



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

Re: 211238
Triplex

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: I49076687 thru I49076764

My license renewal date for the state of Missouri is December 31, 2022.

Missouri COA: Engineering 001193



December 3, 2021

Garcia, Juan ,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	Triplex	I49076687
211238	A1	Half Hip Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:39:55 2021 Page 1
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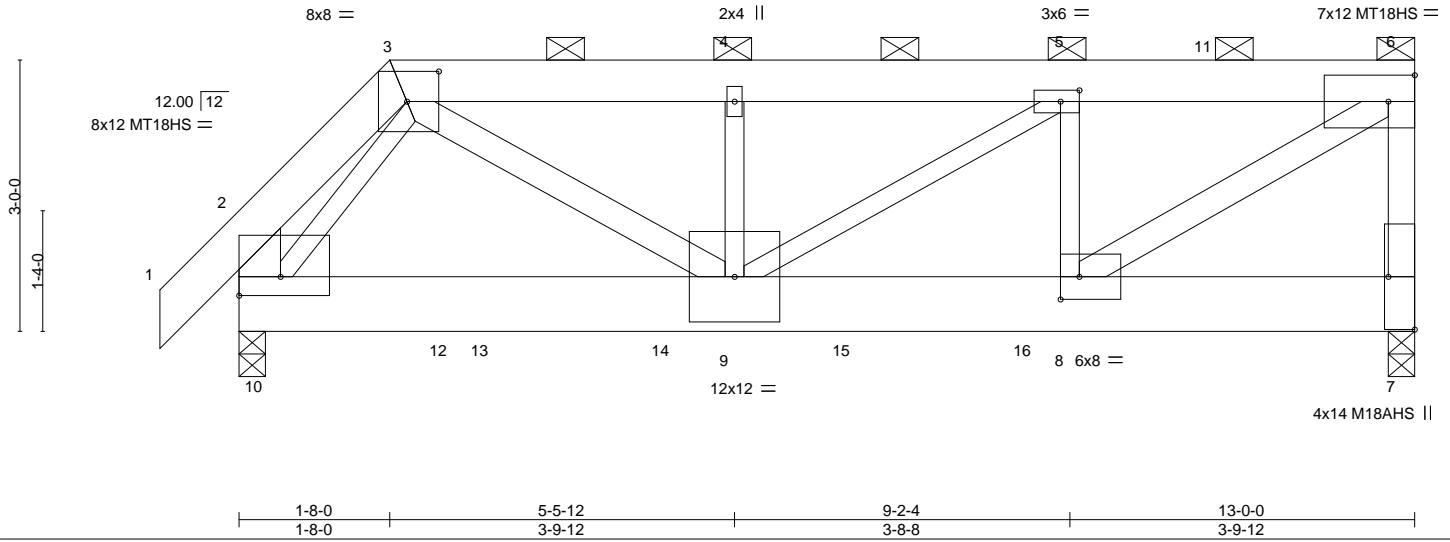


Plate Offsets (X,Y)-- [2:Edge,0-2-8], [3:0-4-4,0-4-0], [5:0-2-8,0-1-8], [7:Edge,0-3-8], [8:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.75	Vert(LL)	-0.08 9-10	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.52	Vert(CT)	-0.13 9-10	>999	240	M18AHS	142/136
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Horz(CT)	0.01 7	n/a	n/a	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Wind(LL)	0.04 9-10	>999	240	Weight: 177 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
6-7,3-9,6-8: 2x4 SPF No.2, 2-10: 2x6 SP DSS

BRACING-

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

REACTIONS.

(size) 7=0-3-8 (req. 0-4-7), 10=0-3-8 (req. 0-3-10)
Max Horz 10=82(LC 34)
Max Uplift 10=501(LC 7)
Max Grav 7=7510(LC 3), 10=6144(LC 1)

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

TOP CHORD 2-3=-2962/302, 3-4=-8198/217, 4-5=-8198/217, 5-6=-6383/0, 6-7=-7334/0,
2-10=-2214/212
BOT CHORD 9-10=-191/3040, 8-9=0/6383
WEBS 3-9=-88/6241, 4-9=-156/284, 5-9=-725/2449, 5-8=-2872/186, 6-8=0/7491, 3-10=-2045/0

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x3 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 7, 10 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 501 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



December 3, 2021

Continued on page 2

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	A1	Half Hip Girder	1	2	I49076687

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:39:55 2021 Page 2
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- NOTES-**
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1769 lb down and 646 lb up at 2-3-4, 1753 lb down and 104 lb up at 2-8-12, 1840 lb down and 102 lb up at 4-8-12, and 1852 lb down and 77 lb up at 6-8-12, and 1762 lb down at 8-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-51, 3-6=-61, 7-10=-20

Concentrated Loads (lb)

Vert: 6=-2274 11=-1643 12=-1769(F) 13=-1753(F) 14=-1779(F) 15=-1704(F) 16=-1386(F)

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	A2	FLAT GIRDER	2	2		I49076688

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:39:56 2021 Page 1
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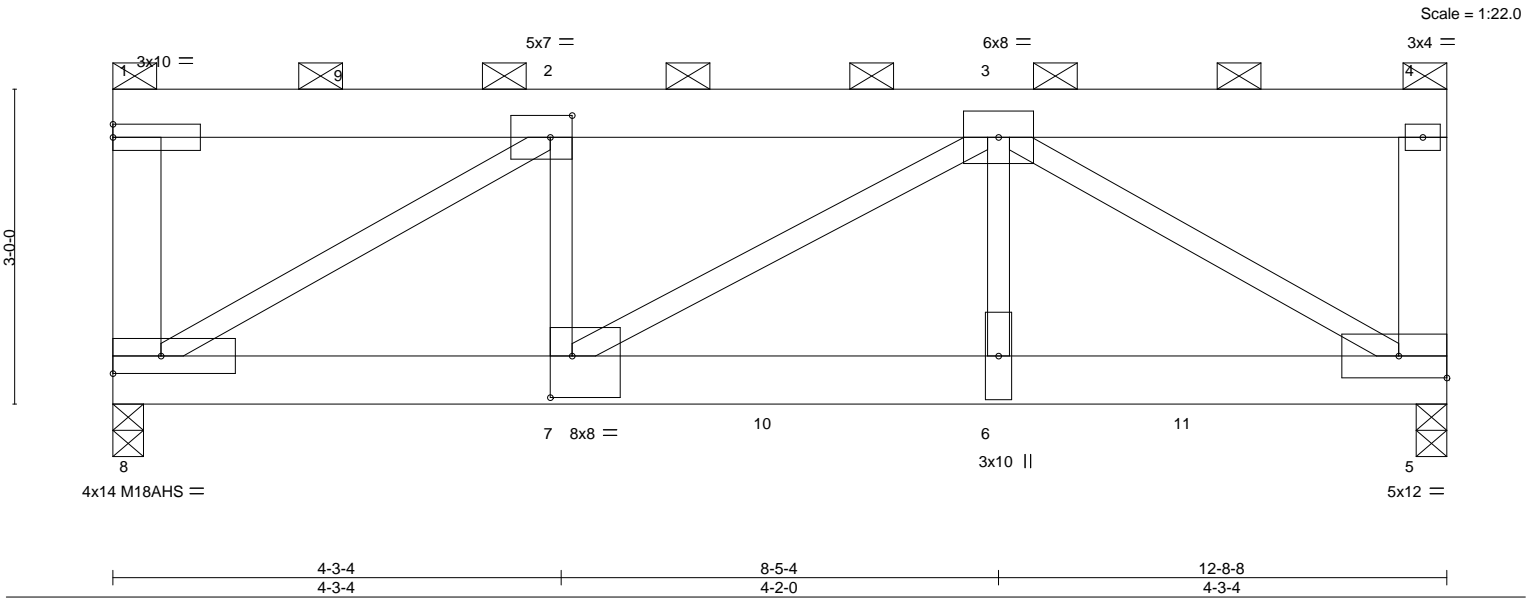


Plate Offsets (X,Y)-- [2:0-2-8,0-2-8], [7:0-2-8,0-4-12]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.10 6-7	>999	360
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.17 6-7	>843	240
TCDL	10.0	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.04 5	n/a	n/a
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-S		Wind(LL)	-0.01 6-7	>999	240
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								M18AHS	142/136
								Weight: 134 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2	TOP CHORD	2-0-0 oc purlins (5-11-8 max.): 1-4, except end verticals.
BOT CHORD	2x6 SPF 1650F 1.4E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except*		
	1-8,4-5: 2x6 SPF No.2		

REACTIONS. (size) 8=0-3-8 (req. 0-5-11), 5=0-3-8 (req. 0-5-3)
 Max Horz 8=68(LC 29)
 Max Grav 8=7251(LC 3), 5=6588(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-8=-3412/0, 1-2=-320/0, 2-3=-6325/0, 3-4=-339/0, 4-5=-312/0
 BOT CHORD 7-8=0/6325, 6-7=0/6286, 5-6=0/6286
 WEBS 2-8=-7094/0, 2-7=0/2540, 3-6=0/3865, 3-5=-7025/0

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.
 Webs connected as follows: 2x3 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - WARNING: Required bearing size at joint(s) 8, 5 greater than input bearing size.
 - This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1753 lb down at 4-3-4, 1753 lb down at 6-3-4, 1753 lb down at 8-3-4, and 1753 lb down at 10-3-4, and 1778 lb down at 12-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



December 3, 2021

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	A2	FLAT GIRDER	2	2	I49076688

Wheeler Lumber,
Waverly, KS - 66871,

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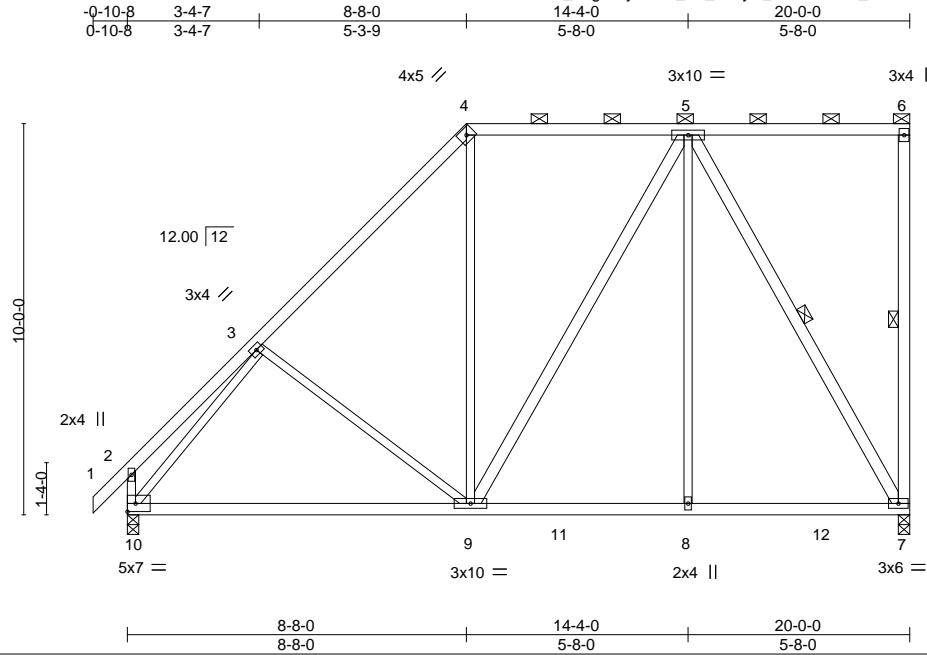
LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-61, 5-8=-20
Concentrated Loads (lb)
Vert: 1=-2279 5=-1530(B) 7=-1525(B) 6=-1525(B) 9=-1504 10=-1525(B) 11=-1525(B)

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076690
211238	B2	Piggyback Base	12	1		

Wheeler Lumber, Waverly, KS - 66871,

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Scale = 1:58.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.44	Vert(LL) -0.15	9-10	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.57	Vert(CT) -0.31	9-10	>765	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.56	Horz(CT) 0.02	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL) -0.02	7-8	>999	240		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 112 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 10=0-3-8
Max Horz 10=283(LC 7)
Max Uplift 7=-91(LC 7)
Max Grav 7=984(LC 3), 10=999(LC 3)

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

TOP CHORD 3-4=-837/52, 4-5=-512/92, 2-10=-267/25
BOT CHORD 9-10=-196/665, 8-9=-104/437, 7-8=-104/437
WEBS 4-9=0/252, 5-8=0/313, 5-7=-870/96, 3-10=-814/9

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 7.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

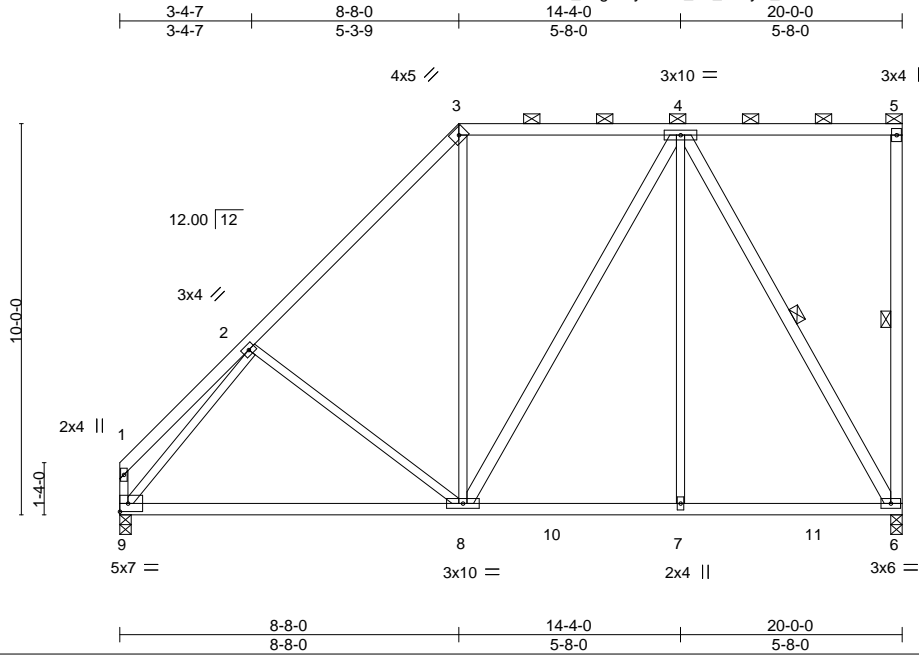


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076691
211238	B3	Piggyback Base	6	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:39:59 2021 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.44	Vert(LL) -0.15	8-9	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.57	Vert(CT) -0.31	8-9	>765	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.57	Horz(CT) 0.02	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL) -0.02	6-7	>999	240		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 111 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-6,4-8,4-6: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 6=0-3-8, 9=0-3-8
Max Horz 9=271(LC 7)
Max Uplift 6=90(LC 7)
Max Grav 6=986(LC 3), 9=942(LC 3)

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

TOP CHORD 2-3=-839/51, 3-4=-514/91
BOT CHORD 8-9=-195/672, 7-8=-104/438, 6-7=-104/438
WEBS 3-8=0/253, 4-7=0/313, 4-6=-872/95, 2-9=-817/30

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 6.
- 7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	B4	Common Supported Gable	2	1		I49076692

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:00 2021 Page 1
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Scale = 1:71.4

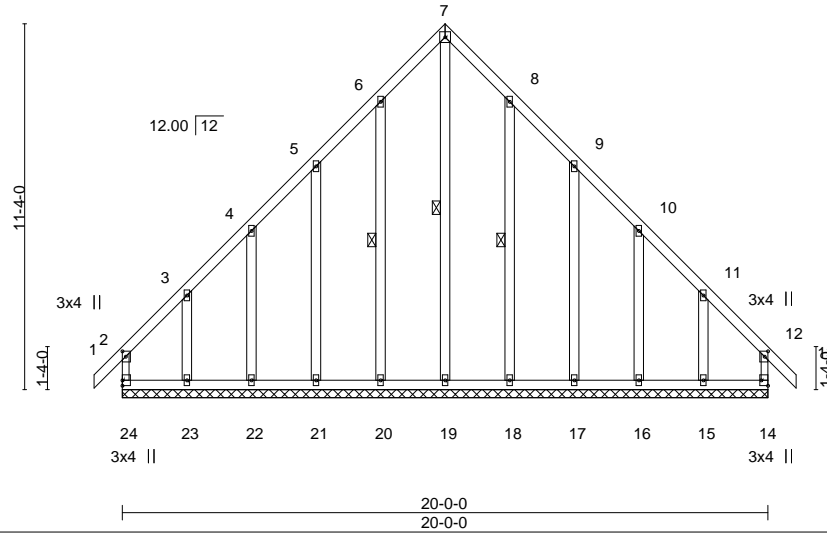


Plate Offsets (X,Y)-- [2:0-2-0,0-1-4], [12:0-2-0,0-1-4], [14:Edge,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.18	Vert(LL) -0.00	13	n/r	120	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT) -0.00	13	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.18	Horz(CT) 0.00	14	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 125 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-19, 6-20, 8-18

REACTIONS.

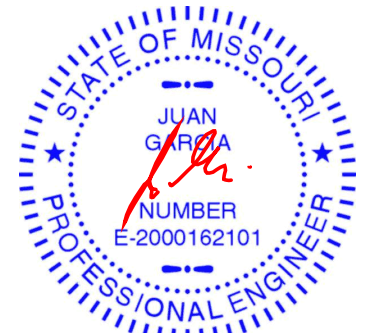
All bearings 20-0-0.
(lb) - Max Horz 24=229(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 19, 20, 21, 22, 18, 17, 16 except 24=133(LC 6), 14=118(LC 7), 23=145(LC 10), 15=141(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 20, 21, 22, 18, 17, 16, 15 except 19=358(LC 11), 23=250(LC 22)

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

TOP CHORD 6-7=-71/274, 7-8=-61/267
WEBS 7-19=-334/27

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 20, 21, 22, 18, 17, 16 except (jt=lb) 24=133, 14=118, 23=145, 15=141.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	149076693
211238	B4A	Common Supported Gable	1	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:01 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-4ESLWYLaGO9cBjQr5cpInWErAAO7oiaU7FcTpcyCytC

-0-10-8 10-0-0 20-0-0 20-10-8
0-10-8 10-0-0 10-0-0 0-10-8

3x4 =

Scale = 1:71.4

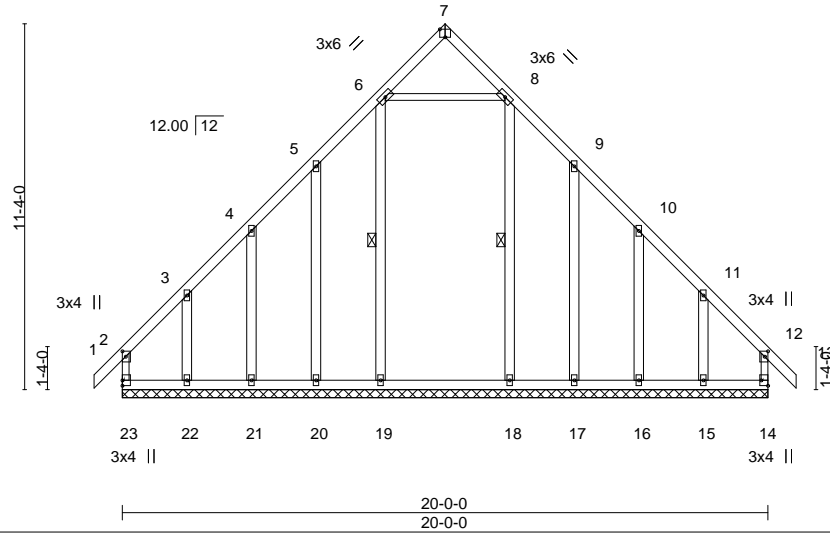


Plate Offsets (X,Y)-- [2:0-2-0,0-1-4], [7:0-2-0,Edge], [12:0-2-0,0-1-4], [14:Edge,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.18	Vert(LL)	-0.00	13	n/r	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	-0.00	13	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Horz(CT)	0.00	14	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 116 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-19, 8-18

REACTIONS.

All bearings 20-0-0.

(lb) - Max Horz 23=229(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 20, 21, 17, 16 except 23=141(LC 6), 14=125(LC 7), 22=132(LC 10), 15=128(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 14, 20, 21, 17, 16 except 23=263(LC 23), 19=390(LC 25), 22=277(LC 22), 18=387(LC 24), 15=271(LC 23)

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

TOP CHORD 5-6=92/253

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 21, 17, 16 except (jt=lb) 23=141, 14=125, 22=132, 15=128.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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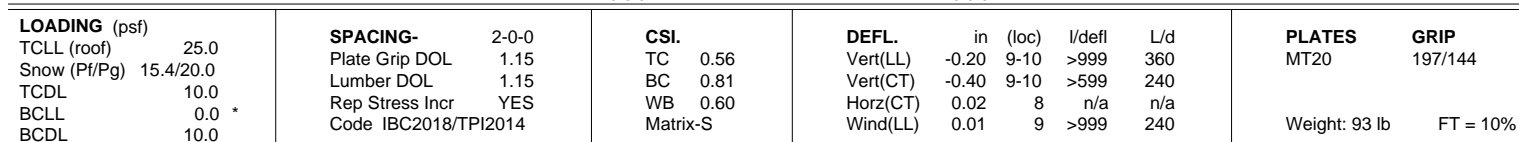
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:02 2021 Page 1
 ID:YO7_68gAzrjMRVt_sV_?nbyD_zk-YQ0jjiMC1iHTot?1fJKXKknwvaZUX1OeMvxQx2yCytB
 -0-10-8 3-4-4 10-0-0 16-7-12 20-0-0 20-10-8
 0-10-8 3-4-4 6-7-12 6-7-12 3-4-4 0-10-8



REACTIONS. (size) 10=0-3-8, 8=0-3-8
 Max Horz 10=-229(LC 8)
 Max Grav 10=959(LC 2), 8=959(LC 2)

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

TOP CHORD	3-4=-785/107, 4-5=-785/107
BOT CHORD	9-10=-97/645, 8-9=0/580
WEBS	4-9=-12/488, 3-10=-865/68, 5-8=-865/68

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCDL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	C1	Common Supported Gable	1	1		I49076696

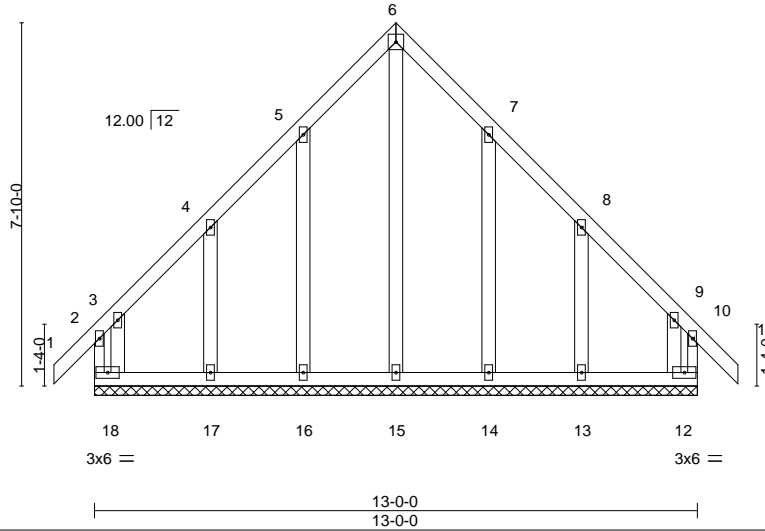
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:05 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-y?hsLKO5Kdf2fKjcKStEyMPXHnn?kUF42tA4YNyCyt8

0-10-8 6-6-0 13-0-0 13-10-8
0-10-8 6-6-0 6-6-0 0-10-8

4x4 =

Scale = 1:49.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.10	Vert(LL)	-0.00	11	n/r	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	-0.01	11	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.21	Horz(CT)	0.00	12	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 71 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-0-0.
(lb) - Max Horz 18=-165(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 18, 12, 16, 14 except 17=-121(LC 10), 13=-120(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 18, 12, 15, 16, 17, 14, 13

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 12, 16, 14 except (jt=lb) 17=121, 13=120.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	C2	Roof Special	6	1		I49076697

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:06 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-QCFEzGpJ5wnvHUIou9PTUayYGB2cTmQDHWve4pyCyt7

0-10-8 6-6-0 13-0-0 13-10-8
0-10-8 6-6-0 6-6-0 0-10-8

4x8 ||

Scale = 1:49.6

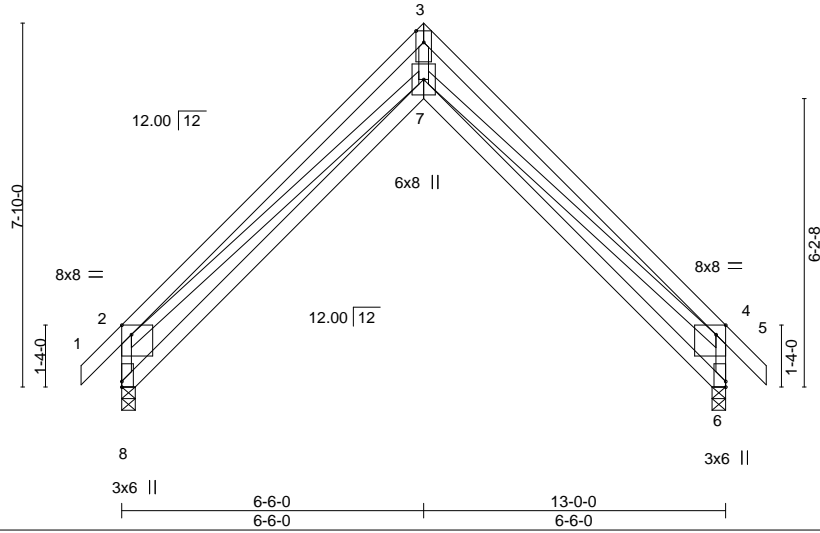


Plate Offsets (X,Y)-- [2:0-2-8,Edge], [4:0-2-8,Edge], [8:0-1-7,Edge]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.73	Vert(LL)	-0.24	7	>630	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.35	Vert(CT)	-0.44	7	>346		
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Horz(CT)	0.90	6	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.13	7	>999		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 62 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
Max Horz 8=-168(LC 8)
Max Grav 8=644(LC 2), 6=644(LC 2)

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

TOP CHORD 2-8=-823/148, 2-3=-2407/0, 3-4=-2461/0, 4-6=-787/74
BOT CHORD 7-8=-255/522, 6-7=-80/339
WEBS 3-7=0/2909, 4-7=-66/1913, 2-7=0/1701

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 8, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



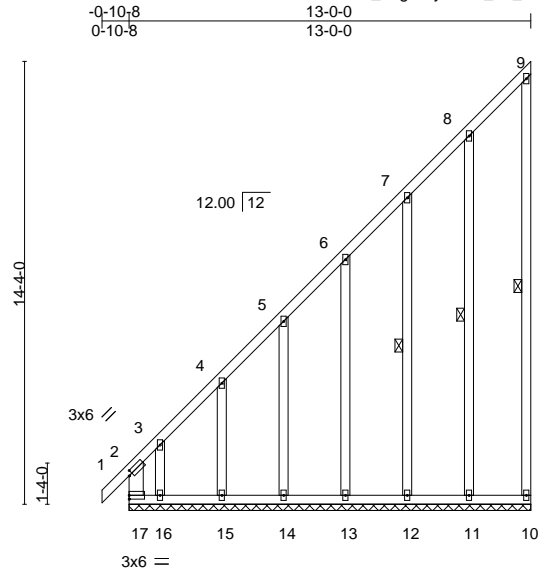
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	C3	Monopitch Supported Gable	2	1	149076698

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:07 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-uOpcm?QLSEvIvet_Stwi1nUq4bPICPTNVafBcGyCyt6



Scale = 1:74.6

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

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.28	Vert(LL)	-0.00	2	n/r	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.29	Vert(CT)	-0.00	1	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Horz(CT)	-0.00	10	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 101 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.
 WEBS 1 Row at midpt 9-10, 8-11, 7-12

REACTIONS.

