



MiTek USA, Inc.

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

Re: B220003
Lot 75 H3

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: I59650776 thru I59650806

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

Missouri COA: Engineering 001193



July 21, 2023

Johnson, Andrew ,Engineer

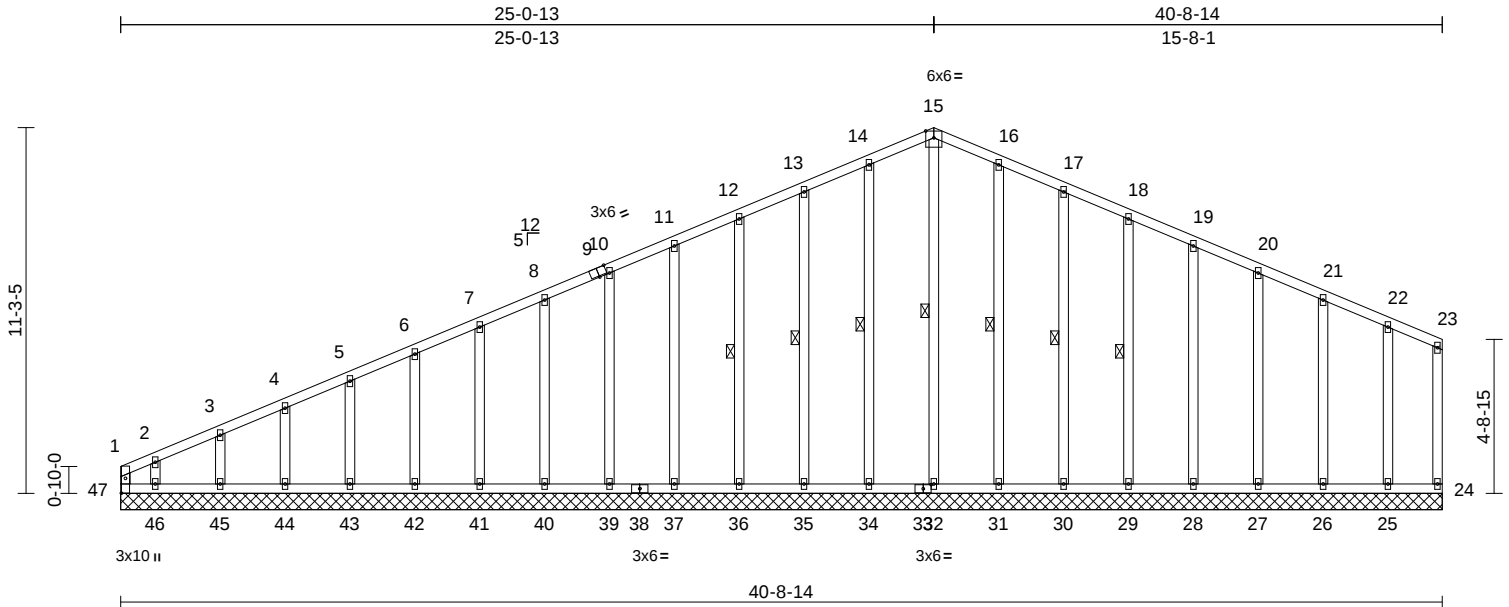
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650776
B220003	A1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:13
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Page: 1



Scale = 1:71									
Plate Offsets (X, Y): [9:0-3-0,Edge], [33:0-2-15,0-1-8], [47:0-5-8,0-1-8]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	999
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	999
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	24	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R					
PLATES MT20 GRIP 197/144									
Weight: 246 lb FT = 10%									

LUMBER		Max Grav		24=56 (LC 16), 25=171 (LC 22), 26=183 (LC 1), 27=179 (LC 22), 28=180 (LC 22), 29=180 (LC 1), 30=179 (LC 22), 31=189 (LC 22), 32=188 (LC 15), 34=189 (LC 21), 35=179 (LC 21), 36=180 (LC 1), 37=180 (LC 21), 39=180 (LC 1), 40=180 (LC 21), 41=180 (LC 1), 42=180 (LC 21), 43=180 (LC 1), 44=179 (LC 21), 45=186 (LC 1), 46=151 (LC 21), 47=257 (LC 8)	NOTES	
TOP CHORD	2x4 SPF No.2			1) Unbalanced roof live loads have been considered for this design.		
BOT CHORD	2x4 SPF No.2			2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60		
WEBS	2x4 SPF No.2			3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.		
OTHERS	2x4 SPF No.2			4) All plates are 2x4 MT20 unless otherwise indicated.		
BRACING		FORCES		5) Gable requires continuous bottom chord bearing.		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	(lb) - Maximum Compression/Maximum Tension		6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	TOP CHORD		7) Gable studs spaced at 2-0-0 oc.		
WEBS	1 Row at midpt	BOT CHORD		8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.		
REACTIONS (size)		WEBS		9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.		
24=40-8-14, 25=40-8-14, 26=40-8-14, 27=40-8-14, 28=40-8-14, 29=40-8-14, 30=40-8-14, 31=40-8-14, 32=40-8-14, 34=40-8-14, 35=40-8-14, 36=40-8-14, 37=40-8-14, 39=40-8-14, 40=40-8-14, 41=40-8-14, 42=40-8-14, 43=40-8-14, 44=40-8-14, 45=40-8-14, 46=40-8-14, 47=40-8-14		Max Horiz				
47=178 (LC 5)		Max Uplift				
24=-23 (LC 8), 25=-51 (LC 9), 26=-49 (LC 9), 27=-47 (LC 9), 28=-48 (LC 9), 29=-47 (LC 9), 30=-52 (LC 9), 31=-42 (LC 9), 34=-43 (LC 8), 35=-51 (LC 8), 36=-47 (LC 8), 37=-48 (LC 8), 39=-48 (LC 8), 40=-48 (LC 8), 41=-48 (LC 8), 42=-48 (LC 8), 43=-47 (LC 8), 44=-52 (LC 8), 45=-33 (LC 8), 46=-219 (LC 8), 47=-36 (LC 19)						





July 21,2023

Continued on page 3

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	Lot 75 H3
B220003	A1	Common Supported Gable	1	1	I59650776
Job Reference (optional)					

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 47, 23 lb uplift at joint 24, 43 lb uplift at joint 34, 51 lb uplift at joint 35, 47 lb uplift at joint 36, 48 lb uplift at joint 37, 48 lb uplift at joint 39, 48 lb uplift at joint 40, 48 lb uplift at joint 41, 48 lb uplift at joint 42, 47 lb uplift at joint 43, 52 lb uplift at joint 44, 33 lb uplift at joint 45, 219 lb uplift at joint 46, 42 lb uplift at joint 31, 52 lb uplift at joint 30, 47 lb uplift at joint 29, 48 lb uplift at joint 28, 47 lb uplift at joint 27, 49 lb uplift at joint 26 and 51 lb uplift at joint 25.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

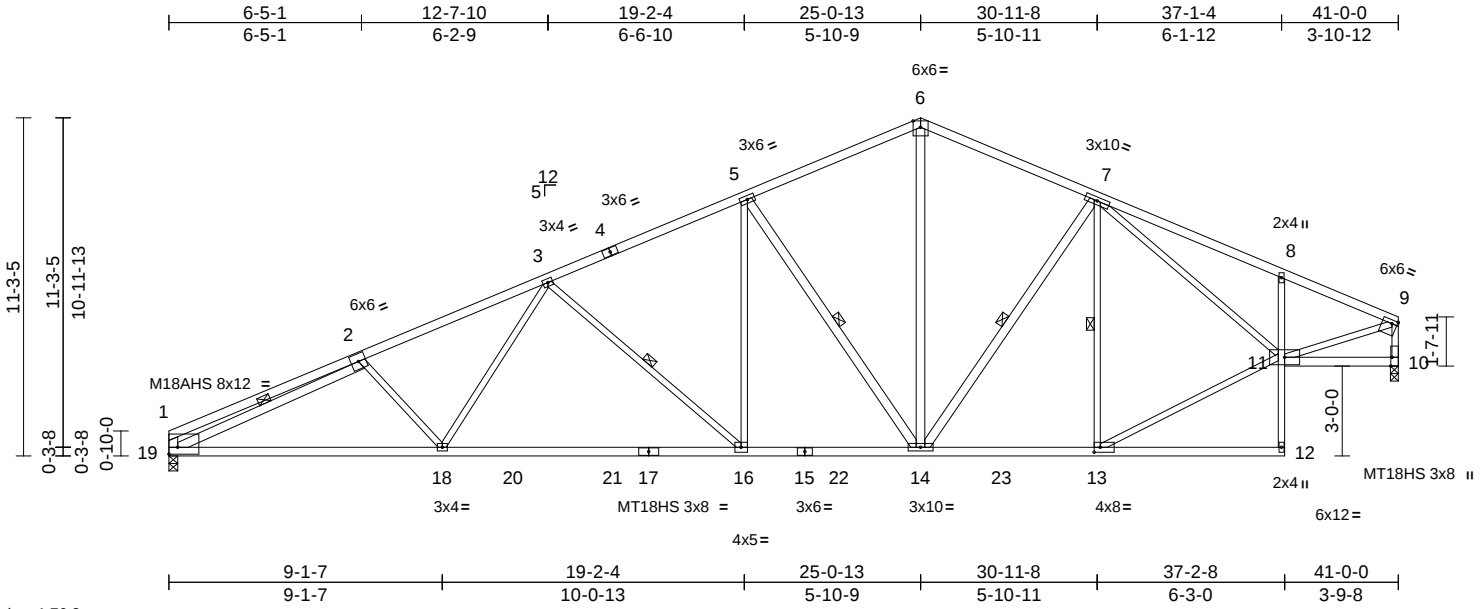
Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650777
B220003	A2	Roof Special	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:15

Page: 1

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Scale = 1:76.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.41	16-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.71	16-18	>691	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.10	10	n/a	n/a	M18AHS	142/136
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	16-18	>999	240	Weight: 190 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 12-8:2x3 SPF No.2, 11-10:2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 14-5,14-6,19-1,19-2,14-7:2x4 SPF No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-7-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-7-14 oc bracing.
WEBS	1 Row at midpt 3-16, 5-14, 7-13, 2-19, 7-14

REACTIONS

(size)	10=0-3-2, 19=0-3-8
Max Horiz	19=235 (LC 8)
Max Uplift	10=-193 (LC 9), 19=-259 (LC 8)
Max Grav	10=1959 (LC 2), 19=1956 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-648/128, 2-3=-3577/485, 3-5=-2696/389, 5-6=-1985/332, 6-7=-1986/350, 7-8=-2560/367, 8-9=-2536/261, 1-19=-417/124, 9-10=-1872/213
BOT CHORD	18-19=-649/3297, 16-18=-507/2967, 14-16=-321/2422, 13-14=-137/1791, 12-13=0/26, 11-12=0/103, 8-11=-355/191, 10-11=-15/61
WEBS	2-18=-214/197, 3-18=-22/545, 3-16=-739/249, 5-16=-64/854, 5-14=-1169/288, 6-14=-150/1172, 7-13=-661/150, 11-13=-153/1964, 7-11=-165/692, 9-11=-225/2390, 2-19=-3104/394, 7-14=-238/173

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 193 lb uplift at joint 10 and 259 lb uplift at joint 19.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21,2023

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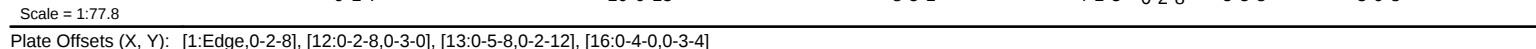
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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



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Wheeler Lumber, Waverly, KS - 66871, Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:16 Page: 1
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LUMBER		2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
TOP CHORD	2x4 SPF No.2	Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
BOT CHORD	2x3 SPF No.2 *Except* 21-19,19-17:2x4 SPF 2100F 1.8E, 16-13,15-14:2x4 SPF No.2, 13-11:2x4 SPF 2400F 2.0E	II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
WEBS	2x3 SPF No.2 *Except* 21-1,11-10,21-2:2x4 SPF No.2	3) All plates are MT20 plates unless otherwise indicated.
BRACING		4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
TOP CHORD	Structural wood sheathing directly applied or 2-6-11 oc purlins, except end verticals.	5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 21.
WEBS	1 Row at midpt 3-18, 5-18, 9-11, 2-21, 5-16	7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
REACTIONS	(size) 11=0-3-2, 21=0-3-8 Max Horiz 21=235 (LC 8) Max Uplift 21=-229 (LC 8) Max Grav 11=2613 (LC 2), 21=1984 (LC 2)	8) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
FORCES	(lb) - Maximum Compression/Maximum Tension	

NOTES

- 1) Unbalanced roof live loads have been considered for this design.



