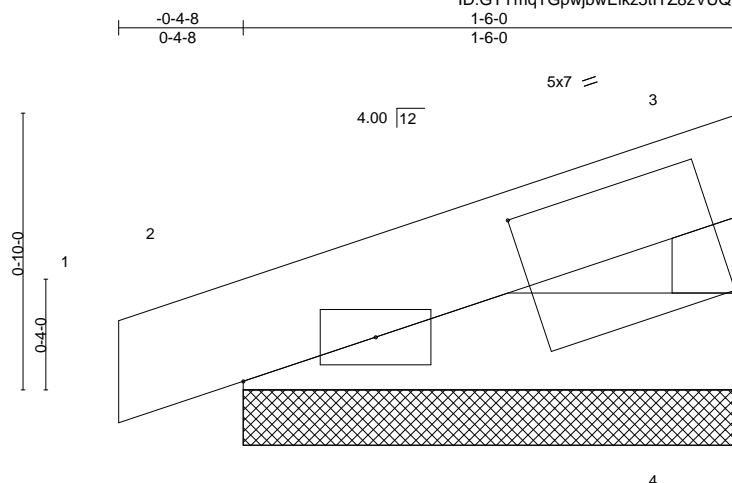
September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



Scale = 1:6.9

 $2 \times 4 =$

Plate Offsets (X,Y)-- [3:0-10-14,0-2-8]												
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	0.03	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-		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=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" 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" tall by 2'-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.



September 11, 2020

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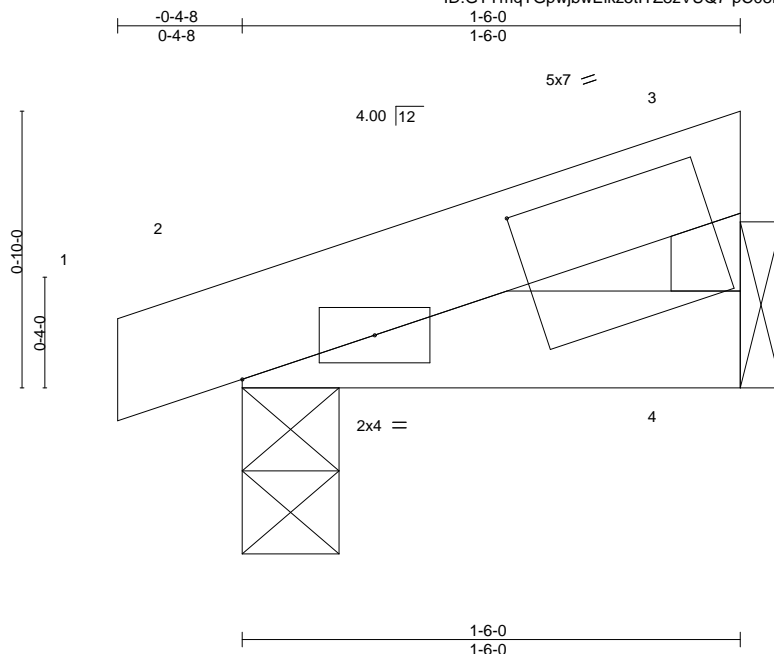
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760570
400567	J5	Jack-Closed	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:22 2020 Page 1

ID:GTymqTGpwjwEikz5t1TZ8zVUQ7-pC08r?5UxcZLAGfb?H9qNZc_9GrTbXoAiTpTEEyf5PZ



Scale = 1:6.9

Plate Offsets (X,Y)-- [3:0-10-14,0-2-8]												
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	0.02	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-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=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; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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.



September 11, 2020

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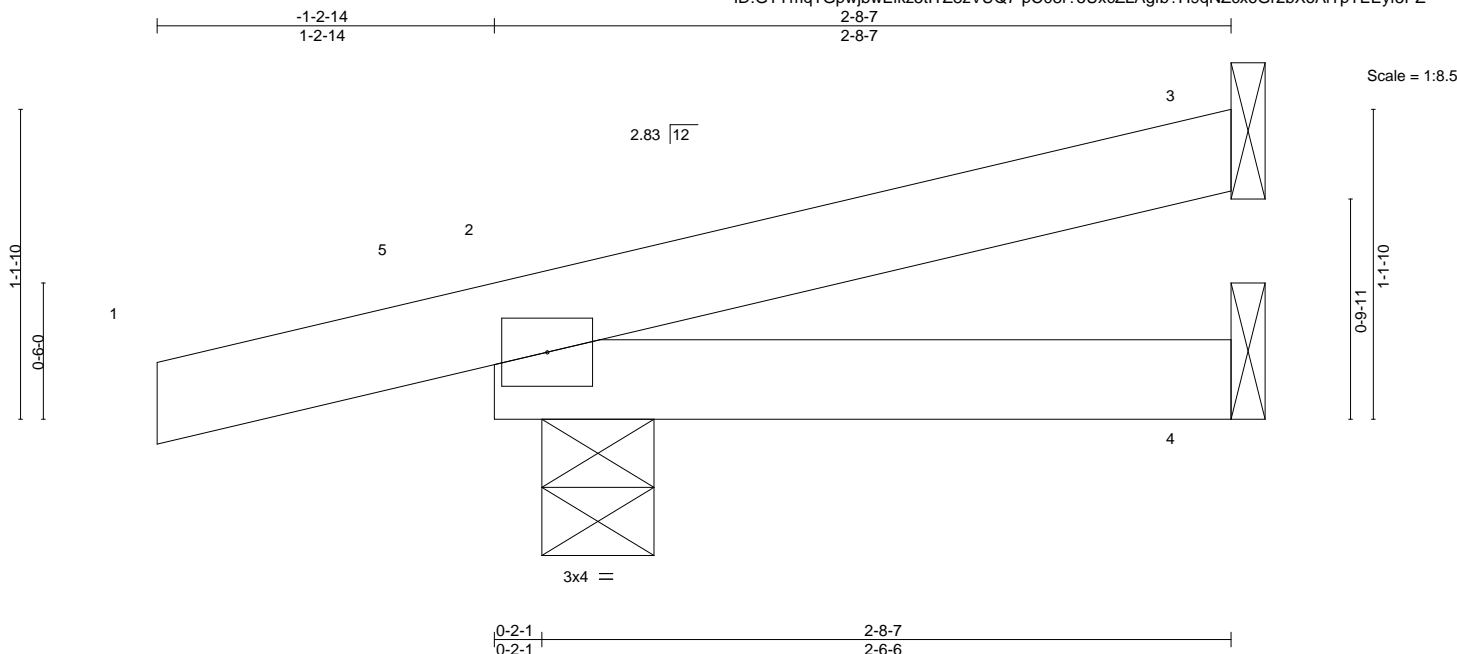


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760571
400567	J6	Diagonal Hip Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:22 2020 Page 1
ID:GTymqTGpwjBwEikz5tTZ8zVUQ7-pC08r75UxcZLAGfb?H9qNZcx6Gr2bXoAiTpTEEyf5PZ



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.00	2-4	>999	360	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-4-15, 4=Mechanical
Max Horz 2=45(LC 6)
Max Uplift 3=-38(LC 6), 2=-112(LC 6)
Max Grav 3=23(LC 1), 2=92(LC 1), 4=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; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=112.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 6 lb up at -1-2-14, and 18 lb down and 6 lb up at -1-2-14 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=-29(F=-14, B=-14)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-5=-19(F=25, B=25), 5=0(F=35, B=35)-to-3=-49(F=10, B=10), 2=-2(F=9, B=9)-to-4=-14(F=3, B=3)



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760572
400567	J7	Jack-Open	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:23 2020 Page 1

ID:GTYmqTGpwbwEikz5tITZ8zVUQ7-HOaW2L56iwhCnqEnY_g3wn88BgBPK_2Jx7Z0mhyf5PY

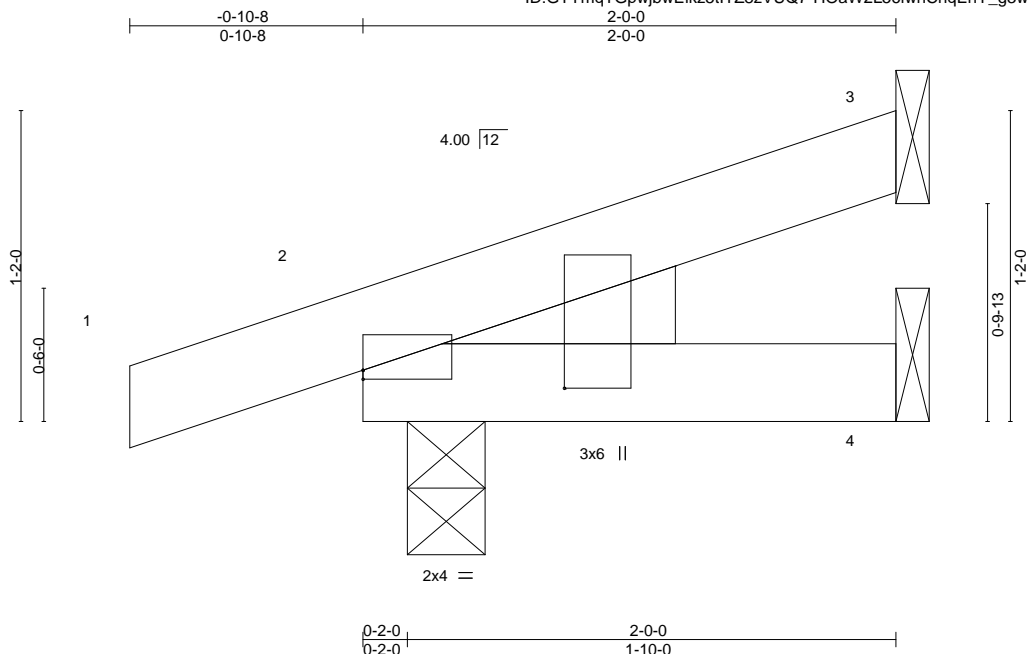


Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [2:0-0-13,0-9-1]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep 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: 7 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 2=0-3-8
Max Horz 2=40(LC 4)
Max Uplift 3=31(LC 8), 2=56(LC 4)
Max Grav 3=54(LC 1), 4=39(LC 3), 2=166(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) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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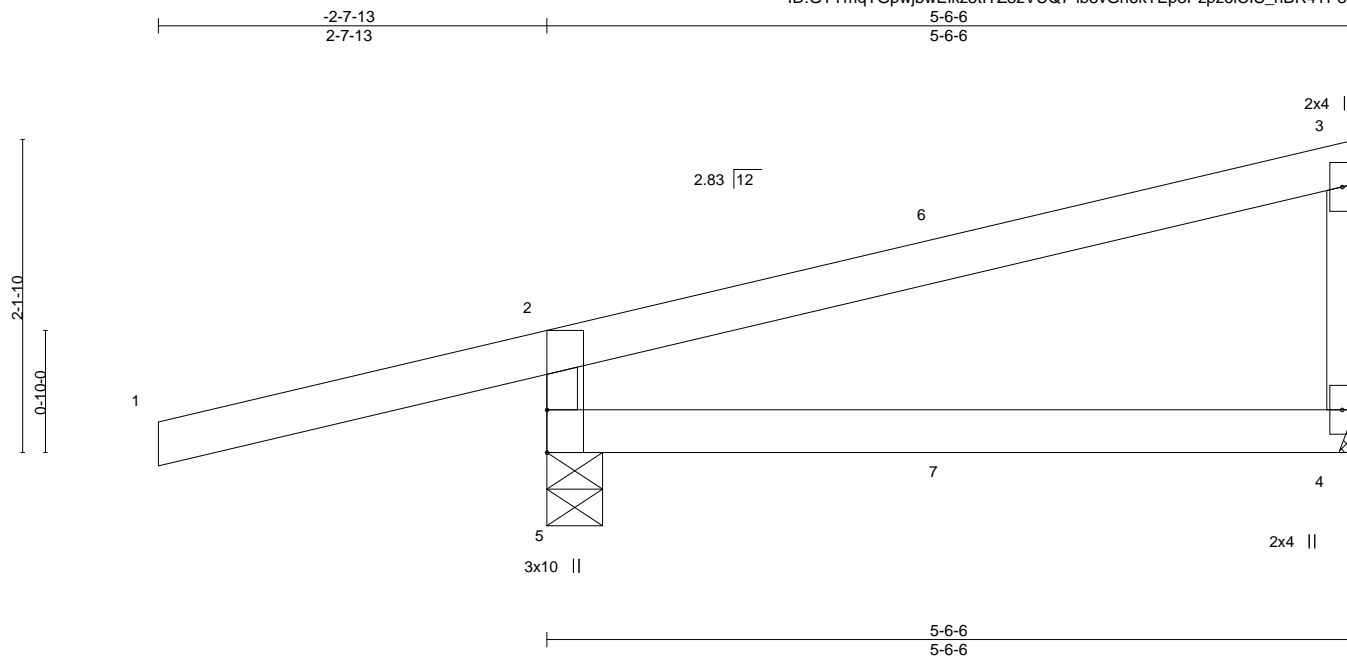


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760573
400567	J8	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:24 2020 Page 1
ID:GTymqTGpwbwEikz5t1TZ8zVUQ7-lb8vGh6kTEp3Pzp6iCIS_hBR4TP3RISAnla7yf5PX



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.06	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.01	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-9, 4=Mechanical
Max Horz 5=88(LC 7)
Max Uplift 5=186(LC 4), 4=34(LC 8)
Max Grav 5=475(LC 1), 4=182(LC 1)

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

TOP CHORD 2-5=-427/216

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) 4 except (jt=lb) 5=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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 15 lb up at 2-9-8, and 74 lb down and 15 lb up at 2-9-8 on top chord, and 6 lb down and 7 lb up at 2-9-8, and 6 lb down and 7 lb up at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=15(F=7, B=7)



September 11, 2020

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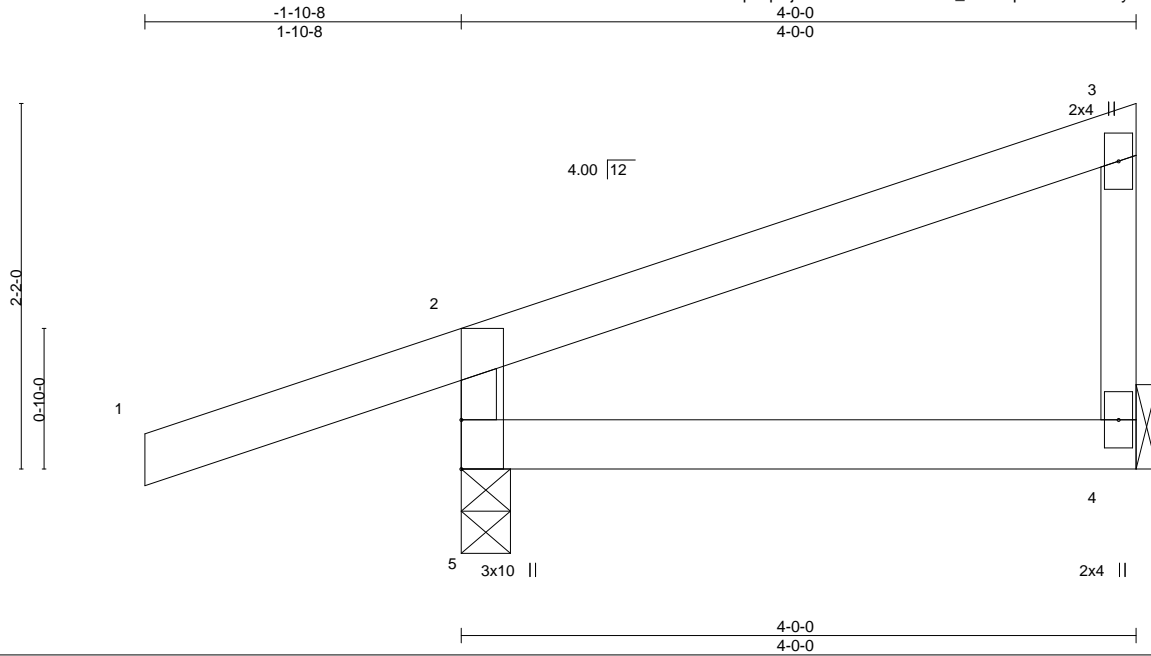


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760575
400567	J10	Jack-Closed	7	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:02:59 2020 Page 1
ID:GTymqTGpwjwEikz5ITZ8zVUQ7-_n7S07p2MYfcv8OA8yFRyj9?9?zdi76nQOllw4yf5Pw



Scale = 1:13.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=92(LC 5)
Max Uplift 5=-129(LC 4), 4=-28(LC 8)
Max Grav 5=345(LC 1), 4=134(LC 1)

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

TOP CHORD 2-5=-306/153

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=129.
- 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.



September 11, 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



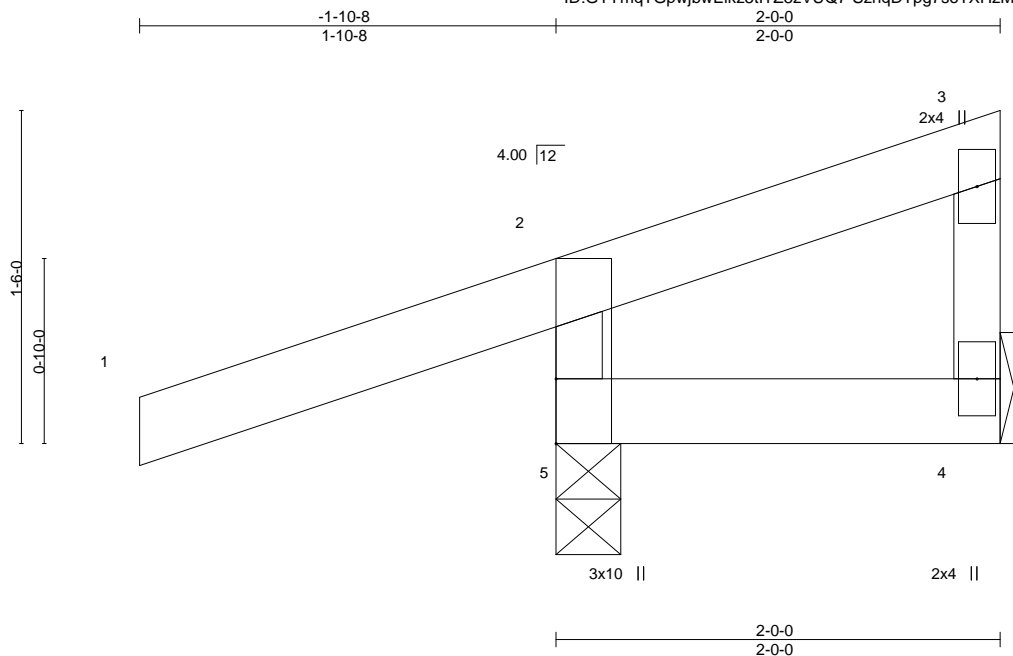
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760576
400567	J11	Jack-Closed	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjBwEikz5tITZ8zVUQ7-SzhqDTpg7soTXHzMifmgUwh9vPKARaMwf2UISWYf5Pv



Scale = 1:10.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Horz 5=73(LC 7)
Max Uplift 5=139(LC 4), 4=-10(LC 5)
Max Grav 5=296(LC 1), 4=32(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-266/147

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=139.
- 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.