All bearings 13'-0".
 (lb) - Max Horz 17=378(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 12, 13, 14, 15 except 17=332(LC 8), 16=732(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) 10, 11, 12, 13, 14, 15 except 17=989(LC 10), 16=348(LC 8)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-17=-655/207, 2-3=-729/270, 3-4=-442/171, 4-5=-369/143, 5-6=-286/115
 WEBS 3-16=-180/397

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) gable end zone; cantilever left and right exposed; end vertical left 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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" 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'-6" tall by 2'-0" 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 100 lb uplift at joint(s) 10, 11, 12, 13, 14, 15 except (jt=lb) 17=332, 16=732.
- 12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

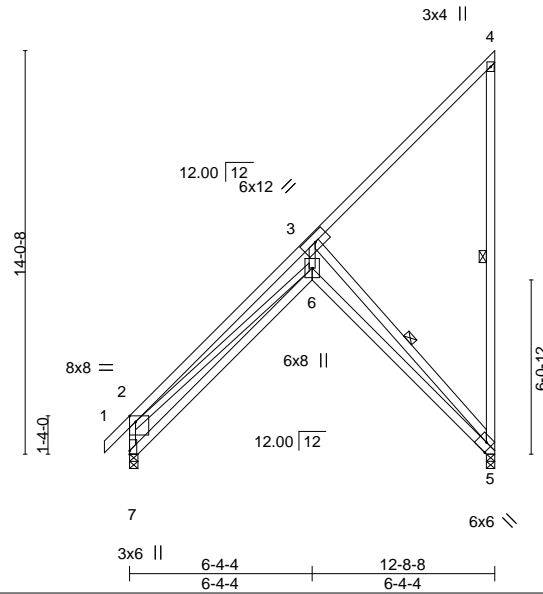
Job	Truss	Truss Type	Qty	Ply	Triplex
211238	C4	Monopitch	12	1	I49076699

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:07 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-uOpcm?QLsEvivet_Stwi1nUldbOZCCPNVafBcGyCyt6

-0-10-8 6-4-4 12-8-8
0-10-8 6-4-4 6-4-4



Scale = 1:80.2

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.63	Vert(LL)	-0.26	6	>569	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT)	-0.47	6	>320		
TCDL 10.0	Lumber DOL 1.15	WB 1.00	Horz(CT)	0.97	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.32	6	>470		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 77 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-5-15 oc bracing.
WEBS 1 Row at midpt 4-5, 3-5

REACTIONS.

(size) 7=0-3-8, 5=0-3-8
Max Horz 7=370(LC 10)
Max Uplift 5=243(LC 10)
Max Grav 7=632(LC 2), 5=587(LC 22)

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

TOP CHORD 2-7=-768/288, 2-3=-2308/729
BOT CHORD 6-7=-627/468, 5-6=-1099/2302
WEBS 2-6=-429/1671, 3-6=-1374/3059, 3-5=-2497/1193

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) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 7, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=243.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



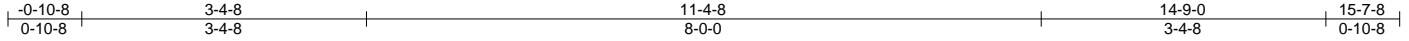
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	D1	Hip Girder	3	1		I49076700

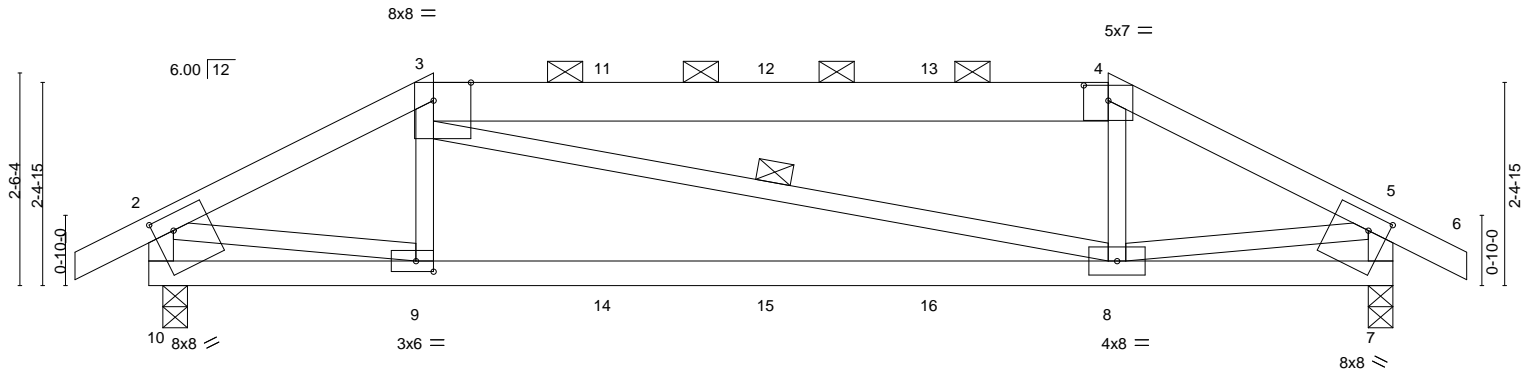
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:09 2021 Page 1

ID:Y07_68gAzryMRVt_sV_?nbyD_zk-mxNBhRbOrAT8x1NZHyA6Ca17P_1gFYgzU8lh8yCyt4



Scale = 1:27.3



0-2-0	3-4-8	11-4-8	14-9-0
0-2-0	3-2-8	8-0-0	3-4-8

Plate Offsets (X,Y)-- [3:0-5-5,Edge], [4:0-3-8,0-2-3], [7:0-2-12,0-2-4], [9:0-2-8,0-1-8], [10:0-2-12,0-2-4]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0		TC 0.88	Vert(LL)	-0.13	8-9	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15		BC 0.69	Vert(CT)	-0.28	8-9	>626	240		
TCDL 10.0	Lumber DOL 1.15		WB 0.44	Horz(CT)	0.02	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO		Matrix-S	Wind(LL)	0.03	8-9	>999	240		
BCDL 10.0	Code IBC2018/TPI2014								Weight: 58 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 7=0-3-8
Max Horz 10=-36(LC 10)
Max Uplift 10=-82(LC 12), 7=-83(LC 13)
Max Grav 10=1001(LC 37), 7=1001(LC 37)

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

TOP CHORD 2-3=-1403/113, 3-4=-1301/121, 4-5=-1444/114, 2-10=-1002/74, 5-7=-1003/74
BOT CHORD 8-9=-99/1250
WEBS 3-9=0/270, 4-8=0/257, 2-9=-86/1245, 5-8=-90/1292

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 47 lb up at 3-3-15, 79 lb down and 47 lb up at 5-5-4, 79 lb down and 47 lb up at 7-4-8, and 79 lb down and 47 lb up at 9-3-12, and 79 lb down and 47 lb up at 11-4-8 on top chord, and 174 lb down and 42 lb up at 3-4-8, 22 lb down at 5-5-4, 22 lb down at 7-4-8, and 22 lb down at 9-3-12, and 174 lb down and 42 lb up at 11-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

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December 3, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	D1	Hip Girder	3	1	I49076700

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:10 2021 Page 2
ID:Y07_68gAzryMRVt_sV_?nbyD_zk-JzUIP1SD99IKm5cZ7?TPfQ6CtoKGPIopB8trDayCyt3

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-51, 3-4=-61, 4-5=-51, 5-6=-51, 7-10=-20

Concentrated Loads (lb)

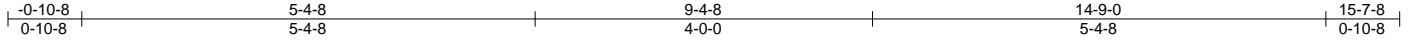
Vert: 3=-52(B) 4=-52(B) 9=-174(B) 8=-174(B) 11=-48(B) 12=-48(B) 13=-48(B) 14=-16(B) 15=-16(B) 16=-16(B)

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076701
211238	D2	Hip	3	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:11 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-n927cNTrwTQBNFBmhi_eBdRoCIE8F_zQodPI1yCyt2



Scale = 1:27.3

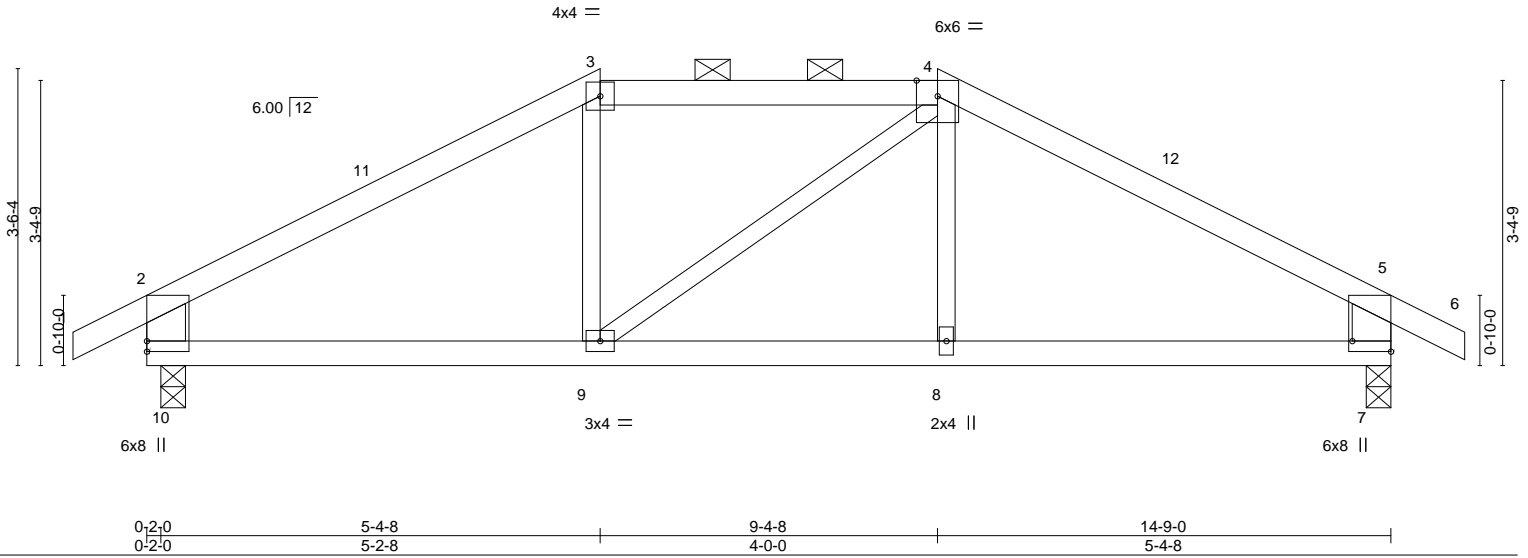


Plate Offsets (X,Y)-- [7:Edge,0-5-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.61	Vert(LL)	-0.06	8-9	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.38	Vert(CT)	-0.12	8-9	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.02	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.02	8-9	>999	240		
BCDL 10.0	Code IBC2018/TPI2014							Weight: 48 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-10,5-7: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 7=0-3-8
 Max Horz 10=-45(LC 10)
 Max Uplift 10=-8(LC 12), 7=-8(LC 13)
 Max Grav 10=748(LC 37), 7=748(LC 37)

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

TOP CHORD 2-3=-850/0, 3-4=-667/19, 4-5=-849/0, 2-10=-680/46, 5-7=-680/46
 BOT CHORD 9-10=0/669, 8-9=0/667, 7-8=0/669

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	D3	Common	9	1		I49076702

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:12 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-FMcVpjUUhmY2?PmyEQVtkrCbwc4Nthj6fSMYHTyCyt1

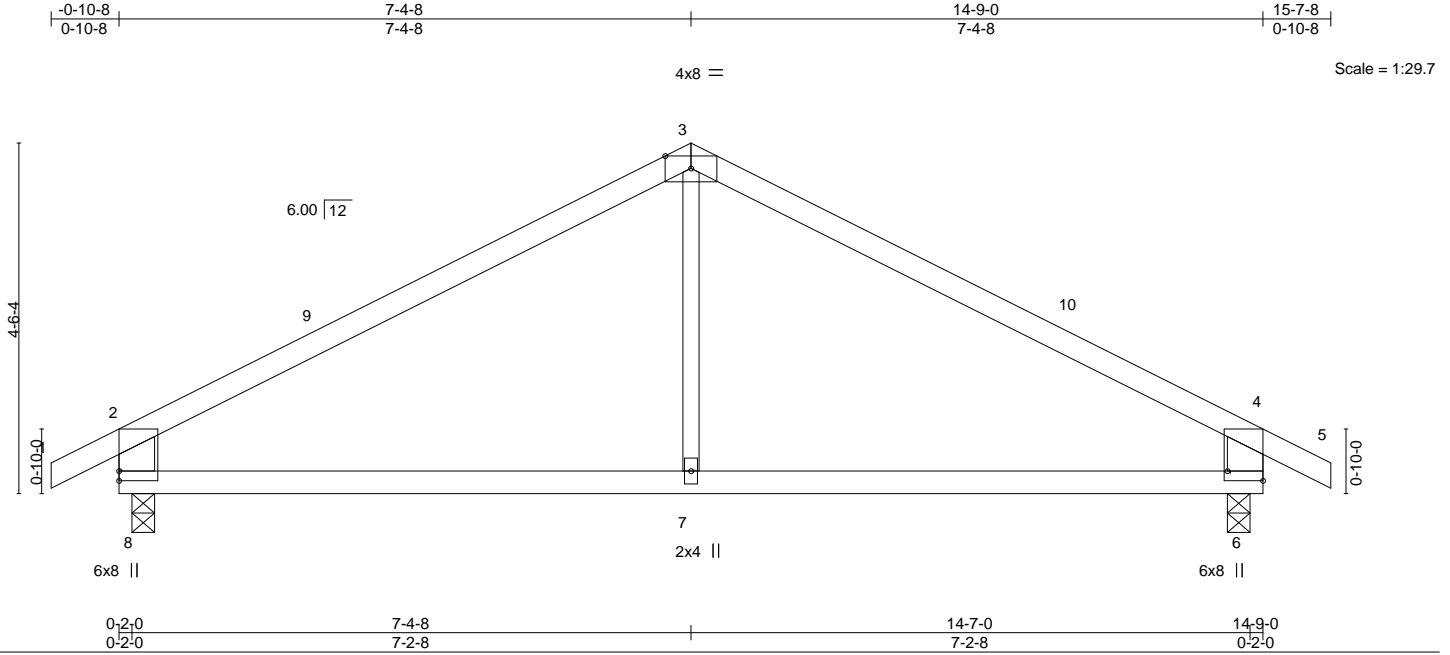


Plate Offsets (X,Y)-- [6:Edge,0-5-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.06 7-8	>999	360
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.12 7-8	>999	240
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01 6	n/a	n/a
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-R		Wind(LL)	-0.02 7-8	>999	240
BCDL	10.0								
								Weight: 43 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
Max Horz 8=55(LC 11)
Max Uplift 8=19(LC 12), 6=19(LC 13)
Max Grav 8=720(LC 2), 6=720(LC 2)

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

TOP CHORD 2-3=-788/30, 3-4=-788/30, 2-8=-655/67, 4-6=-655/67
BOT CHORD 7-8=0/592, 6-7=0/592
WEBS 3-7=0/303

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:17 2021 Page 1
 ID:YO7_68gAzryMRVt_sV_?nbyD_zk-cJQOtQXcVJAL5Aev1z52RuvTRdfmYjHrok4jygyCysy
 -0-10-8 2-2-8 6-2-8 9-5-0 15-5-2 21-5-4 27-5-6 33-8-0
 0-10-8 2-2-8 4-0-0 3-2-8 6-0-2 6-0-2 6-0-2 6-2-10

Structural drawing of a roof truss system. The drawing shows a side elevation of the truss with various members labeled with numbers and material specifications. Key dimensions and specifications include:

- Vertical Dimensions:**
 - Left side: 3-6-8, 3-5-7, 1-11-4, 0-10-0.
 - Right side: 3-5-7.
- Horizontal Dimensions:**
 - Top: 6.00' 12", 5x12 =, 6x8 =, 3x4 =, 3x10 =, 4x8 =, 4x8 =, 2x4 ||.
 - Bottom: 4x8 =, 2x4 ||, 4x8 =, 6x8 =, 6x6 =, 3x4 =, 2x4 ||, 4x4 =, 8x12 MT18HS =.
- Member Labels:**
 - Top chord: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
 - Bottom chord: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43.
 - Internal members: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43.
- Material Specifications:**
 - 8x8 =
 - 3x4 =
 - 3x10 =
 - 4x8 =
 - 4x8 =
 - 2x4 ||
 - 6x8 =
 - 6x6 =
 - 3x4 =
 - 2x4 ||
 - 4x4 =
 - 8x12 MT18HS =

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 3-4: 2x4 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-5 max.): 3-4, 5-10.
BOT CHORD	2x6 SPF No.2 *Except* 2-15: 2x6 SPF 1650F 1.4E	BOT CHORD	Rigid ceiling directly applied or 6-1-11 oc bracing.
WEBS	2x3 SPF No.2 *Except* 9-11: 2x4 SPF No.2	WEBS	1 Row at midpt 6-16, 7-12, 9-11

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

TOP CHORD 2-3=-2855/679, 3-4=-4981/1279, 4-5=-4115/1165, 5-6=-3769/1081, 6-7=-4768/1438,
7-9=-3002/945

BOT CHORD 2-18=-613/2318, 17-18=-616/2344, 16-17=-1358/5069, 14-16=-1468/4768,
13-14=-1409/4495, 12-13=-1409/4495, 11-12=-952/3002

WEBS 3-18=-50/374, 3-17=-773/2828, 4-17=-1281/401, 4-16=-1483/307, 5-16=-351/1413,
6-16=-1121/410, 7-14=-72/351, 7-12=-1668/510, 9-12=-214/867, 9-11=-3317/1033

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

Continued on page 2

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

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	E1	Roof Special Girder	1	1	

I49076703

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:17 2021 Page 2
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NOTES-

- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 44 lb down and 29 lb up at 2-2-8, 44 lb down and 28 lb up at 3-3-4, 44 lb down and 28 lb up at 5-3-4, 46 lb down and 33 lb up at 7-3-4, 56 lb down and 58 lb up at 9-5-0, 61 lb down and 58 lb up at 11-3-4, 61 lb down and 58 lb up at 13-3-4, 61 lb down and 58 lb up at 15-3-4, 61 lb down and 58 lb up at 17-3-4, 61 lb down and 58 lb up at 19-3-4, 61 lb down and 58 lb up at 21-3-4, 61 lb down and 58 lb up at 23-3-4, 61 lb down and 58 lb up at 25-3-4, 61 lb down and 58 lb up at 27-3-4, 61 lb down and 58 lb up at 29-3-4, and 61 lb down and 58 lb up at 31-3-4, and 55 lb down and 61 lb up at 33-6-12 on top chord, and 66 lb down and 35 lb up at 2-2-8, 9 lb down and 3 lb up at 3-3-4, 9 lb down and 3 lb up at 5-3-4, 16 lb down and 13 lb up at 7-3-4, 20 lb down and 22 lb up at 9-3-4, 20 lb down and 22 lb up at 11-3-4, 20 lb down and 22 lb up at 13-3-4, 20 lb down and 22 lb up at 15-3-4, 20 lb down and 22 lb up at 17-3-4, 20 lb down and 22 lb up at 19-3-4, 20 lb down and 22 lb up at 21-3-4, 20 lb down and 22 lb up at 23-3-4, 20 lb down and 22 lb up at 25-3-4, 20 lb down and 22 lb up at 27-3-4, 20 lb down and 22 lb up at 29-3-4, and 20 lb down and 22 lb up at 31-3-4, and 24 lb down and 22 lb up at 33-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 3-4=-61, 4-5=-51, 5-10=-61, 2-11=-20
Concentrated Loads (lb)
Vert: 3=-3(F) 10=-3(F) 11=-7(F) 18=-66(F) 16=-0(F) 14=-0(F) 13=-0(F) 12=-0(F) 22=-1(F) 33=0(F) 34=0(F) 35=-1(F) 36=-0(F) 37=-0(F) 38=-0(F) 39=-0(F) 40=-0(F) 41=-0(F) 42=-0(F) 43=-0(F)

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	E2	Roof Special	1	1		I49076704

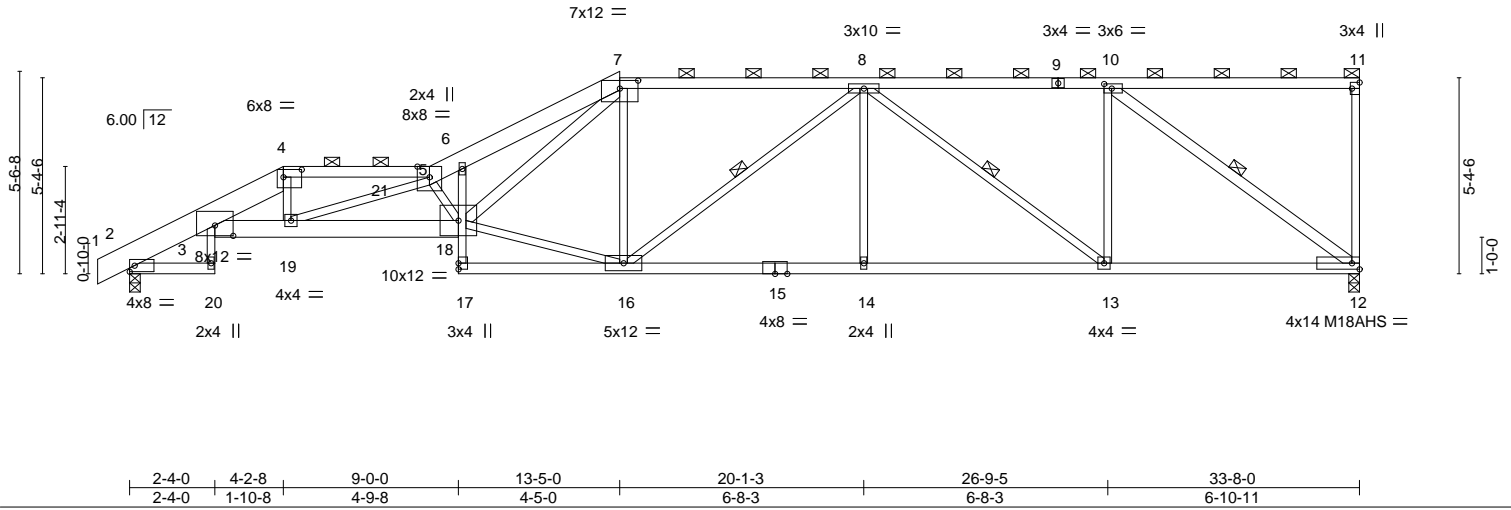
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:19 2021 Page 1

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-0-10-8	2-4-0	4-2-8	8-2-8	9-0-0	13-5-0	20-1-3	26-9-5	33-8-0
0-10-8	2-4-0	1-10-8	4-0-0	0-9-8	4-5-0	6-8-3	6-8-3	6-10-11

Scale = 1:63.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.40	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.71	M18AHS	142/136		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.34				
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-S		Wind(LL)	0.20				
BCDL	10.0							Weight: 156 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x8 SP DSS, 5-7: 2x6 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-5, 7-11.
BOT CHORD	2x4 SPF No.2 *Except* 3-20,6-17: 2x3 SPF No.2, 3-18: 2x6 SPF 1650F 1.4E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 17-18.
WEBS	2x3 SPF No.2 *Except* 7-18,10-12: 2x4 SPF No.2	WEBS	1 Row at midpt 8-16, 8-13, 10-12

REACTIONS. (size) 12=0-3-8, 2=0-3-8
Max Horz 2=149(LC 9)
Max Uplift 12=-60(LC 9), 2=-10(LC 12)
Max Grav 12=1684(LC 39), 2=1577(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-873/8, 3-4=-3730/0, 4-5=-3805/18, 5-6=-5371/0, 6-7=-5475/9, 7-8=-2425/17, 8-10=-1856/71
BOT CHORD 3-19=-96/3782, 18-19=-75/5731, 6-18=-492/82, 16-17=-4/282, 14-16=-108/2625, 13-14=-108/2625, 12-13=-92/1856
WEBS 4-19=0/495, 5-19=-2081/0, 5-18=-1647/30, 16-18=-76/2217, 7-18=-63/3419, 7-16=-374/89, 8-16=-275/172, 8-14=0/261, 8-13=-965/21, 10-13=0/729, 10-12=-2294/76

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 2.
 - This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	E4	Roof Special	1	1		I49076706

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:22 2021 Page 1

ID:Y07_68gAzryMRVt_sV_?nbyD_zk-yHDHw8blKrodCxXtqWhD8ycl1eMOD_1ay0nUduyCyst

0-10-8	2-4-0	8-2-8	9-0-0	12-2-8	16-9-12	21-5-0	27-5-4	33-8-0
0-10-8	2-4-0	5-10-8	0-9-8	3-2-8	4-7-4	4-7-4	6-0-4	6-2-12

Scale = 1:61.7

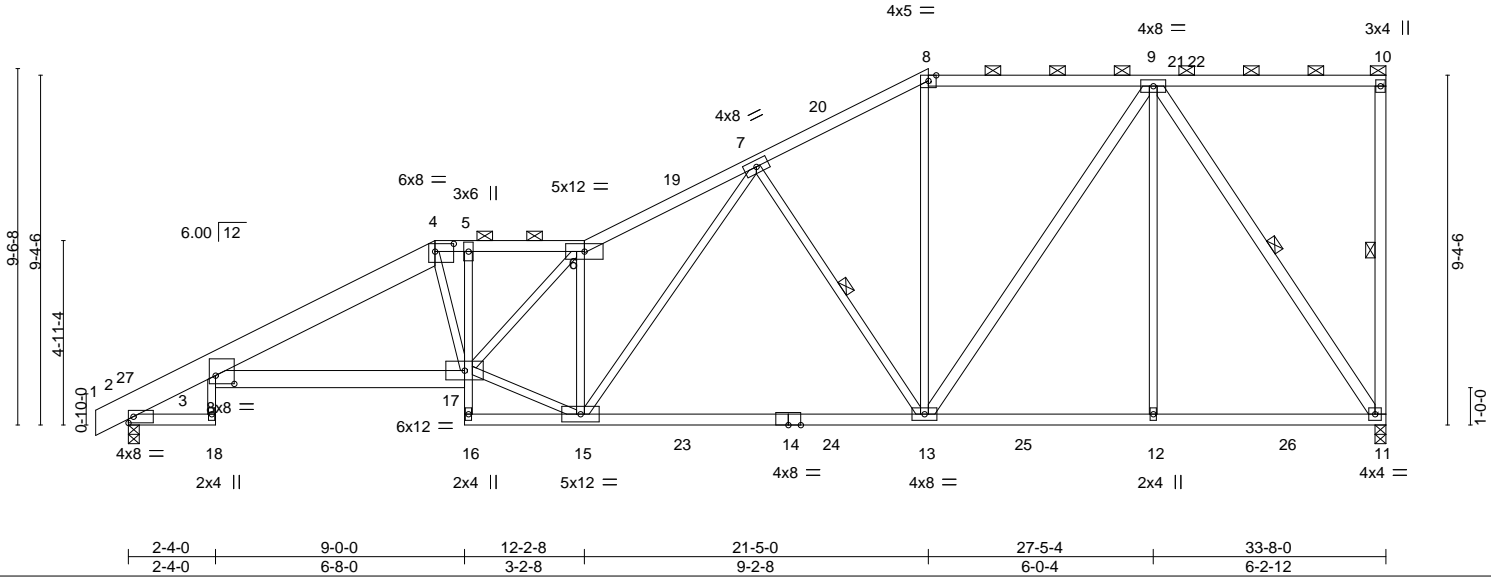


Plate Offsets (X,Y)-- [3:0-6-0,0-2-10], [4:0-6-0,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.68	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.42 13-15 >953 360		
TCDL 10.0	Lumber DOL 1.15	WB 1.00	Vert(CT) -0.73 13-15 >550 240		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.32 11 n/a n/a		
BCDL 10.0	Code IBC2018/TPI2014		Wind(LL) 0.16 3-17 >999 240		
				Weight: 187 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-18,5-16: 2x3 SPF No.2, 3-17: 2x6 SP 2400F 2.0E
11-14: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
10-11,9-13,9-11: 2x4 SPF No.2

REACTIONS.

