



RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI

MiTek USA, Inc.

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

Re: 2867639

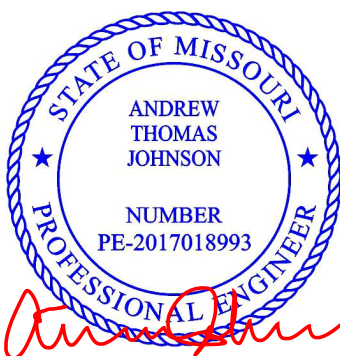
SUMMIT/HAWTHORN RIDGE #136/MO

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: I46980538 thru I46980614

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

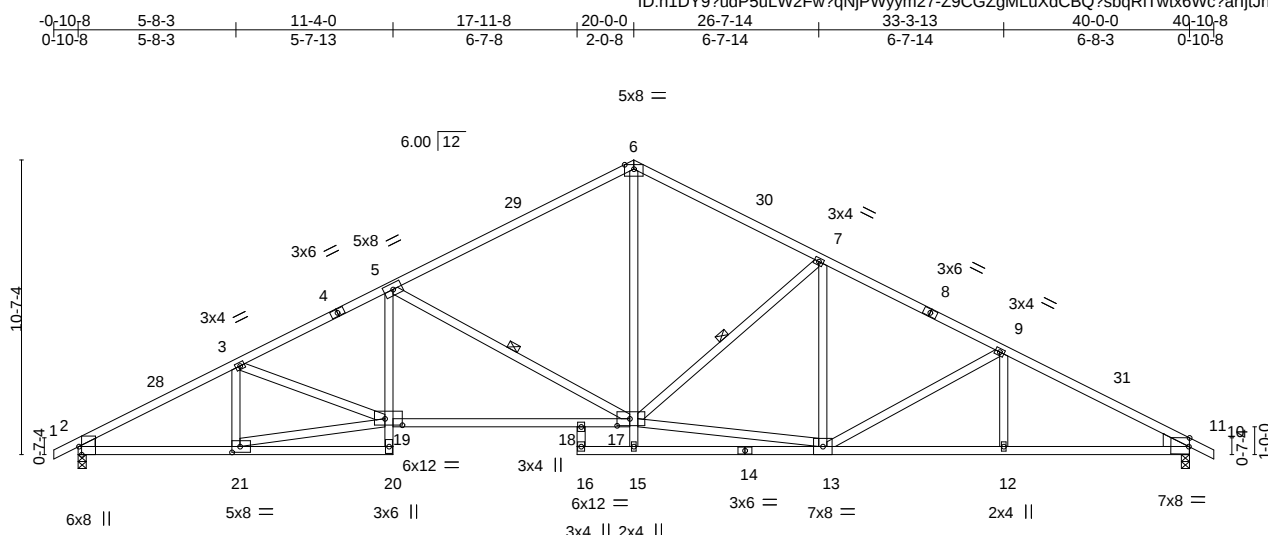
Missouri COA: Engineering 001193



July 14, 2021

Johnson, Andrew ,Engineer

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



	5-8-3	11-4-0	17-11-8	20-0-0	26-7-14	33-3-13	40-0-0
	5-8-3	5-7-13	6-7-8	2-0-8	6-7-14	6-7-14	6-8-3
Plate Offsets (X,Y)--	[2:0-3-8,Edge]	[10:0-0-5,Edge]	[17:0-5-8,0-3-0]	[19:0-7-8,0-2-12]	[21:0-3-8,0-2-8]		

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 0.67	Vert(LL) -0.29 18-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.58 18-19	>825	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.64	Horz(CT) 0.21 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS				Weight: 186 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except*
1-4,8-11: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-20: 2x4 SPF 1650F 1.5E
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.
WEBS	1 Row at midpt 5-17, 7-17

REACTIONS. (size) 2=0-3-8, 10=0-3-8
 Max Horz 2=184(LC 16)
 Max Uplift 2=-317(LC 12), 10=-317(LC 13)
 Max Grav 2=1861(LC 1), 10=1861(LC 1)

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

TOP CHORD 2-3=-3213/521, 3-5=-3423/585, 5-6=-2368/463, 6-7=-2298/469, 7-9=-2734/492,
9-10=-3221/525

BOT CHORD 2-21=-557/2776, 5-19=-62/553, 18-19=-537/3073, 17-18=-467/3094, 12-13=-367/2780,
10-12=-367/2780

WEBS 3-21=-466/144, 19-21=-500/2623, 3-19=0/263, 5-17=-1247/421, 9-13=-510/209,
15-17=0/346, 6-17=-201/1449, 13-17=-183/2342, 7-17=-622/296

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 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
- 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) 2=317, 10=317.
- 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.



July 14, 2021



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/29/2020) 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 #136/MO
2867639	A2	Roof Special	1	1	I46980539
Job Reference (optional)					

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

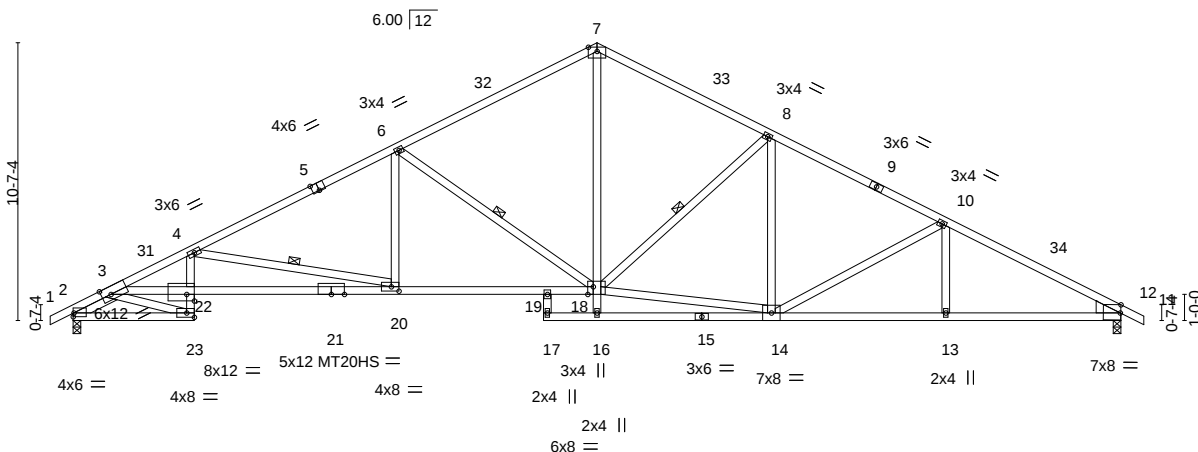
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:17 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-otFfSIT_nllwmoCbdD6pKqkR79h6By82xDSZ4MyyUXC

-0-10-8 4-7-8 11-3-8 12-3-8 17-11-8 20-0-0 26-7-14 33-3-13 40-0-0 40-10-8
0-10-8 4-7-8 6-8-0 1-0-0 5-8-0 2-0-8 6-7-14 6-7-14 6-8-3 0-10-8

5x8 =

Scale = 1:88.0



4-7-8 11-3-8 12-3-8 17-11-8 20-0-0 26-7-14 33-3-13 40-0-0
4-7-8 6-8-0 1-0-0 5-8-0 2-0-8 6-7-14 6-7-14 6-8-3

Plate Offsets (X,Y)--		[2:Edge,0-1-12], [3:0-4-4,Edge], [5:0-3-0,Edge], [11:0-0-5,Edge], [18:0-2-8,Edge], [20:0-3-8,0-2-0], [22:0-3-8,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.78
TCDL 10.0	Lumber DOL	1.15	BC 0.97
BCLL 0.0	Rep Stress Incr	YES	WB 0.54
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.33 20-22 >999 240
			Vert(CT) -0.65 20-22 >734 180
			Horz(CT) 0.32 11 n/a n/a
			PLATES
			MT20 197/144
			MT20HS 148/108
			Weight: 188 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-21,18-21: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x6 SPF No.2
SLIDER Left 2x4 SPF No.2 1-8-7

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-20, 6-18, 8-18

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=184(LC 16)
Max Uplift 2=318(LC 12), 11=316(LC 13)
Max Grav 2=1865(LC 1), 11=1854(LC 1)

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

TOP CHORD 3-25=-1099/177, 3-4=-5056/912, 4-6=-3331/550, 6-7=-2313/469, 7-8=-2260/469,
8-10=-2712/489, 10-11=-3209/524
BOT CHORD 2-23=-472/2045, 22-23=-145/761, 3-22=-843/4207, 20-22=-936/4522, 19-20=-477/2884,
18-19=-425/2777, 13-14=-366/2770, 11-13=-366/2770
WEBS 10-14=-523/214, 16-18=0/282, 7-18=-224/1475, 4-22=-76/726, 4-20=-1669/468,
6-20=-39/558, 6-18=-1152/382, 3-23=-1858/406, 14-18=-198/2202, 8-18=-637/293

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 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
- 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 capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=318, 11=316.
- 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.



July 14, 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 #136/MO
2867639	A3	Roof Special	1	1	146980540

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

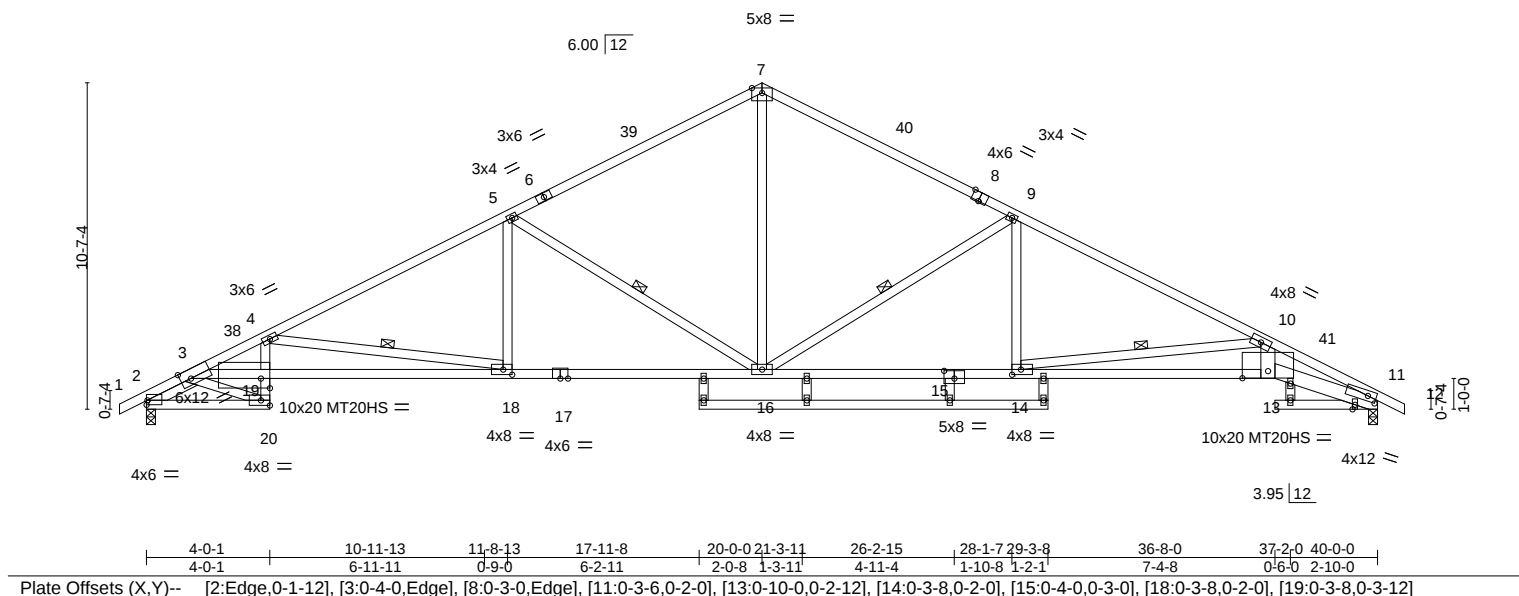
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Job Reference (optional)

0-10-8 4-0-1 10-11-13 11-8-13 17-11-8 20-0-0 28-1-7 29-3-8 36-8-0 40-0-0 40-10-8
0-10-8 4-0-1 6-11-11 0-9-0 6-2-11 2-0-8 8-1-7 1-2-1 7-4-8 3-4-0 0-10-8

Scale = 1:74.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.40 13-14 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.78 13-14 >610 180	MT20HS		148/108	
BCLL	0.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.47 11 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 197 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-6,8-12: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
3-17: 2x4 SPF 1650F 1.5E, 13-15: 2x4 SP 2400F 2.0E
11-13: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
10-13: 2x6 SPF No.2
SLIDER Left 2x4 SPF No.2 1-8-2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 14-16
WEBS 1 Row at midpt 4-18, 5-16, 9-16, 10-14

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=184(LC 16)
Max Uplift 2=-318(LC 12), 11=-316(LC 13)
Max Grav 2=1865(LC 1), 11=1854(LC 1)

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

TOP CHORD 3-32=-1123/193, 3-4=-5455/1003, 4-5=-3422/564, 5-7=-2327/469, 7-9=-2329/470,
9-10=-3433/547, 10-11=-5921/945
BOT CHORD 2-20=-472/2047, 19-20=-191/957, 3-19=-939/4569, 18-19=-1030/4882, 16-18=-504/2969,
14-16=-334/3003, 13-14=-792/5228, 11-13=-805/5336
WEBS 4-18=-1935/533, 7-16=-200/1434, 4-19=-105/865, 3-20=-1941/424, 5-18=-21/559,
5-16=-1196/395, 9-14=-1/573, 9-16=-1236/381, 10-13=-91/1144, 10-14=-2244/507

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 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
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=318, 11=316.
- 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.



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980541
2867639	A4	Roof Special	1	1	Job Reference (optional)	

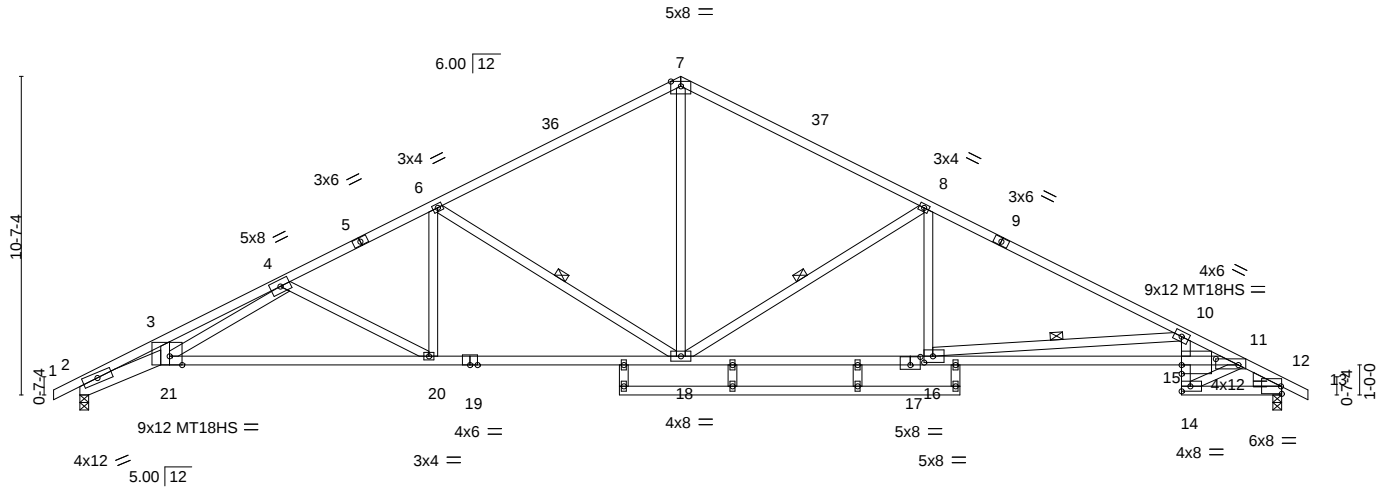
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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0-10-8 2-8-5 6-10-0 10-3-14 11-7-6 17-11-8 20-0-0 28-1-2 29-3-8 36-8-0 40-0-0 40-10-8
0-10-8 2-8-5 4-1-11 3-5-14 1-3-8 6-4-2 2-0-8 8-1-2 1-2-6 7-4-8 3-4-0 0-10-8

Scale = 1:76.7



		2-8-5		10-3-14		11-7-6		17-11-8		20-0-0 21-8-10		25-10-10		28-1-2 29-3-8		36-8-0		40-0-0	
		2-8-5		7-7-10		1-3-8		6-4-2		2-0-8 1-8-10		4-2-0		2-2-8 1-2-6		7-4-8		3-4-0	
Plate Offsets (X,Y)--		[11:0-9-0,0-2-7], [15:0-0-0,0-3-8], [16:0-3-8,0-2-8], [17:0-4-0,0-3-4], [21:0-5-0,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 0.74		Vert(LL)		-0.43 15-16		>999		240		MT20		197/144	
TCDL	10.0	Lumber DOL		1.15		BC 0.94		Vert(CT)		-0.84 15-16		>575		180		MT18HS		197/144	
BCLL	0.0	Rep Stress Incr		YES		WB 0.97		Horz(CT)		0.50 12		n/a		n/a					
BCDL	10.0	Code IRC2018/TPI2014				Matrix-AS										Weight: 201 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
1-5,9-13: 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-21: 2x6 SPF 2100F 1.8E, 19-21: 2x4 SPF 1650F 1.5E
11-17: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
2-2-0 oc bracing: 16-18
WEBS 1 Row at midpt 6-18, 8-18, 10-16

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
Max Horz 2=184(LC 16)
Max Uplift 2=-317(LC 12), 12=-317(LC 13)
Max Grav 2=186(LC 1), 12=186(LC 1)

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

TOP CHORD 2-3=-6834/1263, 3-4=-6630/1301, 4-6=-3390/575, 6-7=-2335/470, 7-8=-2346/473,
8-10=-3455/549, 10-11=-6385/1012, 11-12=-2627/434
BOT CHORD 2-21=-1284/6185, 20-21=-746/3772, 18-20=-494/2973, 16-18=-336/3015,
15-16=-885/5736, 11-15=-809/5401, 14-15=-126/1045, 12-14=-299/2050
WEBS 3-21=0/355, 6-18=-1183/378, 7-18=-196/1424, 10-15=-59/1207, 4-20=-904/286,
4-21=-593/2617, 6-20=-64/634, 8-16=0/572, 8-18=-1232/380, 10-16=-2736/598,
11-14=-1967/257

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-10-1, Interior(1) 2-10-1 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 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
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=317, 12=317.
- 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.



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	A5	Roof Special	1	1	I46980542

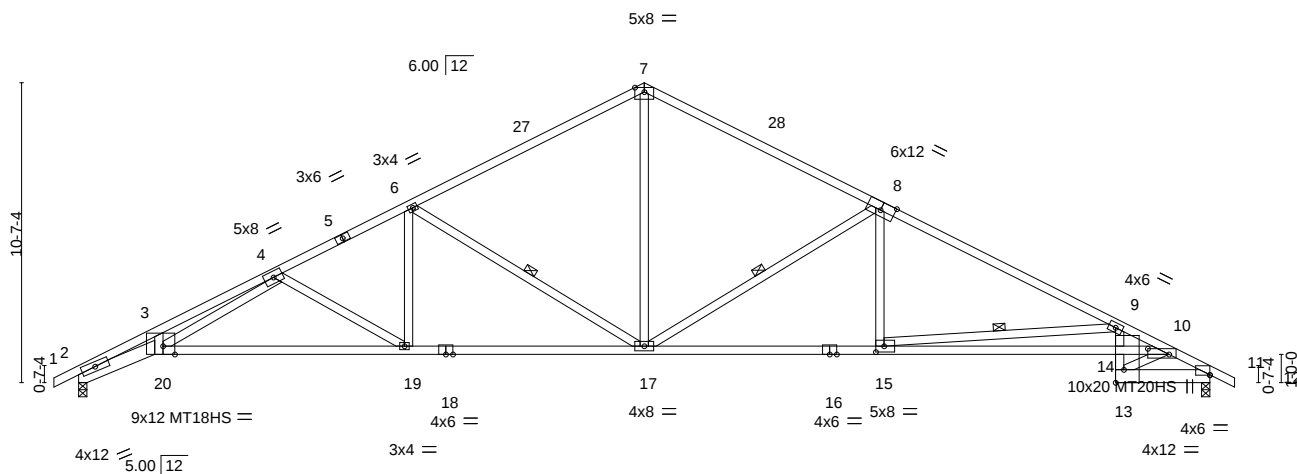
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:n1DY9?udP5uLW2Fw?qNjPWym27-8r2YV7bqODsZ4YQmi_1tSHoAQAs6xn5VAKmZyyUX7

0-10-8 2-8-5 | 7-0-9 | 11-4-2 11-8-0 | 20-0-0 | 28-4-0 | 32-11-7 | 36-8-0 | 40-0-0 40-10-8
0-10-8 2-8-5 | 4-4-4 | 4-3-10 0-3-14 | 8-4-0 | 8-4-0 | 4-7-7 | 3-8-9 | 3-4-0 0-10-8

Scale = 1:81.5



2-8-5 | 11-4-2 | 11-8-0 | 20-0-0 | 28-4-0 | 36-8-0 | 40-0-0
2-8-5 | 8-7-14 | 0-3-14 | 8-4-0 | 8-4-0 | 8-4-0 | 3-4-0

Plate Offsets (X,Y)-- [8:0-6-0,Edge], [10:0-9-0,0-2-7], [11:0-0-0,0-0-3], [14:Edge,0-3-8], [15:0-3-8,0-2-8], [20:0-5-0,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 0.85	Vert(LL)	-0.44 14-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.85 14-15	>563	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.95	Horz(CT)	0.50 11	n/a	n/a	MT18HS	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 182 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
1-5: 2x4 SP 2400F 2.0E, 7-8: 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-20: 2x6 SPF 2100F 1.8E, 18-20: 2x4 SPF 1650F 1.5E
11-13: 2x6 SPF No.2, 10-16: 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-17, 8-17, 9-15

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=-184(LC 13)
Max Uplift 2=-317(LC 12), 11=-317(LC 13)
Max Grav 2=1861(LC 1), 11=1861(LC 1)

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

TOP CHORD 2-3=-6829/1269, 3-4=-6632/1313, 4-6=-3400/579, 6-7=-2337/469, 7-8=-2350/472,
8-9=-3479/553, 9-10=-6389/1005, 10-11=-2980/493
BOT CHORD 2-20=-1290/6182, 19-20=-729/3720, 17-19=-498/2987, 15-17=-341/3046,
14-15=-883/5757, 10-14=-798/5341, 13-14=-186/1453, 11-13=-367/2449
WEBS 3-20=0/345, 6-17=-1191/381, 7-17=-192/1415, 8-17=-1254/385, 8-15=0/578,
9-14=-47/1189, 4-19=-850/268, 6-19=-66/642, 4-20=-618/2667, 10-13=-2463/336,
9-15=-2734/587

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-10-1, Interior(1) 2-10-1 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 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
- 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=317, 11=317.
- 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.



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	A6	Hip	1	1	146980543

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:24 2021 Page 1

-0-10-8 2-8-5
0-10-8 2-8-5

10-4-2
7-7-14

18-0-0
7-7-14

22-0-0
4-0-0

29-3-12
7-3-12

29-7-14
0-4-2

36-7-8
6-11-10

40-0-0 4Q-10-8
3-4-8 0-10-8

ID:n1DY9?udP5uLW2Fw?qNjPWym27-5EAJw8YN7Sex6tExXBkS6lXbFz8EK?p4YpfRqSyyUX5

Job Reference (optional)

Scale = 1:72.3

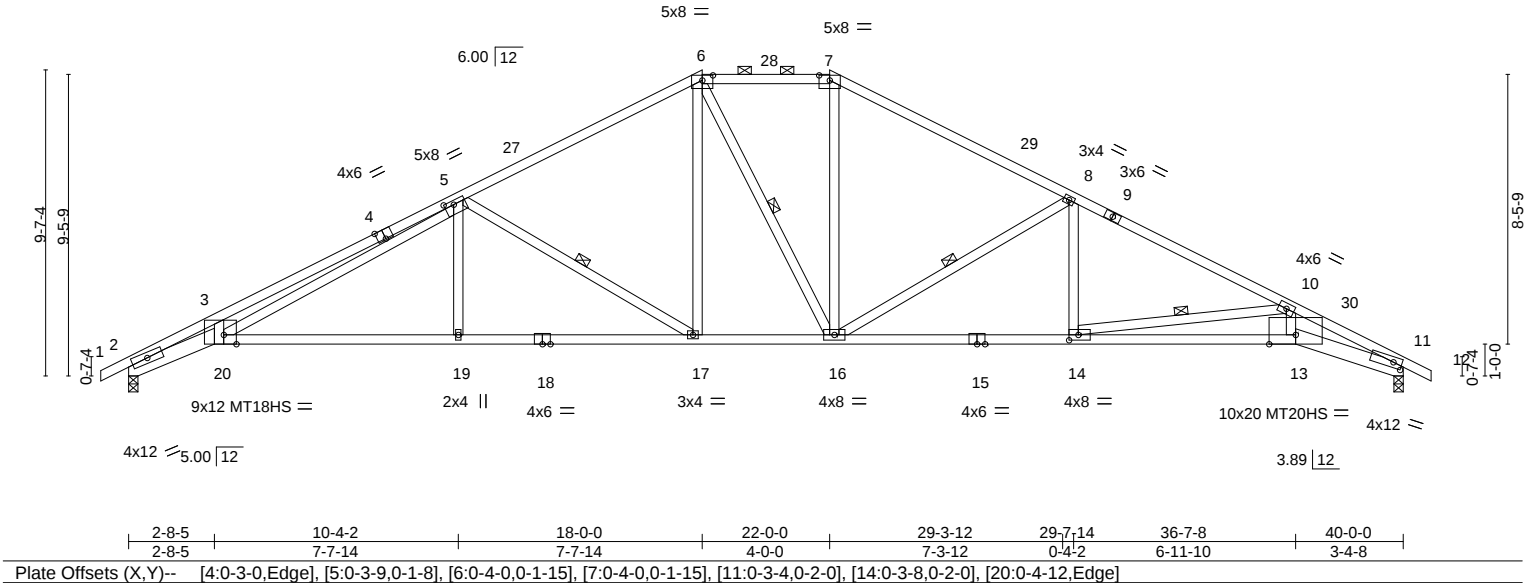


Plate Offsets (X,Y)--		[4:0-3-0,Edge], [5:0-3-9,0-1-8], [6:0-4-0,0-1-15], [7:0-4-0,0-1-15], [11:0-3-4,0-2-0], [14:0-3-8,0-2-0], [20:0-4-12,Edge]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2018/TPI2014
	CSI.	
	TC	0.98
	BC	0.75
	WB	0.99
	Matrix-AS	
	DEFL.	
	in (loc)	l/defl
	Vert(LL)	-0.45 19-20 >999 240
	Vert(CT)	-0.85 19-20 >565 180
	Horz(CT)	0.50 11 n/a n/a
	PLATES	GRIP
	MT20	197/144
	MT20HS	148/108
	MT18HS	197/144
	Weight: 201 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
2x4 SP 2400F 2.0E *Except*	Structural wood sheathing directly applied, except
6-7: 2x4 SPF No.2	2-0-0 oc purlins (3-8-13 max.): 6-7.
BOT CHORD	BOT CHORD
2x4 SP 2400F 2.0E *Except*	Rigid ceiling directly applied.
2-20,11-13: 2x6 SPF 2100F 1.8E, 15-18: 2x4 SPF No.2	1 Row at midpt
WEBS	5-17, 6-16, 8-16, 10-14
2x4 SPF No.2	

REACTIONS.	(size) 2=0-3-8, 11=0-3-8
	Max Horz 2=165(LC 12)
	Max Uplift 2=-321(LC 12), 11=-321(LC 13)
	Max Grav 2=1861(LC 1), 11=1861(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-6554/1261, 3-5=-6450/1368, 5-6=-2585/494, 6-7=-2187/489, 7-8=-2585/492, 8-10=-3642/586, 10-11=-6038/961
BOT CHORD	2-20=-1269/5925, 19-20=-564/3249, 17-19=-565/3248, 16-17=-232/2180, 14-16=-395/3214, 13-14=-779/5133, 11-13=-814/5429
WEBS	5-19=0/386, 5-17=-1229/384, 6-17=-145/717, 6-16=-239/264, 7-16=-117/701, 10-13=-123/1238, 8-14=-7/550, 8-16=-1180/350, 10-14=-1943/433, 5-20=-779/2886

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-10-1, Interior(1) 2-10-1 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 27-7-14, Interior(1) 27-7-14 to 40-10-8 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
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=321, 11=321.
 - 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.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980544
2867639	A7	Hip	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:26 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-1cl3LQaef3ufLBOKfcmwBjcxno4o_PN?68YvKyyUX3

-0-10-8	2-8-5	9-4-2	16-0-0	24-0-0	30-3-12	30-7-14	36-7-8	40-0-0	40-10-8
0-10-8	2-8-5	6-7-14	6-7-14	8-0-0	6-3-12	0-4-2	5-11-10	3-4-8	0-10-8

Scale = 1:72.3

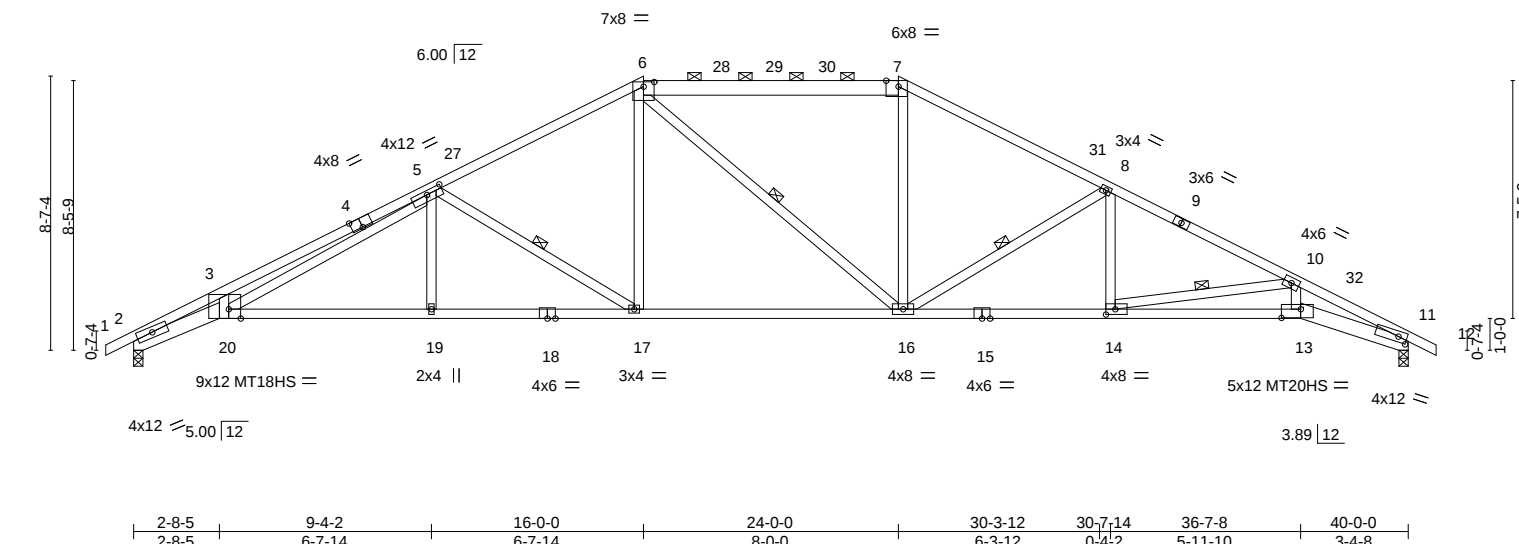


Plate Offsets (X,Y)--		[4:0-4-0,Edge], [5:0-5-15,0-1-8], [6:0-4-0,0-1-12], [7:0-4-10,Edge], [11:0-3-4,0-2-0], [13:0-7-4,0-3-4], [14:0-3-8,0-2-0], [20:0-4-8,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.91	Vert(LL)	-0.41	19-20	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.77	16-17	>623	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.48	11	n/a	MT18HS	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 191 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
6-7: 2x6 SPF No.2, 1-4,9-12: 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SPF 2100F 1.8E *Except*
18-20,13-15: 2x4 SP 2400F 2.0E, 15-18: 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-11-2 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-17, 6-16, 8-16, 10-14

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=-147(LC 13)
Max Uplift 2=-325(LC 12), 11=-325(LC 13)
Max Grav 2=1861(LC 1), 11=1861(LC 1)

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

TOP CHORD 2-3=-6482/1231, 3-5=-6360/1320, 5-6=-2828/526, 6-7=-2431/518, 7-8=-2828/526,
8-10=-3773/620, 10-11=-5997/962
BOT CHORD 2-20=-1220/5851, 19-20=-589/3376, 17-19=-589/3376, 16-17=-294/2423,
14-16=-434/3340, 13-14=-776/5097, 11-13=-813/5388
WEBS 5-19=0/320, 5-17=-1100/344, 6-17=-110/706, 6-16=-250/265, 7-16=-77/689,
8-16=-1048/310, 10-13=-127/1214, 8-14=-28/498, 10-14=-1786/389, 5-20=-697/2672