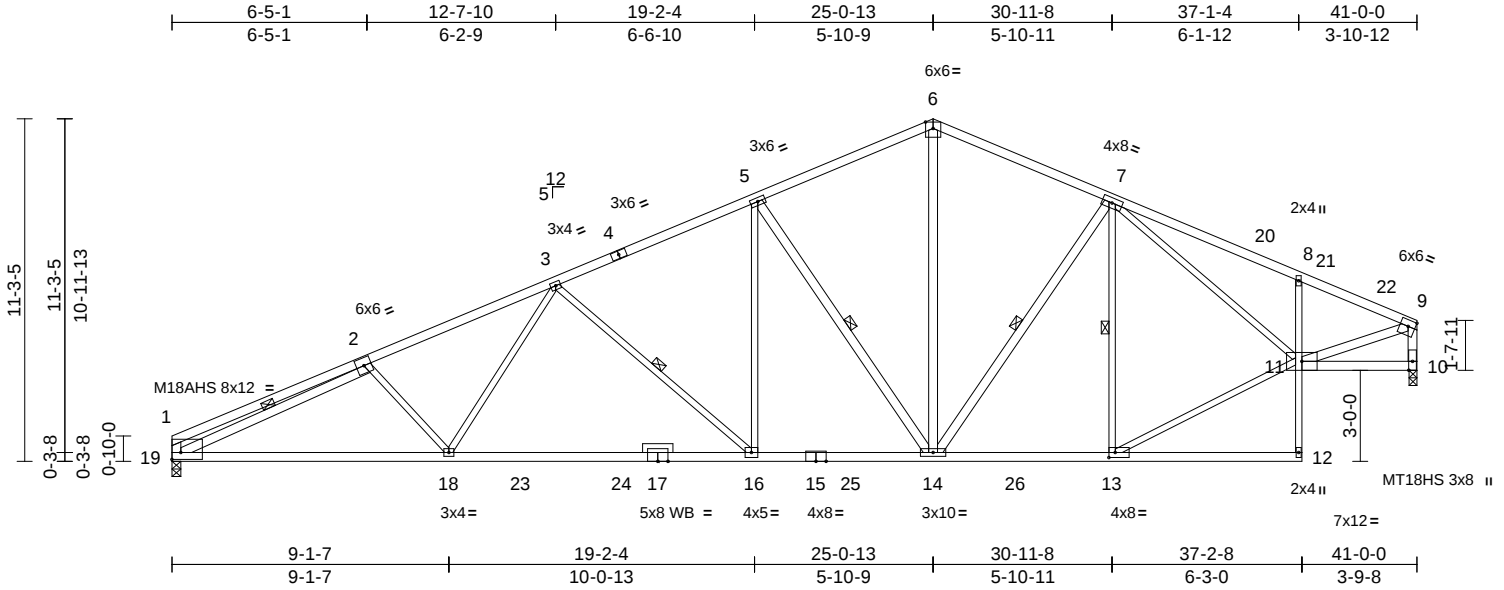
Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	
B220003	A4	Roof Special	1	1	Job Reference (optional)	I59650779

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:16

Page: 1

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Scale = 1:75.9											
Plate Offsets (X, Y): [1:Edge,0-2-12], [9:Edge,0-2-8], [13:0-2-8,0-2-0]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.42	16-18	>999	360	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.73	16-18	>673	240	MT18HS
BCLL	0.0*	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.12	10	n/a	n/a	M18AHS
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	16-18	>999	240	Weight: 193 lb
											FT = 10%

LUMBER	
TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 12-8:2x3 SPF No.2, 11-10:2x4 SPF 2400F 2.0E
WEBS	2x3 SPF No.2 *Except* 14-5,14-6,19-1,10-9,11-9,19-2,14-7:2x4 SPF No.2
OTHERS	2x4 SPF No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 2-4-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-16, 5-14, 7-13, 2-19, 7-14
REACTIONS (size) 10=0-3-2, 19=0-3-8	
Max Horiz 19=235 (LC 8)	
Max Uplift 19=229 (LC 8)	
Max Grav 10=2604 (LC 2), 19=2008 (LC 2)	
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-657/122, 2-3=-3695/418, 3-5=-2823/316, 5-6=-2114/258, 6-7=-2117/274, 7-8=-3292/0, 8-9=-3250/0, 1-19=-422/122, 9-10=-2505/0
BOT CHORD	18-19=-591/3399, 16-18=-442/3081, 14-16=-254/2539, 13-14=-25/1985, 12-13=0/34, 11-12=0/103, 8-11=-939/0, 10-11=0/127
WEBS	2-18=-203/202, 3-18=-28/536, 3-16=-733/252, 5-16=-66/850, 5-14=-1166/289, 6-14=-89/1278, 7-13=-767/97, 11-13=-33/2171, 7-11=0/1320, 9-11=0/2969, 2-19=-3209/333, 7-14=-392/78

NOTES
1) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 229 lb uplift at joint 19.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-70, 6-9=-70, 12-19=-20, 10-11=-20
Concentrated Loads (lb)
Vert: 20=-269, 21=-269, 22=-269



July 21,2023

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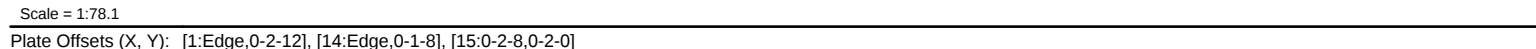
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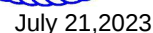
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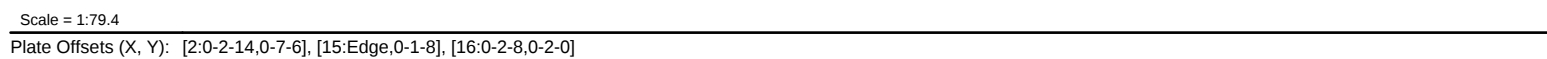
LUMBER		2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
TOP CHORD	2x4 SPF No.2 *Except* 6-7:2x4 SPF 2100F 1.8E	Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
BOT CHORD	2x4 SPF No.2 *Except* 21-18,16-14:2x4 SPF 2100F 1.8E	3) All plates are MT20 plates unless otherwise indicated.
WEBS	2x3 SPF No.2 *Except* 17-5,17-6,17-8,21-2:2x4 SPF No.2, 21-1,12-10:2x4 SPF 2100F 1.8E	4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BRACING		5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.	6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 287 lb uplift at joint 14 and 261 lb uplift at joint 21.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.	7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
WEBS	1 Row at midpt 5-17, 8-17, 8-15, 2-21	
REACTIONS		
	(size) 14=0-3-8, 21=0-3-8	
	Max Horiz 21=202 (LC 8)	
	Max Uplift 14=-287 (LC 9), 21=-261 (LC 8)	
	Max Grav 14=2460 (LC 2), 21=1928 (LC 2)	
LOAD CASE(S)		Standard

NOTES

1) Unbalanced roof live loads have been considered for this design.



Wheeler Lumber, Waverly, KS - 66871, Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:17 Page: 1
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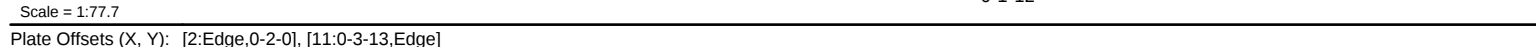
LUMBER		2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
TOP CHORD	2x4 SPF No.2 *Except* 7-8:2x4 SPF 2100F 1.8E	Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
BOT CHORD	2x4 SPF No.2 *Except* 22-19,17-15:2x4 SPF 2100F 1.8E	3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
WEBS	2x3 SPF No.2 *Except* 18-6,18-7,18-9,22-3:2x4 SPF No.2, 22-2,13-11:2x6 SPF No.2	4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
BRACING		5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 288 lb uplift at joint 15 and 286 lb uplift at joint 22.
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.	6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.	
WEBS	1 Row at midpt 6-18, 9-18, 9-16, 3-22	
REACTIONS	(size) 15=0-3-8, 22=0-3-8	LOAD CASE(S) Standard
	Max Horiz 22=216 (LC 8)	
	Max Uplift 15=-288 (LC 9), 22=-286 (LC 8)	
	Max Crd 15=-2453 (LC 2), 22=-1000 (LC 2)	

NOTES

1) Unbalanced roof live loads have been considered for this design.

July 21, 2023

Wheeler Lumber, Waverly, KS - 66871, Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:18 Page: 1
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LUMBER 1) 2x4 SPF 2400F 2.0E bearing block 12" long at jt. 16
attached to front face with 2 rows of 10d (2 12 1/4" C/P)

BRACING			Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
TOP CHORD	Structural wood sheathing directly applied or 4-7-2 oc purlins, except end verticals.		
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.		4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
WEBS	1 Row at midpt	4-18, 6-16, 7-16, 8-16, 10-12, 3-21	5) * This truss has been designed for a live load of 20.0psf

FORCES	(lb) - Maximum Compression/Maximum Tension	8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
TOP CHORD	1-2=0/27, 2-3=-619/173, 3-4=-1429/281, 4-6=-395/165, 6-7=0/823, 7-8=0/1147, 8-10=-629/102, 10-11=-255/118, 11-12=-320/132, 12-13=-150/0	9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

NOTES

NOTES



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

WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH/473 (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



Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650783
B220003	A8	Common	7	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:18

Page: 1

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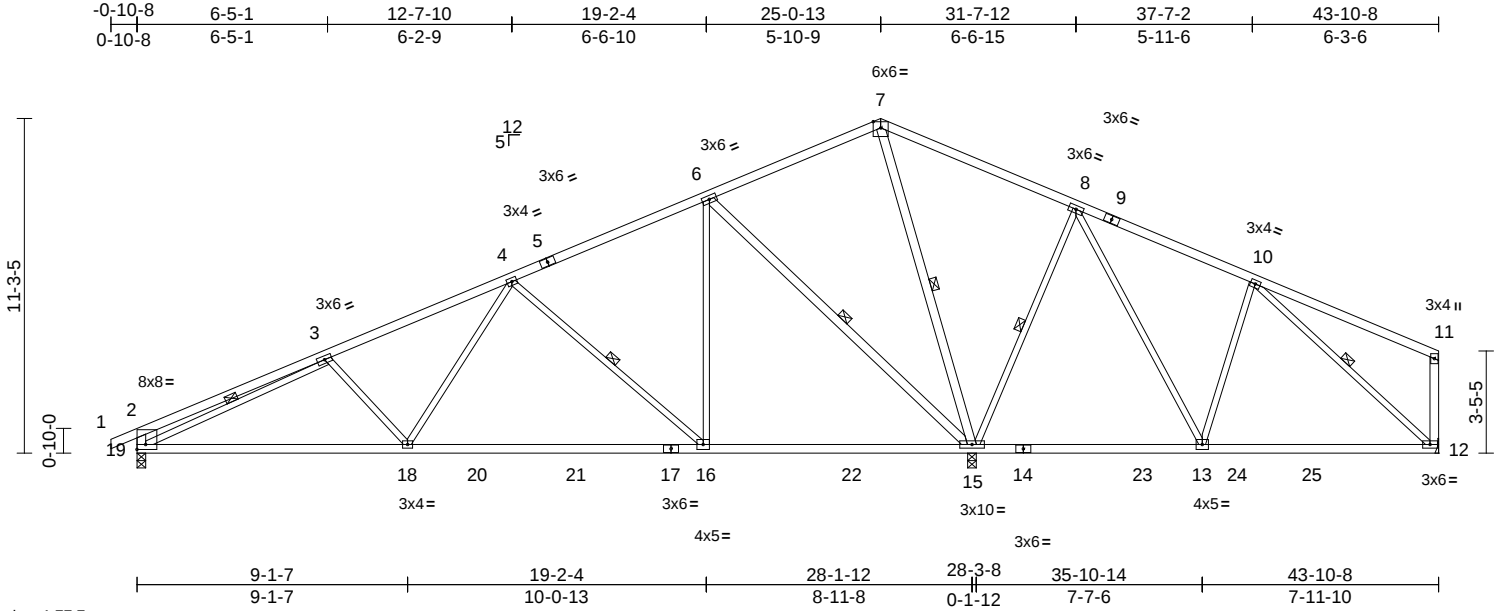


Plate Offsets (X, Y): [2:Edge,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.27	16-18	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.45	16-18	>745	240	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.04	15	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	16-18	>999	240	Weight: 189 lb FT = 10%

LUMBER	
TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 17-14:2x4 SPF 2400F 2.0E
WEBS	2x3 SPF No.2 *Except* 15-6,15-7,19-2,12-11:2x4 SPF No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 4-5-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-16, 6-15, 7-15, 8-15, 10-12, 3-19
REACTIONS (size) 12= Mechanical, 15=0-3-8, 19=0-3-8	
Max Horiz	19=186 (LC 12)
Max Uplift	12=-165 (LC 21), 15=-341 (LC 8), 19=-173 (LC 8)
Max Grav	12=431 (LC 22), 15=3033 (LC 2), 19=1096 (LC 23)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/27, 2-3=-629/168, 3-4=-1509/239, 4-6=-482/120, 6-7=-24/736, 7-8=-49/1039, 8-10=-195/427, 10-11=-127/85, 2-19=-498/169, 11-12=-208/89
BOT CHORD	18-19=-369/1494, 16-18=-206/989, 15-16=-9/379, 13-15=-629/199, 12-13=-295/203
WEBS	3-18=-329/212, 4-18=-42/660, 4-16=-818/264, 6-16=-57/965, 6-15=-1363/300, 7-15=-1010/128, 8-15=-877/282, 8-13=-92/811, 10-13=-456/191, 10-12=-221/431, 3-19=-1100/111

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 3x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 341 lb uplift at joint 15, 165 lb uplift at joint 12 and 173 lb uplift at joint 19.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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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