(size) 11=0-3-8, 2=0-3-8
Max Horz 2=266(LC 11)
Max Uplift 11=-37(LC 9), 2=-46(LC 12)
Max Grav 11=1659(LC 3), 2=1668(LC 48)

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

TOP CHORD 2-3=-1015/0, 3-4=-3143/102, 4-5=-3022/116, 5-6=-2958/114, 6-7=-3124/121,
7-8=-1656/75, 8-9=-1432/85
BOT CHORD 3-17=-136/2916, 5-17=-7/593, 13-15=-54/1958, 12-13=-72/952, 11-12=-72/952
WEBS 4-17=-35/356, 15-17=-49/2881, 6-17=-91/389, 6-15=-1852/166, 7-15=-60/1436,
7-13=-1001/143, 8-13=0/448, 9-13=-43/888, 9-12=0/334, 9-11=-1693/33

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	E5	Roof Special	1	1		I49076707

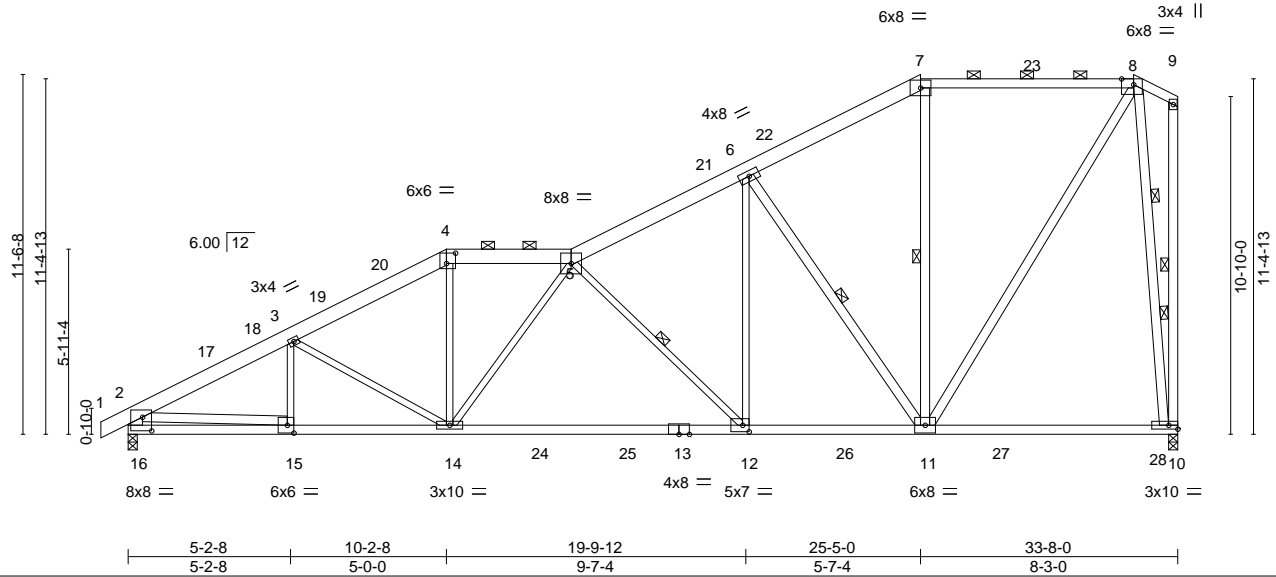
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:26 2021 Page 1

ID:Y07_68gAzryMRVt_sV_?nbyD_zk-r2SomVeGO3J3hZqe3Mm9lonvDFoB9pkAtelimfyCyp

0-10-8 5-2-8 10-2-8 14-2-8 19-9-12 25-5-0 32-3-0 33-8-0
0-10-8 5-2-8 5-0-0 4-0-0 5-7-4 5-7-4 6-10-0 1-5-0

Scale = 1:73.9



Job	Truss	Truss Type	Qty	Ply	Triplex
211238	E5	Roof Special	1	1	

I49076707

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:26 2021 Page 2
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LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-4=-51, 4-5=-61, 5-7=-51, 7-8=-61, 8-9=-51, 10-16=-20
Concentrated Loads (lb)
Vert: 19=-563 20=-563

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	149076708
211238	E6	Piggyback Base	4	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:27 2021 Page 1
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Job Reference (optional)

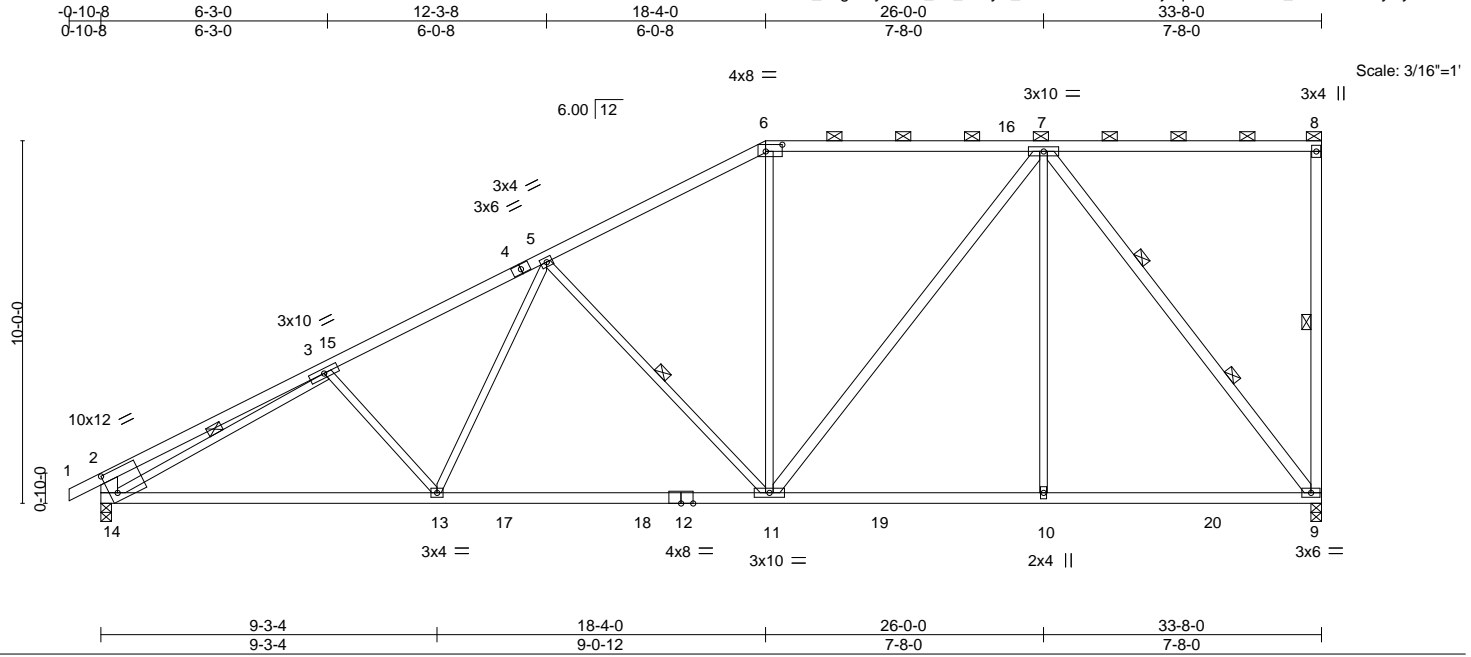


Plate Offsets (X,Y)-- [2:0-2-8,0-7-5], [6:0-5-8,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.67	Vert(LL)	-0.24 11-13	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.90	Vert(CT)	-0.40 11-13	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.89	Horz(CT)	0.08 9	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.05 11-13	>999	240		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 157 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-8: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
12-14: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
8-9,7-11,7-9: 2x4 SPF No.2, 2-14: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-0 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.
WEBS 1 Row at midpt 8-9, 5-11, 3-14
2 Rows at 1/3 pts 7-9

REACTIONS.

(size) 9=0-3-8, 14=0-3-8
Max Horz 14=290(LC 9)
Max Uplift 9=65(LC 9), 14=29(LC 12)
Max Grav 9=1671(LC 35), 14=1671(LC 3)

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

TOP CHORD 2-3=-756/86, 3-5=-2435/54, 5-6=-1685/64, 6-7=-1435/82, 8-9=-263/59, 2-14=-585/93
BOT CHORD 13-14=-122/2196, 11-13=-106/1899, 10-11=-98/1068, 9-10=-98/1068
WEBS 5-13=0/524, 5-11=-796/135, 6-11=0/381, 7-11=-51/687, 7-10=0/462, 7-9=-1724/68, 3-14=-1869/0

NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 14.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	E7	Piggyback Base	6	1		149076709

Wheeler Lumber, Waverly, KS - 66871,

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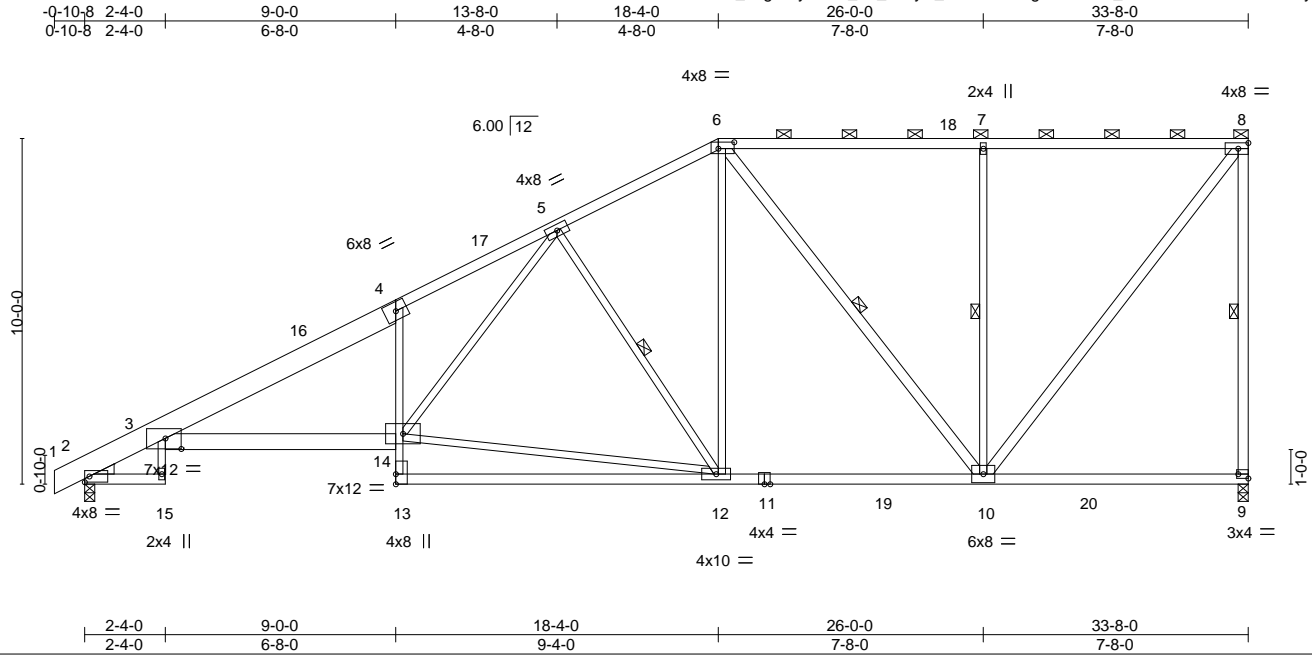


Plate Offsets (X,Y)-- [3:0-5-8,0-3-10], [6:0-5-8,0-2-4], [9:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.92	Vert(LL)	-0.35	12-13	>999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.80	Vert(CT)	-0.71	12-13	>564		
TCDL 10.0	Lumber DOL 1.15	WB 0.70	Horz(CT)	0.34	9	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.17	3-14	>999		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 190 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-8: 2x4 SPF 2100F 1.8E, 1-4: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-15,4-13: 2x3 SPF No.2, 3-14: 2x6 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
8-9,6-10,8-10: 2x4 SP No.2

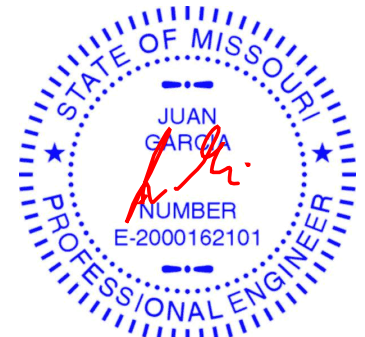
WEDGE
Left: 2x4 SP No.3

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=286(LC 9)
Max Uplift 9=65(LC 9), 2=-28(LC 12)
Max Grav 9=1652(LC 35), 2=1636(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1017/0, 3-4=-3096/59, 4-5=-3198/153, 5-6=-1642/67, 6-7=-1033/51, 7-8=-1033/51, 8-9=-1495/96
BOT CHORD 3-14=-134/2837, 4-14=-799/160, 10-12=-96/1413
WEBS 12-14=-146/1711, 5-14=-109/1513, 5-12=-977/153, 6-12=-10/946, 6-10=-701/47, 7-10=-784/160, 8-10=-68/1665

NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	G1	Common	12	1		149076710

Wheeler Lumber, Waverly, KS - 66871,

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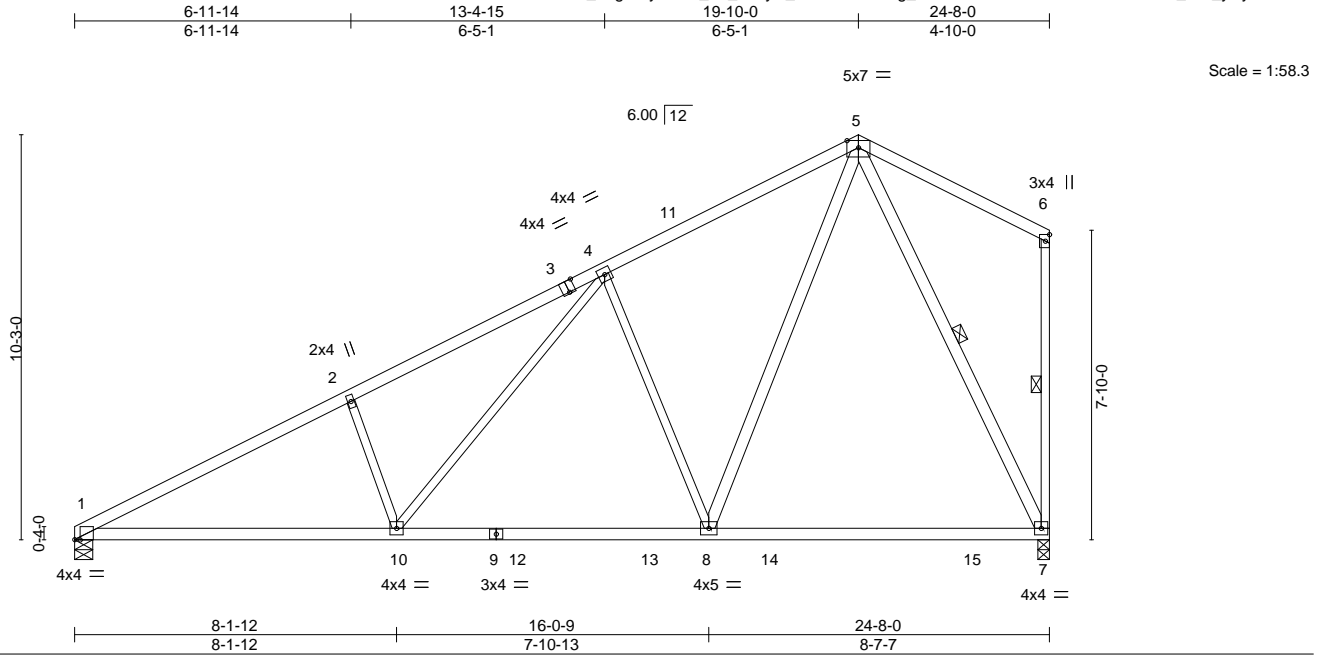


Plate Offsets (X,Y)-- [1:0-1-11,Edge], [3:0-2-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.79	Vert(LL)	-0.23	7-8	>999	360	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.84	Vert(CT)	-0.37	7-8	>779	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.96	Horz(CT)	0.04	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.06	1-10	>999	240		
BCDL 10.0	Code IBC2018/TPI2014							Weight: 105 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 7-9: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2 *Except*
 5-8,5-7: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 6-7, 5-7

REACTIONS.

(size) 1=0-5-8, 7=0-3-8
 Max Horz 1=243(LC 9)
 Max Uplift 1=24(LC 12), 7=32(LC 12)
 Max Grav 1=1164(LC 3), 7=1214(LC 3)

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

TOP CHORD 1-2=-1990/59, 2-4=-1878/115, 4-5=-1045/113
 BOT CHORD 1-10=-130/1738, 8-10=-45/1129, 7-8=-42/479
 WEBS 2-10=-424/150, 4-10=-57/807, 4-8=-742/172, 5-8=-61/1128, 5-7=-1050/36

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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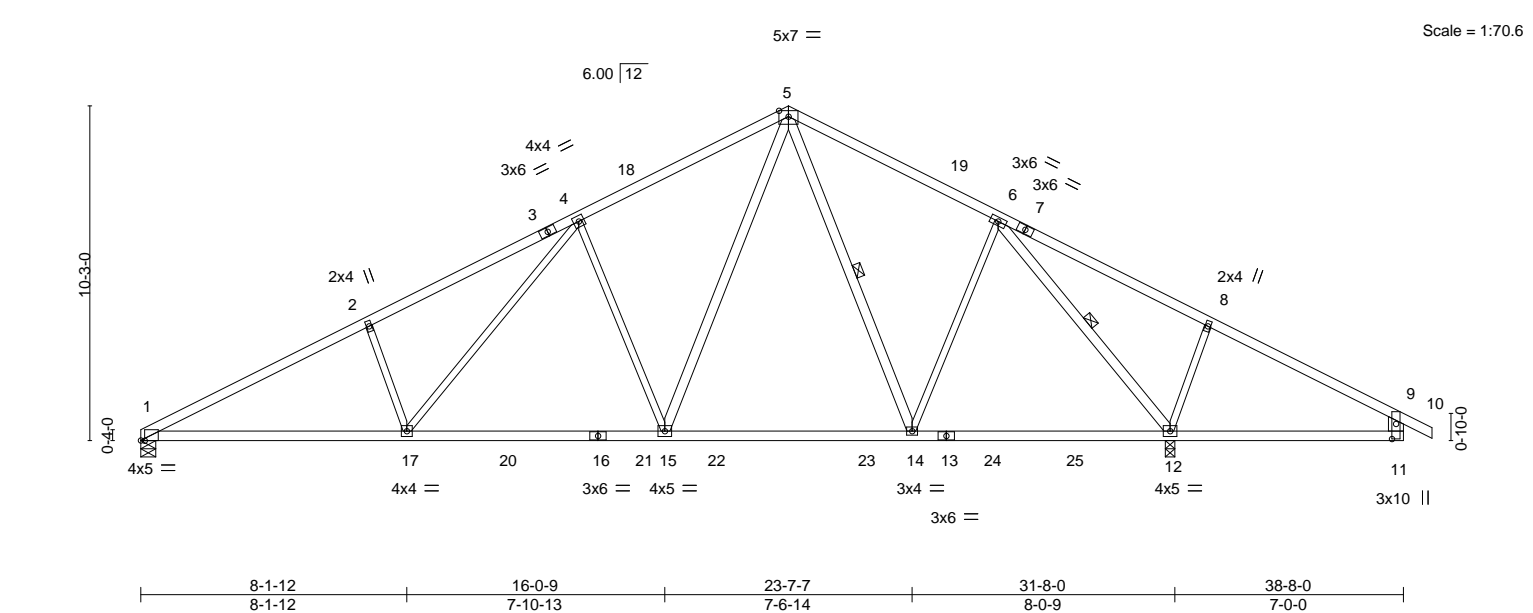
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:30 2021 Page 1
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 6-11-14 13-4-15 19-10-0 26-3-1 32-8-2 38-8-0 39-6-8
 6-11-14 6-5-1 6-5-1 6-5-1 5-11-14 0-10-8



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
	11-13: 2x4 SPF 2100F 1.8E	WEBS	1 Row at midpt 5-14, 6-12
WEBS	2x3 SPF No.2 *Except*		
	5-15,5-14,6-12: 2x4 SPF No.2, 9-11: 2x6 SPF No.2		

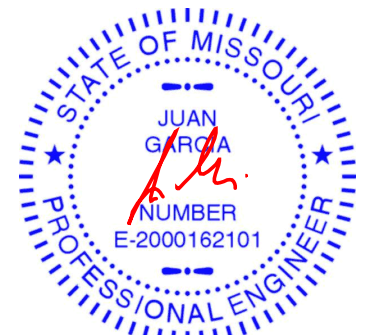
REACTIONS. (size) 1=0-5-8, 12=0-3-8
 Max Horz 1=118(LC 12)
 Max Uplift 1=-33(LC 12), 12=-31(LC 13)
 Max Grav 1=1425(LC 3), 12=2342(LC 3)

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

TOP CHORD	1-2=-2559/78, 2-4=-2446/133, 4-5=-1604/135, 5-6=-1102/112, 6-8=0/769, 8-9=-40/627
BOT CHORD	1-17=-123/2254, 15-17=-421/643, 14-15=0/1016, 12-14=0/727, 11-12=-451/65
WEBS	2-17=-415/150, 4-17=-53/817, 8-15=-742/169, 5-15=-70/1059, 5-14=-288/45, 6-14=0/572, 6-12=-2061/0, 4-12=-463/141

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCDL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021



WARNING – verify design parameters READ NOTES ON THIS AND INCLUDED WITH THE KEY EXERCISES! SEE MIF-743-167, 3/15/2020 (BY ONE USER).
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H1	Piggyback Base	3	1		I49076712

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:32 2021 Page 1

ID:Y07_68gAzryMRVt_sV_?nbyD_zk-fCq30Zj0zv3CPUHoPdsZY31y7gp2ZXW2FZCO_JyCysj

0-10-8 6-11-0 13-7-8 20-4-0 28-2-11 29-4-0 36-4-12 43-8-0 44-6-8
0-10-8 6-11-0 6-8-8 6-8-8 7-10-11 1-1-5 7-0-12 7-3-4 0-10-8

Scale = 1:82.7

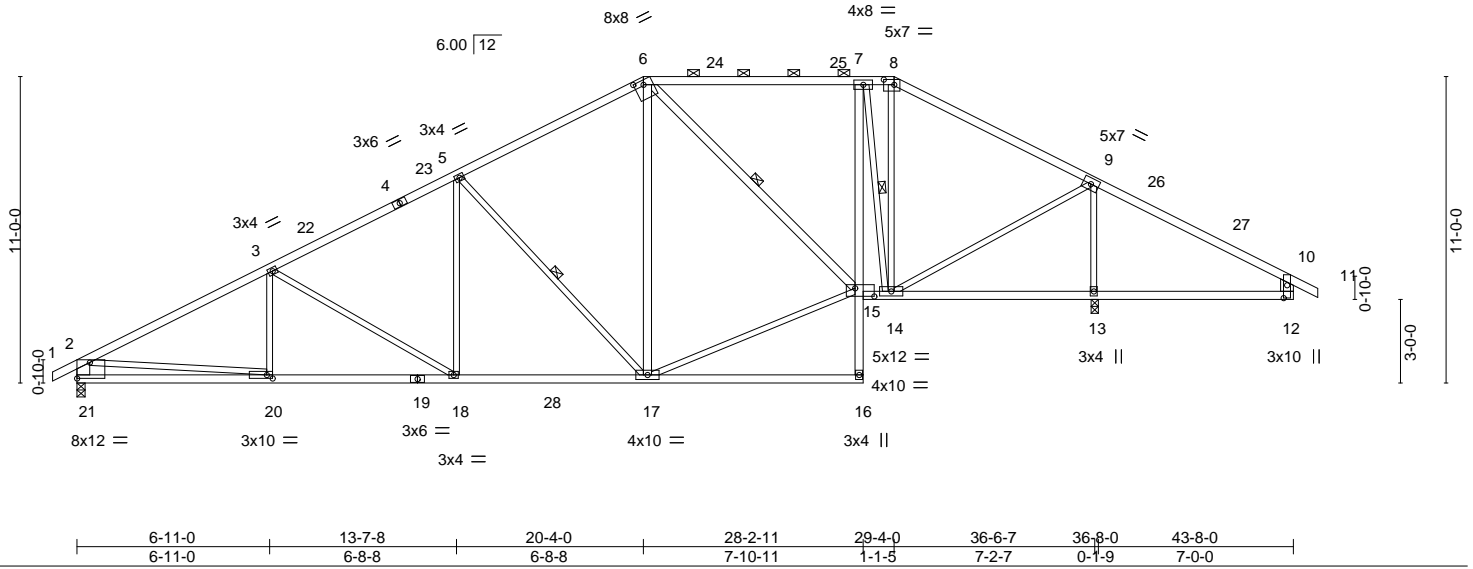


Plate Offsets (X,Y)-- [6:0-4-0,0-1-15], [8:0-4-8,0-2-4], [12:0-5-9,0-1-8], [15:0-8-4,0-3-8], [20:0-2-8,0-1-8], [21:Edge,0-6-13]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.18	17-18	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.32	16-17	>999	240		
TCDL 10.0	Rep Stress Incr YES	WB 0.94	Horz(CT) 0.07	13	n/a	n/a		
BCLL 0.0 *	Code IBC2018/TPI2014	Matrix-S	Wind(LL) 0.07	18	>999	240		
BCDL 10.0							Weight: 200 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
8-11: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
12-15: 2x4 SPF 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
6-17,6-15: 2x4 SPF No.2, 2-21,10-12: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-2 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14,12-13.
WEBS 1 Row at midpt 5-17, 6-15, 7-14

REACTIONS.