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-10-1, Interior(1) 2-10-1 to 16-0-0, Exterior(2R) 16-0-0 to 21-7-14, Interior(1) 21-7-14 to 24-0-0, Exterior(2R) 24-0-0 to 29-7-14, Interior(1) 29-7-14 to 40-10-8 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=325, 11=325.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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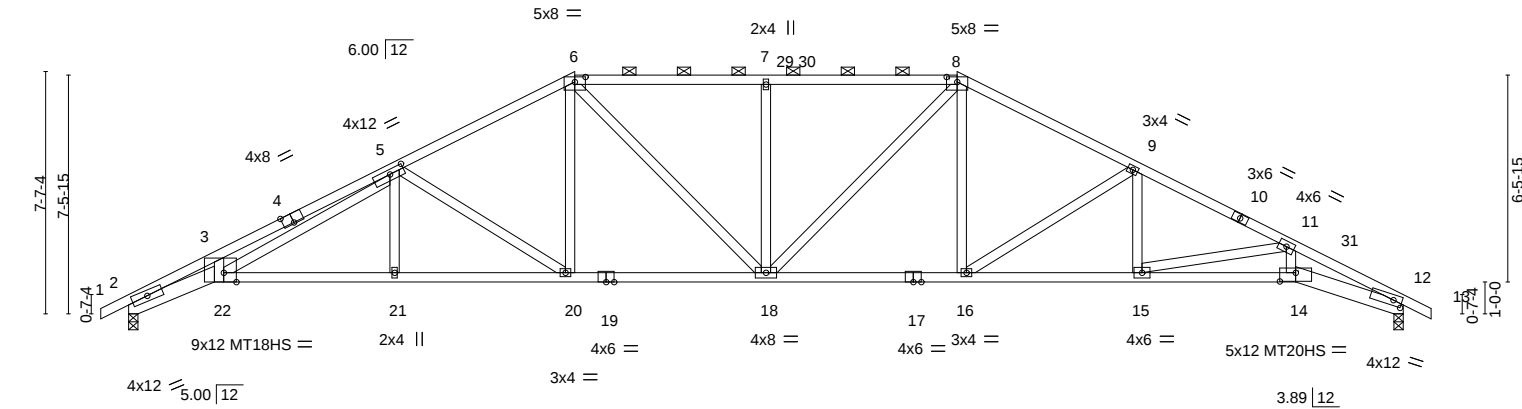


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	A8	Hip	1	1	146980545

Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:27 2021 Page 1		
ID:n1DY9?udP5uLW2Fw?qNjPWym27-VprRYAaGQN0WzLyWDJH9kx99wB9bWQ4WEnt5RnyyUX2			Job Reference (optional)		
-0-10-8	2-8-5	8-4-2	14-0-0	20-0-0	26-0-0
0-10-8	2-8-5	5-7-14	5-7-14	6-0-0	6-0-0
			31-3-12		
			31-7-14		
			36-7-8		
			40-0-0		
			40-10-8		
			0-10-8		

Scale = 1:72.3



	2-8-5	8-4-2	14-0-0	20-0-0	26-0-0	31-3-12	31-7-14	36-7-8	40-0-0
	2-8-5	5-7-14	5-7-14	6-0-0	6-0-0	5-3-12	0-4-2	4-11-10	3-4-8

Plate Offsets (X,Y)--		[4:0-4-0,Edge], [5:0-5-7,0-1-12], [6:0-4-0,0-1-15], [8:0-4-0,0-1-15], [12:0-3-4,0-2-0], [14:0-6-0,0-3-4], [22:0-4-12,Edge]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	in (loc)	l/defl	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(LL)	-0.36 18-20	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.77	Vert(CT)	-0.67 18-20	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	0.43 12	Weight: 197 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP 2400F 2.0E *Except* 6-8: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-10-11 max.): 6-8.
BOT CHORD	2x4 SP 2400F 2.0E *Except* 2-22,12-14: 2x6 SPF 2100F 1.8E, 17-19: 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		

REACTIONS.	
(size)	2=0-3-8, 12=0-3-8
Max Horz	2=129(LC 16)
Max Uplift	2=-329(LC 12), 12=-329(LC 13)
Max Grav	2=1861(LC 1), 12=1861(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-6468/1217, 3-5=-6325/1284, 5-6=-3064/546, 6-7=-2948/568, 7-8=-2948/568, 8-9=-3060/546, 9-11=-3948/649, 11-12=-5929/962
BOT CHORD	2-22=-1185/5836, 21-22=-620/3549, 20-21=-620/3548, 18-20=-353/2645, 16-18=-274/2649, 15-16=-466/3511, 14-15=-771/5035, 12-14=-810/5318
WEBS	5-21=0/297, 5-20=-1051/313, 6-20=-112/653, 6-18=-162/607, 7-18=-496/198, 8-18=-163/604, 8-16=-97/639, 9-16=-1001/278, 11-14=-134/1171, 9-15=-39/515, 11-15=-1560/338, 5-22=-623/2473

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-10-1, Interior(1) 2-10-1 to 14-0-0, Exterior(2R) 14-0-0 to 19-7-14, Interior(1) 19-7-14 to 26-0-0, Exterior(2R) 26-0-0 to 31-7-14, Interior(1) 31-7-14 to 40-10-8 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
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=329, 12=329.
 - 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.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14,2021

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0-10-8	2-8-5	7-4-2	12-0-0	19-0-0	26-0-0	33-11-13	40-0-0	40-10-8
0-10-8	2-8-5	4-7-14	4-7-14	7-0-0	7-0-0	2-0-0	5-11-13	6-0-3

Scale = 1:71.0

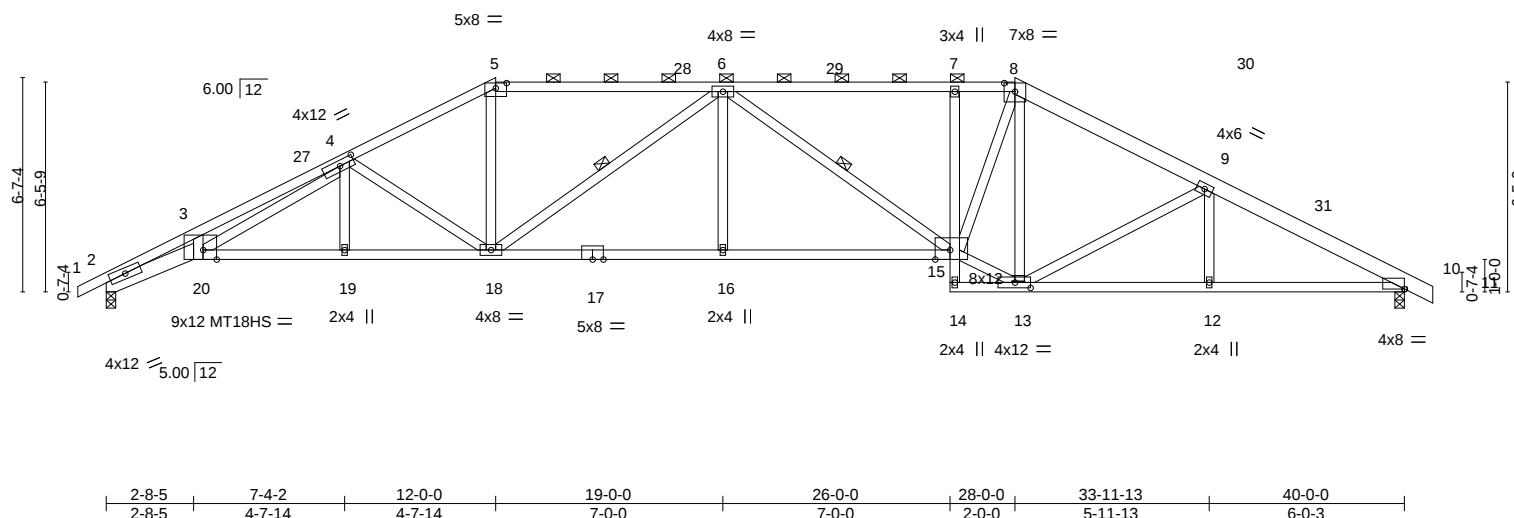


Plate Offsets (X,Y)-- [4:0-5-7,0-2-0], [5:0-4-0,0-1-15], [8:0-4-0,0-3-3], [10:0-0-0,0-0-1], [13:0-5-12,0-2-0], [15:0-5-8,Edge], [20:0-5-0,Edge]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.38	16-18	>999	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.72	16-18	>666	180	MT18HS	197/144	
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.40	10	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 191 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF 1650F 1.5E *Except* 5-8: 2x4 SPF No.2, 8-11: 2x6 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 5-8.
BOT CHORD	2x4 SPF No.2 *Except* 2-20: 2x6 SPF 2100F 1.8E, 17-20: 2x4 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 6-18, 6-15

REACTIONS. (size) 2=0-3-8, 10=0-3-8
 Max Horz 2=-115(LC 13)
 Max Uplift 2=-247(LC 12), 10=-247(LC 13)
 Max Gray 2=1861(LC 1), 10=1861(LC 1)

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

TOP CHORD
2-3=-6367/927, 3-4=-6225/968, 4-5=-3343/568, 5-6=-2911/538, 6-7=-3192/580,
7-8=-3152/573, 8-9=-2858/508, 9-10=-3329/536

BOT CHORD
2-20=-841/5740, 19-20=-489/3741, 18-19=-489/3740, 16-18=-469/3547, 15-16=-469/3547,
7-15=-344/159, 12-13=-404/2878, 10-12=-404/2878

WEBS
5-18=-127/1079, 6-18=-939/229, 6-16=0/310, 6-15=-589/147, 13-15=-255/2673,
8-15=-331/1931, 8-13=-864/159, 9-13=-468/220, 4-19=0/269, 4-20=-445/2181,
4-18=-961/268

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-10-1, Interior(1) 2-10-1 to 12-0-0, Exterior(2R) 12-0-0 to 17-7-14, Interior(1) 17-7-14 to 28-0-0, Exterior(2R) 28-0-0 to 33-7-14, Interior(1) 33-7-14 to 40-10-8 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
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) The Fabrication Tolerance at joint 20 = 0%, joint 20 = 0%
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=247, 10=247.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) 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.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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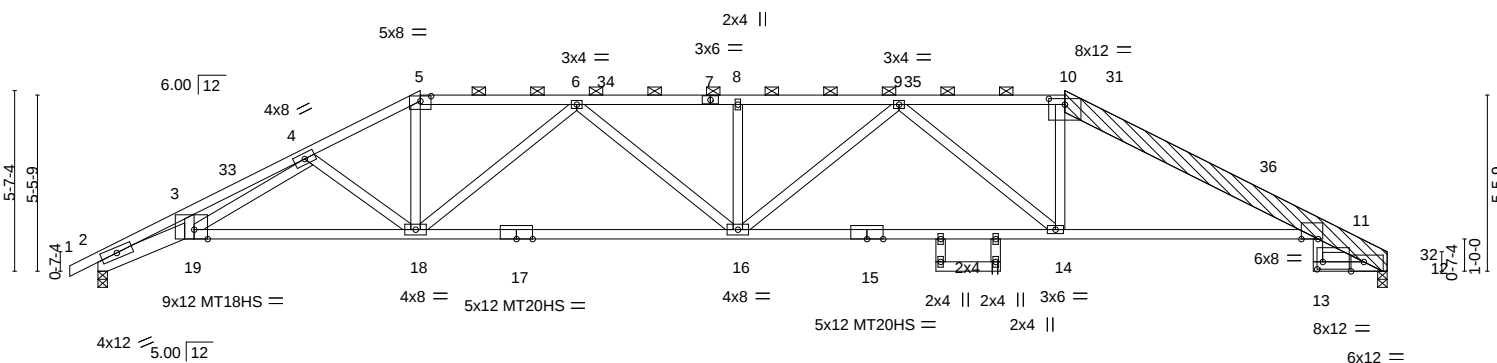
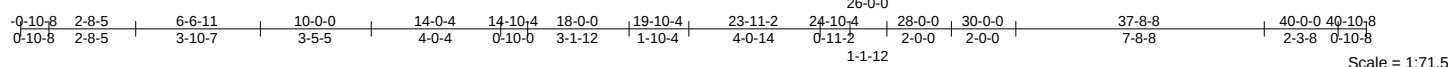
WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH/473 (rev. 5/19/2020) BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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ID:n1DY92udP5ulW2Ew2oNiPWyvm27-Dng9gh1EnIDZ3TVB11XGneqIX3k9tzZPiovg9wRnF



	2-8-5	10-0-0	18-0-0	19-10-4	23-11-2	26-0-0	28-0-0	30-0-0	37-8-8	40-0-0
		7-3-11	8-0-0	1-10-4	4-0-14	2-0-14	2-0-0	2-0-0	7-8-8	2-3-8
Plate Offsets (X,Y)--	[5:0-4-0-0-1-15],	[10:0-6-0-0-2-3],	[11:0-6-4-0-0-0-0],	[12:0-4-12-Edge],	[13:0-2-2-0-2-12],	[19:0-5-0-Edge]				

[illegible]

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x4 SPF 1650F 1.5E, 10-12: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 2-19: 2x6 SPF 2100F 1.8E, 17-19,11-15,15-17: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
OTHERS	2x8 SP 2400F 2.0E
LBR SCAB	10-12 2x8 SP 2400F 2.0E one side
SLIDER	Right 2x4 SPF No.2 -1 1-3-5

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-5-0 max.): 5-10.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
 Max Horz 2=101(LC 16)
 Max Uplift 2=-235(LC 9), 12=-226(LC 8)
 Max Grav 2=1856(LC 1), 12=1800(LC 1)

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

TOP CHORD 2-3=-6677/1002, 3-33=-6489/1014, 4-33=-6441/1028, 4-5=-3675/596, 5-6=-3209/552,
6-34=-4344/746, 7-34=-4344/746, 7-8=-4344/746, 8-35=-4344/746, 9-35=-4344/746,
9-10=-3298/567, 10-31=-3402/552, 31-36=-3552/526, 11-36=-3634/525, 11-32=-811/153,
12-32=-639/111

BOT CHORD 2-19=-897/6038, 18-19=-593/3854, 17-18=-677/4014, 16-17=-677/4014, 15-16=-634/4027,
14-15=-634/4027, 11-14=-414/3269, 11-13=-47/325, 12-13=-68/435

WEBS 3-19=-20/334, 5-18=-175/1346, 10-14=-119/884, 8-16=-347/141, 6-16=-75/528,
6-18=-1147/319, 9-14=-1060/305, 9-16=-68/506, 4-18=-748/233, 4-19=-397/2386

NOTES-

- 1) Attached 11-5-7 scab 10 to 12, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-4 from end at joint 10, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 8-2-9 from end at joint 10, nail 2 row(s) at 2" o.c. for 2-9-10.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-10-1, Interior(1) 2-10-1 to 10-0-0, Exterior(2R) 10-0-0 to 15-7-14, Interior(1) 15-7-14 to 30-0-0, Exterior(2R) 30-0-0 to 35-7-14, Interior(1) 35-7-14 to 39-10-4 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
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 235 lb uplift at joint 2 and 226 lb uplift at joint 12.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced



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standard ANSI/TPI 1.

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



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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980547
2867639	A10	Hip	1	1	Job Reference (optional)	

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- NOTES-**
- 10) 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.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

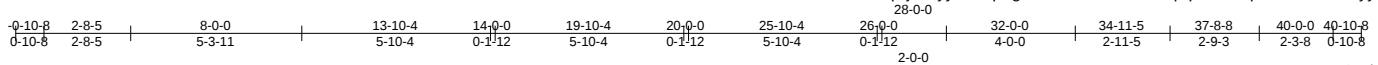


Job 2867639	Truss A11	Truss Type Hip	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980548
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8.430 s Nov 18 2020 MiTek Industries, Inc. Tue Jul 13 15:04:12 2021 Page 1

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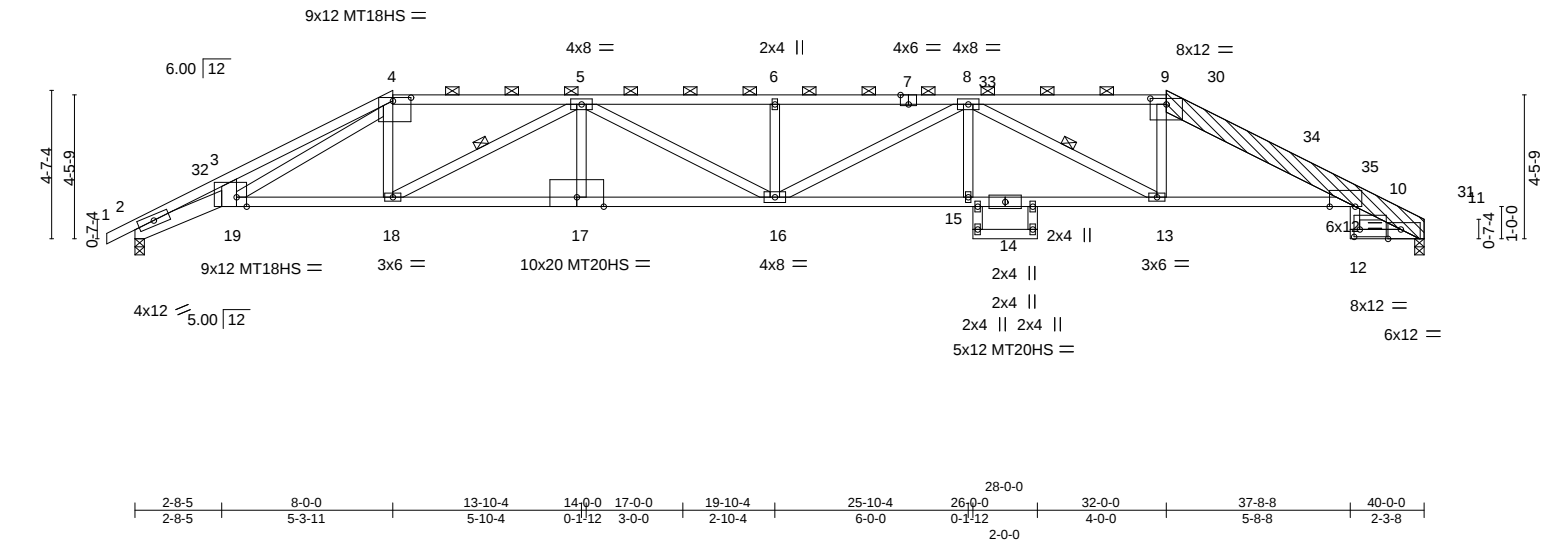


Plate Offsets (X,Y)--		[4:0-6-12,0-1-4], [7:0-3-0,Edge], [9:0-6-0,0-2-3], [10:0-9-8,Edge], [11:0-4-12,Edge], [12:0-2-2,0-2-12], [19:0-3-12,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.89
TCDL 10.0	Lumber DOL	1.15	BC 0.99
BCLL 0.0	Rep Stress Incr	YES	WB 0.58
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.68 16-17	>705	240
Vert(CT)	-1.23 16-17	>388	180
Horz(CT)	0.58 11	n/a	n/a
PLATES	GRIP		
MT20	197/144		
MT20HS	148/108		
MT18HS	197/144		
Weight: 206 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E *Except*
4-7: 2x4 SPF 1650F 1.5E, 9-11: 2x8 SP 2400F 2.0E
7-9: 2x4 SPF No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except*
2-19: 2x6 SP 2100F 1.8E, 17-19,14-17,10-14: 2x4 SP 1650F 1.5E
WEBS 2x4 SP 2400F 2.0E *Except*
3-19: 2x6 SP 2400F 2.0E
OTHERS 2x8 SP 2400F 2.0E
LBR SCAB 9-11 2x8 SP 2400F 2.0E one side
SLIDER Right 2x4 SP 2400F 2.0E 1-3-5

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-0-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-18, 8-13

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=83(LC 16)
Max Uplift 2=-274(LC 9), 11=-265(LC 8)
Max Grav 2=1856(LC 1), 11=1800(LC 1)

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

TOP CHORD 2-32=-6454/1056, 3-32=-6404/1060, 3-4=-6292/1083, 4-5=-3616/680, 5-6=-5700/1106,
6-7=-5700/1106, 7-8=-5700/1106, 8-33=-3694/677, 9-33=-3694/677, 9-30=-3812/693,
30-34=-3907/673, 34-35=-3964/663, 10-35=-3982/659, 10-31=-811/153, 11-31=-639/111
BOT CHORD 2-19=-983/5832, 18-19=-637/3660, 17-18=-962/5162, 16-17=-965/5158, 15-16=-926/5199,
14-15=-926/5199, 13-14=-926/5199, 10-13=-571/3650, 10-12=-46/325, 11-12=-68/435
WEBS 3-19=-54/356, 4-19=-466/2347, 4-18=-168/1060, 9-13=-151/991, 6-16=-420/170,
5-18=-1860/440, 5-16=-158/690, 8-16=-150/647, 8-13=-1795/427

NOTES-

- Attached 9-2-9 scab 9 to 11, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-4 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 3-3-10 from end at joint 9, nail 2 row(s) at 2" o.c. for 5-5-12.
- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 2-11-1, Interior(1) 2-11-1 to 8-0-0, Exterior(2R) 8-0-0 to 13-10-4, Interior(1) 13-10-4 to 32-0-0, Exterior(2R) 32-0-0 to 37-7-14, Interior(1) 37-7-14 to 39-10-4 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 4 = 12%, joint 19 = 4%, joint 19 = 4%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 274 lb uplift at joint 2 and 265 lb uplift at joint 11.



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Continued on page 2

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980548
2867639	A11	Hip	1	1	Job Reference (optional)	

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8.430 s Nov 18 2020 MiTek Industries, Inc. Tue Jul 13 15:04:12 2021 Page 2
ID:n1DY9?udP5uLW2Fw?qNjPWwym27-pTgScTB1U3zaldZuXzYppqkDE3AqhRHrdduBhJLyyRn1

- NOTES-**
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) 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.
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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0-10-8	2-8-5	5-10-4	9-2-15	10-10-11	12-9-6	15-11-2	16-3-13	19-10-4	20-11-9	23-4-11	26-0-0	26-11-2	30-5-9	31-0-14	34-1-12	37-8-8	40-0-0	40-10-8
0-10-8	2-8-5	3-1-15	3-4-11	1-7-12	1-10-11	3-1-12	0-4-11	3-6-7	1-1-5	2-5-2	2-7-5	0-11-2	2-5-9	0-7-5	3-0-14	3-6-12	2-3-8	0-10-8

Scale = 1:71.9

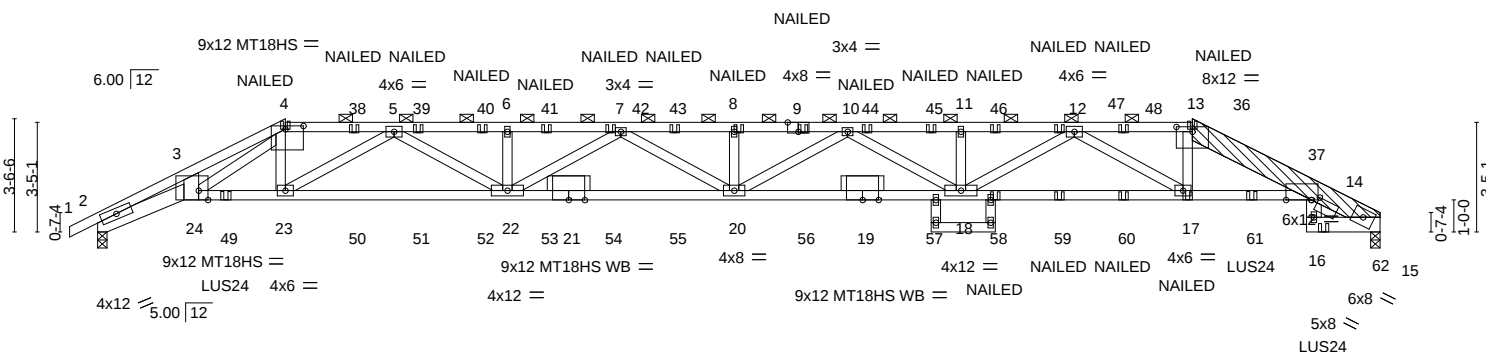


Plate Offsets (X,Y)-- [4:0-6,12,0-1-4], [9:0-4-0,Edge], [13:0-6-0-0-1-13], [14:0-2-6,0-2-3], [14:0-9-8,0-0-0], [24:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-1.06	20	>451	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-1.92	20-22	>250	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.67	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 415 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except*
1-4: 2x4 SP 2400F 2.0E, 13-15: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except*
2-24: 2x6 SPF 2100F 1.8E, 25-26,26-27,27-28: 2x4 SPF No.2
15-16: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-24,14-16: 2x6 SPF No.2
OTHERS 2x6 SP No.2
LBR SCAB 13-15 2x8 SP 2400F 2.0E one side

BRACING- TOP CHORD	Structural wood sheathing directly applied or 3-10-9 oc purlins, except 2-0-0 oc purlins (2-7-9 max.): 4-13.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 15=0-3-8, 2=0-3-8
 Max Horz 2=65(LC 33)
 Max Uplift 15=-989(LC 4), 2=-998(LC 5)
 Max Grav 15=3492(LC 1), 2=3461(LC 1)

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

TOP CHORD 2-3=-12546/3825, 3-4=-12077/3708, 4-5=-8153/2558, 5-6=-14084/4497, 6-7=-14084/4497,
7-8=-16043/5117, 8-10=-16043/5117, 10-11=-14114/4446, 11-12=-14114/4446,
12-13=-8319/2529, 13-14=-8658/2603, 14-31=-1594/481

BOT CHORD 2-24=-3463/11321, 23-24=-2577/8338, 22-23=-3662/11498, 20-22=-4937/15432,
18-20=-4899/15443, 17-18=-3577/11562, 14-17=-2405/8145

WEBS 3-24=-323/1020, 13-17=-761/2551, 8-20=-340/168, 6-22=-383/181, 11-18=-371/177,
12-17=-3827/1335, 12-18=-953/3012, 5-22=-957/3053, 5-23=-3948/1359, 7-20=-192/747,
7-22=-1607/579, 10-18=-1585/593, 10-20=-212/733, 14-16=-155/568, 4-23=-851/2774,
4-24=-1023/3254

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Special connection required between scab 13 to 15 front face(s) and truss.
- 4) Unbalanced roof live loads have been considered for this design.
- 5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=4.2psf; h=25ft; 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
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) All plates are 2x4 MT20 unless otherwise indicated.



July 14, 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/P11 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 #136/MO	I46980549
2867639	A12	HIP GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:15 2021 Page 2
ID:n1DY9?udP5uLW2Fw?qNjPWwym27-rV7v13RkFhVDXV2CW03LFPf4_L1Rj4rlUvzT0TyyUXE

- NOTES-**
- 9) The Fabrication Tolerance at joint 24 = 12%, joint 24 = 12%
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=989, 2=998.
 - 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 15) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 32-0-0 oc max. starting at 4-0-0 from the left end to 38-2-14 to connect truss(es) to back face of bottom chord.
 - 16) Fill all nail holes where hanger is in contact with lumber.
 - 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 37 lb up at 6-0-0, 74 lb down and 37 lb up at 8-0-0, 74 lb down and 37 lb up at 10-0-0, 74 lb down and 37 lb up at 12-0-0, 74 lb down and 37 lb up at 14-0-0, 74 lb down and 37 lb up at 16-0-0, 62 lb down and 33 lb up at 18-0-0, 62 lb down and 33 lb up at 20-0-0, 71 lb down and 36 lb up at 22-0-0, and 71 lb down and 36 lb up at 24-0-0, and 71 lb down and 36 lb up at 26-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-13=-70, 13-31=-70, 24-33=-20, 14-24=-20, 15-16=-20

Concentrated Loads (lb)

Vert: 4=-90(B) 9=-87(B) 13=-94(B) 17=-73(B) 8=-77(B) 20=-62 23=-74 19=-71 14=-241(B) 38=-90(B) 39=-90(B) 40=-90(B) 41=-90(B) 42=-90(B) 43=-77(B) 44=-87(B) 45=-87(B) 46=-94(B) 47=-94(B) 48=-94(B) 49=-420(B) 50=-74 51=-74 52=-74 53=-74 54=-74 55=-62 56=-71 57=-71 58=-73(B) 59=-73(B) 60=-73(B) 61=-233(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980550
2867639	B1	Hip	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:30 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWYym27-vNXaACd8jO4qoh5uSrsMZnjinOG5jqYywk6l26yyUX?

-0-10-8	5-8-3	11-4-0	18-0-0	22-0-0	27-9-12	29-6-14	33-7-8	34-11-6	39-8-12
0-10-8	5-8-3	5-7-13	6-8-0	4-0-0	5-9-12	1-9-2	4-0-10	1-3-14	4-9-6

5x8 =

5x8 =

Scale = 1:76.6

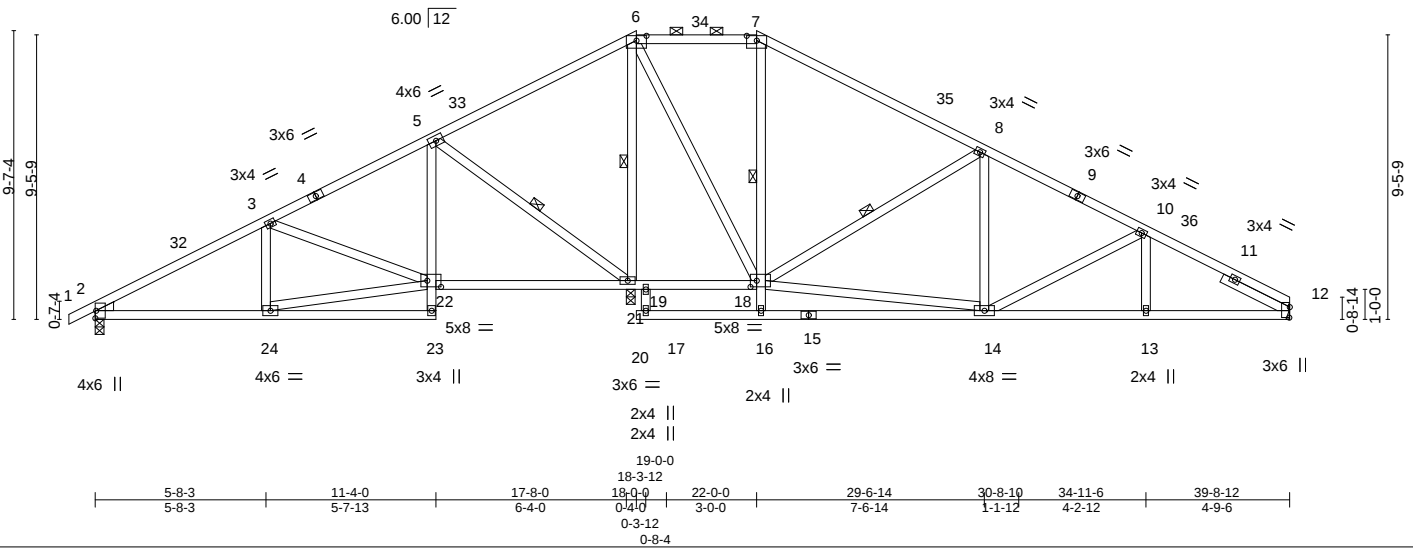


Plate Offsets (X,Y)--														
[6:0-4-0,0-1-15], [7:0-4-0,0-1-15], [12:0-4-3,0-0-3], [18:0-2-8,0-2-8], [22:0-5-8,0-2-8]														
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.53	Vert(LL)	-0.08	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL		1.15		BC	0.40	Vert(CT)	-0.17	14-16	>999	180		
BCLL	0.0	Rep Stress Incr		YES		WB	0.53	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014				Matrix-AS							Weight: 203 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
18-22: 2x4 SP 2400F 2.0E
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, except
2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied. Except:
6-0-0 oc bracing: 19-21
WEBS 1 Row at midpt 7-16, 6-21, 5-21, 8-18

REACTIONS.

