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

Re: B210103
113 MN

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: I49388457 thru I49388520

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

Missouri COA: Engineering 001193

December 22,2021

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	113 MN
B210103	A1	Hip Girder	1	1	I49388457

Job Reference (optional)

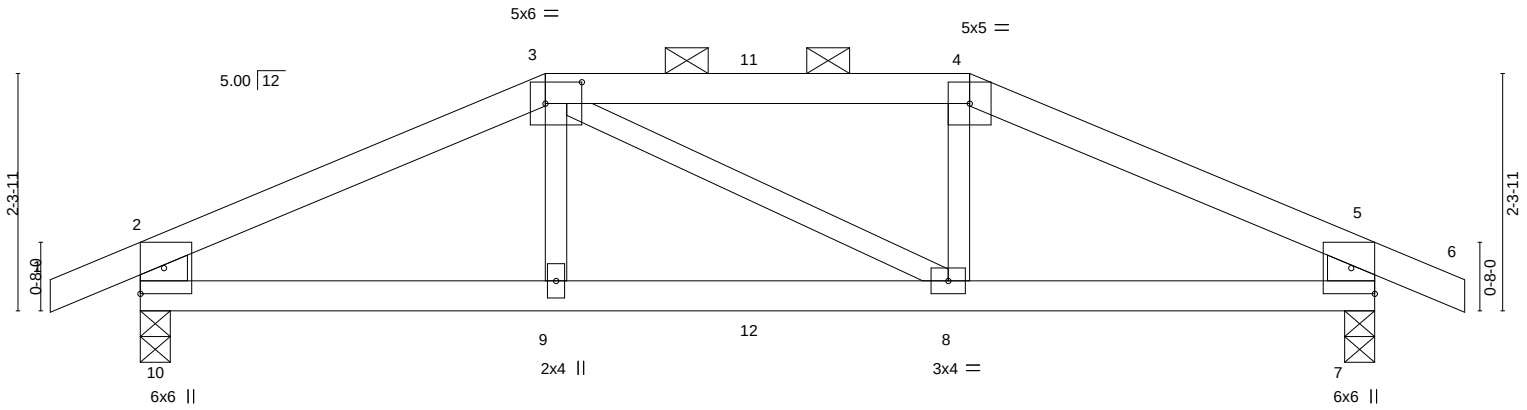
Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:26 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-Wdnkn1Tp0ft7KCcQgbiMmr2w4dG43xCuryWl0Hy6hGJ

-0-10-8 3-11-4 8-0-12 12-0-0 12-10-8

0-10-8 3-11-4 4-1-8 3-11-4 0-10-8

Scale = 1:22.4



3-11-4 8-0-12 12-0-0

3-11-4 4-1-8 3-11-4

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.09	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.16	8-9	>883	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	8-9	>999	240	Weight: 38 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: 2x6 SP 2400F 2.0E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-2 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=-20(LC 9)
Max Uplift 10=-189(LC 8), 7=-189(LC 9)
Max Grav 10=890(LC 1), 7=890(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1338/294, 3-4=-1166/277, 4-5=-1339/294, 2-10=-789/199, 5-7=-790/198
BOT CHORD 9-10=-220/1153, 8-9=-220/1165, 7-8=-219/1153
WEBS 3-9=0/263, 4-8=0/265

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=189, 7=189.
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) 77 lb down and 68 lb up at 3-11-4, and 83 lb down and 68 lb up at 6-0-0, and 77 lb down and 68 lb up at 8-0-12 on top chord, and 215 lb down and 73 lb up at 3-11-4, and 30 lb down at 6-0-0, and 215 lb down and 73 lb up at 8-0-0 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, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-44(B) 4=-44(B) 9=-215(B) 8=-215(B) 11=-44(B) 12=-24(B)

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	A2	Common	4	1	I49388458

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:27 2021 Page 1

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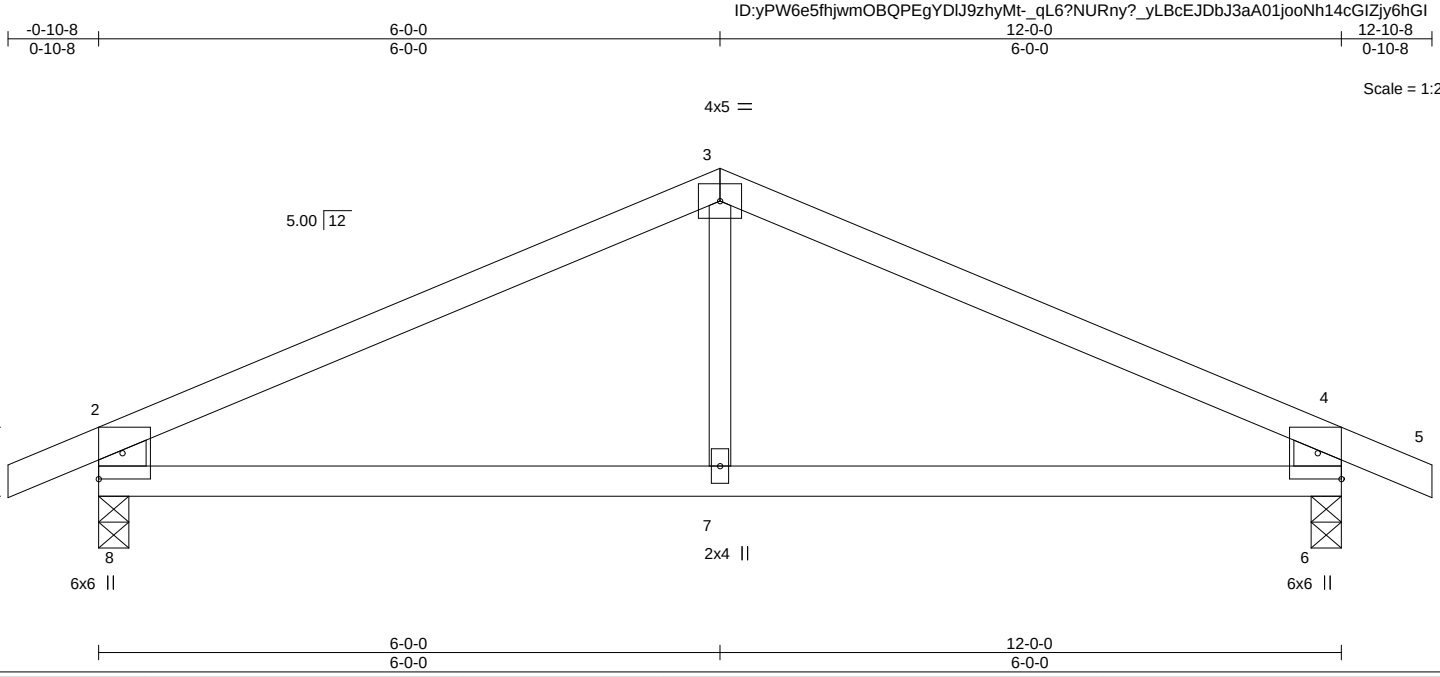

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.03	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	7-8	>999	240	Weight: 34 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=35(LC 8)
Max Uplift 8=-92(LC 8), 6=-92(LC 9)
Max Grav 8=597(LC 1), 6=597(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-692/87, 3-4=-692/87, 2-8=-540/131, 4-6=-540/131
BOT CHORD 7-8=-24/556, 6-7=-24/556

NOTES-

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B1	HIP GIRDER	1	3	I49388459
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:29 2021 Page 1
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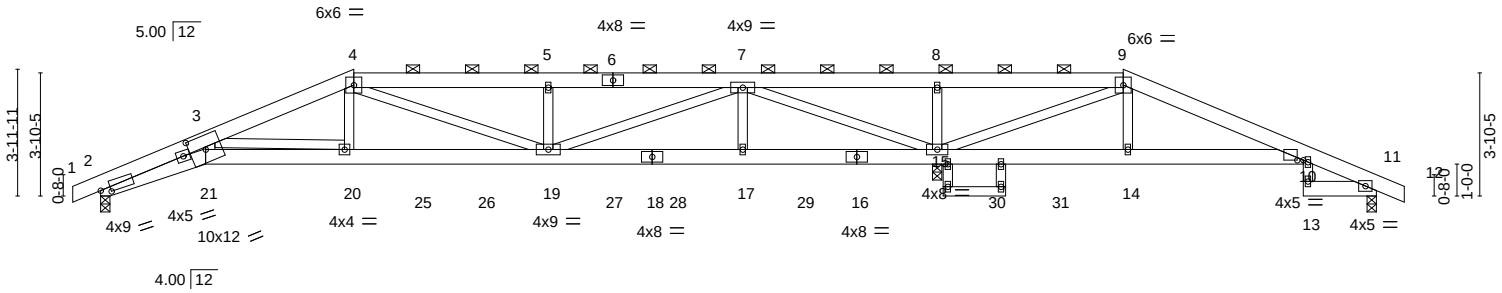
-0-10-8 3-3-8 7-11-4 14-0-7 20-1-9 26-2-12 32-0-12 37-8-8 40-0-0 40-10-8
0-10-8 3-3-8 4-7-12 6-1-3 6-1-3 6-1-3 5-10-0 5-7-12 2-3-8 0-10-8

Scale = 1:72.2



3-3-8 7-11-4 14-0-7 20-1-9 26-2-12 32-0-12 37-8-8 40-0-0
3-3-8 4-7-12 6-1-3 6-1-3 6-1-3 5-10-0 5-7-12 2-3-8

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

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	0.54	Vert(LL)	-0.17	19-20	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.29	19-20	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.12	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	19-20	>999	240	Weight: 663 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except*
22-23: 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15,10-14.

REACTIONS. (size) 2=0-3-8, 11=0-3-8, 15=0-3-8 (req. 0-3-10)
Max Horz 2=-38(LC 30)
Max Uplift 2=-285(LC 4), 11=-71(LC 28), 15=-825(LC 4)
Max Grav 2=2436(LC 19), 11=236(LC 20), 15=6930(LC 1)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-10279/1235, 3-4=-7175/966, 4-5=-6366/757, 5-7=-6365/757, 7-8=-622/5555, 8-9=-621/5556, 9-10=0/832
BOT CHORD 2-21=-1107/9397, 20-21=-1002/8439, 19-20=-819/6562, 17-19=-145/2243, 15-17=-145/2243, 14-15=-841/36, 10-14=-762/23
WEBS 3-21=-244/2475, 3-20=-1766/244, 4-20=-333/2168, 4-19=-321/253, 5-19=-452/111, 7-19=-577/4551, 7-17=-33/943, 7-15=-8003/894, 8-15=-600/122, 9-15=-5157/717, 9-14=-247/1388

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: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 2=285, 15=825.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1152 lb down and 315 lb up at 7-11-4, 326 lb down and 49 lb up at 10-0-0, 326 lb down and 49 lb up at 12-0-0, 321 lb down and 48 lb up at 14-0-0, 321 lb down and 48 lb up at 16-0-0, 321 lb down and 48 lb up at 18-0-0, 321 lb down and 48 lb up at 20-0-0, 321 lb down and 48 lb up at 22-0-0, 321 lb down and 48 lb up at 24-0-0, 321 lb down and 48 lb up at 26-0-0, 283 lb down and 55 lb up at 28-0-0 , and 324 lb down and 46 lb up at 30-0-0, and 1146 lb down and 312 lb up at 32-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-9=-70, 9-12=-70, 2-21=-20, 10-21=-20, 11-13=-20
   Concentrated Loads (lb)
   Vert: 20=-1152(B) 19=-321(B) 17=-321(B) 15=-321(B) 14=-1146(B) 16=-321(B) 25=-326(B) 26=-326(B) 27=-321(B) 28=-321(B) 29=-321(B) 30=-283(B) 31=-324(B)

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B2	HIP	1	1	I49388460
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:30 2021 Page 1
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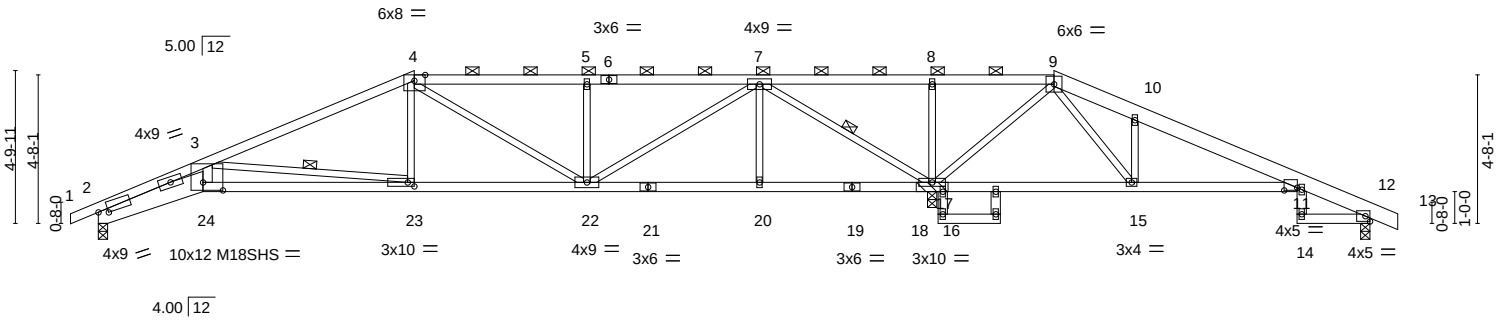
-0-10-8 3-3-8 9-11-4 15-4-7 20-9-9 26-2-12 30-0-12 32-7-5 37-8-8 40-0-0 40-10-8
0-10-8 3-3-8 6-7-12 5-5-3 5-5-3 5-5-3 3-10-0 2-6-8 5-1-4 2-3-8 0-10-8

Scale = 1:72.5



3-3-8 9-11-4 15-4-7 20-9-9 26-2-12 32-7-5 37-8-8 40-0-0
3-3-8 6-7-12 5-5-3 5-5-3 5-5-3 6-4-9 5-1-4 2-3-8

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [4:0-4-2,Edge], [11:0-4-14,0-1-0], [23:0-2-8,0-1-8], [24:0-7-8,0-3-0]

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15	TC 0.90	Vert(LL) -0.28 23-24 >999 360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.60	Vert(CT) -0.50 23-24 >624 240	M18SHS	197/144
BCLL 0.0	*	Rep Stress Incr YES	WB 0.90	Horz(CT) 0.18 17 n/a n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.19 23-24 >999 240	Weight: 156 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
9-13: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-24: 2x8 SP DSS, 21-24,11-19: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
11-14,3-24,17-25,26-27: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-11-5 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-23, 7-17

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 17=(0-3-8 + bearing block) (req. 0-4-1)
Max Horz 2=-81(LC 9)
Max Uplift 2=-135(LC 8), 12=-101(LC 9), 17=-339(LC 4)
Max Grav 2=1026(LC 21), 12=217(LC 22), 17=2609(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4268/559, 3-4=-1730/257, 4-5=-1261/283, 5-7=-1259/281, 7-8=-148/2100, 8-9=-147/2101, 9-10=-75/890, 10-11=-127/876
BOT CHORD 2-24=-563/3926, 23-24=-522/3516, 22-23=-142/1532, 15-17=-1071/174, 11-15=-812/174
WEBS 3-24=-89/1218, 3-23=-1987/458, 4-23=0/415, 4-22=-444/106, 5-22=-413/166, 7-22=-164/1362, 7-17=-2262/341, 8-17=-366/146, 9-17=-1375/144, 9-15=-164/659, 10-15=-386/199

NOTES-
1) 2x4 SPF 2100F 1.8E bearing block 12" long at jt. 17 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=135, 12=101, 17=339.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B3	HIP	1	1	I49388461
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:31 2021 Page 1
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-0-10-8 3-3-8 7-3-9 11-11-4 19-0-6 26-2-12 28-0-12 31-11-10 37-8-8 40-0-0 40-10-8
0-10-8 3-3-8 4-0-1 4-7-11 7-1-2 7-2-6 1-10-0 3-10-14 5-8-14 2-3-8 0-10-8

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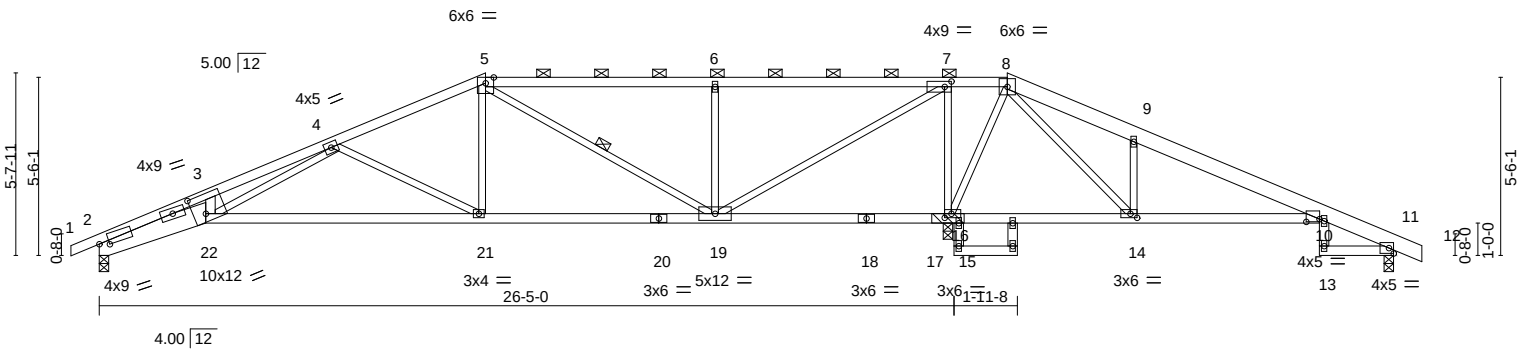


3-3-8 11-11-4 19-0-6 26-2-12 31-11-10 37-8-8 40-0-0
3-3-8 8-7-12 7-1-2 7-2-6 5-8-14 5-8-14 2-3-8

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [7:0-2-8,0-2-0], [10:0-4-14,0-1-0], [14:0-2-8,0-1-8], [16:0-2-8,0-1-8], [22:0-4-8,0-7-0]

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	0.88	Vert(LL)	-0.28	21-22	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.60	21-22	>521	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.16	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	21-22	>999	240	Weight: 159 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
8-12: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-22: 2x8 SP DSS
WEBS 2x3 SPF No.2 *Except*
10-13,3-22,16-23,24-25: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 4-3-6 oc bracing.
WEBS 1 Row at midpt 5-19

REACTIONS. (size) 2=0-3-8, 11=0-3-8, 16=(0-3-8 + bearing block) (req. 0-4-3)
Max Horz 2=-96(LC 9)
Max Uplift 2=-152(LC 8), 11=-113(LC 21), 16=-292(LC 5)
Max Grav 2=1031(LC 21), 11=198(LC 22), 16=2657(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4147/531, 3-4=-3841/581, 4-5=-1413/224, 5-6=-582/209, 6-7=-579/208, 7-8=-53/1770, 8-9=-52/948, 9-10=-105/1014
BOT CHORD 2-22=-540/3787, 21-22=-292/1971, 19-21=-83/1235, 16-19=-1770/258, 14-16=-1368/203, 10-14=-860/149
WEBS 3-22=0/320, 4-22=-269/1824, 4-21=-807/271, 5-21=-19/532, 5-19=-934/118, 6-19=-553/229, 7-19=-303/2284, 7-16=-1584/330, 8-16=-1011/138, 8-14=-226/804, 9-14=-455/231

NOTES-
1) 2x4 SPF No.2 bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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=152, 11=113, 16=292.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B4	HIP	1	1	I49388462

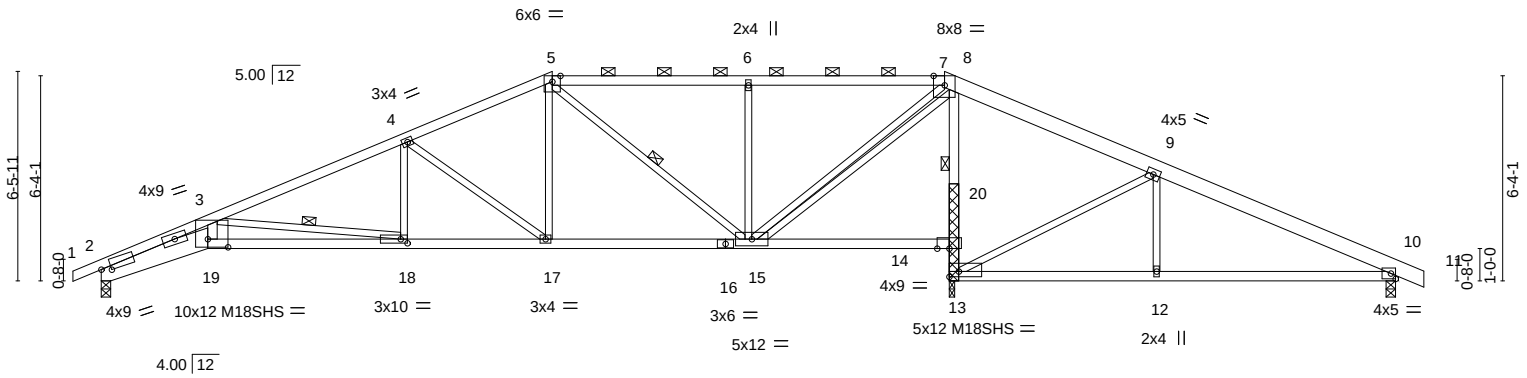
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:32 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-Ln8?24YacVdG273a1som06IyW2J9TQrmDuz3Exy6hGD

-0-10-8	3-3-8	9-4-4	13-11-4	20-0-0	26-0-12	32-7-6	40-0-0	40-10-8
0-10-8	3-3-8	6-0-12	4-6-15	6-0-12	6-0-12	6-6-10	7-4-10	0-10-8

Scale = 1:71.2



3-3-8	9-4-4	13-11-4	20-0-0	26-0-12	26-2-8	32-7-6	40-0-0
3-3-8	6-0-12	4-6-15	6-0-12	6-0-12	0-1-12	6-4-14	7-4-10

APPLY 2 X 4 X 3' SPF/DF/SP NO.2 SCAB(S) TO EACH FACE OF TRUSS AS SHOWN.
ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL
SCHEDULE: 2 x 3'S - 1 ROW, 2 x 4'S - 2 ROWS, 2 x 6'S AND LARGER - 3 ROWS:
SPACED @ 4" O.C. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE
FOR A NET 2" O.C SPACING IN THE TRUSS. USE 2" MEMBER END DISTANCE.

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [7:0-4-2,Edge], [13:Edge,0-1-15], [18:0-2-8,0-1-8], [19:0-7-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.27	18-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.51	18-19	>615	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.10	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.21	18-19	>999	240	Weight: 174 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	7-11: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-19: 2x8 SP DSS, 16-19: 2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2 *Except*
	3-19: 2x4 SPF No.2
OTHERS	2x4 SPF No.2
LBR SCAB	13-20 2x4 SPF No.2 both sides

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-3-12 oc purlins, except
	2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 3-2-6 oc bracing. Except:
	1 Row at midpt 8-14
WEBS	1 Row at midpt 3-18, 5-15

REACTIONS. (size) 2=0-3-8, 10=0-3-8, 13=(0-2-0 + bearing block)
Max Horz 2=-111(LC 9)
Max Uplift 2=-176(LC 8), 10=-174(LC 9), 13=-191(LC 4)
Max Grav 2=1141(LC 21), 10=520(LC 22), 13=2142(LC 1)

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

TOP CHORD	2-3=-4730/755, 3-4=-2153/307, 4-5=-1408/259, 5-6=-736/249, 6-7=-717/241, 7-8=-387/209, 8-9=0/620, 9-10=-490/262
BOT CHORD	2-19=-770/4342, 18-19=-704/3886, 17-18=-258/1946, 15-17=-88/1225, 14-15=-554/99, 13-14=-1735/194, 8-14=-1656/223, 12-13=-156/381, 10-12=-156/381
WEBS	3-19=-159/1348, 3-18=-1958/450, 4-18=0/394, 4-17=-876/229, 5-17=-72/607, 5-15=-656/118, 6-15=-498/203, 7-15=-92/790, 9-13=-805/220, 9-12=0/330, 8-15=-101/876

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) WARNING: Required bearing size at joint(s) 13 greater than input bearing size.

