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

Re: B220118
Lot 141 HM

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: I53666688 thru I53666741

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193

August 16,2022

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	A1	Roof Special Structural Gable	1	1	Job Reference (optional)	I53666688

Wheeler Lumber, Waverly, KS - 66871,

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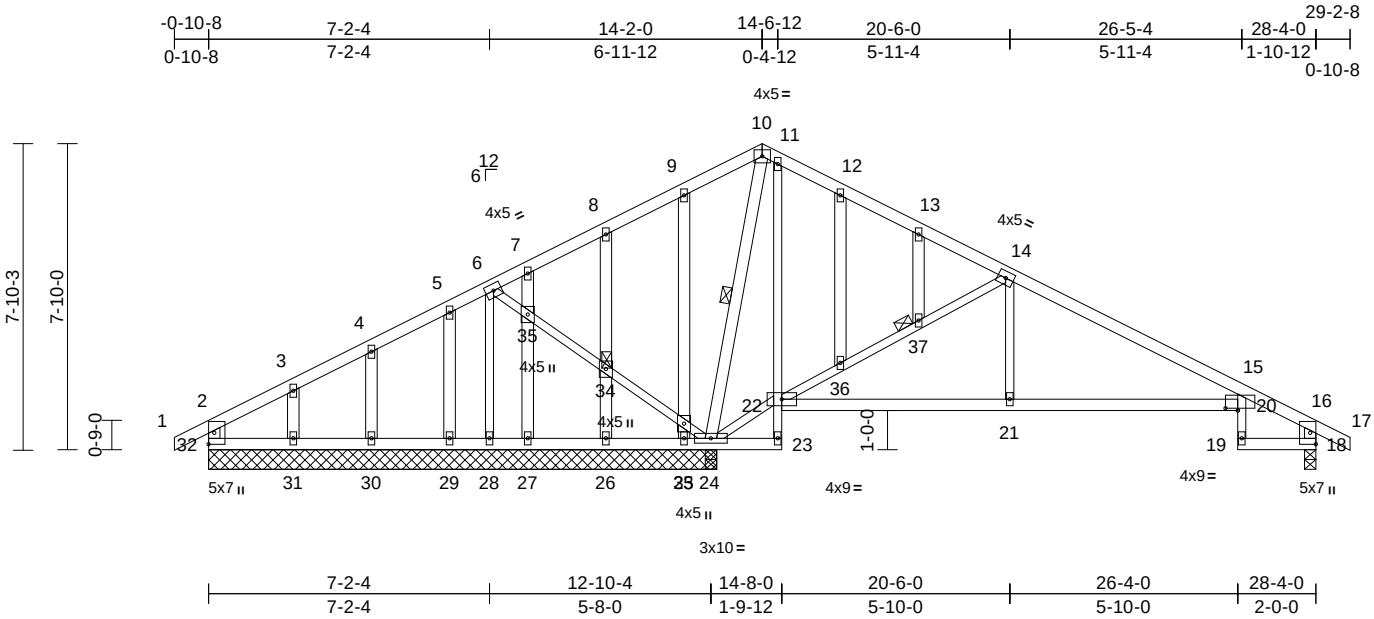

Scale = 1:59

Plate Offsets (X, Y): [20:0-3-12,0-0-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.14	20-21	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.26	20-21	>701	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.13	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.09	20-21	>999	240	Weight: 138 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x3 SPF No.2 *Except* 32-23:2x4 SPF 2100F 1.8E, 22-20,19-18:2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except* 24-10,18-16:2x4 SPF No.2, 32-2:2x4 SPF 2100F 1.8E

OTHERS 2x4 SPF No.2

BRACING

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

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 19-20,18-19.

WEBS 1 Row at midpt 10-24

JOINTS 1 Brace at Jt(s): 34, 37

REACTIONS (size) 18=0-3-8, 24=13-0-0, 25=13-0-0, 26=13-0-0, 27=13-0-0, 28=13-0-0, 29=13-0-0, 30=13-0-0, 31=13-0-0, 32=13-0-0

Max Horiz 32=82 (LC 7)

Max Uplift 18=-14 (LC 9), 24=-95 (LC 9), 25=-259 (LC 22), 26=-26 (LC 8), 27=-45 (LC 22), 28=-579 (LC 22), 29=-43 (LC 22), 30=-22 (LC 8), 31=-36 (LC 8), 32=-243 (LC 22)

Max Grav 18=294 (LC 1), 24=2436 (LC 1), 25=38 (LC 21), 26=213 (LC 1), 27=97 (LC 21), 28=56 (LC 9), 29=98 (LC 21), 30=180 (LC 21), 31=321 (LC 1), 32=33 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-28/472, 3-4=0/441, 4-5=0/431, 5-6=0/471, 6-7=-13/1128, 7-8=-6/1194, 8-9=0/1190, 9-10=0/1188, 10-11=0/969, 11-12=-4/994, 12-13=-20/969, 13-14=-33/900, 14-15=-46/302, 15-16=-184/16, 16-17=0/32, 16-18=-278/22, 2-32=-38/206

BOT CHORD 31-32=-371/107, 30-31=-371/107, 29-30=-371/107, 28-29=-371/107, 27-28=-371/107, 26-27=-371/107, 25-26=-371/107, 24-25=-371/107, 23-24=-45/0, 22-23=-80/10, 11-22=-93/98, 21-22=-157/98, 20-21=-157/98, 19-20=0/41, 15-20=0/117, 18-19=0/103

WEBS 6-28=-51/588, 6-35=-818/76, 34-35=-809/75, 33-34=-806/75, 24-33=-843/79, 10-24=-1083/0, 22-36=-806/96, 36-37=-771/90, 14-37=-784/90, 14-21=0/306, 9-33=-155/41, 25-33=-128/40, 8-34=-149/53, 26-34=-154/53, 7-35=-60/88, 27-35=-66/74, 5-29=-61/84, 4-30=-149/48, 3-31=-209/55, 12-36=-70/12, 13-37=-1/26, 22-24=-957/220

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 243 lb uplift at joint 32, 14 lb uplift at joint 18, 579 lb uplift at joint 28, 95 lb uplift at joint 24, 259 lb uplift at joint 25, 26 lb uplift at joint 26, 45 lb uplift at joint 27, 43 lb uplift at joint 29, 22 lb uplift at joint 30 and 36 lb uplift at joint 31.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666689
B220118	A2	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:09 Page: 1

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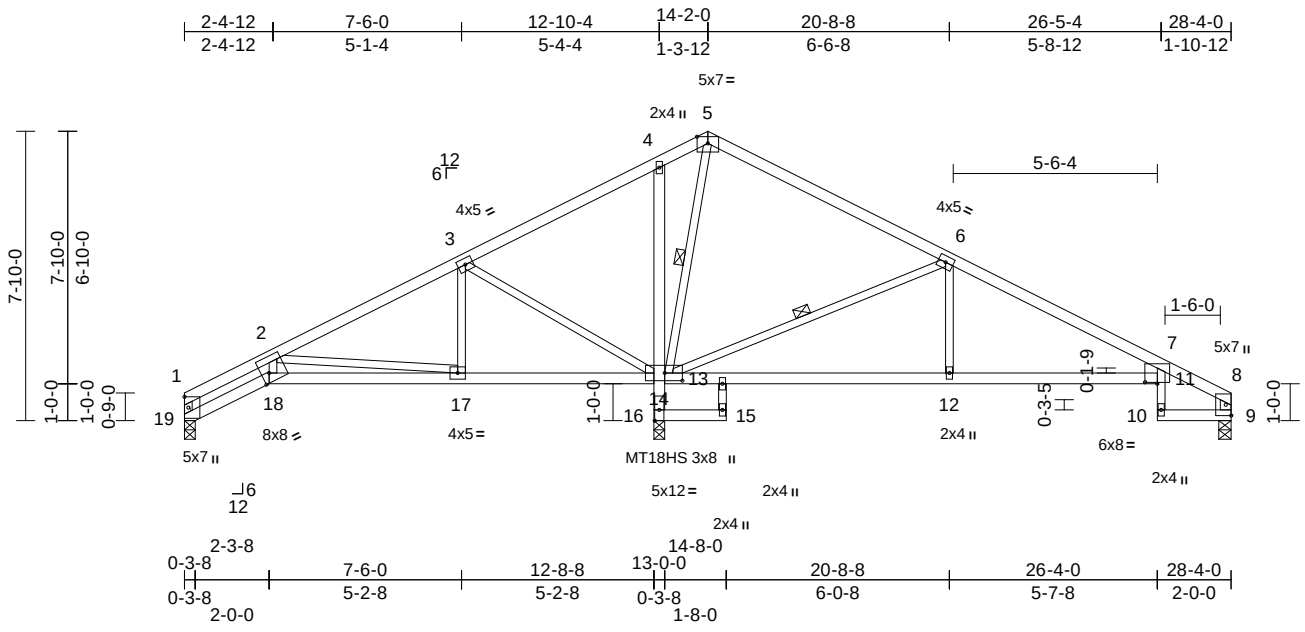

Scale = 1:62.4

Plate Offsets (X, Y): [11:0-4-0,0-0-7], [14:0-5-12,0-2-8], [18:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.22	11-12	>838	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.34	11-12	>544	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.14	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.12	11-12	>999	240	Weight: 106 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 15-13,7-10:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 9-8:2x4 SPF No.2

BRACING

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

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
3-11-0 oc bracing: 14-16
10-0-0 oc bracing: 10-11.

WEBS 1 Row at midpt 5-14, 6-14

REACTIONS (size) 9=0-4-0, 16=0-3-8, 19=0-3-8
Max Horiz 19=78 (LC 5)
Max Uplift 9=-46 (LC 9), 16=-22 (LC 8), 19=-101 (LC 22)
Max Grav 9=391 (LC 22), 16=2214 (LC 1), 19=183 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-19=-241/196, 1-2=-349/355, 2-3=-17/724, 3-4=-21/1304, 4-5=0/1206, 5-6=-1/1042, 6-7=-347/388, 7-8=-397/68, 8-9=-380/57

BOT CHORD 18-19=-289/287, 17-18=-277/247, 14-17=-570/104, 14-16=-2181/42, 4-14=-321/83, 15-16=-50/0, 13-15=0/3, 13-14=-288/308, 12-13=-316/289, 11-12=-316/289, 10-11=0/39, 7-11=0/102, 9-10=-43/254

WEBS 2-18=-6/148, 2-17=-558/129, 3-17=0/271, 3-14=-644/98, 5-14=-1168/0, 6-14=-935/116, 6-12=0/330

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 19 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 101 lb uplift at joint 19, 22 lb uplift at joint 16 and 46 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666690
B220118	A3	Roof Special	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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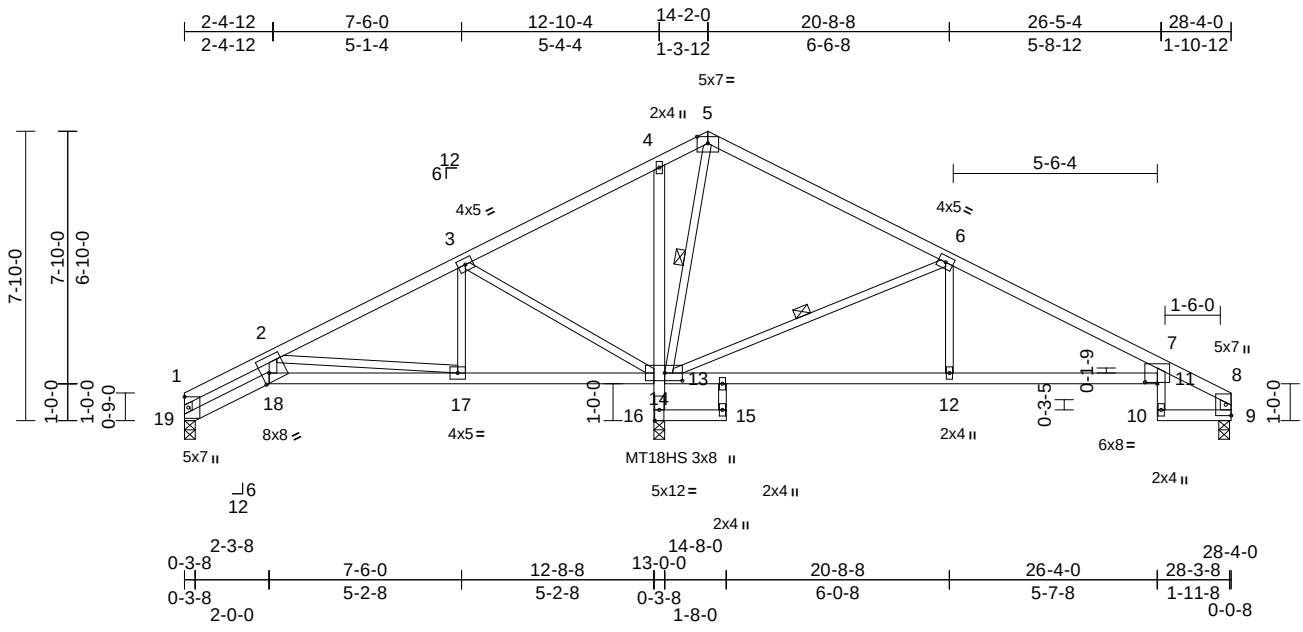

Scale = 1:62.4

Plate Offsets (X, Y): [11:0-4-0,0-0-7], [14:0-5-12,0-2-8], [18:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.22	11-12	>838	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.34	11-12	>544	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.14	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.12	11-12	>999	240	Weight: 106 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 15-13,7-10:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-8:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
3-11-0 oc bracing: 14-16
10-0-0 oc bracing: 10-11.
WEBS 1 Row at midpt 5-14, 6-14

REACTIONS (size) 9=0-3-8, 16=0-3-8, 19=0-3-8
Max Horiz 19=78 (LC 5)
Max Uplift 9=-46 (LC 9), 16=-22 (LC 8), 19=-101 (LC 22)
Max Grav 9=391 (LC 22), 16=2214 (LC 1), 19=183 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-19=-241/196, 1-2=-349/355, 2-3=-17/724, 3-4=-21/1304, 4-5=0/1206, 5-6=-1/1042, 6-7=-347/388, 7-8=-397/68, 8-9=-380/57
BOT CHORD 18-19=-289/287, 17-18=-277/247, 14-17=-570/104, 14-16=-2181/42, 4-14=-321/83, 15-16=-50/0, 13-15=0/3, 13-14=-288/308, 12-13=-316/289, 11-12=-316/289, 10-11=0/39, 7-11=0/102, 9-10=-43/254
WEBS 2-18=-6/148, 3-17=0/271, 3-14=-644/98, 2-17=-558/129, 5-14=-1168/0, 6-12=0/330, 6-14=-935/116

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 19 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 101 lb uplift at joint 19, 22 lb uplift at joint 16 and 46 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	A4	Roof Special Girder	1	2	Job Reference (optional)	I53666691

Wheeler Lumber, Waverly, KS - 66871,

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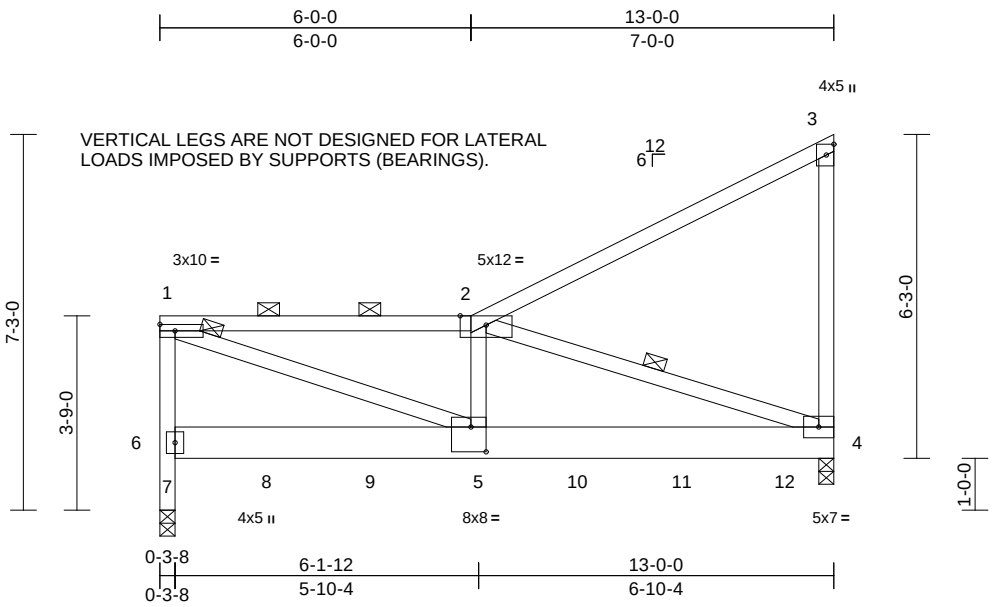

Scale = 1:44.4

Plate Offsets (X, Y): [5:0-3-8,0-5-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.10	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.17	5-6	>894	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.08	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	4-5	>999	240	Weight: 164 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 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 (4-10-1 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-4

REACTIONS (size) 4=0-3-8, 7=0-3-8
Max Horiz 7=181 (LC 5)
Max Grav 4=3412 (LC 15), 7=3944 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=-3944/0, 1-6=-2289/0, 1-2=-5863/0, 2-3=-188/56, 3-4=-220/58
BOT CHORD 5-6=-108/375, 4-5=0/5990
WEBS 1-5=0/5948, 2-5=0/1677, 2-4=-6253/0

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Web 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) 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.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1646 lb down at 2-0-12, 1646 lb down at 4-0-12, 770 lb down and 35 lb up at 6-0-12, 770 lb down and 35 lb up at 8-0-12, and 770 lb down and 35 lb up at 10-0-12, and 772 lb down and 34 lb up at 12-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-704 (F), 8=-1485 (F), 9=-1485 (F), 10=-704 (F), 11=-704 (F), 12=-706 (F)

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	B1	Common Structural Gable	1	1	Job Reference (optional)	I53666692

Wheeler Lumber, Waverly, KS - 66871,

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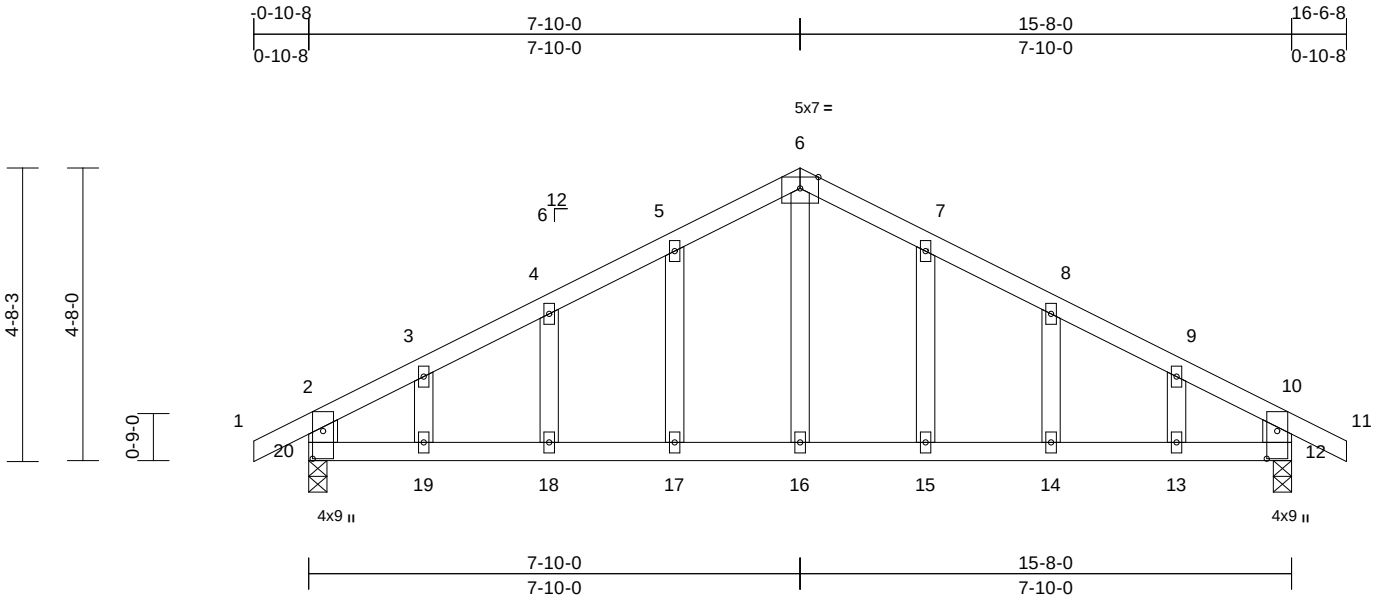

Scale = 1:36.7

Plate Offsets (X, Y): [12:0-5-5,0-2-0], [20:0-5-5,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.16	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.22	17-18	>813	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.09	18	>999	240	Weight: 61 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x6 SPF No.2 *Except* 16-6:2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS (size) 12=0-3-8, 20=0-3-8
Max Horiz 20=54 (LC 7)
Max Uplift 12=-19 (LC 9), 20=-19 (LC 8)
Max Grav 12=762 (LC 1), 20=762 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-859/0, 3-4=-804/11, 4-5=-767/30, 5-6=-752/52, 6-7=-752/52, 7-8=-767/30, 8-9=-804/11, 9-10=-859/0, 10-11=0/35, 2-20=-641/10, 10-12=-641/10
BOT CHORD 19-20=0/679, 18-19=0/679, 17-18=0/679, 16-17=0/679, 15-16=0/679, 14-15=0/679, 13-14=0/679, 12-13=0/679
WEBS 6-16=-6/369, 5-17=-93/43, 4-18=-57/35, 3-19=-15/46, 7-15=-93/43, 8-14=-57/35, 9-13=-15/46

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 20 and 19 lb uplift at joint 12.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	B2	Roof Special	2	1	Job Reference (optional)	I53666693

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 E Aug 16 2021 Print: 8.430 E Aug 16 2021 MiTek Industries, Inc. Tue Aug 16 09:31:58 Page: 1
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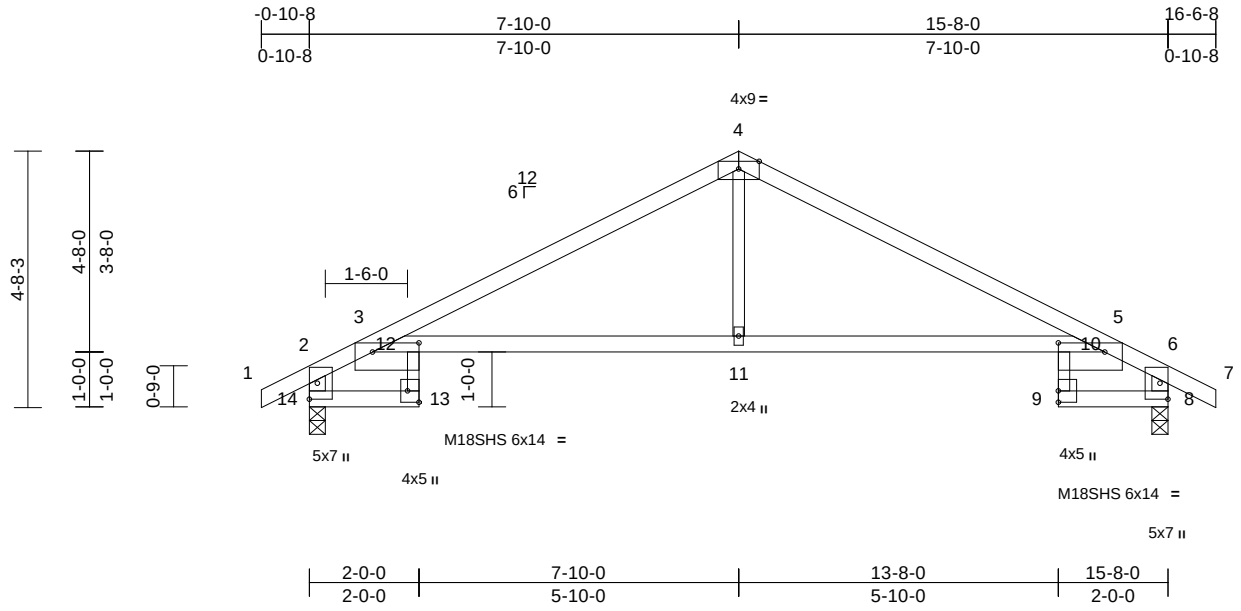

