



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: 2929201

SUMMIT/HAWTHORN RIDGE #152/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: I47911455 thru I47911547

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

Missouri COA: Engineering 001193



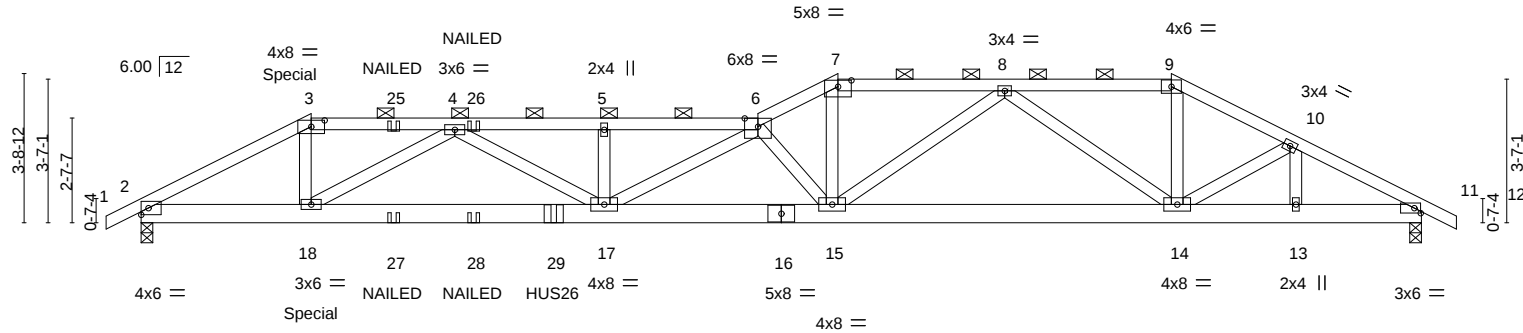
September 16, 2021

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911455
2929201	A1	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:16 2021 Page 1		
0-10-8		4-3-0		ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-3Z?54CgT8dIFNi4DaOeJ1ih?720tUA4hDMOZuydQB9		
0-10-8		4-3-0		17-5-0		
		7-10-1		21-7-0		
		7-10-8		25-9-0		
		11-6-14		28-10-5		
		3-8-6		32-0-0		
		3-10-2		32-10-8		
		2-0-0		0-10-8		
				Scale = 1:57.6		



		4-3-0		7-10-8		11-6-14		15-5-0		17-5-0		21-7-0		25-9-0		28-10-5		32-0-0				
		4-3-0		3-7-8		3-8-6		3-10-2		2-0-0		4-2-0		4-2-0		3-1-5		3-1-11				
Plate Offsets (X,Y)--		[3:0-4-0,0-1-15], [6:0-4-0,0-2-8], [7:0-4-0,0-1-15], [11:0-1-15,0-1-8]																				
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	0.56			Vert(LL)	-0.27	17-18	>999	240	MT20				197/144			
TCDL	10.0	Lumber DOL 1.15				BC	0.50			Vert(CT)	-0.48	17-18	>800	180								
BCLL	0.0	Rep Stress Incr NO				WB	0.31			Horz(CT)	0.06	11	n/a	n/a								
BCDL	10.0	Code IRC2018/TPI2014				Matrix-MS												Weight: 286 lb FT = 20%				

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911455
2929201	A1	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:17 2021 Page 2
ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-XIZTIXh5vxt6?seQ759YZvE9tRM6DdKqR08xVKydQB8

NOTES-
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 244 lb down and 148 lb up at 4-3-0 on top chord, and 98 lb down and 31 lb up at 4-3-0 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: 1-3=-70, 3-6=-70, 6-7=-70, 7-9=-70, 9-12=-70, 19-22=-20
Concentrated Loads (lb)
Vert: 3=-124(F) 18=-98(F) 25=-55(F) 26=-55(F) 27=-37(F) 28=-37(F) 29=-1006(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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911456
2929201	A2	Roof Special	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:18 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-0x7sVthjgE?zd0Dchogn67mJ0rbiyvGzggTV1mydQB7

0-10-8	6-3-0	11-10-0	17-5-0	19-5-0	23-9-0	27-10-5	32-0-0	32-10-8
0-10-8	6-3-0	5-7-0	5-7-0	2-0-0	4-4-0	4-1-5	4-1-11	0-10-8

Scale = 1:57.5

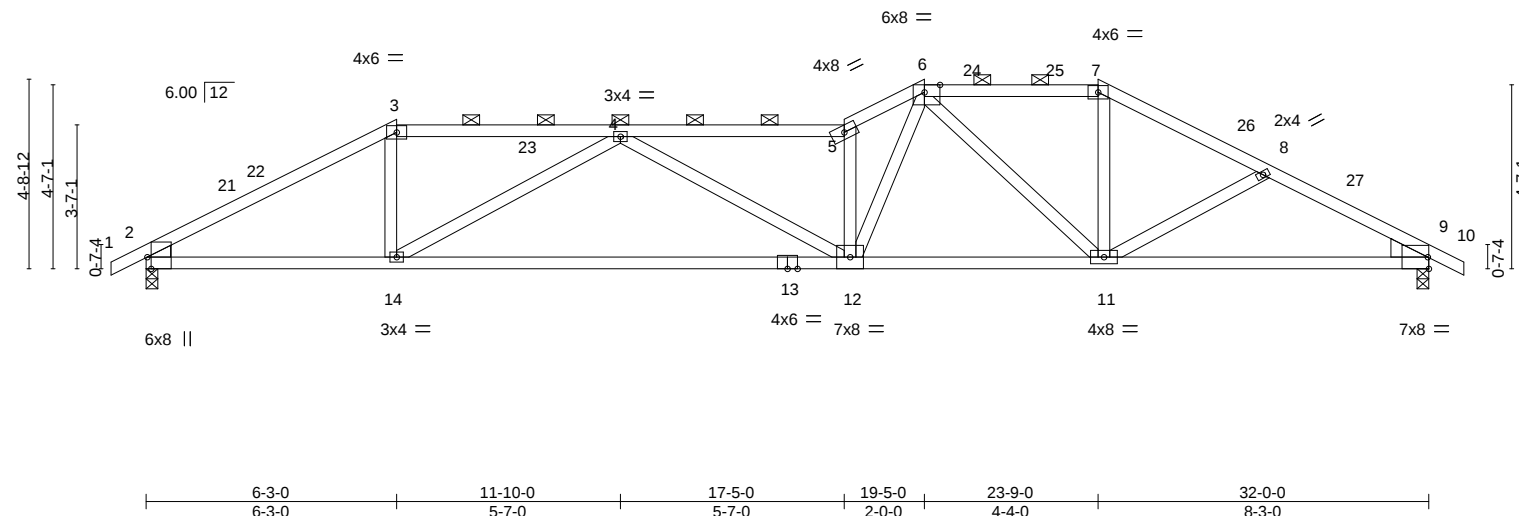


Plate Offsets (X,Y)--	[2:0-3-8,Edge], [6:0-4-10,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.60	Vert(LL) -0.44	12-14	>866	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.86	Vert(CT) -0.99	12-14	>388	180		
BCLL 0.0	Rep Stress Incr YES		WB 0.97	Horz(CT) 0.12	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 124 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, except
2-0-0 oc purlins (2-6-9 max.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=71(LC 12)
Max Uplift 2=-233(LC 12), 9=-133(LC 13)
Max Grav 2=1501(LC 1), 9=1501(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2577/362, 3-4=-2188/361, 4-5=-3469/504, 5-6=-3809/568, 6-7=-2030/369,
7-8=-2319/374, 8-9=-2511/397
BOT CHORD 2-14=-308/2219, 12-14=-476/3262, 11-12=-278/2547, 9-11=-295/2164
WEBS 3-14=-39/785, 5-12=-1880/312, 7-11=-59/654, 6-12=-310/2138, 6-11=-807/139,
4-12=0/403, 4-14=-1242/267

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 6-3-0, Exterior(2R) 6-3-0 to 9-5-6, Interior(1) 9-5-6 to 19-5-0, Exterior(2R) 19-5-0 to 22-7-6, Interior(1) 22-7-6 to 23-9-0, Exterior(2R) 23-9-0 to 26-11-6, Interior(1) 26-11-6 to 32-10-8 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 100 lb uplift at joint(s) except (jt=lb) 2=233, 9=133.
- 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.



September 16,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911457
2929201	A3	Roof Special	1	1		

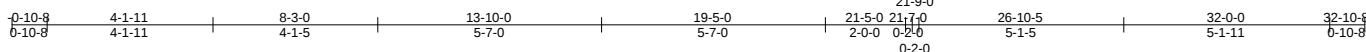
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:21 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-QWo_7vkcy9NYUTyBMxEVklOrQ3d_9LwQMd69e5ydQB4

Job Reference (optional)



Scale = 1:57.5

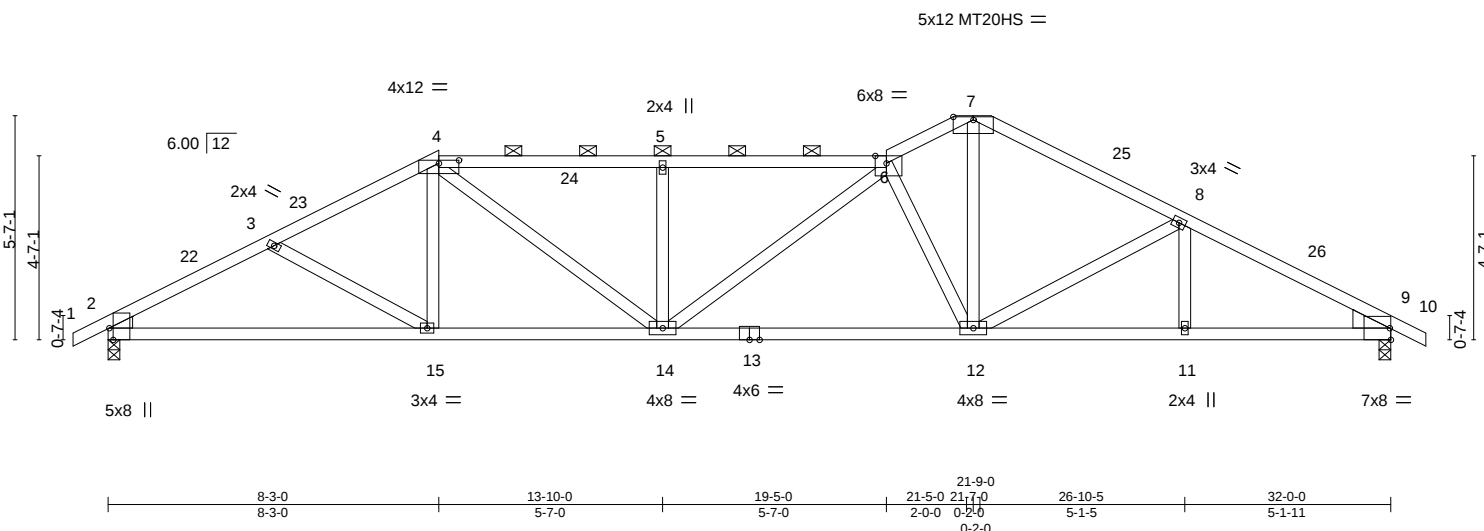


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [4:0-6-0,0-0-15], [6:0-3-6,Edge]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.19 14 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.40 12-14 >964 180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.11 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 131 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-1-4 max.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-88(LC 13)
Max Uplift 2=-243(LC 12), 9=-155(LC 13)
Max Grav 2=1501(LC 1), 9=1501(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2511/427, 3-4=-2324/390, 4-5=-2692/453, 5-6=-2692/453, 6-7=-2142/345,
7-8=-2195/323, 8-9=-2512/330
BOT CHORD 2-15=-397/2162, 14-15=-307/2054, 12-14=-319/2528, 11-12=-234/2166, 9-11=-234/2166
WEBS 4-15=0/258, 4-14=-131/806, 5-14=-483/161, 6-12=-1385/300, 8-12=-379/156,
6-14=-77/335, 7-12=-218/1539

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 8-3-0, Exterior(2R) 8-3-0 to 11-5-6, Interior(1) 11-5-6 to 21-7-0, Exterior(2R) 21-7-0 to 24-9-6, Interior(1) 24-9-6 to 32-10-8 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=243, 9=155.
 - 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.



September 16, 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 #152/MO
2929201	A4	Hip	1	1	147911458

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:23 2021 Page 1

ID:esWXNIBXPC8jUxmZ07IVY6ydf_Q-MvwIYblsUeGjn6ZUMGzpAUCdsJbdLvixbGj_ydQB2

Job Reference (optional)

0-10-8 5-1-11 10-3-0 16-0-0 21-9-0 26-10-5 32-0-0
0-10-8 5-1-11 5-1-5 5-9-0 5-9-0 5-1-5 5-1-11

Scale = 1:56.4

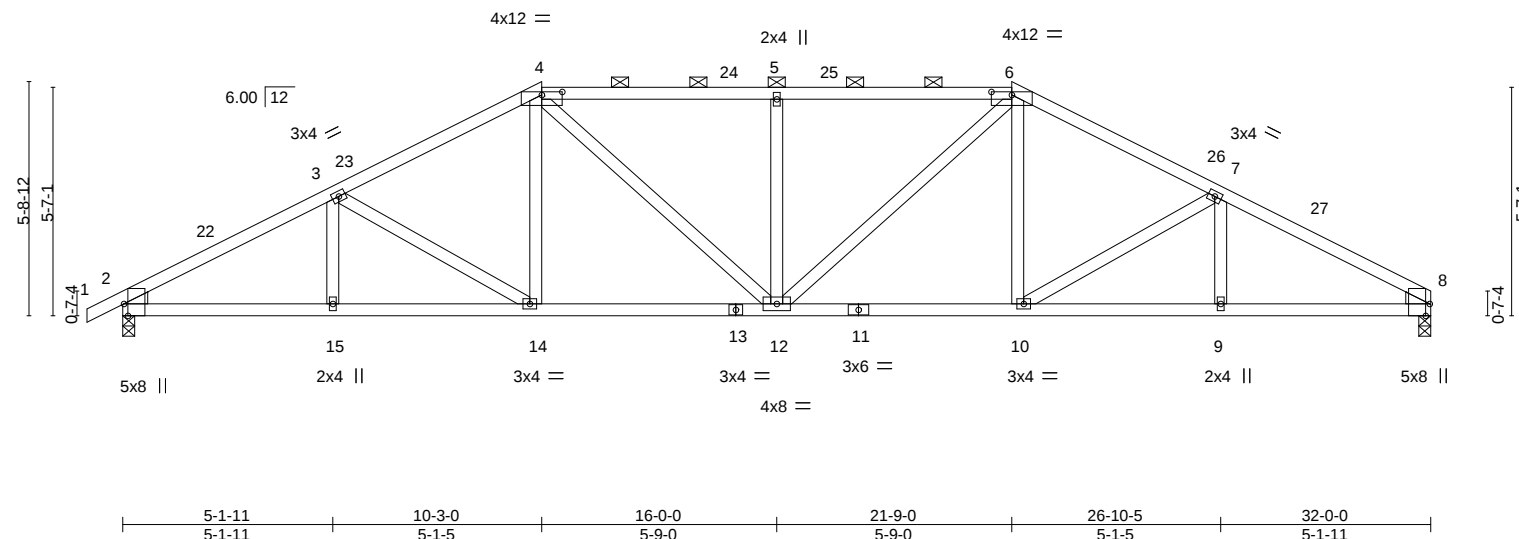


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [4:0-6-0,0-0-15], [6:0-6-0,0-0-15], [8:0-3-8,Edge]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2018/TPI2014
	CSI.	
	TC	0.48
	BC	0.88
	WB	0.24
	Matrix-AS	
	DEFL.	
	in (loc)	l/defl L/d
	Vert(LL)	-0.15 12 >999 240
	Vert(CT)	-0.28 10-12 >999 180
	Horz(CT)	0.11 8 n/a n/a
	PLATES	GRIP
	MT20	197/144
	Weight: 131 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 (3-6-15 max.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=93(LC 12)
Max Uplift 2=-207(LC 12), 8=-190(LC 13)
Max Grav 2=1502(LC 1), 8=1439(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2511/335, 3-4=-2202/312, 4-5=-2221/343, 5-6=-2221/343, 6-7=-2205/315,
7-8=-2519/338
BOT CHORD 2-15=-317/2164, 14-15=-317/2164, 12-14=-202/1909, 10-12=-152/1910, 9-10=-240/2173,
8-9=-240/2173
WEBS 3-14=-305/132, 4-14=-21/329, 4-12=-118/553, 5-12=-473/164, 6-12=-118/552,
6-10=-22/330, 7-10=-313/134

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 10-3-0, Exterior(2R) 10-3-0 to 14-9-5, Interior(1) 14-9-5 to 21-9-0, Exterior(2R) 21-9-0 to 26-3-5, Interior(1) 26-3-5 to 32-0-0 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
 - 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=207, 8=190.
 - 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.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 16,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	A5	Hip	1	1	I47911459

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:25 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-IH2VzHn60Ou_y4GybnIRubZYwg065D8?HF4MnsydQB0

Job Reference (optional)

0-10-8 6-1-11 12-3-0 19-9-0 25-10-5 32-0-0
0-10-8 6-1-11 6-1-5 7-6-0 6-1-5 6-1-11

Scale = 1:55.7

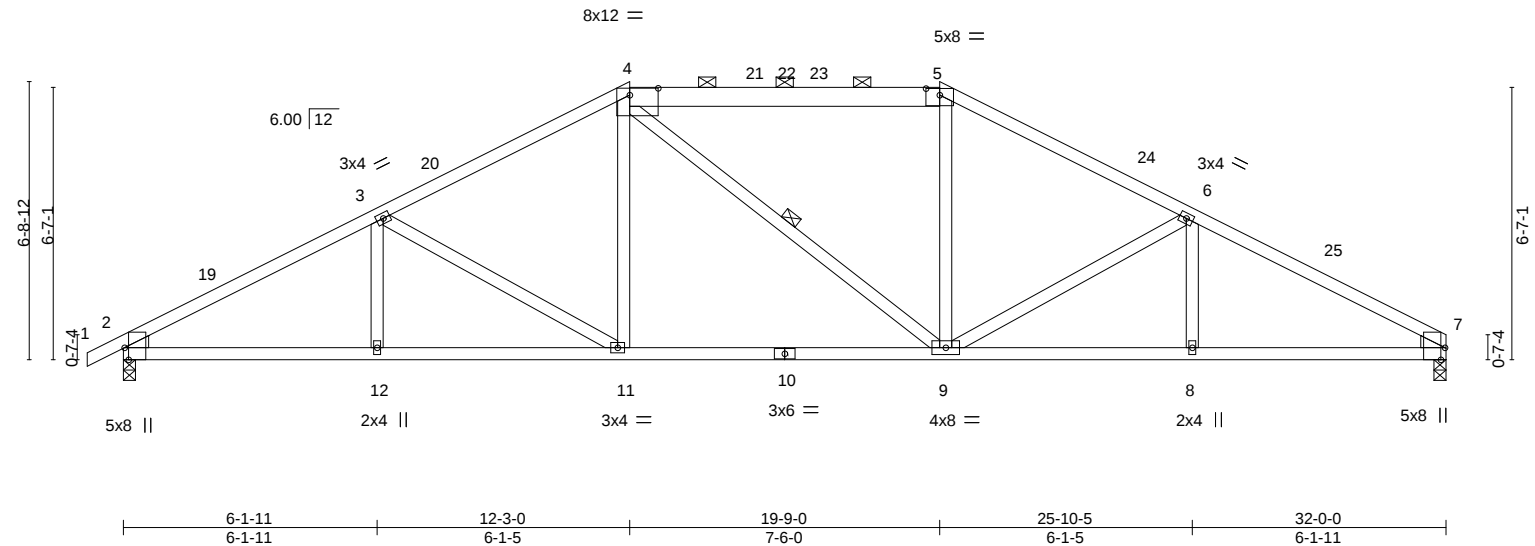


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [4:0-8-4,0-2-0], [5:0-4-0,0-1-15], [7:0-3-8,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.49		Vert(LL)	-0.14 11-12	>999	240	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.75		Vert(CT)	-0.28 9-11	>999	180		
BCLL 0.0		Rep Stress Incr	YES	WB 0.38		Horz(CT)	0.10 7	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS						Weight: 131 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 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 (4-11-7 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-9

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
Max Horz 2=110(LC 12)
Max Uplift 2=204(LC 12), 7=187(LC 13)
Max Grav 2=1502(LC 1), 7=1439(LC 1)

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

TOP CHORD 2-3=-2506/328, 3-4=-2055/309, 4-5=-1759/313, 5-6=-2057/309, 6-7=-2512/331
BOT CHORD 2-12=-318/2153, 11-12=-318/2153, 9-11=-164/1758, 8-9=-224/2160, 7-8=-224/2160
WEBS 3-11=-465/176, 4-11=-25/436, 5-9=-20/436, 6-9=-470/178

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 12-3-0, Exterior(2R) 12-3-0 to 16-9-5, Interior(1) 16-9-5 to 19-9-0, Exterior(2R) 19-9-0 to 24-3-5, Interior(1) 24-3-5 to 32-0-0 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.
- 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=204, 7=187.
- 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.



September 16, 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 #152/MO	147911460
2929201	A6	Hip	1	1	Job Reference (optional)	

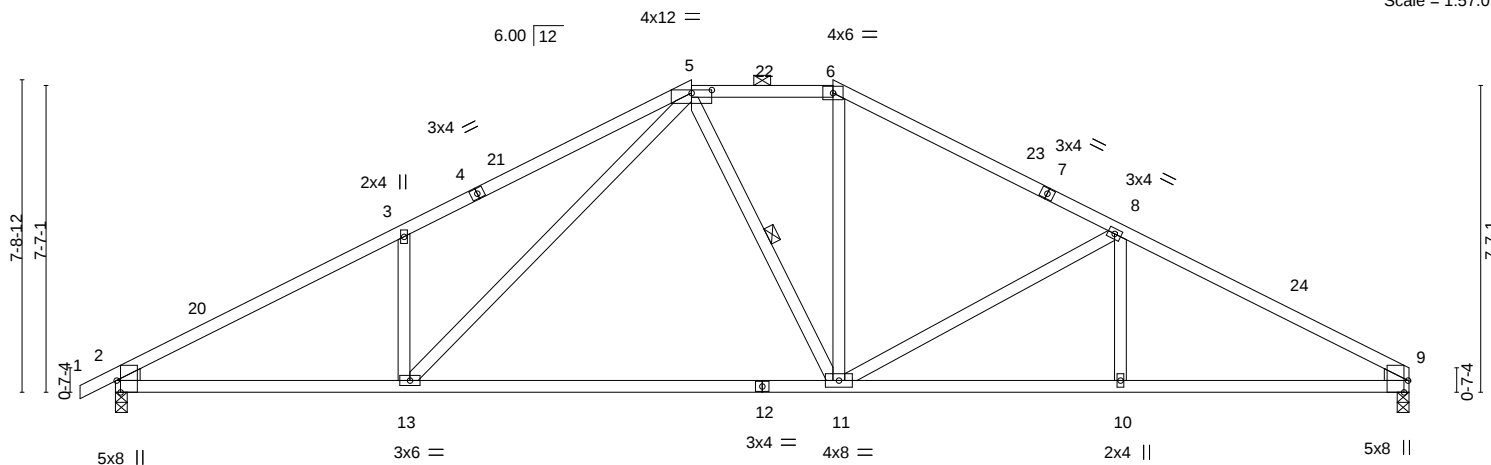
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:27 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-Fg9FOyoNY?8hCOPLjBKvz0ep4TgxZ2dIIZZTsydQB_

0-10-8 7-1-11 14-3-0 17-9-0 24-10-5 32-0-0
0-10-8 7-1-11 7-1-5 3-6-0 7-1-5 7-1-11

Scale = 1:57.0



	7-1-11	14-3-0	17-9-0	24-10-5	32-0-0
	7-1-11	7-1-5	3-6-0	7-1-5	7-1-11
Plate Offsets (X,Y)--	[2:0-3-8,Edge], [5:0-6-0,0-0-15], [9:0-3-8,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 0.77	Vert(LL)	-0.33 11-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.71 11-13	>537	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.10 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 125 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 (4-4-9 max.): 5-6.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	WEBS 1 Row at midpt 5-11
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=125(LC 12)
Max Uplift 2=-200(LC 12), 9=-183(LC 13)
Max Grav 2=1502(LC 1), 9=1439(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2513/307, 3-5=-2512/458, 5-6=-1591/299, 6-8=-1900/294, 8-9=-2489/323
BOT CHORD 2-13=-306/2151, 11-13=-132/1553, 10-11=-213/2134, 9-10=-213/2134
WEBS 3-13=-465/255, 5-11=-127/293, 6-11=-55/433, 8-11=-636/229, 5-13=-250/888

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 14-3-0, Exterior(2E) 14-3-0 to 17-9-0, Exterior(2R) 17-9-0 to 22-3-5, Interior(1) 22-3-5 to 32-0-0 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.
- 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=200, 9=183.
- 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.



September 16, 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 2929201	Truss A7	Truss Type Common	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO 147911461
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:29 2021 Page 1
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0-10-8 8-0-3 16-0-0 23-11-13 32-0-0
0-10-8 8-0-3 7-11-13 7-11-13 8-0-3
4x8 = Scale = 1:55.3

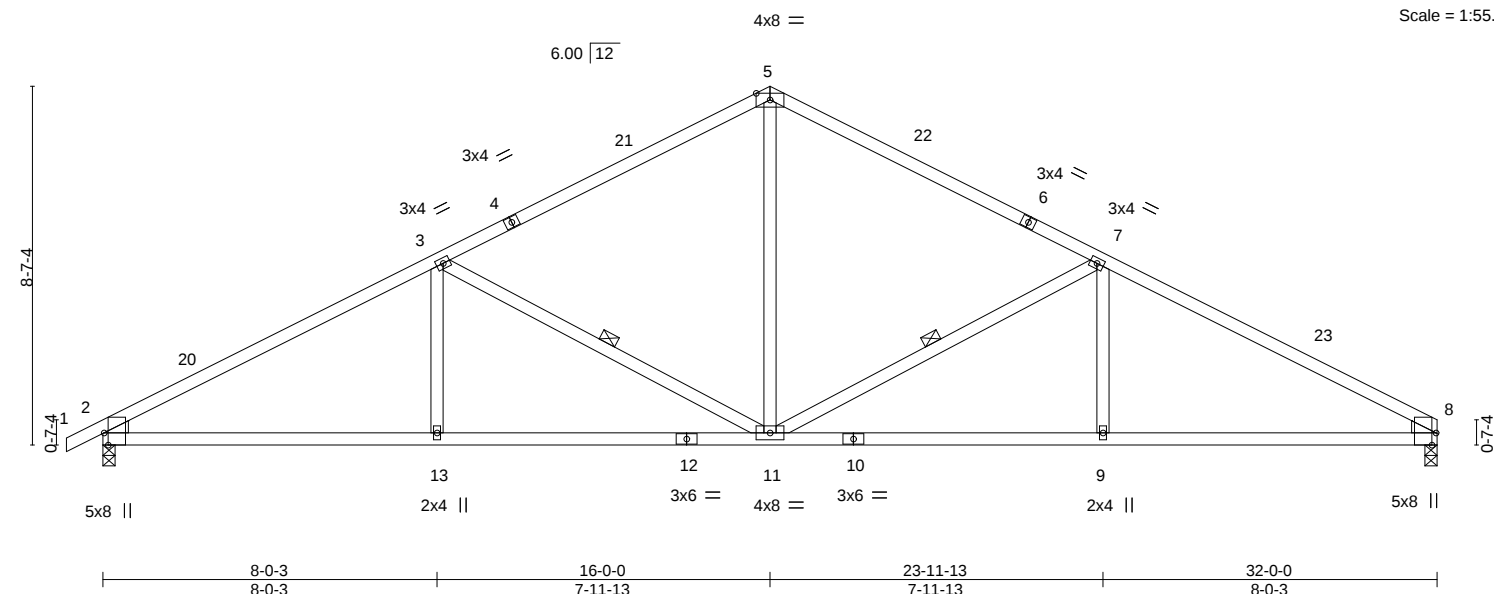


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [8:0-3-8,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	in (loc)	l/defl	L/d		MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(LL)	-0.14 11-13	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Vert(CT)	-0.29 11-13	>999	180		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	0.10 8	n/a	n/a		
										Weight: 118 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-11, 3-11

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
Max Horz 2=140(LC 12)
Max Uplift 2=-197(LC 12), 8=-180(LC 13)
Max Grav 2=1502(LC 1), 8=1439(LC 1)

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

TOP CHORD 2-3=-2464/307, 3-5=-1733/289, 5-7=-1733/291, 7-8=-2469/311
BOT CHORD 2-13=-311/2103, 11-13=-311/2103, 9-11=-193/2107, 8-9=-193/2107
WEBS 5-11=-80/896, 7-11=-809/258, 7-9=0/303, 3-11=-804/256, 3-13=0/302

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 16-0-0, Exterior(2R) 16-0-0 to 19-2-6, Interior(1) 19-2-6 to 32-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=197, 8=180.
- 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.



September 16, 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 #152/MO
2929201	A8	Roof Special Girder	1	1	147911462
Job Reference (optional)					

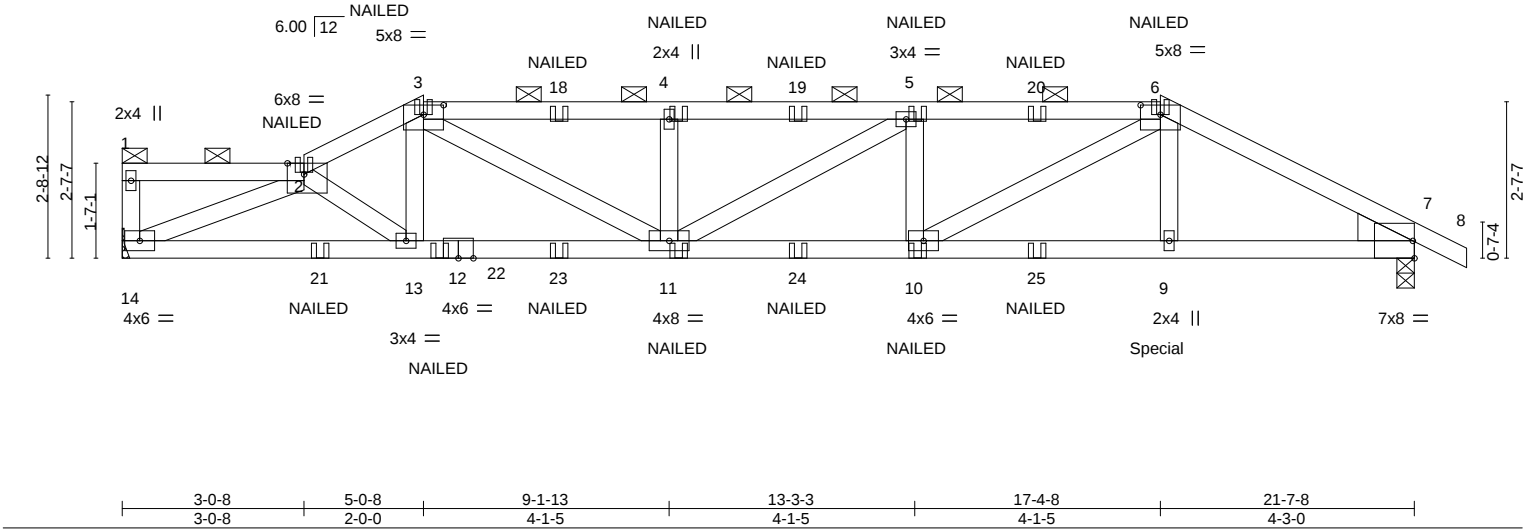
Builders FirstSource (Valley Center),
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:32 2021 Page 1

3-0-8
5-0-8
9-1-13
13-3-3
17-4-8
21-7-8
22-6-0

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

Scale = 1:38.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.18 10-11 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.33 10-11 >775 180				
BCLL	0.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.09 7 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							
								Weight: 85 lb		FT = 20%	

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-1 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-12 max.): 1-2, 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-10-10 oc bracing: 10-11.