(size) 2=0-3-8, 12=Mechanical, 21=0-3-8
Max Horz 2=176(LC 12)
Max Uplift 2=137(LC 12), 12=-195(LC 13), 21=-330(LC 12)
Max Grav 2=673(LC 25), 12=840(LC 26), 21=2256(LC 1)

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

TOP CHORD 2-3=-862/167, 3-5=-404/123, 5-6=-34/690, 7-8=-257/193, 8-10=-941/286,
10-12=-1246/320
BOT CHORD 2-24=-238/704, 5-22=-46/420, 21-22=-95/310, 19-21=-506/257, 18-19=-506/257,
13-14=-220/1077, 12-13=-220/1077
WEBS 22-24=-216/665, 3-22=-479/161, 16-18=0/269, 7-18=-401/105, 6-21=-1613/257,
6-18=-236/1115, 5-21=-876/311, 8-14=0/343, 14-18=-108/757, 8-18=-795/296,
10-14=-345/137

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 27-7-7, Interior(1) 27-7-7 to 39-8-12 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
- 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.
- 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) 2=137, 12=195, 21=330.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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

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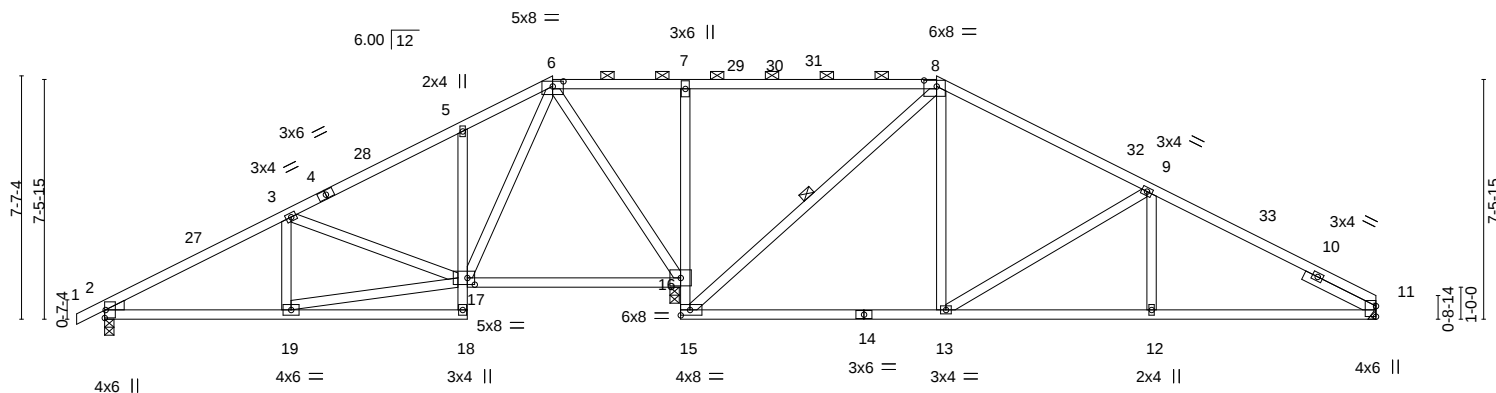


16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

0-10-8	5-8-3	11-4-0	14-0-0	18-0-0	26-0-0	32-8-10	39-8-12
0-10-8	5-8-3	5-7-13	2-8-0	4-0-0	8-0-0	6-8-10	7-0-2

Scale = 1:72.0



	5-8-3	11-4-0	14-0-0	17-8-0	18-0-0	26-0-0	32-8-10	39-8-12
Plate Offsets (X,Y)--	5-8-3	5-7-13	2-8-0	3-8-0	0-4-0	8-0-0	6-8-10	7-0-2
	[6:0-4-0-0-1-15]	[8:0-4-12-0-2-4]	[17:0-2-12-0-2-8]					

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 0.77	Vert(LL) -0.10 13-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.22 13-15	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.72	Horz(CT) 0.02 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS				Weight: 177 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, except 2-0-0 oc purlins (10-0-0 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 8-15

REACTIONS.

(size) 11=Mechanical, 2=0-3-8, 16=0-3-8
Max Horz 2=140(LC 12)
Max Uplift 11=-235(LC 13), 2=-185(LC 12), 16=-262(LC 12)
Max Grav 11=909(LC 26), 2=794(LC 25), 16=1963(LC 1)

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

TOP CHORD 2-3=-1106/266, 3-5=-704/232, 5-6=-662/310, 6-7=-8/268, 7-8=-22/253, 8-9=-782/323,
9-11=-1269/393

BOT CHORD 2-19=-291/922, 5-17=-304/159, 15-16=-86/761, 7-16=-511/212, 13-15=-59/599,
12-13=-261/1135, 11-12=-261/1135

WEBS 17-19=-277/900, 3-17=-405/155, 8-13=-56/521, 9-13=-617/234, 6-17=-231/793,
6-16=-748/190, 8-15=-1020/176

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 14-0-0, Exterior(2R) 14-0-0 to 19-7-7, Interior(1) 19-7-7 to 26-0-0, Exterior(2R) 26-0-0 to 31-7-7, Interior(1) 31-7-7 to 39-8-12 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=235, 2=185, 16=262.
- 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MH-1413 (Rev. 3/29/2020) 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 #136/MO
2867639	B4	Hip	1	1	I46980553

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:37 2021 Page 1

ID:n1DY9?udP5uLW2Fw?gNjPWwym27-CkSDebiX3RH59tjRoQTV81ZxvDbHs1h_XKIdnCyyUWu
 0-10-8 5-8-3 11-4-0 12-0-0 18-0-0 23-1-12 28-0-0 33-8-10 39-8-12
 0-10-8 5-8-3 5-7-13 0-8-0 6-0-0 5-1-12 4-10-4 5-8-10 6-0-2

Scale = 1:70.8

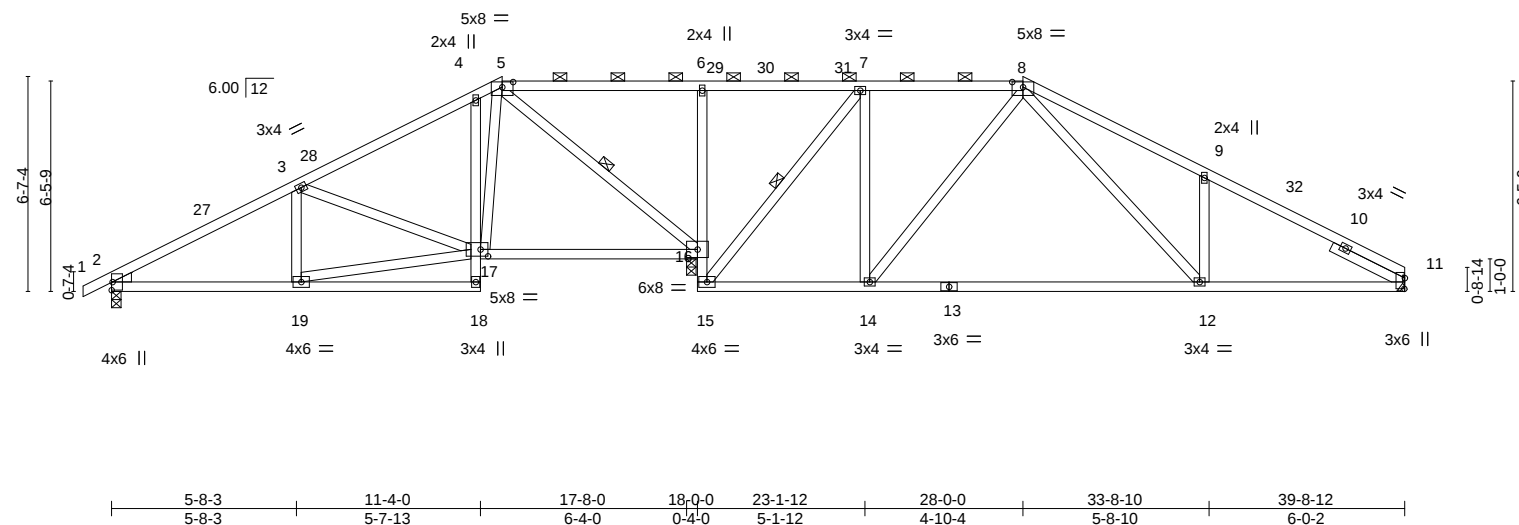


Plate Offsets (X,Y)--		[5:0-4-0,0-1-15], [8:0-4-0,0-1-15], [11:0-3-15,0-0-3], [17:0-2-12,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.47	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(LL) -0.25 12-14 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.44	Vert(CT) -0.52 12-14 >494 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.02 16 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 179 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, except
 2-0-0 oc purlins (6-0-0 max.): 5-8.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 5-16, 7-15

REACTIONS.

(size) 11=Mechanical, 2=0-3-8, 16=0-3-8
 Max Horz 2=122(LC 12)
 Max Uplift 11=-239(LC 13), 2=-200(LC 12), 16=-249(LC 9)
 Max Grav 11=905(LC 26), 2=796(LC 25), 16=1958(LC 1)

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

TOP CHORD 2-3=-1111/295, 3-4=-709/265, 4-5=-584/299, 5-6=0/301, 6-7=0/297, 7-8=-476/312,
 8-9=-1400/518, 9-11=-1376/389
 BOT CHORD 2-19=-298/927, 16-17=-130/467, 15-16=-124/854, 6-16=-423/173, 14-15=-77/474,
 12-14=-132/713, 11-12=-268/1181
 WEBS 17-19=-284/905, 3-17=-405/151, 5-17=-134/535, 5-16=-921/189, 9-12=-351/226,
 7-14=0/545, 8-14=-405/90, 8-12=-204/704, 7-15=-1095/174

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 12-0-0, Exterior(2R) 12-0-0 to 17-7-7, Interior(1) 17-7-7 to 28-0-0, Exterior(2R) 28-0-0 to 33-6-14, Interior(1) 33-6-14 to 39-8-12 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=-239, 2=200, 16=249.
- 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14,2021

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 #136/MO
2867639	B5	Roof Special	1	1	I46980554

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:39 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qnjPWym27-86a_3Hknb3XpPBtqrVzDSfGh0lbKp9H?enkr4yyUWs

-0-10-8	5-0-3	10-0-0	11-4-0	18-0-0	22-11-12	27-8-0	28-10-0	34-1-10	39-8-12
0-10-8	5-0-3	4-11-13	1-4-0	6-8-0	4-11-12	4-8-4	1-2-0	5-3-10	5-7-2

Scale = 1:72.0

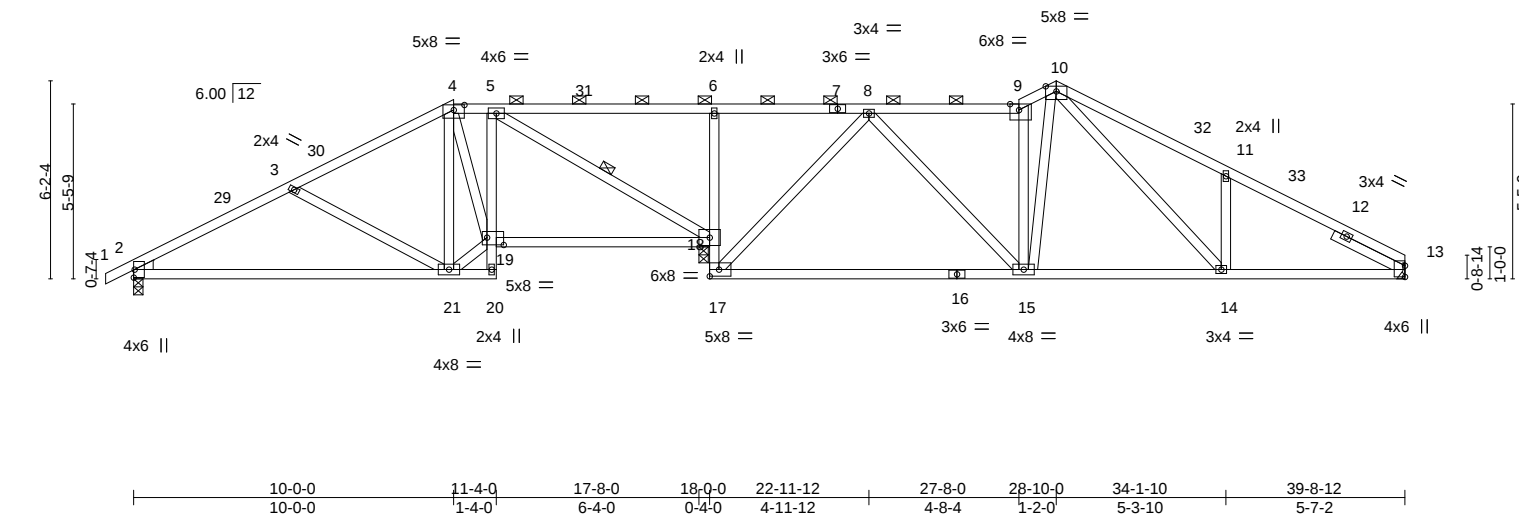


Plate Offsets (X,Y)-- [4:0-4-0,0-1-15], [9:0-3-6,Edge], [19:0-6-4,0-2-12]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.21	15-17	>999	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.43	15-17	>606	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.03	18	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 177 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, except
 2-0-0 oc purlins (5-8-9 max.): 4-9.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 5-18

REACTIONS.

(size) 13=Mechanical, 2=0-3-8, 18=0-3-8
 Max Horz 2=117(LC 12)
 Max Uplift 13=179(LC 13), 2=180(LC 12), 18=389(LC 12)
 Max Grav 13=925(LC 1), 2=832(LC 25), 18=1888(LC 1)

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

TOP CHORD 2-3=-1174/285, 3-4=-816/203, 4-5=-769/241, 8-9=-930/258, 9-10=-1026/284,
 10-11=-1429/415, 11-13=-1394/291
 BOT CHORD 2-21=-290/1000, 18-19=-149/791, 17-18=-101/825, 6-18=-440/179, 15-17=-58/554,
 14-15=-68/839, 13-14=-187/1204
 WEBS 3-21=-392/198, 19-21=-76/842, 4-19=-106/369, 5-18=-1065/265, 11-14=-345/214,
 8-17=-1009/194, 8-15=-55/547, 9-15=-619/171, 10-15=-94/499, 10-14=-238/578

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 10-0-0, Exterior(2R) 10-0-0 to 13-11-11, Interior(1) 13-11-11 to 28-10-0, Exterior(2R) 28-10-0 to 32-9-11, Interior(1) 32-9-11 to 39-8-12 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=179, 2=180, 18=389.
- 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980555
2867639	B6	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:40 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWyyim27-dJ8MHckQMMfg0KSOTY0CmgBQuQf?3LYRDIXHNWyyUWr

-0-10-8	8-0-0	11-4-0	14-8-0	18-0-0	21-4-0	22-3-11	25-8-0	28-10-0	34-1-10	39-8-12
0-10-8	8-0-0	3-4-0	3-4-0	3-4-0	3-4-0	0-11-11	3-4-5	3-2-0	5-3-10	5-7-2

Scale = 1:72.0

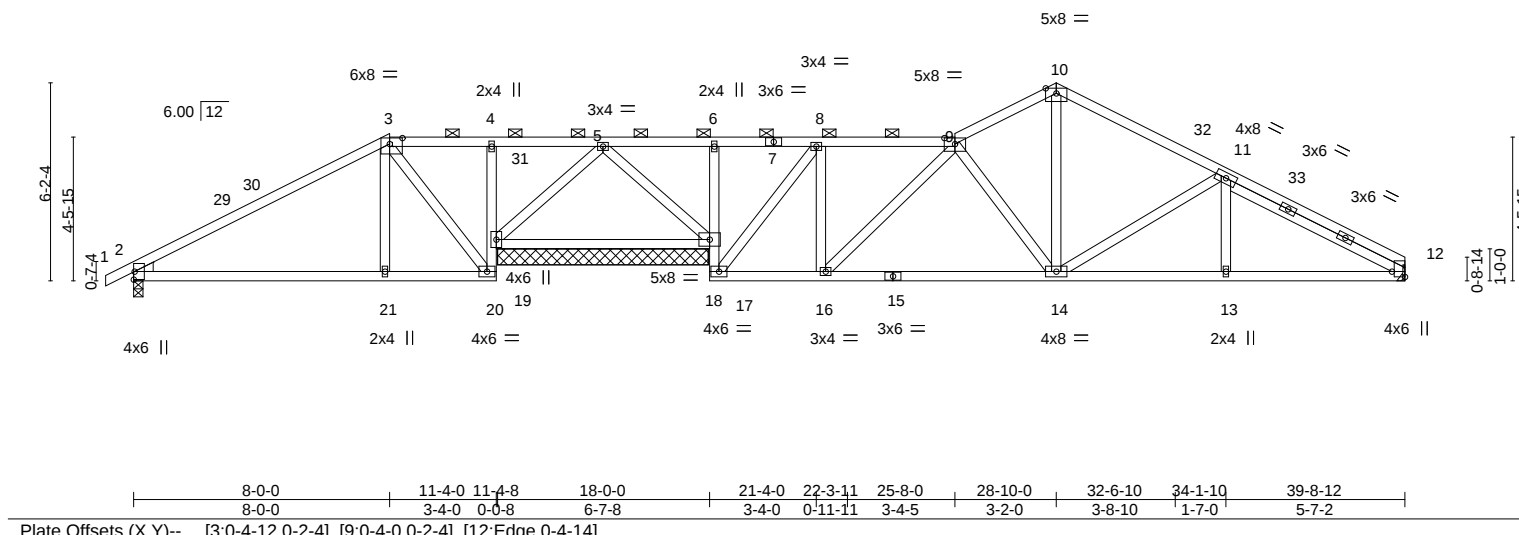


Plate Offsets (X, Y)--		[3:0-4-12,0-2-4], [9:0-4-0,0-2-4], [12:Edge,0-4-14]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.62	Vert(LL) 0.11 21-28 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.49	Vert(CT) -0.20 21-28 >668 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.03 2 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 171 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 3-9.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	
Left: 2x4 SPF No.2	
SLIDER Right 2x4 SPF No.2 6-1-12	

REACTIONS. All bearings 6-7-0 except (jt=length) 12=Mechanical, 2=0-3-8.
 (lb) - Max Horz 2=117(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) except 12=181(LC 13), 2=142(LC 12),
 19=138(LC 12), 18=276(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) except 12=931(LC 1), 2=575(LC 1),
 19=691(LC 25), 18=1462(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-533/185, 5-6=0/253, 8-9=-518/215, 9-10=-997/288, 10-11=-1033/266,
 11-12=-757/226
 BOT CHORD 2-21=-132/382, 20-21=-133/375, 19-20=-98/456, 17-18=-120/895, 16-17=-90/517,
 14-16=-162/987, 13-14=-203/1230, 12-13=-202/1232
 WEBS 3-21=0/295, 10-14=-127/568, 9-14=-282/149, 11-14=-479/194, 9-16=-670/128,
 5-18=-375/132, 3-20=-591/145, 8-16=-40/618, 8-17=-1145/161

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 8-0-0, Exterior(2R) 8-0-0 to 11-11-11, Interior(1) 11-11-11 to 28-10-0, Exterior(2R) 28-10-0 to 32-9-11, Interior(1) 32-9-11 to 39-8-12 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
 - 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 12, 142 lb uplift at joint 2, 138 lb uplift at joint 19 and 276 lb uplift at joint 18.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	B7	Roof Special	1	1	I46980556
Job Reference (optional)					

Builders FirstSource (Valley Center),

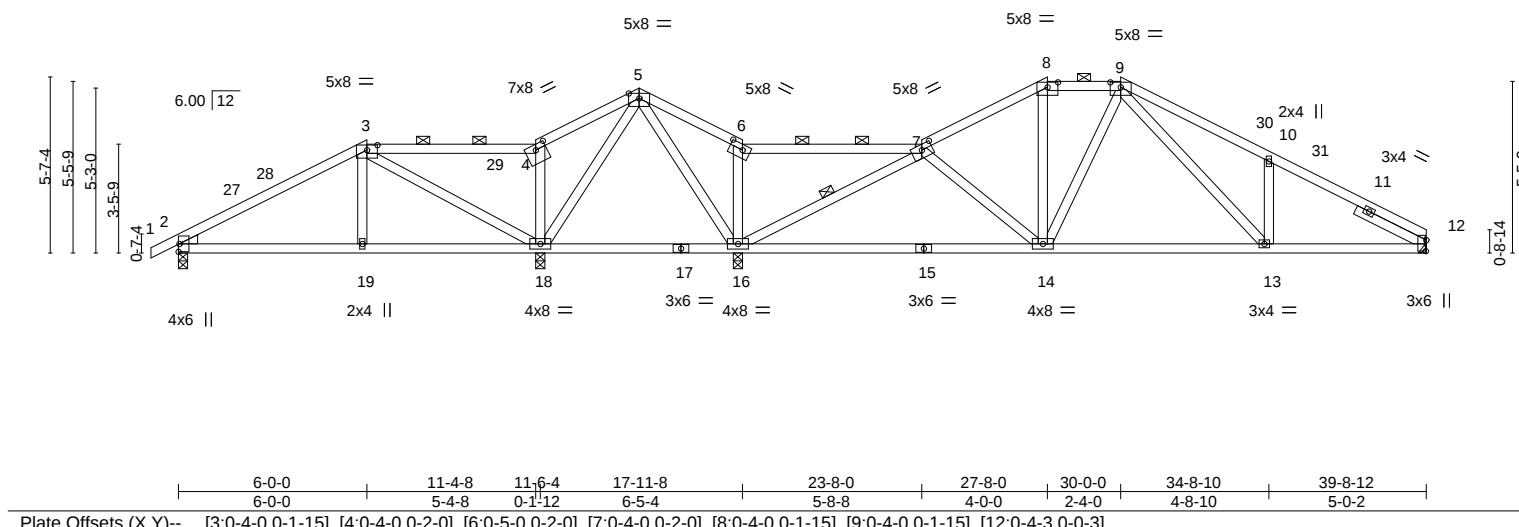
Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:42 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-ZhF6ilmgu_vNGecObz2gr5HncEJgXGEjhc0OSPyUWp

-0-10-8	6-0-0	11-4-8	14-8-0	17-11-8	23-8-0	27-8-0	30-0-0	34-8-10	39-8-12
0-10-8	6-0-0	5-4-8	3-3-8	3-3-8	5-8-8	4-0-0	2-4-0	4-8-10	5-0-2

Scale = 1:73.4



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 0.48	Vert(LL)	-0.17 14-16	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.35 14-16	>757	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.04 12	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
 SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (6-0-0 max.): 3-4, 6-7, 8-9.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 7-16

REACTIONS.

All bearings 0-3-8 except (jt=length) 12=Mechanical.
 (lb) - Max Horz 2=100(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) except 12=148(LC 13), 2=125(LC 12),
 18=160(LC 12), 16=119(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) except 12=883(LC 1), 2=530(LC 25),
 18=650(LC 25), 16=1621(LC 1)

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

TOP CHORD 2-3=-563/137, 5-6=-73/719, 6-7=-83/604, 7-8=-991/247, 8-9=-816/255, 9-10=-1357/365,
 10-12=-1337/278
 BOT CHORD 2-19=-131/438, 18-19=-132/431, 14-16=-158/808, 13-14=-98/842, 12-13=-185/1157
 WEBS 3-18=-670/160, 5-16=-742/164, 7-16=-1612/362, 10-13=-259/190, 9-13=-200/470

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 6-0-0, Exterior(2R) 6-0-0 to 9-11-11, Interior(1) 9-11-11 to 14-8-0, Exterior(2E) 14-8-0 to 17-11-8, Interior(1) 17-11-8 to 27-8-0, Exterior(2E) 27-8-0 to 30-0-0, Exterior(2R) 30-0-0 to 33-11-11, Interior(1) 33-11-11 to 39-8-12 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
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 12, 125 lb uplift at joint 2, 160 lb uplift at joint 18 and 119 lb uplift at joint 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

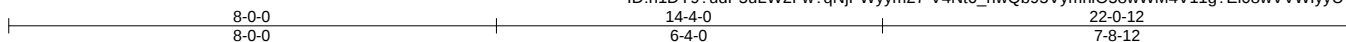
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980557
2867639	B8	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:44 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-V4Nt6_nwQb95VymniO58wWM4V11g?Ei08wVWllyUWn



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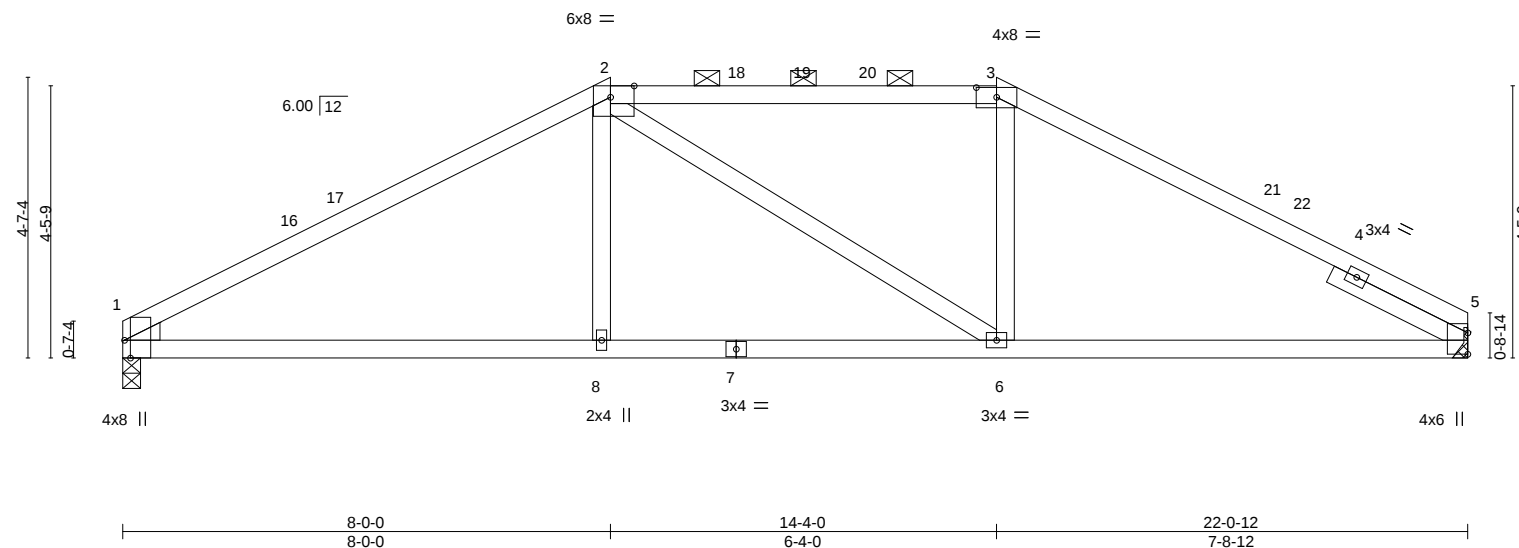


Plate Offsets (X,Y)--		[1:0-3-8,Edge], [2:0-4-10,Edge], [3:0-4-0,0-1-15]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.64	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(LL) 0.10 8-15 >999 240
BCLL 0.0	Lumber DOL 1.15	WB 0.23	Vert(CT) -0.17 8-15 >999 180
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.05 5 n/a n/a
	Code IRC2018/TPI2014		
			PLATES MT20
			GRIP 197/144
			Weight: 74 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, except
 2-0-0 oc purlins (4-7-14 max.): 2-3.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=Mechanical, 1=0-3-8
 Max Horz 1=72(LC 12)
 Max Uplift 5=168(LC 13), 1=171(LC 12)
 Max Grav 5=993(LC 1), 1=993(LC 1)

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

TOP CHORD 1-2=-1539/296, 2-3=-1240/315, 3-5=-1431/293
 BOT CHORD 1-8=-191/1280, 6-8=-192/1275, 5-6=-173/1246
 WEBS 2-8=0/291, 3-6=0/287

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=25ft; 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 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 14-4-0, Exterior(2R) 14-4-0 to 18-6-15, Interior(1) 18-6-15 to 22-0-12 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
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint 5 and 171 lb uplift at joint 1.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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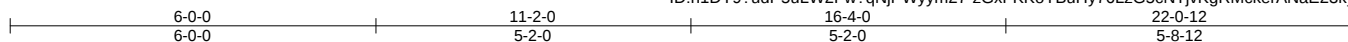
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980558
2867639	B9	Hip	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:45 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWyyim27-zGxFKKoYBuHy76LzG5cNTjvKgRMckerANaE23kyyUWm



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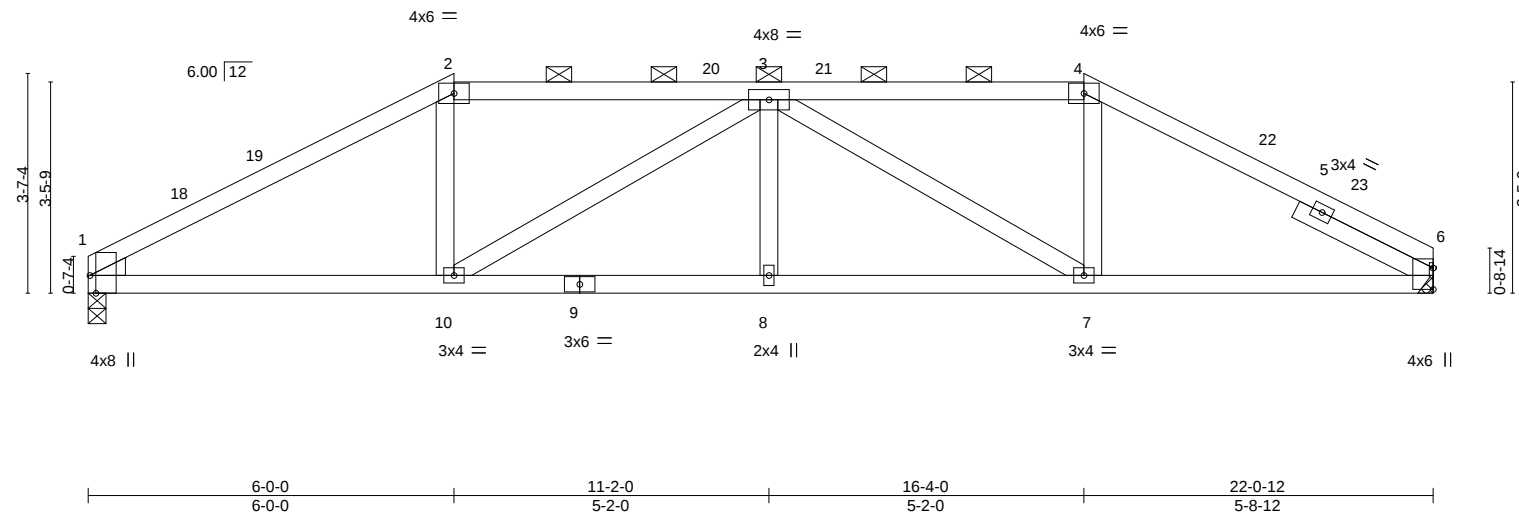


Plate Offsets (X,Y)--		[1:0-3-8,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.08 7-8	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.16 7-8	>999	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.06 6	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 79 lb	FT = 20%		

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (4-9-0 max.): 2-4.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEDGE			
Left: 2x4 SPF No.2			
SLIDER	Right 2x4 SPF No.2 2-6-0		

REACTIONS. (size) 6=Mechanical, 1=0-3-8
Max Horz 1=54(LC 12)
Max Uplift 6=171(LC 13), 1=174(LC 12)
Max Grav 6=993(LC 1), 1=993(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1635/308, 2-3=-1375/307, 3-4=-1320/299, 4-6=-1540/302
BOT CHORD 1-10=-227/1389, 8-10=-287/1793, 7-8=-287/1793, 6-7=-197/1335
WEBS 2-10=-25/383, 3-10=-603/158, 3-7=-655/163, 4-7=-28/399

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=25ft; 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 6-0-0, Exterior(2R) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 16-4-0, Exterior(2R) 16-4-0 to 20-6-15, Interior(1) 20-6-15 to 22-0-12 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
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 6 and 174 lb uplift at joint 1.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 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 2867639	Truss B10	Truss Type Hip Girder	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980559
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:33 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-KyDjpDf10DmfhGQgZaOZzCP9?b9gw5QPcIkQdQyyUWy

Job Reference (optional)

4-0-0	8-9-15	13-6-1	18-4-0	22-0-12
4-0-0	4-9-15	4-8-3	4-9-15	3-8-12

Scale = 1:37.7

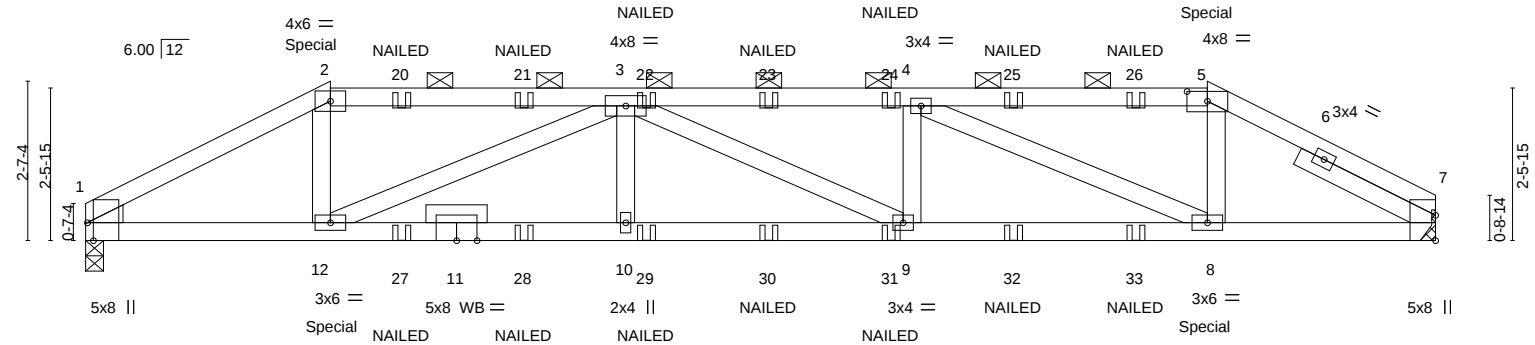


Plate Offsets (X,Y)--	[1:0-3-8,Edge], [5:0-4-0,0-1-15]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.21	9-10	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.38	9-10	>692	180	197/144
BCLL 0.0	Rep Stress Incr	NO	WB 0.90	Horz(CT)	0.10	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 82 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E
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 or 2-5-12 oc purlins, except
2-0-0 oc purlins (2-9-1 max.): 2-5.
BOT CHORD Rigid ceiling directly applied or 6-7-7 oc bracing.