September 11, 2020

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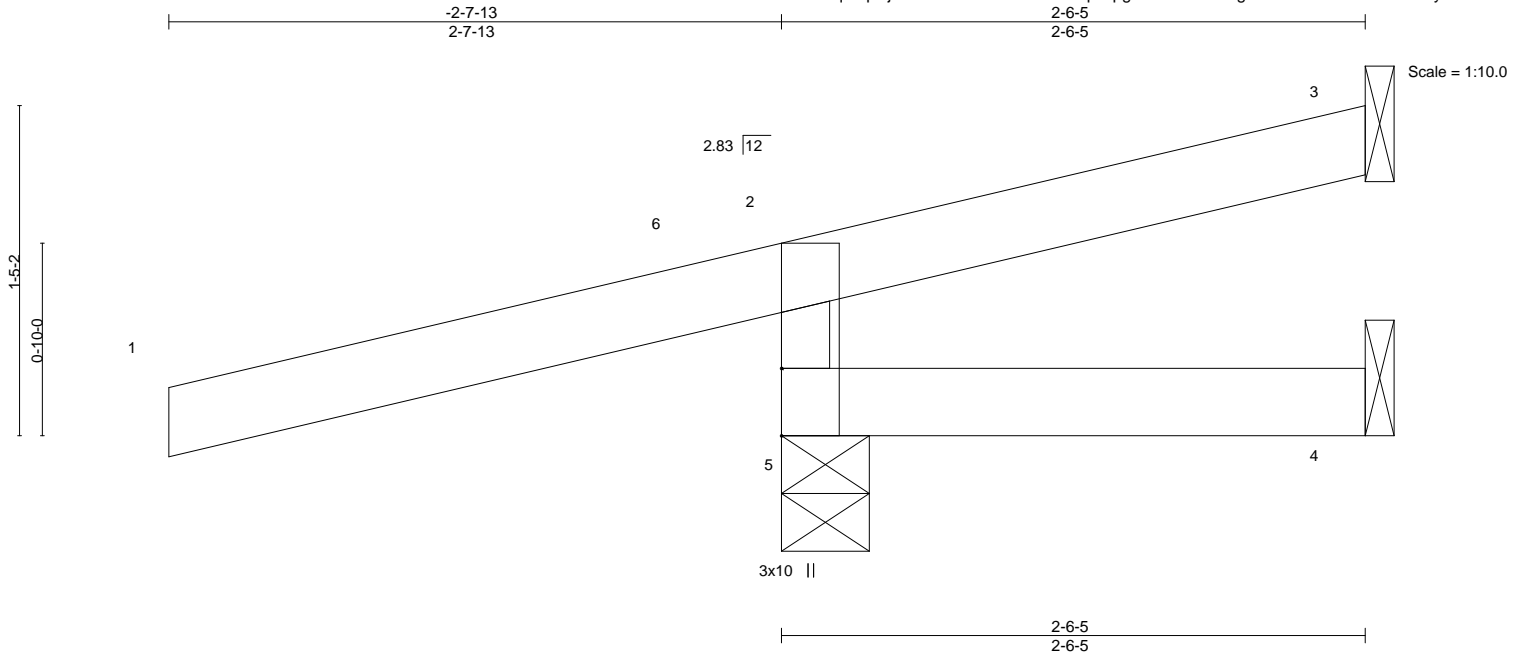
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760577
400567	J12	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjBwEikz5tITZ8zVUQ7-SzhqDTpg7soTXHzMifmgUwh6YPJaRaMwf2UISWYf5Pv



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	0.00	4-5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	0.00	4-5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	4-5	>999	240	
								Weight: 9 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=51(LC 7)
Max Uplift 5=146(LC 4), 3=42(LC 16), 4=13(LC 1)
Max Grav 5=249(LC 1), 3=30(LC 4), 4=27(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=146.
- 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) 42 lb down and 15 lb up at -2-7-13, and 42 lb down and 15 lb up at -2-7-13 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=-65(F=33, B=33)

Trapezoidal Loads (plf)

Vert: 1=-0(F=35, B=35)-to-6=-41(F=14, B=14), 6=0(F=35, B=35)-to-2=-7(F=31, B=31), 2=-7(F=31, B=31)-to-3=-50(F=10, B=10), 5=-2(F=9, B=9)-to-4=-14(F=3, B=3)



September 11, 2020

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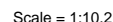
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

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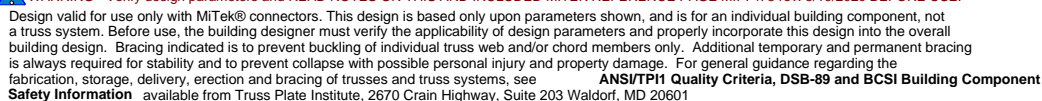


TOP CHORD	Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Horz 5=50(LC 4)
Max Uplift 5=-131(LC 4), 3=-11(LC 8)
Max Grav 5=296(LC 1), 3=6(LC 4), 4=29(LC 3)

TOP CHORD $2-5=-263/140$

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=131.
- 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.



Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760579
400567	J14	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tITZ8zVUQ7-OMoae9xfT2Bmb7lq4o8ZLnQ_CzLvUrD6MzPXOyf5Pt

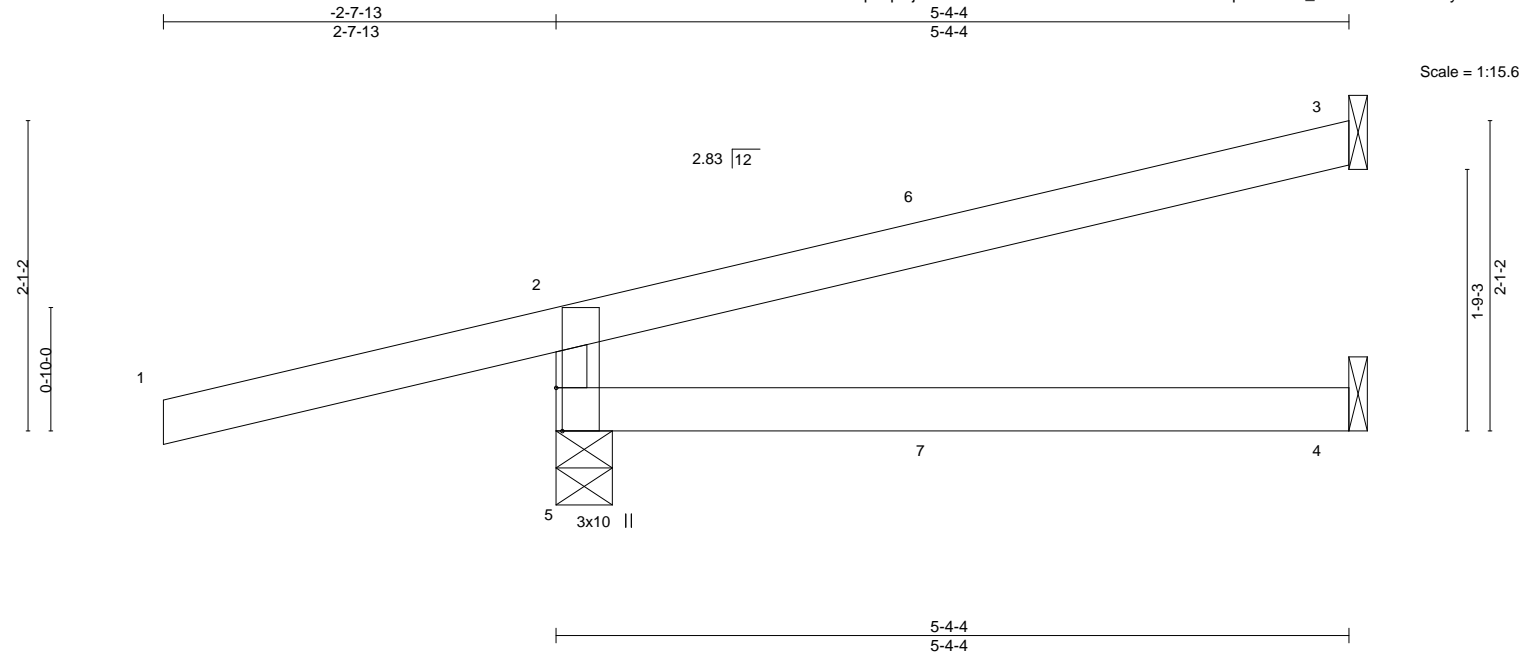


Plate Offsets (X,Y)--		[5:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.61
TCDL 10.0	Lumber DOL	1.15	BC 0.24
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.03 4-5 >999 360
			Vert(CT) -0.06 4-5 >999 240
			Horz(CT) 0.02 3 n/a n/a
			Wind(LL) -0.03 4-5 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 16 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=76(LC 4)
Max Uplift 5=198(LC 4), 3=78(LC 8)
Max Grav 5=439(LC 1), 3=111(LC 1), 4=90(LC 3)

FORCES.

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

TOP CHORD 2-5=-386/234

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 except (jt=lb) 5=198.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 62 lb down and 107 lb up at 2-7-6, and 62 lb down and 107 lb up at 2-7-6 on top chord, and 7 lb down and 8 lb up at 2-7-6, and 7 lb down and 8 lb up at 2-7-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 6=59(F=29, B=29) 7=16(F=8, B=8)



September 11, 2020

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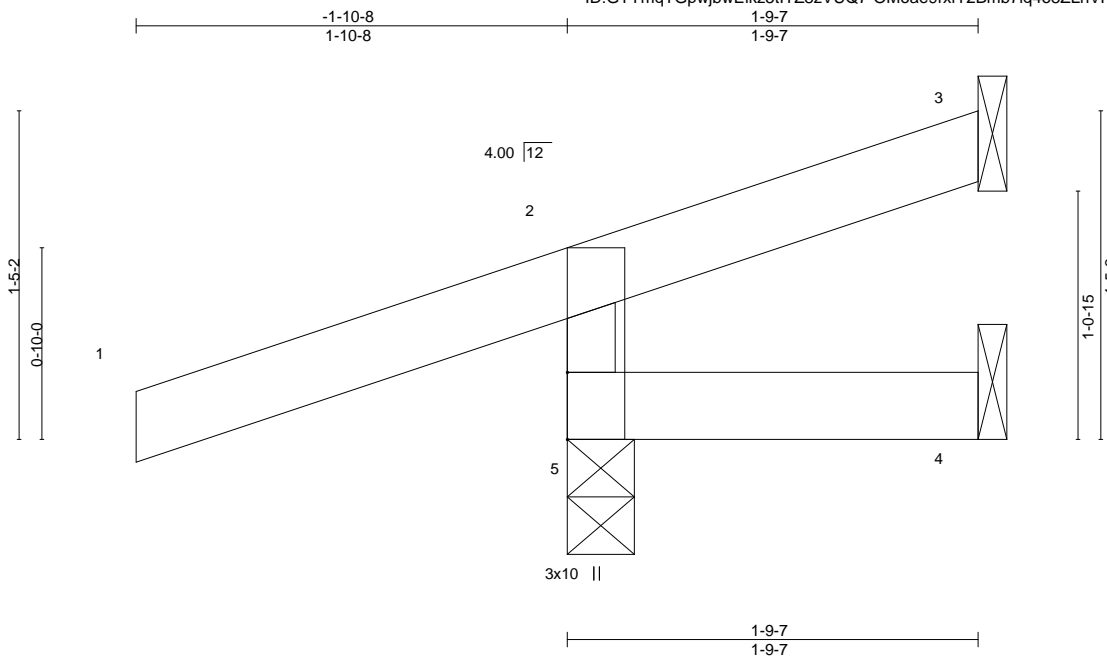
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760580
400567	J15	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-OMoae9xfT2Bmb7lq4o8ZLnVPC0HvUrD6MzPXOyf5Pt



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 0.27	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-9-7 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=49(LC 4)
Max Uplift 5=132(LC 4), 3=9(LC 5)
Max Grav 5=296(LC 1), 3=9(LC 4), 4=27(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-263/141

NOTES-

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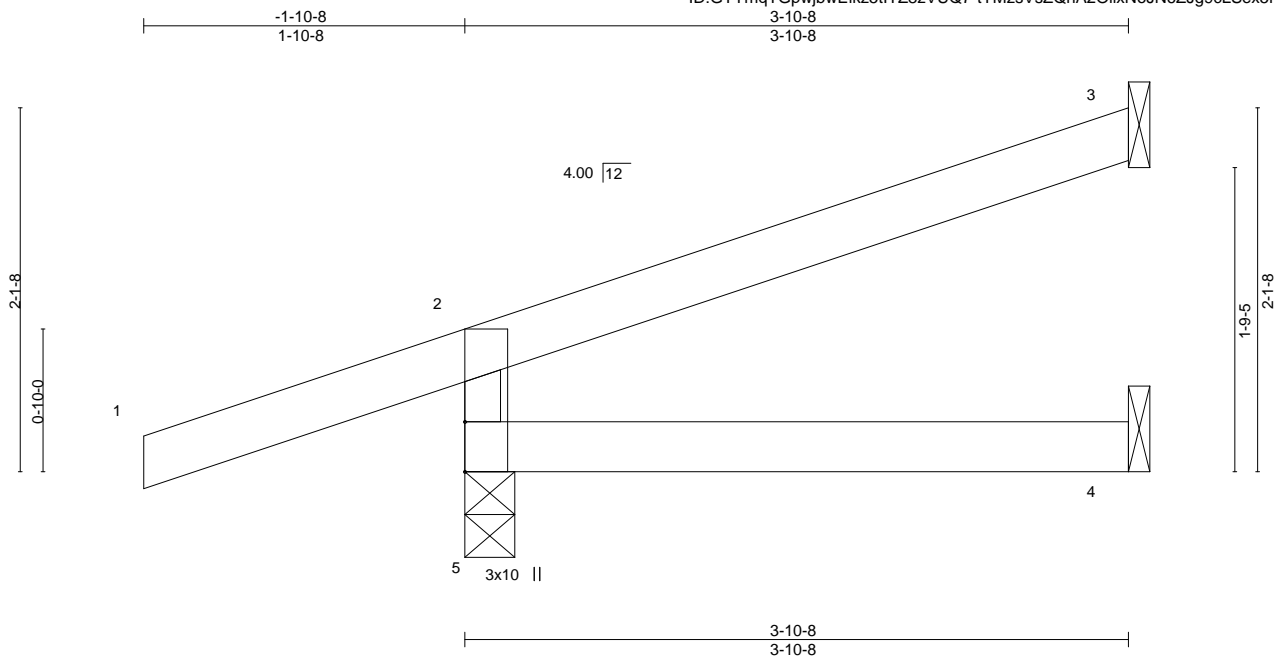


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760581
400567	J16	Jack-Open	6	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:03 2020 Page 1
ID:GTymqTGpwjwEikz5t1TZ8zVUQ7-tYMzsVsZQnA2OlixNoJN6ZJg9cLSex5NL0jy3ryf5Ps



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=77(LC 4)
Max Uplift 5=120(LC 4), 3=51(LC 8)
Max Grav 5=342(LC 1), 3=97(LC 1), 4=68(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-301/147

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760582
400567	J17	Diagonal Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:03 2020 Page 1

ID:GTymqTGpwbwEikz5tITZ8zVUQ7-tYMzsVsZQnA2OlixNoJN6ZJWYcE0et9NL0jy3ryf5Ps



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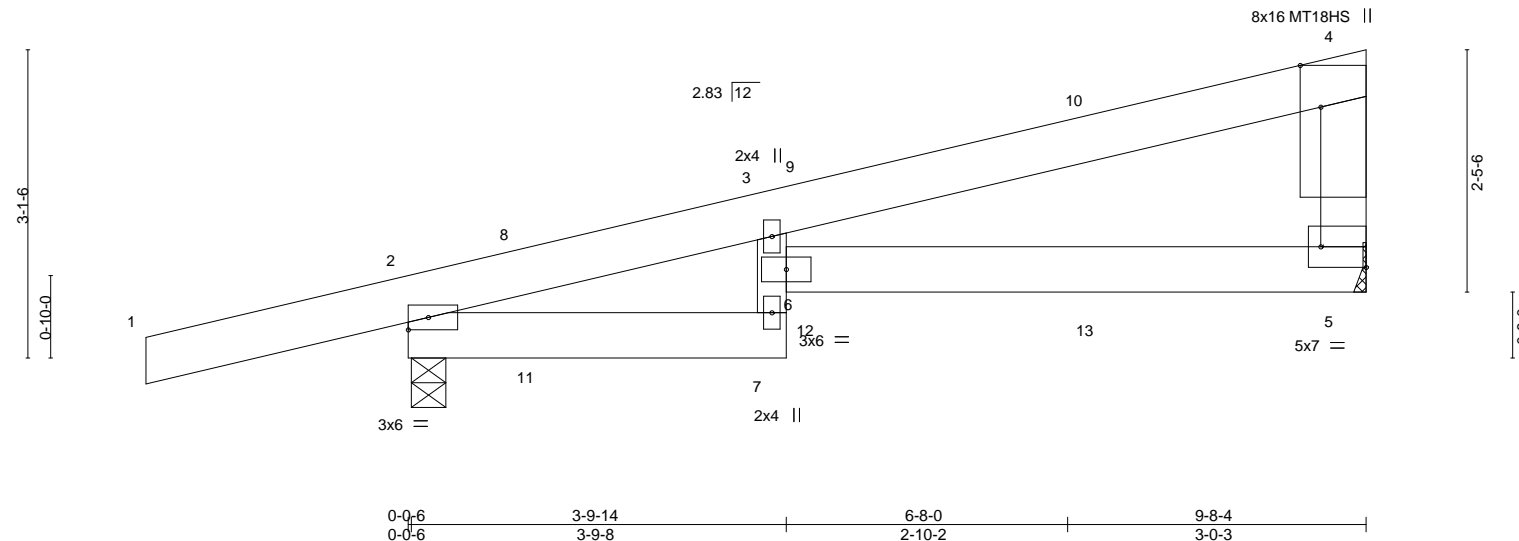


Plate Offsets (X,Y)-- [4:0-5-1,Edge], [5:Edge,0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.19	7	>595	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.36	7	>311	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	7	>572	240	Weight: 44 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=Mechanical, 2=0-4-3
Max Horz 2=120(LC 21)
Max Uplift 5=152(LC 8), 2=226(LC 4)
Max Grav 5=607(LC 1), 2=748(LC 1)

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

TOP CHORD 2-3=-374/27, 3-4=-457/82, 4-5=-345/123
BOT CHORD 5-6=-113/445
WEBS 3-6=0/265

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 5=152, 2=226.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 32 lb up at 1-3-7, 105 lb down and 65 lb up at 4-1-7, and 72 lb down and 36 lb up at 4-1-7, and 103 lb down and 56 lb up at 6-11-6 on top chord, and 3 lb down at 1-3-7, 20 lb down at 4-1-7, 35 lb down at 4-1-7, and 217 lb down and 82 lb up at 6-11-6, and 32 lb down and 28 lb up at 6-11-6 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: 1-4=-70, 2-7=-20, 5-6=-20



September 11, 2020

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760582
400567	J17	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:04 2020 Page 2
ID:GTYmqTGpwjBwEikz5tITZ8zVUQ7-LkwL3rtBA4lu?vH7xVrcfmshI0ZFNKPWagSWbHyf5Pr

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=-31(B) 10=-22(F) 12=-19(F=-10, B=-9) 13=-249(F=-32, B=-217)