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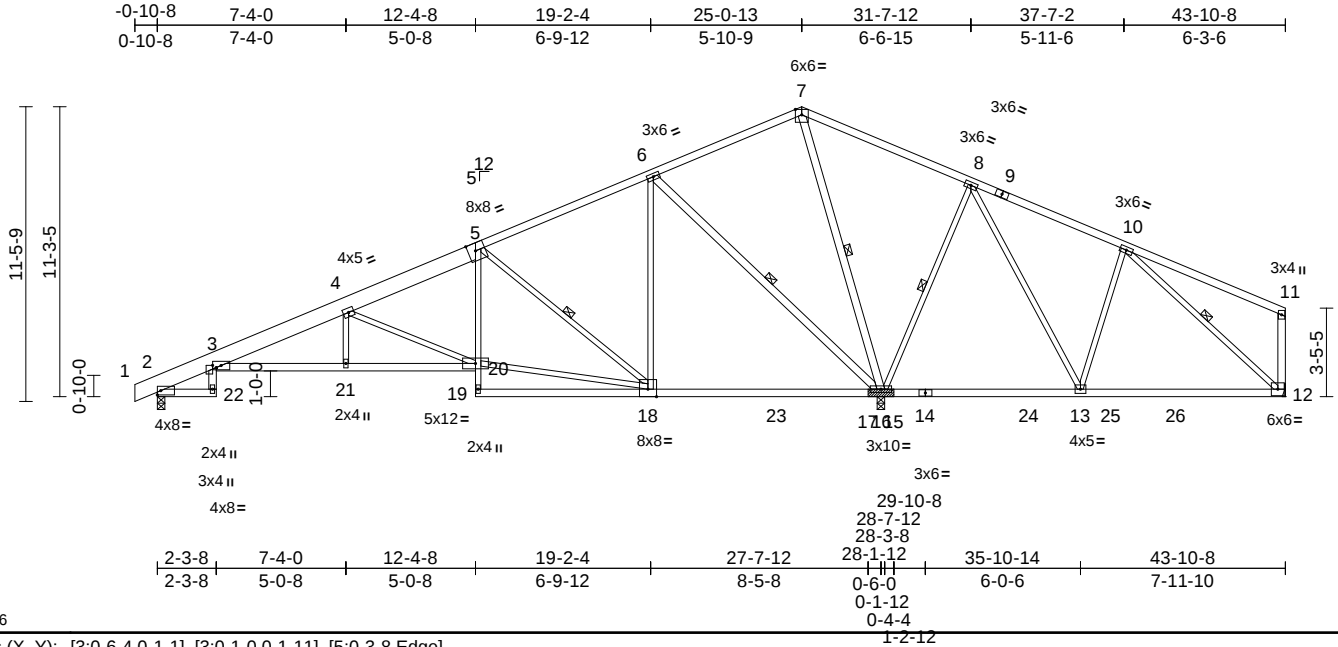
Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650784
B220003	A9	Roof Special	6	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:18

Page: 1

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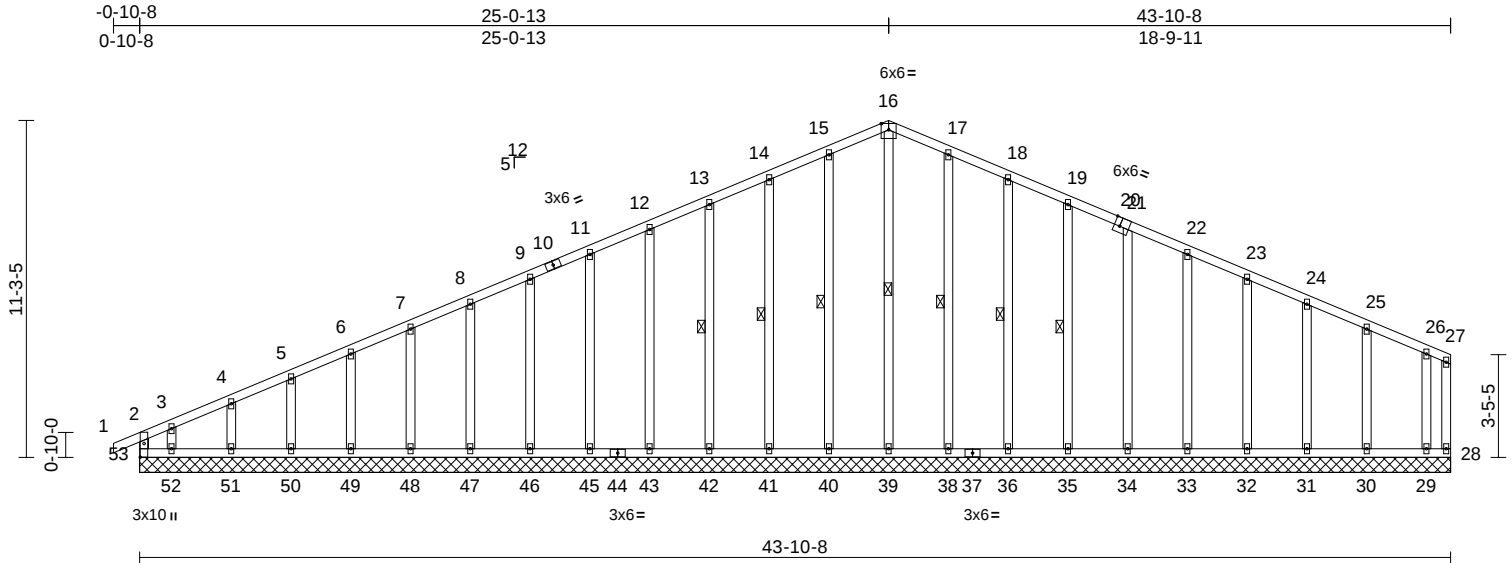


Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650785
B220003	A10	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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Page: 1



Scale = 1:77.1

Plate Offsets (X, Y): [20:0-2-4,Edge], [53:0-5-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	28	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							
Weight: 262 lb FT = 10%											

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 16-39, 15-40, 14-41, 13-42, 17-38, 18-36, 19-35

REACTIONS (size)

28=43-10-8, 29=43-10-8,	
30=43-10-8, 31=43-10-8,	
32=43-10-8, 33=43-10-8,	
34=43-10-8, 35=43-10-8,	
36=43-10-8, 38=43-10-8,	
39=43-10-8, 40=43-10-8,	
41=43-10-8, 42=43-10-8,	
43=43-10-8, 45=43-10-8,	
46=43-10-8, 47=43-10-8,	
48=43-10-8, 49=43-10-8,	
50=43-10-8, 51=43-10-8,	
52=43-10-8, 53=43-10-8	
Max Horiz 53=186 (LC 12)	
Max Uplift 28=18 (LC 12), 29=76 (LC 9),	
30=50 (LC 9), 31=47 (LC 9),	
32=48 (LC 9), 33=48 (LC 9),	
34=48 (LC 9), 35=47 (LC 9),	
36=53 (LC 9), 38=39 (LC 9),	
40=42 (LC 8), 41=51 (LC 8),	
42=47 (LC 8), 43=48 (LC 8),	
45=48 (LC 8), 46=48 (LC 8),	
47=48 (LC 8), 48=48 (LC 8),	
49=47 (LC 8), 50=51 (LC 8),	
51=35 (LC 8), 52=197 (LC 8),	
53=55 (LC 9)	

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-53=-176/45, 1-2=0/27, 2-3=-255/79, 3-4=-197/82, 4-5=-171/96, 5-6=-144/117, 6-7=-118/137, 7-8=-92/158, 8-9=-66/179, 9-11=-57/200, 11-12=-57/221, 12-13=-57/242, 13-14=-57/263, 14-15=-57/285, 15-16=-57/302, 16-17=-56/295, 17-18=-53/262, 18-19=-50/223, 19-21=-47/186, 21-22=-44/156, 22-23=-42/131, 23-24=-39/107, 24-25=-39/83, 25-26=-49/58, 26-27=-63/43, 27-28=-51/28
BOT CHORD	52-53=-44/38, 51-52=-44/38, 50-51=-44/38, 49-50=-44/38, 48-49=-44/38, 47-48=-44/38, 46-47=-44/38, 45-46=-44/38, 43-45=-44/38, 42-43=-44/38, 41-42=-44/38, 40-41=-44/38, 39-40=-44/38, 38-39=-44/38, 36-38=-44/38, 35-36=-44/38, 34-35=-44/38, 33-34=-44/38, 32-33=-44/38, 31-32=-44/38, 30-31=-44/38, 29-30=-44/38, 28-29=-44/38

WEBS

16-39=-175/12, 15-40=-149/66,	
14-41=-139/75, 13-42=-140/71,	
12-43=-140/72, 11-45=-140/72,	
9-46=-140/72, 8-47=-140/72, 7-48=-140/72,	
6-49=-140/72, 5-50=-138/73, 4-51=-148/68,	
3-52=-78/140, 17-38=-149/63,	
18-36=-139/77, 19-35=-140/71,	
21-34=-140/72, 22-33=-140/72,	
23-32=-140/72, 24-31=-139/71,	
25-30=-146/76, 26-29=-107/83	

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.



July 21, 2023

Continued on page 3

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3
B220003	A10	Common Supported Gable	1	1	I59650785
					Job Reference (optional)

- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 53, 18 lb uplift at joint 28, 42 lb uplift at joint 40, 51 lb uplift at joint 41, 47 lb uplift at joint 42, 48 lb uplift at joint 43, 48 lb uplift at joint 45, 48 lb uplift at joint 46, 48 lb uplift at joint 47, 48 lb uplift at joint 48, 47 lb uplift at joint 49, 51 lb uplift at joint 50, 35 lb uplift at joint 51, 197 lb uplift at joint 52, 39 lb uplift at joint 38, 53 lb uplift at joint 36, 47 lb uplift at joint 35, 48 lb uplift at joint 34, 48 lb uplift at joint 33, 48 lb uplift at joint 32, 47 lb uplift at joint 31, 50 lb uplift at joint 30 and 76 lb uplift at joint 29.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

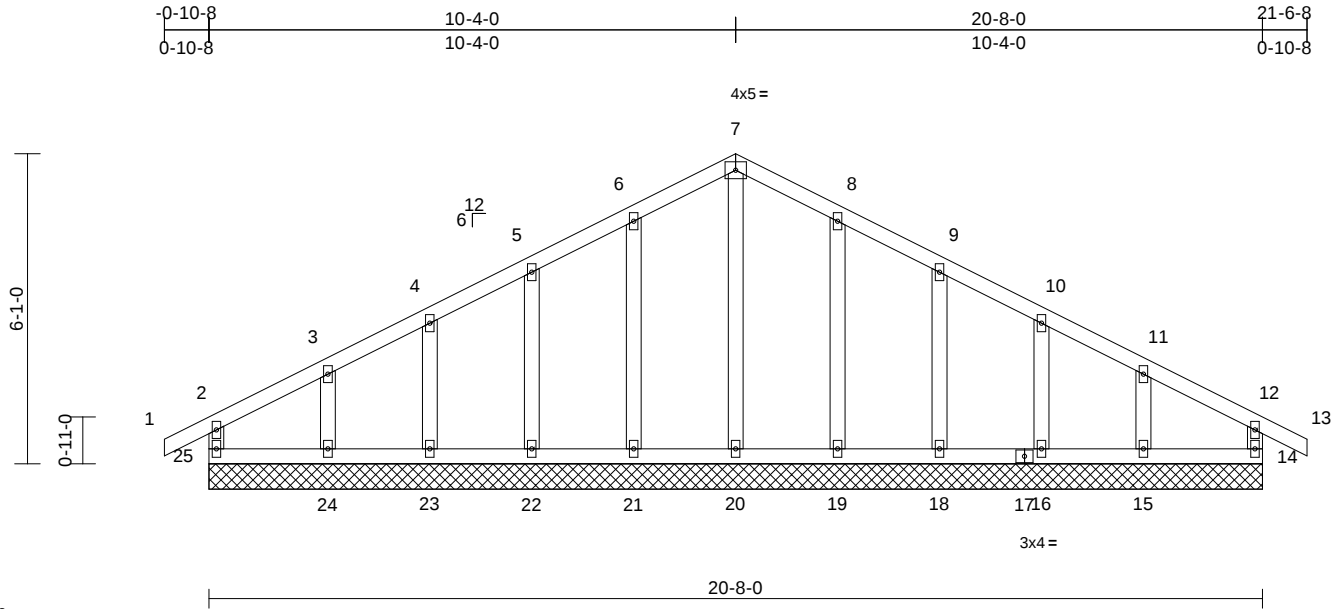
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650786
B220003	B1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 87 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS	(size)	14=20-8-0, 15=20-8-0, 16=20-8-0, 18=20-8-0, 19=20-8-0, 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0
	Max Horiz	25=-98 (LC 6)
	Max Uplift	14=-30 (LC 8), 15=-86 (LC 9), 16=-45 (LC 9), 18=-57 (LC 9), 19=-54 (LC 9), 21=-54 (LC 8), 22=-58 (LC 8), 23=-43 (LC 8), 24=-91 (LC 8), 25=-41 (LC 9)
	Max Grav	14=175 (LC 1), 15=187 (LC 22), 16=178 (LC 22), 18=179 (LC 1), 19=191 (LC 22), 20=177 (LC 18), 21=191 (LC 21), 22=179 (LC 1), 23=178 (LC 21), 24=187 (LC 21), 25=175 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-25=-155/48, 1-2=0/32, 2-3=-76/65, 3-4=-49/89, 4-5=-40/115, 5-6=-35/142, 6-7=-39/166, 7-8=-39/158, 8-9=-35/129, 9-10=-36/102, 10-11=-37/76, 11-12=-65/54, 12-13=0/32, 12-14=-155/40
BOT CHORD	24-25=-33/60, 23-24=-33/60, 22-23=-33/60, 21-22=-33/60, 20-21=-33/60, 19-20=-33/60, 18-19=-33/60, 16-18=-33/60, 15-16=-33/60, 14-15=-33/60
WEBS	7-20=-137/0, 6-21=-151/79, 5-22=-138/81, 4-23=-140/71, 3-24=-142/103, 8-19=-151/78, 9-18=-138/80, 10-16=-140/72, 11-15=-142/99

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 25, 30 lb uplift at joint 14, 54 lb uplift at joint 21, 58 lb uplift at joint 22, 43 lb uplift at joint 23, 91 lb uplift at joint 24, 54 lb uplift at joint 19, 57 lb uplift at joint 18, 45 lb uplift at joint 16 and 86 lb uplift at joint 15.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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Chesterfield, MO 63017

