



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

08/20/2021

MiTek USA, Inc.

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

Re: 2887867

SUMMIT/HAWTHORN RIDGE #106/MO

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Pages or sheets covered by this seal: I47332643 thru I47332681

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

Missouri COA: Engineering 001193



August 6, 2021

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO
2887867	A1	Common Supported Gable	1	1	147332643
Job Reference (optional)					

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:37 2021 Page 1

ID:eM_cJZPAS0ZQ0d5HPdYuvtzUR7k-Yh1js0gh?uCKAA6Lx8pfYApMqpEq5M?us36Om8yqsMi

17-4-8
17-4-8

34-10-8
17-6-0

35-9-0
0-10-8

Scale = 1:61.6

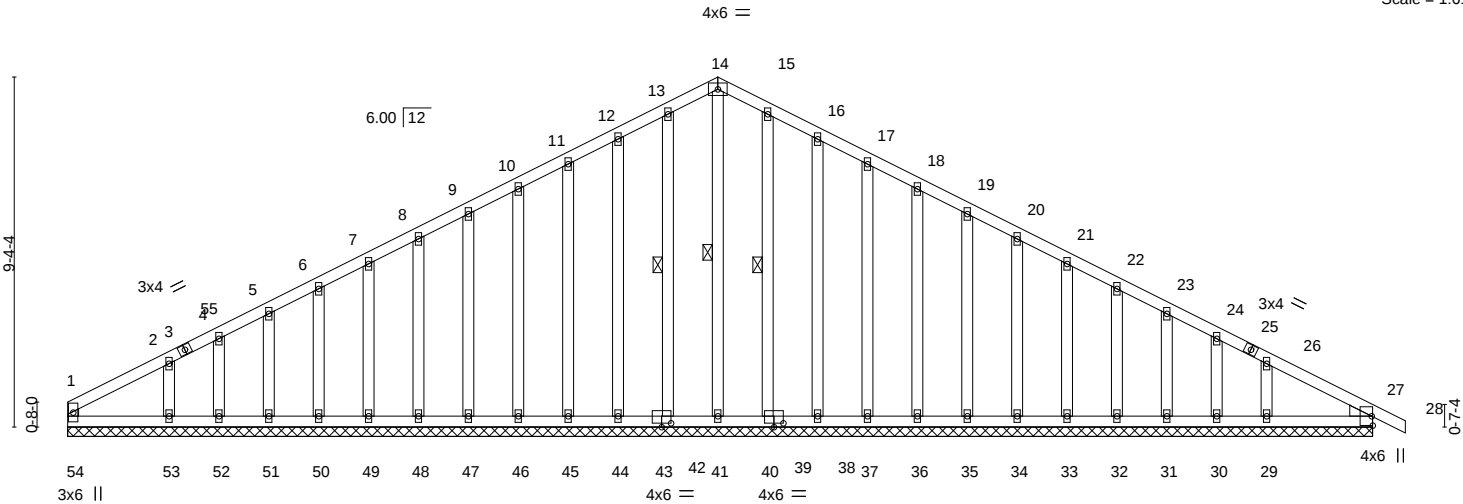


Plate Offsets (X,Y)--		[40:0-3-0,0-1-4], [43:0-3-0,0-1-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.06
BCLL 0.0	Rep Stress Incr	YES	WB 0.10
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.00 28 n/r 120
			Vert(CT) 0.00 28 n/r 120
			Horz(CT) 0.01 27 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 217 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Right: 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 14-41, 13-42, 15-40

REACTIONS.

All bearings 34-10-8.
(lb) - Max Horz 54=-149(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 54, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 27 except 53=-113(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 54, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 27

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

TOP CHORD 12-13=-112/273, 13-14=-119/291, 14-15=-119/291, 15-16=-112/273

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-7-10, Exterior(2N) 3-7-10 to 17-4-8, Corner(3R) 17-4-8 to 20-10-6, Exterior(2N) 20-10-6 to 35-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 54, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 27 except (jt=lb) 53=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 6, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO
2887867	A2	Common	7	1	147332644

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID: eM_cJZPA50ZQd5HPdYvtzuR7k-U49THiiyXVS2QTGj3Zs7dbuWQckwZBjBjMbUq1yqsMg

5-8-12	5-11-13	11-6-10	11-8-3	17-4-8	23-2-6	26-2-8	29-0-5	34-10-8	35-9-0
5-8-12	0-3-1 2-6-11	3-0-2 0-1-9	5-8-5	5-9-14	3-0-2	2-9-12	5-10-3	0-10-8	

9x12 MT18HS ||

Scale = 1:67.2

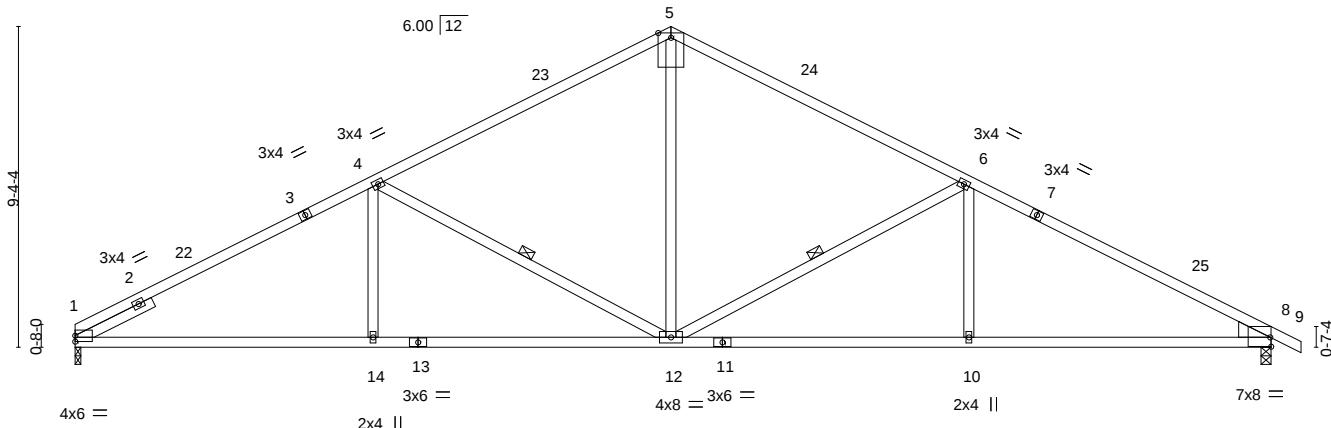


Plate Offsets (X,Y)--	[1:0-0-0,0-2-1], [8:Edge,0-3-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	-0.15 10-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.34 10-12	>999	180	MT18HS	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.11 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 135 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 1-13: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Right: 2x6 SPF No.2
 SLIDER Left 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 6-12, 4-12

REACTIONS.

(size) 1=0-2-0, 8=0-3-8
 Max Horz 1=-154(LC 13)
 Max Uplift 1=-195(LC 12), 8=-213(LC 13)
 Max Grav 1=1569(LC 1), 8=1631(LC 1)

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

TOP CHORD 1-4=-2638/337, 4-5=-1886/317, 5-6=-1887/316, 6-8=-2703/336
 BOT CHORD 1-14=-330/2283, 12-14=-330/2283, 10-12=-197/2306, 8-10=-197/2306
 WEBS 5-12=-87/977, 6-10=0/336, 6-12=-893/283, 4-14=0/336, 4-12=-870/278

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-5-14, Interior(1) 3-5-14 to 17-4-8, Exterior(2R) 17-4-8 to 20-10-6, Interior(1) 20-10-6 to 35-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=195, 8=213.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2887867	Truss A3	Truss Type COMMON	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332645
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

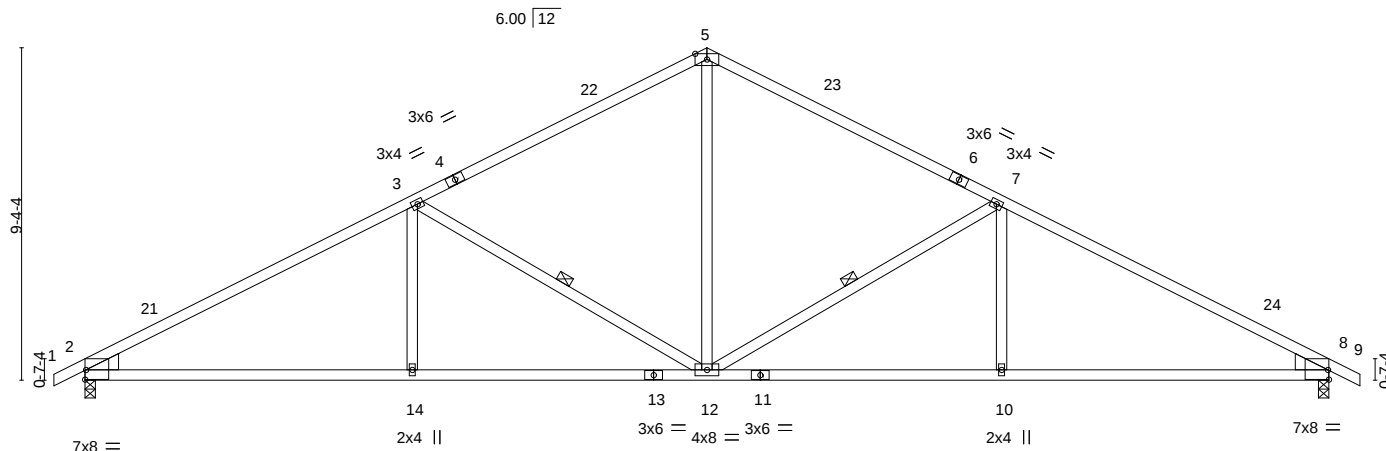
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:40 2021 Page 1

ID: eM_cJZPAS0ZQ0d5HPdYvztuR7k-yGjrU2ialpav1dqwcGNMAoRjx05jlfKLY0K2NTyqsMf

0-10-8 5-10-3 9-4-4 11-8-2 17-6-0 23-3-14 25-7-12 29-1-13 35-0-0 35-10-8
0-10-8 5-10-3 3-6-1 2-3-14 5-9-14 5-9-14 2-3-14 3-6-1 5-10-3 0-10-8

4x8 =

Scale = 1:64.8



8-9-3 9-4-4 17-6-0 25-7-12 26-2-13 35-0-0
8-9-3 0-7-1 8-1-12 8-1-12 0-7-1 8-9-3

Plate Offsets (X,Y)--		[2:Edge,0-3-4], [8:Edge,0-3-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.72
TCDL 10.0	Lumber DOL	1.15	BC 0.69
BCLL 0.0	Rep Stress Incr	YES	WB 0.38
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.15 12 >999 240
			Vert(CT) -0.32 12-14 >999 180
			Horz(CT) 0.11 8 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 132 lb FT = 20%

LUMBER-

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

WEDGE
Left: 2x6 SPF No.2, Right: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-12, 3-12

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
Max Horz 2=145(LC 12)
Max Uplift 2=-214(LC 12), 8=-214(LC 13)
Max Grav 2=1636(LC 1), 8=1636(LC 1)

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

TOP CHORD 2-3=-2689/332, 3-5=-1886/311, 5-7=-1886/311, 7-8=-2689/332
BOT CHORD 2-14=-325/2289, 12-14=-325/2289, 10-12=-184/2289, 8-10=-184/2289
WEBS 5-12=-98/1026, 7-10=0/341, 7-12=-885/279, 3-14=0/341, 3-12=-885/278

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0, Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=214, 8=214.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO	147332646
2887867	A3A	Roof Special	1	1		

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

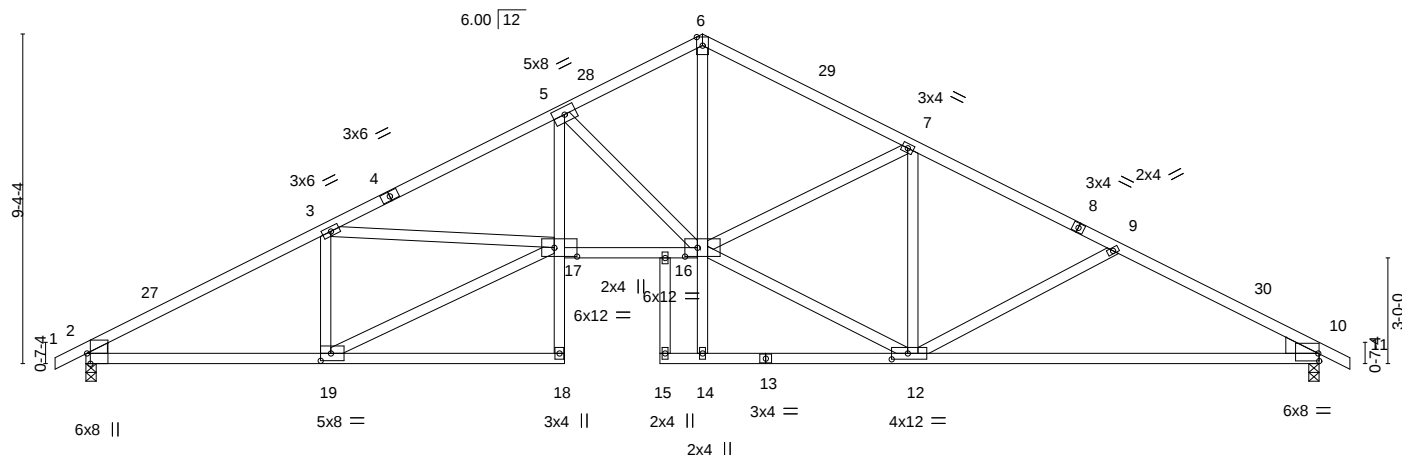
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:41 2021 Page 1

ID:eM_cJZPA50ZQ0d5HPdYuvtzur7k-QTHEiOjC36imfnP6A_ubj0ztEQMF1yWUng4bvvyqsMe

0-10-8 6-9-11 13-7-0 16-3-8 17-6-0 23-3-14 29-1-13 35-0-0 35-10-8
0-10-8 6-9-11 6-9-5 2-8-8 1-2-8 5-9-14 5-9-14 5-10-3 0-10-8

4x6 ||

Scale = 1:65.4



6-9-11 13-7-0 16-3-8 17-6-0 23-3-14 25-7-9 35-0-0
6-9-11 6-9-5 2-8-8 1-2-8 5-9-14 2-3-11 9-4-7

Plate Offsets (X,Y)--		[2:0-3-8,Edge], [10:Edge,0-2-9], [12:0-5-8,0-2-0], [16:0-4-4,0-3-0], [17:0-7-12,0-3-0], [19:0-3-8,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.81	Vert(LL)	-0.32 12-26	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.99	Vert(CT)	-0.67 12-26	>627	180		
BCLL	0.0	Rep Stress Incr YES		WB	0.96	Horz(CT)	0.29 10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 165 lb	FT = 20%

LUMBER-

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

Left: 2x4 SPF No.2 , Right: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 10=0-3-8
Max Horz 2=145(LC 12)
Max Uplift 2=-209(LC 12), 10=-209(LC 13)
Max Grav 2=1647(LC 1), 10=1646(LC 1)

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

TOP CHORD 2-3=-2794/333, 3-5=-4080/469, 5-6=-2692/338, 6-7=-2672/323, 7-9=-2410/306,
9-10=-2776/364
BOT CHORD 2-19=-351/2403, 5-17=-153/1453, 16-17=-340/3557, 10-12=-238/2399
WEBS 3-19=-1075/229, 17-19=-394/2627, 3-17=0/1156, 5-16=-1714/316, 6-16=-209/1998,
12-16=-135/2308, 7-12=-672/107, 7-16=-14/345, 9-12=-385/178

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0, Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=209, 10=209.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss A4	Truss Type Common	Qty 3	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332647
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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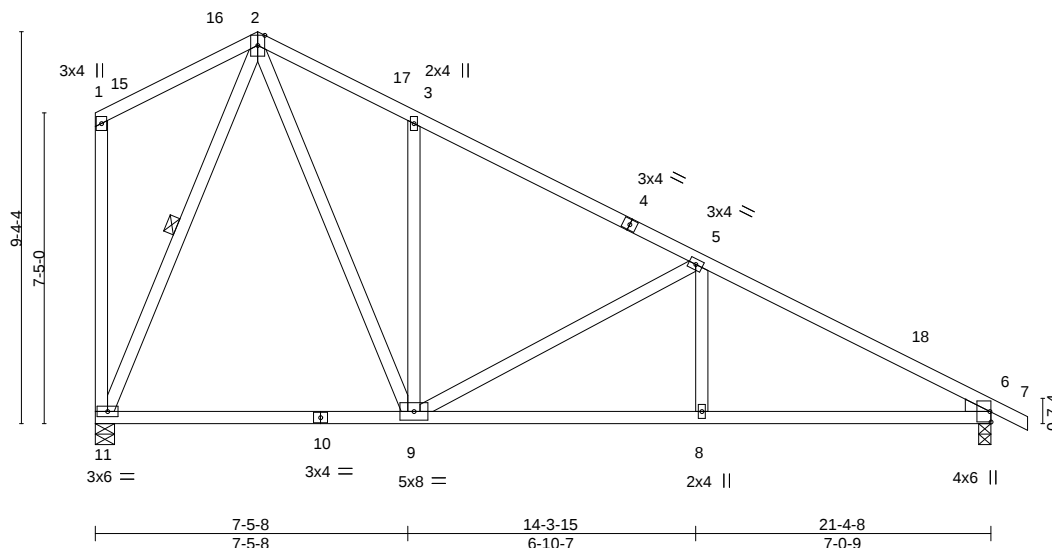
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3-10-8 7-5-8 9-8-6 14-3-15 15-6-5 21-4-8 22-3-0
3-10-8 3-7-0 2-2-14 4-7-9 1-2-5 5-10-3 0-10-8

6.00 12

4x6 ||

Scale = 1:55.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.08 9-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.17 9-11	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.03 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 104 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-11

REACTIONS.