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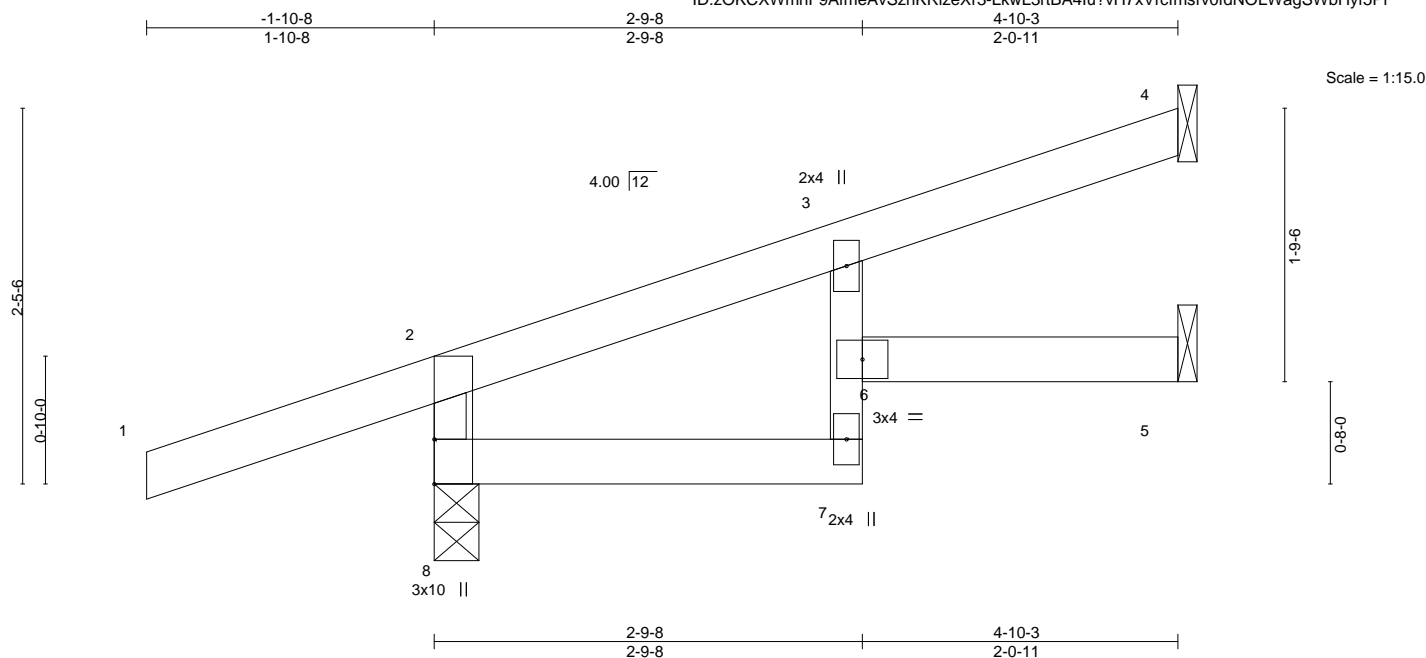
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760583
400567	J18	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:zOKCXWmhF9AmeAvSznKRizeXr3-LkwL3rtBA4lu?vH7xVrcfmsrv0fdNOLWagSWbHyf5Pr



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.04	7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	6	>999	240	Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=90(LC 4)
 Max Uplift 8=121(LC 4), 4=45(LC 8), 5=4(LC 8)
 Max Grav 8=379(LC 1), 4=121(LC 1), 5=71(LC 3)

FORCES.

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

TOP CHORD 2-8=-341/140

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 8=121.
- 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.



September 11, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760584
400567	J19	Jack-Closed	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:05 2020 Page 1

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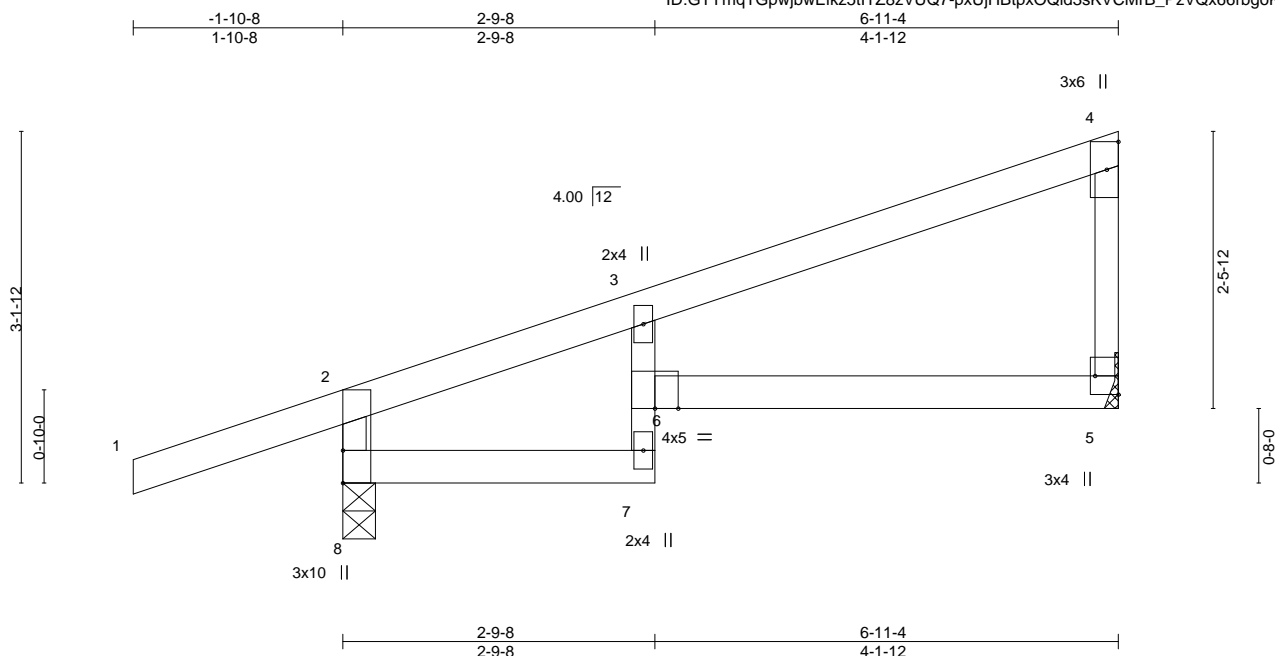


Plate Offsets (X,Y)--		[5:Edge,0-2-8]									
LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.10	6	>812	360	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.18	5-6	>439	240			
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.05	5	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.07	6	>999	240	Weight: 21 lb	FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 5=Mechanical
 Max Horz 8=94(LC 5)
 Max Uplift 8=76(LC 4), 5=20(LC 8)
 Max Grav 8=462(LC 1), 5=282(LC 1)

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

TOP CHORD 2-8=-418/91, 2-3=-263/10

NOTES-

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



September 11, 2020

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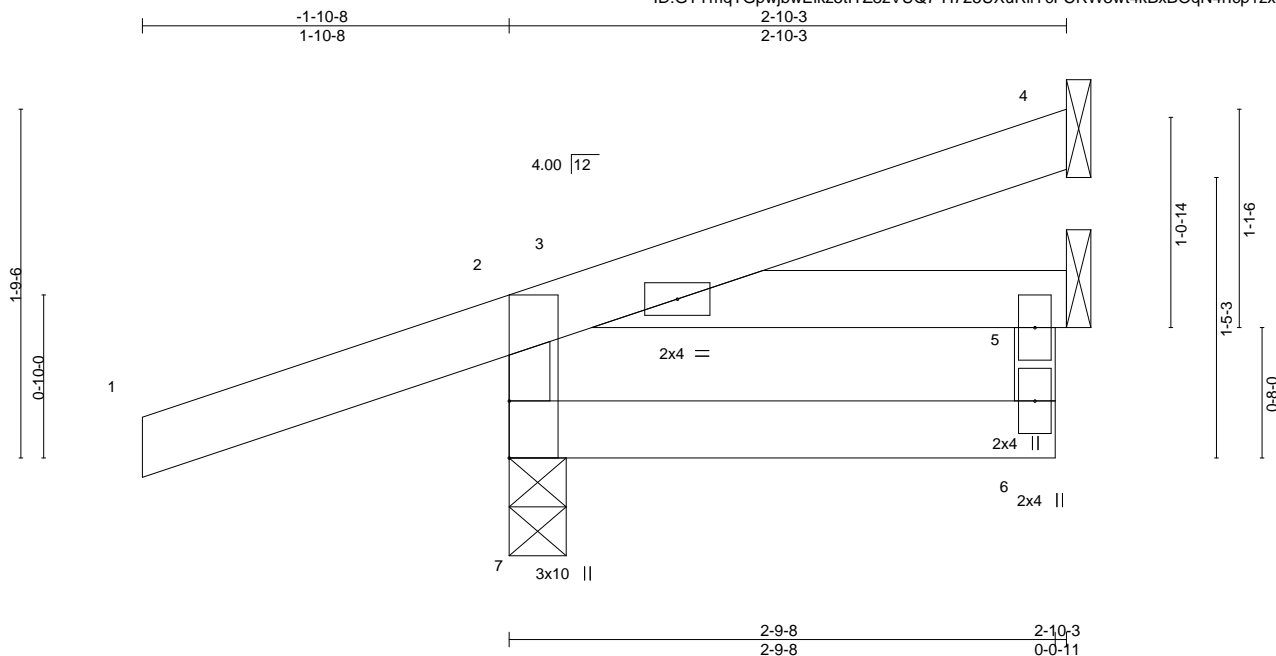


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760585
400567	J20	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:06 2020 Page 1
ID:GTymqTGpwjwEikz5tTZ8zVUQ7-H725UXuRiiYcFCRW3wt4kBXBoQn4rlcp1zxdgAyf5Pp



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.00	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	6-7	>999	240		
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-S	Wind(LL)	-0.00	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

BRACING-

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

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=63(LC 4)
Max Uplift 7=110(LC 4), 4=30(LC 8)
Max Grav 7=330(LC 1), 4=57(LC 1), 5=91(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-298/128

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 7=110.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760586
400567	J21	Diagonal Hip Girder	2	1	Job Reference (optional)	

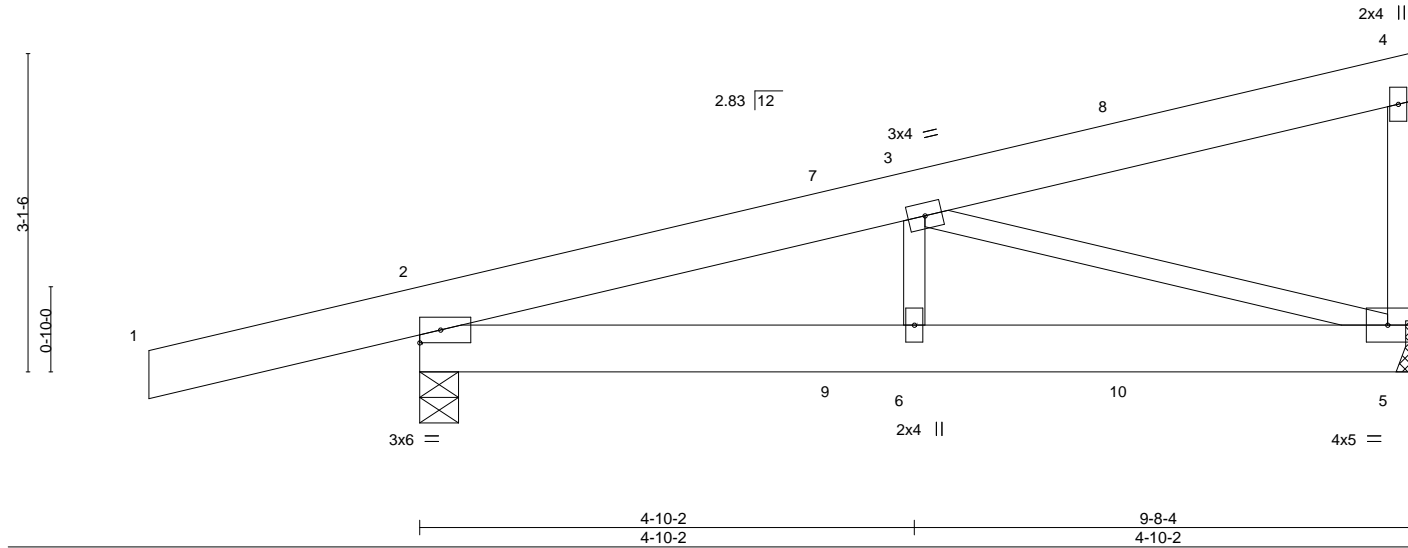
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-IJcThv3T?gTsM0icdOJGpUKJDdPaGyGdhACcyf5Po



Scale = 1:22.6



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 0.38	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.03	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.44	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01	6	>999	240		
									Weight: 47 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 2=0-4-9
Max Horz 2=117(LC 22)
Max Uplift 5=101(LC 8), 2=220(LC 4)
Max Grav 5=467(LC 1), 2=677(LC 1)

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

TOP CHORD 2-3=-792/124
BOT CHORD 2-6=-138/699, 5-6=-138/699
WEBS 3-5=-717/164

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) except (jt=lb) 5=101, 2=220.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 36 lb up at 4-1-7, 71 lb down and 36 lb up at 4-1-7, and 103 lb down and 75 lb up at 6-11-6, and 103 lb down and 75 lb up at 6-11-6 on top chord, and 10 lb down and 4 lb up at 4-1-7, 10 lb down and 4 lb up at 4-1-7, and 31 lb down at 6-11-6, and 31 lb down at 6-11-6 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: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 8=-71(F=-35, B=-35) 9=8(F=4, B=4) 10=-37(F=-19, B=-19)



September 11, 2020

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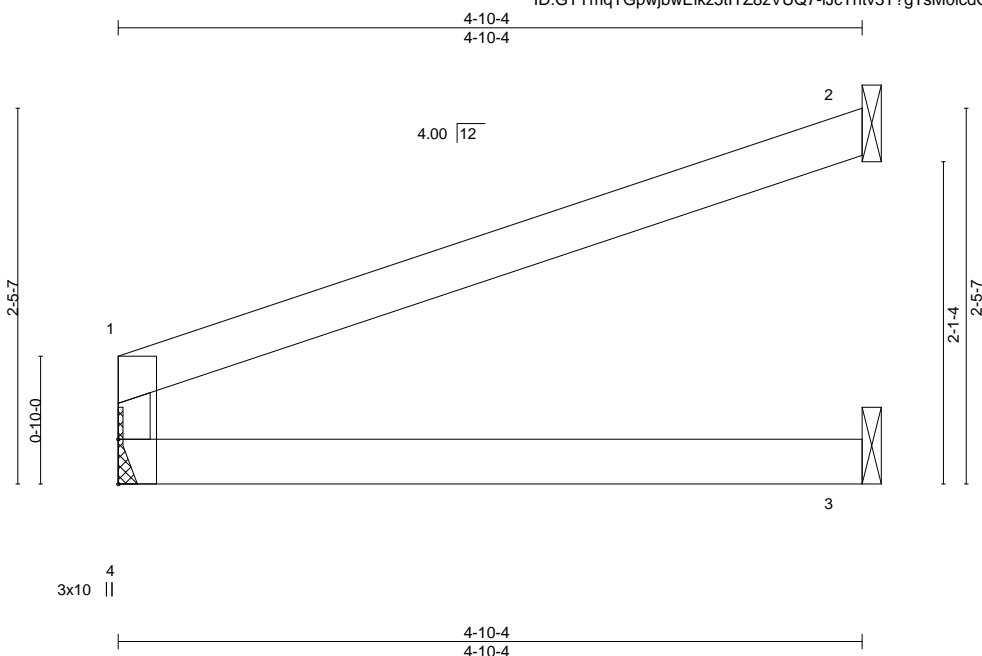
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760587
400567	J22	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTYmqTGpwjwEikz5tITZ8zVUQ7-IJcThvt3T?gTsM0icdOJGPULcDgwaf5yGdhACcyf5Po



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.02	3-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.05	3-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.03	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	3-4	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=56(LC 8)
Max Uplift 4=22(LC 4), 2=-73(LC 8)
Max Grav 4=211(LC 1), 2=154(LC 1), 3=90(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) 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) 4, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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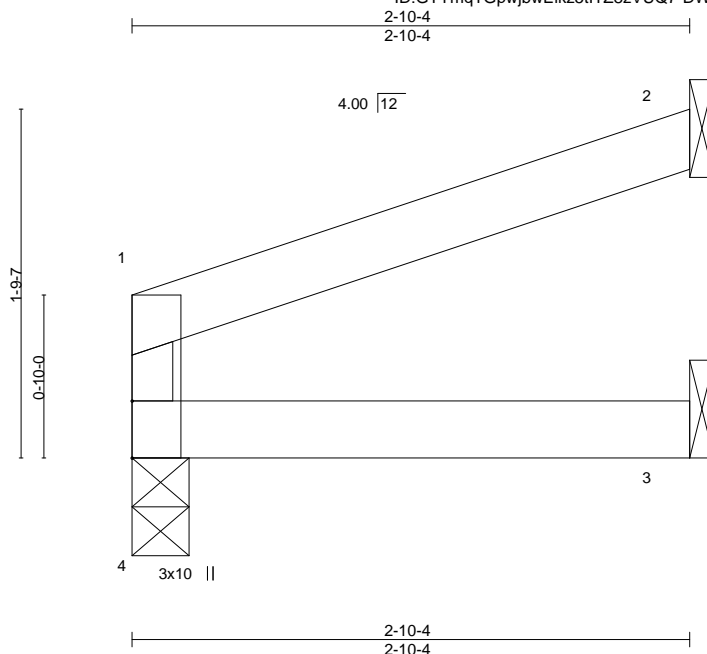
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760588
400567	J23	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tITZ8zVUQ7-DWAsvCwhEJoKUWauALvYpc0aJd3RJCL6UHQjk2yf5Pn



Scale = 1:11.8

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	3-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	3-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	3-4	>999	240	Weight: 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 2-10-4 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=37(LC 5)
Max Uplift 4=-10(LC 4), 2=-44(LC 8)
Max Grav 4=121(LC 1), 2=89(LC 1), 3=52(LC 3)

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

NOTES-

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



September 11, 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



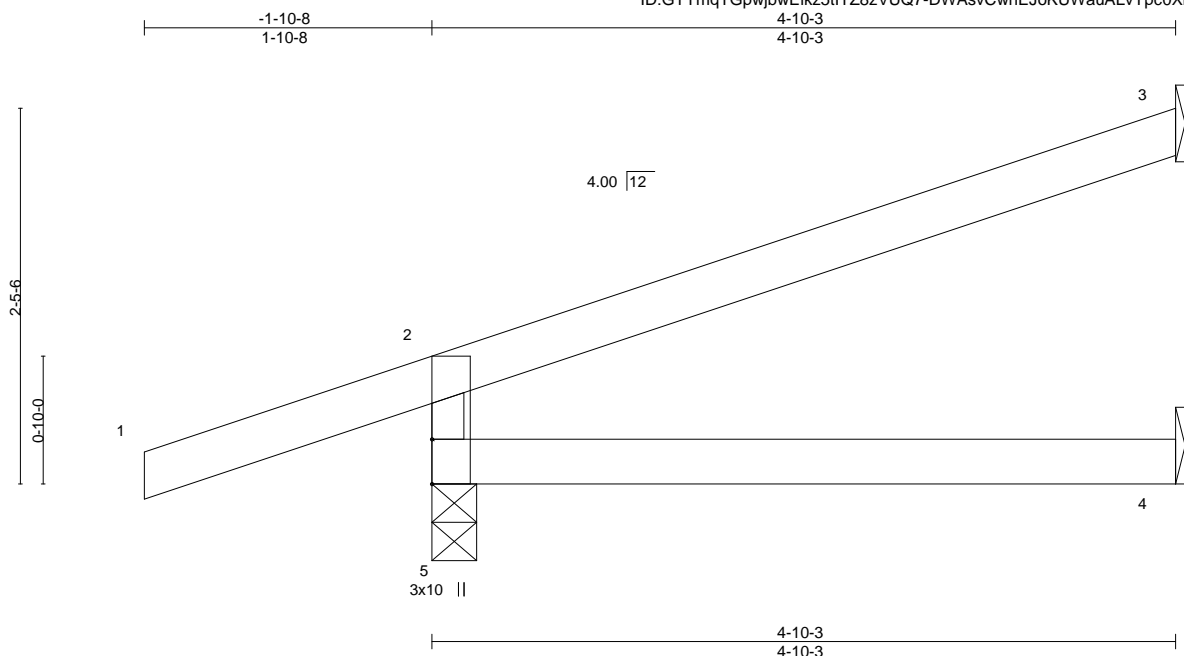
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760589
400567	J24	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-DWAsvCwhEJoKUWauALvYpc0Xkd0MJCL6UHQjk2yf5Pn



Scale = 1:15.0

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 0.28	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.05	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 14 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=90(LC 4)
Max Uplift 5=121(LC 4), 3=67(LC 8)
Max Grav 5=379(LC 1), 3=134(LC 1), 4=87(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-332/157

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=121.
- 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.