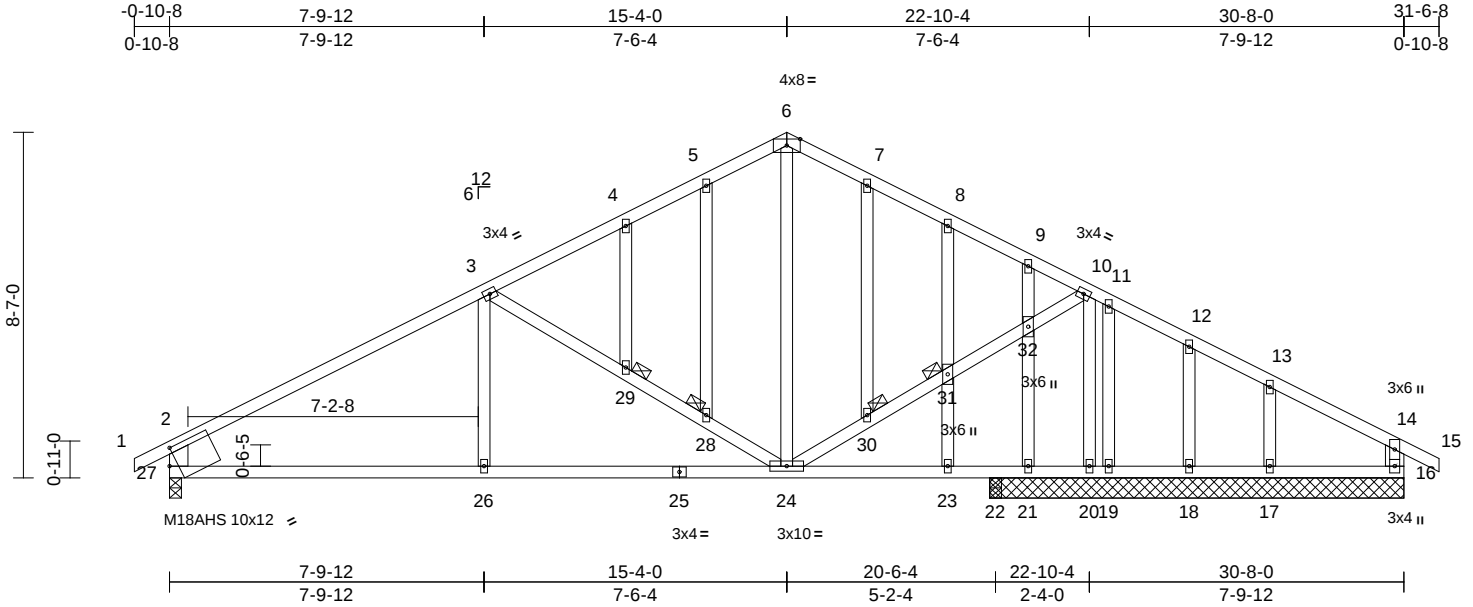
Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650787
B220003	B2	Common Structural Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 E Jul 10 2023 Print: 8.710 E Jul 10 2023 MiTek Industries, Inc. Thu Jul 20 15:30:23

Page: 1

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Scale = 1:57.2

Plate Offsets (X, Y): [27:0-2-7,0-4-14]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.09	24-26	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.20	24-26	>999	240	M18AHS 142/136
BCLL	0.0*	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	22	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	24-26	>999	240	Weight: 157 lb FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 27-2,16-14:2x6 SP 2400F 2.0E
OTHERS 2x4 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 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 26-27,24-26.

JOINTS
1 Brace at Jt(s): 28, 29, 30, 31

REACTIONS (lb/size)
16=-25/10-3-8, 17=390/10-3-8, 18=90/10-3-8, 19=347/10-3-8, 20=603/10-3-8, 21=45/10-3-8, 22=429/0-3-8, 27=994/0-3-8
Max Horiz 27=-132 (LC 6)
Max Uplift 16=-151 (LC 21), 17=-78 (LC 9), 18=-53 (LC 9), 19=-9 (LC 8), 20=-23 (LC 8), 21=-18 (LC 8), 22=-124 (LC 9), 27=-177 (LC 8)
Max Grav 16=91 (LC 22), 17=390 (LC 1), 18=125 (LC 22), 19=347 (LC 1), 20=603 (LC 1), 21=48 (LC 21), 22=437 (LC 22), 27=994 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1279/228, 3-4=-616/155, 4-5=-527/171, 5-6=-482/194, 6-7=-498/215, 7-8=-561/208, 8-9=-555/182, 9-10=-492/155, 10-11=0/244, 11-12=0/366, 12-13=0/337, 13-14=0/401, 14-15=0/35, 2-27=-901/221, 14-16=-81/149

BOT CHORD 26-27=-221/1018, 24-26=-221/1018, 23-24=-291/7, 22-23=-291/7, 21-22=-291/7, 20-21=-291/7, 19-20=-291/7, 18-19=-291/7, 17-18=-291/7, 16-17=-291/7
WEBS 6-24=-55/184, 24-30=-28/877, 30-31=-24/878, 31-32=-28/879, 10-32=-26/857, 10-20=-539/29, 3-29=-650/232, 28-29=-679/239, 24-28=-698/253, 3-26=0/304, 5-28=-36/27, 4-29=-62/14, 7-30=-35/39, 8-31=-159/92, 23-31=-170/95, 9-32=-246/74, 21-32=-289/86, 11-19=-332/29, 12-18=-102/75, 13-17=-283/109

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 27, 23 lb uplift at joint 20, 151 lb uplift at joint 16, 18 lb uplift at joint 21, 9 lb uplift at joint 19, 53 lb uplift at joint 18, 78 lb uplift at joint 17 and 124 lb uplift at joint 22.

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

LOAD CASE(S) Standard



July 21, 2023

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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



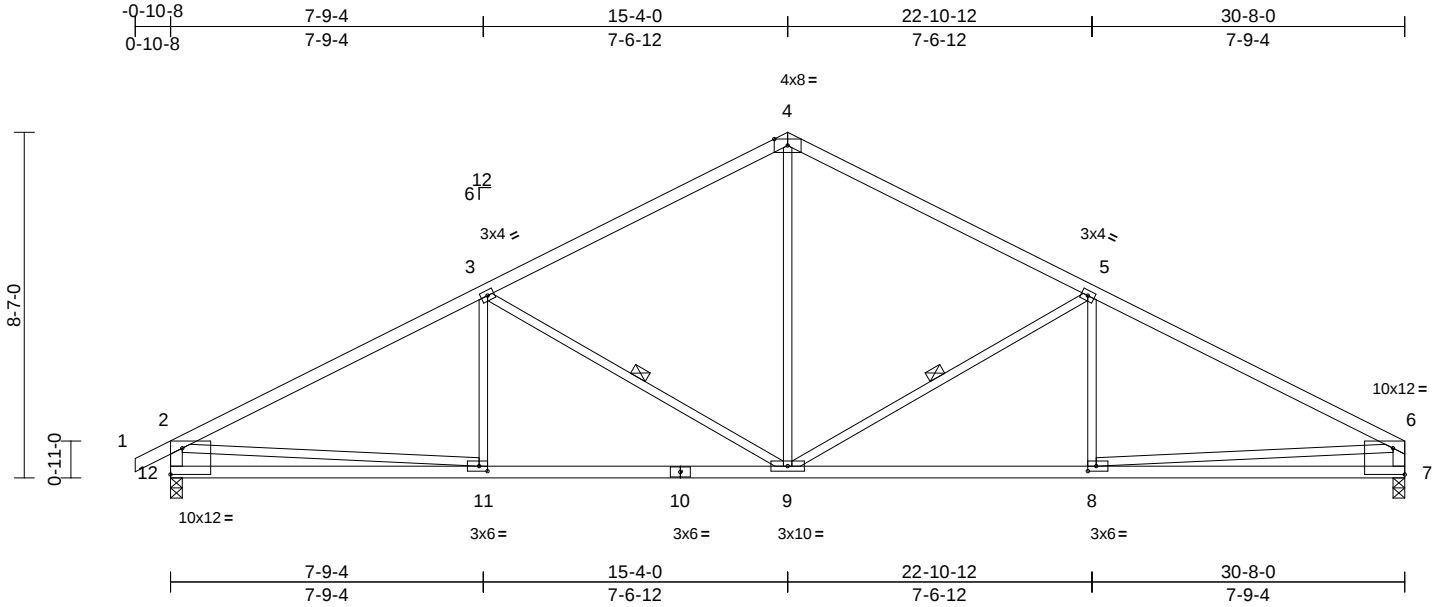
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650788
B220003	B3	Common	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:20
ID:51jDZGAP__1wWmr6zTqqU2z79LL-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwCDoi7J4zJC?f

Page: 1



Scale = 1:57.2

Plate Offsets (X, Y): [6:Edge,0-7-13], [8:0-2-8,0-1-8], [11:0-2-8,0-1-8], [12:Edge,0-7-13]

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	0.86	Vert(LL)	-0.11	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.23	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	8-9	>999	240	Weight: 116 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 12-2,7-6:2x4 SPF No.2

BRACING

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

WEBS 1 Row at midpt 5-9, 3-9

REACTIONS (size) 7=0-3-8, 12=0-3-8

Max Horiz 12=133 (LC 5)

Max Uplift 7=-169 (LC 9), 12=-192 (LC 8)

Max Grav 7=1366 (LC 1), 12=1440 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-2163/265, 3-4=-1567/246, 4-5=-1569/246, 5-6=-2165/265, 2-12=-1363/233, 6-7=-1288/209

BOT CHORD 11-12=-276/544, 9-11=-266/1830, 8-9=-159/1841, 7-8=-93/405

WEBS 4-9=-59/809, 5-9=-692/249, 5-8=0/232, 3-9=-679/245, 3-11=0/237, 2-11=-22/1291, 6-8=-70/1441

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 12 and 169 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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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



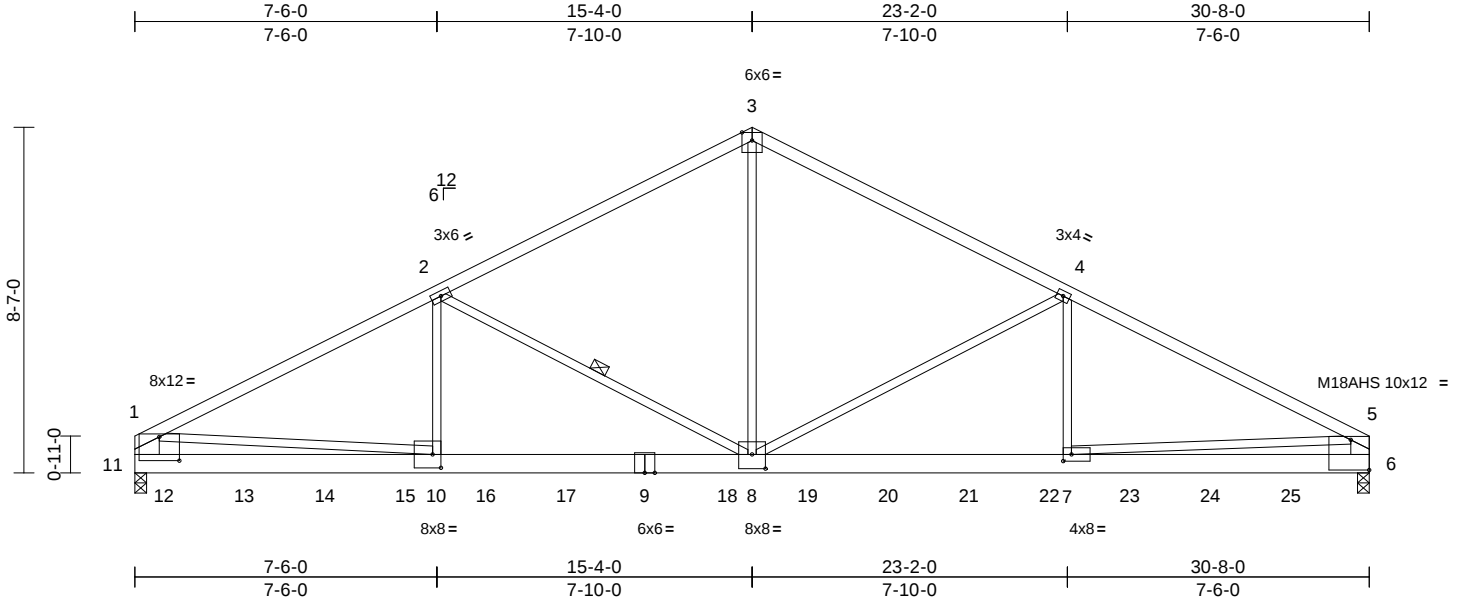
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650789
B220003	B4	Common Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:21
ID: i4BeL6NVgPVtu_w8GI61?xz?9J0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCD0i7J4zJC?f

Page: 1



Scale = 1:57.2

Plate Offsets (X, Y): [1:0-6-0,0-7-1], [5:Edge,0-9-0], [7:0-2-8,0-2-0], [8:0-4-0,0-4-4], [10:0-2-8,0-4-0]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.26 7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.28 8-10	>999	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.05 6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.12 7-8	>999	240	Weight: 283 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SP 2400F 2.0E *Except* 9-6:2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except* 11-1:2x8 SP 2400F 2.0E, 6-5:2x6 SP 2400F 2.0E

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

REACTIONS (size) 6=0-3-8, 11=0-3-8
Max Horiz 11=-123 (LC 4)
Max Uplift 6=-1956 (LC 28), 11=-188 (LC 8)
Max Grav 6=3764 (LC 16), 11=5564 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6759/1560, 2-3=-4465/1760, 3-4=-4466/1756, 4-5=-5940/3317, 1-11=-3535/759, 5-6=-3138/1600
BOT CHORD 10-11=-104/2533, 8-10=-1359/5950, 7-8=-2928/5218, 6-7=-826/1591
WEBS 3-8=-1784/3410, 4-8=-1629/1647, 4-7=-1752/1066, 2-8=-2415/295, 2-10=-111/1681, 1-10=-1420/3432, 5-7=-2110/3650