REACTIONS. (size) 14=Mechanical, 7=0-3-8
Max Horz 14=-63(LC 6)
Max Uplift 14=-271(LC 4), 7=-286(LC 9)
Max Grav 14=1470(LC 1), 7=1578(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2857/527, 3-4=-3498/695, 4-5=-3496/694, 5-6=-3492/712, 6-7=-2687/536
BOT CHORD 13-14=-487/2747, 11-13=-448/2517, 10-11=-659/3490, 9-10=-435/2326, 7-9=-435/2341
WEBS 2-13=-252/80, 3-13=-24/435, 3-11=-254/1166, 4-11=-441/181, 5-10=-487/186, 6-10=-281/1392, 6-9=-19/254, 2-14=-2923/550

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 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) 14=271, 7=286.
 - 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) 271 lb down and 97 lb up at 17-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-6=-70, 6-8=-70, 14-15=-30



September 16,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911462
2929201	A8	Roof Special Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:32 2021 Page 2
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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-55(F) 6=-55(F) 11=-37(F) 4=-55(F) 5=-55(F) 10=-37(F) 9=-271(F) 18=-55(F) 19=-55(F) 20=-55(F) 21=-175(F) 22=-37(F) 23=-37(F) 24=-37(F) 25=-37(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911463
2929201	B1	Half Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:37 2021 Page 1
ID:esWXNibXPCBjUxmZ07IVY6ydf_Q-ym1UNWeB4OHPwAGIIWFN73VaVCbvXjm27_?BAydQAq

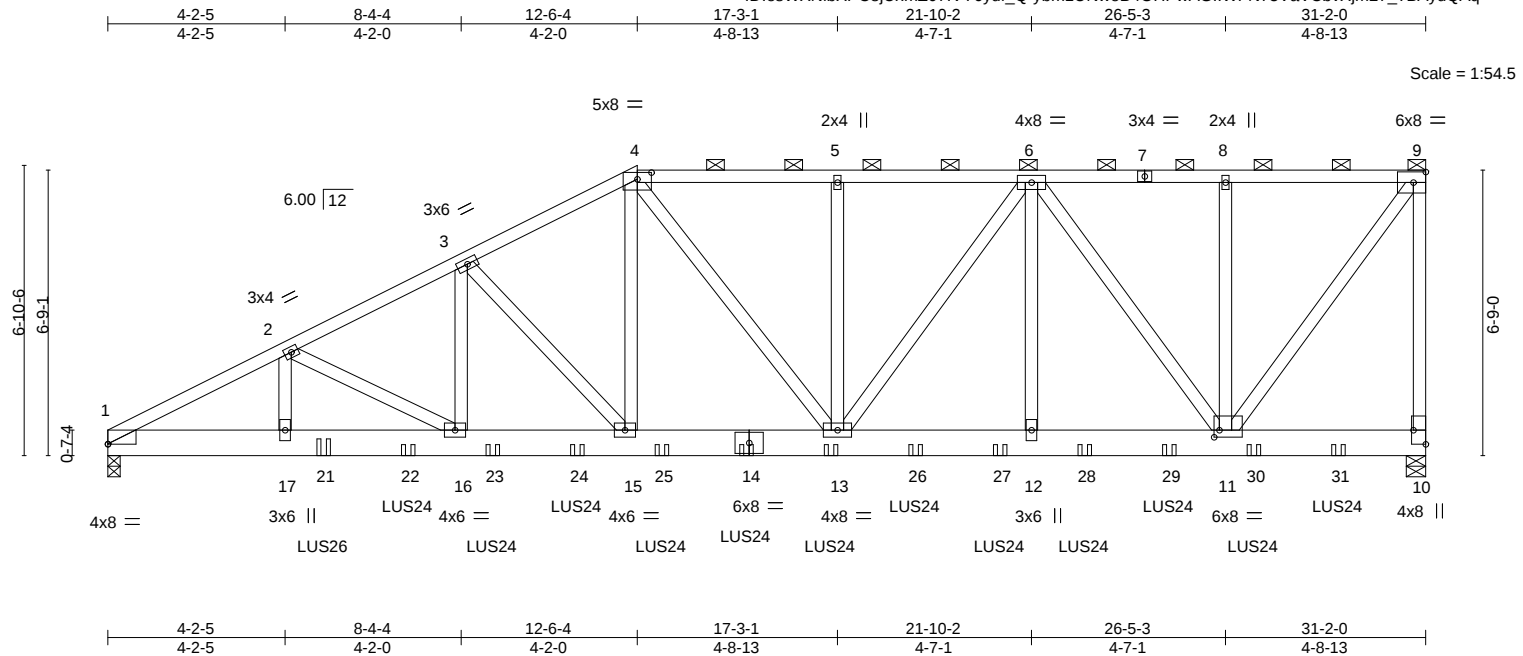


Plate Offsets (X,Y)-- [1:0-0-0,0-0-1], [4:0-4-0,0-1-15], [10:Edge,0-3-8], [11:0-1-8,0-2-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.16 13-15 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.29 13-15 >999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.05 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					
Weight: 436 lb									FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-9 max.): 4-9.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS.	(size) 1=0-3-8, 10=0-5-8
	Max Horz 1=233(LC 28)
	Max Uplift 1=-858(LC 8), 10=-896(LC 5)
	Max Grav 1=4919(LC 1), 10=5342(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 1-2=-9559/1687, 2-3=-8944/1519, 3-4=-7487/1238, 4-5=-6857/1130, 5-6=-6855/1129, 6-8=-3511/608, 8-9=-3511/608, 9-10=-4945/844	
BOT CHORD 1-17=-1623/8482, 16-17=-1623/8482, 15-16=-1477/7963, 13-15=-1208/6612, 12-13=-1029/5787, 11-12=-1029/5787	
WEBS 2-17=-122/374, 2-16=-589/247, 3-16=-388/1798, 3-15=-1893/494, 4-15=-532/2678, 4-13=-97/564, 5-13=-393/132, 6-13=-330/1815, 6-12=-165/1337, 6-11=-3867/668, 8-11=-336/138, 9-11=-990/5934	

- 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 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=858, 10=896.
 - 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 LUS26 (4-10d Girder, 4-10d Truss) or equivalent at 5-1-4 from the left end to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 7-1-4 from the left end to 29-1-4 to connect truss(es) to front face of bottom chord.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911463
2929201	B1	Half Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Wed Sep 15 10:03:37 2021
Page 2
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LOAD CASE(S)
Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-9=-70, 10-18=-20

Concentrated Loads (lb)

Vert: 14=-540(F) 13=-540(F) 21=-1005(F) 22=-535(F) 23=-535(F) 24=-535(F) 25=-540(F) 26=-540(F) 27=-540(F) 28=-540(F) 29=-540(F) 30=-540(F) 31=-540(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	B2	Hip	1	1	147911464

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:44 2021 Page 1
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7-5-12
8-0-0
11-1-5
14-8-0
15-8-8
23-0-0
26-11-4
31-2-0
7-5-12
0-6-4
3-1-5
3-6-11
1-0-8
7-3-8
3-11-4
4-2-12

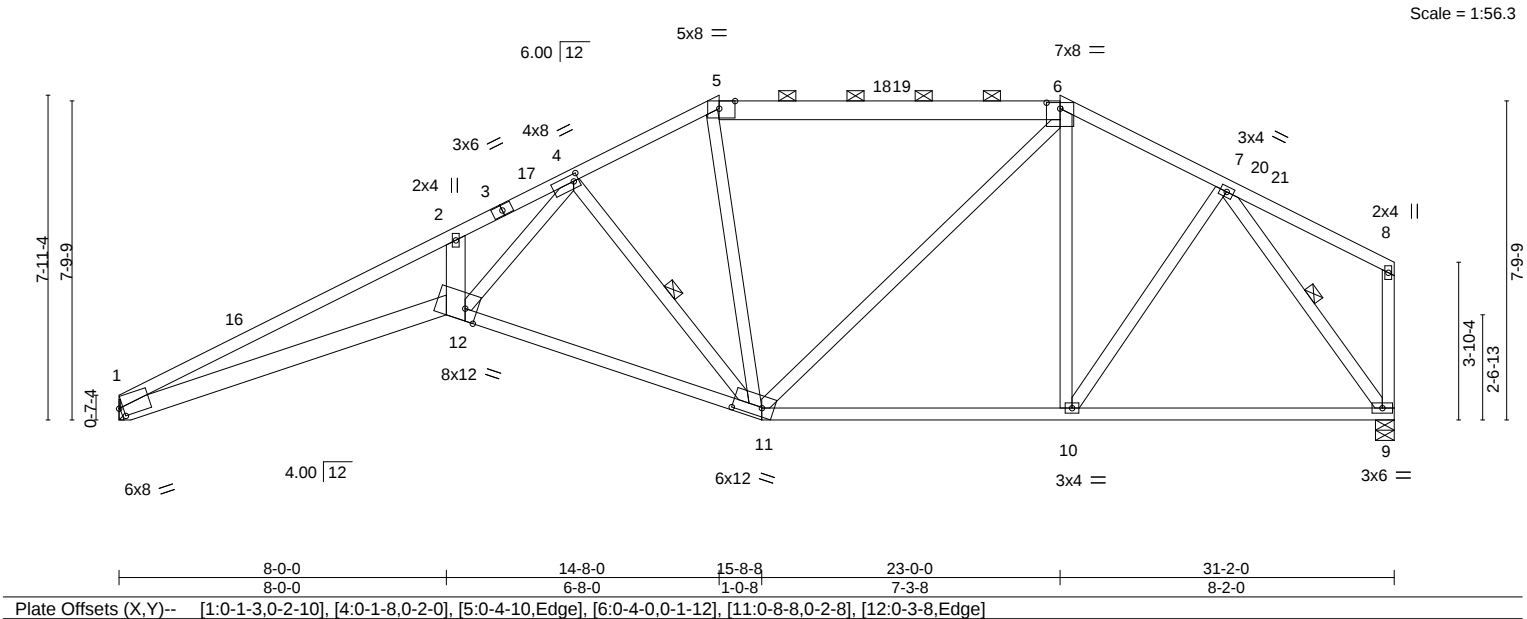


Plate Offsets (X,Y)--		[1:0-1-3,0-2-10], [4:0-1-8,0-2-0], [5:0-4-10,Edge], [6:0-4-0,0-1-12], [11:0-8-8,0-2-8], [12:0-3-8,Edge]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.82	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.37 11-12 >996 240
BCLL 0.0	Lumber DOL 1.15	WB 0.80	Vert(CT) -0.73 11-12 >511 180
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.35 9 n/a n/a
	Code IRC2018/TPI2014		
		PLATES	GRIP
		MT20	197/144
		Weight: 149 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-11-13 max.): 5-6.
5-6: 2x6 SPF No.2, 1-3: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	WEBS 1 Row at midpt 7-9, 4-11
1-12: 2x6 SPF No.2	
WEBS 2x4 SPF No.2 *Except*	
2-12: 2x6 SPF No.2	

REACTIONS.	(size) 1=Mechanical, 9=0-5-8
	Max Horz 1=177(LC 11)
	Max Uplift 1=-200(LC 12), 9=-155(LC 13)
	Max Grav 1=1396(LC 1), 9=1396(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-5076/782, 2-4=-4972/886, 4-5=-1593/286, 5-6=-1435/284, 6-7=-1304/249
BOT CHORD	1-12=-758/4604, 11-12=-395/2421, 10-11=-157/1134, 9-10=-152/866
WEBS	6-10=-267/118, 7-10=-56/519, 7-9=-1432/214, 2-12=-309/198, 4-12=-606/3255, 5-11=0/321, 6-11=-127/510, 4-11=-1421/290

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-6, Interior(1) 3-1-6 to 14-8-0, Exterior(2R) 14-8-0 to 19-0-14, Interior(1) 19-0-14 to 23-0-0, Exterior(2R) 23-0-0 to 27-4-14, Interior(1) 27-4-14 to 31-0-4 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.
 - 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) 1=200, 9=155.
 - 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.



September 16,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911465
2929201	B3	Hip	1	1	Job Reference (optional)	

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

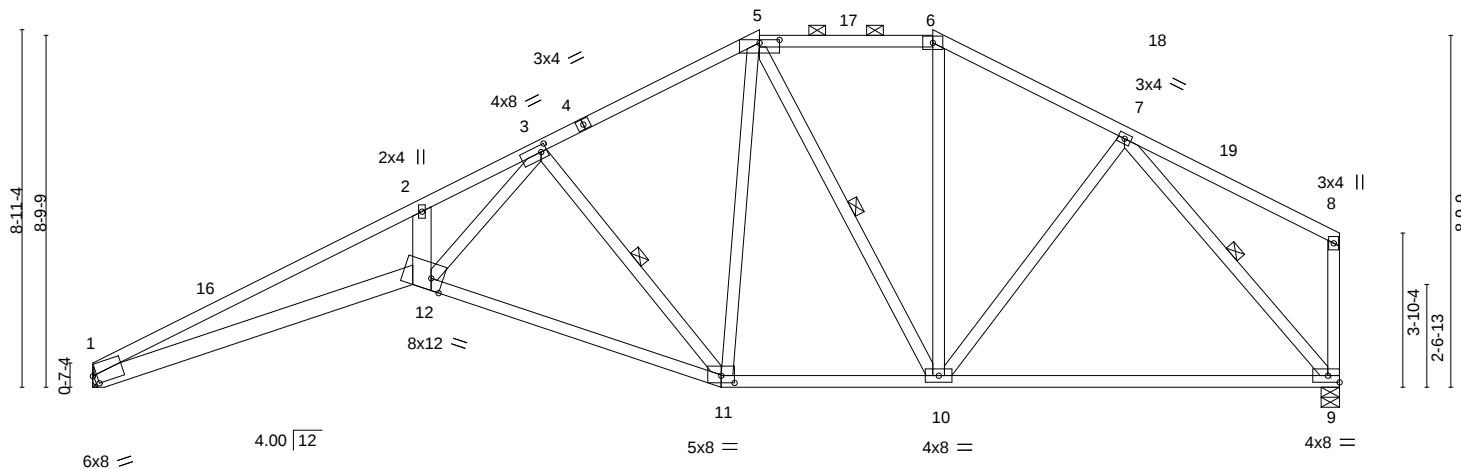
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:46 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-BKpRNS1H4rX?_JM_KhAMF1x3Q877Wcv560fz09ydQAh

5-9-0	8-0-0	11-2-8	16-8-0	21-0-0	25-11-4	31-2-0
5-9-0	2-3-0	3-2-8	5-5-8	4-4-0	4-11-4	5-2-12

6.00 | 12 4x12 =

Scale = 1:57.6



8-0-0	15-8-8	21-0-0	25-11-4	31-2-0
8-0-0	7-8-8	5-3-8	4-11-4	5-2-12

Plate Offsets (X,Y)-- [1:0-1-3,0-2-10], [3:0-1-12,0-2-0], [5:0-6-0,0-0-15], [11:0-4-0,0-2-3], [12:0-3-8,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 0.82	Vert(LL)	-0.37 11-12	>993	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.74 11-12	>500	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.35 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 149 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
1-12: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-12: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=Mechanical, 9=0-5-8
Max Horz 1=189(LC 11)
Max Uplift 1=195(LC 12), 9=153(LC 13)
Max Grav 1=1396(LC 1), 9=1396(LC 1)

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

TOP CHORD 1-2=-5071/773, 2-3=-4947/868, 3-5=-1581/295, 5-6=-1126/266, 6-7=-1337/267
BOT CHORD 1-12=-765/4599, 11-12=-399/2413, 10-11=-182/1276, 9-10=-169/981
WEBS 3-11=-1537/346, 5-11=-122/601, 5-10=-423/138, 6-10=-56/286, 7-10=-19/353,
2-12=-270/177, 3-12=-590/3225, 7-9=-1438/225

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-6, Interior(1) 3-1-6 to 16-8-0, Exterior(2E) 16-8-0 to 21-0-0, Exterior(2R) 21-0-0 to 25-4-14, Interior(1) 25-4-14 to 31-0-4 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.
- 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) 1=195, 9=153.
- 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	B4	Hip	1	1	147911466

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:48 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-7jxBo83YbSnjDdWNS6DqKS0PTxpY_ULoak8441ydQAf

Job Reference (optional)

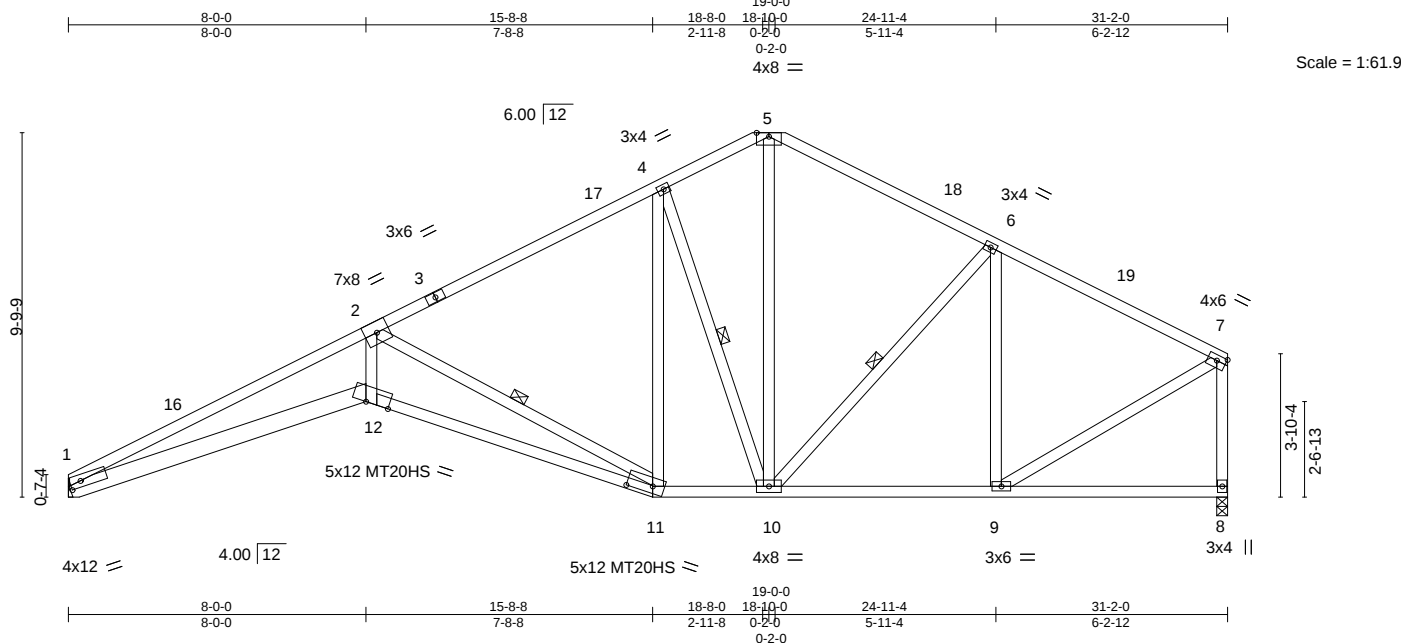


Plate Offsets (X, Y)--		[1:0-3-7,0-2-0], [7:Edge,0-1-12], [11:0-8-4,0-2-4], [12:0-7-7,0-0-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.79
TCDL 10.0	Lumber DOL	1.15	BC 1.00
BCLL 0.0	Rep Stress Incr	YES	WB 0.92
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.49 11-12	>762	240
Vert(CT)	-0.93 11-12	>399	180
Horz(CT)	0.46 8	n/a	n/a
PLATES	GRIP		
MT20	197/144		
MT20HS	148/108		
Weight: 152 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
1-12: 2x6 SPF 2100F 1.8E, 11-12: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2 *Except*
2-11: 2x4 SPF 1650F 1.5E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-11, 4-10, 6-10

REACTIONS.

(size) 1=Mechanical, 8=0-3-8
Max Horz 1=201(LC 11)
Max Uplift 1=190(LC 12), 8=148(LC 13)
Max Grav 1=1396(LC 1), 8=1396(LC 1)

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

TOP CHORD 1-2=-5313/835, 2-4=-1648/266, 4-5=-1273/283, 5-6=-1313/260, 6-7=-1285/204,
7-8=-1338/191
BOT CHORD 1-12=-846/4846, 11-12=-845/4846, 10-11=-181/1365, 9-10=-151/1076
WEBS 2-12=-441/3011, 2-11=-3711/750, 4-11=-71/489, 4-10=-843/247, 6-9=-485/129,
7-9=-132/1206, 5-10=-188/813

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-6, Interior(1) 3-1-6 to 18-10-0, Exterior(2R) 18-10-0 to 23-2-14, Interior(1) 23-2-14 to 31-0-4 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
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) The Fabrication Tolerance at joint 12 = 4%, joint 11 = 0%
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=190, 8=148.
- 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	B5	Roof Special	2	1	I47911467

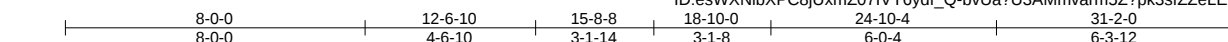
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:49 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-bvUa?U3AMmvarm5Z?pk3sfZZeLEdJy8Xo_uedTydQAE

Job Reference (optional)



Scale = 1:61.5

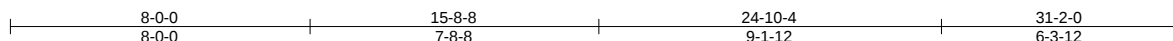
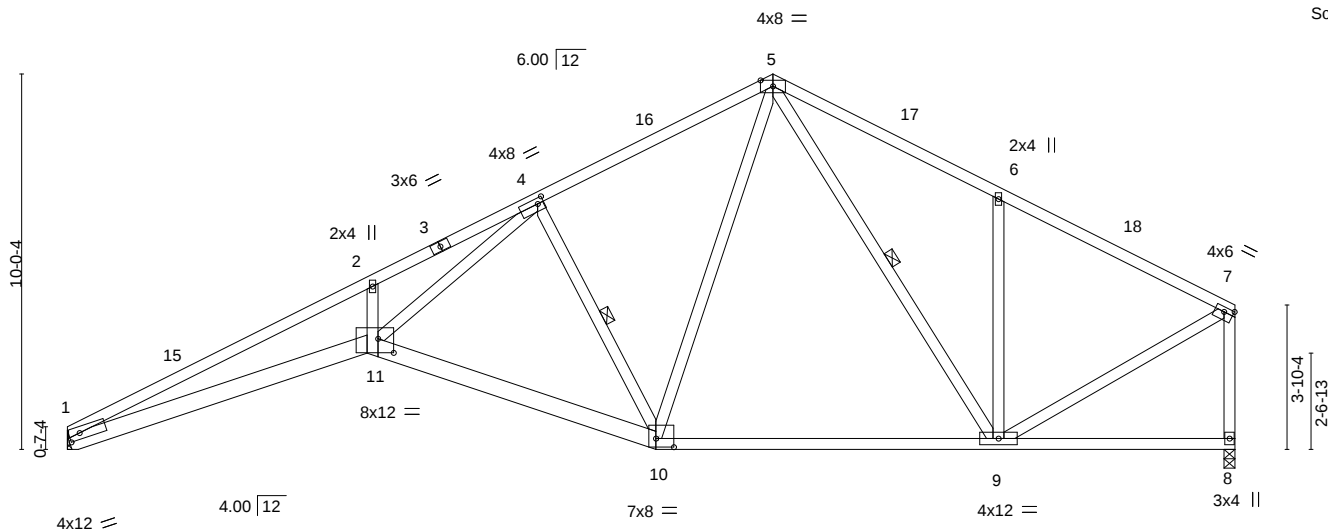


Plate Offsets (X,Y)-- [1:0-3-7,0-2-0], [4:0-2-0,0-1-12], [7:0-3-0,0-1-8], [10:0-5-12,0-2-12], [11:0-5-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	-0.42 10-11	>896	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.76 10-11	>491	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.89	Horz(CT)	0.38 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 147 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
1-11: 2x6 SPF 2100F 1.8E, 10-11: 2x6 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.
WEBS 1 Row at midpt 5-9, 4-10

REACTIONS.

(size) 1=Mechanical, 8=0-3-8
Max Horz 1=202(LC 11)
Max Uplift 1=-189(LC 12), 8=-148(LC 13)
Max Grav 1=1396(LC 1), 8=1396(LC 1)

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

TOP CHORD 1-2=-5294/821, 2-4=-5178/927, 4-5=-1586/312, 5-6=-1312/314, 6-7=-1296/206,
7-8=-1345/195
BOT CHORD 1-11=-833/4824, 10-11=-318/2020, 9-10=-141/1073
WEBS 2-11=-310/184, 6-9=-484/235, 7-9=-131/1210, 4-11=-690/3619, 4-10=-1347/353,
5-10=-169/835

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-6, Interior(1) 3-1-6 to 18-10-0, Exterior(2R) 18-10-0 to 21-11-6, Interior(1) 21-11-6 to 31-0-4 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
- The Fabrication Tolerance at joint 11 = 12%
- 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) 1=189, 8=148.
- 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

[illegible]

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except*	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
	1-3: 2x4 SPF 1650F 1.5E	BOT CHORD	Rigid ceiling directly applied. Except:
BOT CHORD	2x4 SPF No.2 *Except*		10-0-0 oc bracing: 8-9
	1-18: 2x6 SPF 2100F 1.8E, 17-18: 2x4 SPF 1650F 1.5E	WEBS	1 Row at midpt 2-17, 4-16
WEBS	2x4 SPF No.2 *Except*		
	2-17: 2x4 SPF 1650F 1.5E, 7-8: 2x6 SPF No.2		
 REACTIONS.	(size) 1=0-3-8, 8=0-5-8 Max Horz 1=185(LC 9) Max Uplift 1=-189(LC 12), 8=-140(LC 13) Max Grav 1=1393(LC 1), 8=1408(LC 1)		
 FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	1-2=-5296/857, 2-4=-1641/277, 4-5=-1303/302, 5-6=-1500/331, 6-7=-1475/216, 7-8=-1329/201		
BOT CHORD	1-18=-888/4831, 17-18=-887/4831, 16-17=-175/1358		
WEBS	2-18=-466/3002, 2-17=-3702/775, 4-17=-72/486, 14-15=0/256, 6-14=-474/232, 5-16=-198/768, 4-16=-873/259, 14-16=-121/1041, 5-14=-173/402, 7-14=-138/1266		

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

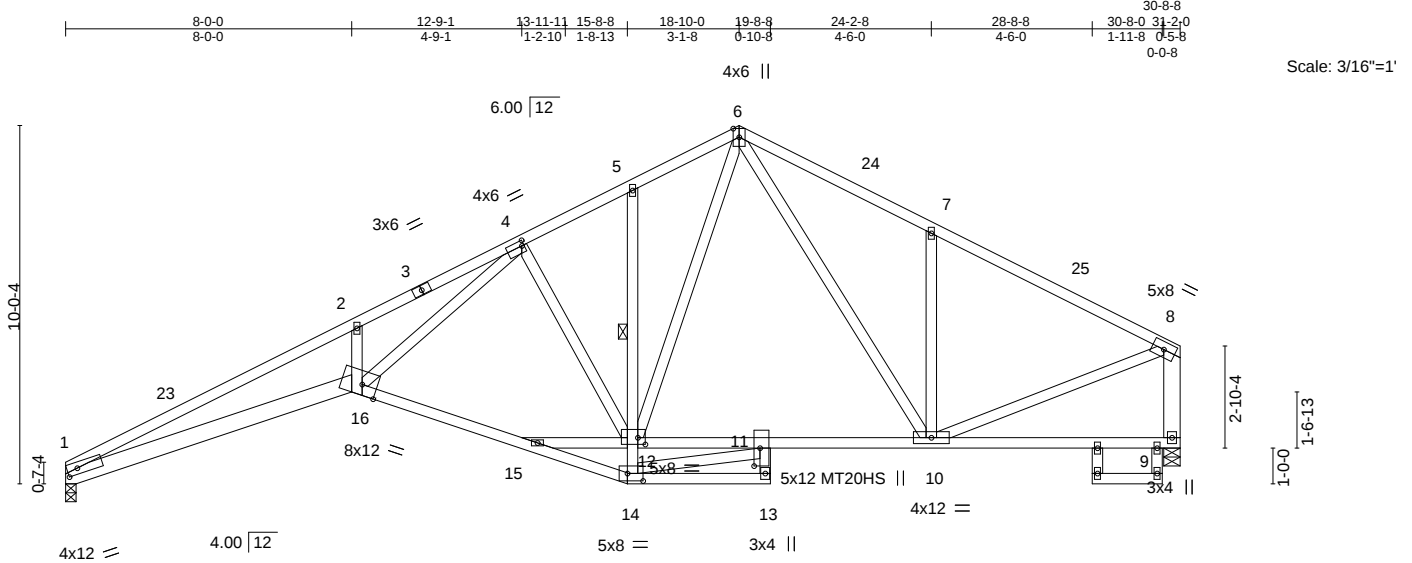


Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911469
2929201	B7	Roof Special	3	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:54 2021 Page 1

ID:esWXNIBXPC8jUxmZ07IVY6ydf_Q-ytlT3B7JBIYsYzXoMJEZjGR6Ms3OEHHyGbPIhydQAZ



	8-0-0		13-11-11		18-10-0		19-8-8		24-2-8		28-8-8		30-8-0 31-2-0	
	8-0-0		5-11-11		4-10-5		0-10-8		4-6-0		4-6-0		1-11-8 0-6-0	
Plate Offsets (X,Y)--	[1:0-3-7,0-2-0], [4:0-0-12,0-1-12], [11:0-6-0,0-2-0], [12:0-2-8,0-2-4], [14:0-5-4,0-2-8], [16:0-5-0,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 0.72		Vert(LL) -0.43 10-11		>860		240		MT20		197/144	
TCDL 10.0	Lumber DOL 1.15		BC 0.99		Vert(CT) -0.79 10-11		>473		180		MT20HS		148/108	
BCLL 0.0	Rep Stress Incr YES		WB 0.83		Horz(CT) 0.41 9		n/a		n/a					
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS								Weight: 164 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
1-16: 2x6 SPF 2100F 1.8E, 14-16,9-12: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2 *Except*
8-9: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14

REACTIONS.

(size) 1=0-3-8, 9=0-5-8
Max Horz 1=185(LC 9)
Max Uplift 1=189(LC 12), 9=147(LC 13)
Max Grav 1=1392(LC 1), 9=1392(LC 1)

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

TOP CHORD 1-2=-5031/812, 2-4=-4959/930, 4-5=-1577/274, 5-6=-1574/319, 6-7=-1552/331,
7-8=-1555/224, 8-9=-1363/210
BOT CHORD 1-16=-842/4568, 15-16=-289/1990, 14-15=-234/821, 13-14=-58/407, 11-12=0/606,
10-11=-120/1125
WEBS 2-16=-378/209, 12-14=-415/181, 8-10=-142/1323, 7-10=-468/229, 6-10=-175/412,
6-12=-189/846, 12-15=-66/1202, 4-12=-1142/293, 4-16=-698/3292, 11-14=-190/312

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-6, Interior(1) 3-1-6 to 18-10-0, Exterior(2R) 18-10-0 to 21-11-6, Interior(1) 21-11-6 to 30-11-4 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
- All plates are 2x4 MT20 unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- The Fabrication Tolerance at joint 16 = 8%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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 100 lb uplift at joint(s) except (jt=lb) 1=189, 9=147.
- 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.



September 16, 2021

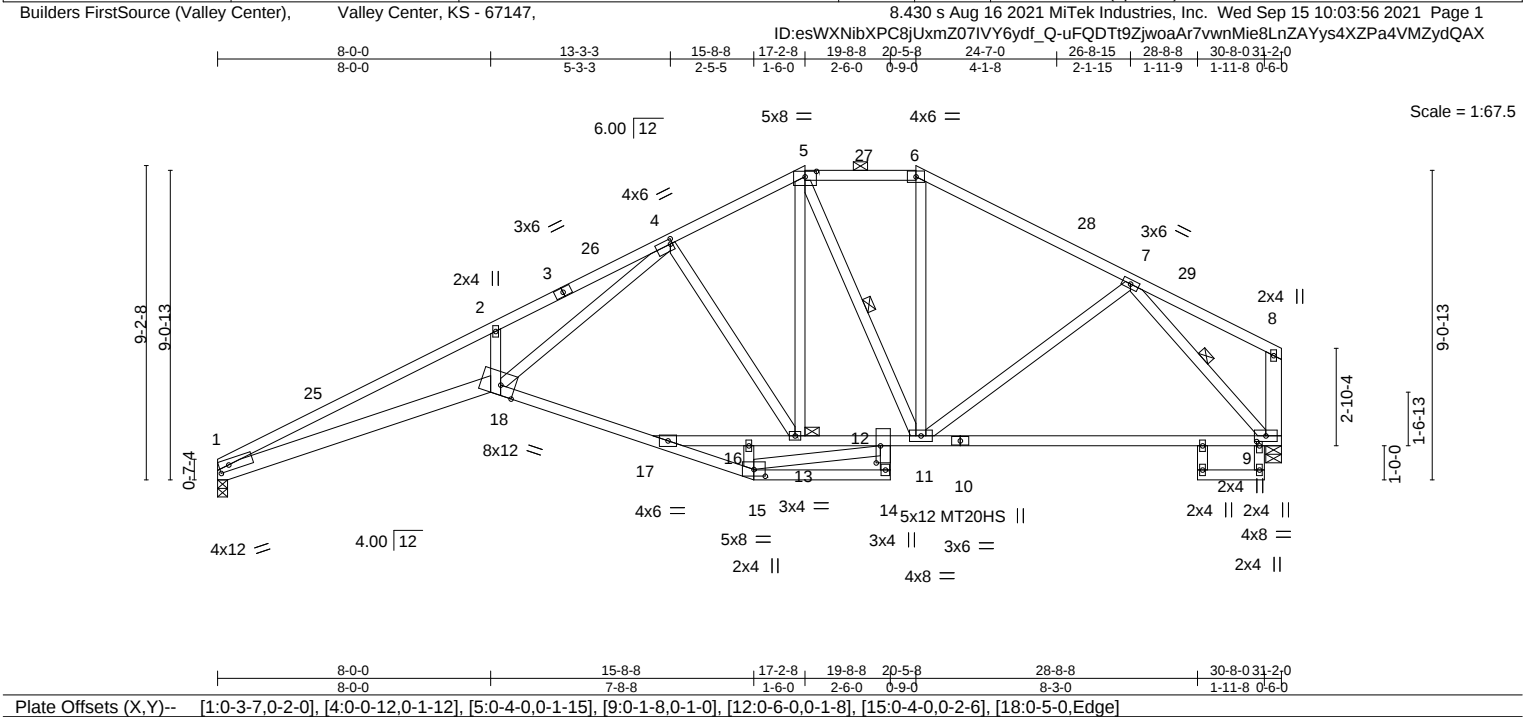
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 #152/MO	147911470
2929201	B8	Hip	1	1	Job Reference (optional)	



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 0.72	Vert(LL)	-0.43	18	>865	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.75	18	>494	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.42	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 163 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-3: 2x4 SPF 1650F 1.5E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-0-0 max.): 5-6.
BOT CHORD	2x4 SPF No.2 *Except* 1-18: 2x6 SPF 2100F 1.8E, 15-18,10-17: 2x4 SPF 1650F 1.5E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2 *Except* 8-9: 2x6 SPF No.2	WEBS	1 Row at midpt 5-11, 7-9
		JOINTS	1 Brace at Jt(s): 13

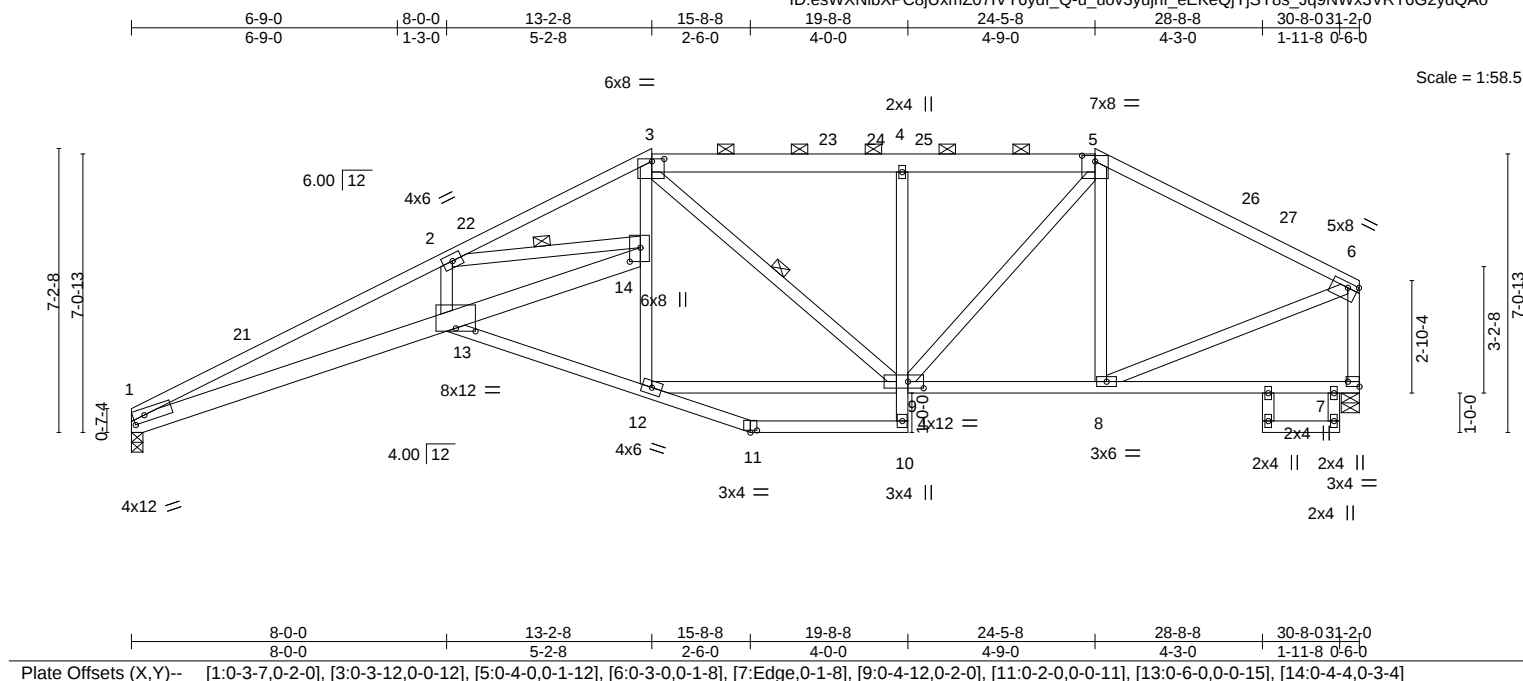
REACTIONS.	(size) 1=0-3-8, 9=0-5-8 Max Horz 1=175(LC 9) Max Uplift 1=193(LC 12), 9=151(LC 13) Max Grav 1=1392(LC 1), 9=1392(LC 1)	
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-5043/800, 2-4=-4976/924, 4-5=-1422/271, 5-6=-1270/268, 6-7=-1520/259	
BOT CHORD	1-18=-815/4580, 17-18=-271/1890, 15-17=-221/1078, 14-15=-154/496, 16-17=-66/842, 13-16=-85/914, 12-13=0/339, 11-12=-135/1212, 9-11=-176/1082	
WEBS	2-18=-385/216, 6-11=-50/326, 5-13=-74/302, 4-13=-1128/298, 4-18=-681/3374, 15-16=-497/137, 12-15=-25/430, 7-11=-14/347, 7-9=-1534/257	

- 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-6, Interior(1) 3-1-6 to 17-2-8, Exterior(2E) 17-2-8 to 20-5-8, Exterior(2R) 20-5-8 to 24-10-6, Interior(1) 24-10-6 to 30-11-4 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - The Fabrication Tolerance at joint 18 = 12%, joint 12 = 16%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 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 100 lb uplift at joint(s) except (jt=lb) 1=193, 9=151.
 - 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.