REACTIONS. (size) 7=Mechanical, 1=0-3-8
Max Horz 1=37(LC 8)
Max Uplift 7=-442(LC 9), 1=-437(LC 8)
Max Grav 7=1471(LC 1), 1=1459(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2614/810, 2-3=-2231/736, 3-4=-3705/1192, 4-5=-2104/696, 5-7=-2465/780
BOT CHORD 1-12=-712/2282, 10-12=-1184/3740, 9-10=-1184/3740, 8-9=-1169/3705, 7-8=-653/2157
WEBS 2-12=-185/808, 3-12=-1690/553, 3-10=0/312, 4-9=-21/321, 4-8=-1784/578, 5-8=-201/853

- 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=25ft; 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
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=442, 1=437.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 135 lb down and 140 lb up at 4-0-0, and 135 lb down and 140 lb up at 18-4-0 on top chord, and 115 lb down and 63 lb up at 4-0-0, and 115 lb down and 63 lb up at 18-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



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Continued on page 2

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MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980559
2867639	B10	Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-5=-70, 5-7=-70, 13-17=-20
- Concentrated Loads (lb)
- Vert: 2=-76(F) 5=-76(F) 12=-115(F) 8=-115(F) 20=-35(F) 21=-35(F) 22=-35(F) 23=-35(F) 24=-35(F) 25=-35(F) 26=-35(F) 27=-45(F) 28=-45(F) 29=-45(F) 30=-45(F) 31=-45(F) 32=-45(F) 33=-45(F)

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

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



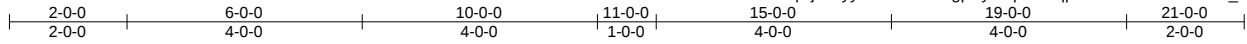
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980560
2867639	C1	Roof Special Girder	1	2	Job Reference (optional)	

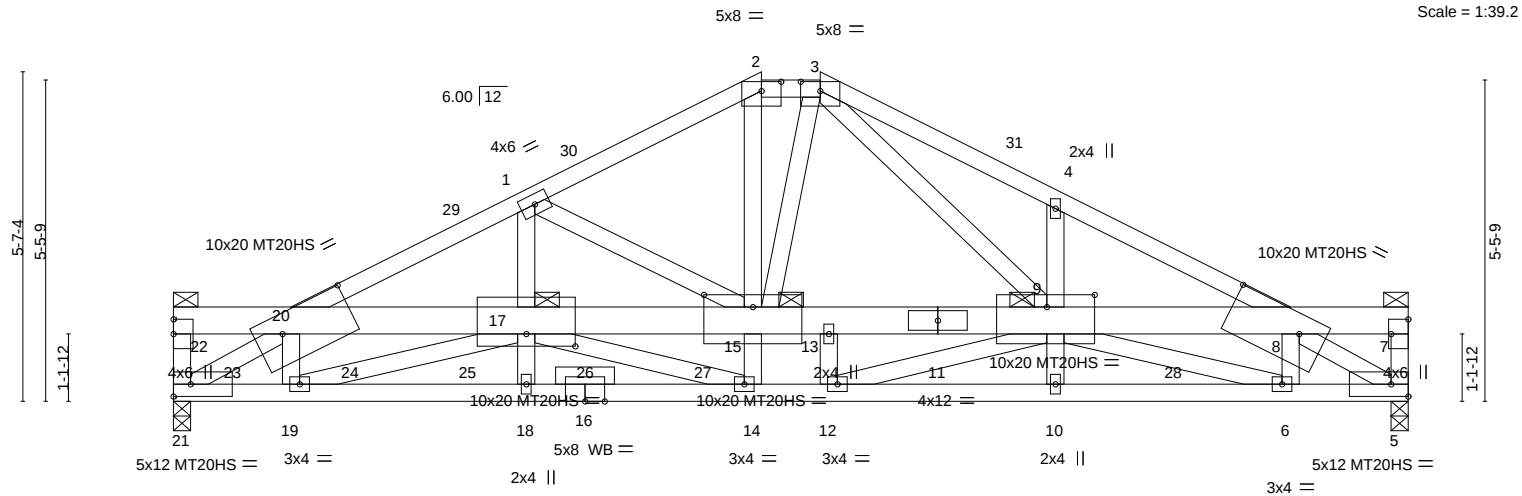
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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Scale = 1:39.2



	2-0-0	6-0-0	10-0-0	11-0-0	15-0-0	19-0-0	21-0-0
	2-0-0	4-0-0	4-0-0	1-0-0	4-0-0	4-0-0	2-0-0
Plate Offsets (X,Y)--	[2:0-4-0,0-1-15], [3:0-4-0,0-1-15], [7:Edge,0-3-8], [8:1-2-12,0-3-14], [9:0-9-12,0-2-8], [15:0-10-0,0-2-8], [17:0-10-0,0-2-8], [20:1-2-8,0-3-14]						

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 0.58	Vert(LL)	-0.03	10-12	>999	240	MT20 197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.29	9-13	>858	180	MT20HS 148/108
BCLL 0.0	Rep Stress Incr	NO	WB 0.74	Horz(CT)	0.09	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 287 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-6 max.): 2-3.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 16-21,5-16: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied. Except: 6-0-0 oc bracing: 20-22, 7-8
WEBS 2x4 SPF No.2	JOINTS 1 Brace at Jt(s): 22, 7, 15, 17, 9
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 21=0-3-8, 5=0-3-8
Max Horz 21=89(LC 11)
Max Grav 21=6079(LC 1), 5=6359(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 21-22=-727/0, 1-20=-8662/0, 1-2=-6335/0, 2-3=-5545/0, 3-4=-8271/0, 4-8=-8395/0, 5-7=-511/0
BOT CHORD 20-22=-443/0, 17-20=-414/0, 13-15=-2515/0, 9-13=-2515/0, 8-9=-1356/0, 7-8=-457/0, 19-21=0/8037, 18-19=0/7292, 14-18=0/7292, 12-14=0/7727, 10-12=0/8533, 6-10=0/8532, 5-6=0/8756
WEBS 20-21=-9111/0, 19-20=-304/0, 1-17=0/2032, 2-15=0/2592, 4-9=-15/403, 5-8=-9957/0, 14-15=0/335, 1-15=-2274/0, 3-9=0/3127, 6-9=0/298, 17-19=0/806, 9-12=-942/0, 14-17=0/594, 3-15=0/1301

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-3-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-7-0 oc, Except member 19-20 2x4 - 1 row at 0-9-0 oc, member 1-17 2x4 - 1 row at 0-9-0 oc, member 15-2 2x4 - 1 row at 0-9-0 oc, member 4-9 2x4 - 1 row at 0-9-0 oc, member 6-8 2x4 - 1 row at 0-9-0 oc, member 17-18 2x4 - 1 row at 0-9-0 oc, member 9-10 2x4 - 1 row at 0-9-0 oc, member 13-12 2x4 - 1 row at 0-9-0 oc, member 15-14 2x4 - 1 row at 0-9-0 oc, member 1-15 2x4 - 1 row at 0-9-0 oc, member 9-3 2x4 - 1 row at 0-9-0 oc, member 6-9 2x4 - 1 row at 0-9-0 oc, member 19-17 2x4 - 1 row at 0-9-0 oc, member 12-9 2x4 - 1 row at 0-9-0 oc, member 17-14 2x4 - 1 row at 0-9-0 oc, member 15-3 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) 2-0-0 to 5-0-0, Interior(1) 5-0-0 to 10-0-0, Exterior(2E) 10-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 19-0-0 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980560
2867639	C1	Roof Special Girder	1	2	Job Reference (optional)	

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

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NOTES-

- 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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 10) 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . 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: 20-22=-140, 7-8=-140, 2-20=-70, 2-3=-70, 3-8=-70, 19-21=-140, 6-19=-20, 5-6=-140
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 20-22=-115, 7-8=-115, 2-20=-58, 2-3=-58, 3-8=-57, 19-21=-115, 6-19=-20, 5-6=-115
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 20-22=-40, 7-8=-40, 2-20=-20, 2-3=-20, 3-8=-20, 5-21=-40
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 20-29=30, 2-29=26, 2-3=30, 3-31=33, 8-31=26, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=20, 20-29=-42, 2-29=-38, 3-31=45, 8-31=38, 5-7=35
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 20-30=26, 2-30=33, 2-3=33, 3-8=26, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=-35, 20-30=-38, 2-30=-45, 3-8=38, 5-7=-20
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-52, 7-8=-52, 2-20=-36, 2-3=-36, 3-8=-36, 19-21=-52, 6-19=-20, 5-6=-52
Horz: 21-22=-23, 2-20=16, 3-8=-16, 5-7=-32
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-52, 7-8=-52, 2-20=-36, 2-3=-36, 3-8=-36, 19-21=-52, 6-19=-20, 5-6=-52
Horz: 21-22=32, 2-20=16, 3-8=-16, 5-7=23
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 2-20=0, 2-3=29, 3-8=13, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=12, 2-20=-12, 3-8=25, 5-7=18
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 2-20=13, 2-3=29, 3-8=0, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=-18, 2-20=-25, 3-8=12, 5-7=-12
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-52, 7-8=-52, 2-20=-20, 2-3=9, 3-8=-7, 19-21=-52, 6-19=-20, 5-6=-52
Horz: 21-22=24, 2-20=-0, 3-8=13, 5-7=6
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-52, 7-8=-52, 2-20=-7, 2-3=9, 3-8=-20, 19-21=-52, 6-19=-20, 5-6=-52
Horz: 21-22=-6, 2-20=-13, 3-8=0, 5-7=-24

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980560
2867639	C1	Roof Special Girder	1	2	Job Reference (optional)	

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

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LOAD CASE(S) Standard

- Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 2-20=29, 2-3=11, 3-8=11, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=7, 2-20=-41, 3-8=23, 5-7=15
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 2-20=11, 2-3=11, 3-8=29, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=-15, 2-20=-23, 3-8=41, 5-7=-7
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 2-20=16, 2-3=6, 3-8=6, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=7, 2-20=-28, 3-8=18, 5-7=15
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-9, 7-8=-9, 2-20=6, 2-3=6, 3-8=16, 19-21=-9, 6-19=-8, 5-6=-9
Horz: 21-22=-15, 2-20=-18, 3-8=28, 5-7=-7
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-52, 7-8=-52, 2-20=9, 2-3=-9, 3-8=-9, 19-21=-52, 6-19=-20, 5-6=-52
Horz: 21-22=19, 2-20=-29, 3-8=11, 5-7=4
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-52, 7-8=-52, 2-20=-9, 2-3=-9, 3-8=9, 19-21=-52, 6-19=-20, 5-6=-52
Horz: 21-22=-4, 2-20=-11, 3-8=29, 5-7=-19
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 20-22=-40, 7-8=-40, 2-20=-20, 2-3=-20, 3-8=-20, 19-21=-40, 6-19=-20, 5-6=-40
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-124, 7-8=-124, 2-20=-57, 2-3=-36, 3-8=-48, 19-21=-124, 6-19=-20, 5-6=-124
Horz: 21-22=18, 2-20=0, 3-8=10, 5-7=5
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-124, 7-8=-124, 2-20=-48, 2-3=-36, 3-8=-57, 19-21=-124, 6-19=-20, 5-6=-124
Horz: 21-22=-5, 2-20=-10, 3-8=0, 5-7=-18
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-124, 7-8=-124, 2-20=-36, 2-3=-49, 3-8=-49, 19-21=-124, 6-19=-20, 5-6=-124
Horz: 21-22=14, 2-20=-22, 3-8=9, 5-7=3
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-124, 7-8=-124, 2-20=-49, 2-3=-49, 3-8=-36, 19-21=-124, 6-19=-20, 5-6=-124
Horz: 21-22=-3, 2-20=-9, 3-8=22, 5-7=-14
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 23) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-20, 7-8=-20, 2-20=-28, 2-3=-28, 3-8=-28, 19-21=-20, 6-19=-8, 5-6=-20
Horz: 21-22=-16, 2-20=16, 3-8=-16, 5-7=-16

Continued on page 4

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	C1	Roof Special Girder	1	2	I46980560
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

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LOAD CASE(S) Standard

- Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 24) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 20-22=-20, 7-8=-20, 2-20=4, 2-3=4, 3-8=4, 19-21=-20, 6-19=-8, 5-6=-20
Horz: 21-22=16, 2-20=-16, 3-8=16, 5-7=16
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 20-22=-140, 7-8=-40, 2-20=-70, 2-3=-70, 3-8=-20, 19-21=-140, 6-19=-20, 5-6=-40
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 20-22=-40, 7-8=-140, 2-20=-20, 2-3=-70, 3-8=-70, 19-21=-40, 6-19=-20, 5-6=-140
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 27) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 20-22=-115, 7-8=-40, 2-20=-58, 2-3=-58, 3-8=-20, 19-21=-115, 6-19=-20, 5-6=-40
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)
- 28) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 20-22=-40, 7-8=-115, 2-20=-20, 2-3=-58, 3-8=-57, 19-21=-40, 6-19=-20, 5-6=-115
Concentrated Loads (lb)
Vert: 11=-885(F) 7=-70(F) 8=-1500(F) 9=-995(F) 13=-930(F) 23=-845(F) 24=-910(F) 25=-910(F) 26=-910(F) 27=-925(F) 28=-990(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	C2	Hip	1	1	146980561
Job Reference (optional)					

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

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ID:n1DY9?udP5uLW2Fw?qNjPWym27-OrdNyMrRUpfX_Z3YxD944MXmCeNXx31c3YTif3yyUWj

0-10-8	8-0-0	13-0-0	21-0-0	21-10-8
0-10-8	8-0-0	5-0-0	8-0-0	0-10-8

Scale = 1:37.7

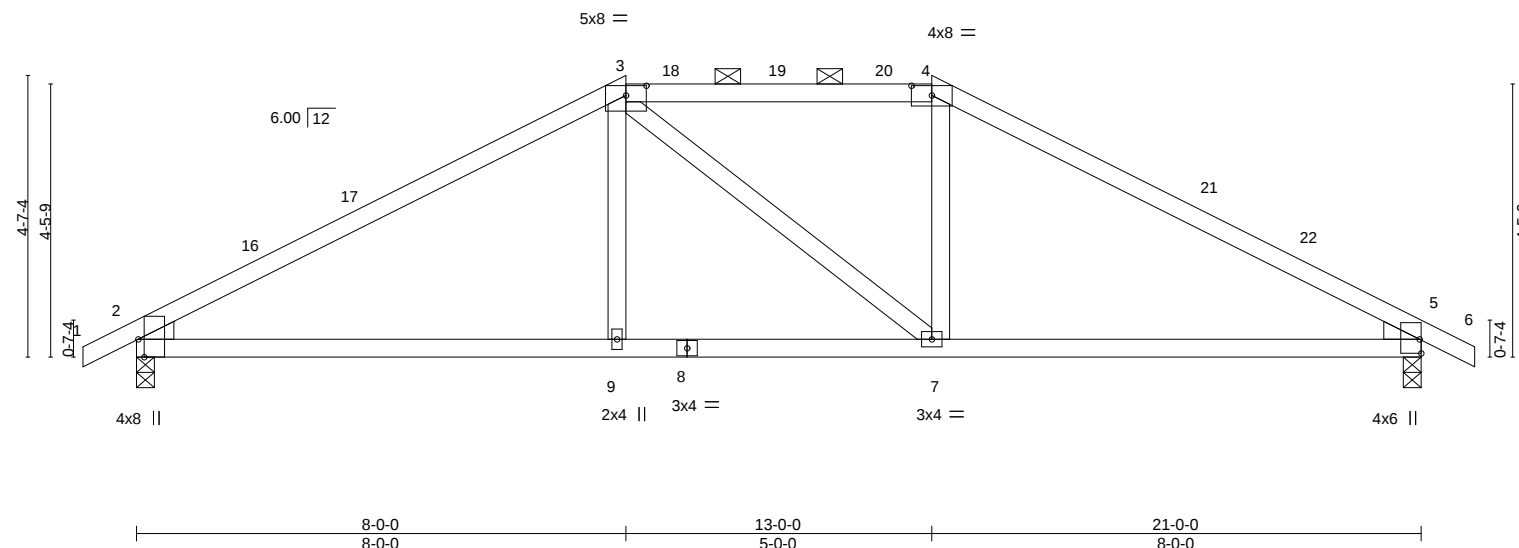


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [3:0-4-0,0-1-15], [4:0-4-0,0-1-15], [5:Edge,0-0-5]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2018/TPI2014
CSI.	DEFL.	in (loc) l/defl L/d
TC 0.66	Vert(LL)	0.10 9-12 >999 240
BC 0.51	Vert(CT)	-0.17 9-12 >999 180
WB 0.14	Horz(CT)	0.03 5 n/a n/a
Matrix-AS		
PLATES	GRIP	
MT20	197/144	
Weight: 70 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, except
2-0-0 oc purlins (5-1-6 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=77(LC 12)
Max Uplift 2=-181(LC 12), 5=-181(LC 13)
Max Grav 2=1006(LC 1), 5=1006(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1421/290, 3-4=-1167/316, 4-5=-1421/290
BOT CHORD 2-9=-161/1172, 7-9=-162/1167, 5-7=-157/1172
WEBS 3-9=0/257, 4-7=-8/257

- 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=25ft; 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 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 13-0-0, Exterior(2R) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 21-10-8 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
 - 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 181 lb uplift at joint 2 and 181 lb uplift at joint 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980562
2867639	C3	Hip	1	1	Job Reference (optional)	

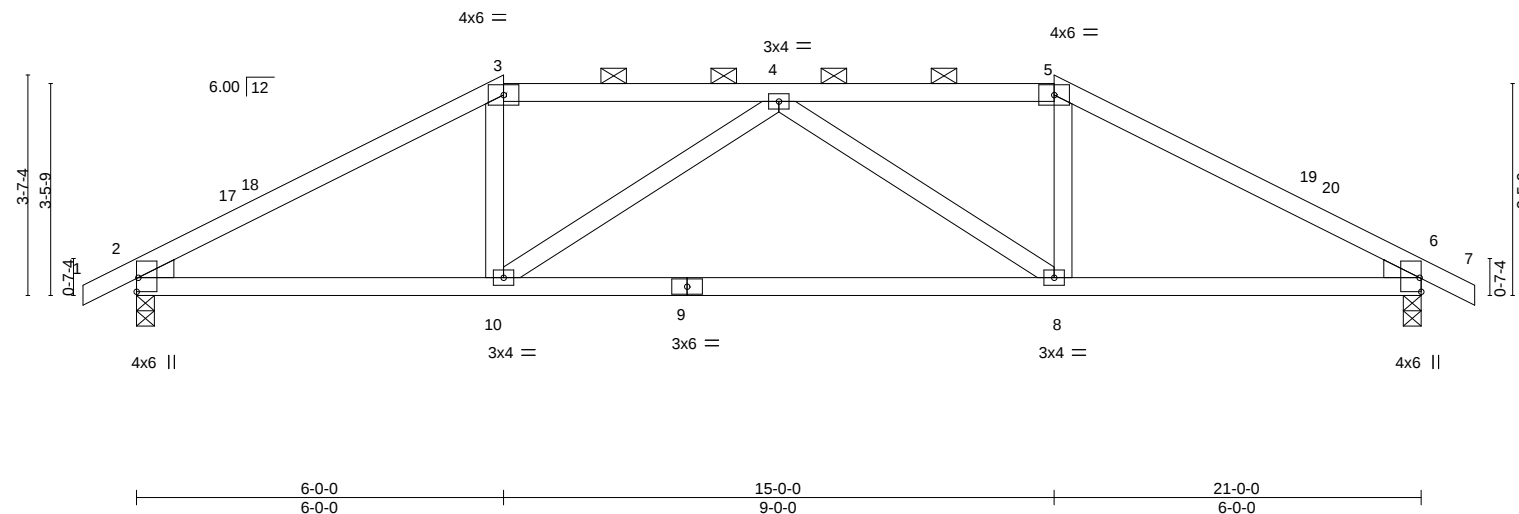
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:49 2021 Page 1

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0-10-8	6-0-0	10-6-0	15-0-0	21-0-0	21-10-8
0-10-8	6-0-0	4-6-0	4-6-0	6-0-0	0-10-8

Scale = 1:37.7



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 0.35	Vert(LL)	-0.19	8-10	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.40	8-10	>624	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.05	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 72 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (4-11-12 max.): 3-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=58(LC 12)
Max Uplift 2=-184(LC 12), 6=-184(LC 13)
Max Grav 2=1006(LC 1), 6=1006(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1551/282, 3-4=-1297/294, 4-5=-1297/294, 5-6=-1551/282
BOT CHORD 2-10=-185/1310, 8-10=-243/1558, 6-8=-169/1310
WEBS 3-10=-15/383, 4-10=-424/163, 4-8=-424/163, 5-8=-15/383

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=25ft; 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 10-6-0, Interior(1) 10-6-0 to 15-0-0, Exterior(2R) 15-0-0 to 19-2-15, Interior(1) 19-2-15 to 21-10-8 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
- 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 184 lb uplift at joint 2 and 184 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	C4	Hip Girder	1	1	146980563

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

8.430 s Jun 2 2021
MiTek Industries, Inc.
Tue Jul 13 11:56:50 2021
Page 1

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0-10-8
0-10-8

4-0-0
4-0-0

8-4-9
4-4-9

12-7-7
4-2-13

17-0-0
4-4-9

21-0-0
4-0-0

21-10-8
0-10-8

Scale = 1:37.7

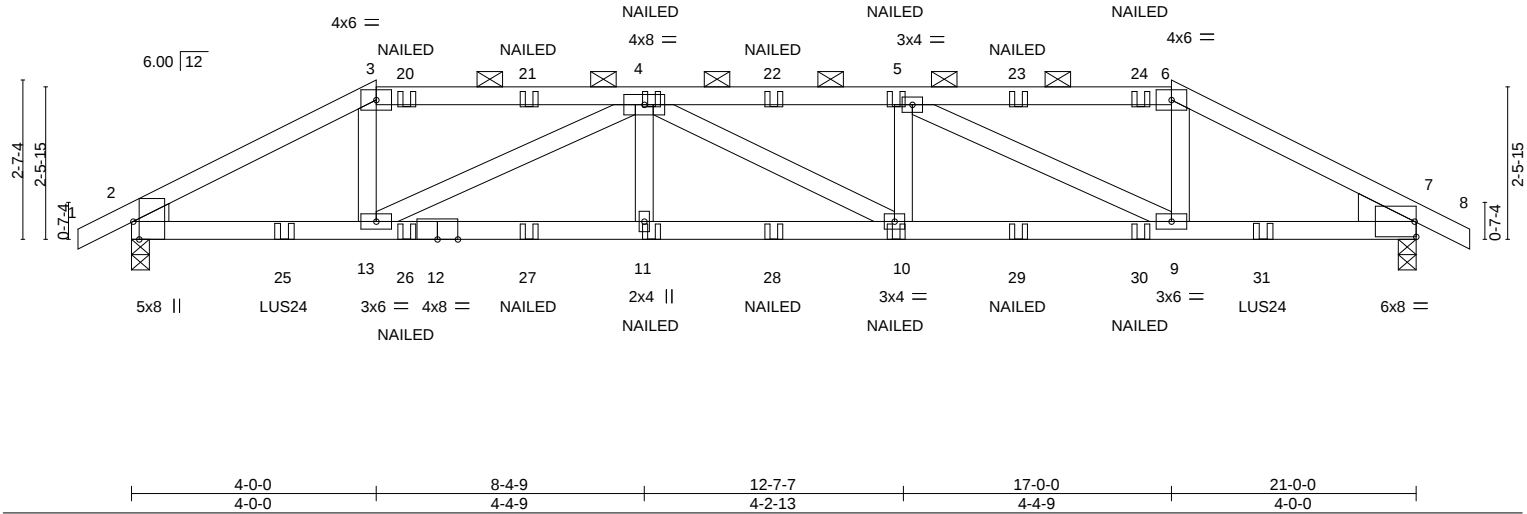


Plate Offsets (X,Y)-- [2:0-3-8,Edge]		4-0-0 4-0-0		8-4-9 4-4-9		12-7-7 4-2-13		17-0-0 4-4-9		21-0-0 4-0-0	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL 25.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	-0.17	10-11	>999	MT20	197/144		
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.31	10-11	>810				
BCLL 0.0	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.08	7	n/a				
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS								
								Weight: 78 lb	FT = 20%		

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-1 oc purlins, except 2-0-0 oc purlins (2-11-13 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 7-3-8 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-41(LC 9)
Max Uplift 2=-448(LC 8), 7=-448(LC 9)
Max Grav 2=1517(LC 1), 7=1517(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2454/732, 3-4=-2095/669, 4-5=-3342/1021, 5-6=-2095/669, 6-7=-2454/732
BOT CHORD 2-13=-628/2146, 11-13=-988/3342, 10-11=-988/3342, 9-10=-978/3342, 7-9=-592/2146
WEBS 3-13=-207/809, 4-13=-1441/465, 4-11=0/274, 5-10=-16/274, 5-9=-1440/464, 6-9=-207/809

- 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=25ft; 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 448 lb uplift at joint 2 and 448 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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 LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 16-0-0 oc max. starting at 2-6-0 from the left end to 18-6-0 to connect truss(es) to front face of bottom chord.
 - 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

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-6=-70, 6-8=-70, 14-17=-20

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



July 14,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980563
2867639	C4	Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:51 2021 Page 2
ID:n1DY9?udP5uLW2Fw?qNjPWyyym27-oQlWaNtJmk26r1o7dMjni_9JfsLi8JE2lVhNGOyyUWg

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 4=-35(F) 11=-45(F) 10=-45(F) 5=-35(F) 20=-35(F) 21=-35(F) 22=-35(F) 23=-35(F) 24=-35(F) 25=-230(F) 26=-45(F) 27=-45(F) 28=-45(F) 29=-45(F) 30=-45(F) 31=-230(F)

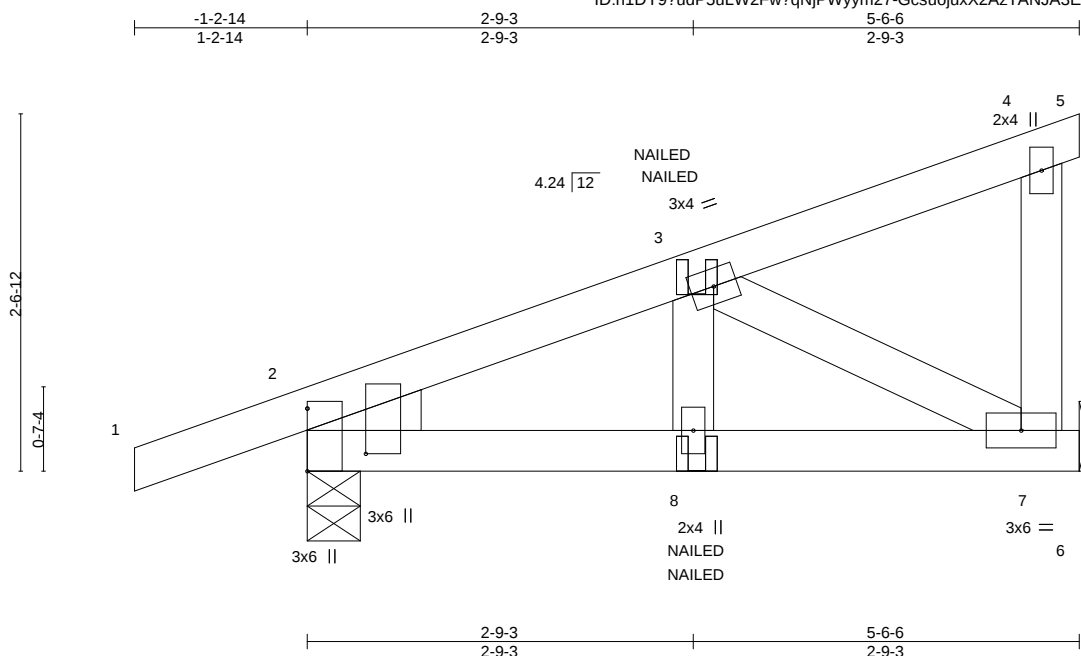
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:52 2021 Page 1
ID:n1DY9?udP5uLW2Fw?qNiPWvym27-GcsuoiuxX2AzTANJA3E0FChbkGrxtyTC 9RwoavvUWf



Scale = 1:16.5

Plate Offsets (X,Y)--		[2:0-3-14,0-5-0]									
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	0.11	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	0.05	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 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 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) 7=Mechanical, 2=0-4-9
Max Horz 2=104(LC 7)
Max Uplift 7=-78(LC 8), 2=-113(LC 4)
Max Grav 7=244(LC 1), 2=339(LC 1)

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

TOP CHORD 2-3=-294/75
BOT CHORD 2-8=-83/258, 7-8=-83/258
WEBS 3-7=-290/114

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=25ft; 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 78 lb uplift at joint 7 and 113 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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=-12(F=-6, B=-6)



July 14, 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



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Chesterfield, MO 63017

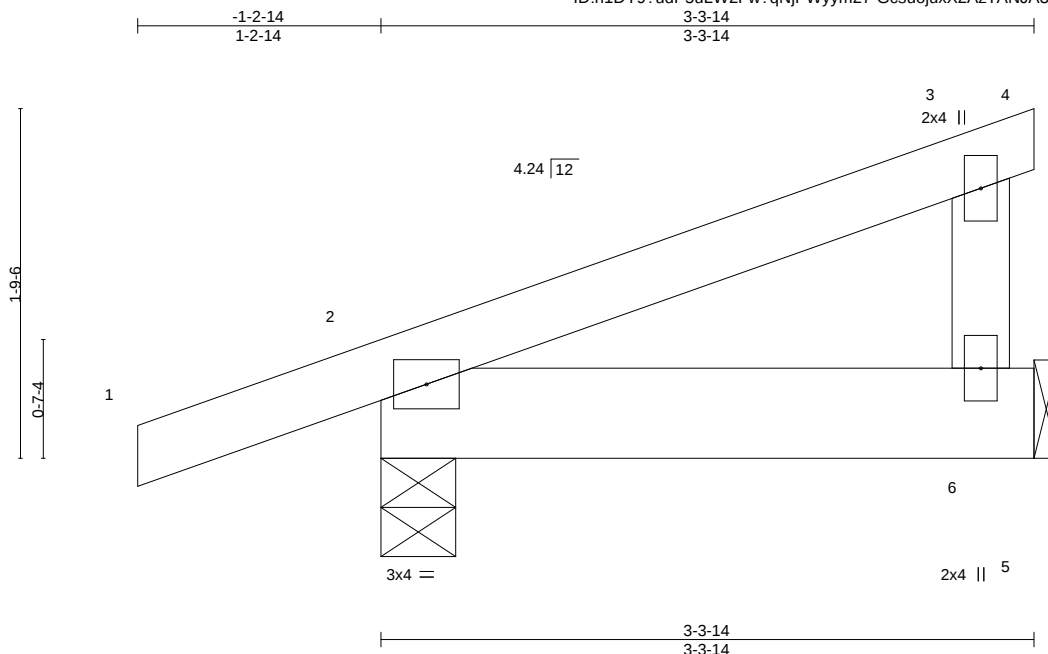
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980565
2867639	CJ1A	Diagonal Hip Girder	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:52 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-GcsuojuxX2AzTANJA3E0FChbkGsjtEC_9RwoqyyUWf



Scale = 1:11.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	6-9	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	2	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
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-4-9
Max Horz 2=67(LC 11)
Max Uplift 6=36(LC 12), 2=87(LC 8)
Max Grav 6=131(LC 1), 2=241(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 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 36 lb uplift at joint 6 and 87 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 14, 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



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Chesterfield, MO 63017

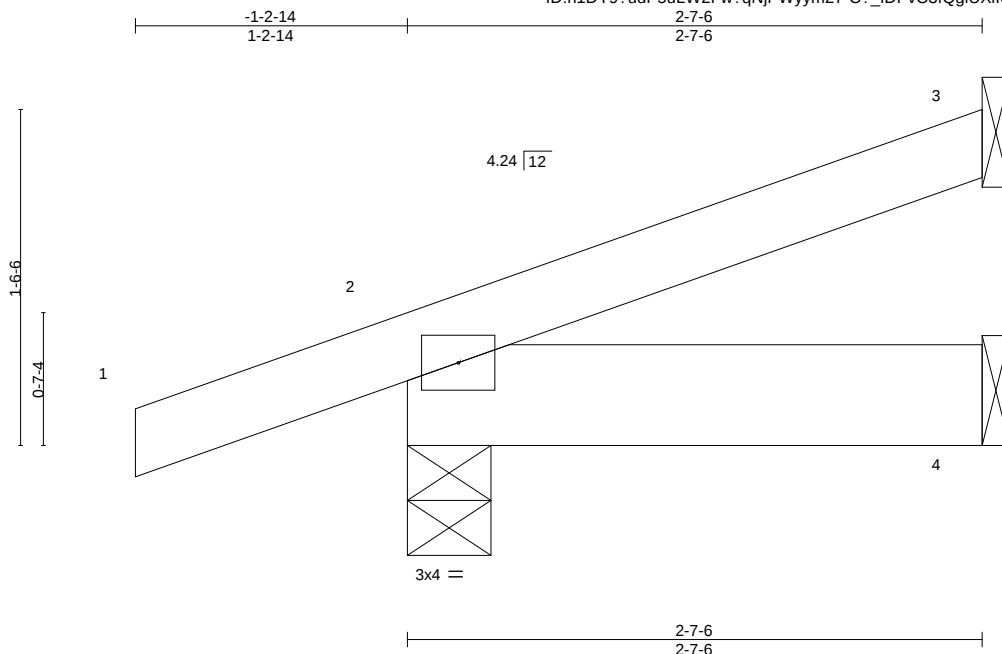
Job 2867639	Truss CJ3	Truss Type Jack-Open	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980567
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:54 2021 Page 1