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.
Web 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 11 and 1956 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1069 lb down at 0-8-12, 1066 lb down at 2-8-12, 411 lb down and 185 lb up at 4-8-12, 411 lb down and 185 lb up at 6-8-12, 411 lb down and 185 lb up at 8-8-12, 411 lb down and 185 lb up at 10-8-12, 411 lb down and 185 lb up at 12-8-12, 411 lb down and 185 lb up at 14-8-12, 332 lb down and 530 lb up at 16-8-12, 332 lb down and 530 lb up at 18-8-12, 332 lb down and 530 lb up at 20-8-12, 332 lb down and 530 lb up at 22-8-12, 332 lb down and 530 lb up at 24-8-12, and 332 lb down and 530 lb up at 26-8-12, and 411 lb down and 185 lb up at 28-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 6-11=-20
Concentrated Loads (lb)
Vert: 9=-411 (B), 12=-1069 (B), 13=-1066 (B), 14=-411 (B), 15=-411 (B), 16=-411 (B), 17=-411 (B), 18=-411 (B), 19=-263 (B), 20=-263 (B), 21=-263 (B), 22=-263 (B), 23=-263 (B), 24=-263 (B), 25=-411 (B)



July 21, 2023

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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



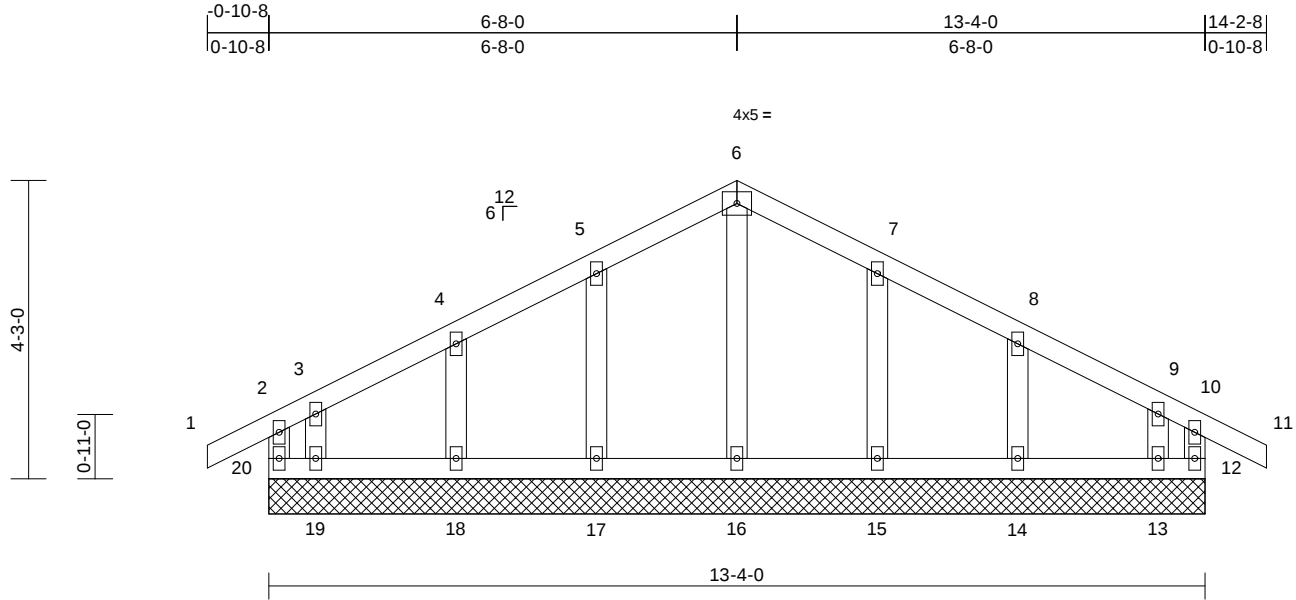
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	159650790
B220003	C1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:22
ID:u52ndZy23LuQUys7t3RXGLz?9Hm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 52 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS	(size)	12=13-4-0, 13=13-4-0, 14=13-4-0, 15=13-4-0, 16=13-4-0, 17=13-4-0, 18=13-4-0, 19=13-4-0, 20=13-4-0
	Max Horiz	20=75 (LC 6)
	Max Uplift	12=49 (LC 5), 13=79 (LC 9), 14=54 (LC 9), 15=57 (LC 9), 17=58 (LC 8), 18=54 (LC 8), 19=90 (LC 8), 20=71 (LC 4)
	Max Grav	12=115 (LC 22), 13=103 (LC 16), 14=184 (LC 1), 15=190 (LC 22), 16=174 (LC 1), 17=190 (LC 21), 18=184 (LC 1), 19=118 (LC 15), 20=119 (LC 16)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-20=-111/52, 1-2=0/32, 2-3=-55/40, 3-4=-36/60, 4-5=-26/78, 5-6=-30/103, 6-7=-30/95, 7-8=-26/69, 8-9=-28/54, 9-10=-44/28, 10-11=0/32, 10-12=-111/38
BOT CHORD	19-20=-28/43, 18-19=-28/43, 17-18=-28/43, 16-17=-28/43, 15-16=-28/43, 14-15=-28/43, 13-14=-28/43, 12-13=-28/43
WEBS	6-16=-134/0, 5-17=-150/81, 4-18=-143/80, 3-19=-70/77, 7-15=-150/81, 8-14=-143/80, 9-13=-63/71

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 20, 49 lb uplift at joint 12, 58 lb uplift at joint 17, 54 lb uplift at joint 18, 90 lb uplift at joint 19, 57 lb uplift at joint 15, 54 lb uplift at joint 14 and 79 lb uplift at joint 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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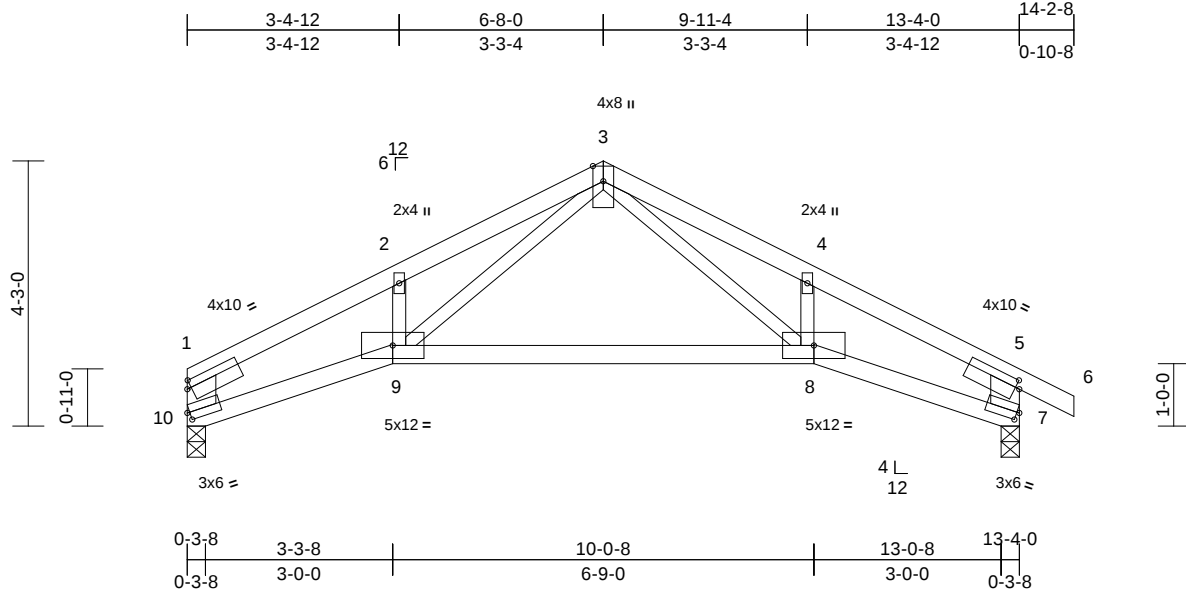
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650791
B220003	C2	Roof Special	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:22
ID:4CDyxK4xTjGslfBE1t86Dgz?9Hb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.9

Plate Offsets (X, Y): [1:0-0-13,0-1-8], [5:0-0-13,0-1-8], [7:0-0-8,0-1-8], [10:0-0-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.19	8-9	>820	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.42	8-9	>369	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.18	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.12	8-9	>999	240	Weight: 45 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 10-1,7-5:2x6 SP
2400F 2.0E

BRACING

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

REACTIONS (size) 7=0-3-8, 10=0-3-8
Max Horiz 10=-80 (LC 6)
Max Uplift 7=-96 (LC 9), 10=-70 (LC 8)
Max Grav 7=660 (LC 1), 10=576 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1125/136, 2-3=-997/218,
3-4=-1004/190, 4-5=-1153/105, 5-6=0/35,
1-10=-727/108, 5-7=-849/118
BOT CHORD 9-10=-118/915, 8-9=-26/615, 7-8=-47/936
WEBS 3-8=-112/410, 4-8=0/159, 3-9=-127/410,
2-9=-25/135

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.

- Bearing at joint(s) 10, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 10 and 96 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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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



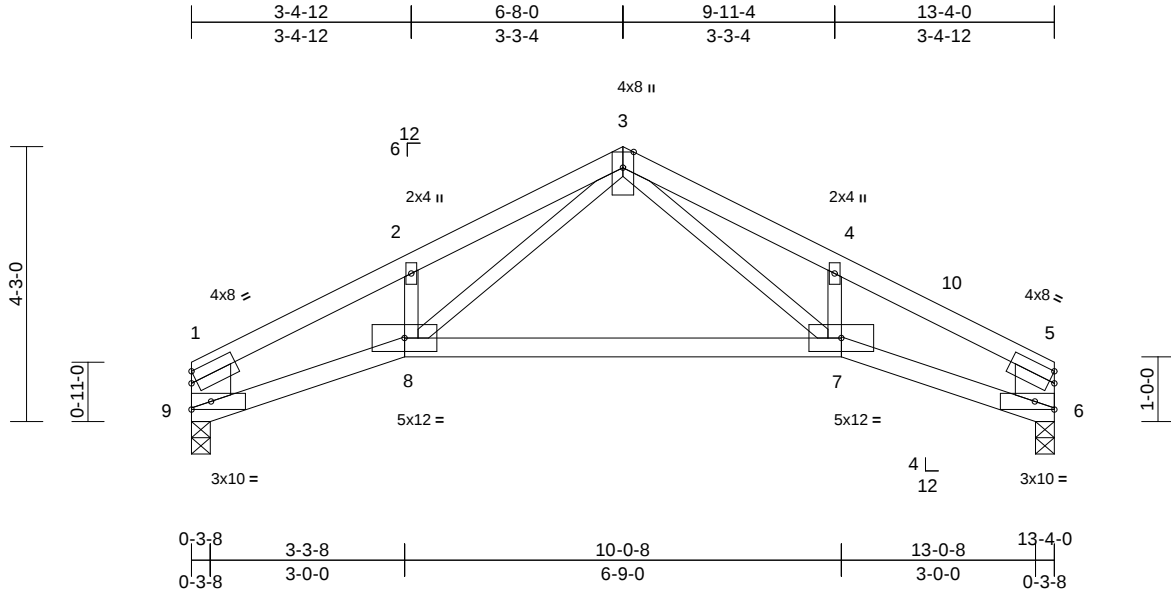
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	
B220003	C3	Roof Special	2	1	Job Reference (optional)	159650792

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:22
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Scale = 1:35.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.16	7-8	>932	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.41	7-8	>372	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.18	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.10	7-8	>999	240	Weight: 46 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 8-7:2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 9-1,6-5:2x8 SP 2400F 2.0E

BRACING

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

REACTIONS

(size)	6=0-3-8, 9=0-3-8
Max Horiz	9=69 (LC 5)
Max Uplift	9=-39 (LC 8)
Max Grav	6=905 (LC 2), 9=603 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-1184/67, 2-3=-1046/157, 3-4=-1320/0, 4-5=-1554/0, 1-9=-767/67, 5-6=-1131/0
BOT CHORD	8-9=-68/963, 7-8=0/675, 6-7=0/1202
WEBS	3-7=0/752, 4-7=-168/47, 3-8=-135/389, 2-8=0/162

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 9, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 9.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 8-9=-20, 7-8=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 10=-257
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor:
Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-58, 3-5=-58, 8-9=-20, 7-8=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 10=-467



July 21, 2023

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

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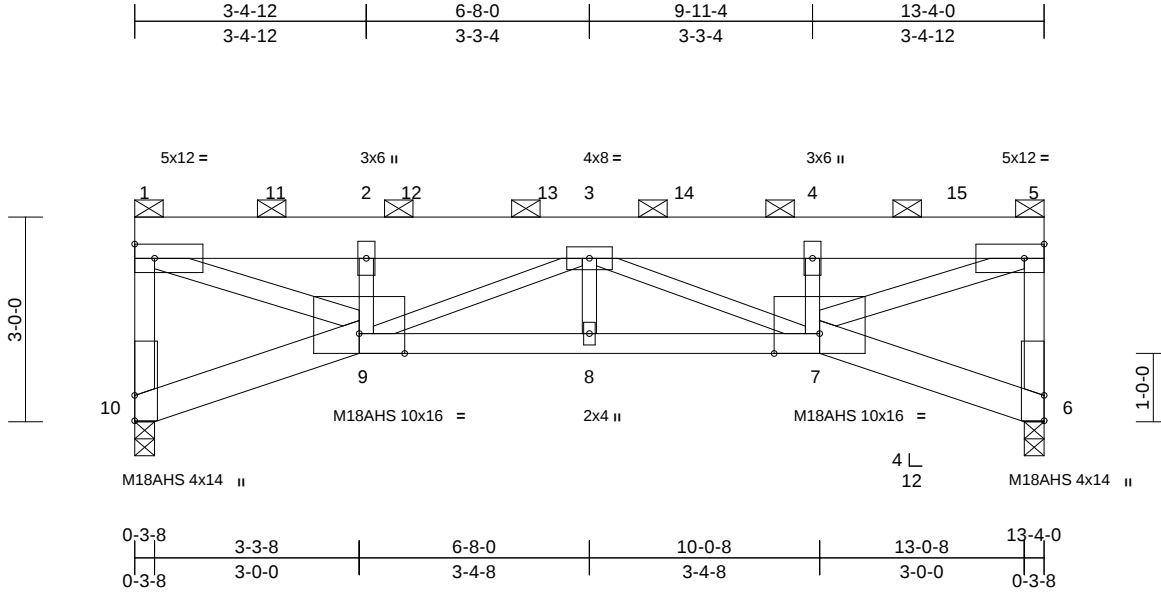
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	159650793
B220003	C4	Roof Special Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:23
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.16	8	>999	360	M18AHS	142/136
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.28	7-8	>568	240	MT20	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.17	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	8-9	>999	240	Weight: 171 lb	FT = 10%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except* 9-7:2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 10-1.5-6:2x4 SPF No.2, 9-1.7-5:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=0-3-8, 10=0-3-8
Max Horiz 10=-96 (LC 6)
Max Uplift 10=-249 (LC 4)
Max Grav 6=7921 (LC 15), 10=6356 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-6300/269, 1-2=-11556/354, 2-3=-11556/354, 3-4=-12510/0, 4-5=-12510/0, 5-6=-7857/0
BOT CHORD 9-10=-82/154, 8-9=-7/14765, 7-8=-7/14765, 6-7=-5/142
WEBS 1-9=-356/12656, 2-9=-3845/363, 4-7=-4782/0, 5-7=0/13720, 3-8=-18/89, 3-9=-3564/0, 3-7=-2475/965