September 16,2021





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 0.77	Vert(LL) -0.35 13-14	>999	240	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.63	Vert(CT) -0.62 13-14	>600	180		
BCLL 0.0		Rep Stress Incr YES	WB 0.49	Horz(CT) 0.32 7	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-AS				Weight: 163 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	3-5: 2x6 SPF No.2, 5-6: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	1-14: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-4 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-9, 2-14

REACTIONS.

(size) 1=0-3-8, 7=0-5-8
 Max Horz 1=151(LC 9)
 Max Uplift 1=-202(LC 12), 7=-160(LC 13)
 Max Gray 1=1396(LC 1), 7=1396(LC 1)

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

TOP CHORD 1-2=-5468/884, 2-3=-2170/357, 3-4=-1798/306, 4-5=-1803/302, 5-6=-1515/228,
6-7=-1333/207

BOT CHORD 1-13=-865/4998, 13-14=-619/3123, 12-13=-279/1953, 4-9=-512/172, 8-9=-173/1281

WEBS 5-9=-160/886, 5-8=-354/112, 6-8=-142/1286, 12-14=-520/145, 3-14=-74/567,
2-13=-888/1086, 2-14=-2883/579, 9-12=-272/1718

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-6, Interior(1) 3-1-6 to 13-2-8, Exterior(2R) 13-2-8 to 17-7-6, Interior(1) 17-7-6 to 24-5-8, Exterior(2R) 24-5-8 to 28-10-6, Interior(1) 28-10-6 to 31-0-4 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
- 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) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=202, 7=160.
- 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.



September 16, 2021



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/25/2020) BEFORE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	B11	Hip Girder	1	2	147911473

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:03:42 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-JZZwX5_n0c1ZVi3D5r6Q4BmRaWo8askVBPhtNydQAI

0-10-8	3-9-1	7-5-12	11-2-8	16-4-1	21-3-15	26-5-8	31-2-0
0-10-8	3-9-1	3-8-12	3-8-12	5-1-9	4-11-13	5-1-9	4-8-8

Scale = 1:57.5

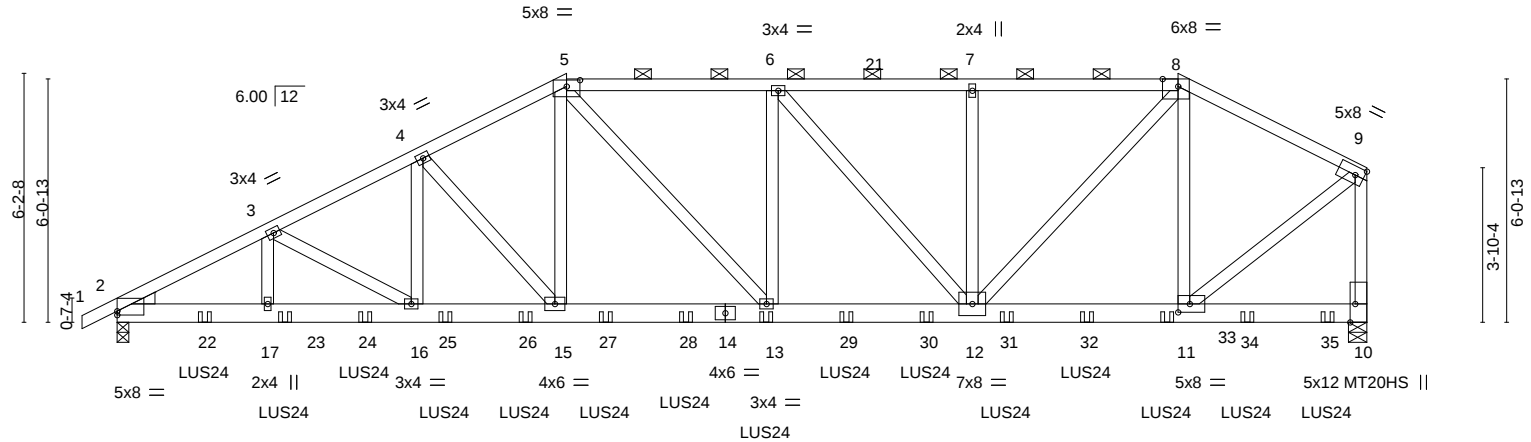


Plate Offsets (X, Y)--		[2:0-0-0,0-1-3], [5:0-4-0,0-1-15], [8:0-4-10,Edge], [10:0-5-8,Edge], [11:0-3-8,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.56	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.87	Vert(LL) -0.18 13-15 >999 240
BCLL 0.0	Lumber DOL 1.15	WB 0.55	Vert(CT) -0.32 13-15 >999 180
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.08 10 n/a n/a
	Code IRC2018/TPI2014		
			PLATES
			MT20 197/144
			MT20HS 148/108
			Weight: 342 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 2100F 1.8E *Except*
10-14: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 10=0-5-8
Max Horz 2=163(LC 7)
Max Uplift 2=-881(LC 8), 10=-821(LC 9)
Max Grav 2=4909(LC 1), 10=5149(LC 1)

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

TOP CHORD 2-3=-8774/1552, 3-4=-8281/1456, 4-5=-7244/1280, 5-6=-7055/1214, 6-7=-6095/1009,
7-8=-6097/1010, 8-9=-3995/663, 9-10=-4658/746
BOT CHORD 2-17=-1430/7762, 16-17=-1430/7762, 15-16=-1286/7381, 13-15=-1107/6420,
12-13=-1205/7052, 11-12=-600/3568
WEBS 3-17=-127/339, 3-16=-440/164, 4-16=-238/1271, 4-15=-1349/328, 5-15=-408/2188,
5-13=-208/1083, 6-13=-137/668, 6-12=-1473/326, 7-12=-433/143, 8-12=-655/3823,
8-11=-1388/268, 9-11=-718/4463

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 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 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=15ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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=881, 10=821.
- 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.

Continued on page 2



September 16, 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 #152/MO	I47911473
2929201	B11	Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Wed Sep 15 10:03:42 2021
Page 2
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- NOTES-**
- 11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-2-4 from the left end to 30-2-4 to connect truss(es) to back face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-70, 5-8=-70, 8-9=-70, 10-18=-20

Concentrated Loads (lb)

Vert: 13=-481(B) 22=-505(B) 23=-475(B) 24=-475(B) 25=-475(B) 26=-475(B) 27=-481(B) 28=-481(B) 29=-481(B) 30=-481(B) 31=-481(B) 32=-481(B) 33=-481(B) 34=-475(B) 35=-477(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911474
2929201	C1	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:01 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-FDD6XaDiXSQtHc0tiKytLB2iVBO3XWKIZsoG2nydQAS

0-10-8	7-0-0	12-5-4	17-10-8	24-10-8	25-9-0
0-10-8	7-0-0	5-5-4	5-5-4	7-0-0	0-10-8

Scale = 1:44.4

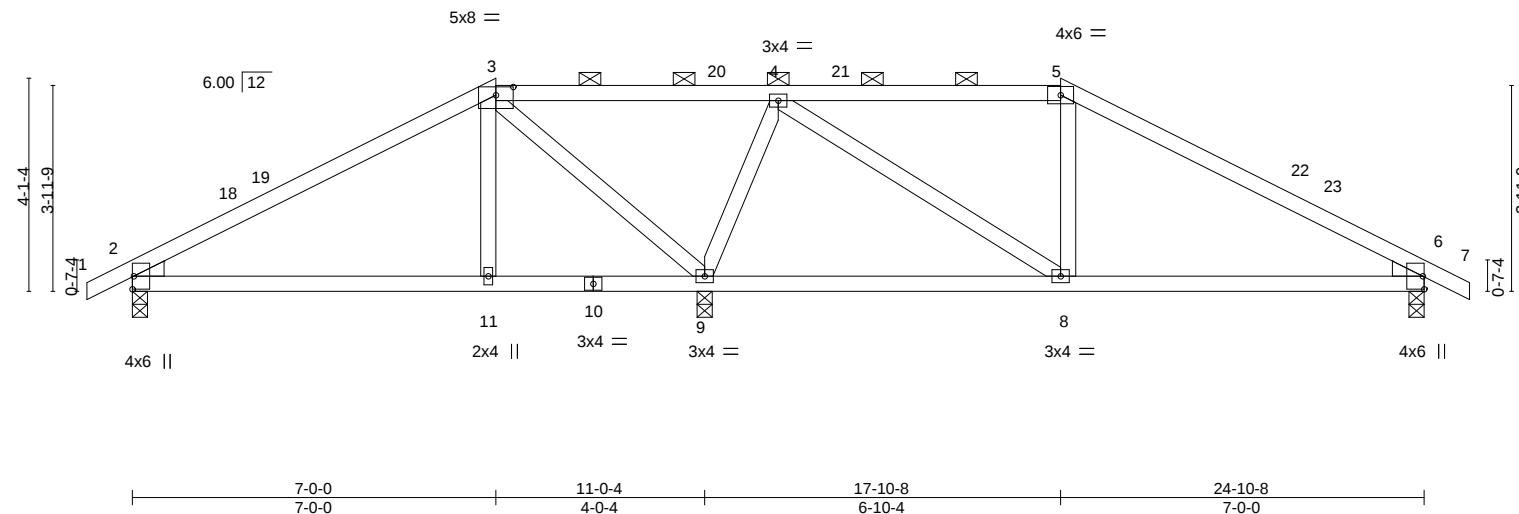


Plate Offsets (X,Y)-- [3:0-4-0,0-1-15]		7-0-0 7-0-0		11-0-4 4-0-4		17-10-8 6-10-4		24-10-8 7-0-0	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.05 11-14	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.12 11-14	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.02 2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 88 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.): 3-5.
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, 9=0-3-8, 6=0-3-8
Max Horz 2=60(LC 12)
Max Uplift 2=-131(LC 12), 9=-133(LC 9), 6=-148(LC 13)
Max Grav 2=585(LC 1), 9=1069(LC 1), 6=707(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-611/171, 4-5=-700/225, 5-6=-870/200
BOT CHORD 2-11=-117/466, 9-11=-118/460, 8-9=-67/325, 6-8=-83/695
WEBS 3-9=-548/96, 4-9=-728/176, 4-8=-53/495

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 17-10-8, Exterior(2R) 17-10-8 to 22-1-7, Interior(1) 22-1-7 to 25-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=131, 9=133, 6=148.
- 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.



September 16, 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 #152/MO	147911475
2929201	C2	Roof Special	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:03 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-BbLsxGEy33gaWwAFqL_LRc82B_24?Lqb0AHN6fydQAQ

0-10-8 5-0-0 10-5-4 11-0-4 15-10-8 17-10-8 24-10-8 25-9-0
0-10-8 5-0-0 5-5-4 0-7-0 4-10-4 2-0-0 7-0-0 0-10-8

Scale = 1:44.4

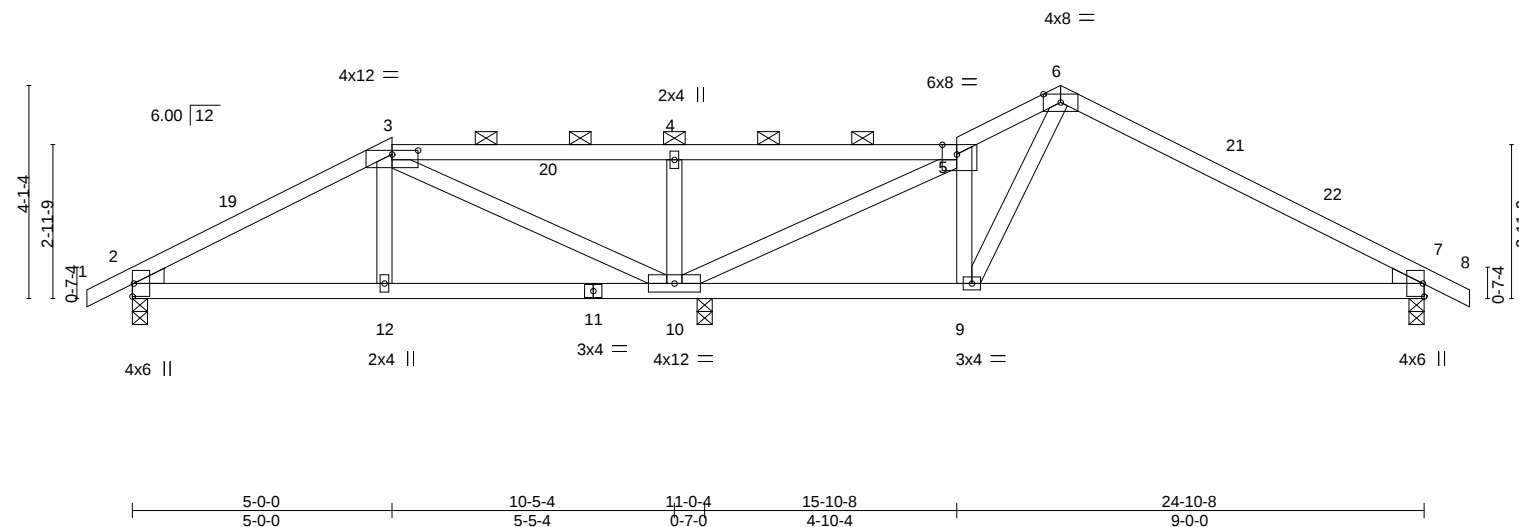


Plate Offsets (X,Y)-- [3:0-6-0,0-0-15], [5:0-3-6,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.12 9-18 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.26 9-18 >665 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	-0.01 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 89 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.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 7=0-3-8, 10=0-3-8
Max Horz 2=62(LC 12)
Max Uplift 2=-86(LC 12), 7=-109(LC 13), 10=-194(LC 12)
Max Grav 2=485(LC 1), 7=678(LC 1), 10=1198(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-526/110, 5-6=-841/191, 6-7=-733/153
BOT CHORD 2-12=-72/417, 10-12=-74/410, 9-10=-62/754, 7-9=-47/593
WEBS 6-9=-47/368, 3-10=-590/119, 4-10=-434/155, 5-10=-942/120

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 17-10-8, Exterior(2R) 17-10-8 to 20-10-8, Interior(1) 20-10-8 to 25-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 except (jt=lb) 7=109, 10=194.
 - 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.



September 16,2021

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	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	C3	Roof Special Girder	1	1	147911476
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:05 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-7_SdMyGCbhwlmEJexA0pW1DK0okBTklUUmUBYYdQAO

0-10-8	3-0-0	8-5-4	13-10-8	17-10-8	21-4-5	24-10-8	25-9-0
0-10-8	3-0-0	5-5-4	5-5-4	4-0-0	3-5-13	3-6-3	0-10-8

Scale = 1:44.4

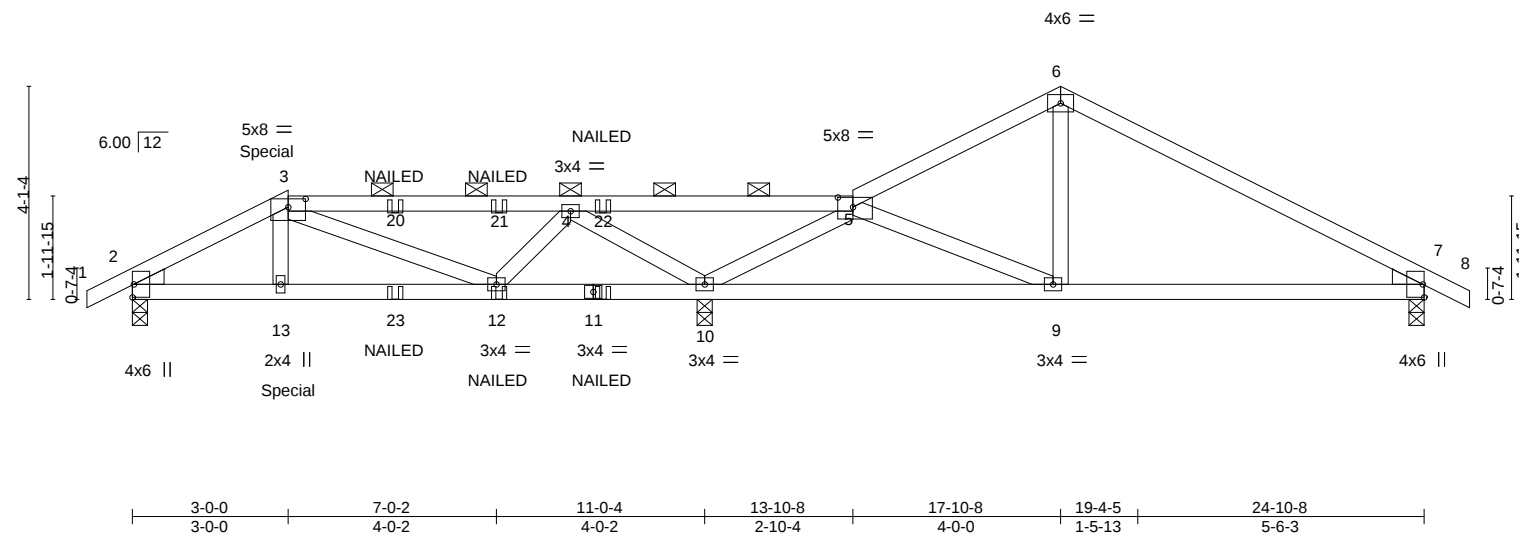


Plate Offsets (X,Y)--		[3:0-4-0,0-1-15], [5:0-3-8,0-2-4]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.08 9-19	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.14 9-19	>999	180
BCLL 0.0	Rep Stress Incr	NO	WB 0.27	Horz(CT)	0.01 7	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 87 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 5-5-11 oc purlins, except
 2-0-0 oc purlins (6-0-0 max.): 3-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 10=0-3-8, 7=0-3-8
 Max Horz 2=62(LC 8)
 Max Uplift 2=-128(LC 8), 10=-258(LC 8), 7=-119(LC 30)
 Max Grav 2=555(LC 1), 10=1370(LC 1), 7=610(LC 1)

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

TOP CHORD 2-3=-741/192, 3-4=-511/199, 4-5=-154/672, 5-6=-612/165, 6-7=-653/136
 BOT CHORD 2-13=-178/635, 12-13=-180/627, 10-12=-144/346, 9-10=-148/385, 7-9=-26/494
 WEBS 4-12=-15/298, 4-10=-1184/348, 5-10=-1161/214

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 10=258, 7=119.
- 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) 144 lb down and 97 lb up at 3-0-0 on top chord, and 53 lb down and 17 lb up at 3-0-0 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, 5-6=-70, 6-8=-70, 14-17=-20



September 16, 2021

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 #152/MO	I47911476
2929201	C3	Roof Special Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-23(B) 11=-27(B) 13=-52(B) 12=-27(B) 20=-6(B) 21=-6(B) 22=-6(B) 23=-27(B)

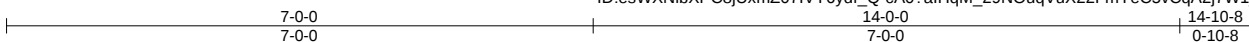
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911477
2929201	C4	Common	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

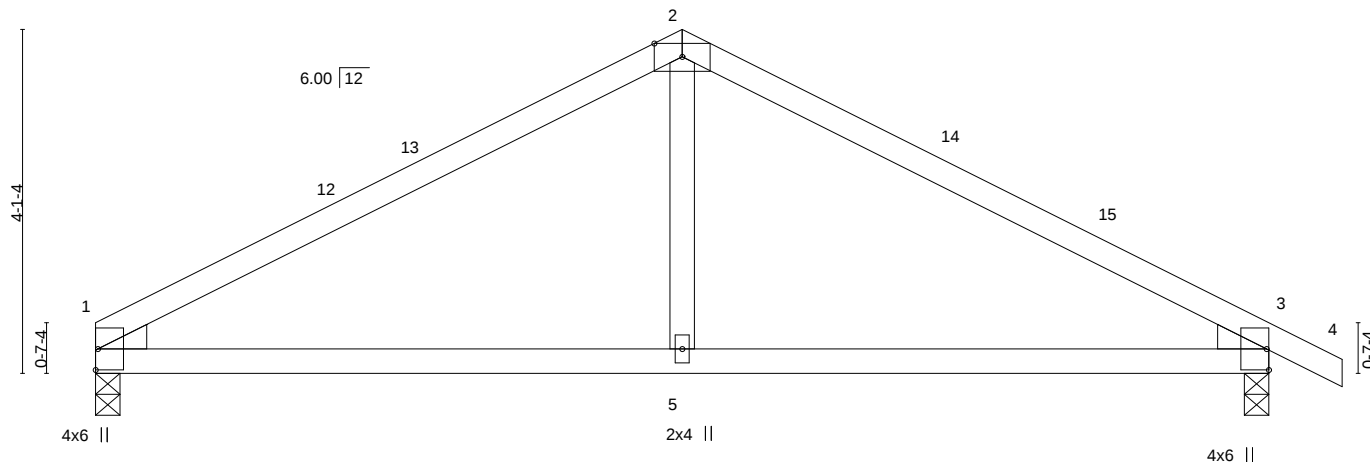
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:06 2021 Page 1

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4x8 =

Scale = 1:27.5



				7-0-0				14-0-0									
				7-0-0				7-0-0									
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	0.49	Vert(LL)		-0.08	5-11	>999		240		MT20		197/144	
TCDL	10.0	Lumber DOL 1.15		BC	0.41	Vert(CT)		-0.13	5-11	>999		180					
BCLL	0.0	Rep Stress Incr YES		WB	0.07	Horz(CT)		0.02	1	n/a		n/a					
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS										Weight: 41 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

WEDGE

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

BRACING-

TOP CHORD

Structural wood sheathing directly applied.

BOT CHORD

Rigid ceiling directly applied.

REACTIONS.

(size) 3=0-3-8, 1=0-3-8

Max Horz 1=-69(LC 17)

Max Uplift 3=-95(LC 13), 1=-78(LC 12)

Max Grav 3=693(LC 1), 1=628(LC 1)

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

TOP CHORD 1-2=-845/252, 2-3=-846/248

BOT CHORD 1-5=-105/673, 3-5=-105/673

WEBS 2-5=0/299

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 14-10-8 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) 3, 1.

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.



September 16, 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

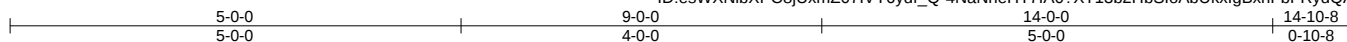
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911478
2929201	C5	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:07 2021 Page 1

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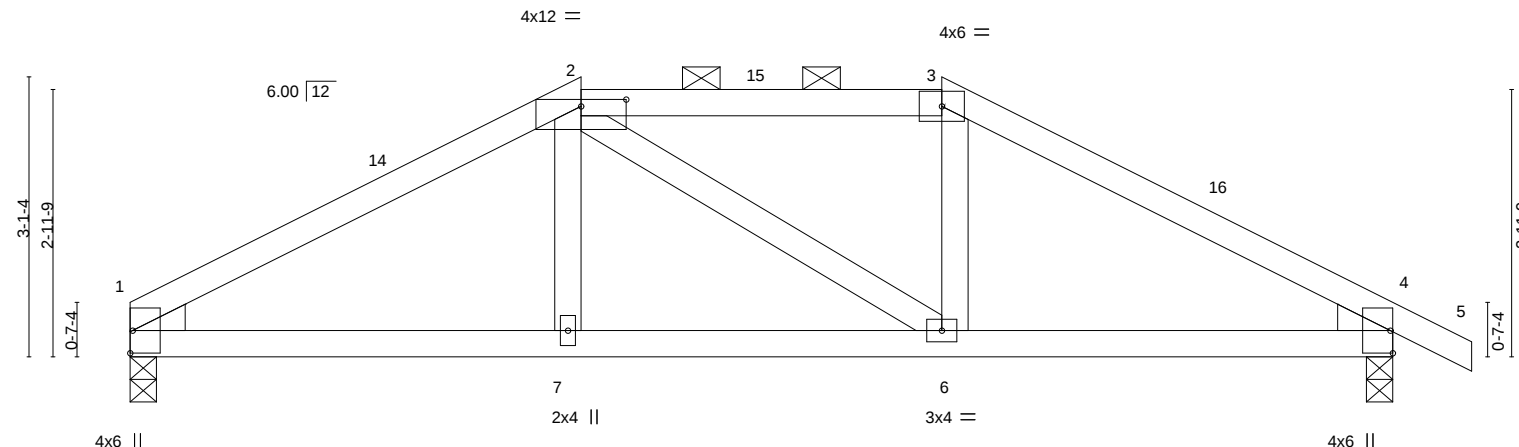


Plate Offsets (X,Y)--	[2:0-6-0,0-0-15]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.04	6-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.02	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 47 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.): 2-3.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=0-3-8, 1=0-3-8
Max Horz 1=-52(LC 17)
Max Uplift 4=-99(LC 13), 1=-82(LC 12)
Max Grav 4=693(LC 1), 1=628(LC 1)

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

TOP CHORD 1-2=-937/245, 2-3=-771/266, 3-4=-932/251
BOT CHORD 1-7=-139/781, 6-7=-140/777, 4-6=-145/776

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-0-0, Exterior(2E) 5-0-0 to 9-0-0, Exterior(2R) 9-0-0 to 13-4-11, Interior(1) 13-4-11 to 14-10-8 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) 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) 4, 1.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 16,2021

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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



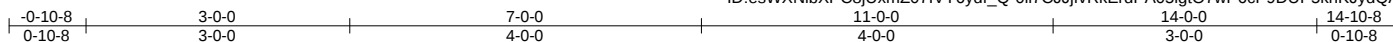
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911479
2929201	C6	Hip Girder	1	1	Job Reference (optional)	

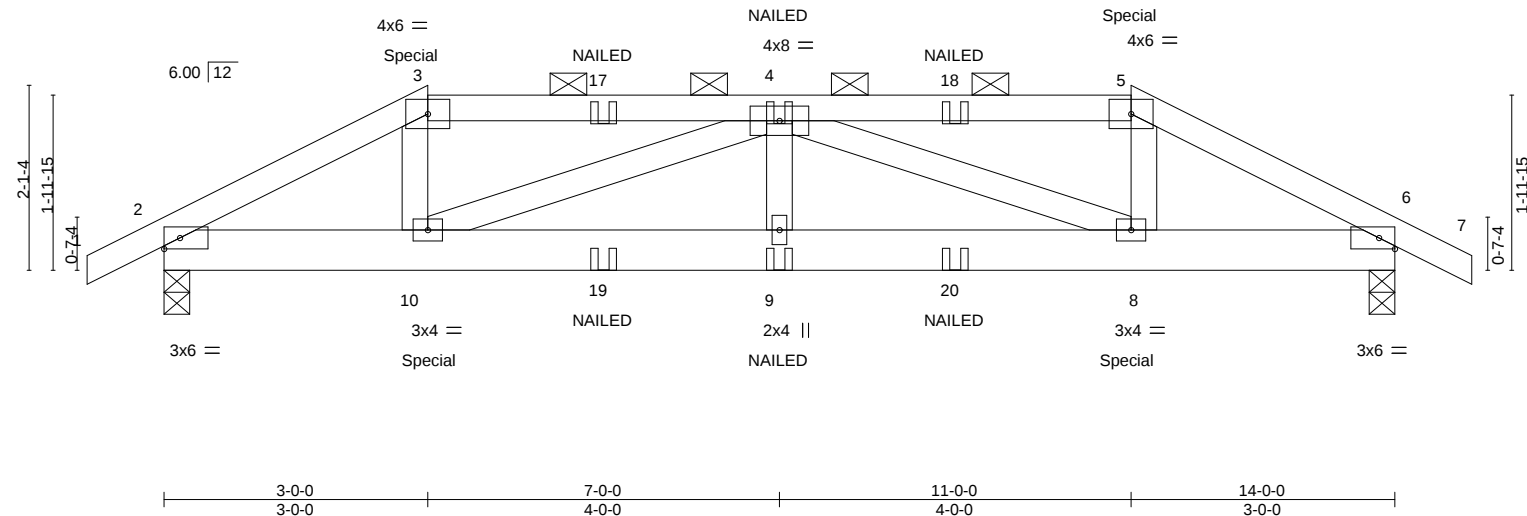
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:09 2021 Page 1

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Scale = 1:26.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.04	9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.08	9	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.24	Horz(CT)	0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 58 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-4 oc purlins, except 2-0-0 oc purlins (5-5-11 max.): 3-5.
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=29(LC 12)
Max Uplift 2=180(LC 8), 6=180(LC 9)
Max Grav 2=816(LC 1), 6=816(LC 1)

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

TOP CHORD 2-3=-1261/288, 3-4=-1072/270, 4-5=-1072/270, 5-6=-1261/288
BOT CHORD 2-10=-242/1097, 9-10=-403/1711, 8-9=-403/1711, 6-8=-228/1097
WEBS 3-10=-26/309, 4-10=-705/191, 4-8=-705/190, 5-8=-26/309

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=180, 6=180.
- 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) 82 lb down and 97 lb up at 3-0-0, and 82 lb down and 97 lb up at 11-0-0 on top chord, and 53 lb down and 17 lb up at 3-0-0, and 53 lb down and 17 lb up at 10-11-4 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
Concentrated Loads (lb)
Vert: 3=-23(B) 5=-23(B) 10=-52(B) 9=-27(B) 8=-52(B) 4=-6(B) 17=-6(B) 18=-6(B) 19=-27(B) 20=-27(B)



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	CJ1	Diagonal Hip Girder	1	1	I47911480

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:10 2021 Page 1

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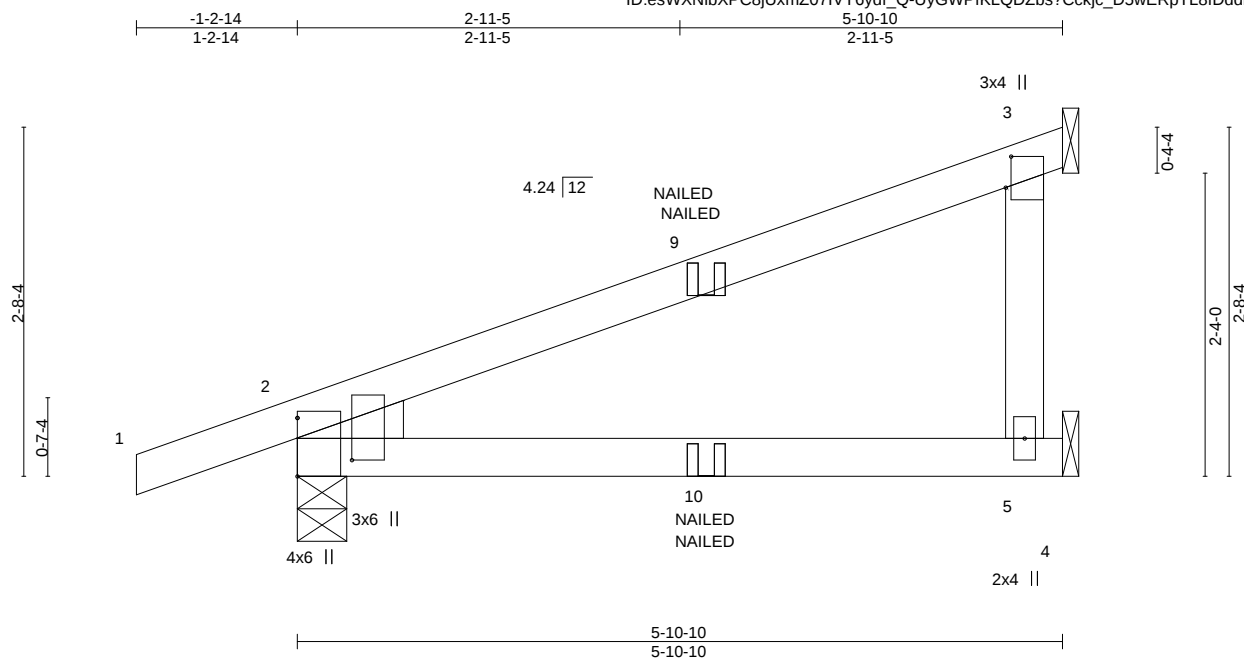