(size) 6=0-3-8, 11=0-5-8
Max Horz 11=-294(LC 10)
Max Uplift 6=-150(LC 13), 11=-152(LC 13)
Max Grav 6=1018(LC 1), 11=954(LC 1)

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

TOP CHORD 2-3=-839/312, 3-5=-876/214, 5-6=-1514/257
BOT CHORD 9-11=-19/368, 8-9=-125/1272, 6-8=-125/1272
WEBS 2-11=-814/262, 2-9=-256/958, 3-9=-408/195, 5-9=-672/214, 5-8=0/256

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-10-8, Exterior(2R) 3-10-8 to 6-10-8, Interior(1) 6-10-8 to 22-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=150, 11=152.
- 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.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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

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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 2887867	Truss A4A	Truss Type Roof Special	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332648
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

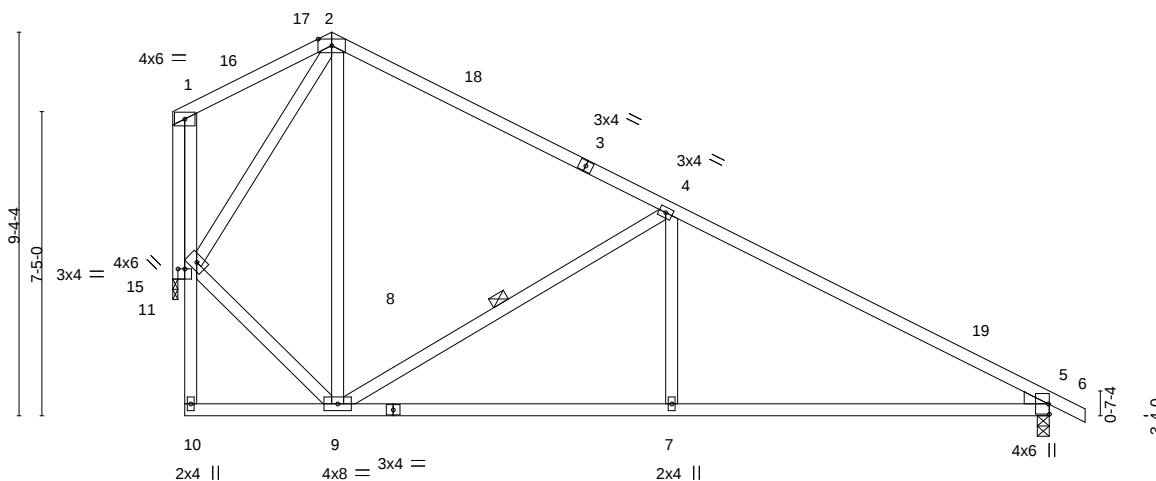
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:43 2021 Page 1

ID:eM_cJZPas0ZQ0d5HPdYuvtzuR7k-MrP_73ISbkzUu5ZVlPw3oR3EYE8NV?knE_ZizoyqsMc

3-10-8 9-8-6 11-8-1 12-2-0 15-6-5 21-4-8 22-3-0
3-10-8 5-9-14 1-11-11 0-5-15 3-4-5 5-10-3 0-10-8

6.00 12 4x8 =

Scale = 1:56.2



0-3-8 3-10-8 7-3-12 11-8-1 12-2-0 14-3-15 21-4-8
0-3-8 3-7-0 3-5-4 4-4-6 0-5-15 2-1-15 7-0-9

Plate Offsets (X,Y)--	[11:0-2-0,0-0-0]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.11	7-14	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.27	7-14	>961	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 104 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-9

REACTIONS.

(size) 5=0-3-8, 15=0-1-8
Max Horz 15=-242(LC 13)
Max Uplift 5=-169(LC 13), 15=-134(LC 13)
Max Grav 5=1021(LC 1), 15=924(LC 1)

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

TOP CHORD 2-4=-559/191, 4-5=-1416/251, 1-11=-130/806
BOT CHORD 7-9=-114/1162, 5-7=-114/1162
WEBS 2-9=-191/357, 9-11=0/488, 2-11=-538/280, 4-9=-933/282, 4-7=0/368, 1-15=-928/165

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 3-10-8, Exterior(2R) 3-10-8 to 6-10-8, Interior(1) 6-10-8 to 22-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=169, 15=134.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss A5	Truss Type ROOF SPECIAL	Qty 3	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332649
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

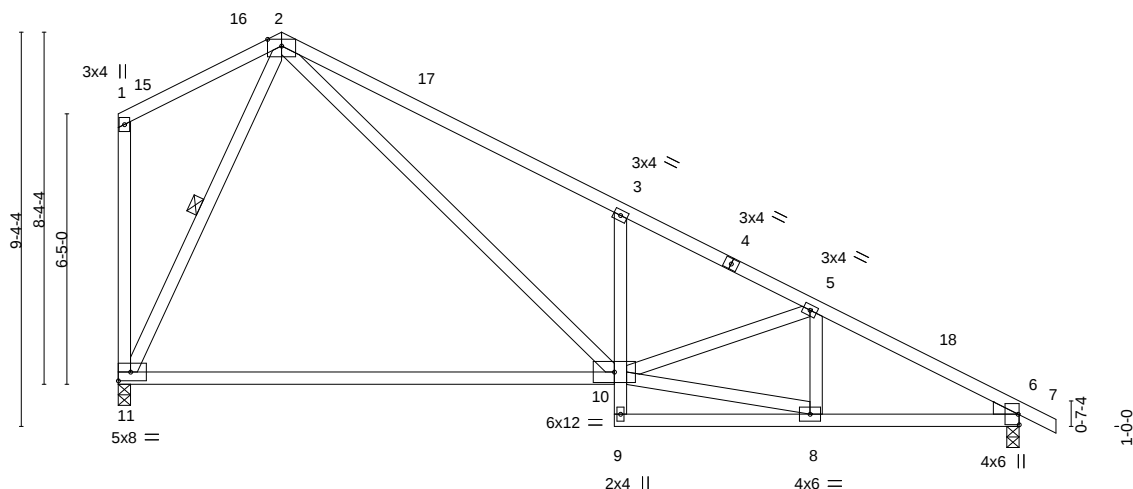
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:44 2021 Page 1

ID: eM_cJZPAs0ZQ0d5HPdYuvizuR7k-q1zMKPI4M15LWE8hr6RIKebPmdRzENhwTeIFWEyqsMb

3-10-8 11-9-4 16-6-11 21-4-8 22-3-0
3-10-8 7-10-12 4-9-7 4-9-13 0-10-8

6.00 12 5x8 =

Scale = 1:54.7



3-10-8 11-9-4 16-6-11 21-4-8
3-10-8 7-10-12 4-9-7 4-9-13

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.49 10-11	>517	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-1.01 10-11	>253	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.03 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 101 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
10-11: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-11

REACTIONS.

(size) 6=0-3-8, 11=0-3-8
Max Horz 11=-276(LC 8)
Max Uplift 6=-159(LC 13), 11=-144(LC 13)
Max Grav 6=1018(LC 1), 11=954(LC 1)

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

TOP CHORD 2-3=-1672/409, 3-5=-1526/257, 5-6=-1556/257
BOT CHORD 10-11=0/394, 3-10=-541/251, 6-8=-144/1322
WEBS 8-10=-69/1353, 2-11=-815/295, 2-10=-324/1423

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-10-8, Exterior(2R) 3-10-8 to 6-10-8, Interior(1) 6-10-8 to 22-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=159, 11=144.
- 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.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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



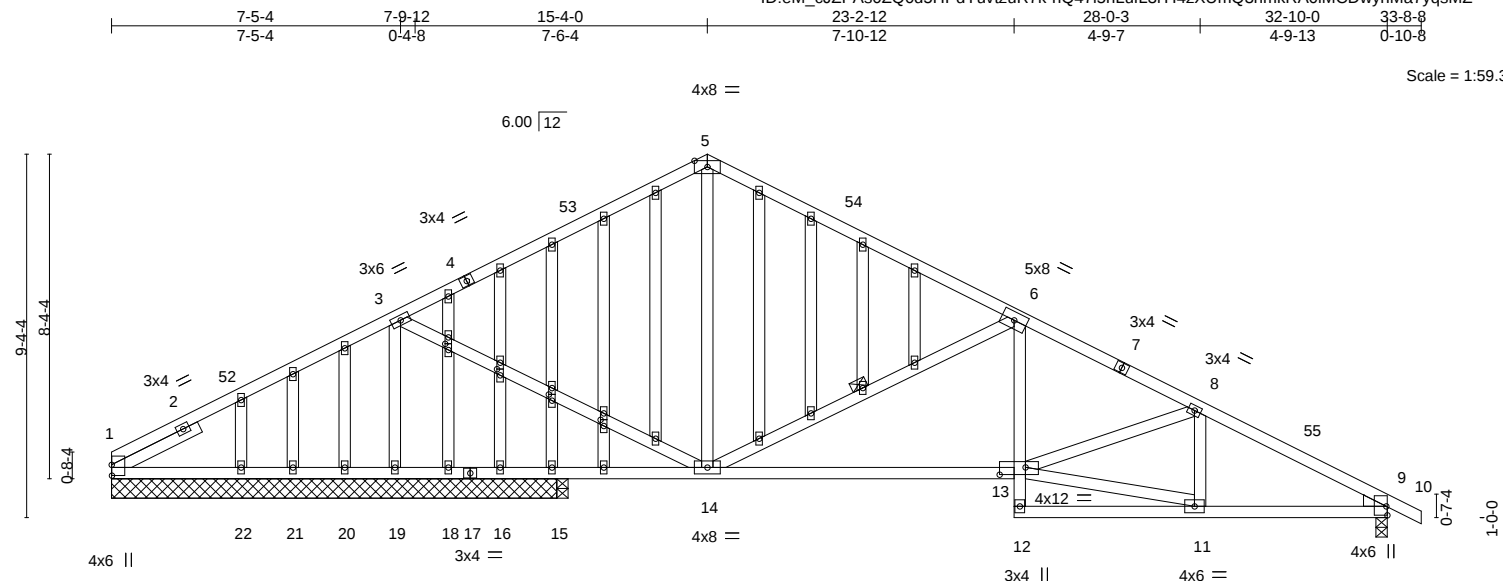
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO	147332650
2887867	A6	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:eM_cJZPAs0ZQ0d5HPdYuvZuR7k-nQ47l5nLufL3lYl4zXUmQ3hmkRA0iMCDwynMa7yqsMZ



										7-5-4		7-9-12		11-5-8		15-4-0		23-2-12				28-0-3		32-10-0	
										7-5-4		0-4-8		3-7-12		3-10-8		7-10-12				4-9-7		4-9-13	
Plate Offsets (X,Y)--										[1:0-3-5,0-0-1], [9:Edge,0-0-5], [13:0-8-0,0-2-4], [25:0-1-15,0-1-0], [28:0-1-15,0-1-0], [30:0-1-15,0-1-0], [32:0-1-15,0-1-0]															
LOADING (psf)		SPACING- 2-0-0				CSI.		DEFL.				in (loc)		l/defl		L/d		PLATES		GRIP					
TCLL	25.0	Plate Grip DOL 1.15				TC	0.64	Vert(LL)	-0.12	13-14	>999		240		MT20		197/144								
TCDL	10.0	Lumber DOL 1.15				BC	0.57	Vert(CT)	-0.28	13-14	>904		180												
BCLL	0.0	Rep Stress Incr YES				WB	0.42	Horz(CT)	0.05	9	n/a		n/a												
BCDL	10.0	Code IRC2018/TPI2014				Matrix-AS										Weight: 196 lb		FT = 20%							

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 WEDGE
 Right: 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 6-14

REACTIONS.