Continued on page 2

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B4	HIP	1	1	I49388462

Job Reference (optional)

NOTES-

8) Bearing at joint(s) 2, 13 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=176, 10=174, 13=191.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN	
B210103	B5	HIP	1	1	Job Reference (optional)	I49388463

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:34 2021 Page 1
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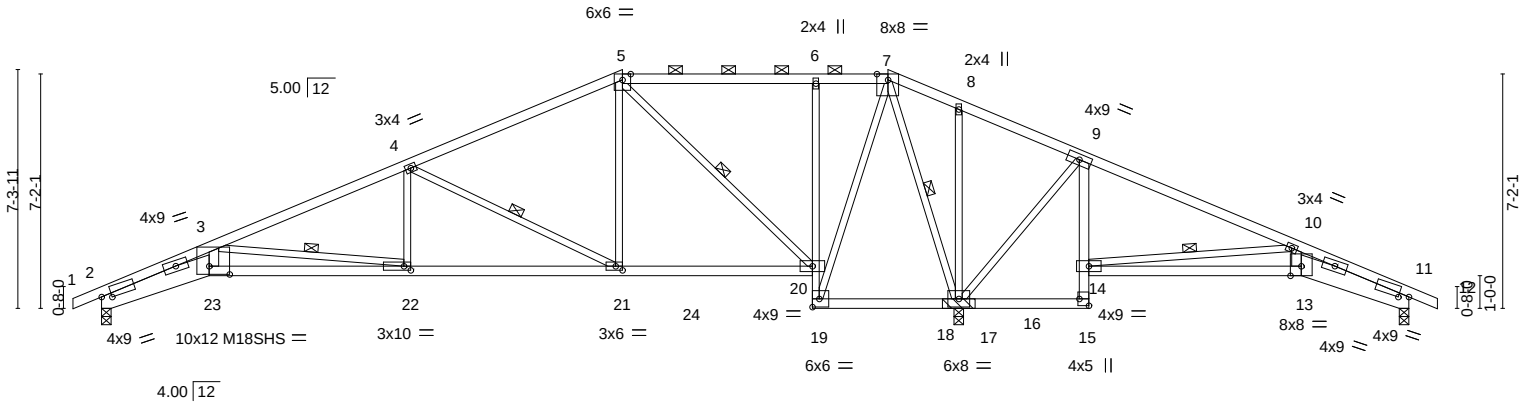
-0-10-8	3-3-8	9-4-4	15-11-4	21-9-0	24-0-12	26-2-12	30-2-8	36-8-8	40-0-0	40-10-8
0-10-8	3-3-8	6-0-12	6-7-0	5-9-12	2-3-12	2-2-0	3-11-12	6-6-0	3-3-8	0-10-8

Scale = 1:70.5



3-3-8	9-4-4	15-11-4	21-9-0	26-2-12	30-2-8	36-8-8	40-0-0
3-3-8	6-0-12	6-7-0	5-9-12	4-5-12	3-11-12	6-6-0	3-3-8

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [7:0-4-2,Edge], [11:0-3-11,0-1-4], [15:Edge,0-3-8], [21:0-2-8,0-1-8], [22:0-2-8,0-1-8], [23:0-7-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.30	22-23	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.51	22-23	>613	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.23	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.21	22-23	>999	240	Weight: 174 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-23,11-13: 2x8 SP DSS, 20-23,9-15: 2x4 SPF 2100F 1.8E
	6-19: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	3-23,10-13: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-4-13 oc purlins, except
	2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 4-4-6 oc bracing.
WEBS	1 Row at midpt 3-22, 4-21, 5-20, 7-17, 10-14

REACTIONS. (size) 2=0-3-8, 11=0-3-8, 17=(0-3-8 + bearing block) (req. 0-4-0)
Max Horz 2=-122(LC 13)
Max Uplift 2=-189(LC 8), 11=-159(LC 9), 17=-163(LC 4)
Max Grav 2=1077(LC 23), 11=345(LC 22), 17=2537(LC 2)

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

TOP CHORD	2-3=-4434/829, 3-4=-1974/358, 4-5=-956/201, 7-8=0/1052, 8-9=0/1079, 9-10=-20/829, 10-11=-876/547
BOT CHORD	2-23=-853/4078, 22-23=-777/3627, 21-22=-325/1794, 20-21=-61/796, 19-20=-1179/166, 6-20=-391/165, 17-19=-461/108, 15-17=-595/61, 9-14=0/266, 13-14=-455/686, 11-13=-493/787
WEBS	3-23=-190/1345, 3-22=-1848/456, 4-22=0/472, 4-21=-1103/295, 5-21=-46/753, 5-20=-1094/130, 7-19=-147/1280, 7-17=-1717/117, 9-17=-619/185, 10-14=-1063/369, 10-13=-61/363

NOTES-

1) 2x4 SPF No.2 bearing block 12" long at jt. 17 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearing at joint(s) 2, 11 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=189, 11=159, 17=163.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

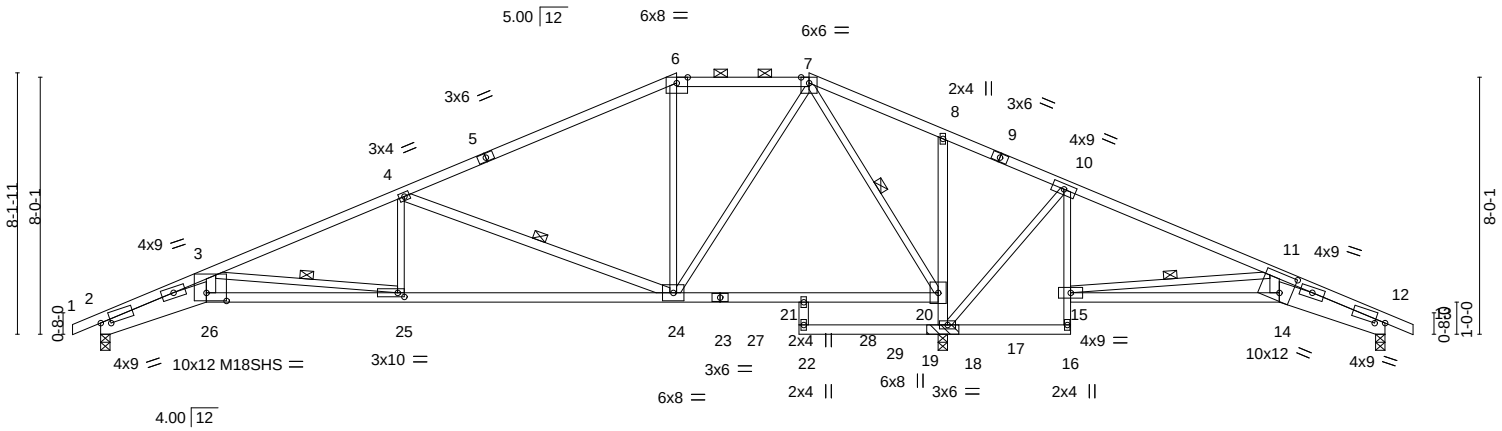
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B6	HIP	1	1	I49388464
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:35 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-lMp7g6aSvQ?rvao9i_MTelwRCFL4gnkDvrCjrGy6hGA

-0-10-8 3-3-8 9-4-3 17-11-4 21-9-0 22-0-12 26-2-12 30-2-8 36-8-8 40-0-0 40-10-8
0-10-8 3-3-8 6-0-11 8-7-0 3-9-12 0-3-12 4-2-0 3-11-12 6-6-0 3-3-8 0-10-8

Scale = 1:71.8



3-3-8 9-4-3 17-11-4 21-9-0 22-0-12 26-2-12 30-2-8 36-8-8 40-0-0
3-3-8 6-0-11 8-7-0 3-9-12 0-3-12 4-2-0 3-11-12 6-6-0 3-3-8

Plate Offsets (X,Y)-- [2:0-3-11,0-1-4], [6:0-4-2,Edge], [12:0-3-11,0-1-4], [14:0-4-8,0-7-0], [25:0-2-8,0-1-8], [26:0-7-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.34	20-21	>915	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.54	25-26	>578	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.12	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	25-26	>999	240	Weight: 175 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-26,12-14: 2x8 SP DSS, 23-26: 2x4 SPF 2100F 1.8E
10-16: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
21-22,3-26,4-24,11-14: 2x4 SPF No.2, 8-18: 2x4 SPF 2100F 1.8E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-25, 4-24, 7-20, 11-15

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 18=(0-3-8 + bearing block) (req. 0-3-10)
Max Horz 2=137(LC 8)
Max Uplift 2=-207(LC 8), 12=-155(LC 9), 18=-126(LC 9)
Max Grav 2=1180(LC 23), 12=502(LC 22), 18=2320(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4892/916, 3-4=-2324/430, 4-6=-1032/210, 6-7=-858/243, 7-8=0/662, 8-10=0/555, 10-11=-132/254, 11-12=-1683/520
BOT CHORD 2-26=-947/4495, 25-26=-858/4001, 24-25=-412/2128, 21-24=0/316, 20-21=0/316, 10-15=0/272, 14-15=-415/1353, 12-14=-445/1534
WEBS 3-26=-226/1468, 3-25=-1889/450, 4-25=0/492, 4-24=-1360/374, 7-24=-123/1054, 7-20=-1527/94, 18-20=-1610/125, 8-20=-265/130, 10-18=-599/188, 11-15=-1314/373, 11-14=-56/627

NOTES-
1) 2x4 SPF No.2 bearing block 12" long at jt. 18 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearing at joint(s) 2, 12 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=207, 12=155, 18=126.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B7	Roof Special	2	1	I49388465

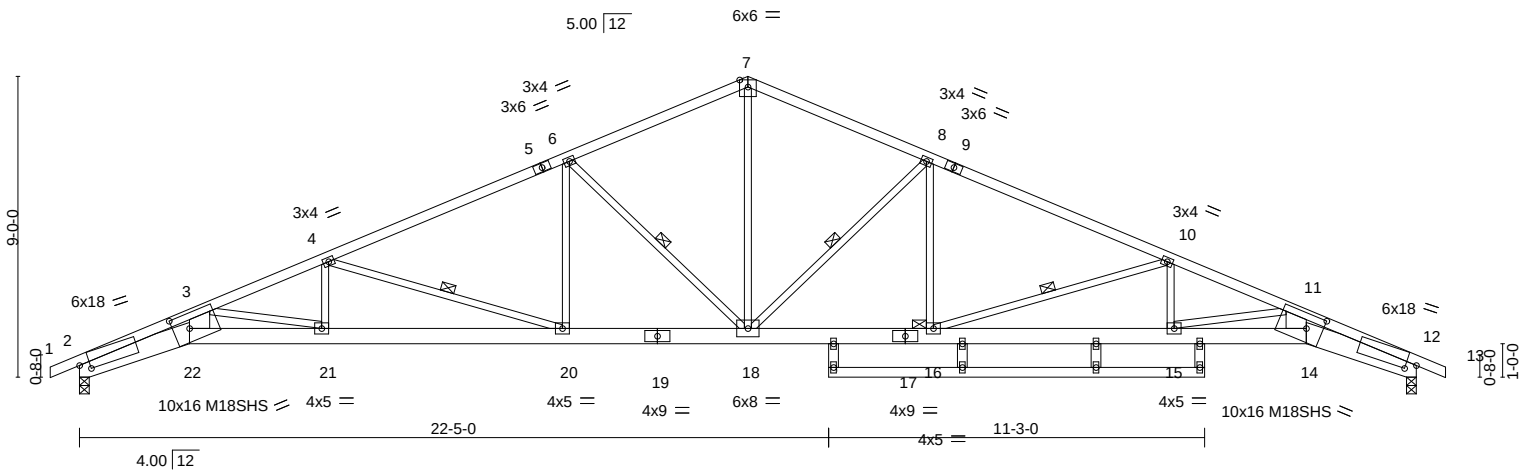
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:36 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-DZNWuSb4gj7iXkNLGitiAySbYffnPGdM8VyHNiy6hG9

-0-10-8	3-3-8	7-4-3	14-6-10	20-0-0	25-5-6	32-7-13	36-8-8	40-0-0	40-10-8
0-10-8	3-3-8	4-0-11	7-2-7	5-5-6	5-5-6	7-2-7	4-0-11	3-3-8	0-10-8

Scale = 1:68.9



3-3-8	7-4-3	14-6-10	20-0-0	25-5-6	32-7-13	36-8-8	40-0-0
3-3-8	4-0-11	7-2-7	5-5-6	5-5-6	7-2-7	4-0-11	3-3-8

Plate Offsets (X,Y)-- [2:0-3-11,0-2-5], [12:0-3-11,0-2-5], [14:0-5-12,0-5-4], [22:0-5-12,0-5-4]

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	0.91	Vert(LL)	-0.46	16-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.84	16-18	>567	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.51	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.32	20	>999	240	Weight: 214 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5,9-13: 2x4 SPF 2100F 1.8E

BOT CHORD 2x8 SP DSS *Except*
17-19: 2x6 SPF No.2, 14-17,19-22: 2x6 SP DSS, 23-24: 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*
11-14,3-22: 2x8 SP DSS, 23-25,24-26,27-28,29-30: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 8-7-1 oc bracing.

WEBS 1 Row at midpt 8-18, 10-16, 6-18, 4-20

JOINTS 1 Brace at Jt(s): 16

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-153(LC 13)
Max Uplift 2=-253(LC 8), 12=-253(LC 9)
Max Grav 2=1858(LC 1), 12=1858(LC 1)

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

TOP CHORD 2-3=-7653/1086, 3-4=-5005/664, 4-6=-3470/426, 6-7=-2625/334, 7-8=-2625/350, 8-10=-3470/397, 10-11=-5005/596, 11-12=-7653/882

BOT CHORD 2-22=-1114/7002, 21-22=-967/6021, 20-21=-666/4622, 18-20=-332/3113, 16-18=-163/3113, 15-16=-448/4622, 14-15=-669/6021, 12-14=-767/7002

WEBS 7-18=-166/1633, 8-18=-1077/265, 8-16=-15/603, 10-16=-1586/312, 10-15=0/597, 11-15=-1431/226, 11-14=-169/1893, 6-18=-1076/275, 6-20=-26/602, 4-20=-1587/352, 4-21=-12/598, 3-21=-1431/308, 3-22=-265/1892

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 12=253.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	B8	Roof Special	6	1	I49388466

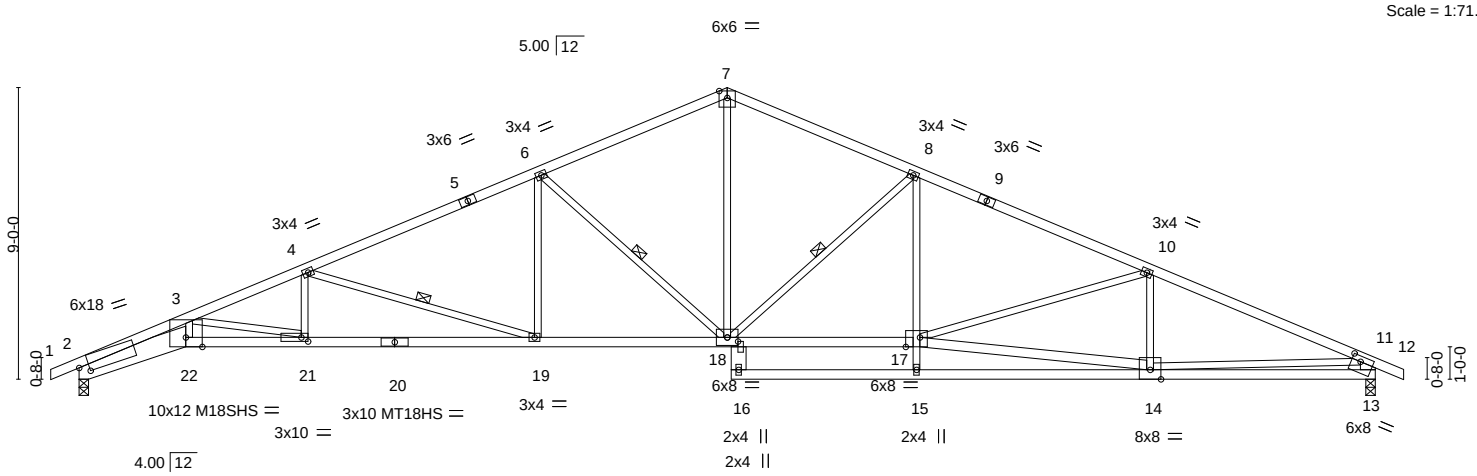
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:37 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-hlxu5ocjR1FZ9uyXpPOxjA?m03yv8kOWN9hqv8y6hG8

-0-10-8	3-3-8	6-11-8	14-1-14	20-0-0	25-10-2	33-0-10	40-0-0	40-10-8
0-10-8	3-3-8	3-8-0	7-2-6	5-10-2	5-10-2	7-2-8	6-11-6	0-10-8

Scale = 1:71.1



3-3-8	6-11-8	14-1-14	20-0-0	20-1-8	25-10-2	33-0-10	40-0-0
3-3-8	3-8-0	7-2-6	5-10-2	0-1-8	5-8-10	7-2-8	6-11-6

Plate Offsets (X,Y)-- [2:0-3-11,0-2-5], [13:0-3-4,0-2-0], [17:0-5-4,Edge], [18:0-1-8,0-4-0], [21:0-2-8,0-1-8], [22:0-6-2,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	0.93	Vert(LL)	-0.42	19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.79	19-21	>603	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.39	13	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.30	21	>999	240	Weight: 173 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5,9-12: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
2-22: 2x8 SP DSS, 20-22: 2x4 SPF 2400F 2.0E
17-20: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
16-18: 2x6 SPF No.2, 11-13: 2x6 SP DSS, 14-17: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-11-5 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

WEBS 1 Row at midpt 4-19, 6-18, 8-18

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=148(LC 12)
Max Uplift 2=-254(LC 8), 13=-256(LC 9)
Max Grav 2=1853(LC 1), 13=1859(LC 1)

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

TOP CHORD 2-3=-7834/1124, 3-4=-4941/661, 4-6=-3476/431, 6-7=-2565/332, 7-8=-2601/350, 8-10=-3446/405, 10-11=-3481/437, 11-13=-1783/290

BOT CHORD 2-22=-1144/7172, 21-22=-1045/6556, 19-21=-663/4576, 18-19=-336/3119, 17-18=-179/3103, 13-14=-192/973

WEBS 3-22=-309/2130, 3-21=-2027/390, 4-21=-2/522, 4-19=-1527/343, 6-19=-15/593, 6-18=-1108/279, 8-18=-1080/267, 15-17=0/286, 8-17=-11/567, 10-14=-438/145, 11-14=-132/2154, 7-18=-154/1566, 14-17=-336/3093

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=254, 13=256.
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.

December 22,2021

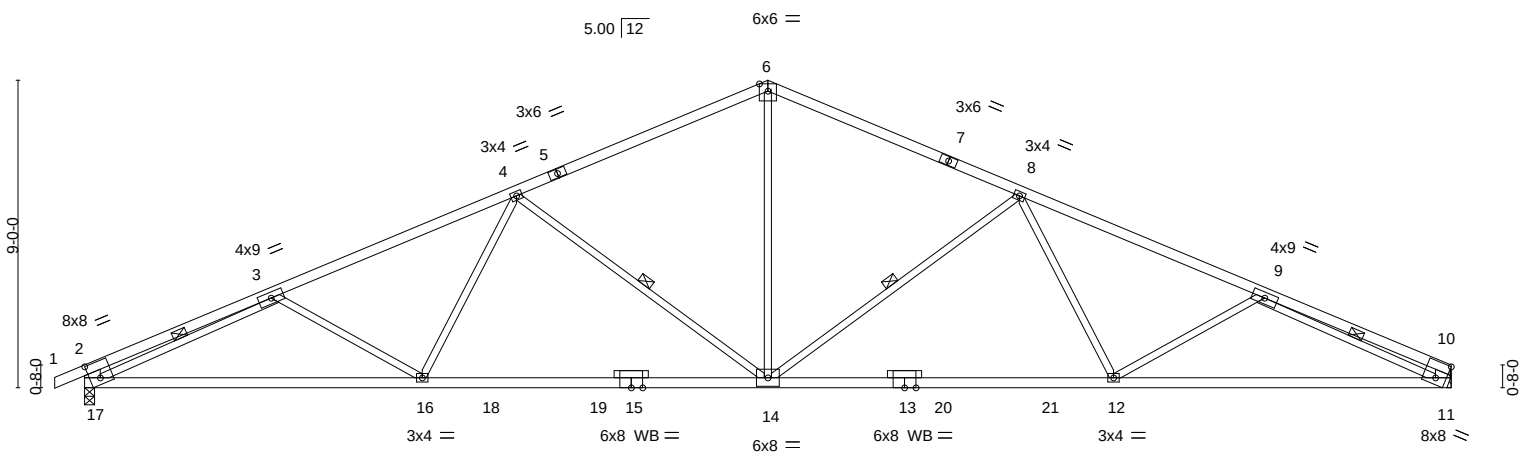
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C1	Common	1	1	I49388467
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:38 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-9xVGI7cLCLNQm2XjN7vAFNXx3SMTt8XfcpRNSay6hG7

-0-10-8	5-7-0	12-7-11	20-0-0	27-4-5	34-5-0	40-0-0
0-10-8	5-7-0	7-0-11	7-4-5	7-4-5	7-0-11	5-7-0

Scale = 1:67.4



9-10-10	20-0-0	30-1-7	40-0-0
9-10-10	10-1-6	10-1-7	9-10-10

Plate Offsets (X,Y)-- [2:0-3-9,0-5-11], [11:Edge,0-5-11]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.39	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.67	12-14	>709	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.15	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	14-16	>999	240	Weight: 148 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2 *Except* 2-17,10-11: 2x6 SP DSS
OTHERS	2x3 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 8-14, 4-14, 3-17, 9-11

REACTIONS. (size) 17=0-3-8, 11=Mechanical
Max Horz 17=86(LC 8)
Max Uplift 17=-37(LC 8), 11=-25(LC 9)
Max Grav 17=1940(LC 2), 11=1875(LC 2)

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

TOP CHORD	2-3=-1073/23, 3-4=-3444/45, 4-6=-2479/69, 6-8=-2479/68, 8-9=-3450/46, 9-10=-913/0, 2-17=-634/54, 10-11=-481/28
BOT CHORD	16-17=-128/3215, 14-16=-30/2898, 12-14=0/2899, 11-12=-55/3234
WEBS	6-14=0/1458, 8-14=-899/139, 8-12=0/523, 9-12=-279/146, 4-14=-898/139, 4-16=0/515, 3-16=-261/144, 3-17=-2562/76, 9-11=-2740/107

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) 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) 17, 11.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C2	Hip	1	1	I49388468
					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 22 15:02:26 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-DUq9B8I?t_19ty9T5KwvW?tEATVvGyg2acgCZJy6NYR

-0-10-8	1-9-8	6-3-0	11-4-8	17-11-4	22-0-12	28-8-4	34-5-14	40-0-0
0-10-8	1-9-8	4-5-8	5-1-8	6-6-11	4-1-8	6-7-8	5-9-9	5-6-2

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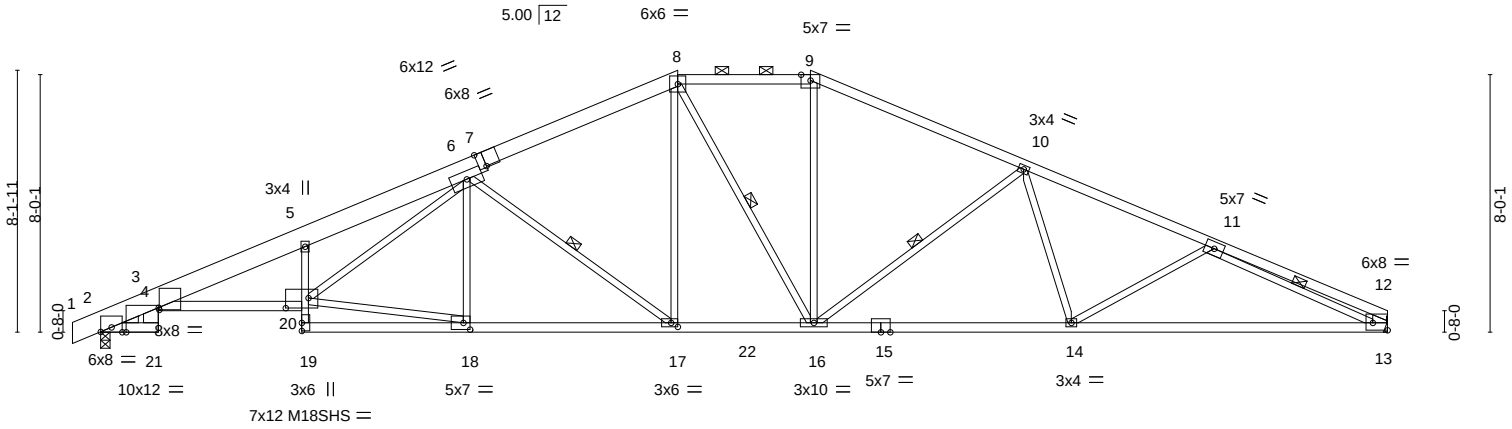


1-9-8	6-3-0	11-4-8	17-11-4	22-0-12	30-2-1	40-0-0
1-9-8	4-5-8	5-1-8	6-6-11	4-1-8	8-1-5	9-9-15

Plate Offsets (X,Y)-- [4:0-0-4,0-0-13], [7:0-2-12,Edge], [12:Edge,0-2-12], [17:0-2-8,0-1-8], [18:0-2-8,0-2-8], [20:0-8-8,0-3-12], [21:0-9-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.36	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.64	17-18	>739	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.31	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	17-18	>999	240	Weight: 188 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-8: 2x6 SPF No.2, 1-7: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-21: 2x6 SPF No.2, 4-20,13-15: 2x4 SPF 2100F 1.8E
5-19: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
12-13: 2x6 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-7 max.): 8-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-17, 8-16, 10-16, 11-13

REACTIONS. (lb/size) 2=1851/0-3-8, 13=1782/Mechanical
Max Horz 2=86(LC 8)
Max Uplift 2=-30(LC 8), 13=-16(LC 9)
Max Grav 2=1901(LC 2), 13=1847(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1549/0, 3-4=-56/1020, 4-5=-5116/51, 5-6=-5134/116, 6-7=-2659/16, 7-8=-2657/36, 8-9=-2368/58, 9-10=-2645/39, 10-11=-3386/26, 11-12=-953/0, 12-13=-505/31
BOT CHORD 2-21=-23/697, 4-20=-75/4814, 5-20=-586/100, 18-19=-4/313, 17-18=-6/3060, 17-22=0/2378, 16-22=0/2378, 15-16=0/2966, 14-15=0/2966, 13-14=-32/3146
WEBS 18-20=-3/2784, 6-20=-87/2124, 6-18=-322/78, 6-17=-854/111, 8-17=-5/724, 8-16=-254/225, 9-16=0/695, 10-16=-766/106, 10-14=0/402, 11-13=-2627/82

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2 and 16 lb uplift at joint 13.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

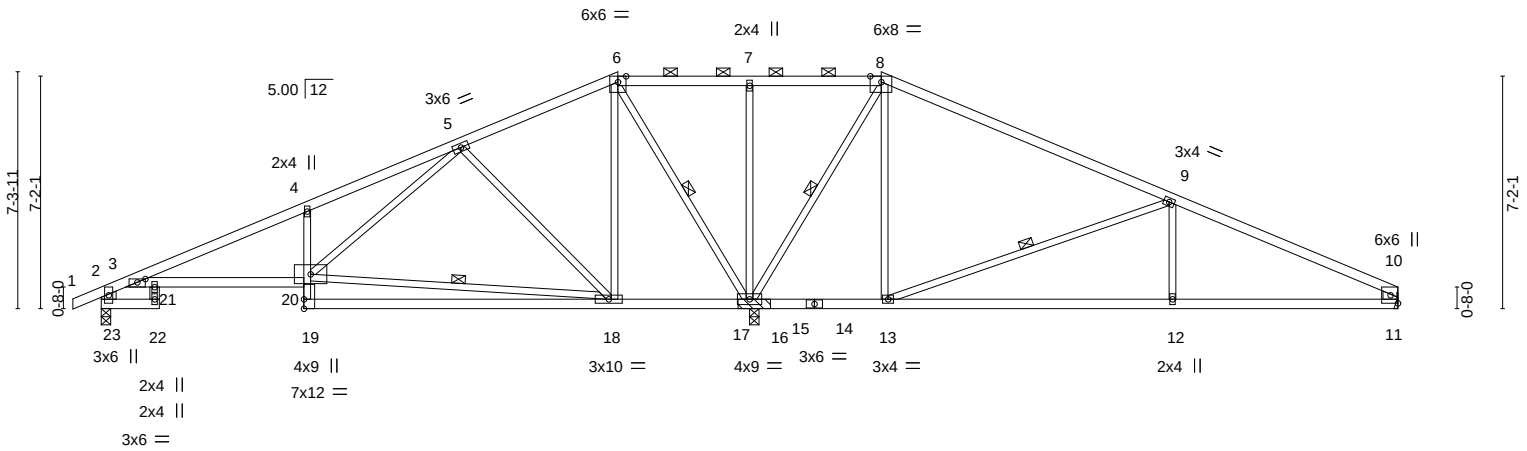
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C3	HIP	1	1	I49388469
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:44 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-_5sXZBh6nB8ZUz_tkN0aVen2mtS_Hu8X_luifEy6hG1

