



RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/22/2023

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

Re: B230083
Lot 113 H4

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: I58592455 thru I58592494

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

Missouri COA: Engineering 001193



Scott Sevier

May 26, 2023

Sevier, Scott, Engineer

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

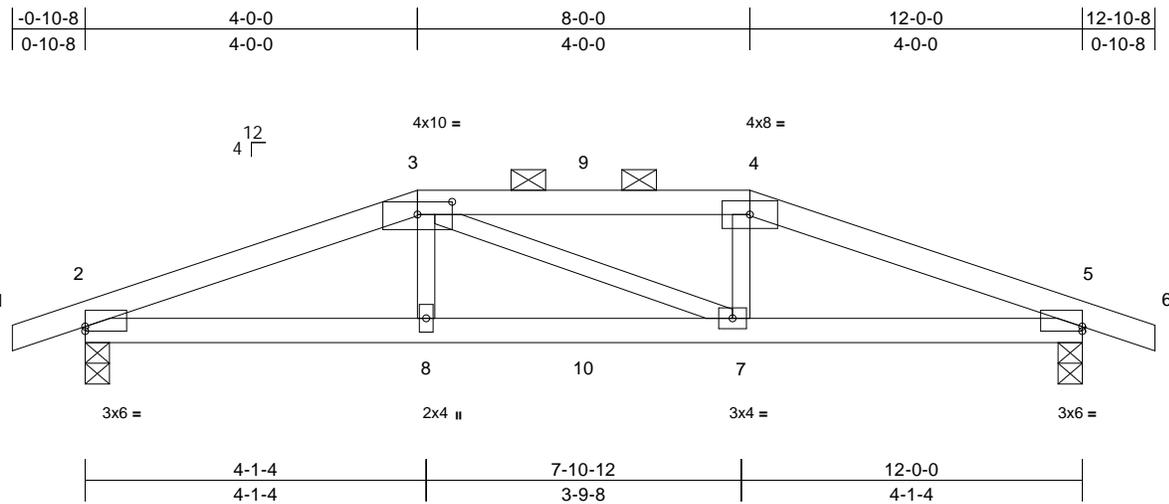
Job B230083	Truss A1	Truss Type Hip Girder	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	--------------------------	----------	----------	------------

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
 158592455
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:26 Page: 1
 ID:eIVzmttrvqeWtykiiM9UhzAKds-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J423C7

06/22/2023



Scale = 1:27.6

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

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	0.47	Vert(LL)	-0.06	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.10	7-8	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	7-8	>999	240	Weight: 35 lb	FT = 10%

- LUMBER**
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2
- BRACING**
 TOP CHORD Structural wood sheathing directly applied or 4-1-6 oc purlins, except 2-0-0 oc purlins (4-0-10 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied or 9-8-11 oc bracing.
- REACTIONS** (size) 2=0-3-8, 5=0-3-8
 Max Horiz 2=29 (LC 27)
 Max Uplift 2=-232 (LC 4), 5=-232 (LC 5)
 Max Grav 2=897 (LC 1), 5=897 (LC 1)
- FORCES** (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/6, 2-3=-1822/421, 3-4=-1668/413, 4-5=-1823/421, 5-6=0/6
 BOT CHORD 2-8=-369/1647, 7-8=-369/1667, 5-7=-350/1648
 WEBS 3-8=0/314, 3-7=-75/77, 4-7=-6/323

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 2 and 232 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) 83 lb down and 64 lb up at 4-0-0, and 83 lb down and 63 lb up at 6-0-0, and 83 lb down and 64 lb up at 8-0-0 on top chord, and 210 lb down and 50 lb up at 4-0-0, and 36 lb down at 6-0-0, and 210 lb down and 50 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-70, 3-4=-70, 4-6=-70, 2-5=-20
 Concentrated Loads (lb)
 Vert: 3=-53 (F), 4=-53 (F), 8=-210 (F), 7=-210 (F), 9=-53 (F), 10=-18 (F)

- 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



May 26, 2023

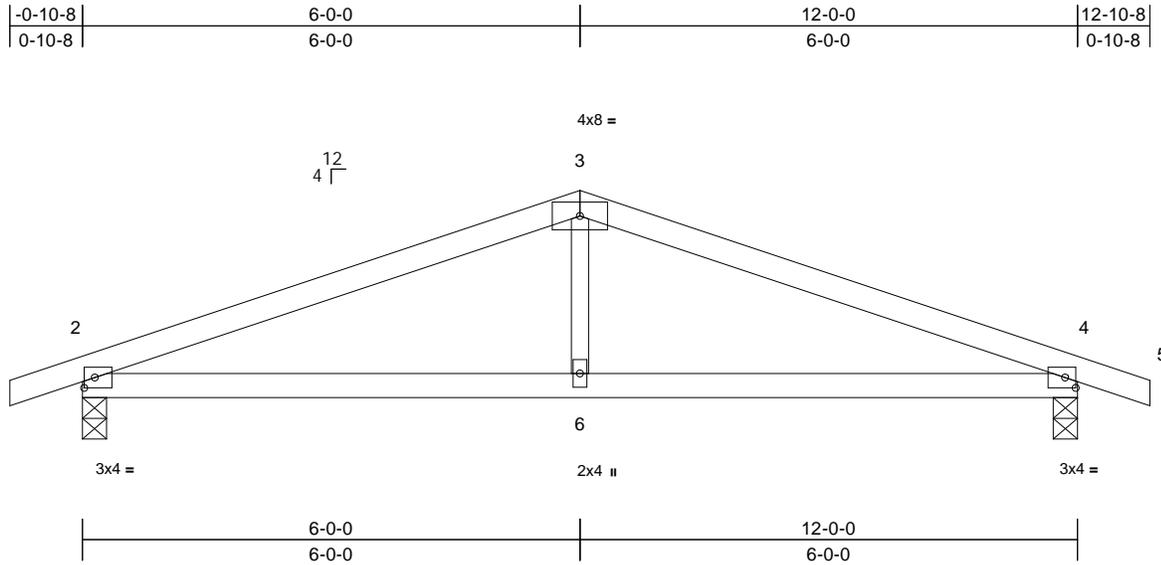
Job B230083	Truss A2	Truss Type Common	Qty 4	Ply 1	Lot 113 H4
----------------	-------------	----------------------	----------	----------	------------

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592456
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:28 Page: 1
ID:eIVzmttrvqeWtykiiM9UhzAKds-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J423C?

06/22/2023



Scale = 1:27.7

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

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	0.50	Vert(LL)	-0.03	4-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.08	4-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	2-6	>999	240	Weight: 32 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 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 5-0-8 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4=0-3-8
 Max Horiz 2=-40 (LC 13)
 Max Uplift 2=-121 (LC 4), 4=-121 (LC 5)
 Max Grav 2=598 (LC 1), 4=598 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/6, 2-3=-914/107, 3-4=-914/107, 4-5=0/6
 BOT CHORD 2-6=-57/791, 4-6=-57/791
 WEBS 3-6=0/281

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 2 and 121 lb uplift at joint 4.



May 26, 2023

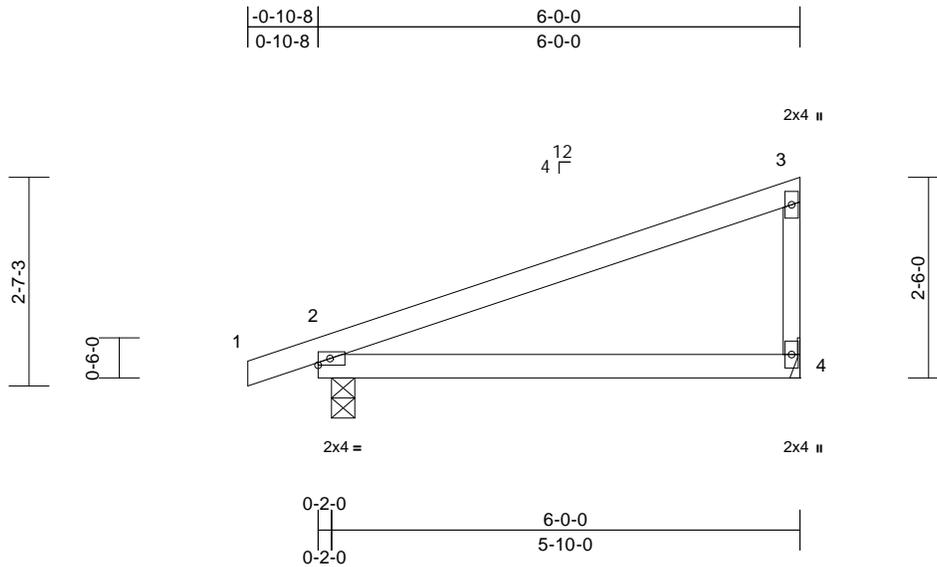
Job B230083	Truss B1	Truss Type Monopitch	Qty 9	Ply 1	Lot 113 H4
----------------	-------------	-------------------------	----------	----------	------------

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592457 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:28 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwTCDoi7JzJCA

06/22/2023



Scale = 1:28.5

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	0.61	Vert(LL)	-0.07	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.13	2-4	>526	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-3-8, 4= Mechanical
Max Horiz 2=98 (LC 7)
Max Uplift 2=-88 (LC 4), 4=-55 (LC 8)
Max Grav 2=337 (LC 1), 4=252 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-87/55, 3-4=-195/89
BOT CHORD 2-4=-31/23

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 4 and 88 lb uplift at joint 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



May 26, 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



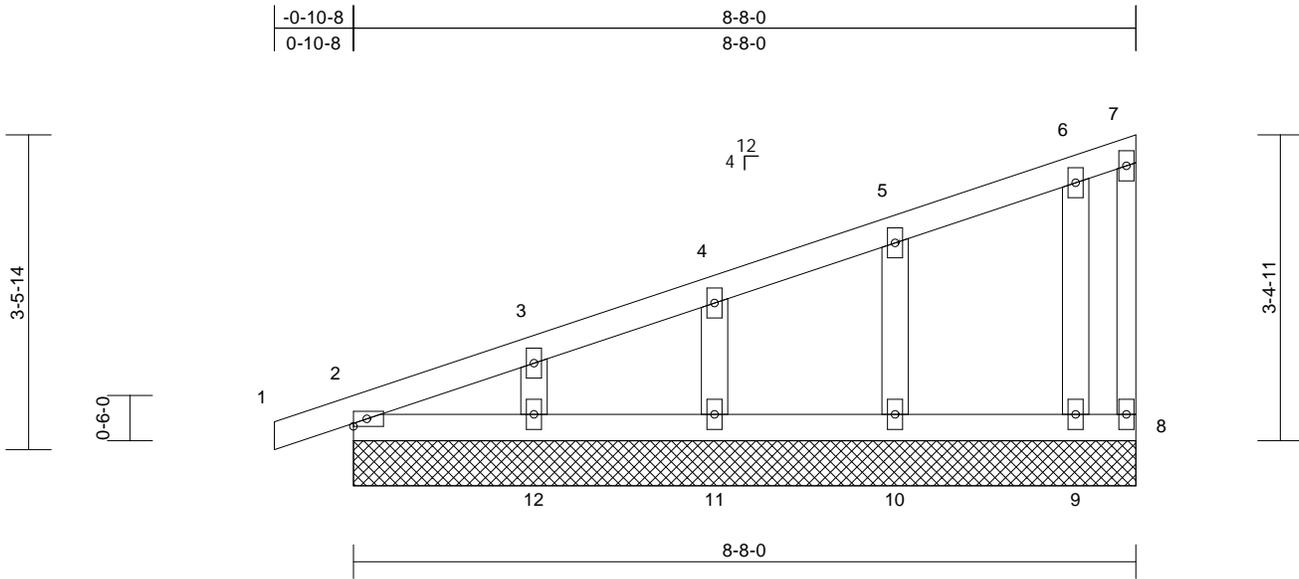
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B230083	Truss C1	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	---	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:28 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwrcDoi7JzJCA

06/22/2023



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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 31 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size)

2=8-8-0, 8=8-8-0, 9=8-8-0, 10=8-8-0, 11=8-8-0, 12=8-8-0
Max Horiz 2=138 (LC 5)
Max Uplift 2=-27 (LC 4), 8=-17 (LC 7), 9=-30 (LC 4), 10=-46 (LC 8), 11=-43 (LC 4), 12=-51 (LC 8)
Max Grav 2=149 (LC 1), 8=10 (LC 4), 9=141 (LC 1), 10=189 (LC 1), 11=177 (LC 1), 12=183 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/6, 2-3=-113/27, 3-4=-85/22, 4-5=-72/23, 5-6=-61/20, 6-7=-49/35, 7-8=-12/13
BOT CHORD	2-12=-43/33, 11-12=-43/33, 10-11=-43/33, 9-10=-43/33, 8-9=-43/33
WEBS	3-12=-138/78, 4-11=-139/66, 5-10=-147/71, 6-9=-108/50

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

- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 8, 27 lb uplift at joint 2, 51 lb uplift at joint 12, 43 lb uplift at joint 11, 46 lb uplift at joint 10 and 30 lb uplift at joint 9.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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



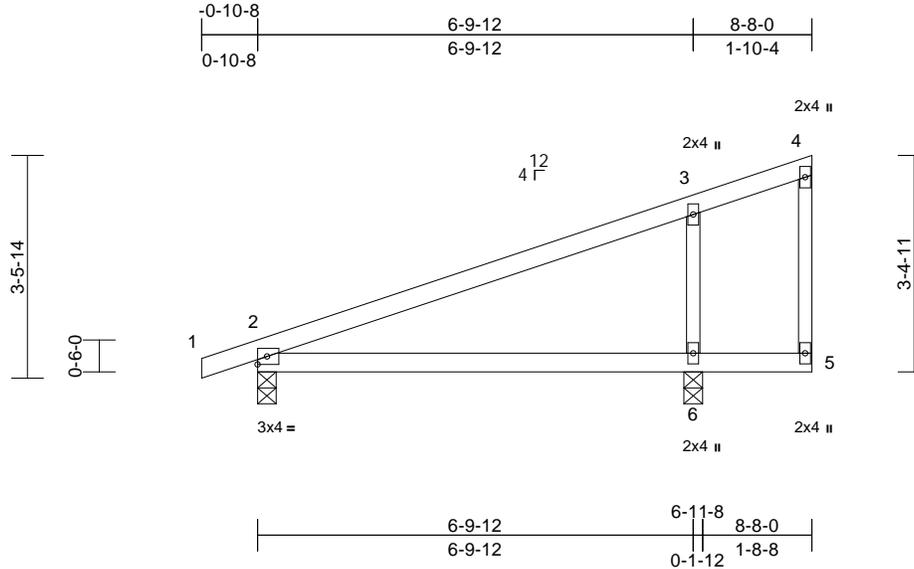
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job B230083	Truss C2	Truss Type Monopitch	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	-------------------------	----------	----------	------------

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:29 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



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	0.57	Vert(LL)	-0.06	2-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.15	2-6	>523	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	2-6	>999	240	Weight: 26 lb	FT = 10%

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

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

REACTIONS (size) 2=0-3-8, 6=0-3-8
 Max Horiz 2=138 (LC 5)
 Max Uplift 2=-85 (LC 4), 6=-102 (LC 8)
 Max Grav 2=356 (LC 1), 6=473 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/6, 2-3=-148/57, 3-4=-88/47, 4-5=-26/31
 BOT CHORD 2-6=-30/27, 5-6=-30/27
 WEBS 3-6=-389/189

- NOTES**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 2 and 102 lb uplift at joint 6.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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 B230083	Truss C3	Truss Type Monopitch	Qty 8	Ply 1	Lot 113 H4
----------------	-------------	-------------------------	----------	----------	------------

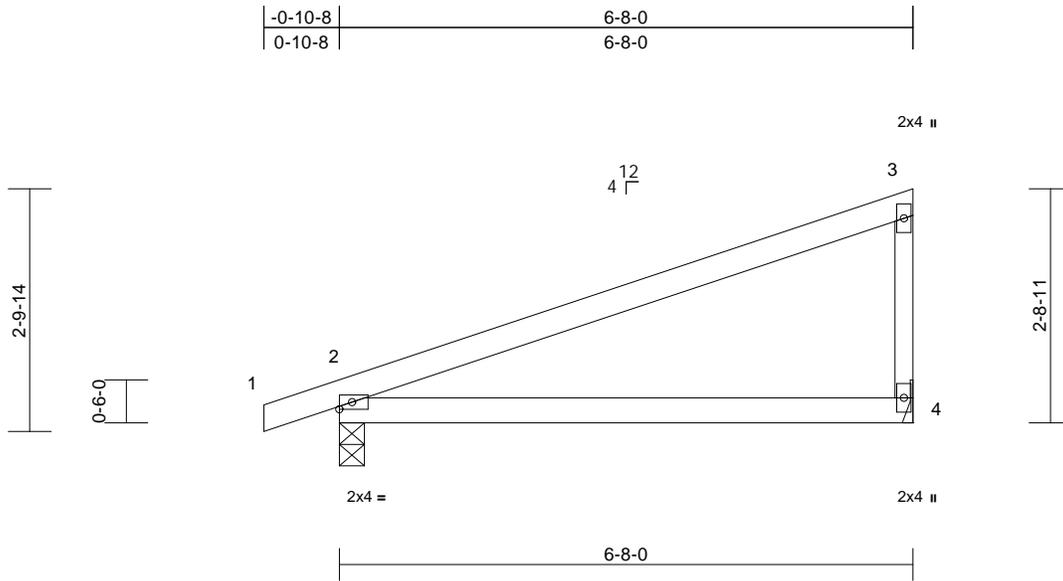
AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592460 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:29 Page: 1

ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:26.6

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	0.78	Vert(LL)	-0.10	2-4	>757	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.20	2-4	>379	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 2=0-3-8, 4= Mechanical
Max Horiz 2=108 (LC 5)
Max Uplift 2=-92 (LC 4), 4=-61 (LC 8)
Max Grav 2=366 (LC 1), 4=283 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-95/61, 3-4=-219/100
BOT CHORD 2-4=-34/26

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 4 and 92 lb uplift at joint 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



May 26, 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 B230083	Truss C4	Truss Type Monopitch	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	-------------------------	----------	----------	------------

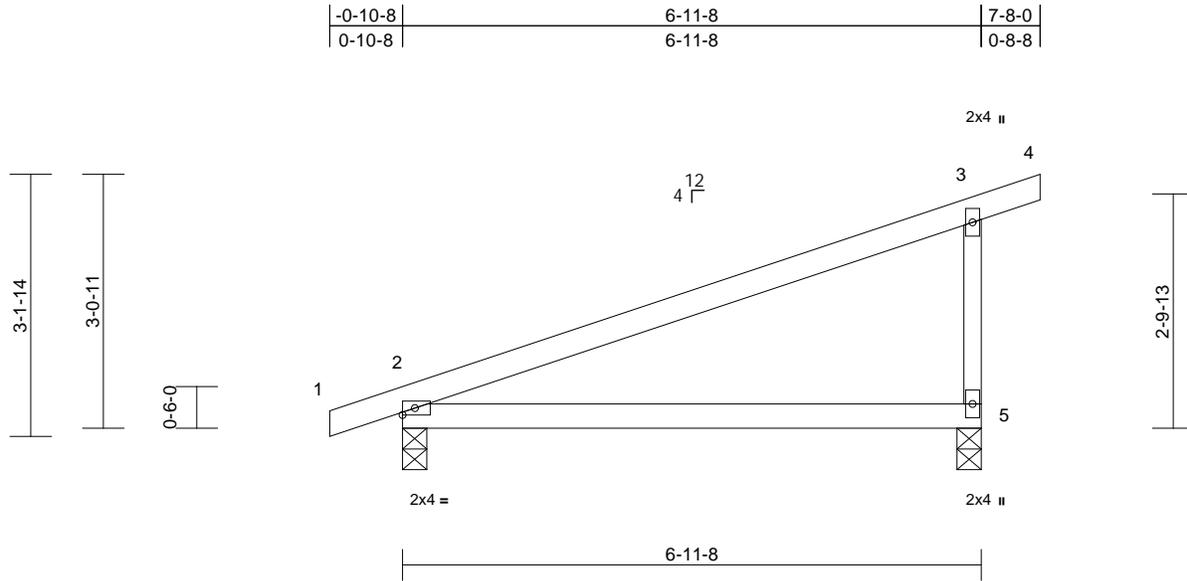
AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592461 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:29 Page: 1

ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:27.6

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	0.84	Vert(LL)	-0.12	2-5	>663	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.24	2-5	>331	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 10%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 5=0-3-8
 Max Horiz 2=124 (LC 5)
 Max Uplift 2=-89 (LC 4), 5=-88 (LC 8)
 Max Grav 2=375 (LC 1), 5=357 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-103/65, 3-4=-18/0,
 3-5=-290/128
 BOT CHORD 2-5=-35/27

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 5 and 89 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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 B230083	Truss C5	Truss Type Monopitch Structural Gable	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	--	----------	----------	--

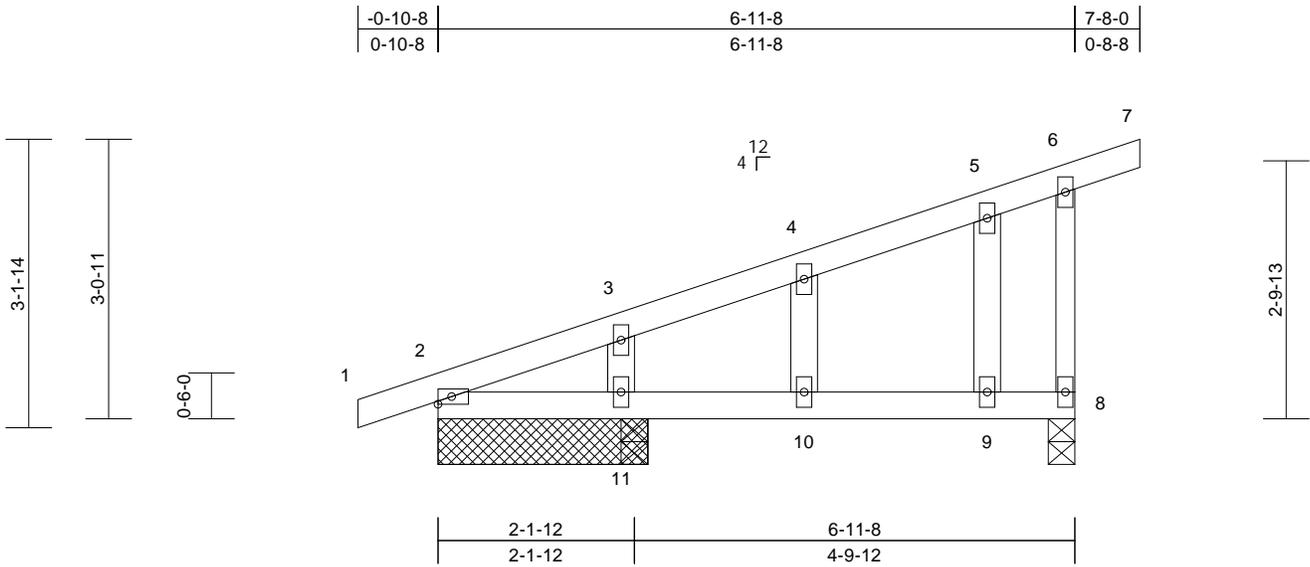
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592462
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:29 Page: 1

ID:lpnO10ZFf1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwTrCDoi7JzJCA

06/22/2023



Scale = 1:25

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	0.15	Vert(LL)	-0.02	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	9-10	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 25 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
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) 2=2-3-8, 8=0-3-8, 11=2-3-8
Max Horiz 2=124 (LC 5)
Max Uplift 2=-17 (LC 4), 8=-60 (LC 8), 11=-99 (LC 8)
Max Grav 2=91 (LC 1), 8=250 (LC 1), 11=395 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-102/16, 3-4=-101/0, 4-5=-69/0, 5-6=-45/12, 6-7=-18/0, 6-8=-164/52
BOT CHORD 2-11=-29/23, 10-11=-29/23, 9-10=-29/23, 8-9=-29/23
WEBS 3-11=-240/98, 4-10=-55/48, 5-9=-30/27

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 8, 17 lb uplift at joint 2 and 99 lb uplift at joint 11.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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



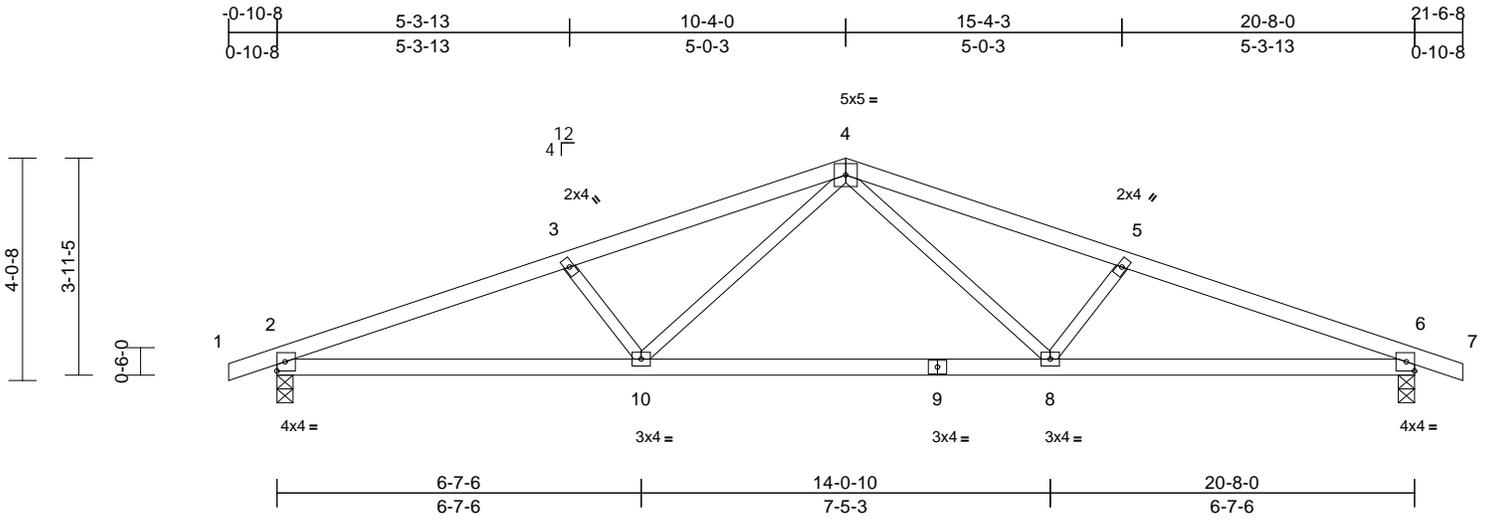
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	D1	Common	5	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:29 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:41.7

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	0.34	Vert(LL)	-0.10	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.22	8-10	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	8-10	>999	240	Weight: 62 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 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 3-8-15 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
 Max Horiz 2=66 (LC 12)
 Max Uplift 2=-178 (LC 4), 6=-178 (LC 5)
 Max Grav 2=988 (LC 1), 6=988 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/6, 2-3=-2045/297, 3-4=-1836/268, 4-5=-1836/268, 5-6=-2045/297, 6-7=0/6
 BOT CHORD 2-10=-275/1859, 8-10=-118/1278, 6-8=-225/1859
 WEBS 4-8=-84/598, 5-8=-327/179, 4-10=-83/598, 3-10=-327/179

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 2 and 178 lb uplift at joint 6.



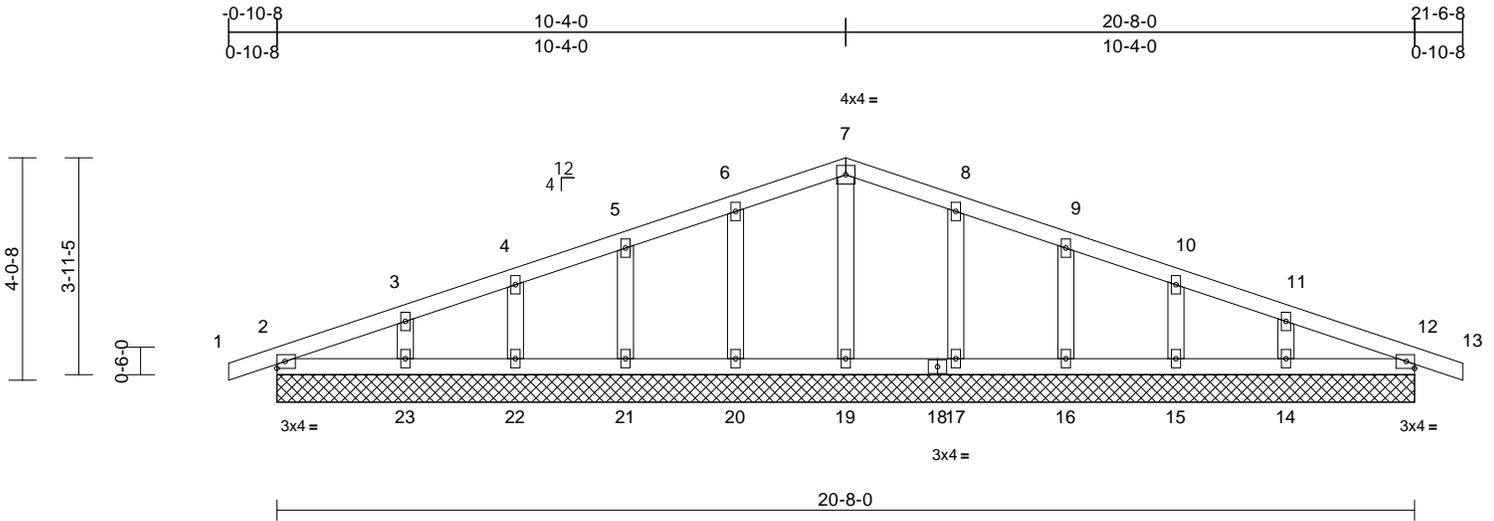
May 26, 2023

Job B230083	Truss D2	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	--------------------------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:50 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwTCDoi7JzJCA

06/22/2023



Scale = 1:41.7

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size)

2=20-8-0, 12=20-8-0, 14=20-8-0, 15=20-8-0, 16=20-8-0, 17=20-8-0, 19=20-8-0, 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0

Max Horiz 2=66 (LC 8)
 Max Uplift 2=-40 (LC 4), 12=-49 (LC 5), 14=-52 (LC 9), 15=-42 (LC 5), 16=-43 (LC 9), 17=-46 (LC 9), 20=-47 (LC 8), 21=-42 (LC 8), 22=-42 (LC 4), 23=-55 (LC 8)

Max Grav 2=163 (LC 1), 12=163 (LC 1), 14=207 (LC 22), 15=173 (LC 22), 16=180 (LC 1), 17=191 (LC 22), 19=162 (LC 1), 20=191 (LC 21), 21=180 (LC 1), 22=173 (LC 21), 23=207 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-73/47, 3-4=-47/52, 4-5=-31/67, 5-6=-29/84, 6-7=-32/102, 7-8=-32/98, 8-9=-29/68, 9-10=-29/40, 10-11=-31/22, 11-12=-50/27, 12-13=0/6

BOT CHORD 2-23=-3/53, 22-23=-3/53, 21-22=-3/53, 20-21=-3/53, 19-20=-3/53, 17-19=-3/53, 16-17=-3/53, 15-16=-3/53, 14-15=-3/53, 12-14=-3/53

WEBS 7-19=-122/0, 6-20=-151/71, 5-21=-139/67, 4-22=-136/65, 3-23=-156/81, 8-17=-151/70, 9-16=-139/67, 10-15=-136/65, 11-14=-156/78

- 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.
- 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 2, 47 lb uplift at joint 20, 42 lb uplift at joint 21, 42 lb uplift at joint 22, 55 lb uplift at joint 23, 46 lb uplift at joint 17, 43 lb uplift at joint 16, 42 lb uplift at joint 15, 52 lb uplift at joint 14 and 49 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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 B230083	Truss E1	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	--------------------------------------	----------	----------	------------

RELEASED FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

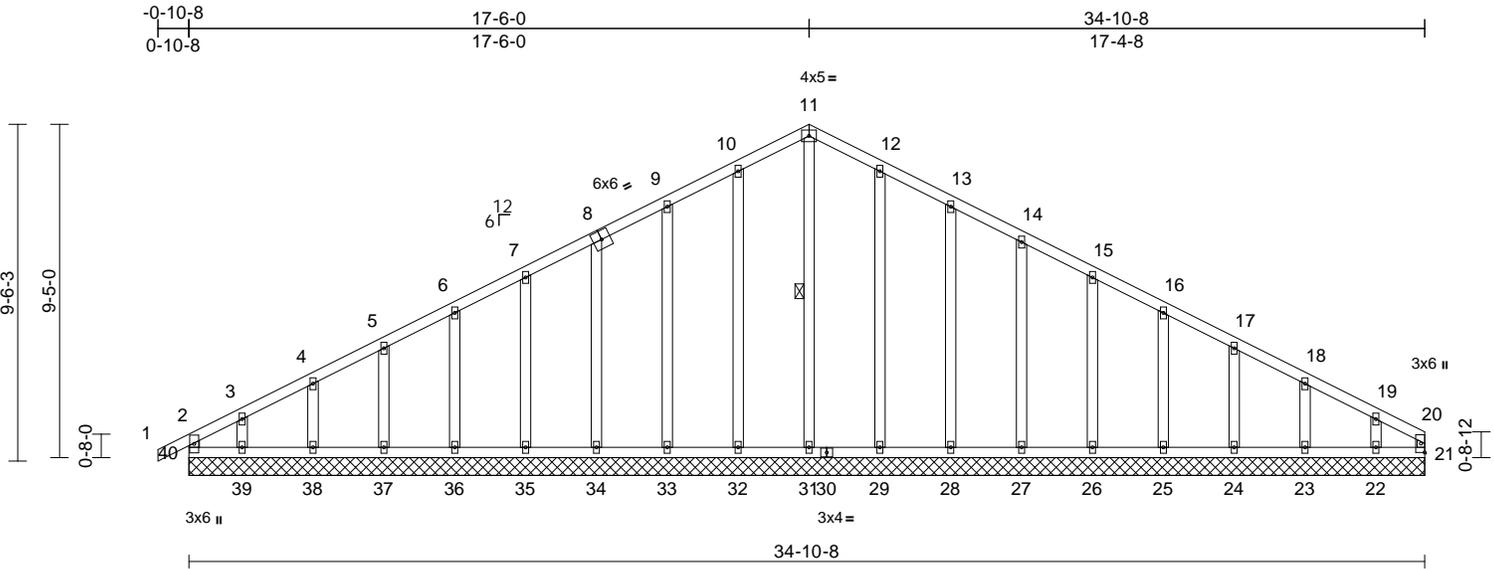
158592465

LEE'S SUMMIT, MISSOURI

06/22/2023

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:50 Page: 1
 ID:\pn010ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3lTXbGKwrcDoi7JzJCA