Scale = 1:42

Plate Offsets (X, Y): [5:0-10-3,0-2-0], [12:0-10-3,0-2-0], [13:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.20	11-12	>913	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.38	11-12	>486	240	M18SHS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.37	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.13	11-12	>999	240	Weight: 47 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except* 13-12,10-9:2x3 SPF No.2, 3-5:2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* 11-4:2x3 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. Except:
10-0-0 oc bracing: 10-11

REACTIONS (lb/size) 8=763/0-3-8, 14=763/0-3-8
Max Horiz 14=53 (LC 7)
Max Uplift 8=-18 (LC 9), 14=-18 (LC 8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-523/26, 3-4=-1129/0, 4-5=-1129/18, 5-6=-523/35, 2-14=-796/38, 6-8=-796/30
BOT CHORD 3-12=0/726, 11-12=0/957, 10-11=0/957, 5-10=0/726
WEBS 4-11=0/430

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 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 18 lb uplift at joint 14 and 18 lb uplift at joint 8.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	C1	Piggyback Base Supported Gable	1	1	Job Reference (optional)	I53666694

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:11 Page: 1
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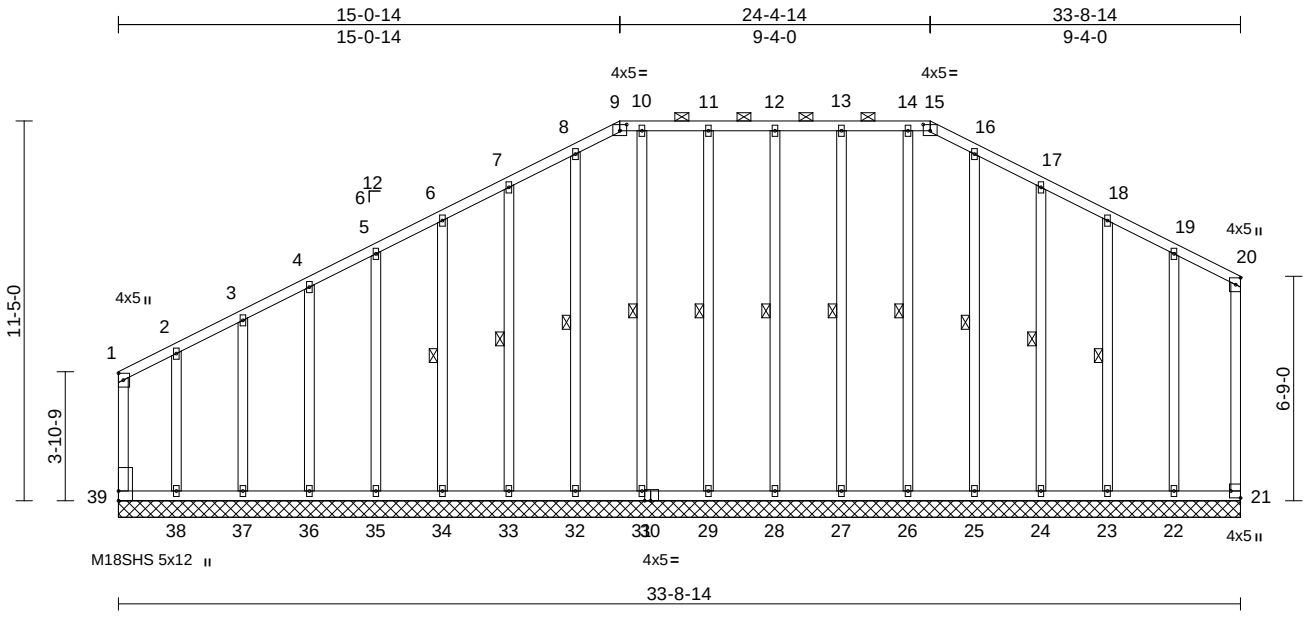

Scale = 1:69.3

Plate Offsets (X, Y): [9:0-2-8,0-2-4], [15:0-2-8,0-2-4], [21:Edge,0-3-8], [30:0-2-2,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	M18SHS	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(TL)	n/a	-	n/a	999	MT20	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 251 lb	FT = 10%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-15.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 18-23, 17-24, 16-25, 14-26, 13-27, 12-28, 11-29, 10-31, 8-32, 7-33, 6-34

REACTIONS (size) 21=33-8-14, 22=33-8-14, 23=33-8-14, 24=33-8-14, 25=33-8-14, 26=33-8-14, 27=33-8-14, 28=33-8-14, 29=33-8-14, 31=33-8-14, 32=33-8-14, 33=33-8-14, 34=33-8-14, 35=33-8-14, 36=33-8-14, 37=33-8-14, 38=33-8-14, 39=33-8-14
Max Horiz 39=224 (LC 5)
Max Uplift 21=-100 (LC 5), 22=-78 (LC 4), 23=-33 (LC 9), 24=-27 (LC 9), 25=-3 (LC 9), 27=-16 (LC 4), 28=-9 (LC 5), 29=-18 (LC 4), 33=-30 (LC 8), 34=-23 (LC 8), 35=-22 (LC 8), 36=-33 (LC 8), 37=-18 (LC 4), 38=-426 (LC 5), 39=-230 (LC 6)
Max Grav 21=107 (LC 15), 22=262 (LC 16), 23=179 (LC 1), 24=180 (LC 22), 25=179 (LC 22), 26=181 (LC 22), 27=184 (LC 21), 28=180 (LC 1), 29=184 (LC 22), 31=181 (LC 21), 32=179 (LC 21), 33=180 (LC 1), 34=180 (LC 21), 35=180 (LC 1), 36=180 (LC 21), 37=194 (LC 16), 38=355 (LC 15), 39=419 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-39=-219/118, 1-2=-195/107, 2-3=-106/69, 3-4=-109/86, 4-5=-96/94, 5-6=-86/104, 6-7=-76/112, 7-8=-71/125, 8-9=-66/136, 9-10=-58/133, 10-11=-58/133, 11-12=-58/133, 12-13=-58/133, 13-14=-58/133, 14-15=-58/133, 15-16=-66/139, 16-17=-67/134, 17-18=-61/115, 18-19=-62/93, 19-20=-62/97, 20-21=-57/78

BOT CHORD 38-39=-90/65, 37-38=-90/65, 36-37=-90/65, 35-36=-90/65, 34-35=-90/65, 33-34=-90/65, 32-33=-90/65, 31-32=-90/65, 29-31=-90/65, 28-29=-90/65, 27-28=-90/65, 26-27=-90/65, 25-26=-90/65, 24-25=-90/65, 23-24=-90/65, 22-23=-90/65, 21-22=-90/65

WEBS 19-22=-146/46, 18-23=-140/48, 17-24=-140/53, 16-25=-139/27, 14-26=-141/14, 13-27=-144/40, 12-28=-140/33, 11-29=-144/42, 10-31=-141/20, 8-32=-139/22, 7-33=-140/54, 6-34=-140/47, 5-35=-140/47, 4-36=-140/51, 3-37=-142/32, 2-38=-200/215

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

August 16,2022

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 39, 100 lb uplift at joint 21, 78 lb uplift at joint 22, 33 lb uplift at joint 23, 27 lb uplift at joint 24, 3 lb uplift at joint 25, 16 lb uplift at joint 27, 9 lb uplift at joint 28, 18 lb uplift at joint 29, 30 lb uplift at joint 33, 23 lb uplift at joint 34, 22 lb uplift at joint 35, 33 lb uplift at joint 36, 18 lb uplift at joint 37 and 426 lb uplift at joint 38.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666695
B220118	C2	Piggyback Base	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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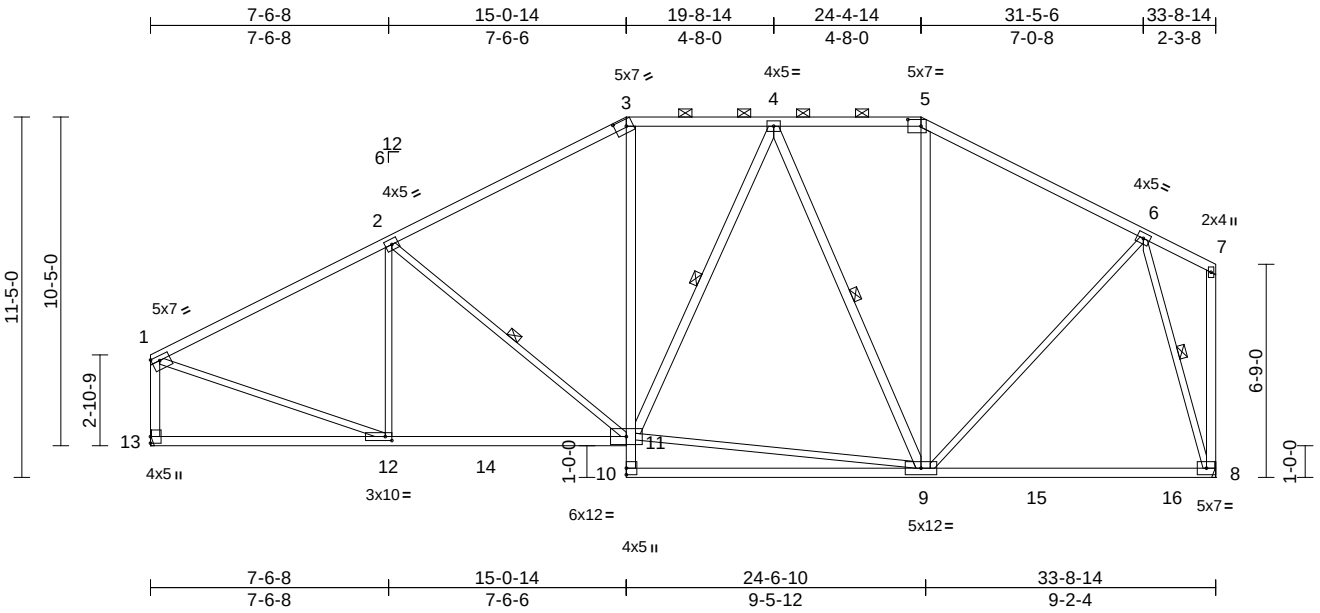

Scale = 1:73

Plate Offsets (X, Y): [1:Edge,0-1-12], [3:0-4-7,0-2-9], [5:0-5-0,0-2-8], [12:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.25	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.39	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	11-12	>999	240	Weight: 181 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 10-8:2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 11-4,9-4,9-5,8-7,13-1:2x4 SPF No.2

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

REACTIONS (size) 8= Mechanical, 13= Mechanical
Max Horiz 13=217 (LC 7)
Max Grav 8=1617 (LC 2), 13=1587 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1804/20, 2-3=-1575/55, 3-4=-1307/78, 4-5=-989/49, 5-6=-1205/42, 6-7=-91/83, 7-8=-66/48, 1-13=-1479/35
BOT CHORD 12-13=-186/151, 11-12=-69/1540, 10-11=0/161, 3-11=0/348, 9-10=0/110, 8-9=-45/433
WEBS 1-12=0/1563, 2-12=-323/90, 2-11=-333/114, 9-11=-59/1101, 4-11=-31/303, 4-9=-645/92, 5-9=0/249, 6-9=0/825, 6-8=-1533/69

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) This truss 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666696
B220118	C3	Piggyback Base	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:12

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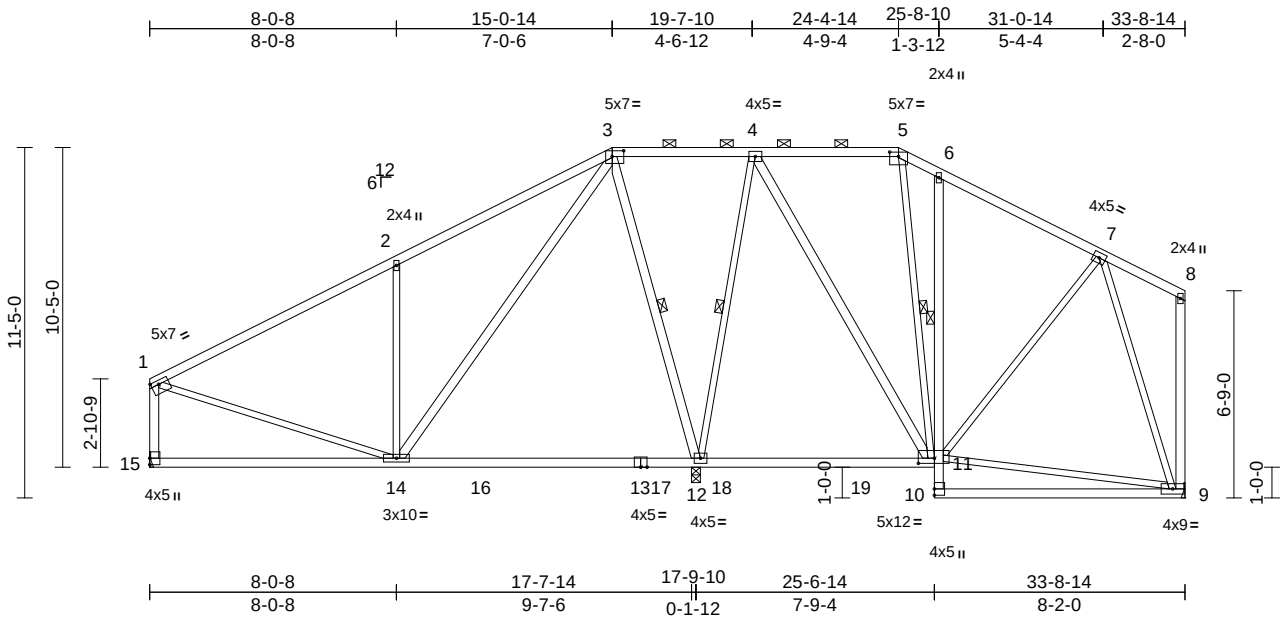

Scale = 1:75.1

Plate Offsets (X, Y): [1:0-3-0,0-1-8], [3:0-4-8,0-2-4], [5:0-3-8,0-1-12], [11:0-6-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.30	12-14	>714	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.44	12-14	>481	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.95	Horz(CT)	-0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.02	9-10	>999	240	Weight: 187 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-3,12-3,11-4,9-8,15-1:2x4 SPF No.2

BRACING

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

REACTIONS (size) 9= Mechanical, 12=0-3-8, 15= Mechanical
Max Horiz 15=217 (LC 7)
Max Uplift 9=-11 (LC 9), 15=-23 (LC 8)
Max Grav 9=661 (LC 22), 12=1897 (LC 2), 15=743 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-705/51, 2-3=-723/181, 3-4=-10/184, 4-5=-270/101, 5-6=-351/113, 6-7=-387/91, 7-8=-97/73, 8-9=-83/39, 1-15=-656/61
BOT CHORD 14-15=-188/156, 12-14=-110/91, 11-12=-122/75, 10-11=0/165, 6-11=-292/104, 9-10=0/71
WEBS 1-14=0/504, 2-14=-601/208, 3-14=-121/876, 3-12=-767/91, 4-12=-768/53, 4-11=-22/498, 5-11=-100/71, 9-11=-79/149, 7-11=-1/141, 7-9=-587/84

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 15 and 11 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666697
B220118	C4	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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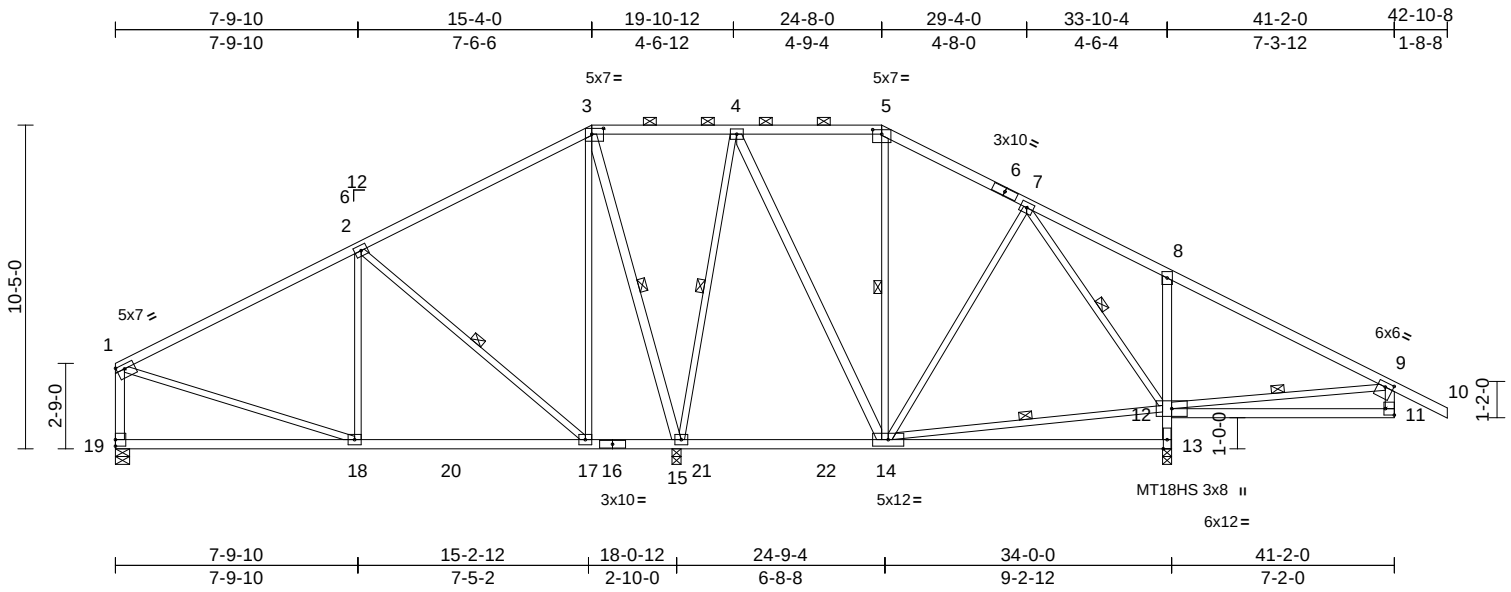

Scale = 1:74.2

Plate Offsets (X, Y): [1:Edge,0-1-12], [3:0-4-8,0-2-4], [5:0-3-8,0-1-12], [9:0-3-0,0-1-12], [11:Edge,0-3-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.16	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.33	13-14	>576	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	17-18	>999	240	Weight: 203 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 15-3,14-4,11-9,19-1:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 4-7-1 oc bracing.
WEBS 1 Row at midpt 2-17, 3-15, 4-15, 5-14, 12-14, 7-12, 9-12

REACTIONS (size) 13=0-3-8, 15=0-3-8, 19=0-5-8
Max Horiz 19=-143 (LC 6)
Max Uplift 13=-85 (LC 9), 19=-18 (LC 8)
Max Grav 13=1594 (LC 22), 15=1726 (LC 2), 19=748 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-718/48, 2-3=-222/105, 3-4=0/271, 4-5=-76/111, 5-7=-144/101, 7-8=0/823, 8-9=-67/859, 9-10=0/58, 9-11=-6/140, 1-19=-651/57
BOT CHORD 18-19=-75/163, 17-18=-35/578, 15-17=-29/149, 14-15=-136/128, 13-14=0/51, 12-13=-1511/135, 8-12=-430/144, 11-12=-32/195
WEBS 1-18=0/517, 2-18=0/289, 2-17=-679/113, 3-17=-10/610, 3-15=-944/50, 4-15=-642/48, 4-14=0/387, 5-14=-299/20, 7-14=0/296, 12-14=-141/79, 7-12=-1087/28, 9-12=-858/142

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 B; Enclosed; MWFRS (envelope) exterior 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) All plates are 4x5 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 19 and 85 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666698
B220118	C5	Piggyback Base	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:13 Page: 1
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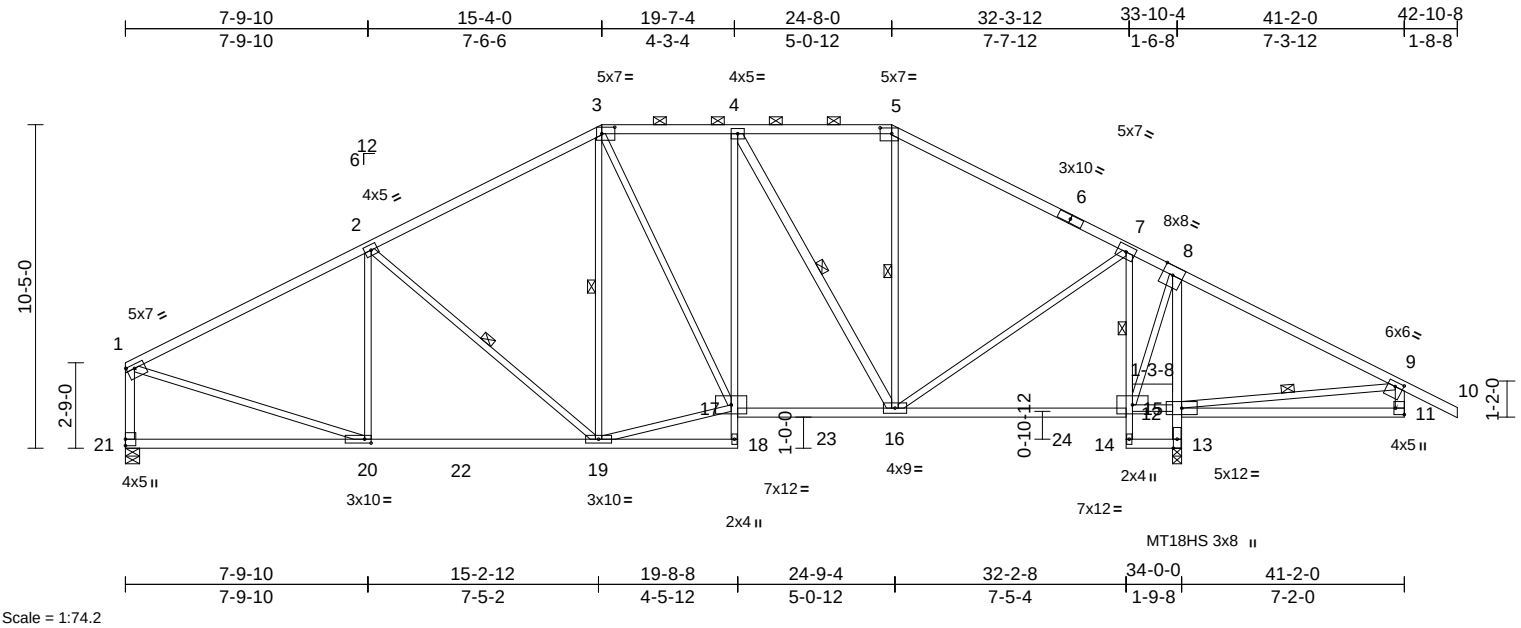


Scale = 1:74.2

Plate Offsets (X, Y): [1:0-3-0,0-1-8], [3:0-5-0,0-2-8], [5:0-4-8,0-2-4], [9:0-3-0,0-1-12], [11:Edge,0-3-8], [20:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.14	19-20	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.24	19-20	>999	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	19-20	>999	240	Weight: 198 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 18-4,7-14:2x3 SPF No.2, 14-13:2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 16-4,11-9,21-1:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-7 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 3-6-9 oc bracing. Except:
1 Row at midpt 7-15
WEBS 1 Row at midpt 2-19, 3-19, 4-16, 5-16, 9-12

REACTIONS (size) 13=0-3-8, 21=0-5-8
Max Horiz 21=-143 (LC 6)
Max Uplift 13=-17 (LC 9), 21=-7 (LC 8)
Max Grav 13=2494 (LC 2), 21=1515 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1750/32, 2-3=-1477/67, 3-4=-1295/58, 4-5=-958/49, 5-7=-1180/42, 7-8=-127/241, 8-9=-68/857, 9-10=0/58, 9-11=-6/139, 1-21=-1397/46
BOT CHORD 20-21=-74/169, 19-20=-22/1489, 18-19=-1/30, 17-18=0/61, 4-17=-8/385, 16-17=0/1307, 15-16=-167/121, 14-15=-23/14, 7-15=-1555/41, 13-14=-92/0, 12-13=-2423/31, 8-12=-2130/42, 11-12=-34/192
WEBS 1-20=0/1481, 2-20=-266/90, 2-19=-383/118, 3-19=-41/194, 17-19=0/1250, 3-17=-43/271, 4-16=-707/48, 5-16=-79/263, 7-16=0/1249, 12-15=-639/145, 8-15=0/1699, 9-12=-854/145

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 21 and 17 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.