-0-10-8 1-9-8 | 6-3-0 | 11-1-2 | 15-11-4 | 20-0-0 | 20-1-12 | 24-0-12 | 33-0-9 | 40-0-0
0-10-8 1-9-8 | 4-5-8 | 4-10-2 | 4-10-2 | 4-0-12 | 0-1-12 | 3-11-0 | 8-11-13 | 6-11-7

Scale = 1:71.1



1-9-8 | 6-3-0 | 15-11-4 | 20-1-12 | 24-0-12 | 33-0-9 | 40-0-0
1-9-8 | 4-5-8 | 9-8-4 | 4-2-8 | 3-11-0 | 8-11-13 | 6-11-7

Plate Offsets (X,Y)-- [8:0-4-2,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	0.64	Vert(LL)	-0.21	18-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.44	18-19	>535	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.08	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	20-21	>999	240	Weight: 158 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
6-8: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-19: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
21-22: 2x4 SPF No.2, 2-23,10-11: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 18-20, 6-16, 8-16, 9-13

REACTIONS. (size) 23=0-3-8, 16=(0-3-8 + bearing block) (req. 0-4-2), 11=Mechanical
Max Horz 23=68(LC 8)
Max Uplift 23=-39(LC 8), 11=-46(LC 9)
Max Grav 23=657(LC 19), 16=2647(LC 1), 11=562(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1078/97, 4-5=-1047/160, 5-6=0/617, 6-7=0/1234, 7-8=0/1235, 8-9=-22/670, 9-10=-831/108, 2-23=-689/69, 10-11=-488/76
BOT CHORD 3-21=-101/958, 20-21=-102/961, 4-20=-398/116, 16-18=-547/111, 13-16=-528/93, 12-13=-55/697, 11-12=-55/697
WEBS 18-20=-360/110, 5-20=-79/934, 5-18=-661/131, 6-18=0/659, 6-16=-1357/13, 7-16=-291/68, 8-16=-1394/8, 8-13=0/552, 9-13=-1073/120, 9-12=0/334

NOTES-
1) 2x4 SPF No.2 bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 23 and 46 lb uplift at joint 11.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

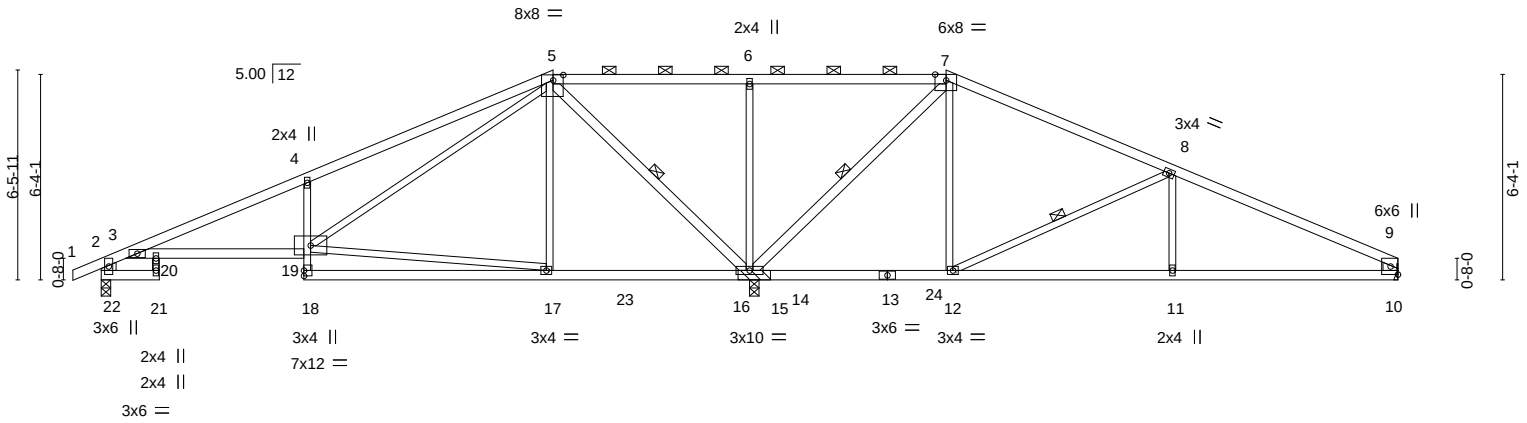
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C4	HIP	1	1	I49388470
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:46 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-wU_I_sjMJoOHkG8Gro32a3tMLh8WlsFqR3Nok7y6hG?

-0-10-8 1-9-8 | 6-3-0 | 13-11-4 | 20-0-0 | 26-0-12 | 33-0-9 | 40-0-0
0-10-8 1-9-8 | 4-5-8 | 7-8-4 | 6-0-12 | 6-0-12 | 6-11-13 | 6-11-8

Scale = 1:71.1



1-9-8 | 6-3-0 | 13-11-4 | 20-0-0 | 20-1-12 | 26-0-12 | 33-0-9 | 40-0-0
1-9-8 | 4-5-8 | 7-8-4 | 6-0-12 | 0-1-12 | 5-11-0 | 6-11-13 | 6-11-8

Plate Offsets (X,Y)-- [5:0-3-12,0-2-0], [7:0-4-2,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	0.76	Vert(LL)	-0.12	19-20	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.22	17-18	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	19-20	>999	240	Weight: 156 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
4-18: 2x3 SPF No.2, 13-18: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
5-15,7-15: 2x4 SPF No.2, 2-22,9-10: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-17,12-15.
WEBS 1 Row at midpt 5-15, 7-15, 8-12

REACTIONS. (size) 22=0-3-8, 15=(0-3-8 + bearing block) (req. 0-4-4), 10=Mechanical
Max Horz 22=58(LC 10)
Max Uplift 22=-40(LC 8), 15=-3(LC 5), 10=-45(LC 9)
Max Grav 22=663(LC 19), 15=2722(LC 2), 10=577(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1142/111, 4-5=-1196/214, 5-6=0/1322, 6-7=0/1324, 7-8=-49/362, 8-9=-816/102, 2-22=-689/66, 9-10=-500/80
BOT CHORD 3-20=-108/1027, 19-20=-109/1030, 4-19=-548/165, 15-17=-302/102, 12-15=-290/89, 11-12=-46/676, 10-11=-46/676
WEBS 17-19=-308/79, 5-19=-177/1269, 5-17=0/359, 5-15=-1506/19, 6-15=-471/111, 7-15=-1505/0, 7-12=0/618, 8-12=-846/95, 8-11=0/285

NOTES-

1) 2x4 SPF 2100F 1.8E bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 22, 3 lb uplift at joint 15 and 45 lb uplift at joint 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

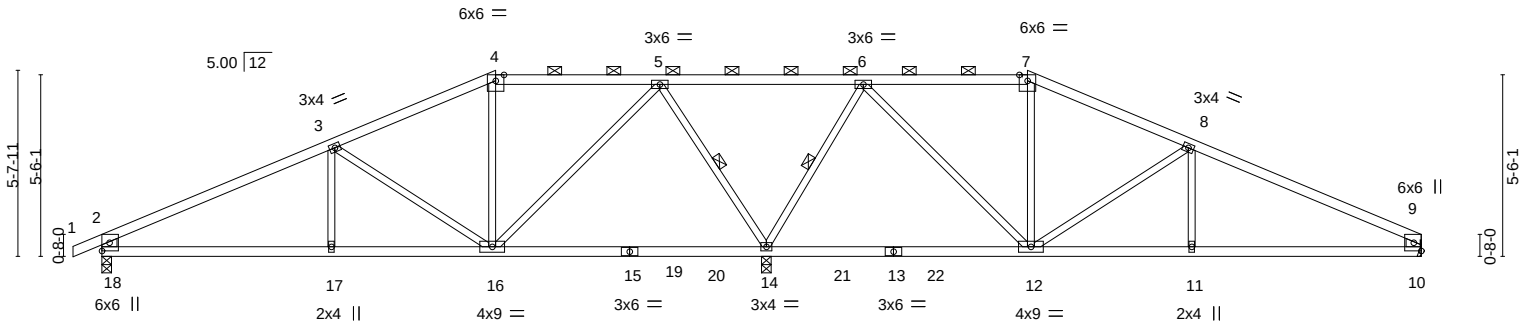
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C5	Hip	1	1	I49388471
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:47 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-OgYgBCj_46W8LQjSPWaH7HPZ45TAUKw_gj6MGZy6hG_

-0-10-8	6-11-8	11-11-4	16-11-0	23-1-0	28-0-12	33-0-8	40-0-0
0-10-8	6-11-8	4-11-12	4-11-12	6-2-1	4-11-12	4-11-12	6-11-8

Scale = 1:69.9



6-11-8	11-11-4	20-1-12	28-0-12	33-0-8	40-0-0
6-11-8	4-11-12	8-2-8	7-11-0	4-11-12	6-11-8

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	0.63	Vert(LL)	-0.12	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.21	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	11-12	>999	240	Weight: 139 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	2-18,9-10: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 18=0-3-8, 14=0-3-8 (req. 0-3-14), 10=Mechanical
Max Horz 18=50(LC 8)
Max Uplift 18=-54(LC 8), 14=-12(LC 5), 10=-43(LC 9)
Max Grav 18=756(LC 19), 14=2473(LC 2), 10=643(LC 22)

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

TOP CHORD	2-3=-999/96, 3-4=-466/97, 4-5=-367/104, 5-6=0/1092, 6-7=-286/106, 7-8=-380/100, 8-9=-920/96, 2-18=-680/96, 9-10=-554/81
BOT CHORD	17-18=-79/831, 16-17=-79/831, 14-16=-440/33, 12-14=-492/6, 11-12=-40/766, 10-11=-40/766
WEBS	3-16=-586/82, 5-16=0/983, 5-14=-1263/69, 6-14=-1251/70, 6-12=0/998, 8-12=-600/81

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 18, 12 lb uplift at joint 14 and 43 lb uplift at joint 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

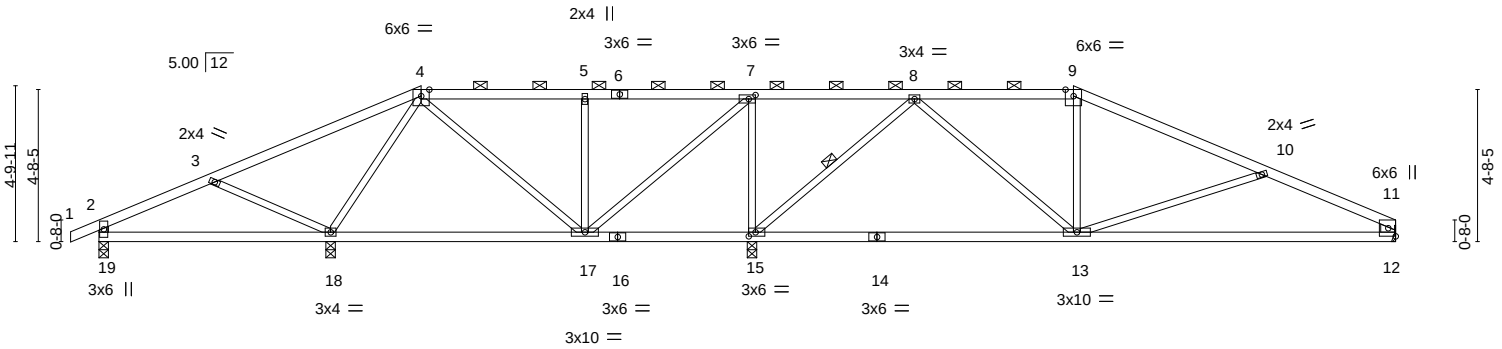
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C6	Hip	1	1	I49388472
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:50 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-pFDoqEmsN1ujDuR14e7_kv14hISVhg1QMhL0suy6hFx

-0-10-8	3-6-13	9-11-4	14-11-14	20-1-12	25-1-14	30-0-12	35-10-7	40-0-0
0-10-8	3-6-13	6-4-7	5-0-10	5-1-14	5-0-2	4-10-14	5-9-11	4-1-9

Scale = 1:71.1



7-1-12	14-11-14	20-1-12	30-0-12	40-0-0
7-1-12	7-10-2	5-1-14	9-11-0	9-11-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.17	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.36	13-15	>660	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	-0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	13-15	>999	240	Weight: 139 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-19: 2x4 SPF 2400F 2.0E, 11-12: 2x6 SP DSS

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-10-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD	Rigid ceiling directly applied or 5-9-3 oc bracing.
WEBS	1 Row at midpt 8-15

REACTIONS. All bearings 0-3-8 except (jt=length) 12=Mechanical.
(lb) - Max Horz 19=42(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 18, 15, 12
Max Grav All reactions 250 lb or less at joint(s) 19 except 18=946(LC 19), 15=1949(LC 20), 12=666(LC 20)

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

TOP CHORD	3-4=-94/534, 4-5=-29/262, 5-7=-29/260, 7-8=-29/926, 8-9=-569/4, 9-10=-688/0, 10-11=-1090/60, 11-12=-568/49
BOT CHORD	15-17=-926/132, 12-13=-29/944
WEBS	3-18=-534/159, 4-18=-654/99, 5-17=-377/87, 7-17=-49/922, 7-15=-957/115, 8-15=-1253/81, 8-13=0/718, 10-13=-404/152

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 15, 12.
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.

December 22,2021

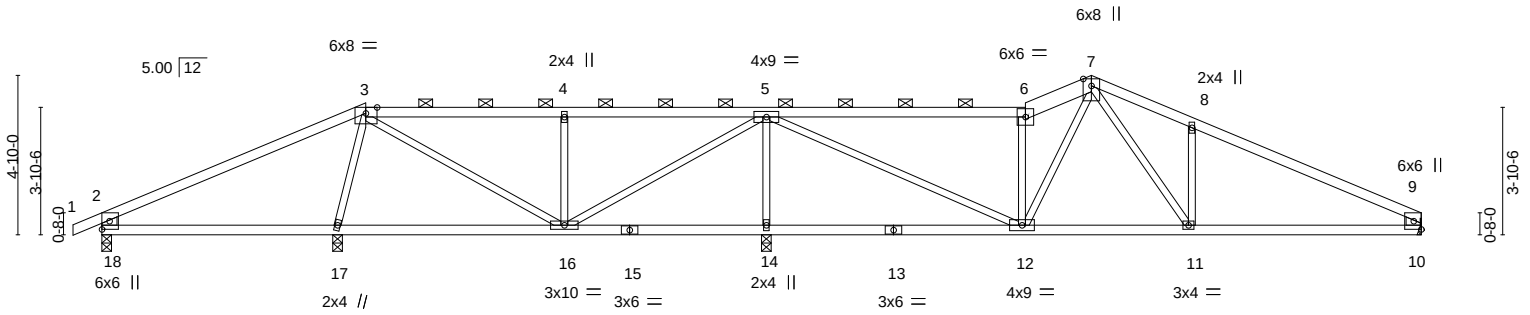
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C7	Roof Special	1	1	I49388473
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:52 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-leLZEwn7ve8RSBbQC39SqK7Nz6Bg9Zfjq?q7wmy6hFv

-0-10-8	8-0-0	14-0-4	20-1-12	28-0-0	30-0-0	33-0-9	40-0-0
0-10-8	8-0-0	6-0-4	6-1-8	7-10-4	2-0-0	3-0-9	6-11-7

Scale = 1:69.9



7-1-12	14-0-4	20-1-12	28-0-0	33-0-9	40-0-0
7-1-12	6-10-8	6-1-8	7-10-4	5-0-9	6-11-7

Plate Offsets (X,Y)-- [3:0-4-2,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	0.75	Vert(LL)	-0.10	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.18	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	11-12	>999	240	Weight: 136 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-18,9-10: 2x6 SP DSS

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

REACTIONS. All bearings 0-3-8 except (jt=length) 10=Mechanical.
(lb) - Max Horz 18=42(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 14, 10 except 18=-107(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 18=614(LC 19), 17=393(LC 19), 14=1930(LC 1), 10=745(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-646/194, 3-4=-484/150, 4-5=-481/149, 5-6=-755/49, 6-7=-915/81, 7-8=-1105/118, 8-9=-1141/52, 2-18=-570/148, 9-10=-653/64
BOT CHORD 17-18=-151/497, 16-17=-152/550, 14-16=-620/9, 12-14=-620/9, 11-12=0/657, 10-11=0/964
WEBS 4-16=-396/97, 5-16=-102/1161, 5-14=-1770/168, 5-12=0/1513, 6-12=-751/124, 7-12=-61/362, 7-11=-84/584, 8-11=-394/138

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 14, 10 except (jt=lb) 18=107.
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.

December 22,2021

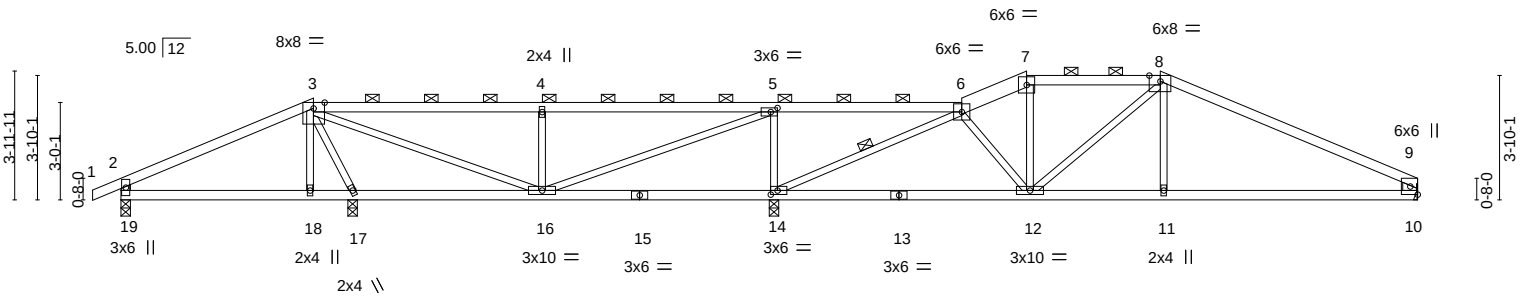
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C8	Roof Special	1	1	I49388474
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:55 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-9D1htxp?BZX?JfK?tBj9Rzls8JD_Lvc9Wz2nX5y6hFs

-0-10-8 5-11-4 12-11-14 20-1-12 25-11-4 27-11-4 32-0-12 40-0-0
0-10-8 5-11-4 7-0-10 7-1-14 5-9-8 2-0-0 4-1-8 7-11-4

Scale = 1:71.1



5-11-4 7-1-12 12-11-14 20-1-12 27-11-4 32-0-12 40-0-0
5-11-4 1-2-8 5-10-2 7-1-14 7-9-8 4-1-8 7-11-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.09	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.20	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	11-12	>999	240	Weight: 134 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-19: 2x4 SPF No.2, 9-10: 2x6 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6, 7-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17,14-16.
WEBS 1 Row at midpt 6-14

REACTIONS. All bearings 0-3-8 except (jt=length) 10=Mechanical.
(lb) - Max Horz 19=33(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 19, 17, 14, 10
Max Grav All reactions 250 lb or less at joint(s) except 19=387(LC 19), 17=720(LC 19), 14=1775(LC 1), 10=758(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-273/76, 3-4=-403/120, 4-5=-403/120, 5-6=0/744, 6-7=-871/46, 7-8=-780/46, 8-9=-1118/31, 2-19=-344/83, 9-10=-670/68
BOT CHORD 14-16=-743/21, 12-14=-13/692, 11-12=0/931, 10-11=0/934
WEBS 3-17=-712/55, 3-16=-70/562, 4-16=-522/126, 5-16=-70/1219, 5-14=-923/137, 6-14=-1587/37, 8-12=-261/32

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 19, 17, 14, 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C9	Roof Special	1	1	I49388475
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:57 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-6b9SIdrFjAnjYzUN_cldXOqFX7tmpnzSzGXuc_y6hFq

-0-10-8 3-11-4 7-1-12 13-7-12 20-1-12 23-11-4 25-11-4 30-1-4 34-0-12 40-0-0
0-10-8 3-11-4 3-2-8 6-6-0 6-6-0 3-9-8 2-0-0 4-2-0 3-11-8 5-11-4

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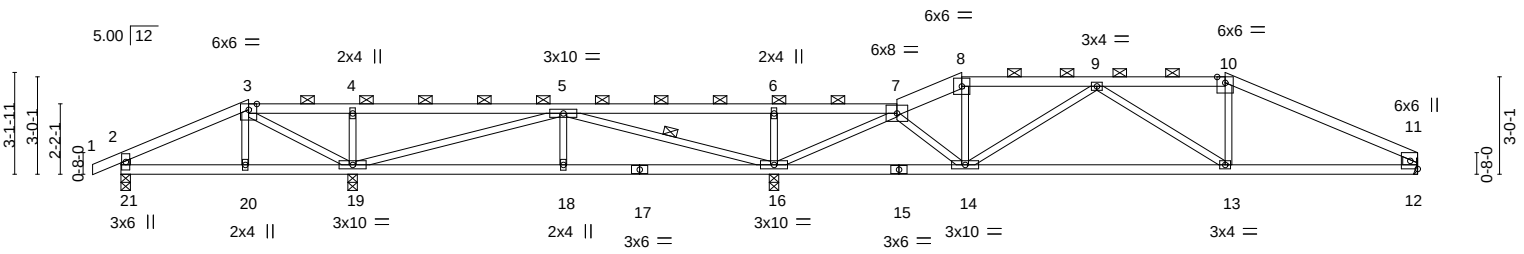

3-11-4 7-1-12 13-7-12 20-1-12 25-11-4 34-0-12 40-0-0
3-11-4 3-2-8 6-6-0 6-6-0 5-9-8 8-1-8 5-11-4

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	0.70	Vert(LL)	-0.13	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.31	13-14	>769	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.08	13-14	>999	240	Weight: 132 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-21: 2x4 SPF 2400F 2.0E, 11-12: 2x6 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-15 max.): 3-7, 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,16-18.
WEBS 1 Row at midpt 5-16

REACTIONS. All bearings 0-3-8 except (jt=length) 12=Mechanical.
(lb) - Max Horz 21=41(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 21, 12 except 19=-182(LC 8), 16=-278(LC 4)
Max Grav All reactions 250 lb or less at joint(s) except 21=265(LC 21), 19=909(LC 21), 16=1713(LC 1), 12=758(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-18/326, 4-5=-20/325, 5-6=-122/1121, 6-7=-122/1121, 7-8=-823/140, 8-9=-755/139, 9-10=-1056/172, 10-11=-1235/163, 11-12=-673/109
BOT CHORD 18-19=-143/299, 16-18=-143/299, 14-16=-65/382, 13-14=-193/1153, 12-13=-111/1060
WEBS 3-19=-432/72, 4-19=-385/156, 5-19=-645/183, 5-18=0/262, 5-16=-1448/248, 6-16=-426/167, 7-16=-1681/239, 7-14=-23/497, 9-14=-500/136, 10-13=0/253

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) 21, 12 except (jt=lb) 19=182, 16=278.
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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C10	Roof Special Girder	1	1	I49388476
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:41 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-aWBPx9fDUGm_dVFI2FTtt09TSgKA4aP5Inf22vy6hG4

-0-10-8 4-0-0 6-0-0 7-1-12 13-7-12 20-1-12 22-0-0 24-0-0 30-0-0 36-0-0 40-0-0
0-10-8 4-0-0 2-0-0 1-1-12 6-6-0 6-6-0 1-10-4 2-0-0 6-0-0 6-0-0 4-0-0

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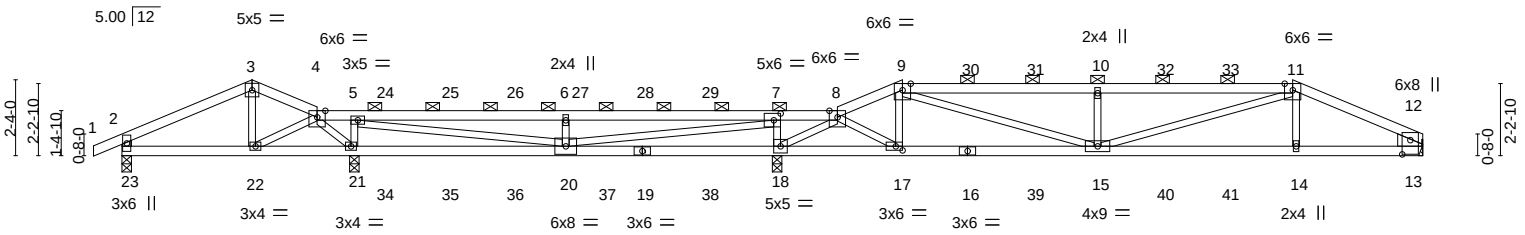

4-0-0 7-1-12 13-7-12 20-1-12 24-0-0 30-0-0 36-0-0 40-0-0
4-0-0 3-1-12 6-6-0 6-6-0 3-10-4 6-0-0 6-0-0 4-0-0

Plate Offsets (X,Y)-- [7:0-2-8,0-2-8], [12:0-5-4,0-3-0], [17:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.21	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.39	14-15	>594	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	-0.03	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	14-15	>999	240	Weight: 129 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-8,9-11: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
13-16: 2x4 SPF 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
2-23: 2x4 SPF 2400F 2.0E, 12-13: 2x10 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-3 max.): 4-8, 9-11.
BOT CHORD Rigid ceiling directly applied or 4-3-11 oc bracing.