Scale = 1:64.7

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R								

Weight: 176 lb FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2 *Except* 20-21:2x3 SPF No.2
 OTHERS 2x4 SPF No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 11-31

REACTIONS (size)
 21=34-10-8, 22=34-10-8,
 23=34-10-8, 24=34-10-8,
 25=34-10-8, 26=34-10-8,
 27=34-10-8, 28=34-10-8,
 29=34-10-8, 31=34-10-8,
 32=34-10-8, 33=34-10-8,
 34=34-10-8, 35=34-10-8,
 36=34-10-8, 37=34-10-8,
 38=34-10-8, 39=34-10-8,
 40=34-10-8
 Max Horiz 40=156 (LC 8)
 Max Uplift 22=-108 (LC 9), 23=-47 (LC 9),
 24=-56 (LC 9), 25=-53 (LC 9),
 26=-54 (LC 9), 27=-53 (LC 9),
 28=-58 (LC 9), 29=-48 (LC 9),
 32=-51 (LC 8), 33=-55 (LC 8),
 34=-53 (LC 8), 35=-57 (LC 8),
 36=-53 (LC 8), 37=-57 (LC 8),
 38=-44 (LC 8), 39=-116 (LC 8),
 40=48 (LC 4)

Max Grav 21=100 (LC 9), 22=161 (LC 22),
 23=184 (LC 1), 24=179 (LC 22),
 25=180 (LC 1), 26=180 (LC 22),
 27=180 (LC 1), 28=179 (LC 1),
 29=190 (LC 22), 31=214 (LC 18),
 32=191 (LC 21), 33=174 (LC 1),
 34=181 (LC 1), 35=184 (LC 21),
 36=180 (LC 1), 37=178 (LC 21),
 38=189 (LC 1), 39=136 (LC 15),
 40=173 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD
 2-40=-140/47, 1-2=0/32, 2-3=-198/80,
 3-4=-144/84, 4-5=-107/97, 5-6=-78/123,
 6-7=-65/149, 7-9=-55/201, 9-10=-38/227,
 10-11=-42/250, 11-12=-42/242,
 12-13=-39/199, 13-14=-39/152,
 14-15=-39/118, 15-16=-39/92, 16-17=-39/66,
 17-18=-61/44, 18-19=-86/36, 19-20=-137/29,
 20-21=-68/3

BOT CHORD
 39-40=-27/113, 38-39=-27/113,
 37-38=-27/113, 36-37=-27/113,
 35-36=-27/113, 34-35=-27/113,
 33-34=-27/113, 32-33=-27/113,
 31-32=-27/113, 29-31=-27/113,
 28-29=-27/113, 27-28=-27/113,
 26-27=-27/113, 25-26=-27/113,
 24-25=-27/113, 23-24=-27/113,
 22-23=-27/113, 21-22=-27/113

WEBS
 11-31=-174/0, 10-32=-151/75, 9-33=-134/79,
 8-34=-141/78, 7-35=-144/81, 6-36=-139/77,
 5-37=-139/79, 4-38=-147/74, 3-39=-101/105,
 12-29=-150/72, 13-28=-139/82,
 14-27=-140/77, 15-26=-140/78,
 16-25=-140/78, 17-24=-139/78,
 18-23=-143/76, 19-22=-125/98

- 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.

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



May 26, 2023

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job B230083	Truss E1	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	--------------------------------------	----------	----------	--

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

158592465

LEE'S SUMMIT, MISSOURI

06/22/2023

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. From May 26 08:47:50 Page: 2
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7J4zJCA

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 40, 51 lb uplift at joint 32, 55 lb uplift at joint 33, 53 lb uplift at joint 34, 57 lb uplift at joint 35, 53 lb uplift at joint 36, 57 lb uplift at joint 37, 44 lb uplift at joint 38, 116 lb uplift at joint 39, 48 lb uplift at joint 29, 58 lb uplift at joint 28, 53 lb uplift at joint 27, 54 lb uplift at joint 26, 53 lb uplift at joint 25, 56 lb uplift at joint 24, 47 lb uplift at joint 23 and 108 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

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



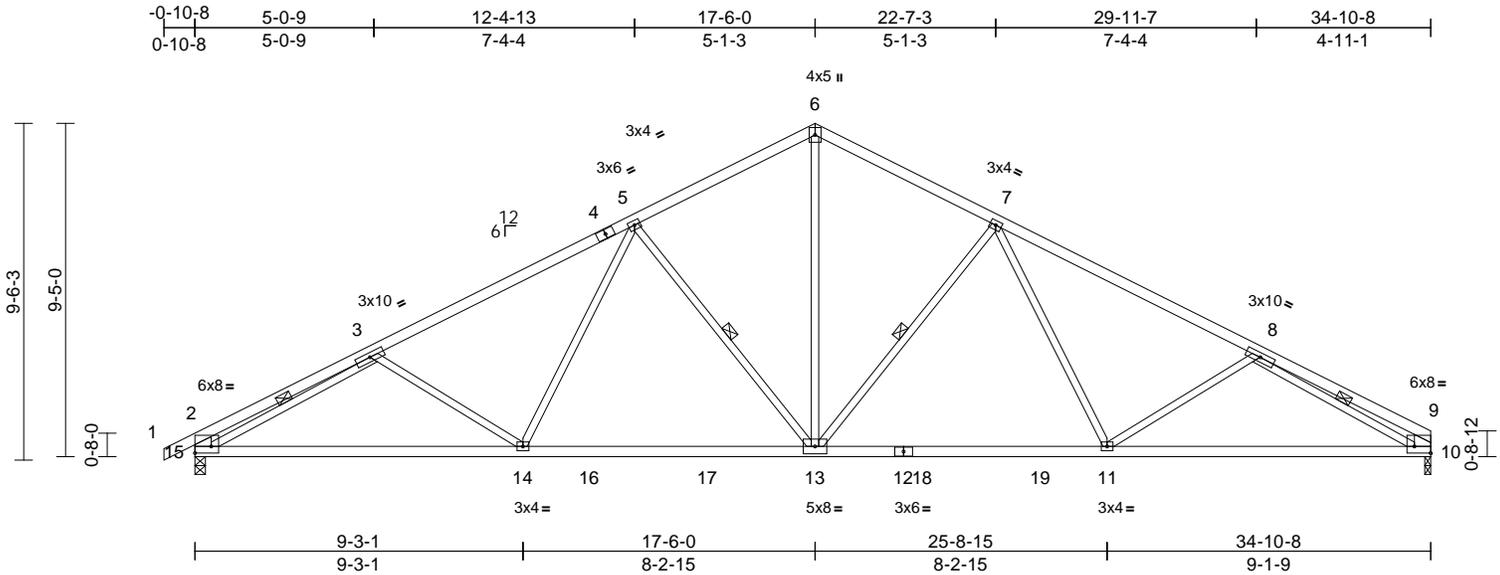
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B230083	Truss E2	Truss Type Common	Qty 7	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	----------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:50 Page: 1
 ID:\pnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwrcDoi7JzJCA

06/22/2023



Scale = 1:64.7

Plate Offsets (X, Y): [2:Edge,0-2-4], [9:Edge,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.24	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.40	13-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	13-14	>999	240	Weight: 135 lb	FT = 10%

- LUMBER**
- TOP CHORD 2x4 SPF No.2
- BOT CHORD 2x4 SPF No.2 *Except* 12-10:2x4 SPF 2400F 2.0E
- WEBS 2x3 SPF No.2 *Except* 15-2,10-9:2x6 SPF No.2
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 1-4-12 oc bracing: 14-15.
- WEBS 1 Row at midpt 7-13, 5-13, 3-15, 8-10
- REACTIONS** (size) 10=0-2-0, 15=0-3-8
- Max Horiz 15=156 (LC 12)
- Max Uplift 10=-192 (LC 9), 15=-218 (LC 8)
- Max Grav 10=1641 (LC 2), 15=1706 (LC 2)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/35, 2-3=-788/69, 3-5=-2579/307, 5-6=-1872/288, 6-7=-1872/288, 7-8=-2560/305, 8-9=-618/37, 2-15=-525/102, 9-10=-365/55
- BOT CHORD 14-15=-426/2368, 13-14=-222/2015, 11-13=-101/2006, 10-11=-290/2333
- WEBS 6-13=-167/1383, 7-13=-680/260, 7-11=-14/484, 8-11=-284/233, 5-13=-692/262, 5-14=-14/502, 3-14=-298/235, 3-15=-2004/318, 8-10=-2145/348

- 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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 10.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 218 lb uplift at joint 15 and 192 lb uplift at joint 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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



May 26, 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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



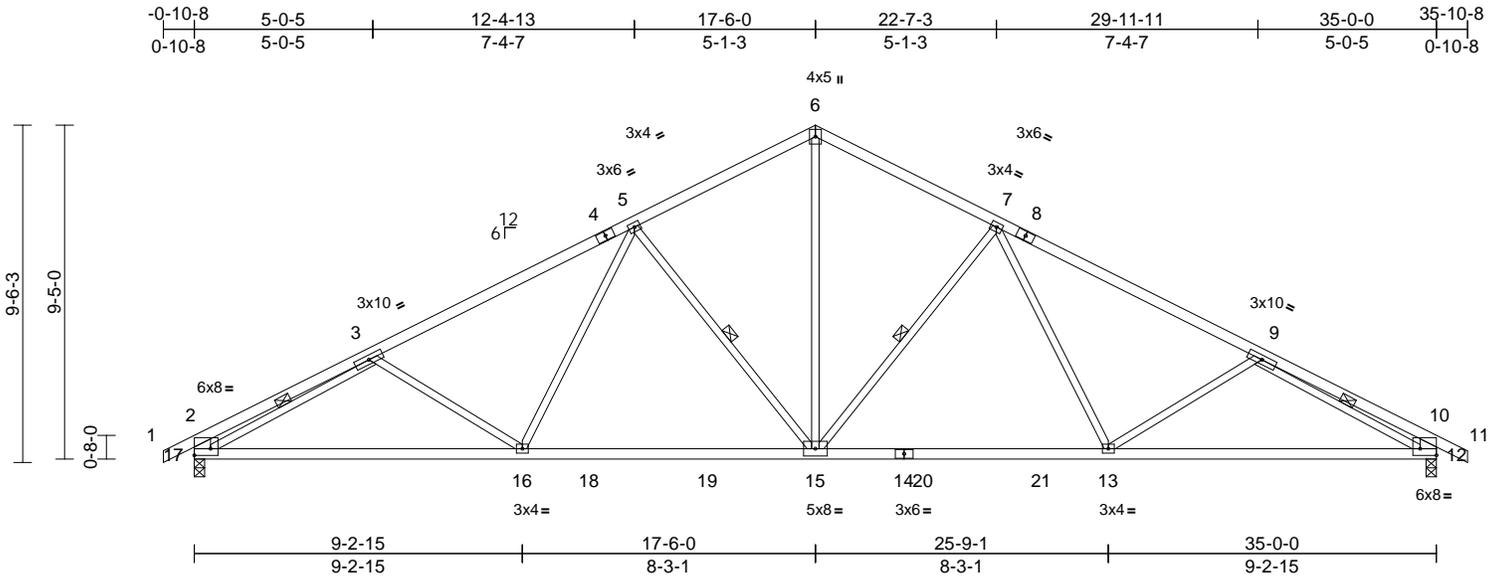
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	E3	Common	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:51 Page: 1
 ID:\pnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwrcDoi7JzJCA

06/22/2023



Scale = 1:64.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.25	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.41	13-15	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.12	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	15-16	>999	240	Weight: 136 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except* 17-2,12-10:2x6 SPF No.2

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

REACTIONS (size) 12=0-3-8, 17=0-3-8
 Max Horiz 17=146 (LC 8)
 Max Uplift 12=-219 (LC 9), 17=-219 (LC 8)
 Max Grav 12=1711 (LC 2), 17=1711 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/35, 2-3=-787/67, 3-5=-2589/307, 5-6=-1884/288, 6-7=-1884/288, 7-9=-2589/308, 9-10=-787/66, 10-11=0/35, 2-17=-524/101, 10-12=-524/101
 BOT CHORD 16-17=-418/2378, 15-16=-213/2025, 13-15=-92/2025, 12-13=-272/2376
 WEBS 6-15=-167/1395, 7-15=-692/263, 7-13=-15/499, 9-13=-297/235, 5-15=-692/263, 5-16=-14/499, 3-16=-297/235, 3-17=-2015/322, 9-12=-2015/322

- 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
 - 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 219 lb uplift at joint 17 and 219 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 2023

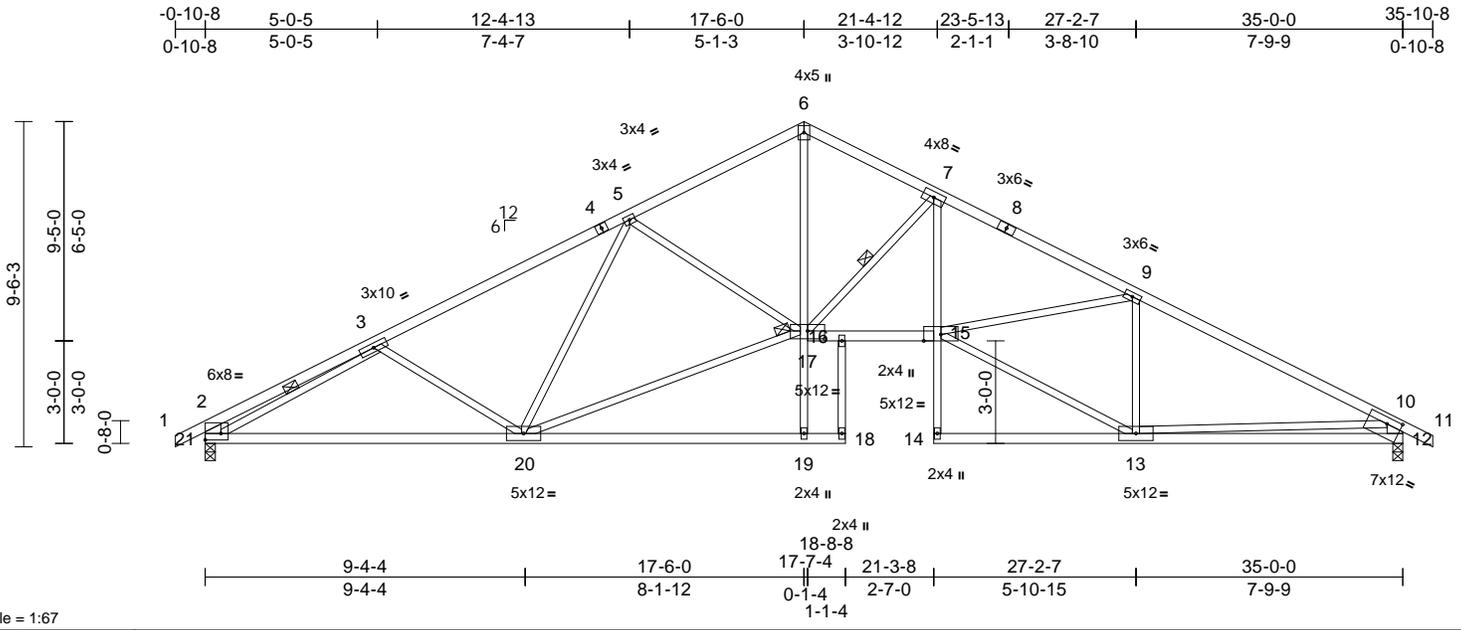
Job B230083	Truss E4	Truss Type Roof Special	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	----------------------------	----------	----------	------------

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592468
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:51 Page: 1
ID:lpnO10ZFdF1T0VaStr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwrcDoi7JzJCA

06/22/2023



Scale = 1:67

Plate Offsets (X, Y): [2:Edge,0-2-4], [12:0-5-0,0-2-4], [17:0-6-0,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.27	14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.50	19-20	>836	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.29	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.17	15-16	>999	240	Weight: 154 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 18-16,7-14:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 21-2,12-10:2x6 SP DSS

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-10-14 oc bracing: 20-21
6-0-0 oc bracing: 16-18.