All bearings 11-5-8 except (jt=length) 9=0-3-8.
 (lb) - Max Horz 1=175(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 16, 20, 22 except 9=196(LC 13), 19=182(LC 12), 21=108(LC 1)
 Max Grav All reactions 250 lb or less at joint(s) 1, 15, 15, 16, 18, 20, 21, 1 except 9=1160(LC 1), 19=1437(LC 1), 22=265(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-57/331, 3-5=-934/236, 5-6=-931/224, 6-8=-1883/322, 8-9=-1834/308
 BOT CHORD 1-22=-263/139, 21-22=-263/139, 20-21=-263/139, 19-20=-263/139, 18-19=-263/139, 16-18=-263/139, 15-16=-263/139, 14-15=-263/139, 13-14=-159/1691, 6-13=-8/476, 9-11=-201/1565
 WEBS 5-14=-47/291, 6-14=-1098/294, 8-11=-287/75, 11-13=-157/1501, 3-19=-1426/202, 3-14=-40/943

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-3-6, Interior(1) 3-3-6 to 15-4-0, Exterior(2R) 15-4-0 to 18-7-6, Interior(1) 18-7-6 to 33-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 16, 20, 22, 1 except (jt=lb) 9=196, 19=182, 21=108.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO
2887867	B1	COMMON SUPPORTED GAB	1	1	147332651

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:47 2021 Page 1

ID:eM_cJZPA50ZQ0d5HPdYuvtzur7k-FceVyRozfyTwNitGXE??yHD3lreWRv9N9cXv7ZyqsMY

Job Reference (optional)

0-10-8 10-8-4 21-4-8 22-3-0
0-10-8 10-8-4 10-8-4 0-10-8

Scale = 1:39.7

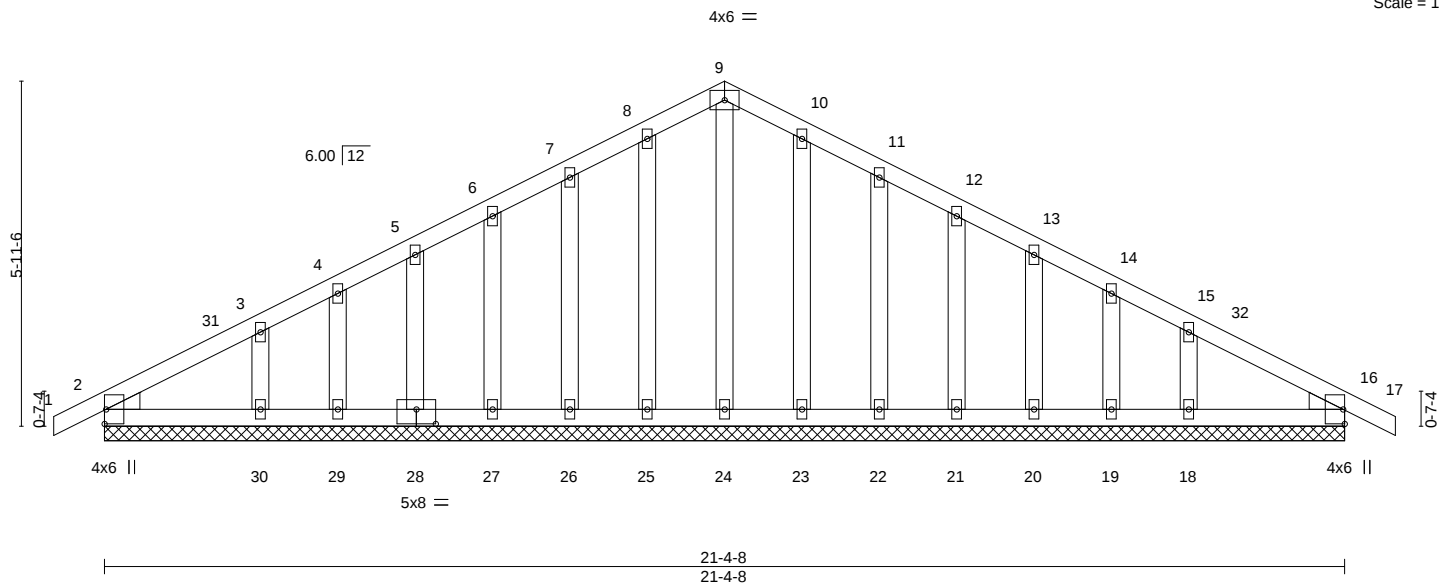


Plate Offsets (X,Y)--		[28:0-4-0,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.07	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) 0.00 16 n/r 120
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Vert(CT) 0.00 17 n/r 120
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 16 n/a n/a
		PLATES MT20	
		GRIP 197/144	
		Weight: 104 lb FT = 20%	

LUMBER-

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

Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 21-4-8.
(lb) - Max Horz 2--92(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 10-8-4, Corner(3R) 10-8-4 to 13-8-4, Exterior(2N) 13-8-4 to 22-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 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.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

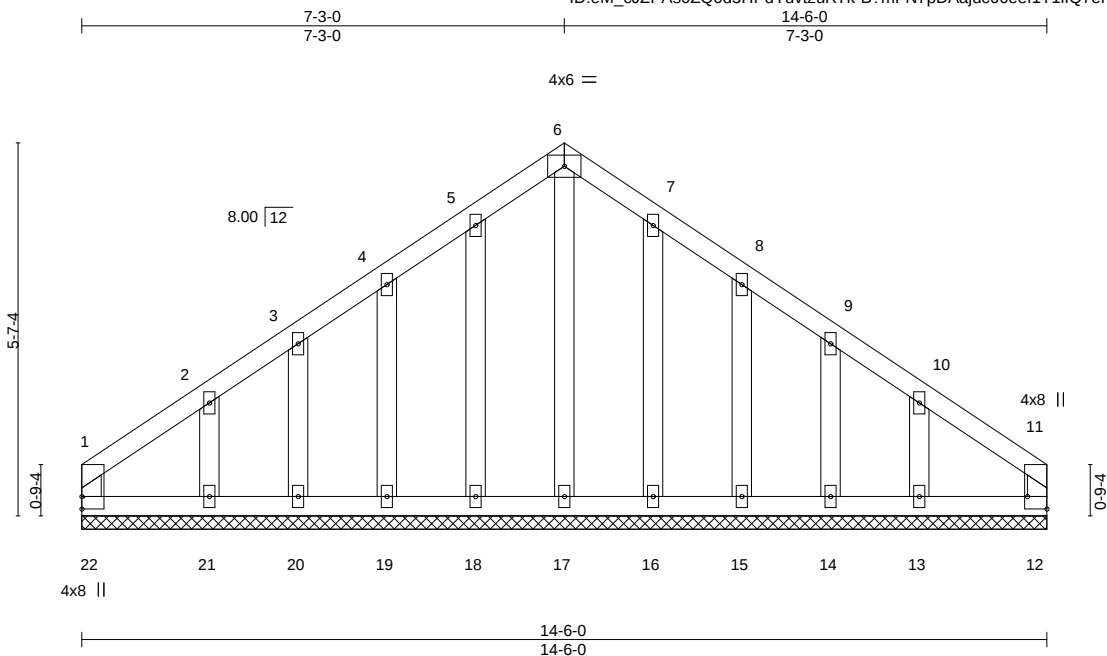
Job 2887867	Truss B2	Truss Type Common Supported Gable	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332652
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:49 2021 Page 1

ID:eM_cJZPA50ZQ0d5HPdYuvtzR7k-B?mFN7pDAajdc00eef1T1ilQ7eK2voJfcw00BSyqsMW



Scale = 1:34.6

Plate Offsets (X, Y)--		[11:Edge,0-3-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05
TCDL 10.0	Lumber DOL	1.15	BC 0.04
BCLL 0.0	Rep Stress Incr	YES	WB 0.08
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.00 12 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 69 lb FT = 20%

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.

All bearings 14-6-0.

(lb) - Max Horz 22=-130(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 22, 12, 18, 19, 20, 21, 16, 15, 14, 13

Max Grav All reactions 250 lb or less at joint(s) 22, 12, 17, 18, 19, 20, 21, 16, 15, 14, 13

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-3-0, Exterior(2N) 3-3-0 to 7-3-0, Corner(3R) 7-3-0 to 10-3-0, Exterior(2N) 10-3-0 to 14-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 12, 18, 19, 20, 21, 16, 15, 14, 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss C1	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332653
Job Reference (optional)					

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:50 2021 Page 1

ID:eM_cJZPAsoZQ0d5HPdYvutzuR7k-fBKdbTqrtrUE9brCNYiavrZZ2faeGGpralajuyqsMV

-0-10-8	10-4-0	20-8-0	21-6-8
0-10-8	10-4-0	10-4-0	0-10-8

Scale = 1:35.9

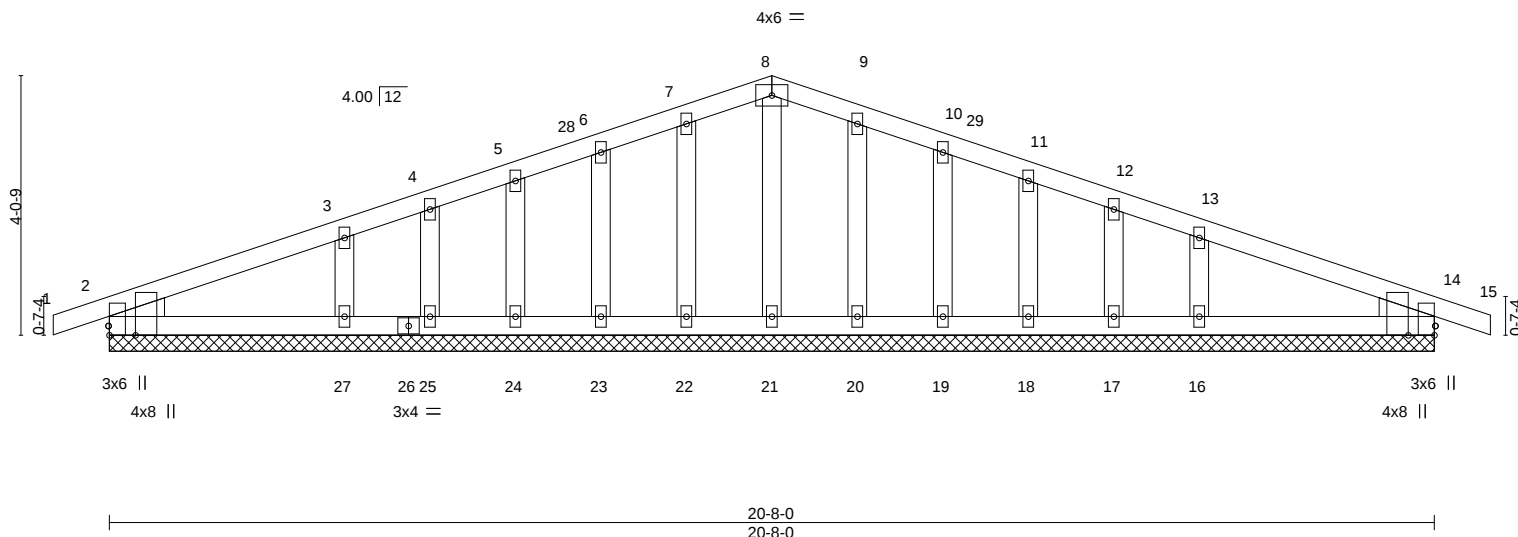


Plate Offsets (X,Y)--		[2:Edge,0-0-3], [2:0-1-12,Edge], [14:Edge,0-0-3], [14:0-1-12,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13
TCDL 10.0	Lumber DOL	1.15	BC 0.08
BCLL 0.0	Rep Stress Incr	YES	WB 0.03
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	0.00 15 n/r 120
		Vert(CT)	0.01 15 n/r 120
		Horz(CT)	0.00 14 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 81 lb	FT = 20%

LUMBER-

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

Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 20-8-0.

(lb) - Max Horz 2=59(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 22, 23, 24, 25, 27, 20, 19, 18, 17, 16, 2, 14

Max Grav All reactions 250 lb or less at joint(s) 21, 22, 23, 24, 25, 20, 19, 18, 17, 2, 14 except 27=335(LC 25), 16=335(LC 26)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 21-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 23, 24, 25, 27, 20, 19, 18, 17, 16, 2, 14.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 6,2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss C2	Truss Type COMMON	Qty 4	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332654
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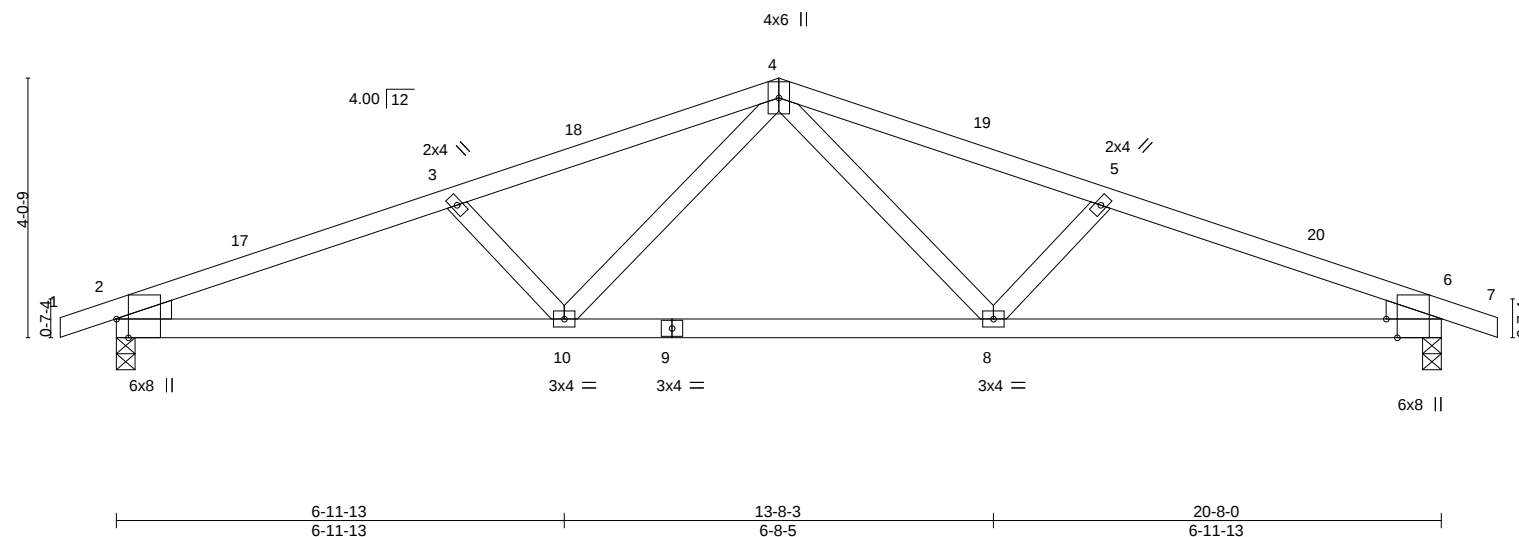
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:51 2021 Page 1

ID:eM_cJZPAs0ZQ0d5HPdYuvztuR7k-7Ou0oprTiBzLsJA1m44x67OhkStGni7y4EV7GkyqsMU

0-10-8	5-3-12	10-4-0	15-4-4	20-8-0	21-6-8
0-10-8	5-3-12	5-0-4	5-0-4	5-3-12	0-10-8

Scale = 1:35.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) -0.12 8-10 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.23 8-10 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.05 6 n/a n/a		
	Code IRC2018/TPI2014			Weight: 69 lb	FT = 20%

LUMBER-

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

Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=59(LC 12)
Max Uplift 2=-167(LC 8), 6=-167(LC 9)
Max Grav 2=991(LC 1), 6=991(LC 1)

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

TOP CHORD 2-3=-1944/391, 3-4=-1733/359, 4-5=-1733/359, 5-6=-1944/391
BOT CHORD 2-10=-318/1789, 8-10=-193/1292, 6-8=-319/1789
WEBS 3-10=-332/146, 4-10=-72/497, 4-8=-72/497, 5-8=-332/146

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=167, 6=167.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO
2887867	C3	GABLE	1	1	I47332655

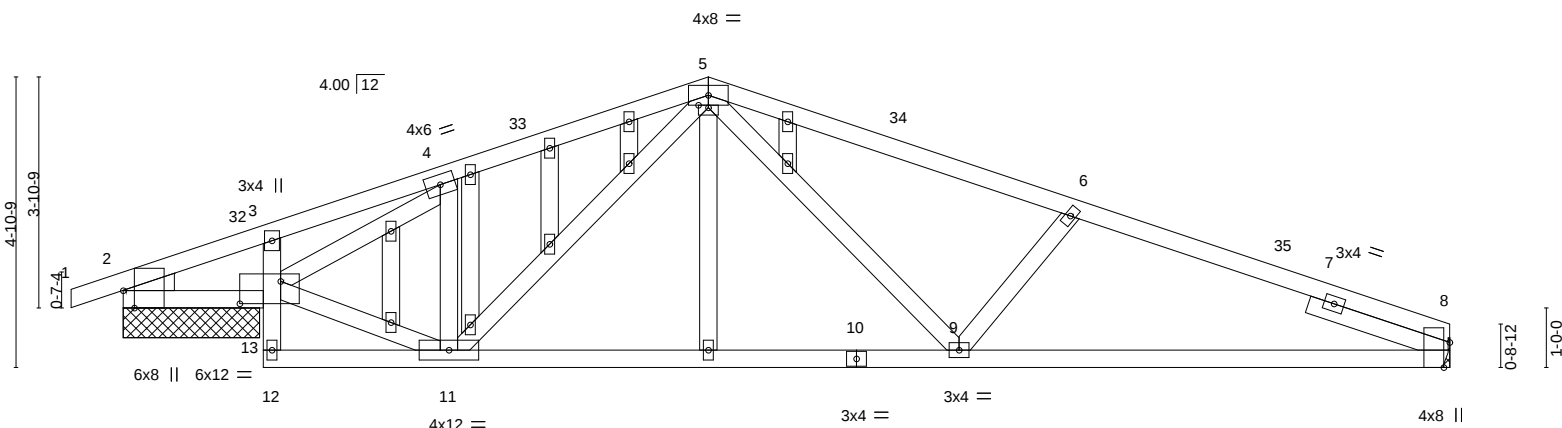
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:52 2021 Page 1