September 11, 2020

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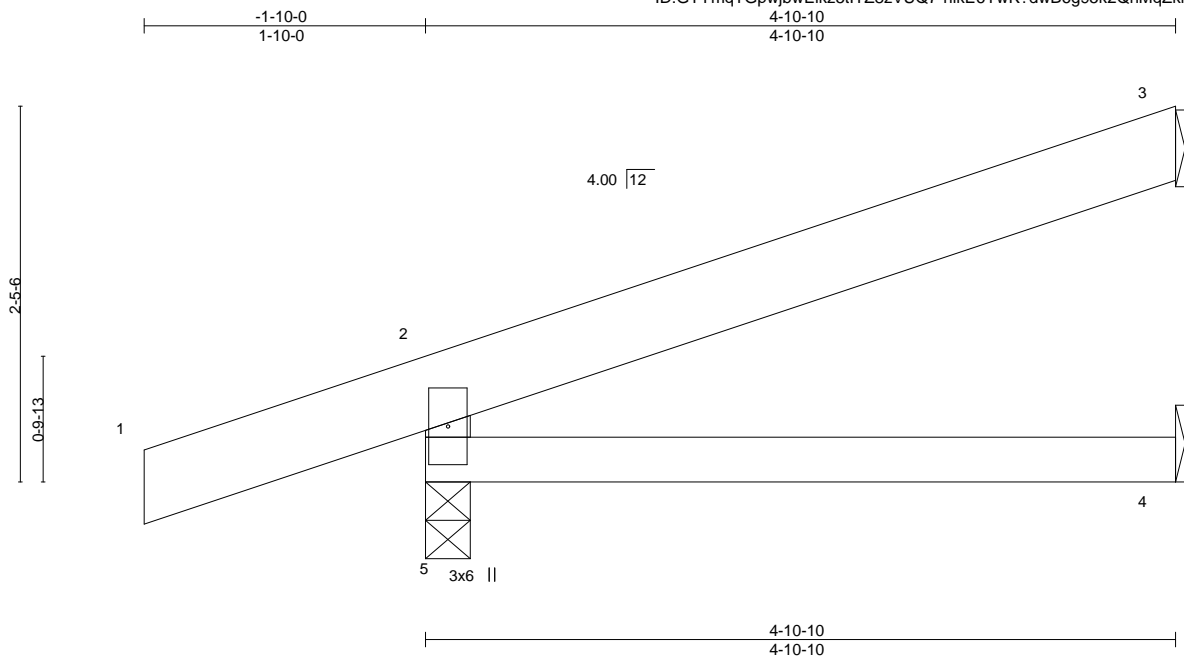


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760590
400567	J24A	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5lITZ8zVUQ7-hikE6YwK?dwB6g95k2QnMqZkm1N72faFjxAHGUyf5Pm



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.04	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 19 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=91(LC 4)
Max Uplift 5=123(LC 4), 3=67(LC 8)
Max Grav 5=378(LC 1), 3=140(LC 1), 4=79(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-326/158

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=123.
- 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.



September 11, 2020

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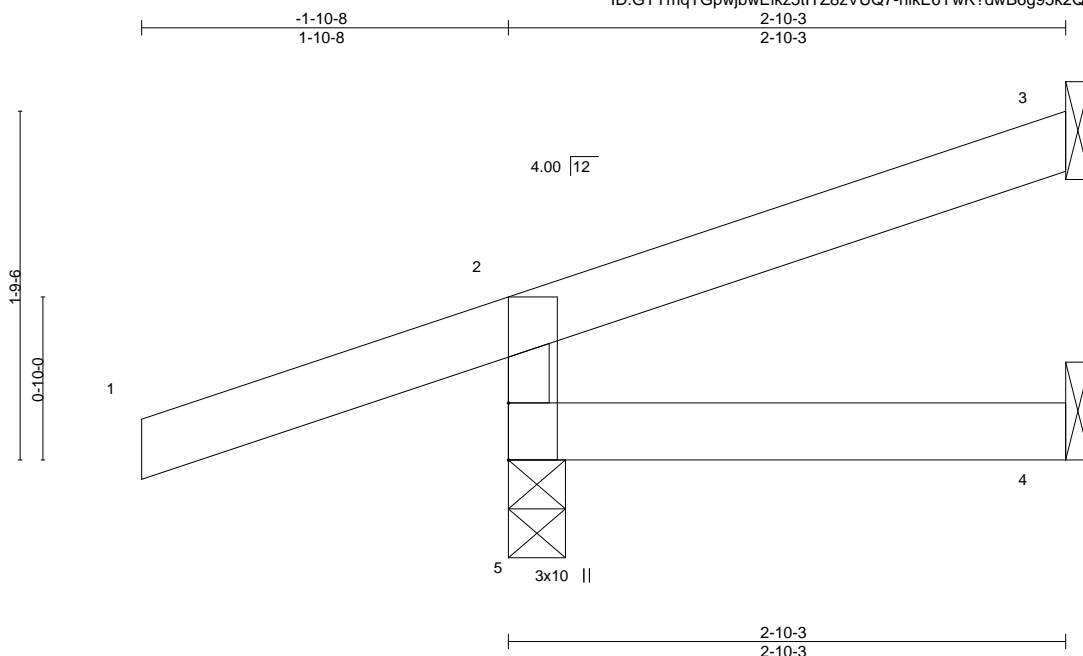
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760591
400567	J25	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-hikE6YwK?dwB6g95k2QnMqZie1Pp2faFjxAHGUyf5Pm



Scale = 1:11.8

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 0.27	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 9 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 4)
Max Uplift 5=121(LC 4), 3=32(LC 8)
Max Grav 5=310(LC 1), 3=52(LC 1), 4=48(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-274/139

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=121.
- 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.



September 11, 2020

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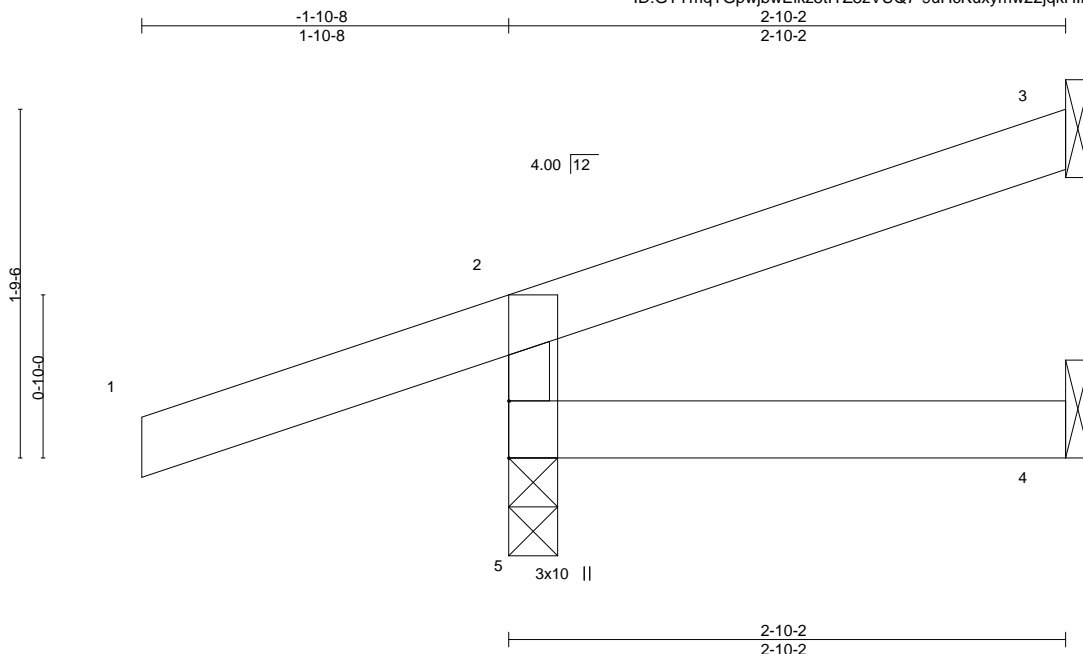


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760592
400567	J25A	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:10 2020 Page 1
ID:GTYmqTGpwjwEikz5t1TZ8zVUQ7-9uHcKuxymw22jqkHlmx0u16tORl3n6qPybvqpxyf5Pl



Scale = 1:11.8

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 0.27	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	Weight: 9 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-0, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 4)
Max Uplift 5=121(LC 4), 3=32(LC 8)
Max Grav 5=310(LC 1), 3=52(LC 1), 4=48(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-274/139

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=121.
- 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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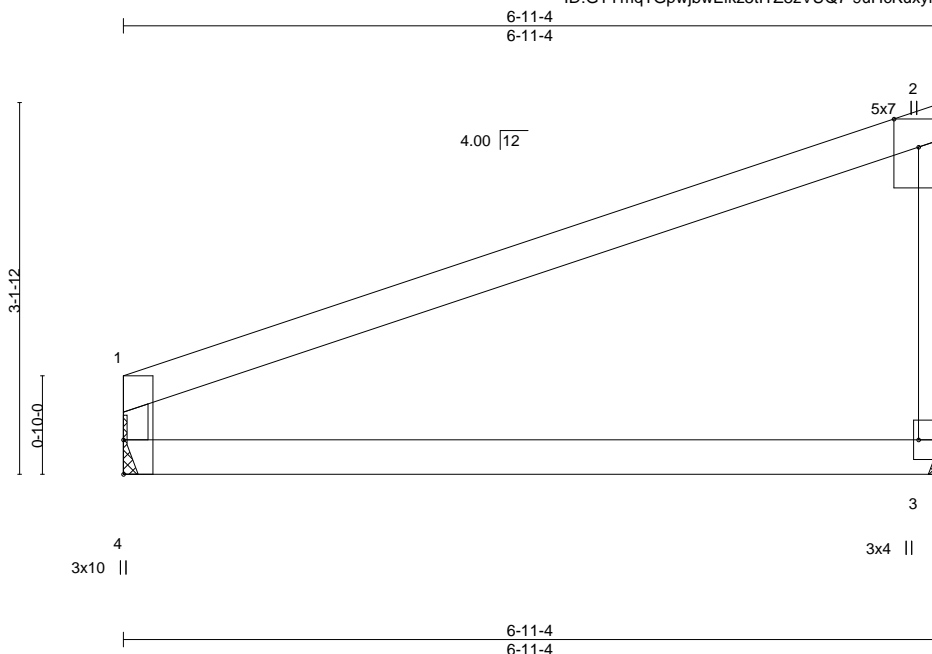
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400567	Truss J26	Truss Type Jack-Closed	Qty 7	Ply 1	Lot 20 RT Job Reference (optional)	I42760593
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Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:10 2020 Page 1

ID:GTymqTGpwjwEikz5tTZ8zVUQ7-9uHcKuxymw22jqkHlmx0u16ngRfln6qPybvqpxyf5PI



Scale = 1:19.5

Plate Offsets (X,Y)-- [3:Edge,0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.09	3-4	>936	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.18	3-4	>451	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	3-4	>999	240	Weight: 19 lb	FT = 10%

LUMBER-

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

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) 4=Mechanical, 3=Mechanical
Max Horz 4=93(LC 5)
Max Uplift 4=-10(LC 4), 3=-22(LC 8)
Max Grav 4=303(LC 1), 3=303(LC 1)

FORCES.

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

TOP CHORD 1-4=-251/55

NOTES-

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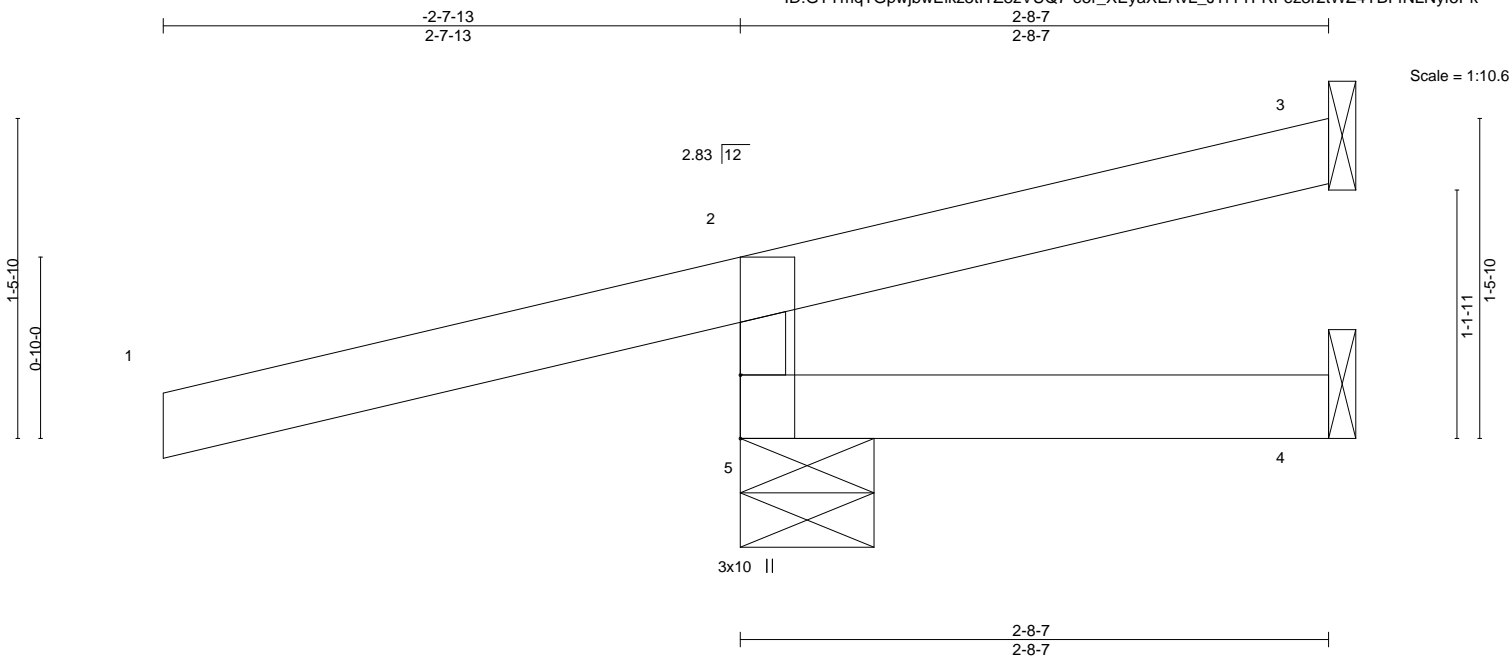


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760594
400567	J27	Diagonal Hip Girder	4	1	Job Reference (optional)	

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ID:GTymqTGpwbwEikz5t1TZ8zVUQ7-e5r_XEyaXEAvL_JTrTTFRFez3r2tWZ4YBFfNLNyl5Pk



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.59	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	0.01	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	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 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-7-6, 3=Mechanical, 4=Mechanical
Max Horz 5=52(LC 7)
Max Uplift 5=154(LC 4), 3=48(LC 17), 4=14(LC 1)
Max Grav 5=270(LC 1), 3=28(LC 4), 4=28(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=154.
- 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) 46 lb down and 16 lb up at -2-7-13, and 46 lb down and 16 lb up at -2-7-13 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=-71(F=36, B=-36)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-2=-48(F=11, B=11), 2=-4(F=33, B=33)-to-3=-49(F=10, B=10), 5=-0(F=10, B=10)-to-4=-14(F=3, B=3)



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

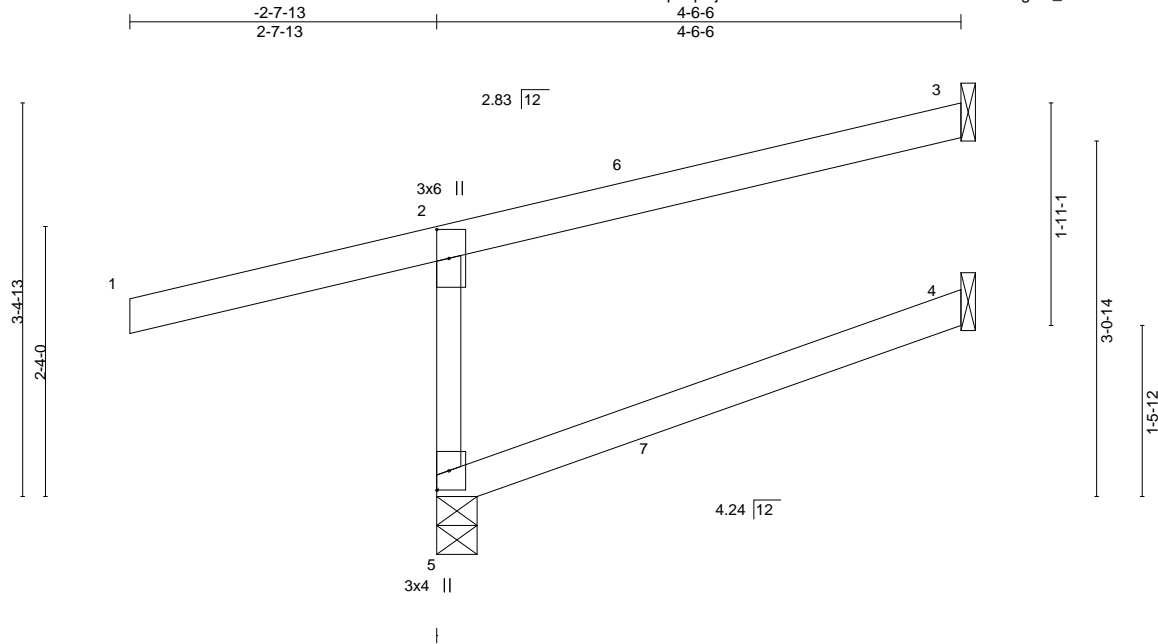
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760596
400567	J29	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-6HPMazCIYImz7ugPB_UzSB59ENuF0KhPvOxtpyf5Pj



Scale = 1:19.9

Plate Offsets (X,Y)--		[2:0-3-0,0-1-4]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	0.06	4-5	>921
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	0.05	4-5	>999
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.13	3	n/a
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R					
								PLATES	GRIP
								MT20	197/144
								Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-3, 3=Mechanical, 4=Mechanical
Max Horz 5=86(LC 5)
Max Uplift 5=273(LC 4), 3=92(LC 8), 4=30(LC 5)
Max Grav 5=394(LC 1), 3=78(LC 38), 4=79(LC 3)

FORCES.