LOAD CASE(S) Standard

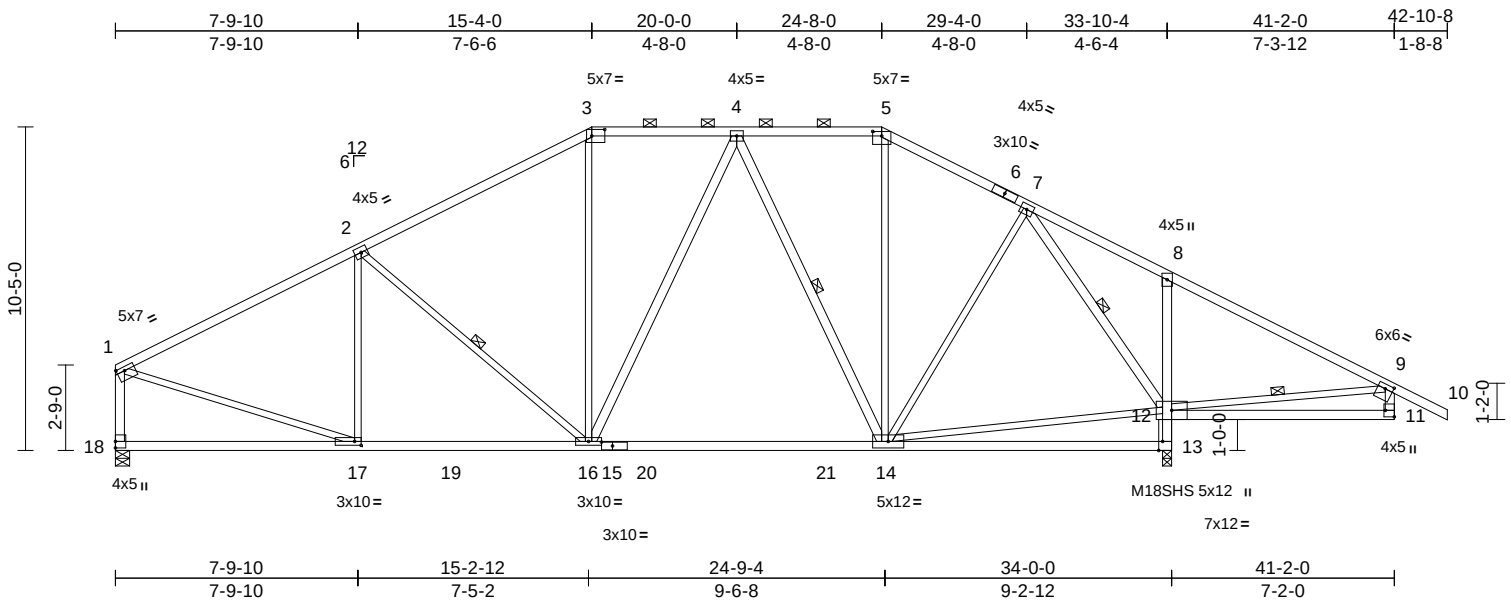
August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	C6	Piggyback Base	1	1	Job Reference (optional)	I53666699

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:13 ID:QvPmNtAJ_1?1_tFxc?1Eegyncie-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:74.2

Plate Offsets (X, Y): [1:0-3-0,0-1-8], [3:0-5-0,0-2-8], [5:0-3-8,0-1-12], [9:0-3-0,0-1-12], [11:Edge,0-3-8], [13:0-3-8,Edge], [15:0-4-4,0-1-8], [17:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.27	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.41	14-16	>980	240	M18SHS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.03	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	16-17	>999	240	Weight: 198 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 13-8,12-11:2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 16-4,14-4,12-7,11-9,18-1:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-10 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 3-7-5 oc bracing: 12-13.
WEBS 1 Row at midpt 2-16, 4-14, 7-12, 9-12

REACTIONS (size) 13=0-3-8, 18=0-5-8
Max Horiz 18=-143 (LC 6)
Max Uplift 13=-17 (LC 9), 18=-7 (LC 8)
Max Grav 13=2488 (LC 2), 18=1531 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1764/34, 2-3=-1521/64, 3-4=-1257/88, 4-5=-884/55, 5-7=-1054/53, 7-8=0/827, 8-9=-67/860, 9-10=0/58, 9-11=-6/140, 1-18=-1407/47
BOT CHORD 17-18=-74/172, 16-17=-23/1502, 14-16=0/1143, 13-14=0/57, 12-13=-2358/64, 8-12=-431/144, 11-12=-32/194
WEBS 1-17=0/1491, 2-17=-276/84, 2-16=-348/124, 3-16=0/333, 4-16=-33/327, 4-14=-608/72, 5-14=0/270, 7-14=0/804, 12-14=0/487, 7-12=-2062/0, 9-12=-858/142

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 18 and 17 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	C7	Piggyback Base	2	1	Job Reference (optional)	I53666700

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:13 Page: 1
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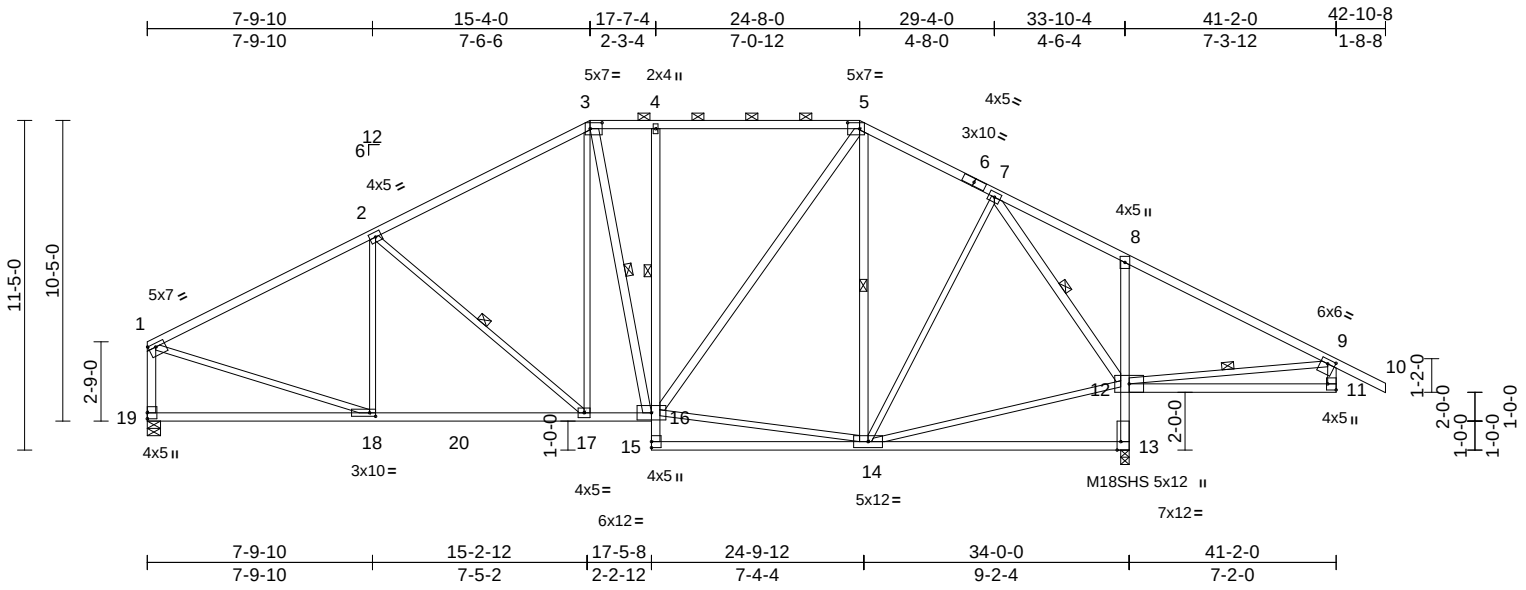

Scale = 1:79.8

Plate Offsets (X, Y): [1:0-3-0,0-1-8], [3:0-5-0,0-2-8], [5:0-5-0,0-2-8], [9:0-3-0,0-1-12], [11:Edge,0-3-8], [13:0-3-8,Edge], [18:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.13	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.24	13-14	>999	240	M18SHS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	17-18	>999	240	Weight: 223 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 15-13:2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 16-3,16-5,14-5,12-7,11-9,19-1:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-14 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
3-7-9 oc bracing: 12-13.
1 Row at midpt 4-16
WEBS 1 Row at midpt 2-17, 3-16, 5-14, 7-12, 9-12

REACTIONS (size) 13=0-3-8, 19=0-5-8
Max Horiz 19=-144 (LC 6)
Max Uplift 13=-17 (LC 9), 19=-7 (LC 8)
Max Grav 13=2437 (LC 2), 19=1496 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1724/32, 2-3=-1443/68, 3-4=-1164/79, 4-5=-1167/80, 5-7=-890/65, 7-8=0/825, 8-9=-67/860, 9-10=0/58, 9-11=-6/141, 1-19=-1378/46
BOT CHORD 18-19=-74/169, 17-18=-22/1466, 16-17=0/1192, 15-16=0/122, 4-16=-445/113, 14-15=0/129, 13-14=0/31, 12-13=-2313/63, 8-12=-434/145, 11-12=-32/194
WEBS 1-18=0/1457, 2-18=-266/90, 2-17=-392/117, 3-17=-1/498, 3-16=-169/175, 14-16=0/659, 5-16=-36/707, 5-14=-619/82, 7-14=0/755, 12-14=0/444, 7-12=-1944/0, 9-12=-857/141

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 19 and 17 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666701
B220118	C8	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:14 Page: 1
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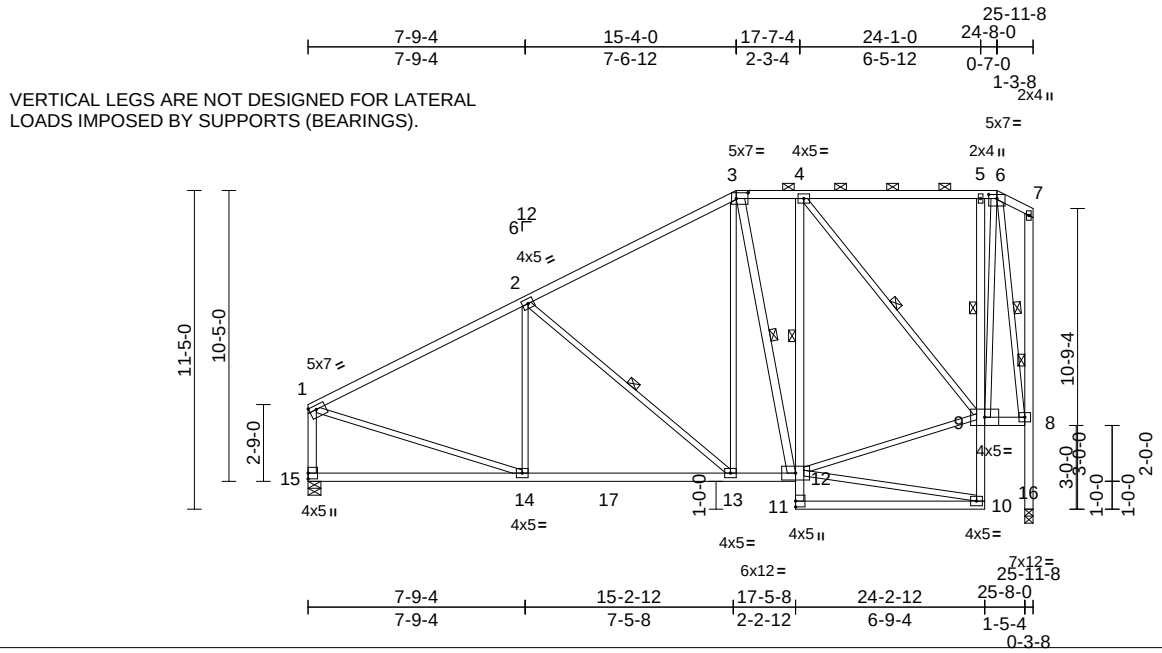

Scale = 1:82.5

Plate Offsets (X, Y): [1:Edge,0-1-12], [3:0-5-0,0-2-8], [6:0-3-8,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.11	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.20	13-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.08	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	13-14	>999	240	Weight: 170 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 12-3,15-1,16-7:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
1 Row at midpt 4-12, 5-9
WEBS 1 Row at midpt 2-13, 3-12, 7-16, 6-8, 4-9

REACTIONS (size) 15=0-5-8, 16=0-3-8
Max Horiz 15=301 (LC 7)
Max Uplift 15=-9 (LC 8), 16=-41 (LC 5)
Max Grav 15=1216 (LC 2), 16=1203 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1347/35, 2-3=-974/72, 3-4=-682/83, 4-5=-261/50, 5-6=-252/49, 6-7=-95/67, 1-15=-1100/48, 8-16=-1203/41, 7-8=-79/48
BOT CHORD 14-15=-269/150, 13-14=-134/1138, 12-13=-111/765, 11-12=0/132, 4-12=-40/309, 10-11=0/100, 9-10=0/137, 5-9=-336/118, 8-9=-122/190
WEBS 2-14=-162/153, 2-13=-490/116, 3-13=-1/543, 3-12=-420/53, 10-12=-63/0, 9-12=-125/675, 6-9=-86/1031, 1-14=0/1107, 6-8=-1105/91, 4-9=-699/53

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 B; Enclosed; MWFRS (envelope) exterior 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 4x5 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 16 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 9 lb uplift at joint 15 and 41 lb uplift at joint 16.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	C9	Piggyback Base	1	1	Job Reference (optional)	I53666702

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:14 Page: 1
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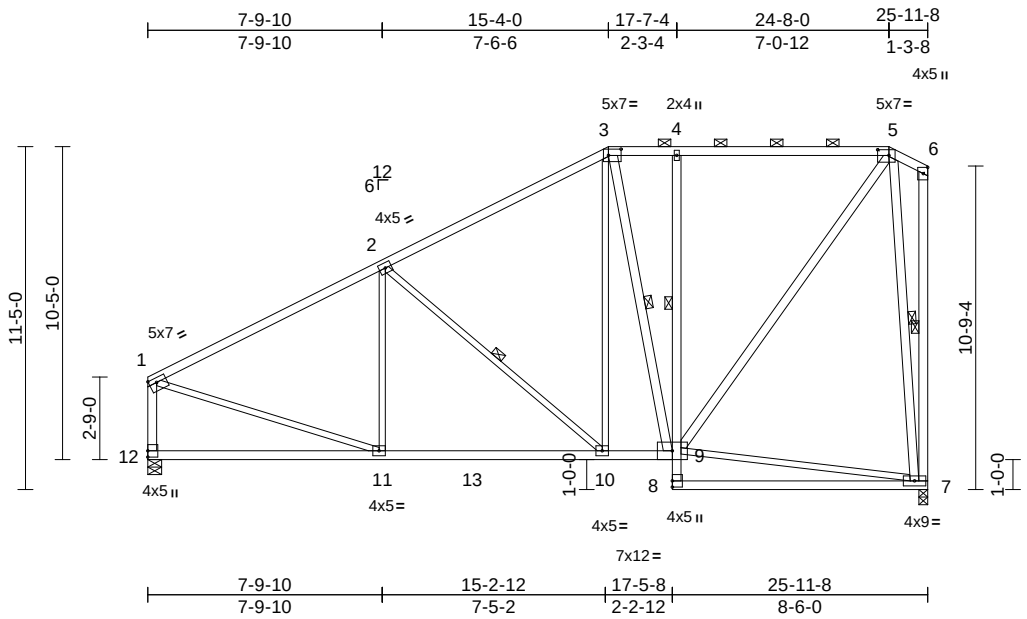

Scale = 1:76.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.17	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.35	7-8	>881	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.05	7-8	>999	240	Weight: 159 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
9-3,9-5,7-6,7-5,12-1:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-9 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
1 Row at midpt 4-9
WEBS 1 Row at midpt 2-10, 3-9, 6-7, 5-7

REACTIONS (size) 7=0-3-8, 12=0-5-8
Max Horiz 12=298 (LC 7)
Max Uplift 7=-41 (LC 5), 12=-10 (LC 8)
Max Grav 7=1203 (LC 2), 12=1216 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1347/36, 2-3=-974/72, 3-4=-685/84, 4-5=-689/85, 5-6=-186/120, 6-7=-186/104, 1-12=-1099/49
BOT CHORD 11-12=-268/150, 10-11=-132/1136, 9-10=-109/765, 8-9=0/174, 4-9=-447/111, 7-8=0/170
WEBS 1-11=0/1105, 2-11=-160/154, 2-10=-491/116, 3-10=0/547, 3-9=-411/49, 7-9=-189/48, 5-9=-58/991, 5-7=-1142/227

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 12 and 41 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	C10	Piggyback Base	1	1	Job Reference (optional)	I53666703

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:15 Page: 1
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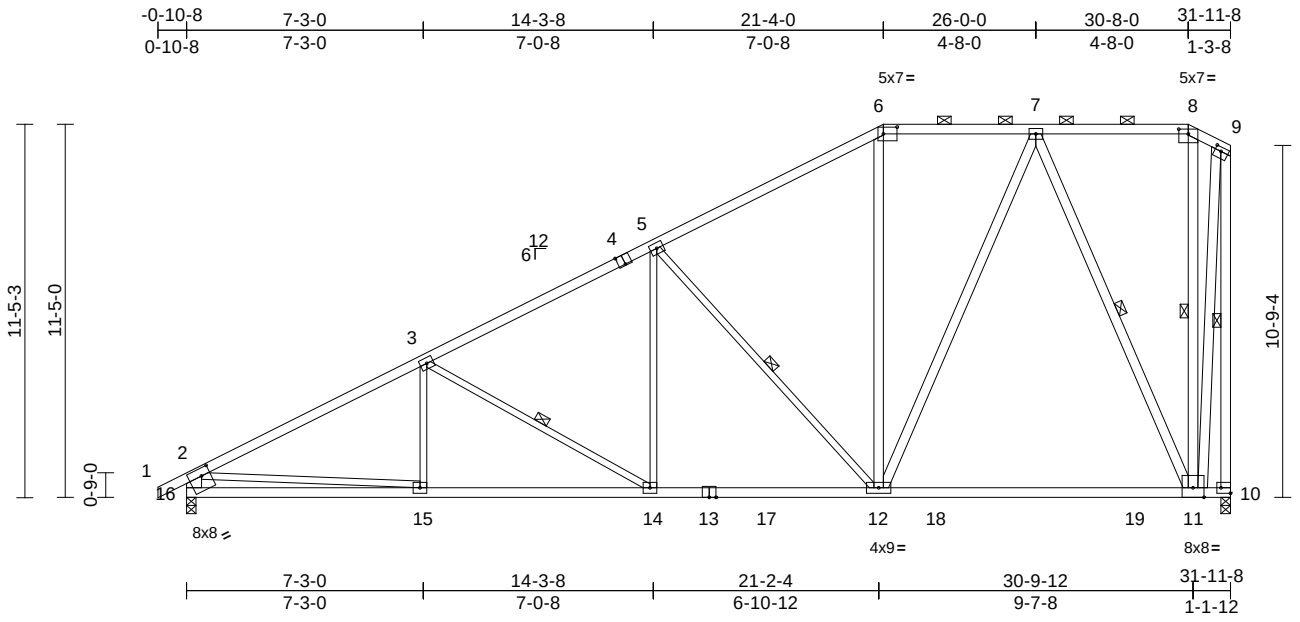

Scale = 1:70.5

Plate Offsets (X, Y): [4:0-2-8,Edge], [6:0-5-0,0-2-8], [8:0-3-8,0-1-12], [9:0-2-4,0-1-8], [10:Edge,0-2-0], [16:0-3-4,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.34	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.55	11-12	>685	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	14-15	>999	240	Weight: 182 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 12-6,12-7,11-7,11-8,11-9:2x4 SPF No.2, 10-9:2x4 SPF 2100F 1.8E, 16-2:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-14 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 12-14.
WEBS 1 Row at midpt 3-14, 5-12, 7-11, 9-10, 8-11

REACTIONS (size) 10=0-3-8, 16=0-3-8
Max Horiz 16=320 (LC 5)
Max Uplift 10=-26 (LC 5), 16=-39 (LC 8)
Max Grav 10=1560 (LC 2), 16=1568 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2456/51, 3-5=-1909/75, 5-6=-1247/89, 6-7=-1021/109, 7-8=-222/72, 8-9=-304/106, 9-10=-1798/0, 2-16=-1449/78
BOT CHORD 15-16=-275/714, 14-15=-126/2110, 12-14=-80/1631, 11-12=-91/657, 10-11=-104/81
WEBS 3-15=0/223, 3-14=-558/92, 5-14=0/531, 5-12=-905/141, 6-12=0/252, 7-12=-40/921, 7-11=-1237/74, 8-11=-129/170, 2-15=0/1445, 9-11=0/1676

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 B; Enclosed; MWFRS (envelope) exterior 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 4x5 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 16 and 26 lb uplift at joint 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	C11	Piggyback Base	2	1	Job Reference (optional)	I53666704

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:15 Page: 1
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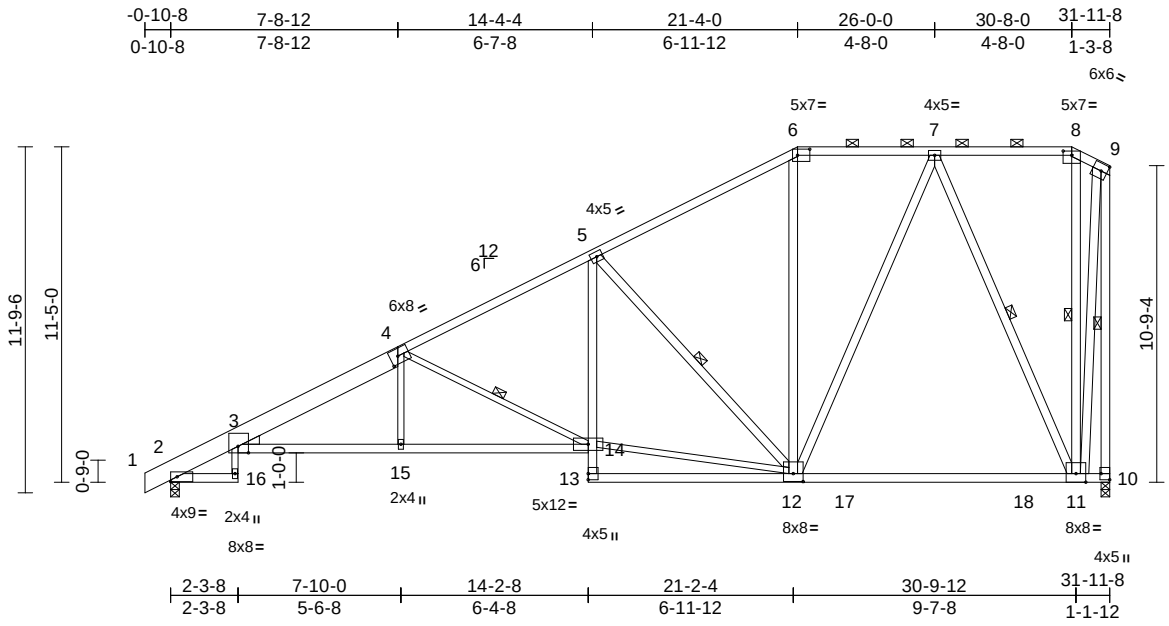