ID:eM_cJZPAs0ZQ0d5HPdYuvtzuR7k-baRO08s5TV5CTTIDJobAfKwqFs9565L6luEgonyqsMT

0-10-8	2-4-4	5-7-7	6-1-2	9-10-0	15-11-0	22-3-8
0-10-8	2-4-4	3-3-3	0-5-11	3-8-14	6-1-0	6-4-8

Scale = 1:38.7



	2-4-4	5-7-7	6-1-2	14-0-9	22-3-8	22-3-9
	2-4-4	3-3-3	0-5-11	7-11-7	8-2-15	0-0-1

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.13	9-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.31	9-11	>869	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.05	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 101 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

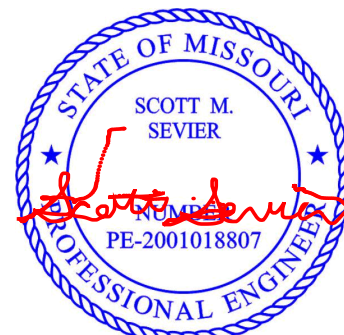
(size) 8=Mechanical, 2=2-3-8
 Max Horz 2=-79(LC 13)
 Max Uplift 8=-153(LC 9), 2=-170(LC 8)
 Max Grav 8=1002(LC 1), 2=1066(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2137/389, 3-4=-2130/407, 4-5=-1496/346, 5-6=-1771/365, 6-8=-1984/393
 BOT CHORD 2-13=-312/1937, 9-11=-179/1212, 8-9=-320/1839
 WEBS 11-13=-178/1280, 4-13=-130/746, 5-11=-73/365, 5-9=-91/634, 6-9=-392/177,
 4-11=-507/160

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-10-0, Exterior(2R) 9-10-0 to 12-10-0, Interior(1) 12-10-0 to 22-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=153, 2=170.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

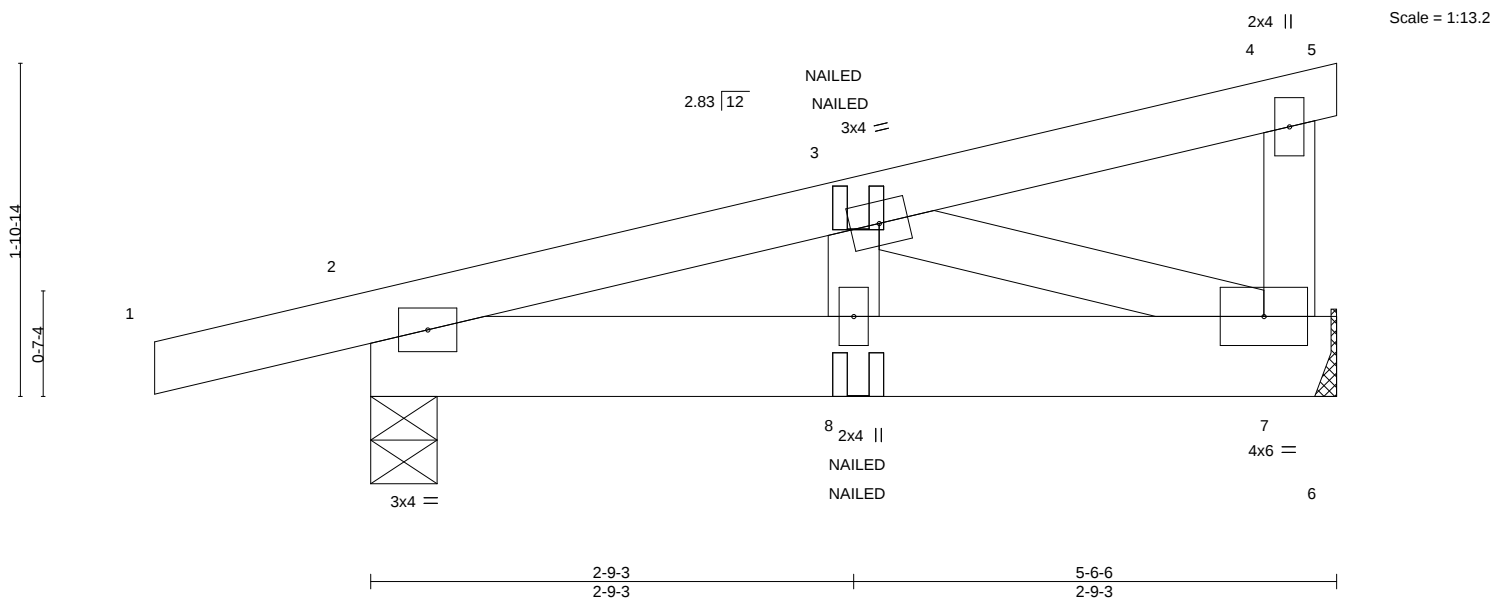
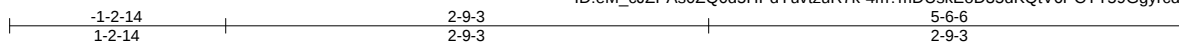
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO
2887867	CJ1	Diagonal Hip Girder	2	1	I47332656

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:53 2021 Page 1

ID:eM_cJZPA50ZQ0d5HPdYuvizuR7k-4m?mDUskEoD35dKQtV6PCYT59GgyrcdFX_Y_EKDyqsMS



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	8	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 22 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 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, 7=Mechanical
Max Horz 2=60(LC 7)
Max Uplift 2=-99(LC 4), 7=-58(LC 8)
Max Grav 2=340(LC 1), 7=246(LC 1)

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

TOP CHORD 2-3=-356/77
BOT CHORD 2-8=-79/331, 7-8=-79/331
WEBS 3-7=-351/98

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 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.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-20, 6-9=-20
Concentrated Loads (lb)
Vert: 8=-15(F=-8, B=-8)



August 6, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss D1	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332657
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:54 2021 Page 1

ID: eM_cJZPAs0ZQd5HPdYuvtzR7k-Yz8RqtM?6LwjnvcRDdekI0Hsf1Ra2aOmCjnsfyqsMR

0-10-8 8-4-0 16-8-0 17-6-8
0-10-8 8-4-0 8-4-0 0-10-8

4x6 =

Scale = 1:38.3

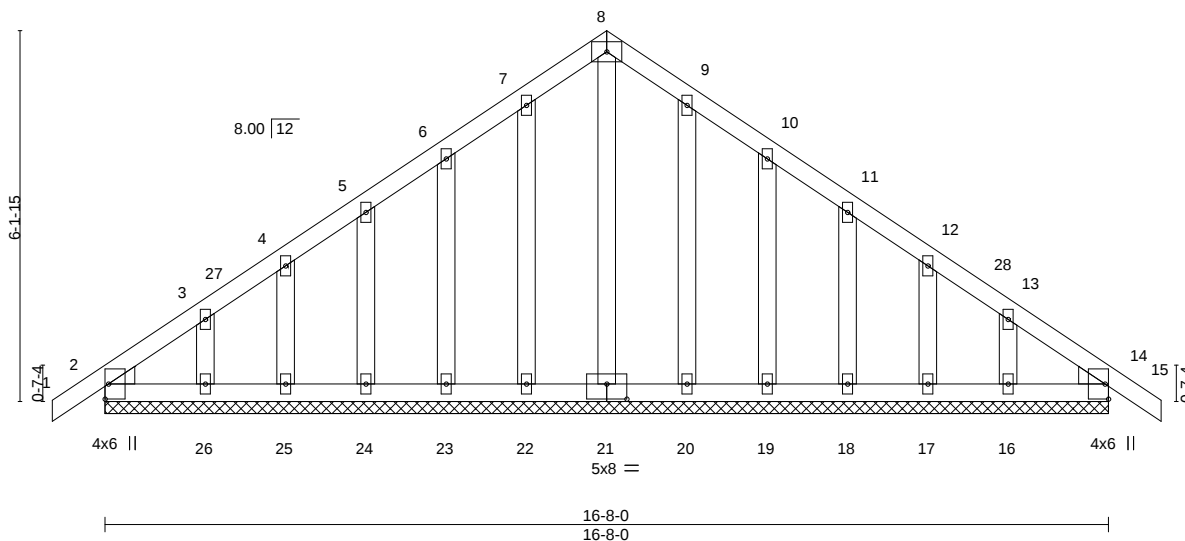


Plate Offsets (X,Y)--		[21:0-4-0,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.05	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(LL) -0.00 14 n/r 120
BCLL 0.0	Rep Stress Incr YES	WB 0.08	Vert(CT) -0.00 15 n/r 120
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 14 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 86 lb FT = 20%

LUMBER-

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

WEDGE

Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 16-8-0.

(lb) - Max Horz 2=-144(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14

Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 8-4-0, Corner(3R) 8-4-0 to 11-4-0, Exterior(2N) 11-4-0 to 17-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 6, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss D2	Truss Type COMMON	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332658
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:55 2021 Page 1

ID:eM_cJZPA50ZQ0d5HPdYuvizuR7k-097WeAu_mQTnLxUo?w8tHzYQc3GXJUzY?sTKP5yqsMQ

0-10-8	4-2-5	8-4-0	12-5-11	16-8-0	17-6-8
0-10-8	4-2-5	4-1-11	4-1-11	4-2-5	0-10-8

4x6 =

Scale = 1:38.3

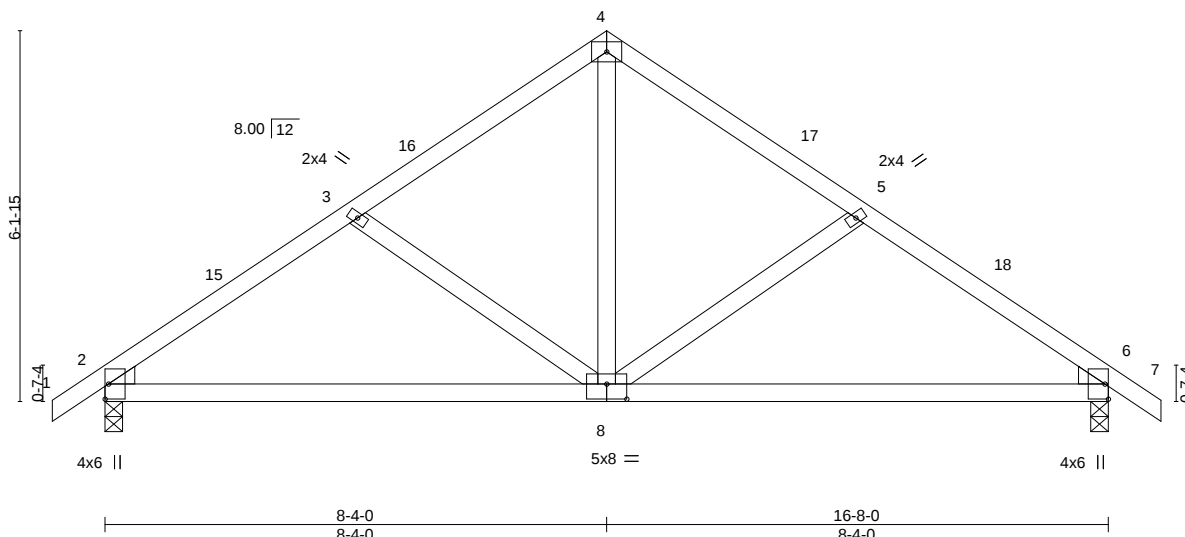


Plate Offsets (X,Y)--		[8:0-4-0,0-3-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.07 8-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.13 8-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02 6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 63 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=144(LC 11)
Max Uplift 2=-104(LC 12), 6=-104(LC 13)
Max Grav 2=811(LC 1), 6=811(LC 1)

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

TOP CHORD 2-3=-992/156, 3-4=-760/147, 4-5=-760/147, 5-6=-992/156
BOT CHORD 2-8=-131/774, 6-8=-58/773
WEBS 4-8=-55/463, 5-8=-278/153, 3-8=-277/153

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-4-0, Exterior(2R) 8-4-0 to 11-4-0, Interior(1) 11-4-0 to 17-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=104, 6=104.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss D3	Truss Type Roof Special	Qty 4	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332659
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:56 2021 Page 1

ID:eM_cJZPas0ZQ0d5HPdYuvztzuR7k-ULhvrWvcXjbey43?Ydf6pA5RvTUC2w6hDWCuxYyqMP

2-3-8	5-2-4	5-5-1	8-4-0	11-2-15	11-5-12	14-4-8	16-6-8
2-3-8	2-10-12	0-2-13	2-10-15	2-10-15	0-2-13	2-10-12	2-2-0

4x6 =

Scale = 1:37.8

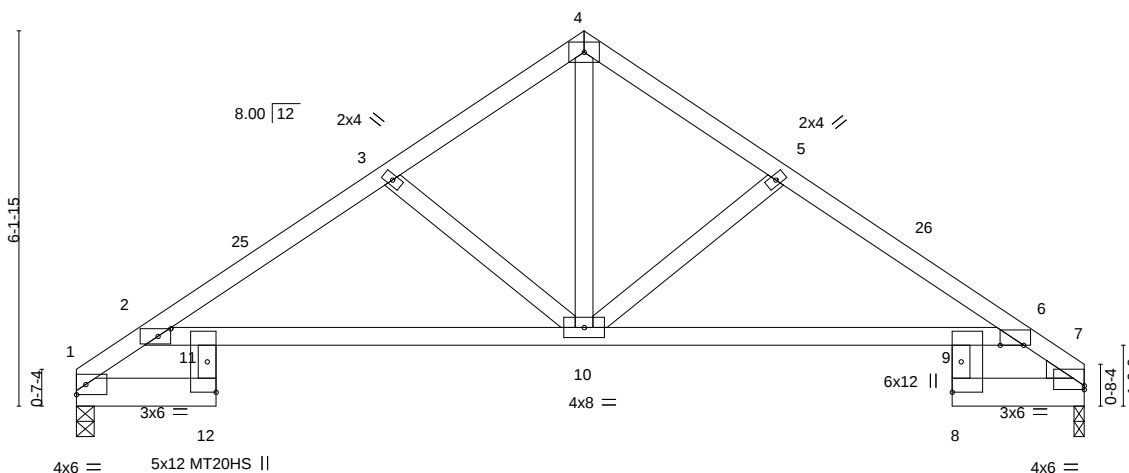


Plate Offsets (X,Y)--	[2:0-2-8,0-1-8], [6:0-4-10,0-0-0], [7:0-0-0,0-0-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.18 10-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.37 10-11	>531	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.23 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 63 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 1-12,7-8: 2x6 SPF No.2
 WEBS 2x4 SPF No.2
 WEDGE
 Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except:
 10-0-0 oc bracing: 9-10

REACTIONS.