Plate Offsets (X,Y)-- [2:0-3-14,0-5-0], [3:0-2-14,0-0-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.06 5-8 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.11 5-8 >585 180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.02 2 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP				Weight: 19 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 5-10-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-4-9, 3=Mechanical, 5=Mechanical
Max Horz 2=94(LC 4)
Max Uplift 2=-90(LC 4), 3=-67(LC 8), 5=-4(LC 8)
Max Grav 2=355(LC 1), 3=167(LC 1), 5=114(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3, 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 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: 1-3=-70, 4-6=-20
Concentrated Loads (lb)
Vert: 10=-15(F=-8, B=-8)



September 16, 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

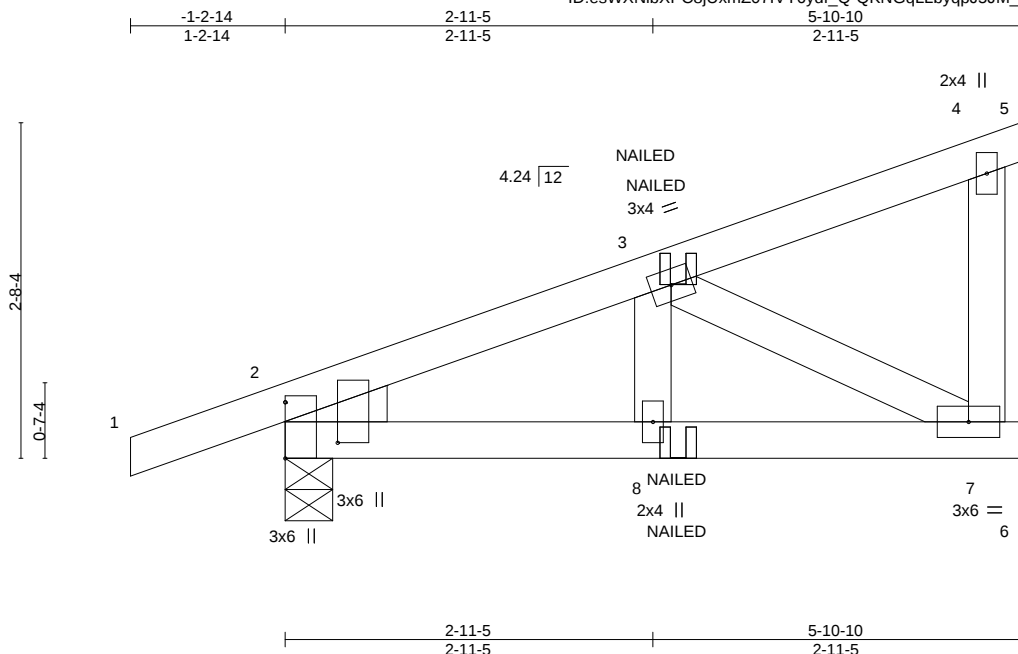
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	CJ2	Diagonal Hip Girder	1	1	I47911481

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:12 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-QKNGqLLbyqpJ5JM_s8eSIW0gycD1cZow53zLxeydQAH



Scale = 1:18.4

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 0.11		Vert(CT) -0.01 8 >999 180				
BCLL	0.0	Rep Stress Incr NO		WB 0.06		Horz(CT) 0.00 7 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP						
									Weight: 23 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 5-10-10 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=98(LC 7)
 Max Uplift 7=69(LC 8), 2=98(LC 4)
 Max Grav 7=262(LC 1), 2=356(LC 1)

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

TOP CHORD 2-3=-327/70
 BOT CHORD 2-8=-76/288, 7-8=-76/288
 WEBS 3-7=-322/106

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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=-15(F=-8, B=-8)



September 16, 2021

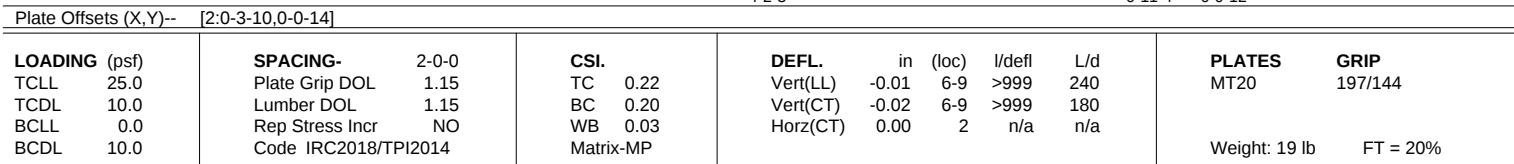
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:13 2021 Page 1
ID:esWXNIBXPC8iUxm207IVY6vdf Q-uWxe2hMDi8xAiSwAPs9hriYp20XnLO03KiivT4vdOAG



LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-6: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 5=Mechanical, 2=0-3-7, 3=Mechanical
 Max Horz 2=68(LC 5)
 Max Uplift 2=-82(LC 4), 3=-50(LC 8)
 Max Grav 5=27(LC 3), 2=316(LC 1), 3=200(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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) 2 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) 2, 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.
- 7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 9) 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, 6-7=-20, 4-6=-20
Concentrated Loads (lb)
Vert: 11=5(F=2, B=2)



September 16, 2021



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	CJ4	Diagonal Hip Girder	1	1	I47911483
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:14 2021 Page 1

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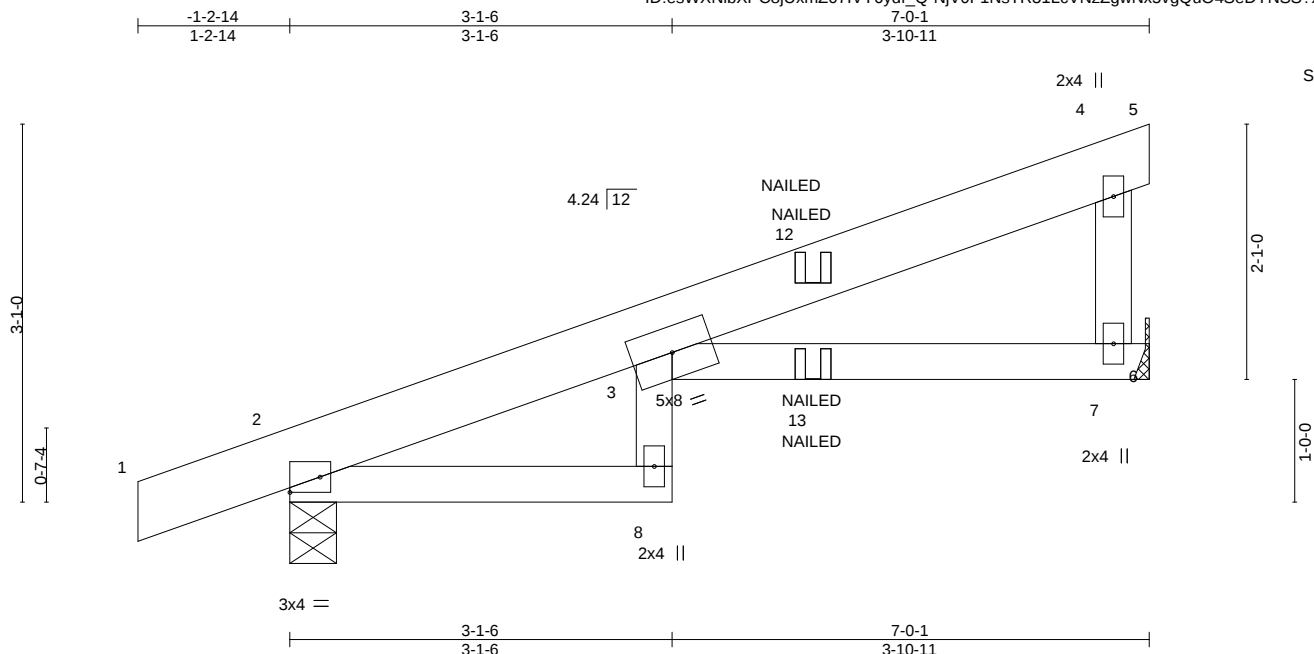


Plate Offsets (X,Y)--		[2:Edge,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.09 8	>946	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.14 8	>572	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.07 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 26 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 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, Except:
6-0-0 oc bracing: 3-7.

REACTIONS.

(size) 2=0-4-9, 7=Mechanical
Max Horz 2=112(LC 4)
Max Uplift 2=102(LC 4), 7=106(LC 8)
Max Grav 2=416(LC 1), 7=339(LC 1)

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

WEBS 4-7=-278/107

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=102, 7=106.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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, 3-4=-70, 4-5=-20, 8-9=-20, 3-6=-20
Concentrated Loads (lb)
Vert: 13=-52(F=-26, B=-26)



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2929201	Truss CJ5	Truss Type Jack-Open	Qty 3	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO 147911484
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:15 2021 Page 1
ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-rv3PTNOUEIBtm4ZXHC9w8dA6qD6pvSMn1B0XzydQAE

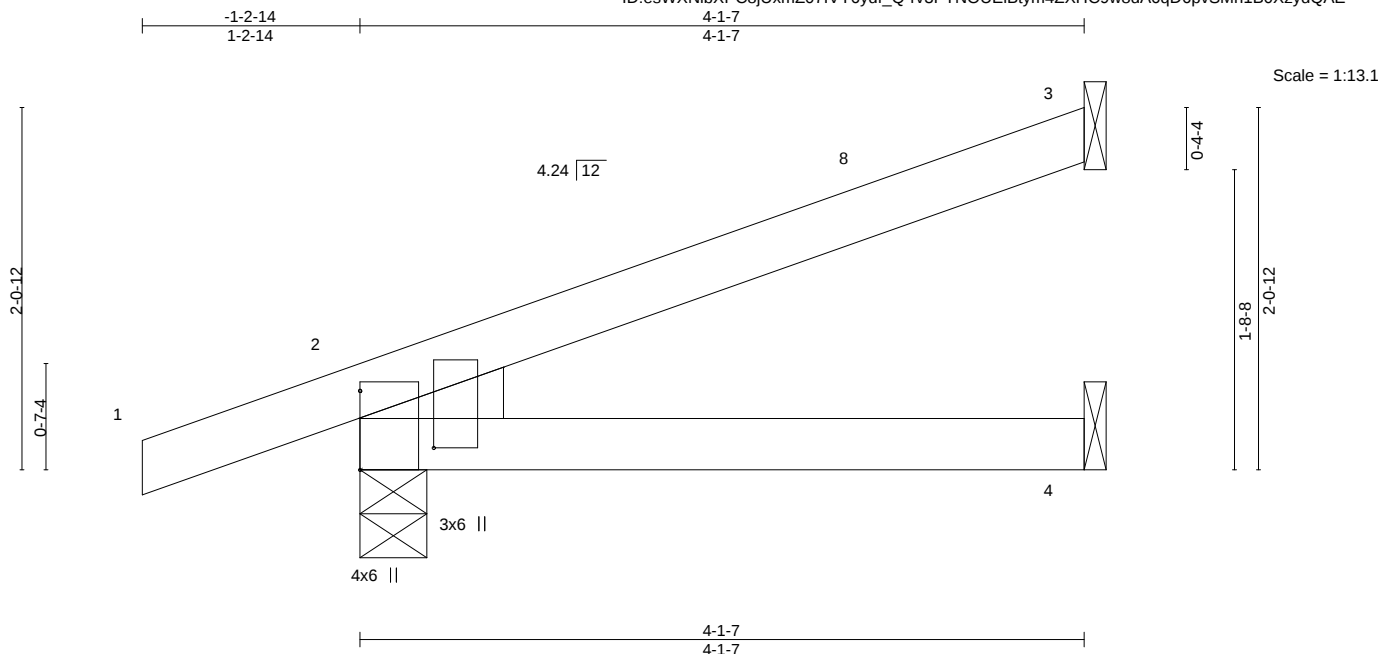


Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	0.02 4-7	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.03 4-7	>999	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01 2	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 12 lb	FT = 20%		

LUMBER-

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

BRACING-

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 2=0-4-9
Max Horz 2=74(LC 8)
Max Uplift 3=-45(LC 12), 2=-72(LC 8)
Max Grav 3=116(LC 1), 4=71(LC 3), 2=282(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-14 to 3-0-1, Exterior(2R) 3-0-1 to 4-0-11 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.
- 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.



September 16, 2021

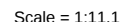
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:16 2021 Page 1
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LUMBER-		BRACING-
TOP CHORD	2x4 SPF No.2	TOP CHORD
BOT CHORD	2x6 SPF No.2	BOT CHORD
		Structural wood sheathing directly applied or 2-11-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
 Max Horz 2=59(LC 8)
 Max Uplift 3=-29(LC 12), 2=-69(LC 8)
 Max Grav 3=71(LC 1), 2=235(LC 1), 4=57(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; TCDD=6.0psf; BCDL=4.2psf; h=15ft; 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 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.



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



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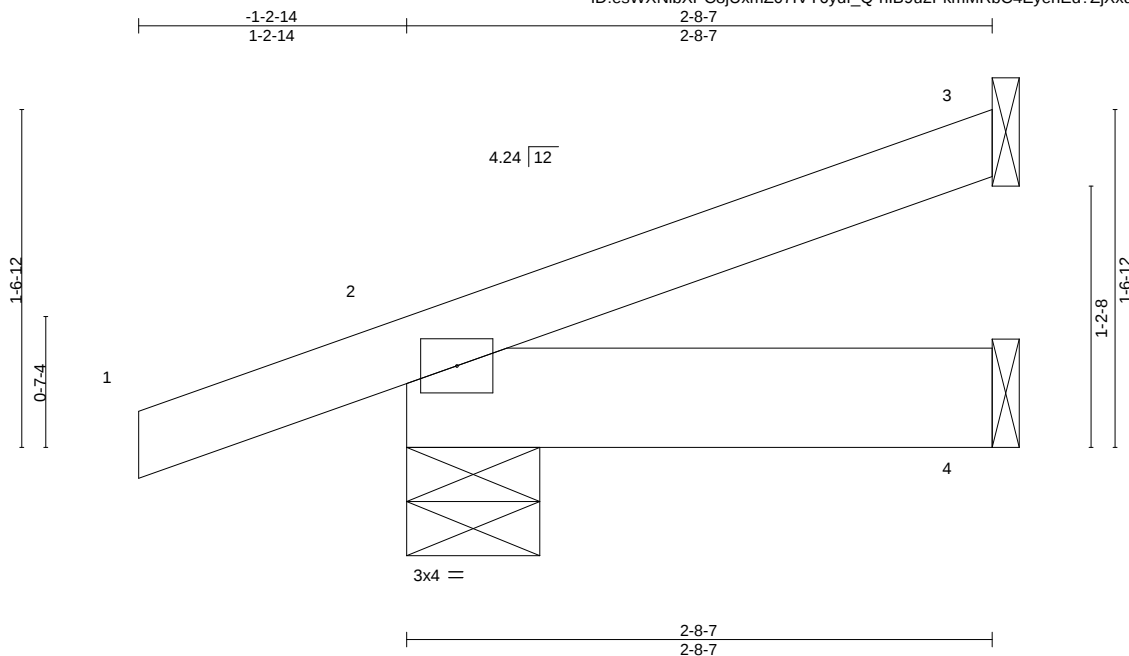
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911487
2929201	CJ8	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:17 2021 Page 1

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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 0.10	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: 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=0-7-6, 4=Mechanical
Max Horz 2=56(LC 8)
Max Uplift 3=-26(LC 12), 2=-69(LC 8)
Max Grav 3=63(LC 1), 2=226(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=15ft; 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 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.



September 16, 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

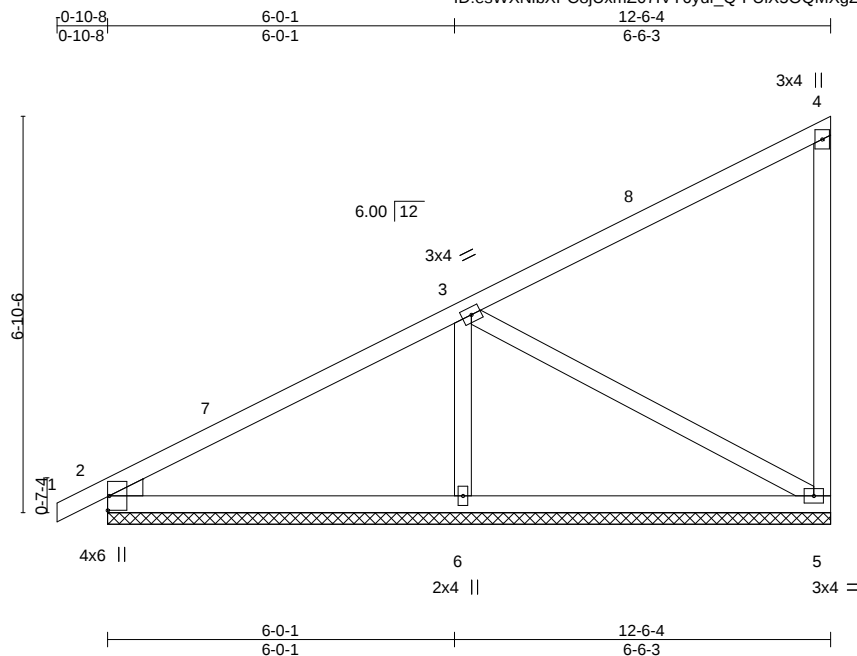
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	D1	Monopitch Supported Gable	1	1	I47911488
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:18 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-FUIX5OQMxgZSpEp8CPisYnFb11DP0FdpT?Qg8IydQAB



Scale = 1:39.9

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 0.52	Vert(LL)	-0.01	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	0.01	1	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	5	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

WEBS 2x4 SPF No.2

WEDGE

Left: 2x4 SPF No.2

BRACING-

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

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

REACTIONS. (size) 5=12-6-4, 2=12-6-4, 6=12-6-4

Max Horz 2=245(LC 9)

Max Uplift 5=-75(LC 12), 2=-29(LC 12), 6=-115(LC 12)

Max Grav 5=249(LC 1), 2=311(LC 1), 6=615(LC 1)

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

WEBS 3-6=-454/232

NOTES-

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



September 16, 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 #152/MO	I47911489
2929201	D2	Jack-Closed	3	1		

Builders FirstSource (Valley Center),

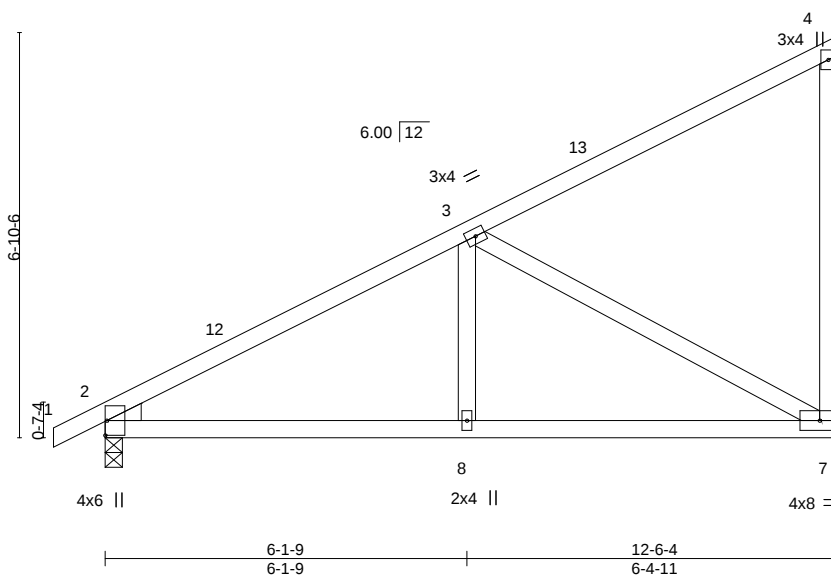
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:19 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-jglvIkR_I_hJRNOKm6G54_op0RZVlbqyif9DgkydQAA

0-10-8 6-1-9 12-6-4
0-10-8 6-1-9 6-4-11

Scale = 1:39.0



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 0.38	Vert(LL)	-0.03	7-8	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.07	7-8	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.01	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 50 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) 2=0-3-8, 7=Mechanical
Max Horz 2=246(LC 11)
Max Uplift 2=-74(LC 12), 7=-75(LC 9)
Max Grav 2=615(LC 1), 7=560(LC 1)

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

TOP CHORD 2-3=-737/139
BOT CHORD 2-8=-256/595, 7-8=-256/595
WEBS 3-8=0/265, 3-7=-655/208

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-6-4 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) 2, 7.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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.



September 16, 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 #152/MO
2929201	D3	Jack-Closed	2	1	I47911490
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:20 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-BtsIW4Rc3HpA3XzXKqnKdCL_CrsjU625xJvnDAydQA9

0-10-8	3-3-8	6-0-8	7-11-5	12-6-4
0-10-8	3-3-8	2-9-0	1-10-13	4-6-15

Scale = 1:39.4

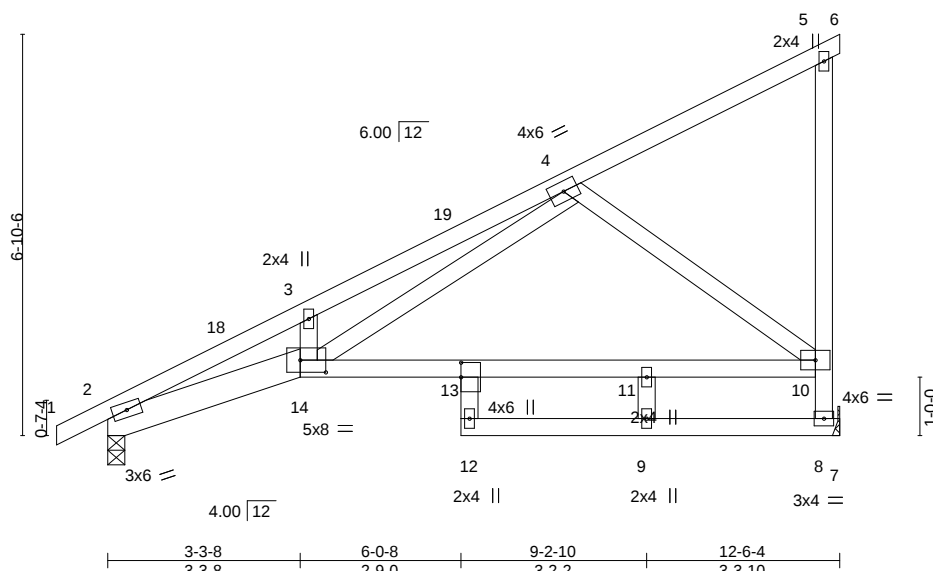


Plate Offsets (X,Y)--		[13:0-3-0,0-0-0], [14:0-5-4,0-2-8]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.09 12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.21 12	>690	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.06 8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 63 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-14: 2x6 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) 8=Mechanical, 2=0-3-8
 Max Horz 2=246(LC 11)
 Max Uplift 8=-75(LC 9), 2=-73(LC 12)
 Max Grav 8=560(LC 1), 2=615(LC 1)

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

TOP CHORD 2-3=-1605/202, 3-4=-1602/296, 8-10=-492/201
 BOT CHORD 2-14=-497/1430, 13-14=-255/480, 11-13=-313/371, 10-11=-313/371
 WEBS 4-14=-293/1129, 4-10=-577/213

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-6-4 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) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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.



September 16, 2021

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	D4	Jack-Closed	3	1	I47911491

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:22 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-8F_2xmTtbv3ulr6vRFqoidQGueXGy0FOOdOtH3ydQA7

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

Scale = 1:39.4

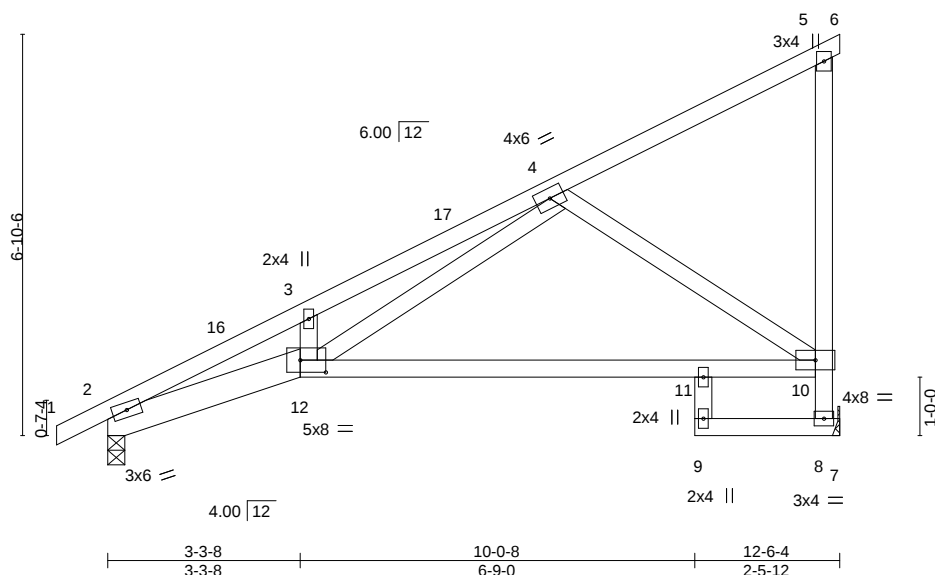


Plate Offsets (X,Y)--	[12:0-5-4,0-2-8]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL)	-0.17 11-12	>848	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.37 11-12	>402	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.13 8	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 2x4 SPF No.2 *Except*
 2-12: 2x6 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) 8=Mechanical, 2=0-3-8
 Max Horz 2=246(LC 11)
 Max Uplift 8=-75(LC 9), 2=-73(LC 12)
 Max Grav 8=560(LC 1), 2=615(LC 1)

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

TOP CHORD 2-3=-1625/203, 3-4=-1613/291, 8-10=-514/192
 BOT CHORD 2-12=-486/1449, 11-12=-258/526, 10-11=-270/564
 WEBS 4-12=-277/1094, 4-10=-586/222

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-6-4 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) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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.



September 16, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	D5	Jack-Closed	1	1	I47911492

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:23 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-cSYQ86UVMCBW?h5?yL1FqzM82qlhPzYdH7RpVydQA6

0-10-8	2-3-8	6-9-12	11-4-0	12-6-4
0-10-8	2-3-8	4-6-4	4-6-4	1-2-4

Scale = 1:40.9

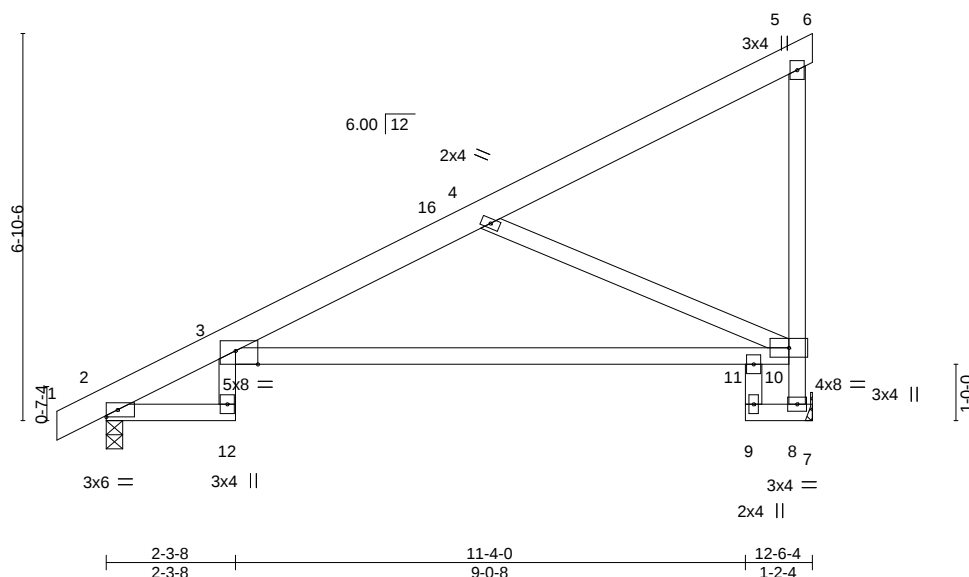


Plate Offsets (X,Y)--	[3:0-4-12,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.89	Vert(LL)	-0.25 3-11	>592	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.55 3-11	>269	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.25 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 58 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 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) 8=Mechanical, 2=0-3-8
Max Horz 2=244(LC 11)
Max Uplift 8=-74(LC 9), 2=-74(LC 12)
Max Grav 8=560(LC 1), 2=615(LC 1)

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

TOP CHORD 3-14=-394/72, 3-4=-843/169, 8-10=-519/184
BOT CHORD 3-11=-352/822, 10-11=-344/895
WEBS 4-10=-846/312

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 12-6-4 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) 8, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911493
2929201	D6	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:24 2021 Page 1

ID:esWXNIBXPC8jUxmZ07IVY6ydf_Q-4e6oMSU77WJcX9GIzGsGn2VYdSBtQxshsxt_MyydQA5

0-10-8	2-3-8	6-8-0	11-0-8	12-6-4
0-10-8	2-3-8	4-4-8	4-4-8	1-5-12

Scale = 1:37.6

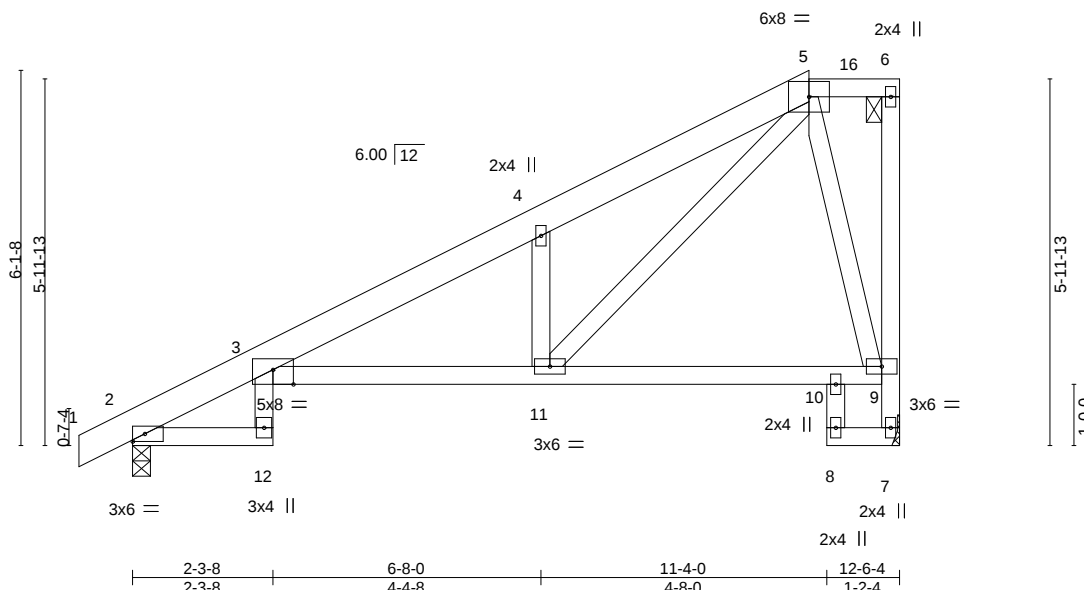


Plate Offsets (X,Y)--	[3:0-4-0,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.77	Vert(LL)	-0.14 3-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.26 3-11	>581	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.17 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 64 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
5-6: 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, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 7=Mechanical, 2=0-3-8
Max Horz 2=218(LC 11)
Max Uplift 7=114(LC 12), 2=93(LC 12)
Max Grav 7=555(LC 1), 2=620(LC 1)

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

TOP CHORD 3-14=-375/73, 3-4=-883/144, 4-5=-1008/258, 7-9=-535/213
BOT CHORD 3-11=-368/819
WEBS 5-9=-483/261, 5-11=-341/995, 4-11=-600/298

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 11-0-8, Exterior(2E) 11-0-8 to 12-4-8 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) 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) 2 except (jt=lb) 7=114.
- 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.



September 16, 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 #152/MO	147911494
2929201	D7	Half Hip	1	1		

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:26 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-01EZm7WNf7aKnSQgg4uksTbu6GtXusT_JFM5QqydQA3

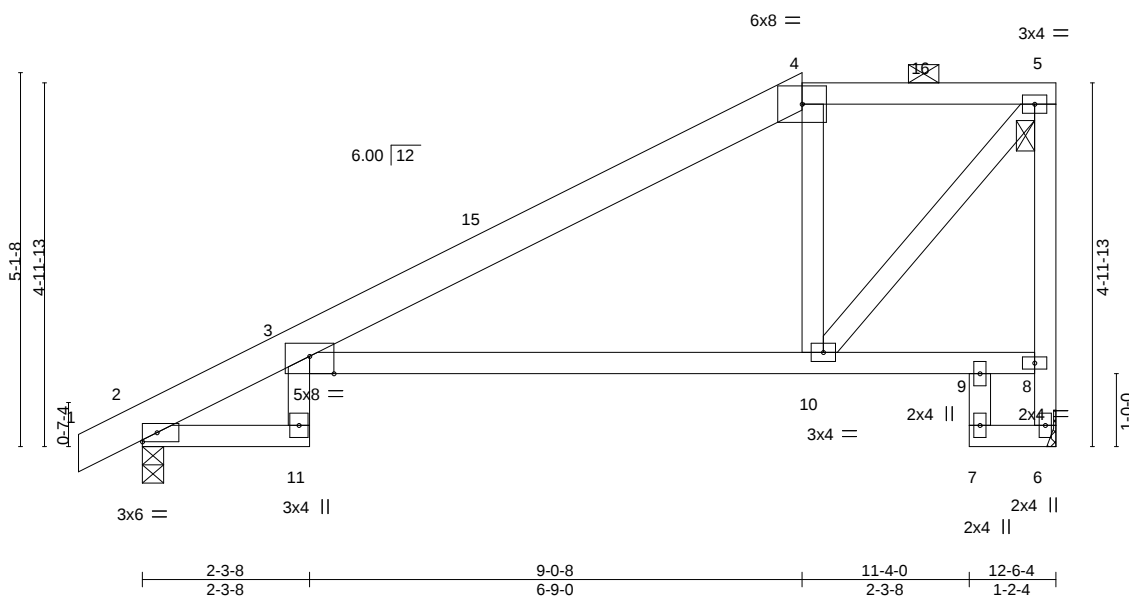
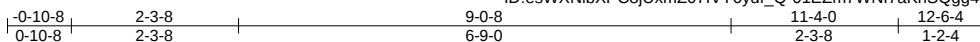


Plate Offsets (X,Y)-- [3:0-4-0,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.23	3-10	>651	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.43	3-10	>343	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.23	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 55 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
4-5: 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, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
Max Horz 2=181(LC 11)
Max Uplift 6=92(LC 12), 2=100(LC 12)
Max Grav 6=555(LC 1), 2=620(LC 1)

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

TOP CHORD 3-13=-344/76, 3-4=-544/110, 4-5=-455/142, 6-8=-544/177, 5-8=-580/188
BOT CHORD 3-10=-229/469
WEBS 4-10=-344/214, 5-10=-251/709

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 9-0-8, Exterior(2E) 9-0-8 to 12-4-8 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) 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) 6, 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.
- 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.