(size) 21=0-3-8, 13=0-3-2
Max Horz 21=165(LC 12)
Max Uplift 21=-39(LC 12)
Max Grav 21=1703(LC 54), 13=2477(LC 3)

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

TOP CHORD 2-3=-2660/52, 3-5=-2217/75, 5-6=-1579/88, 6-7=-1238/64, 7-8=-1055/58, 8-9=-1261/53,
9-10=-507/09, 2-21=-1585/76
BOT CHORD 20-21=-224/612, 18-20=-142/2296, 17-18=-66/1909, 7-15=-20/759, 14-15=0/1196,
13-14=-505/78, 12-13=-505/78
WEBS 3-18=-459/88, 5-18=0/505, 5-17=-936/132, 6-17=-7/488, 15-17=0/1378, 6-15=-250/79,
7-14=-1175/127, 8-14=-57/586, 9-14=0/1746, 9-13=-2191/58, 2-20=0/1746

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H2	Piggyback Base	2	1		I49076713

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:38 2021 Page 1
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0-10-0 8 2-4-0 7-4-0 12-4-0 20-4-0 24-10-0 29-4-0 30-7-12 36-8-0
0-10-0 8 2-4-0 5-0-0 5-0-0 8-0-0 4-6-0 4-6-0 1-3-12 6-0-4

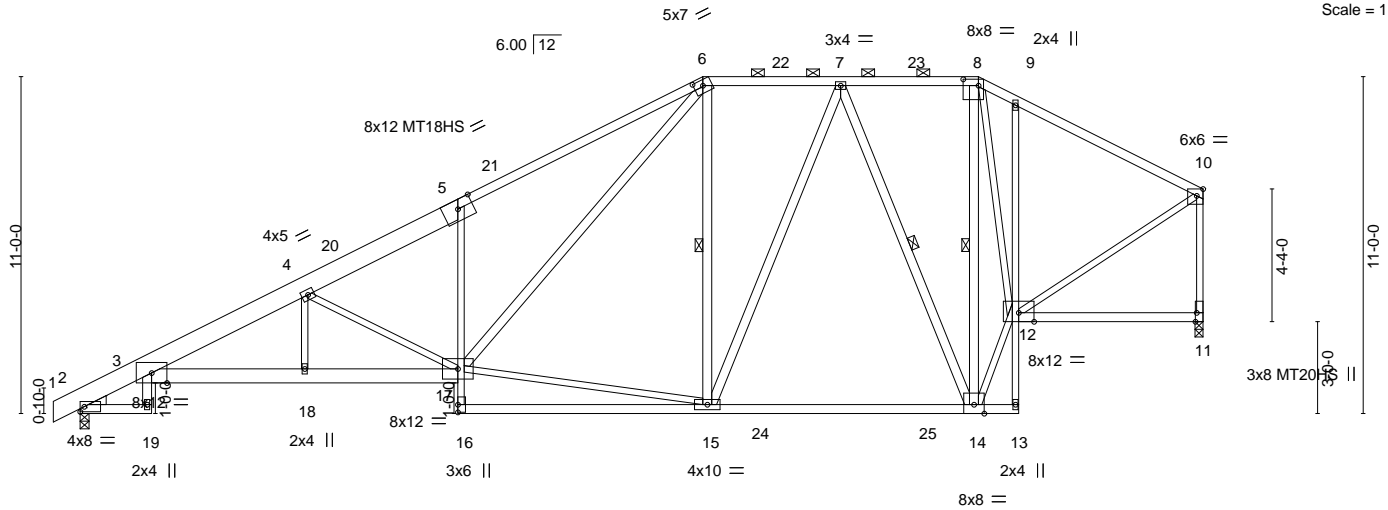


Plate Offsets (X,Y)--	[6:0-3-8,0-2-3], [8:0-6-0,0-2-8], [10:0-2-8,Edge], [11:0-3-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.92	Vert(LL)	-0.30 14-15	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.85	Vert(CT)	-0.52 15-16	>833	240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.98	Horz(CT)	0.37 11	n/a	n/a	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.15 5	>999	240	Weight: 239 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x4 SPF 2100F 1.8E, 1-5: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-13 max.): 6-8.
BOT CHORD 2x4 SPF No.2 *Except* 3-17: 2x6 SP 2400F 2.0E, 5-16,9-13: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14,12-13.
WEBS 2x3 SPF No.2 *Except* 6-17,6-15,7-15,7-14,8-14: 2x4 SPF No.2	WEBS 1 Row at midpt 6-15, 7-14, 8-14
WEDGE Left: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 11=0-3-2
Max Horz 2=206(LC 9)
Max Uplift 2=31(LC 12)
Max Grav 2=1770(LC 3), 11=1739(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1029/0, 3-4=-3819/90, 4-5=-2959/96, 5-6=-2981/223, 6-7=-1498/93, 7-8=-994/57, 8-9=-1446/58, 9-10=-1483/27, 10-11=-1629/0
BOT CHORD 3-18=-204/3601, 17-18=-201/3599, 5-17=-620/188, 14-15=-18/1299, 9-12=-500/162
WEBS 4-17=-1197/96, 15-17=-27/1317, 6-17=-216/1734, 6-15=-509/150, 7-15=-43/639, 7-14=-853/54, 8-14=-1069/40, 12-14=0/2423, 8-12=-78/1584, 10-12=0/1497

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
 - This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H3	Piggyback Base	8	1		I49076714

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:40 2021 Page 1
ID:Y07_68gAzryMRVt_sV_?nbyD_zk-QkJ5ilp25N44MivKtI0RtkMLsuXDR7uE5p8RGryCysb

0-10-8 2-4-0 7-4-0 12-4-0 20-4-0 24-10-0 29-4-0 36-4-14
0-10-8 2-4-0 5-0-0 5-0-0 8-0-0 4-6-0 4-6-0 7-0-14

Scale = 1:73.2

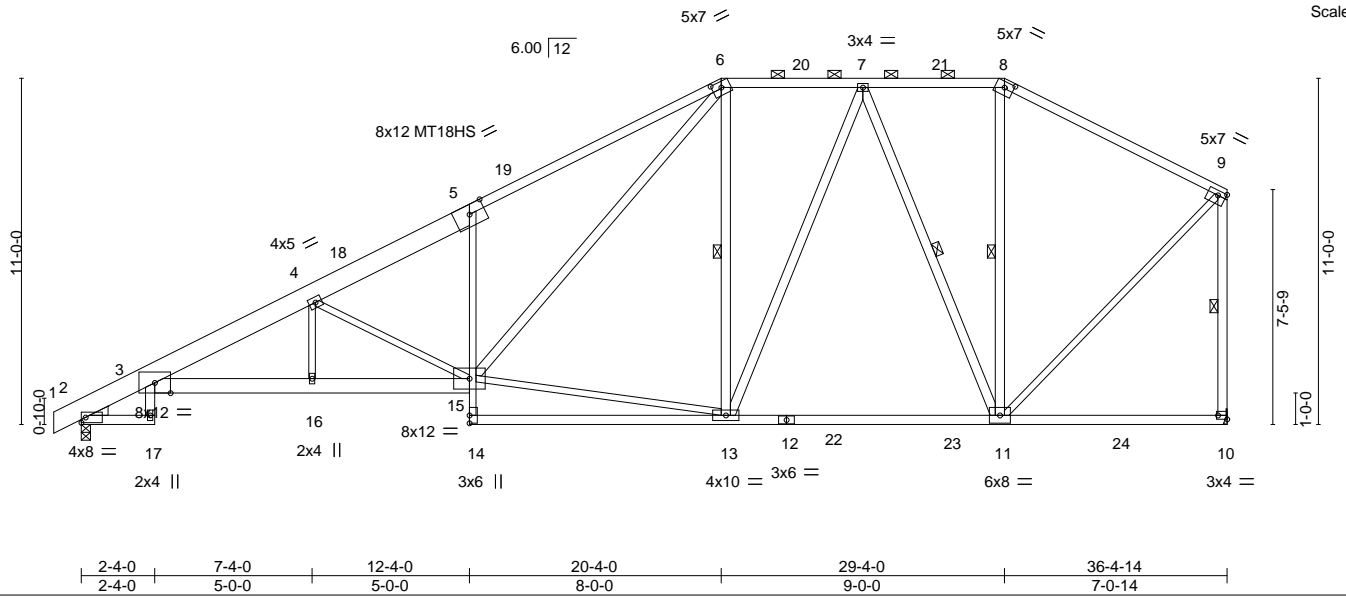


Plate Offsets (X,Y)-- [6:0-3-8,0-2-3], [8:0-3-8,0-2-3], [9:Edge,0-1-12], [10:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.78	Vert(LL)	-0.29 11-13	>999	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.82	Vert(CT)	-0.49 13-14	>892	240	MT18HS	197/144
TCDL 10.0	Lumber DOL 1.15	WB 0.98	Horz(CT)	0.30 10	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.14 5	>999	240		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 229 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
6-8: 2x4 SPF No.2, 1-5: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-15: 2x6 SP 2400F 2.0E, 5-14: 2x3 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-16,4-15,13-15,9-11: 2x3 SPF No.2

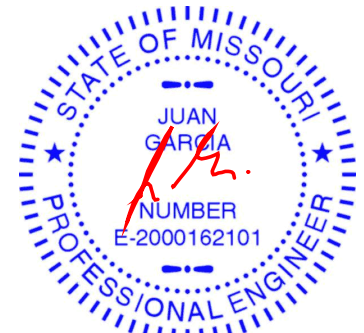
WEDGE
Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 10=Mechanical
Max Horz 2=244(LC 11)
Max Uplift 2=33(LC 12)
Max Grav 2=1758(LC 3), 10=1773(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1061/0, 3-4=-3787/80, 4-5=-2929/91, 5-6=-2951/219, 6-7=-1476/97, 7-8=-966/63,
8-9=-1165/59, 9-10=-1641/0
BOT CHORD 3-16=-149/3570, 15-16=-146/3568, 5-15=-619/189, 11-13=-53/1268
WEBS 4-15=-1192/83, 13-15=-62/1298, 6-15=-205/1726, 6-13=-528/143, 7-13=-42/664,
7-11=-863/58, 8-11=-78/250, 9-11=0/1350

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.00; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



December 3, 2021

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

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H4	Piggyback Base	2	1		I49076715
Job Reference (optional)						

Wheeler Lumber, Waverly, KS - 66871,

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ID:Y07_68gAzyMRVt_sV_?nbyD_zk-N7Qr6zrlc_Kob02j?j2vy9Ri7iBBv3VXY7dYKkyCysZ

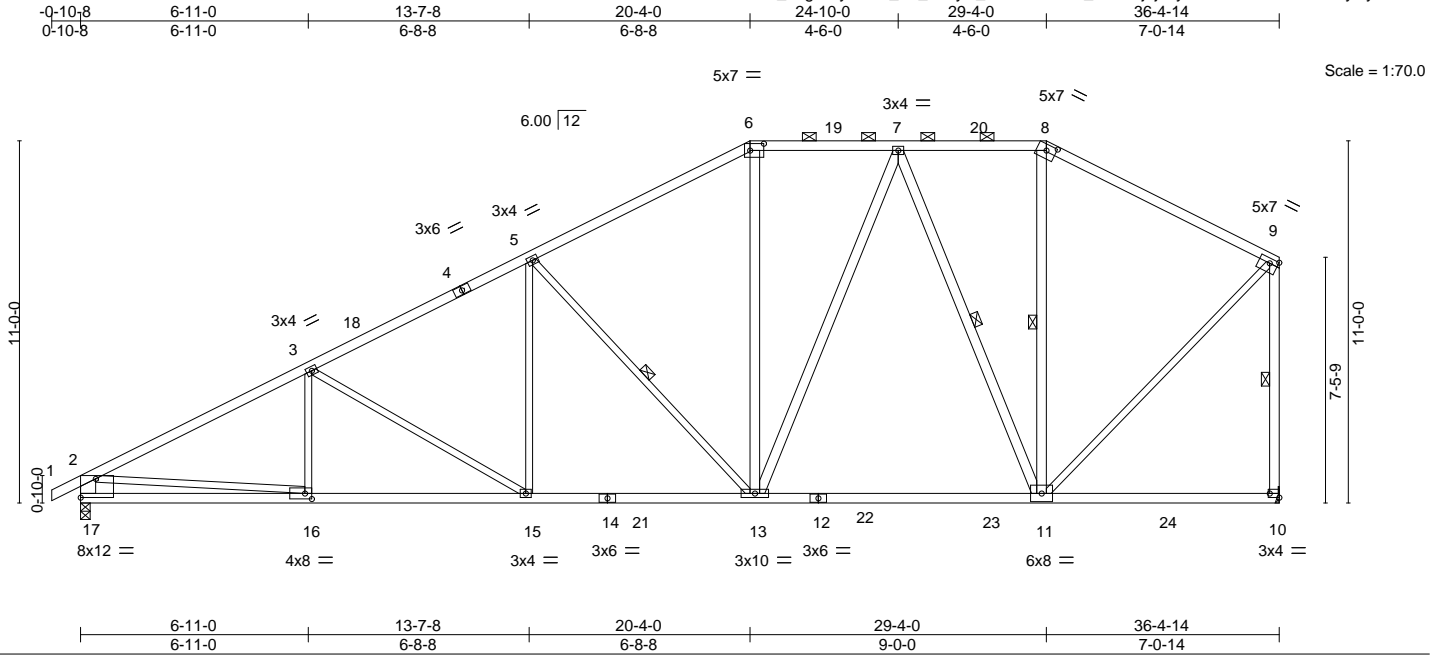


Plate Offsets (X,Y)-- [6:0-5-0,0-2-8], [8:0-3-8,0-2-3], [9:Edge,0-1-12], [10:Edge,0-1-8], [16:0-2-8,0-2-0], [17:Edge,0-6-13]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.91	Vert(LL) -0.25 11-13 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.84	Vert(CT) -0.41 11-13 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 10 n/a n/a		
BCDL 10.0	Code IBC2018/TPI2014		Wind(LL) 0.07 15-16 >999 240	Weight: 182 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
8-9: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-13,7-13,7-11,8-11,9-10: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 17=0-3-8, 10=Mechanical
Max Horz 17=249(LC 11)
Max Uplift 17=-34(LC 12)
Max Grav 17=1788(LC 3), 10=1790(LC 3)

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

TOP CHORD 2-3=-2819/43, 3-5=-2388/66, 5-6=-1762/78, 6-7=-1495/97, 7-8=-977/63, 8-9=-1178/58, 9-10=-1659/0, 2-17=-1670/71
BOT CHORD 16-17=-220/630, 15-16=-106/2437, 13-15=-40/2064, 11-13=-54/1285
WEBS 3-15=-444/88, 5-15=0/485, 5-13=-917/133, 6-13=0/442, 7-13=-41/668, 7-11=-864/62, 8-11=-78/257, 9-11=0/1367, 2-16=0/1878

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H5	Hip	1	1		I49076716

Wheeler Lumber, Waverly, KS - 66871,

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ID:YO7_68gAzryMRVt_sV_?nbyD_zk-JWYbXfsY8baVrKC5684N1aW2cWz5Nxfp0R6fPcyCysX

0-10-8 2-4-0 | 7-4-0 | 12-4-0 | 17-4-0 | 22-4-0 | 27-4-0 | 30-7-12 | 36-8-0
0-10-8 2-4-0 | 5-0-0 | 5-0-0 | 5-0-0 | 5-0-0 | 5-0-0 | 3-3-12 | 6-0-4

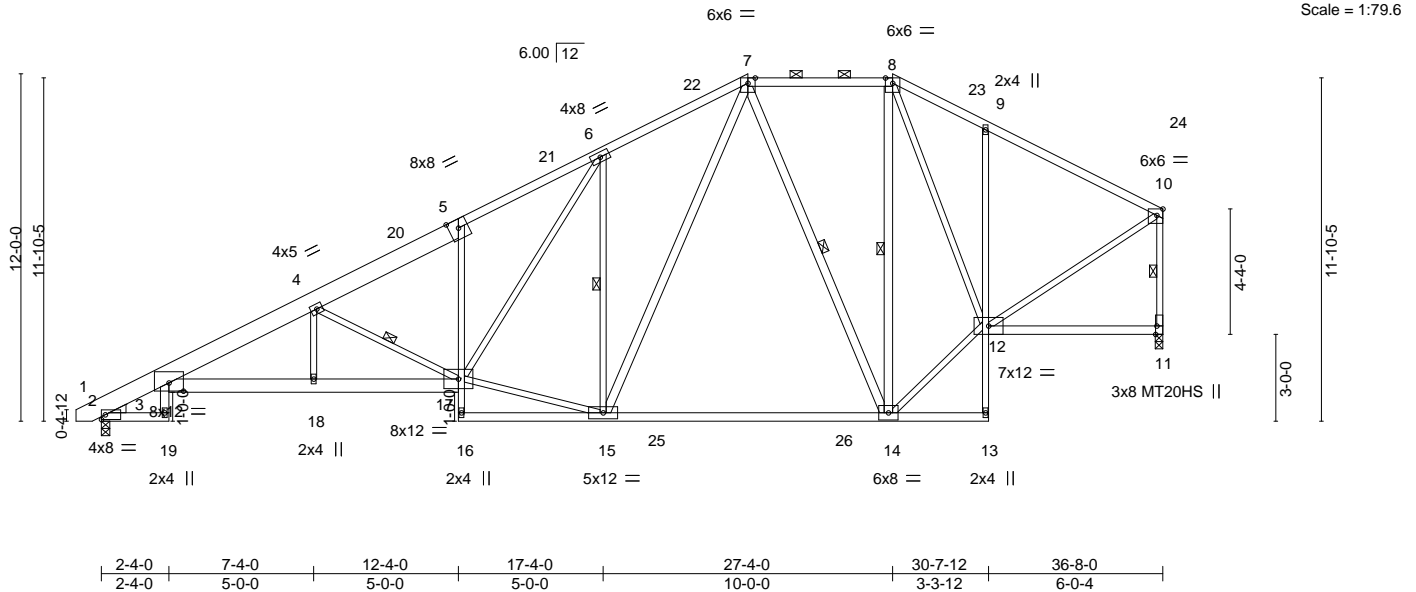


Plate Offsets (X,Y)-- [3:0-6-0,0-3-6], [10:0-2-8,Edge], [11:0-3-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.73	Vert(LL)	-0.39	14-15	>999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.57	Vert(CT)	-0.66	14-15	>660	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.99	Horz(CT)	0.28	11	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.16	5	>999		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 231 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-17: 2x6 SP 2400F 2.0E, 5-16,9-13: 2x3 SPF No.2
13-16: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
7-15,7-14,8-14: 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 11=0-3-2
Max Horz 2=213(LC 9)
Max Uplift 2=-34(LC 12)
Max Grav 2=1765(LC 3), 11=1792(LC 43)

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

TOP CHORD 2-3=-1050/0, 3-4=-3867/121, 4-5=-2971/103, 5-6=-2945/177, 6-7=-2093/167,
7-8=-1087/82, 8-9=-1492/81, 9-10=-1523/44, 10-11=-1687/6
BOT CHORD 3-18=-247/3652, 17-18=-245/3649, 5-17=-303/105, 14-15=0/1305, 9-12=-476/143
WEBS 4-17=-1278/138, 15-17=-24/1724, 6-17=-162/1453, 6-15=-1266/224, 7-15=-123/1286,
7-14=-645/102, 8-14=-282/78, 12-14=0/1475, 8-12=-89/638, 10-12=0/1525

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI



December 3,2021

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIF-7473 rev. 5/19/2020 BEFORE USE.
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H6	Hip	1	1		I49076717

Wheeler Lumber, Waverly, KS - 66871,

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ID:YO7_68gAzryMRVt_sV_?nbyD_zk-FugMyLuogDqD4dMUEZ6r6?cOcjDWruV6TlbiTVyCysV

0-10-8	2-4-0	7-4-0	12-4-0	18-4-0	24-10-0	31-4-0	36-4-14
0-10-8	2-4-0	5-0-0	5-0-0	6-0-0	6-6-0	6-6-0	5-0-14

Scale = 1:69.5

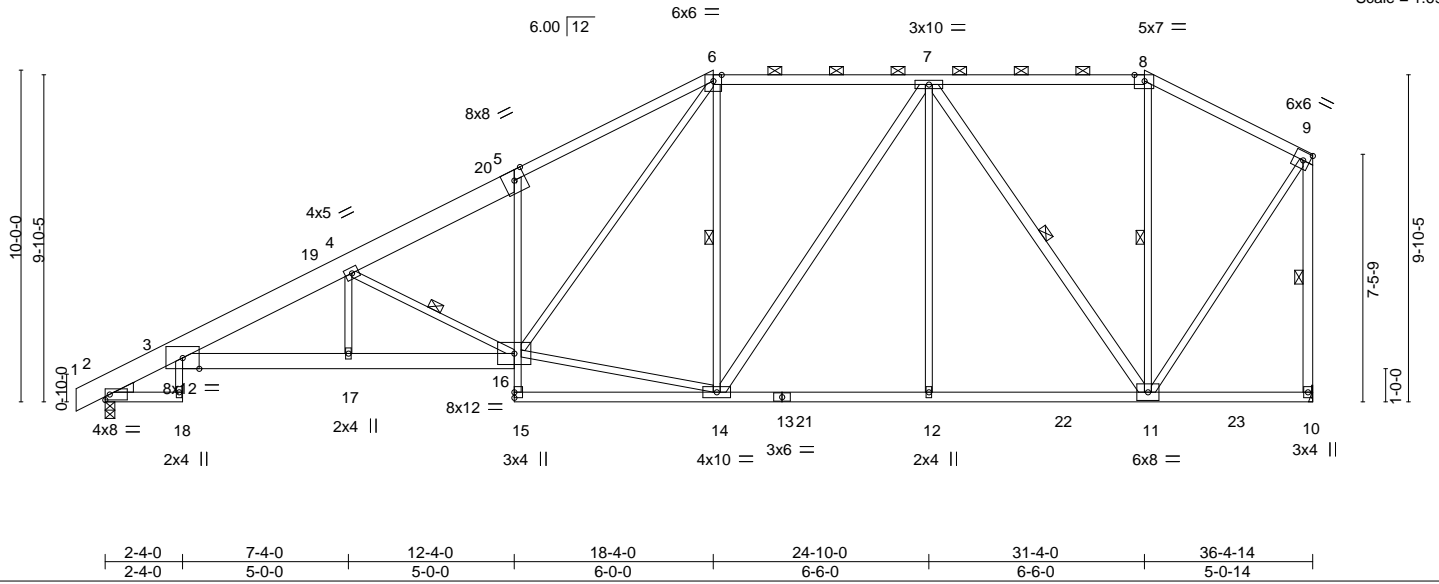


Plate Offsets (X,Y)-- [8:0-3-10,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.76	Vert(LL)	-0.26	16-17	>999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.63	Vert(CT)	-0.45	16-17	>968		
TCDL 10.0	Lumber DOL 1.15	WB 0.78	Horz(CT)	0.32	10	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.13	5	>999		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 219 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-18,5-15: 2x3 SPF No.2, 3-16: 2x6 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
7-14,7-11,9-10: 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

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.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-16, 6-14, 7-11, 8-11, 9-10

REACTIONS.

(size) 2=0-3-8, 10=Mechanical
Max Horz 2=235(LC 11)
Max Uplift 2=25(LC 12)
Max Grav 2=1769(LC 3), 10=1782(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1044/0, 3-4=-3820/57, 4-5=-2937/61, 5-6=-2897/157, 6-7=-1662/77, 7-8=-795/50,
8-9=-940/46, 9-10=-1693/0
BOT CHORD 3-17=-114/3607, 16-17=-111/3605, 5-16=-441/145, 12-14=-76/1492, 11-12=-76/1492
WEBS 4-16=-1246/97, 14-16=-75/1523, 6-16=-153/1572, 6-14=-469/118, 7-14=-58/458,
7-12=0/382, 7-11=-1251/46, 9-11=-15/1413

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3,2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

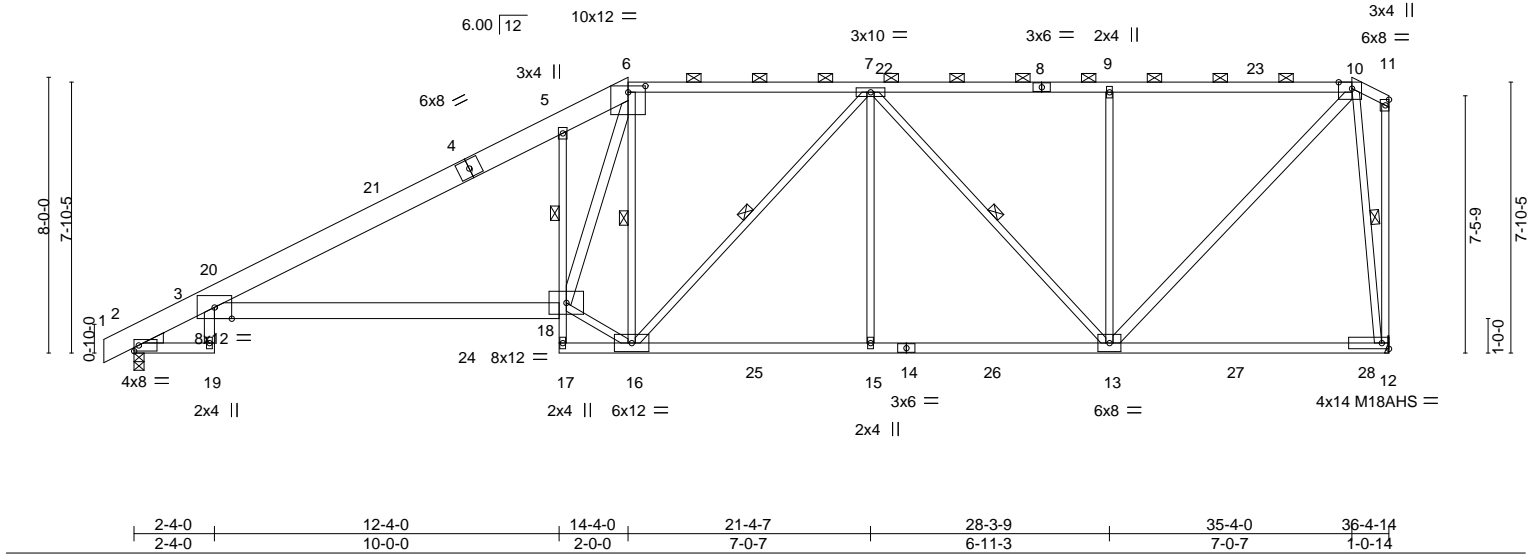
Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H7	Hip	1	1		I49076718

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:47 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-j5EkAhvRRWy4inxgoGe4fd8YtjuAaIDGiPLJ0xyCysU

0-10-8 2-4-0 12-4-0 14-4-0 21-4-7 28-3-9 35-4-0 36-4-14
0-10-8 2-4-0 10-0-0 2-0-0 7-0-7 6-11-3 7-0-7 1-0-14

Scale = 1:66.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.52 3-18 >836 360	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.91 3-18 >479 240	M18AHS		142/136	
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.50 12 n/a n/a				
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-S		Wind(LL)	0.23 3-18 >999 240				
BCDL	10.0							Weight: 205 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6,1-4: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-19: 2x4 SPF 2100F 1.8E, 3-18: 2x6 SP 2400F 2.0E
5-17: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-18,10-13: 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 12=Mechanical
Max Horz 2=216(LC 9)
Max Uplift 2=-4(LC 12), 12=-57(LC 9)
Max Grav 2=1808(LC 3), 12=1872(LC 42)

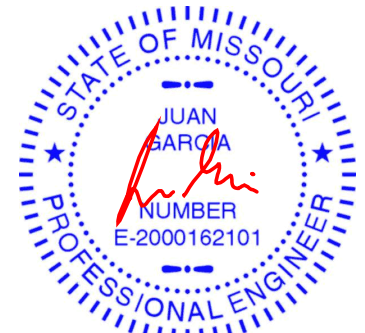
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1077/0, 3-5=-3297/27, 5-6=-3629/117, 6-7=-2078/32, 7-9=-1607/61,
9-10=-1607/61
BOT CHORD 3-18=-152/2993, 5-18=-1597/269, 15-16=-128/2172, 13-15=-128/2172
WEBS 16-18=-96/2553, 6-18=-167/3030, 6-16=-1035/113, 7-16=-301/195, 7-15=0/365,
7-13=-883/37, 9-13=-648/123, 10-13=-60/2009, 10-12=-1808/180

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.