Scale = 1:78.4

Plate Offsets (X, Y): [3:0-4-4,Edge], [4:0-3-4,0-3-0], [6:0-5-0,0-2-8], [8:0-3-8,0-1-12], [10:Edge,0-3-8], [12:0-4-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.31	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.53	11-12	>721	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.33	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	3-15	>999	240	Weight: 207 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 1-4:2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except* 16-3:2x3 SPF No.2, 13-10:2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* 4-15,14-4,12-14:2x3 SPF No.2, 10-9:2x4 SPF 2100F 1.8E
WEDGE Left: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-3-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-9 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 3-15.
WEBS 1 Row at midpt 4-14, 5-12, 7-11, 8-11, 9-10

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=316 (LC 5)
Max Uplift 2=-38 (LC 8), 10=-26 (LC 5)
Max Grav 2=1542 (LC 2), 10=1538 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/12, 2-3=-966/0, 3-5=-2963/86, 5-6=-1223/89, 6-7=-1002/109, 7-8=-219/72, 8-9=-301/107, 9-10=-1762/0
BOT CHORD 2-16=0/5, 3-16=0/72, 3-15=-164/2787, 14-15=-159/2784, 13-14=0/104, 5-14=0/899, 12-13=-9/114, 11-12=-90/645, 10-11=-104/81
WEBS 4-15=0/193, 4-14=-1087/116, 12-14=-86/1713, 5-12=-1190/158, 6-12=0/234, 7-12=-39/898, 7-11=-1213/73, 8-11=-130/169, 9-11=0/1642

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2 and 26 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666705
B220118	C12	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:15 Page: 1
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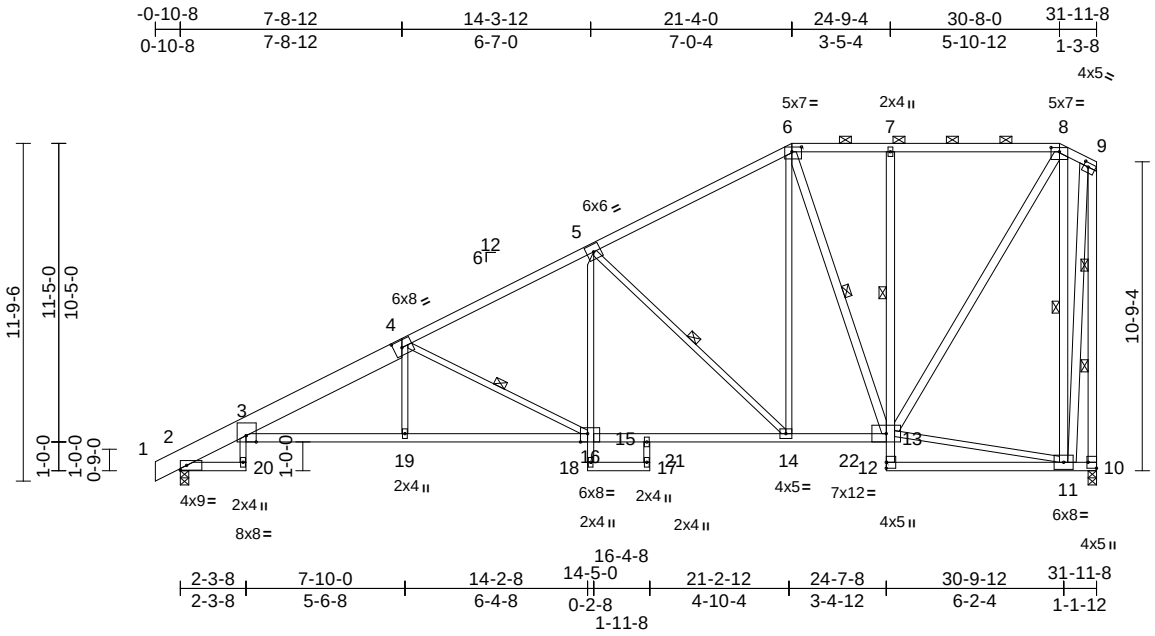

Scale = 1:80.4

Plate Offsets (X, Y): [3:0-4-4,Edge], [4:0-3-8,0-3-0], [6:0-4-0,0-2-0], [8:0-3-8,0-1-12], [9:Edge,0-1-12], [10:Edge,0-3-8], [16:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.31	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.53	14-15	>723	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.35	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	3-19	>999	240	Weight: 208 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 1-4:2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except* 20-3,5-18,17-15:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 13-6,13-8,11-8,10-9,11-9:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-13 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 3-19
6-0-0 oc bracing: 17-18.
1 Row at midpt 7-13
WEBS 1 Row at midpt 4-16, 5-14, 6-13, 8-11
WEBS 2 Rows at 1/3 pts 9-10

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=316 (LC 5)
Max Uplift 2=-38 (LC 8), 10=-26 (LC 5)
Max Grav 2=1588 (LC 2), 10=1536 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/12, 2-3=-992/0, 3-5=-3067/85, 5-6=-1355/86, 6-7=-855/87, 7-8=-856/88, 8-9=-256/114, 9-10=-1490/51
BOT CHORD 2-20=0/5, 3-20=0/73, 3-19=-162/2886, 16-19=-157/2881, 16-18=0/75, 5-16=0/777, 17-18=-9/9, 15-17=0/42, 15-16=-84/1938, 14-15=-91/1946, 13-14=-93/1109, 12-13=0/125, 7-13=-389/95, 11-12=0/91, 10-11=-104/81
WEBS 4-19=0/179, 4-16=-1066/113, 5-14=-1126/143, 6-14=-20/1037, 6-13=-810/63, 11-13=-108/84, 8-13=-57/1389, 8-11=-1327/199, 9-11=-9/1403

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2 and 26 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666706
B220118	C13	Piggyback Base	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:16

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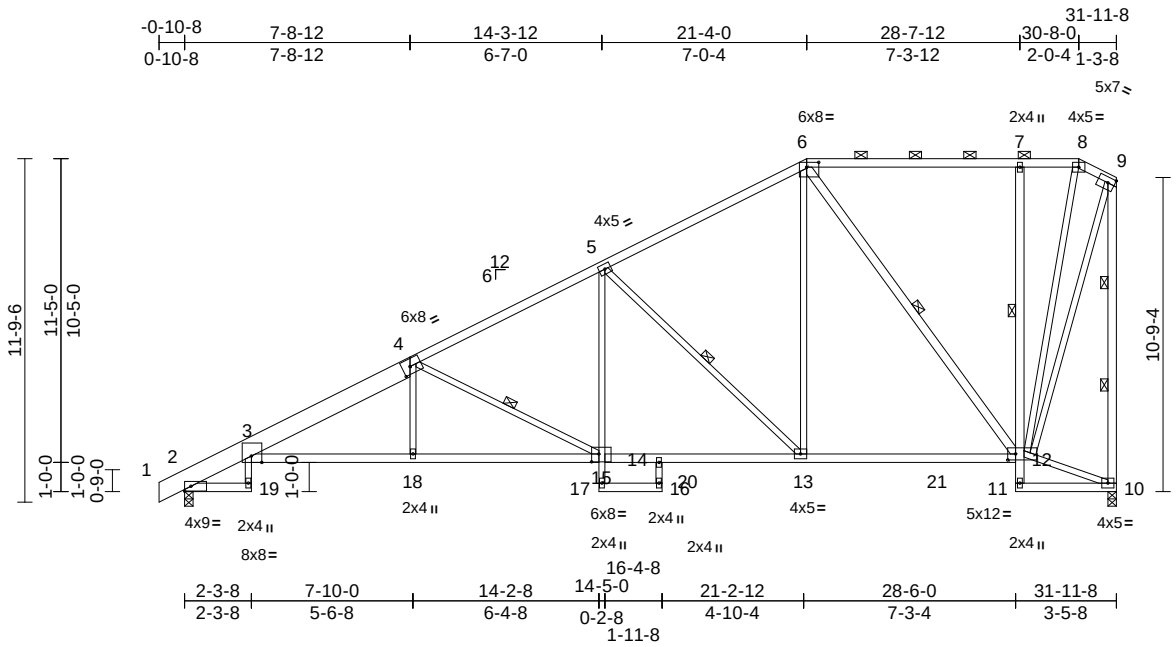

Scale = 1:79

Plate Offsets (X, Y): [3:0-4-4,Edge], [4:0-3-4,0-3-0], [6:0-5-0,0-2-0], [9:Edge,0-2-4], [12:0-3-4,0-2-8], [15:0-3-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.30	3-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.52	3-18	>734	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.36	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	3-18	>999	240	Weight: 187 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 1-4:2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except* 19-3,5-17,16-14:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 12-6,10-9:2x4 SPF No.2

BRACING

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

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
1-4-12 oc bracing: 3-18
6-0-0 oc bracing: 16-17,10-11.

1 Row at midpt 7-12

WEBS 1 Row at midpt 4-15, 5-13, 6-12

WEBS 2 Rows at 1/3 pts 9-10

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=316 (LC 7)
Max Uplift 2=-38 (LC 8), 10=-26 (LC 5)
Max Grav 2=1596 (LC 2), 10=1565 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/12, 2-3=-997/0, 3-5=-3094/86, 5-6=-1383/85, 6-7=-495/72, 7-8=-487/72, 8-9=-535/89, 9-10=-1519/37

BOT CHORD 2-19=0/5, 3-19=0/73, 3-18=-164/2912, 15-18=-158/2908, 15-17=0/73, 5-15=0/766, 16-17=-5/16, 14-16=0/45, 14-15=-86/1923, 13-14=-92/1938, 12-13=-93/1139, 11-12=-9/82, 7-12=-523/123, 10-11=-62/10

WEBS 4-18=0/182, 4-15=-1084/116, 5-13=-1091/148, 6-13=-6/1110, 6-12=-1129/56, 10-12=-100/120, 8-12=-110/375, 9-12=-109/1284

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2 and 26 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666707
B220118	C14	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:16 Page: 1
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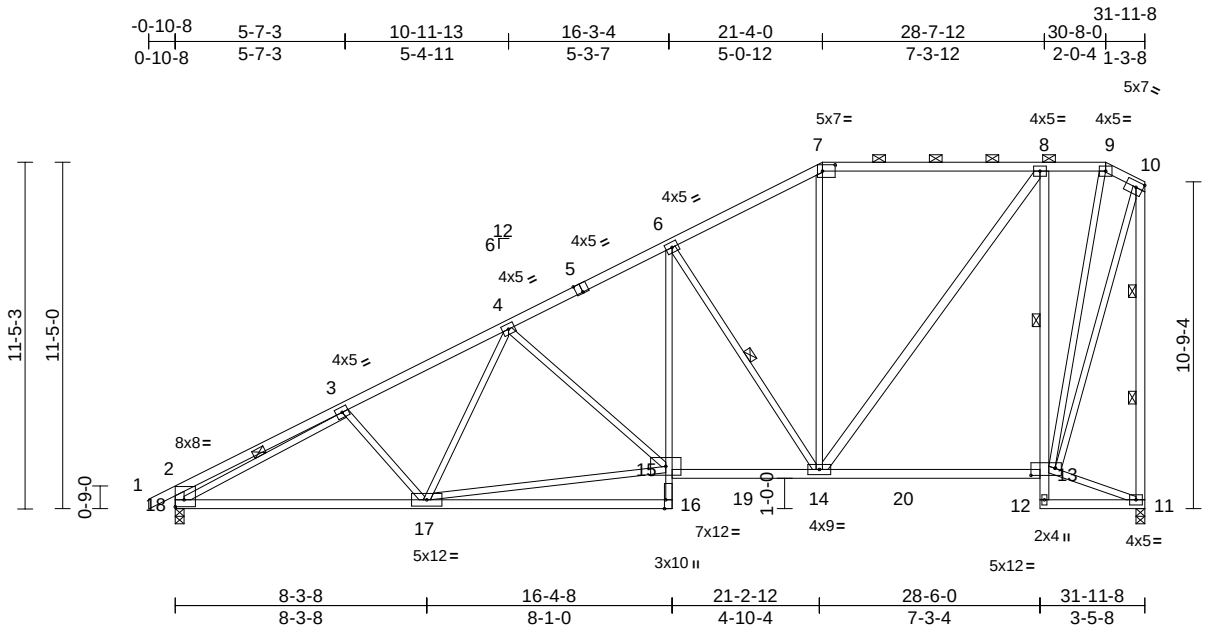

Scale = 1:75.9

Plate Offsets (X, Y): [2:Edge,0-2-12], [5:0-2-8,Edge], [7:0-5-0,0-2-8], [10:Edge,0-2-4], [13:0-9-7,0-2-13], [16:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.20	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.38	16-17	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	14-15	>999	240	Weight: 181 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 16-6:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-8,11-10:2x4 SPF No.2, 18-2:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-2 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 11-12.
1 Row at midpt 8-13
WEBS 1 Row at midpt 6-14, 3-18
WEBS 2 Rows at 1/3 pts 10-11

REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=319 (LC 5)
Max Uplift 11=-26 (LC 5), 18=-38 (LC 8)
Max Grav 11=1541 (LC 2), 18=1553 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-784/77, 3-4=-2310/70, 4-6=-1893/92, 6-7=-1298/93, 7-8=-1099/105, 8-9=-480/72, 9-10=-527/88, 10-11=-1499/37, 2-18=-575/83
BOT CHORD 17-18=-160/2090, 16-17=0/137, 15-16=0/141, 6-15=-22/781, 14-15=-96/1636, 13-14=-88/472, 12-13=-9/82, 8-13=-1296/132, 11-12=-78/12
WEBS 3-17=-197/124, 4-17=0/226, 15-17=-111/1820, 4-15=-424/97, 6-14=-976/139, 7-14=0/260, 8-14=-55/1061, 11-13=-98/120, 9-13=-113/352, 3-18=-1699/0, 10-13=-109/1278

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 B; Enclosed; MWFRS (envelope) exterior 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) The Fabrication Tolerance at joint 2 = 6%, joint 2 = 6%
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 11 and 38 lb uplift at joint 18.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	C15	Piggyback Base Supported Gable	1	1	Job Reference (optional)	I53666708

Wheeler Lumber, Waverly, KS - 66871, Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:17 Page: 1

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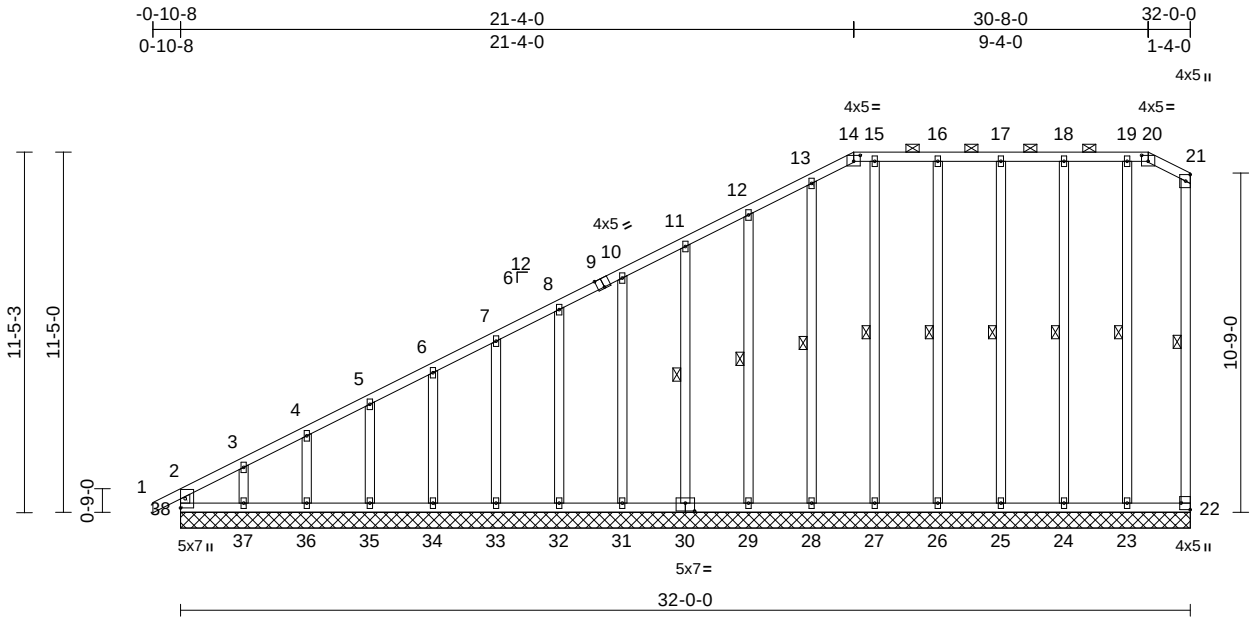


Scale = 1:73

Plate Offsets (X, Y): [9:0-2-8,Edge], [14:0-2-8,0-2-4], [20:0-2-8,0-2-4], [22:Edge,0-3-8], [30:0-3-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.01	22	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 216 lb	FT = 10%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 14-20.

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

WEBS 1 Row at midpt 21-22, 11-30, 12-29, 13-28, 15-27, 16-26, 17-25, 18-24, 19-23

REACTIONS (size) 22=32-0-0, 23=32-0-0, 24=32-0-0, 25=32-0-0, 26=32-0-0, 27=32-0-0, 28=32-0-0, 29=32-0-0, 30=32-0-0, 31=32-0-0, 32=32-0-0, 33=32-0-0, 34=32-0-0, 35=32-0-0, 36=32-0-0, 37=32-0-0, 38=32-0-0

Max Horiz 38=319 (LC 5)

Max Uplift 22=-22 (LC 8), 23=-18 (LC 5), 24=-13 (LC 5), 25=-12 (LC 4), 26=-15 (LC 4), 27=-29 (LC 5), 28=-7 (LC 8), 29=-28 (LC 8), 30=-23 (LC 8), 31=-24 (LC 8), 32=-24 (LC 8), 33=-24 (LC 8), 34=-22 (LC 8), 35=-29 (LC 8), 36=-2 (LC 8), 37=-116 (LC 8)

Max Grav 22=84 (LC 16), 23=190 (LC 22), 24=178 (LC 22), 25=180 (LC 1), 26=184 (LC 22), 27=181 (LC 1), 28=179 (LC 1), 29=180 (LC 1), 30=180 (LC 1), 31=180 (LC 1), 32=180 (LC 1), 33=180 (LC 1), 34=180 (LC 1), 35=179 (LC 1), 36=184 (LC 1), 37=164 (LC 1), 38=245 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-38=-205/3, 1-2=0/32, 2-3=-289/52, 3-4=-243/54, 4-5=-229/54, 5-6=-209/54, 6-7=-190/54, 7-8=-180/55, 8-10=-169/60, 10-11=-159/70, 11-12=-148/78, 12-13=-140/90, 13-14=-121/89, 14-15=-104/85, 15-16=-104/85, 16-17=-104/85, 17-18=-104/85, 18-19=-104/85, 19-20=-104/85, 20-21=-150/114, 21-22=-125/83

BOT CHORD 37-38=-105/80, 36-37=-105/80, 35-36=-105/80, 34-35=-105/80, 33-34=-105/80, 32-33=-105/80, 31-32=-105/80, 29-31=-105/80, 28-29=-105/80, 27-28=-105/80, 26-27=-105/80, 25-26=-105/80, 24-25=-105/80, 23-24=-105/80, 22-23=-105/80

WEBS 3-37=-126/100, 4-36=-143/36, 5-35=-139/51, 6-34=-140/47, 7-33=-140/48, 8-32=-140/48, 10-31=-140/48, 11-30=-140/47, 12-29=-140/52, 13-28=-139/31, 15-27=-141/54, 16-26=-144/40, 17-25=-140/35, 18-24=-139/51, 19-23=-148/119

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 22, 116 lb uplift at joint 37, 2 lb uplift at joint 36, 29 lb uplift at joint 35, 22 lb uplift at joint 34, 24 lb uplift at joint 33, 24 lb uplift at joint 32, 24 lb uplift at joint 31, 23 lb uplift at joint 30, 28 lb uplift at joint 29, 7 lb uplift at joint 28, 29 lb uplift at joint 27, 15 lb uplift at joint 26, 12 lb uplift at joint 25, 13 lb uplift at joint 24 and 18 lb uplift at joint 23.
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.