September 16, 2021

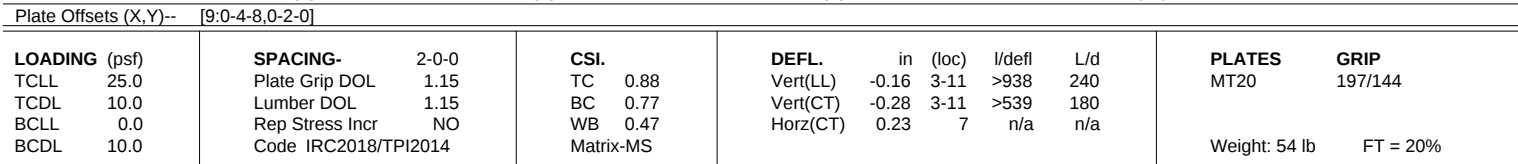
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:29 2021 Page 1
 ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-Rbvhp9YGx2yuew9FLDSRU5DOKTrf58YQ?Dal19ydaqAO
 -0-10-8 2-3-8 5-0-8 8-9-6 11-4-0 12-6-4
 0-10-8 2-3-8 2-9-0 3-8-14 2-6-10 1-2-4



REACTIONS. (size) 7=Mechanical, 2=0-3-8
 Max Horz 2=107(LC 7)
 Max Uplift 7=-277(LC 5), 2=-245(LC 8)
 Max Grav 7=1025(LC 1), 2=980(LC 1)

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

TOP CHORD	3-14=-494/119, 3-4=-2261/605, 4-5=-2194/617, 7-9=-978/279
BOT CHORD	3-11=-621/2161, 10-11=-501/1585, 9-10=-499/1647
WEBS	4-11=-65/326, 5-11=-164/675, 5-9=-1589/505

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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=277, 2=245.
 - 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) 374 lb down and 163 lb up at 5'-0"-8" on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 

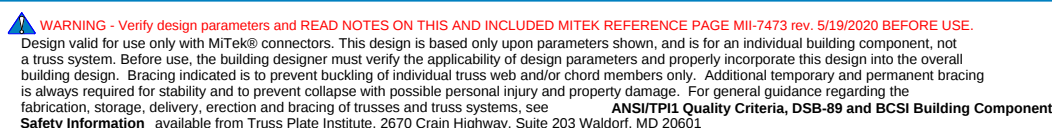
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 12-13=-20, 3-10=-20, 7-8=-20

September 16, 2021



September 16, 2021

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911496
2929201	D9	Half Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 4=-67(B) 11=-374(B) 16=-67(B) 17=-67(B) 18=-67(B) 19=-63(B) 20=-63(B) 21=-63(B)

Job 2929201	Truss E1	Truss Type Hip Girder	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO 147911497
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:31 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-N_1SqrWTgCctDleTeUvZWlqkHbRZ7BjTW3s62ydQA_

Job Reference (optional)

-0-10-8 0-10-8	3-9-0 3-9-0	7-9-0 4-0-0	11-6-0 3-9-0
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Scale = 1:21.0

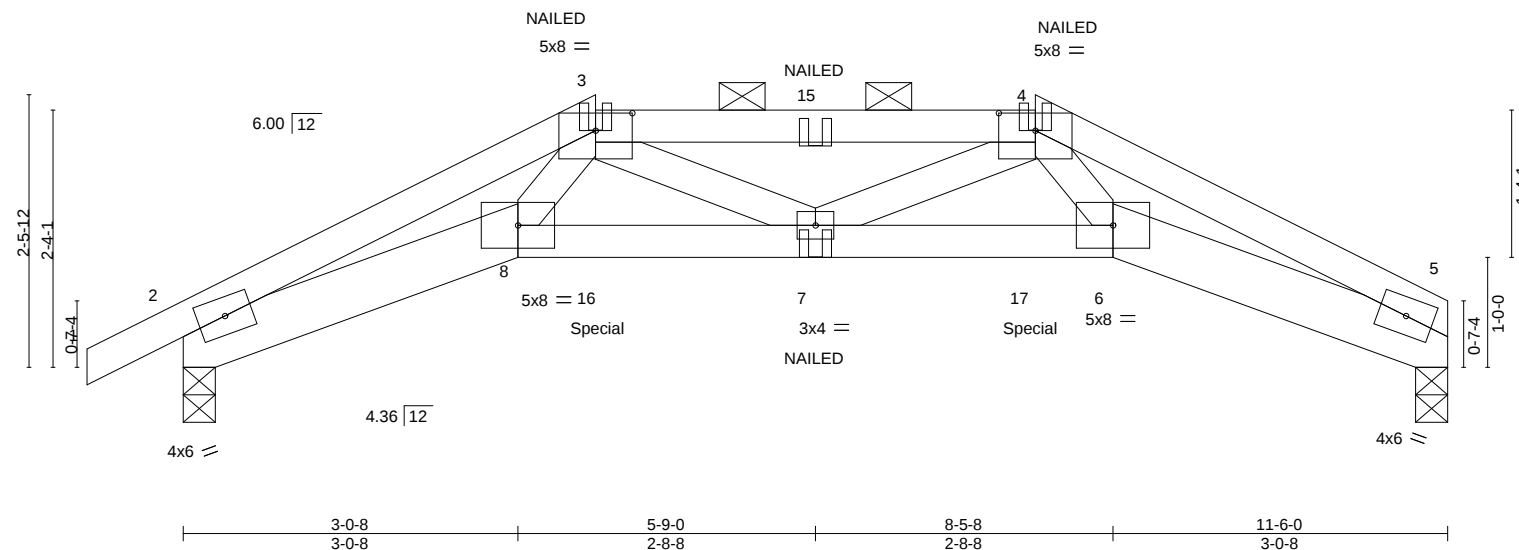


Plate Offsets (X,Y)-- [3:0-4-0,0-1-15], [4:0-4-0,0-1-15]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.08	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.14	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 41 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
6-8: 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-4 oc purlins, except 2-0-0 oc purlins (4-0-3 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=42(LC 12)
Max Uplift 2=-145(LC 8), 5=-127(LC 9)
Max Grav 2=691(LC 1), 5=624(LC 1)

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

TOP CHORD 2-3=-2043/449, 3-4=-1690/373, 4-5=-2061/416
BOT CHORD 2-8=-401/1853, 7-8=-317/1490, 6-7=-268/1499, 5-6=-342/1872
WEBS 3-8=-124/569, 4-6=-109/583, 3-7=-76/282, 4-7=-78/276

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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) Bearing at joint(s) 2, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=145, 5=127.
- 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) 47 lb down and 40 lb up at 3-9-0, and 47 lb down and 40 lb up at 7-8-4 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-5=-70, 8-9=-20, 6-8=-20, 6-12=-20



September 16, 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 #152/MO	I47911497
2929201	E1	Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:31 2021 Page 2
ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-N_1SqraWTgCctDleTeUvZWlqkHbRZ7BjTW3s62ydQA_

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-26(B) 4=-26(B) 7=-47(B) 15=-26(B) 16=-47(B) 17=-47(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	E2	Roof Special	2	1	147911498

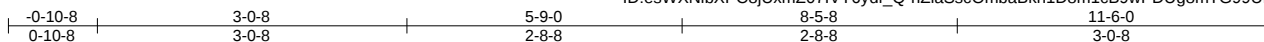
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:34 2021 Page 1

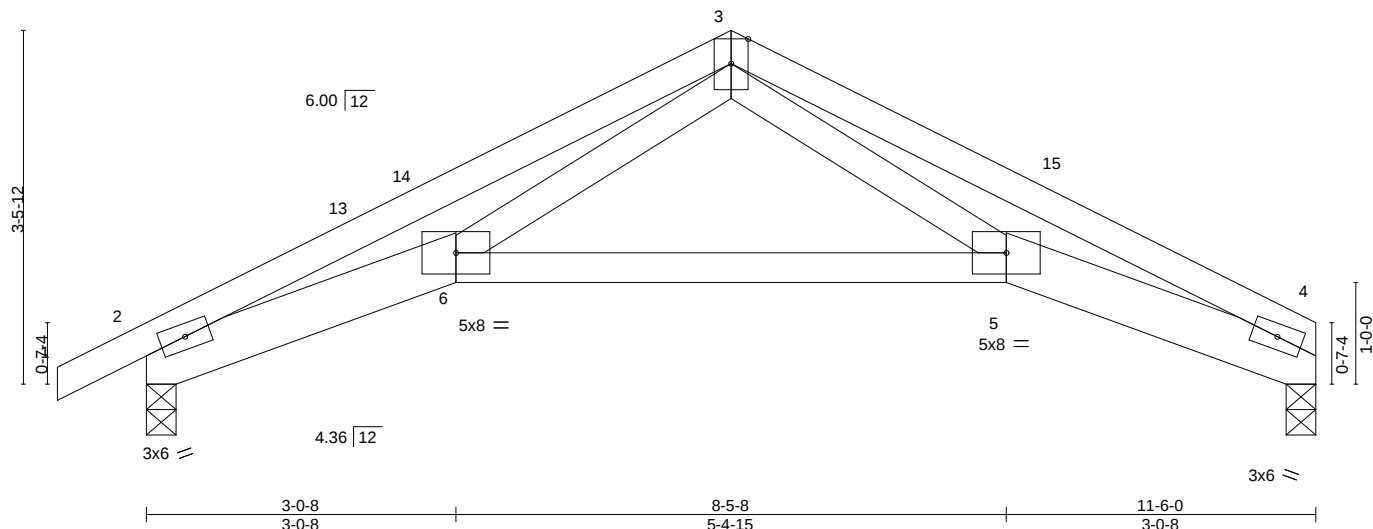
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Job Reference (optional)



4x6 ||

Scale = 1:22.7



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 0.25	Vert(LL)	-0.06	5-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.14	5-6	>995	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.19	Horz(CT)	0.06	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 42 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x6 SPF No.2 *Except*
 5-6: 2x4 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=59(LC 16)
 Max Uplift 2=-81(LC 12), 4=-64(LC 13)
 Max Grav 2=581(LC 1), 4=515(LC 1)

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

TOP CHORD 2-3=-1493/417, 3-4=-1510/416
 BOT CHORD 2-6=-323/1327, 5-6=-180/687, 4-5=-307/1345
 WEBS 3-5=-140/757, 3-6=-148/738

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-0, Exterior(2R) 5-9-0 to 8-9-0, Interior(1) 8-9-0 to 11-6-0 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.
- Bearing at joint(s) 2, 4 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) 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.
- 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.



September 16, 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 #152/MO	I47911499
2929201	E3	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:35 2021 Page 1

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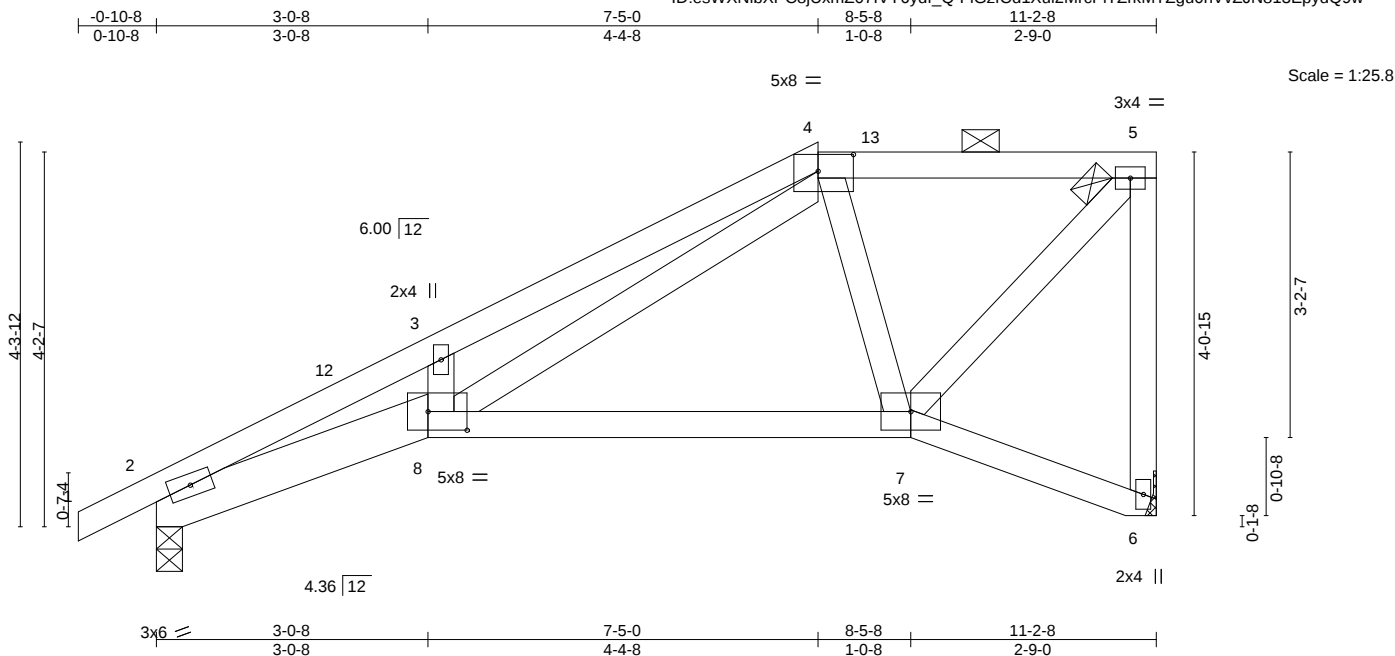


Plate Offsets (X,Y)--		[4:0-4-12,0-2-4], [8:0-5-4,0-2-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.12	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 48 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-8: 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 (6-0-0 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
 Max Horz 2=148(LC 11)
 Max Uplift 6=-80(LC 9), 2=-85(LC 12)
 Max Grav 6=495(LC 25), 2=561(LC 1)

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

TOP CHORD 2-3=-1447/477, 3-4=-1456/582, 4-5=-349/120, 5-6=-488/213
 BOT CHORD 2-8=-647/1295, 7-8=-253/440
 WEBS 5-7=-216/509, 4-7=-279/192, 4-8=-475/1005

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-5-0, Exterior(2E) 7-5-0 to 11-0-12 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
- 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) 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) 6, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



September 16, 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



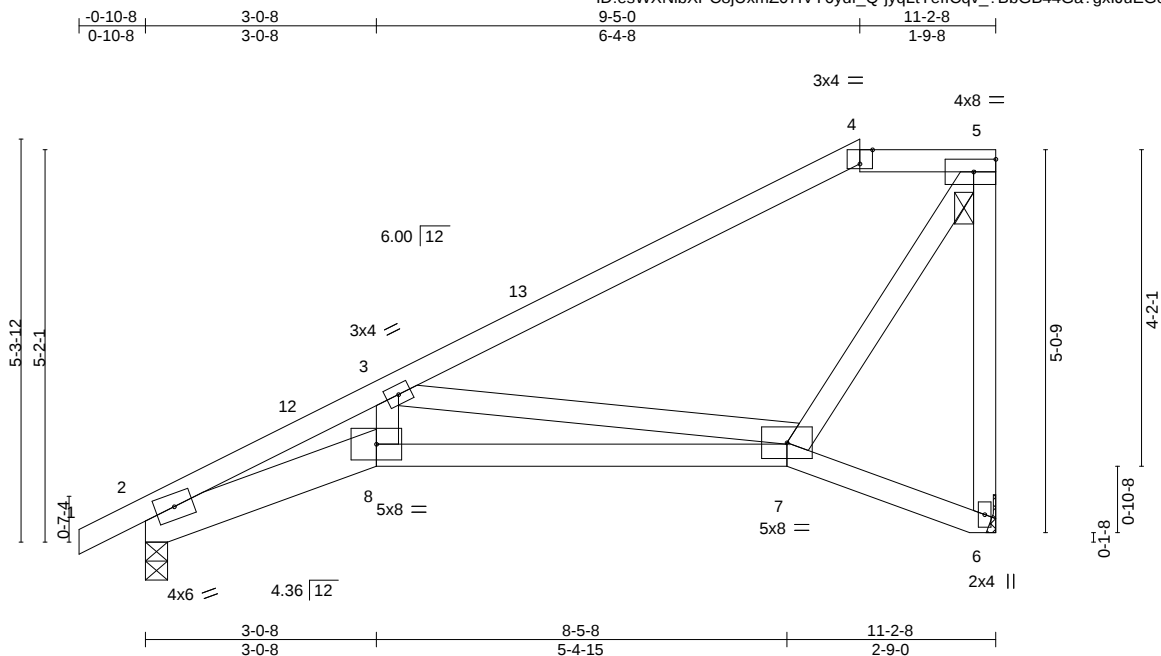
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911500
2929201	E4	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:36 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-jyqLtYeflCqv_?BbGB44Ga?gxIJuEGoScondmFydQ9v



Scale = 1:30.4

Plate Offsets (X,Y)-- [4:0-2-0,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	0.50	Vert(LL)	-0.05 7-8 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.10 7-8 >999 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.04 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 48 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-8: 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 (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
Max Horz 2=184(LC 11)
Max Uplift 6=-86(LC 12), 2=-85(LC 12)
Max Grav 6=495(LC 25), 2=561(LC 1)

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

TOP CHORD 2-3=-1646/531, 3-4=-405/85, 4-5=-269/112, 5-6=-500/244
BOT CHORD 2-8=-777/1517, 7-8=-746/1419
WEBS 3-8=-108/407, 3-7=-1172/599, 5-7=-121/401

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-5-0, Exterior(2E) 9-5-0 to 11-0-12 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
- 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) 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) 6, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



September 16, 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 #152/MO
2929201	E5	Jack-Closed	8	1	I47911501

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:37 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-C8Oj4ufH3Wymb9mopubJpnYplhcyznfcrSWAlhydQ9u

0-10-8	5-5-11	11-2-8
0-10-8	5-5-11	5-8-13

Scale = 1:35.4

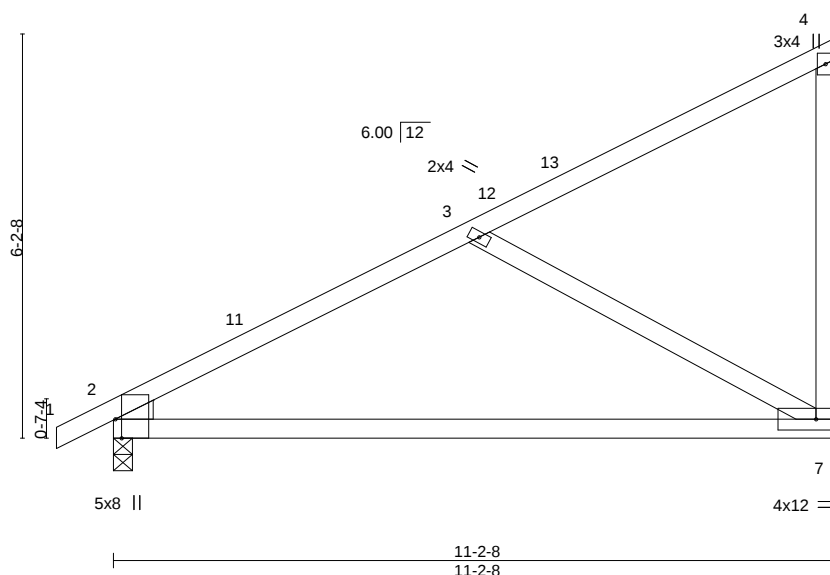


Plate Offsets (X,Y)-- [2:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.29	7-10	>448	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.59	7-10	>222	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 42 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) 2=0-3-8, 7=Mechanical
 Max Horz 2=222(LC 11)
 Max Uplift 2=-69(LC 12), 7=-70(LC 12)
 Max Grav 2=556(LC 1), 7=501(LC 1)

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

TOP CHORD 2-3=-561/147
 BOT CHORD 2-7=-270/475
 WEBS 3-7=-499/241

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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.



September 16, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911502
2929201	E6	Half Hip	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:38 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-gKy5IEfvqp4dDIL_Nc6YL?44W52hiGMI46Gkq8yDQ9t

Job Reference (optional)

0-10-8 5-0-15 10-1-8 11-2-8
0-10-8 5-0-15 5-0-9 1-1-0

Scale = 1:33.6

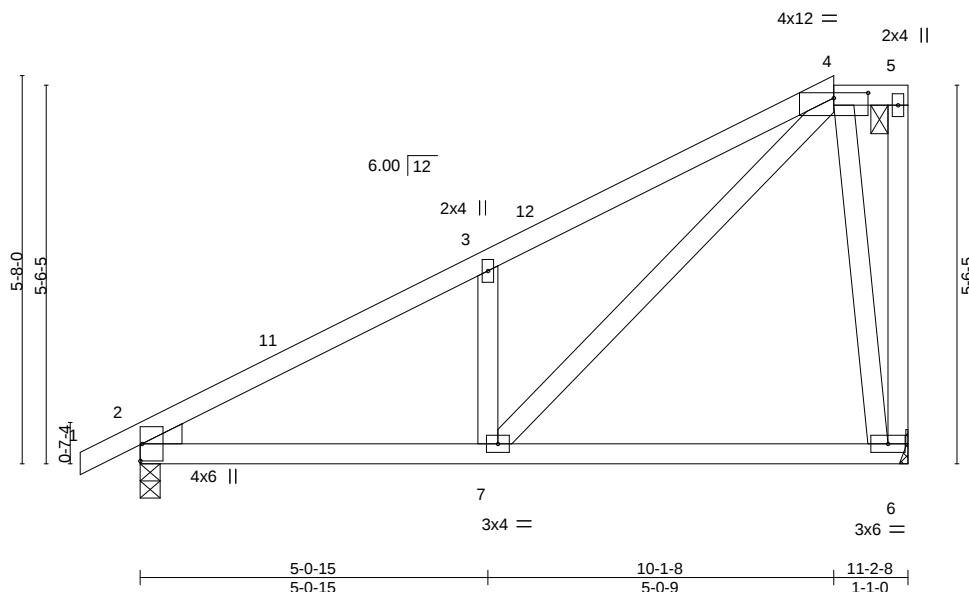


Plate Offsets (X,Y)--		[4:0-6-0,0-0-15]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC 0.23		Vert(LL) -0.04 6-7 >999 240		MT20 197/144	
TCDL	10.0	Lumber DOL 1.15		BC 0.27		Vert(CT) -0.07 6-7 >999 180			
BCLL	0.0	Rep Stress Incr YES		WB 0.24		Horz(CT) 0.01 6 n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 51 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 (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
Max Horz 2=199(LC 11)
Max Uplift 6=99(LC 12), 2=83(LC 12)
Max Grav 6=495(LC 1), 2=561(LC 1)

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

TOP CHORD 2-3=-676/138, 3-4=-693/241
BOT CHORD 2-7=-265/549
WEBS 3-7=-355/213, 4-6=-495/340, 4-7=-227/659

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-1-8, Exterior(2E) 10-1-8 to 11-0-12 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 100 lb uplift at joint(s) 6, 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	E7	Half Hip	1	1	147911503

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:39 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-8XWTvagXb7CUsSwAxJdnuCd9yVL8Rk?ulm?HNaydQ9s

-0-10-8	4-0-15	8-1-8	11-2-8
0-10-8	4-0-15	4-0-9	3-1-0

6x8 =

Scale = 1:28.0

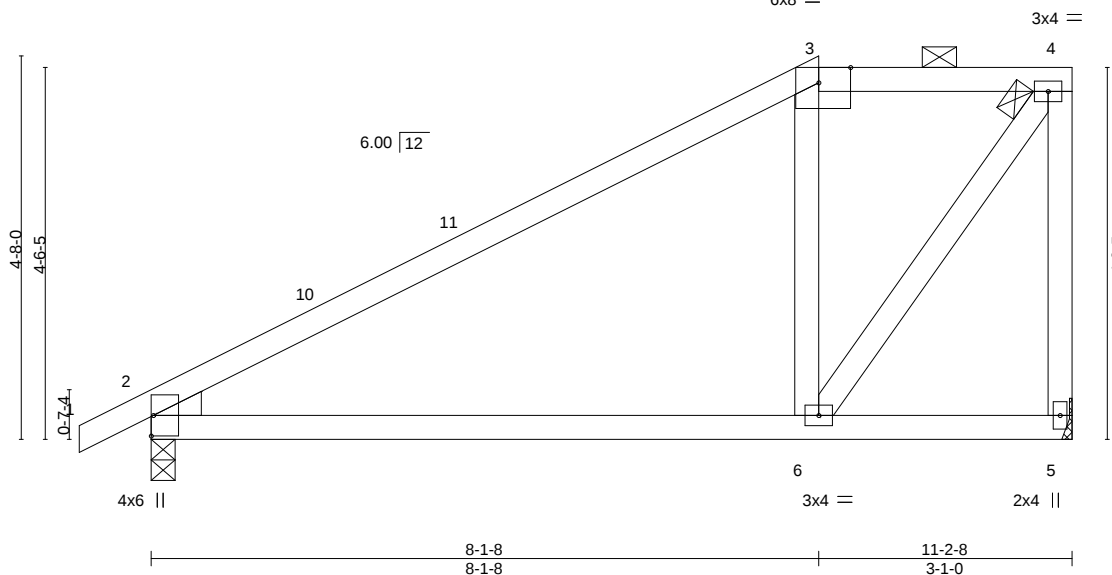


Plate Offsets (X,Y)-- [3:0-4-10,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.10	6-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.21	6-9	>620	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 43 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 (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=Mechanical, 2=0-3-8
Max Horz 2=162(LC 11)
Max Uplift 5=-77(LC 9), 2=-86(LC 12)
Max Grav 5=495(LC 25), 2=561(LC 1)

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

TOP CHORD 2-3=-499/120, 3-4=-361/159, 4-5=-528/223
BOT CHORD 2-6=-195/351
WEBS 3-6=-294/240, 4-6=-277/627

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-1-8, Exterior(2E) 8-1-8 to 11-0-12 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 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911504
2929201	E8	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:40 2021 Page 1
ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-cj4siwh9MRKKScVNV180RQAPuvk?A8R2XQlqv0ydQ9r



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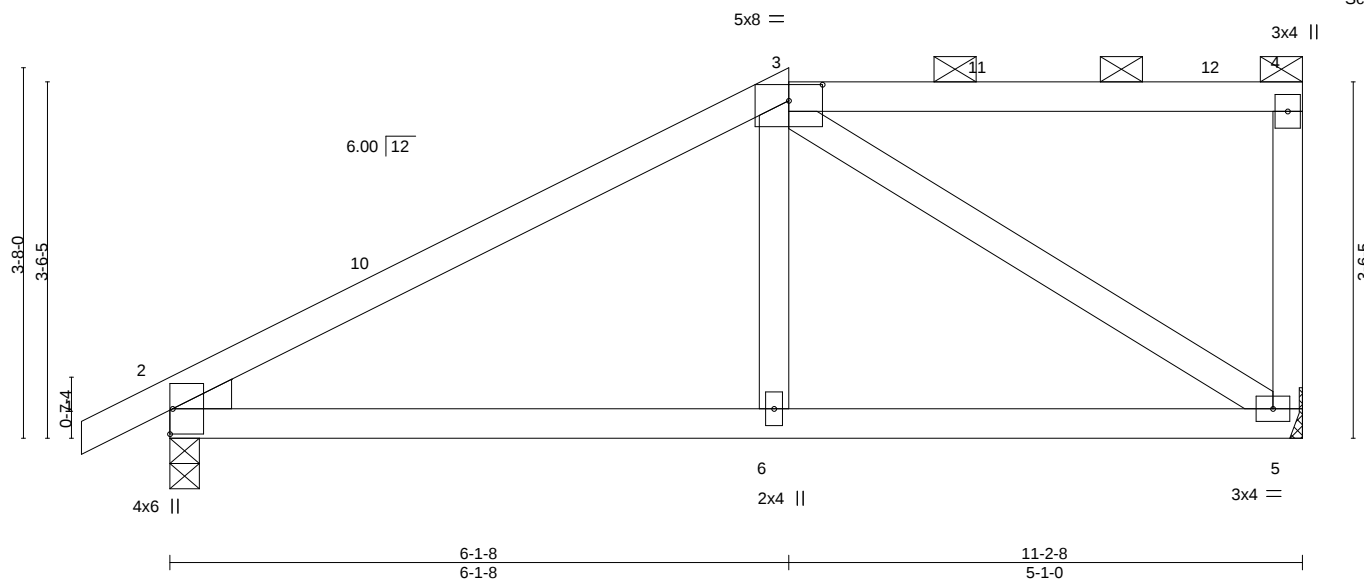


Plate Offsets (X,Y)--		[3:0-4-0,0-1-15]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.31		Vert(LL)	-0.03 6-9	>999	240	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.27		Vert(CT)	-0.06 6-9	>999	180		
BCLL 0.0		Rep Stress Incr	YES	WB 0.33		Horz(CT)	0.01 2	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS						Weight: 42 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 (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 2=124(LC 11)
Max Uplift 2=-81(LC 12), 5=-83(LC 9)
Max Grav 2=561(LC 1), 5=495(LC 1)

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

TOP CHORD 2-3=-617/158
BOT CHORD 2-6=-221/483, 5-6=-222/477
WEBS 3-5=-539/220

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-1-8, Exterior(2R) 6-1-8 to 10-4-7, Interior(1) 10-4-7 to 11-0-12 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 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.
- 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911505
2929201	E9	Half Hip	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

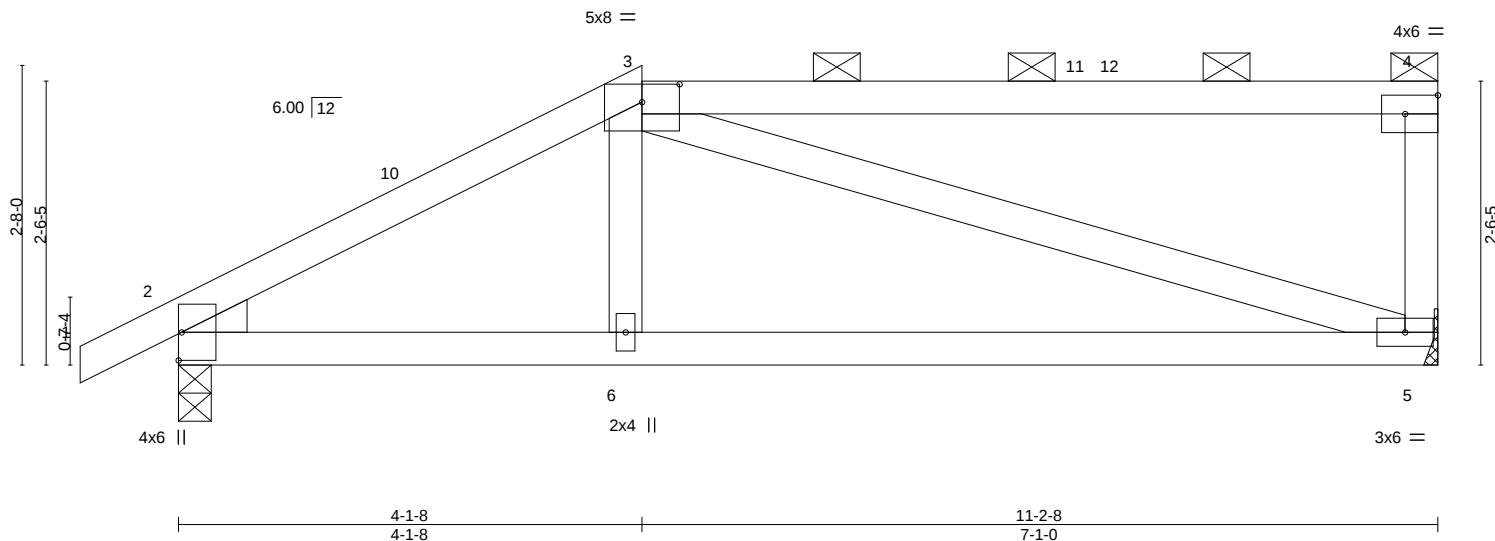
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:41 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-4veEwGin7kTB4m3Z2kfFzdiV3J2tvYpBm4UORSydQ9q

Job Reference (optional)

-0-10-8	4-1-8	11-2-8
0-10-8	4-1-8	7-1-0

Scale = 1:20.5



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 0.60	Vert(LL)	-0.07	5-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.14	5-6	>977	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.52	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 41 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 (6-0-0 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
 Max Horz 2=87(LC 11)
 Max Uplift 2=-69(LC 12), 5=-87(LC 9)
 Max Grav 2=561(LC 1), 5=495(LC 1)

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

TOP CHORD 2-3=-759/197, 4-5=-252/115
 BOT CHORD 2-6=-228/647, 5-6=-231/641
 WEBS 3-5=-541/187

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-8, Exterior(2R) 4-1-8 to 8-4-7, Interior(1) 8-4-7 to 11-0-12 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 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.
- 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.