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 10, 6 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 249 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2040 lb down and 165 lb up at 2-0-12, 2040 lb down and 165 lb up at 4-0-12, and 2040 lb down and 165 lb up at 6-0-12, and 2040 lb down and 165 lb up at 8-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-70, 9-10=-20, 7-9=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 4=-2506, 11=-1764, 12=-1764, 13=-1764, 14=-1764, 15=-2506



July 21, 2023

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

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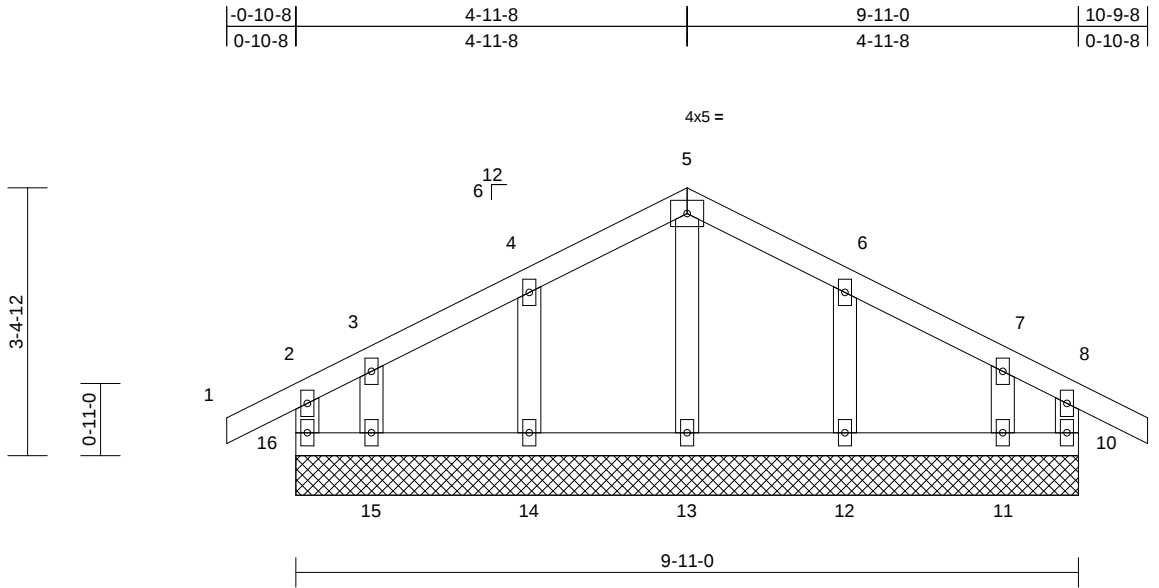
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	159650794
B220003	D1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66671,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:23
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	10	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 37 lb	FT = 10%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 9-11-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size)	10=9-11-0, 11=9-11-0, 12=9-11-0, 13=9-11-0, 14=9-11-0, 15=9-11-0, 16=9-11-0
	Max Horiz 16=64 (LC 6)
Max Uplift	10=38 (LC 5), 11=55 (LC 9), 12=59 (LC 9), 14=59 (LC 8), 15=59 (LC 8), 16=48 (LC 4)
	Max Grav 10=120 (LC 22), 11=108 (LC 16), 12=201 (LC 22), 13=175 (LC 1), 14=201 (LC 21), 15=114 (LC 15), 16=120 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension	
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TOP CHORD	2-16=-113/41, 1-2=0/32, 2-3=-29/37, 3-4=-21/63, 4-5=-27/78, 5-6=-27/73, 6-7=-18/60, 7-8=-24/33, 8-9=0/32, 8-10=-113/34
BOT CHORD	15-16=-29/36, 14-15=-29/36, 13-14=-29/36, 12-13=-29/36, 11-12=-29/36, 10-11=-29/36
WEBS	5-13=-136/0, 4-14=-159/85, 3-15=-76/65, 6-12=-159/85, 7-11=-76/63

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 16, 38 lb uplift at joint 10, 59 lb uplift at joint 14, 59 lb uplift at joint 15, 59 lb uplift at joint 12 and 55 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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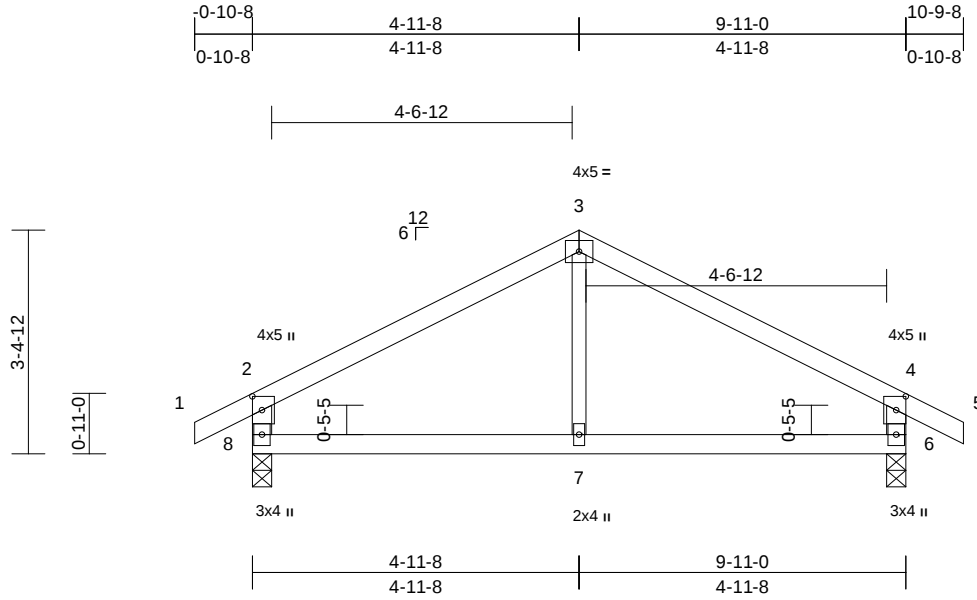
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650795
B220003	D2	Common	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:23
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Page: 1



Scale = 1:35

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.02	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	6-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	7-8	>999	240	Weight: 30 lb	FT = 10%

LUMBER

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

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

LOAD CASE(S) Standard

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) 6=0-3-8, 8=0-3-8

Max Horiz 8=-64 (LC 6)
Max Uplift 6=-76 (LC 9), 8=-76 (LC 8)
Max Grav 6=505 (LC 1), 8=505 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-473/75, 3-4=-473/75,
4-5=0/32, 2-8=-443/110, 4-6=-443/110

BOT CHORD 7-8=-6/343, 6-7=-6/343

WEBS 3-7=0/186

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 8 and 76 lb uplift at joint 6.



July 21, 2023

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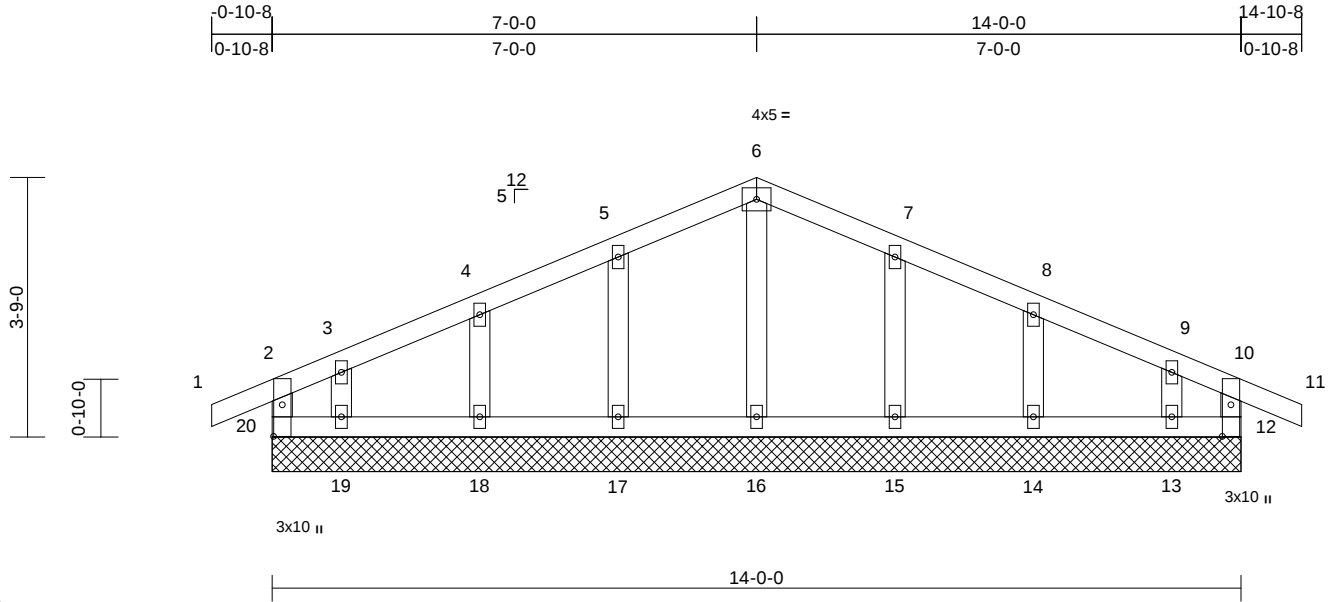
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	159650796
B220003	E1	Common Supported Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:24
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Scale = 1:33.3

Plate Offsets (X, Y): [12:0-5-8,0-1-8], [20:0-5-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	12	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							
Weight: 51 lb FT = 10%											

LUMBER

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

BRACING

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

REACTIONS (size)	12=14-0-0, 13=14-0-0, 14=14-0-0, 15=14-0-0, 16=14-0-0, 17=14-0-0, 18=14-0-0, 19=14-0-0, 20=14-0-0
Max Horiz	20=38 (LC 8)
Max Uplift	12=35 (LC 5), 13=53 (LC 9), 14=48 (LC 9), 15=52 (LC 9), 17=52 (LC 8), 18=47 (LC 8), 19=60 (LC 8), 20=36 (LC 4)
Max Grav	12=122 (LC 22), 13=109 (LC 1), 14=187 (LC 1), 15=189 (LC 22), 16=177 (LC 1), 17=189 (LC 21), 18=187 (LC 1), 19=109 (LC 1), 20=122 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-20=-113/41, 1-2=0/27, 2-3=-42/36, 3-4=-24/57, 4-5=-18/67, 5-6=-22/87, 6-7=-22/81, 7-8=-18/58, 8-9=-18/50, 9-10=-31/29, 10-11=0/27, 10-12=-113/40
BOT CHORD	19-20=-13/37, 18-19=-13/37, 17-18=-13/37, 16-17=-13/37, 15-16=-13/37, 14-15=-13/37, 13-14=-13/37, 12-13=-13/37
WEBS	6-16=-137/0, 5-17=-150/75, 4-18=-145/73, 3-19=-81/65, 7-15=-150/75, 8-14=-145/73, 9-13=-81/62

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 20, 35 lb uplift at joint 12, 52 lb uplift at joint 17, 47 lb uplift at joint 18, 60 lb uplift at joint 19, 52 lb uplift at joint 15, 48 lb uplift at joint 14 and 53 lb uplift at joint 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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

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



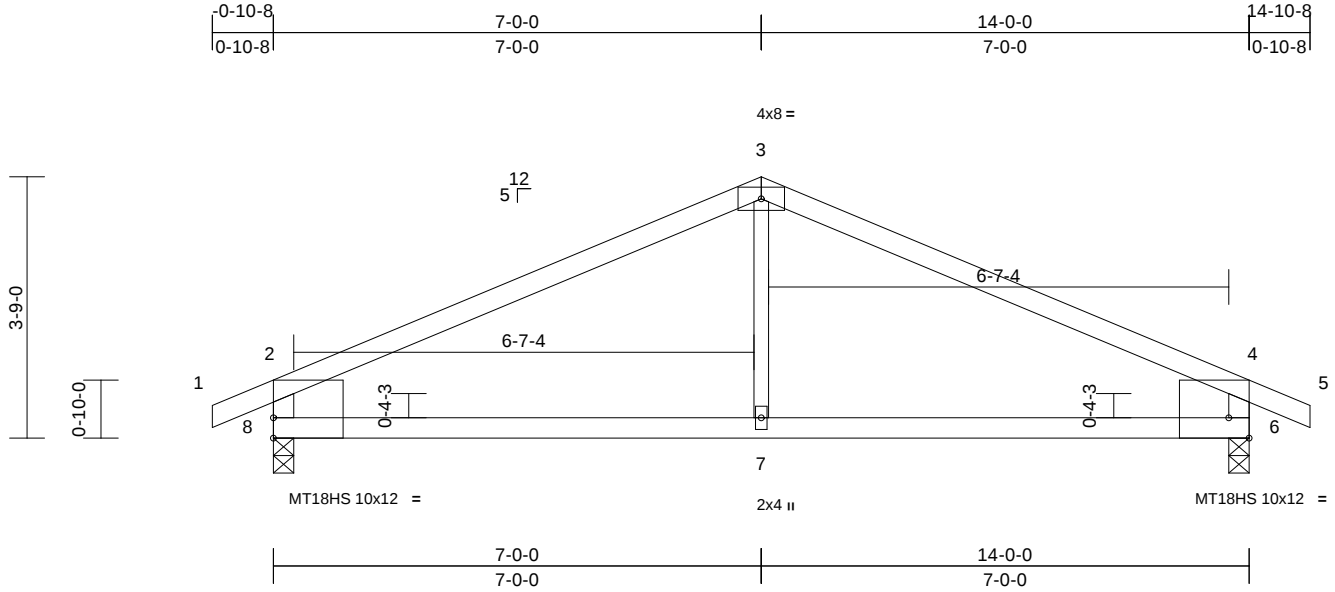
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	
B220003	E2	Common	5	1	Job Reference (optional)	I59650797

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:24
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Page: 1



Scale = 1:33.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.05	7-8	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.11	7-8	>999	240	MT18HS 197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	7-8	>999	240	Weight: 39 lb FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF 2400F 2.0E *Except* 7-3:2x3 SPF No.2

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

LOAD CASE(S) Standard

BRACING

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

REACTIONS (size) 6=0-3-8, 8=0-3-8
Max Horiz 8=38 (LC 8)
Max Uplift 6=-102 (LC 9), 8=-102 (LC 8)
Max Grav 6=688 (LC 1), 8=688 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/27, 2-3=-818/105, 3-4=-818/105, 4-5=0/27, 2-8=-619/148, 4-6=-619/148
BOT CHORD 7-8=-31/658, 6-7=-31/658
WEBS 3-7=0/284

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 8 and 102 lb uplift at joint 6.