Continued on page 2



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	H7	Hip	1	1	I49076718

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:48 2021 Page 2
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-BHn6N1w3Cq4xJxWtL_9JBQhd7EPJITPx34sYNyCysT

- NOTES-**
- 12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

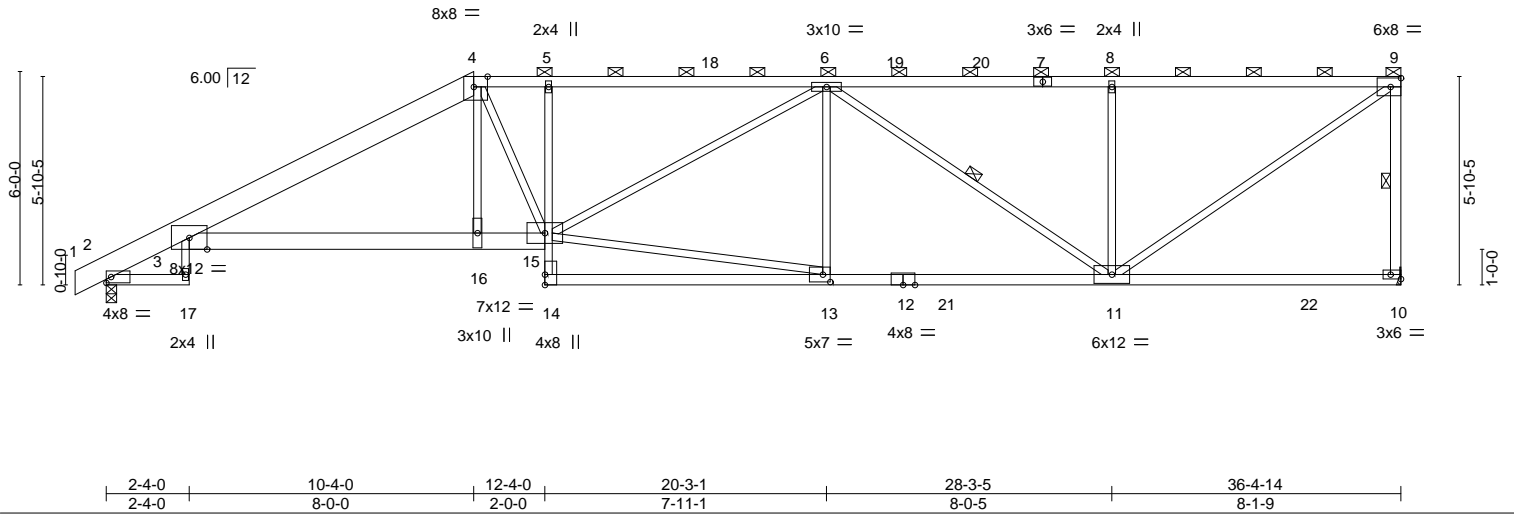
Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H8	Half Hip	1	1		I49076719

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:49 2021 Page 1
ID:Y07_68gAzryMRVt_sV_?nbyD_zk-gTLUaNwhz8Cox553vhgYkeEtnXZa2DFZ9jqP4qyCysS

0-10-8 2-4-0 10-4-0 12-4-0 20-3-1 28-3-5 36-4-14
0-10-8 2-4-0 8-0-0 2-0-0 7-11-1 8-0-5 8-1-9

Scale = 1:64.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.40 3-16 >999 360	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.70 3-16 >616 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.46 10 n/a n/a				
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-S		Wind(LL)	0.20 3-16 >999 240				
BCDL	10.0							Weight: 173 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF 2100F 1.8E *Except* 1-4: 2x8 SP DSS	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-2 max.): 4-9.
BOT CHORD	2x4 SPF No.2 *Except* 3-17,5-14: 2x3 SPF No.2, 3-15: 2x6 SPF 1650F 1.4E 10-12: 2x4 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 11-13.
WEBS	2x3 SPF No.2 *Except* 9-10: 2x4 SPF No.2	WEBS	1 Row at midpt 9-10, 6-11
REACTIONS.			
(size) 10=Mechanical, 2=0-3-8 Max Horz 2=165(LC 9) Max Uplift 10=-82(LC 9) Max Grav 10=1860(LC 35), 2=1748(LC 3)			
FORCES.			
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
TOP CHORD	2-3=-1003/0, 3-4=-3222/70, 4-5=-3092/122, 5-6=-3099/124, 6-8=-2125/97, 8-9=-2125/97, 9-10=-1725/120		
BOT CHORD	3-16=-157/2933, 15-16=-152/2942, 5-15=-443/122, 13-14=0/329, 11-13=-162/2936		
WEBS	4-16=0/501, 4-15=-191/583, 13-15=-179/2632, 6-15=-40/375, 6-11=-993/42, 8-11=-720/148, 9-11=-114/2544		

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
- 10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H9	Half Hip	1	1		I49076720

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:51 2021 Page 1
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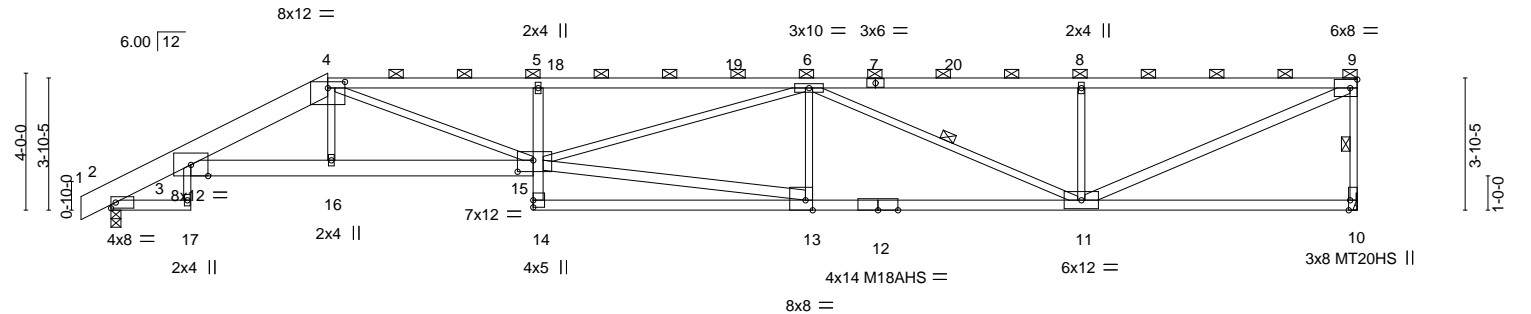


Plate Offsets (X,Y)--	[4:0-6-0,0-2-3], [10:0-3-8,Edge], [13:0-2-8,Edge], [15:0-5-8,0-4-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.97	Vert(LL) -0.50	5	>859	360	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.71	Vert(CT) -0.89	13-14	>490	240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.93	Horz(CT) 0.38	10	n/a	n/a	M18AHS	142/136
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.28	15	>999	240	Weight: 159 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2400F 2.0E *Except* 1-4: 2x8 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-9.
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 2-17: 2x4 SPF No.2, 3-17: 2x3 SPF No.2, 3-15: 2x6 SPF 1650F 1.4E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 13-15,9-11: 2x4 SPF No.2	WEBS 1 Row at midpt 9-10, 6-11

REACTIONS.	(size) 10=Mechanical, 2=0-3-8
	Max Horz 2=106(LC 11)
	Max Uplift 10=-84(LC 9), 2=-18(LC 9)
	Max Grav 10=1773(LC 33), 2=1700(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-947/24, 3-4=-3781/150, 4-5=-5558/272, 5-6=-5478/275, 6-8=-3164/157, 8-9=-3164/157, 9-10=-1700/123
BOT CHORD	3-16=-204/3609, 15-16=-198/3610, 5-15=-600/124, 13-14=-13/633, 11-13=-234/4297
WEBS	4-15=-163/2096, 13-15=-223/3698, 6-15=-87/1238, 6-13=-352/130, 6-11=-1319/64, 8-11=-723/148, 9-11=-168/3419

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Refer to girder(s) for truss to truss connections.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2.
 - 11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

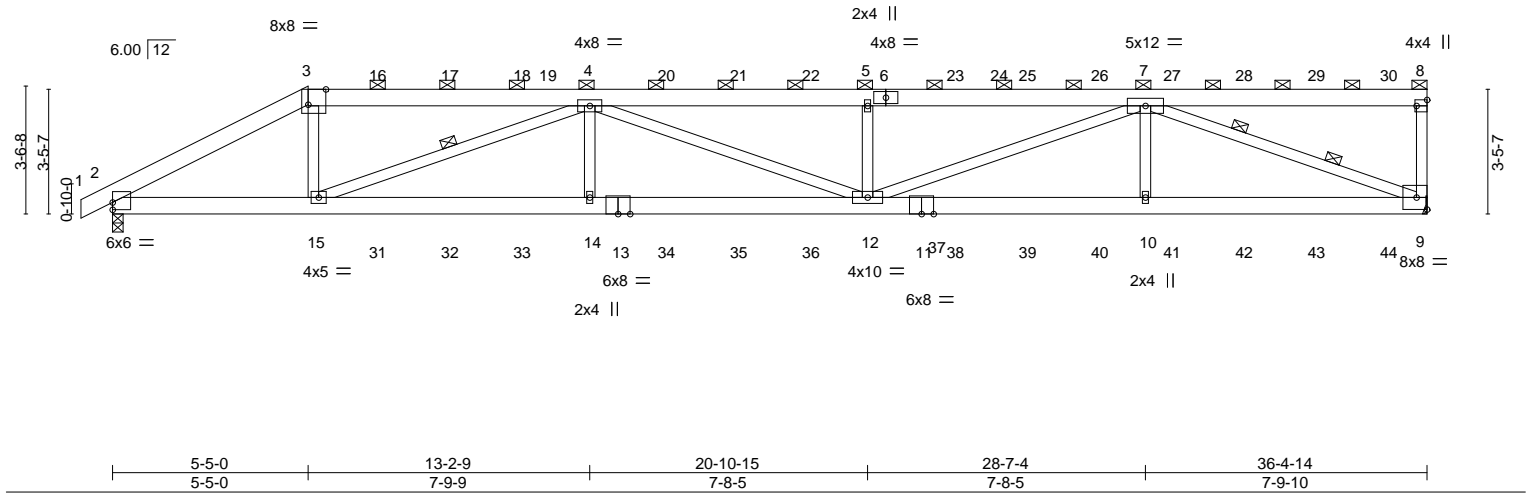
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	H10	Half Hip Girder	1	1		I49076721

Wheeler Lumber,		Waverly, KS - 66871,		8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:36 2021 Page 1			
ID:Y07_68gAzryMRVt_sV_?nbyD_zk-Yz3aswmX18Zet5bZeSxViuBgBHAWVKAEABAD74yCysf							
-0-10-8	5-5-0	13-2-9	20-10-15	28-7-4	36-4-14		
0-10-8	5-5-0	7-9-9	7-8-5	7-8-5	7-9-10		

Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.80	Vert(LL) -0.40 12-14 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.96	Vert(CT) -0.70 12-14 >616 240		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.15 9 n/a n/a		
BCDL 10.0	Code IBC2018/TPI2014		Wind(LL) 0.43 12-14 >999 240	Weight: 184 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (2-10-14 max.): 3-8.
BOT CHORD 2x6 SPF 1650F 1.4E *Except* 9-11: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-5-2 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-15 2 Rows at 1/3 pts 7-9

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=89(LC 54)
Max Uplift 9=626(LC 9), 2=511(LC 9)
Max Grav 9=1789(LC 33), 2=1803(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
2-3=-3194/1085, 3-4=-2815/976, 4-5=-5093/1867, 5-7=-5093/1867, 8-9=-300/119
BOT CHORD 2-15=-992/2757, 14-15=-1822/5039, 12-14=-1822/5039, 10-12=-1328/3662, 9-10=-1328/3662
WEBS 3-15=-370/1174, 4-15=-2389/897, 4-14=0/304, 4-12=-103/256, 5-12=-516/259, 7-12=-614/1638, 7-10=0/326, 7-9=-3853/1381

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=626, 2=511.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	H10	Half Hip Girder	1	1	I49076721

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:36 2021 Page 2
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NOTES-

- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 58 lb up at 5-5-0, 61 lb down and 58 lb up at 7-3-4, 61 lb down and 58 lb up at 9-3-4, 61 lb down and 58 lb up at 11-3-4, 61 lb down and 58 lb up at 13-3-4, 61 lb down and 58 lb up at 15-3-4, 61 lb down and 58 lb up at 17-3-4, 61 lb down and 58 lb up at 19-3-4, 61 lb down and 58 lb up at 21-3-4, 61 lb down and 58 lb up at 23-3-4, 61 lb down and 58 lb up at 25-3-4, 61 lb down and 58 lb up at 27-3-4, 61 lb down and 58 lb up at 29-3-4, 61 lb down and 58 lb up at 31-3-4, and 61 lb down and 58 lb up at 33-3-4, and 61 lb down and 58 lb up at 35-3-4 on top chord, and 150 lb down and 107 lb up at 5-5-0, 20 lb down and 22 lb up at 7-3-4, 20 lb down and 22 lb up at 9-3-4, 20 lb down and 22 lb up at 11-3-4, 20 lb down and 22 lb up at 13-3-4, 20 lb down and 22 lb up at 15-3-4, 20 lb down and 22 lb up at 17-3-4, 20 lb down and 22 lb up at 19-3-4, 20 lb down and 22 lb up at 21-3-4, 20 lb down and 22 lb up at 23-3-4, 20 lb down and 22 lb up at 25-3-4, 20 lb down and 22 lb up at 27-3-4, 20 lb down and 22 lb up at 29-3-4, 20 lb down and 22 lb up at 31-3-4, and 20 lb down and 22 lb up at 33-3-4, and 20 lb down and 22 lb up at 35-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-3=-51, 3-8=-61, 2-9=-20
- Concentrated Loads (lb)
- Vert: 15=-150(B) 14=-0(B) 31=-0(B) 32=-0(B) 33=-0(B) 34=-0(B) 35=-0(B) 36=-0(B) 37=-0(B) 38=-0(B) 39=-0(B) 40=-0(B) 41=-0(B) 42=-0(B) 43=-0(B) 44=-0(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	J1	Diagonal Hip Girder	6	1		I49076722

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:52 2021 Page 1

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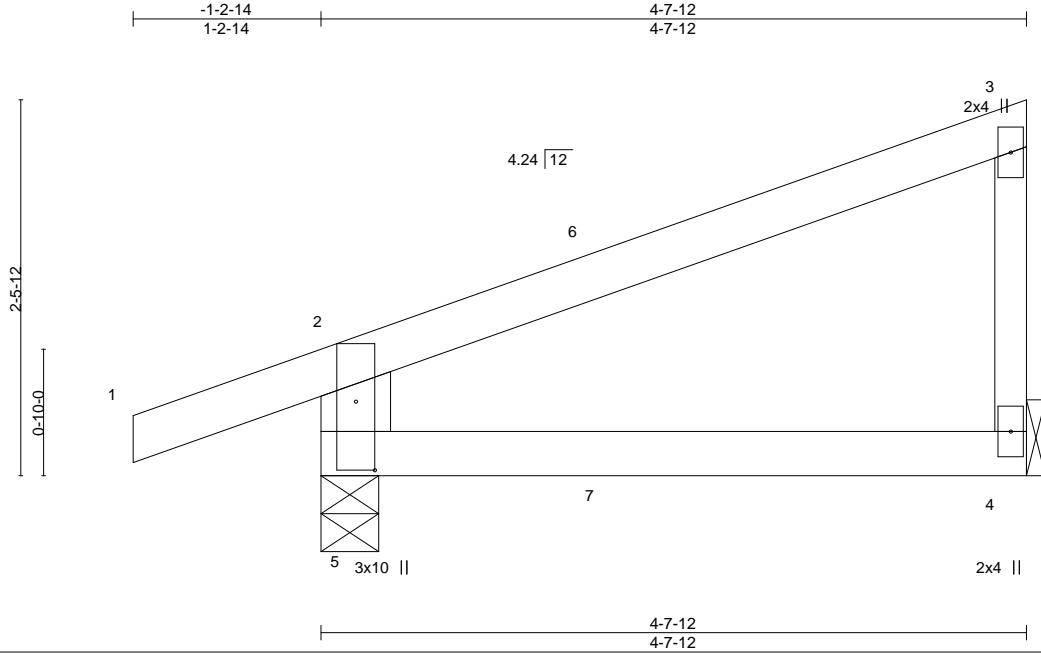


Plate Offsets (X,Y)-- [5:0-5-7,0-1-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.26	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	-0.03	4-5	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-R	Wind(LL)	0.00	4-5	>999	240		
BCDL 10.0	Code IBC2018/TPI2014							Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-9, 4=Mechanical
 Max Horz 5=73(LC 9)
 Max Uplift 5=48(LC 8), 4=-14(LC 12)
 Max Grav 5=334(LC 19), 4=186(LC 19)

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

TOP CHORD 2-5=-298/78

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 48 lb down and 16 lb up at 1-10-14, and 48 lb down and 16 lb up at 1-10-14 on top chord, and 3 lb down and 2 lb up at 1-10-14, and 3 lb down and 2 lb up at 1-10-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-51, 2-3=-51, 4-5=-20
 Concentrated Loads (lb)
 Vert: 7=1(F=0, B=0)



December 3, 2021

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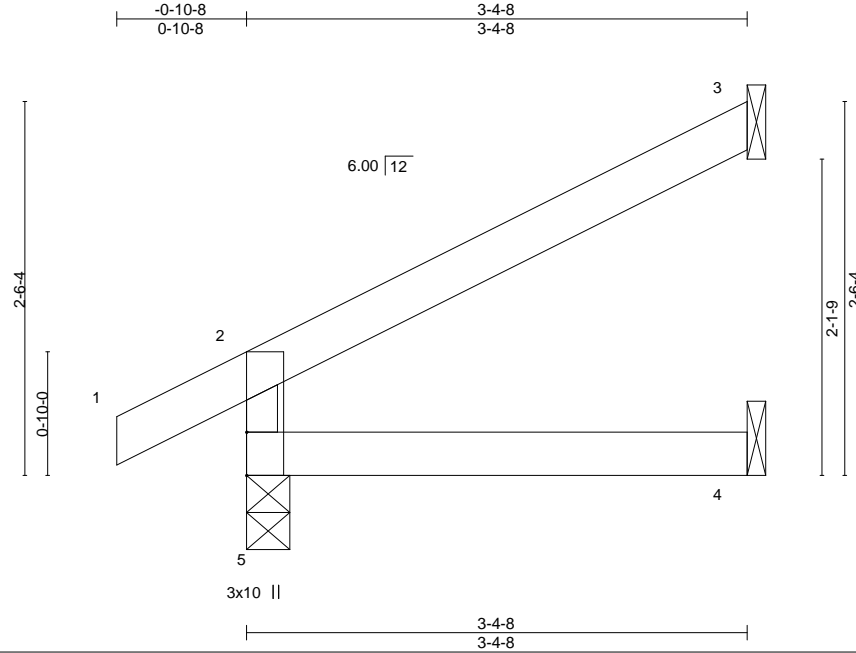


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	J2	Jack-Open	15	1		I49076723

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:53 2021 Page 1
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Scale = 1:15.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.16	Vert(LL)	-0.01	4-5	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	-0.01	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.01	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Wind(LL)	0.00	4-5	>999		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=52(LC 12)
Max Uplift 5=-1(LC 12), 3=-37(LC 12)
Max Grav 5=243(LC 19), 3=108(LC 19), 4=61(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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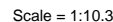
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:54 2021 Page 1
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8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:54 2021 Page 1
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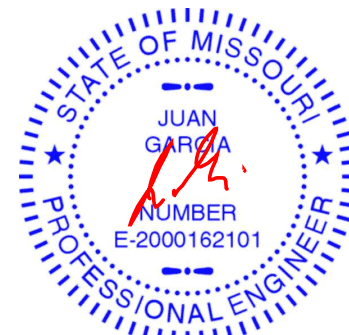
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-3-7 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2		
WEBS	2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=26(LC 9)
 Max Uplift 5=-6(LC 12), 3=-13(LC 12)
 Max Grav 5=150(LC 2), 3=16(LC 2), 4=21(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TcLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	J4	Diagonal Hip Girder	1	1		I49076725

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:55 2021 Page 1
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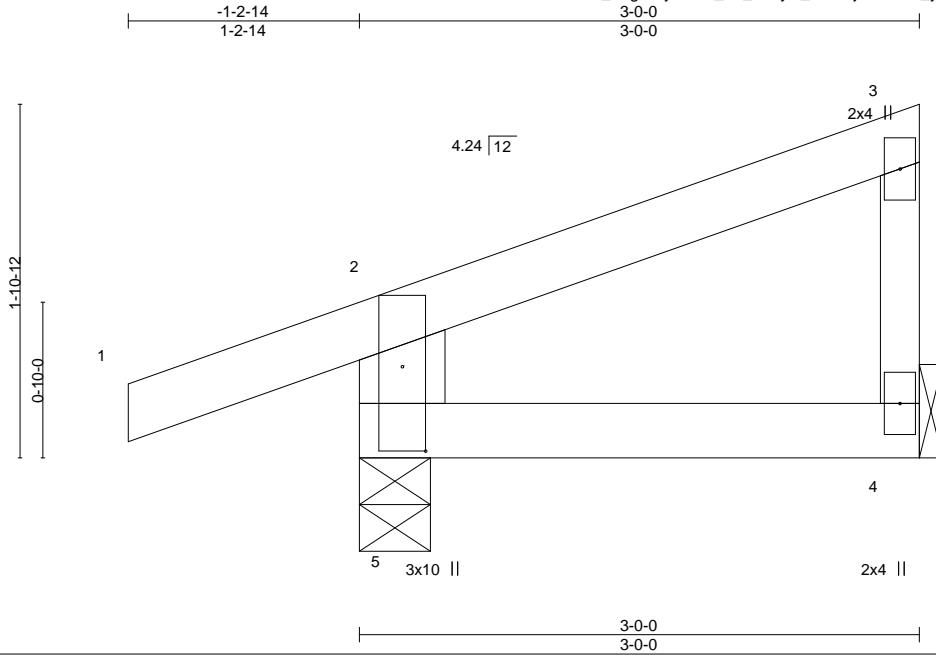


Plate Offsets (X,Y)-- [5:0-5-7,0-1-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.17	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-R	Wind(LL)	0.00	5	>999	240		
BCDL 10.0	Code IBC2018/TPI2014							Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-9, 4=Mechanical
Max Horz 5=54(LC 9)
Max Uplift 5=-49(LC 8), 4=-8(LC 9)
Max Grav 5=260(LC 19), 4=94(LC 19)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	J5	Jack-Open	3	1		I49076726

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:55 2021 Page 1
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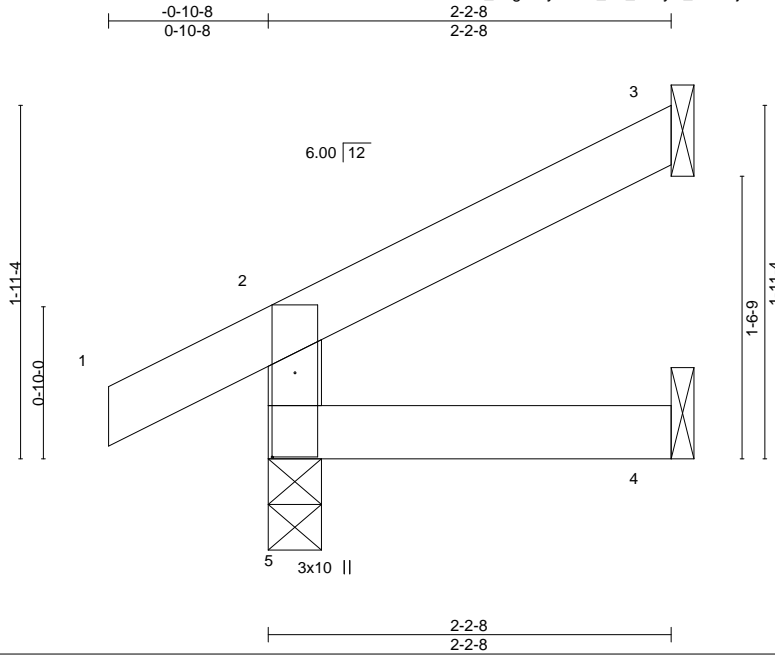


Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Wind(LL)	0.00	5	>999		
BCDL 10.0	Code IBC2018/TPI2014						Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=35(LC 12)
Max Uplift 5=4(LC 12), 3=23(LC 12)
Max Grav 5=187(LC 19), 3=56(LC 19), 4=37(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	J6	Jack-Open	29	1	

I49076727

Job Reference (optional)

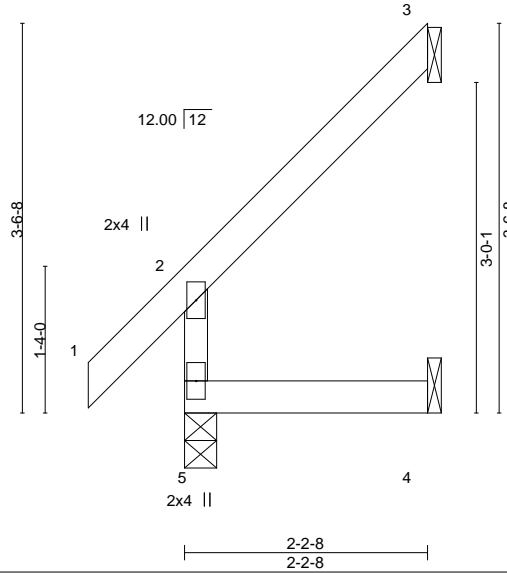
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:56 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-ypG82m04JH5pHA7PpfIBW60F8LAIBb5amI0HqwyCysL