(size) 1=0-3-8, 7=0-2-0
 Max Horz 1=130(LC 9)
 Max Uplift 1=-86(LC 12), 7=-85(LC 13)
 Max Grav 1=744(LC 1), 7=744(LC 1)

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

TOP CHORD 2-14=-871/132, 2-3=-1189/175, 3-4=-931/163, 4-5=-928/166, 5-6=-1181/177,
 6-7=-816/123
 BOT CHORD 1-12=-112/455, 2-11=-39/561, 10-11=-151/1012, 9-10=-79/998, 6-9=-24/591,
 7-8=-63/407
 WEBS 4-10=-112/819, 5-10=-396/148, 3-10=-425/165

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-4-0, Exterior(2R) 8-4-0 to 11-7-3, Interior(1) 11-7-3 to 16-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

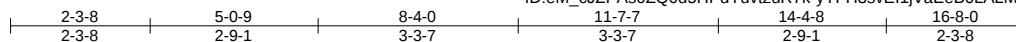
Job 2887867	Truss D3A	Truss Type Roof Special	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332660
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:57 2021 Page 1

ID:eM_cJZPAS0ZQ0d5HPdYuvtzR7k-yYFH3svE1jVaEeB6LALMOectsrnNNrSAyRT_yqsMO



4x6 =

Scale = 1:37.8

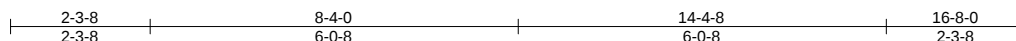
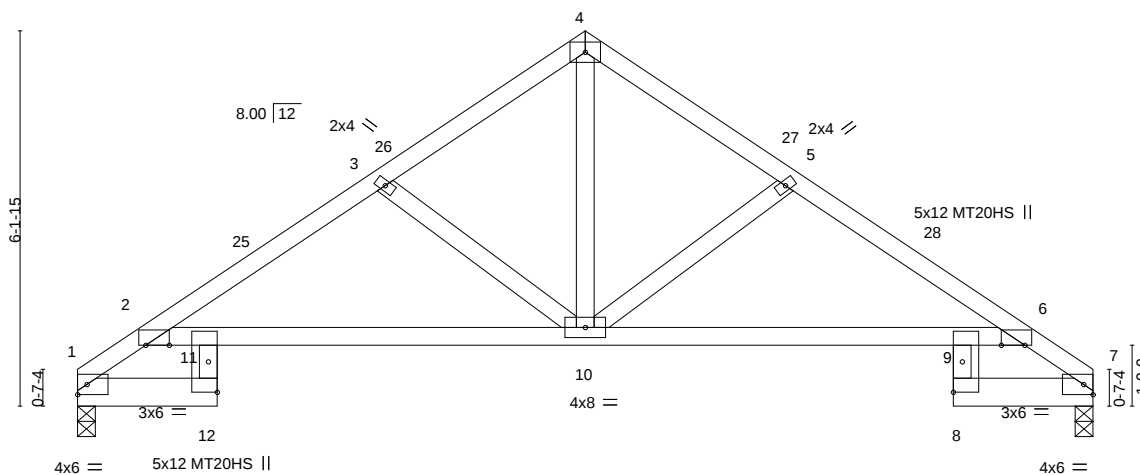


Plate Offsets (X,Y)--		[2:0-4-10,0-0-0], [6:0-4-10,0-0-0]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.18 9-10 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.36 9-10 >557 180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.23 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 63 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 1-12,7-8: 2x6 SPF No.2, 2-6: 2x4 SPF 1650F 1.5E
 WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except:
 10-0-0 oc bracing: 9-10

REACTIONS.

(size) 1=0-3-8, 7=0-3-8
 Max Horz 1=-130(LC 8)
 Max Uplift 1=-87(LC 12), 7=-87(LC 13)
 Max Grav 1=750(LC 1), 7=750(LC 1)

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

TOP CHORD 2-14=-880/130, 2-3=-1214/174, 3-4=-946/159, 4-5=-946/162, 5-6=-1214/176,
 6-7=-880/128
 BOT CHORD 1-12=-110/460, 2-11=-45/580, 10-11=-155/1036, 9-10=-79/1036, 6-9=-23/580,
 7-8=-65/457
 WEBS 4-10=-103/817, 3-10=-428/166, 5-10=-415/151

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-4-0, Exterior(2R) 8-4-0 to 11-4-0, Interior(1) 11-4-0 to 16-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

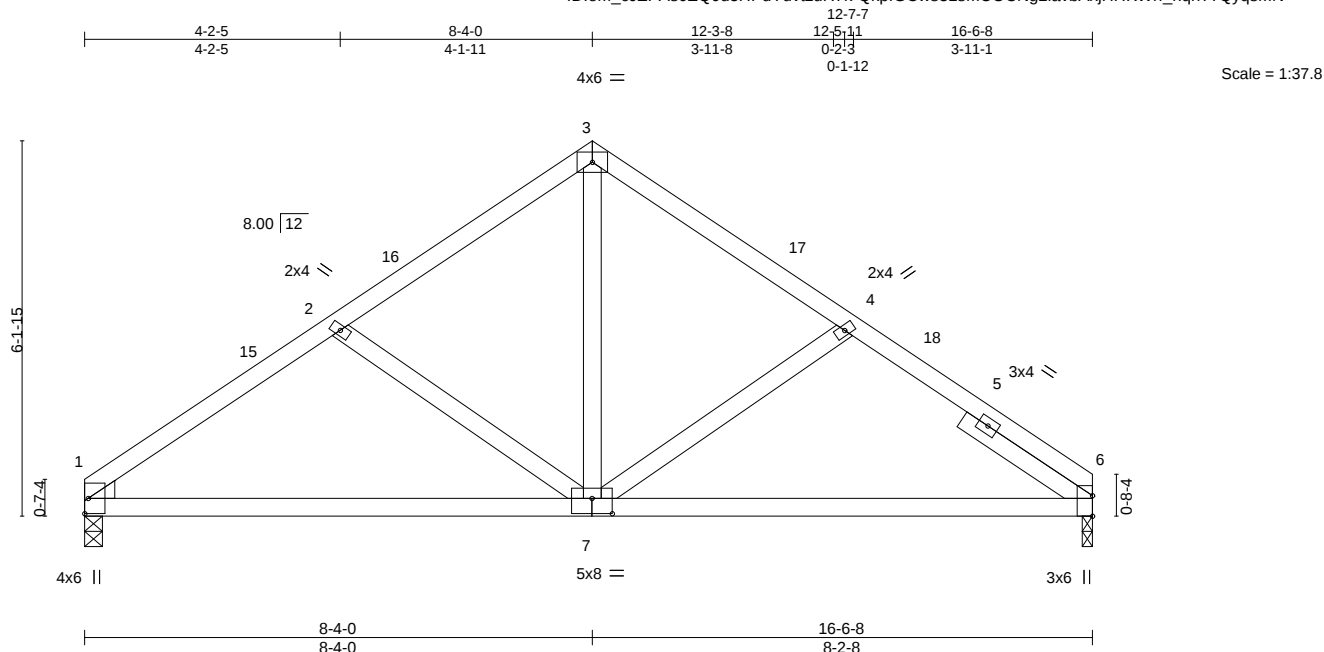


Plate Offsets (X,Y)-- [6:Edge,0-0-0], [7:0-4-0,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.07	7-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.14	7-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 63 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS.

(size) 6=0-2-0, 1=0-3-8
 Max Horz 1=130(LC 9)
 Max Uplift 6=-85(LC 13), 1=-86(LC 12)
 Max Grav 6=744(LC 1), 1=744(LC 1)

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

TOP CHORD 1-2=-991/161, 2-3=-757/150, 3-4=-755/150, 4-6=-908/159
BOT CHORD 1-7=-143/775, 6-7=-77/756
WEBS 3-7=-58/455, 4-7=-264/151, 2-7=-283/154

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-4-0, Exterior(2R) 8-4-0 to 11-4-0, Interior(1) 11-4-0 to 16-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 1.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/25/2020) 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



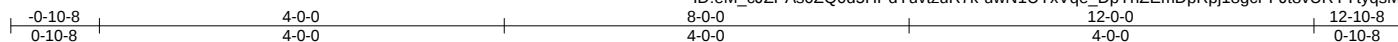
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO
2887867	E1	Hip Girder	1	1	147332662
Job Reference (optional)					

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:59 2021 Page 1

ID: eM_cJZPas0ZQ0d5HPdYuvtzur7k-uwN1UYxVqe_DpYnZEmDpRpi18gcPFJt8vURYyytyqsMM



Scale = 1:22.8

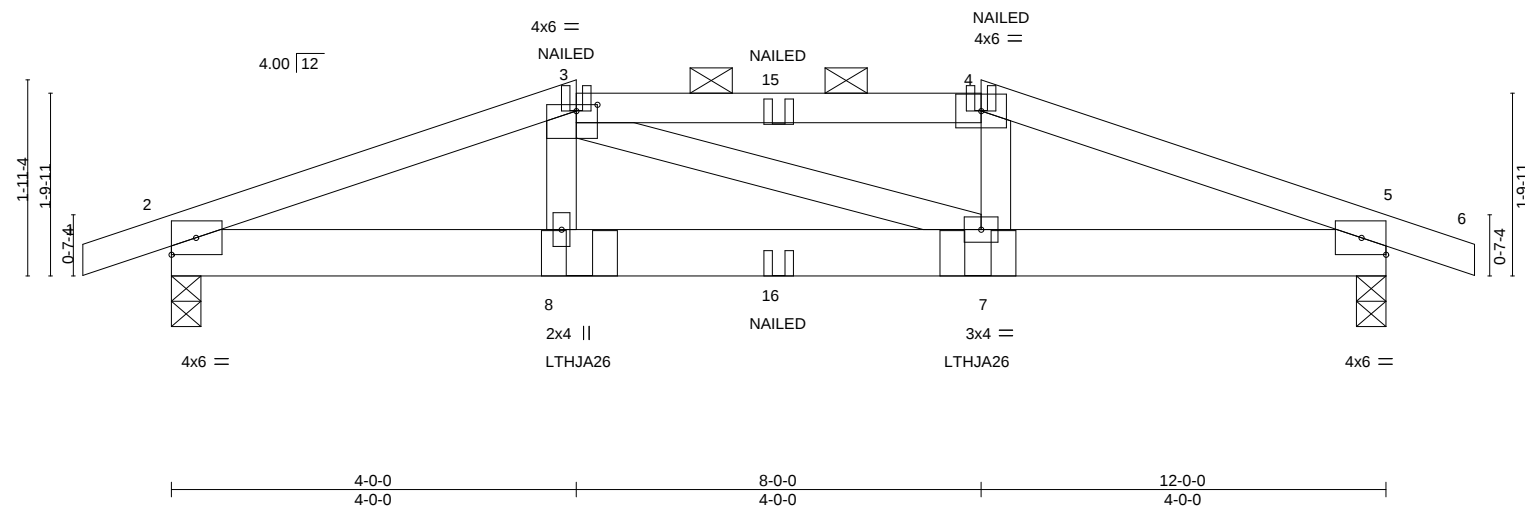


Plate Offsets (X,Y)--		[3:0-2-8,0-0-12]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.06 7-8 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.11 7-8 >999 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.07	Horz(CT) 0.02 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 45 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins, except
2-0-0 oc purlins (3-11-4 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 5=0-3-8
Max Horz 2=-25(LC 9)
Max Uplift 2=-230(LC 4), 5=-230(LC 5)
Max Grav 2=939(LC 1), 5=939(LC 1)

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

TOP CHORD 2-3=-1948/454, 3-4=-1776/440, 4-5=-1934/450
BOT CHORD 2-8=-409/1817, 7-8=-406/1789, 5-7=-383/1803
WEBS 3-8=-34/292, 4-7=-37/290

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 5=230.
- 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.
- Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Left Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Right Hand Hip) or equivalent at 7-11-10 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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 (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 9-12=-20



August 6, 2021

Continued on page 2

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #106/MO	I47332662
2887867	E1	Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:21:59 2021 Page 2
ID:eM_cJZPAs0ZQ0d5HPdYuvtzuR7k-uwN1UYxVqe_DpYnZEmDpRpi18gcPFJt8vURYytyqsMM

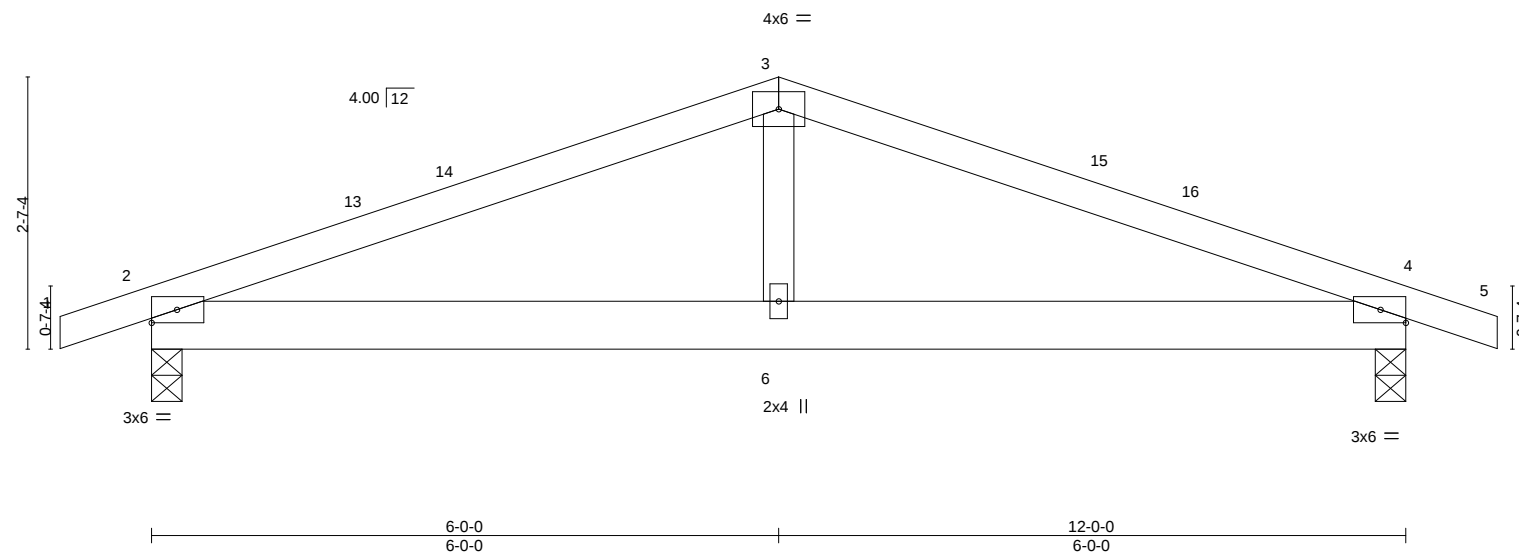
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-33(F) 4=-33(F) 8=-265(F) 7=-265(F) 15=-33(F) 16=-48(F)

Job 2887867	Truss E2	Truss Type Common	Qty 3	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332663
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:00 2021 Page 1
ID:eM_cJZPA50ZQ0d5HPdYuvizuR7k-M6wPhuy7by64RiMmnTk2_0GEg41h_nLH88A54JyqsML

-0-10-8 0-10-8	6-0-0 6-0-0	12-0-0 6-0-0	12-10-8 0-10-8
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Scale = 1:22.0



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.02 6-9 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.04 6-9 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 40 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
Max Horz 2=-36(LC 13)
Max Uplift 2=-111(LC 8), 4=-111(LC 9)
Max Grav 2=601(LC 1), 4=601(LC 1)