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.
(lb) - Max Horz 23=29(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) except 23=-104(LC 29), 21=-149(LC 9), 18=-504(LC 9), 13=-277(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 23=266(LC 21), 21=932(LC 1), 18=2166(LC 22), 13=1209(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-73/520, 5-6=-509/88, 6-7=-509/88, 7-8=-346/1654, 8-9=-1432/356, 9-10=-3017/729, 10-11=-3017/729, 11-12=-2067/477, 12-13=-969/242
BOT CHORD 21-22=-458/108, 20-21=-529/94, 18-20=-1658/364, 15-17=-309/1346, 14-15=-411/1833, 13-14=-407/1838
WEBS 4-22=-80/508, 5-21=-673/221, 5-20=-135/893, 6-20=-400/184, 7-20=-408/2040, 7-18=-839/252, 8-18=-2148/486, 8-17=-297/1350, 9-17=-394/170, 9-15=-388/1756, 10-15=-693/319, 11-15=-288/1244

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 104 lb uplift at joint 23, 149 lb uplift at joint 21, 504 lb uplift at joint 18 and 277 lb uplift at joint 13.
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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NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 37 lb up at 8-0-0, 54 lb down and 31 lb up at 10-0-0, 54 lb down and 31 lb up at 12-0-0, 54 lb down and 31 lb up at 14-0-0, 54 lb down and 31 lb up at 16-0-0, 54 lb down and 31 lb up at 18-0-0, 96 lb down and 69 lb up at 24-0-0, 96 lb down and 69 lb up at 26-0-0, 96 lb down and 69 lb up at 28-0-0, 96 lb down and 69 lb up at 30-0-0, 96 lb down and 69 lb up at 32-0-0, and 96 lb down and 69 lb up at 34-0-0, and 96 lb down and 69 lb up at 36-0-0 on top chord, and 8 lb down at 8-0-0, 7 lb down and 1 lb up at 10-0-0, 7 lb down and 1 lb up at 12-0-0, 7 lb down and 1 lb up at 14-0-0, 7 lb down and 1 lb up at 16-0-0, 7 lb down and 1 lb up at 18-0-0, 44 lb down and 43 lb up at 20-0-0, 222 lb down and 74 lb up at 24-0-0, 31 lb down at 26-0-0, 31 lb down at 28-0-0, 31 lb down at 30-0-0, 31 lb down at 32-0-0, and 31 lb down at 34-0-0, and 222 lb down and 74 lb up at 35-11-4 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

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, 4-8=-70, 8-9=-70, 9-11=-70, 11-12=-70, 13-23=-20
   Concentrated Loads (lb)
   Vert: 9=-46(F) 11=-46(F) 19=1(F) 18=-44(F) 17=-222(F) 10=-46(F) 15=-25(F) 14=-222(F) 16=-25(F) 30=-46(F) 31=-46(F) 32=-46(F) 33=-46(F) 34=-3(F) 35=1(F) 36=1(F) 37=1(F) 38=1(F) 39=-25(F) 40=-25(F) 41=-25(F)

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	C11	Hip Girder	1	1	I49388477

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:42 2021 Page 1
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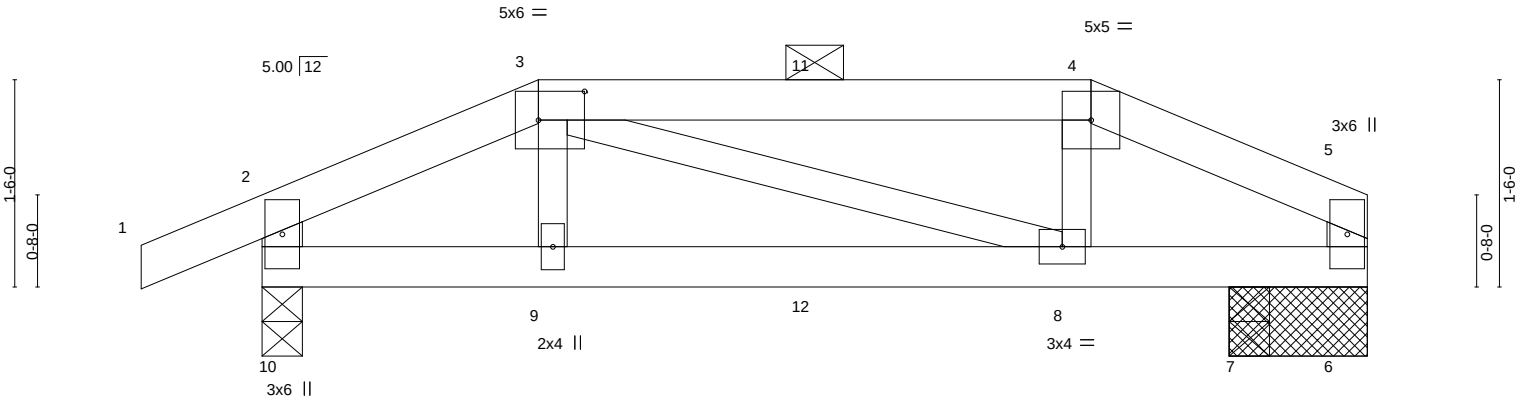

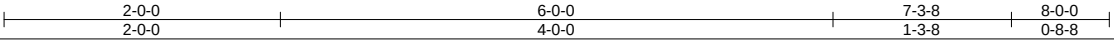

Plate Offsets (X,Y)-- [3:0-4-0,0-2-8]

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	0.27	Vert(LL)	-0.02	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.04	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	8-9	>999	240	Weight: 25 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-6: 2x4 SPF No.2

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

REACTIONS. (size) 10=0-3-8, 6=1-0-0, 7=0-3-8
Max Horz 10=23(LC 5)
Max Uplift 10=-95(LC 4), 6=-30(LC 9), 7=-49(LC 4)
Max Grav 10=401(LC 1), 6=156(LC 1), 7=201(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-447/107, 3-4=-313/80, 4-5=-378/85, 2-10=-343/91
BOT CHORD 9-10=-88/371, 8-9=-84/373, 7-8=-70/318, 6-7=-70/318

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 10, 30 lb uplift at joint 6 and 49 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 108 lb down and 94 lb up at 2-0-0, and 54 lb down and 31 lb up at 4-0-0, and 108 lb down and 94 lb up at 6-0-0 on top chord, and 12 lb down and 3 lb up at 2-0-0, and 7 lb down and 1 lb up at 4-0-0, and 12 lb down and 3 lb up at 5-11-4 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, 3-4=-70, 4-5=-70, 6-10=-20

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=3(F) 8=3(F) 12=1(F)

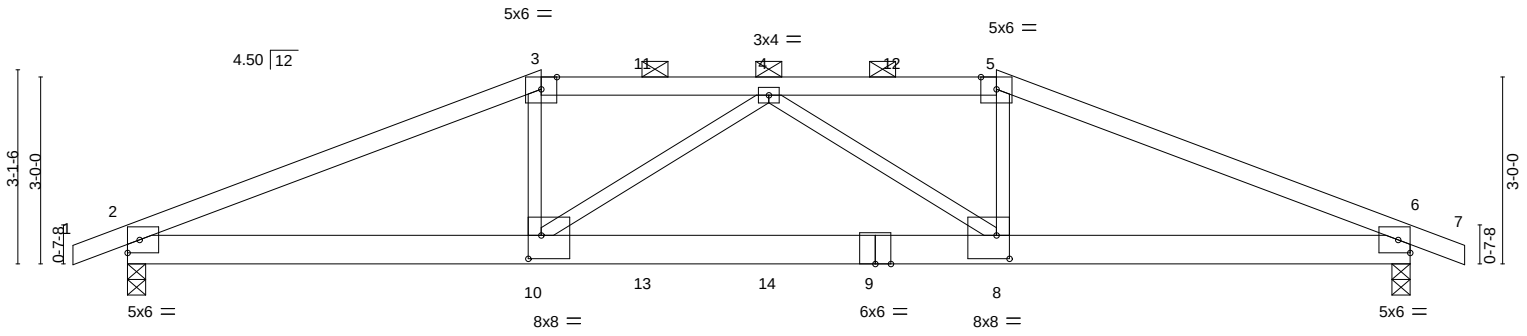
Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	D1	Hip Girder	1	1	I49388478

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:36:59 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-2_GCiJtWFn1RoGdm61n5cpva6wbFHndlRa0_gsy6hFo

0-10-8 6-7-11 10-3-8 13-11-5 20-7-0 21-5-8
0-10-8 6-7-11 3-7-13 3-7-13 6-7-11 0-10-8

Scale = 1:37.0



6-7-11 13-11-5 20-7-0
6-7-11 7-3-11 6-7-11

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

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	0.76	Vert(LL)	-0.14	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.28	8-10	>885	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	8-10	>999	240	Weight: 86 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-2-10 oc purlins, except 2-0-0 oc purlins (2-8-13 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-49(LC 34)
Max Uplift 2=-355(LC 4), 6=-356(LC 5)
Max Grav 2=1796(LC 1), 6=1794(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3913/691, 3-4=-3490/667, 4-5=-3487/669, 5-6=-3909/693
BOT CHORD 2-10=-596/3531, 8-10=-690/3889, 6-8=-567/3527
WEBS 3-10=-144/1152, 4-10=-615/170, 4-8=-619/168, 5-8=-145/1151

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=355, 6=356.
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) 111 lb down and 60 lb up at 8-3-8, and 111 lb down and 60 lb up at 10-3-8, and 111 lb down and 60 lb up at 12-3-8 on top chord, and 573 lb down and 182 lb up at 6-7-11, 67 lb down at 8-3-8, 67 lb down at 10-3-8, and 67 lb down at 12-3-8, and 573 lb down and 182 lb up at 13-11-5 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: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-51(B) 10=-573(B) 4=-108(B) 8=-573(B) 11=-108(B) 12=-108(B) 13=-51(B) 14=-51(B)

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	D2	Hip	1	1	I49388479
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:00 2021 Page 1
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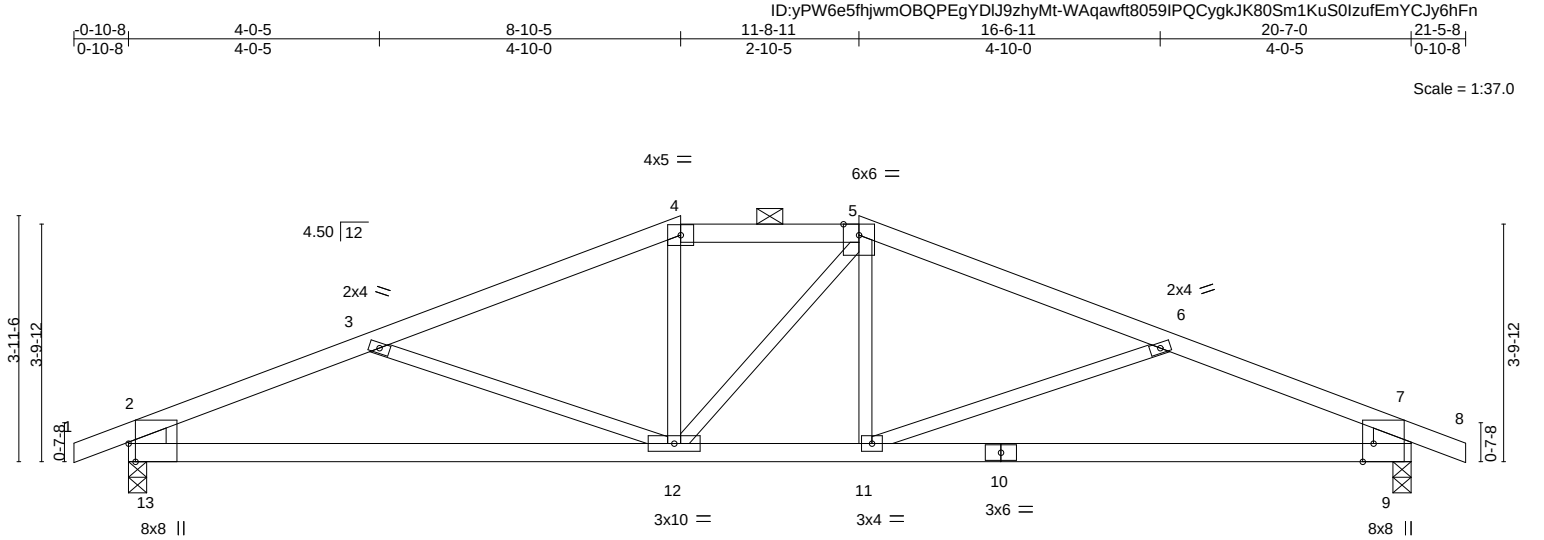

Plate Offsets (X,Y)-- [9:0-3-8,Edge], [13:0-3-8,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.14	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.30	9-11	>796	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	11-12	>999	240	Weight: 69 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,7-9: 2x8 SP DSS

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

REACTIONS. (size) 13=0-3-8, 9=0-3-8
Max Horz 13=-48(LC 9)
Max Uplift 13=-173(LC 4), 9=-173(LC 5)
Max Grav 13=981(LC 1), 9=981(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1596/278, 3-4=-1377/190, 4-5=-1252/207, 5-6=-1376/191, 6-7=-1596/278, 2-13=-886/219, 7-9=-886/219
BOT CHORD 12-13=-230/1403, 11-12=-79/1251, 9-11=-201/1403

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=173, 9=173.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	D3	COMMON GIRDER	1	3	I49388480
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:01 2021 Page 1
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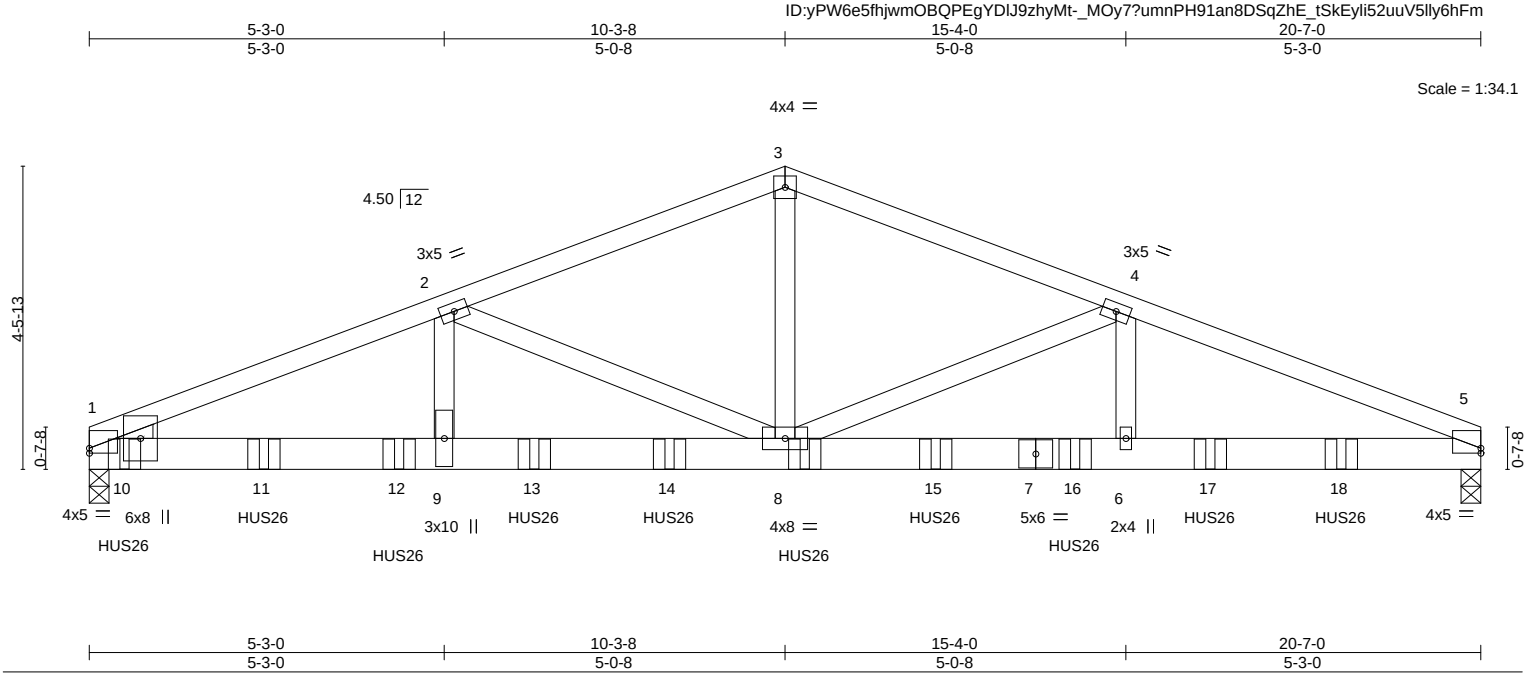

Plate Offsets (X,Y)-- [1:0-0-0,0-0-14], [5:0-0-0,0-0-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.11	6-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.18	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	6-8	>999	240	Weight: 282 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 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) 5=0-3-8, 1=0-3-8
Max Horz 1=-43(LC 28)
Max Uplift 5=-463(LC 9), 1=-263(LC 8)
Max Grav 5=4674(LC 1), 1=6431(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9545/543, 2-3=-6363/398, 3-4=-6362/398, 4-5=-9292/708
BOT CHORD 1-9=-497/8723, 8-9=-497/8723, 6-8=-613/8486, 5-6=-613/8486
WEBS 3-8=-217/4079, 4-8=-2870/389, 4-6=-202/2216, 2-8=-3129/221, 2-9=-74/2404

NOTES-
1) N/A
2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
3) 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.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 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
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=463, 1=263.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-12 oc max. starting at 0-6-4 from the left end to 2-7-0 to connect truss(es) to front face of bottom chord.
11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-12 oc max. starting at 4-7-0 from the left end to 18-6-4 to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

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LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 1-5=-20
   Concentrated Loads (lb)
   Vert: 8=-646(F) 10=-1765(F) 11=-1762(F) 12=-542(F) 13=-557(F) 14=-618(F) 15=-725(F) 16=-738(F) 17=-738(F) 18=-1189(F)

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J1	Diagonal Hip Girder	2	1	I49388481

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:01 2021 Page 1
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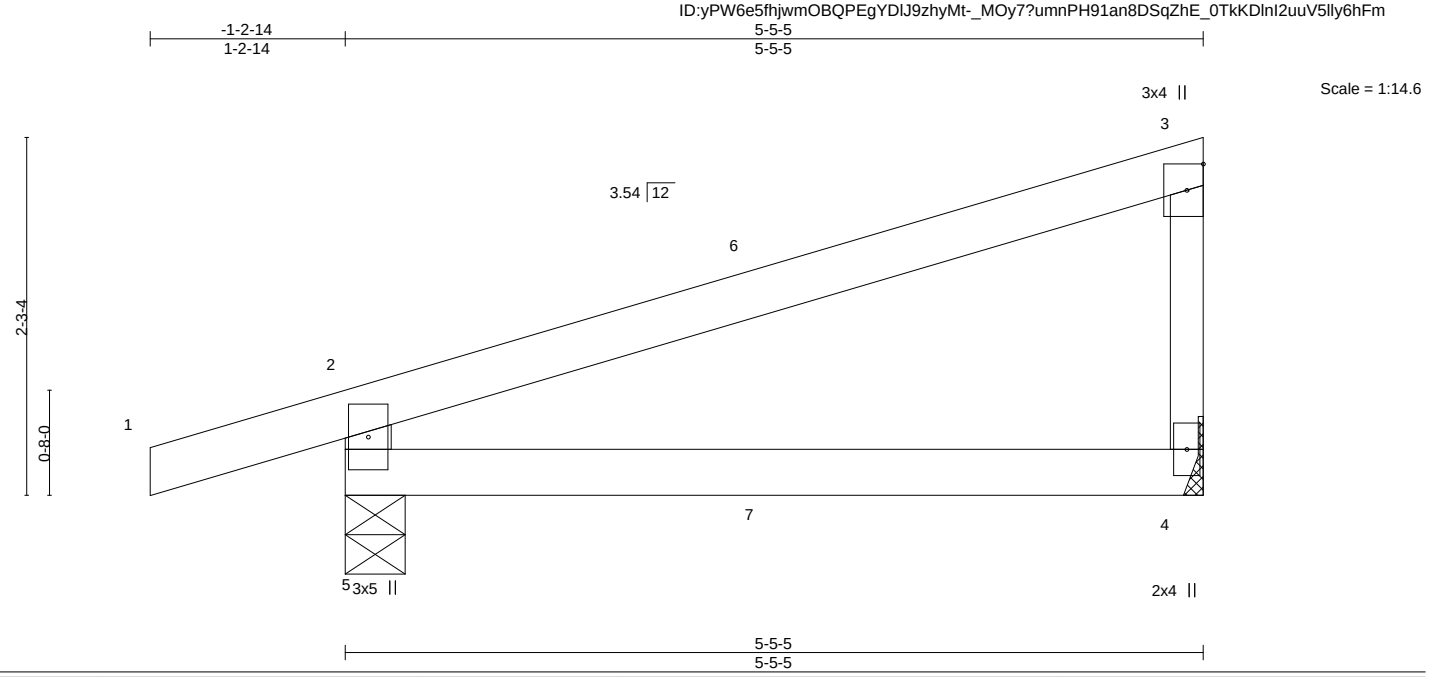

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-5-5 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=91(LC 5)
Max Uplift 5=-103(LC 4), 4=-47(LC 8)
Max Grav 5=342(LC 1), 4=219(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-303/141

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) 4 except (jt=lb) 5=103.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 31 lb up at 2-8-7, and 67 lb down and 31 lb up at 2-8-7 on top chord, and 2 lb down and 1 lb up at 2-8-7, and 2 lb down and 1 lb up at 2-8-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J2	Jack-Open	6	1	I49388482

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:09 2021 Page 1
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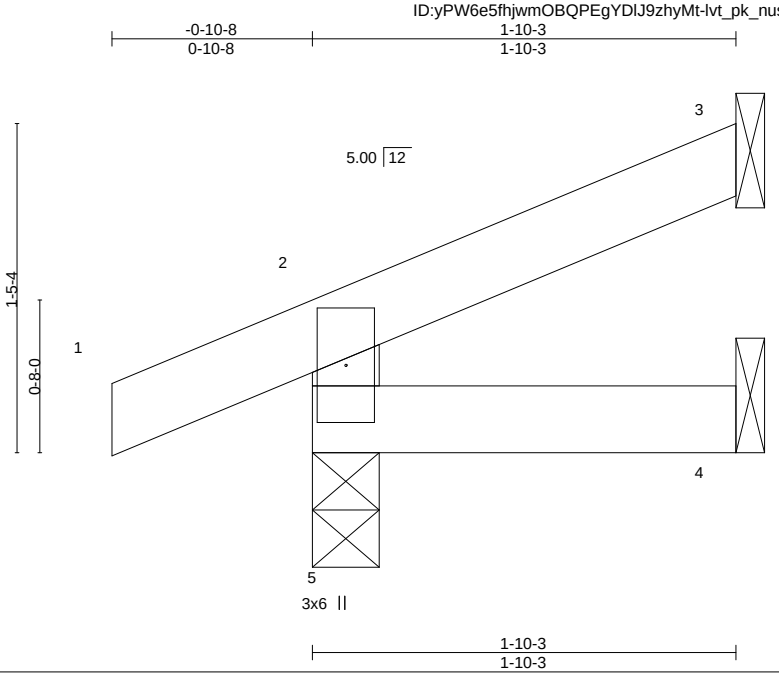

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-3 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=38(LC 8)
Max Uplift 5=-35(LC 4), 3=-26(LC 8)
Max Grav 5=169(LC 1), 3=42(LC 1), 4=30(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J3	Jack-Open	3	1	I49388483

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:14 2021 Page 1

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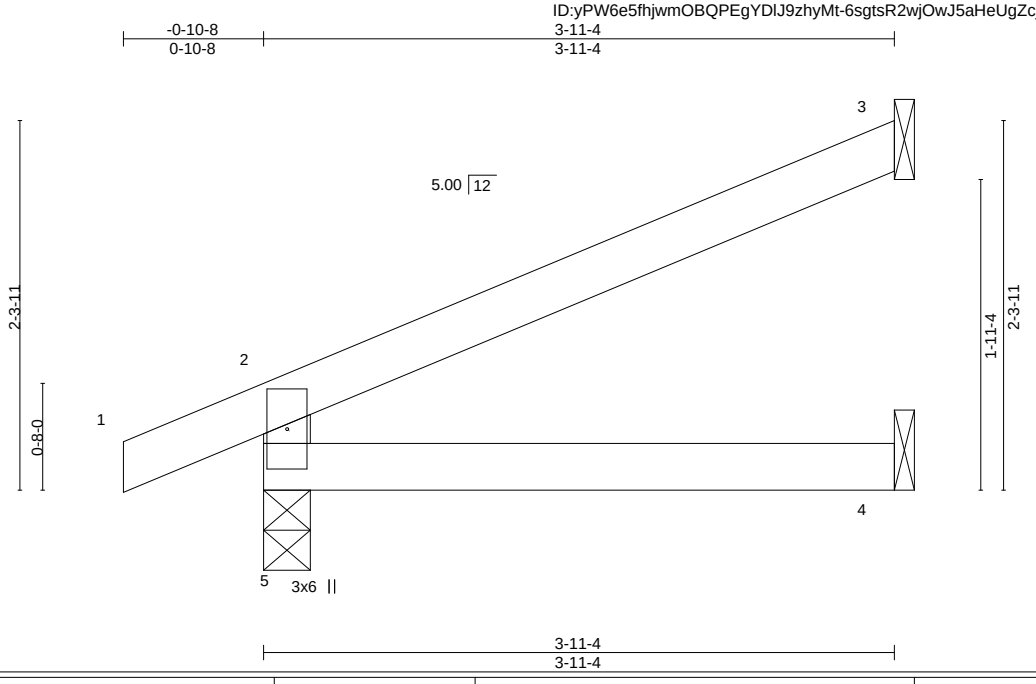

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=72(LC 8)
Max Uplift 5=-37(LC 8), 3=-59(LC 8)
Max Grav 5=249(LC 1), 3=114(LC 1), 4=70(LC 3)