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

Scale = 1:20.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.12	Vert(LL) 0.00	4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT) -0.00	4-5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.01	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 9 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=72(LC 10)
Max Uplift 3=-56(LC 10), 4=-10(LC 10)
Max Grav 5=177(LC 2), 3=66(LC 22), 4=39(LC 5)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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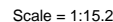
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:57 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-R0qWG60i4bDfVkiBnNPQ3KZQbIXNw2Lk?ymrMMYcysK



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	2x4 SPF No.2		
WEBS	2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 6=46(LC 7)
 Max Uplift 4=-24(LC 7), 5=-1(LC 10)
 Max Gray 6=177(LC 2), 4=56(LC 2), 5=39(LC 5)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	J9	Jack-Open	1	1	

I49076730

Job Reference (optional)

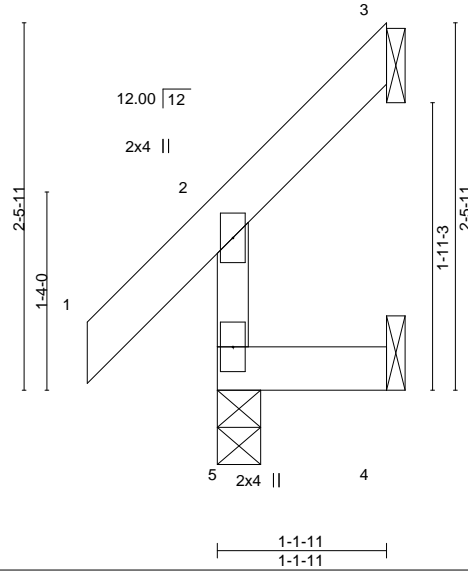
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:58 2021 Page 1

ID:Y07_68gAzryMRVt_sV_?nbyD_zk-vCOuTR1KrvLWWTHox4KfbX6bP9tjVbtEcVOuoyCysJ

-0-10-8
0-10-8
1-1-11
1-1-11

Scale = 1:15.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 6 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-1-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 7)
Max Uplift 3=-32(LC 10), 4=-18(LC 10)
Max Grav 5=147(LC 2), 3=20(LC 8), 4=25(LC 8)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	J10	Jack-Open	1	1	

I49076731

Job Reference (optional)

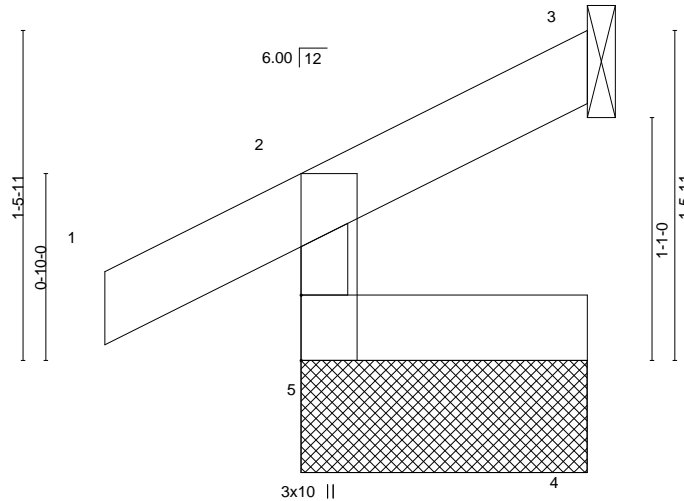
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:53 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-YEb?QkzB1MiEQiOq8XIuUOkH89L_EM84KodDbyCysO

-0-10-8
0-10-8
1-3-5
1-3-5

Scale = 1:10.3



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 0.10	Vert(LL)	-0.01	4	>999	360	MT20
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.02	4	>849	240	197/144
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a	
BCLL 0.0 *	Code IBC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4	>999	240	
BCDL 10.0									

Weight: 5 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=1-3-5, 3=Mechanical
Max Horz 5=26(LC 9)
Max Uplift 5=6(LC 12), 3=-12(LC 12)
Max Grav 5=150(LC 2), 3=27(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



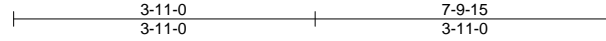
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	LAY1	GABLE	3	1	

I49076732

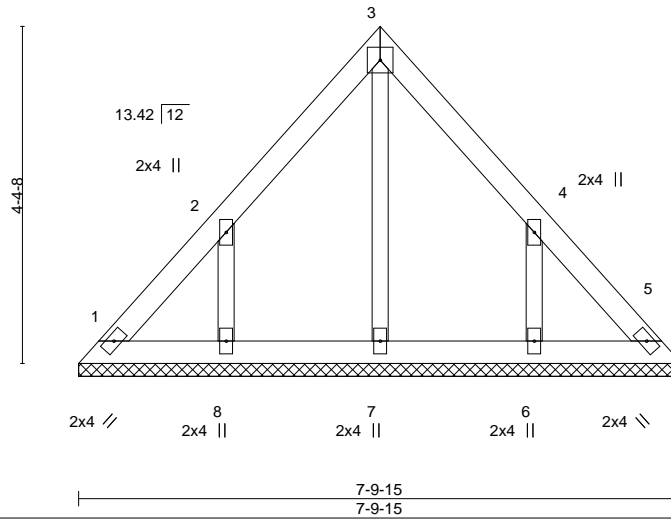
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:40:59 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-NOyGhn2ycCTN8ds_Vnru8lenVZC5OyO1TGfRfYcYsl

4x4 =

Scale = 1:29.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 27 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 7-9-15.

(lb) - Max Horz 1=76(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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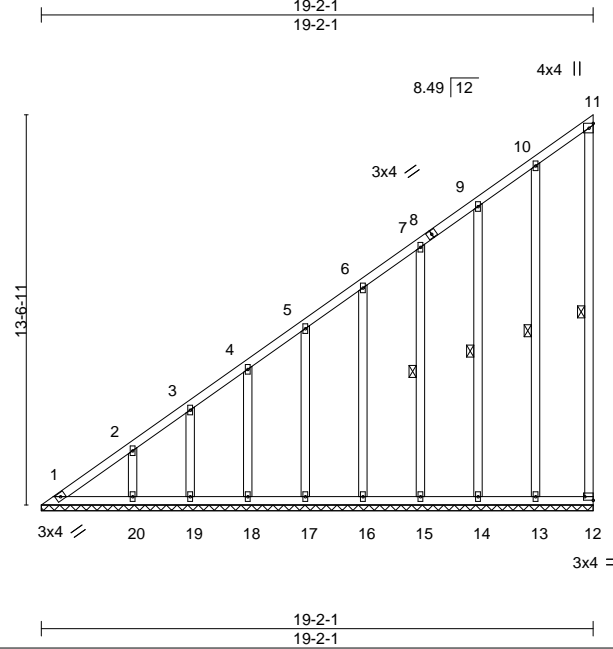
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	LAY2	GABLE	2	1		I49076733

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:00 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-rbWfu73bNWbEmnQA2VN7gyBtFyV?7NuAhw_VzhyCysH



Scale = 1:80.1

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

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.37	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.24	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.14	Horz(CT)	-0.00	12	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 123 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 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 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-12, 10-13, 9-14, 7-15

REACTIONS.

All bearings 19-2-1.
(lb) - Max Horz 1=368(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 12, 1, 13, 14, 15, 16, 17, 18, 19, 20
Max Grav All reactions 250 lb or less at joint(s) 12, 1, 13, 14, 15, 16, 17, 18, 19 except 20=255(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-346/228, 2-3=-309/195, 3-4=-282/182, 4-5=-254/163

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 1, 13, 14, 15, 16, 17, 18, 19, 20.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

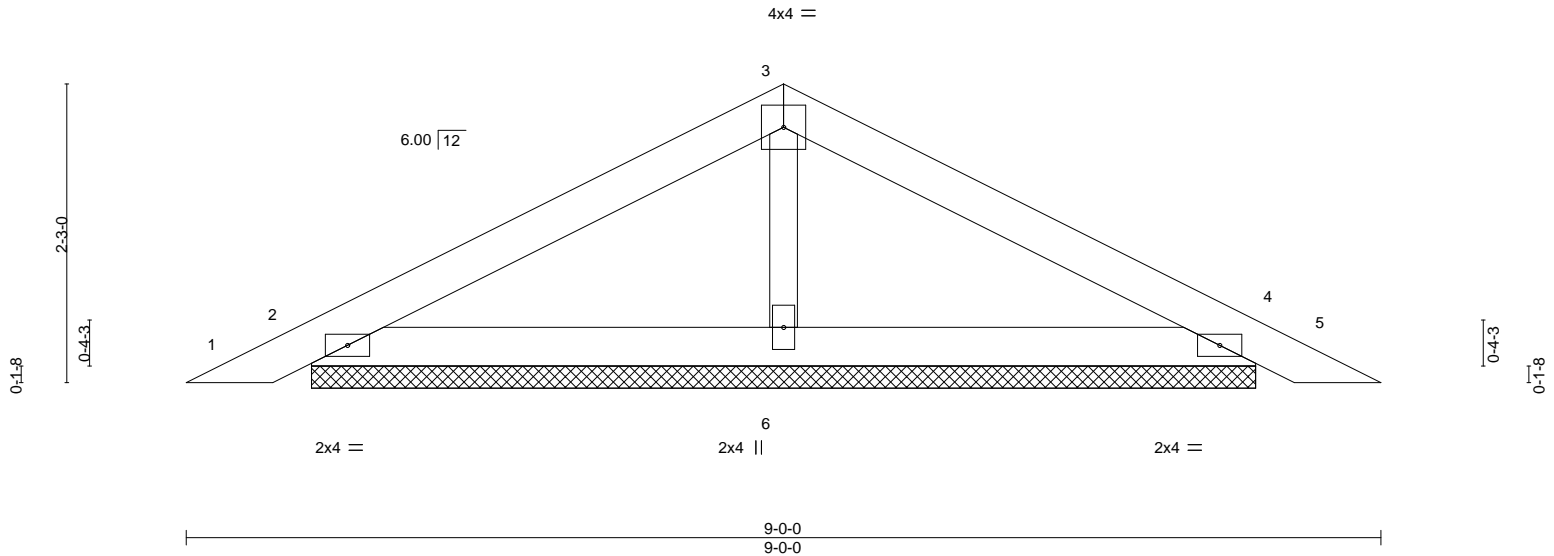
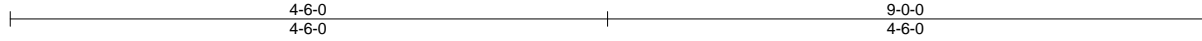


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	P1	Piggyback	15	1		I49076736

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:02 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-nzePjP4rv7ry?5aZAwPbmNGFnmDUBJzT9ETb2ayCysF



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0		2-0-0	TC	0.24	in	(loc)	l/defl	L/d	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0		Plate Grip DOL	BC	0.11	0.01	5	n/r	120				
TCDL	10.0		Lumber DOL	WB	0.04	0.01	5	n/r	120				
BCLL	0.0 *		Rep Stress Incr	Matrix-P		0.00	4	n/a	n/a				
BCDL	10.0		Code IBC2018/TPI2014										
										Weight: 21 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=7-1-6, 4=7-1-6, 6=7-1-6
Max Horz 2=26(LC 12)
Max Uplift 2=-24(LC 12), 4=-29(LC 13)
Max Grav 2=228(LC 19), 4=228(LC 20), 6=299(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2 and 29 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



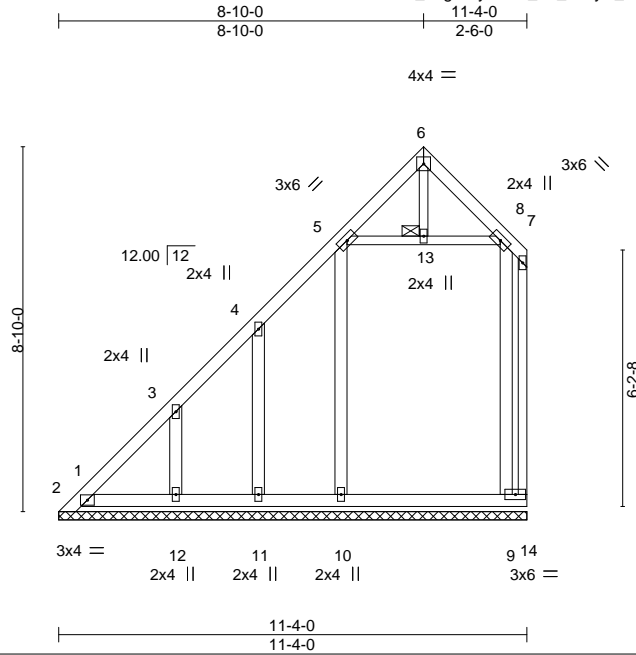
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	P2	GABLE	2	1	

I49076737

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:03 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-FABnX95TgRzpdF9lkdwqlbpQfAYnKkicNuD9a0yCysE

Scale = 1:55.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Horz(CT)	-0.00	9	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IBC2018/TPI2014							Weight: 61 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 JOINTS 1 Brace at Jt(s): 13

REACTIONS.

All bearings 11-4-0.
 (lb) - Max Horz 1=215(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12 except 1=162(LC 22)
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 2, 11 except 10=428(LC 22), 12=257(LC 22)

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

TOP CHORD 1-2=281/224

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2, 10, 11, 12 except (jt=lb) 1=162.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	P3	Piggyback	16	1	

I49076738

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:04 2021 Page 1
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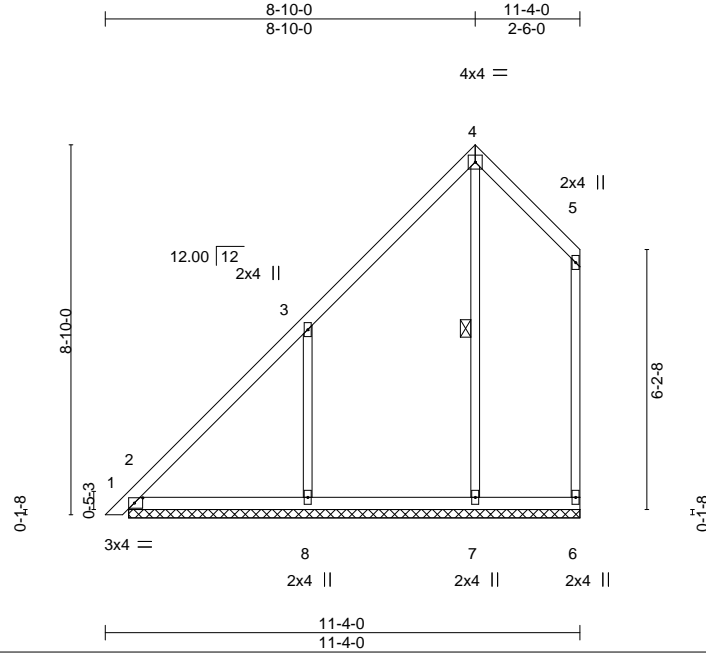


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.26	Vert(LL) 0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT) 0.00	1	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Horz(CT) -0.00	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 45 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

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 4-7

REACTIONS.

All bearings 10-9-5.

(lb) - Max Horz 2=214(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=171(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 6 except 2=267(LC 23), 7=412(LC 22), 8=567(LC 22)

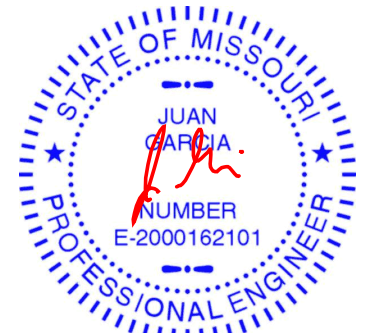
FORCES.

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

WEBS 3-8=355/217

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7 except (jt=lb) 8=171.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	P4	Piggyback	2	1	149076739

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:05 2021 Page 1
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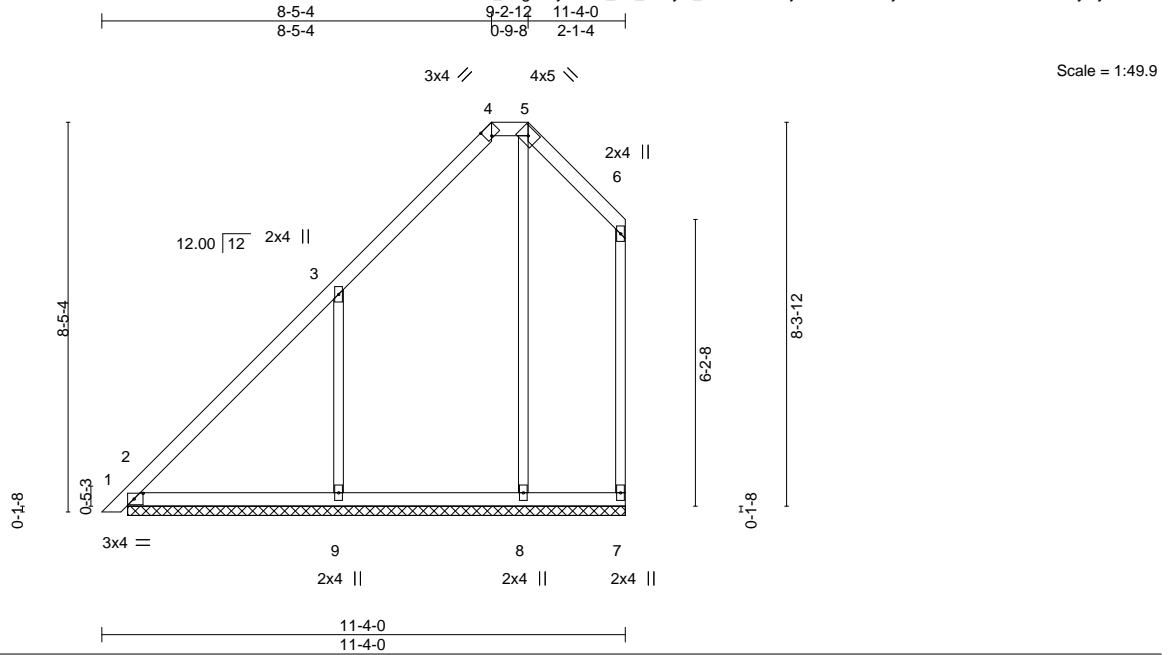


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [4:0-1-8,Edge]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.28	Vert(LL) 0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT) 0.01	1	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.37	Horz(CT) -0.00	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 45 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, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 10-9-5.

(lb) - Max Horz 2=207(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8 except 9=163(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 7 except 2=273(LC 23), 8=369(LC 22), 9=593(LC 22)

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

WEBS 3-9=369/209

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 8 except (jt=lb) 9=163.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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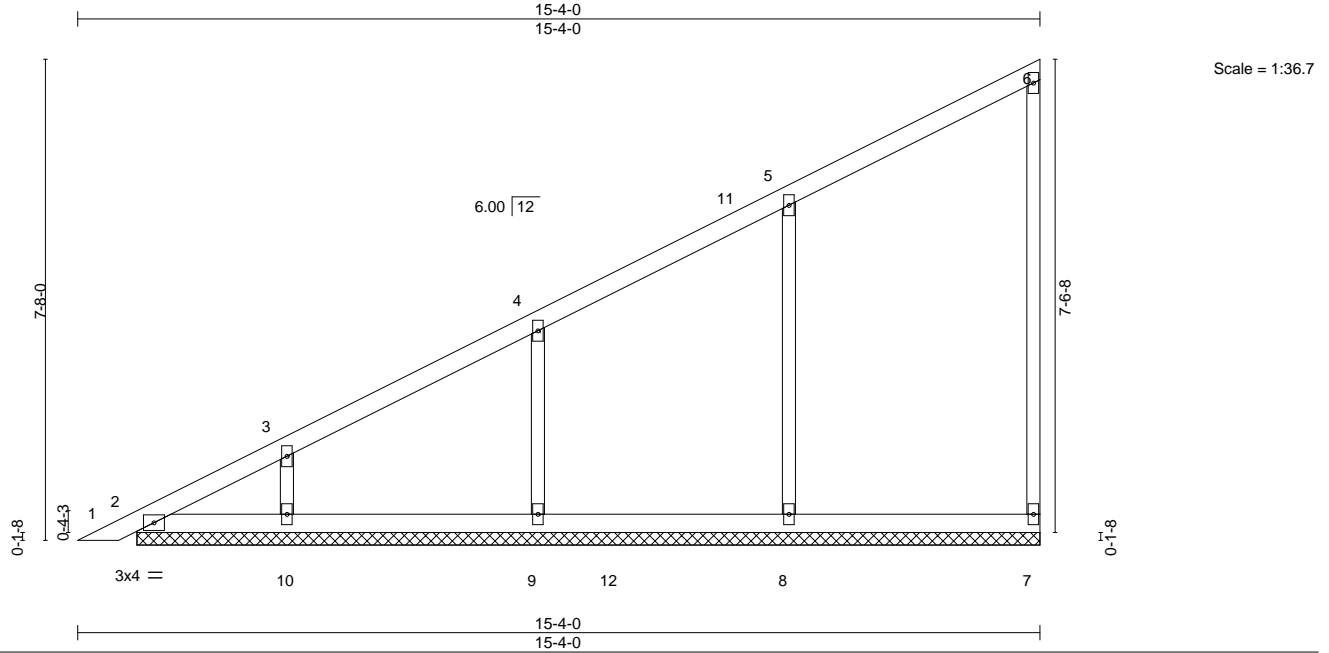


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	P5	Piggyback	2	1		I49076740

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:05 2021 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.33	Vert(LL) 0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT) 0.00	1	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.21	Horz(CT) -0.00	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 49 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.

All bearings 14-4-11.
(lb) - Max Horz 2=214(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10
Max Grav All reactions 250 lb or less at joint(s) 7, 2 except 8=477(LC 5), 9=383(LC 3), 10=324(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-8=-313/90, 4-9=-281/100

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10.
- 10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 3, 2021

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	P6	Piggyback	2	1		I49076741

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:06 2021 Page 1
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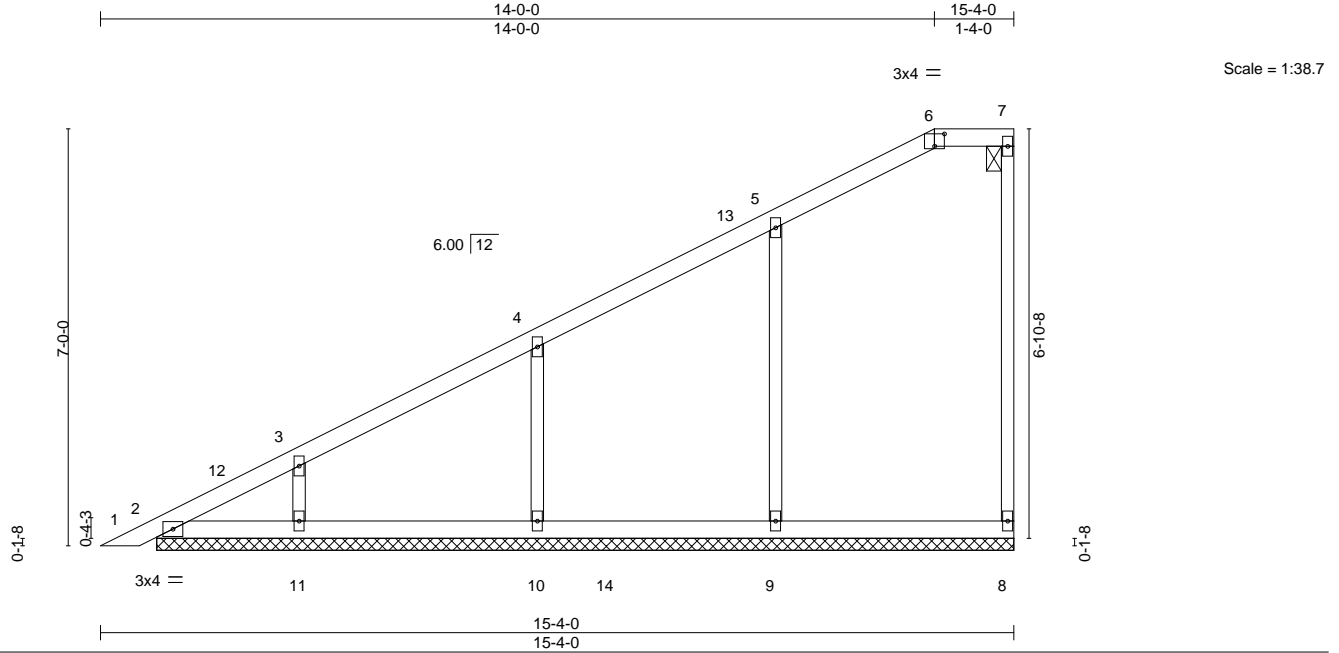


Plate Offsets (X,Y)-- [6:0-2-0,0-2-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.28	Vert(LL)	0.00	1	n/r	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	0.00	1	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.25	Horz(CT)	-0.00	8	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 48 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

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" oc purlins, except end verticals, and 2'-0" oc purlins (6'-0" max.): 6'-7".
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS.

All bearings 14'-4" x 11".
(lb) - Max Horz 2=196(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 10, 11
Max Grav All reactions 250 lb or less at joint(s) 8, 2 except 9=516(LC 36), 10=439(LC 36), 11=364(LC 34)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-9=-366/76, 4-10=-355/104, 3-11=-294/83

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50'-0"-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 10, 11.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	P7	Piggyback	2	1		I49076742

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:08 2021 Page 1
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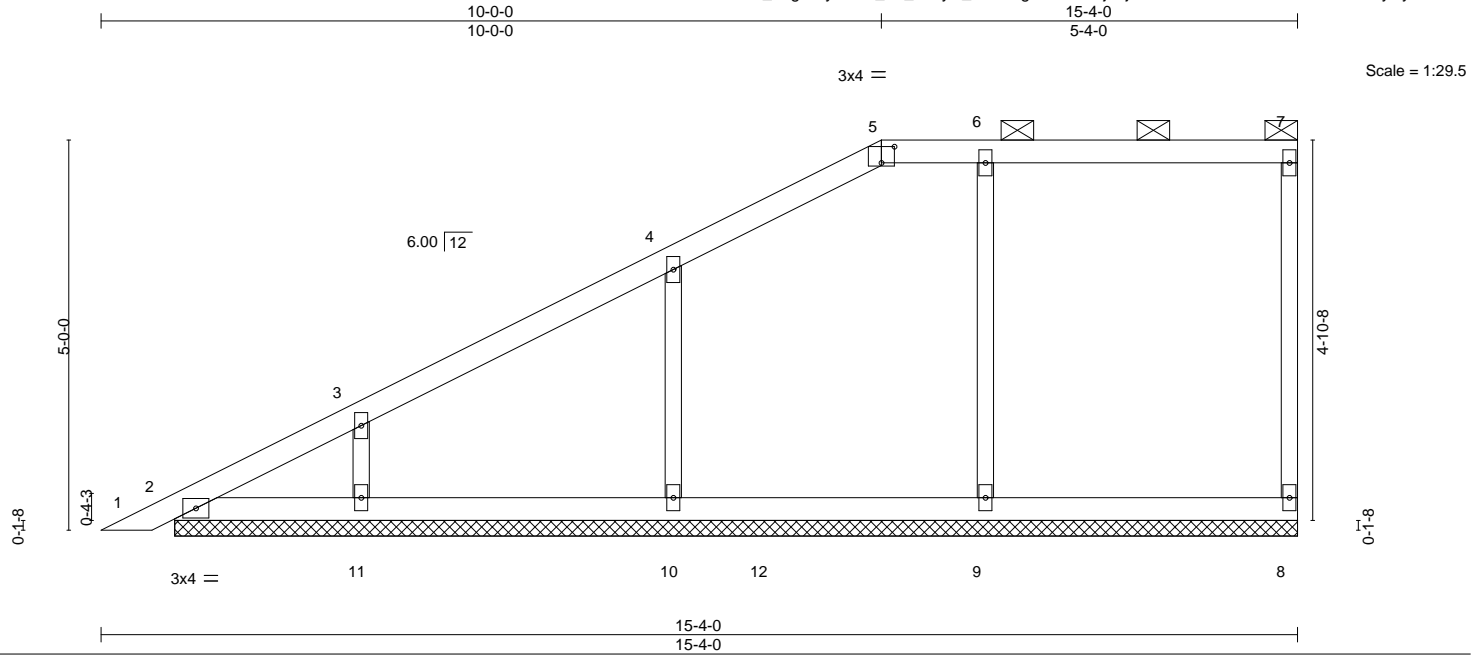


Plate Offsets (X,Y)-- [5:0-2-0,0-2-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.23	Vert(LL)	0.00	1	n/r	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	0.00	1	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.18	Horz(CT)	-0.00	8	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 45 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

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" oc purlins, except end verticals, and 2'-0" oc purlins (6'-0" max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS.