August 16,2022

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

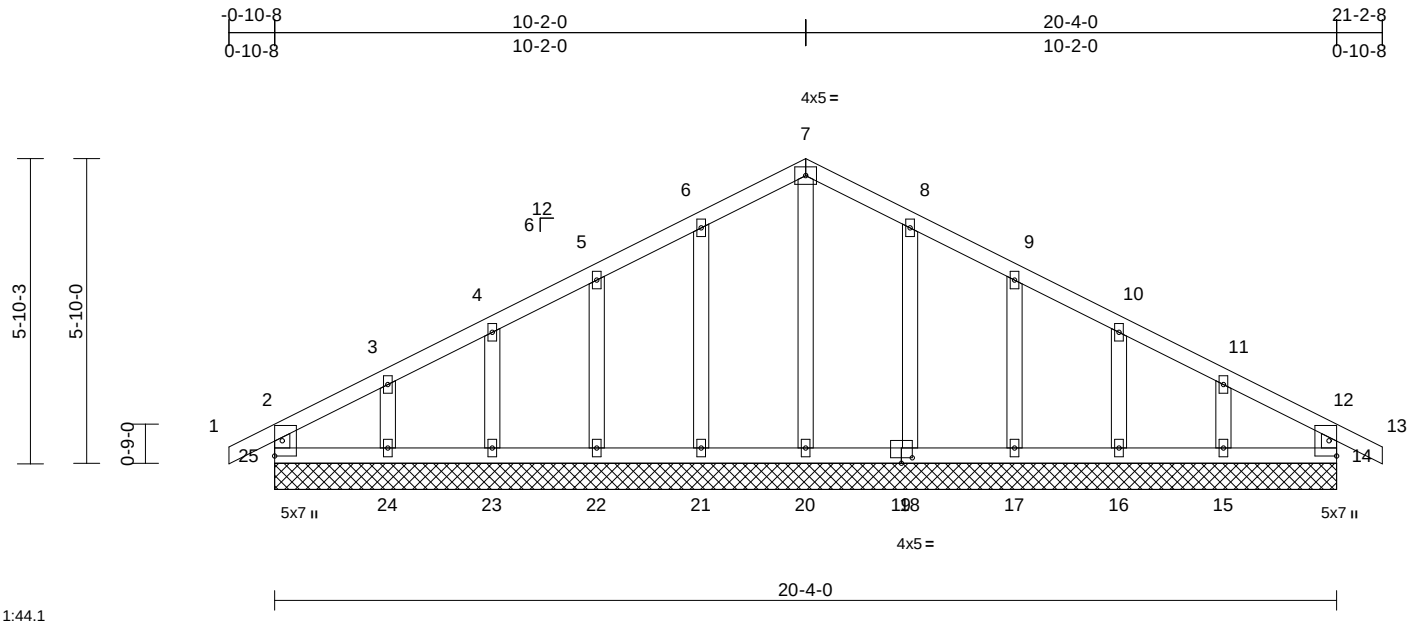
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	D1	Common Supported Gable	1	1	Job Reference (optional)	I53666709

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:17 ID:PetLp3zf_psRSFRg6wEFS5ynciv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.1

Plate Offsets (X, Y): [19:0-2-8,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	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	0.07	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 84 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 14=20-4-0, 15=20-4-0, 16=20-4-0, 17=20-4-0, 18=20-4-0, 20=20-4-0, 21=20-4-0, 22=20-4-0, 23=20-4-0, 24=20-4-0, 25=20-4-0
Max Horiz 25=-64 (LC 6)
Max Uplift 14=-2 (LC 8), 15=-40 (LC 9), 16=-19 (LC 9), 17=-26 (LC 9), 18=-24 (LC 9), 21=-24 (LC 8), 22=-26 (LC 8), 23=-18 (LC 8), 24=-45 (LC 8), 25=-12 (LC 9)
Max Grav 14=168 (LC 22), 15=176 (LC 1), 16=182 (LC 22), 17=178 (LC 1), 18=191 (LC 22), 20=165 (LC 18), 21=191 (LC 21), 22=178 (LC 1), 23=182 (LC 21), 24=176 (LC 1), 25=168 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-25=-149/21, 1-2=0/32, 2-3=-65/48, 3-4=-44/55, 4-5=-38/74, 5-6=-33/93, 6-7=-38/109, 7-8=-38/104, 8-9=-33/79, 9-10=-34/60, 10-11=-33/45, 11-12=-54/37, 12-13=0/32, 12-14=-149/13
BOT CHORD 24-25=-16/49, 23-24=-16/49, 22-23=-16/49, 21-22=-16/49, 20-21=-16/49, 18-20=-16/49, 17-18=-16/49, 16-17=-16/49, 15-16=-16/49, 14-15=-16/49
WEBS 7-20=-125/0, 6-21=-151/48, 5-22=-138/49, 4-23=-142/44, 3-24=-134/61, 8-18=-151/48, 9-17=-138/49, 10-16=-142/45, 11-15=-134/58

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 25, 2 lb uplift at joint 14, 24 lb uplift at joint 21, 26 lb uplift at joint 22, 18 lb uplift at joint 23, 45 lb uplift at joint 24, 24 lb uplift at joint 18, 26 lb uplift at joint 17, 19 lb uplift at joint 16 and 40 lb uplift at joint 15.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666710
B220118	D2	Common	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:18 Page: 1
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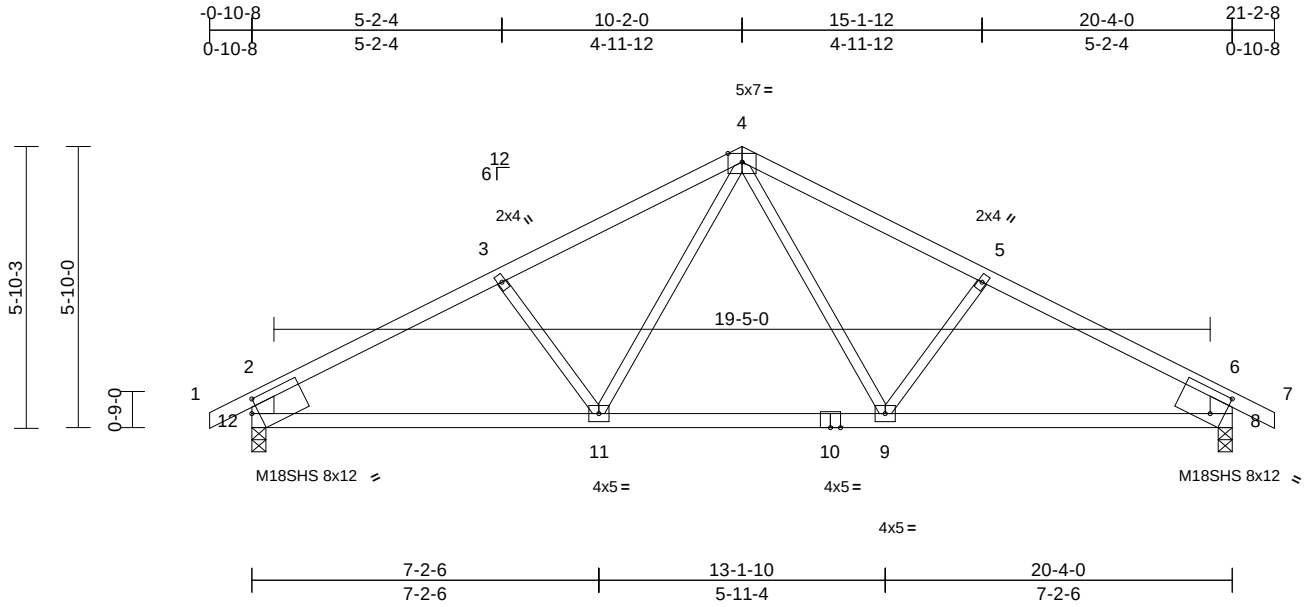

Scale = 1:47.8

Plate Offsets (X, Y): [8:0-3-5,0-5-12], [12:0-1-10,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.13	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.23	9-11	>999	240	M18SHS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	9-11	>999	240	Weight: 69 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 12-2,8-6:2x6 SP DSS

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 12=0-3-8
Max Horiz 12=-65 (LC 6)
Max Uplift 8=-21 (LC 9), 12=-21 (LC 8)
Max Grav 8=972 (LC 1), 12=972 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1330/38, 3-4=-1130/47, 4-5=-1130/48, 5-6=-1330/38, 6-7=0/35, 2-12=-880/61, 6-8=-880/61
BOT CHORD 11-12=-37/1086, 9-11=0/807, 8-9=0/1086
WEBS 4-9=-22/359, 5-9=-253/121, 4-11=-22/359, 3-11=-253/121

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 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 21 lb uplift at joint 12 and 21 lb uplift at joint 8.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	D3	Common Girder	1	**2**	Job Reference (optional)	I53666711

Wheeler Lumber, Waverly, KS - 66871,

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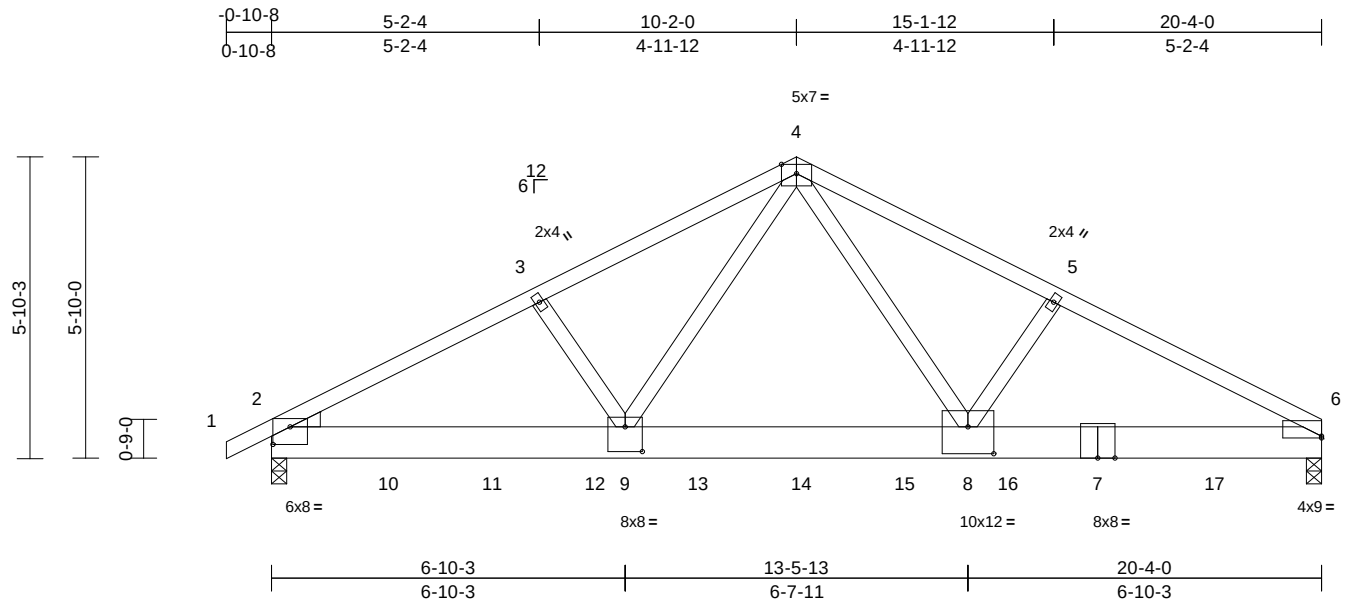

Scale = 1:44.6

Plate Offsets (X, Y): [2:0-4-0,0-4-1], [6:Edge,0-0-7], [8:0-6-0,0-6-4], [9:0-4-0,0-5-12]

Loading	(psf)	**Spacing**	2-0-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.13	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.22	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.01	8-9	>999	240	Weight: 222 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SPF No.2
WEDGE Left: 2x4 SPF No.2

BRACING

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

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=70 (LC 12)
Max Grav 2=5721 (LC 1), 6=4827 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-3=-7655/0, 3-4=-7505/0, 4-5=-7547/0, 5-6=-7697/0
BOT CHORD 2-9=0/6595, 8-9=0/4707, 6-8=0/6631
WEBS 4-8=0/3766, 5-8=0/317, 4-9=0/3694, 3-9=0/307

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-6-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Web 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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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) 874 lb down at 0-1-12, 867 lb down at 2-3-4, 867 lb down at 4-3-4, 867 lb down at 6-3-4, 867 lb down at 8-3-4, 867 lb down at 10-3-4, 867 lb down at 12-3-4, 867 lb down at 14-3-4, and 865 lb down at 16-3-4, and 865 lb down at 18-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-6=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 2=-874 (F), 7=-865 (F), 10=-867 (F), 11=-867 (F), 12=-867 (F), 13=-867 (F), 14=-867 (F), 15=-867 (F), 16=-867 (F), 17=-865 (F)

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

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666712
B220118	E1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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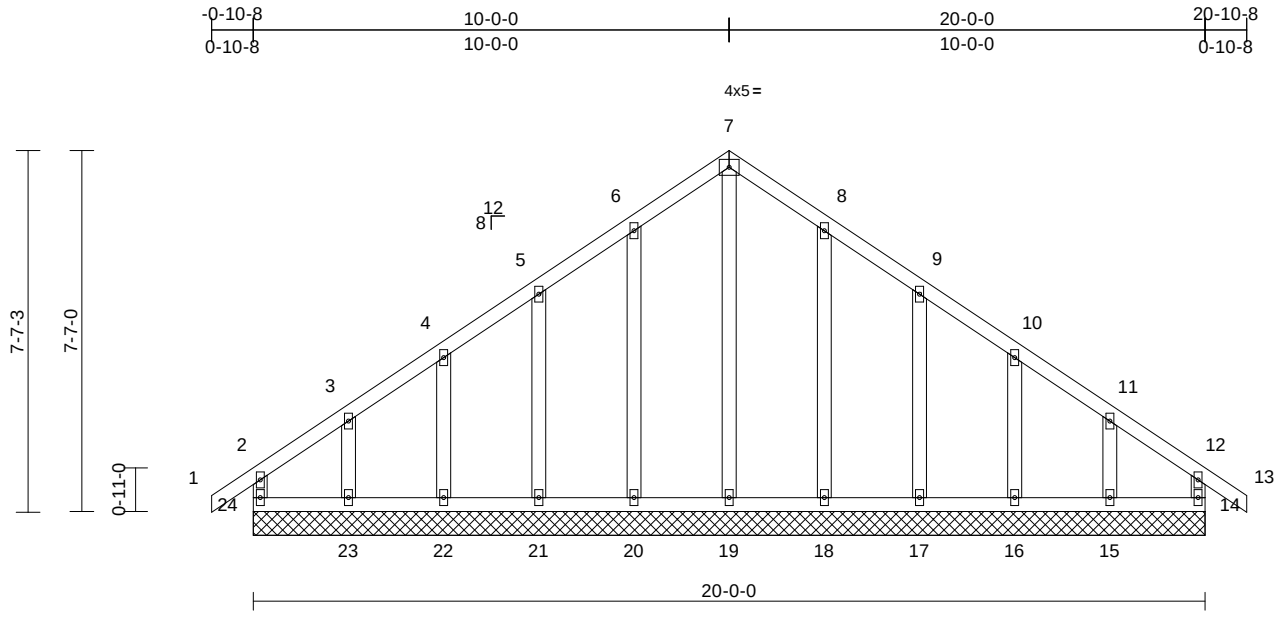

Scale = 1:48.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	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	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 96 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 14=20-0-0, 15=20-0-0, 16=20-0-0, 17=20-0-0, 18=20-0-0, 19=20-0-0, 20=20-0-0, 21=20-0-0, 22=20-0-0, 23=20-0-0, 24=20-0-0
Max Horiz 24=-152 (LC 6)
Max Uplift 14=-25 (LC 5), 15=-68 (LC 9), 16=-27 (LC 9), 17=-39 (LC 9), 18=-32 (LC 9), 20=-33 (LC 8), 21=-39 (LC 8), 22=-25 (LC 8), 23=-74 (LC 8), 24=-47 (LC 4)
Max Grav 14=162 (LC 15), 15=190 (LC 16), 16=184 (LC 22), 17=177 (LC 1), 18=191 (LC 22), 19=195 (LC 18), 20=191 (LC 21), 21=177 (LC 1), 22=184 (LC 21), 23=199 (LC 15), 24=180 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-24=-150/42, 1-2=0/40, 2-3=-103/96, 3-4=-81/76, 4-5=-75/100, 5-6=-64/126, 6-7=-56/150, 7-8=-48/142, 8-9=-45/114, 9-10=-56/87, 10-11=-62/64, 11-12=-80/70, 12-13=0/40, 12-14=-144/24
BOT CHORD 23-24=-66/76, 22-23=-66/76, 21-22=-66/76, 20-21=-66/76, 19-20=-66/76, 18-19=-66/76, 17-18=-66/76, 16-17=-66/76, 15-16=-66/76, 14-15=-66/76
WEBS 7-19=-155/0, 6-20=-151/57, 5-21=-138/62, 4-22=-144/54, 3-23=-143/79, 8-18=-151/56, 9-17=-138/62, 10-16=-144/55, 11-15=-138/76

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 24, 25 lb uplift at joint 14, 33 lb uplift at joint 20, 39 lb uplift at joint 21, 25 lb uplift at joint 22, 74 lb uplift at joint 23, 32 lb uplift at joint 18, 39 lb uplift at joint 17, 27 lb uplift at joint 16 and 68 lb uplift at joint 15.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666713
B220118	E2	Common	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:18 Page: 1
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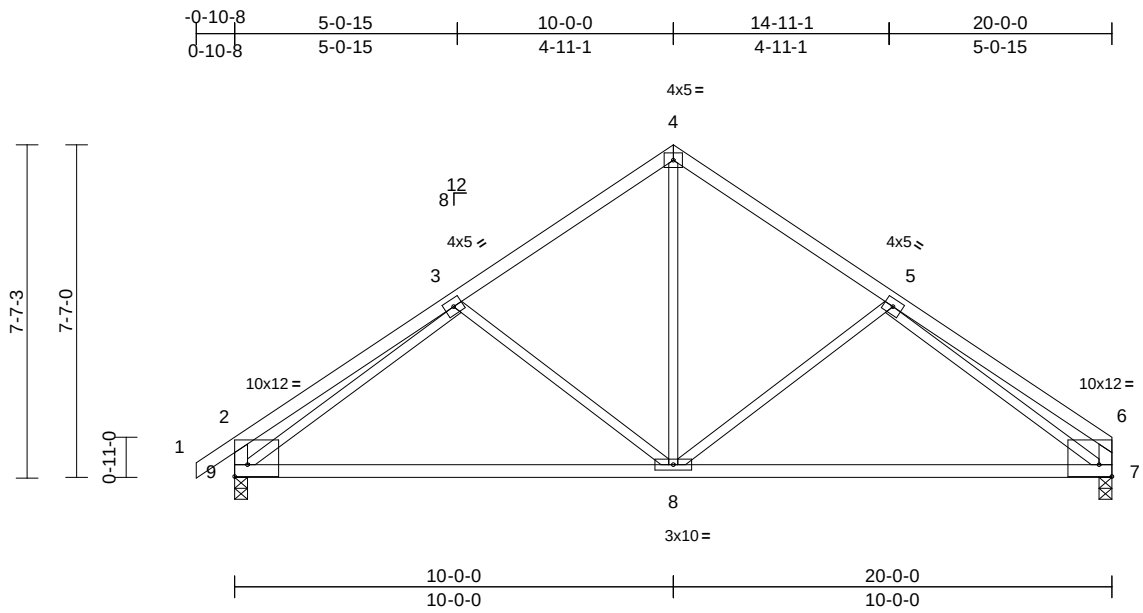

Scale = 1:52.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.18	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.37	8-9	>633	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	8	>999	240	Weight: 78 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-2,7-6:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-10-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-3-8, 9=0-3-8
Max Horiz 9=148 (LC 7)
Max Uplift 9=-13 (LC 8)
Max Grav 7=885 (LC 1), 9=960 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-425/51, 3-4=-870/53, 4-5=-872/53, 5-6=-379/24, 2-9=-423/67, 6-7=-316/37
BOT CHORD 8-9=-53/830, 7-8=0/839
WEBS 4-8=0/524, 5-8=-282/145, 3-8=-272/143, 3-9=-713/25, 5-7=-764/41

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 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 13 lb uplift at joint 9.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	E3	Common	8	1	Job Reference (optional)	I53666714

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:19 Page: 1
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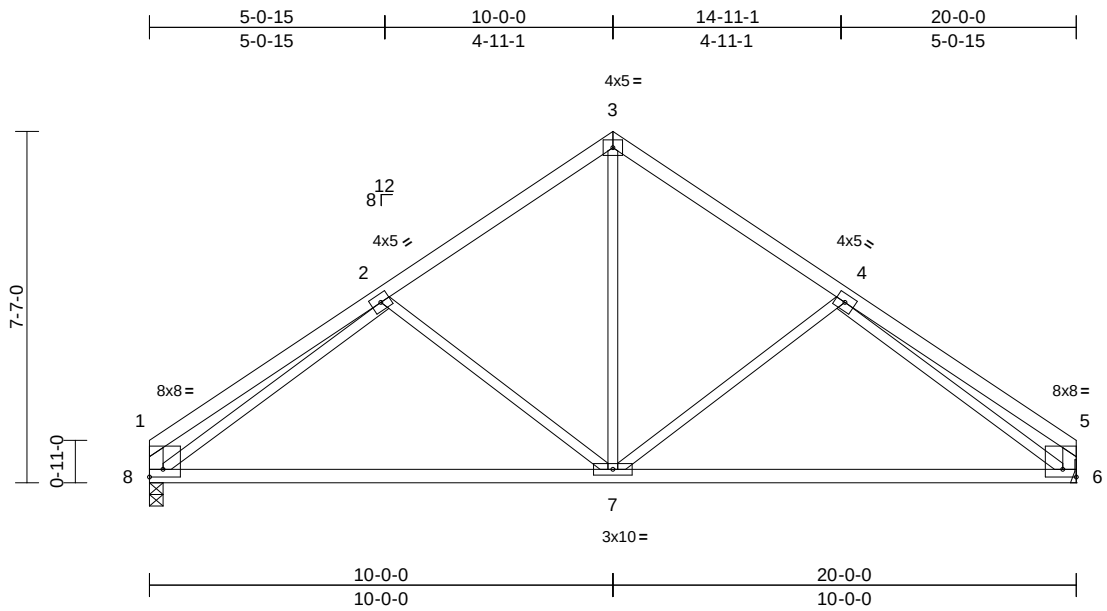


Scale = 1:49.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.18	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.37	6-7	>633	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	7	>999	240	Weight: 77 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 8-1,6-5:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6= Mechanical, 8=0-3-8
Max Horiz 8=-139 (LC 4)
Max Grav 6=887 (LC 1), 8=887 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-380/24, 2-3=-875/53, 3-4=-875/53, 4-5=-380/24, 1-8=-316/37, 5-6=-316/37
BOT CHORD 7-8=-55/841, 6-7=0/841
WEBS 3-7=0/531, 4-7=-282/145, 2-7=-282/145, 2-8=-767/41, 4-6=-767/41

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

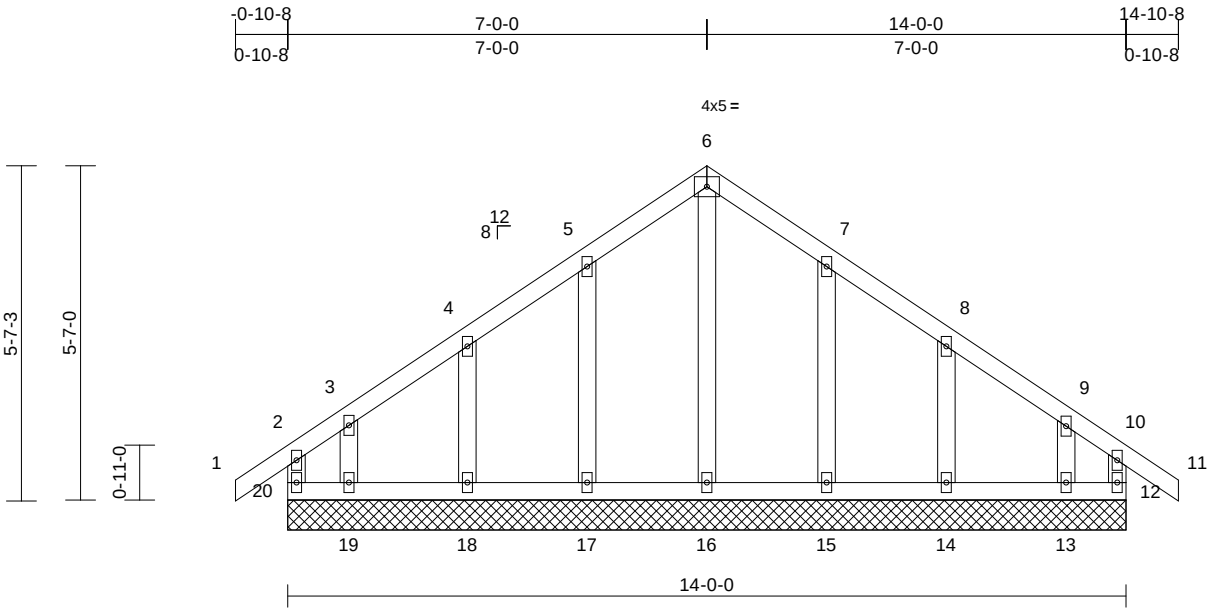
August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	F1	Common Supported Gable	1	1	Job Reference (optional)	I53666715

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:19 ID:uqRj0P_Hl6_I3P0sgelU?lynciu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	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	0.07	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 61 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 12=14-0-0, 13=14-0-0, 14=14-0-0, 15=14-0-0, 16=14-0-0, 17=14-0-0, 18=14-0-0, 19=14-0-0, 20=14-0-0
Max Horiz 20=115 (LC 7)
Max Uplift 12=-41 (LC 5), 13=-63 (LC 9), 14=-34 (LC 9), 15=-36 (LC 9), 17=-37 (LC 8), 18=-33 (LC 8), 19=-69 (LC 8), 20=-63 (LC 4)
Max Grav 12=129 (LC 15), 13=140 (LC 16), 14=187 (LC 1), 15=189 (LC 22), 16=179 (LC 18), 17=189 (LC 21), 18=186 (LC 1), 19=150 (LC 15), 20=149 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-20=-122/45, 1-2=0/40, 2-3=-77/76, 3-4=-59/73, 4-5=-53/79, 5-6=-45/103, 6-7=-39/95, 7-8=-38/71, 8-9=-45/62, 9-10=-56/52, 10-11=0/40, 10-12=-115/28
BOT CHORD	19-20=-53/56, 18-19=-53/56, 17-18=-53/56, 16-17=-53/56, 15-16=-53/56, 14-15=-53/56, 13-14=-53/56, 12-13=-53/56
WEBS	3-19=-102/64, 6-16=-139/0, 5-17=-150/60, 4-18=-144/60, 7-15=-150/60, 8-14=-145/61, 9-13=-97/62