WEBS 1 Row at midpt 7-17, 3-21
JOINTS 1 Brace at Jt(s): 17

REACTIONS (size) 12=0-3-8, 21=0-3-8
Max Horiz 21=146 (LC 12)
Max Uplift 12=219 (LC 9), 21=219 (LC 8)
Max Grav 12=1632 (LC 1), 21=1632 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-692/65, 3-5=-2403/305, 5-6=-2538/299, 6-7=-2544/320, 7-9=-3637/329, 9-10=-2613/312, 10-11=0/35, 2-21=-511/101, 10-12=-1554/262
BOT CHORD 20-21=-418/2270, 19-20=0/31, 18-19=-2/22, 16-18=-92/0, 16-17=-134/3136, 15-16=-137/3161, 14-15=0/91, 7-15=-80/1180, 13-14=0/27, 12-13=-259/943
WEBS 3-20=-301/236, 5-20=-547/93, 5-17=-273/218, 17-19=0/283, 6-17=-195/1941, 7-17=-1399/250, 13-15=-194/2495, 9-15=-42/957, 9-13=-1124/179, 3-21=-1999/323, 10-13=-9/1283, 17-20=-274/2390

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 12 and 219 lb uplift at joint 21.
- 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

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



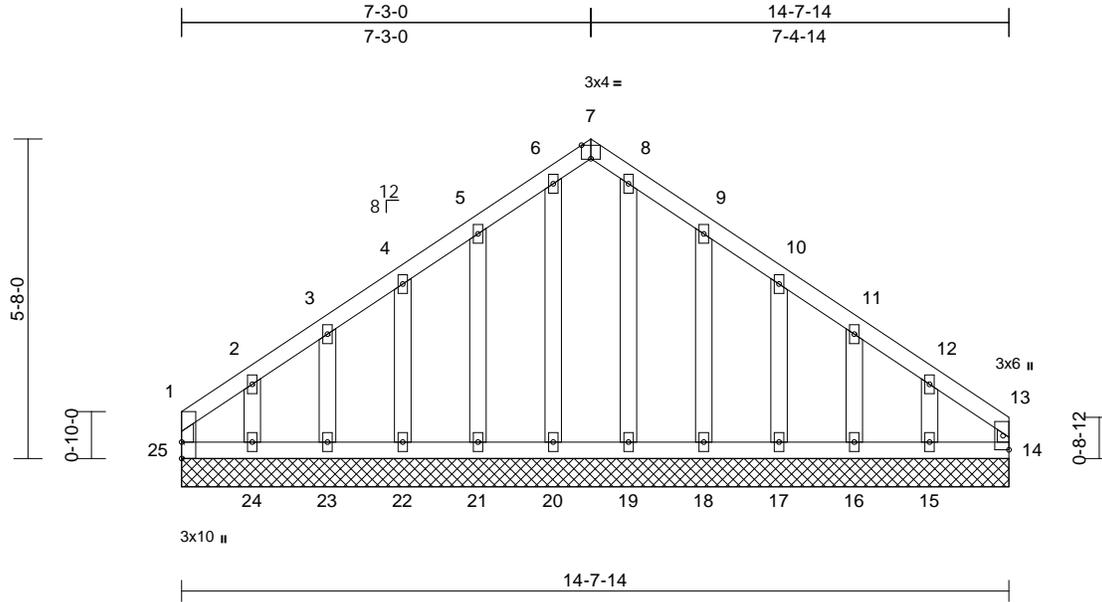
May 26, 2023

Job B230083	Truss G1	Truss Type GABLE	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	---------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:42:51 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:40.6
 Plate Offsets (X, Y): [7:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 71 lb	FT = 10%

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

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

REACTIONS (size)
 14=14-7-14, 15=14-7-14, 16=14-7-14, 17=14-7-14, 18=14-7-14, 19=14-7-14, 20=14-7-14, 21=14-7-14, 22=14-7-14, 23=14-7-14, 24=14-7-14, 25=14-7-14
 Max Horiz 25=147 (LC 4)
 Max Uplift 14=41 (LC 5), 15=95 (LC 9), 16=35 (LC 9), 17=48 (LC 9), 18=63 (LC 9), 21=63 (LC 8), 22=48 (LC 8), 23=35 (LC 8), 24=103 (LC 8), 25=59 (LC 4)
 Max Grav 14=95 (LC 15), 15=162 (LC 16), 16=118 (LC 1), 17=126 (LC 16), 18=127 (LC 16), 19=120 (LC 17), 20=121 (LC 18), 21=127 (LC 15), 22=126 (LC 15), 23=121 (LC 1), 24=163 (LC 15), 25=104 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-25=-76/44, 1-2=-101/87, 2-3=-76/62, 3-4=-69/72, 4-5=-59/96, 5-6=-51/129, 6-7=-37/100, 7-8=-34/98, 8-9=-45/126, 9-10=-54/94, 10-11=-64/69, 11-12=-72/55, 12-13=-92/79, 13-14=-72/34

BOT CHORD 24-25=-71/84, 23-24=-71/84, 22-23=-71/84, 21-22=-71/84, 20-21=-71/84, 19-20=-71/84, 18-19=-71/84, 17-18=-71/84, 16-17=-71/84, 15-16=-71/84, 14-15=-71/84
WEBS 2-24=-115/89, 3-23=-95/58, 4-22=-98/62, 5-21=-100/79, 6-20=-95/0, 8-19=-93/0, 9-18=-101/80, 10-17=-98/62, 11-16=-94/57, 12-15=-118/88

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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 1-4-0 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 59 lb uplift at joint 25, 41 lb uplift at joint 14, 103 lb uplift at joint 24, 35 lb uplift at joint 23, 48 lb uplift at joint 22, 63 lb uplift at joint 21, 63 lb uplift at joint 18, 48 lb uplift at joint 17, 35 lb uplift at joint 16 and 95 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



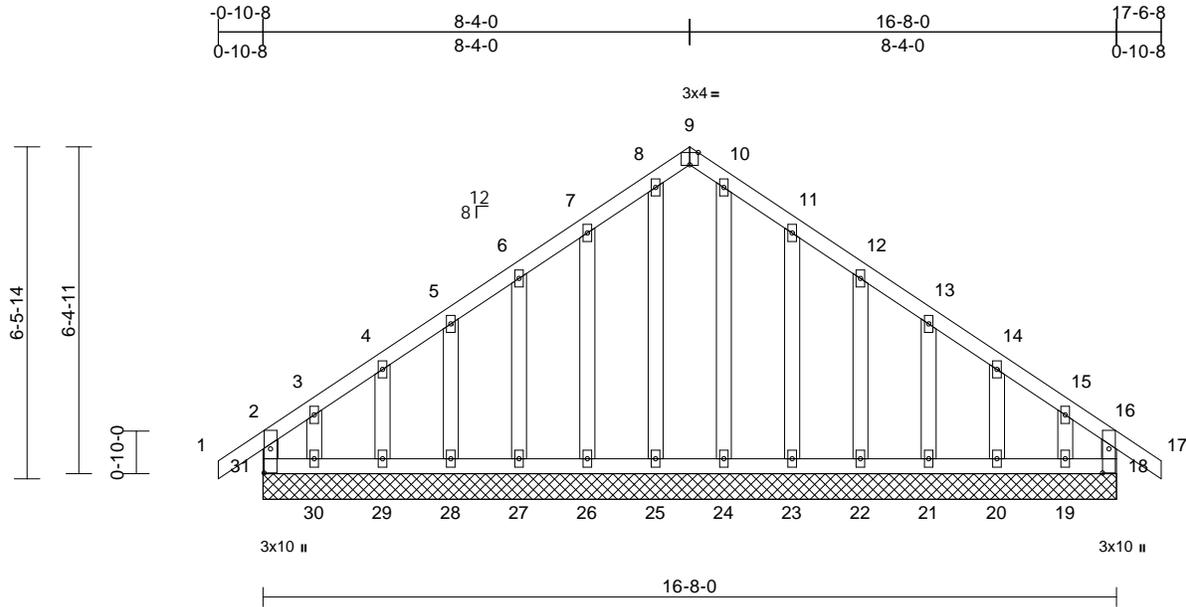
May 26, 2023

Job B230083	Truss G2	Truss Type GABLE	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	---------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:52 Page: 1
 ID:lpnO10ZFDF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWtrCDoi7JzJCA

06/22/2023



Scale = 1:44.8

Plate Offsets (X, Y): [9:0-2-0,Edge], [18:0-5-10,0-1-8], [31:0-5-10,0-1-8]

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	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 89 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)
 18=16-8-0, 19=16-8-0, 20=16-8-0, 21=16-8-0, 22=16-8-0, 23=16-8-0, 24=16-8-0, 25=16-8-0, 26=16-8-0, 27=16-8-0, 28=16-8-0, 29=16-8-0, 30=16-8-0, 31=16-8-0
 Max Horiz 31=184 (LC 7)
 Max Uplift 18=56 (LC 5), 19=114 (LC 9), 20=38 (LC 9), 21=49 (LC 9), 22=45 (LC 9), 23=65 (LC 9), 26=63 (LC 8), 27=45 (LC 8), 28=49 (LC 8), 29=36 (LC 8), 30=128 (LC 8), 31=98 (LC 4)
 Max Grav 18=160 (LC 15), 19=117 (LC 7), 20=129 (LC 22), 21=124 (LC 16), 22=124 (LC 16), 23=127 (LC 16), 24=127 (LC 17), 25=136 (LC 18), 26=125 (LC 15), 27=124 (LC 15), 28=125 (LC 15), 29=129 (LC 21), 30=145 (LC 6), 31=194 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 2-31=-153/72, 1-2=0/40, 2-3=-140/123, 3-4=-94/94, 4-5=-83/83, 5-6=-71/91, 6-7=-58/115, 7-8=-49/149, 8-9=-36/113, 9-10=-32/109, 10-11=-29/130, 11-12=-31/98, 12-13=-40/73, 13-14=-50/51, 14-15=-61/64, 15-16=-114/80, 16-17=0/40, 16-18=-130/42

BOT CHORD 30-31=-81/104, 29-30=-81/104, 28-29=-81/104, 27-28=-81/104, 26-27=-81/104, 25-26=-81/104, 24-25=-81/104, 23-24=-81/104, 22-23=-81/104, 21-22=-81/104, 20-21=-81/104, 19-20=-81/104, 18-19=-81/104
WEBS 3-30=-84/91, 4-29=-101/60, 5-28=-97/63, 6-27=-98/62, 7-26=-98/79, 8-25=-109/6, 10-24=-101/0, 11-23=-101/81, 12-22=-98/62, 13-21=-97/63, 14-20=-102/61, 15-19=-73/84

NOTES
 1) Unbalanced roof live loads have been considered for this design.
 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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
 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 1-4-0 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 98 lb uplift at joint 31, 56 lb uplift at joint 18, 128 lb uplift at joint 30, 36 lb uplift at joint 29, 49 lb uplift at joint 28, 45 lb uplift at joint 27, 63 lb uplift at joint 26, 65 lb uplift at joint 23, 45 lb uplift at joint 22, 49 lb uplift at joint 21, 38 lb uplift at joint 20 and 114 lb uplift at joint 19.

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



May 26, 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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



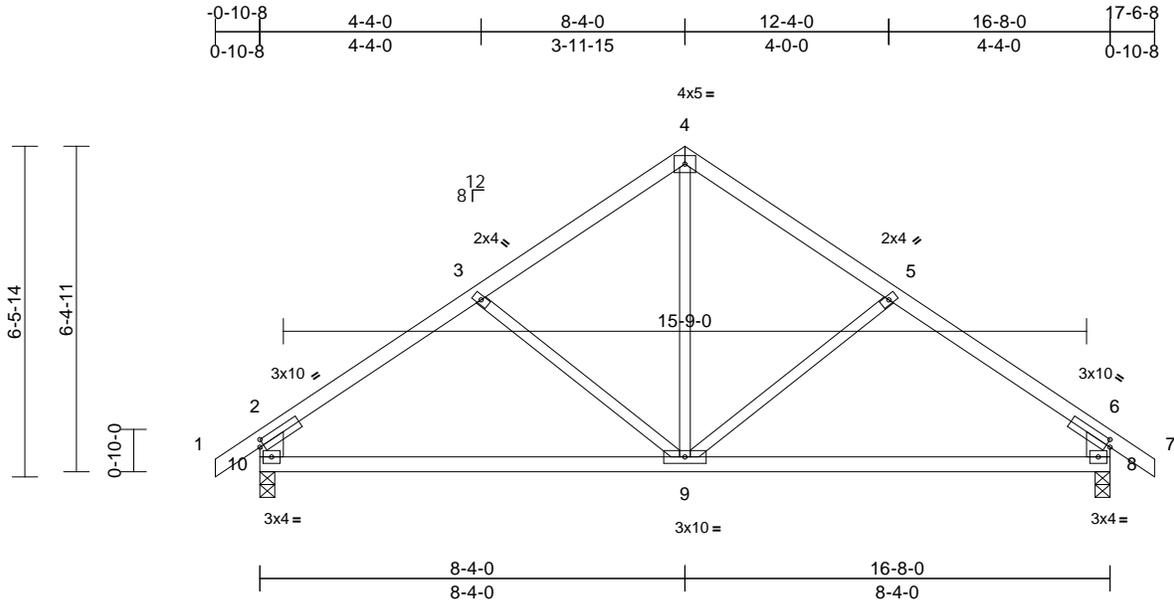
Job B230083	Truss G3	Truss Type Common	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	----------------------	----------	----------	------------

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592471 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:52 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJJC9

06/22/2023



Scale = 1:45
Plate Offsets (X, Y): [2:0-1-0,0-1-8], [6:0-1-0,0-1-8]

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	0.59	Vert(LL)	-0.08	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.17	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	9	>999	240	Weight: 60 lb	FT = 10%

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 10 and 107 lb uplift at joint 8.
- 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.

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

LOAD CASE(S) Standard

REACTIONS (size) 8=0-3-8, 10=0-3-8
 Max Horiz 10=186 (LC 7)
 Max Uplift 8=-107 (LC 9), 10=-107 (LC 8)
 Max Grav 8=807 (LC 1), 10=807 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/43, 2-3=-883/132, 3-4=-663/129, 4-5=-663/129, 5-6=-883/132, 6-7=0/43, 2-10=-719/148, 6-8=-719/148
 BOT CHORD 9-10=-114/667, 8-9=-29/633
 WEBS 4-9=-39/388, 5-9=-200/175, 3-9=-200/175

- 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.



May 26, 2023

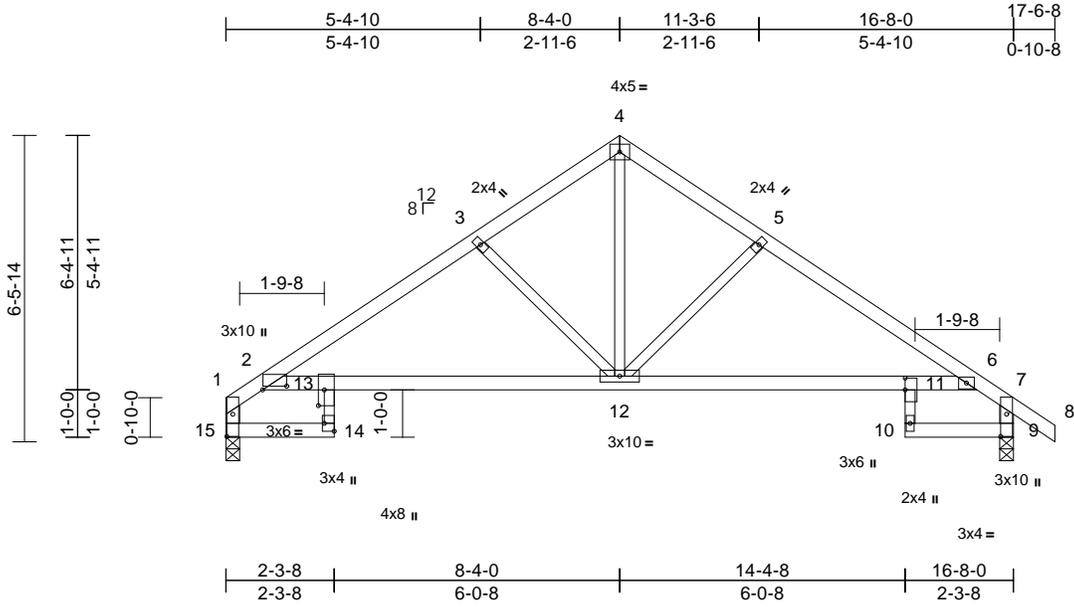
Job B230083	Truss G4	Truss Type Roof Special	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	----------------------------	----------	----------	------------

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592472
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:52 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRrCDoi7HzJCA

06/22/2023



Scale = 1:48.5

Plate Offsets (X, Y): [1:0-5-10,0-1-8], [2:0-6-2,0-0-15], [9:0-5-10,0-1-8], [11:0-3-0,Edge], [13:0-4-0,0-1-8], [14:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.14	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.30	12-13	>645	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	12-13	>999	240	Weight: 59 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2 *Except* 4-8:2x4 SPF 2100F 1.8E
 BOT CHORD 2x4 SPF No.2 *Except* 14-13,11-10:2x3 SPF No.2
 WEBS 2x3 SPF No.2 *Except* 15-1,9-7:2x4 SPF No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 10-0-0 oc bracing: 11-12

REACTIONS (size) 9=0-3-8, 15=0-3-8
 Max Horiz 15=178 (LC 4)
 Max Uplift 9=-106 (LC 9), 15=-82 (LC 8)
 Max Grav 9=811 (LC 1), 15=735 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-538/108, 2-3=-1085/149, 3-4=-860/133, 4-5=-860/143, 5-6=-1086/136, 6-7=-514/96, 7-8=0/40, 1-15=-745/115, 7-9=-818/125
 BOT CHORD 14-15=-70/208, 13-14=-15/71, 2-13=-42/709, 12-13=-112/903, 11-12=-29/882, 6-11=-7/740, 10-11=0/51, 9-10=-30/142
 WEBS 4-12=-101/756, 3-12=-367/184, 5-12=-352/171