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Scale = 1:10.5

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)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	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: 9 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 2-7-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=61(LC 8)
Max Uplift 3=-29(LC 12), 2=-81(LC 8)
Max Grav 3=61(LC 1), 2=222(LC 1), 4=50(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 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 29 lb uplift at joint 3 and 81 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 14, 2021

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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 2867639	Truss CJ4	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980568
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:55 2021 Page 1

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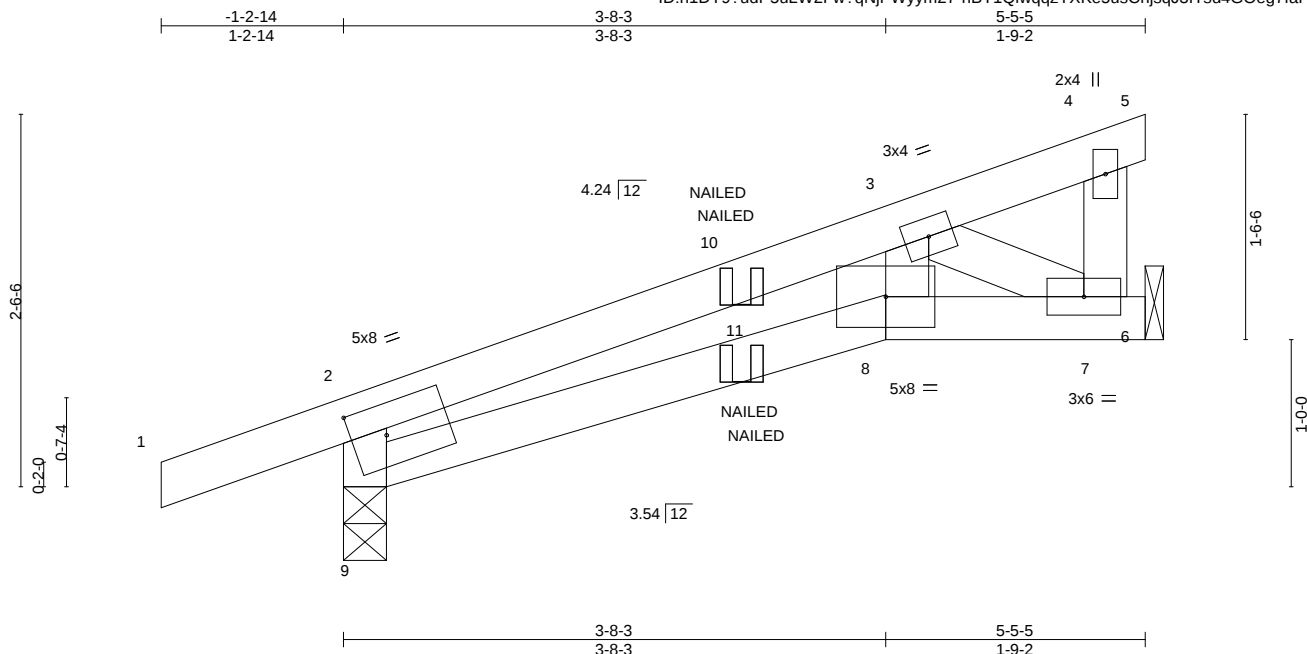


Plate Offsets (X,Y)--		[2:0-2-13,0-2-8]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC 0.29		Vert(LL) -0.01 8 >999 240		MT20 197/144	
TCDL	10.0	Lumber DOL 1.15		BC 0.16		Vert(CT) -0.02 8-9 >999 180			
BCLL	0.0	Rep Stress Incr NO		WB 0.04		Horz(CT) 0.01 7 n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS				Weight: 18 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 5-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=Mechanical, 9=0-3-8
Max Horz 9=91(LC 5)
Max Uplift 7=-68(LC 8), 9=-109(LC 4)
Max Grav 7=225(LC 1), 9=337(LC 1)

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

TOP CHORD 2-9=-373/146, 2-3=-380/99
BOT CHORD 8-9=-118/322, 7-8=-109/283
WEBS 3-7=-294/132

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) Bearing at joint(s) 9 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 capable of withstanding 68 lb uplift at joint 7 and 109 lb uplift at joint 9.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-20, 8-9=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 11=-3(F=1, B=-4)



July 14, 2021

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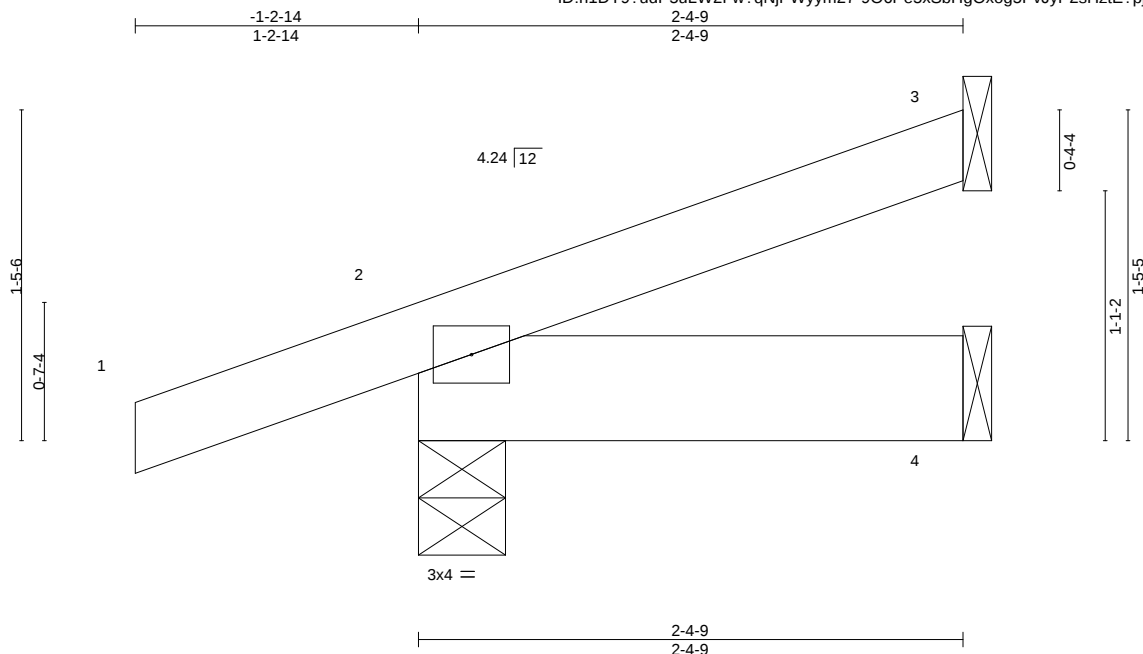
Job 2867639	Truss CJ5	Truss Type Jack-Open	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980569
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:56 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-9O6Pe5xSbHgOxog5PvJyP2sHtE?pjEnvnP7xbyyUWb



Scale = 1:10.1

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)	-0.00	7	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	>999	180	197/144
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: 9 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 2-4-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=57(LC 8)
Max Uplift 3=-26(LC 12), 2=-81(LC 8)
Max Grav 3=54(LC 1), 2=214(LC 1), 4=45(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 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 26 lb uplift at joint 3 and 81 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 14, 2021

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

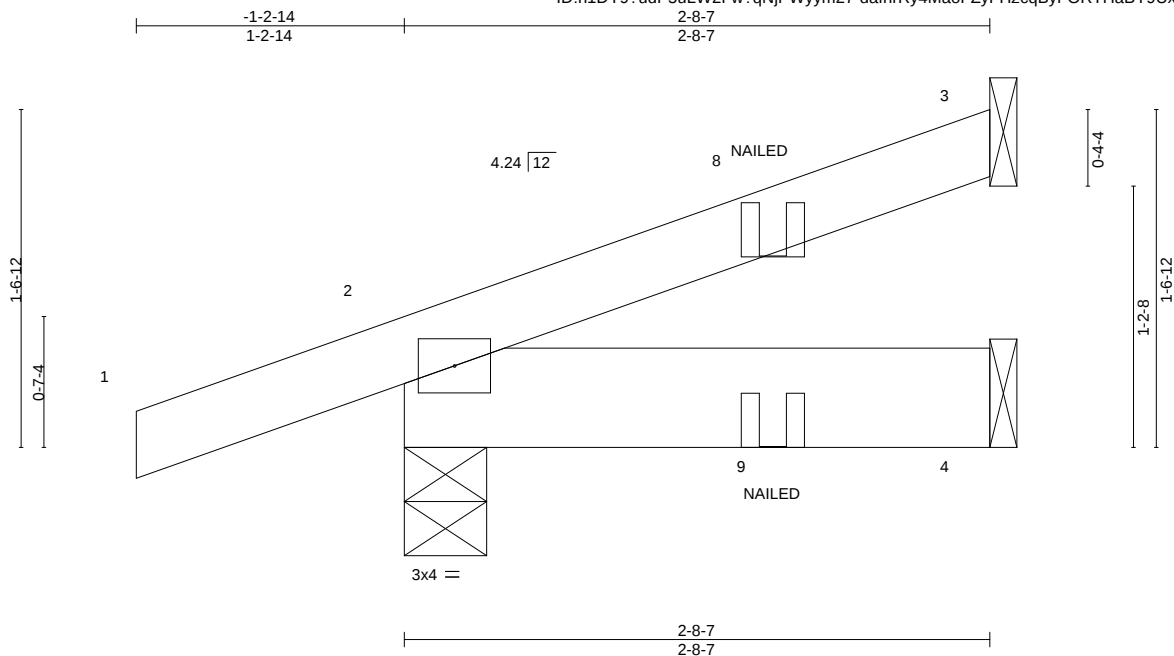
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Chesterfield, MO 63017

Job 2867639	Truss CJ6	Truss Type Jack-Open Girder	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980570
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:57 2021 Page 1
ID:n1DY9?udP5uLW2Fw?qnJPWym27-dafnrRy4MaoFZyFHzcqByFORTHaBY9Ux8R8hU1yyUWw



Scale = 1:10.6

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 0.11	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 10 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 2-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=62(LC 21)
Max Uplift 3=-31(LC 8), 2=-83(LC 4), 4=-2(LC 8)
Max Grav 3=63(LC 1), 2=225(LC 1), 4=52(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=25ft; 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 31 lb uplift at joint 3, 83 lb uplift at joint 2 and 2 lb uplift at joint 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.
- 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: 1-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 9=2(B)



July 14, 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



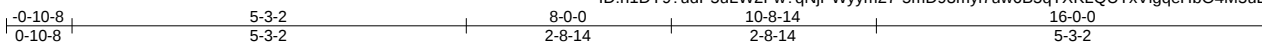
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980571
2867639	D1	Common	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:58 2021 Page 1

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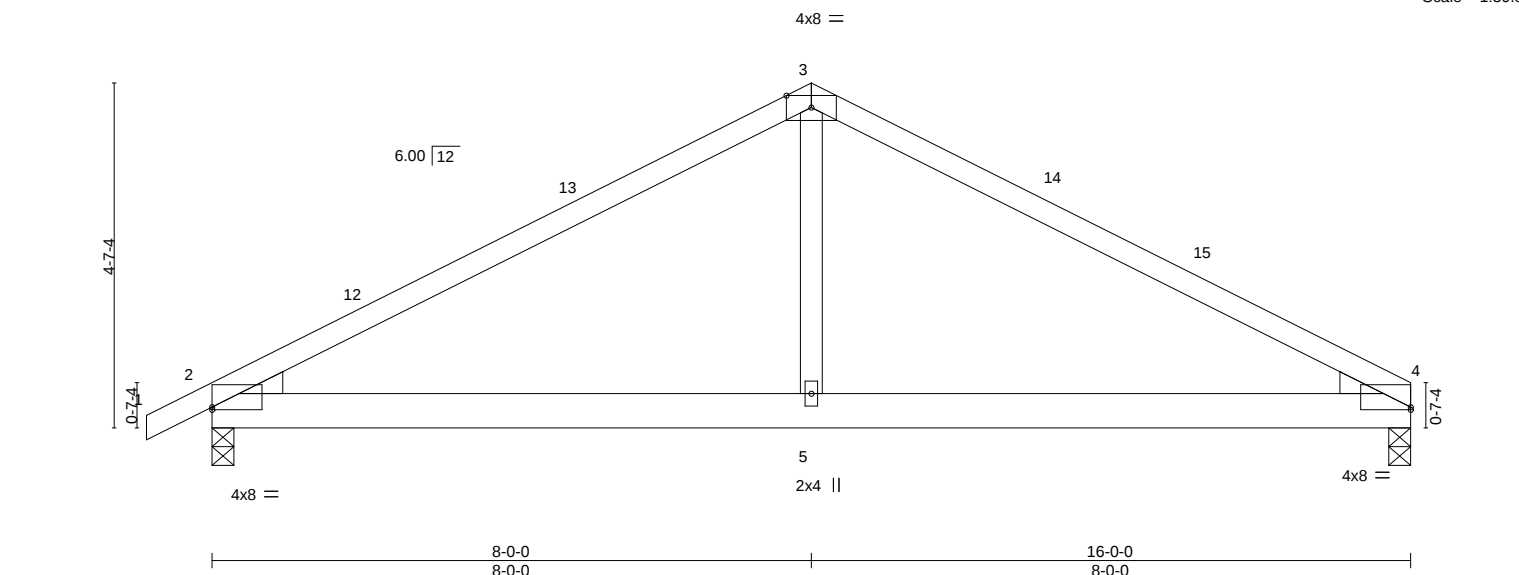


Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [4:0-0-0,0-0-7]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.06	5-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.09	5-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 57 lb FT = 20%		

LUMBER-

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

Left: 2x4 SP No.3 , Right: 2x4 SP No.2

BRACING-

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

REACTIONS.

(size) 4=0-3-8, 2=0-3-8
Max Horz 2=86(LC 12)
Max Uplift 4=-118(LC 13), 2=-139(LC 12)
Max Grav 4=718(LC 1), 2=783(LC 1)

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

TOP CHORD 2-3=-1015/308, 3-4=-1015/312
BOT CHORD 2-5=-163/799, 4-5=-163/799
WEBS 3-5=0/382

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=25ft; 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 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 16-0-0 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
- 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 118 lb uplift at joint 4 and 139 lb uplift at joint 2.
- 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.



July 14, 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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

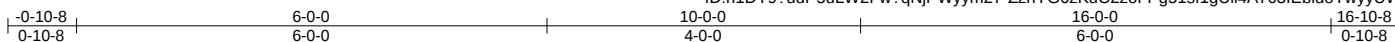
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980572
2867639	D2	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

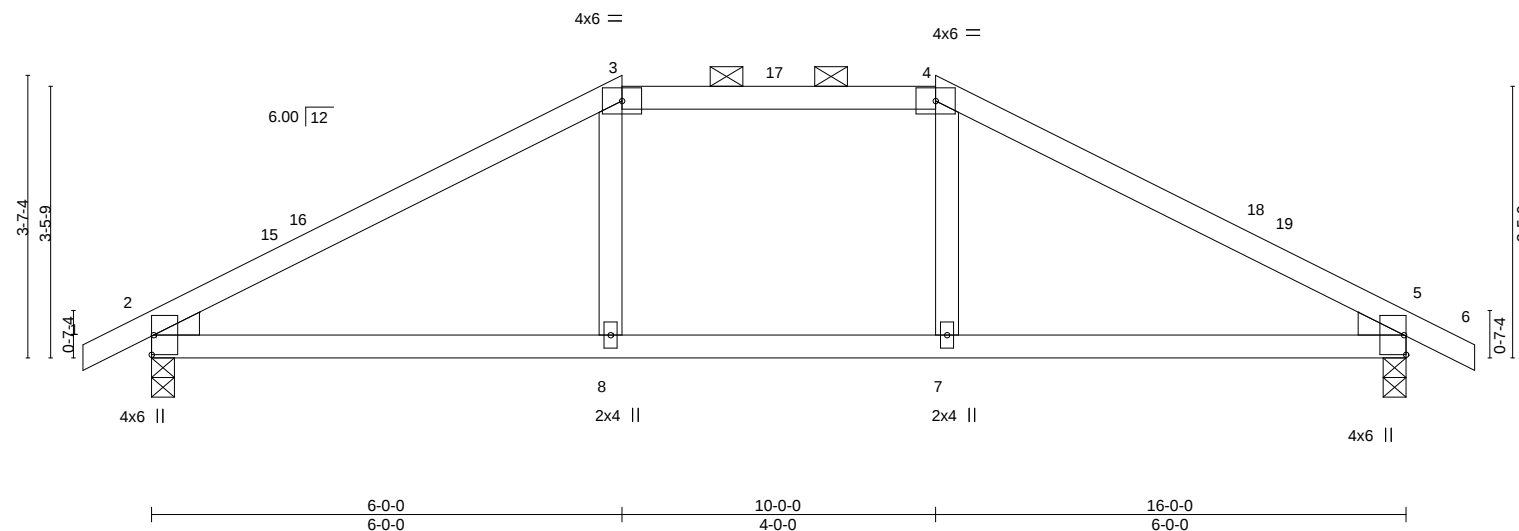
Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:56:59 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-ZznYG6zKuC2zoFPg51sf1gUii4A703IEbldoYwyyUWY



Scale = 1:29.4



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 0.39	Vert(LL)	-0.13	8-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.38	Vert(CT)	-0.16	8-11	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.03	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 49 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, except
2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=-59(LC 17)
Max Uplift 2=-143(LC 12), 5=-143(LC 13)
Max Grav 2=781(LC 1), 5=781(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1061/291, 3-4=-872/295, 4-5=-1061/291
BOT CHORD 2-8=-154/877, 7-8=-155/872, 5-7=-153/877

- 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=25ft; 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(2E) 6-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 16-10-8 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
 - 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 143 lb uplift at joint 2 and 143 lb uplift at joint 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 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 2867639	Truss D3	Truss Type Hip Girder	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980573
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:00 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWYym27-19LwTS_zfVAqQP_selNuZu0tgUOqISInqPNL5MyyUWX

Job Reference (optional)

-0-10-8	4-0-0	8-0-0	12-0-0	16-0-0	16-10-8
0-10-8	4-0-0	4-0-0	4-0-0	4-0-0	0-10-8

Scale = 1:29.4

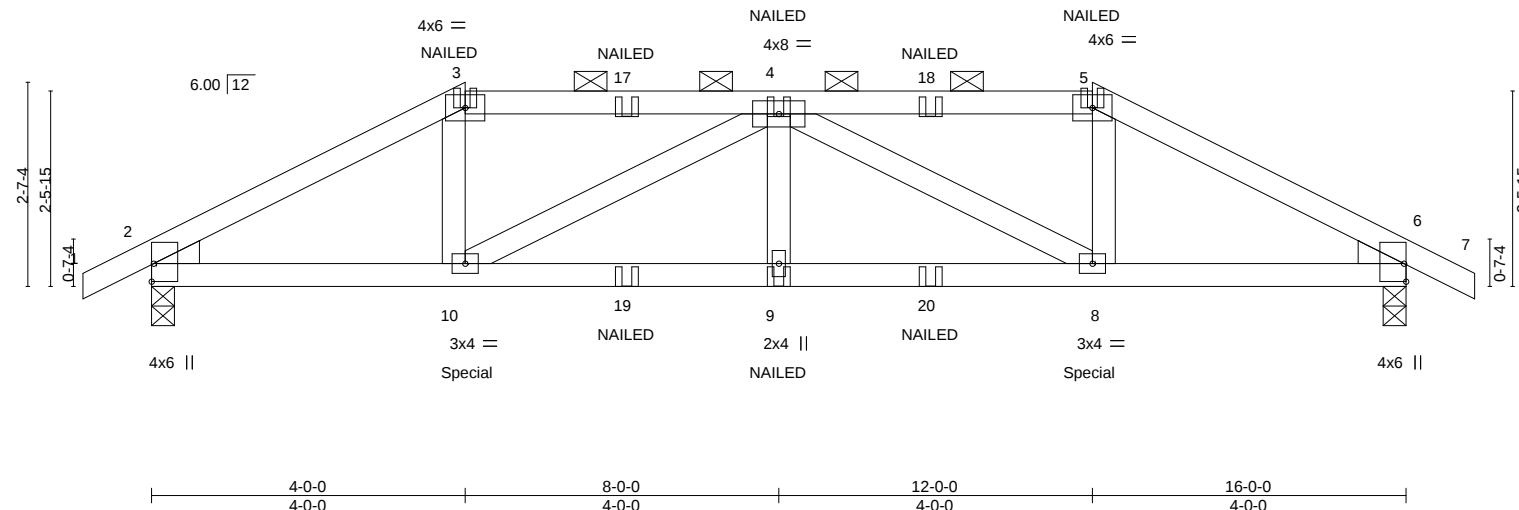


Plate Offsets (X,Y)-- [2:Edge,0-0-5], [6:Edge,0-0-5]		4-0-0 4-0-0		8-0-0 4-0-0		12-0-0 4-0-0		16-0-0 4-0-0	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.08	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.15	8-9	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.29	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 58 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 or 3-10-5 oc purlins, except
2-0-0 oc purlins (4-3-10 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=41(LC 8)
Max Uplift 2=-355(LC 8), 6=-355(LC 9)
Max Grav 2=1198(LC 1), 6=1198(LC 1)

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

TOP CHORD 2-3=-1943/601, 3-4=-1646/552, 4-5=-1646/552, 5-6=-1943/601
BOT CHORD 2-10=-508/1683, 9-10=-674/2273, 8-9=-674/2273, 6-8=-466/1683
WEBS 3-10=-159/607, 4-10=-766/258, 4-9=-10/293, 4-8=-766/258, 5-8=-159/607

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=25ft; 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 355 lb uplift at joint 2 and 355 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 260 lb down and 130 lb up at 4-0-0, and 260 lb down and 130 lb up at 11-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 11-14=-20



July 14, 2021

Continued on page 2

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980573
2867639	D3	Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:01 2021 Page 2
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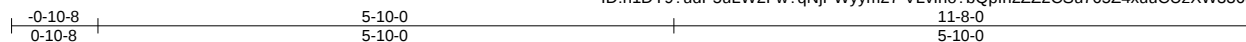
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-35(B) 5=-35(B) 10=-260(B) 9=-45(B) 8=-260(B) 4=-35(B) 17=-35(B) 18=-35(B) 19=-45(B) 20=-45(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980574
2867639	D4	Common	2	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:01 2021 Page 1

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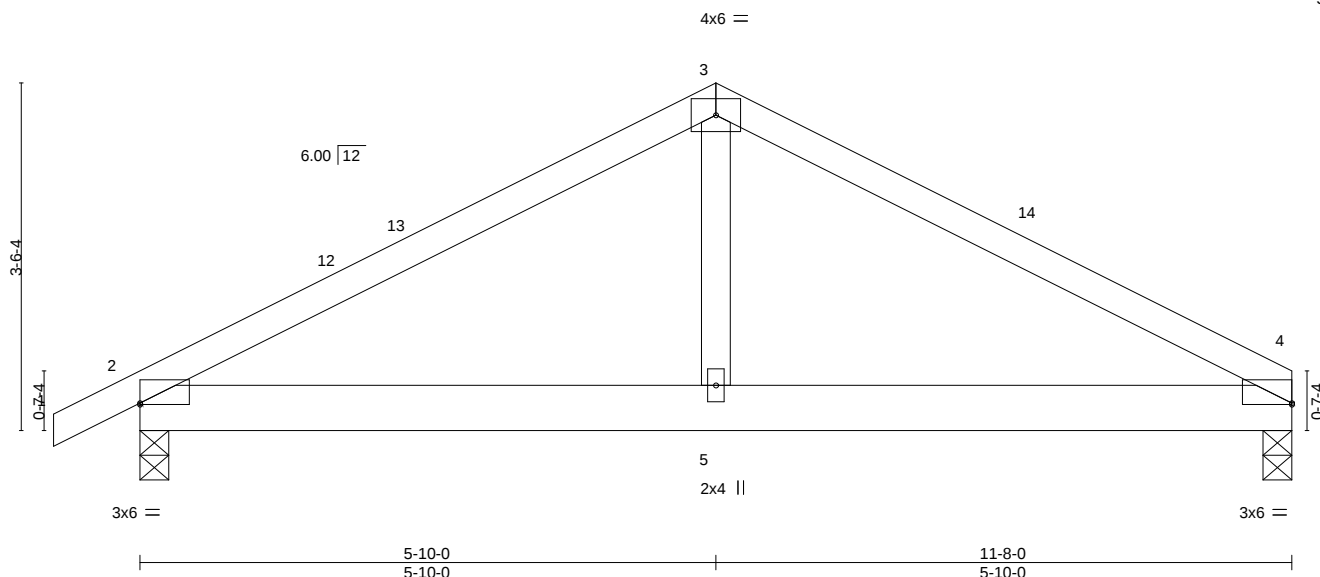


Plate Offsets (X,Y)--		[2:Edge,0-0-3], [4:0-0-0,0-0-3]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.02	5-8	>999	240	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.03	5-8	>999	180			
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	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) 4=0-3-8, 2=0-3-8
Max Horz 2=67(LC 16)
Max Uplift 4=86(LC 13), 2=107(LC 12)
Max Grav 4=523(LC 1), 2=589(LC 1)

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

TOP CHORD 2-3=-716/285, 3-4=-716/290
BOT CHORD 2-5=-164/562, 4-5=-164/562
WEBS 3-5=-9/268

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=25ft; 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 5-10-0, Exterior(2R) 5-10-0 to 8-10-0, Interior(1) 8-10-0 to 11-8-0 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
- 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 86 lb uplift at joint 4 and 107 lb uplift at joint 2.
- 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.



July 14, 2021

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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

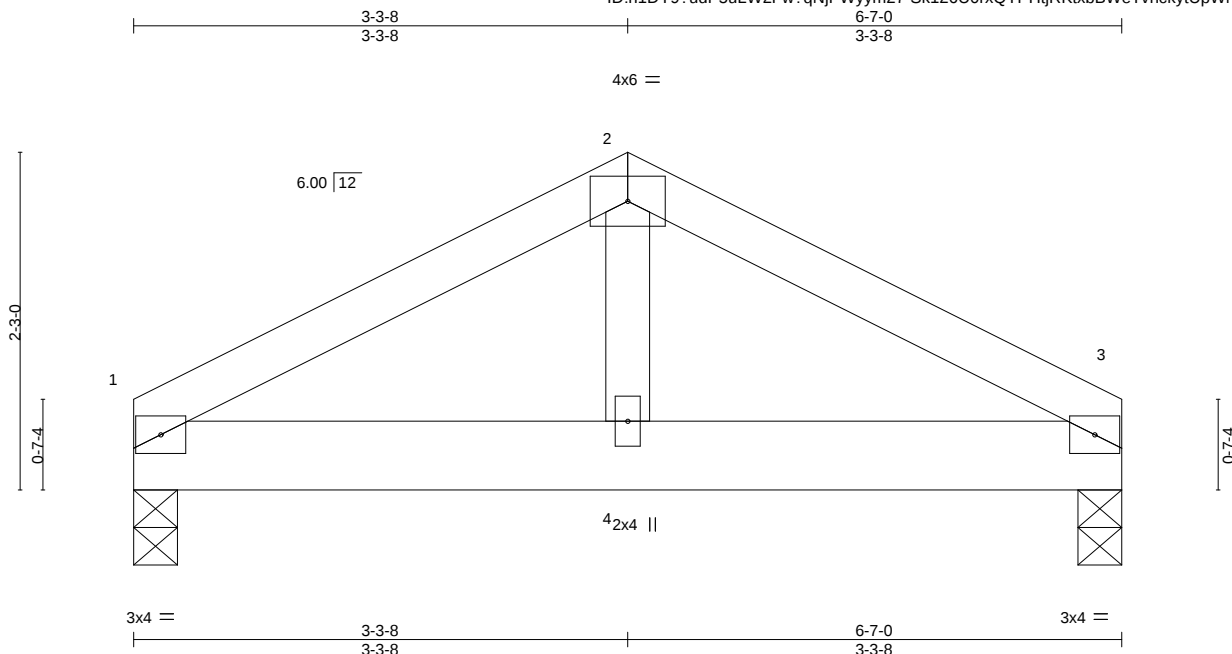
Job 2867639	Truss E1	Truss Type Common	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980575
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:03 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWyyym27-Sk126U0rxQYPHjRKtXbBWeTvhckytUpWNb?hhyyUWU



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 0.12	Vert(LL)	-0.00	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.00	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 1=0-3-8, 3=0-3-8
Max Horz 1=29(LC 12)
Max Uplift 1=-48(LC 12), 3=-48(LC 13)
Max Grav 1=296(LC 1), 3=296(LC 1)

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

TOP CHORD 1-2=-366/219, 2-3=-366/229
BOT CHORD 1-4=-130/278, 3-4=-130/278

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=25ft; 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
- 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 48 lb uplift at joint 1 and 48 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



July 14, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

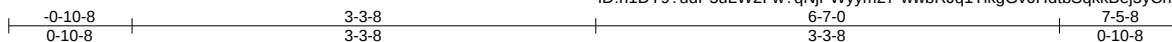
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980576
2867639	E2	Common	2	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

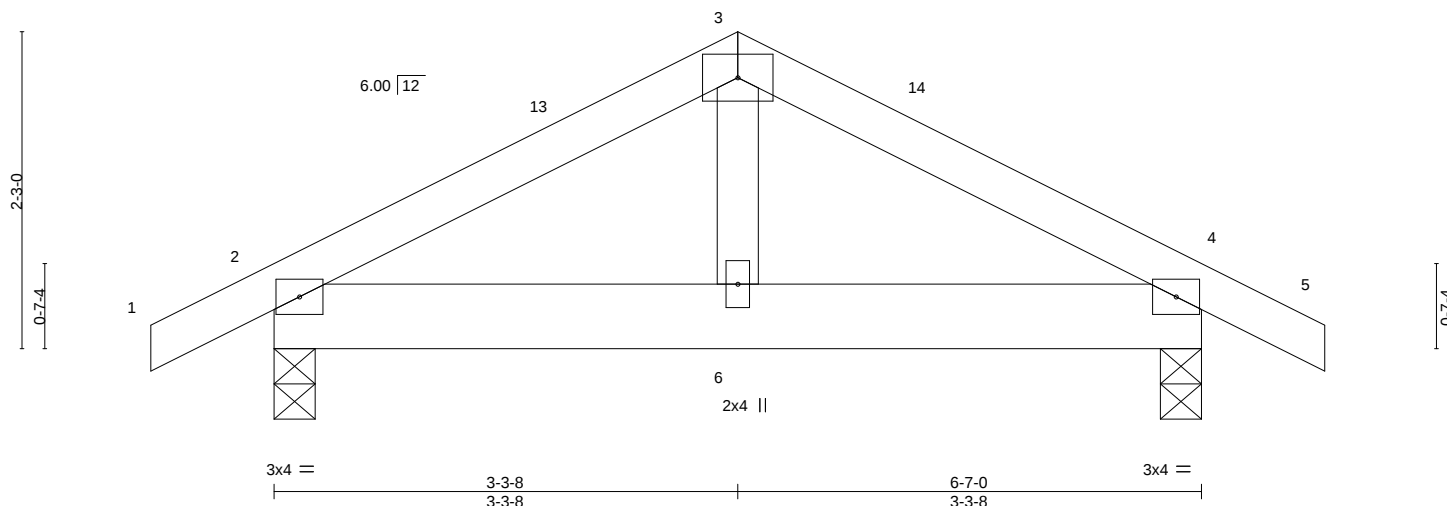
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:04 2021 Page 1

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Scale = 1:16.4

4x6 =



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	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 24 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=37(LC 16)
Max Uplift 2=-69(LC 12), 4=-69(LC 13)
Max Grav 2=358(LC 1), 4=357(LC 1)

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

TOP CHORD 2-3=-345/204, 3-4=-345/205
BOT CHORD 2-6=-75/259, 4-6=-75/259

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=25ft; 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 3-3-8, Exterior(2R) 3-3-8 to 6-2-11, Interior(1) 6-2-11 to 7-5-8 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 capable of withstanding 69 lb uplift at joint 2 and 69 lb uplift at joint 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.
- 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.