All bearings 14'-4" to 11'.
(lb) - Max Horz 2=138(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 10, 11
Max Grav All reactions 250 lb or less at joint(s) 8, 2 except 9=492(LC 35), 10=443(LC 38), 11=374(LC 34)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 6-9=-337/84, 4-10=-357/94, 3-11=-303/85

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50'-0"-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 10, 11.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	P8	Piggyback	2	1		I49076743

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:09 2021 Page 1
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9-4-0

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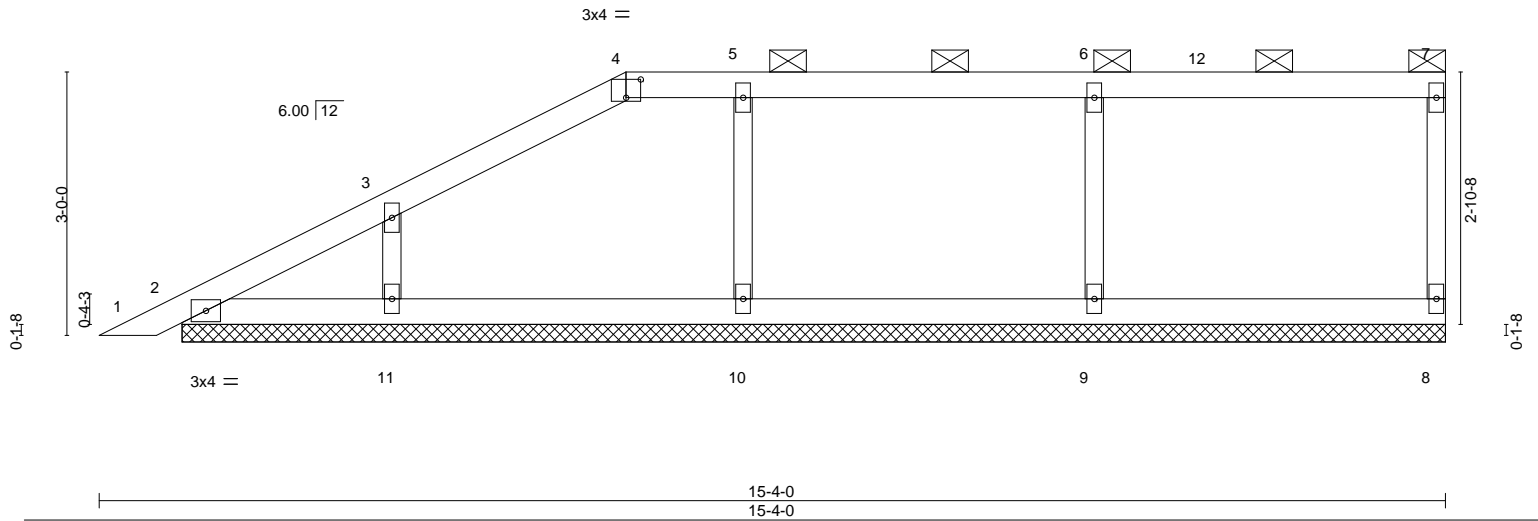


Plate Offsets (X,Y)-- [4:0-2-0,0-2-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.26	Vert(LL)	0.00	1	n/r	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	0.00	1	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Horz(CT)	-0.00	8	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 41 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

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, and 2'-0-0 oc purlins (6'-0-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

REACTIONS.

All bearings 14-4-11.
(lb) - Max Horz 2=79(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 10, 11
Max Grav All reactions 250 lb or less at joint(s) 8, 2 except 9=473(LC 33), 10=378(LC 33), 11=373(LC 34)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 6-9=-388/76, 5-10=-298/68, 3-11=-302/80

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 10, 11.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	P9	Piggyback	2	1		I49076744

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:10 2021 Page 1
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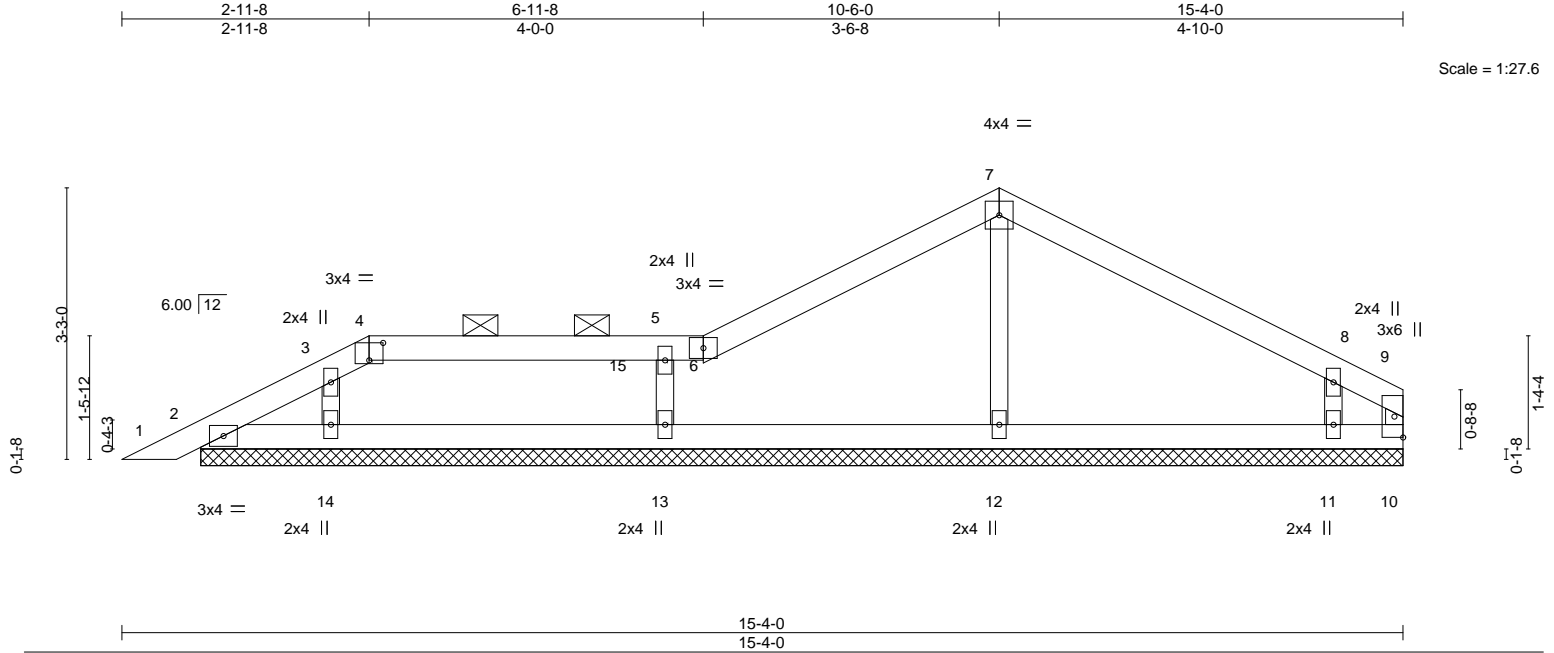


Plate Offsets (X,Y)-- [4:0-2-0,0-2-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	0.00	1	n/r
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.00	1	n/r
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	10	n/a
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S					
BCDL	10.0								
						PLATES		GRIP	
						MT20		197/144	
						Weight: 39 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14'-4"-11'.
(lb) - Max Horz 2=43(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 11 except 10=131(LC 20)
Max Grav All reactions 250 lb or less at joint(s) 10, 2 except 12=329(LC 39), 13=401(LC 56), 14=266(LC 56), 11=430(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-13=319/83, 8-11=363/117

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50'-0"-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13, 14, 11 except (jt=lb) 10=131.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

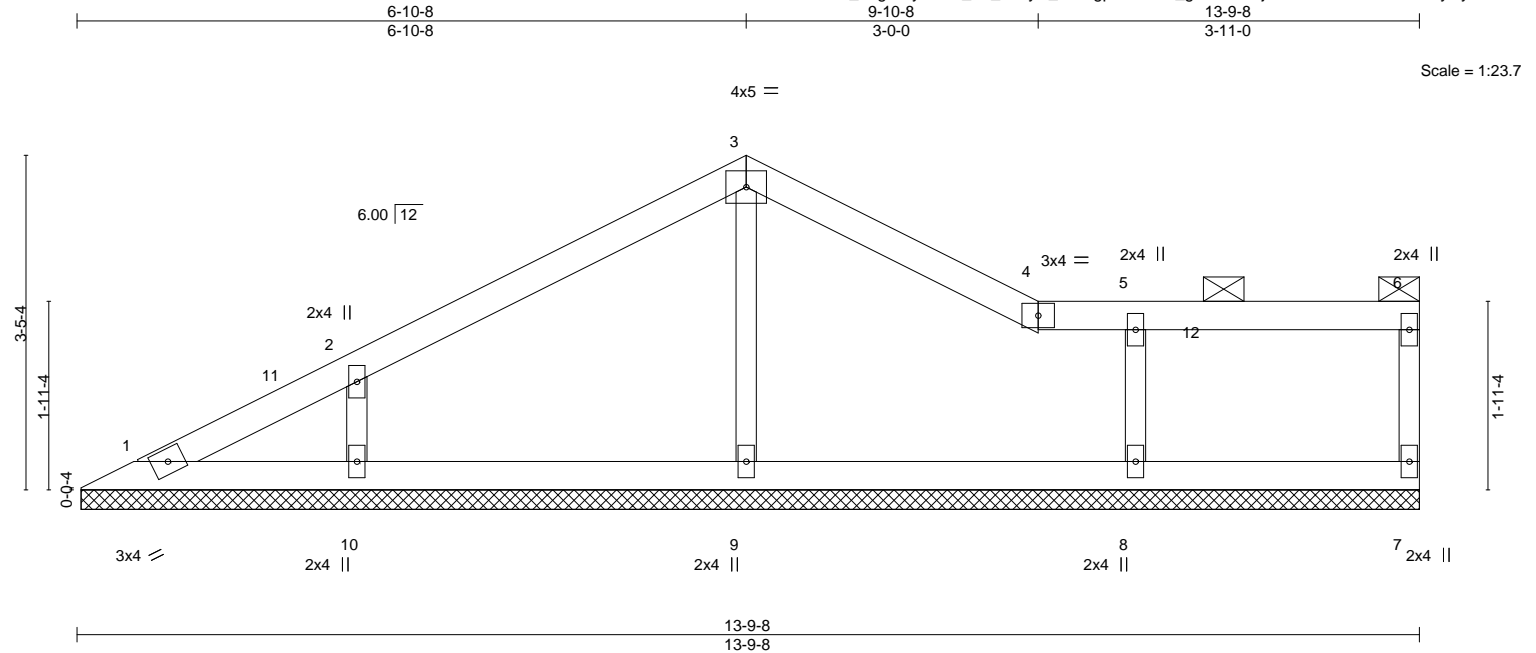


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V1	Valley	3	1		I49076745

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:11 2021 Page 1
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LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0		2-0-0	TC	0.21	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.10	n/a	-	n/a	999		
TCDL	10.0	Lumber DOL	1.15	WB	0.07	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		Horz(CT)	-0.00	7	n/a		
BCDL	10.0	Code IBC2018/TPI2014								Weight: 37 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, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 13-9-0.
(lb) - Max Horz 1=62(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 7, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=345(LC 2), 10=360(LC 18), 8=382(LC 19)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-9=-261/28, 2-10=-294/93, 5-8=-305/77

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10, 8.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

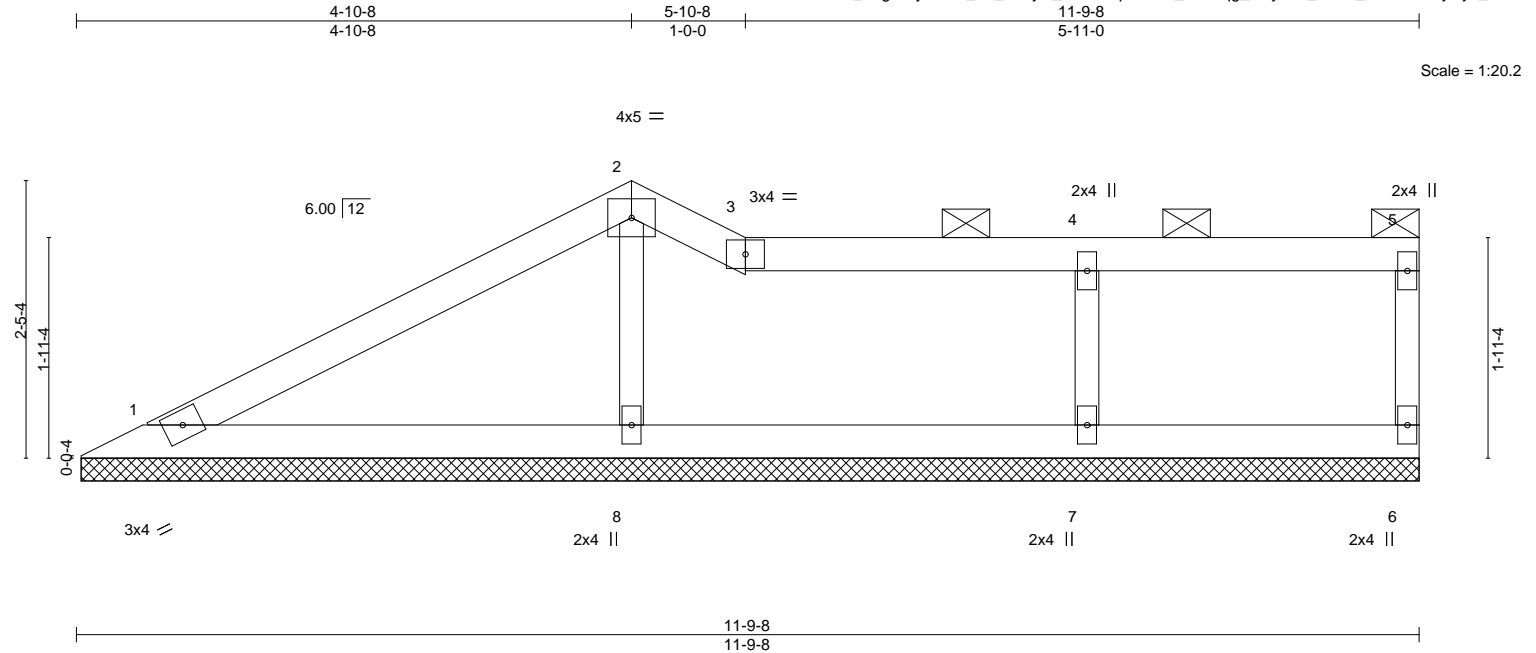


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V2	Valley	2	1		I49076746

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:19 2021 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.27	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	-0.00	6	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 31 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, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 11-9-0.
(lb) - Max Horz 1=53(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=406(LC 2), 7=419(LC 36)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-300/52, 4-7=-346/68

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 8, 7.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V3	Valley	2	1		I49076747

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:21 2021 Page 1
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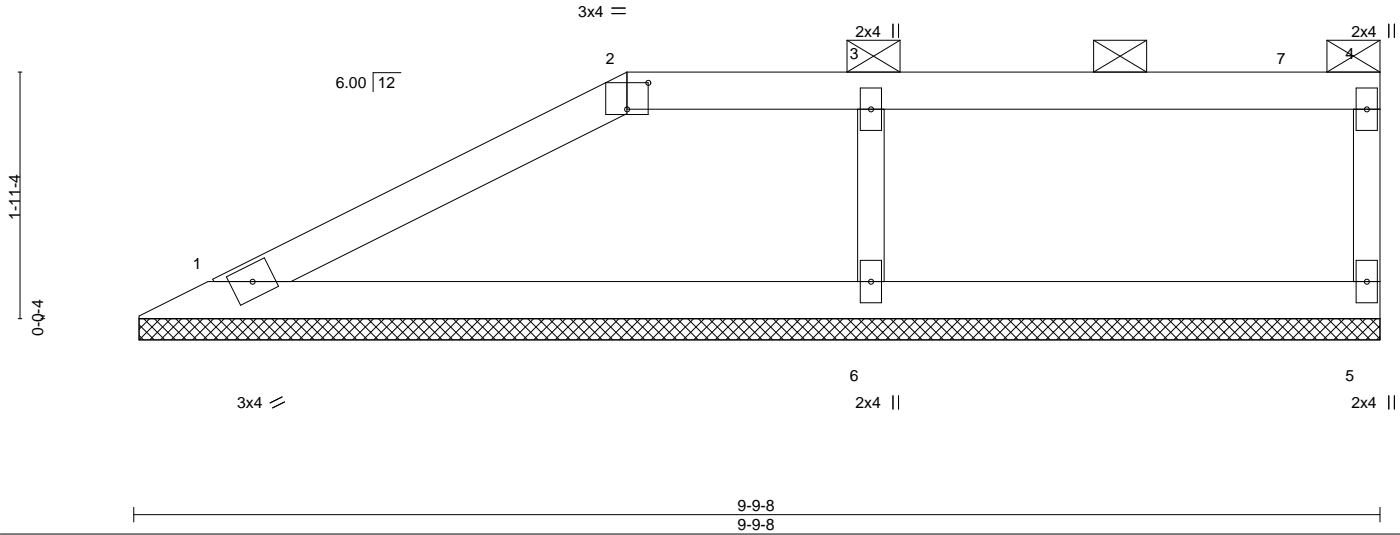


Plate Offsets (X,Y)-- [2:0-2-0,0-2-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.36	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 24 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

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, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=9-9-0, 5=9-9-0, 6=9-9-0
Max Horz 1=48(LC 9)
Max Uplift 1=-5(LC 12), 5=-13(LC 8), 6=-17(LC 9)
Max Grav 1=226(LC 33), 5=168(LC 32), 6=499(LC 32)

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

WEBS 3-6=-387/82

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

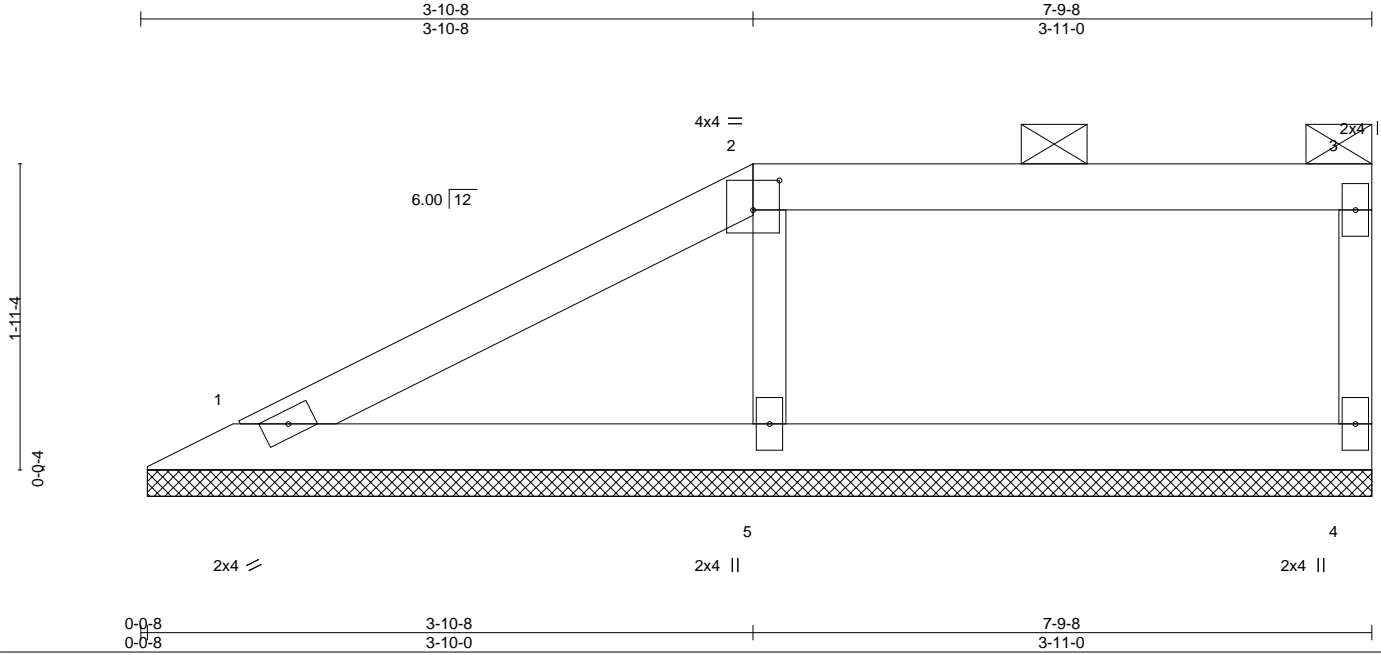


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076748
211238	V4	Valley	2	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:22 2021 Page 1
ID:YO7_68gAzryMRVt_sV_?nbyD_zk-CprzWfKOCHM6P96PL7mIZb5e1q2BHMfPILJfkPyCyrx



Scale = 1:14.6

Plate Offsets (X,Y)-- [2:0-2-0,0-2-4]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	4	n/a
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 20 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2		

REACTIONS. (size) 1=7-9-0, 4=7-9-0, 5=7-9-0
Max Horz 1=48(LC 9)
Max Uplift 1=-8(LC 12), 4=-15(LC 9)
Max Grav 1=172(LC 33), 4=195(LC 32), 5=328(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076749
211238	V5	Valley	2	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:23 2021 Page 1
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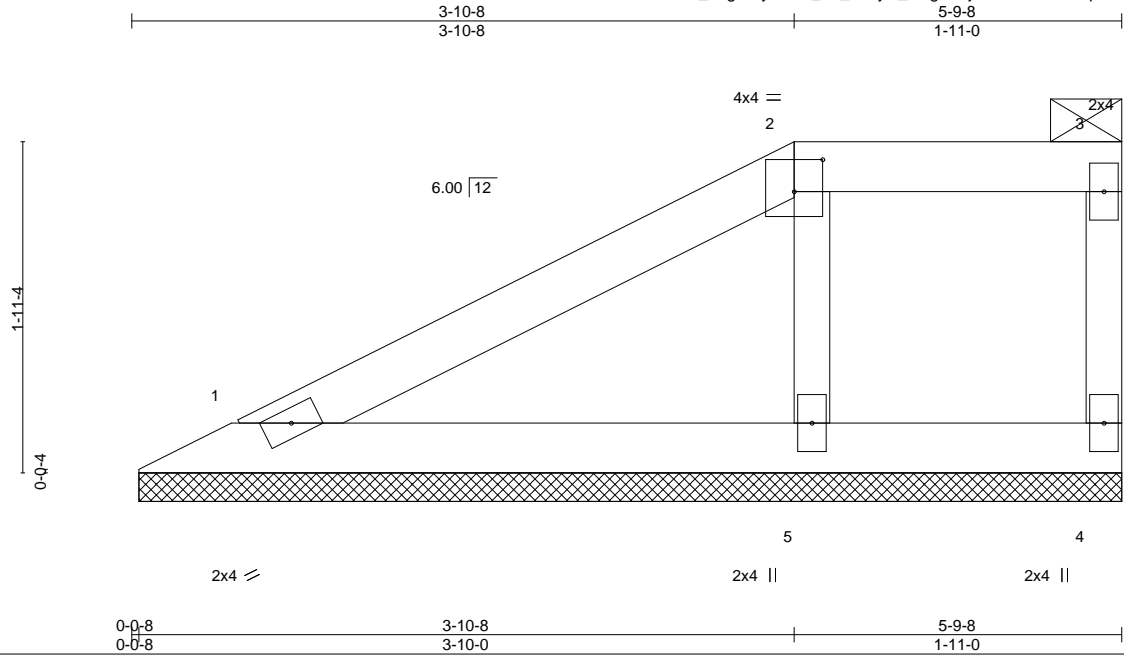


Plate Offsets (X,Y)-- [2:0-2-0,0-2-4]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.24	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	-0.00	4	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

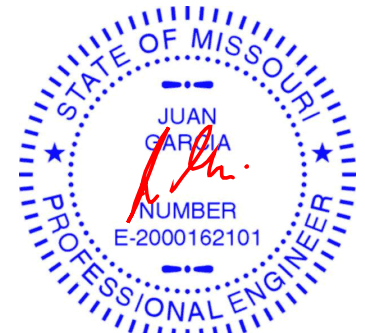
REACTIONS.

(size) 1=5-9-0, 4=5-9-0, 5=5-9-0
Max Horz 1=48(LC 9)
Max Uplift 1=-6(LC 12), 4=-12(LC 9)
Max Grav 1=174(LC 33), 4=84(LC 32), 5=241(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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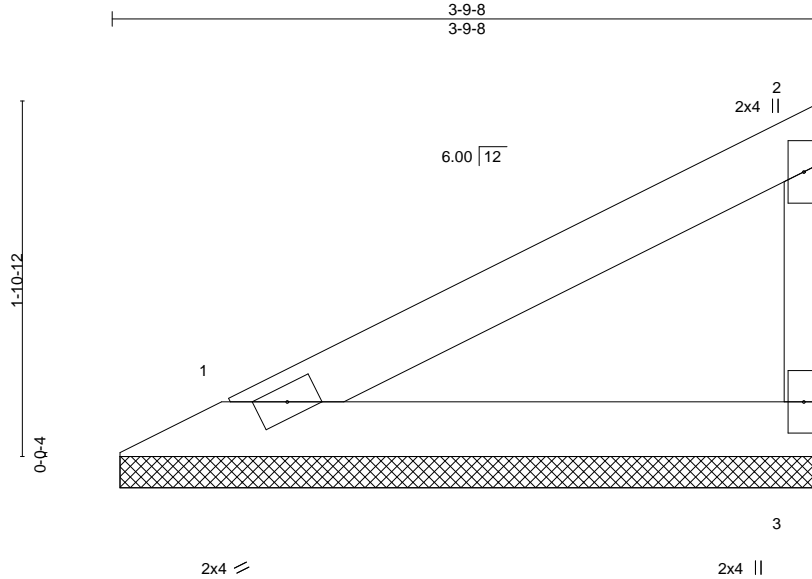


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V6	Valley	2	1		I49076750

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:24 2021 Page 1
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Scale = 1:12.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						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 3-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-9-0, 3=3-9-0
Max Horz 1=45(LC 9)
Max Uplift 1=-2(LC 12), 3=-13(LC 12)
Max Grav 1=143(LC 18), 3=143(LC 18)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:25 2021 Page 1
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 3-10-8 10-9-0 11-9-8
 3-10-8 6-10-8 1-0-8

Technical drawing of a roof structure. The drawing shows a cross-section of a roof with rafters, a ridge, and various dimensions and material specifications.