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

NOTES-

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J4	Diagonal Hip Girder	1	1	I49388484
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:15 2021 Page 1
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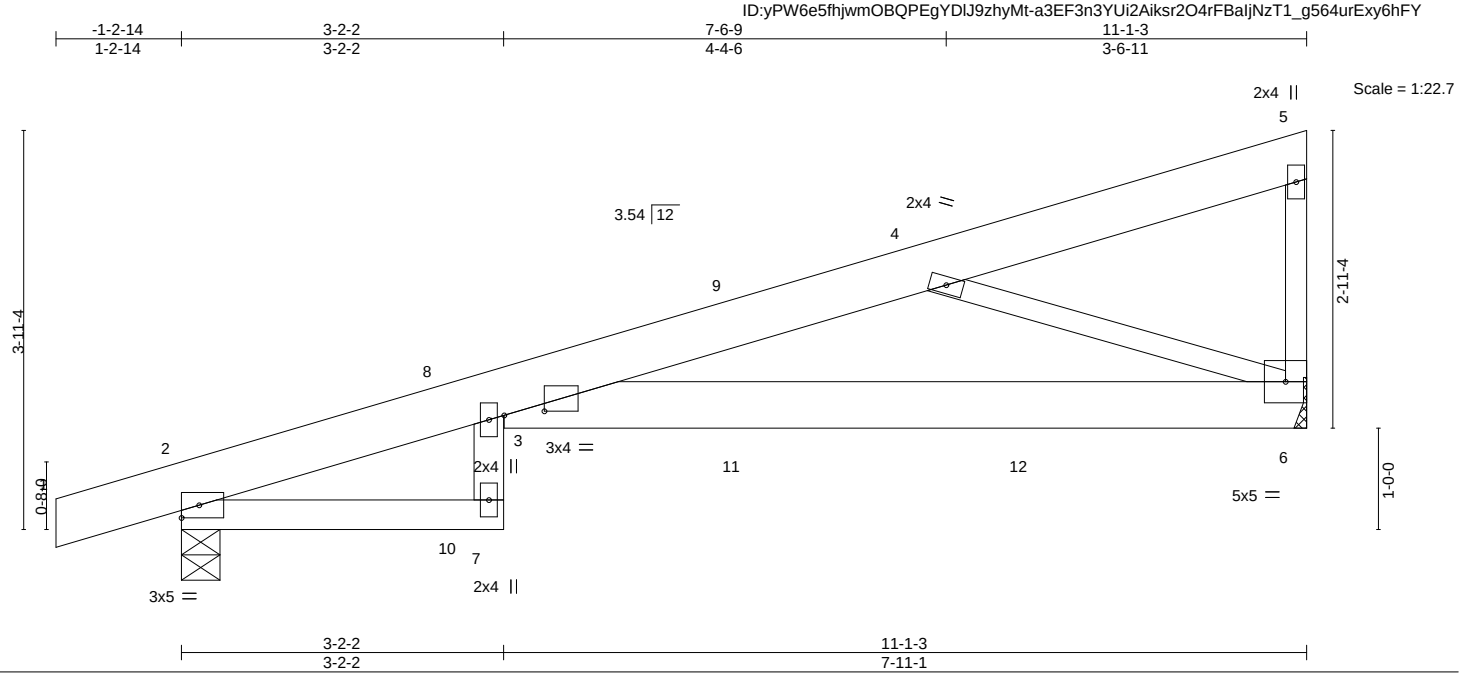

Plate Offsets (X,Y)-- [3:0-4-12,0-0-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.27	3-6	>476	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.49	3-6	>264	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.20	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.26	3-6	>492	240	Weight: 54 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-6: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
3-7: 2x4 SPF No.2

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

REACTIONS. (size) 6=Mechanical, 2=0-4-9
Max Horz 2=138(LC 5)
Max Uplift 6=-238(LC 8), 2=-206(LC 4)
Max Grav 6=850(LC 1), 2=731(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-316/25, 3-4=-1312/385
BOT CHORD 3-6=-422/1373
WEBS 4-6=-1392/459

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=238, 2=206.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 31 lb up at 2-8-7, 67 lb down and 31 lb up at 2-8-7, and 93 lb down and 52 lb up at 5-6-6, and 93 lb down and 52 lb up at 5-6-6 on top chord, and 2 lb down and 1 lb up at 2-8-7, 2 lb down and 1 lb up at 2-8-7, 32 lb down and 26 lb up at 5-6-6, 32 lb down and 26 lb up at 5-6-6, and 221 lb down and 86 lb up at 8-4-5, and 221 lb down and 86 lb up at 8-4-5 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: 1-5=-70, 2-7=-20, 3-6=-20

December 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-18(F=-9, B=-9) 10=3(F=1, B=1) 11=-64(F=-32, B=-32) 12=-442(F=-221, B=-221)

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J5	Jack-Open	2	1	I49388485
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:16 2021 Page 1
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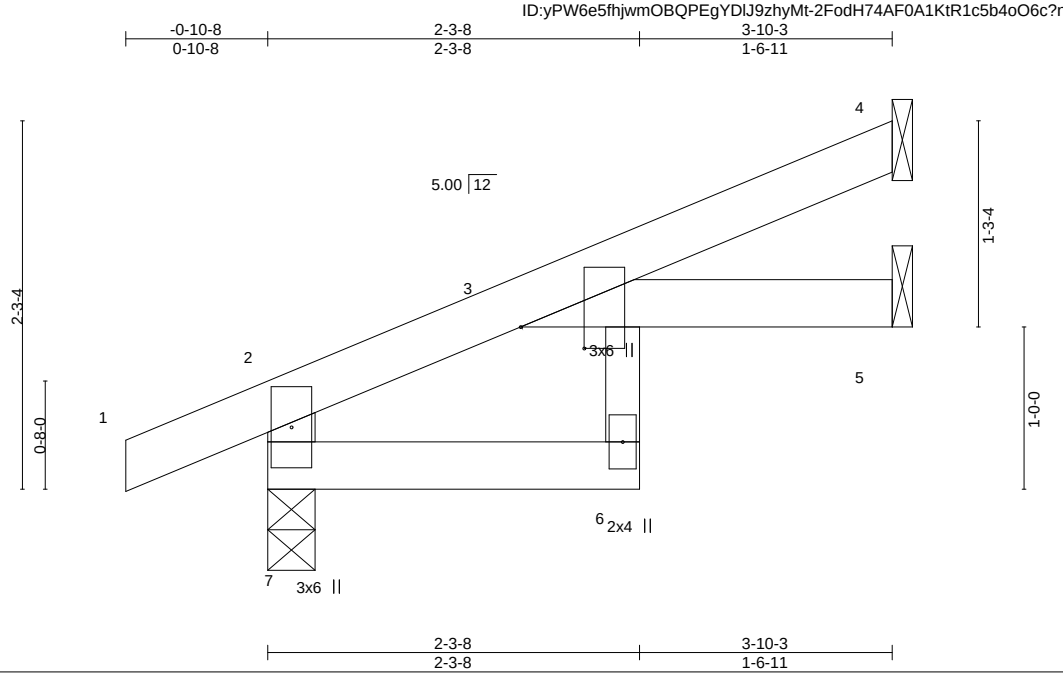

Plate Offsets (X,Y)-- [3:0-1-9,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.04	6	>999	240		
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)	0.03	6	>999	240	Weight: 12 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-3 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=71(LC 8)
Max Uplift 7=-32(LC 8), 4=-42(LC 8), 5=-2(LC 8)
Max Grav 7=252(LC 1), 4=99(LC 1), 5=69(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) 7, 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J6	Jack-Closed	2	1	I49388486

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:16 2021 Page 1
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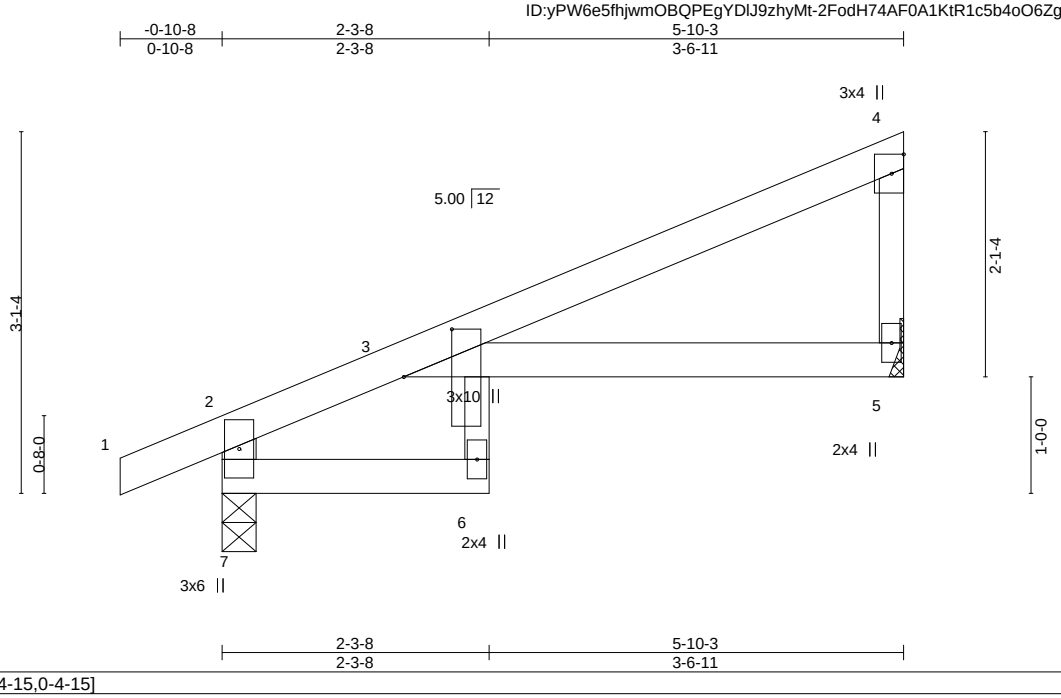

Plate Offsets (X,Y)-- [3:0-4-15,0-4-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.09	6	>718	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.18	6	>382	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.10	6	>661	240	Weight: 18 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-7: 2x4 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 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=110(LC 5)
Max Uplift 7=-51(LC 8), 5=-58(LC 8)
Max Grav 7=339(LC 1), 5=249(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-328/72

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J7	Jack-Closed	2	1	I49388487

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:17 2021 Page 1
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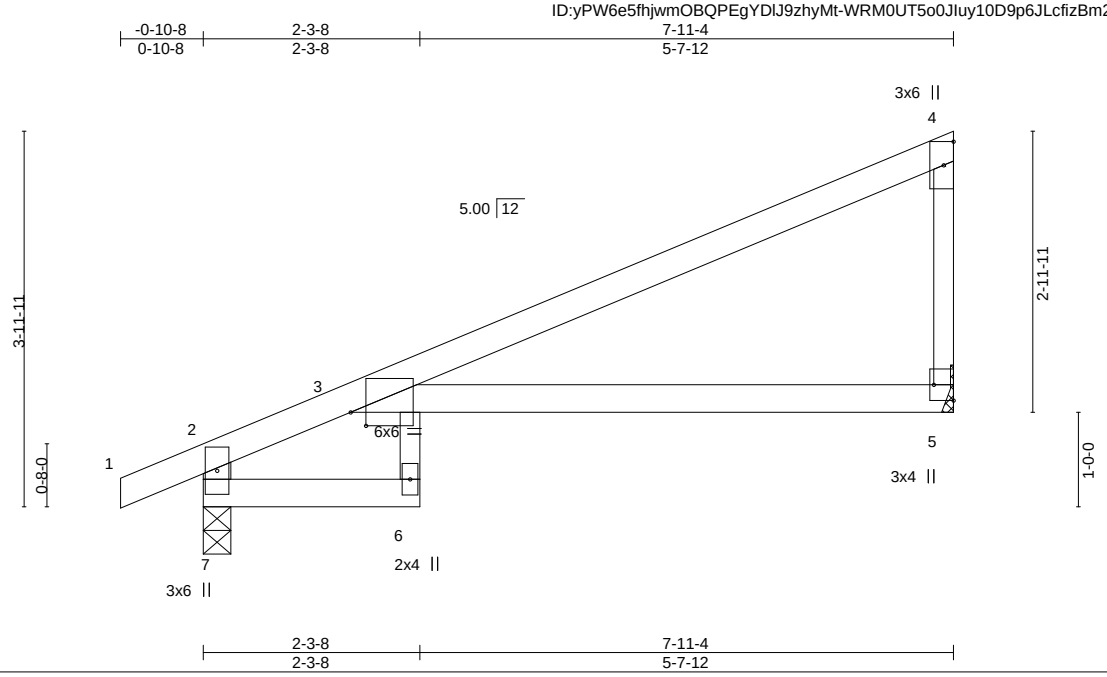

Plate Offsets (X,Y)-- [3:0-1-15,0-1-11], [5:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.20	6	>463	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.36	6	>258	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.18	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.14	6	>648	240	Weight: 24 lb	FT = 10%

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

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

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=114(LC 5)
Max Uplift 7=-10(LC 8), 5=-26(LC 8)
Max Grav 7=432(LC 1), 5=344(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-427/28

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J8	Jack-Closed	1	1	I49388488

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:17 2021 Page 1

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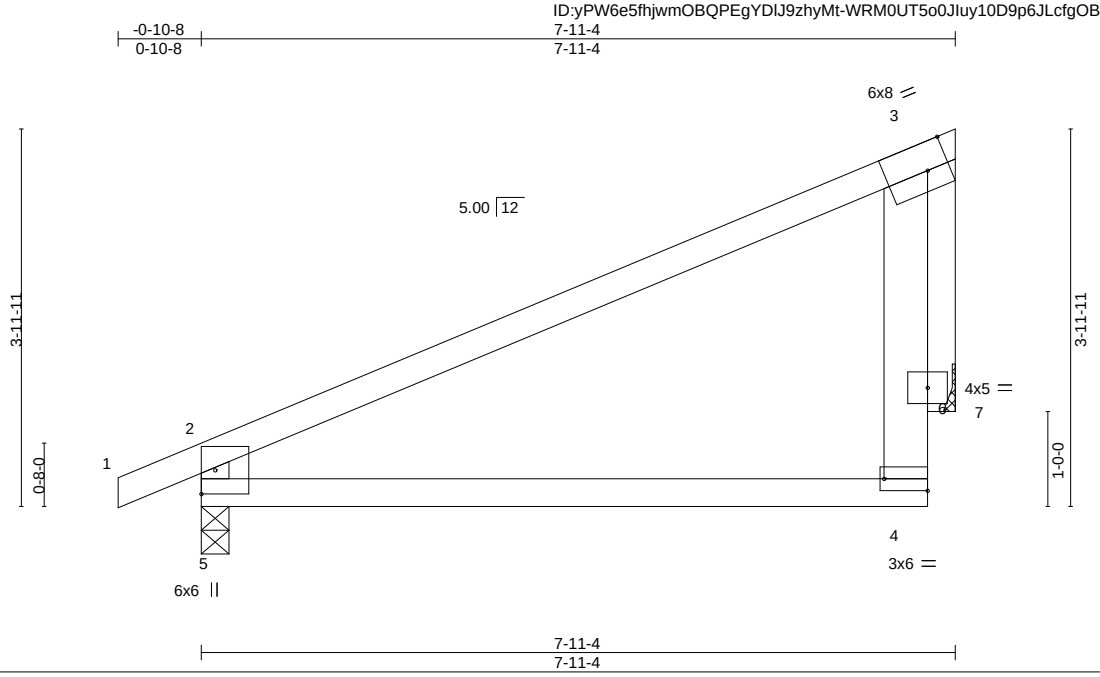

Plate Offsets (X,Y)-- [3:0-2-12,Edge], [4:Edge,0-1-8]

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	0.64	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.11	4-5	>810	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 29 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 7=Mechanical
Max Horz 5=89(LC 5)
Max Uplift 5=-7(LC 8), 7=-35(LC 8)
Max Grav 5=423(LC 1), 7=303(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-380/58, 2-3=-298/0

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) The Fabrication Tolerance at joint 2 = 6%
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) 5, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J9	Jack-Closed	7	1	I49388489

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:18 2021 Page 1
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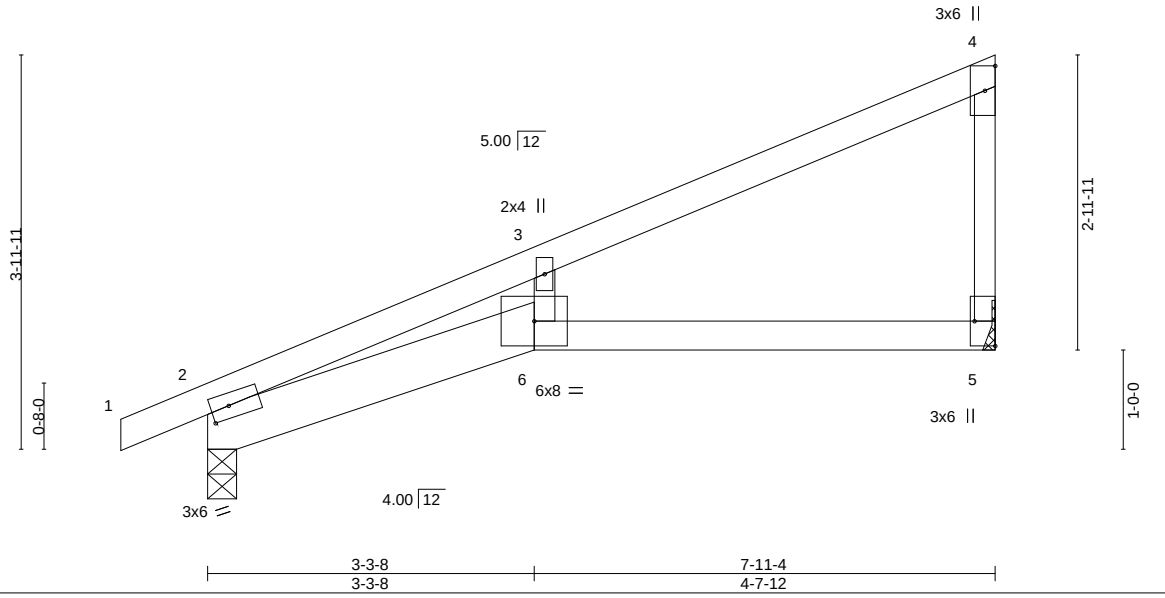

Plate Offsets (X,Y)-- [2:0-2-3,0-1-8], [5:Edge,0-2-8]

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	0.56	Vert(LL)	-0.20	6	>457	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.36	5-6	>256	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.12	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	6	>665	240	Weight: 25 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except*
5-6: 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=Mechanical, 2=0-3-8
Max Horz 2=109(LC 5)
Max Uplift 5=-28(LC 8), 2=-17(LC 8)
Max Grav 5=341(LC 1), 2=422(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); 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J9A	Jack-Closed	3	1	I49388490

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:18 2021 Page 1
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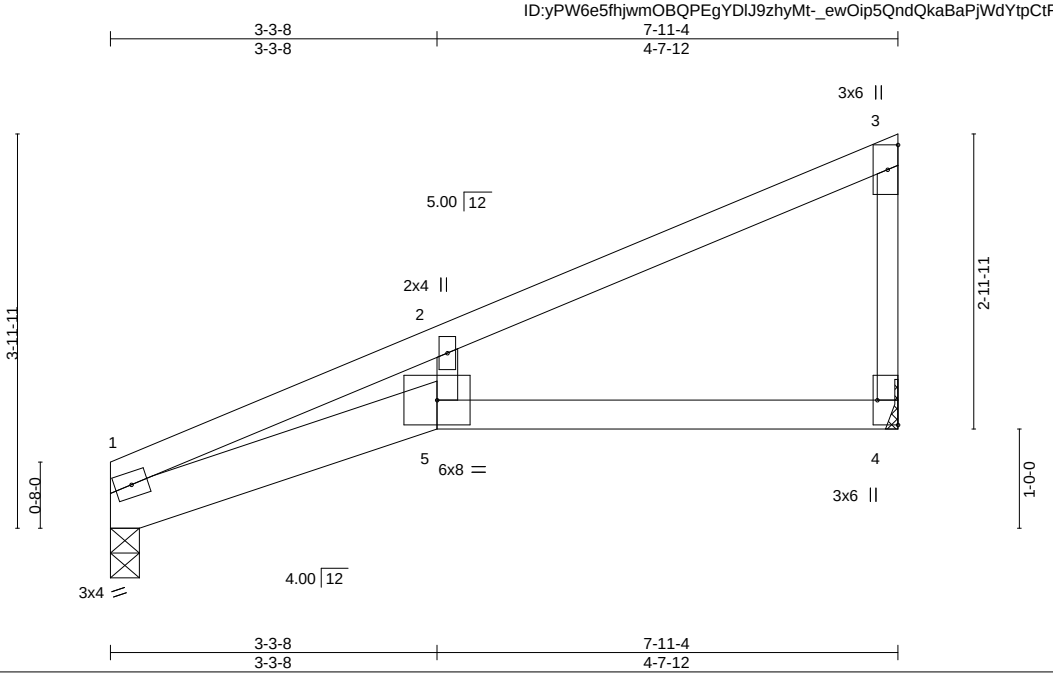

Plate Offsets (X,Y)-- [4:Edge,0-2-8]

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	0.57	Vert(LL)	-0.21	5	>434	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.38	4-5	>245	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.12	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14	5	>639	240	Weight: 24 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except*
4-5: 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) 1=0-3-8, 4=Mechanical
Max Horz 1=108(LC 5)
Max Uplift 1=-5(LC 8), 4=-29(LC 8)
Max Grav 1=346(LC 1), 4=346(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); 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) 1 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) 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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J10	Diagonal Hip Girder	1	1	I49388491

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:02 2021 Page 1
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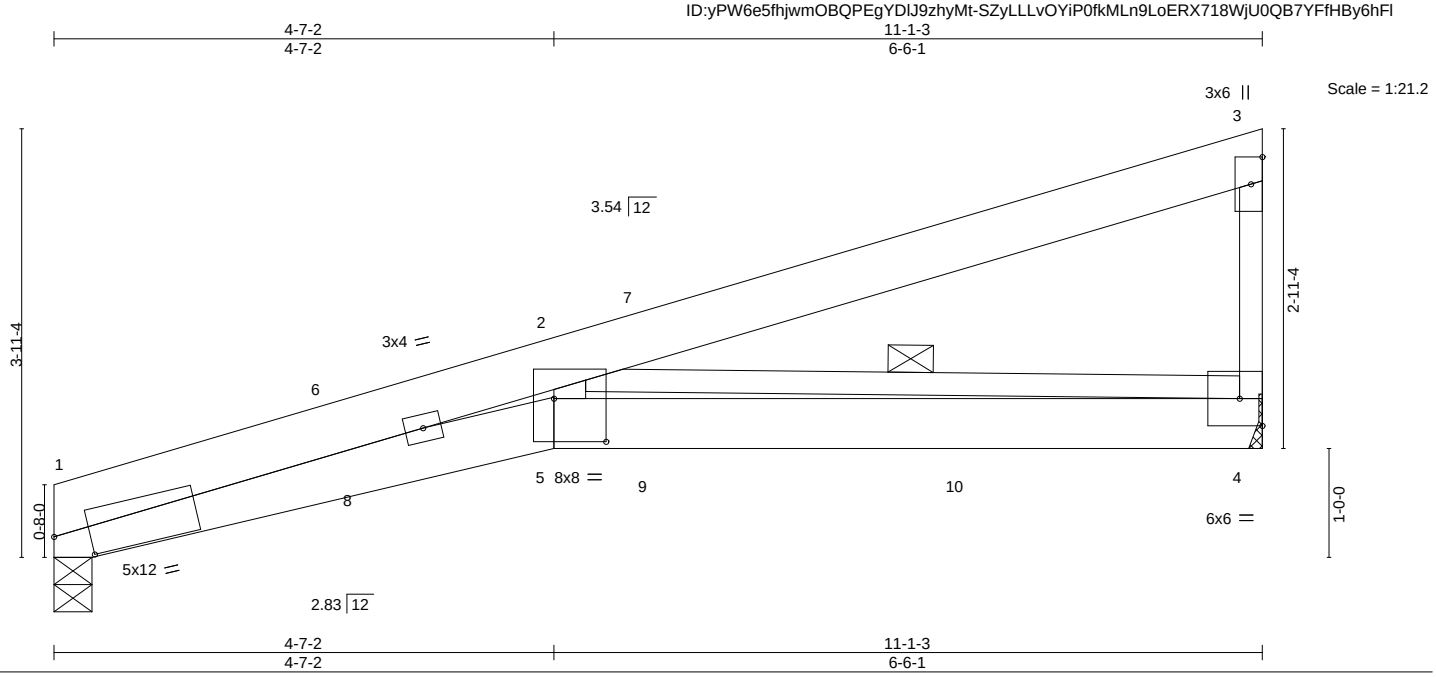

Plate Offsets (X,Y)-- [1:0-3-15,0-2-15], [5:0-5-12,0-4-12]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.22	4-5	>596	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.38	4-5	>339	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.11	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.20	4-5	>645	240	Weight: 48 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SPF No.2
BOT CHORD	2x6 SPF No.2 *Except*
	4-5: 2x6 SPF 1650F 1.4E
WEBS	2x3 SPF No.2 *Except*
	2-5: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-10-5 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-6-12 oc bracing.
WEBS	1 Row at midpt 2-4

REACTIONS. (size) 1=0-4-3, 4=Mechanical
Max Horz 1=135(LC 5)
Max Uplift 1=-133(LC 4), 4=-238(LC 8)
Max Grav 1=629(LC 1), 4=854(LC 1)

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

TOP CHORD	1-2=-2834/719, 3-4=-267/104
BOT CHORD	1-5=-749/2665, 4-5=-691/2378
WEBS	2-5=-141/890, 2-4=-2300/693

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) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=133, 4=238.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 39 lb up at 2-8-7, 67 lb down and 32 lb up at 2-8-7, and 96 lb down and 70 lb up at 5-6-6, and 94 lb down and 67 lb up at 5-6-6 on top chord, and 3 lb down at 2-8-7, 2 lb down and 1 lb up at 2-8-7, 23 lb down at 5-6-6, 22 lb down at 5-6-6, and 226 lb down and 91 lb up at 8-4-5, and 217 lb down and 89 lb up at 8-4-5 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

December 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 1-5=-20, 4-5=-20
   Concentrated Loads (lb)
   Vert: 7=-35(F=-13, B=-22) 8=-1(F=1, B=-3) 9=-30(F=-14, B=-16) 10=-443(F=-217, B=-226)