July 14, 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



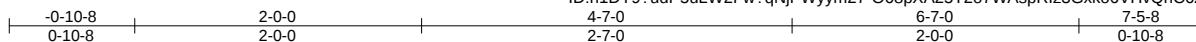
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	146980577
2867639	E3	Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:05 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-O68pXA25T2o7WAspRiz3Gxko6VHvQnC6zh46mayyUWS



Scale: 3/4"=1'

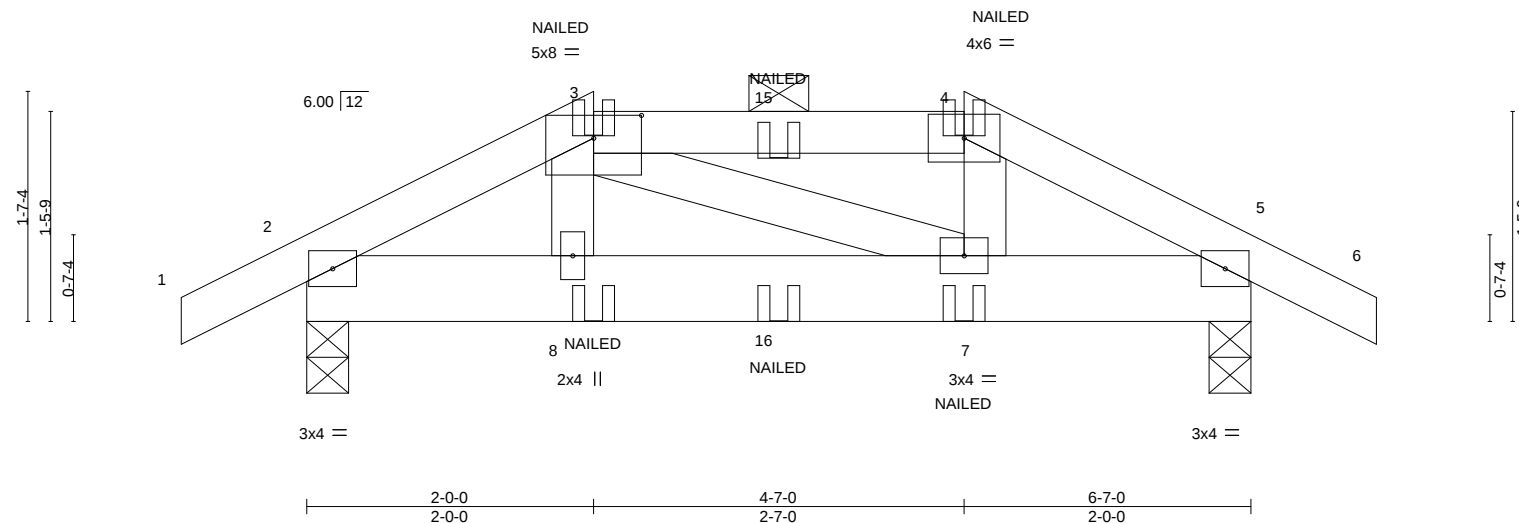


Plate Offsets (X,Y)-- [3:0-4-0,0-1-15]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 27 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 5=0-3-8
Max Horz 2=-24(LC 9)
Max Uplift 2=-97(LC 8), 5=-97(LC 9)
Max Grav 2=368(LC 1), 5=368(LC 1)

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

TOP CHORD 2-3=-405/106, 3-4=-333/105, 4-5=-400/103
BOT CHORD 2-8=-77/341, 7-8=-77/338, 5-7=-61/336

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=25ft; 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 97 lb uplift at joint 2 and 97 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (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
Concentrated Loads (lb)
Vert: 8=-6(F) 7=-6(F) 16=-8(F)



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2867639	Truss J1	Truss Type Half Hip Girder	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980578
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:06 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-sJiBkv3jELwz8KR0??Ulp9G_3vWk9CMGCLqfI0yyUWR

Job Reference (optional)

2-8-5	3-11-4	5-10-4
2-8-5	1-2-15	1-11-0

Scale = 1:17.0

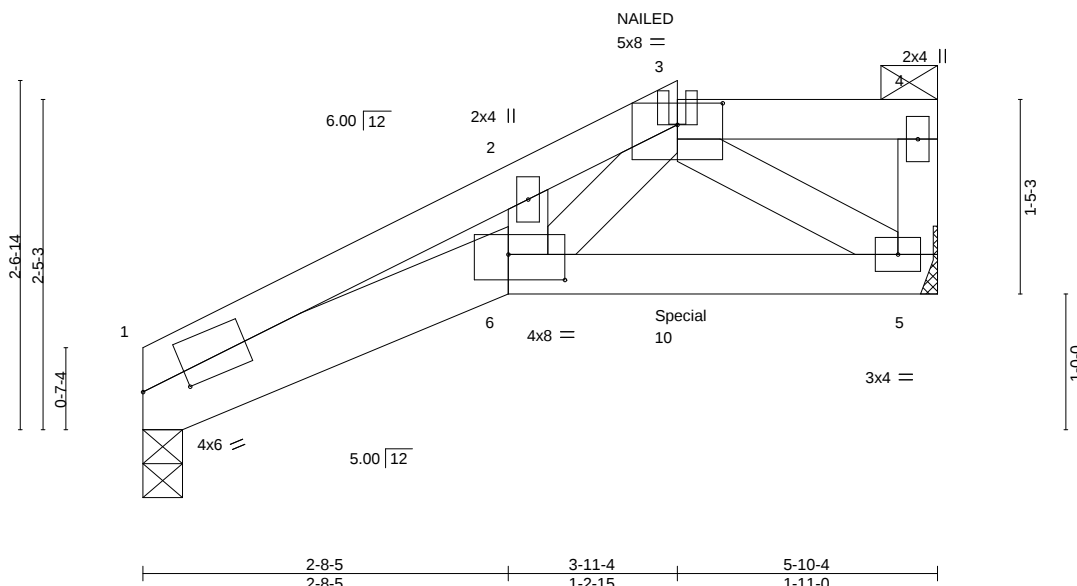


Plate Offsets (X,Y)--		[1:0-4-1,0-1-3], [3:0-4-0,0-1-15], [6:0-5-0,0-2-4]							
LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15	TC 0.12	Vert(LL)	-0.02 5-6	>999	240	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.51	Vert(CT)	-0.05 5-6	>999	180		
BCLL 0.0		Rep Stress Incr NO	WB 0.15	Horz(CT)	0.01 5	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 2x4 SPF No.2 *Except*
1-6: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-15 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 5=Mechanical
Max Horz 1=64(LC 5)
Max Uplift 1=-80(LC 8), 5=-132(LC 5)
Max Grav 1=339(LC 1), 5=440(LC 1)

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

TOP CHORD 1-2=-982/307, 2-3=-895/318
BOT CHORD 1-6=-300/894, 5-6=-143/380
WEBS 3-6=-205/614, 3-5=-459/173

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 1 and 132 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 220 lb down and 96 lb up at 3-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 6-7=-20, 5-6=-20



July 14, 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 #136/MO	I46980578
2867639	J1	Half Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 3=-45(F) 10=-220(F)



Job 2867639	Truss J2	Truss Type Jack-Open	Qty 6	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980579
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:18 2021 Page 1

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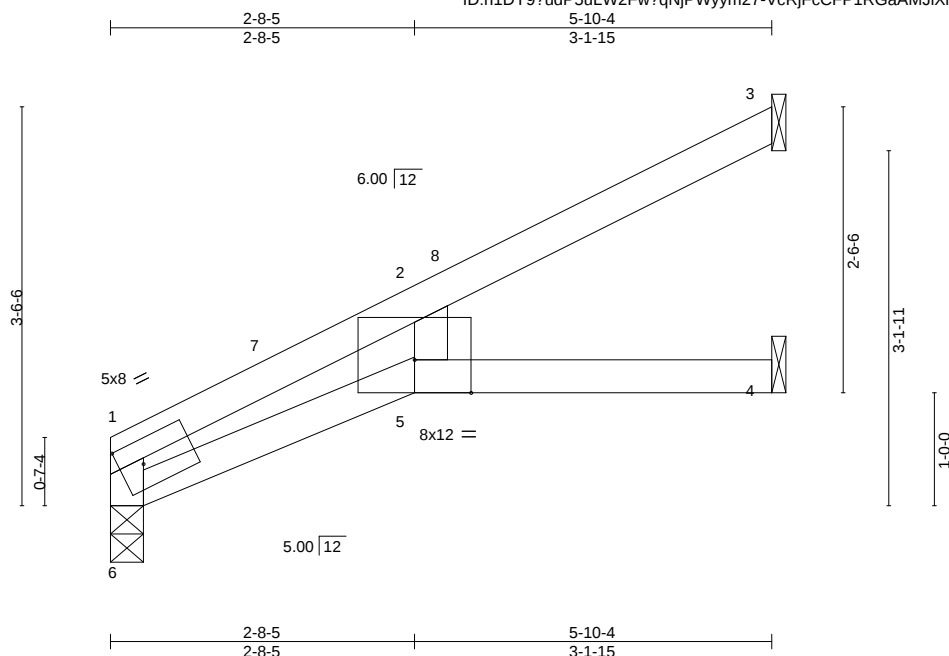


Plate Offsets (X,Y)--		[1:0-2-8,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.35	Vert(LL)	0.10	5	>651	240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.41	Vert(CT)	-0.14	5	>486	180	
BCLL	0.0	Rep Stress Incr YES		WB	0.03	Horz(CT)	0.06	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 15 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 6=0-3-8
Max Horz 6=109(LC 12)
Max Uplift 3=-77(LC 12), 4=-17(LC 12), 6=-21(LC 12)
Max Grav 3=160(LC 1), 4=95(LC 3), 6=254(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=25ft; 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 5-9-8 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
- 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) Bearing at joint(s) 6 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 capable of withstanding 100 lb uplift at joint(s) 3, 4, 6.
- 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.



July 14, 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 2867639	Truss J3	Truss Type Jack-Open	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980580
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:20 2021 Page 1

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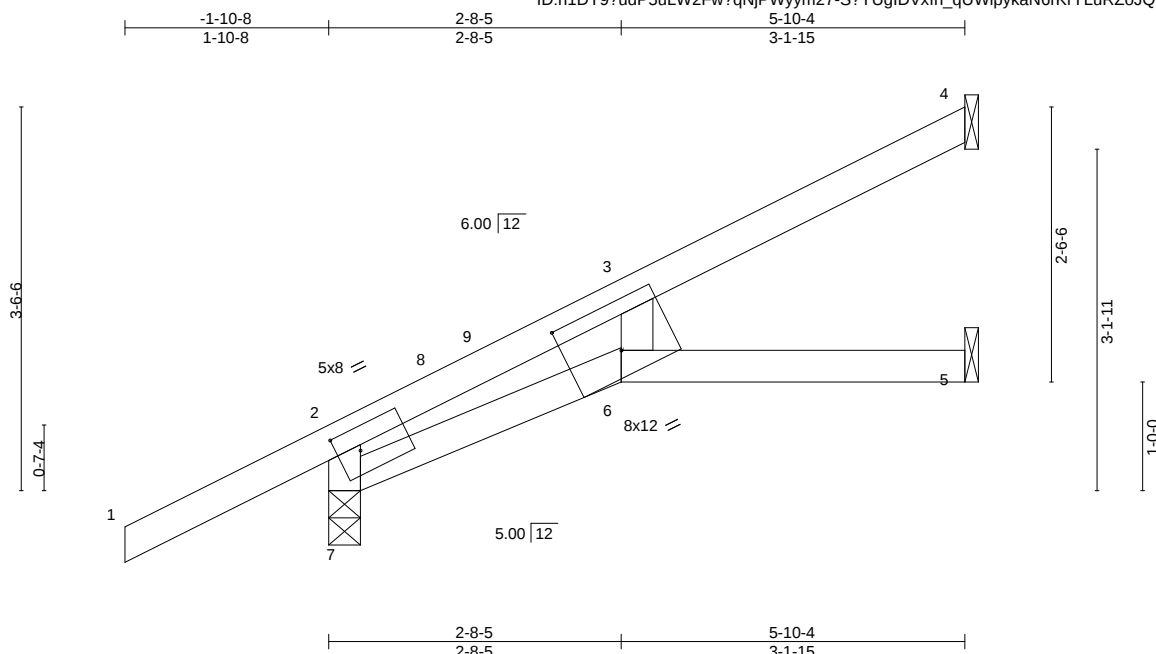


Plate Offsets (X,Y)--		[2:0-2-8,0-2-8], [6:0-6-0,0-5-3]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	0.09	6	>763	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.11	5-6	>634	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.04	5	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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=145(LC 12)
Max Uplift 4=-73(LC 12), 5=-13(LC 12), 7=-76(LC 12)
Max Grav 4=147(LC 1), 5=92(LC 3), 7=421(LC 1)

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

TOP CHORD 2-7=-311/185

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-9-8 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
- 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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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.



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

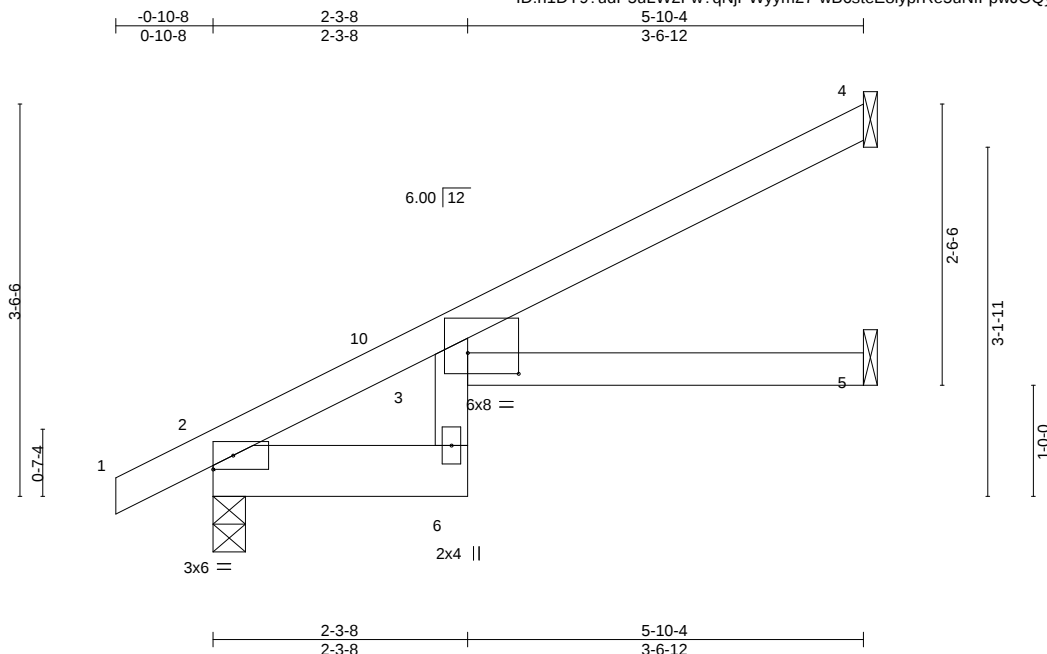
Job 2867639	Truss J5	Truss Type Jack-Open	Qty 4	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980582
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:21 2021 Page 1

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Scale = 1:20.7

Plate Offsets (X,Y)--		[3:0-5-8,0-2-4]									
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 0.59		Vert(LL) 0.11 6		>634 240		MT20 197/144	
TCDL	10.0	Lumber DOL 1.15		BC 0.45		Vert(CT) -0.16 3-5		>437 180			
BCLL	0.0	Rep Stress Incr YES		WB 0.00		Horz(CT) 0.10 5		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 *Except*
2-6: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=133(LC 12)
Max Uplift 4=-79(LC 12), 2=-46(LC 12), 5=-12(LC 12)
Max Grav 4=164(LC 1), 2=328(LC 1), 5=101(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 5-9-8 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
- 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.
- 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.



July 14, 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 2867639	Truss J6	Truss Type Half Hip	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980583
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:22 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-OOgE5_FmTGyi3og4xMm2TXxbmL40vTvcuqiWs5yyUWB

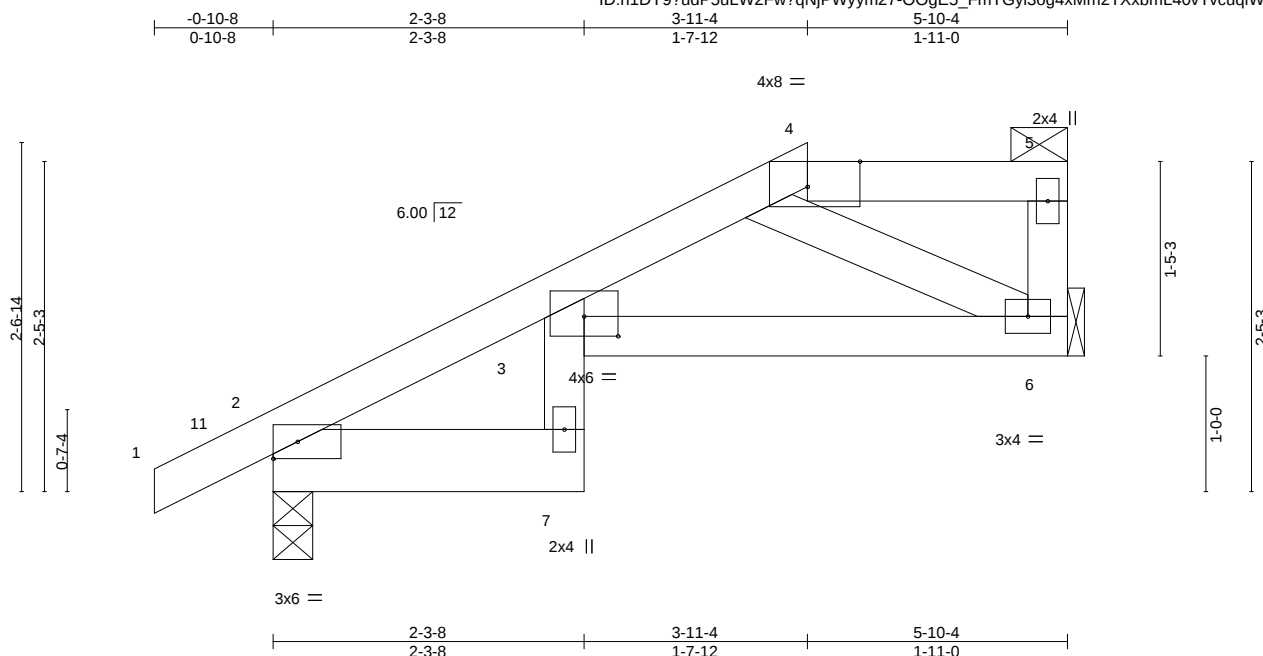


Plate Offsets (X,Y)--		[3:0-3-0,0-1-12], [4:0-4-10,Edge]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.59		Vert(LL) 0.10 7	>668	240	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.16		Vert(CT) -0.14 7	>500	180		
BCLL 0.0		Rep Stress Incr YES		WB 0.05		Horz(CT) 0.09 6	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS					Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
Max Horz 2=73(LC 9)
Max Uplift 2=-65(LC 12), 6=-50(LC 9)
Max Grav 2=324(LC 1), 6=253(LC 1)

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

BOT CHORD 3-6=-249/264
WEBS 4-6=-315/280

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 3-11-4, Exterior(2E) 3-11-4 to 5-8-8 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
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 2021

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

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



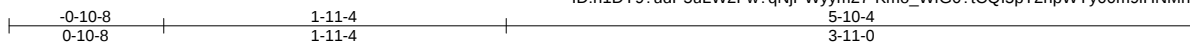
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980584
2867639	J7	Half Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:24 2021 Page 1

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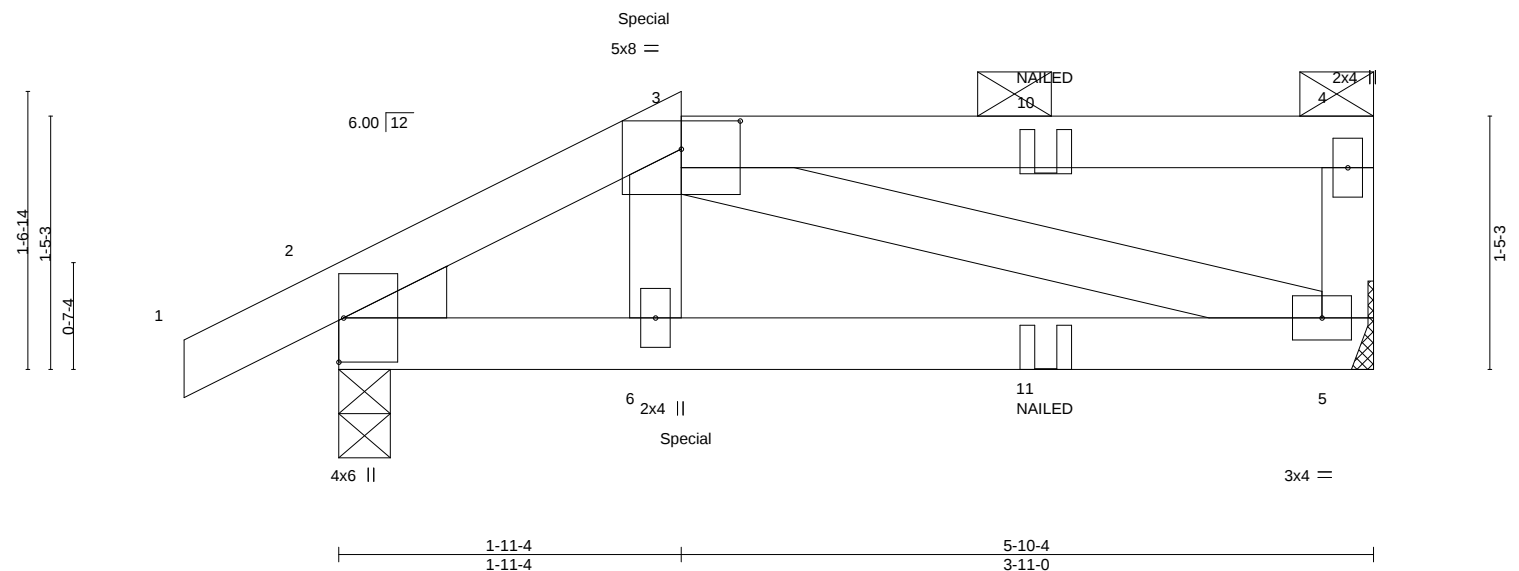


Plate Offsets (X,Y)-- [3:0-4-0,0-1-15]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	5	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 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 2=51(LC 7)
Max Uplift 2=-73(LC 8), 5=-69(LC 5)
Max Grav 2=334(LC 1), 5=261(LC 1)

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

TOP CHORD 2-3=-349/66
BOT CHORD 2-6=-79/292, 5-6=-81/284
WEBS 3-5=-298/75

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 67 lb up at 1-11-4 on top chord, and 31 lb down and 12 lb up at 1-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 5-7=-20



July 14, 2021

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980584
2867639	J7	Half Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 6=-13(B) 11=-7(B)



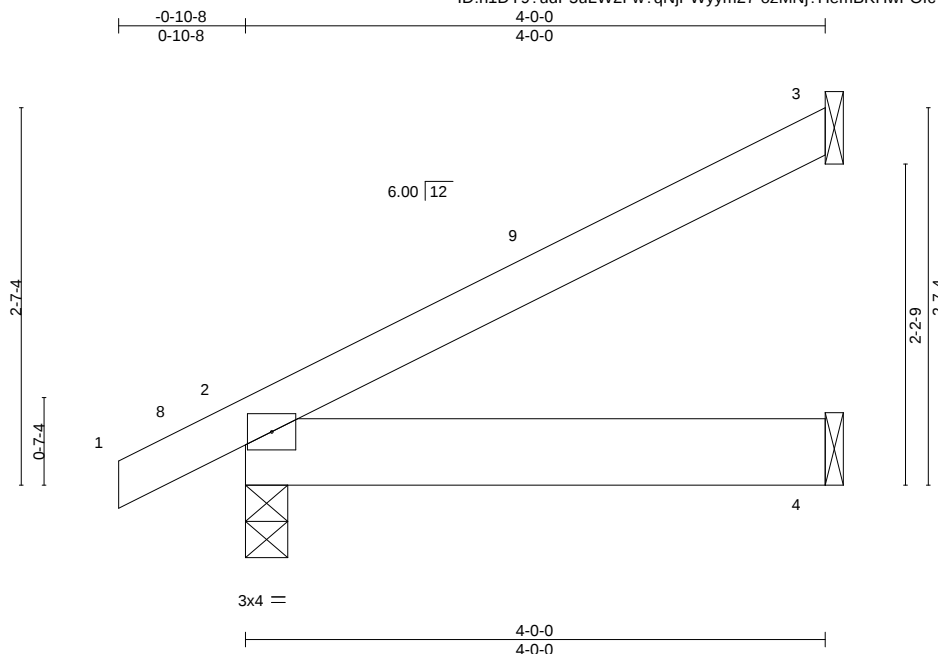
Job 2867639	Truss J8	Truss Type Jack-Open	Qty 21	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980585
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:25 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-ozMNj?HemBKHWFOcVKI49ZDnZ6h6qP3aowATQyyUW8



Scale: 3/4"=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 0.15	Vert(LL)	0.01	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	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-AS						Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=96(LC 12)
Max Uplift 3=-58(LC 12), 2=-38(LC 12), 4=-5(LC 12)
Max Grav 3=105(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=25ft; 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, 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.
- 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.



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980586
2867639	J8A	Jack-Closed Girder	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:26 2021 Page 1

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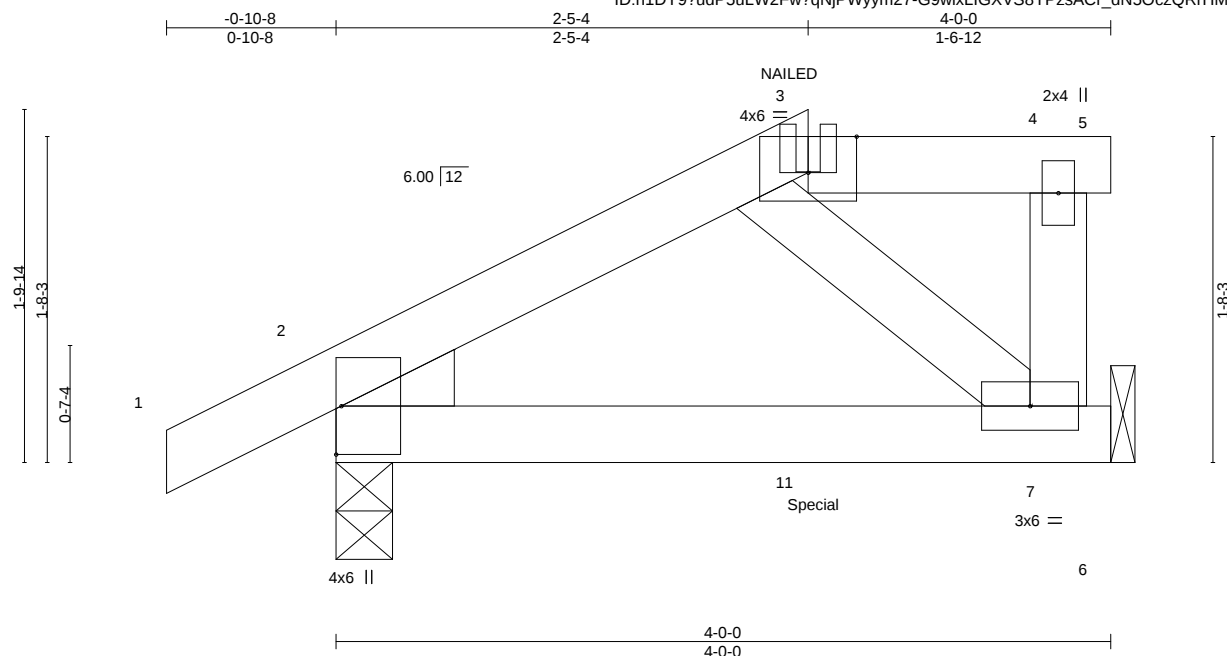


Plate Offsets (X,Y)-- [3:0-3-0,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	7-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.02	7-10	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 15 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 or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 7=Mechanical
 Max Horz 2=62(LC 7)
 Max Uplift 2=-76(LC 8), 7=-85(LC 5)
 Max Grav 2=277(LC 1), 7=250(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=25ft; 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 119 lb down and 80 lb up at 2-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 Vert: 1-3=-70, 3-4=-70, 4-5=-20, 6-8=-20
- Concentrated Loads (lb)
 Vert: 11=-119(F)



July 14, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	J9	Jack-Open	1	1	146980587

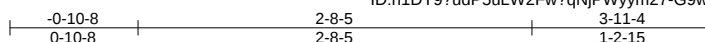
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:26 2021 Page 1

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Job Reference (optional)



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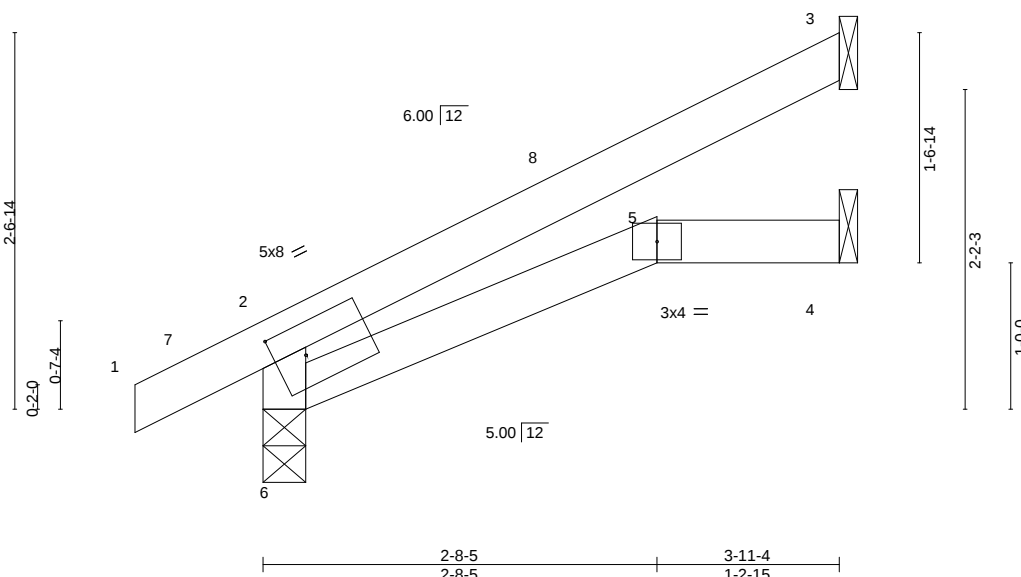


Plate Offsets (X,Y)--		[2:0-2-8,0-2-8]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 11 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 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 6=0-3-8
Max Horz 6=88(LC 12)
Max Uplift 3=-66(LC 12), 6=-37(LC 12)
Max Grav 3=115(LC 1), 4=70(LC 3), 6=249(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=25ft; 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 3-10-8 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
- 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) Bearing at joint(s) 6 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 capable of withstanding 100 lb uplift at joint(s) 3, 6.
- 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.



July 14, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	J10	Jack-Open	2	1	I46980588
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

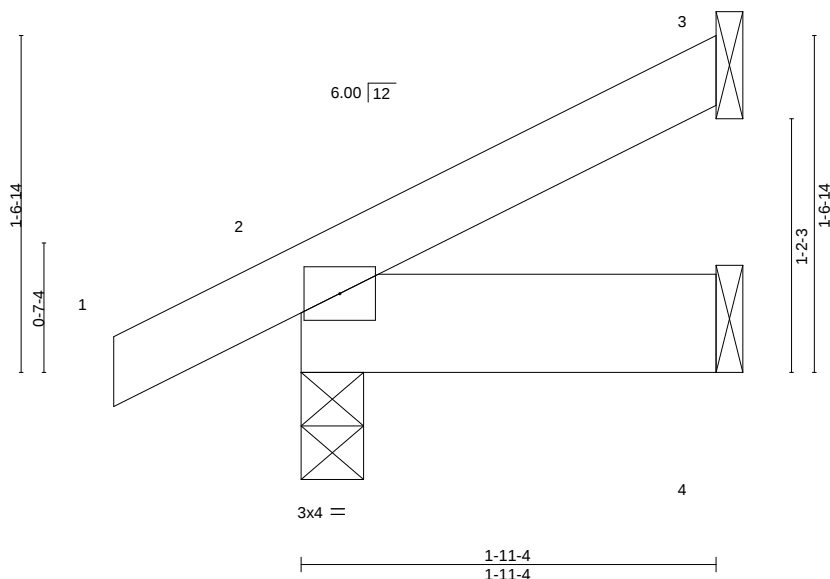
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-0-10-8
0-10-8

1-11-4
1-11-4

Scale = 1:10.8



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 0.05	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 1-11-4 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=55(LC 12)
Max Uplift 3=-26(LC 12), 2=-30(LC 12), 4=-3(LC 12)
Max Grav 3=46(LC 1), 2=162(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=25ft; 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 26 lb uplift at joint 3, 30 lb uplift at joint 2 and 3 lb uplift at joint 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.



July 14, 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 2867639	Truss J11	Truss Type Jack-Open	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980589
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:07 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-KVGZxr3M?f3qmU0CZj?XMMp9eJ_auhyPR?ZDqSyyUWQ

-0-10-8
0-10-8

1-10-3
1-10-3

Scale = 1:10.5

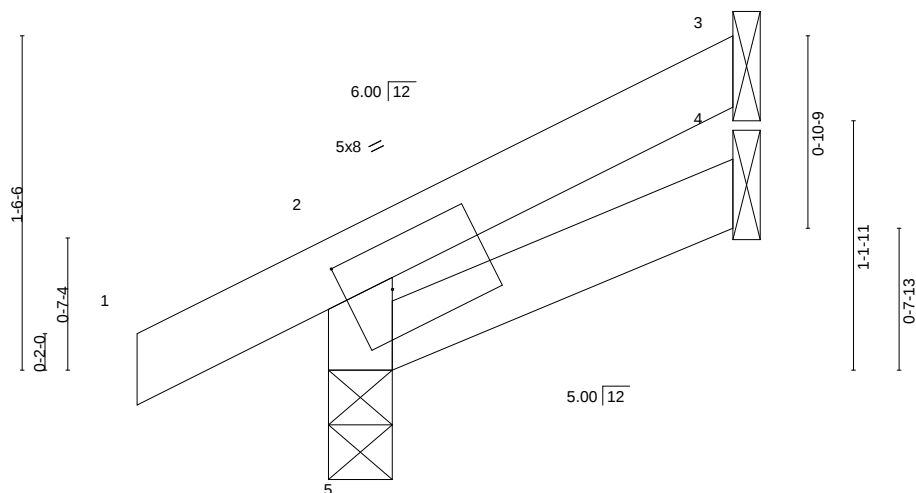


Plate Offsets (X,Y)--		[2:0-2-8,0-2-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MR
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 5 >999 240
			Vert(CT) -0.00 5 >999 180
			Horz(CT) -0.00 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			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 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=46(LC 12)
Max Uplift 3=-29(LC 12), 5=-30(LC 12)
Max Grav 3=42(LC 1), 4=30(LC 3), 5=169(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=25ft; 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) Bearing at joint(s) 5 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 capable of withstanding 29 lb uplift at joint 3 and 30 lb uplift at joint 5.
- 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.