Dimensions:

- Overall width: 11-9-8
- Overall height: 1-11-4
- Roof slope: 6.00 | 12
- Vertical height on the right: 1-5-0
- Horizontal distance from left wall to first rafter: 0-0-4
- Horizontal distance between rafters: 10
- Horizontal distance from last rafter to right wall: 1-11-4

Material Specifications:

- 3x4 = (at ridge and eaves)
- 2x4 || (for rafters and vertical supports)
- 3x4 ≡ (for horizontal supports)

Labels:

- 1, 2, 3, 4, 5, 6, 7, 8, 9 (numbered points on the structure)

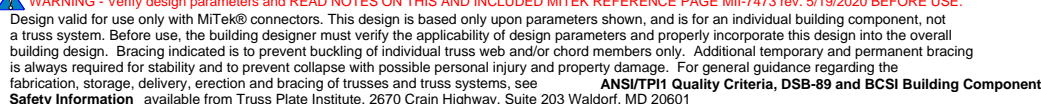
Notes:

- 11-9-8
- 11-9-8

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5. Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD	2x4 SPF No.2	BOT CHORD	
WEBS	2x3 SPF No.2		
OTHERS	2x3 SPF No.2		

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-8--388/75

- 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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9.
- 10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V9	GABLE	1	1		I49076752

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:26 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-4b4UL0NuFVsYtnQAayqEkRGLRROqDA??gzHttAyCyr



Scale = 1:18.4

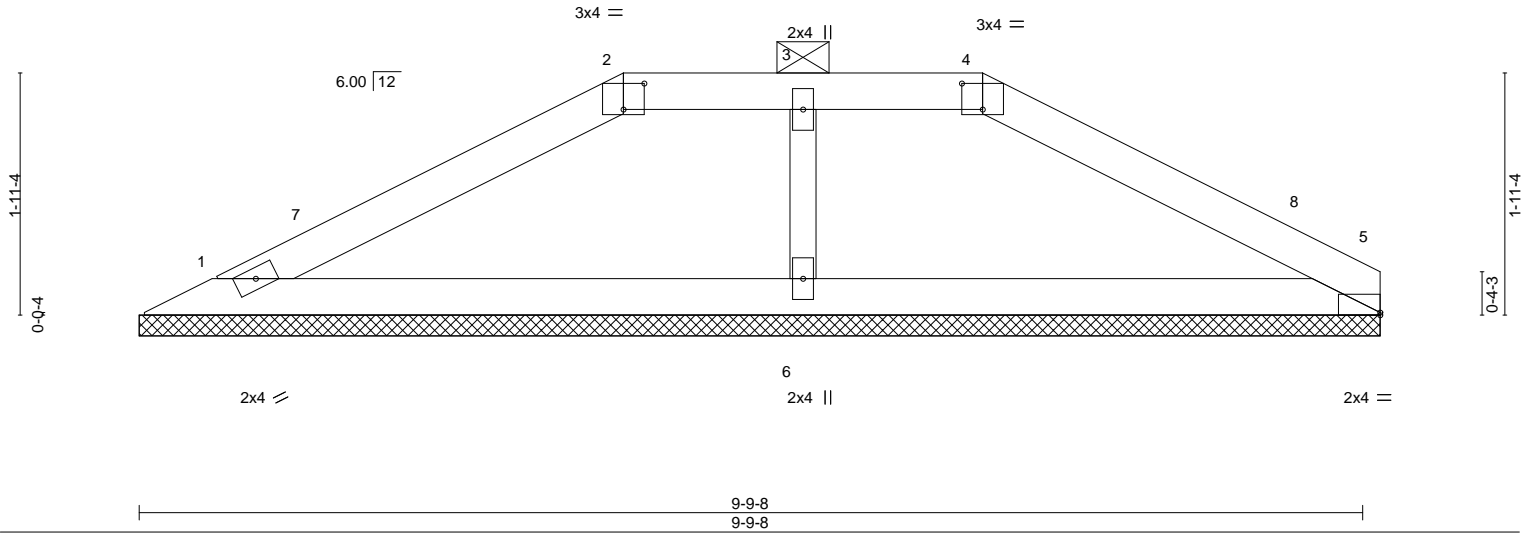


Plate Offsets (X,Y)-- [2:0-2-0,0-2-8], [4:0-2-0,0-2-8], [5:0-0-0,0-0-4]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 24 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 2-4.
OTHERS 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=9-11-3, 5=9-11-3, 6=9-11-3
Max Horz 1=20(LC 12)
Max Uplift 1=-23(LC 12), 5=-24(LC 13)
Max Grav 1=312(LC 36), 5=310(LC 36), 6=300(LC 35)

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

TOP CHORD 1-2=-379/54, 2-3=-281/55, 3-4=-281/55, 4-5=-366/50
BOT CHORD 1-6=-25/281, 5-6=-25/281

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
- This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

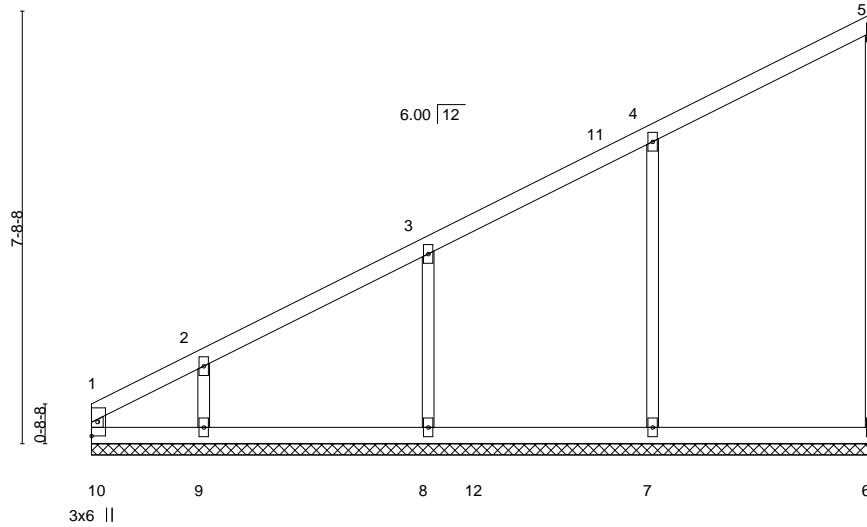
Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V11	Valley	3	1		I49076754

Wheeler Lumber, Waverly, KS - 66871,

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ID:YO7_68gAzryMRVt_sV_?nbyD_zk-z5oZdaDkJWEOpnwgJk5BiiD5NCyBgEo5hSehwRyCys4

14-0-0
14-0-0



Scale = 1:41.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.34	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.23	Horz(CT)	-0.00	6	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 48 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.

All bearings 14-0-0.
(lb) - Max Horz 10=214(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 10, 6, 7, 8, 9
Max Grav All reactions 250 lb or less at joint(s) 10, 6 except 7=478(LC 5), 8=389(LC 3), 9=318(LC 25)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-313/90, 3-8=-282/98

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6, 7, 8, 9.
- 9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

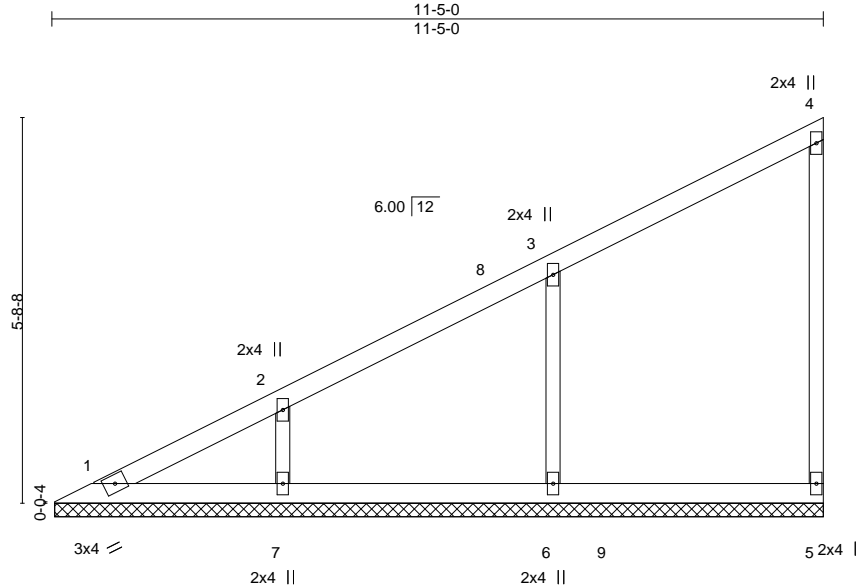


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V12	Valley	3	1		I49076755

Wheeler Lumber, Waverly, KS - 66871,

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ID:YO7_68gAzryMRVt_sV_?nbyD_zk-RHMxqWEN4pMFRxVstRdQFvmlBclnPj0Ev6NETtyCys3



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.14	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.10	Horz(CT)	-0.00	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 34 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.

All bearings 11-4-8.
(lb) - Max Horz 1=157(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=440(LC 5), 7=333(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-318/99, 2-7=-253/87

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 7.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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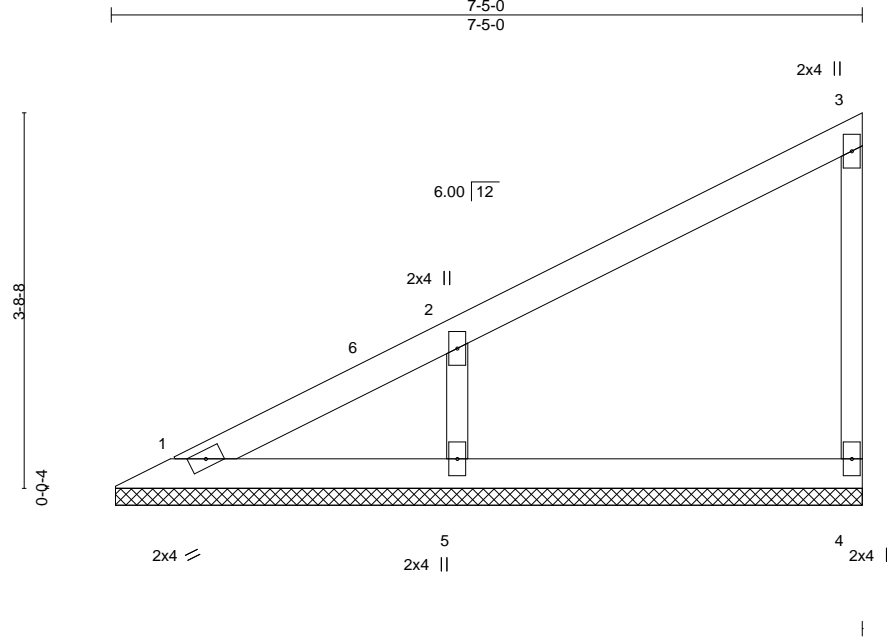
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076756
211238	V13	Valley	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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ID:YO7_68gAzryMRVt_sV_?nbyD_zk-RHMxqwEN4pMFRxVstRdQFvml9cJOPkgEv6NETtyCys3



Scale = 1:22.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	-0.00	4	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						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=7-4-8, 4=7-4-8, 5=7-4-8
Max Horz 1=98(LC 11)
Max Uplift 4=-7(LC 12), 5=-51(LC 12)
Max Grav 1=83(LC 26), 4=158(LC 18), 5=398(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-313/102

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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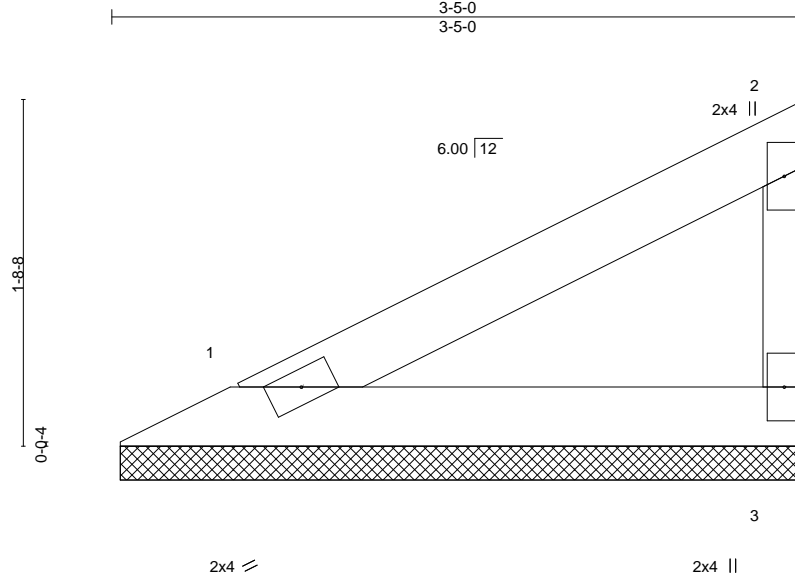
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V14	Valley	3	1		I49076757

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:15 2021 Page 1

ID:Y07_68gAzryMRVt_sV_?nbyD_zk-vTwJ2GE?r7U63543R98fn7JUE?f98BpN8m7o?JyCys2



Scale = 1:11.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IBC2018/TPI2014							Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

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

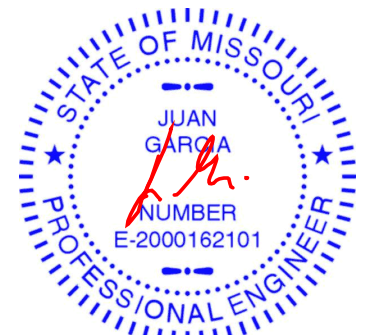
REACTIONS.

(size) 1=3-4-8, 3=3-4-8
Max Horz 1=39(LC 9)
Max Uplift 1=-1(LC 12), 3=-11(LC 12)
Max Grav 1=123(LC 18), 3=123(LC 18)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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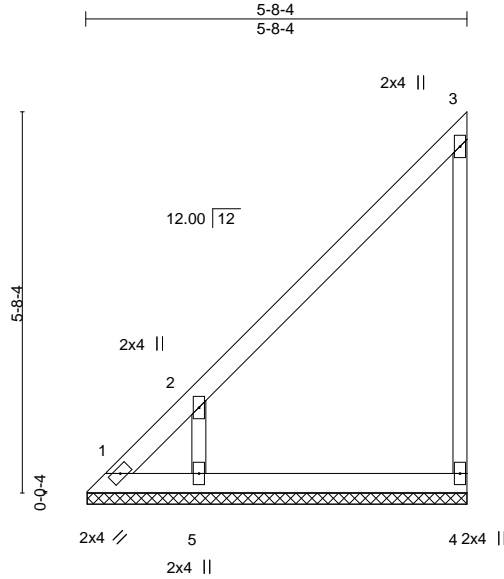


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	V15	Valley	2	1	I49076758

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:16 2021 Page 1
ID:Y07_68gAzryMRVt_sV_?nbyD_zk-NgUiFbFdcRczgEff_sfuKKrdsP?tteFXNPsLXmyCys1



Scale = 1:34.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.26	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	-0.00	4	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P					Weight: 20 lb	FT = 10%
BCDL 10.0	Code IBC2018/TPI2014							

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 5-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

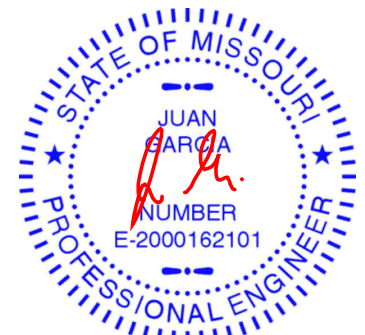
REACTIONS.

(size) 1=5-8-0, 4=5-8-0, 5=5-8-0
Max Horz 1=147(LC 7)
Max Uplift 1=-98(LC 8), 4=-44(LC 7), 5=-136(LC 10)
Max Grav 1=127(LC 10), 4=160(LC 21), 5=379(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-298/185

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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=1b) 5=136.
- 7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



December 3, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



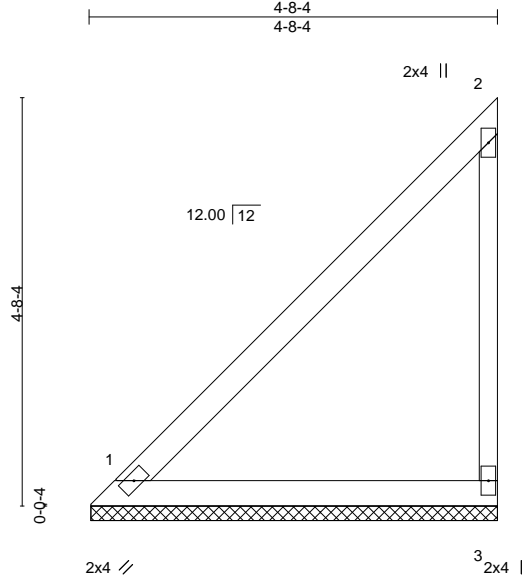
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	V16	Valley	2	1	I49076759

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:16 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-NgUiFbFdcRczgEfF_sfuKKrcWP_cte2XNPslXmyCys1



Scale = 1:26.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IBC2018/TPI2014							Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-8-0, 3=4-8-0
Max Horz 1=119(LC 7)
Max Uplift 3=43(LC 7)
Max Grav 1=196(LC 22), 3=208(LC 21)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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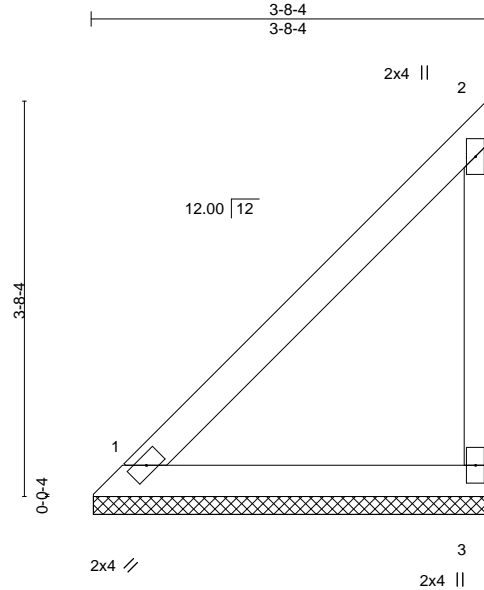
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	V17	Valley	2	1	I49076760

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:17 2021 Page 1

ID:YO7_68gAzryMRVt_sV_?nbyD_zk-rs24TxGFNkkqlOERYZA7tYOphL4c5lgb3cu3CyCys0



Scale = 1:21.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-8-0, 3=3-8-0
Max Horz 1=91(LC 9)
Max Uplift 3=33(LC 7)
Max Grav 1=149(LC 22), 3=159(LC 21)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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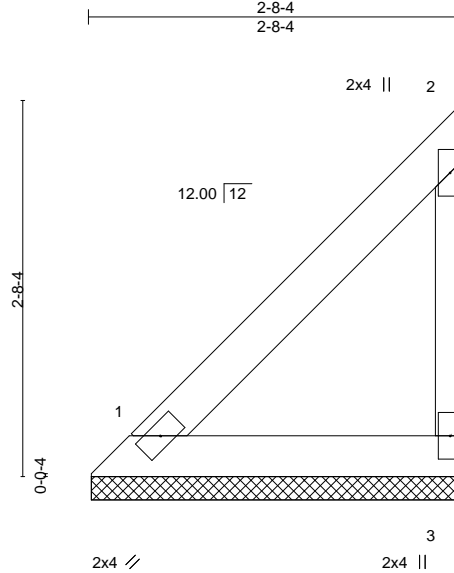


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076761
211238	V18	Valley	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:18 2021 Page 1
ID:Y07_68gAzryMRVt_sV_?nbyD_zk-J2bSgHHt82shwYoe6HhMPix06DhBLYYqqjLSceyCys?



Scale = 1:16.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-8-0, 3=2-8-0
Max Horz 1=63(LC 9)
Max Uplift 3=23(LC 7)
Max Grav 1=103(LC 22), 3=110(LC 21)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex
211238	V19	Valley	2	1	

I49076762

Job Reference (optional)

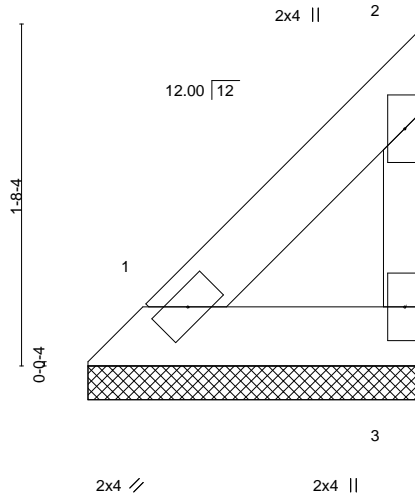
Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:18 2021 Page 1

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1-8-4
1-8-4

Scale = 1:11.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.02	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.01	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=1-8-0, 3=1-8-0
Max Horz 1=34(LC 9)
Max Uplift 3=13(LC 7)
Max Grav 1=57(LC 22), 3=60(LC 21)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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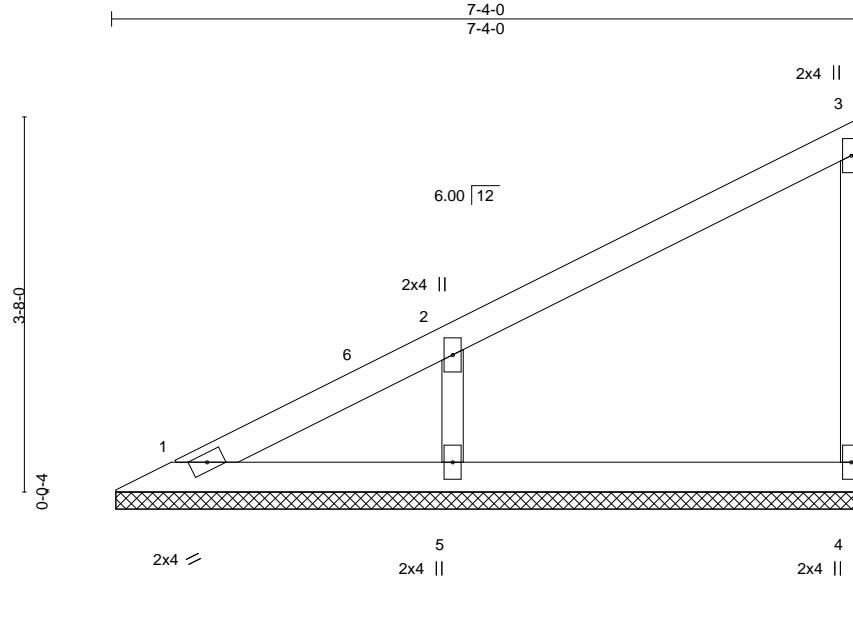


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	I49076763
211238	V20	Valley	3	1		

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:20 2021 Page 1
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Scale = 1:22.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	-0.00	4	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IBC2018/TPI2014						Weight: 20 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=7-3-8, 4=7-3-8, 5=7-3-8
Max Horz 1=97(LC 9)
Max Uplift 4=-7(LC 12), 5=-50(LC 12)
Max Grav 1=79(LC 26), 4=158(LC 18), 5=396(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-312/101

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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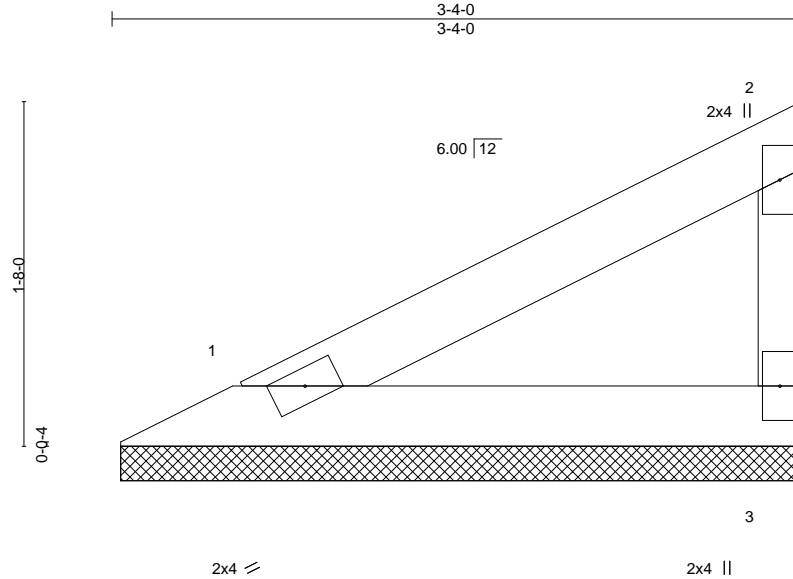


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Triplex	
211238	V21	Valley	3	1		I49076764

Wheeler Lumber, Waverly, KS - 66871,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 15:41:20 2021 Page 1
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Scale = 1:11.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IBC2018/TPI2014							Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

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

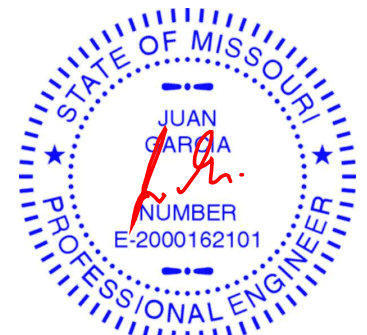
REACTIONS.

(size) 1=3-3-8, 3=3-3-8
Max Horz 1=38(LC 9)
Max Uplift 1=-1(LC 12), 3=-11(LC 12)
Max Grav 1=119(LC 18), 3=119(LC 18)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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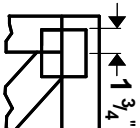
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



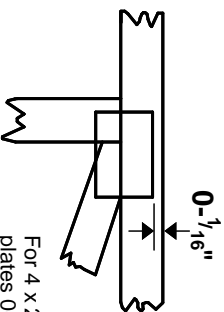
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

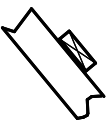
*** Plate location details available in MITek 20/20 software or upon request.**

PLATE SIZE

4 X 4

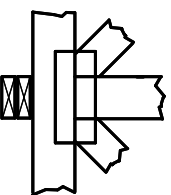
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



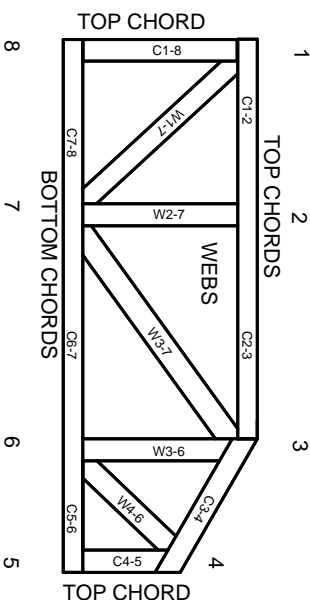
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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