- 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
 - 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 82 lb uplift at joint 15 and 106 lb uplift at joint 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



May 26, 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



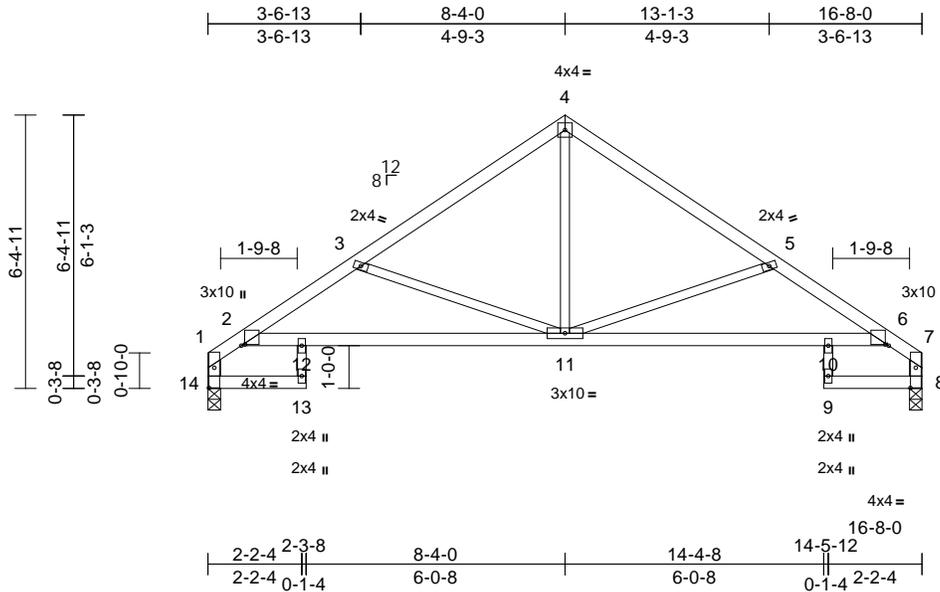
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B230083	Truss G5	Truss Type Roof Special	Qty 4	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	----------------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:53 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrcDoi7JzJCA

06/22/2023



Scale = 1:53.5

Plate Offsets (X, Y): [1:0-5-10,0-1-8], [2:0-1-0,0-0-6], [6:0-1-0,0-0-6], [7:0-5-10,0-1-8]

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	0.47	Vert(LL)	-0.09	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.22	10-11	>905	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.22	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.08	11-12	>999	240	Weight: 60 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-1,8-7:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-10-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 10-11

REACTIONS

(size) 8=0-3-8, 14=0-3-8
Max Horiz 14=-166 (LC 4)
Max Uplift 8=-82 (LC 9), 14=-82 (LC 8)
Max Grav 8=737 (LC 1), 14=737 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-422/107, 2-3=-1276/223, 3-4=-880/113, 4-5=-880/134, 5-6=-1276/188, 6-7=-390/51, 1-14=-740/114, 7-8=-740/103
BOT CHORD 13-14=0/0, 2-12=-236/1144, 11-12=-236/1144, 10-11=-121/1110, 6-10=-121/1110, 8-9=0/0
WEBS 12-13=-13/59, 9-10=0/47, 4-11=-22/551, 3-11=-544/252, 5-11=-504/227

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 14 and 82 lb uplift at joint 8.
- 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



May 26, 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

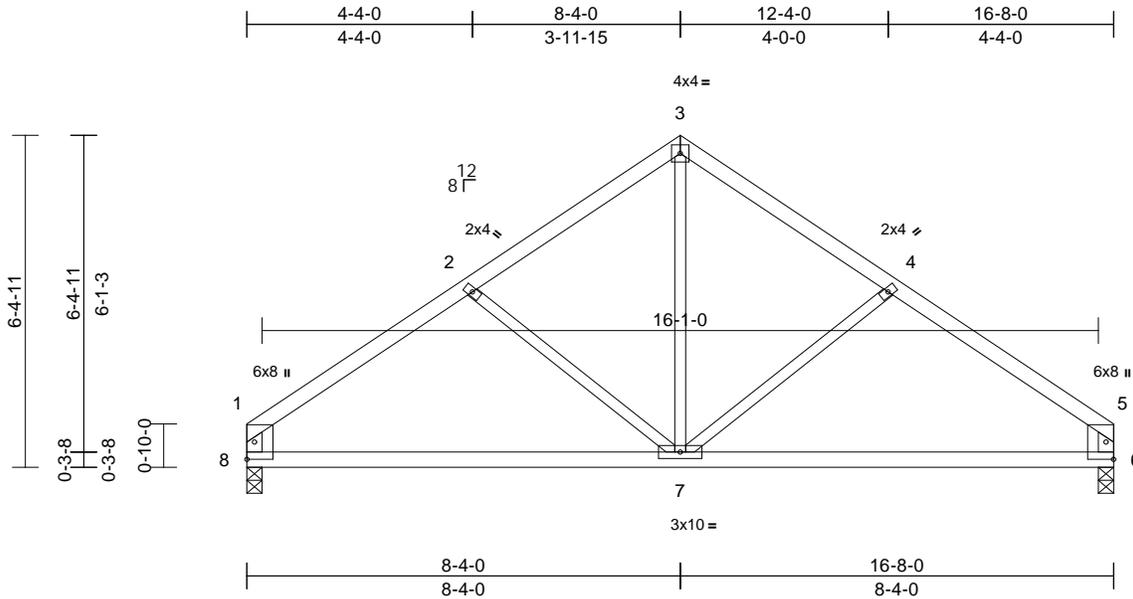
Job B230083	Truss G6	Truss Type Common	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	----------------------	----------	----------	------------

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592474 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:53 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7J4zJCA

06/22/2023



Scale = 1:44.1

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	0.43	Vert(LL)	-0.09	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.18	6-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	7	>999	240	Weight: 56 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except* 8-1,6-5:2x4 SPF 2400F 2.0E

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 5-6-9 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=-166 (LC 4)
 Max Uplift 6=-82 (LC 9), 8=-82 (LC 8)
 Max Grav 6=737 (LC 1), 8=737 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-914/135, 2-3=-698/130, 3-4=-698/130, 4-5=-914/135, 1-8=-641/122, 5-6=-641/122
 BOT CHORD 7-8=-132/690, 6-7=-57/671
 WEBS 3-7=-41/403, 4-7=-228/182, 2-7=-228/182

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 82 lb uplift at joint 8 and 82 lb uplift at joint 6.



May 26, 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



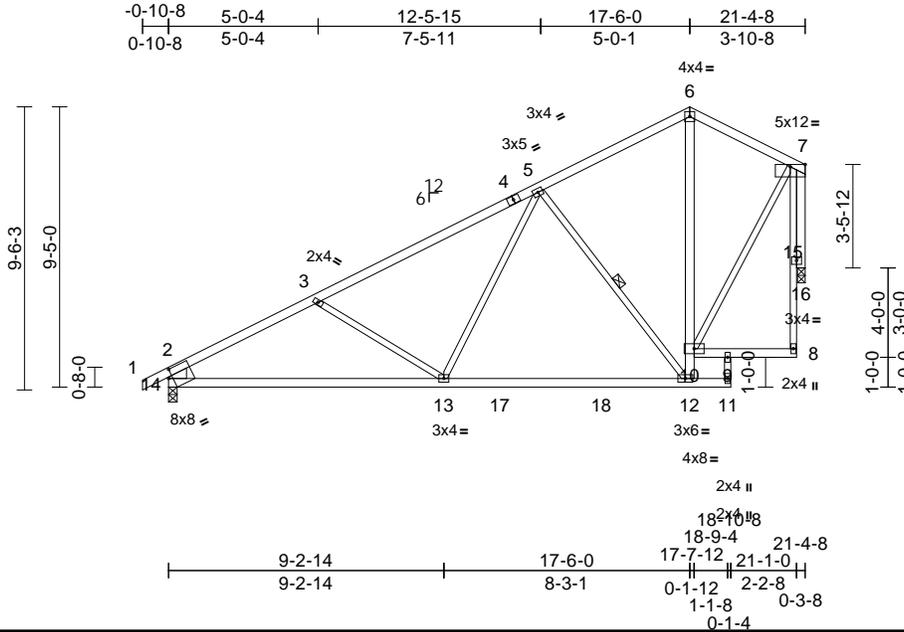
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job B230083	Truss H1	Truss Type Roof Special	Qty 2	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	----------------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:53 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3uTXbGkVrCDoi7JzJCA

06/22/2023



Scale = 1:77
 Plate Offsets (X, Y): [14:0-1-10,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.23	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.37	12-13	>672	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.26	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	12-13	>999	240	Weight: 96 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except* 12-6:2x4 SPF 2100F 1.8E, 14-2:2x8 SP DSS
 OTHERS 2x4 SPF No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-12

REACTIONS (size) 14=0-3-8, 16=0-3-2
 Max Horiz 14=213 (LC 5)
 Max Uplift 14=-17 (LC 8), 16=-50 (LC 8)
 Max Grav 14=1066 (LC 13), 16=993 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/37, 2-3=-1513/58, 3-5=-1254/19, 5-6=-496/50, 6-7=-488/59, 2-14=-927/64, 8-15=0/36, 7-15=0/36
 BOT CHORD 13-14=-180/1310, 12-13=-67/843, 11-12=0/0, 9-10=-39/55, 8-9=-39/55
 WEBS 9-11=-135/0, 3-13=-342/154, 5-13=0/542, 5-12=-754/131, 10-12=-18/904, 6-10=-1/220, 7-10=-34/776, 7-16=-995/51

- * 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.
- Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 14 and 50 lb uplift at joint 16.
- 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; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



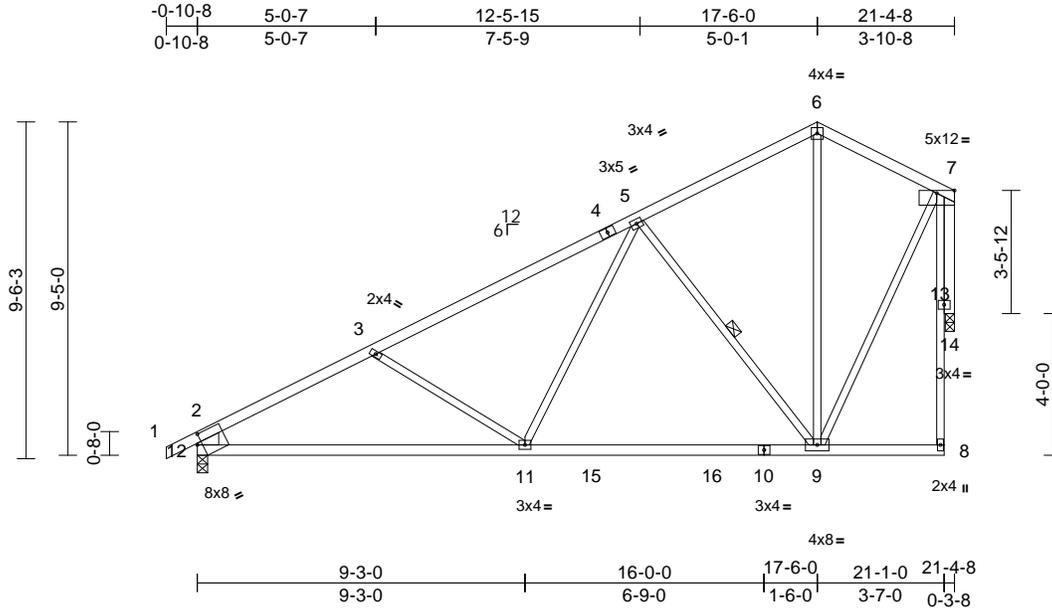
May 26, 2023

Job B230083	Truss H2	Truss Type Roof Special	Qty 3	Ply 1	Lot 113 H4
----------------	-------------	----------------------------	----------	----------	------------

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:53 Page: 1
 ID:\pnO10ZFDF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWTCDoi7JzJCA

06/22/2023



Scale = 1:64.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.20	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.31	9-11	>801	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.19	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	9-11	>999	240	Weight: 93 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except* 12-2:2x8 SP DSS
 OTHERS 2x4 SPF No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-9

REACTIONS (size) 12=0-3-8, 14=0-3-2
 Max Horiz 12=226 (LC 5)
 Max Uplift 12=-17 (LC 8), 14=-50 (LC 8)
 Max Grav 12=1063 (LC 13), 14=976 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/37, 2-3=-1507/58, 3-5=-1247/20, 5-6=-492/48, 6-7=-430/64, 2-12=-926/64, 8-13=0/33, 7-13=0/33
 BOT CHORD 11-12=-165/1309, 9-11=-56/842, 8-9=-57/54
 WEBS 3-11=-343/154, 5-11=0/540, 5-9=-747/131, 6-9=-8/181, 7-9=-30/789, 7-14=-979/51

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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, with BCDL = 10.0psf.

- 5) Bearing at joint(s) 14 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 17 lb uplift at joint 12 and 50 lb uplift at joint 14.
- 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



May 26, 2023

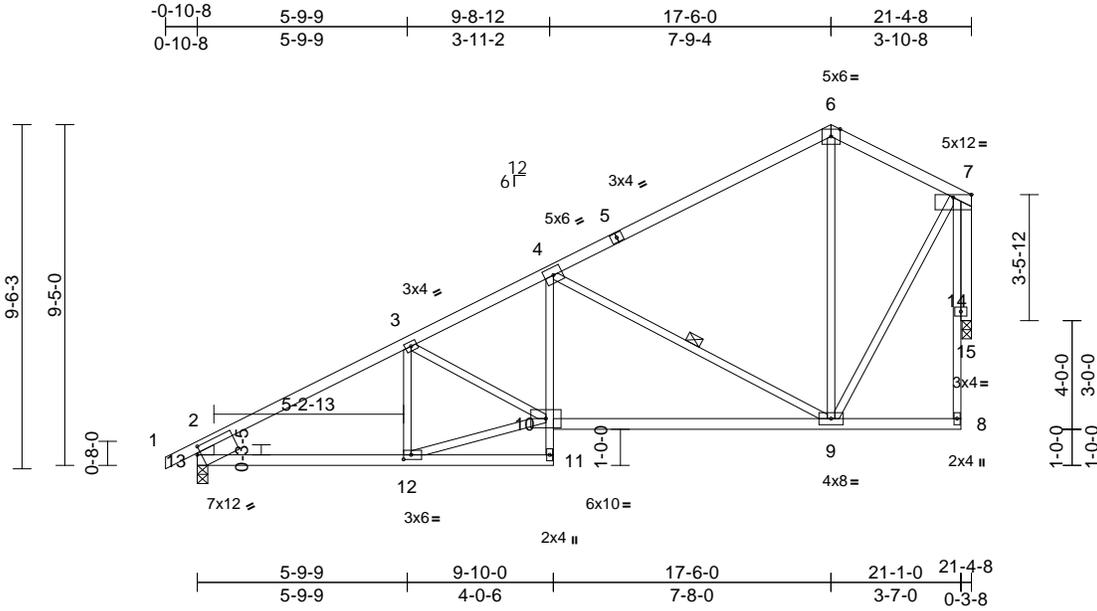
Job B230083	Truss H3	Truss Type Roof Special	Qty 3	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	----------------------------	----------	----------	--

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
 158592477
LEE'S SUMMIT, MISSOURI

06/22/2023

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:54 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGkVrCDoi7JzJCA



Scale = 1:63.3

Plate Offsets (X, Y): [12:0-2-8,0-1-8], [13:0-1-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.12	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.27	9-10	>937	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.13	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	11	>999	240	Weight: 94 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except* 11-4:2x3 SPF No.2
 WEBS 2x3 SPF No.2 *Except* 13-2:2x6 SP 2400F 2.0E
 OTHERS 2x4 SPF No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or 3-0-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.
 WEBS 1 Row at midpt 4-9

REACTIONS (size) 13=0-3-8, 15=0-3-2
 Max Horiz 13=268 (LC 8)
 Max Uplift 13=139 (LC 8), 15=174 (LC 8)
 Max Grav 13=1025 (LC 1), 15=920 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/35, 2-3=-1431/161, 3-4=-1389/229, 4-6=-568/84, 6-7=-454/123, 2-13=-936/175, 8-14=-4/21, 7-14=-4/21
 BOT CHORD 12-13=-327/1170, 11-12=-46/37, 10-11=0/71, 4-10=-23/412, 9-10=-316/1251, 8-9=-52/50
 WEBS 3-12=-239/134, 3-10=-1/68, 4-9=-981/322, 6-9=-36/142, 7-9=-149/729, 10-12=-290/1169, 7-15=-922/175

- 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) 15 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 139 lb uplift at joint 13 and 174 lb uplift at joint 15.
- 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