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 20, 41 lb uplift at joint 12, 69 lb uplift at joint 19, 37 lb uplift at joint 17, 33 lb uplift at joint 18, 36 lb uplift at joint 15, 34 lb uplift at joint 14 and 63 lb uplift at joint 13.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666716
B220118	F2	Common	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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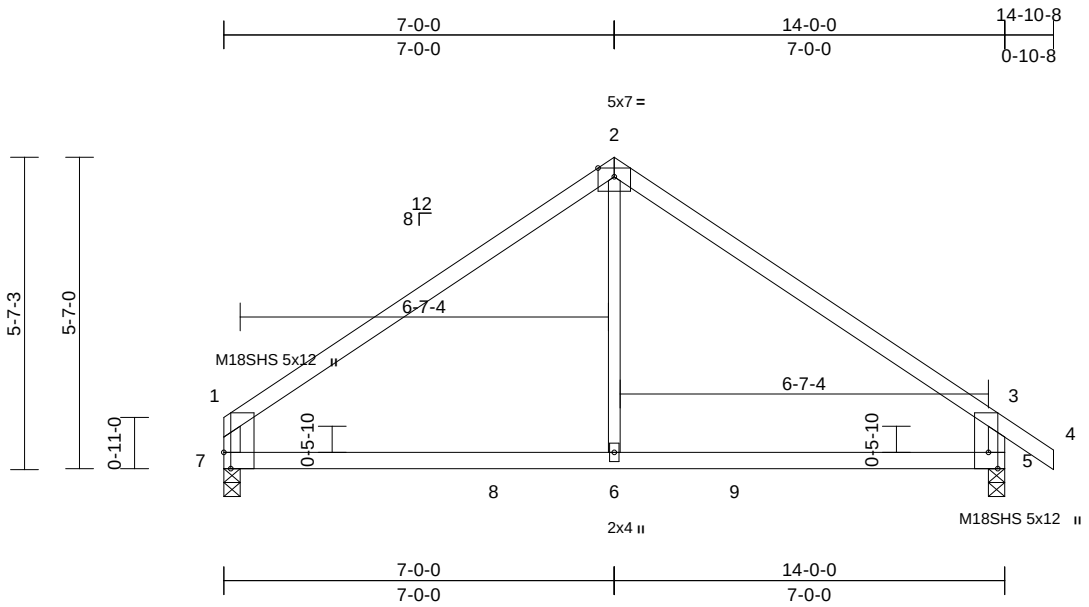

Scale = 1:41.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.07	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.13	5-6	>999	240	M18SHS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	-0.03	6-7	>999	240	Weight: 42 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-3-8, 7=0-3-8
Max Horiz 7=-111 (LC 6)
Max Uplift 5=-12 (LC 9)
Max Grav 5=748 (LC 16), 7=680 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-738/43, 2-3=-744/44, 3-4=0/40, 1-7=-561/47, 3-5=-635/61
BOT CHORD 6-7=0/542, 5-6=0/542
WEBS 2-6=0/363

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666717
B220118	F3	Common	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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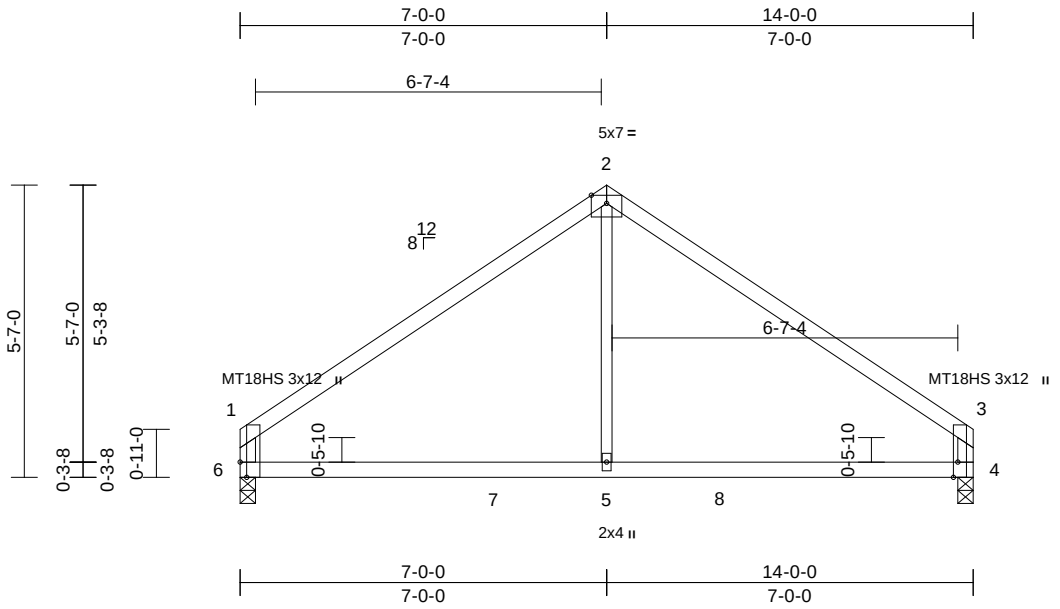

Scale = 1:44

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.07	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.12	5-6	>999	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	5-6	>999	240	Weight: 41 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 4=0-3-8, 6=0-3-8
Max Horiz 6=103 (LC 7)
Max Grav 4=682 (LC 16), 6=682 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-739/43, 2-3=-738/43, 1-6=-560/46, 3-4=-560/46
BOT CHORD 5-6=0/536, 4-5=0/536
WEBS 2-5=0/357

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 B; Enclosed; MWFRS (envelope) exterior 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	F4	Common Girder	1	**2**	Job Reference (optional)	I53666718

Wheeler Lumber, Waverly, KS - 66871,

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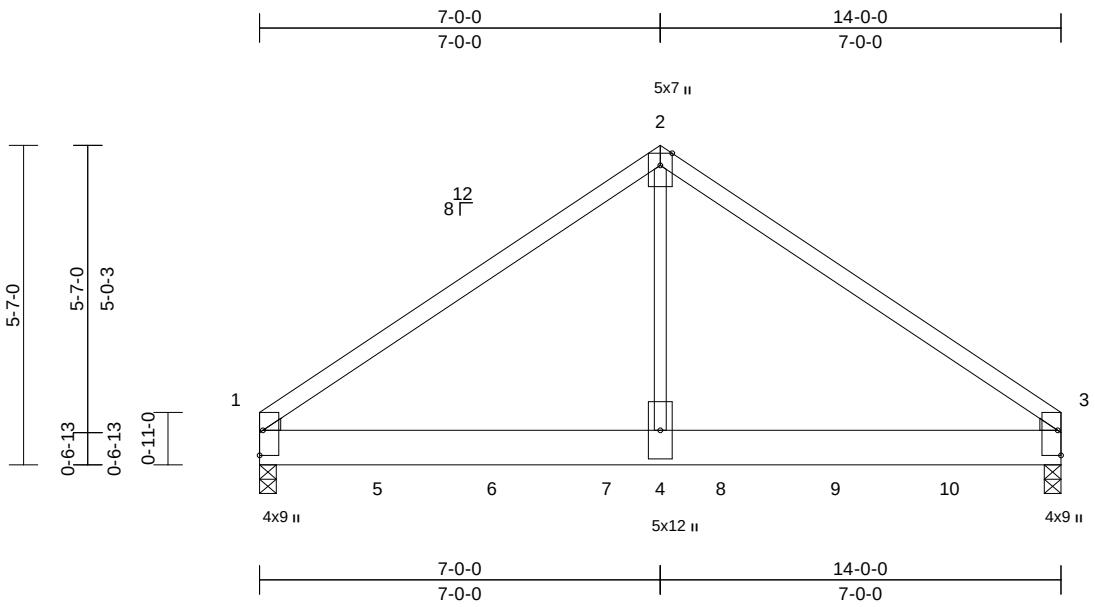


Scale = 1:40.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.09	1-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.16	1-4	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	3-4	>999	240	Weight: 134 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x3 SPF No.2
WEDGE Left: 2x3 SPF No.2
Right: 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 3=0-3-8
Max Horiz 1=94 (LC 26)
Max Grav 1=4126 (LC 15), 3=3040 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3896/0, 2-3=-3927/0
BOT CHORD 1-4=0/3077, 3-4=0/3077
WEBS 2-4=0/4104

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x3 - 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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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) 1664 lb down at 2-0-12, 1664 lb down at 4-0-12, 686 lb down and 23 lb up at 6-0-12, 686 lb down and 23 lb up at 8-0-12, and 686 lb down and 23 lb up at 10-0-12, and 686 lb down and 23 lb up at 12-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 5=-1485 (B), 6=-1485 (B), 7=-641 (B), 8=-641 (B), 9=-641 (B), 10=-641 (B)

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

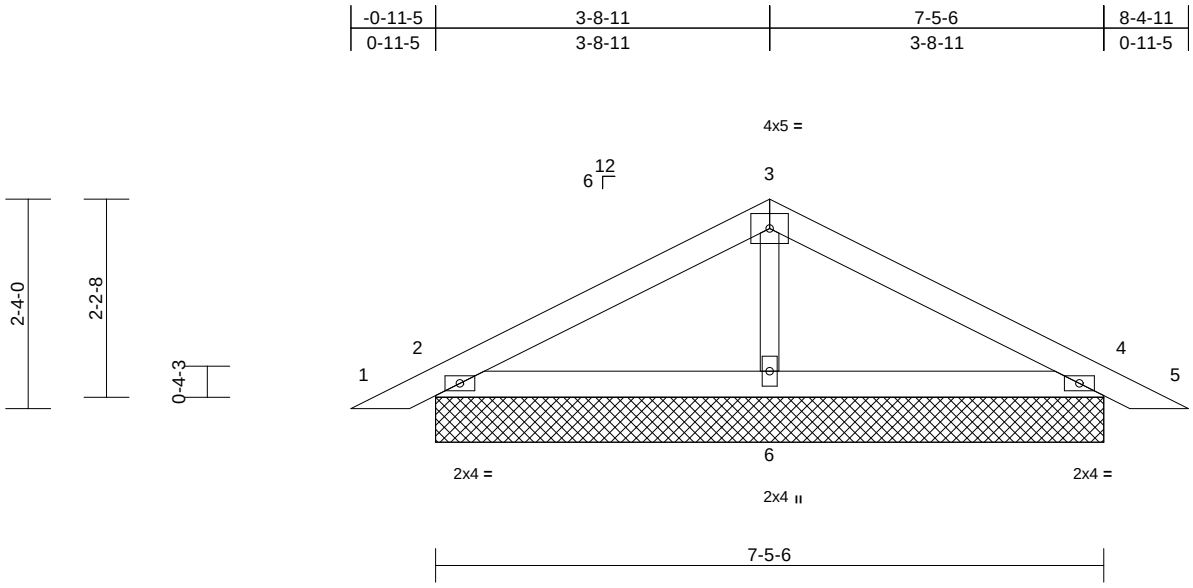
August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	P1	Piggyback	22	1	Job Reference (optional)	I53666719

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:20 ID:uqRj0P_Hl6_I3P0sgelU?lynciu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:25.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 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) 2=7-5-6, 4=7-5-6, 6=7-5-6
Max Horiz 2=-27 (LC 13)
Max Uplift 2=-25 (LC 8), 4=-30 (LC 9)
Max Grav 2=222 (LC 1), 4=222 (LC 1), 6=313 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-85/36, 3-4=-85/25, 4-5=0/17
BOT CHORD 2-6=0/37, 4-6=0/37
WEBS 3-6=-220/28

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 25 lb uplift at joint 2 and 30 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666720
B220118	P2	Piggyback	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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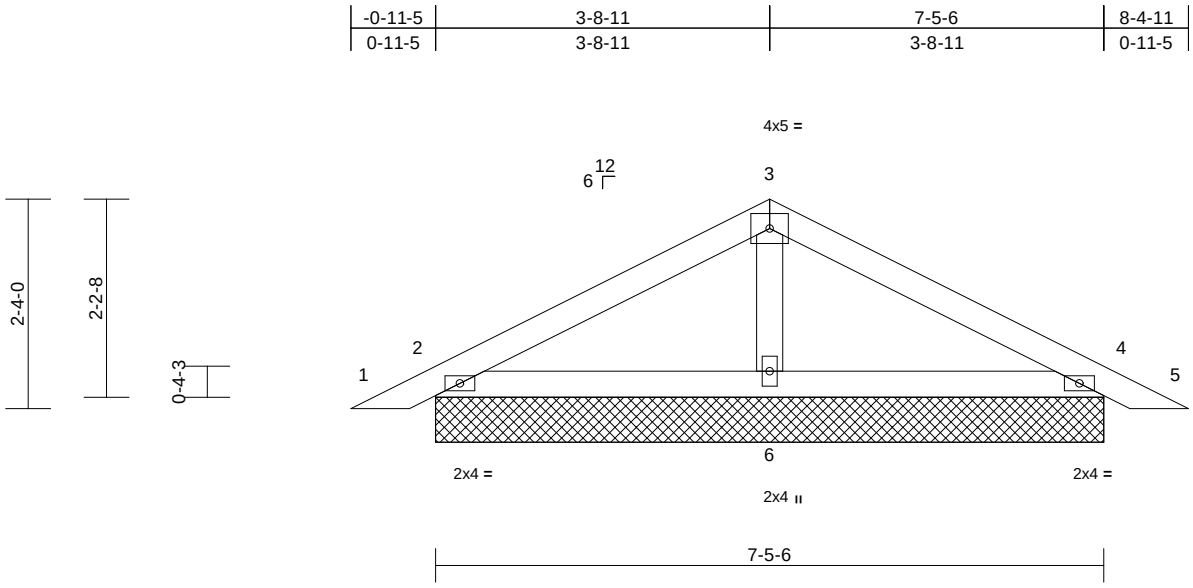

Scale = 1:25.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 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 (size) 2=7-5-6, 4=7-5-6, 6=7-5-6
Max Horiz 2=-27 (LC 13)
Max Uplift 2=-24 (LC 8), 4=-29 (LC 9)
Max Grav 2=217 (LC 1), 4=217 (LC 1), 6=322 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-76/35, 3-4=-76/29, 4-5=0/17
BOT CHORD 2-6=0/31, 4-6=0/31
WEBS 3-6=-229/30

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 24 lb uplift at joint 2 and 29 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666721
B220118	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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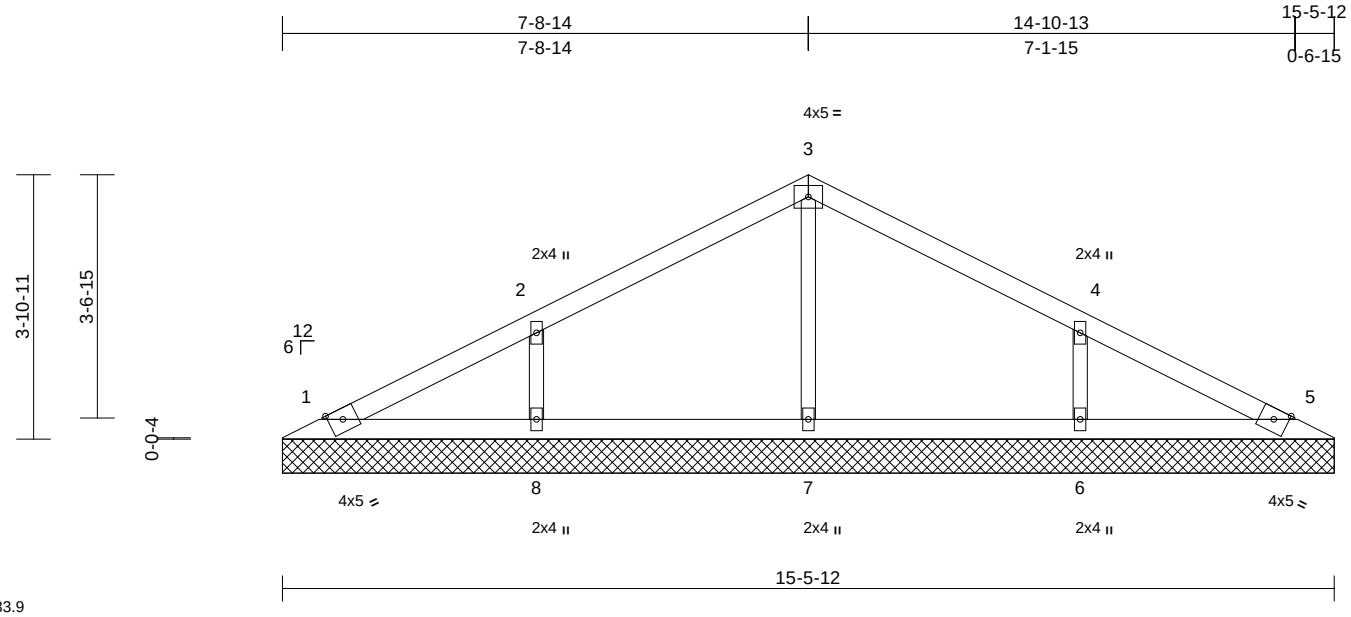

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 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=15-5-12, 5=15-5-12, 6=15-5-12, 7=15-5-12, 8=15-5-12
Max Horiz 1=44 (LC 8)
Max Uplift 6=-55 (LC 9), 8=-56 (LC 8)
Max Grav 1=118 (LC 1), 5=118 (LC 1), 6=382 (LC 22), 7=301 (LC 1), 8=382 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-77/41, 2-3=-106/66, 3-4=-106/55, 4-5=-64/39
BOT CHORD 1-8=0/47, 7-8=0/47, 6-7=0/47, 5-6=0/47
WEBS 3-7=-222/10, 2-8=-299/100, 4-6=-299/100

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 56 lb uplift at joint 8 and 55 lb uplift at joint 6.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666722
B220118	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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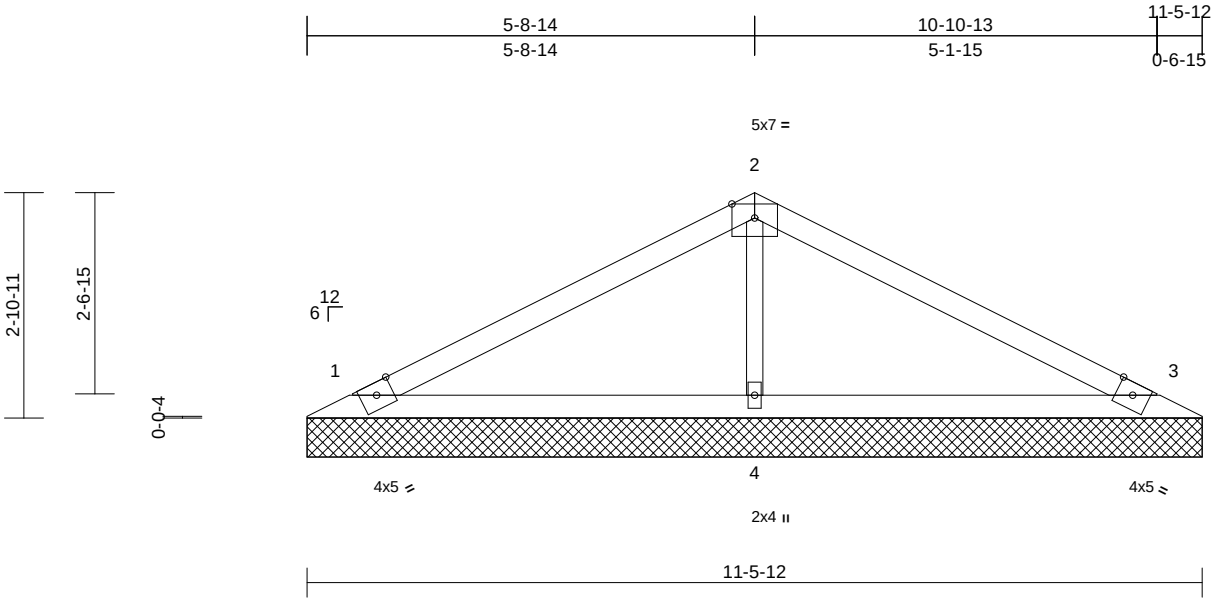

Scale = 1:29.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 28 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=11-5-12, 3=11-5-12, 4=11-5-12
Max Horiz 1=32 (LC 12)
Max Uplift 1=-15 (LC 8), 3=-21 (LC 9)
Max Grav 1=218 (LC 21), 3=218 (LC 22), 4=492 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-133/48, 2-3=-133/45
BOT CHORD 1-4=0/53, 3-4=0/53
WEBS 2-4=-336/44

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 15 lb uplift at joint 1 and 21 lb uplift at joint 3.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666723
B220118	V3	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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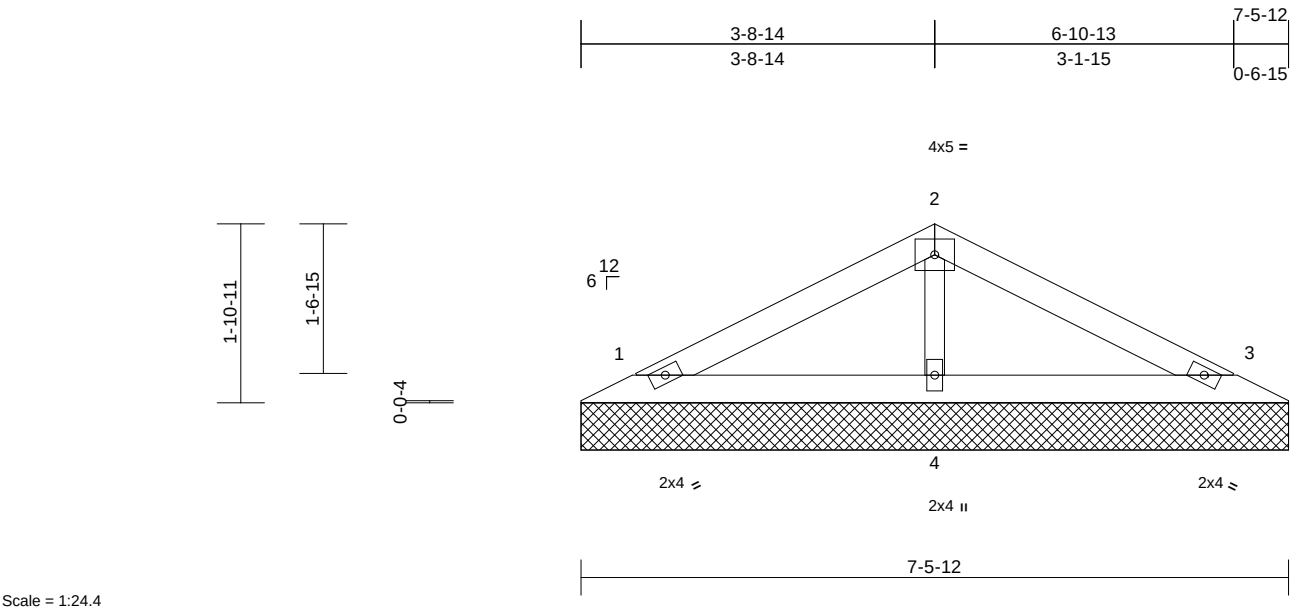

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	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=7-5-12, 3=7-5-12, 4=7-5-12
Max Horiz 1=-20 (LC 13)
Max Uplift 1=-13 (LC 8), 3=-17 (LC 9)
Max Grav 1=148 (LC 1), 3=148 (LC 1), 4=271 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-71/28, 2-3=-71/20
BOT CHORD 1-4=0/29, 3-4=0/29
WEBS 2-4=-192/26