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

TOP CHORD 2-3=-916/308, 3-4=-916/307
BOT CHORD 2-6=-215/810, 4-6=-215/810
WEBS 3-6=0/256

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=111, 4=111.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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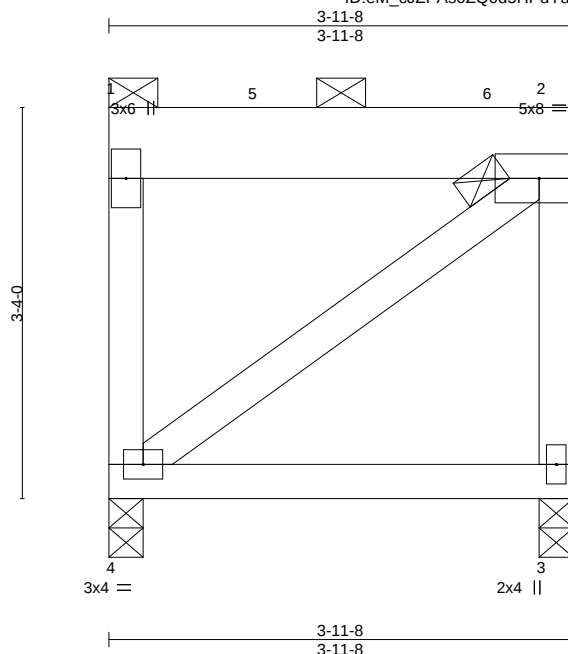


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss G1	Truss Type Flat Girder	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332664
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:00 2021 Page 1

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Scale = 1:19.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.01 3-4	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02 3-4	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.02	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 27 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 3=0-3-8, 4=0-3-8
Max Horz 4=-99(LC 4)
Max Uplift 3=-206(LC 5), 4=-156(LC 4)
Max Grav 3=1211(LC 1), 4=847(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-4=-810/133, 2-3=-1174/221

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=206, 4=156.
- 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.
- 6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 854 lb down and 128 lb up at 1-4-4, and 873 lb down and 129 lb up at 3-4-4 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 (plf)
Vert: 1-2=-70, 3-4=-20
Concentrated Loads (lb)
Vert: 5=-854 6=-873



August 6, 2021

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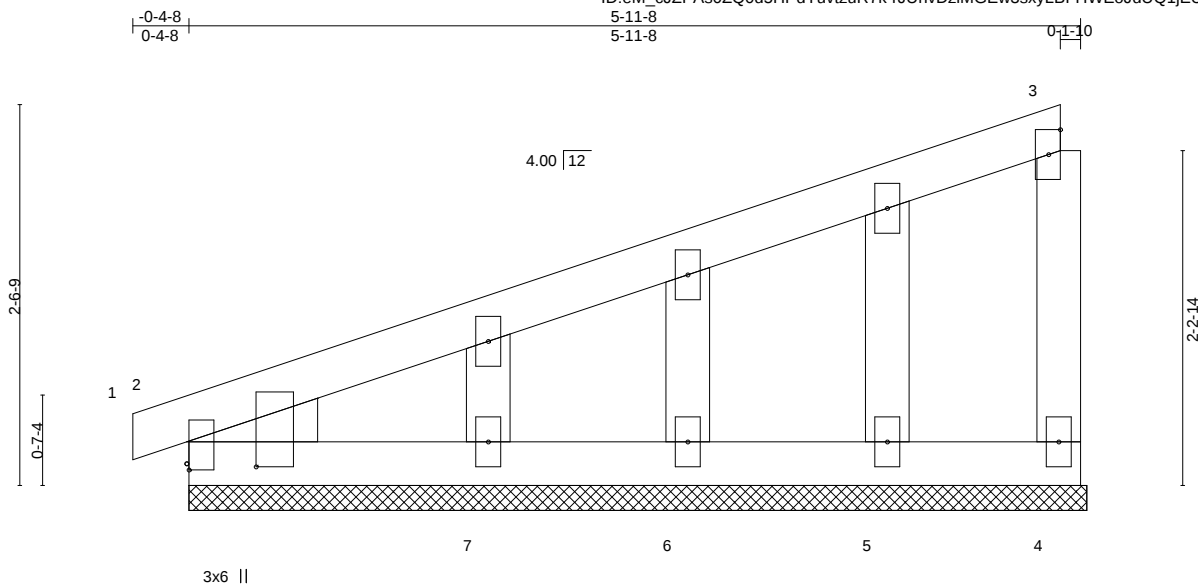
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss M1	Truss Type MONOPITCH STRUCTURAL	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332665
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:01 2021 Page 1

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Scale = 1:15.4

Plate Offsets (X,Y)--		[2:Edge,0-0-3], [2:0-0-4,0-5-9]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.66
TCDL 10.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-P
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.01 1 n/r 120
			Vert(CT) 0.01 1 n/r 120
			Horz(CT) -0.00 4 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 22 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 6-0-0.
(lb) - Max Horz 2=86(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 4, 2
Max Grav All reactions 250 lb or less at joint(s) 4, 2, 5, 6, 7

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-4-8 to 2-7-8, Interior(1) 2-7-8 to 5-9-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 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.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss M2	Truss Type MONOPITCH	Qty 8	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332666
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:02 2021 Page 1
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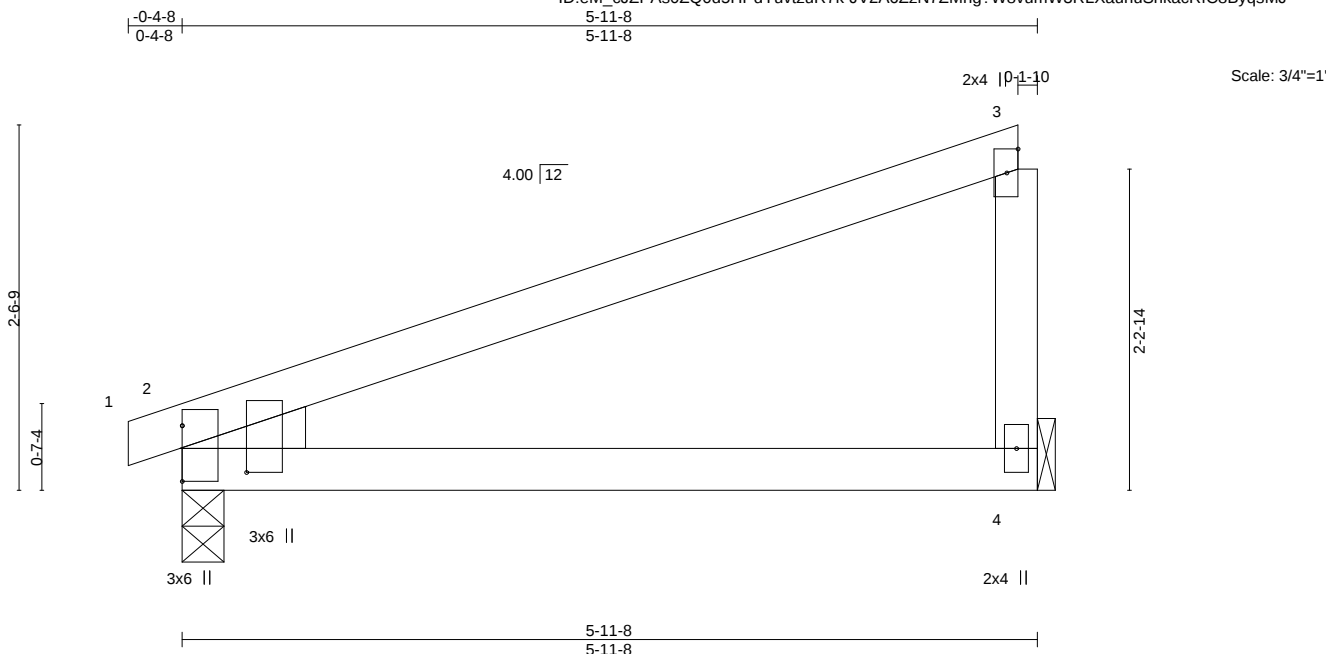


Plate Offsets (X,Y)--		[2:0-3-14,0-5-6]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.45	Vert(LL)	0.07	4-7	>982	240	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.37	Vert(CT)	-0.13	4-7	>546	180		
BCLL	0.0	Rep Stress Incr YES		WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=88(LC 11)
Max Uplift 4=-55(LC 12), 2=-54(LC 8)
Max Grav 4=261(LC 1), 2=289(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-4-8 to 2-7-8, Interior(1) 2-7-8 to 5-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss M3	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332667
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:03 2021 Page 1

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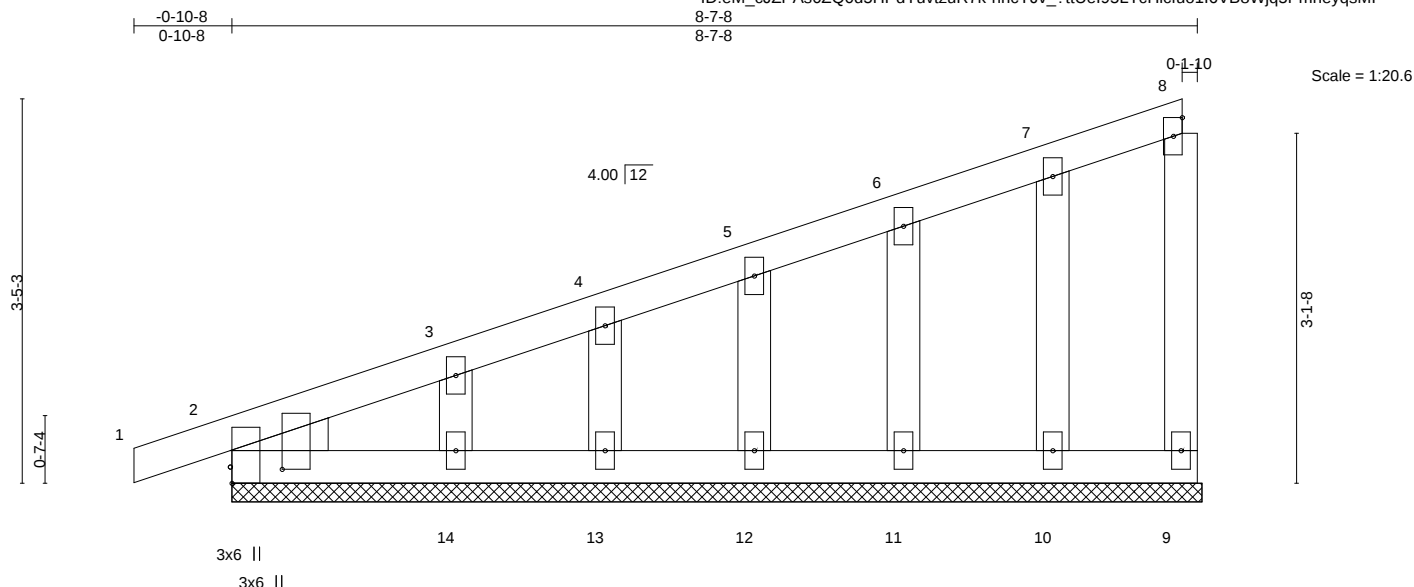


Plate Offsets (X,Y)--		[2:Edge,0-0-3], [2:0-0-4,0-5-9]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00 1 n/r	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00 1 n/r		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00 9 n/a n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P				Weight: 35 lb	FT = 20%

LUMBER-

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

All bearings 8-8-0.
(lb) - Max Horz 2=124(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 9, 10, 11, 12, 13, 14, 2
Max Grav All reactions 250 lb or less at joint(s) 9, 10, 11, 12, 13, 14, 2

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-267/125

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 8-5-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 10, 11, 12, 13, 14, 2.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 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.



August 6, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss M4	Truss Type MONOPITCH	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332668
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:03 2021 Page 1
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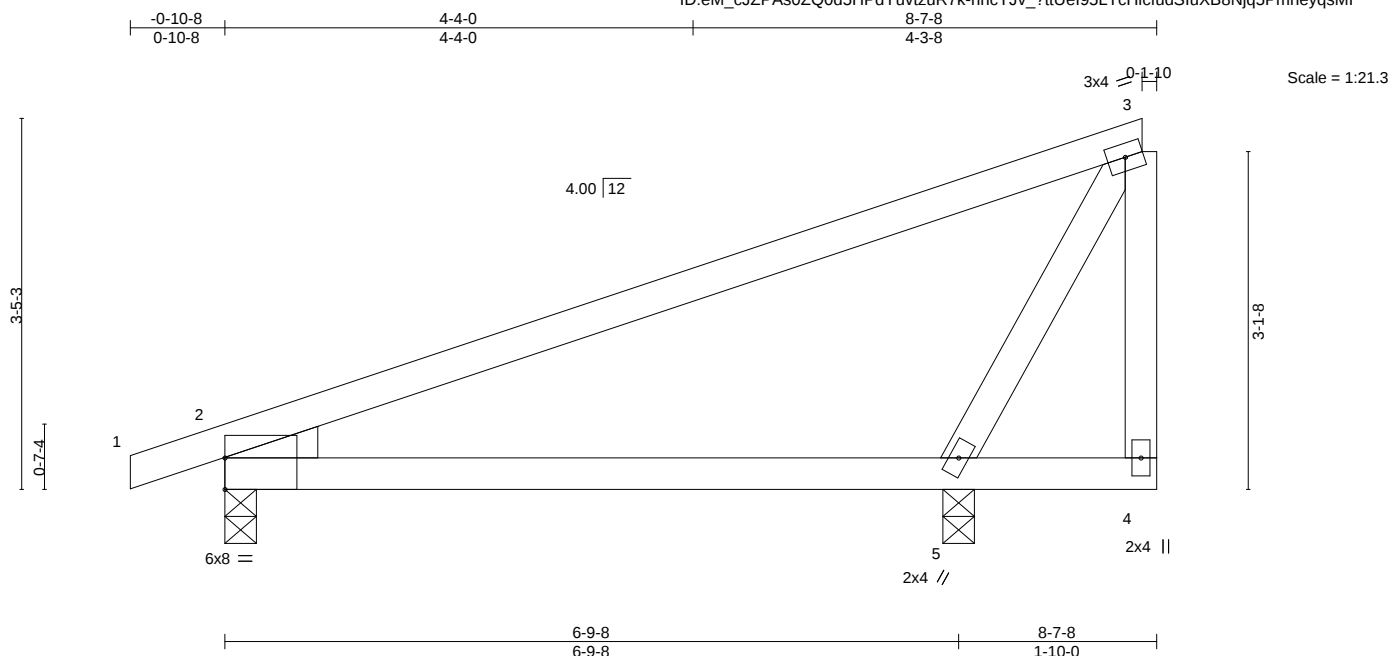


Plate Offsets (X,Y)--		[2:0-0-0,0-3-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.83		Vert(LL)	-0.13 5-8	>610	240	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.92		Vert(CT)	-0.22 5-8	>359	180		
BCLL 0.0		Rep Stress Incr	YES	WB 0.04		Horz(CT)	0.04 2	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS						Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=0-3-8, 2=0-3-8
Max Horz 2=126(LC 11)
Max Uplift 5=-100(LC 12), 2=-72(LC 8)
Max Grav 5=478(LC 1), 2=346(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss M5	Truss Type MONOPITCH	Qty 9	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332669
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:04 2021 Page 1