July 21, 2023

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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



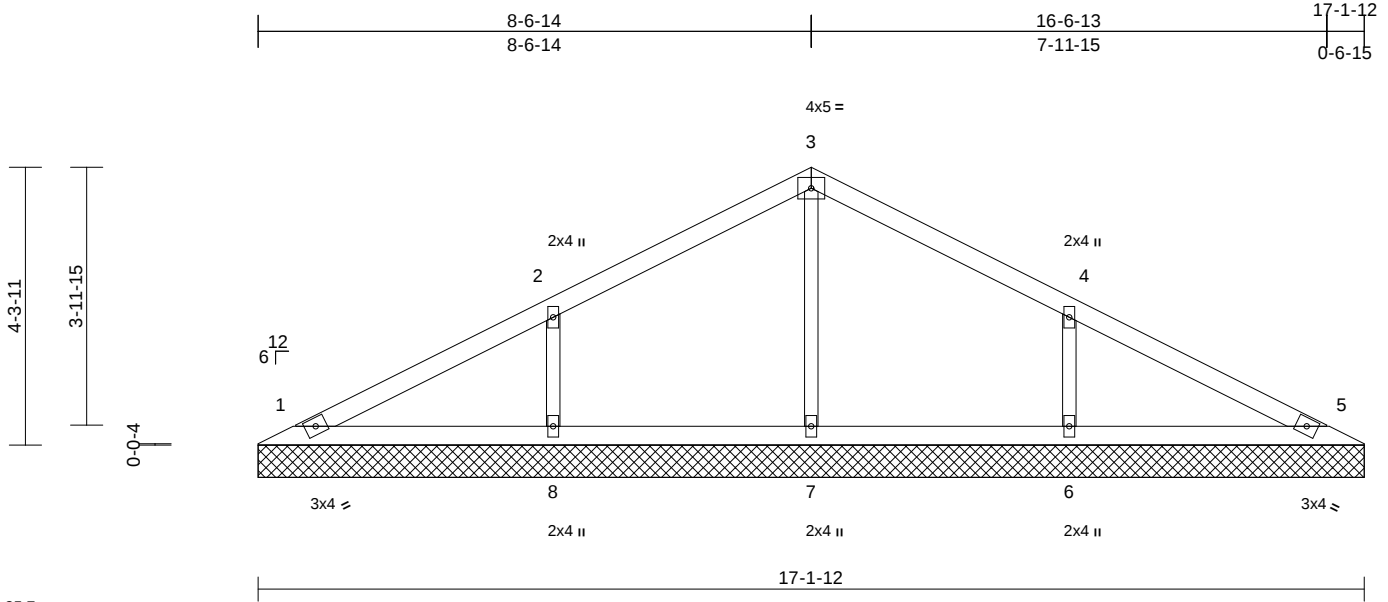
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	
B220003	V1	Valley	1	1	Job Reference (optional)	I59650798

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:24
ID:eSPkBPzZ9BcD5CG7K99jMbZ?A5O-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

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Scale = 1:35.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 46 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=17-1-12, 5=17-1-12, 6=17-1-12, 7=17-1-12, 8=17-1-12
Max Horiz	1=-70 (LC 13)
Max Uplift	1=-14 (LC 9), 5=-11 (LC 9), 6=-133 (LC 9), 8=-133 (LC 8)
Max Grav	1=154 (LC 1), 5=154 (LC 1), 6=430 (LC 22), 7=280 (LC 1), 8=430 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-97/64, 2-3=-107/102, 3-4=-107/87, 4-5=-75/52
BOT CHORD	1-8=-1/59, 7-8=-1/59, 6-7=-1/59, 5-6=-1/59
WEBS	3-7=-209/19, 2-8=-332/181, 4-6=-332/181

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1, 11 lb uplift at joint 5, 133 lb uplift at joint 8 and 133 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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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



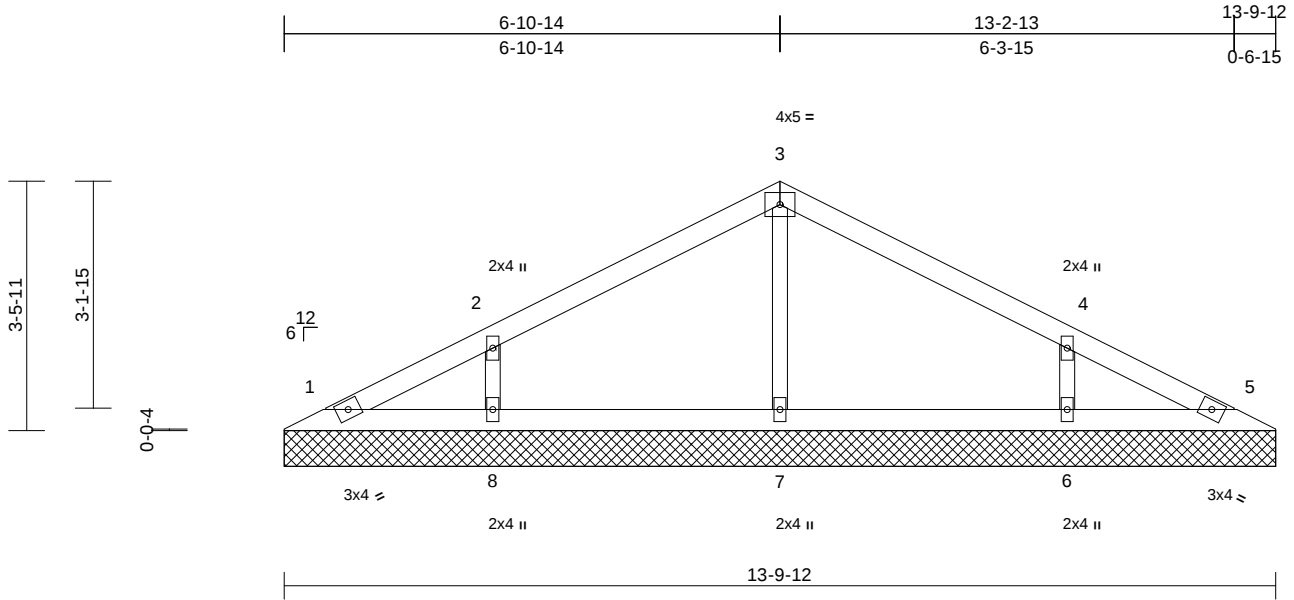
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	159650799
B220003	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:25
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 36 lb FT = 10%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=13-9-12, 5=13-9-12, 6=13-9-12, 7=13-9-12, 8=13-9-12
	Max Horiz	1=-56 (LC 9)
	Max Uplift	1=-10 (LC 9), 6=-111 (LC 9), 8=-111 (LC 8)
	Max Grav	1=75 (LC 1), 5=75 (LC 1), 6=347 (LC 22), 7=312 (LC 1), 8=347 (LC 21)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-77/38, 2-3=-106/82, 3-4=-106/66, 4-5=-60/29
BOT CHORD	1-8=0/51, 7-8=0/51, 6-7=0/51, 5-6=0/51
WEBS	3-7=-228/39, 2-8=-277/152, 4-6=-277/152

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1, 111 lb uplift at joint 8 and 111 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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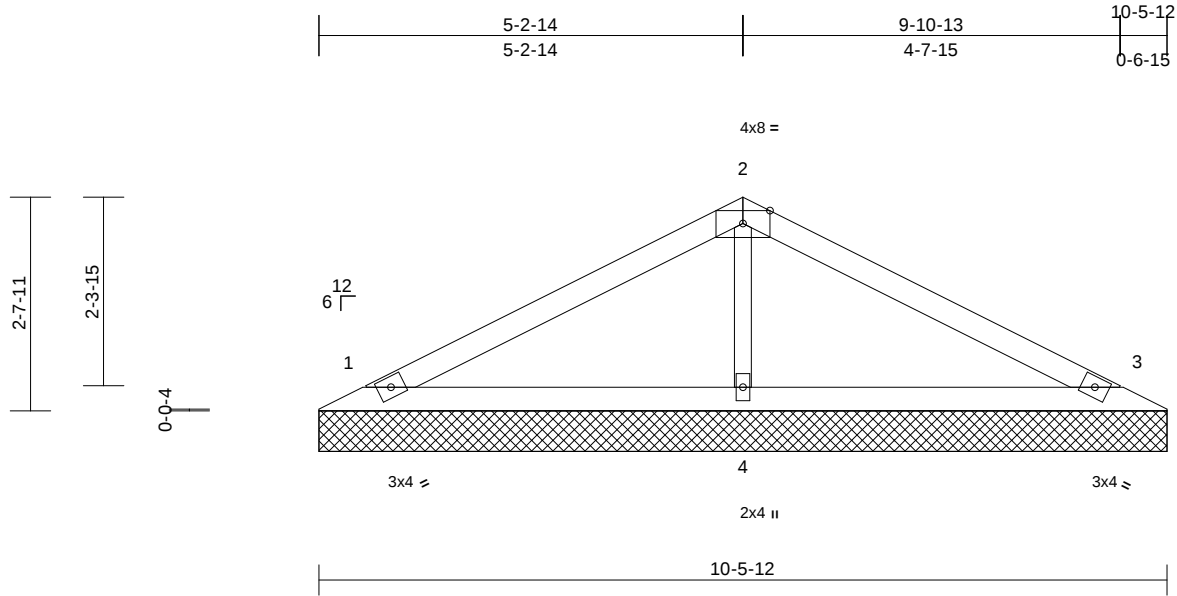
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	159650800
B220003	V3	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:25
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 25 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=10-5-12, 3=10-5-12, 4=10-5-12
	Max Horiz	1=41 (LC 12)
	Max Uplift	1=-40 (LC 8), 3=-48 (LC 9), 4=-25 (LC 8)
	Max Grav	1=197 (LC 21), 3=197 (LC 22), 4=444 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-120/60, 2-3=-120/43
BOT CHORD	1-4=-3/50, 3-4=-3/50
WEBS	2-4=-303/79

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1, 48 lb uplift at joint 3 and 25 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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



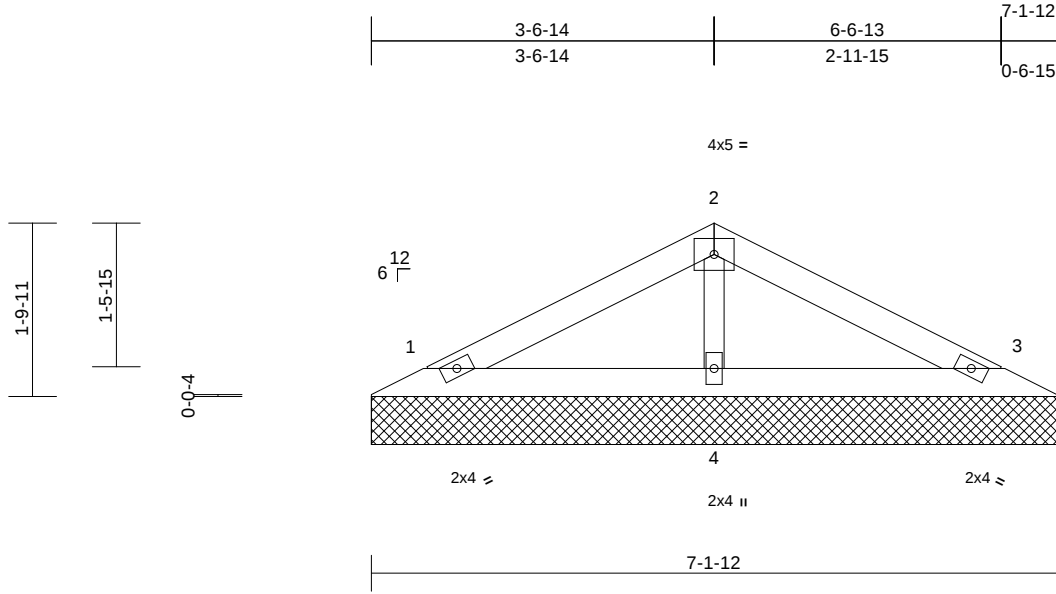
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	
B220003	V4	Valley	1	1	Job Reference (optional)	I59650801