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J11	Jack-Open	1	1	I49388492
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:03 2021 Page 1
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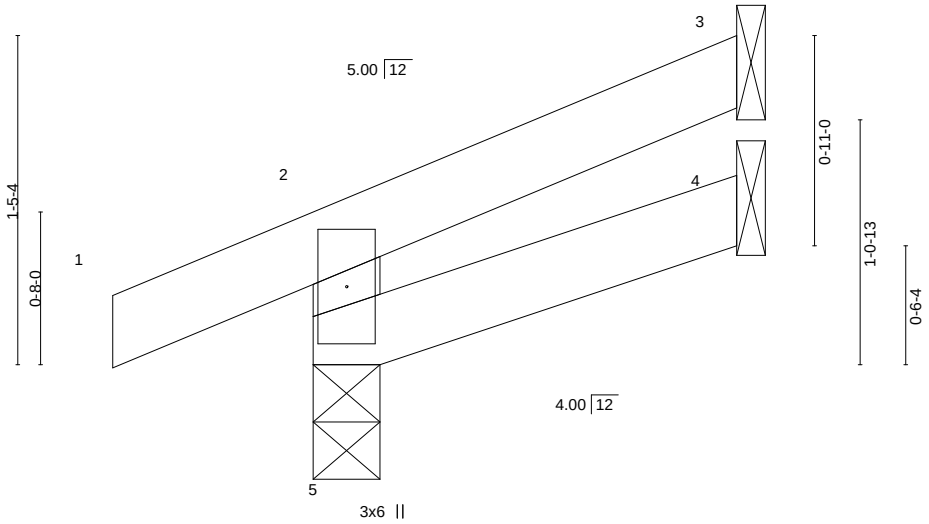
-0-10-8 1-10-3
0-10-8 1-10-3

Scale = 1:10.1



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	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-3 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=38(LC 5)
Max Uplift 5=-34(LC 4), 3=-27(LC 8)
Max Grav 5=169(LC 1), 3=42(LC 1), 4=30(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J11A	Jack-Open	1	1	I49388493
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:03 2021 Page 1
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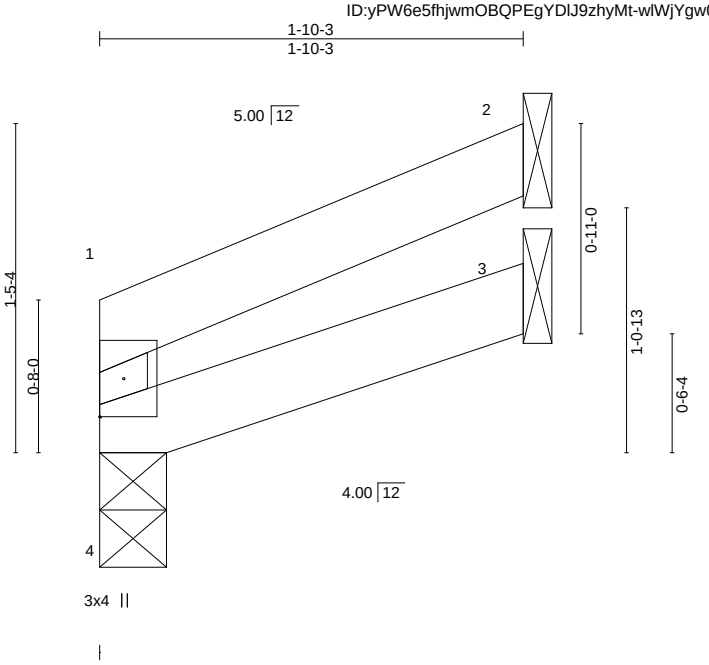

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=29(LC 5)
Max Uplift 4=-1(LC 8), 2=-32(LC 8)
Max Grav 4=78(LC 1), 2=58(LC 1), 3=34(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J12	Jack-Open	1	1	I49388494
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:04 2021 Page 1
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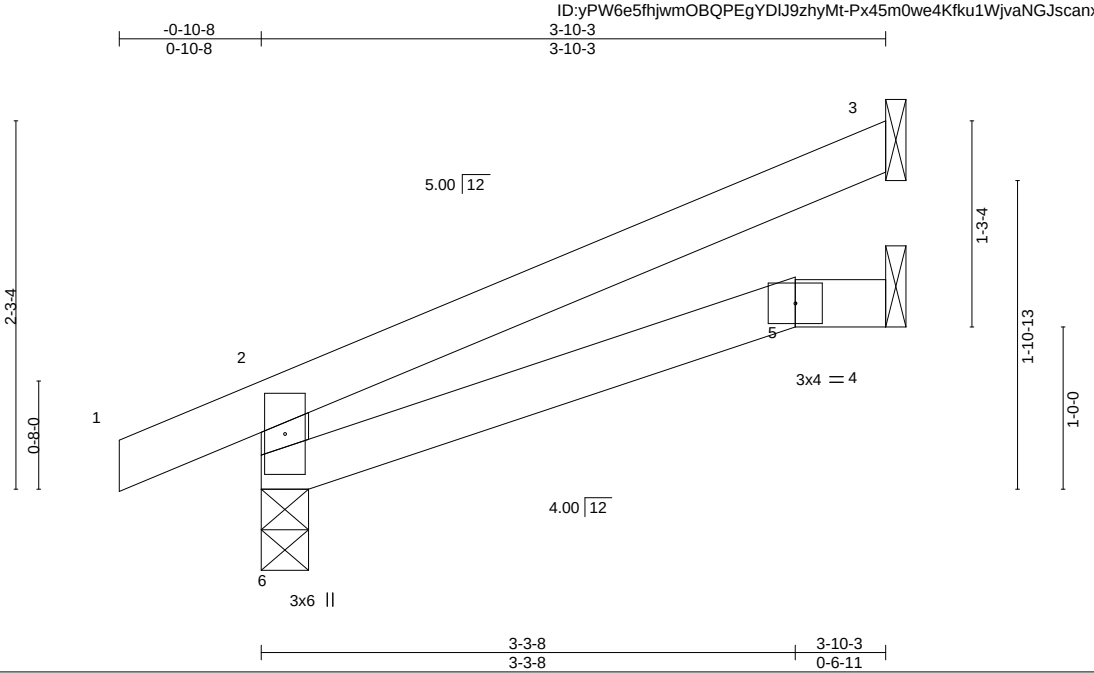

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-3 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=70(LC 8)
Max Uplift 6=-36(LC 8), 3=-58(LC 8)
Max Grav 6=245(LC 1), 3=112(LC 1), 4=68(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J12A	Jack-Open	1	1	I49388495
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:04 2021 Page 1
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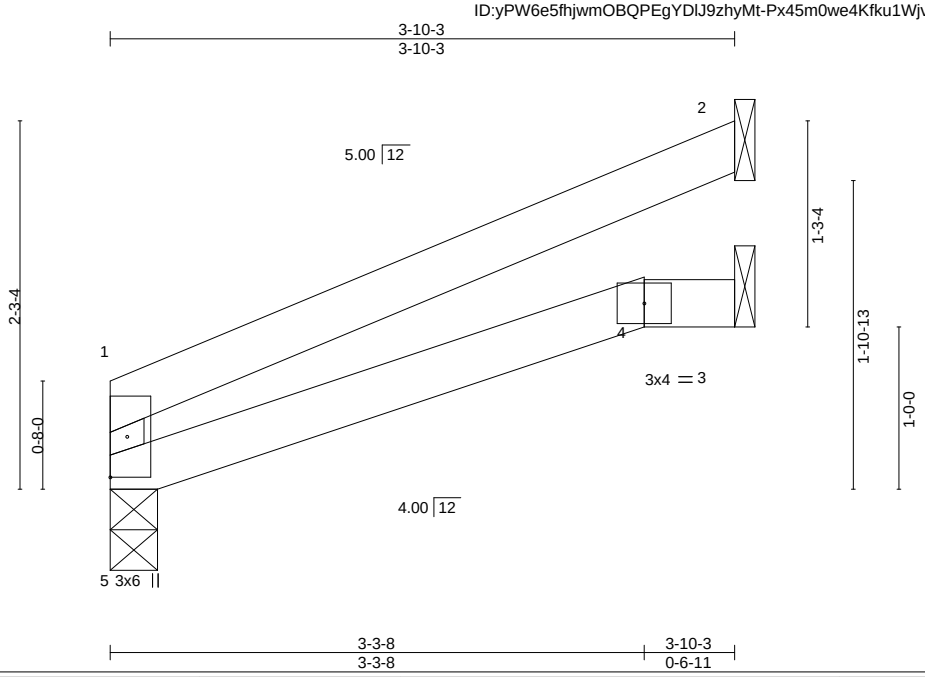

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 5=56(LC 8)
Max Uplift 5=-10(LC 8), 2=-62(LC 8)
Max Grav 5=166(LC 1), 2=121(LC 1), 3=71(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J13	Jack-Closed	1	1	I49388496
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:05 2021 Page 1
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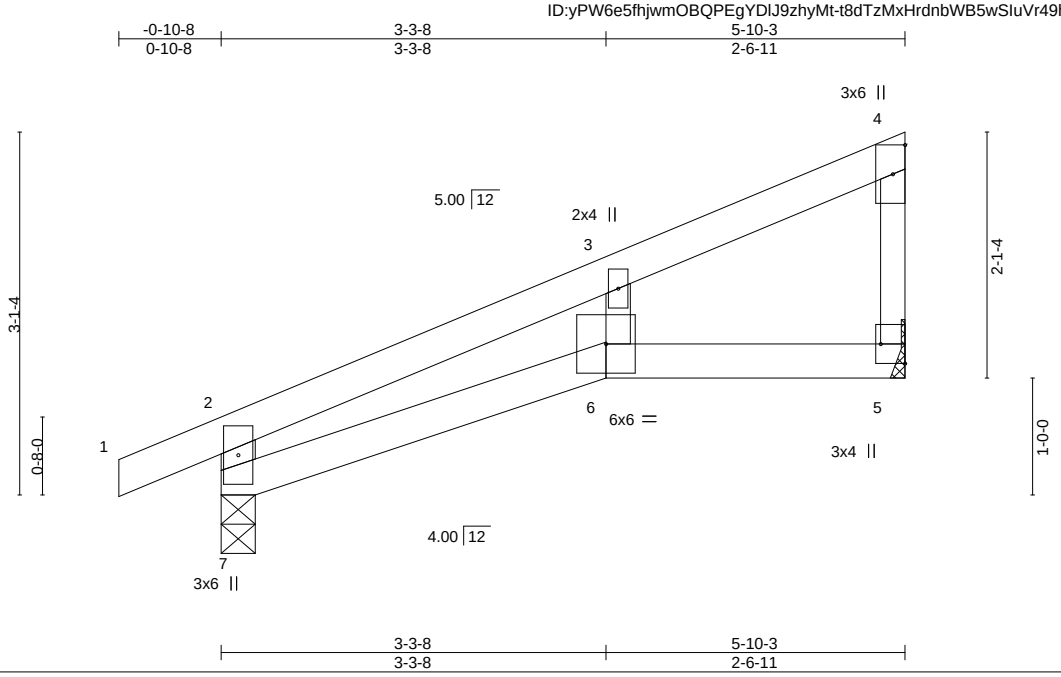

Plate Offsets (X,Y)-- [5:Edge,0-2-8]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.07	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.12	6	>572	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-R		Wind(LL)	0.07	6	>981	240	Weight: 17 lb	FT = 10%

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

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

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=111(LC 5)
Max Uplift 7=-56(LC 8), 5=-61(LC 8)
Max Grav 7=330(LC 1), 5=245(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-294/72

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J13A	Jack-Closed	1	1	I49388497
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:06 2021 Page 1
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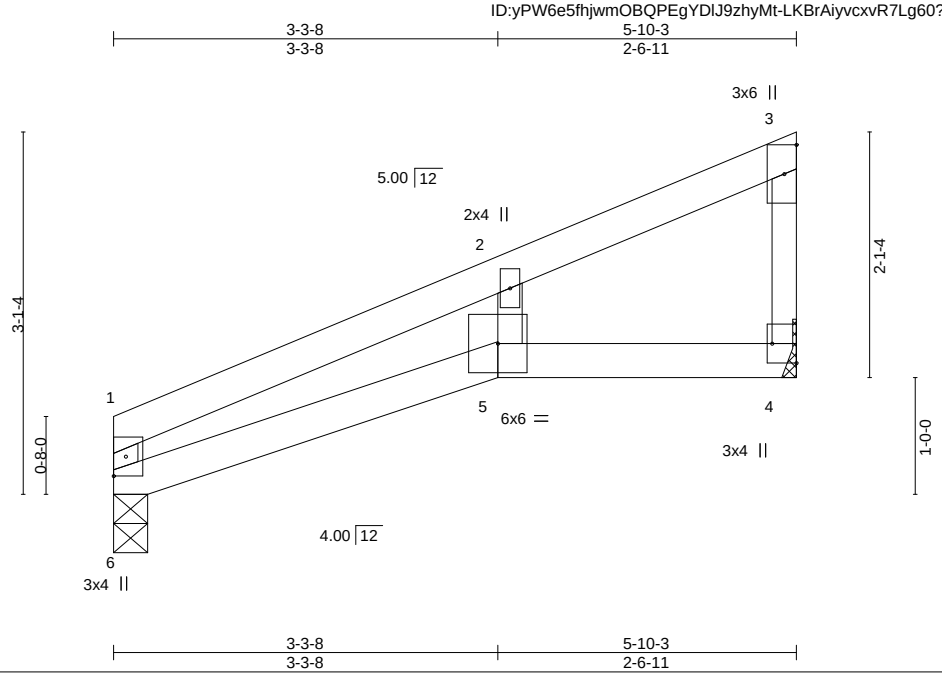

Plate Offsets (X,Y)-- [4:Edge,0-2-8]

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	0.38	Vert(LL)	-0.07	5	>914	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.13	5	>523	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.07	5	>920	240	Weight: 16 lb	FT = 10%

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

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

REACTIONS. (size) 6=0-3-8, 4=Mechanical
Max Horz 6=103(LC 5)
Max Uplift 6=-32(LC 8), 4=-63(LC 8)
Max Grav 6=254(LC 1), 4=254(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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J14	Diagonal Hip Girder	2	1	I49388498

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:06 2021 Page 1
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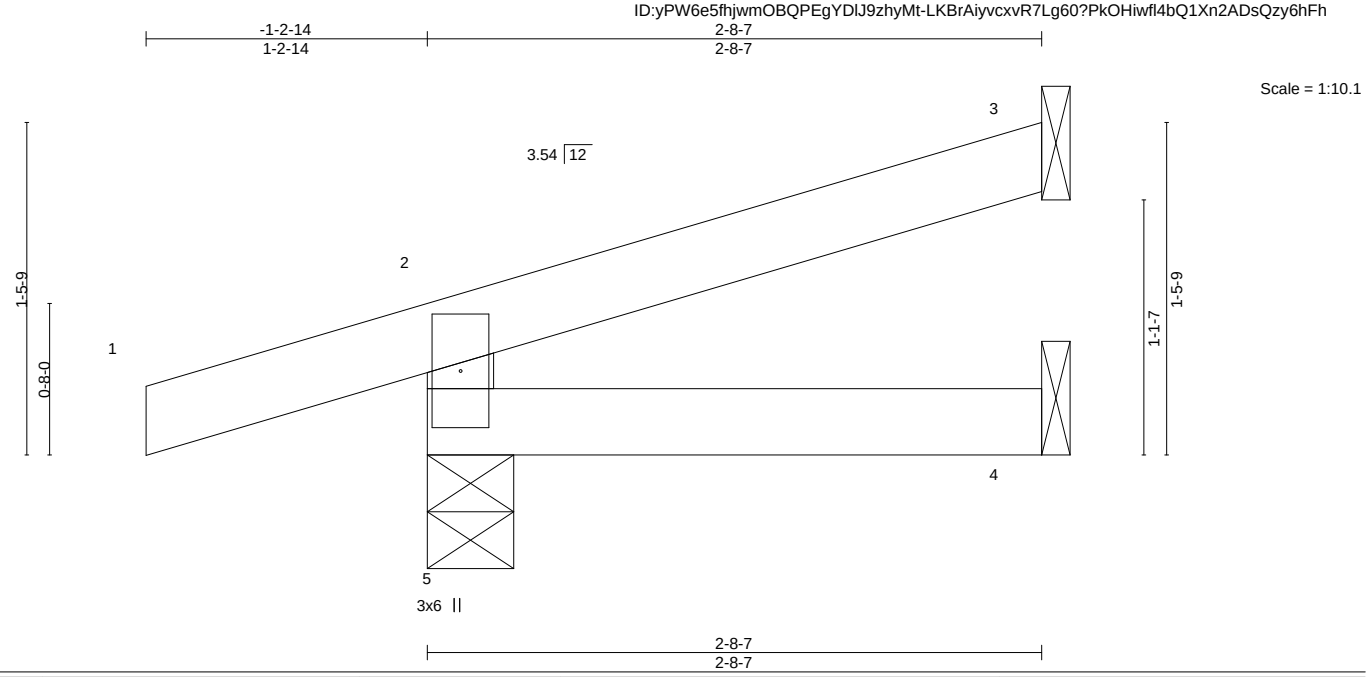

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-7 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=50(LC 12)
Max Uplift 5=-102(LC 6), 3=-40(LC 12), 4=-2(LC 19)
Max Grav 5=95(LC 1), 3=30(LC 1), 4=32(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=102.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19 lb down and 7 lb up at -1-2-14, and 19 lb down and 7 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-2=-24(F=23, B=23), 2=-5(F=33, B=33)-to-3=-49(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J15	Jack-Open	8	1	I49388499

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:07 2021 Page 1
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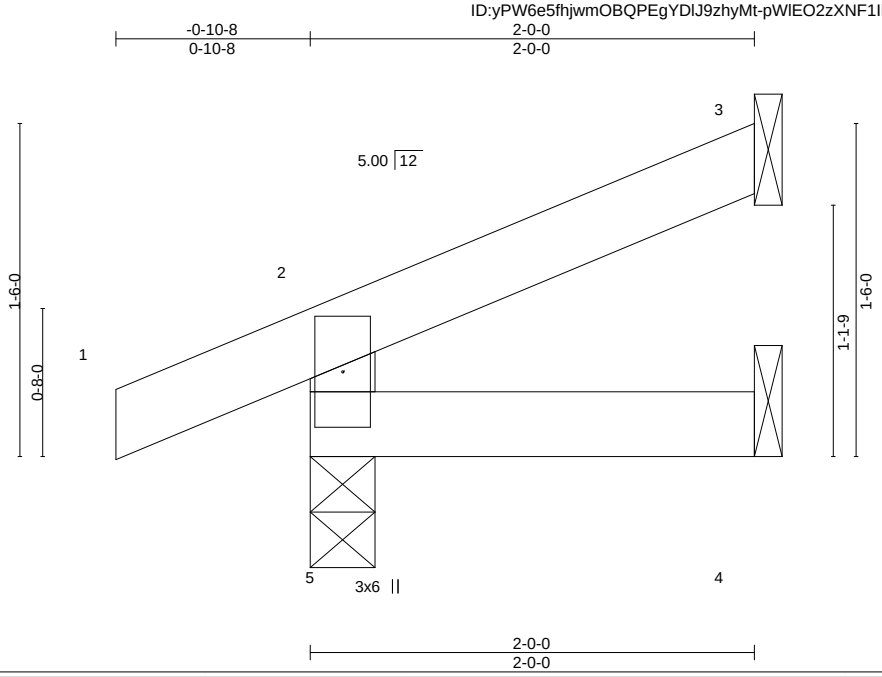

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=40(LC 8)
Max Uplift 5=-34(LC 4), 3=-29(LC 8)
Max Grav 5=174(LC 1), 3=48(LC 1), 4=33(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J16	Jack-Open	2	1	I49388500
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:07 2021 Page 1
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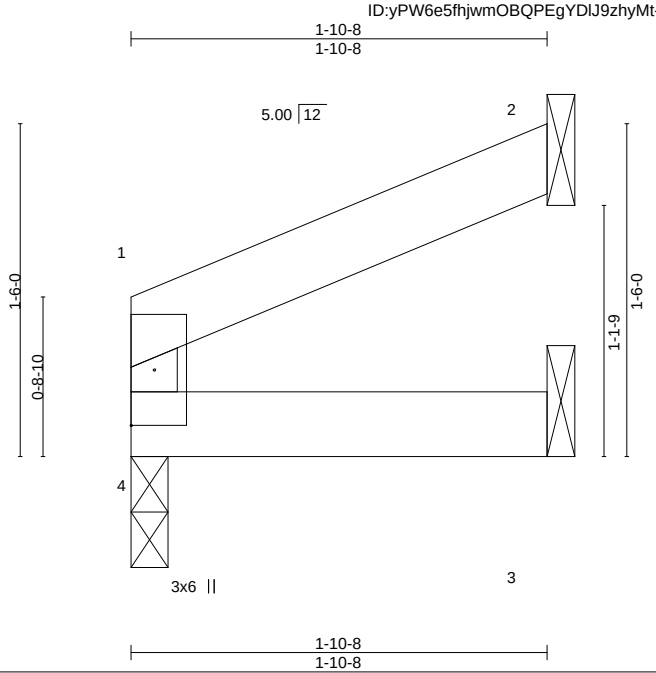

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

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

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

REACTIONS. (size) 4=0-2-0, 2=Mechanical, 3=Mechanical
Max Horz 4=30(LC 5)
Max Uplift 4=-2(LC 8), 2=-32(LC 8)
Max Grav 4=79(LC 1), 2=59(LC 1), 3=34(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 at joint(s) 4.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J18	Diagonal Hip Girder	2	1	I49388501

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:08 2021 Page 1
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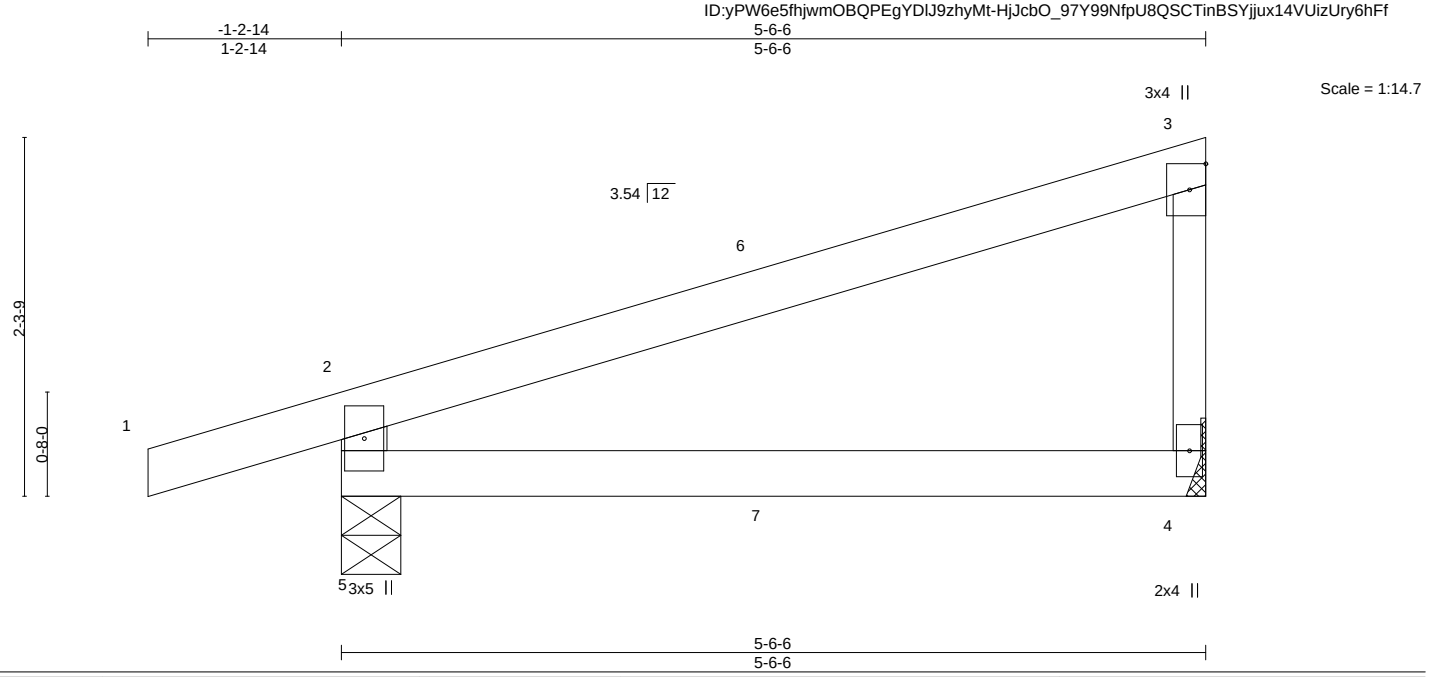

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.06	4-5	>992	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 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=93(LC 5)
Max Uplift 5=-104(LC 4), 4=-48(LC 8)
Max Grav 5=348(LC 1), 4=226(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-306/142

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=104.
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) 69 lb down and 40 lb up at 2-9-8, and 67 lb down and 33 lb up at 2-9-8 on top chord, and 3 lb down at 2-9-8, and 2 lb down and 1 lb up 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: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=-2(F=1, B=-3)

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J19	Jack-Open	2	1	I49388502
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:08 2021 Page 1
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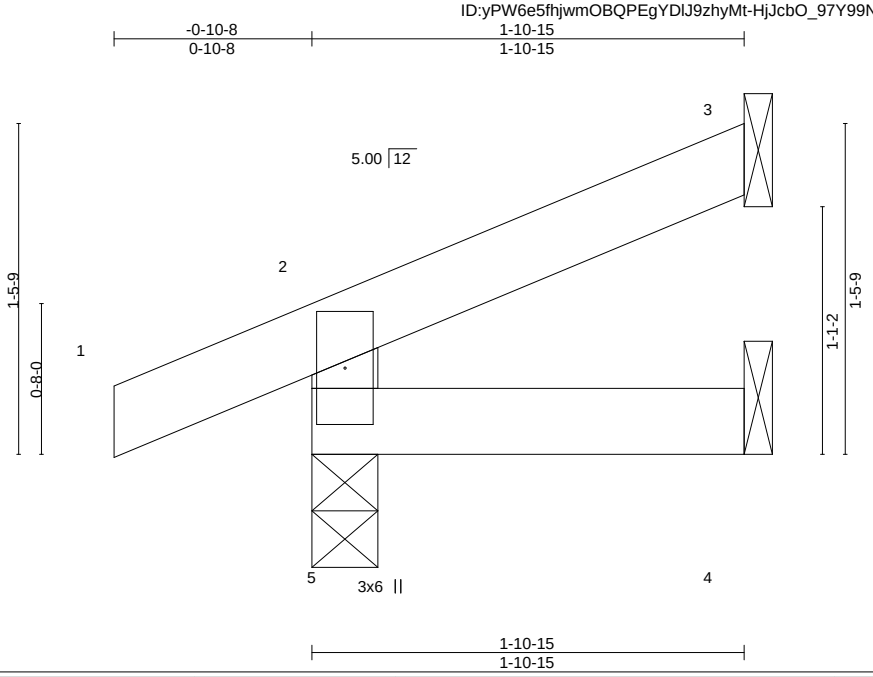