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 B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 13 lb uplift at joint 1 and 17 lb uplift at joint 3.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666724
B220118	V4	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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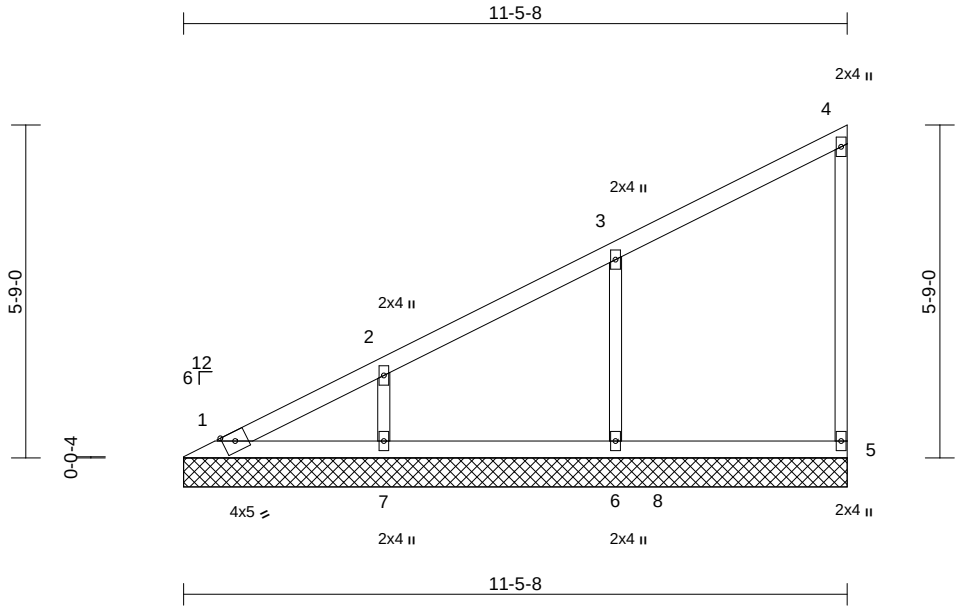

Scale = 1:39.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 35 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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=11-5-8, 5=11-5-8, 6=11-5-8, 7=11-5-8
Max Horiz 1=158 (LC 7)
Max Uplift 5=-13 (LC 5), 6=-52 (LC 8), 7=-44 (LC 8)
Max Grav 1=129 (LC 16), 5=177 (LC 15), 6=436 (LC 2), 7=338 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-136/57, 2-3=-121/66, 3-4=-111/43, 4-5=-109/26
BOT CHORD	1-7=-53/41, 6-7=-53/41, 5-6=-53/41
WEBS	3-6=-311/99, 2-7=-255/88

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 5, 52 lb uplift at joint 6 and 44 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666725
B220118	V5	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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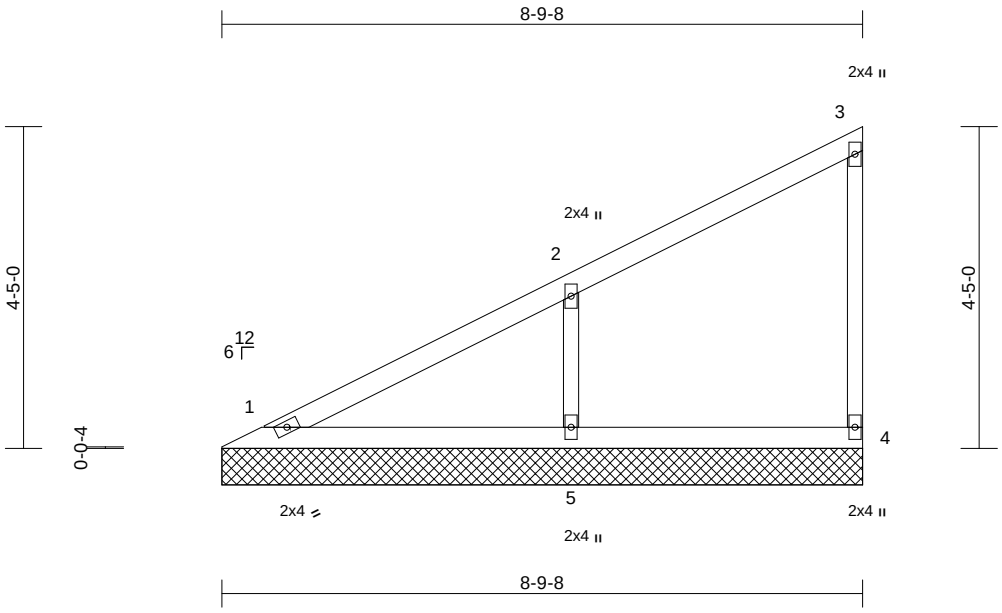

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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=8-9-8, 4=8-9-8, 5=8-9-8
Max Horiz 1=119 (LC 5)
Max Uplift 4=-9 (LC 5), 5=-60 (LC 8)
Max Grav 1=145 (LC 1), 4=128 (LC 1), 5=456 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-97/81, 2-3=-103/38, 3-4=-100/26
BOT CHORD	1-5=-41/31, 4-5=-41/31
WEBS	2-5=-354/121

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 9 lb uplift at joint 4 and 60 lb uplift at joint 5.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666726
B220118	V6	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:21 Page: 1
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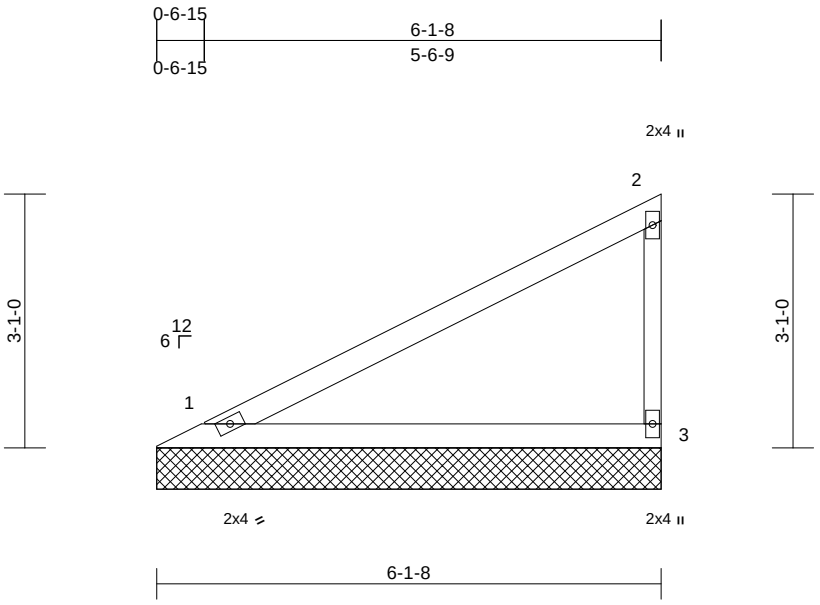


Scale = 1:28

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							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 6-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=6-1-8, 3=6-1-8
Max Horiz 1=80 (LC 5)
Max Uplift 1=-3 (LC 8), 3=-23 (LC 8)
Max Grav 1=244 (LC 1), 3=244 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-89/68, 2-3=-190/55
BOT CHORD 1-3=-27/21

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 3 lb uplift at joint 1 and 23 lb uplift at joint 3.
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.

LOAD CASE(S) Standard

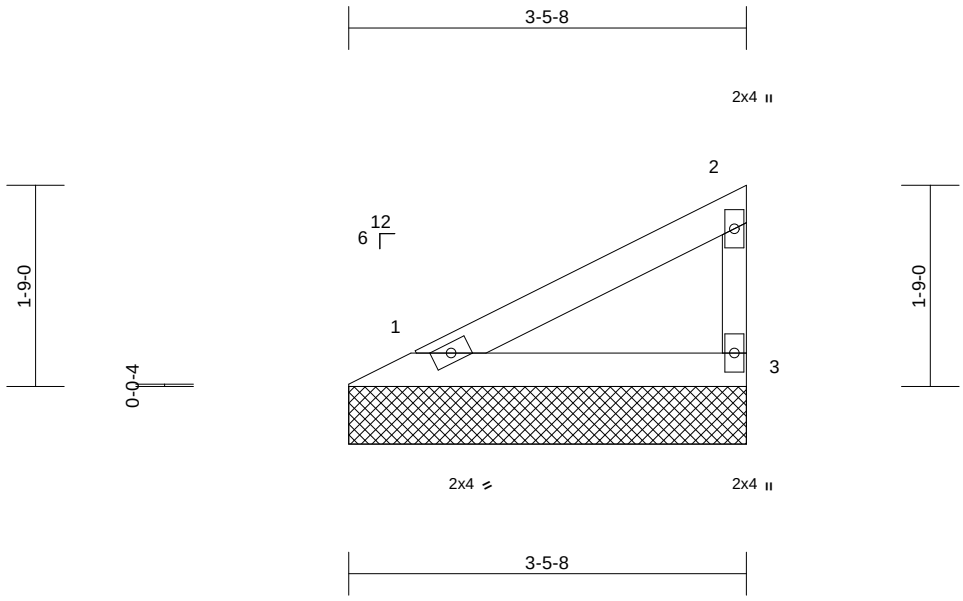
August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666727
B220118	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:21 ID:mbgEsn1opLUkY1KdvUpQ98ynciq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:20

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 10%

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

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

REACTIONS (size) 1=3-5-8, 3=3-5-8
Max Horiz 1=41 (LC 5)
Max Uplift 1=-1 (LC 8), 3=-12 (LC 8)
Max Grav 1=124 (LC 1), 3=124 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-46/35, 2-3=-97/28
BOT CHORD 1-3=-14/11

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 1 lb uplift at joint 1 and 12 lb uplift at joint 3.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666728
B220118	V8	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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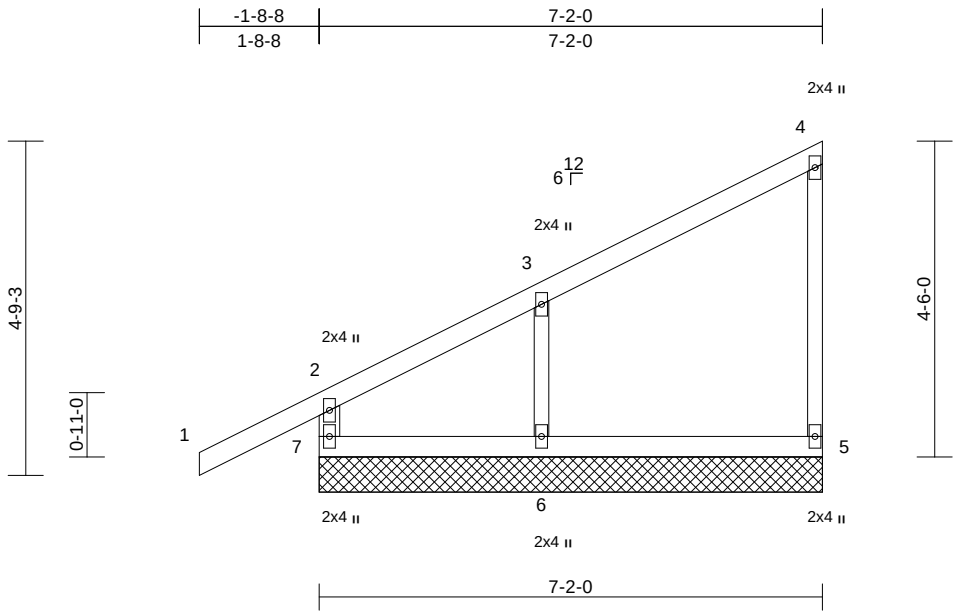

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Loading	(psf)	Spacing	1-9-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 25 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 4-5:2x3 SPF No.2
OTHERS 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=7-2-0, 6=7-2-0, 7=7-2-0
Max Horiz 7=116 (LC 5)
Max Uplift 5=-5 (LC 5), 6=-55 (LC 8), 7=-2 (LC 4)
Max Grav 5=132 (LC 1), 6=287 (LC 1), 7=239 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-212/14, 1-2=0/51, 2-3=-91/40, 3-4=-87/35, 4-5=-102/23
BOT CHORD 6-7=-35/28, 5-6=-35/28
WEBS 3-6=-224/88

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 2 lb uplift at joint 7, 5 lb uplift at joint 5 and 55 lb uplift at joint 6.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	V9	Valley	1	1	Job Reference (optional)	I53666729

Wheeler Lumber, Waverly, KS - 66871,

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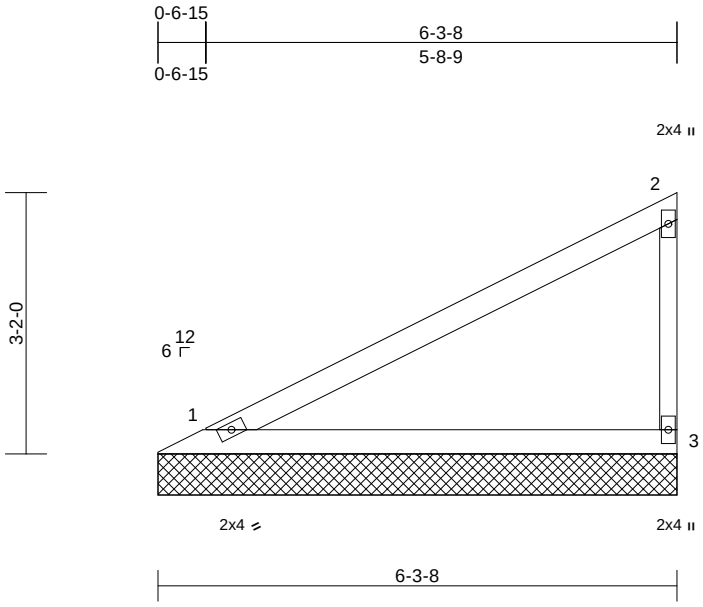

Scale = 1:27.9

Loading	(psf)	Spacing	1-9-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 10%

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

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

REACTIONS (size) 1=6-3-8, 3=6-3-8
Max Horiz 1=72 (LC 5)
Max Uplift 1=-2 (LC 8), 3=-21 (LC 8)
Max Grav 1=220 (LC 1), 3=220 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-81/61, 2-3=-171/50
BOT CHORD 1-3=-25/19

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 2 lb uplift at joint 1 and 21 lb uplift at joint 3.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666730
B220118	V10	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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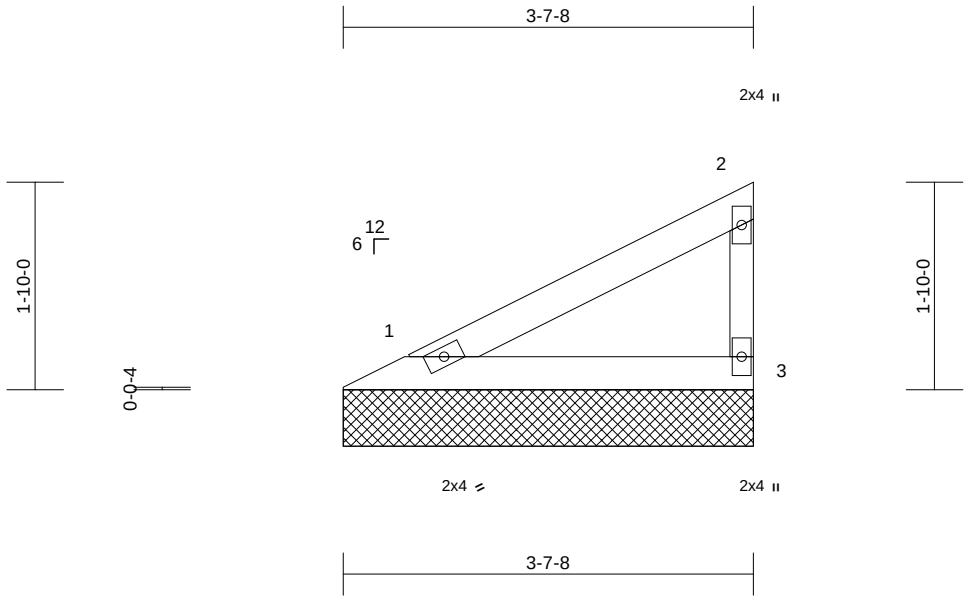

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Loading	(psf)	Spacing	1-9-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 10%

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

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

REACTIONS (size) 1=3-7-8, 3=3-7-8
Max Horiz 1=38 (LC 7)
Max Uplift 1=-1 (LC 8), 3=-11 (LC 8)
Max Grav 1=115 (LC 1), 3=115 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-42/32, 2-3=-90/26
BOT CHORD 1-3=-13/10

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 1 lb uplift at joint 1 and 11 lb uplift at joint 3.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	V11	Valley	1	1	Job Reference (optional)	I53666731

Wheeler Lumber, Waverly, KS - 66871,

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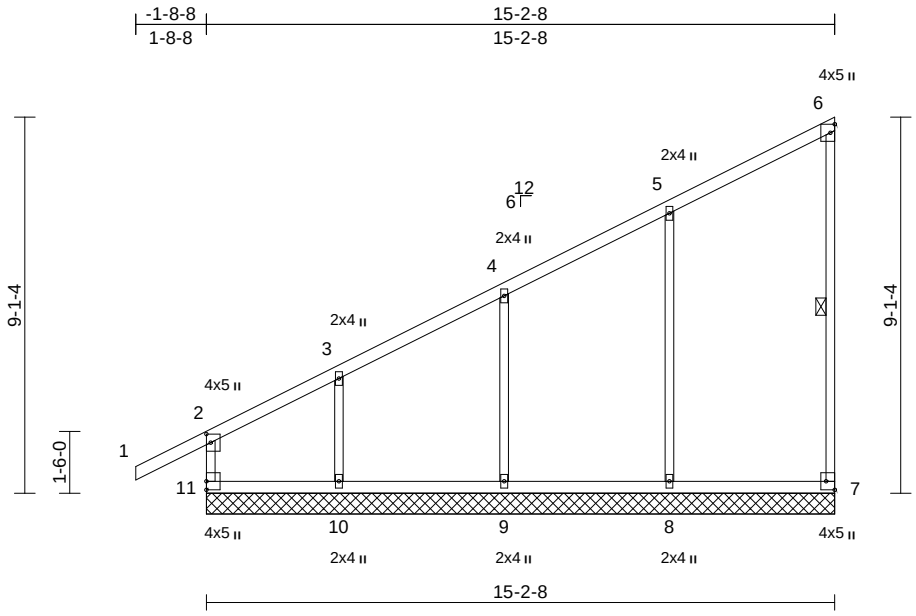

Scale = 1:55.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 58 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 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.
WEBS 1 Row at midpt 6-7

REACTIONS (size) 7=15-2-8, 8=15-2-8, 9=15-2-8, 10=15-2-8, 11=15-2-8
Max Horiz 11=265 (LC 5)
Max Uplift 7=-24 (LC 5), 8=-54 (LC 8), 9=-31 (LC 8), 10=-132 (LC 8)
Max Grav 7=179 (LC 15), 8=474 (LC 2), 9=400 (LC 2), 10=336 (LC 15), 11=335 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-11=-262/15, 1-2=0/57, 2-3=-221/62, 3-4=-160/76, 4-5=-150/76, 5-6=-132/66, 6-7=-110/27
BOT CHORD 10-11=-88/67, 9-10=-88/67, 8-9=-88/67, 7-8=-88/67
WEBS 5-8=-305/84, 4-9=-285/92, 3-10=-228/133

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 7, 54 lb uplift at joint 8, 31 lb uplift at joint 9 and 132 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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	
B220118	V12	Valley	1	1	Job Reference (optional)	I53666732

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:22 Page: 1
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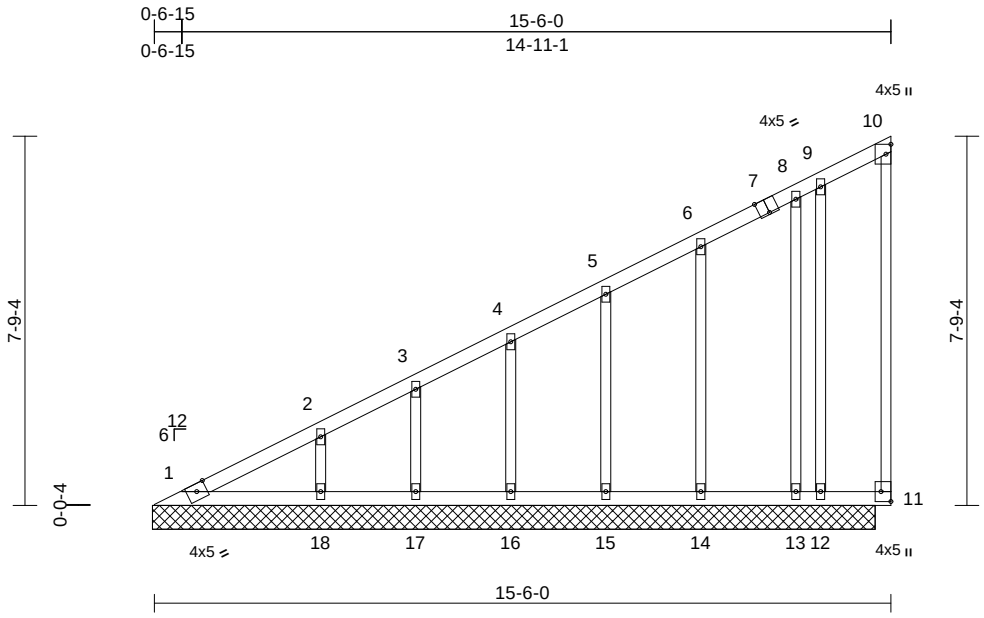


Scale = 1:48.5

Plate Offsets (X, Y): [7:0-2-8,Edge], [11:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 66 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 1=15-2-8, 12=15-2-8, 13=15-2-8, 14=15-2-8, 15=15-2-8, 16=15-2-8, 17=15-2-8, 18=15-2-8
Max Horiz 1=217 (LC 5)
Max Uplift 12=-57 (LC 5), 13=-45 (LC 4), 14=-30 (LC 8), 15=-22 (LC 8), 16=-25 (LC 8), 17=-20 (LC 8), 18=-36 (LC 8)
Max Grav 1=135 (LC 16), 12=256 (LC 1), 13=62 (LC 7), 14=184 (LC 1), 15=178 (LC 1), 16=188 (LC 1), 17=149 (LC 1), 18=270 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-188/64, 2-3=-160/41, 3-4=-142/49, 4-5=-128/47, 5-6=-117/47, 6-8=-110/58, 8-9=-102/68, 9-10=-70/41, 10-11=-34/30
BOT CHORD	1-18=-74/56, 17-18=-74/56, 16-17=-74/56, 15-16=-74/56, 14-15=-74/56, 13-14=-74/56, 12-13=-74/56, 11-12=-74/56
WEBS	9-12=-116/68, 8-13=-70/41, 6-14=-138/56, 5-15=-140/46, 4-16=-145/49, 3-17=-119/41, 2-18=-202/67

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 57 lb uplift at joint 12, 45 lb uplift at joint 13, 30 lb uplift at joint 14, 22 lb uplift at joint 15, 25 lb uplift at joint 16, 20 lb uplift at joint 17 and 36 lb uplift at joint 18.
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.