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:25
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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb FT = 10%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=7-1-12, 3=7-1-12, 4=7-1-12
Max Horiz	1=26 (LC 8)
Max Uplift	1=-32 (LC 8), 3=-37 (LC 9), 4=-3 (LC 8)
Max Grav	1=140 (LC 1), 3=140 (LC 1), 4=257 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-67/37, 2-3=-67/27
BOT CHORD	1-4=-1/30, 3-4=-1/30
WEBS	2-4=-182/48

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 1, 37 lb uplift at joint 3 and 3 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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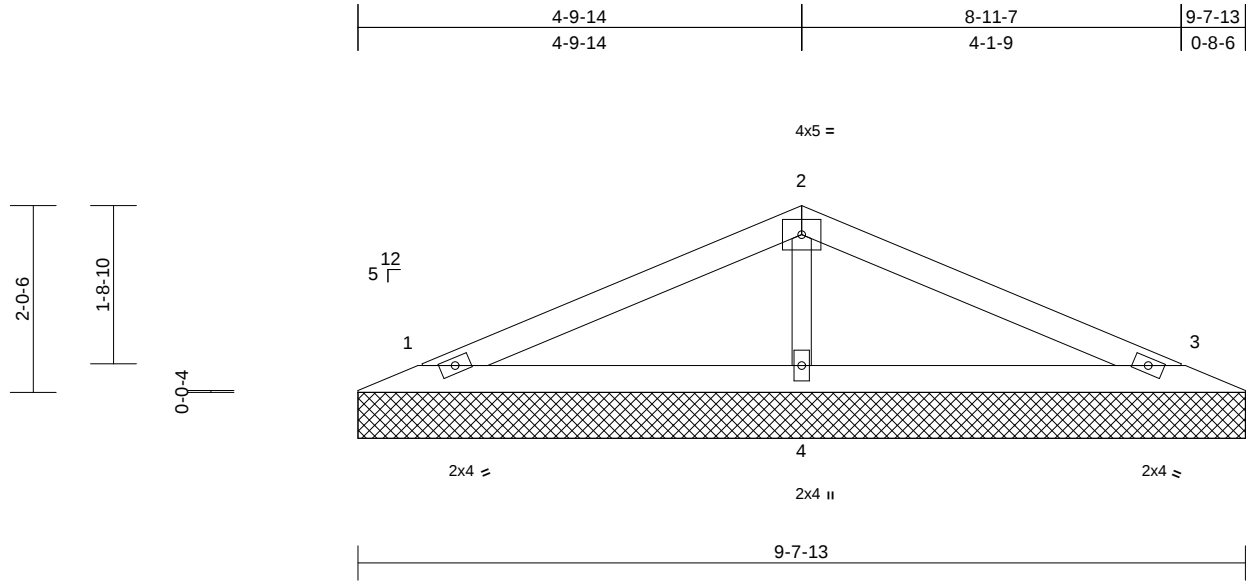
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	
B220003	V5	Valley	1	1	Job Reference (optional)	I59650802

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:25
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Page: 1



Scale = 1:25.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 22 lb FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 1=9-7-13, 3=9-7-13, 4=9-7-13
Max Horiz 1=30 (LC 12)
Max Uplift 1=-35 (LC 8), 3=-40 (LC 9), 4=-26 (LC 8)
Max Grav 1=170 (LC 21), 3=170 (LC 22), 4=408 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-87/45, 2-3=-87/34
BOT CHORD 1-4=-2/35, 3-4=-2/35
WEBS 2-4=-284/75

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 1, 40 lb uplift at joint 3 and 26 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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



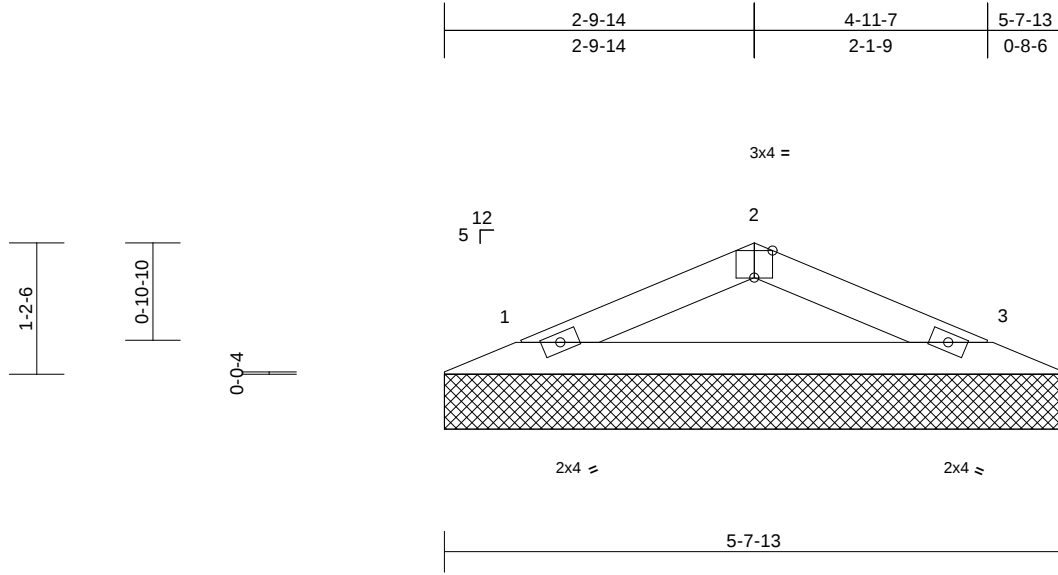
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650803
B220003	V6	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:26
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							
										Weight: 12 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size) 1=5-7-13, 3=5-7-13
Max Horiz 1=16 (LC 8)
Max Uplift 1=-25 (LC 8), 3=-25 (LC 9)
Max Grav 1=191 (LC 1), 3=191 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-214/63, 2-3=-214/63
BOT CHORD 1-3=-44/176

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1 and 25 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

NOTES

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



July 21, 2023

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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



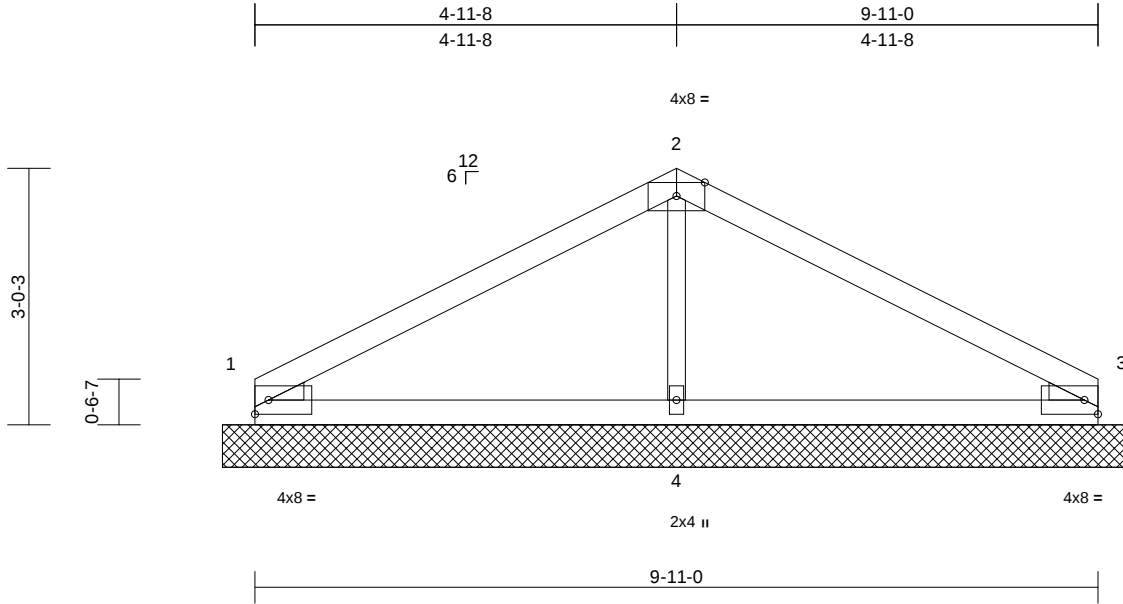
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	I59650804
B220003	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:26
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 27 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 1=10-8-3, 3=10-8-3, 4=10-8-3
Max Horiz 1=-48 (LC 13)
Max Uplift 1=-43 (LC 8), 3=-52 (LC 9), 4=-24 (LC 8)
Max Grav 1=215 (LC 1), 3=215 (LC 1), 4=463 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-141/69, 2-3=-141/51
BOT CHORD 1-4=-3/59, 3-4=-3/59
WEBS 2-4=-313/81

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 1, 52 lb uplift at joint 3 and 24 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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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



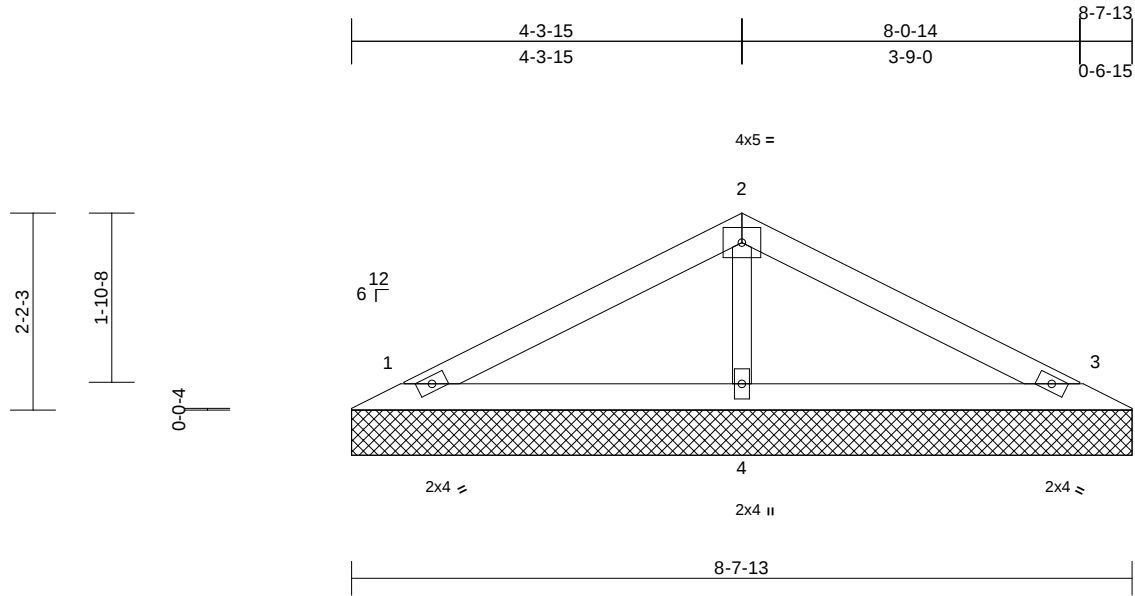
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 75 H3	
B220003	V8	Valley	1	1	Job Reference (optional)	I59650805

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:26
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Scale = 1:25.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							
										Weight: 21 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=8-7-13, 3=8-7-13, 4=8-7-13
	Max Horiz	1=33 (LC 8)
	Max Uplift	1=-40 (LC 8), 3=-46 (LC 9), 4=-4 (LC 8)
	Max Grav	1=176 (LC 1), 3=176 (LC 1), 4=322 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-84/47, 2-3=-84/33
BOT CHORD	1-4=-1/37, 3-4=-1/37
WEBS	2-4=-228/60

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1, 46 lb uplift at joint 3 and 4 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 21, 2023

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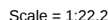
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS - 66871, Run: 8.71 S May 19 2023 Print: 8.710 S May 19 2023 MiTek Industries, Inc. Thu Jul 20 10:16:26 Page: 1
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LUMBER

BRACING

REACTIONS (size) 1=5-3-13, 3=5-3-13, 4=5-3-13
 Max Horiz 1=18 (LC 8)
 Max Uplift 1=22 (LC 8), 3=26 (LC 9), 4=26 (LC 8)
 Max Grav 1=97 (LC 1), 3=97 (LC 1), 4=178 (LC 1)

TOP CHORD 1-2=-47/26, 2-3=-47/19
BOT CHORD 1-4=-1/21, 3-4=-1/21
WFRS 2-4=-126/33

NOTES

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

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1, 26 lb uplift at joint 3 and 2 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1

LOAD CASE(S) Standard



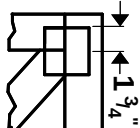
Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



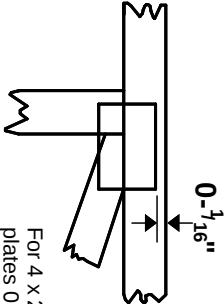
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{3}{16}$ " from outside edge of truss.

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

*** Plate location details available in MiTek 2012 software or upon request.**

PLATE SIZE

4 X 4

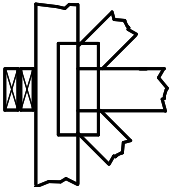
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



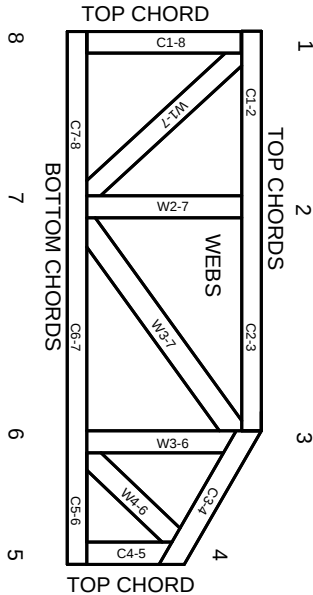
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.