- 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



May 26, 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



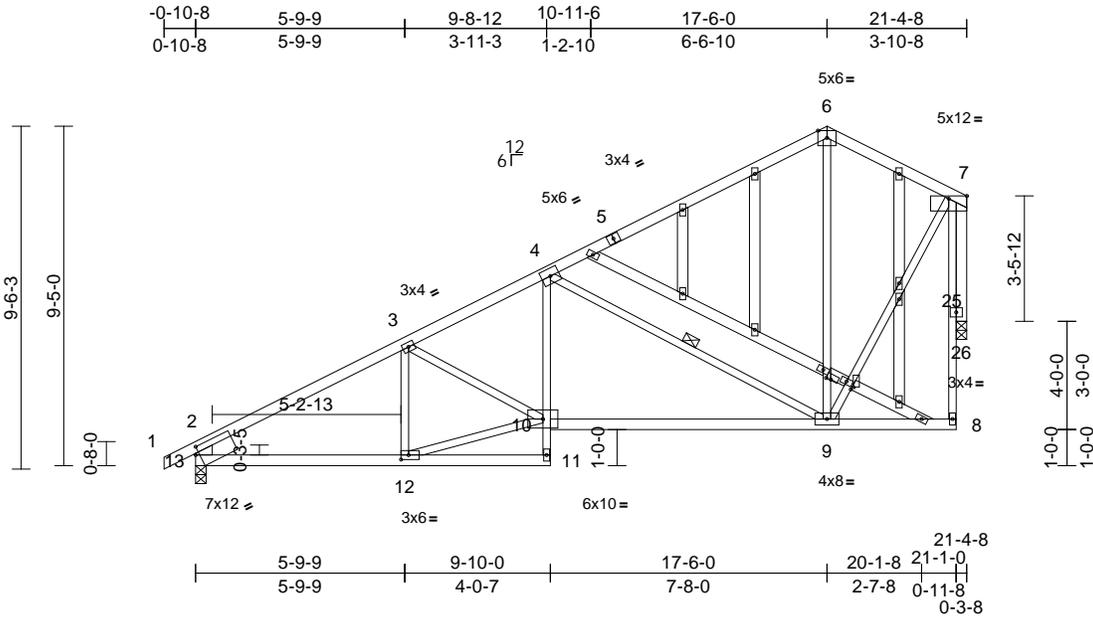
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	H4	Roof Special Structural Gable	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:54 Page: 1
 ID:lpnO10ZFdF1T0VaStr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3uTXbGkVrCDoi7JzJCA

06/22/2023



Scale = 1:63.6

Plate Offsets (X, Y): [12:0-2-8,0-1-8], [13:0-1-4,0-2-8], [15:0-1-10,0-0-4], [16:0-0-13,0-0-13]

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	0.78	Vert(LL)	-0.12	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.27	9-10	>939	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.13	26	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	11	>999	240	Weight: 121 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except* 11-4:2x3 SPF No.2
 WEBS 2x3 SPF No.2 *Except* 13-2:2x6 SP 2400F
 2.0E, 14-15,15-16,16-17:2x4 SPF No.2
 OTHERS 2x4 SPF No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or
 3-0-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
 bracing, Except:
 6-0-0 oc bracing: 11-12.
 WEBS 1 Row at midpt 4-9

REACTIONS (size) 13=0-3-8, 26=0-3-8
 Max Horiz 13=268 (LC 8)
 Max Uplift 13=-138 (LC 8), 26=-174 (LC 8)
 Max Grav 13=1024 (LC 1), 26=921 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
 Tension
 TOP CHORD 1-2=0/35, 2-3=-1430/161, 3-4=-1387/229,
 4-6=-566/84, 6-7=-452/123, 2-13=-936/174,
 8-25=-4/21, 7-25=-4/21
 BOT CHORD 12-13=-327/1169, 11-12=-46/37, 10-11=0/71,
 4-10=-23/412, 9-10=-316/1249, 8-9=-52/50
 WEBS 4-9=-981/322, 6-9=-37/141, 3-12=-239/134,
 10-12=-290/1168, 3-10=-1/68, 7-9=-149/731,
 7-26=-923/175

NOTES
 1) Unbalanced roof live loads have been considered for
 this design.
 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
 II; Exp C; Enclosed; MWFRS (envelope) 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.
- 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.
- Bearing at joint(s) 26 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 138 lb uplift at joint 13 and 174 lb uplift at joint 26.
- 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



May 26, 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

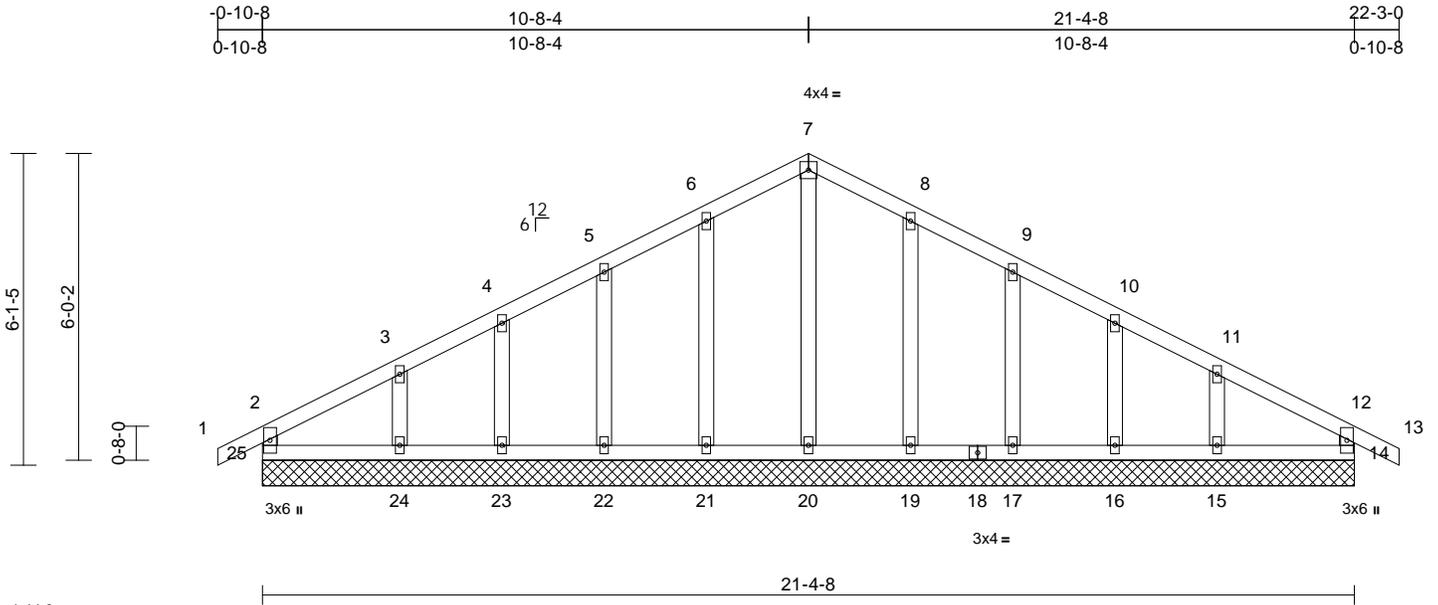


Job B230083	Truss H5	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	--------------------------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:54 Page: 1
 ID:lpn010ZFDf1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWfrcDoi7JzJCA

06/22/2023



Scale = 1:44.9

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	-	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	14	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 88 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

WEBS
 7-20=-129/0, 6-21=-150/79, 5-22=-140/81,
 4-23=-134/69, 3-24=-161/108, 8-19=-150/78,
 9-17=-140/81, 10-16=-134/70,
 11-15=-161/104

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=21-4-8, 15=21-4-8, 16=21-4-8, 17=21-4-8, 19=21-4-8, 20=21-4-8, 21=21-4-8, 22=21-4-8, 23=21-4-8, 24=21-4-8, 25=21-4-8
 Max Horiz 25=-91 (LC 6)
 Max Uplift 14=-18 (LC 8), 15=-84 (LC 9), 16=-44 (LC 9), 17=-57 (LC 9), 19=-54 (LC 9), 21=-55 (LC 8), 22=-58 (LC 8), 23=-42 (LC 8), 24=-90 (LC 8), 25=-33 (LC 9)
 Max Grav 14=194 (LC 1), 15=213 (LC 22), 16=171 (LC 1), 17=181 (LC 1), 19=190 (LC 22), 20=169 (LC 18), 21=190 (LC 21), 22=181 (LC 1), 23=171 (LC 1), 24=213 (LC 21), 25=194 (LC 1)

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; BC DL=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 33 lb uplift at joint 25, 18 lb uplift at joint 14, 55 lb uplift at joint 21, 58 lb uplift at joint 22, 42 lb uplift at joint 23, 90 lb uplift at joint 24, 54 lb uplift at joint 19, 57 lb uplift at joint 17, 44 lb uplift at joint 16 and 84 lb uplift at joint 15.
- 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.

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 2-25=-171/45, 1-2=0/32, 2-3=-98/59, 3-4=-65/86, 4-5=-54/112, 5-6=-48/138, 6-7=-51/162, 7-8=-51/155, 8-9=-48/115, 9-10=-48/88, 10-11=-51/63, 11-12=-79/40, 12-13=0/32, 12-14=-171/33
 BOT CHORD 24-25=-17/74, 23-24=-17/74, 22-23=-17/74, 21-22=-17/74, 20-21=-17/74, 19-20=-17/74, 17-19=-17/74, 16-17=-17/74, 15-16=-17/74, 14-15=-17/74

LOAD CASE(S) Standard



May 26, 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 ANSITPI 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

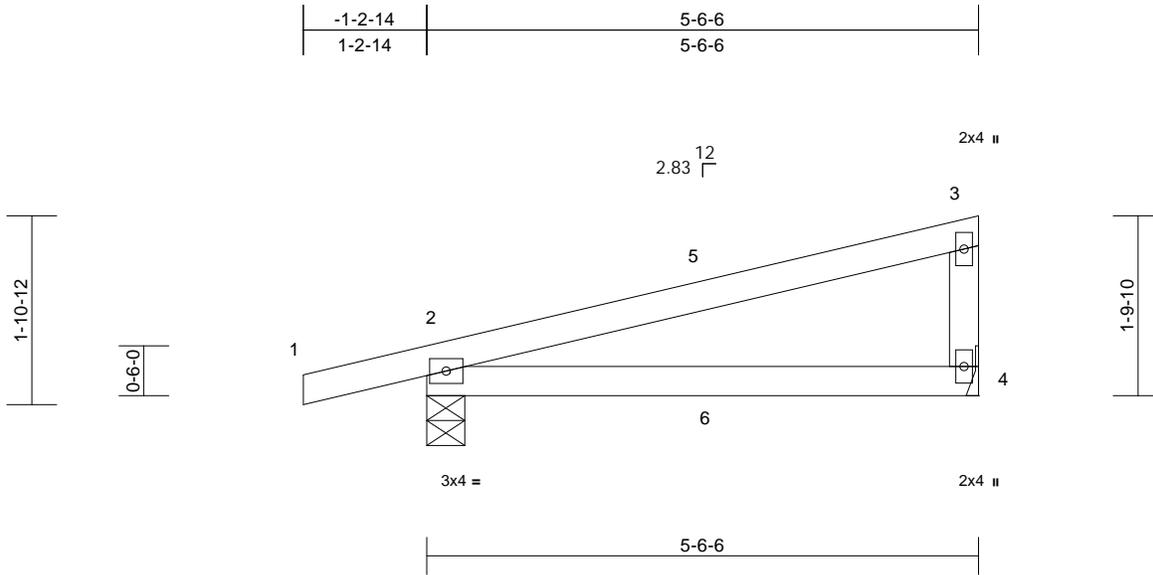
Job B230083	Truss J1	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	Lot 113 H4
----------------	-------------	-----------------------------------	----------	----------	------------

<p>AS NOTED FOR PLAN REVIEW</p> <p>DEVELOPMENT SERVICES</p> <p>158592480</p> <p>LEE'S SUMMIT, MISSOURI</p>
--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:55 Page: 1
 ID:eIVzmttrvqeWtykiiM9UhZAKds-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J42zC7?

06/22/2023



Scale = 1:23

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	0.51	Vert(LL)	-0.04	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.09	2-4	>713	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-4-9, 4= Mechanical
 Max Horiz 2=65 (LC 5)
 Max Uplift 2=-108 (LC 4), 4=-43 (LC 8)
 Max Grav 2=347 (LC 1), 4=220 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/6, 2-3=-74/36, 3-4=-168/75
 BOT CHORD 2-4=-21/16

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 4 and 108 lb uplift at joint 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.

- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 34 lb up at 2-9-8, and 67 lb down and 34 lb up at 2-9-8 on top chord, and 2 lb down at 2-9-8, and 2 lb down at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



May 26, 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

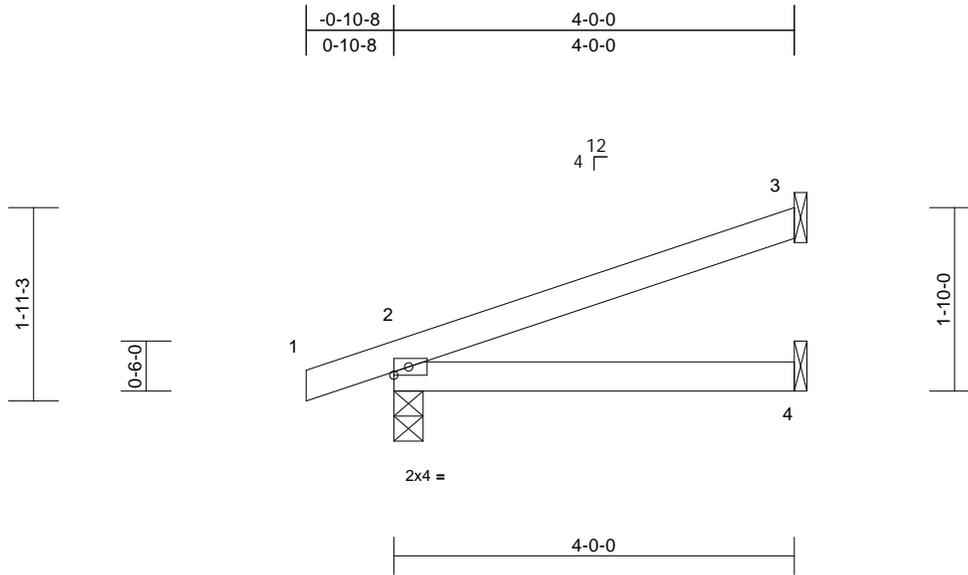
Job B230083	Truss J2	Truss Type Jack-Open	Qty 3	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	-------------------------	----------	----------	--

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592481 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:55 Page: 1
ID:eIVzmttrvqeWtykiiM9UhzAKds-RIC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J42zC7?

06/22/2023



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)	-0.01	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

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

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

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

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-60/36
BOT CHORD 2-4=0/0

- NOTES**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 3 and 69 lb uplift at joint 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



May 26, 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



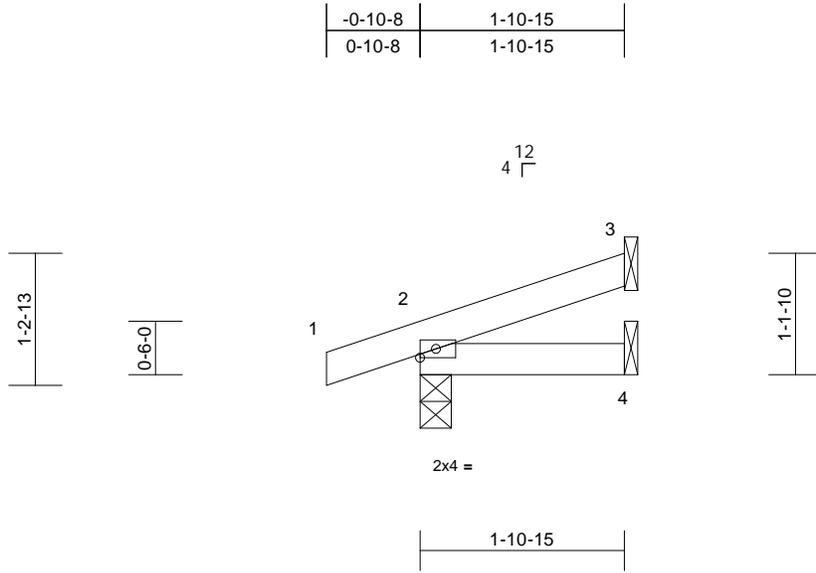
Job B230083	Truss J3	Truss Type Jack-Open	Qty 4	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	-------------------------	----------	----------	--

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592482 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:55 Page: 1
ID:eIVzmttrvqeWtykiiM9UhzAKds-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J423C7?