September 16, 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 #152/MO	I47911506
2929201	E10	Half Hip Girder	1	1	Job Reference (optional)	

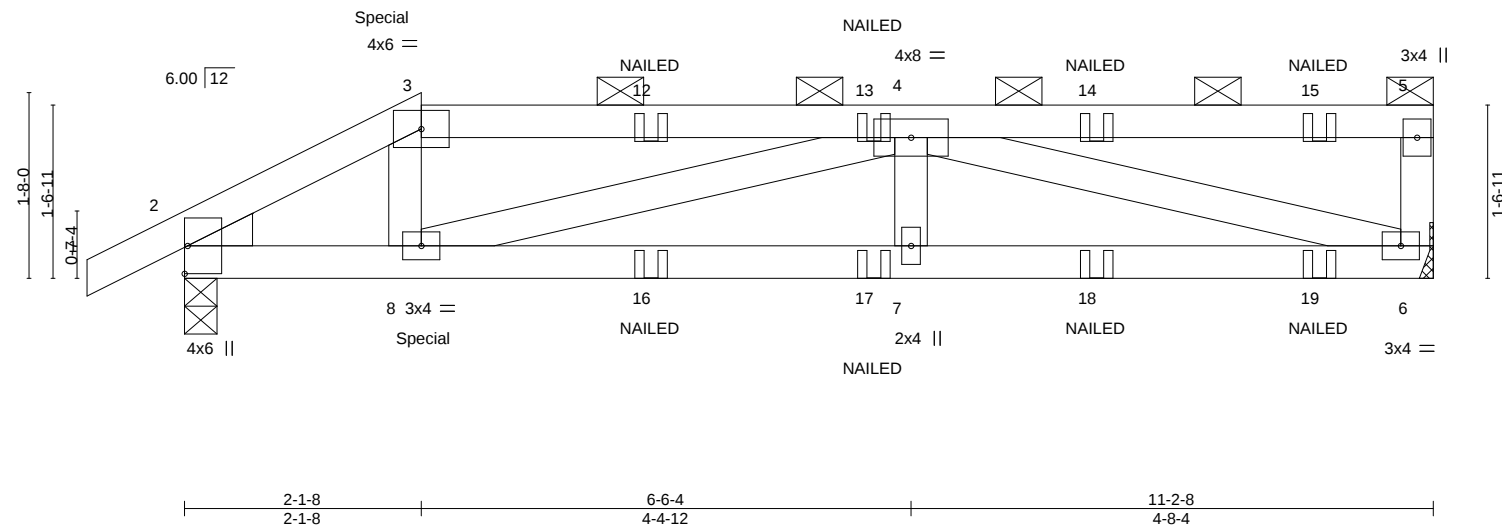
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:32 2021 Page 1

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Scale = 1:20.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCCL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.04	7-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.08	7-8	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.45	Horz(CT)	0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 41 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 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
Max Horz 2=51(LC 7)
Max Uplift 2=-94(LC 8), 6=-118(LC 5)
Max Grav 2=592(LC 1), 6=525(LC 1)

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

TOP CHORD 2-3=-825/160, 3-4=-703/148
BOT CHORD 2-8=-167/721, 7-8=-283/1210, 6-7=-283/1210
WEBS 4-8=-547/136, 4-6=-1169/264

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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 except (jt=lb) 6=118.
- 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) 31 lb down and 67 lb up at 2-1-8 on top chord, and 35 lb down and 12 lb up at 2-1-8 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, 6-9=-20



September 16, 2021

Continued on page 2

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

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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 #152/MO	I47911506
2929201	E10	Half Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:33 2021 Page 2
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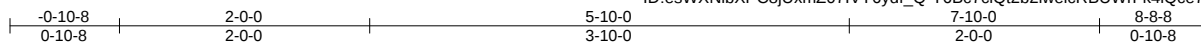
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 8=-20(F) 16=-10(F) 17=-10(F) 18=-10(F) 19=-11(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911507
2929201	G1	Hip Girder	1	1		

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:42 2021 Page 1

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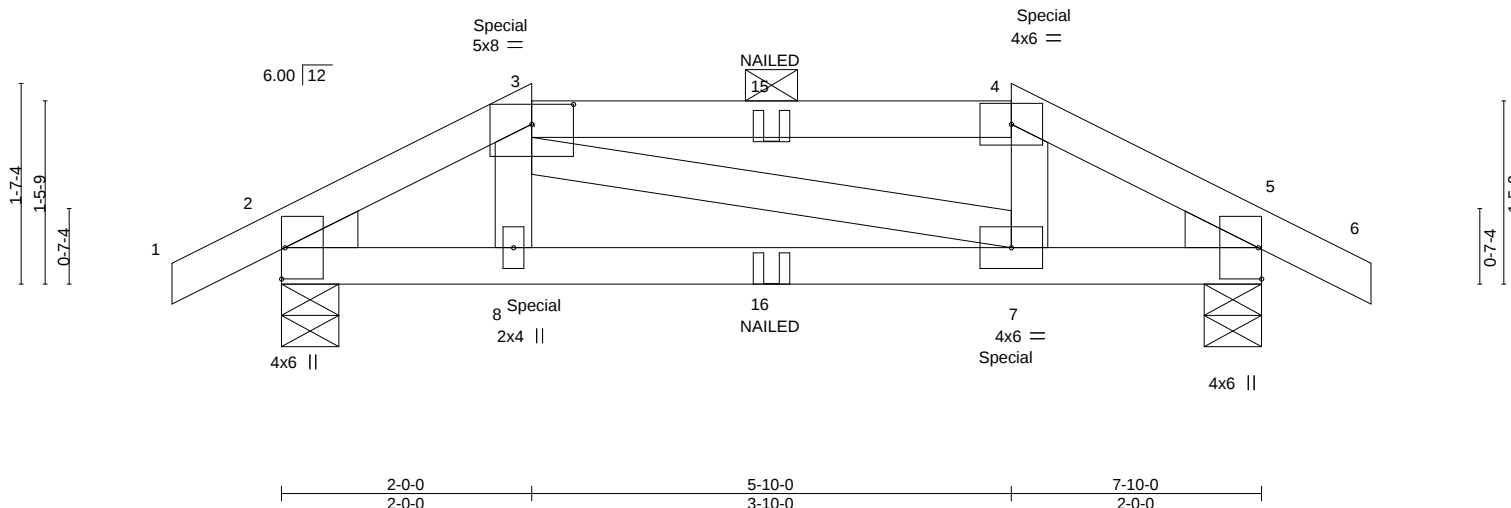


Plate Offsets (X,Y)--		[3:0-4:0,0-1-15]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.33	Vert(LL)	-0.01	7-8	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.20	Vert(CT)	-0.03	7-8	>999	180	
BCLL	0.0	Rep Stress Incr NO		WB	0.03	Horz(CT)	0.00	5	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 29 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2 , Right: 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=0-5-8, 5=0-5-8
 Max Horz 2=22(LC 8)
 Max Uplift 2=-87(LC 8), 5=-87(LC 9)
 Max Grav 2=433(LC 1), 5=433(LC 1)

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

TOP CHORD 2-3=-523/98, 3-4=-441/98, 4-5=-523/98
 BOT CHORD 2-8=-71/447, 7-8=-72/441, 5-7=-59/447

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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) 28 lb down and 63 lb up at 2-0-0, and 28 lb down and 63 lb up at 5-10-0 on top chord, and 32 lb down and 11 lb up at 2-0-0, and 32 lb down and 11 lb up at 5-9-4 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, 4-6=-70, 9-12=-20
 Concentrated Loads (lb)
 Vert: 8=-15(F) 7=-15(F) 16=-8(F)



September 16, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

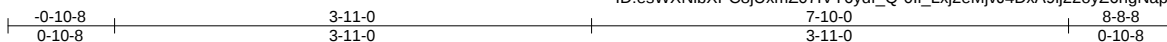
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	G2	Common	3	1	I47911508

Builders FirstSource (Valley Center),

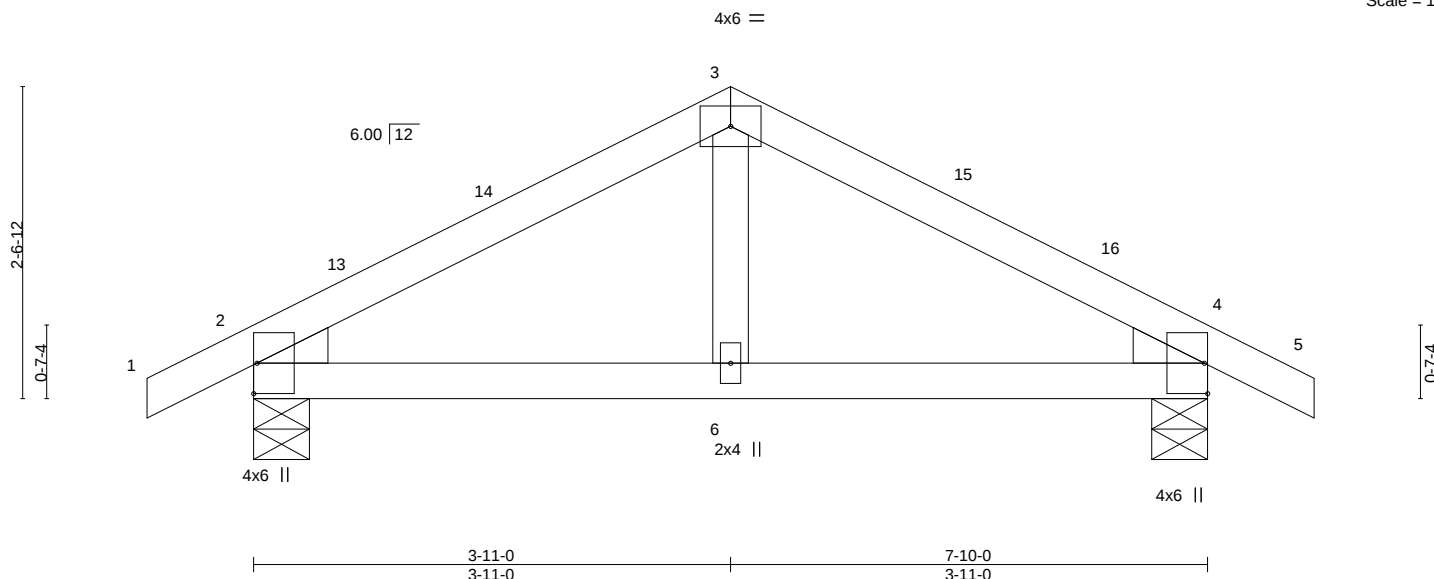
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:43 2021 Page 1

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Scale = 1:18.9



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 0.15	Vert(LL)	-0.01	6-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.01	6-9	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 25 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

WEDGE

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-5-8, 4=0-5-8

Max Horz 2=38(LC 12)

Max Uplift 2=-61(LC 12), 4=-61(LC 13)

Max Grav 2=414(LC 1), 4=414(LC 1)

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

TOP CHORD 2-3=-411/193, 3-4=-411/193

BOT CHORD 2-6=-68/315, 4-6=-68/315

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior(1) 6-11-0 to 8-8-8 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
- 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, 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.
- 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.



September 16, 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 2929201	Truss GRDR	Truss Type Half Hip Girder	Qty 1	Ply 2	SUMMIT/HAWTHORN RIDGE #152/MO I47911509
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:45 2021 Page 1

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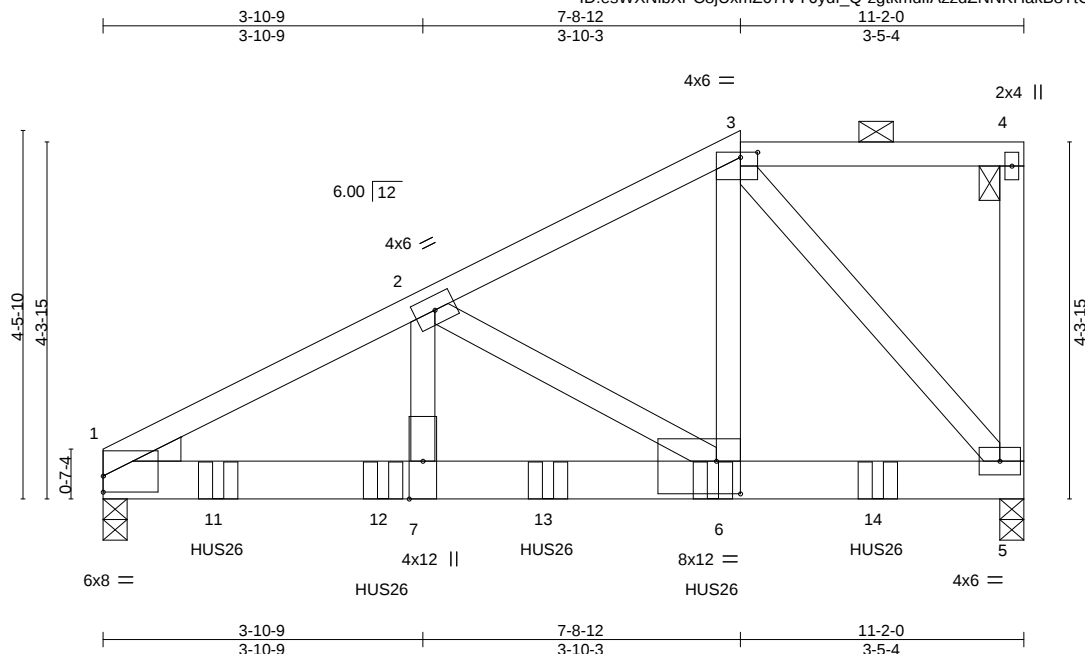


Plate Offsets (X,Y)--										[1:0-0,0-2-5], [3:0-2-8,0-0-12], [6:0-3-8,0-4-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP							
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144							
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.09	6-7	>999	180									
BCLL	0.0	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.02	5	n/a	n/a									
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 110 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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=145(LC 7)
Max Uplift 1=-581(LC 8), 5=-568(LC 5)
Max Grav 1=3984(LC 1), 5=3888(LC 1)

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

TOP CHORD 1-2=-5870/856, 2-3=-3129/468
BOT CHORD 1-7=-788/5200, 6-7=-788/5200, 5-6=-408/2626
WEBS 2-7=-324/2425, 2-6=-2798/480, 3-6=-608/4233, 3-5=-4072/602

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 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=581, 5=568.
- 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 HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-4-12 from the left end to 9-4-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard



September 16, 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 #152/MO	I47911509
2929201	GRDR	Half Hip Girder	1	2	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:45 2021 Page 2
ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-zgtkmdIIAzzdZNNKHakB8TtGLwl5rMmnhiSbaEydQ9m

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 6=-1376(F) 11=-1376(F) 12=-1376(F) 13=-1376(F) 14=-1376(F)

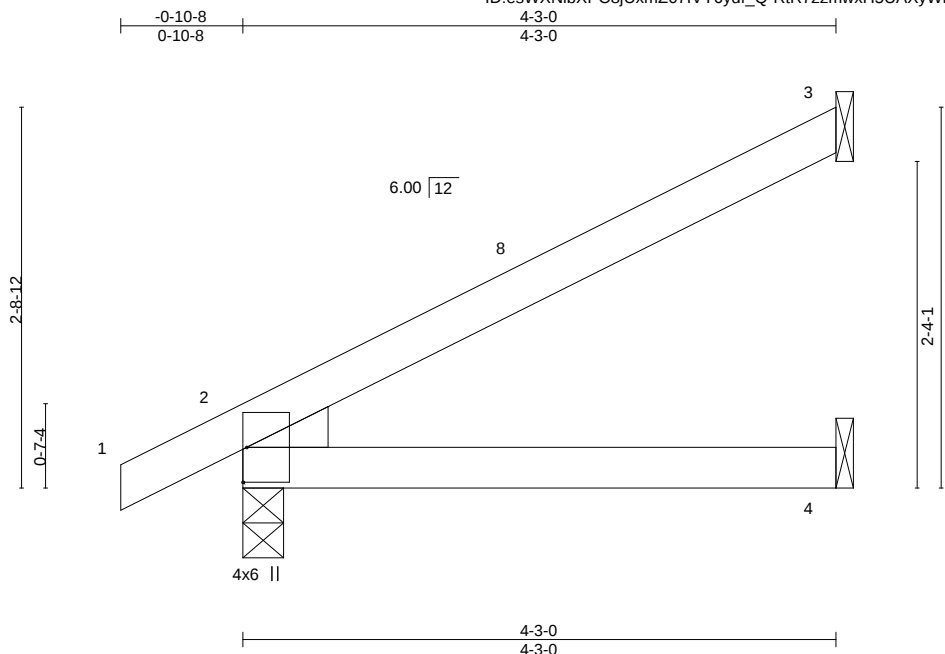
Job 2929201	Truss J1	Truss Type Jack-Open	Qty 10	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911510
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:46 2021 Page 1

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Scale = 1:16.5

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 0.22	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: 12 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEDGE

Left: 2x4 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=90(LC 12)

Max Uplift 3=-57(LC 12), 2=-28(LC 12)

Max Grav 3=125(LC 1), 2=256(LC 1), 4=76(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



September 16, 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 #152/MO
2929201	J2	Jack-Open	4	1	I47911511

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:47 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-v3?VAJmYiaDLohXjP?mfDuyZij5nJON480xif6ydQ9k



Scale = 1:19.4

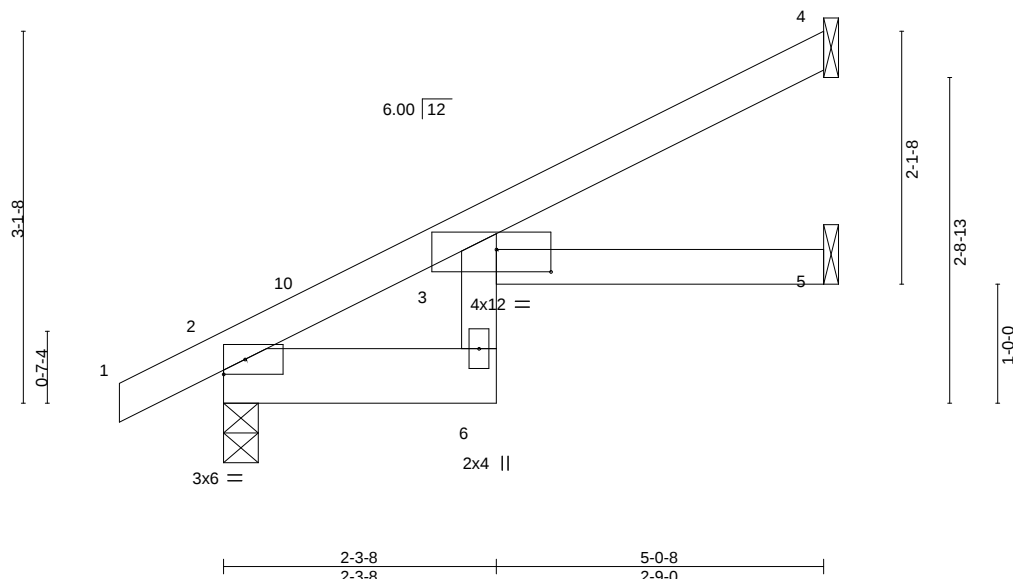


Plate Offsets (X,Y)--		[3:0-5-8,0-2-4]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	0.06	6	>939	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.10	6	>628	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 16 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=105(LC 12)
Max Uplift 4=-56(LC 12), 2=-32(LC 12), 5=-10(LC 12)
Max Grav 4=137(LC 1), 2=292(LC 1), 5=87(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 4-11-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 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.



September 16, 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 2929201	Truss J3	Truss Type Jack-Open	Qty 9	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911512
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Builders FirstSource (Valley Center),

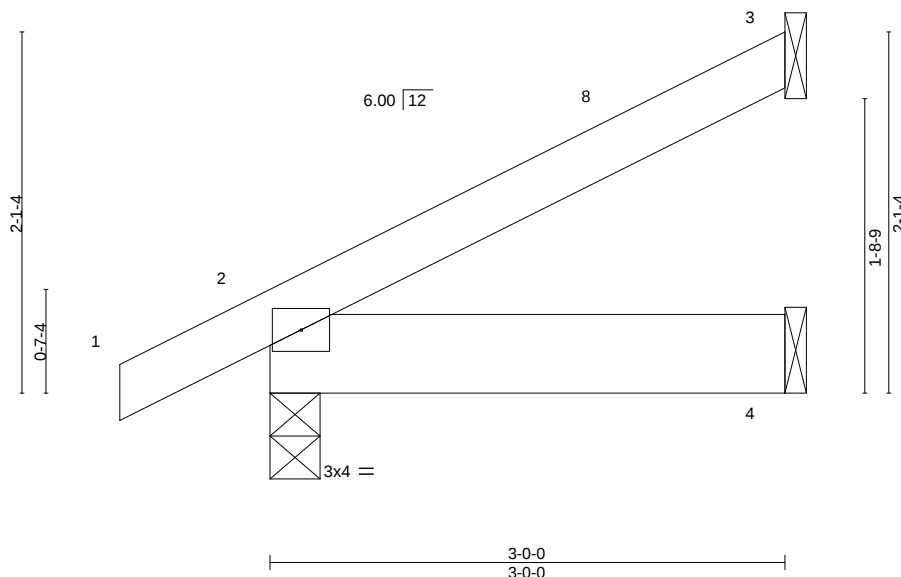
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:48 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-NFZtOfnATuLCQr6vziHul6VqO7WO2rdDNghFBZydQ9j

-0-10-8
0-10-8
3-0-0
3-0-0

Scale = 1:13.4



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 0.08	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 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 3-0-0 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=68(LC 12)
Max Uplift 3=-36(LC 12), 2=-26(LC 12), 4=-2(LC 12)
Max Grav 3=76(LC 1), 2=203(LC 1), 4=61(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-4 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.



September 16, 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

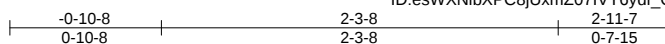
Job 2929201	Truss J4	Truss Type Jack-Open	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911513
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:49 2021 Page 1

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Scale = 1:13.3

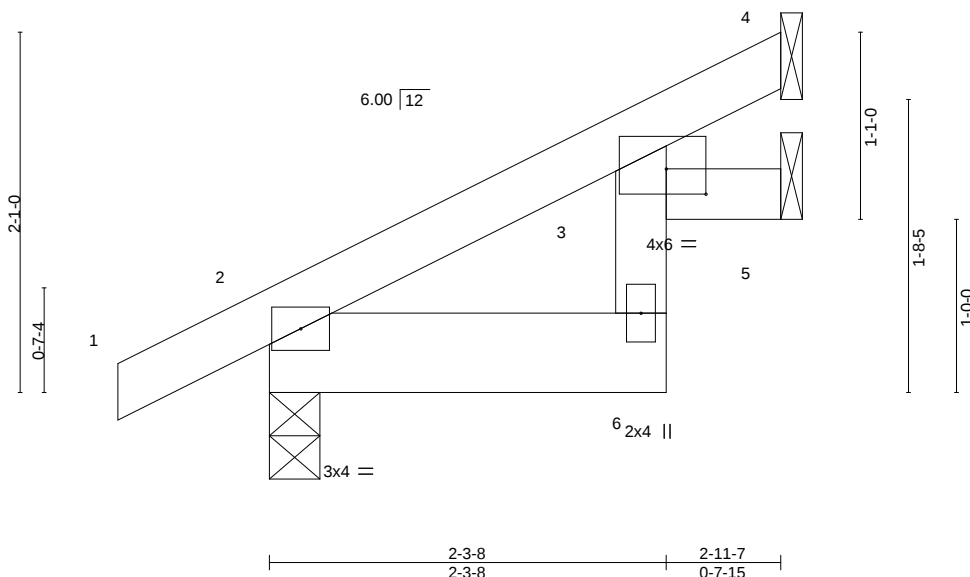


Plate Offsets (X,Y)--		[3:0-2-12,0-1-12]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.01	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	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 *Except*
2-6: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=67(LC 12)
Max Uplift 4=-25(LC 12), 2=-26(LC 12), 5=-12(LC 12)
Max Grav 4=68(LC 1), 2=201(LC 1), 5=54(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 2-10-11 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.



September 16, 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

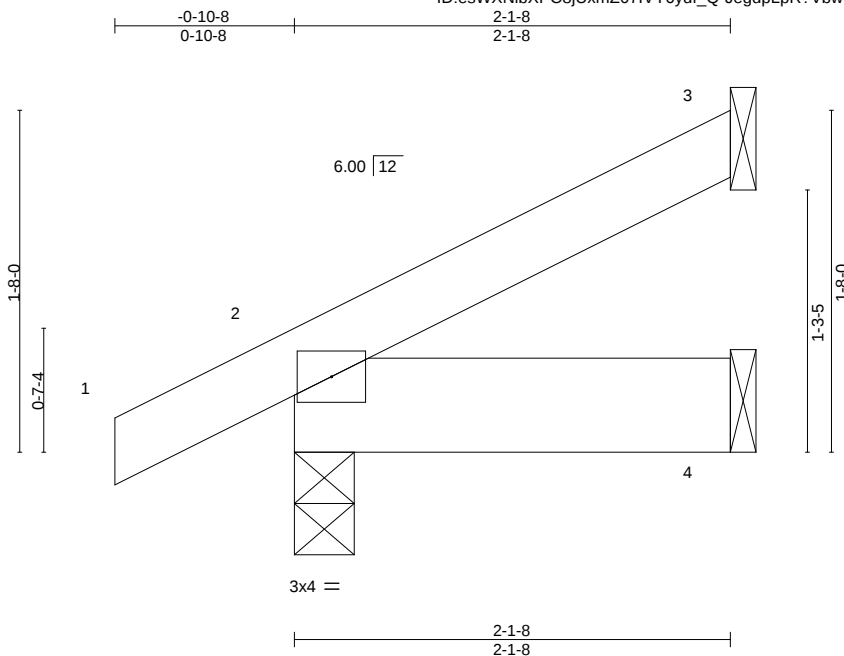
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	J5	Jack-Open	5	1	I47911514

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:50 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-JegdpLpR?Vbwf8FI47KMrXaBLxCJWl6Wq_AMGRydQ9h



Scale = 1:11.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	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: 8 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 2-1-8 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=52(LC 12)
Max Uplift 3=-24(LC 12), 2=-24(LC 12), 4=-2(LC 12)
Max Grav 3=50(LC 1), 2=167(LC 1), 4=41(LC 3)

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

NOTES-

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



September 16, 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

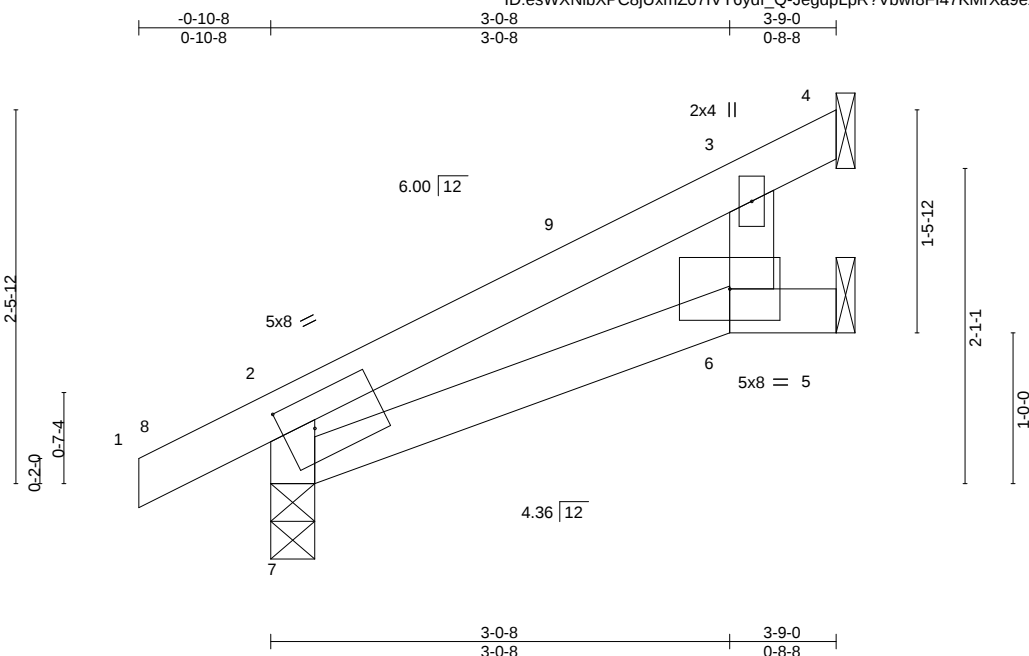
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	J6	Jack-Open	3	1	I47911515
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:50 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-JegdLpR?Vbwf8FI47KMrXa9exB2WlvWq_AMGRydQ9h



Scale = 1:15.3

Plate Offsets (X, Y)--		[2:0-2-8, 0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.16	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(LL) -0.01 6-7 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.01	Vert(CT) -0.02 6-7 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	Horz(CT) -0.01 4 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 12 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 3-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=76(LC 12)
Max Uplift 4=-22(LC 12), 5=-28(LC 12), 7=-27(LC 12)
Max Grav 4=82(LC 1), 5=67(LC 1), 7=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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-8-4 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
- 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.



September 16, 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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

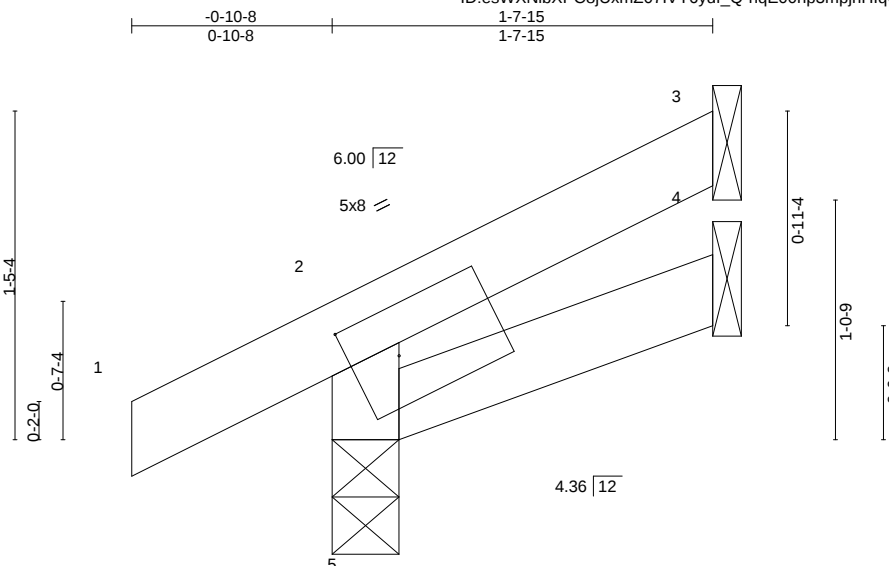
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	J8	Jack-Open	4	1	I47911517

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:51 2021 Page 1

ID:esWXNIBXPC8jUxmZ07IVY6ydf_Q-nqE00hp3mpjnHlqUeqrbNk7LoLYZFBMf3evwotyDQ9g



Scale = 1:10.1

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	0.07	Vert(LL)	-0.00 5 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00 5 >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-MR				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 1-7-15 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=38(LC 12)
Max Uplift 3=-22(LC 12), 5=-23(LC 12)
Max Grav 3=34(LC 1), 4=26(LC 3), 5=163(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 5 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) 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.



September 16, 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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	I47911518
2929201	J9	Jack-Open	4	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

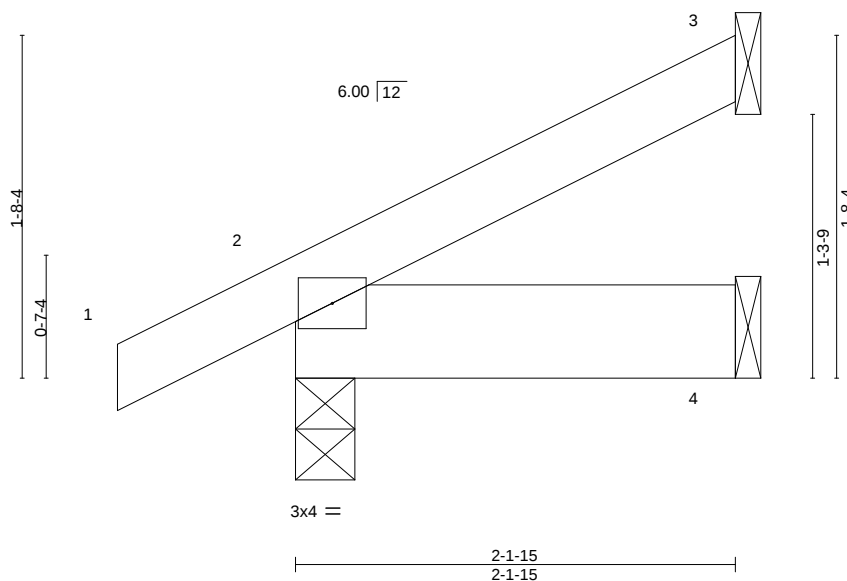
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:52 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-F1oOE0qhX7rduSPgCYMqwygWqkum_ecpllfTKKydQ9f

-0-10-8
0-10-8
2-1-15
2-1-15

Scale = 1:11.3



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: 8 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 2-1-15 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=52(LC 12)
Max Uplift 3=-25(LC 12), 2=-24(LC 12), 4=-2(LC 12)
Max Grav 3=51(LC 1), 2=168(LC 1), 4=42(LC 3)

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

NOTES-

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



September 16, 2021

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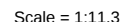
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:47 2021 Page 1
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LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-5-8 oc purlins, except end verticals.
BOT CHORD	2x6 SPF No.2		
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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: 1-2=-70, 3-4=-20
Concentrated Loads (lb)
Vert: 2=-16(F) 3=-25(F)



September 16, 2021



WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH/473 rev. 5/19/2020 BEFORE USE.