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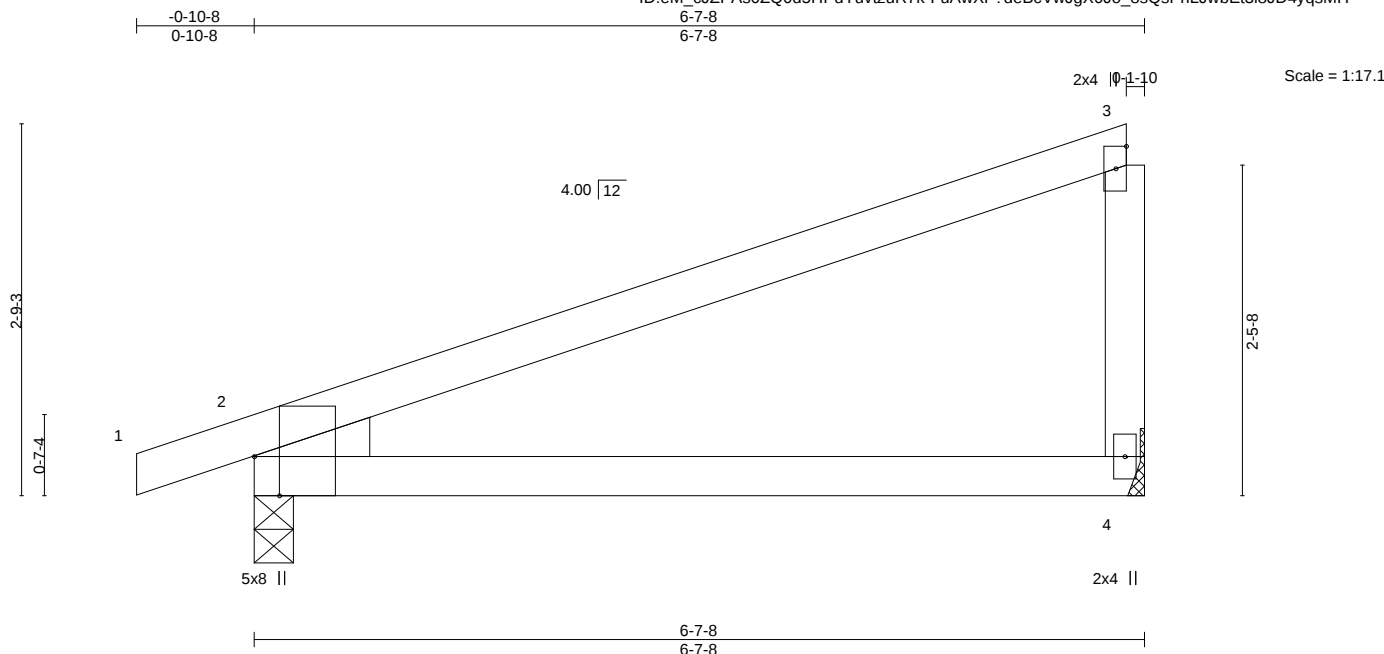


Plate Offsets (X,Y)-- [2:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	0.10	4-7	>763	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.19	4-7	>415	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=100(LC 11)
Max Uplift 4=60(LC 12), 2=-79(LC 8)
Max Grav 4=287(LC 1), 2=357(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 6, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

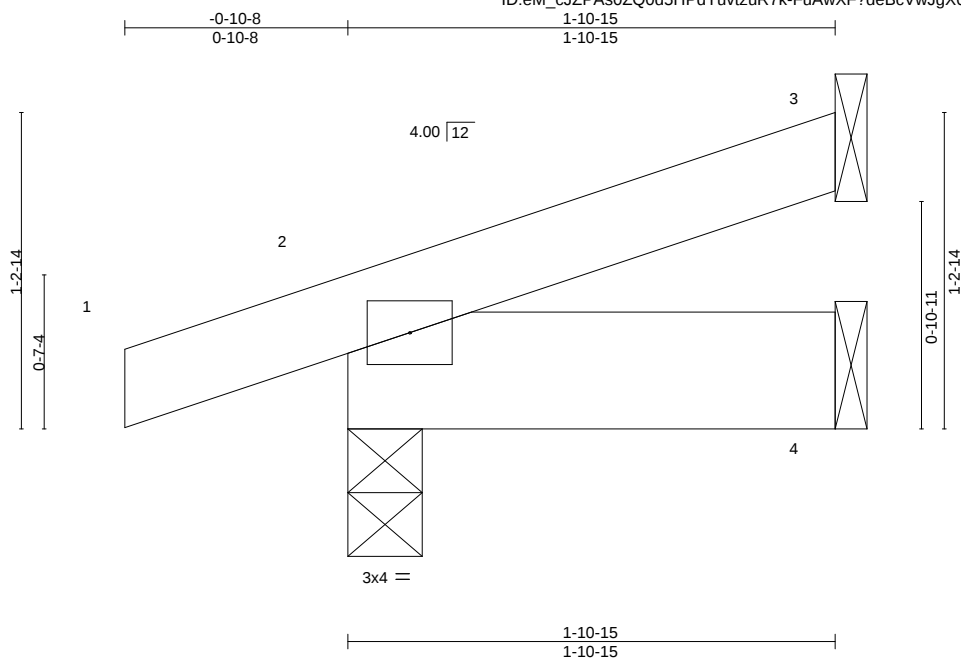
Job 2887867	Truss M6	Truss Type Jack-Open	Qty 4	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332670
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:04 2021 Page 1

ID:eM_cJZPAs0ZQ0d5HPdYuvtzUR7k-FuAwXF?deBcVwJgX0Jo_8sQ_KhRtwbEt3l8JD4yqsMH



Scale = 1:9.0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999	180		
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-MP						Weight: 7 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 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) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=37(LC 8)
Max Uplift 3=-18(LC 12), 2=-48(LC 8), 4=-1(LC 12)
Max Grav 3=43(LC 1), 2=161(LC 1), 4=38(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 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.



August 6, 2021

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

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Chesterfield, MO 63017

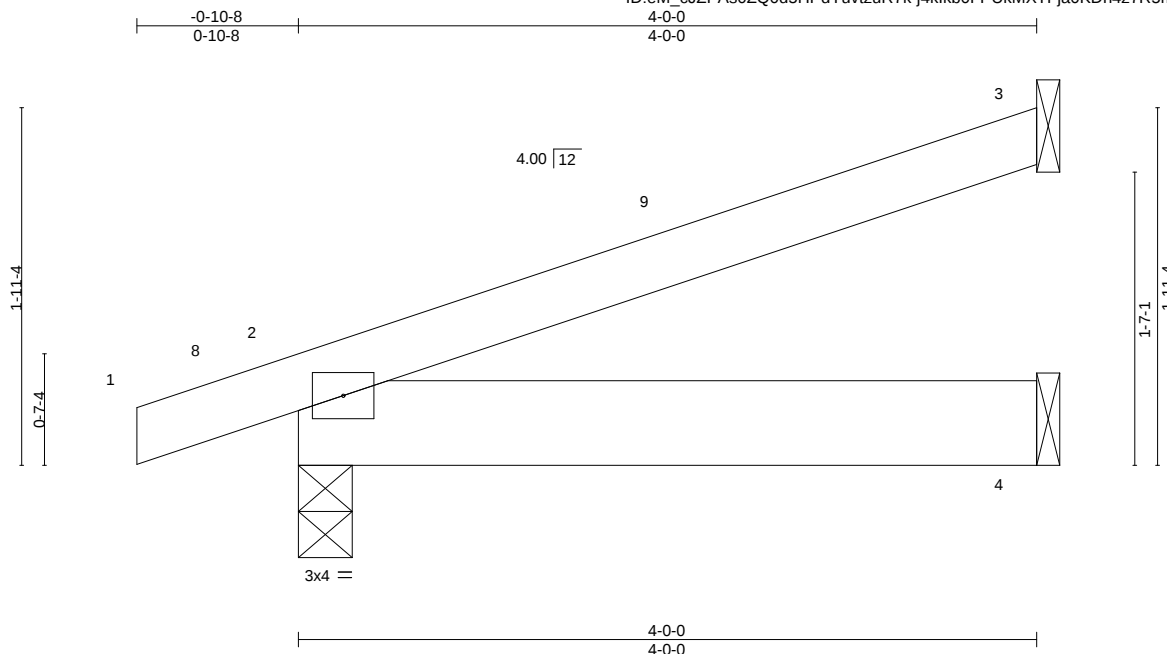
Job 2887867	Truss M7	Truss Type Jack-Open	Qty 3	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332671
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:05 2021 Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	0.01	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	4-7	>999	180		
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-MP						Weight: 13 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 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) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=62(LC 8)
Max Uplift 3=-41(LC 12), 2=-57(LC 8)
Max Grav 3=103(LC 1), 2=245(LC 1), 4=82(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.



August 6, 2021

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

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Chesterfield, MO 63017

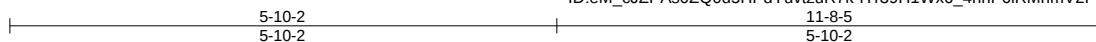
Job 2887867	Truss V2	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332672
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

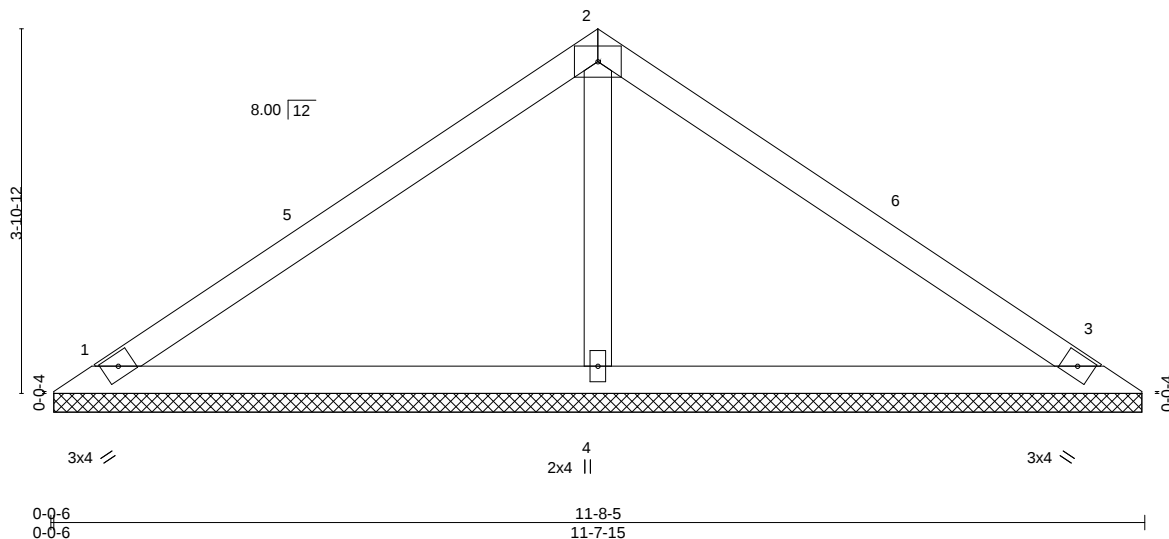
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:07 2021 Page 1

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4x6 =

Scale = 1:24.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 32 lb	FT = 20%

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) 1=11-7-9, 3=11-7-9, 4=11-7-9
Max Horz 1=84(LC 9)
Max Uplift 1=-41(LC 12), 3=-52(LC 13), 4=-31(LC 12)
Max Grav 1=237(LC 1), 3=237(LC 1), 4=491(LC 1)

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

WEBS 2-4=-327/103

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-10-2, Exterior(2R) 5-10-2 to 8-10-2, Interior(1) 8-10-2 to 11-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 6, 2021

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Chesterfield, MO 63017

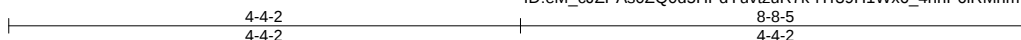
Job 2887867	Truss V3	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332673
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

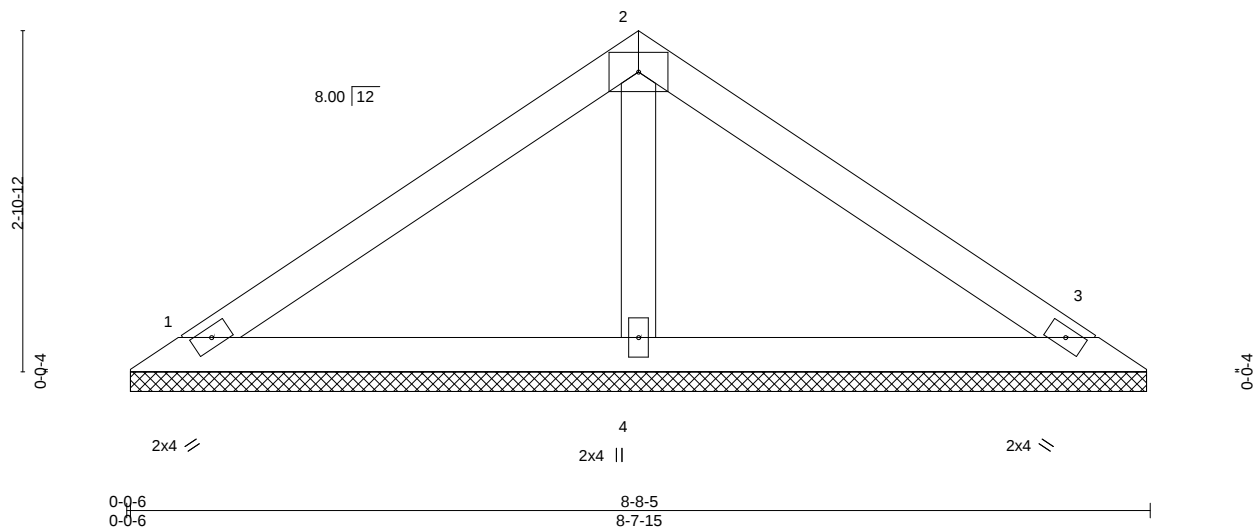
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:07 2021 Page 1

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4x6 =

Scale = 1:19.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 23 lb	FT = 20%

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) 1=8-7-9, 3=8-7-9, 4=8-7-9
Max Horz 1=-60(LC 8)
Max Uplift 1=-38(LC 12), 3=-46(LC 13), 4=-6(LC 12)
Max Grav 1=188(LC 1), 3=188(LC 1), 4=319(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-4-2, Exterior(2R) 4-4-2 to 7-4-2, Interior(1) 7-4-2 to 8-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss V4	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO 147332674
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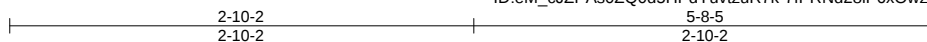
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:08 2021 Page 1

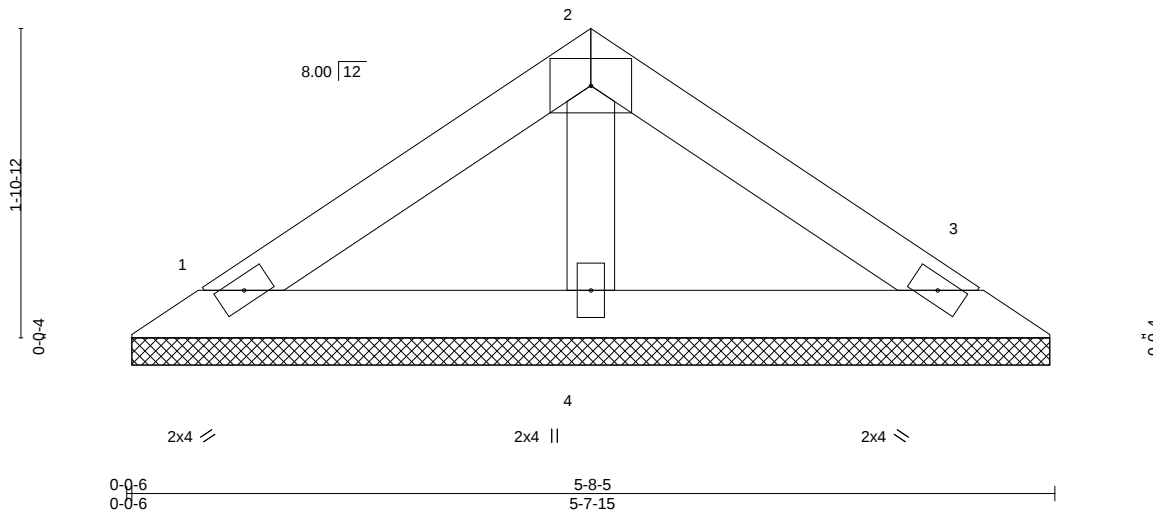
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Job Reference (optional)