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=39(LC 8)
Max Uplift 5=-34(LC 4), 3=-27(LC 8)
Max Grav 5=171(LC 1), 3=44(LC 1), 4=31(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J20	Jack-Open	2	1	I49388503

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:09 2021 Page 1

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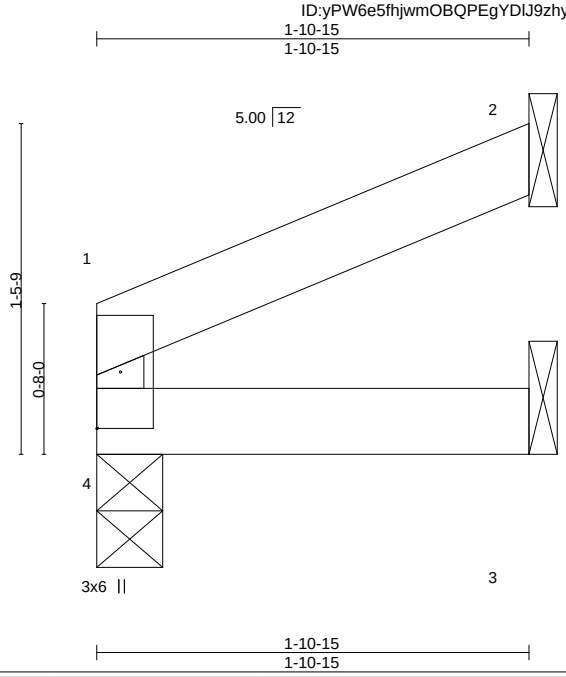

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-10-15 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=29(LC 5)
Max Uplift 4=-2(LC 8), 2=-32(LC 8)
Max Grav 4=81(LC 1), 2=60(LC 1), 3=35(LC 3)

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

NOTES-

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J21	Jack-Open	7	1	I49388504
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:10 2021 Page 1
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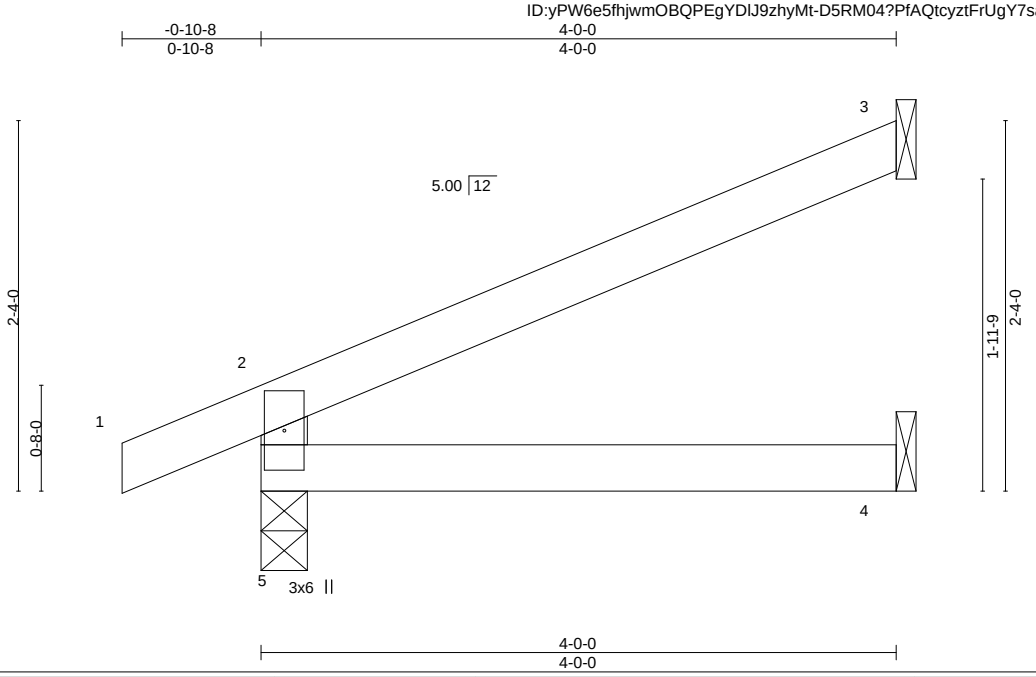

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 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, 3=Mechanical, 4=Mechanical
Max Horz 5=73(LC 8)
Max Uplift 5=-37(LC 8), 3=-60(LC 8)
Max Grav 5=252(LC 1), 3=116(LC 1), 4=71(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J22	Diagonal Hip Girder	2	1	I49388505

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:11 2021 Page 1
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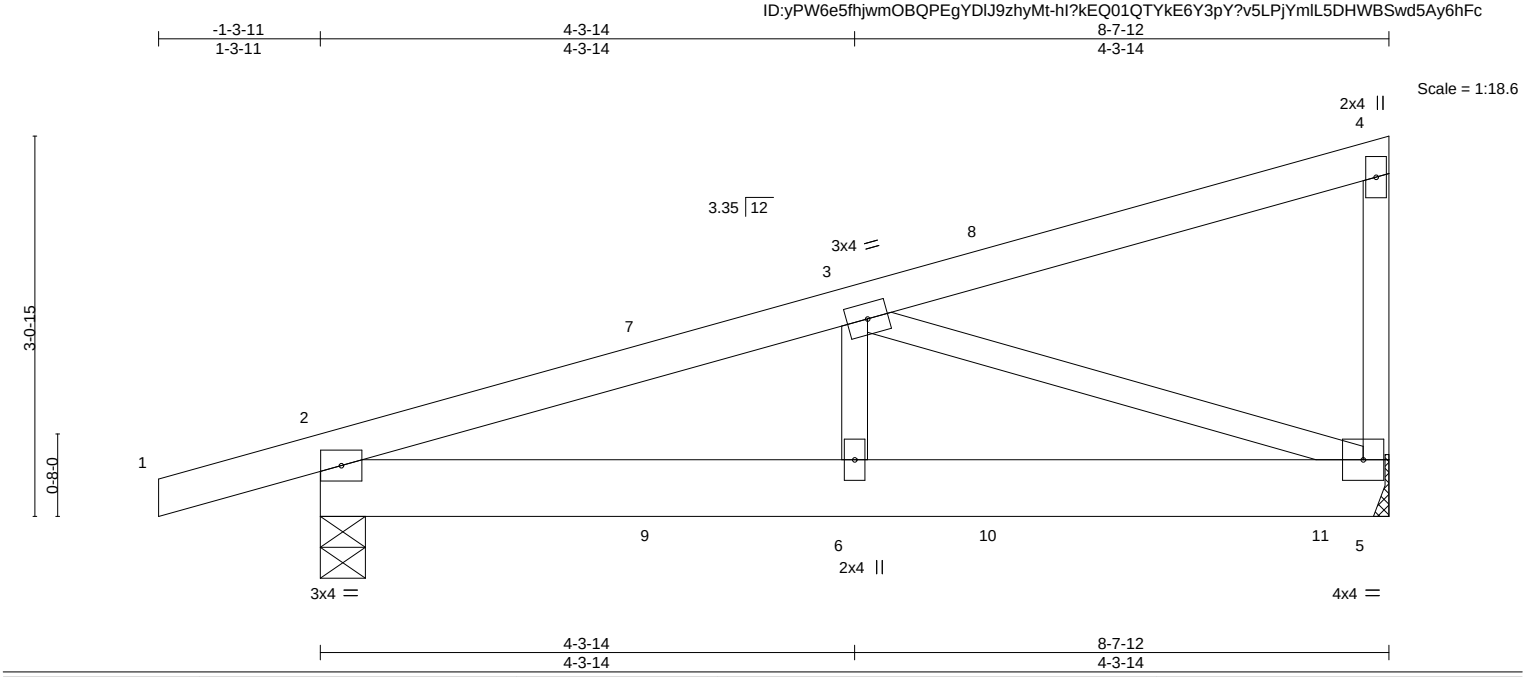

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.03	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.01	6	>999	240	Weight: 34 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 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=0-4-6
Max Horz 2=118(LC 5)
Max Uplift 5=-152(LC 8), 2=-142(LC 4)
Max Grav 5=602(LC 1), 2=517(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-748/130
BOT CHORD 2-6=-144/662, 5-6=-144/662
WEBS 3-5=-702/180

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=152, 2=142.
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) 70 lb down and 32 lb up at 2-9-1, 64 lb down and 30 lb up at 2-9-11, and 88 lb down and 62 lb up at 5-5-15, and 100 lb down and 69 lb up at 5-8-15 on top chord, and 2 lb down and 2 lb up at 2-9-1, 2 lb down and 2 lb up at 2-9-11, 20 lb down at 5-5-15, and 25 lb down at 5-8-15, and 209 lb down and 71 lb up at 8-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 8=-28(F=-18, B=-10) 9=4(F=2, B=2) 10=-30(F=-18, B=-12) 11=-209(B)

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J23	Jack-Closed	2	1	I49388506
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:11 2021 Page 1
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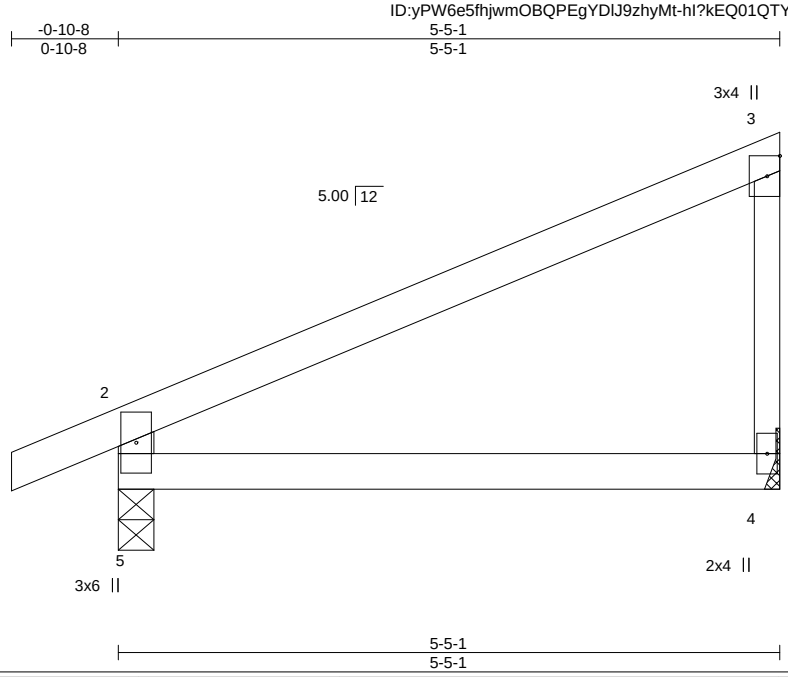


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 16 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-1 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=119(LC 5)
Max Uplift 5=-56(LC 8), 4=-54(LC 8)
Max Grav 5=311(LC 1), 4=226(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-273/97

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

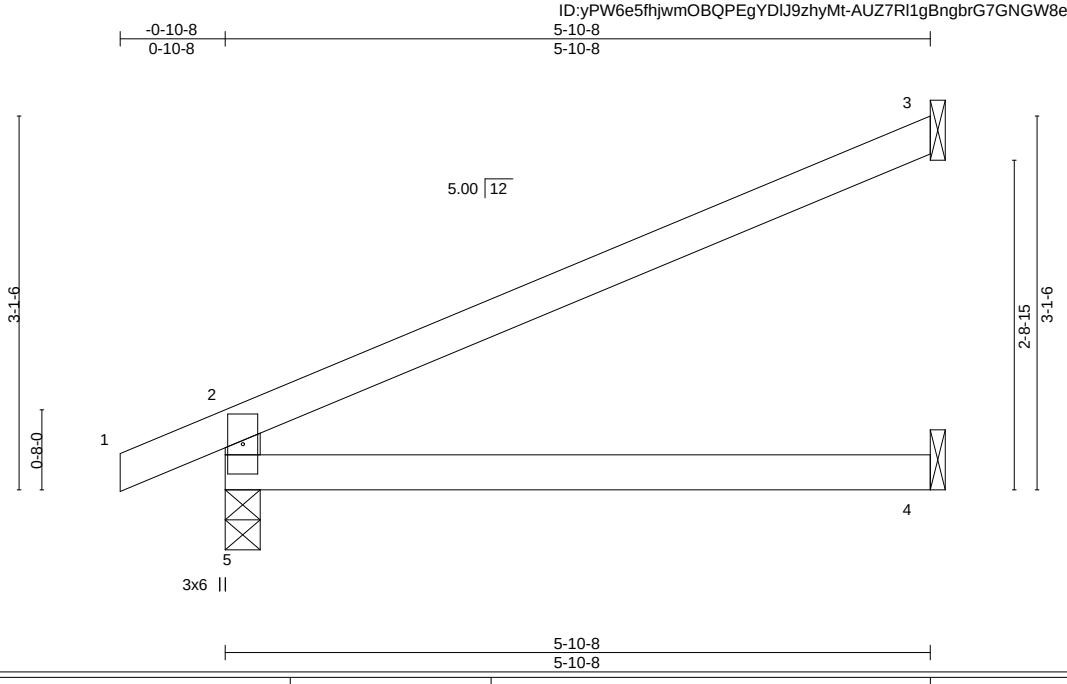
December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J24	Jack-Open	3	1	I49388507

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:12 2021 Page 1
ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-AUZ7Rl1gBngbrG7GNGW8eYyslA4lql0fQ6gAecy6hFb



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.11	4-5	>637	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 15 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-8 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=74(LC 8)
Max Uplift 5=-5(LC 8), 3=-52(LC 8)
Max Grav 5=333(LC 1), 3=178(LC 1), 4=107(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-290/52

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, 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.

December 22,2021

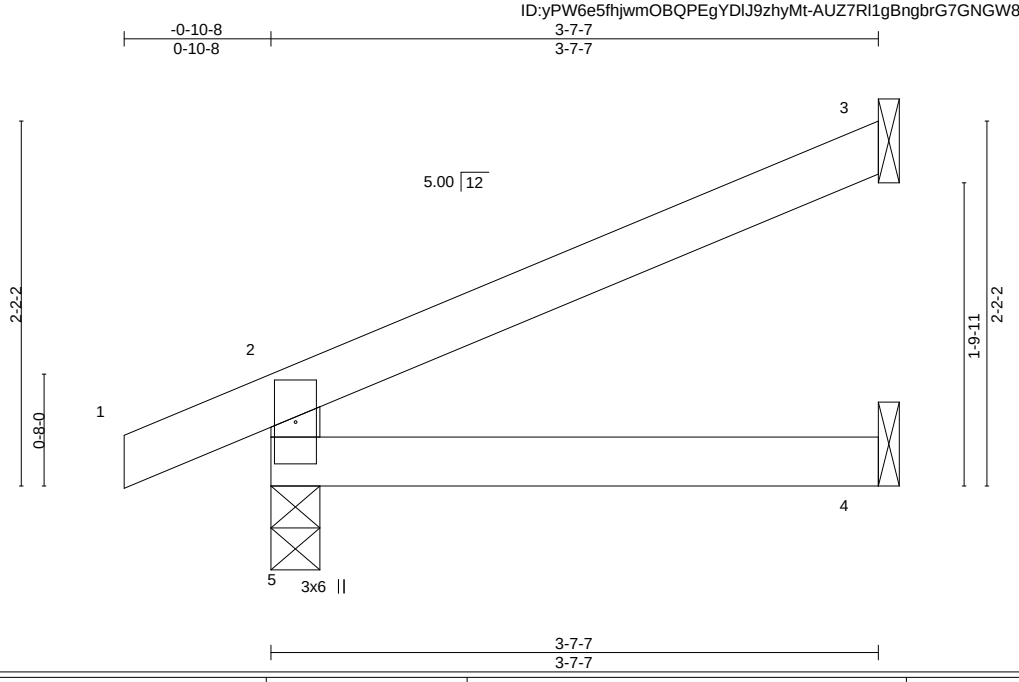
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J25	Jack-Open	2	1	I49388508

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:12 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-AUZ7Rl1gBngbrG7GNGW8eYyxCA7yql0fQ6gAecy6hFb



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

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-7-7 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=67(LC 8)
Max Uplift 5=-36(LC 8), 3=-54(LC 8)
Max Grav 5=236(LC 1), 3=104(LC 1), 4=64(LC 3)

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

NOTES-

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J26	Jack-Open	2	1	I49388509

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:13 2021 Page 1
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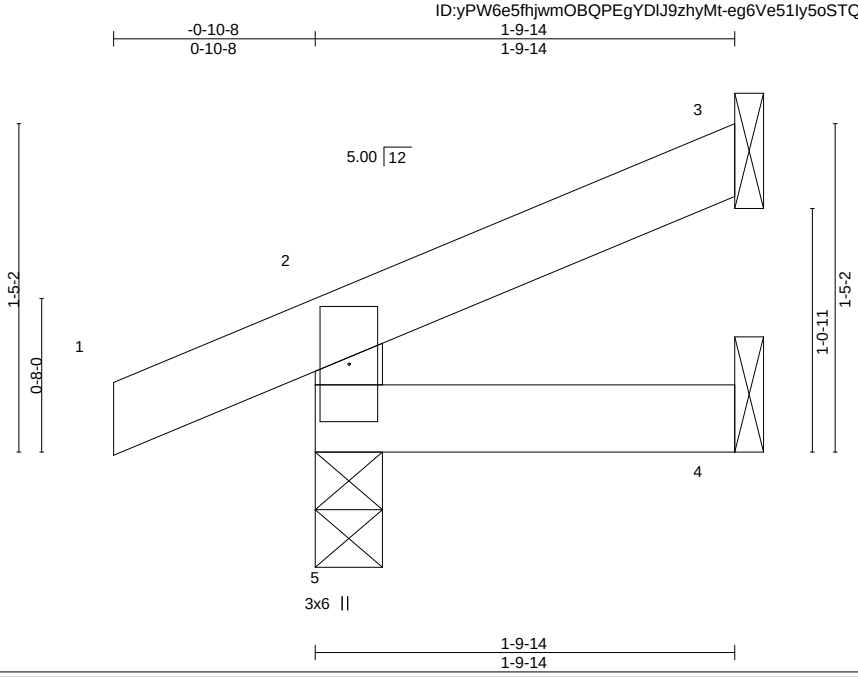

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-9-14 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=37(LC 8)
Max Uplift 5=-35(LC 4), 3=-26(LC 8)
Max Grav 5=168(LC 1), 3=41(LC 1), 4=29(LC 3)

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

NOTES-

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J27	Jack-Open	2	1	I49388510
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:13 2021 Page 1
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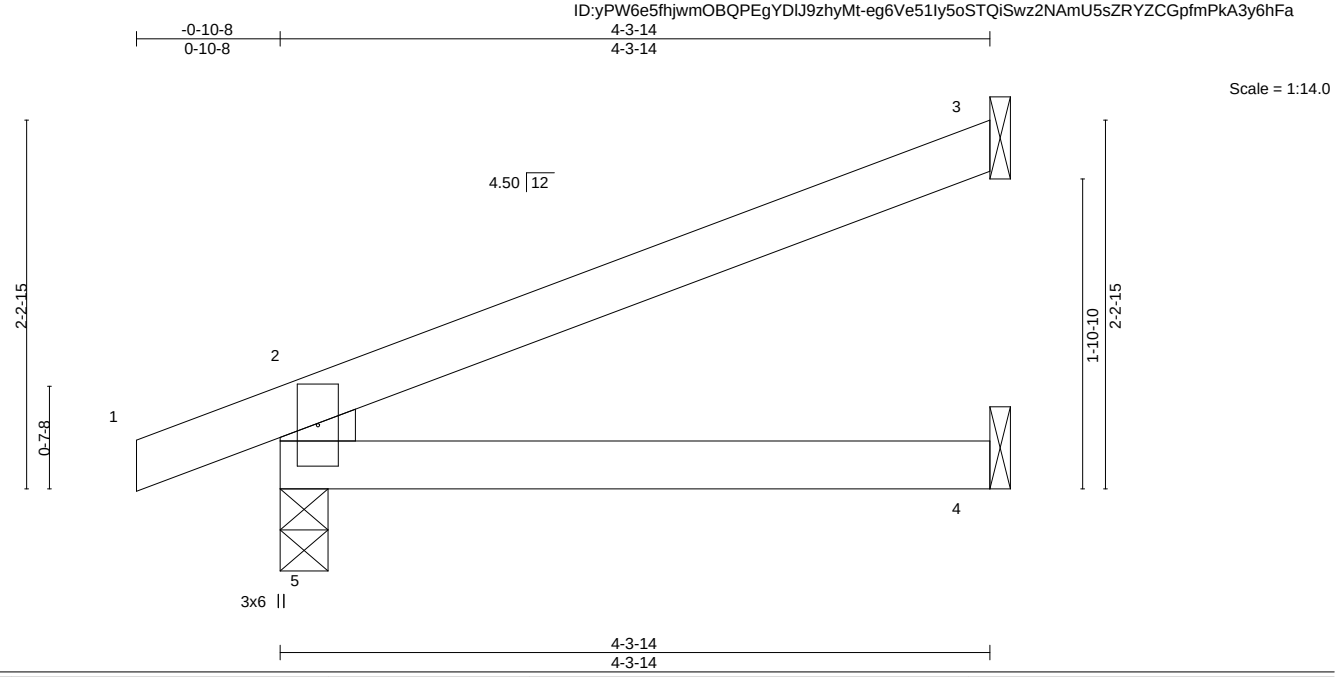

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 12 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-14 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=73(LC 4)
Max Uplift 5=-62(LC 4), 3=-60(LC 8)
Max Grav 5=269(LC 1), 3=123(LC 1), 4=75(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	J28	Jack-Open	2	1	I49388511

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:14 2021 Page 1
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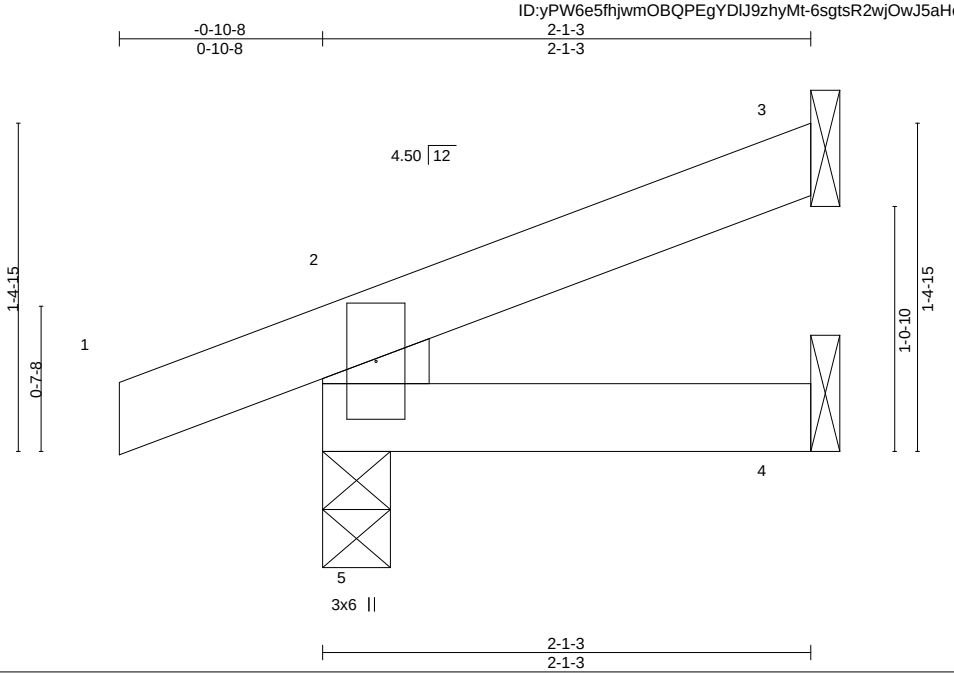

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-3 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=41(LC 4)
Max Uplift 5=-58(LC 4), 3=-26(LC 8)
Max Grav 5=182(LC 1), 3=46(LC 1), 4=31(LC 3)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	LAY1	GABLE	2	1	I49388512
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:19 2021 Page 1
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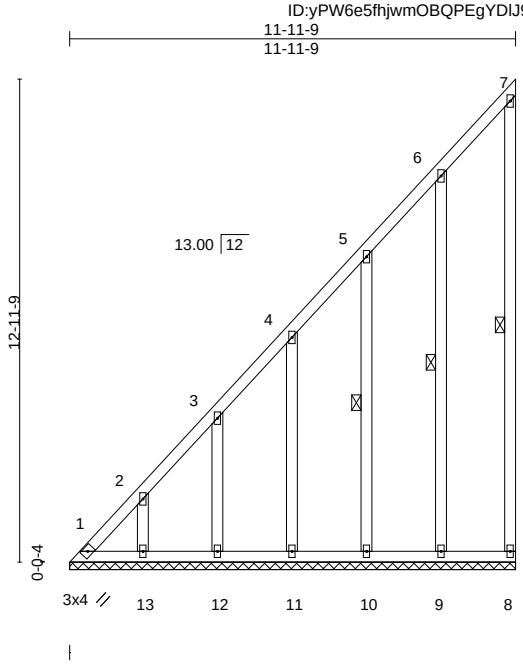

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 81 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-8, 6-9, 5-10

REACTIONS. All bearings 11-11-9.
(lb) - Max Horz 1=508(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 8 except 1=-162(LC 6), 9=-132(LC 8), 10=-130(LC 8), 11=-129(LC 8), 12=-129(LC 8), 13=-130(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 11, 12, 13 except 1=510(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-709/280, 2-3=-586/232, 3-4=-455/183, 4-5=-325/134