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Chesterfield, MO 63017

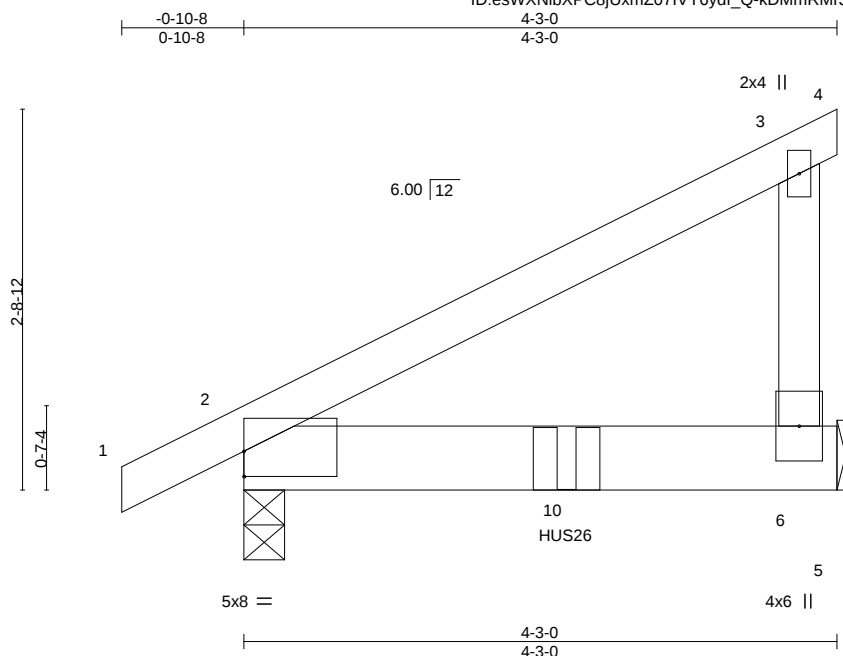
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	JG1	Jack-Closed Girder	1	1	I47911520

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:53 2021 Page 1

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Scale = 1:16.5

Plate Offsets (X,Y)-- [2:0-0-0,0-2-3]												
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	0.39	Vert(LL)	-0.05	6-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.08	6-9	>565	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	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 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-1-4 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
Max Horz 2=90(LC 7)
Max Uplift 6=-210(LC 8), 2=-155(LC 8)
Max Grav 6=1026(LC 1), 2=854(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 6=210, 2=155.
- 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.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 2-3-12 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- 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=-20, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-1450(F)



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO	147911521
2929201	JG2	Half Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:54 2021 Page 1

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Scale: 1"=1'

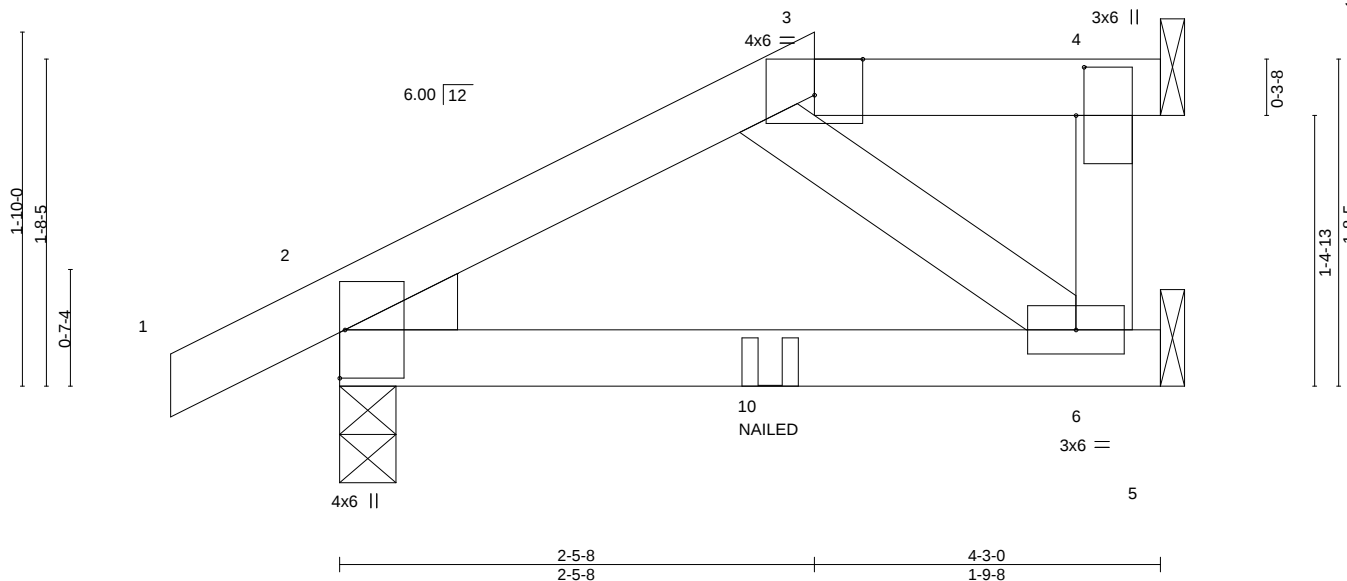


Plate Offsets (X,Y)--		[3:0-3-0,Edge], [4:0-3-0,0-0-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	6-9	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.03	6-9	>999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 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 4-3-0 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) 4=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=56(LC 7)
Max Uplift 4=-19(LC 4), 2=-59(LC 8), 6=-31(LC 5)
Max Grav 4=52(LC 1), 2=300(LC 1), 6=195(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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) 4, 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-125(B)



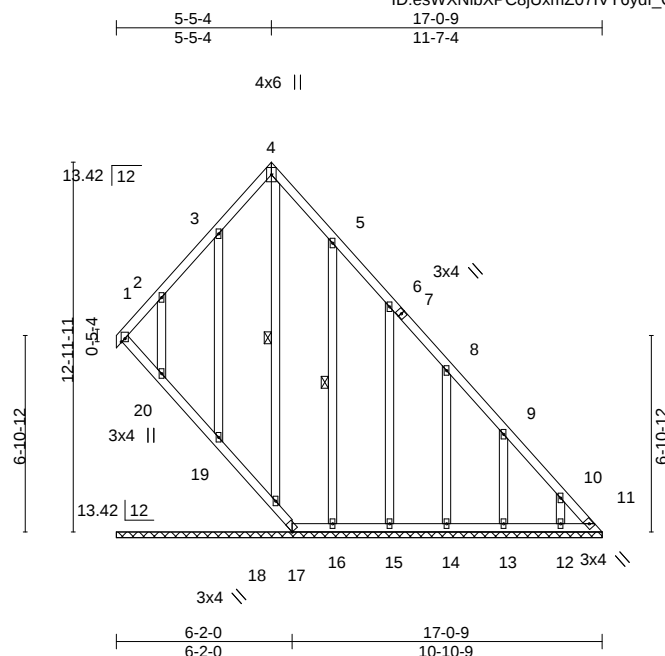
September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



Scale = 1:80.8

Plate Offsets (X,Y)--		[1:0-1-5,0-1-8]											
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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999			
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	11	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 108 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.
WEBS	1 Row at midpt 4-18, 5-16

REACTIONS.

ONS. All bearings 17-0-9.
(lb) - Max Horz 1=-336(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 18 except 17=-327(LC 13), 11=-100(LC 11), 19=-113(LC 12),
20=-153(LC 12), 16=-127(LC 13), 15=-128(LC 13), 14=-123(LC 13), 13=-127(LC 13), 12=-109(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 17, 19, 20, 16, 15, 14, 13, 12 except 1=261(LC 12), 11=285(LC
13), 18=331(LC 13)

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

TOP CHORD 9-10=-290/211, 10-11=-390/292
BOT CHORD 1-20=-317/416, 19-20=-319/421, 18-19=-317/422, 17-18=-313/435, 16-17=-200/273,
15-16=-200/273, 14-15=-200/273, 13-14=-200/273, 12-13=-200/273, 11-12=-200/273
WEBS 4-18=-294/204

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-11 to 3-7-0, Interior(1) 3-7-0 to 5-5-4, Exterior(2R) 5-5-4 to 8-5-4, Interior(1) 8-5-4 to 16-8-10 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
- 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, 18 except (jt=lb) 17=327, 11=100, 19=113, 20=153, 16=127, 15=128, 14=123, 13=127, 12=109.
- 7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 18, 19, 20.
- 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.



September 16, 2021



WARNING – Velly design parameters are READ-ONLY on this and INCLUDED WITH REFERENCE PAGE MH-1413 (Rev. 3/29/2020) BEFORE USE.
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

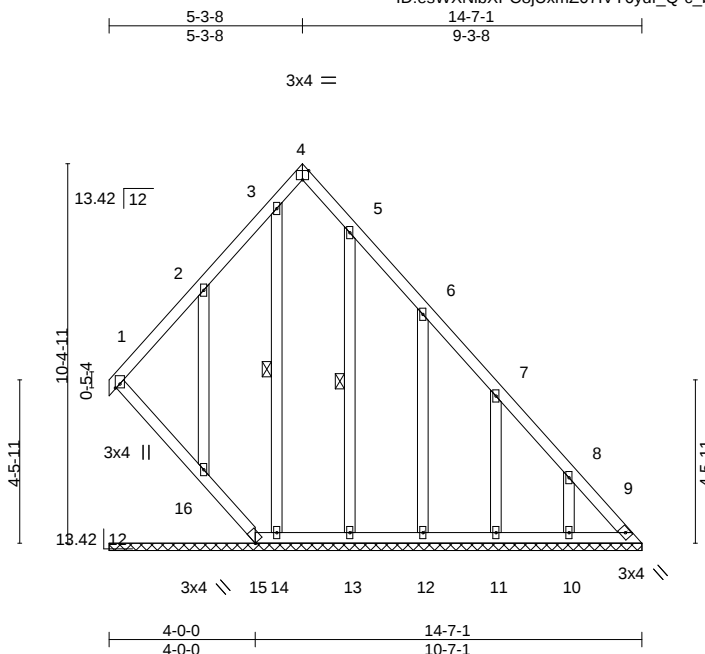
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	L2	GABLE	1	1	I47911523

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:57 2021 Page 1

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Scale = 1:63.1

Plate Offsets (X,Y)--		[1:0-1-5,0-1-8], [4:Edge,0-3-0]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014		Matrix-S						Weight: 83 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.
WEBS 1 Row at midpt 5-13, 3-14

REACTIONS.

All bearings 14-7-1.
(lb) - Max Horz 1=-244(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 9, 13, 14 except 15=-319(LC 13), 10=-128(LC 13), 11=-120(LC 13), 12=-145(LC 13), 16=-199(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 15, 10, 11, 12, 13, 14 except 9=276(LC 13), 1=334(LC 13), 16=264(LC 19)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-268/203, 8-9=-386/304
BOT CHORD 1-16=-348/431, 15-16=-333/438, 14-15=-216/282, 13-14=-216/282, 12-13=-216/282, 11-12=-216/282, 10-11=-216/282, 9-10=-216/282

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 5-3-8, Exterior(2R) 5-3-8 to 8-7-1, Interior(1) 8-7-1 to 14-3-2 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
- 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) 9, 13, 14 except (jt=lb) 15=319, 10=128, 11=120, 12=145, 16=199.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 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.



September 16, 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

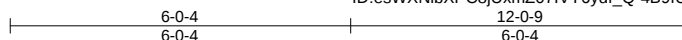
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	L3	GABLE	1	1	I47911524

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:58 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-4B9fU4vS6zncNtqYpTE9DvYG9x1OLuhgD6nYzydQ9Z



4x6 =

Scale = 1:40.8

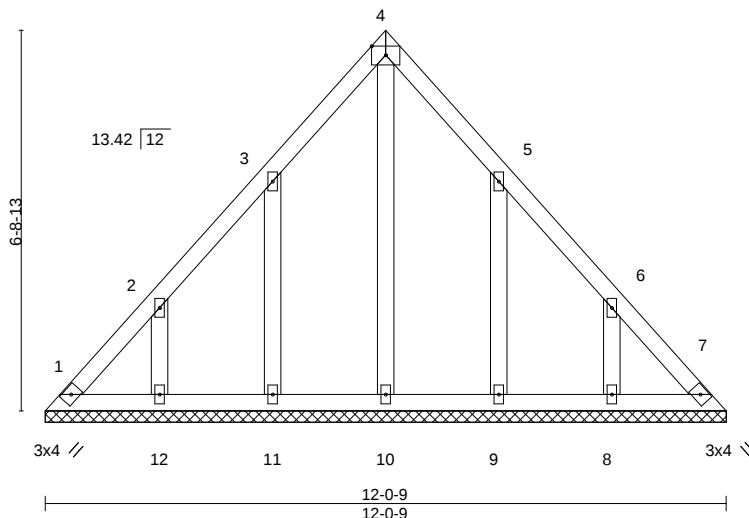


Plate Offsets (X,Y)--		[4:Edge,0-1-14]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 53 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 12-0-9.

(lb) - Max Horz 1=154(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=129(LC 12), 12=128(LC 12), 9=128(LC 13),
8=128(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=15ft; 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 6-0-4, Exterior(2R) 6-0-4 to 9-0-4, Interior(1) 9-0-4 to 11-8-10 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
- 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=129, 12=128, 9=128, 8=128.
- 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.



September 16, 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 #152/MO
2929201	L4	GABLE	1	1	I47911525

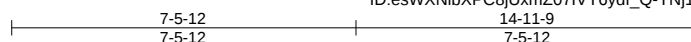
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:04:59 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-YNj1iQw4tGkeEXR06W_TiQsJ0ZHE7norvtrL4QydQ9Y

Job Reference (optional)



4x6 =

Scale = 1:50.1

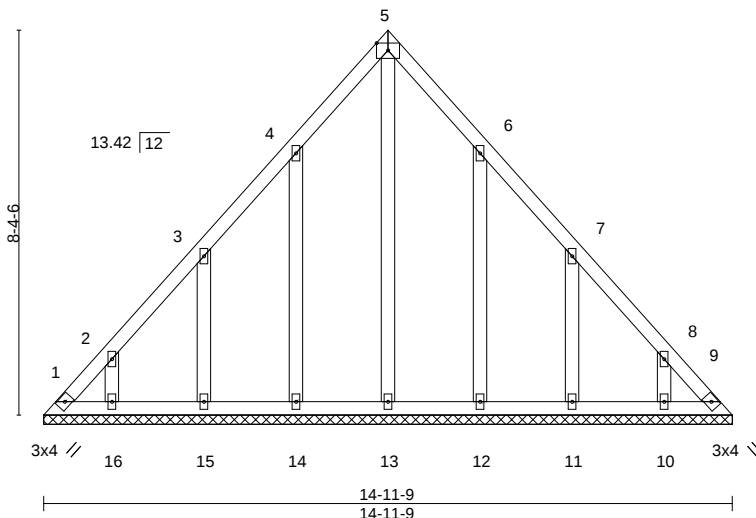


Plate Offsets (X,Y)--		[5:Edge,0-1-14]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(LL) n/a - n/a 999
BCLL 0.0	Rep Stress Incr YES	WB 0.16	Vert(CT) n/a - n/a 999
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 9 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 73 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 14-11-9.
(lb) - Max Horz 1=194(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 1=101(LC 10), 14=126(LC 12), 15=128(LC 12),
16=109(LC 12), 12=125(LC 13), 11=129(LC 13), 10=109(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

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

TOP CHORD 1-2=-275/172

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-5-12, Interior(1) 3-5-12 to 7-5-12, Exterior(2R) 7-5-12 to 10-5-12, Interior(1) 10-5-12 to 14-7-10 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) 9 except (jt=lb) 1=101, 14=126, 15=128, 16=109, 12=125, 11=129, 10=109.
- 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.



September 16, 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

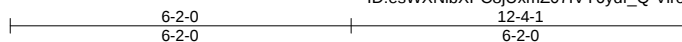
Job 2929201	Truss L5	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911526
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:01 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-VIro75xKPu_MTrbPDx0xnrX3TNyibiY8MBKR8IydQ9W



4x6 =

Scale = 1:41.7

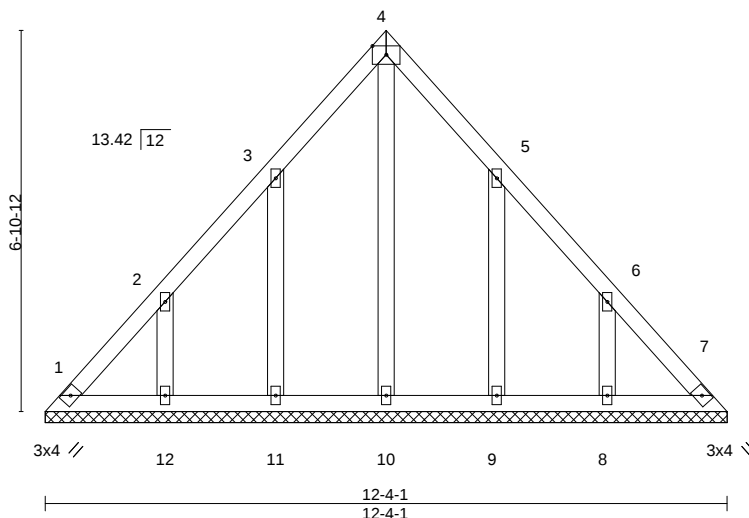


Plate Offsets (X,Y)--		[4:Edge,0-1-14]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06
TCDL 10.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.08
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.00 7 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 55 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 12-4-1.

(lb) - Max Horz 1=-158(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-127(LC 12), 12=-134(LC 12), 9=-126(LC 13),
8=-134(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=15ft; 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 6-2-0, Exterior(2R) 6-2-0 to 9-2-0, Interior(1) 9-2-0 to 12-0-2 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
- 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=127, 12=134, 9=126, 8=134.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 16, 2021

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



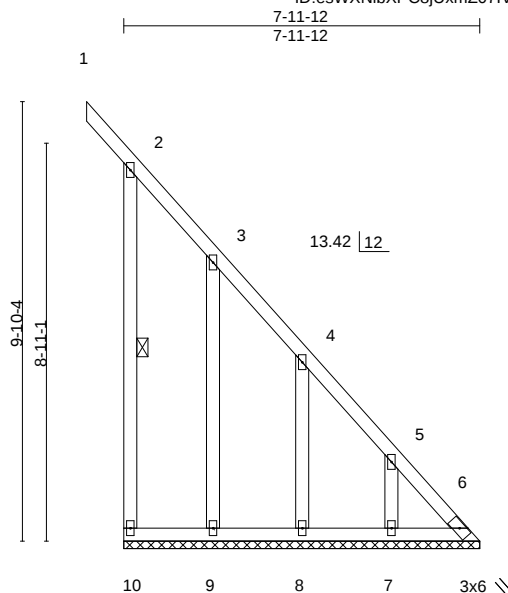
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	L6	GABLE	1	1	I47911527
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:01 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-Vlro75xKpu_MTrbPDx0xnrXwPNx4bhb8MBKR8lydQ9W



Scale = 1:51.7

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 0.64	Vert(LL)	0.00	1	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	1	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 46 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-3-0 oc bracing.
WEBS 1 Row at midpt 2-10

REACTIONS.

All bearings 7-11-12.

(lb) - Max Horz 10=-335(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 9 except 10=-169(LC 8), 6=-139(LC 11), 8=-130(LC 13), 7=-125(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 10, 9, 8, 7 except 6=288(LC 8)

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

TOP CHORD 2-10=-292/227, 2-3=-257/274, 3-4=-371/375, 4-5=-492/487, 5-6=-608/599

BOT CHORD 9-10=-413/428, 8-9=-413/428, 7-8=-413/428, 6-7=-413/428

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-0 to 3-4-15, Interior(1) 3-4-15 to 7-7-14 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) All plates are 2x4 MT20 unless otherwise indicated.
- 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) 9 except (jt=lb) 10=169, 6=139, 8=130, 7=125.
- 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

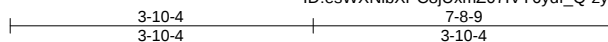
Job 2929201	Truss L7	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911528
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:02 2021 Page 1

ID:esWXNibXPCBjUxmZ07IVY6ydf_Q-zyPAKRyzAB6D5_AbneYAK34EFml3KAfHbr4?hlydQ9V



4x6 =

Scale = 1:29.3

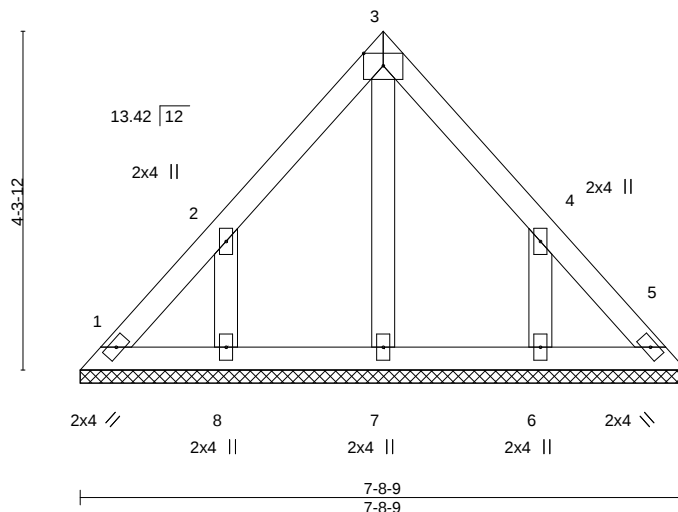


Plate Offsets (X,Y)-- [3:Edge,0-1-14]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999	GRIP
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a	197/144
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=-96(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-139(LC 12), 6=-139(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=15ft; 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=139, 6=139.
- 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.



September 16, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

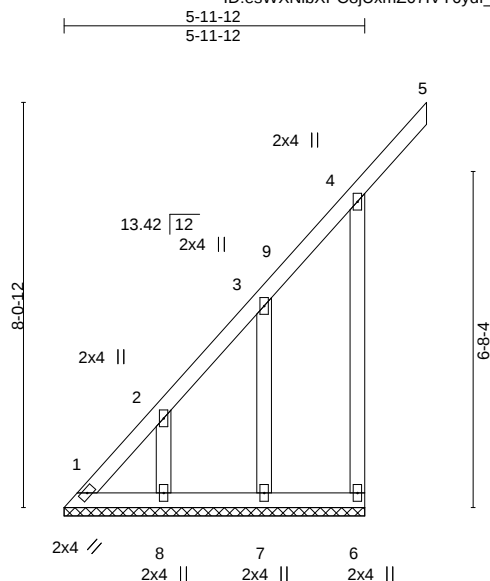
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	L8	GABLE	1	1	I47911529
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:03 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-R8zYXnzbxVE4j8InLM3PsGdKbAeH3cHRpVpYDBydQ9U



Scale = 1:45.8

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 0.34	Vert(LL)	0.01	5	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	4	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 32 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 5-11-12.

(lb) - Max Horz 1=270(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 6=194(LC 9), 8=134(LC 12)

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

FORCES.

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

TOP CHORD 1-2=-492/486, 2-3=-365/362, 3-4=-265/281, 4-6=-332/252

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 4-6-13, Exterior(2R) 4-6-13 to 7-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 6=194, 8=134.
- 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.



September 16, 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

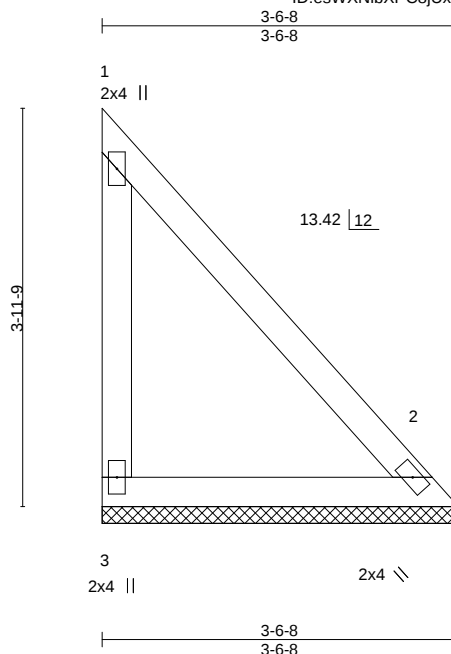
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	L9	Lay-In Gable	1	1	I47911530
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:04 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-vKWwI7zDipMxLIK_v3aePU9XSazVo4aa29Z6ldydQ9T



Scale = 1:22.9

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 0.20	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 13 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 3-6-8 oc purlins, except end verticals.

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

REACTIONS.

(size) 3=3-6-8, 2=3-6-8

Max Horz 3=-122(LC 8)

Max Uplift 3=-69(LC 8), 2=-7(LC 9)

Max Grav 3=168(LC 20), 2=159(LC 19)

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

NOTES-

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



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	V1	GABLE	1	1	I47911531

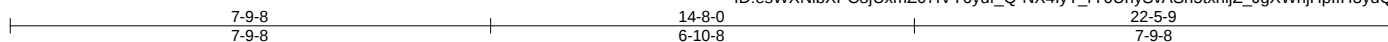
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:05 2021 Page 1

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Job Reference (optional)



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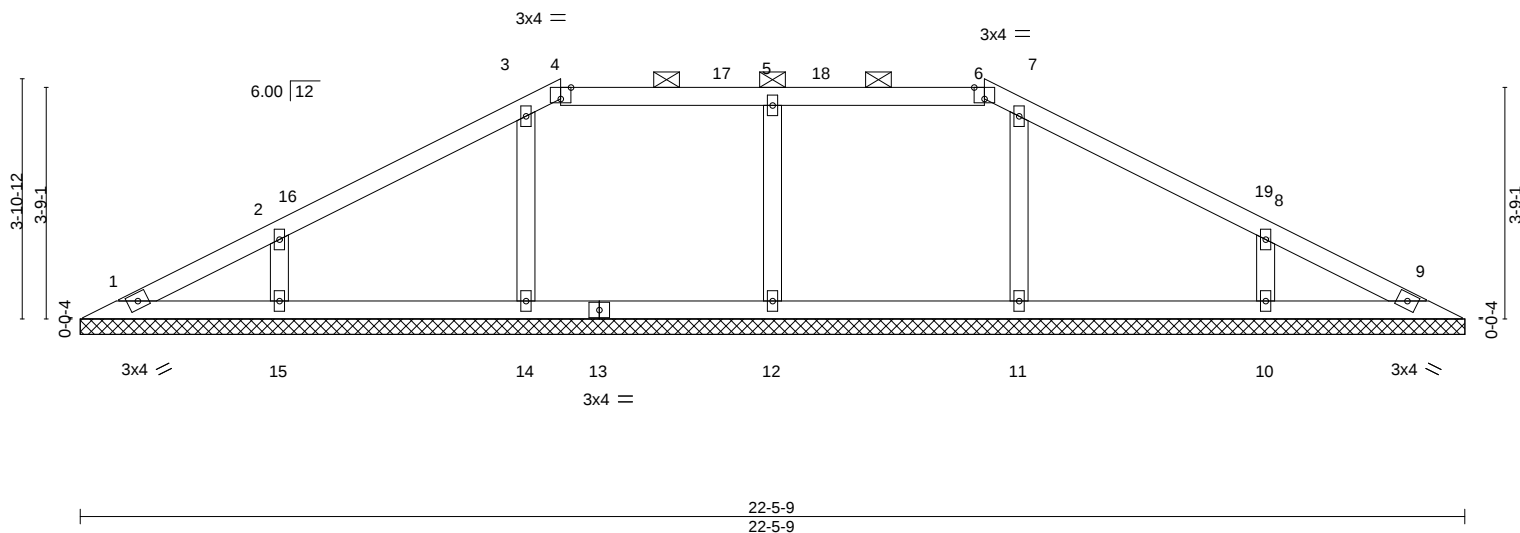


Plate Offsets (X,Y)--		[4:0-2-0,Edge], [6:0-2-0,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	9	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 22-5-9.

(lb) - Max Horz 1=55(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 14, 15, 11, 10

Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 12=369(LC 25), 14=352(LC 1), 15=336(LC 25), 11=352(LC 1), 10=336(LC 26)

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

WEBS 5-12=-290/103, 3-14=-270/103, 2-15=-260/127, 7-11=-270/94, 8-10=-260/128

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-9-8, Exterior(2R) 7-9-8 to 12-0-7, Interior(1) 12-0-7 to 14-8-0, Exterior(2R) 14-8-0 to 18-10-15, Interior(1) 18-10-15 to 21-10-0 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 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, 12, 14, 15, 11, 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 16, 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 #152/MO	I47911532
2929201	V2	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:12 2021 Page 1

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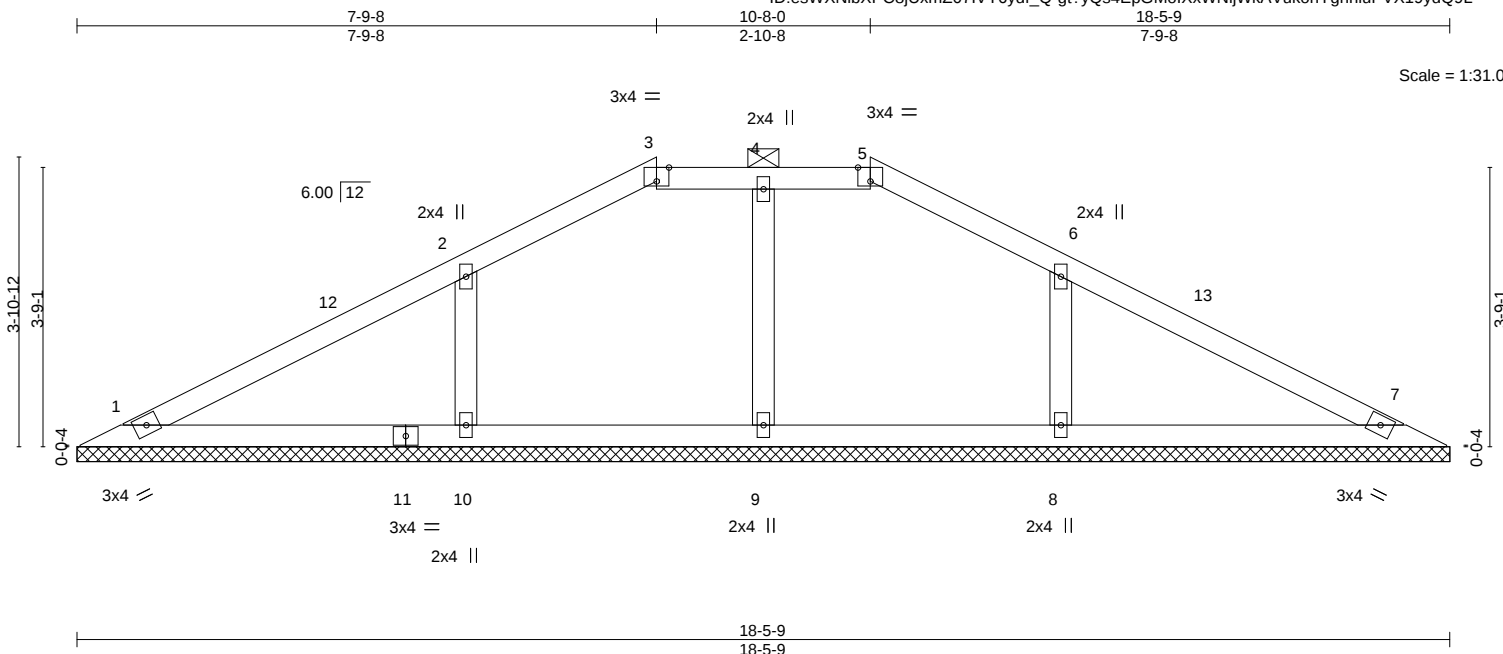


Plate Offsets (X,Y)--		[3:0-2-0,Edge], [5:0-2-0,Edge]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.25		Vert(LL) n/a - n/a 999		MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.14		Vert(CT) n/a - n/a 999			
BCLL 0.0		Rep Stress Incr YES		WB 0.05		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, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 18-5-9.
(lb) - Max Horz 1=55(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 9 except 10=-122(LC 12), 8=-121(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=254(LC 1), 10=447(LC 25), 8=447(LC 26)

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

WEBS 2-10=-336/156, 6-8=-336/155

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-9-8, Exterior(2E) 7-9-8 to 10-8-0, Exterior(2R) 10-8-0 to 14-10-15, Interior(1) 14-10-15 to 17-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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, 9 except (jt=lb) 10=122, 8=121.
- 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.