July 14, 2021

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

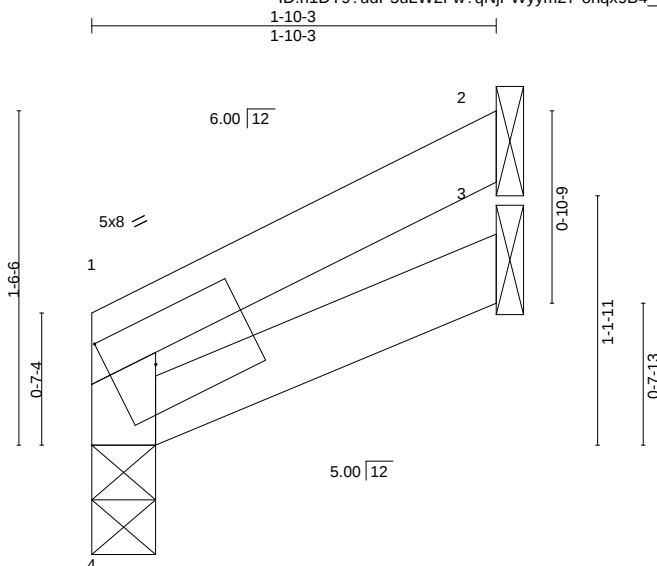
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Scale = 1:10.5

Plate Offsets (X,Y)-- [1:0-2-8,0-2-8]												
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	0.04	Vert(LL)	-0.00	4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 5 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2		
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 4=0-3-8
 Max Horz 4=30(LC 9)
 Max Uplift 2=-33(LC 12), 3=-1(LC 12), 4=-1(LC 12)
 Max Grav 2=55(LC 1), 3=32(LC 3), 4=76(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=25ft; 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) Bearing at joint(s) 4 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 capable of withstanding 33 lb uplift at joint 2, 1 lb uplift at joint 3 and 1 lb uplift at joint 4.
- 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.



July 14, 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

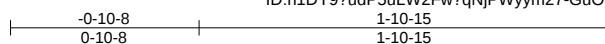
Job 2867639	Truss J13	Truss Type Jack-Open	Qty 7	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980591
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Builders FirstSource (Valley Center),

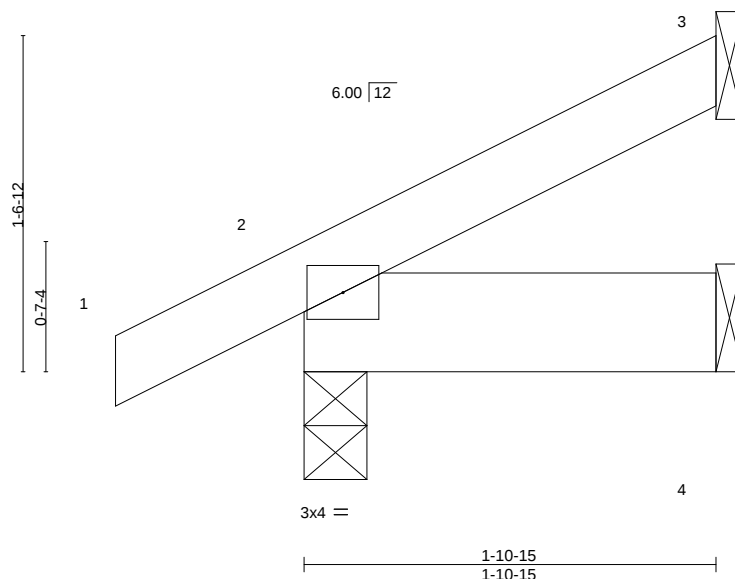
Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:09 2021 Page 1

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Scale = 1:10.7



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=54(LC 12)
Max Uplift 3=-26(LC 12), 2=-30(LC 12), 4=-3(LC 12)
Max Grav 3=45(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=25ft; 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 26 lb uplift at joint 3, 30 lb uplift at joint 2 and 3 lb uplift at joint 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.



July 14, 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 2867639	Truss J14	Truss Type Jack-Open	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO Job Reference (optional)	I46980592
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

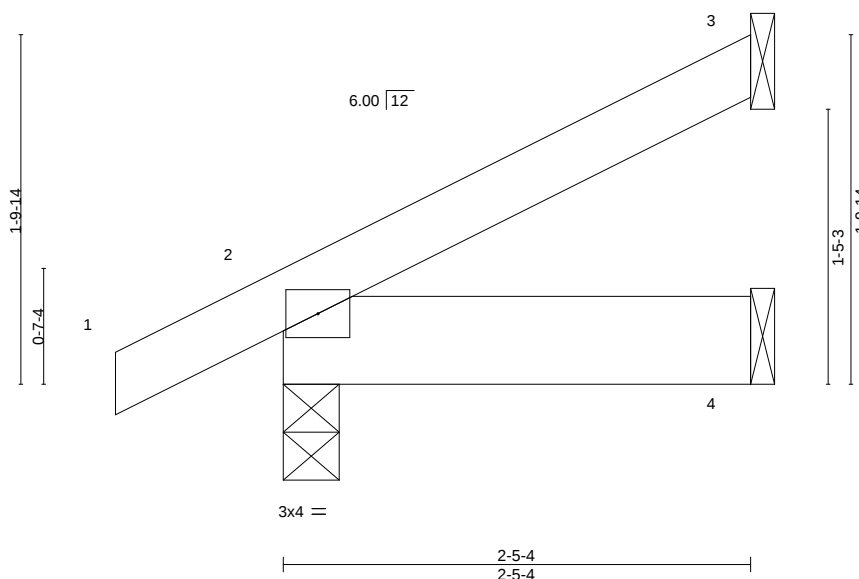
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:10 2021 Page 1

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-0-10-8
0-10-8

2-5-4
2-5-4

Scale: 1"=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 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	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: 9 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 2-5-4 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=64(LC 12)
Max Uplift 3=33(LC 12), 2=32(LC 12), 4=4(LC 12)
Max Grav 3=59(LC 1), 2=179(LC 1), 4=48(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=25ft; 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 33 lb uplift at joint 3, 32 lb uplift at joint 2 and 4 lb uplift at joint 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.



July 14, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

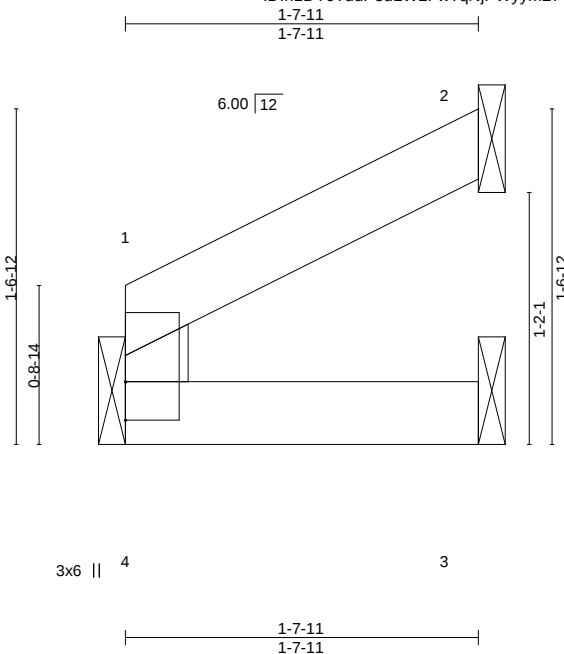
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	J15	Jack-Open	1	1	I46980593
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:11 2021 Page 1

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Scale = 1:10.7

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 0.04	Vert(LL)	-0.00	4	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	4	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						
									Weight: 4 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 1-7-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=29(LC 9)
Max Uplift 2=30(LC 12), 3=-2(LC 12)
Max Grav 4=67(LC 1), 2=49(LC 1), 3=29(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=25ft; 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 30 lb uplift at joint 2 and 2 lb uplift at joint 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.



July 14, 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 2867639	Truss J16	Truss Type Jack-Open	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980594
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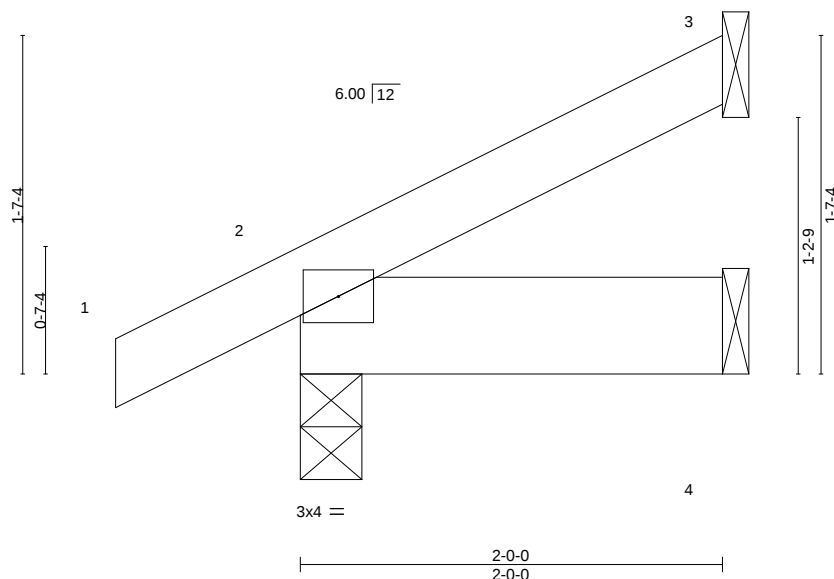
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:12 2021 Page 1

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



Scale = 1:10.9

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 2-0-0 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=56(LC 12)
Max Uplift 3=-27(LC 12), 2=-30(LC 12), 4=-3(LC 12)
Max Grav 3=48(LC 1), 2=164(LC 1), 4=40(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=25ft; 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 27 lb uplift at joint 3, 30 lb uplift at joint 2 and 3 lb uplift at joint 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.



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	J17	Jack-Open	1	1	I46980595
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

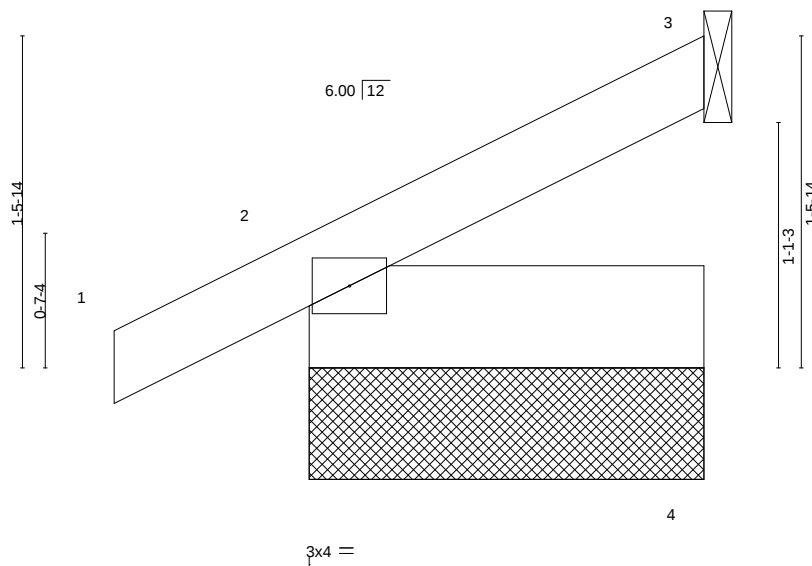
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0-10-8

1-9-4
1-9-4

Scale = 1:10.3



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)	-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 1-9-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 1-9-4 except (jt=length) 3=Mechanical, 3=Mechanical.

(lb) - Max Horz 2=51(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 3, 2, 4
Max Grav All reactions 250 lb or less at joint(s) 3, 3, 2, 4, 2

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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, 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.



July 14, 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	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	J18	Jack-Open	2	1	I46980596
Job Reference (optional)					

Builders FirstSource (Valley Center),

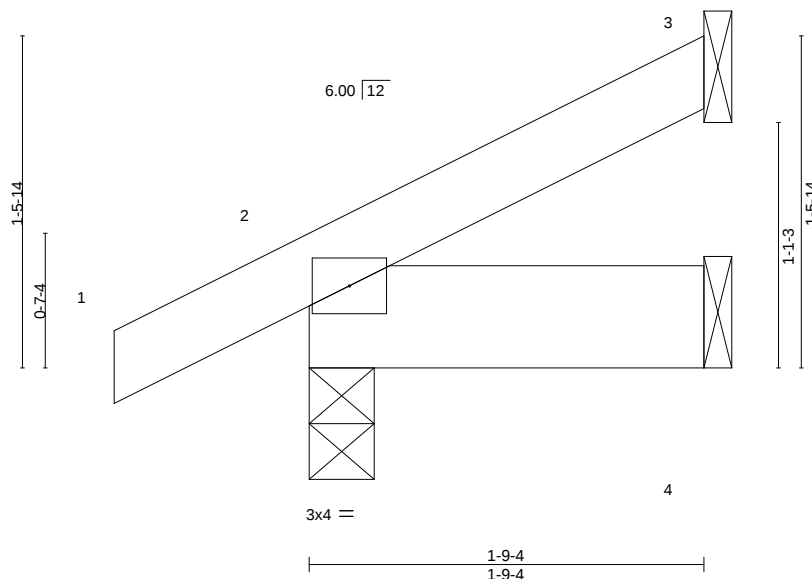
Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:17 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-1QtL2GBdekJQz0n78pBtmTDtOKP3ECRtkY_IBtyyUWG

0-10-8 1-9-4
0-10-8 1-9-4

Scale = 1:10.3



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)	-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 1-9-4 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=51(LC 12)
Max Uplift 3=-23(LC 12), 2=-30(LC 12), 4=-3(LC 12)
Max Grav 3=41(LC 1), 2=156(LC 1), 4=35(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=25ft; 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.



July 14, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

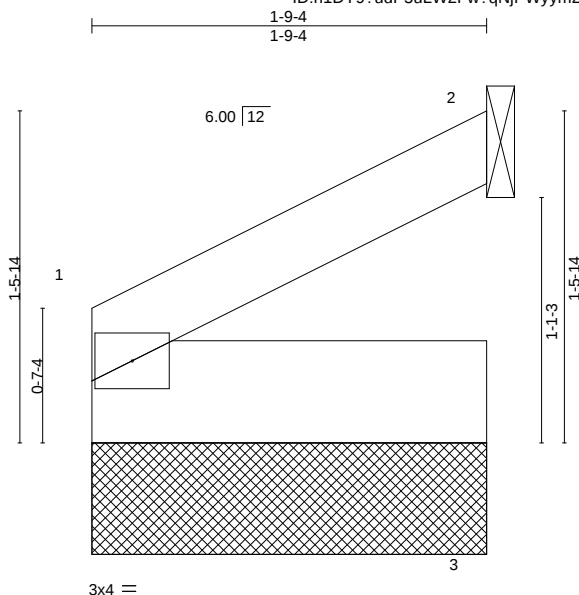
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	J19	Jack-Open	1	1	I46980597
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:17 2021 Page 1

ID:n1DY9?udP5uLW2Fw?QNPWyym27-1QtL2GBdekJQz0n78pBtmTDsmKPrECRtkY_IBtyyUWG



Scale = 1:10.3

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 0.09	Vert(LL)	-0.01	3	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.01	3	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	1	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
									Weight: 6 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 1-9-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=1-9-4, 2=Mechanical
Max Horz 1=36(LC 12)
Max Uplift 1=-5(LC 12), 2=-31(LC 12)
Max Grav 1=79(LC 1), 2=79(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=25ft; 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) 1, 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.



July 14, 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

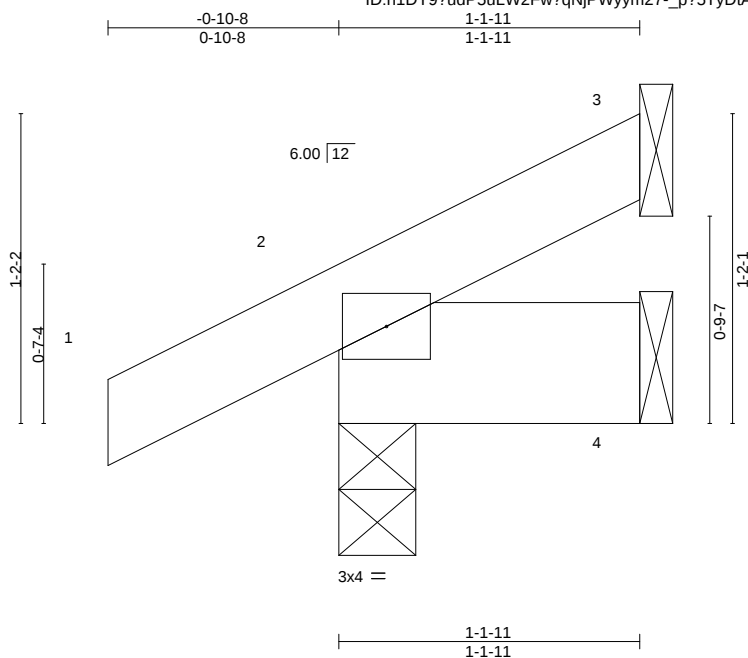
Job 2867639	Truss J20	Truss Type Jack-Open	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980598
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:19 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-_p?5TyDtALZ7CKxWGEDLruJD84hi6wABsTrGmyyUWE



Scale = 1:8.7

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
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	>999	180	197/144
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: 5 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 1-1-11 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=38(LC 12)
Max Uplift 3=-13(LC 12), 2=-29(LC 12)
Max Grav 3=21(LC 1), 2=136(LC 1), 4=19(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=25ft; 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.
- 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.



July 14, 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 2867639	Truss L1	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980599
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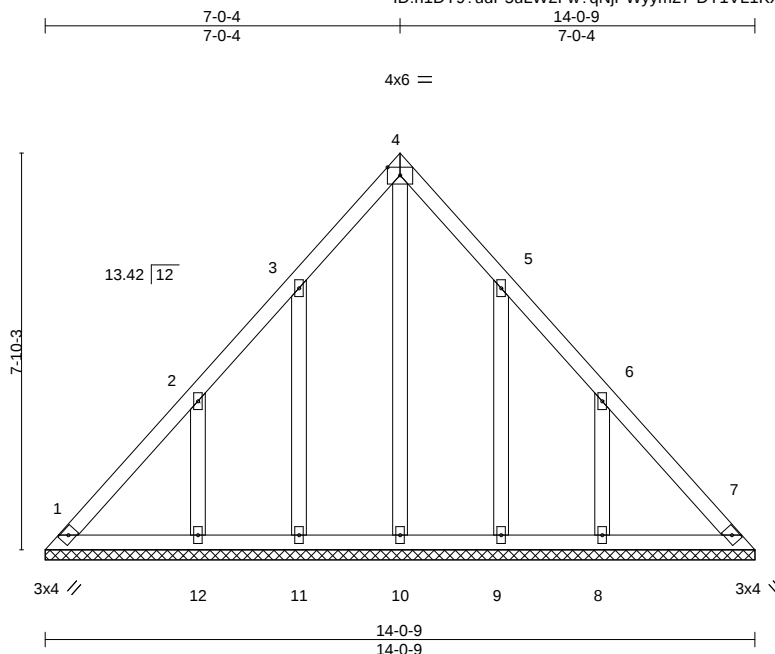
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:28 2021 Page 1

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Job Reference (optional)



Scale = 1:45.6

Plate Offsets (X,Y)--		[4:Edge,0-1-14]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10
TCDL 10.0	Lumber DOL	1.15	BC 0.05
BCLL 0.0	Rep Stress Incr	YES	WB 0.14
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			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 7 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 65 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" oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS.

All bearings 14'-0".

(lb) - Max Horz 1=-202(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-129(LC 12), 12=-201(LC 12), 9=-128(LC 13), 8=-201(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 9 except 12=290(LC 19), 8=291(LC 20)

FORCES.

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

WEBS 2-12=-258/212, 6-8=-258/212

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 7-0-4, Exterior(2R) 7-0-4 to 10-0-4, Interior(1) 10-0-4 to 13-8-10 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 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=129, 12=201, 9=128, 8=201.
- 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.



July 14, 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 2867639	Truss L2	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980600
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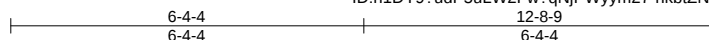
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:29 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-hkbtZKN9qQqjPsiRrLOhF?jv6AVV2dseVQuNcByyUW4

Job Reference (optional)



4x6 =

Scale = 1:41.5

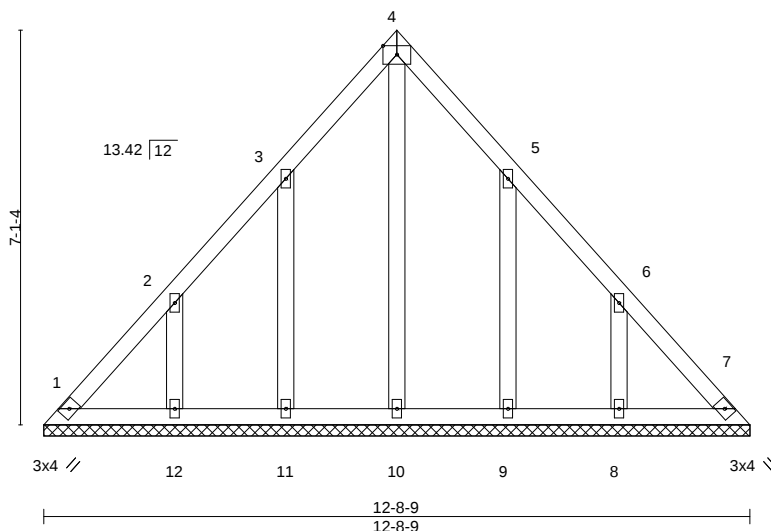


Plate Offsets (X,Y)--		[4:Edge,0-1-14]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 57 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.

All bearings 12-8-9.

(lb) - Max Horz 1=-182(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-143(LC 12), 12=-163(LC 12), 9=-142(LC 13),
8=-164(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 6-4-4, Exterior(2R) 6-4-4 to 9-4-4, Interior(1) 9-4-4 to 12-4-10 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 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=143, 12=163, 9=142, 8=164.
- 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.



July 14, 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

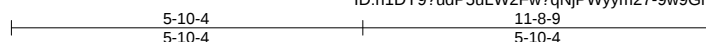
Job 2867639	Truss L3	Truss Type GABLE	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980601
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:30 2021 Page 1

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4x6 =

Scale = 1:38.4

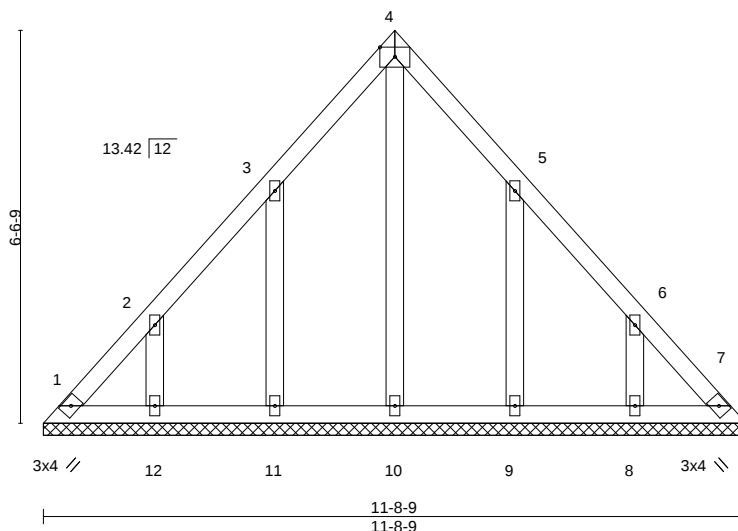


Plate Offsets (X,Y)--		[4:Edge,0-1-14]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 51 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.

All bearings 11-8-9.

(lb) - Max Horz 1=-167(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-150(LC 12), 12=-139(LC 12), 9=-149(LC 13),
8=-140(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-10-4, Exterior(2R) 5-10-4 to 8-10-4, Interior(1) 8-10-4 to 11-4-10 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 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=150, 12=139, 9=149, 8=140.
- 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.



July 14, 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 2867639	Truss L4	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980602
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:32 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWyy27-5JH0BON16LCHGKQ?WtyOseLRSNWDF_94BO71DWyyUW1

Job Reference (optional)

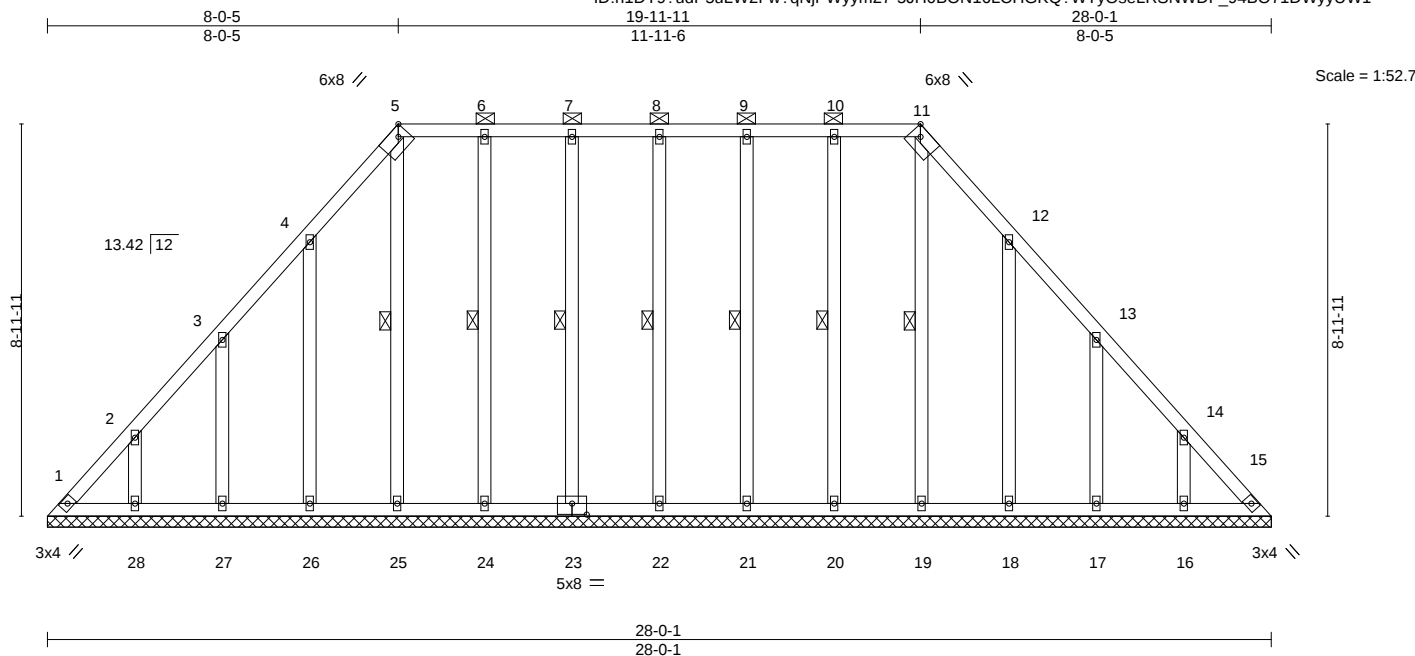


Plate Offsets (X,Y)--		[5:0-2-10,Edge], [11:0-2-10,Edge], [23:0-4-0,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999
BCLL 0.0	Rep Stress Incr YES	WB 0.13	Vert(CT) n/a - n/a 999
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.01 15 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 166 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, except 2-0-0 oc purlins (6-0-0 max.): 5-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-22, 7-23, 6-24, 5-25, 9-21, 10-20, 11-19

REACTIONS.

All bearings 28-0-1.
(lb) - Max Horz 1=233(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 15, 22, 23, 24, 25, 21, 20 except 1=123(LC 10), 26=-153(LC 12), 27=-142(LC 12), 28=-146(LC 12), 18=-152(LC 13), 17=-143(LC 13), 16=-146(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17, 16

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

TOP CHORD 1-2=-299/225

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 8-0-5, Exterior(2R) 8-0-5 to 12-0-0, Interior(1) 12-0-0 to 19-11-11, Exterior(2R) 19-11-11 to 24-0-0, Interior(1) 24-0-0 to 27-8-2 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
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 22, 23, 24, 25, 21, 20 except (jt=lb) 1=123, 26=153, 27=142, 28=146, 18=152, 17=143, 16=146.
- 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.



July 14, 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 2867639	Truss L5	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980603
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:33 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-ZVrOPkNfE8tU?C4ATdPrubwnsD_RnEP2sblyyyUW0

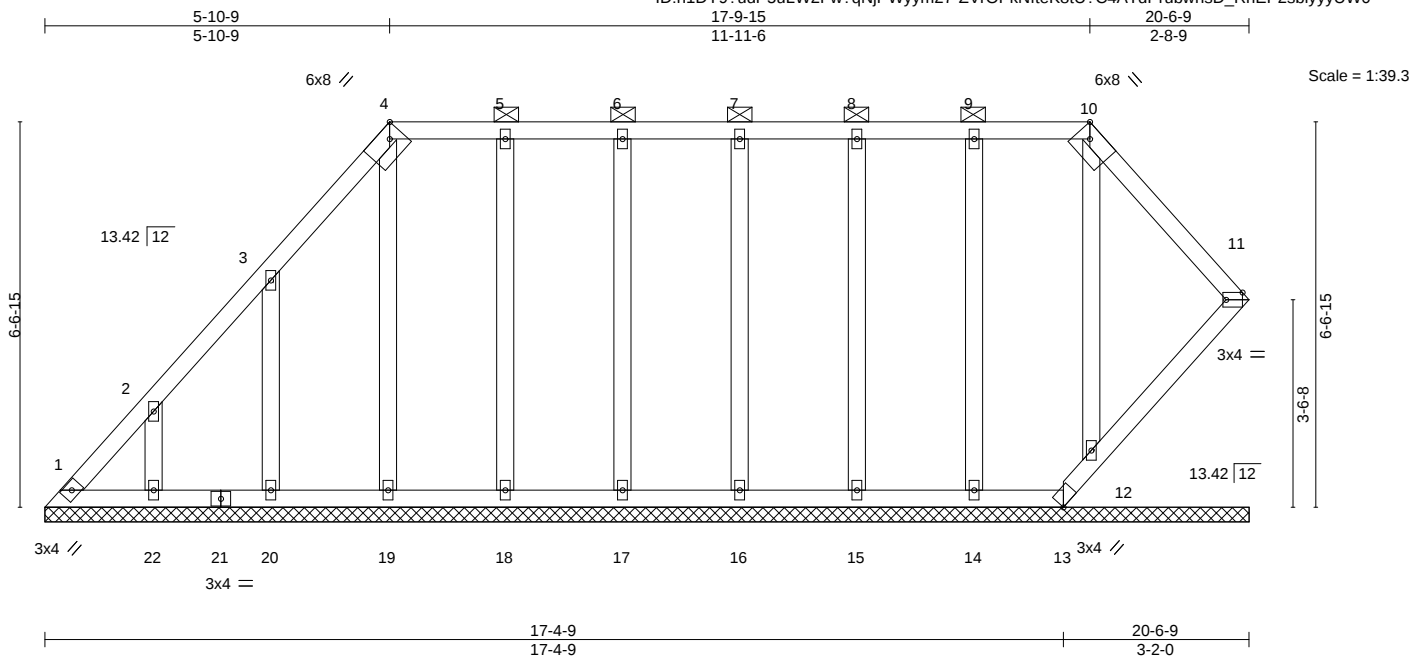


Plate Offsets (X,Y)--		[4:0-2-10,Edge], [10:0-2-10,Edge], [11:Edge,0-1-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(LL) n/a - n/a 999
BCLL 0.0	Rep Stress Incr YES	WB 0.10	Vert(CT) n/a - n/a 999
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 11 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 106 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, except 2-0-0 oc purlins (6-0-0 max.): 4-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 20-6-9.
(lb) - Max Horz 1=189(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 13, 19, 18, 17, 16, 15, 14, 12 except 22=137(LC 12),
20=156(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 13, 22, 20, 19, 18, 17, 16, 15, 14, 12

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-10-9, Exterior(2R) 5-10-9 to 9-10-4, Interior(1) 9-10-4 to 17-9-15, Exterior(2E) 17-9-15 to 20-4-3 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
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 13, 19, 18, 17, 16, 15, 14, 12 except (jt=lb) 22=137, 20=156.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 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

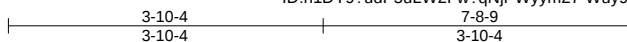
Job 2867639	Truss L6	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980604
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:35 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNJPWym27-Wuy9pQPwPGas7n9aCbV5UGzyjbY9SLPXtMLiqyyUW_



4x6 =

Scale = 1:28.2

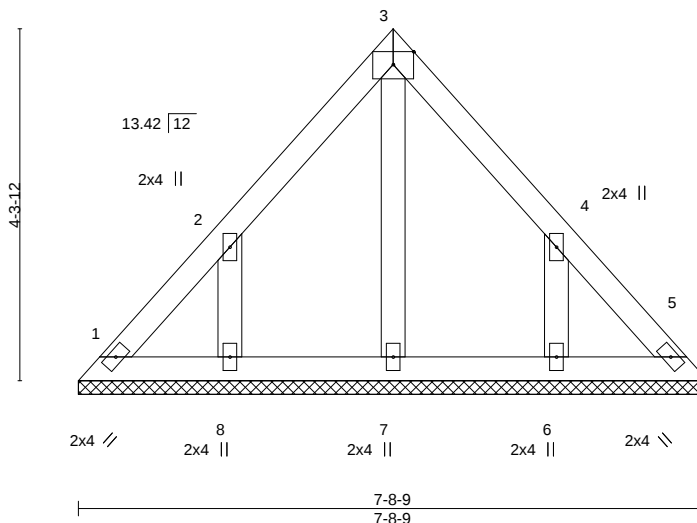


Plate Offsets (X,Y)--		[3:Edge,0-1-14]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC 0.06		Vert(LL) n/a - n/a 999			MT20 197/144	
TCDL	10.0	Lumber DOL 1.15		BC 0.02		Vert(CT) n/a - n/a 999				
BCLL	0.0	Rep Stress Incr YES		WB 0.03		Horz(CT) 0.00 5 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 29 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.