06/22/2023



Scale = 1:21.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 6 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=39 (LC 4)
Max Uplift 2=-56 (LC 4), 3=-29 (LC 8)
Max Grav 2=163 (LC 1), 3=50 (LC 1), 4=37 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-35/15
BOT CHORD 2-4=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 2 and 29 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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

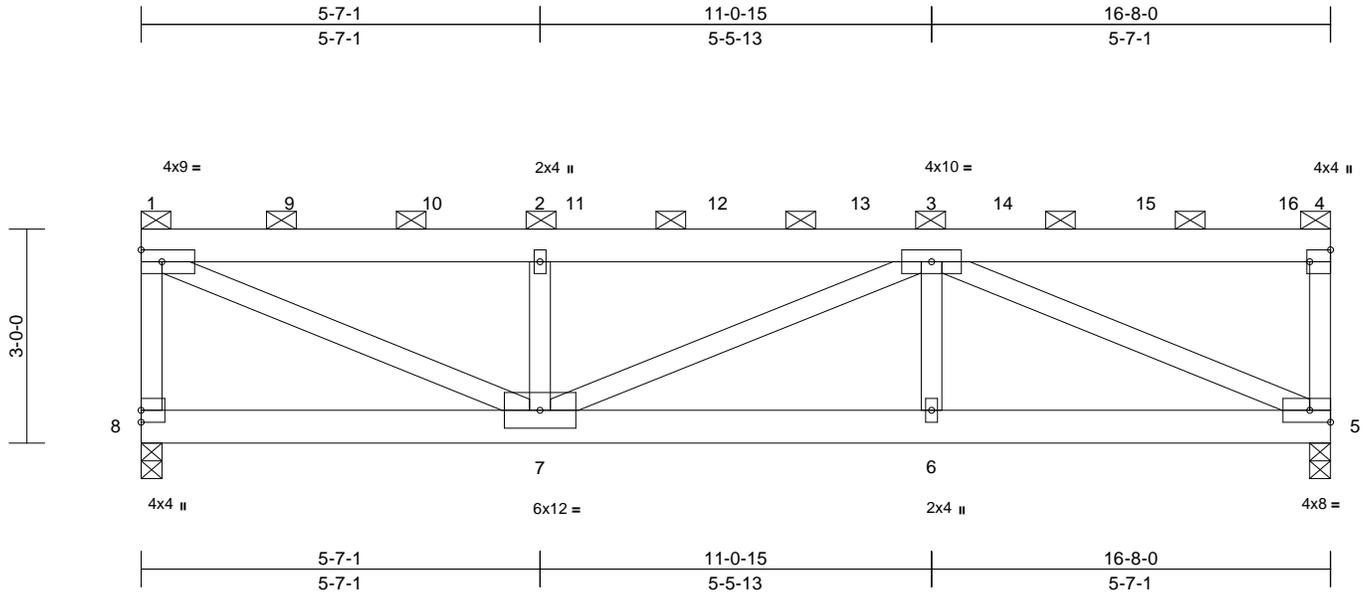
Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	R1	Flat Girder	1	2	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
 158592483
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:14:25 Page: 1
 ID:lpnO10ZFf1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:32.1
 Plate Offsets (X, Y): [4: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	0.37	Vert(LL)	-0.09	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.16	6-7	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	6-7	>999	240	Weight: 213 lb	FT = 10%

LUMBER
 TOP CHORD 2x6 SP 2400F 2.0E
 BOT CHORD 2x6 SP DSS
 WEBS 2x4 SPF No.2

BRACING
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-4, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-3-8, 8=0-3-8
 Max Horiz 8=97 (LC 5)
 Max Uplift 5=-336 (LC 5), 8=-505 (LC 4)
 Max Grav 5=4786 (LC 15), 8=3821 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-8=-3696/518, 1-2=-6362/740, 2-3=-6362/740, 3-4=-215/39, 4-5=-1605/110
 BOT CHORD 7-8=-97/206, 6-7=-568/6732, 5-6=-568/6732
 WEBS 1-7=-791/6841, 2-7=-2816/510, 3-7=-492/0, 3-6=0/184, 3-5=-7212/590

- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 505 lb uplift at joint 8 and 336 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 850 lb down and 145 lb up at 2-1-0, 850 lb down and 145 lb up at 4-1-0, 850 lb down and 145 lb up at 6-1-0, 1011 lb down and 21 lb up at 8-1-0, 1011 lb down and 21 lb up at 10-1-0, 1011 lb down and 21 lb up at 12-1-0, and 1027 lb down and 22 lb up at 14-1-0, and 1037 lb down and 30 lb up at 16-1-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-4=-70, 5-8=-20
 Concentrated Loads (lb)
 Vert: 9=-850, 10=-850, 11=-850, 12=-846, 13=-846, 14=-846, 15=-846, 16=-866

- 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, 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - 3) 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



May 26, 2023

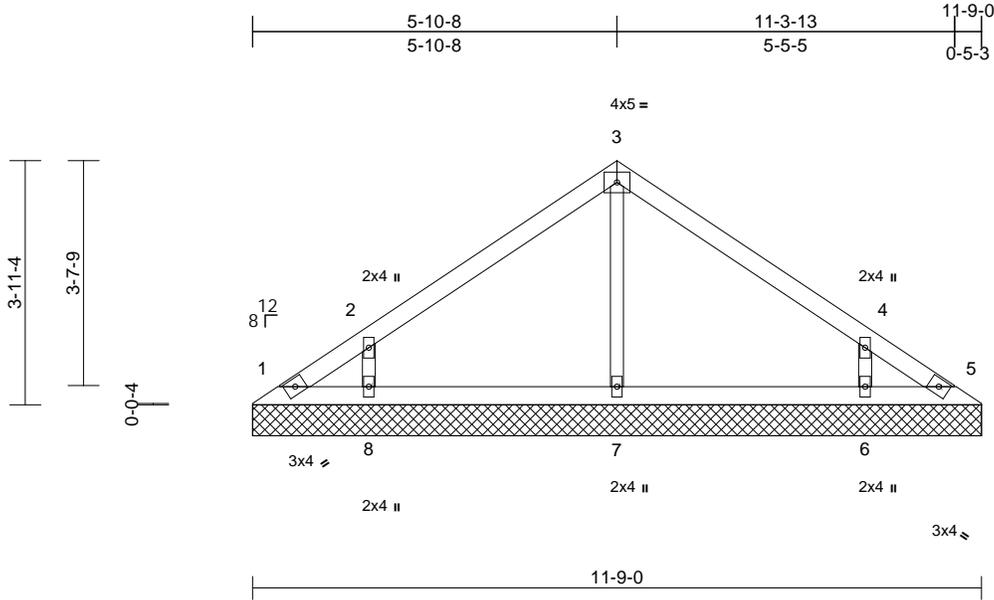
Job B230083	Truss V1	Truss Type Valley	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	----------------------	----------	----------	------------

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592484
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:56 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3u1TXbGKwtrCDoi7JzJCA

06/22/2023



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 10%

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

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

REACTIONS (size) 1=11-9-0, 5=11-9-0, 6=11-9-0, 7=11-9-0, 8=11-9-0
Max Horiz 1=-94 (LC 4)
Max Uplift 1=-42 (LC 6), 5=-24 (LC 7), 6=-139 (LC 9), 8=-140 (LC 8)
Max Grav 1=58 (LC 5), 5=46 (LC 9), 6=344 (LC 16), 7=284 (LC 1), 8=344 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-97/81, 2-3=-142/88, 3-4=-141/66, 4-5=-79/49
BOT CHORD 1-8=-21/68, 7-8=-21/68, 6-7=-21/68, 5-6=-21/68
WEBS 3-7=-199/28, 2-8=-284/184, 4-6=-284/184

- 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 42 lb uplift at joint 1, 24 lb uplift at joint 5, 140 lb uplift at joint 8 and 139 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



May 26, 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



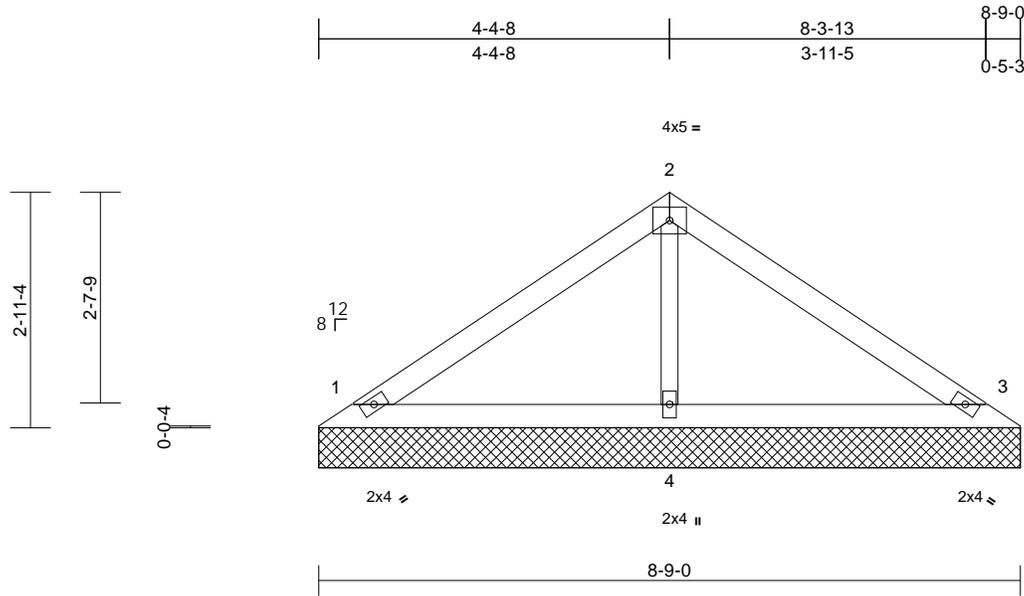
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B230083	Truss V2	Truss Type Valley	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	----------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:56 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWtrCDoi7JzJCA

06/22/2023



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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
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-P							Weight: 23 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=8-9-0, 3=8-9-0, 4=8-9-0
 Max Horiz 1=-68 (LC 4)
 Max Uplift 1=-44 (LC 8), 3=-52 (LC 9)
 Max Grav 1=199 (LC 1), 3=199 (LC 1), 4=309 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-123/63, 2-3=-119/47
 BOT CHORD 1-4=-14/58, 3-4=-14/58
 WEBS 2-4=-211/53

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp 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) Gable requires continuous bottom chord bearing.
 - 5) Gable studs spaced at 4-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1 and 52 lb uplift at joint 3.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



May 26, 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

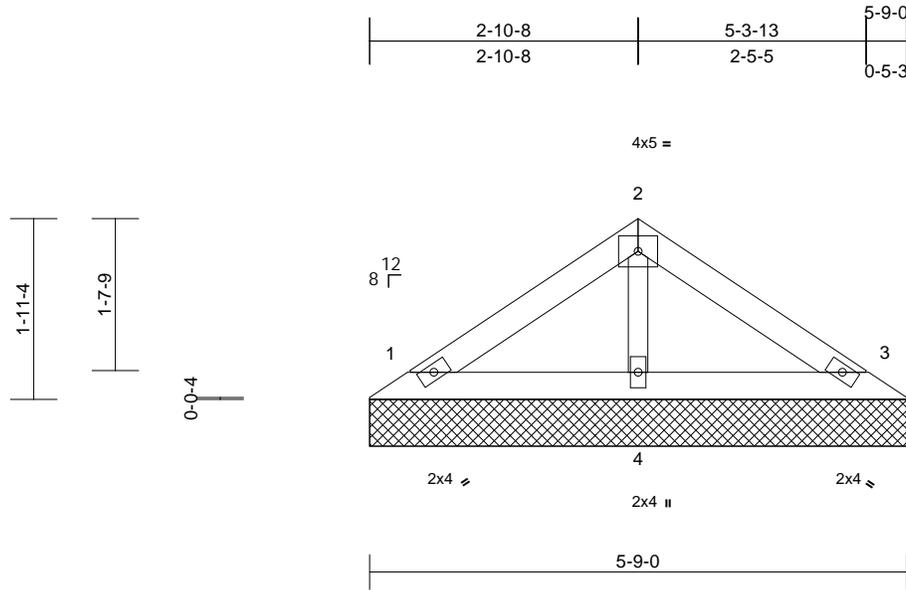
Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	V3	Valley	1	1	Job Reference (optional)

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592486
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fri May 26 08:47:56 Page: 1
ID:lpnO10ZFf1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwTCDoi7JzJCA

06/22/2023



Scale = 1:24.5

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 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 5-9-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=5-9-0, 3=5-9-0, 4=5-9-0
Max Horiz 1=-42 (LC 4)
Max Uplift 1=-27 (LC 8), 3=-32 (LC 9)
Max Grav 1=123 (LC 1), 3=123 (LC 1), 4=191 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-76/39, 2-3=-73/29
BOT CHORD 1-4=-9/36, 3-4=-9/36
WEBS 2-4=-130/33

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/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1 and 32 lb uplift at joint 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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



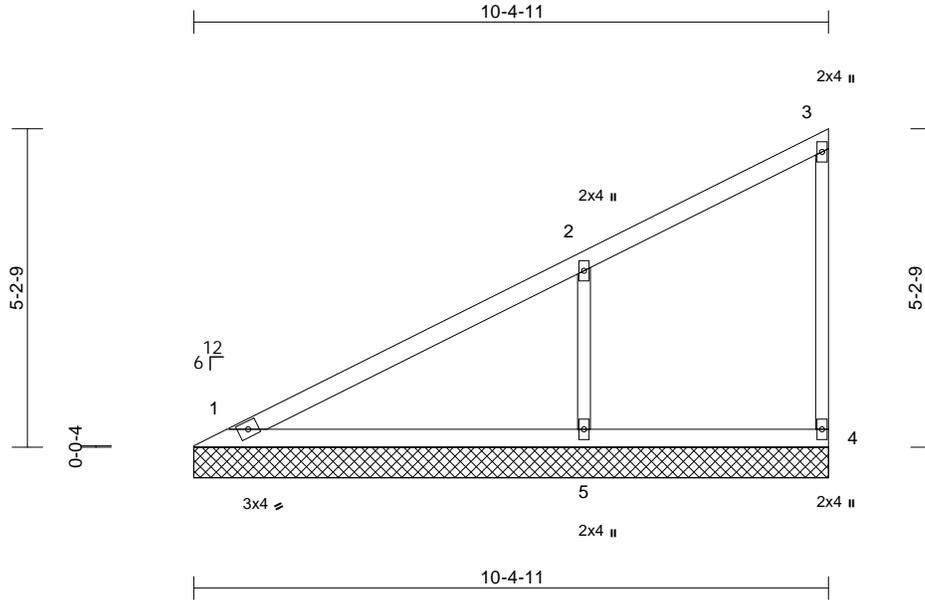
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	V4	Valley	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:56 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwrcD0i7JzJCA

06/22/2023



Scale = 1:37.5

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	0.43	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 30 lb	FT = 10%

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

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

REACTIONS (size) 1=10-4-11, 4=10-4-11, 5=10-4-11
 Max Horiz 1=202 (LC 5)
 Max Uplift 4=29 (LC 5), 5=168 (LC 8)
 Max Grav 1=211 (LC 1), 4=101 (LC 1), 5=561 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-158/104, 2-3=-132/53, 3-4=-82/38
 BOT CHORD 1-5=-69/52, 4-5=-69/52
 WEBS 2-5=-422/223

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 4 and 168 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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 B230083	Truss V5	Truss Type Valley	Qty 1	Ply 1	Lot 113 H4
----------------	-------------	----------------------	----------	----------	------------

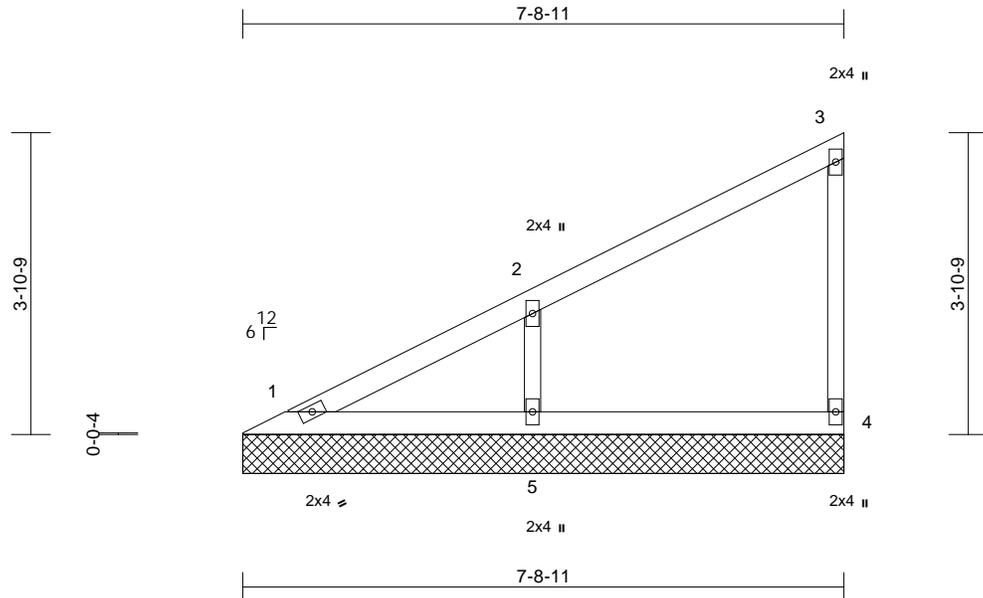
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592488
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:56 Page: 1

ID:\pnO10ZFf1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:29.5

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 10%

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

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

REACTIONS (size) 1=7-8-11, 4=7-8-11, 5=7-8-11
Max Horiz 1=147 (LC 5)
Max Uplift 4=-26 (LC 5), 5=-120 (LC 8)
Max Grav 1=105 (LC 16), 4=139 (LC 1), 5=399 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-120/67, 2-3=-111/44, 3-4=-108/44
BOT CHORD 1-5=-50/38, 4-5=-50/38
WEBS 2-5=-310/173

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 4 and 120 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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