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

TOP CHORD 2-5=-347/246

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=273.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 87 lb down and 179 lb up at 1-9-8, and 87 lb down and 179 lb up at 1-9-8 on top chord, and 33 lb down and 51 lb up at 1-9-8, and 33 lb down and 51 lb up at 1-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 6=84(F=42, B=42) 7=8(F=4, B=4)



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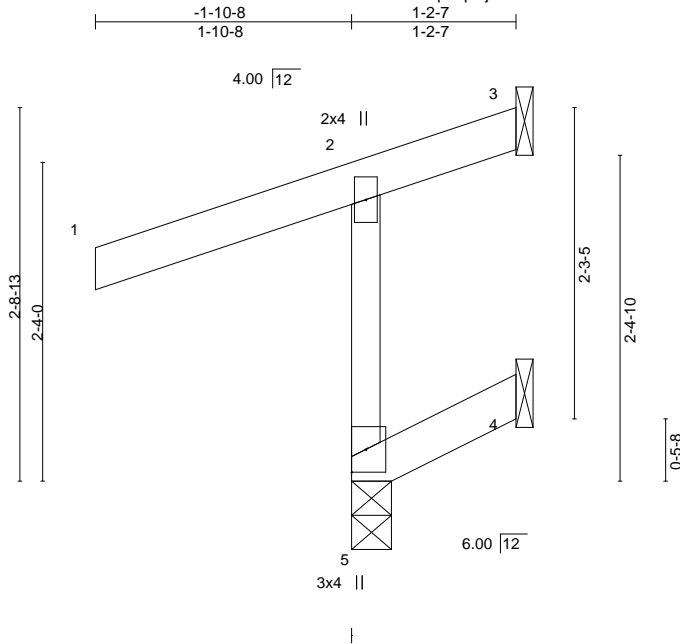
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760597
400567	J30	Jack-Open	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-aTzlyw_q3rQdaHTszuVjWgkOdelR_SareZ8UPGyf5Pi



Scale = 1:16.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						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 1-2-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=71(LC 5)
Max Uplift 5=113(LC 4), 3=-80(LC 1), 4=-46(LC 5)
Max Grav 5=314(LC 1), 3=26(LC 4), 4=28(LC 19)

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

TOP CHORD 2-5=-295/142

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.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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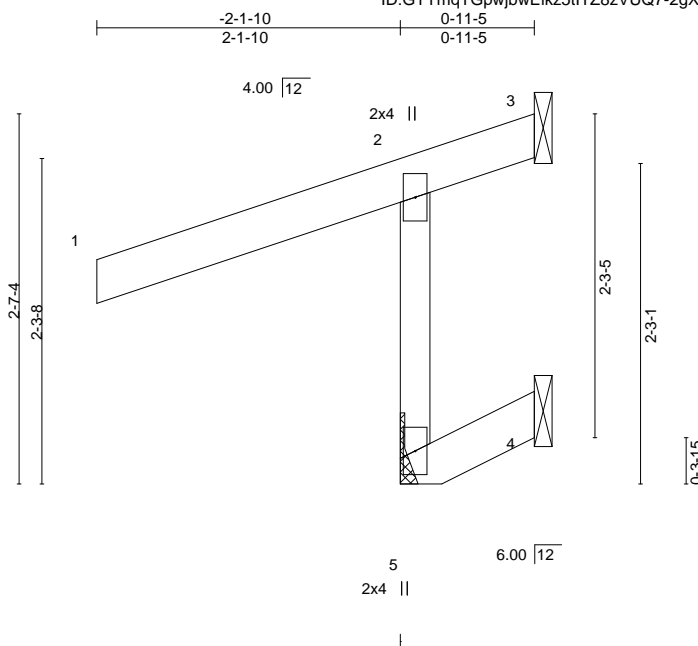
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760598
400567	J31	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-2gX79G_Sq9YUCR22Xb0y2tGY725jivq_tDt2yiyf5Ph



Scale = 1:16.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						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 0-11-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 3=Mechanical, 4=Mechanical
Max Horz 5=69(LC 5)
Max Uplift 5=-160(LC 4), 3=-172(LC 1), 4=-61(LC 5)
Max Grav 5=406(LC 1), 3=75(LC 4), 4=32(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-387/194

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) 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) 4 except (jt=lb) 5=160, 3=172.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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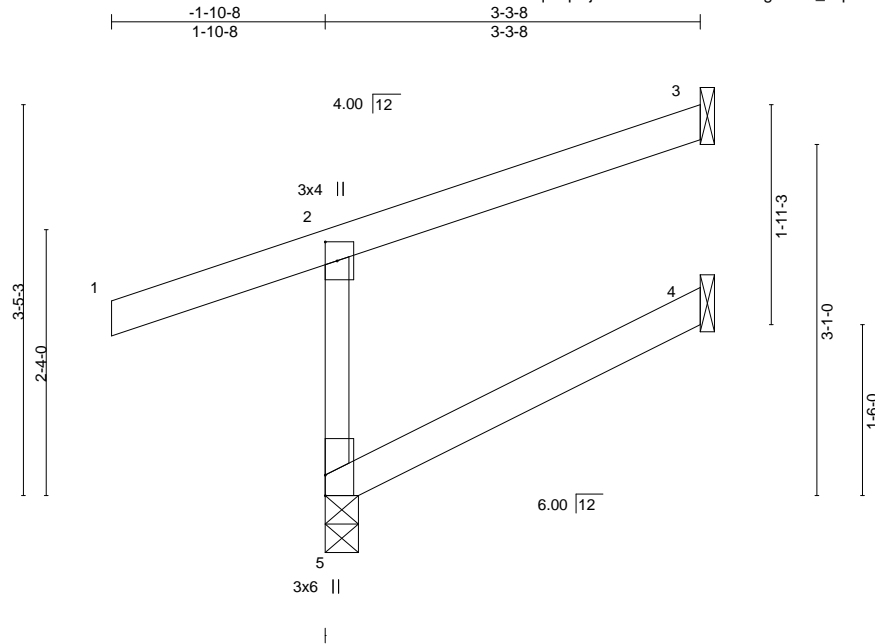
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760599
400567	J32	Jack-Open	4	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-2gX79G_Sq9YUCR22Xb0y2tGZF25xjqv_tDt2iyif5Ph



Scale = 1:20.2

Plate Offsets (X,Y)--		[2:0-2-0,0-1-4], [5:0-2-3,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.28		Vert(LL)	-0.01 4-5	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.12		Vert(CT)	-0.01 4-5	>999	240		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	-0.07 3	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01 4-5	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=90(LC 5)
Max Uplift 5=-92(LC 4), 3=-54(LC 8), 4=-6(LC 5)
Max Grav 5=323(LC 1), 3=69(LC 1), 4=60(LC 3)

FORCES.

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

TOP CHORD 2-5=-288/128

NOTES-

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



September 11, 2020

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	J33	Diagonal Hip Girder	1	1	I42760600
Job Reference (optional)					

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 9=-71(F=-36, B=-36) 10=8(F=4, B=4) 11=-37(F=-19, B=-19)

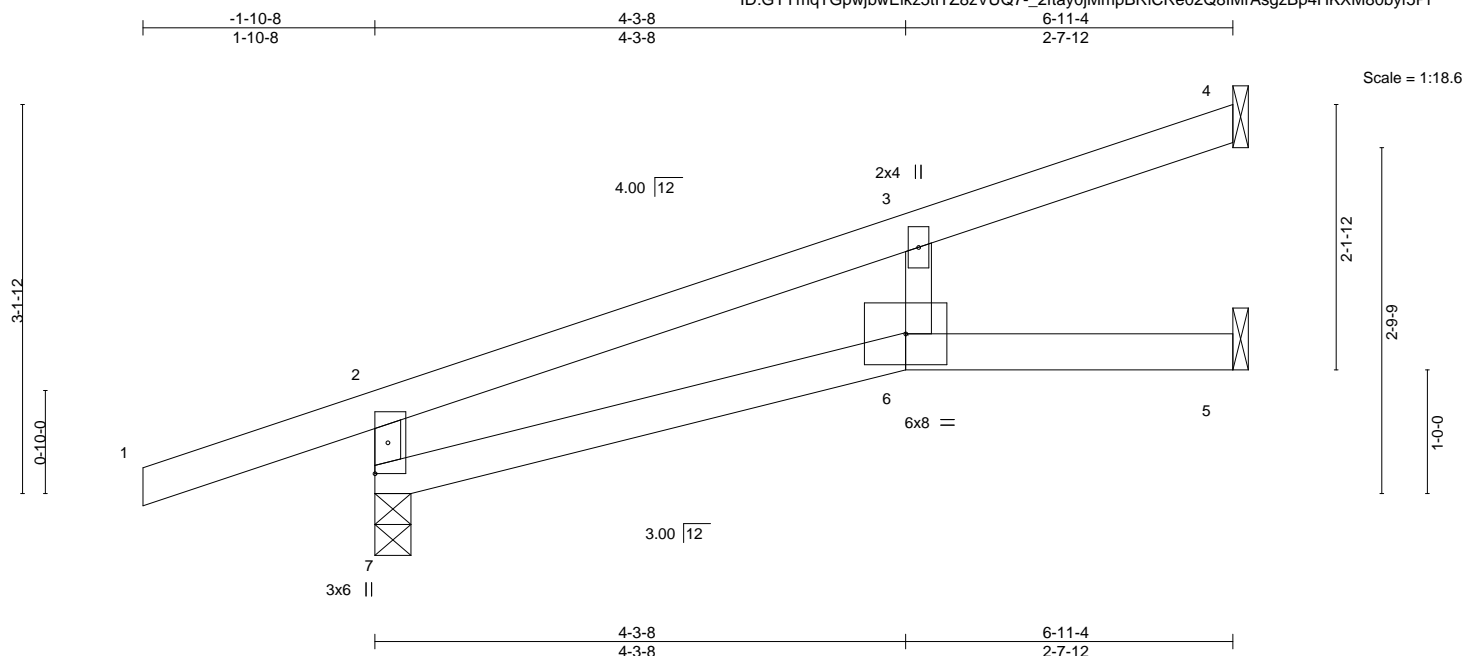
Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760601
400567	J34	Jack-Open	7	1		

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ID:GTymqTGpwbwEikz5tITZ8zVUQ7-2ftay0jMmpBRICRe02Q8IMrAsgzBp4HKXM80byf5Pf

Job Reference (optional)



LOADING (psf)	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)	-0.13	6-7	>632	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.24	6-7	>334	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.06	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.10	6-7	>811	240	
									Weight: 20 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=84(LC 4)
Max Uplift 7=66(LC 4), 4=-27(LC 8), 5=-2(LC 8)
Max Grav 7=463(LC 1), 4=165(LC 1), 5=119(LC 1)

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

TOP CHORD 2-7=-360/86

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); 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.
- 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) 7, 4, 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.



September 11, 2020

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760602
400567	J35	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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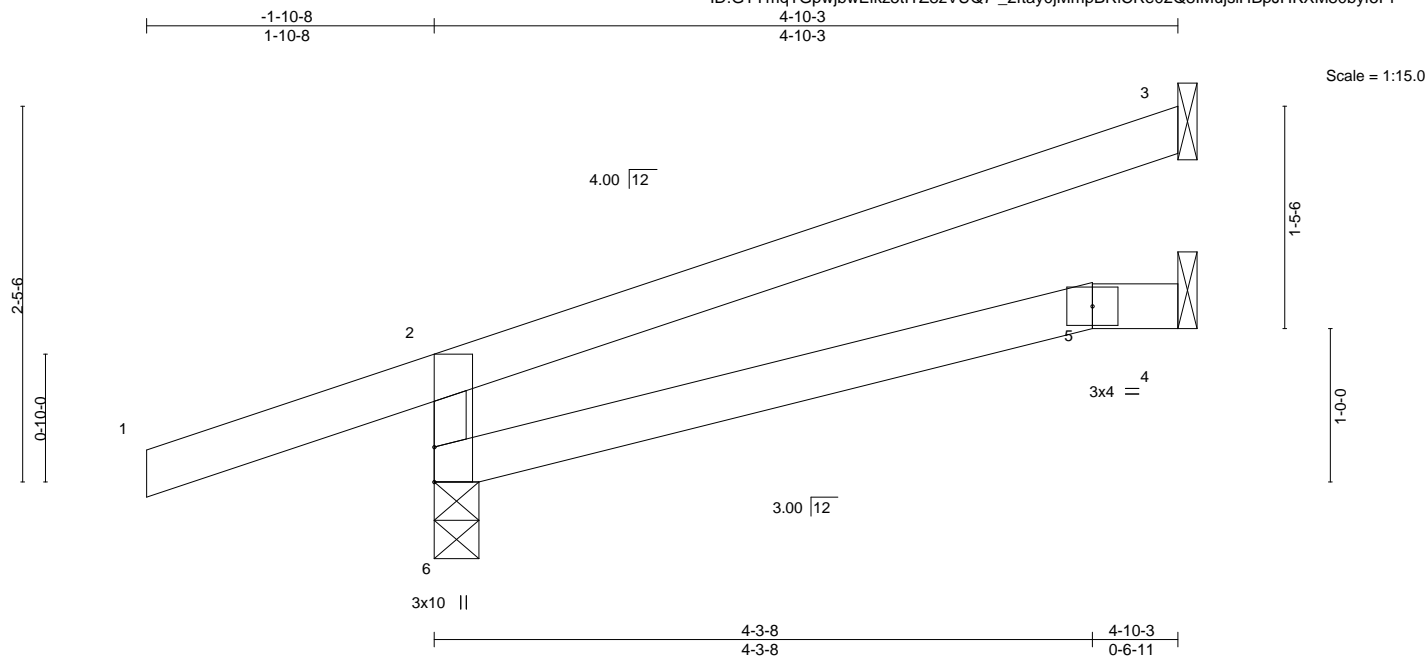


Plate Offsets (X,Y)--		[6:0-2-12,Edge]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.05	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	5-6	>999	240	Weight: 14 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=89(LC 4)
Max Uplift 6=120(LC 4), 3=67(LC 8)
Max Grav 6=379(LC 1), 3=135(LC 1), 4=87(LC 3)

FORCES.

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

TOP CHORD 2-6=-332/157

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 6=120.
- 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.



September 11, 2020

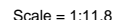
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:17 2020 Page 1
ID:GTYmaTGpwibwEikz5tITZ8zVUQ7-SECFoH1L74x23vmdCkZfoWu3dF7hwGZRZB6iY1vf5P

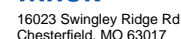


FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-274/139

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=120.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760604
400567	J37	Jack-Closed	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tTZ8zVUQ7-SECFoH1L74x23vmdCkZfgWu_cf2YwGZRB6iY1yf5Pe

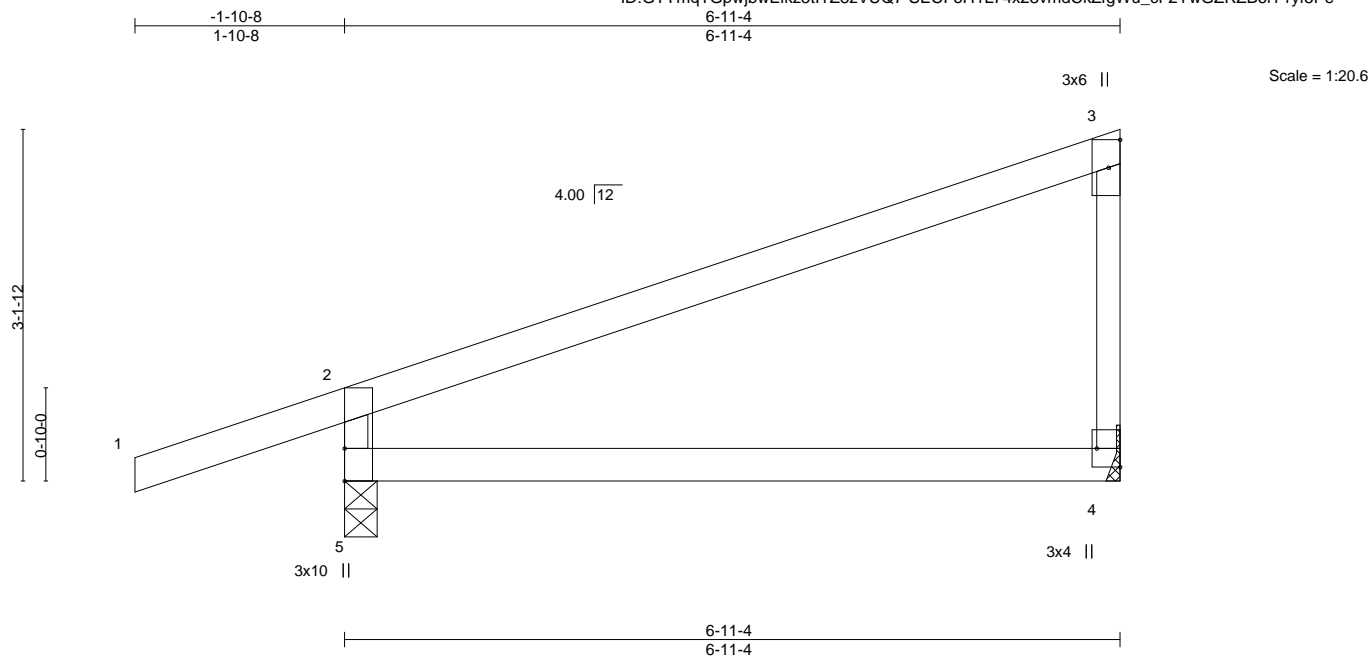


Plate Offsets (X,Y)--		[4:Edge,0-2-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.08 4-5 >957 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.17 4-5 >465 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02 4-5 >999 240	Weight: 21 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=103(LC 5)
Max Uplift 5=-77(LC 4), 4=-19(LC 8)
Max Grav 5=462(LC 1), 4=282(LC 1)

FORCES.