LOAD CASE(S) Standard

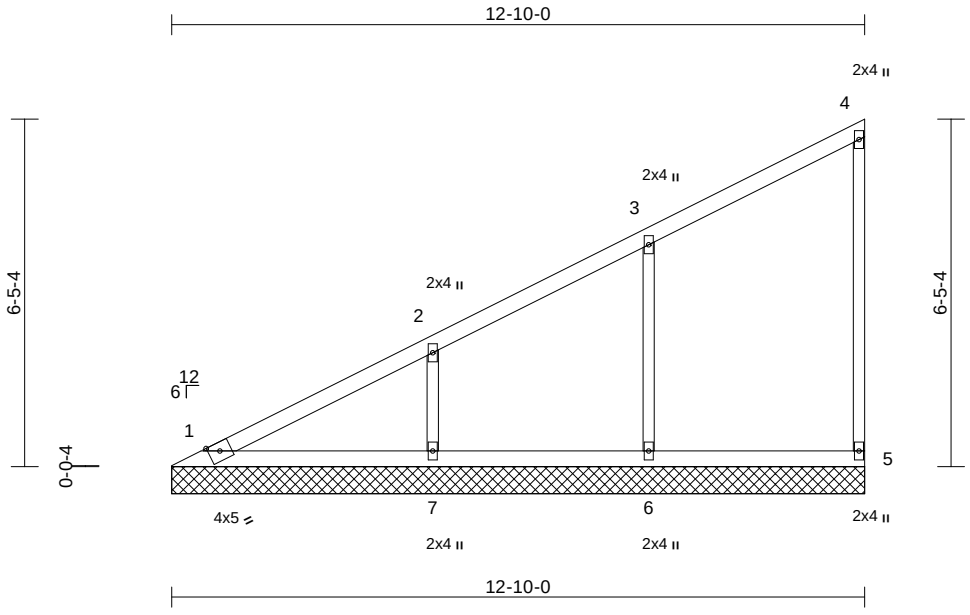
August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666733
B220118	V13	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:23 ID:qDYTR5?XHkE0JjAFn3ny4jyncis-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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=12-10-0, 5=12-10-0, 6=12-10-0, 7=12-10-0
Max Horiz 1=178 (LC 5)
Max Uplift 5=-15 (LC 5), 6=-50 (LC 8), 7=-55 (LC 8)
Max Grav 1=189 (LC 16), 5=182 (LC 15), 6=424 (LC 2), 7=423 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-150/77, 2-3=-131/63, 3-4=-115/48, 4-5=-111/27
BOT CHORD	1-7=-60/47, 6-7=-60/47, 5-6=-60/47
WEBS	3-6=-296/92, 2-7=-315/107

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 5, 50 lb uplift at joint 6 and 55 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666734
B220118	V14	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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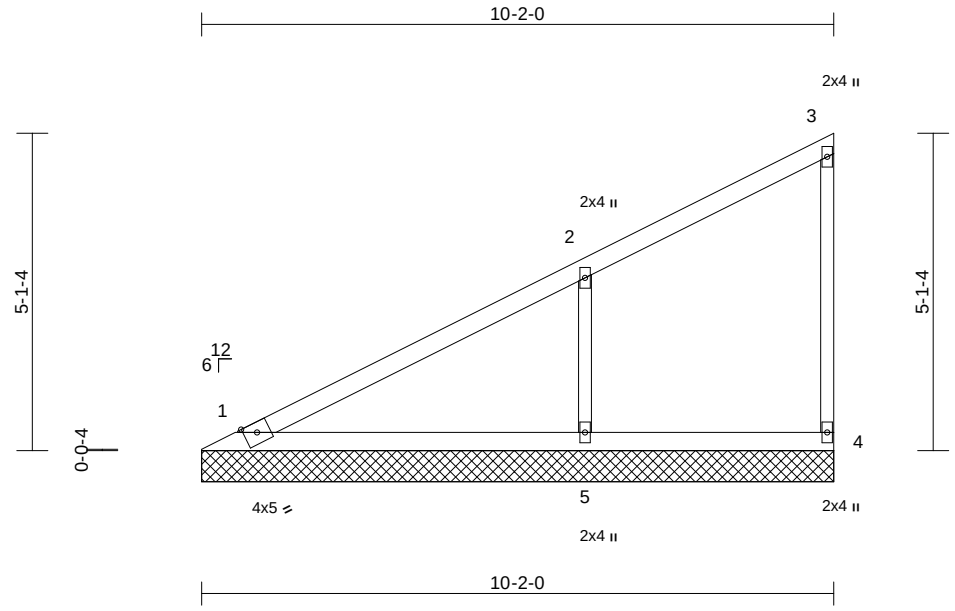

Scale = 1:37.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 30 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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=10-2-0, 4=10-2-0, 5=10-2-0
Max Horiz 1=139 (LC 5)
Max Uplift 4=-12 (LC 5), 5=-72 (LC 8)
Max Grav 1=203 (LC 1), 4=106 (LC 1), 5=544 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-115/99, 2-3=-112/38, 3-4=-85/23
BOT CHORD	1-5=-47/36, 4-5=-47/36
WEBS	2-5=-410/131

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 12 lb uplift at joint 4 and 72 lb uplift at joint 5.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666735
B220118	V15	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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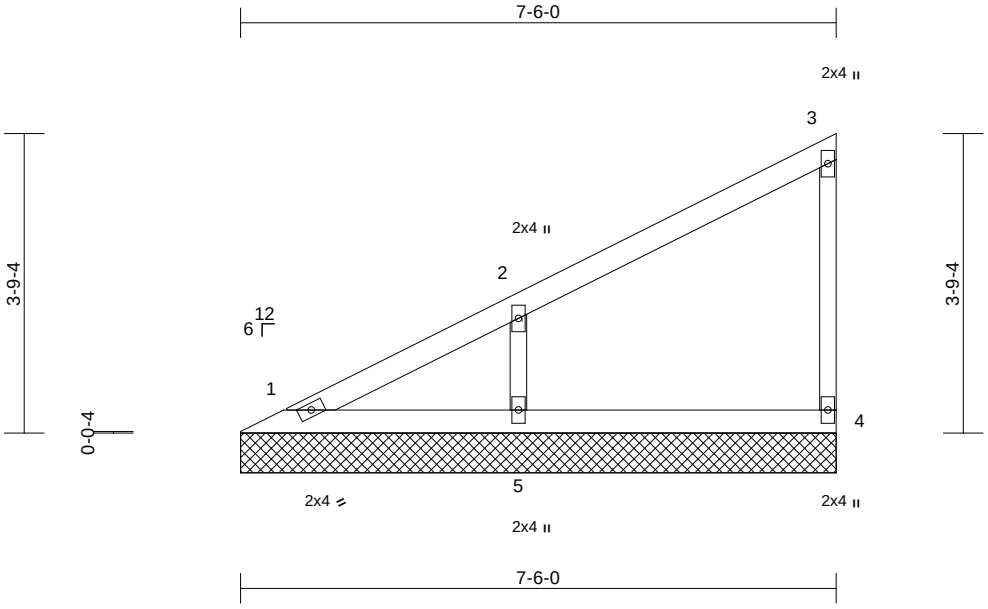

Scale = 1:29

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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=7-6-0, 4=7-6-0, 5=7-6-0
Max Horiz 1=100 (LC 5)
Max Uplift 4=-7 (LC 5), 5=-51 (LC 8)
Max Grav 1=89 (LC 16), 4=140 (LC 1), 5=389 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-84/62, 2-3=-95/40, 3-4=-109/25
BOT CHORD	1-5=-34/26, 4-5=-34/26
WEBS	2-5=-302/103

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 7 lb uplift at joint 4 and 51 lb uplift at joint 5.
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.

LOAD CASE(S) Standard

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

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666736
B220118	V16	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:23 Page: 1
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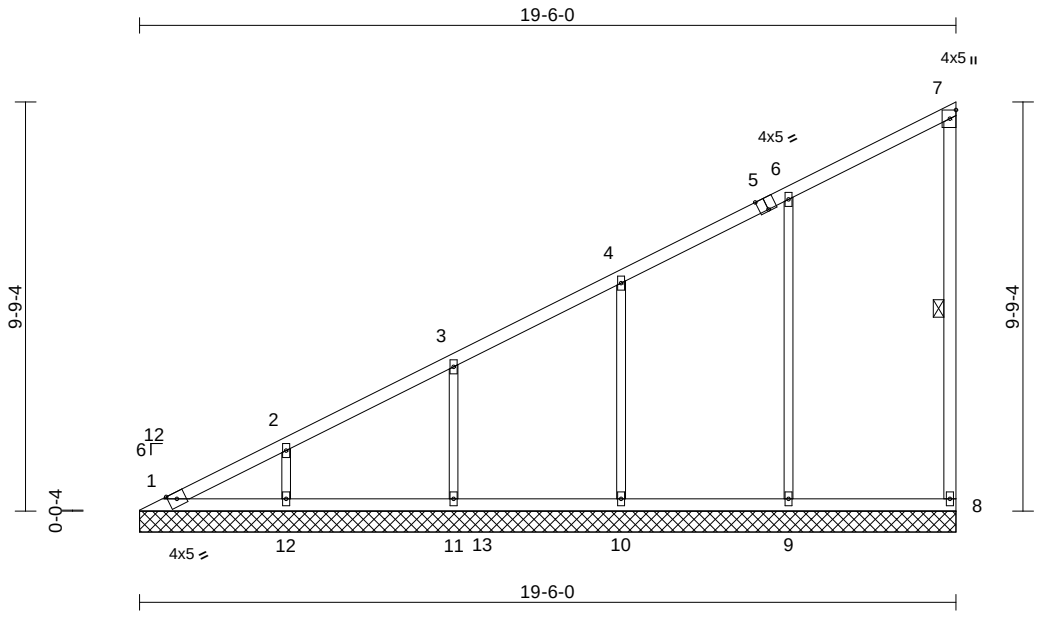

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Plate Offsets (X, Y): [5:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	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.
WEBS	1 Row at midpt 7-8

REACTIONS (size) 1=19-6-0, 8=19-6-0, 9=19-6-0, 10=19-6-0, 11=19-6-0, 12=19-6-0
Max Horiz 1=275 (LC 5)
Max Uplift 8=-25 (LC 5), 9=-52 (LC 8), 10=-46 (LC 8), 11=-48 (LC 8), 12=-46 (LC 8)
Max Grav 1=158 (LC 16), 8=182 (LC 15), 9=464 (LC 2), 10=424 (LC 2), 11=397 (LC 2), 12=350 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-240/70, 2-3=-208/75, 3-4=-174/73, 4-6=-156/77, 6-7=-137/72, 7-8=-110/29
BOT CHORD	1-12=-93/72, 11-12=-93/72, 10-11=-93/72, 9-10=-93/72, 8-9=-93/72
WEBS	6-9=-303/83, 4-10=-274/99, 3-11=-285/96, 2-12=-264/90

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 8, 52 lb uplift at joint 9, 46 lb uplift at joint 10, 48 lb uplift at joint 11 and 46 lb uplift at joint 12.
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.

LOAD CASE(S) Standard

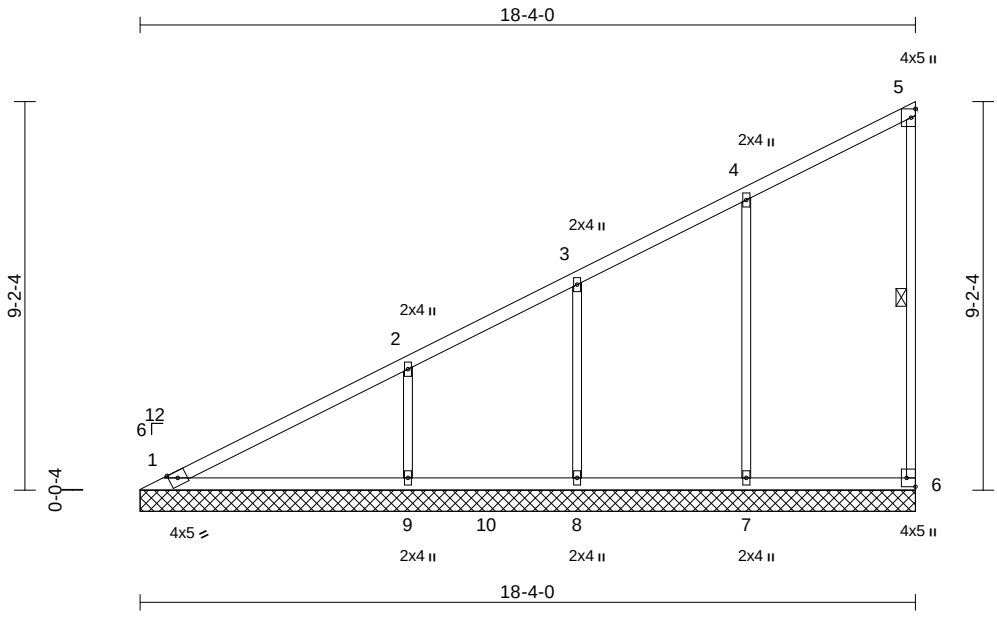
August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666737
B220118	V17	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:23 ID:IP6rfR0921MtwtlRLmIBcxyncir-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:54.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.37	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 62 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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.
WEBS	1 Row at midpt 5-6

REACTIONS (size) 1=18-4-0, 6=18-4-0, 7=18-4-0, 8=18-4-0, 9=18-4-0
Max Horiz 1=258 (LC 5)
Max Uplift 6=-23 (LC 5), 7=-54 (LC 8), 8=-38 (LC 8), 9=-71 (LC 8)
Max Grav 1=260 (LC 16), 6=177 (LC 15), 7=490 (LC 2), 8=353 (LC 2), 9=558 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-219/108, 2-3=-176/61, 3-4=-149/81, 4-5=-133/67, 5-6=-108/27
BOT CHORD	1-9=-88/67, 8-9=-88/67, 7-8=-88/67, 6-7=-88/67
WEBS	4-7=-318/87, 3-8=-231/86, 2-9=-403/132

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 6, 54 lb uplift at joint 7, 38 lb uplift at joint 8 and 71 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

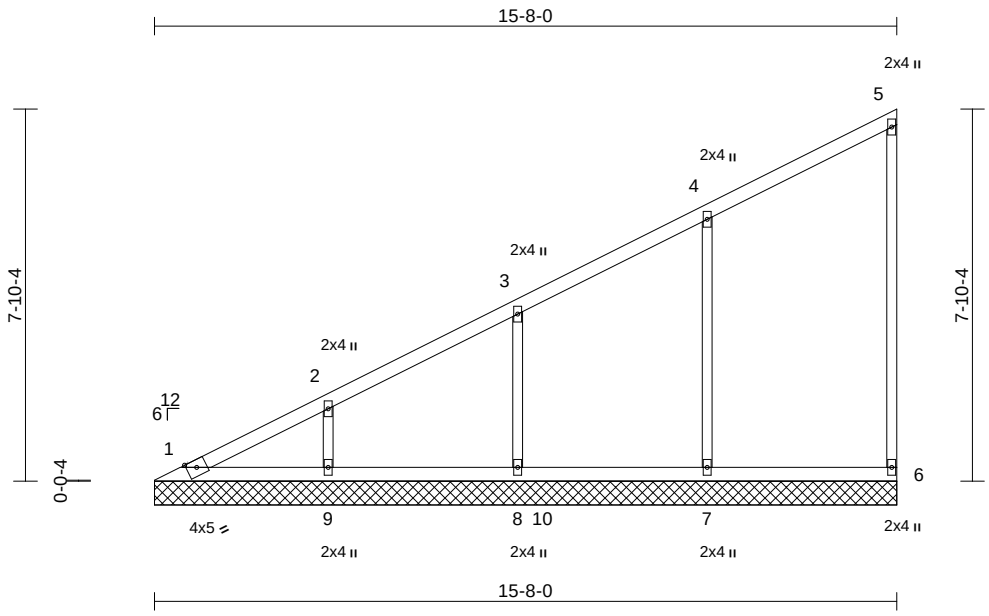
August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666738
B220118	V18	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Mon Aug 15 13:48:24 ID:IP6rfR0921MtwtlRLmIBcxyncir-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:48.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.23	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 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=15-8-0, 6=15-8-0, 7=15-8-0, 8=15-8-0, 9=15-8-0
Max Horiz 1=219 (LC 7)
Max Uplift 6=-19 (LC 5), 7=-52 (LC 8), 8=-47 (LC 8), 9=-47 (LC 8)
Max Grav 1=150 (LC 16), 6=178 (LC 15), 7=475 (LC 2), 8=384 (LC 2), 9=362 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-191/68, 2-3=-157/70, 3-4=-139/72, 4-5=-124/58, 5-6=-110/27
BOT CHORD 1-9=-75/57, 8-9=-75/57, 7-8=-75/57, 6-7=-75/57
WEBS 4-7=-307/89, 3-8=-276/98, 2-9=-272/91

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 6, 52 lb uplift at joint 7, 47 lb uplift at joint 8 and 47 lb uplift at joint 9.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666739
B220118	V19	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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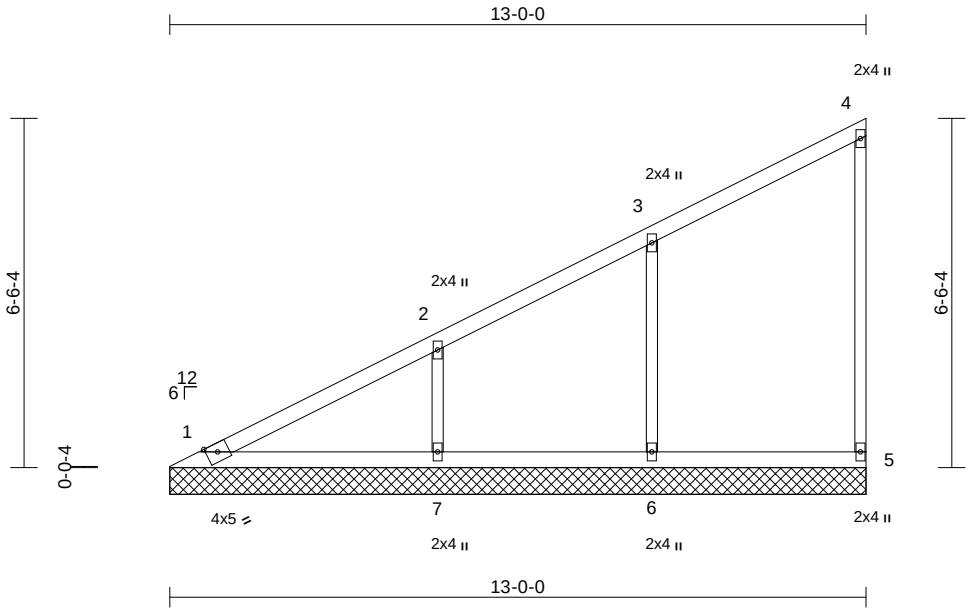

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 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=13-0-0, 5=13-0-0, 6=13-0-0, 7=13-0-0
Max Horiz 1=180 (LC 5)
Max Uplift 5=-15 (LC 5), 6=-49 (LC 8), 7=-57 (LC 8)
Max Grav 1=196 (LC 16), 5=183 (LC 15), 6=420 (LC 2), 7=434 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-152/79, 2-3=-132/63, 3-4=-115/49, 4-5=-112/27
BOT CHORD 1-7=-61/47, 6-7=-61/47, 5-6=-61/47
WEBS 3-6=-294/91, 2-7=-323/110

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 5, 49 lb uplift at joint 6 and 57 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666740
B220118	V20	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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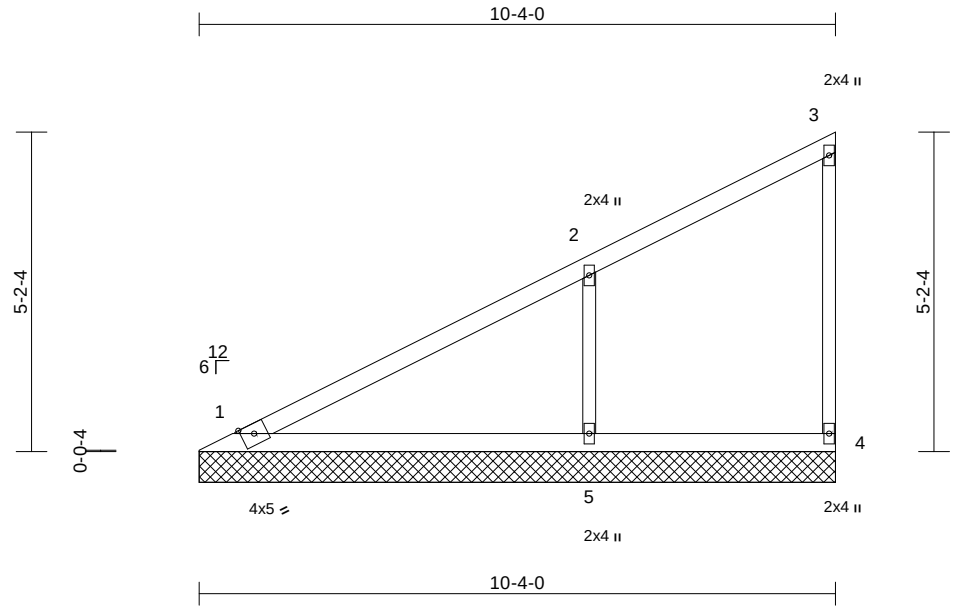

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 30 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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=10-4-0, 4=10-4-0, 5=10-4-0
Max Horiz 1=141 (LC 5)
Max Uplift 4=-12 (LC 5), 5=-73 (LC 8)
Max Grav 1=209 (LC 1), 4=102 (LC 1), 5=557 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-118/102, 2-3=-113/39, 3-4=-83/23
BOT CHORD	1-5=-48/37, 4-5=-48/37
WEBS	2-5=-419/134

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 12 lb uplift at joint 4 and 73 lb uplift at joint 5.
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.

LOAD CASE(S) Standard

August 16,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 141 HM	I53666741
B220118	V21	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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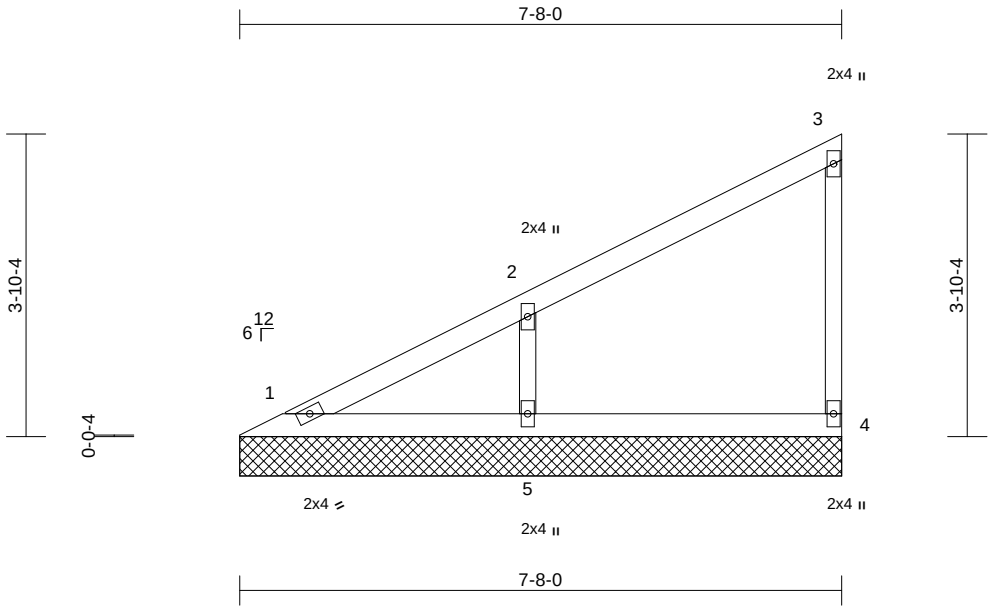

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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=7-8-0, 4=7-8-0, 5=7-8-0
Max Horiz 1=102 (LC 5)
Max Uplift 4=-7 (LC 5), 5=-52 (LC 8)
Max Grav 1=96 (LC 16), 4=139 (LC 1), 5=396 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-85/64, 2-3=-96/40, 3-4=-108/26
BOT CHORD	1-5=-35/26, 4-5=-35/26
WEBS	2-5=-308/105

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 7 lb uplift at joint 4 and 52 lb uplift at joint 5.
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.

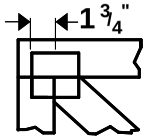
LOAD CASE(S) Standard

August 16,2022

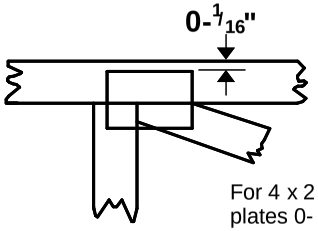
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

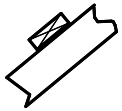
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

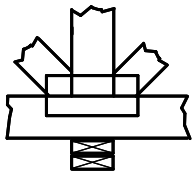
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

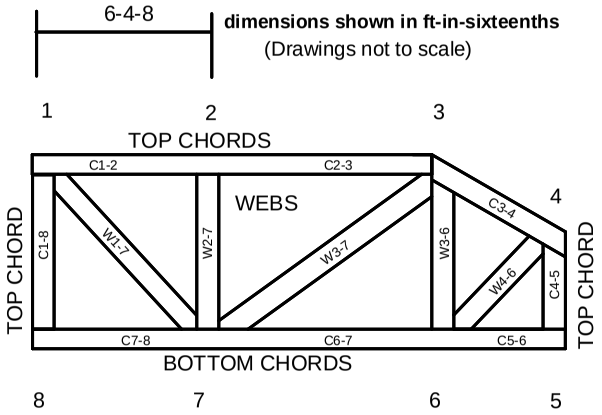


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.