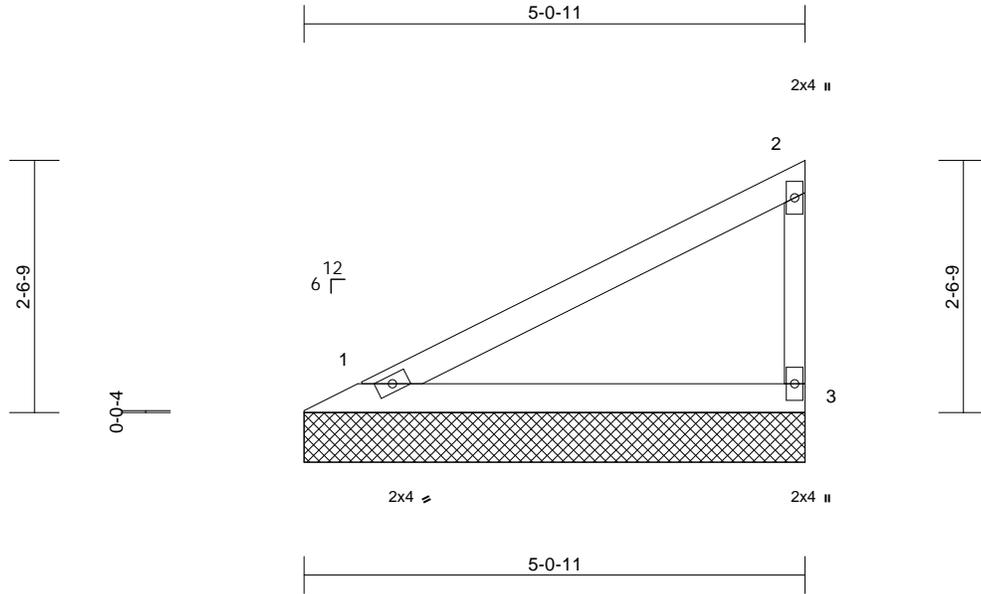
Job B230083	Truss V6	Truss Type Valley	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	----------------------	----------	----------	--

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 158592489 LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:57 Page: 1
ID:lpnO10ZFf1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwTCDoi7JzJCA

06/22/2023



Scale = 1:23.1

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	0.36	Vert(LL)	n/a	-	n/a	999	MT20	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: 13 lb	FT = 10%

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

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

LOAD CASE(S) Standard

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

REACTIONS (size) 1=5-0-11, 3=5-0-11
 Max Horiz 1=91 (LC 5)
 Max Uplift 1=-25 (LC 8), 3=-48 (LC 8)
 Max Grav 1=196 (LC 1), 3=196 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-83/55, 2-3=-153/74
 BOT CHORD 1-3=-31/24

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



May 26, 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



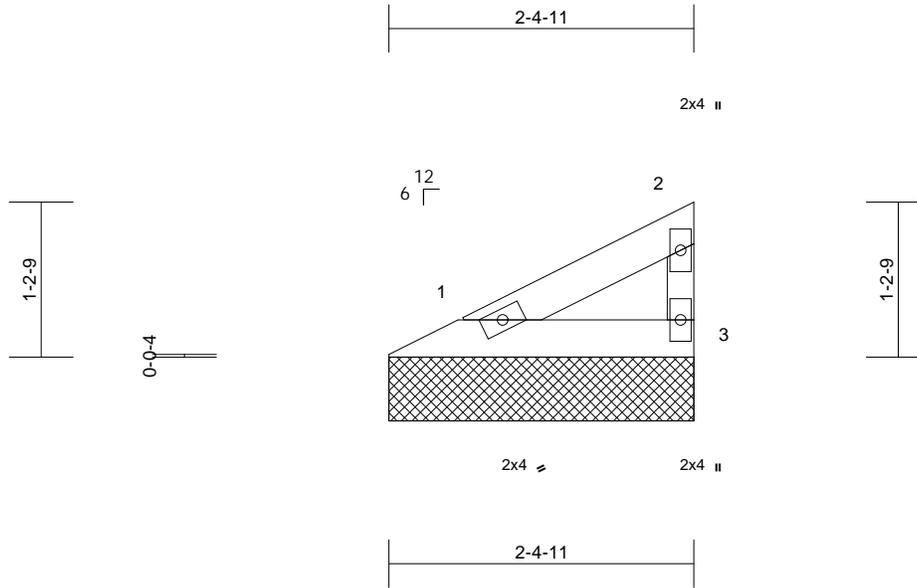
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	V7	Valley	1	1	Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:57 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwTCDoi7JzJCA

06/22/2023



Scale = 1:18

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	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: 6 lb	FT = 10%

LUMBER

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

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

LOAD CASE(S) Standard

BRACING

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

REACTIONS

(size) 1=2-4-11, 3=2-4-11
 Max Horiz 1=36 (LC 5)
 Max Uplift 1=-10 (LC 8), 3=-19 (LC 8)
 Max Grav 1=76 (LC 1), 3=76 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-32/21, 2-3=-59/29
 BOT CHORD 1-3=-12/9

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp 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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1 and 19 lb uplift at joint 3.



May 26, 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



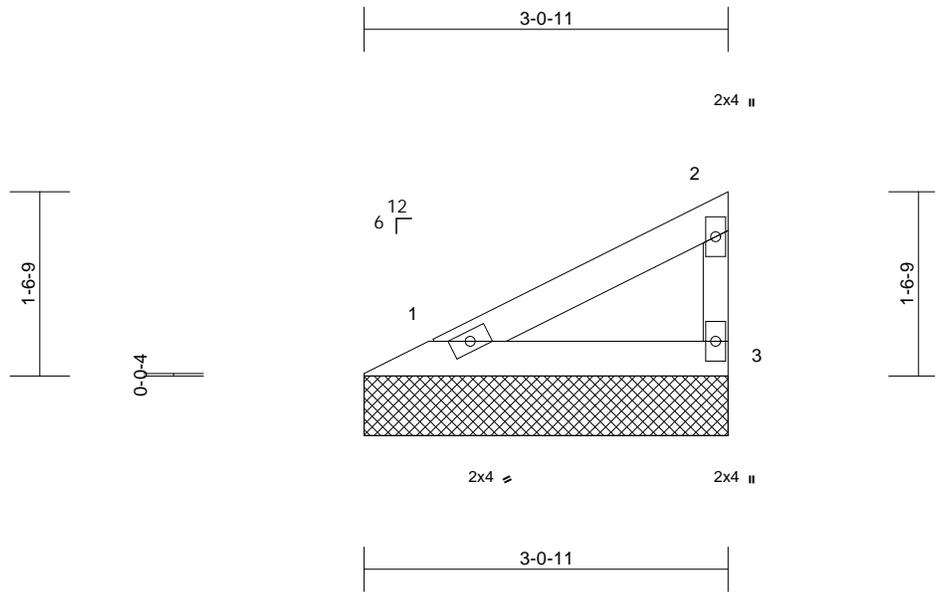
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job B230083	Truss V8	Truss Type Valley	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	-------------	----------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:57 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:19.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	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: 7 lb	FT = 10%

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

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

LOAD CASE(S) Standard

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

REACTIONS (size) 1=3-0-11, 3=3-0-11
Max Horiz 1=49 (LC 5)
Max Uplift 1=-14 (LC 8), 3=-26 (LC 8)
Max Grav 1=106 (LC 1), 3=106 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-45/30, 2-3=-83/40
BOT CHORD 1-3=-17/13

- NOTES**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) Gable studs spaced at 4-0-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 26 lb uplift at joint 3.



May 26, 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

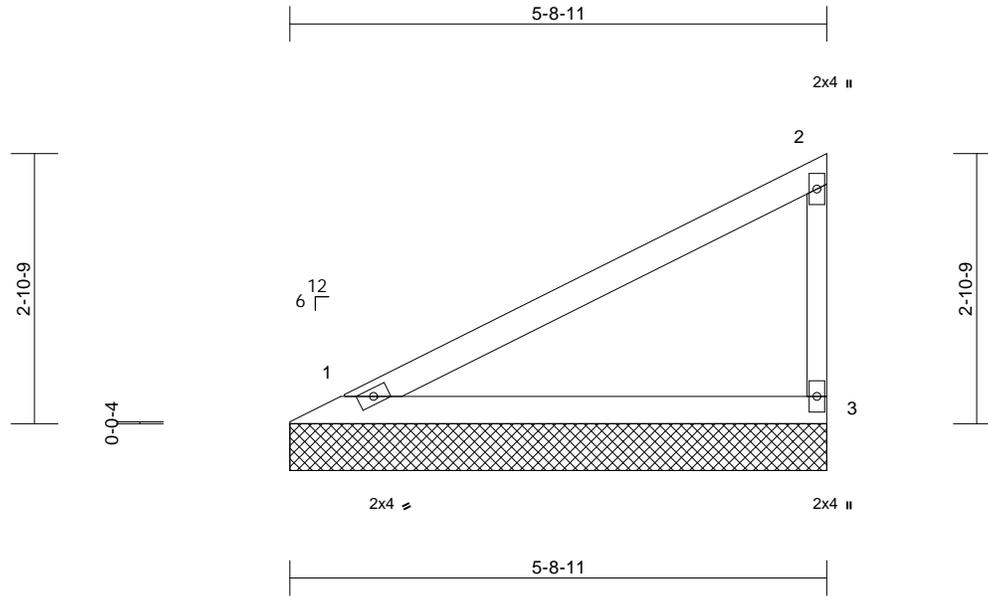
Job	Truss	Truss Type	Qty	Ply	Lot 113 H4
B230083	V9	Valley	1	1	Job Reference (optional)

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
158592492
LEE'S SUMMIT, MISSOURI

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fri May 26 08:47:57 Page: 1
ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwTCDoi7JzJCA

06/22/2023



Scale = 1:24.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	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: 15 lb	FT = 10%

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

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

LOAD CASE(S) Standard

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

REACTIONS (size) 1=5-8-11, 3=5-8-11
Max Horiz 1=105 (LC 5)
Max Uplift 1=-29 (LC 8), 3=-55 (LC 8)
Max Grav 1=226 (LC 1), 3=226 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-96/63, 2-3=-176/86
BOT CHORD 1-3=-36/27

- NOTES**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) Gable studs spaced at 4-0-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1 and 55 lb uplift at joint 3.



May 26, 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



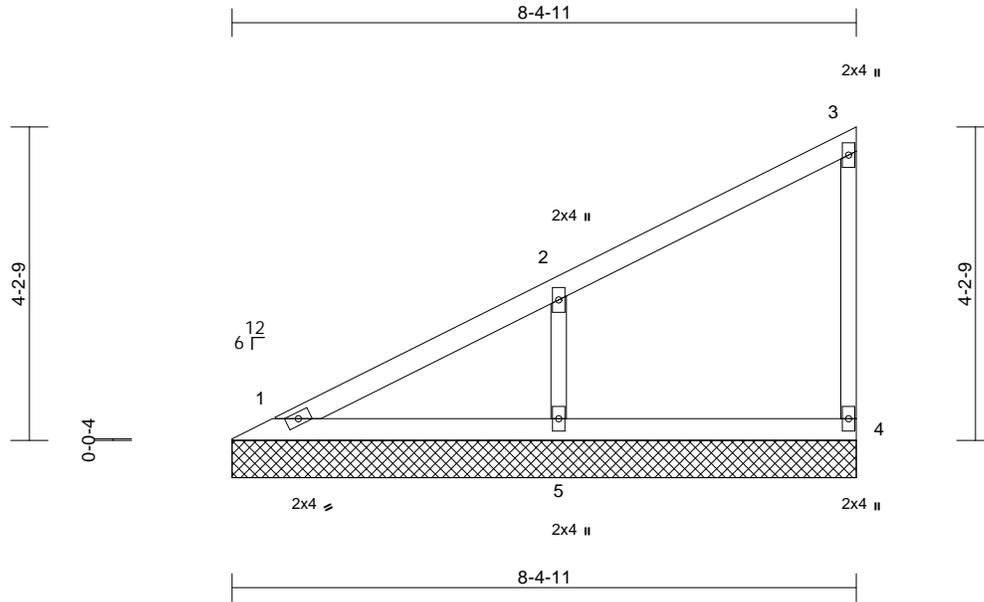
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job B230083	Truss V10	Truss Type Valley	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	--------------	----------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fr May 26 08:47:57 Page: 1
 ID:lpnO10ZFdF1T0VaStrr?zJzsVXo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwtrCDoi7JzJCA

06/22/2023



Scale = 1:30.8

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	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	0.07	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=8-4-11, 4=8-4-11, 5=8-4-11
 Max Horiz 1=160 (LC 5)
 Max Uplift 4=-27 (LC 5), 5=-130 (LC 8)
 Max Grav 1=132 (LC 16), 4=133 (LC 1), 5=433 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-129/76, 2-3=-116/44, 3-4=-103/44
 BOT CHORD 1-5=-55/42, 4-5=-55/42
 WEBS 2-5=-336/188

NOTES

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 4 and 130 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 26, 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



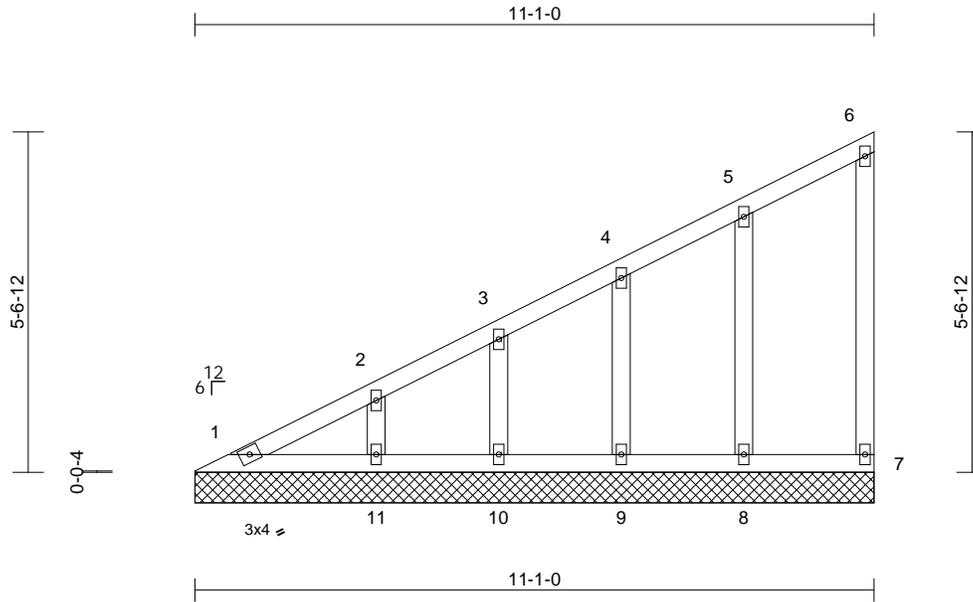
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job B230083	Truss V11	Truss Type Valley	Qty 1	Ply 1	Lot 113 H4 Job Reference (optional)
----------------	--------------	----------------------	----------	----------	--

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Fri May 26 08:42:57 Page: 1
 ID:thmYsao0GwtsOZMi_NYE?LzOWgS-RfC?PsB70Hq3NSgPqnL8w3uITXb6KWrcD07J42C?

06/22/2023



Scale = 1:37.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 43 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)

1=11-1-0, 7=11-1-0, 8=11-1-0, 9=11-1-0, 10=11-1-0, 11=11-1-0
Max Horiz 1=216 (LC 7)
Max Uplift 7=-29 (LC 5), 8=-58 (LC 8), 9=-54 (LC 8), 10=-50 (LC 8), 11=-69 (LC 8)
Max Grav 1=116 (LC 16), 7=74 (LC 1), 8=195 (LC 1), 9=180 (LC 1), 10=166 (LC 1), 11=229 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-183/54, 2-3=-150/42, 3-4=-127/45, 4-5=-115/49, 5-6=-90/54, 6-7=-58/26
BOT CHORD	1-11=-74/56, 10-11=-74/56, 9-10=-74/56, 8-9=-74/56, 7-8=-74/56
WEBS	2-11=-172/94, 3-10=-131/73, 4-9=-140/82, 5-8=-152/67

- NOTES**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp 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
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.

- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 7, 69 lb uplift at joint 11, 50 lb uplift at joint 10, 54 lb uplift at joint 9 and 58 lb uplift at joint 8.
- 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



May 26, 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

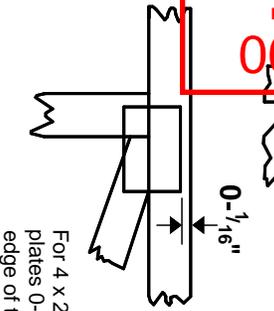


06/22/2023

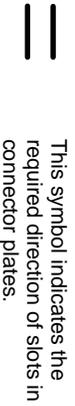
Symbols

PLATE LOCATION AND ORIENTATION

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



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



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

PLATE SIZE

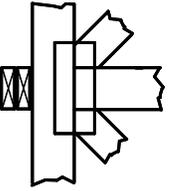
4 X 4
 The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



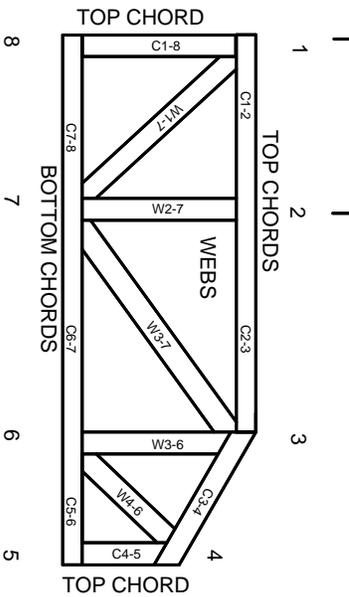
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MITek® All Rights Reserved

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