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

TOP CHORD 2-5=-406/121

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760605
400567	J38	Jack-Closed	1	1	Job Reference (optional)	

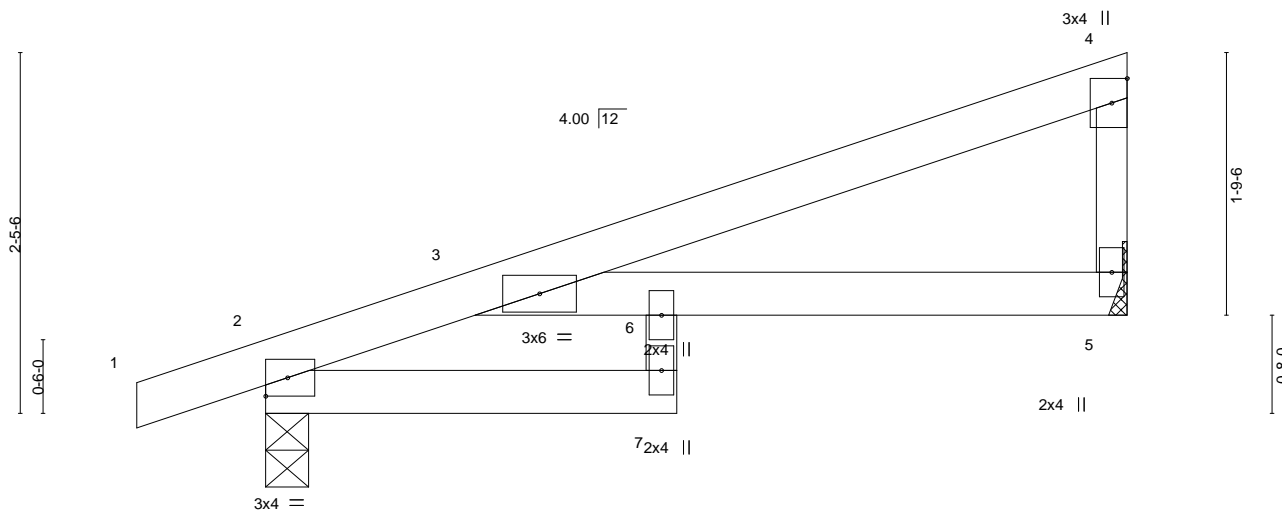
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:18 2020 Page 1

ID:GTymqTGpwbwEikz5tTZ8zVUQ7-wRmd?d1ztO3vh2LpmR5uDjRD3fOPfjXaorrF5Tyf5Pd

-0-10-8	2-9-8	5-10-3
0-10-8	2-9-8	3-0-11

Scale = 1:15.6



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 0.35	Vert(LL)	-0.05	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.10	7	>649	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.04	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	6	>999	240	Weight: 18 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=Mechanical, 2=0-3-8
Max Horz 2=85(LC 5)
Max Uplift 5=54(LC 8), 2=-86(LC 4)
Max Grav 5=245(LC 1), 2=330(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, 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.



September 11, 2020

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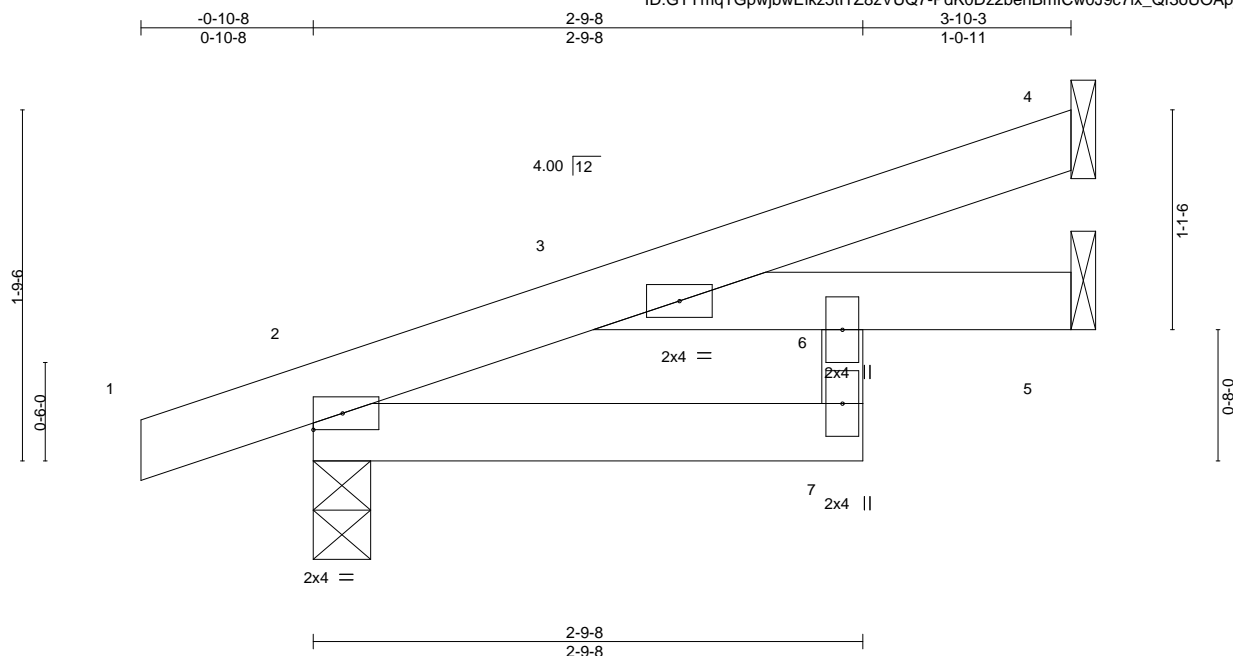
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760606
400567	J39	Jack-Open	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:19 2020 Page 1

ID:GTYmqTGpwjwEikz5tITZ8zVUQ7-PdK0Dz2behBmICw0J9c7lx_Qf3oUOAj0Vbpdvyf5Pc



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.02	3	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.04	3	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.02	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.02	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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=65(LC 4)
Max Uplift 4=-54(LC 8), 2=-61(LC 4)
Max Grav 4=130(LC 1), 2=257(LC 1), 5=74(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.



September 11, 2020

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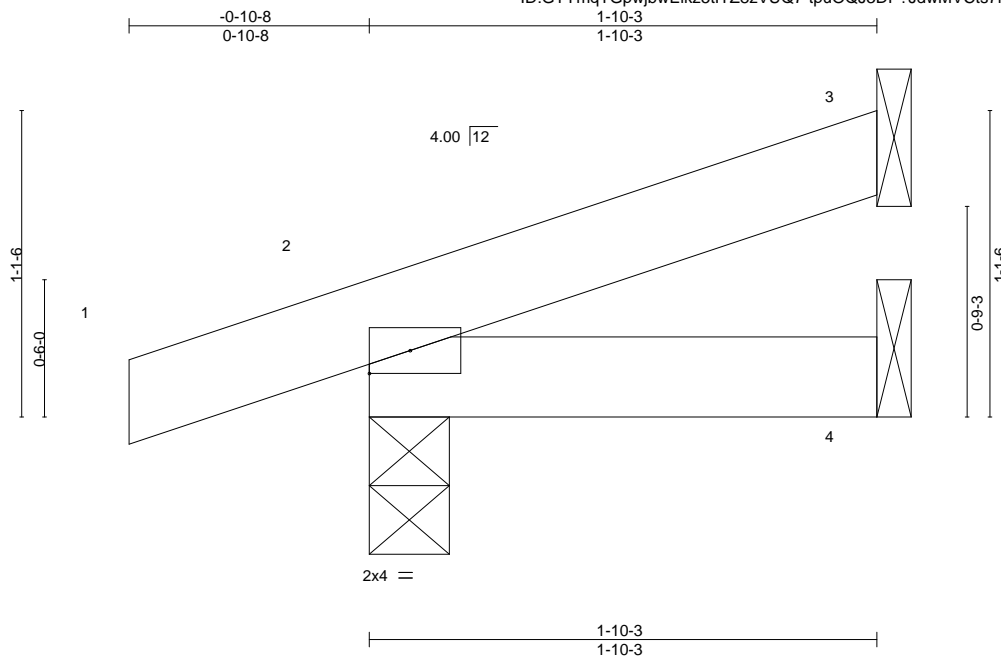
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760607
400567	J40	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:20 2020 Page 1

ID:GTymqTGpwbwEikz5tTZ8zVUQ7-tpuOQJ3DP?JdwMVCts7MI8WeET9o7dJtF9KM9Myf5Pb



Scale = 1:8.4

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	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 1-10-3 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=38(LC 4)
Max Uplift 3=28(LC 8), 2=56(LC 4)
Max Grav 3=47(LC 1), 2=160(LC 1), 4=36(LC 3)

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

NOTES-

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



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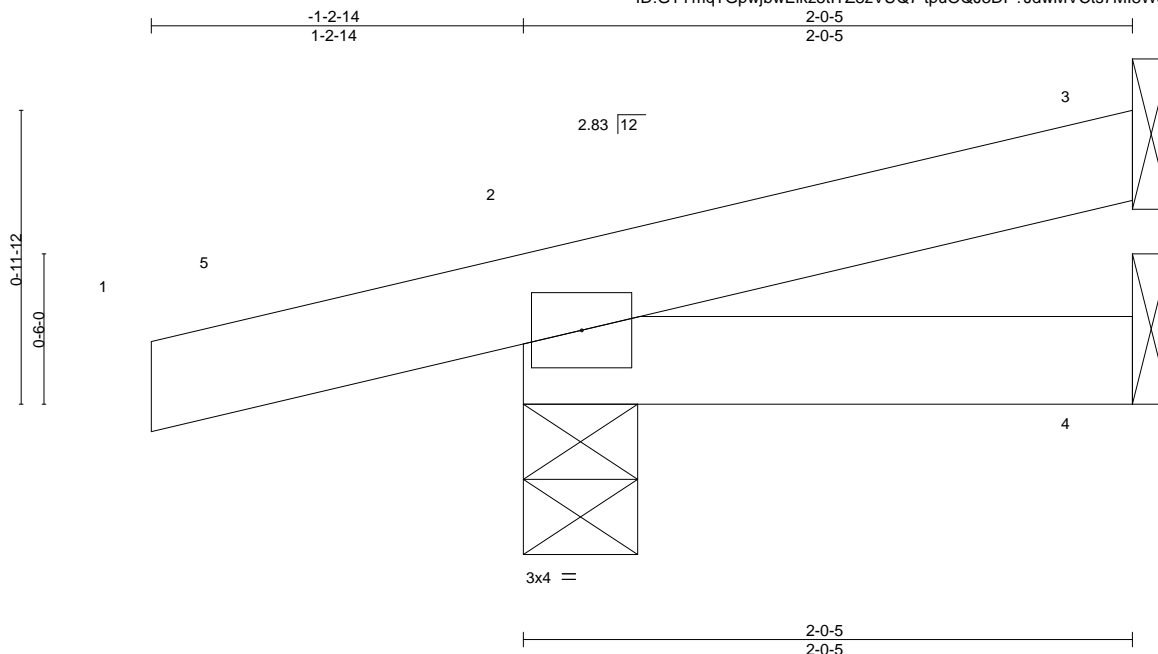
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760608
400567	J41	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tITZ8zVUQ7-tpuOQJ3DP?JdwMVCts7MI8WdwT9u7dJtF9KM9Myf5Pb



LOADING (psf)	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	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	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 6 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 2-0-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=35(LC 6)
Max Uplift 3=-16(LC 8), 2=-127(LC 6)
Max Grav 3=23(LC 1), 2=65(LC 1), 4=28(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 except (jt=lb) 2=127.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7 lb down and 2 lb up at -1-2-14, and 7 lb down and 2 lb up at -1-2-14 on top 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
Concentrated Loads (lb)
Vert: 1=-11(F=-5, B=-5)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-5=-8(F=31, B=31), 5=0(F=35, B=35)-to-3=-50(F=10, B=10), 2=-5(F=7, B=7)-to-4=-14(F=3, B=3)



September 11, 2020

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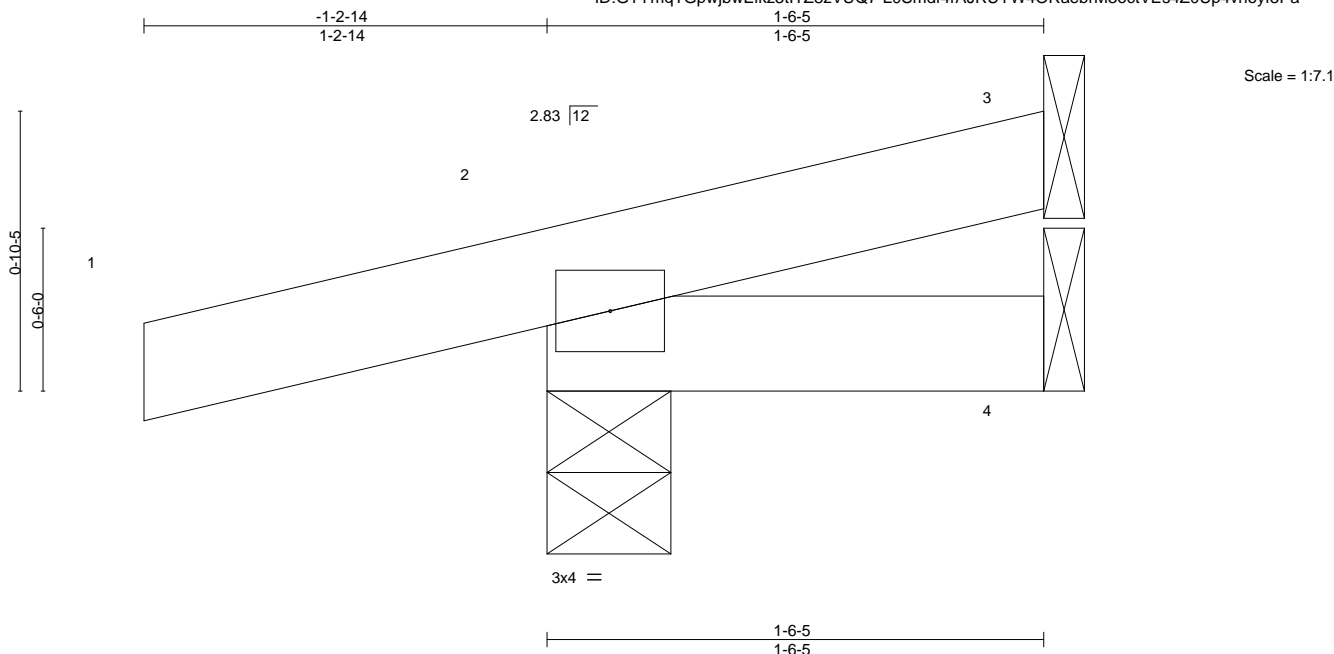


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760609
400567	J42	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-L0Smdf4rAJRUYW4ORaebM3octVes4Z0Up4vhoyf5Pa



LOADING (psf)	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	2	>999	360	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	2	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	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 1-6-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=30(LC 6)
Max Uplift 3=-17(LC 8), 2=-125(LC 6)
Max Grav 3=27(LC 1), 2=49(LC 9), 4=23(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 except (jt=lb) 2=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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 0 lb down and 1 lb up at -1-2-14, and 0 lb down and 1 lb up at -1-2-14 on top 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
Concentrated Loads (lb)
Vert: 1=2(F=1, B=1)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-3=-50(F=10, B=10), 2=-7(F=7, B=7)-to-4=-14(F=3, B=3)



September 11, 2020

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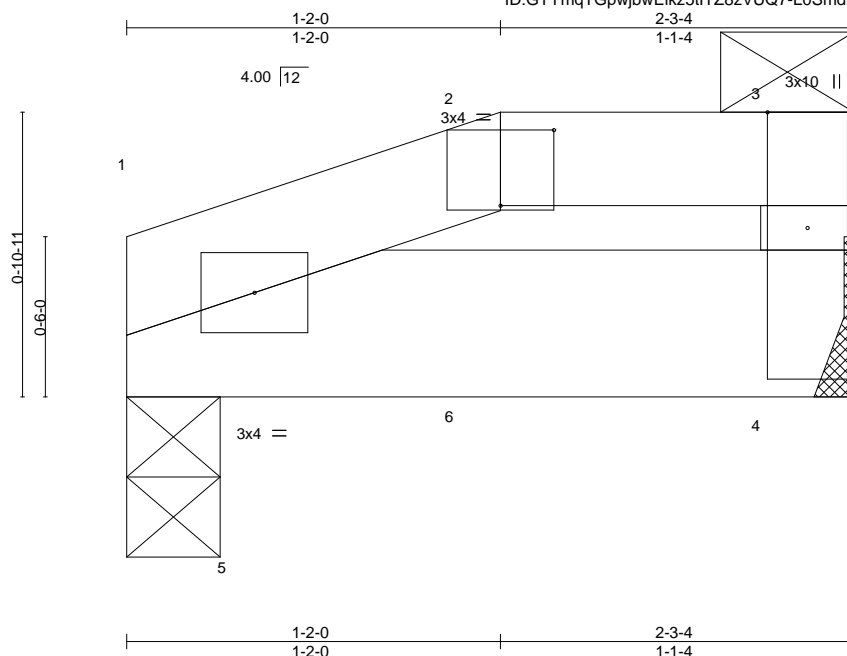
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760610
400567	J43	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tITZ8zVUQ7-L0Smdf4rAJRUYW4ORaebM3o8tT8s4Z0Up4vhoyf5Pa



Scale = 1:7.2

Plate Offsets (X,Y)-- [2:0-2-0,0-2-13]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	1-4	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.00	1-4	>999	240	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	1-4	>999	240	Weight: 8 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
2-3: 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 4=Mechanical
Max Horz 1=23(LC 22)
Max Uplift 1=67(LC 4), 4=28(LC 4)
Max Grav 1=1221(LC 1), 4=301(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) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 18 lb up at 1-2-0 on top chord, and 1344 lb down and 66 lb up at 0-5-8, and at 1-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 1-4=-20
- Concentrated Loads (lb)
Vert: 5=-1344(F)



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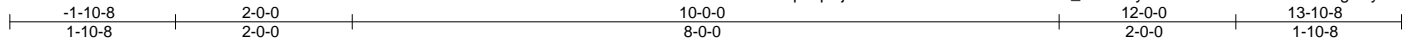
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760611
400567	K1	Hip Girder	1	1		

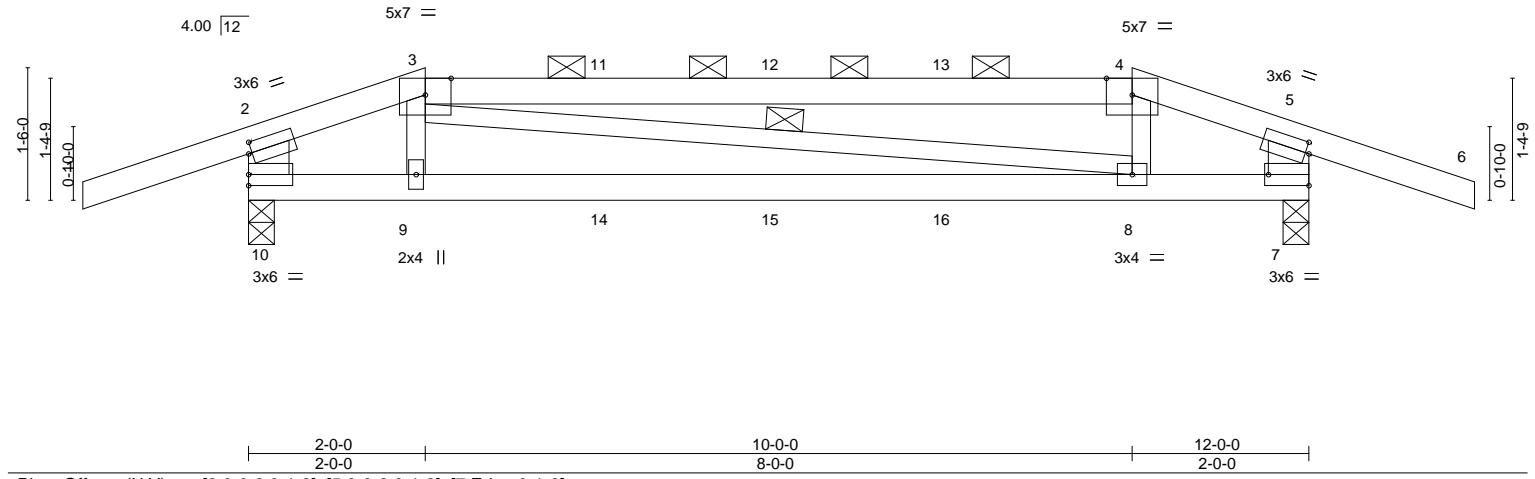
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5t1TZ8zVUQ7-hzFhM8_?r3neHyME7EmYPmVlu3hXKild5ngN?yf5PV