4x6 =

Scale = 1:14.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	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 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 14 lb	FT = 20%

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 5-8-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-7-9, 3=5-7-9, 4=5-7-9
Max Horz 1=-37(LC 8)
Max Uplift 1=-23(LC 12), 3=-28(LC 13), 4=-4(LC 12)
Max Grav 1=115(LC 1), 3=115(LC 1), 4=195(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

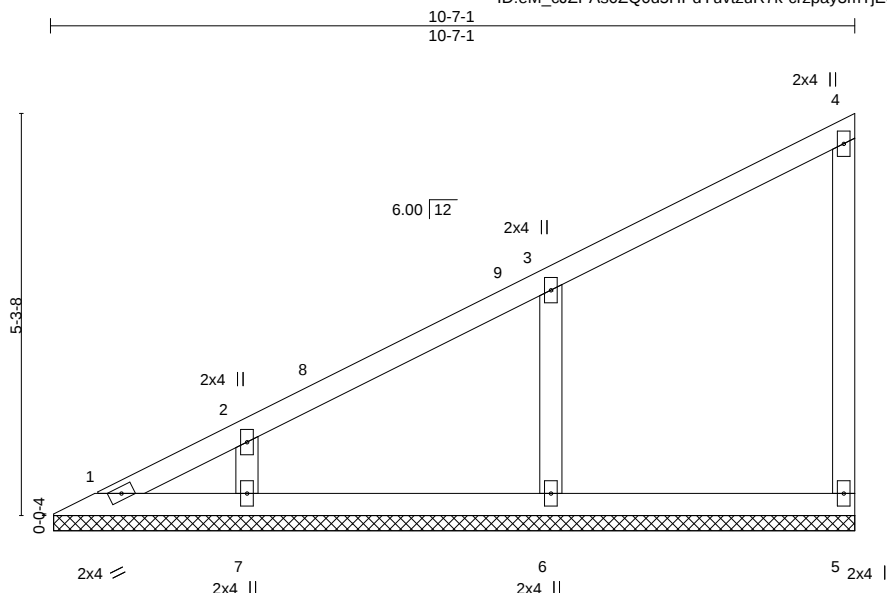
Job 2887867	Truss V5	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332675
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:09 2021 Page 1

ID: eM_cJZPAS0ZQ0d5HPdYuvztuR7k-crzpay3mTjEo04YUpsO9rw7obi8cbsacD1s4uHyqsMC



Scale = 1:30.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 34 lb FT = 20%

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.

All bearings 10-6-9.

(lb) - Max Horz 1=184(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=397(LC 1), 7=298(LC 5)

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

TOP CHORD 1-2=-279/173

WEBS 3-6=-310/205

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 10-5-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 7.
- 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.



August 6, 2021

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

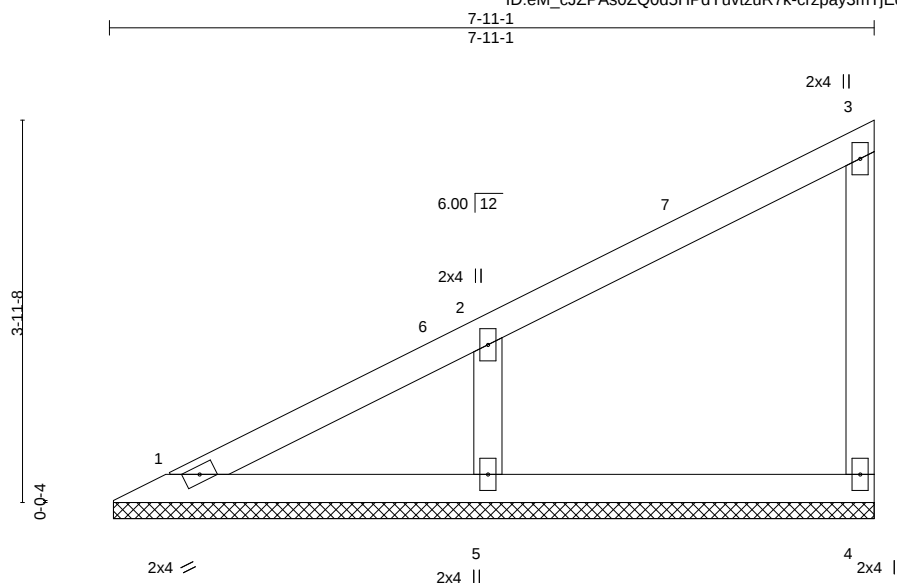
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017



Scale: 1/2"=1'

[illegible]

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

REACTIONS. (size) 1=7-10-9, 4=7-10-9, 5=7-10-9
 Max Horz 1=134(LC 11)
 Max Uplift 4=-25(LC 9), 5=-106(LC 12)
 Max Grav 1=110(LC 20), 4=136(LC 1), 5=404(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-314/233

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-11-1, Interior(1) 3-11-1 to 7-9-5 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=106.
- 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.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

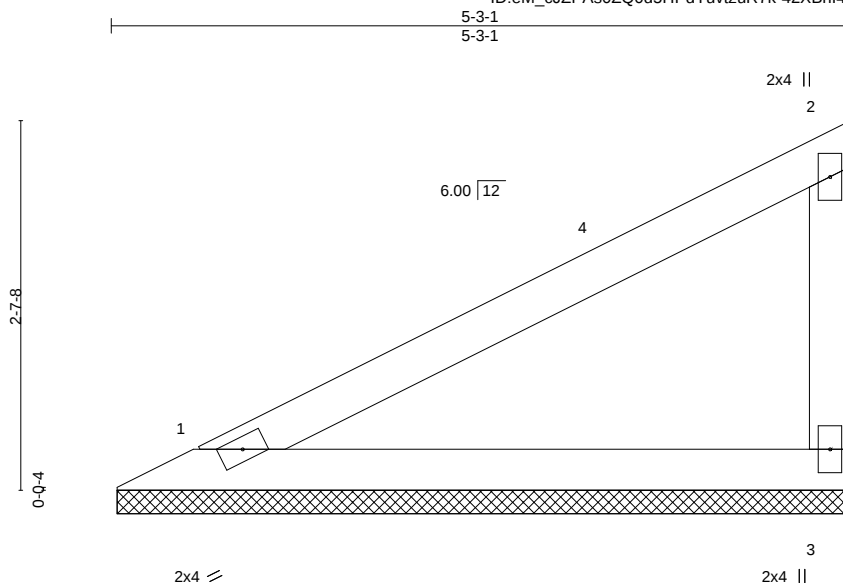
Job 2887867	Truss V7	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332677
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:10 2021 Page 1

ID:eM_cJZPAs0ZQ0d5HPdYuvtzur7k-42XBnI4OE1MfeE7hNavOO7gxf6RKKljiRhbdRkyqsMB



Scale = 1:16.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 14 lb	FT = 20%

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 5-3-1 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=5-2-9, 3=5-2-9

Max Horz 1=84(LC 9)

Max Uplift 1=-26(LC 12), 3=-47(LC 12)

Max Grav 1=201(LC 1), 3=201(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-1-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

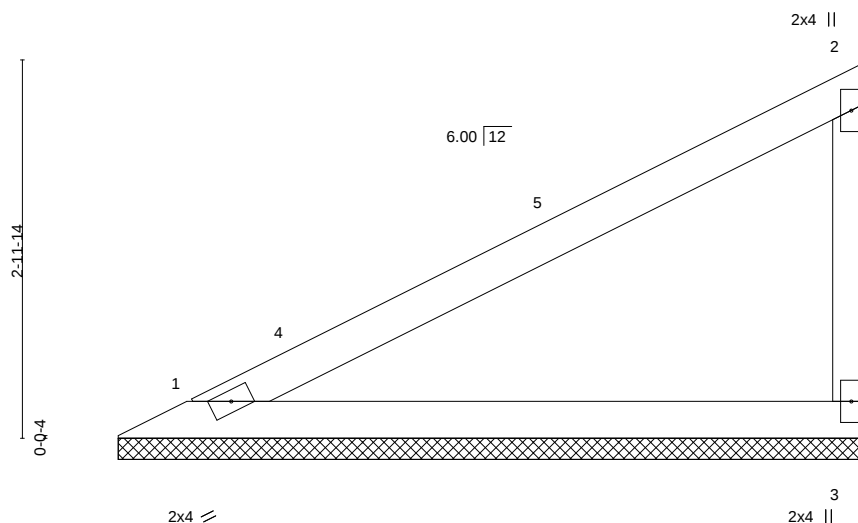
Job 2887867	Truss V8	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332678
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:11 2021 Page 1

ID: eM_cJZPAs0ZQ0d5HPdYuvtzuR7k-YE5Z?e40?KUWFOitxHRdwLD37WmK3lyvgLLBzAysMA

5-11-11

5-11-11



Scale = 1:18.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	n/a	-	n/a	999		
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: 16 lb	FT = 20%

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 5-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-11-3, 3=5-11-3
Max Horz 1=97(LC 11)
Max Uplift 1=-30(LC 12), 3=-54(LC 12)
Max Grav 1=234(LC 1), 3=234(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-9-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss V9	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332679
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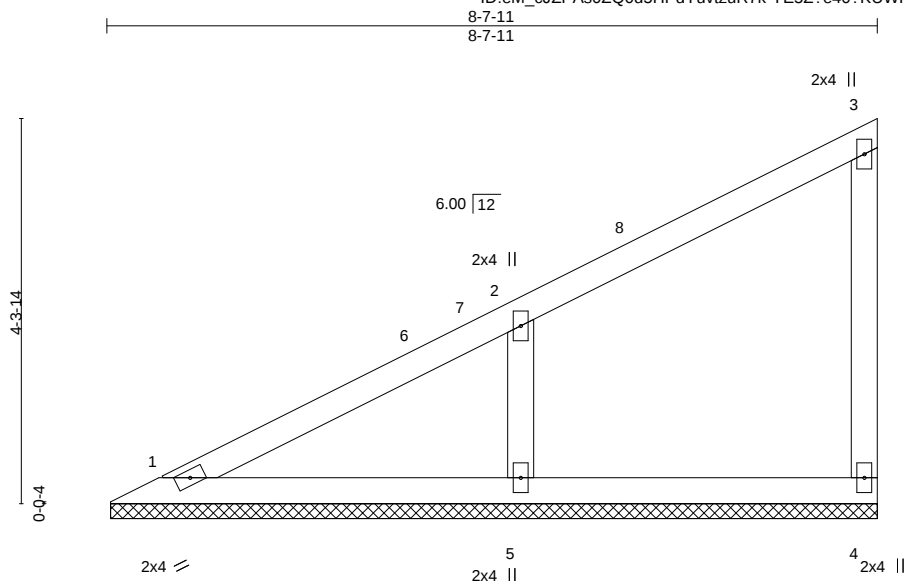
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:11 2021 Page 1

ID: eM_cJZPA50ZQ0d5HPdYuvtzur7k-YE5Z?e40?KUWFOitxHRdwLD8QWol3CvgLLBzAysMA

Job Reference (optional)



Scale = 1:25.8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 26 lb	FT = 20%

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=8-7-3, 4=8-7-3, 5=8-7-3
Max Horz 1=147(LC 9)
Max Uplift 4=-26(LC 9), 5=-110(LC 12)
Max Grav 1=138(LC 20), 4=128(LC 1), 5=442(LC 1)

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

WEBS 2-5=-344/238

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 8-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=110.
- 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.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss V11	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332680
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Builders FirstSource (Valley Center),

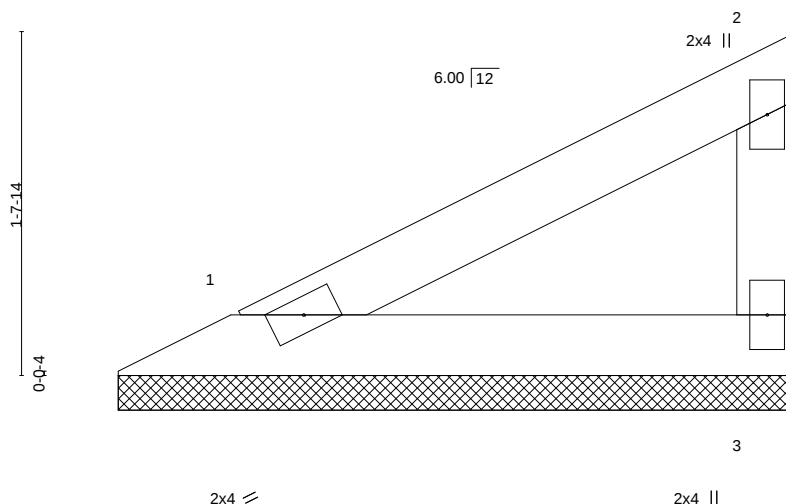
Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:06 2021 Page 1

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3-3-11

3-3-11



Scale = 1:11.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 8 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-11 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=3-3-3, 3=3-3-3

Max Horz 1=48(LC 9)

Max Uplift 1=-15(LC 12), 3=-27(LC 12)

Max Grav 1=114(LC 1), 3=114(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



August 6, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2887867	Truss V12	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #106/MO I47332681
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

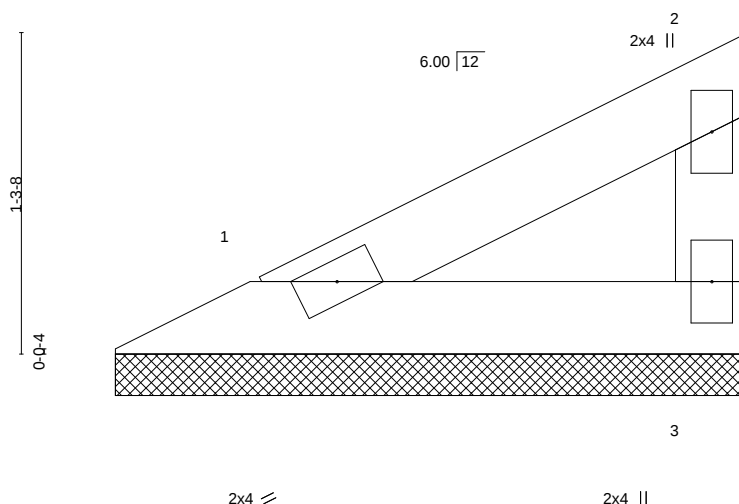
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 15:22:06 2021 Page 1

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2-7-1

2-7-1

Scale = 1:9.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 6 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-1 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=2-6-9, 3=2-6-9

Max Horz 1=34(LC 9)

Max Uplift 1=-10(LC 12), 3=-19(LC 12)

Max Grav 1=81(LC 1), 3=81(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



August 6, 2021

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

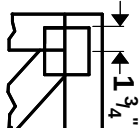
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



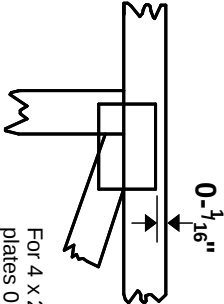
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

*** Plate location details available in MITek 20120 software or upon request.**

PLATE SIZE

4 X 4

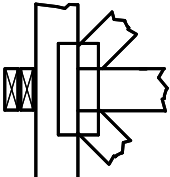
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



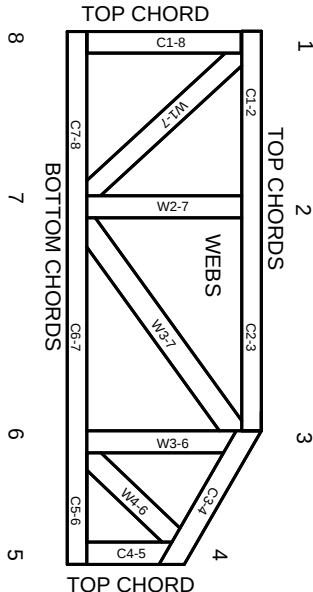
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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