September 16, 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 #152/MO
2929201	V3	Valley	1	1	I47911533

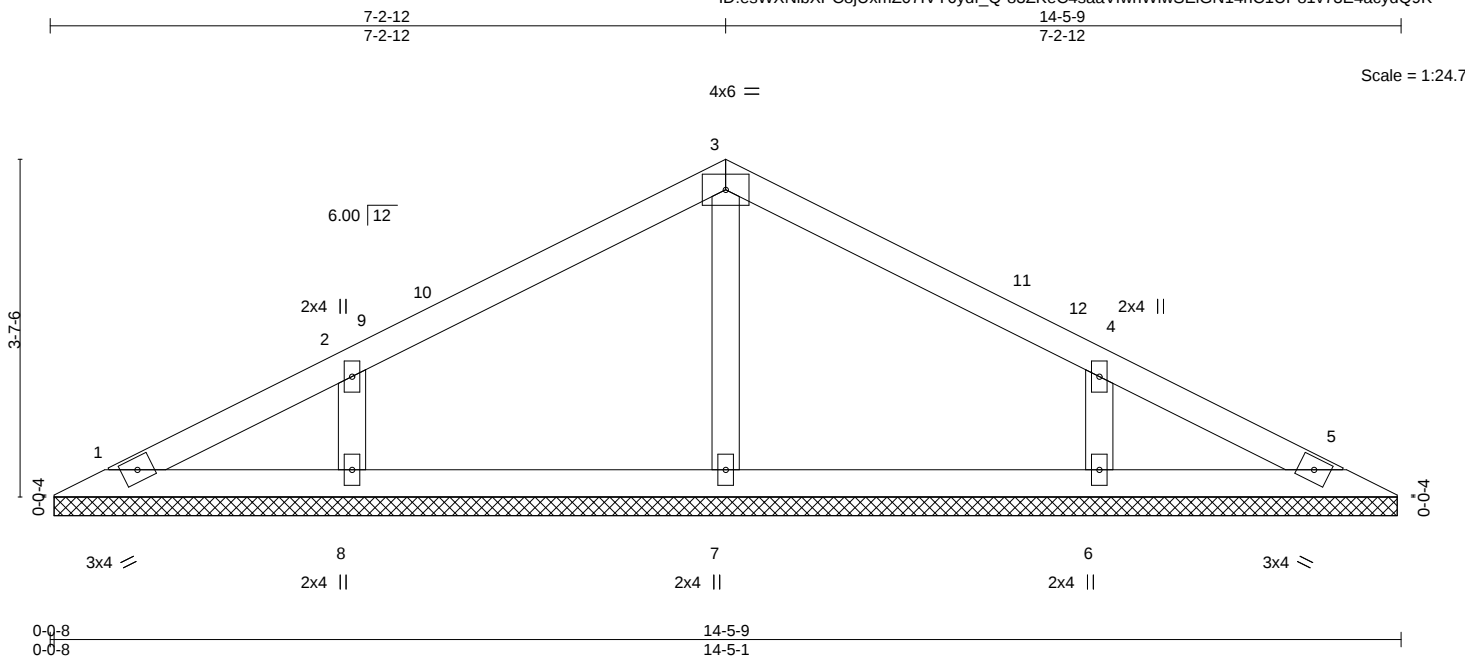
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:13 2021 Page 1

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Job Reference (optional)



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 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 39 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 14-4-9.
(lb) - Max Horz 1=52(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-106(LC 12), 6=-106(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=318(LC 1), 8=357(LC 25), 6=357(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-283/171, 4-6=-283/171

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-2-12, Exterior(2R) 7-2-12 to 10-2-12, Interior(1) 10-2-12 to 13-10-0 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
- 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 except (jt=lb) 8=106, 6=106.
- 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	V4	Valley	1	1	I47911534

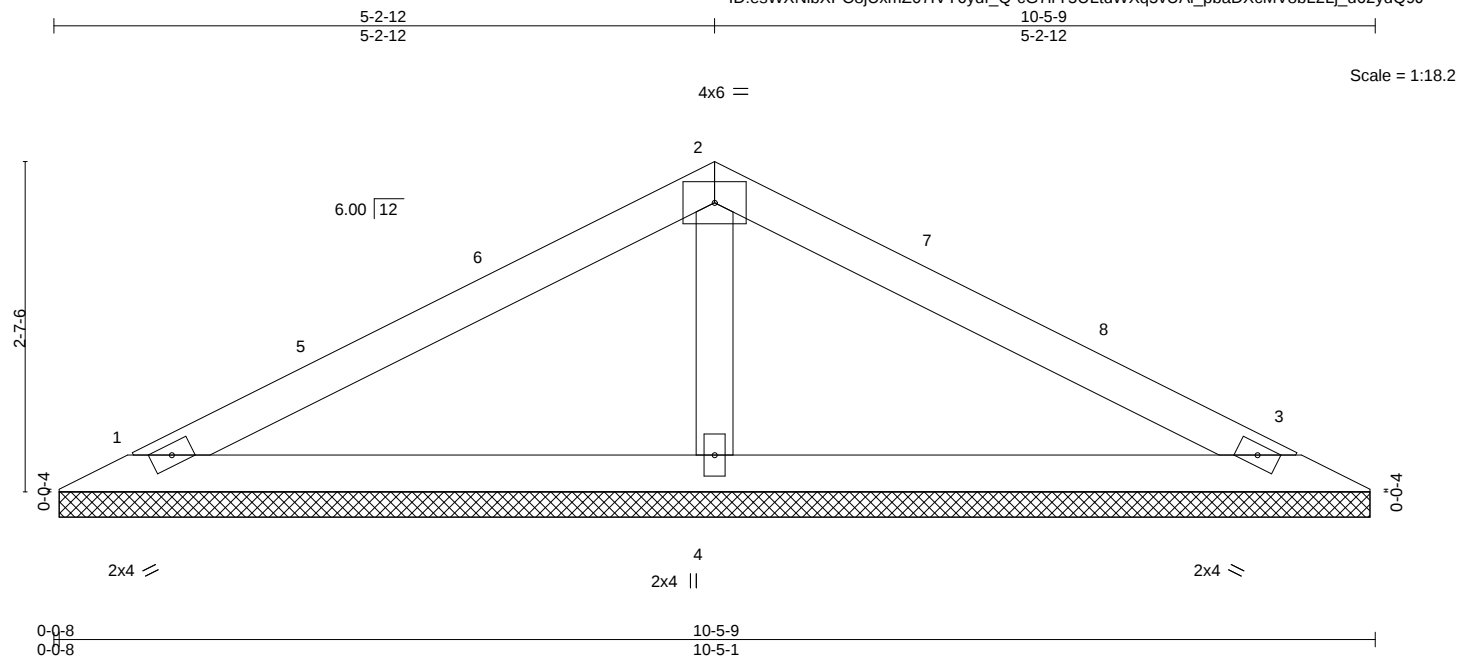
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:14 2021 Page 1

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Job Reference (optional)



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)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 26 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=10-4-9, 3=10-4-9, 4=10-4-9
Max Horz 1=37(LC 12)
Max Uplift 1=36(LC 12), 3=43(LC 13), 4=32(LC 12)
Max Grav 1=191(LC 25), 3=191(LC 26), 4=451(LC 1)

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

WEBS 2-4=-312/163

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-2-12, Exterior(2R) 5-2-12 to 8-2-12, Interior(1) 8-2-12 to 9-10-0 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
- 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.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

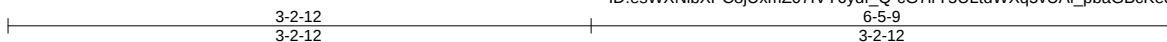
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	V5	Valley	1	1	I47911535

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

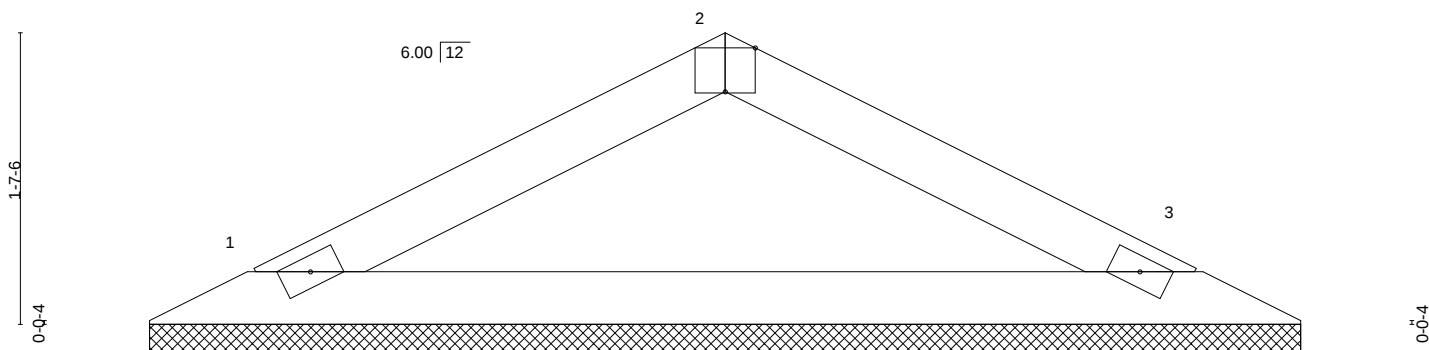
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:14 2021 Page 1

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3x4 =

Scale = 1:12.8



0-0-8
0-0-8

6-5-9
6-5-1

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 0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	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: 14 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=6-4-9, 3=6-4-9
Max Horz 1=-21(LC 17)
Max Uplift 1=-29(LC 12), 3=-29(LC 13)
Max Grav 1=234(LC 1), 3=234(LC 1)

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

NOTES-

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



September 16, 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

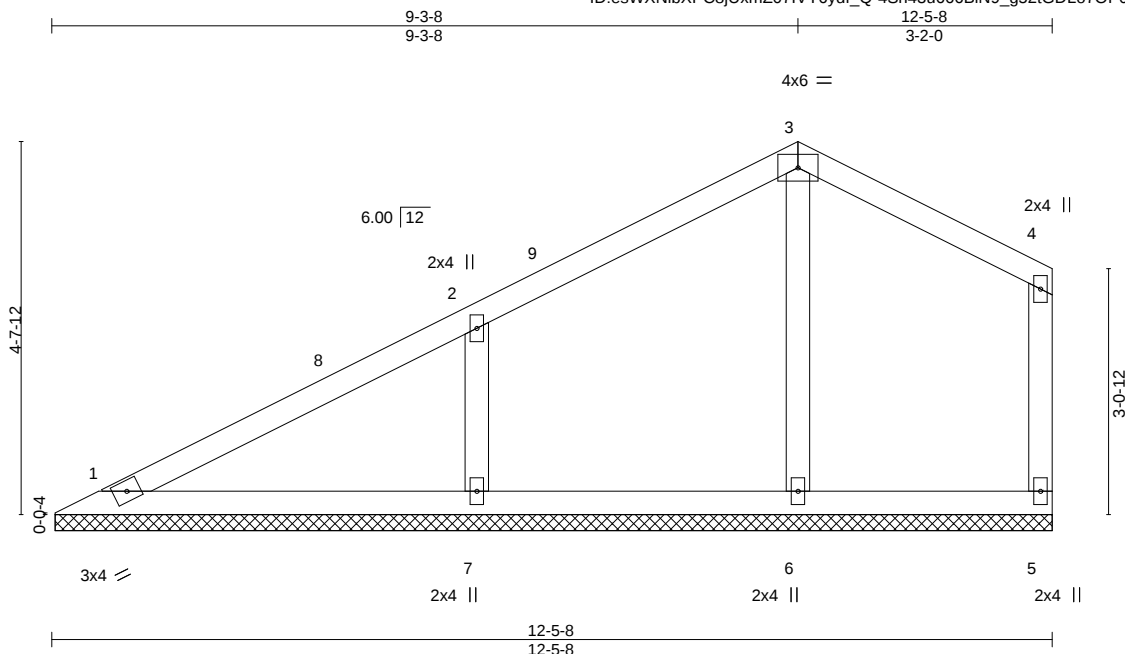
Job 2929201	Truss V6	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911536
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:15 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-4Sh43u666BIN9_g52tGDL07OP0iF1BCaJBeUydQ9I



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	-0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 39 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 12-5-0.

(lb) - Max Horz 1=123(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=137(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=278(LC 1), 7=474(LC 25)

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

WEBS 2-7=-362/226

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-3-8, Exterior(2E) 9-3-8 to 12-3-12 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) 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) 5, 6 except (jt=lb) 7=137.

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.



September 16, 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

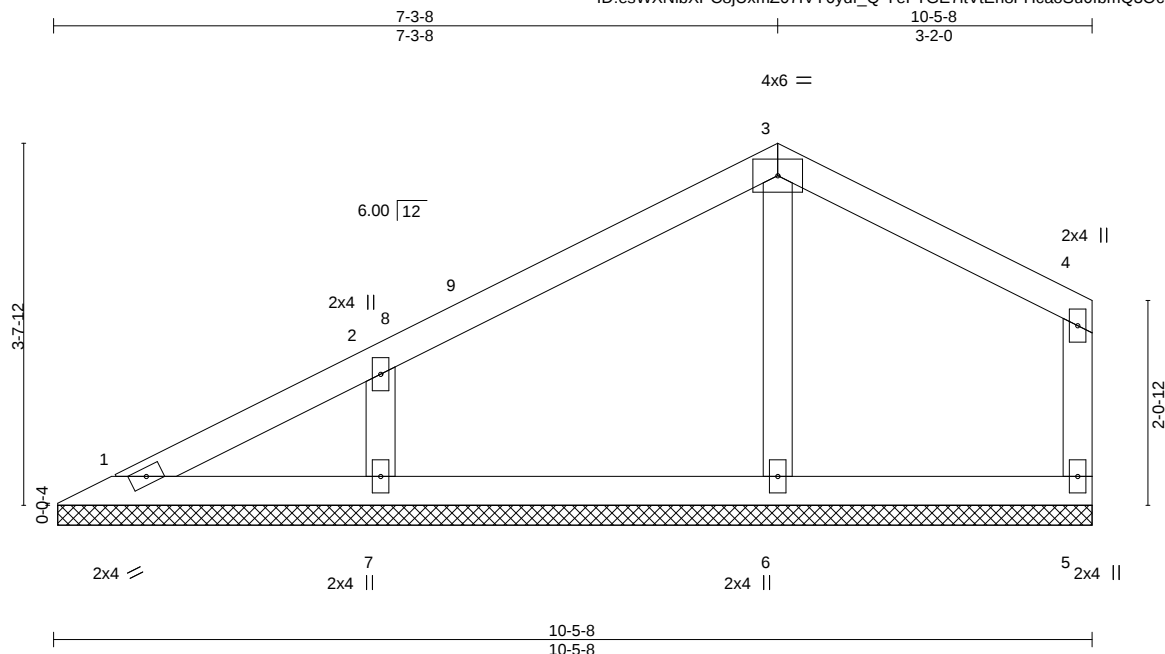
Job 2929201	Truss V7	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911537
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:16 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-YeFTGE7ltVtEn8FHcaoSu0fbmQ3OcVnLp0TkAxydQ9H



Scale = 1:23.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	5	n/a	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
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 10-5-0.

(lb) - Max Horz 1=86(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=-106(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=302(LC 1), 7=361(LC 25)

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

WEBS 2-7=-285/205

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-3-8, Exterior(2E) 7-3-8 to 10-3-12 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) 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, 5, 6 except (jt=lb) 7=106.
- 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.



September 16, 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 2929201	Truss V8	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911538
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

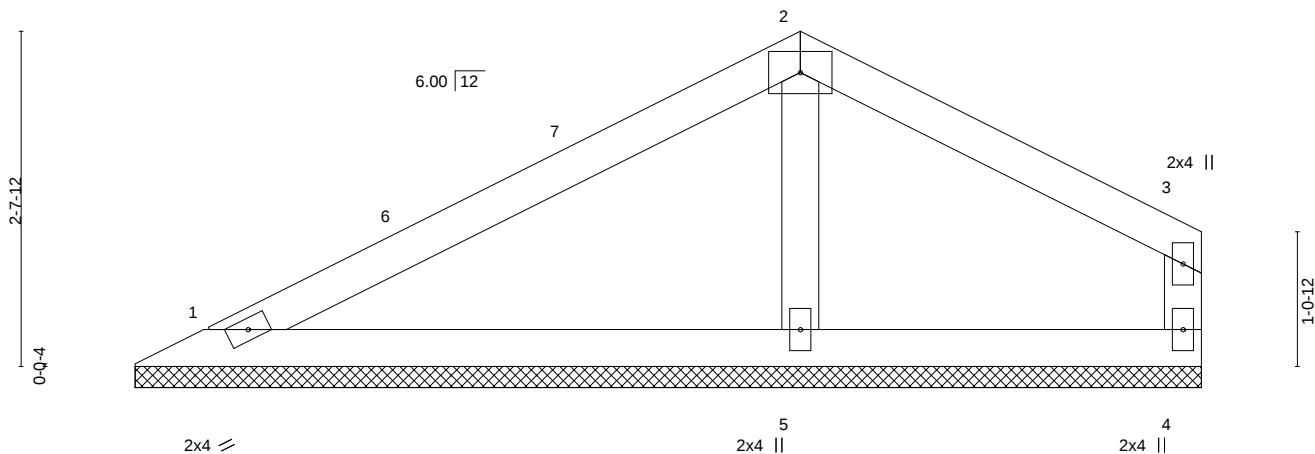
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:17 2021 Page 1

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4x6 =

Scale = 1:18.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-5-0, 4=8-5-0, 5=8-5-0
Max Horz 1=48(LC 11)
Max Uplift 1=-40(LC 12), 4=-42(LC 13), 5=-19(LC 12)
Max Grav 1=201(LC 1), 4=122(LC 1), 5=369(LC 1)

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

WEBS 2-5=-269/171

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-3-8, Exterior(2E) 5-3-8 to 8-3-12 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) 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, 4, 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.



September 16, 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

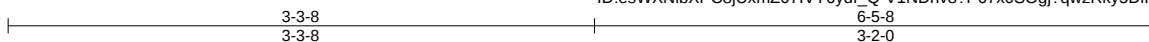
Job 2929201	Truss V9	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911539
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

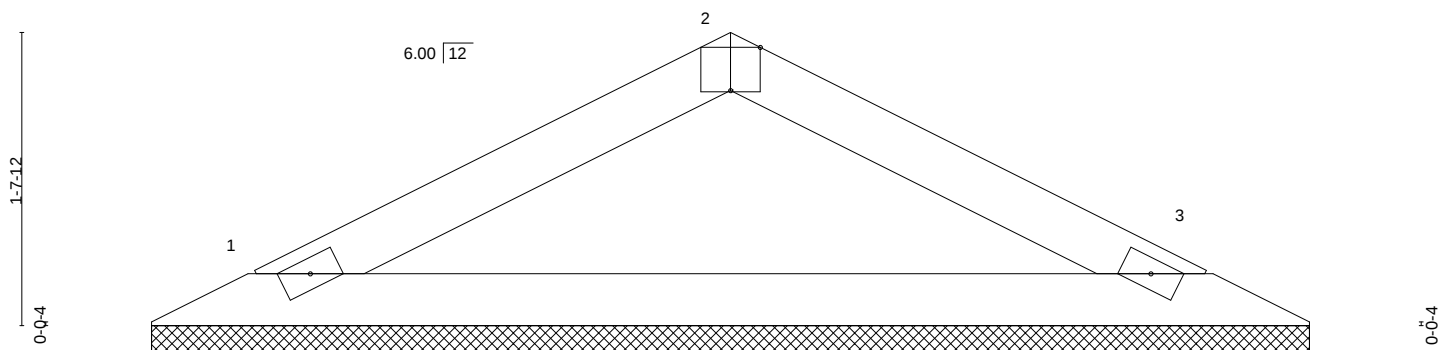
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:18 2021 Page 1

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3x4 =

Scale = 1:12.9



2x4 =

2x4 =

0-0-8
0-0-8

6-5-8
6-5-0

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 0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.31	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: 14 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=6-6-1, 3=6-6-1
Max Horz 1=21(LC 12)
Max Uplift 1=-30(LC 12), 3=-30(LC 13)
Max Grav 1=240(LC 1), 3=240(LC 1)

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

NOTES-

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



September 16, 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



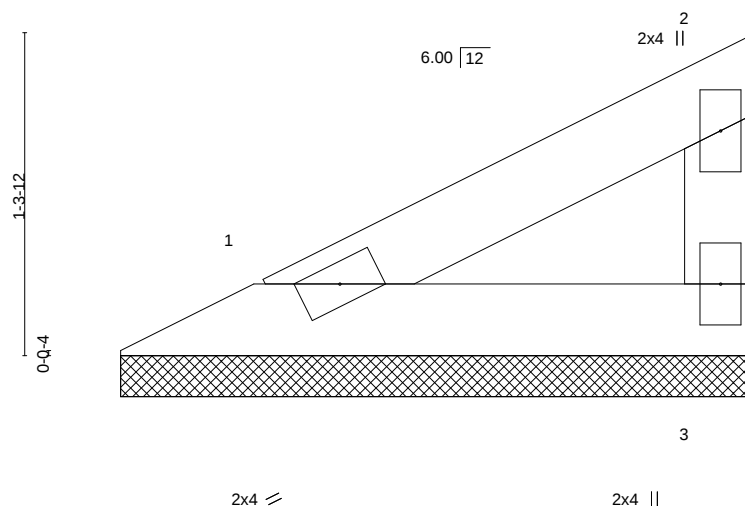
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2929201	Truss V10	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911540
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:06 2021 Page 1
ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-rjehAp?TEQceacUM0Uc6UvFwEOfvG_4tWT2CqWydQ9R

2-7-8
2-7-8

Scale = 1:9.4



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 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-7-0, 3=2-7-0
Max Horz 1=35(LC 9)
Max Uplift 1=-11(LC 12), 3=-19(LC 12)
Max Grav 1=83(LC 1), 3=83(LC 1)

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

NOTES-

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



September 16, 2021

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

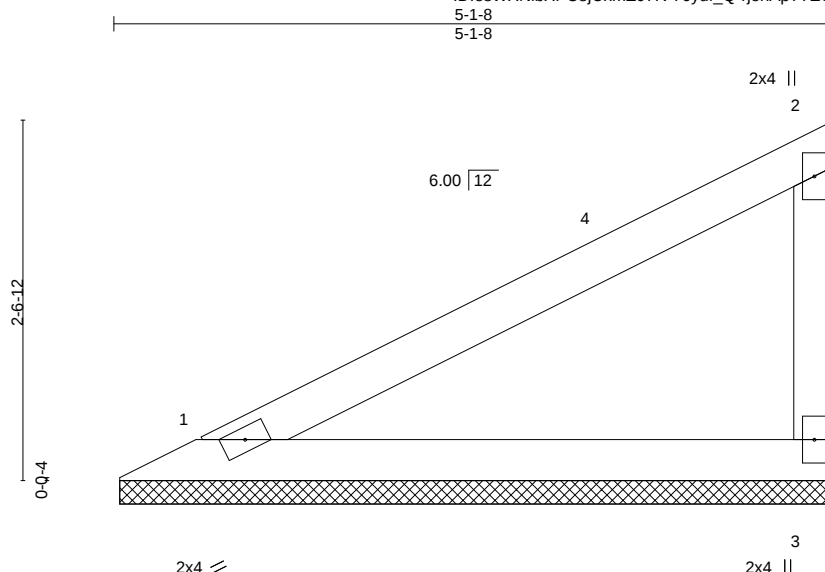
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2929201	Truss V11	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911541
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:06 2021 Page 1
ID:esWXNibXPC8jUxmZ07VY6ydf_Q-rjehAp?TEQceacUM0Uc6UvFrWocMG_4tWT2CqWydQ9R



Scale = 1:16.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.36	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-1-0, 3=5-1-0
Max Horz 1=82(LC 9)
Max Uplift 1=25(LC 12), 3=46(LC 12)
Max Grav 1=196(LC 1), 3=196(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-11-12 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 16, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2929201	Truss V12	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911542
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

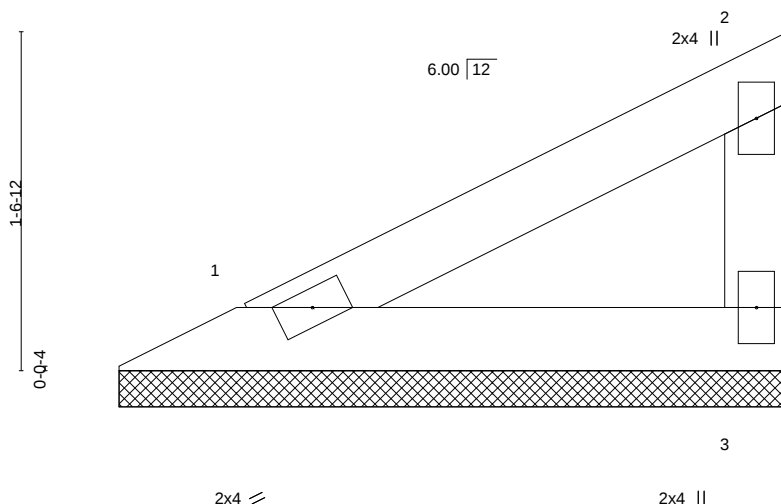
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:07 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-JvC3N905?kkVCm3ZaC7L16n4On?q?RK0k7nmMydQ9Q

3-1-8

3-1-8

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 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 8 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-8 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=3-1-0, 3=3-1-0

Max Horz 1=44(LC 9)

Max Uplift 1=-14(LC 12), 3=-25(LC 12)

Max Grav 1=106(LC 1), 3=106(LC 1)

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

NOTES-

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



September 16, 2021

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

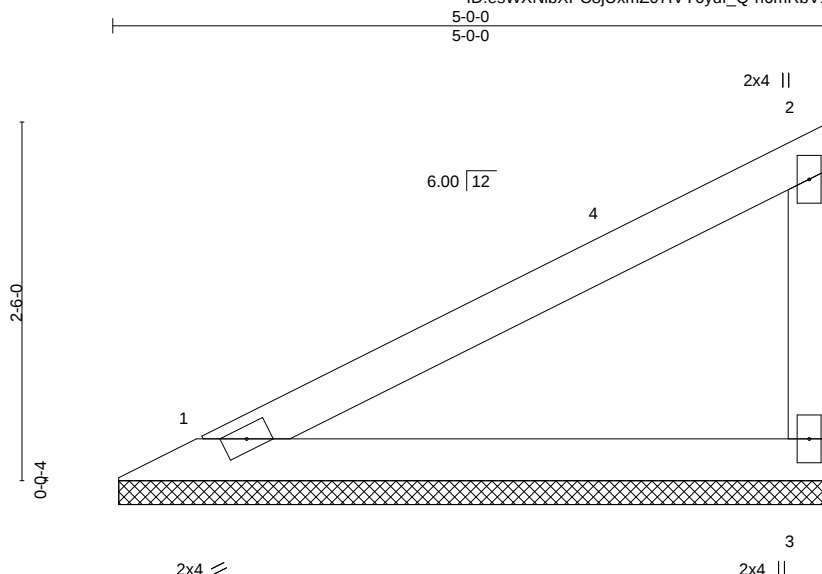
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2929201	Truss V13	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911543
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:08 2021 Page 1
ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-n6mRbV1jm1sMpvel8veaZKKAMB30kuaAzNzJuOydQ9P



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 0.34	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	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: 13 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 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-11-8, 3=4-11-8
Max Horz 1=79(LC 9)
Max Uplift 1=24(LC 12), 3=44(LC 12)
Max Grav 1=190(LC 1), 3=190(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-10-4 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
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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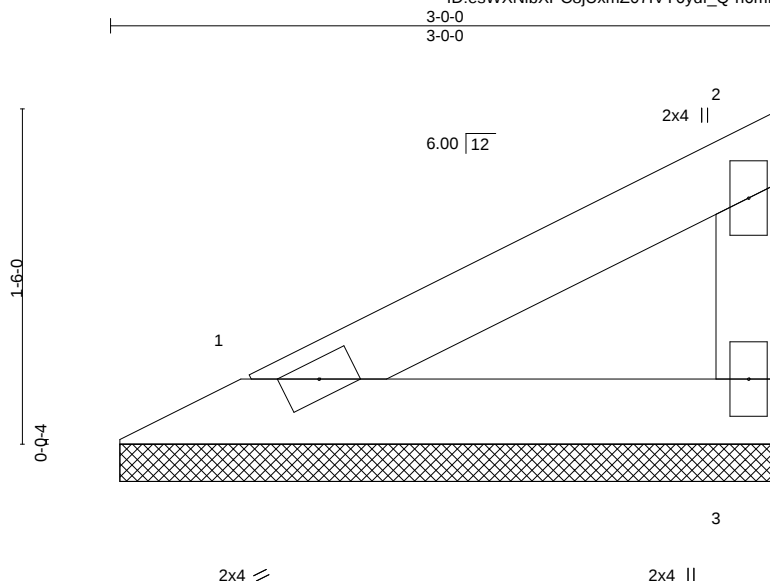
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2929201	Truss V14	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911544
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:08 2021 Page 1
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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 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	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: 7 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 3-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-11-8, 3=2-11-8
Max Horz 1=42(LC 9)
Max Uplift 1=-13(LC 12), 3=-23(LC 12)
Max Grav 1=100(LC 1), 3=100(LC 1)

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

NOTES-

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



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



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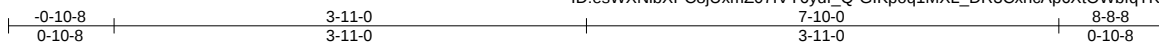
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	V15	Valley	1	1	I47911545

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:09 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-GIKpoq1MXL_DR3CxcAp6XtOWbfqTKQJCRGtQrydQ90



Scale = 1:19.1

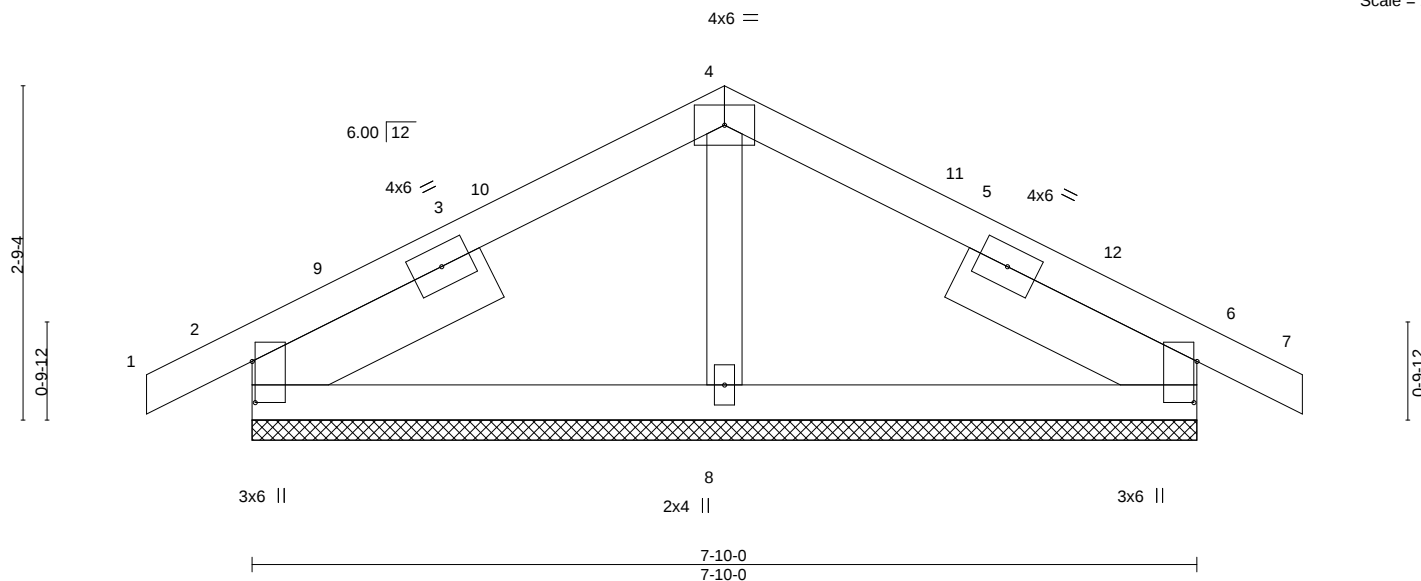


Plate Offsets (X,Y)--		[2:0-4-2,0-0-5], [6:0-4-2,0-0-5]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC 0.18		Vert(LL) 0.01 7 n/r 120			MT20 197/144	
TCDL	10.0	Lumber DOL 1.15		BC 0.14		Vert(CT) 0.01 7 n/r 120				
BCLL	0.0	Rep Stress Incr YES		WB 0.03		Horz(CT) 0.00 6 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 32 lb FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 SLIDER Left 2x6 SPF No.2 2-2-6, Right 2x6 SPF No.2 2-2-6

BRACING-

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

REACTIONS.

(size) 2=7-10-0, 6=7-10-0, 8=7-10-0
 Max Horz 2=-38(LC 13)
 Max Uplift 2=-121(LC 12), 6=-126(LC 13), 8=-3(LC 1)
 Max Grav 2=415(LC 1), 6=415(LC 1), 8=167(LC 3)

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

TOP CHORD 2-4=-426/386, 4-6=-426/381
 BOT CHORD 2-8=-240/287, 6-8=-240/287

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior(1) 6-11-0 to 8-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) 8 except (jt=lb) 2=121, 6=126.
- 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.



September 16, 2021

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

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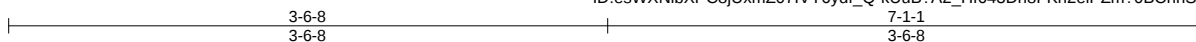
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #152/MO
2929201	V16	Valley	1	1	I47911546
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

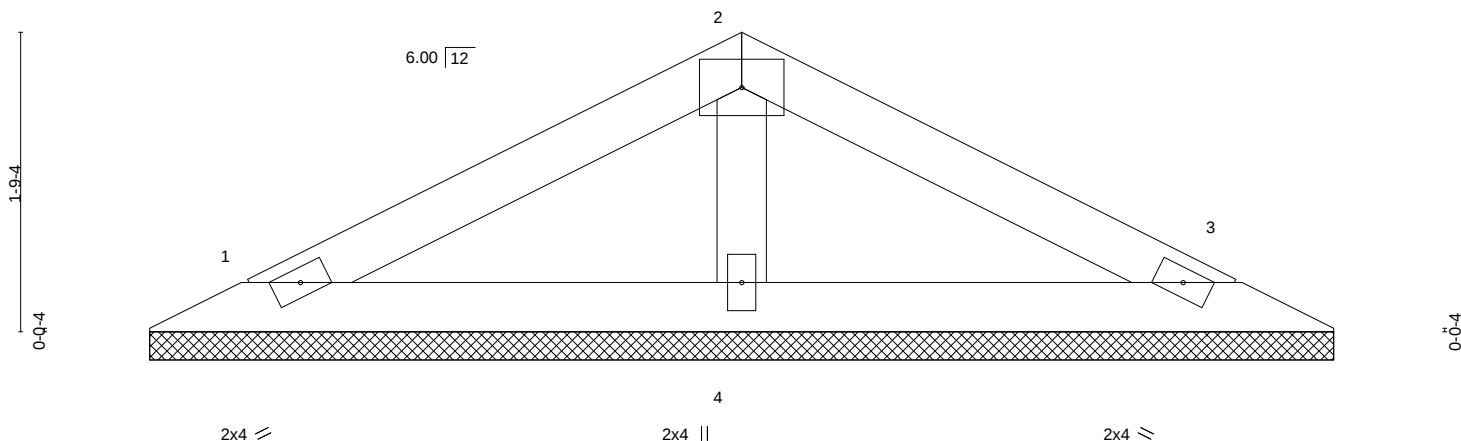
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:10 2021 Page 1

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Scale = 1:13.6

4x6 =



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							
								Weight: 17 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=7-0-1, 3=7-0-1, 4=7-0-1
Max Horz 1=23(LC 12)
Max Uplift 1=28(LC 12), 3=32(LC 13), 4=10(LC 12)
Max Grav 1=134(LC 1), 3=134(LC 1), 4=257(LC 1)

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

NOTES-

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



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Chesterfield, MO 63017

Job 2929201	Truss V17	Truss Type Valley	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #152/MO I47911547
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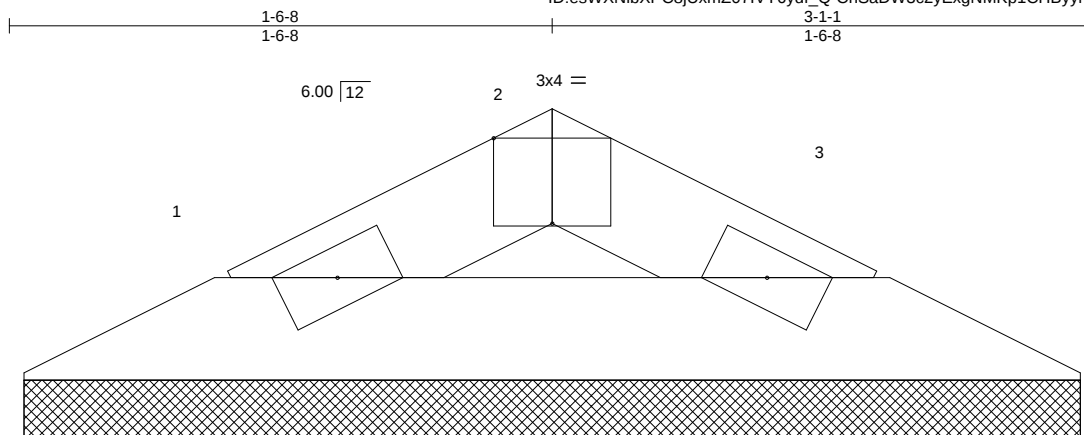
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:05:11 2021 Page 1

ID:esWXNibXPC8jUxmZ07IVY6ydf_Q-ChSaDW3c2yExgNMkp1CHByymXPN1xEJcflZVjydQ9M

Job Reference (optional)



Scale = 1:6.6

		0-0-8		3-1-1					
		0-0-8		3-0-9					
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	0.02	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	0.00	Horz(CT)	0.00 3 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P				Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=3-0-1, 3=3-0-1
Max Horz 1=-7(LC 13)
Max Uplift 1=-10(LC 12), 3=-10(LC 13)
Max Grav 1=82(LC 1), 3=82(LC 1)

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

NOTES-

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



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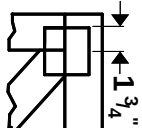
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



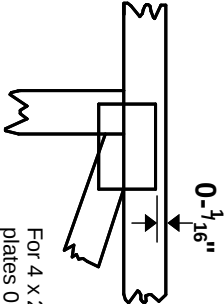
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 X 4

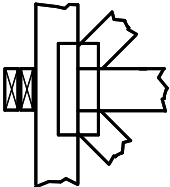
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



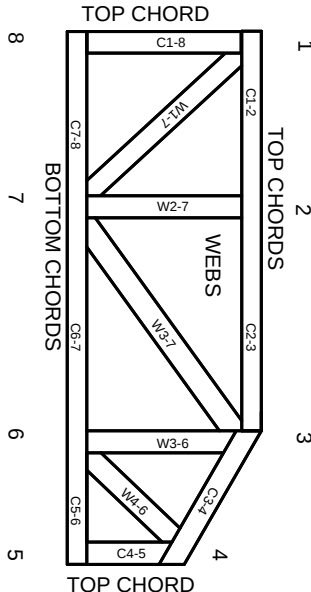
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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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.