Scale = 1:26.1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.75	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(LL) -0.13 8-9 >999 360		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.07	Vert(CT) -0.28 8-9 >490 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
			Wind(LL) 0.08 8-9 >999 240	Weight: 42 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-10,5-7: 2x6 SPF No.2	WEBS 1 Row at midpt 3-8

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=11(LC 20)
Max Uplift 10=-234(LC 4), 7=-234(LC 5)
Max Grav 10=615(LC 21), 7=615(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-780/169, 3-4=-692/177, 4-5=-769/164, 2-10=-474/154, 5-7=-483/155
BOT CHORD 9-10=-123/727, 8-9=-135/727, 7-8=-123/710

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) except (it=lb) 10=234, 7=234.
- This truss 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) 117 lb down and 133 lb up at 2-0-0, 53 lb down and 12 lb up at 4-0-12, 53 lb down and 12 lb up at 6-0-0, and 53 lb down and 12 lb up at 7-11-4, and 117 lb down and 133 lb up at 10-0-0 on top chord, and 26 lb down and 49 lb up at 2-0-0, 8 lb down and 7 lb up at 4-0-12, 8 lb down and 7 lb up at 6-0-0, and 8 lb down and 7 lb up at 7-11-4, and 26 lb down and 49 lb up at 9-11-4 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



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Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760611
400567	K1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTYmqTGpwjbwEikz5tITZ8zVUQ7-hzFfhM8_?r3neHyME7EmYPmVlu3hXKild5ngN?yf5PV

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20

Concentrated Loads (lb)

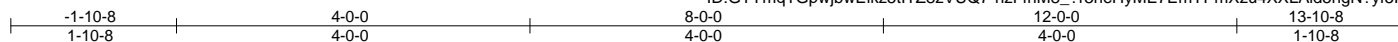
Vert: 3=37(F) 4=37(F) 9=7(F) 8=7(F) 14=7(F) 15=7(F) 16=7(F)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760612
400567	K2	Hip	1	1	Job Reference (optional)	

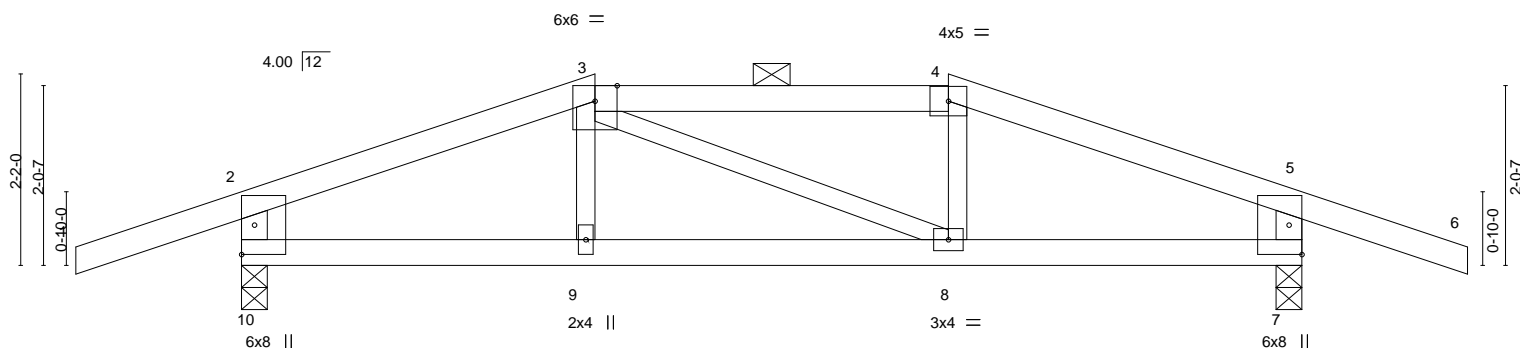
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:26 2020 Page 1

ID:GTYmqTGpwjwEikz5tTZ8zVUQ7-hzFhM8_?r3neHyME7EmYPmXzu4XXLAld5ngN?yf5PV



Scale = 1:26.1



4-0-0 4-0-0		8-0-0 4-0-0		12-0-0 4-0-0	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.09 8-9 >999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.16 8-9 >856 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.01 7 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 8-9 >999 240
				PLATES	GRIP
				MT20	197/144
				Weight: 39 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x4 SPF 2400F 2.0E

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 7=0-3-8
Max Horz 10=15(LC 4)
Max Uplift 10=-180(LC 4), 7=-180(LC 5)
Max Grav 10=668(LC 1), 7=668(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-749/103, 3-4=-648/113, 4-5=-750/102, 2-10=-573/189, 5-7=-573/189
BOT CHORD 9-10=-48/649, 8-9=-52/648, 7-8=-44/649

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) except (jt=lb) 10=180, 7=180.
- This truss 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.



September 11, 2020

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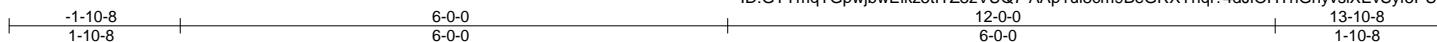
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760613
400567	K3	Common	5	1		

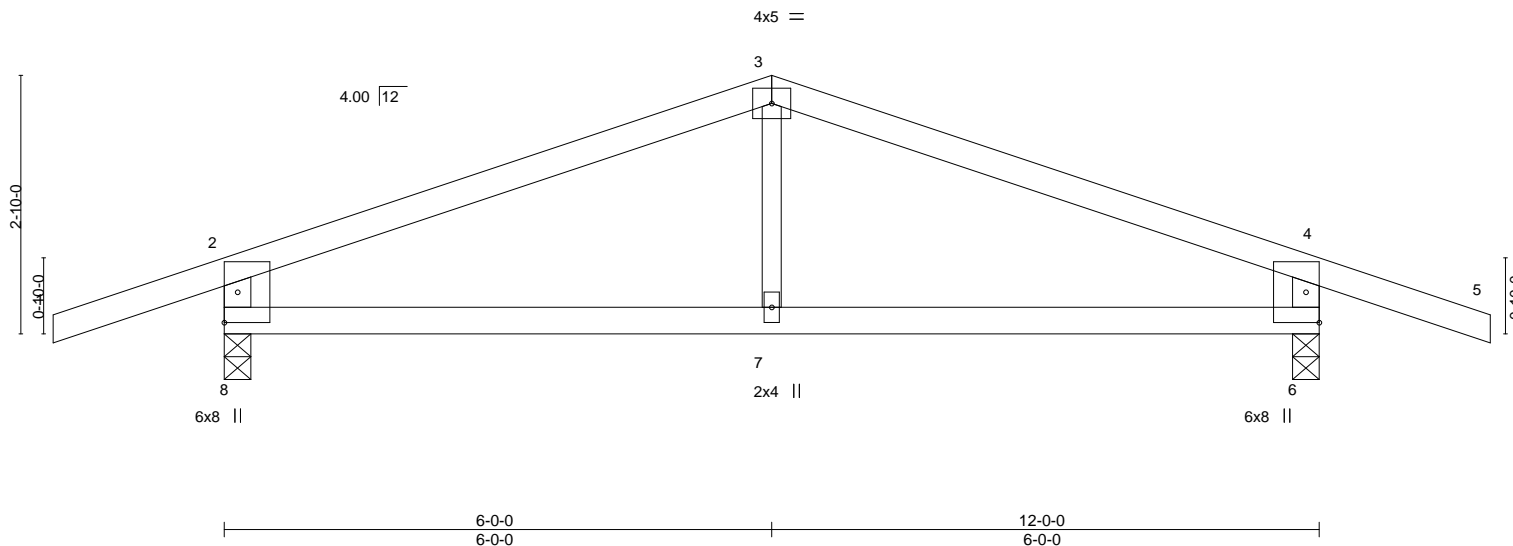
Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwjwEikz5tTZ8zVUQ7-AAp1ui8cm9BeGRXYnql?4dJiOHThGnyvslXEvSyf5PU



Scale = 1:25.3



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 0.63	Vert(LL)	-0.05	7	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.10	7	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.01	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.03	7	>999	240	
								Weight: 35 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF 2100F 1.8E *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=-26(LC 13)
 Max Uplift 8=-167(LC 4), 6=-167(LC 5)
 Max Grav 8=668(LC 1), 6=668(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-681/81, 3-4=-681/81, 2-8=-589/199, 4-6=-589/199
 BOT CHORD 7-8=-17/568, 6-7=-17/568

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=167, 6=167.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT
400567	K4	Common Girder	1	2	I42760614
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:28 2020 Page 2
ID:GTYmqTGpwjbwEikz5!ITZ8zVUQ7-eMNP529EXSJVub6kLYGEdqrVPhpz?8k25PGnRuyf5PT

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 4-6=-20

Concentrated Loads (lb)

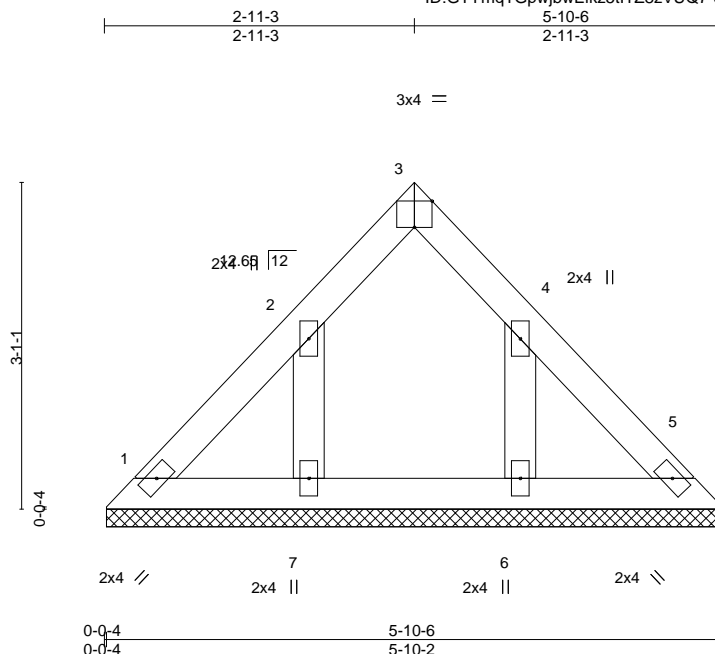
Vert: 7=-1444(B) 8=-1441(B) 9=-1443(B) 10=-1443(B) 11=-1443(B) 12=-1449(B)

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760615
400567	LAY1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:GTymqTGpwbwEikz5tTZ8zVUQ7-6YxoJOAtlmRLVlhxFnT92OBH5E?kiDCJ20K_Kyf5PS



Scale = 1:21.8

Plate Offsets (X,Y)-- [3:Edge,0-3-0], [4:0-0-1,0-0-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	n/a	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	n/a	GRIP
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	5	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P				Weight: 19 lb
							FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 5-10-2.
(lb) - Max Horz 1=-72(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 7, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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) 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.



September 11, 2020

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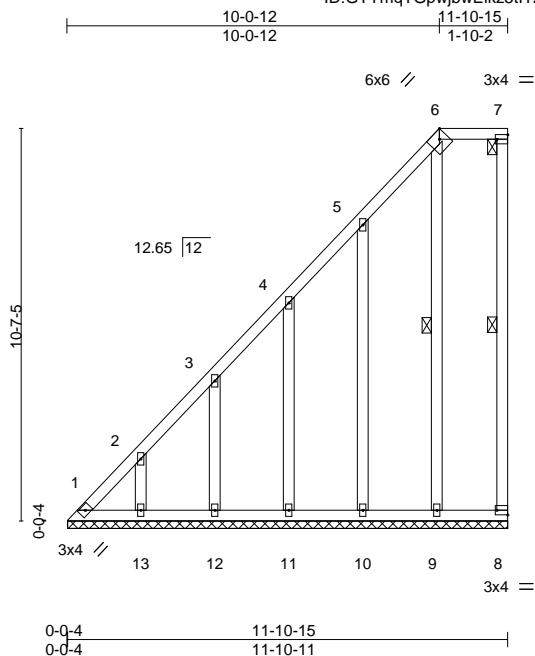


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760616
400567	LAY2	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:29 2020 Page 1
ID:GTymqTGpwbwEikz5t1TZ8zVUQ7-6YxoJOAtlmRLVlhxvFnT92O4x5B6kfQCJ20K_Kyf5PS



Scale = 1:62.3

Plate Offsets (X,Y)-- [6:0-2-9,Edge], [7:Edge,0-1-8], [8:Edge,0-1-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	n/a - n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a - n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	-0.00 8	n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 76 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-10-11.
(lb) - Max Horz 1=411(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 8 except 1=172(LC 6), 13=127(LC 8), 12=123(LC 8), 11=129(LC 8), 10=119(LC 8), 9=105(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 8, 13, 12, 11, 10, 9 except 1=328(LC 5)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-454/298, 2-3=-389/253, 3-4=-319/205, 4-5=-286/187, 5-6=-252/175
WEBS 6-9=-178/259

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 1=172, 13=127, 12=123, 11=129, 10=119, 9=105.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 11, 2020

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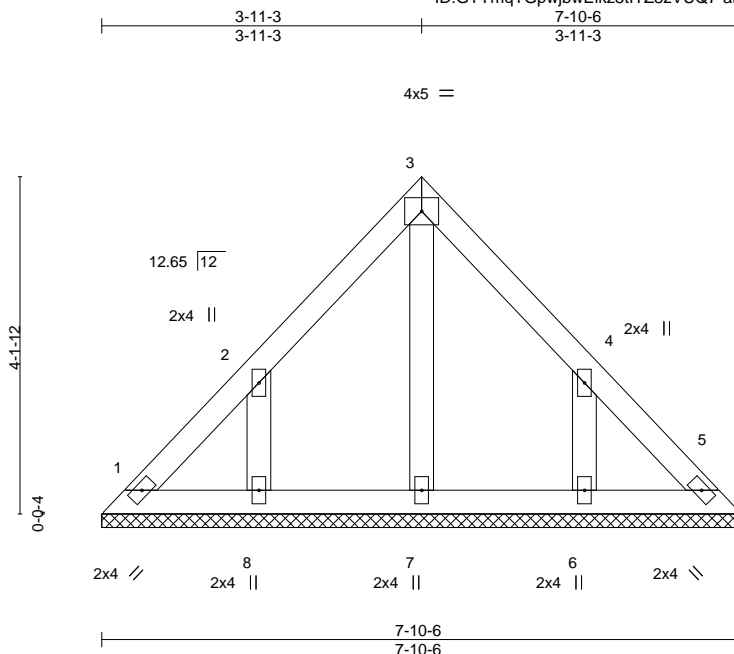


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	142760617
400567	LAY3	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:30 2020 Page 1
ID:GTymqTGpwjwEikz5tTZ8zVUQ7-aIVAWkBV33ZC7uG7TylifxMhVZDT9KLYiluWnyf5PR



Scale = 1:28.3

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)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 28 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

- All bearings 7-10-6.
(lb) - Max Horz 1=-100(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-142(LC 8), 6=-142(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=142, 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.



September 11, 2020

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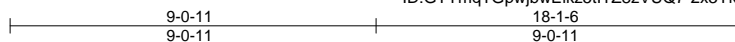


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760618
400567	LAY4	Lay-In Gable	2	1	Job Reference (optional)	

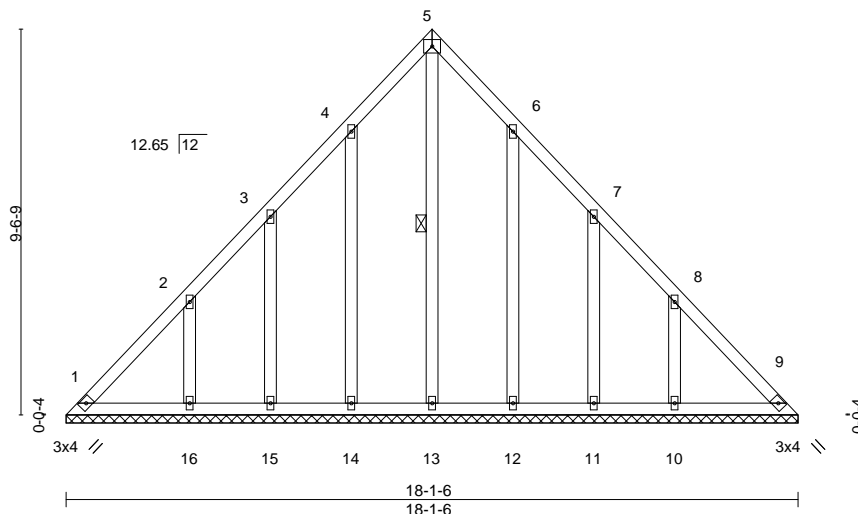
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:31 2020 Page 1
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4x5 =

Scale = 1:57.0



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 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 92 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 18-1-6.
(lb) - Max Horz 1=244(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=128(LC 8), 15=110(LC 8), 16=175(LC 8),
12=126(LC 9), 11=111(LC 9), 10=175(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 12, 11 except 16=287(LC 15), 10=287(LC 16)

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

TOP CHORD 1-2=-300/204, 8-9=-262/147

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=128, 15=110, 16=175, 12=126, 11=111, 10=175.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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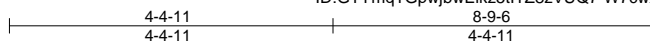
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760619
400567	LAY6	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

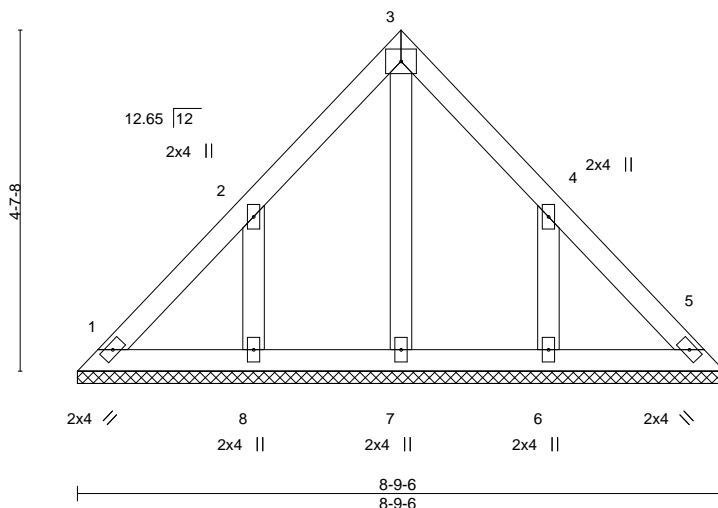
8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:32 2020 Page 1