All bearings 7-8-9.

(lb) - Max Horz 1=-106(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-159(LC 12), 6=-159(LC 13)

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

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-4, Exterior(2R) 3-10-4 to 6-10-4, Interior(1) 6-10-4 to 7-4-10 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, 5 except (jt=lb) 8=159, 6=159.
- 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.



July 14, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980605
2867639	M1	Half Hip Girder	2	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:36 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-4WX1mQYAZijxknJ0K1UW6h?0Bogg6?5FLHyUVz

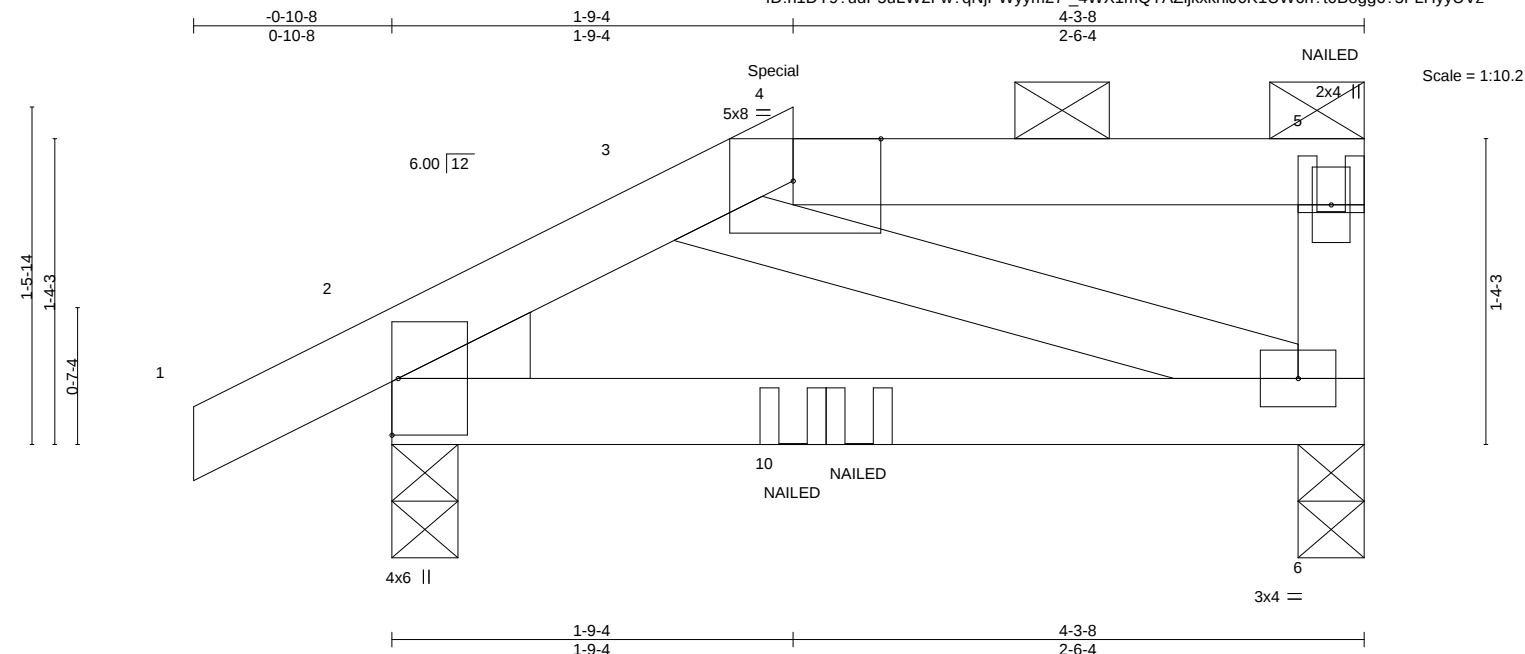


Plate Offsets (X,Y)--		[4:0-4-10,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.01 6-9 >999 240	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01 6-9 >999 180				
BCLL	0.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00 2 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP				Weight: 16 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 or 4-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
 Max Horz 2=48(LC 7)
 Max Uplift 2=57(LC 8), 6=61(LC 5)
 Max Grav 2=259(LC 1), 6=225(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=25ft; 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) 2, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 25 lb down and 60 lb up at 1-9-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-70, 4-5=-70, 6-7=-20
 Concentrated Loads (lb)
 Vert: 5=-41(F) 10=-9(F)



July 14, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

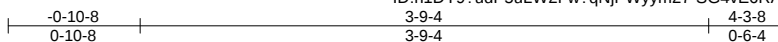
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	M2	Half Hip	2	1	I46980606
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:37 2021 Page 1

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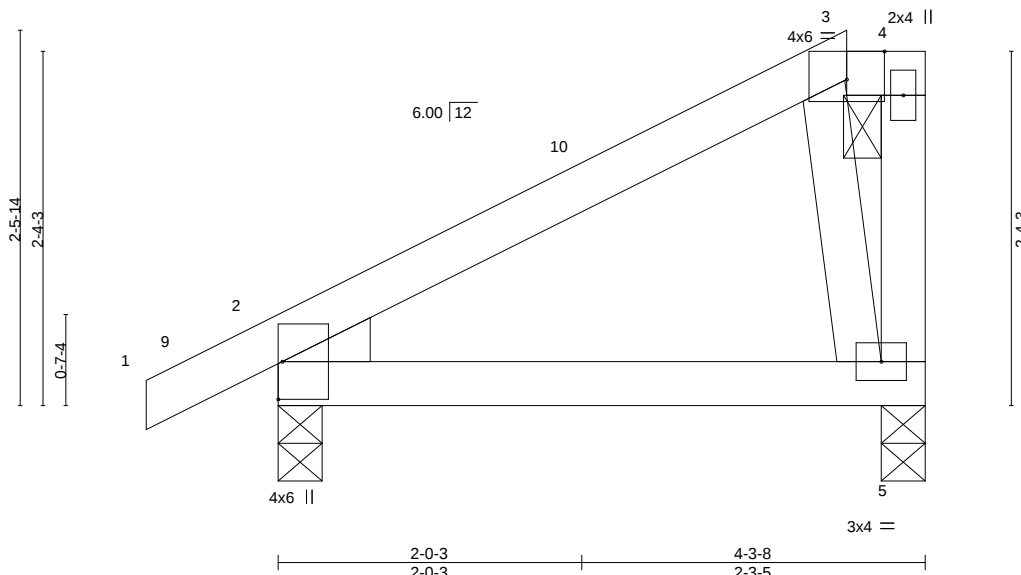


Plate Offsets (X,Y)--	[3:0-3-0,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	0.02	5-8	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03	5-8	>999
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.01	2	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 16 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, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=0-3-8, 2=0-3-8
Max Horz 2=89(LC 11)
Max Uplift 5=-45(LC 12), 2=-53(LC 12)
Max Grav 5=180(LC 1), 2=254(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=25ft; 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 3-9-4, Exterior(2E) 3-9-4 to 4-1-12 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
- 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) 5, 2.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 14, 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

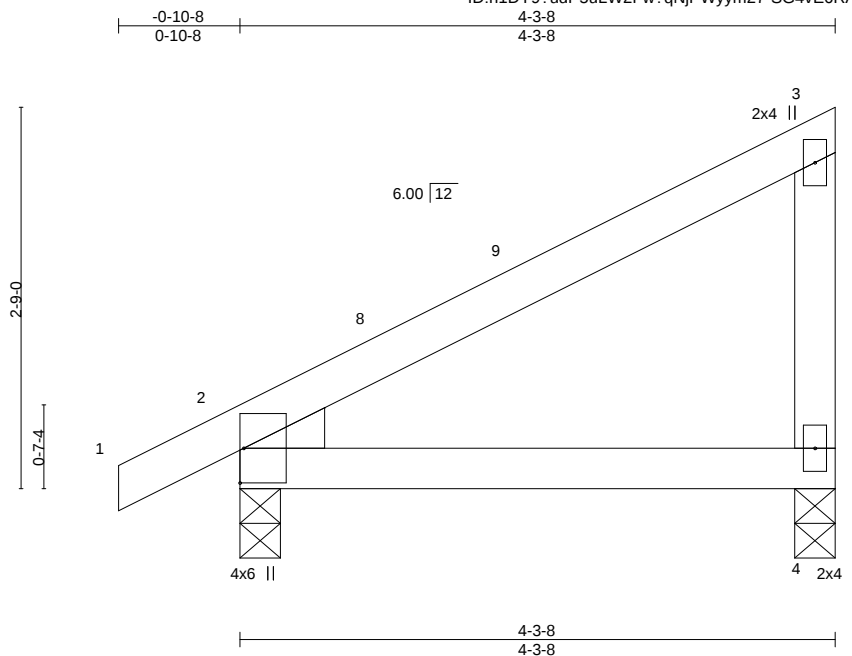
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	M3	Monopitch	1	1	I46980607
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:37 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-SG4vE6RAxtqaM5JzJ0YZZh2FsOBLwFNqKfotjyyUVy



Scale = 1:16.6

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 0.21	Vert(LL)	-0.02	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.03	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 15 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=0-3-8, 2=0-3-8

Max Horz 2=103(LC 11)

Max Uplift 4=-54(LC 12), 2=-50(LC 12)

Max Grav 4=180(LC 1), 2=254(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=25ft; 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 4-1-12 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) 4, 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.



July 14, 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



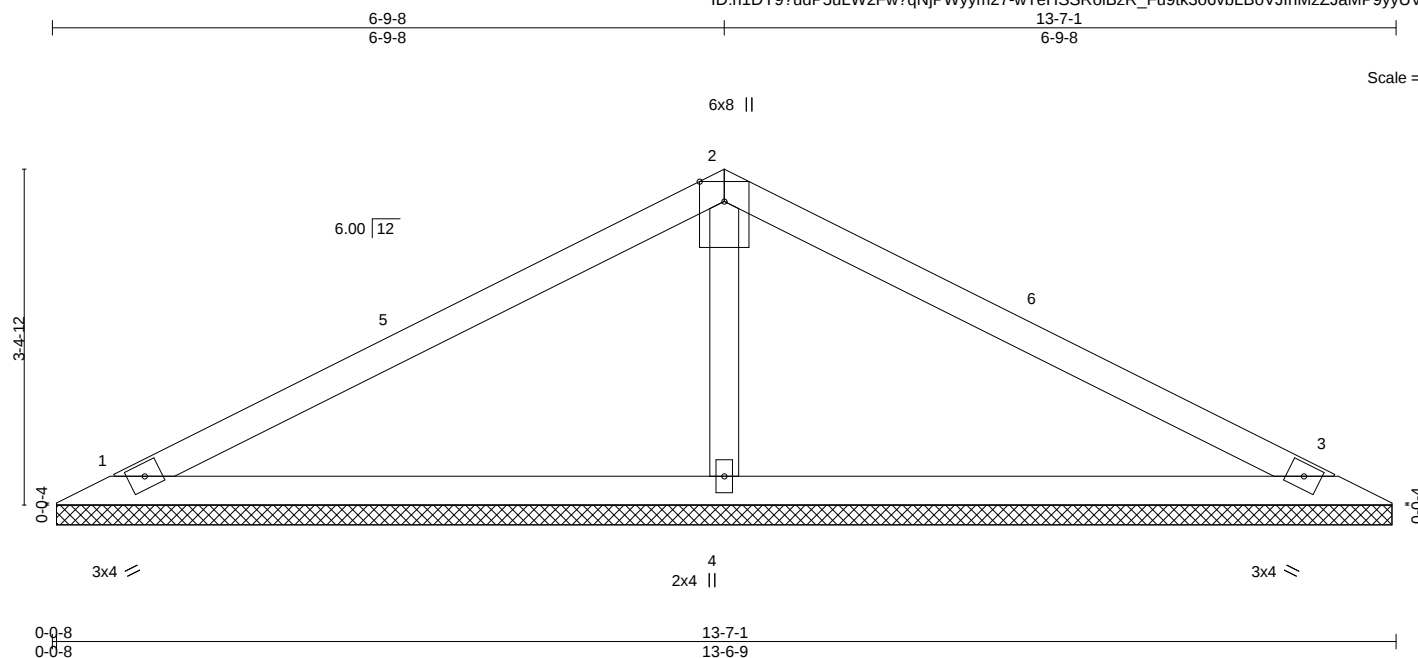
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2867639	Truss V1	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980608
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:38 2021 Page 1
ID:n1DY9?udP5uLW2Fw?qNjPWym27-wTeHSSRoIBzR_Fu9tk3o6vbLBoVJfhMzZJaMP9yyUVx

13-7-1
6-9-8

Scale = 1:23.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	n/a	MT20		197/144	
BCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00				
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
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=13-6-1, 3=13-6-1, 4=13-6-1
Max Horz 1=-54(LC 17)
Max Uplift 1=-60(LC 12), 3=-70(LC 13), 4=-64(LC 12)
Max Grav 1=256(LC 25), 3=256(LC 26), 4=604(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-418/208

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=25ft; 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 6-9-8, Exterior(2R) 6-9-8 to 9-9-8, Interior(1) 9-9-8 to 12-11-8 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.



July 14, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO
2867639	V2	Valley	1	1	I46980609

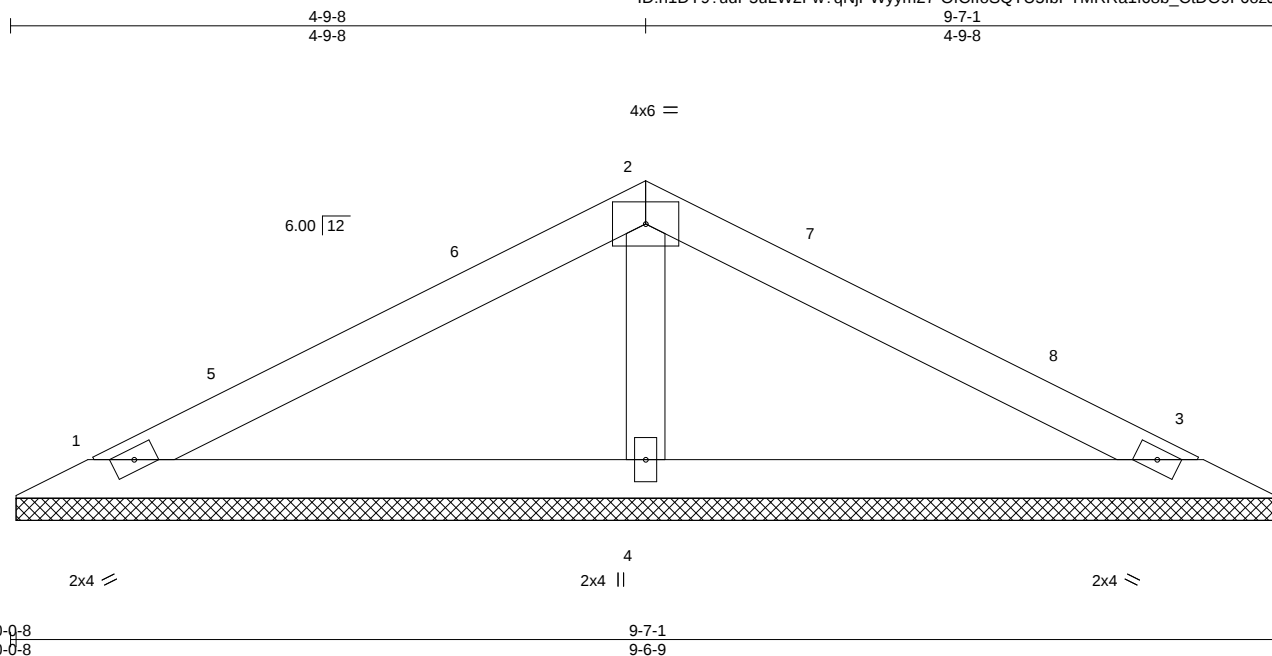
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:39 2021 Page 1

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Job Reference (optional)



Scale = 1:17.4

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 0.24	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.14	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-S						
								Weight: 24 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=9-6-1, 3=9-6-1, 4=9-6-1
Max Horz 1=-37(LC 13)
Max Uplift 1=-40(LC 12), 3=-47(LC 13), 4=-43(LC 12)
Max Grav 1=173(LC 25), 3=173(LC 26), 4=408(LC 1)

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

WEBS 2-4=-282/181

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=25ft; 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 4-9-8, Exterior(2R) 4-9-8 to 7-9-8, Interior(1) 7-9-8 to 8-11-8 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.



July 14, 2021

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

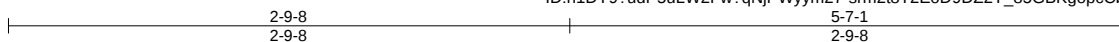
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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Chesterfield, MO 63017

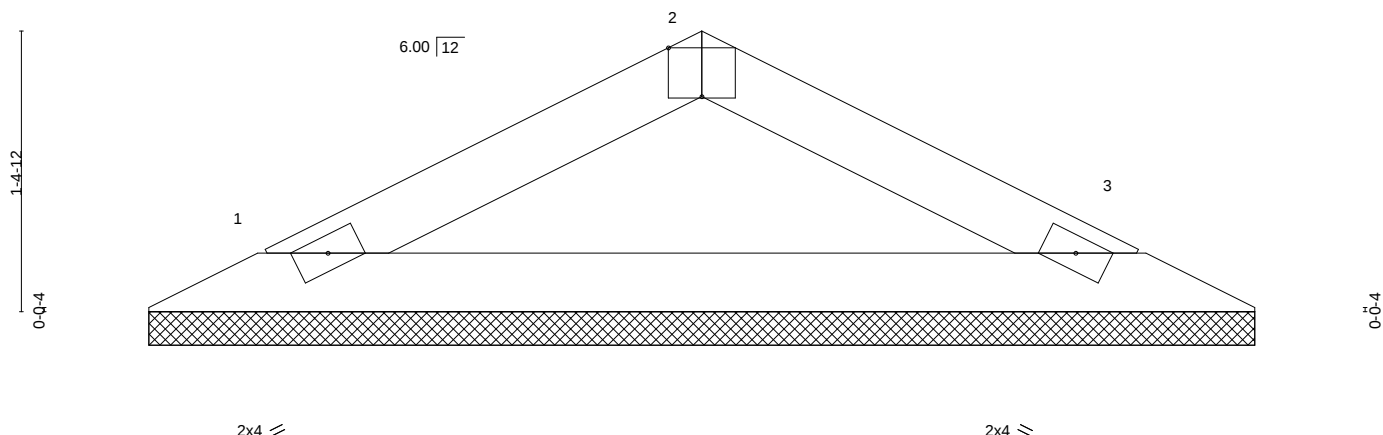
Job 2867639	Truss V3	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980610
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:40 2021 Page 1
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3x4 =

Scale = 1:11.5



		0-0-8		5-7-1					
		0-0-8		5-6-9					
Plate Offsets (X,Y)--		[2:0-2:0,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	0.10	Vert(LL)	n/a - n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.20	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: 12 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-6-1, 3=5-6-1
Max Horz 1=19(LC 16)
Max Uplift 1=32(LC 12), 3=32(LC 13)
Max Grav 1=195(LC 1), 3=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=25ft; 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.
- 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.



July 14, 2021

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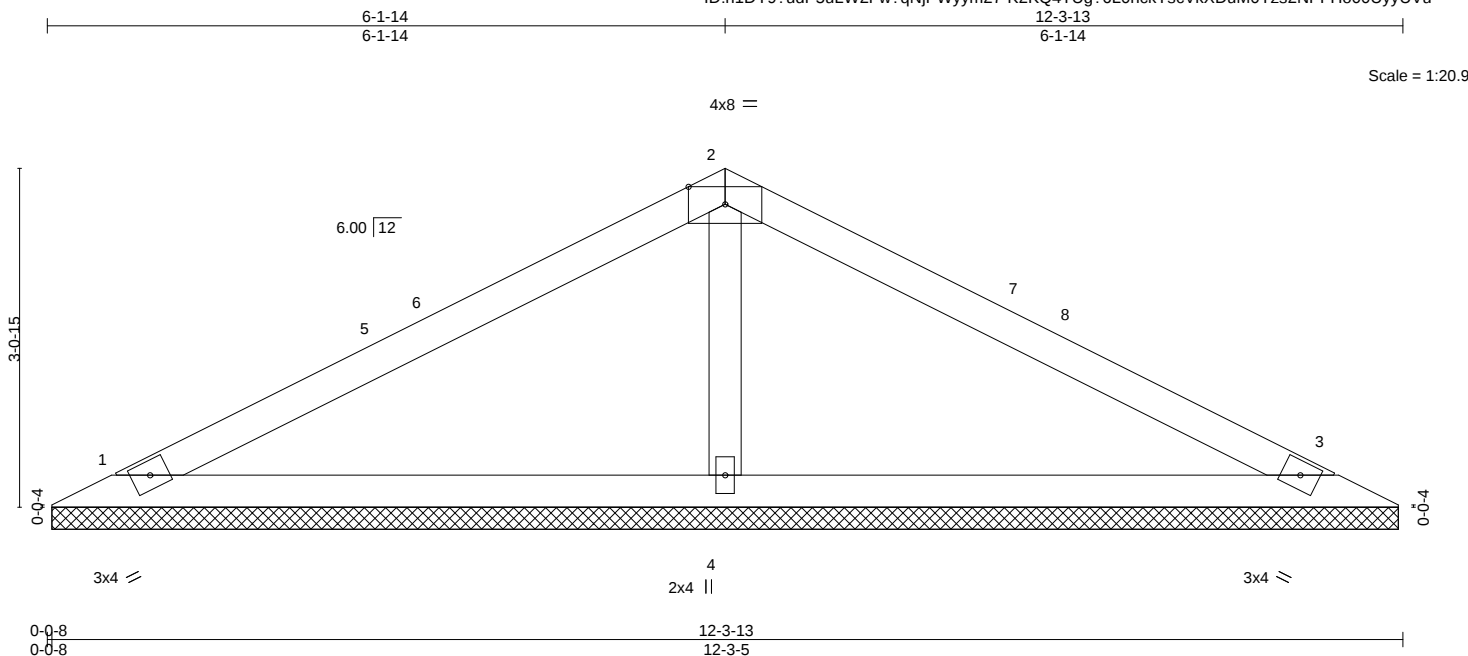
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2867639	Truss V4	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO 146980611
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:41 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 0.44	Vert(LL)	n/a	-	n/a	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 31 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=12-2-13, 3=12-2-13, 4=12-2-13
Max Horz 1=49(LC 16)
Max Uplift 1=54(LC 12), 3=63(LC 13), 4=57(LC 12)
Max Grav 1=230(LC 25), 3=230(LC 26), 4=542(LC 1)

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

WEBS 2-4=-374/200

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; 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 6-1-14, Exterior(2R) 6-1-14 to 9-1-14, Interior(1) 9-1-14 to 11-8-4 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
- 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.



July 14, 2021

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



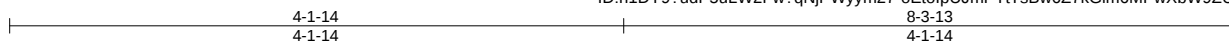
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #136/MO	I46980612
2867639	V5	Valley	1	1	Job Reference (optional)	

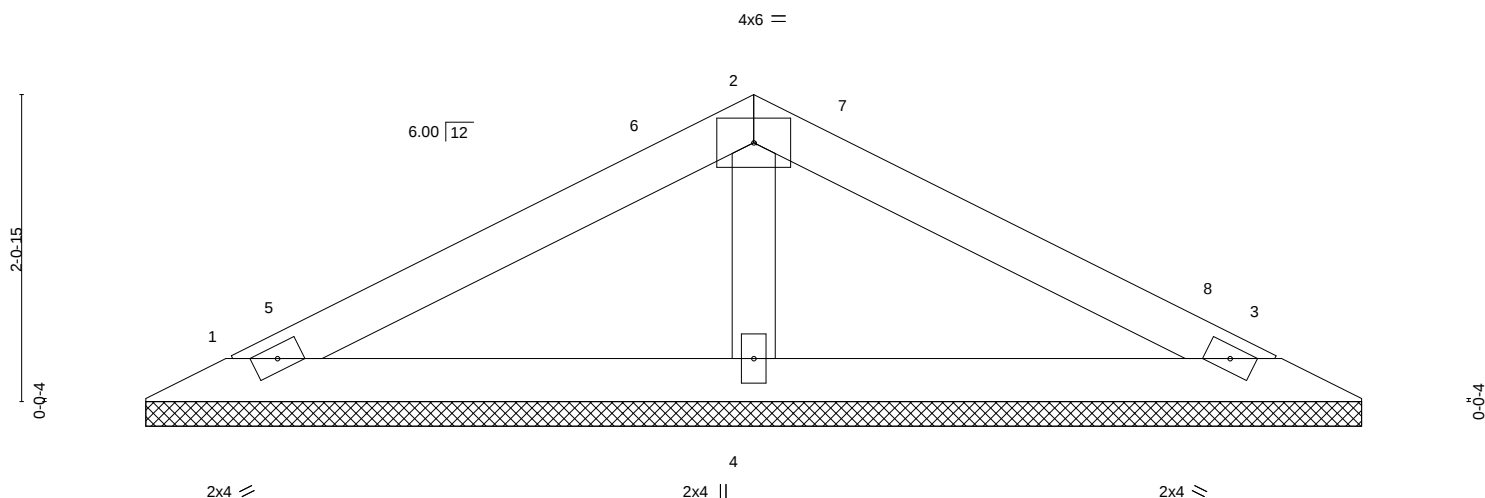
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:42 2021 Page 1

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Scale = 1:15.6



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 0.23	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 20 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=8-2-13, 3=8-2-13, 4=8-2-13
Max Horz 1=31(LC 16)
Max Uplift 1=-42(LC 12), 3=-47(LC 13), 4=-22(LC 12)
Max Grav 1=162(LC 1), 3=162(LC 1), 4=312(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=25ft; 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 4-1-14, Exterior(2R) 4-1-14 to 7-1-14, Interior(1) 7-1-14 to 7-8-4 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
- 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.



July 14, 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 2867639	Truss V6	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980613
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

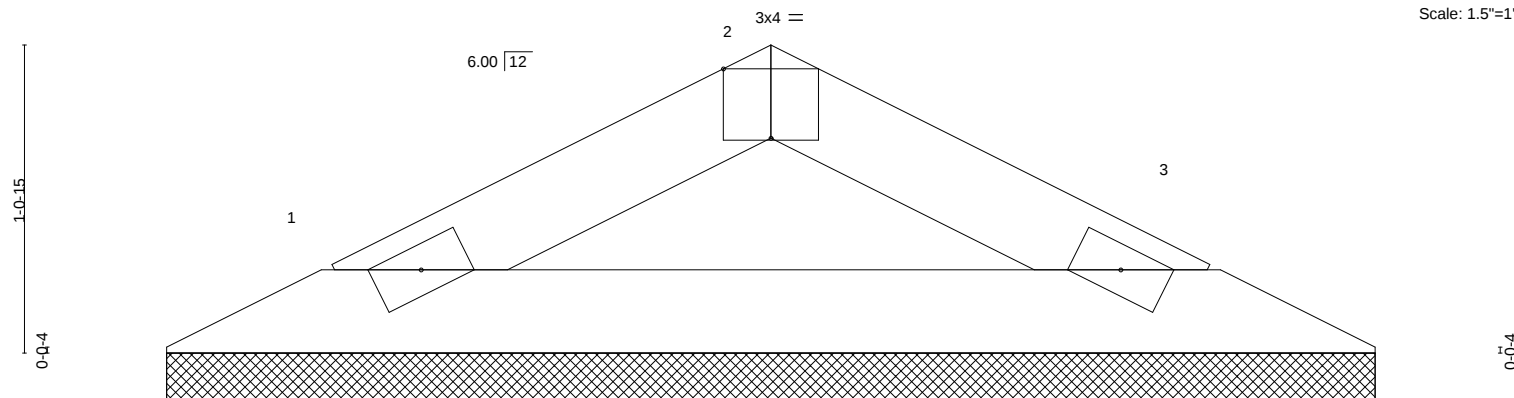
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:42 2021 Page 1

ID:n1DY9?udP5uLW2Fw?qNjPWym27-oEtolpUJmPTtTsBw6Z7kGlm93PwgbWdZUxYZZwyyUVt

Job Reference (optional)

2-1-14 2-1-14 4-3-13 2-1-14

Scale: 1.5"=1'



0-0-8 0-0-8	4-3-13 4-3-5
Plate Offsets (X,Y)--	[2:0-2-0,Edge]
LOADING (psf)	SPACING- 2-0-0
TCLL 25.0	Plate Grip DOL 1.15
TCDL 10.0	Lumber DOL 1.15
BCLL 0.0	Rep Stress Incr YES
BCDL 10.0	Code IRC2018/TPI2014
	CSI.
	TC 0.05
	BC 0.10
	WB 0.00
	Matrix-P
	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 3 n/a n/a
	PLATES GRIP
	MT20 197/144
	Weight: 9 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-2-13, 3=4-2-13
Max Horz 1=14(LC 16)
Max Uplift 1=23(LC 12), 3=23(LC 13)
Max Grav 1=138(LC 1), 3=138(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 14, 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 2867639	Truss V7	Truss Type Valley	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #136/MO I46980614
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Builders FirstSource (Valley Center),

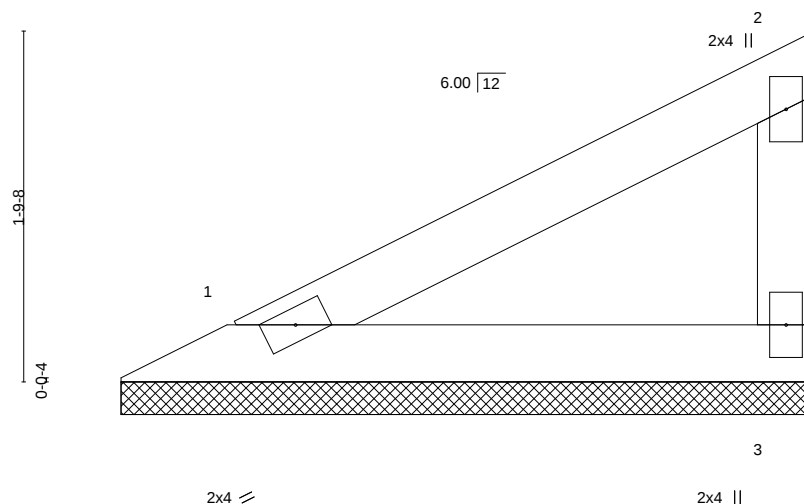
Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 13 11:57:43 2021 Page 1

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3-7-0
3-7-0

Scale = 1:11.8



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 0.14	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	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: 9 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 3-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-6-8, 3=3-6-8
Max Horz 1=59(LC 9)
Max Uplift 1=-21(LC 12), 3=-36(LC 12)
Max Grav 1=126(LC 1), 3=126(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=25ft; 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
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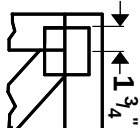
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



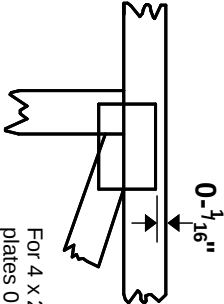
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Symbols

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

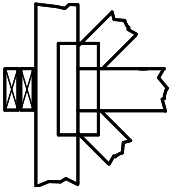
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



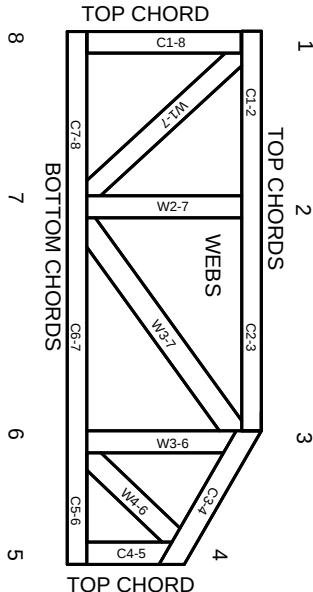
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.