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 1=162, 9=132, 10=130, 11=129, 12=129, 13=130.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	LAY2	GABLE	1	1	I49388513
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:20 2021 Page 1
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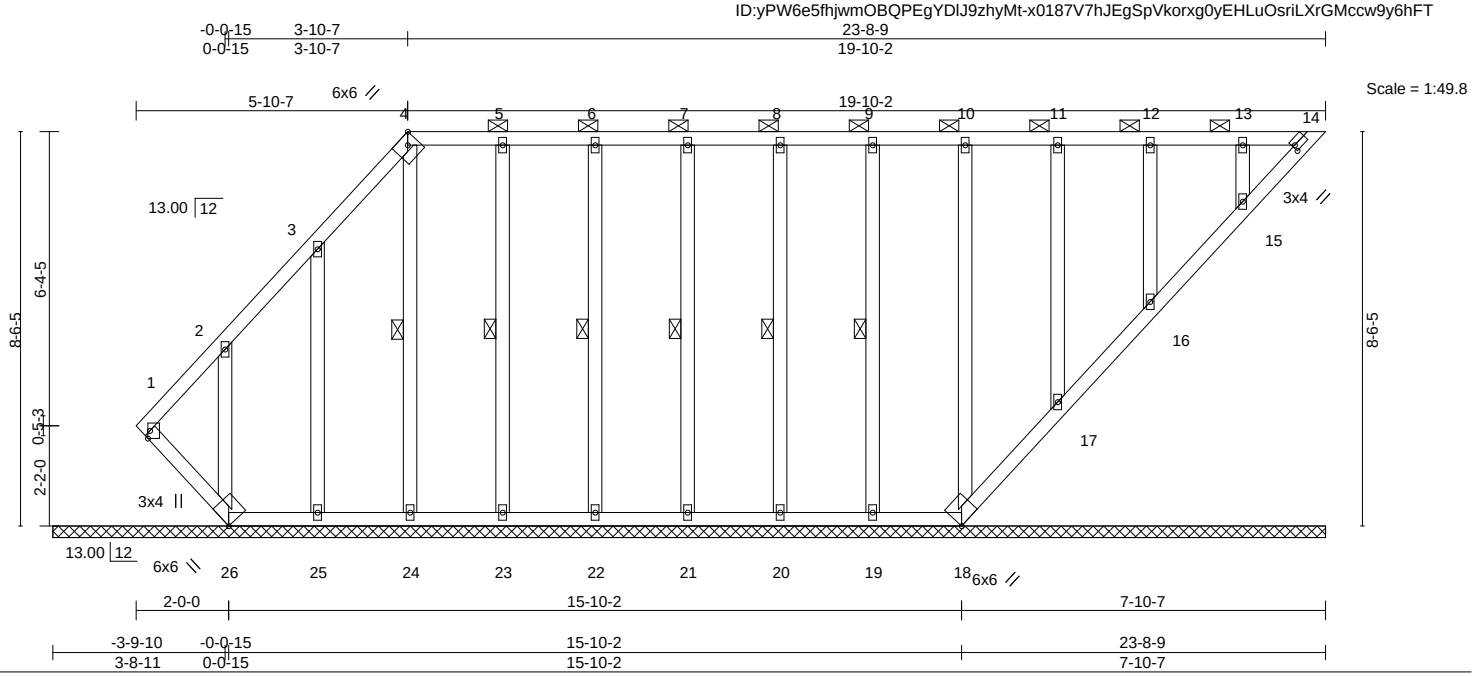


Plate Offsets (X,Y)-- [4:0-2-9,Edge], [14:0-0-10,0-1-8], [26:0-0-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 153 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-14.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-24, 5-23, 6-22, 7-21, 8-20, 9-19

REACTIONS. All bearings 27-6-3.
(lb) - Max Horz 1=262(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 18, 24, 23, 22, 21, 20, 19, 17, 16, 15 except 25=-136(LC 8), 26=-137(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 14, 18, 25, 24, 23, 22, 21, 20, 19, 17, 16, 15, 26

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-314/126

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 14, 18, 24, 23, 22, 21, 20, 19, 17, 16, 15 except (jt=lb) 25=136, 26=137.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 14, 17, 16, 15.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 22,2021

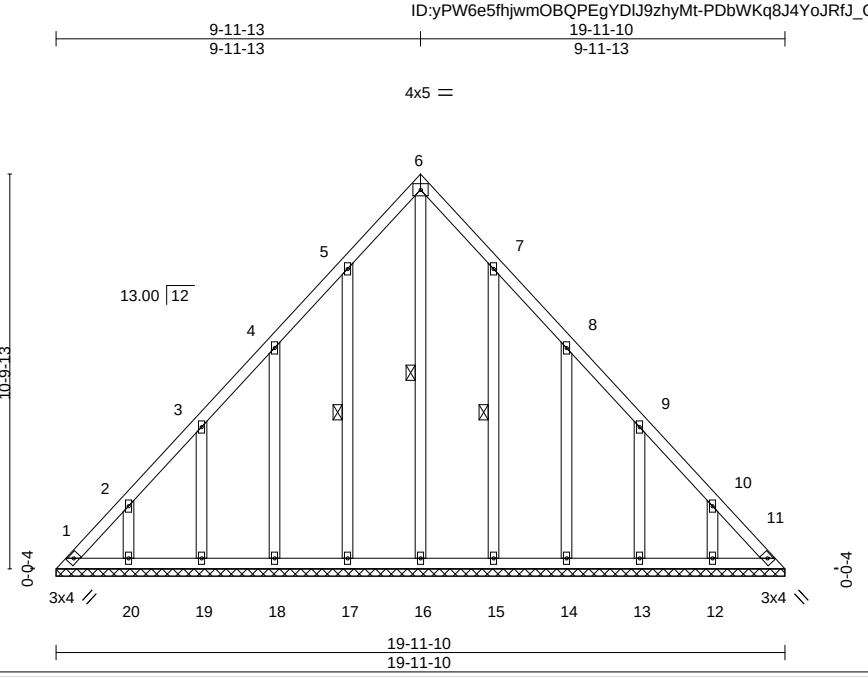
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	LAY3	GABLE	1	1	I49388514

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:21 2021 Page 1

ID:yPW6e5fhjwmOBQPEgYDlJ9zhyMt-PDbWKq8J4YoJRfJ_OfBFVSpVPoCpRpR_U?L9Sby6hFS



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 111 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-16, 5-17, 7-15

REACTIONS. All bearings 19-11-10.

(lb) - Max Horz 1=-279(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-134(LC 6), 17=-127(LC 8), 18=-133(LC 8), 19=-128(LC 8), 20=-131(LC 8), 15=-125(LC 9), 14=-134(LC 9), 13=-128(LC 9), 12=-131(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 11, 17, 18, 19, 20, 15, 14, 13, 12 except 1=274(LC 8), 16=257(LC 9)

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

TOP CHORD 1-2=-388/242, 2-3=-264/194, 10-11=-347/180

BOT CHORD 1-20=-123/262, 19-20=-123/262, 18-19=-123/262, 17-18=-123/262, 16-17=-123/262, 15-16=-123/262, 14-15=-123/262, 13-14=-123/262, 12-13=-123/262, 11-12=-123/262

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 1=134, 17=127, 18=133, 19=128, 20=131, 15=125, 14=134, 13=128, 12=131.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	LAY4	GABLE	1	1	I49388515
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:22 2021 Page 1
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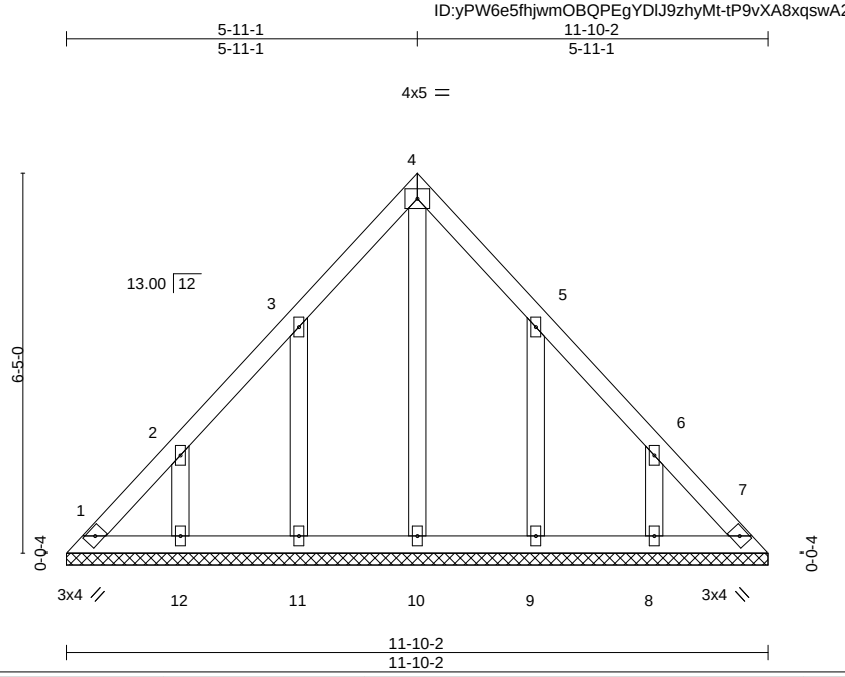

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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 11-10-2.
(lb) - Max Horz 1=162(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-136(LC 8), 12=-129(LC 8), 9=-135(LC 9), 8=-129(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=136, 12=129, 9=135, 8=129.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	LAY5	GABLE	1	1	I49388516
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:23 2021 Page 1
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3-6-13 7-1-10
3-6-13 3-6-13

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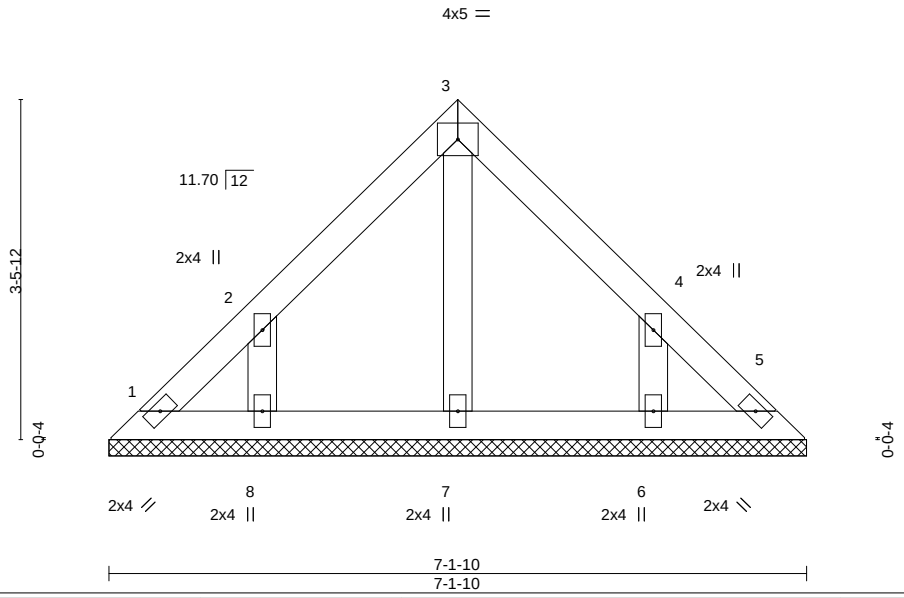

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 24 lb	FT = 10%

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

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

REACTIONS. All bearings 7-1-10.
(lb) - Max Horz 1=-82(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-119(LC 8), 6=-119(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-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=119, 6=119.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	V1	Valley	1	1	I49388517
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:23 2021 Page 1
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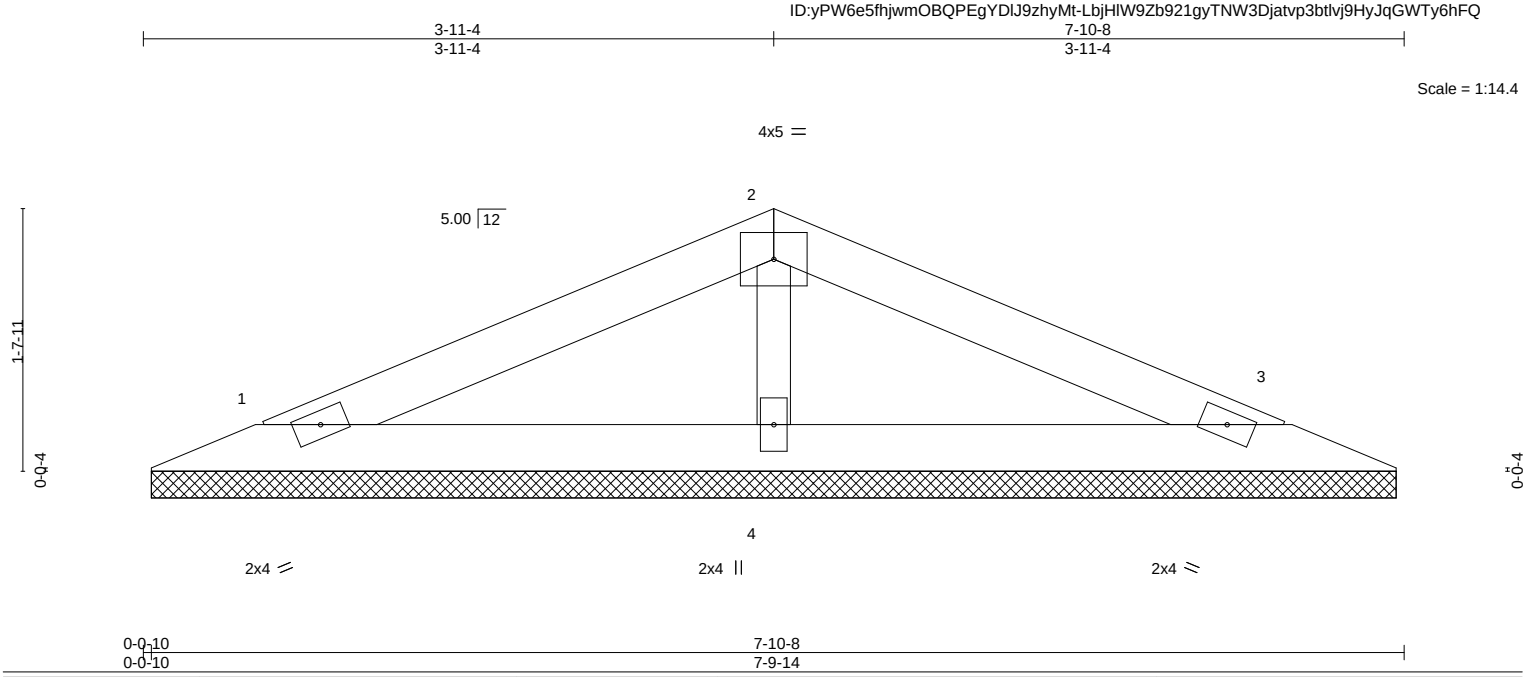

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 10%

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

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

REACTIONS. (size) 1=7-9-5, 3=7-9-5, 4=7-9-5
Max Horz 1=-24(LC 9)
Max Uplift 1=-33(LC 8), 3=-37(LC 9), 4=-7(LC 8)
Max Grav 1=145(LC 1), 3=145(LC 1), 4=284(LC 1)

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

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	V2	Valley	1	1	I49388518

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:24 2021 Page 1

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7-11-8 15-11-0

7-11-8 7-11-8

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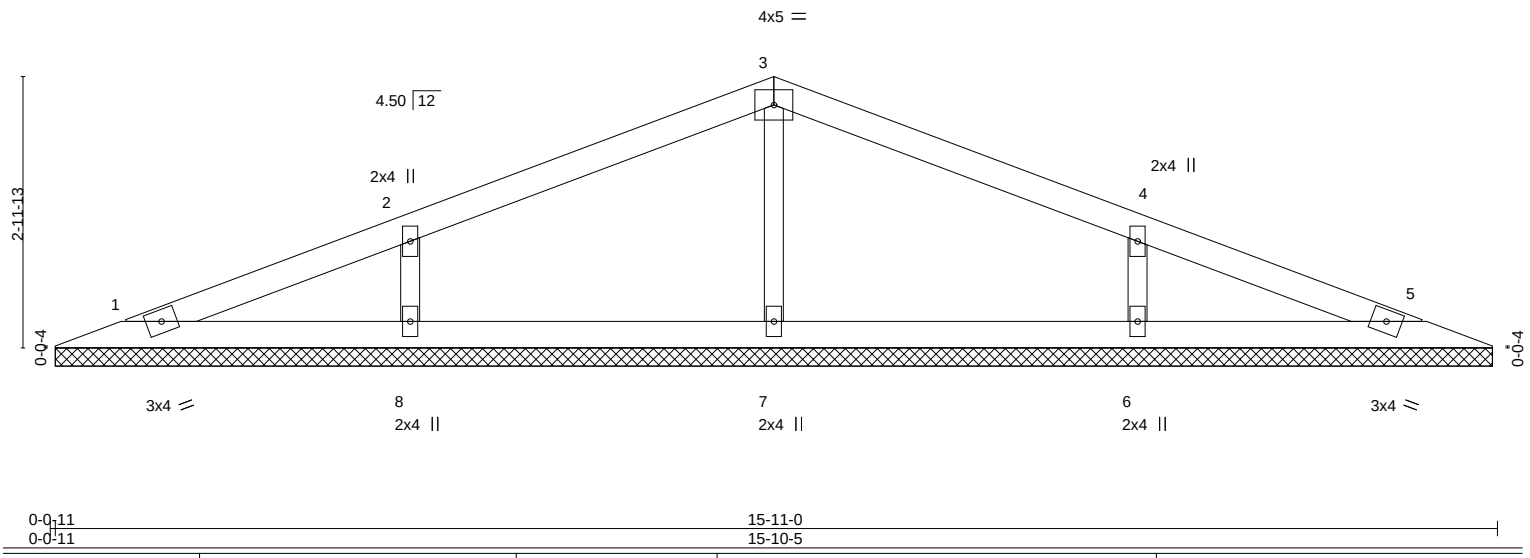

0-0-11 15-11-0

0-0-11 15-10-5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 39 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 15-9-11.
(lb) - Max Horz 1=47(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-101(LC 8), 6=-101(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=318(LC 1), 8=381(LC 21), 6=381(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-299/145, 4-6=-299/145

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=101, 6=101.
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.

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	V3	Valley	1	1	I49388519
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:25 2021 Page 1
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5-8-13
5-8-13
11-5-11
5-8-13

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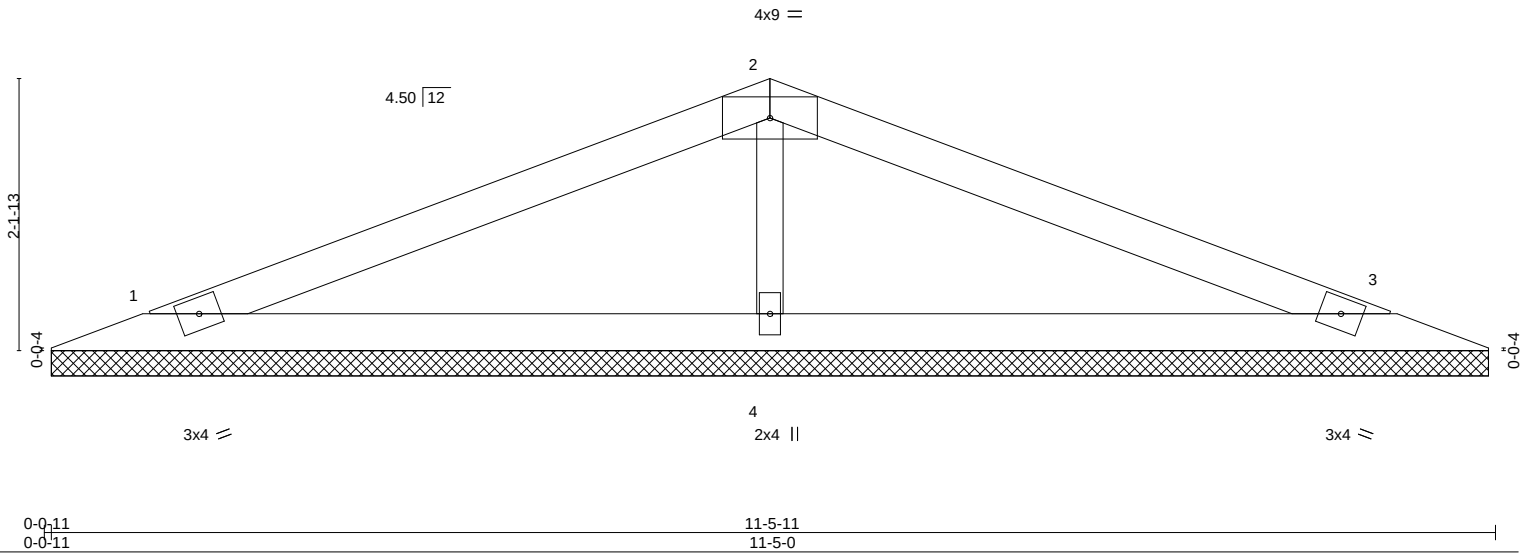

0-0-11
0-0-11
11-5-11
11-5-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 26 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=11-4-5, 3=11-4-5, 4=11-4-5
Max Horz 1=-33(LC 9)
Max Uplift 1=-41(LC 8), 3=-47(LC 9), 4=-37(LC 4)
Max Grav 1=200(LC 21), 3=200(LC 22), 4=493(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-345/96

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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	113 MN
B210103	V4	Valley	1	1	I49388520

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 21 16:37:25 2021 Page 1

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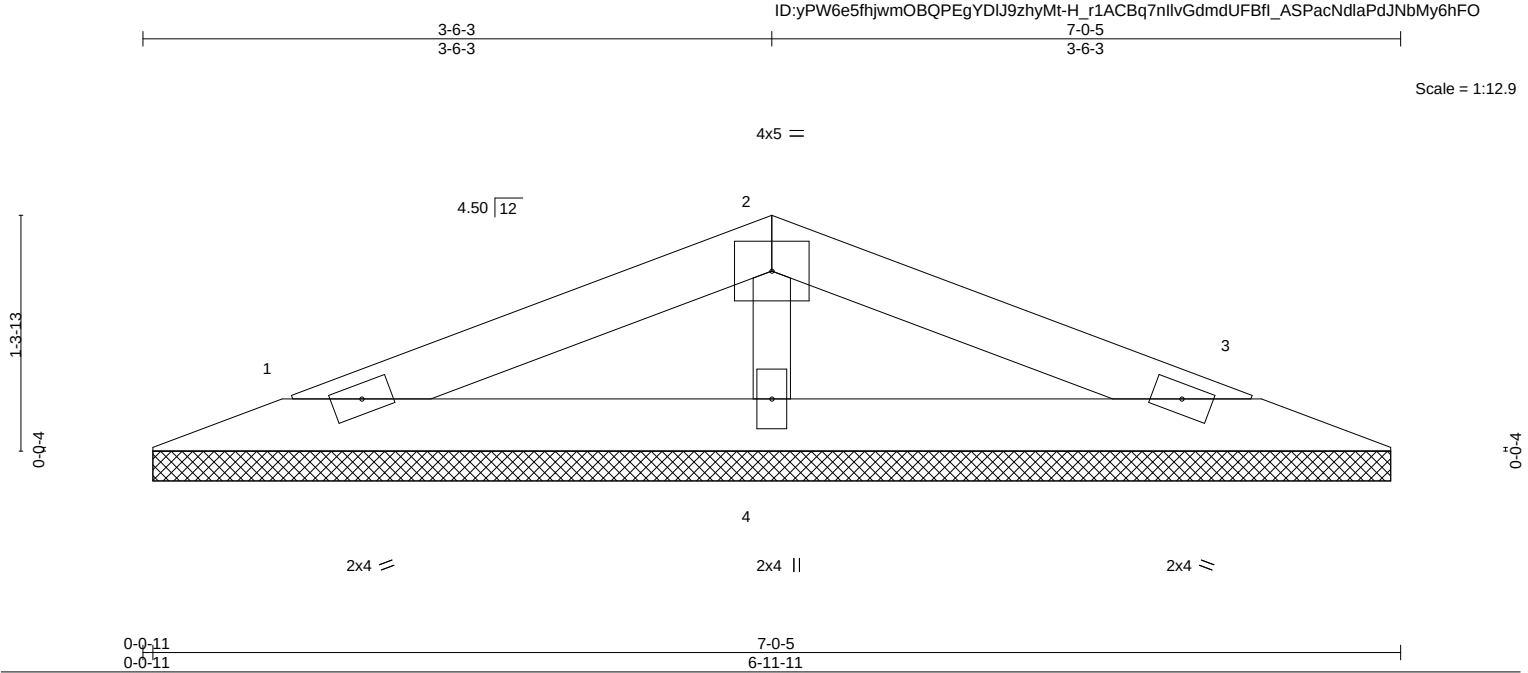


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=6-11-0, 3=6-11-0, 4=6-11-0
Max Horz 1=18(LC 12)
Max Uplift 1=-28(LC 8), 3=-31(LC 9), 4=-9(LC 4)
Max Grav 1=120(LC 1), 3=120(LC 1), 4=242(LC 1)

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

NOTES-

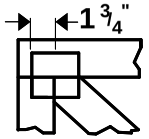
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber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

December 22,2021

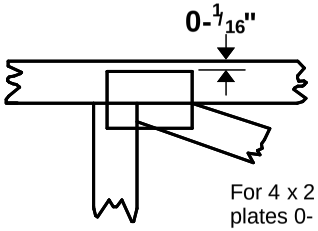
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

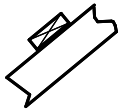
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

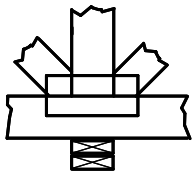
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

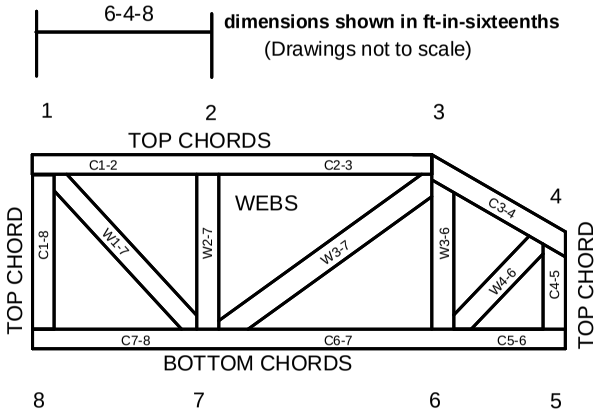


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21.The design does not take into account any dynamic or other loads other than those expressly stated.