ID:GTYmqTGpwbwEikz5tITZ8zVUQ7-W7cwXQClaHqWMCQWaNLAng0g_IFax2ne00E?afyf5PP



4x5 =

Scale = 1:31.3



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 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 33 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 8-9-6.
(lb) - Max Horz 1=113(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=157(LC 8), 6=157(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=251(LC 15), 6=251(LC 16)

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=157, 6=157.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

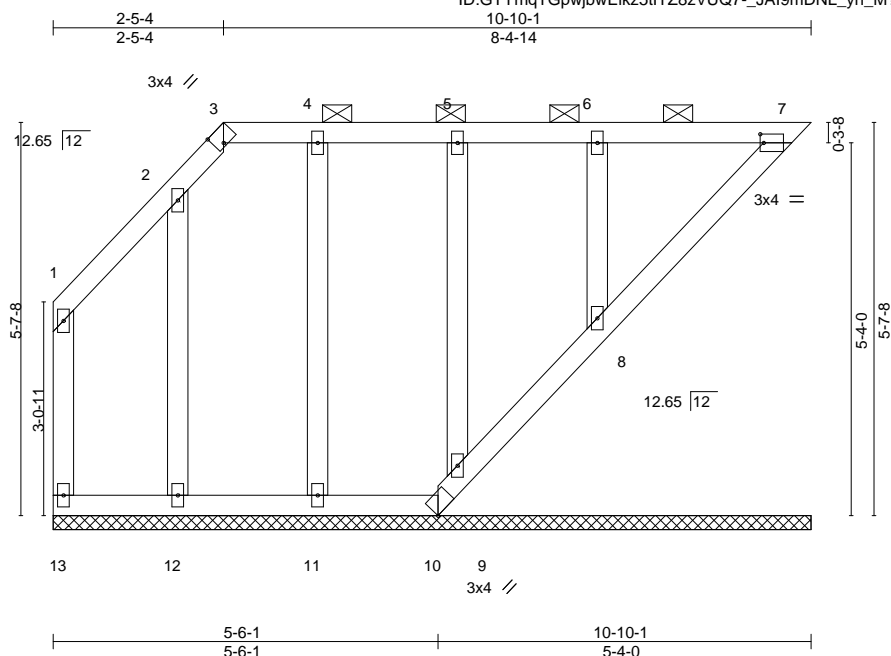
Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760620
400567	LAY7	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:33 2020 Page 1

ID:GTYmqTGpwjwEikz5tTZ8zVUQ7-JAI9mDNL_yn_M?i85sPKuZrOibQgUOnEg_Y75yf5PO

Job Reference (optional)



Scale = 1:33.0

Plate Offsets (X,Y)-- [3:0-1-7,Edge], [7:0-0-10,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	7	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 51 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

- All bearings 10-10-1.
(lb) - Max Horz 13=121(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 13, 10, 12, 11, 9, 8 except 7=110(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 13, 7, 10, 12, 11, 9 except 8=262(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
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 10, 12, 11, 9, 8 except (jt=lb) 7=110.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 9, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 11, 2020

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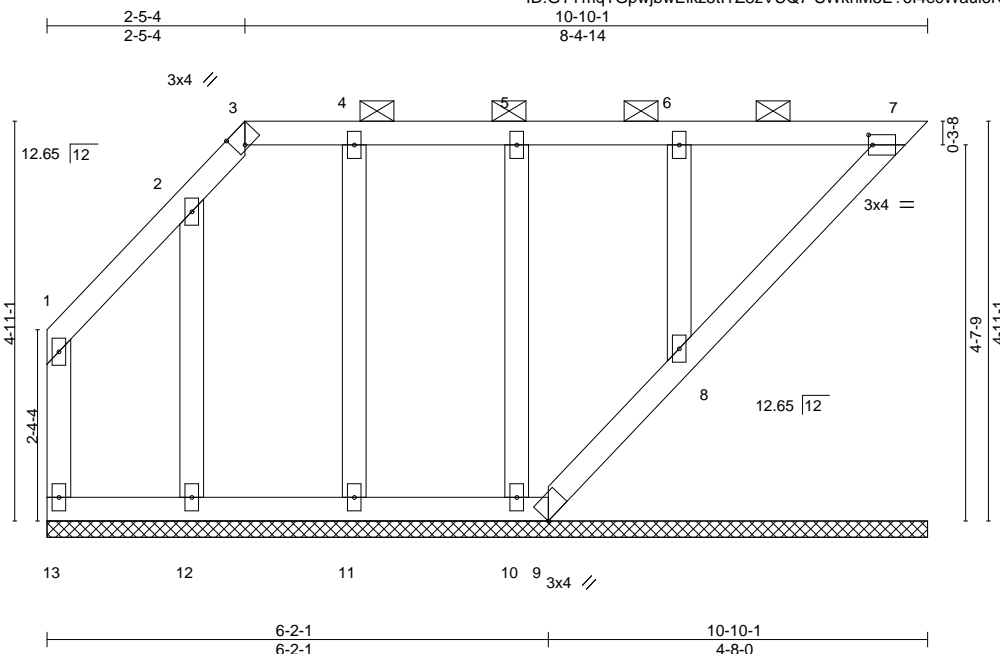


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760621
400567	LAY8	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:34 2020 Page 1
ID:GTYmqTGpwjwEikz5tTZ8zVUQ7-SWkhM5E?6l4ecWauioNes55086xhPyvxTKj5fYf5PN



Scale = 1:28.4

Plate Offsets (X,Y)-- [3:0-1-7,Edge], [7:0-0-10,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.05	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.06	Horz(CT)	-0.00	7	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 48 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 10-10-1.
(lb) - Max Horz 13=106(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 13, 9, 12, 11, 10, 8 except 7=100(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 13, 7, 9, 12, 11, 10 except 8=261(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
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 9, 12, 11, 10, 8 except (jt=lb) 7=100.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 11, 2020

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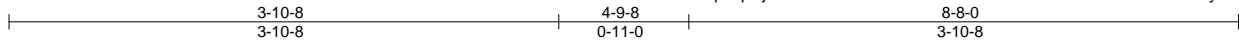
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760622
400567	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:34 2020 Page 1

ID:GTymqTGpwjwEikz5tTZ8zVUQ7-SWkhM5E?6l4ecWauioNes55?56v5PyLxTKj5fYf5PN



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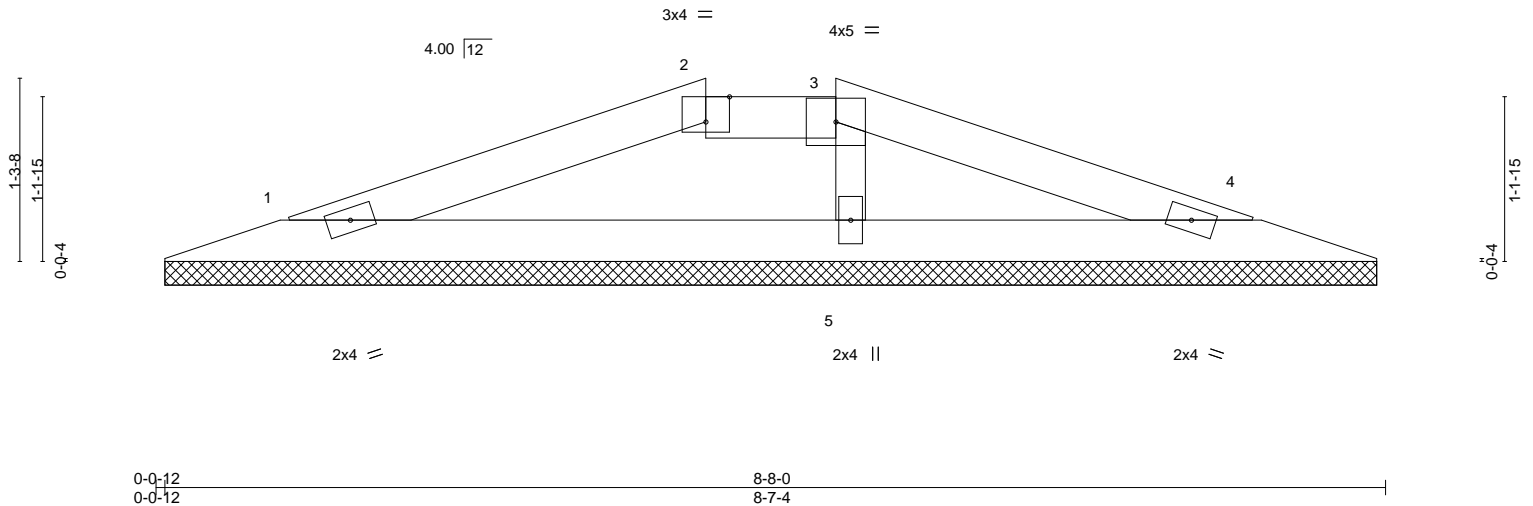


Plate Offsets (X,Y)--		[2:0-2-0,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.15		Vert(LL)	n/a	-	n/a
TCDL 10.0		Lumber DOL	1.15	BC 0.16		Vert(CT)	n/a	-	n/a
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.03		Horz(CT)	0.00	4	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 18 lb	FT = 10%		

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-6-8, 4=8-6-8, 5=8-6-8
Max Horz 1=-16(LC 13)
Max Uplift 1=-80(LC 4), 4=-72(LC 4)
Max Grav 1=271(LC 1), 4=257(LC 1), 5=172(LC 3)

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

TOP CHORD 1-2=-478/191, 2-3=-433/197, 3-4=-479/200
BOT CHORD 1-5=-171/432, 4-5=-174/441

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.
- 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, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 11, 2020

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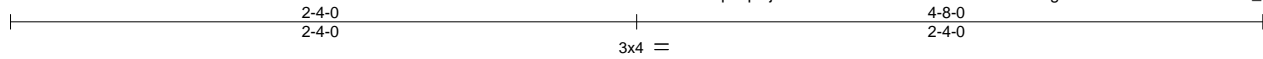
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760623
400567	V2	Valley	1	1	Job Reference (optional)	

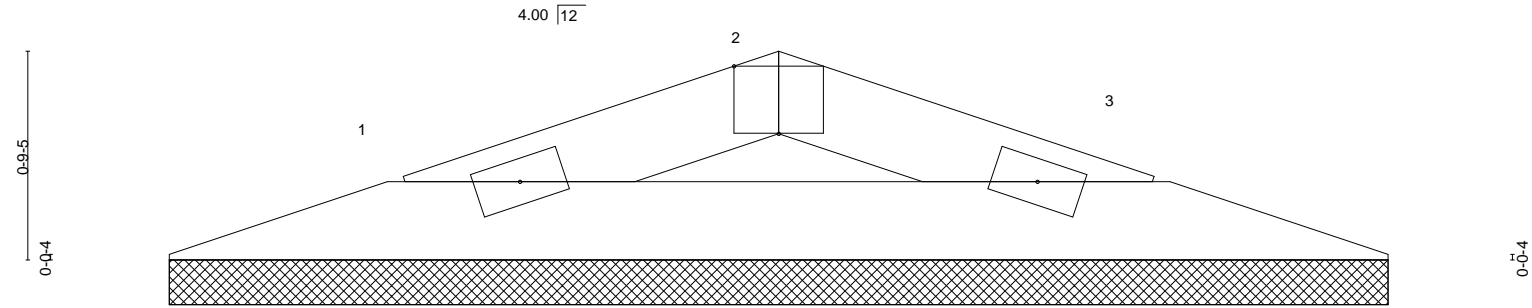
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:35 2020 Page 1

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Scale = 1:8.6



0-0-12 0-0-12		4-8-0 4-7-4	
Plate Offsets (X,Y)--		[2:0-2-0,Edge]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.03	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(LL) n/a - n/a 999
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) n/a - n/a 999
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	Horz(CT) 0.00 3 n/a n/a
		PLATES MT20	
		GRIP 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 4-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-6-8, 3=4-6-8
Max Horz 1=8(LC 8)
Max Uplift 1=-18(LC 4), 3=-18(LC 5)
Max Grav 1=125(LC 1), 3=125(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.



September 11, 2020

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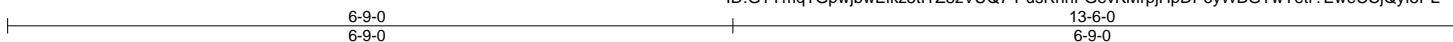
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400567	Truss V3	Truss Type Valley	Qty 1	Ply 1	Lot 20 RT Job Reference (optional)	I42760624
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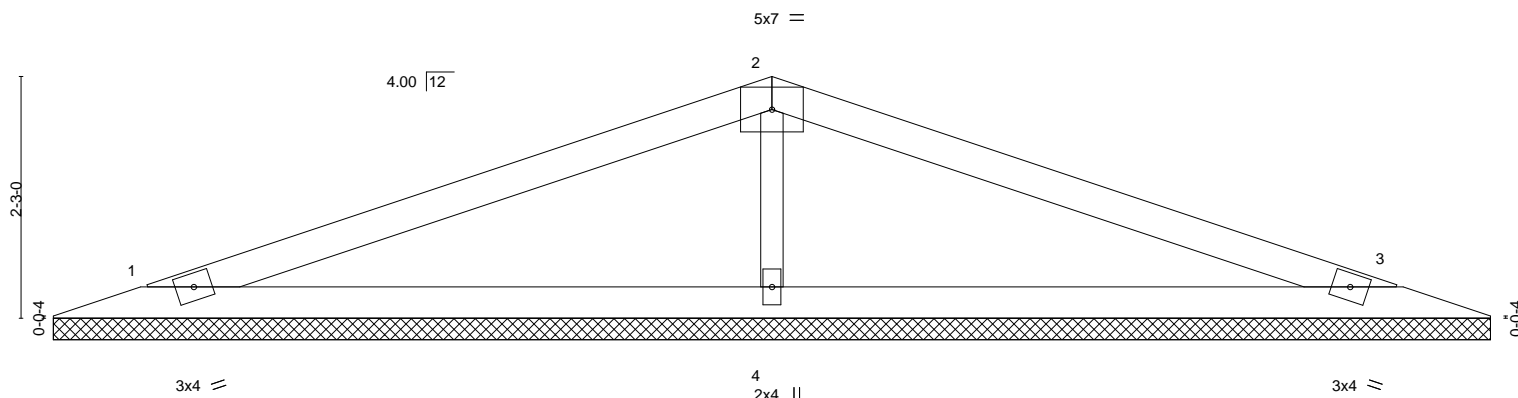
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:36 2020 Page 1

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Scale = 1:21.4



0-0-12	13-6-0
0-0-12	13-5-4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 31 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x3 SPF No.2	

REACTIONS. (size) 1=13-4-8, 3=13-4-8, 4=13-4-8
 Max Horz 1=34(LC 8)
 Max Uplift 1=50(LC 4), 3=54(LC 9), 4=54(LC 4)
 Max Grav 1=234(LC 21), 3=234(LC 22), 4=592(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-417/124

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



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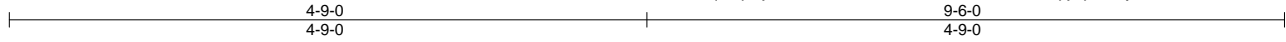
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 20 RT	I42760625
400567	V4	Valley	1	1	Job Reference (optional)	

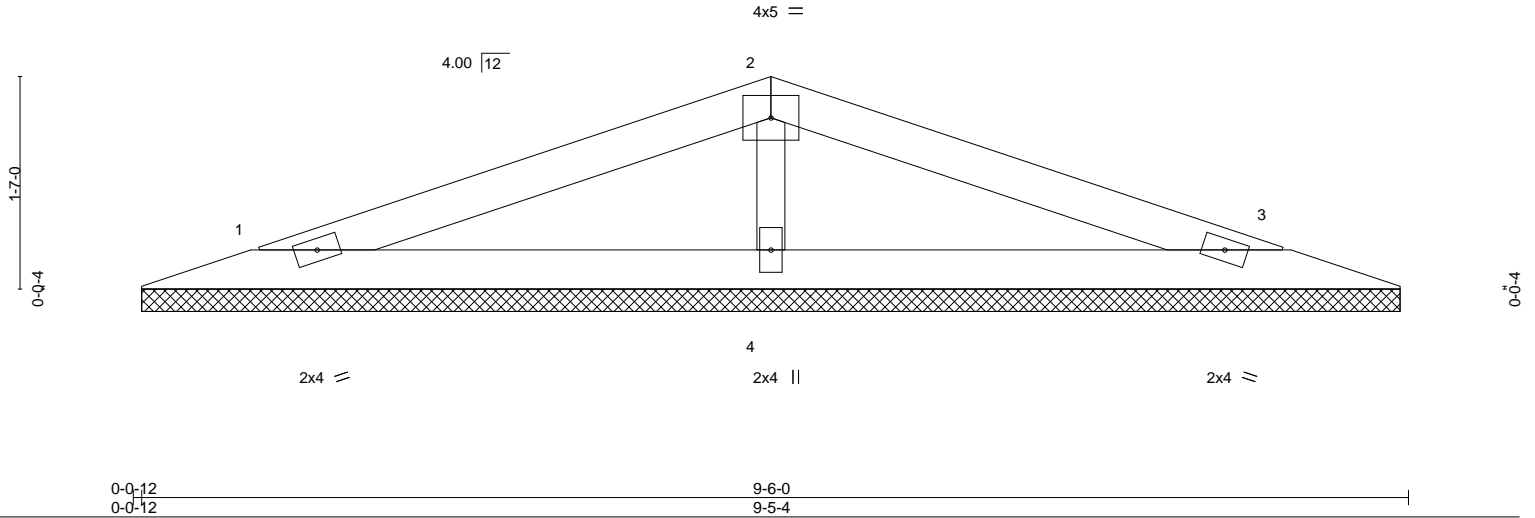
Wheeler Lumber, Waverly, KS 66871

8.420 s Aug 25 2020 MiTek Industries, Inc. Thu Sep 10 08:03:36 2020 Page 1

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Scale = 1:17.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 21 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-4-8, 3=9-4-8, 4=9-4-8
Max Horz 1=23(LC 8)
Max Uplift 1=33(LC 4), 3=35(LC 9), 4=35(LC 4)
Max Grav 1=154(LC 21), 3=154(LC 22), 4=388(LC 1)

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

WEBS 2-4=-273/81

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.



September 11, 2020

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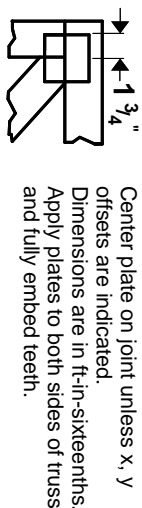
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

PLATE SIZE

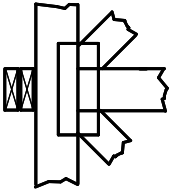
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

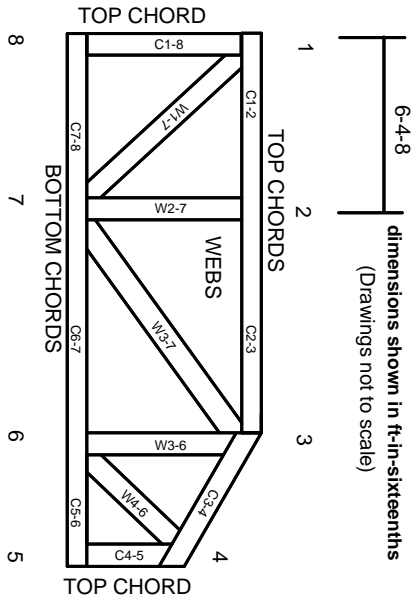
BEARING



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: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:
ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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