



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/02/2022 2:43:44

MiTek USA, Inc.

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

Re: 3172181

SUMMIT/WOODSIDE RIDGE #34/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: I52026605 thru I52026666

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

Missouri COA: Engineering 001193



May 19, 2022

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/WOODSIDE RIDGE #34/MO
3172181	A2	Roof Special	3	1	I52026606

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

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ID:clow4Ylgf7iox0?ly?5BCcz33zm-WsrC57INX8k490LTCmN5SWHilwSV_SXn?Dq1ynzFHQX

0-10-8 3-3-8 5-3-5 6-7-8 7-8-8 12-10-4 13-8-0 20-0-0 27-1-12 31-1-11 32-3-8 34-8-11 36-8-8 40-0-0 49-10-8
0-10-8 3-3-8 1-11-13 1-4-3 1-1-0 5-1-12 0-9-12 6-4-0 7-1-12 3-11-15 1-1-13 2-5-3 1-11-13 3-3-8 0-10-8

Scale = 1:74.9

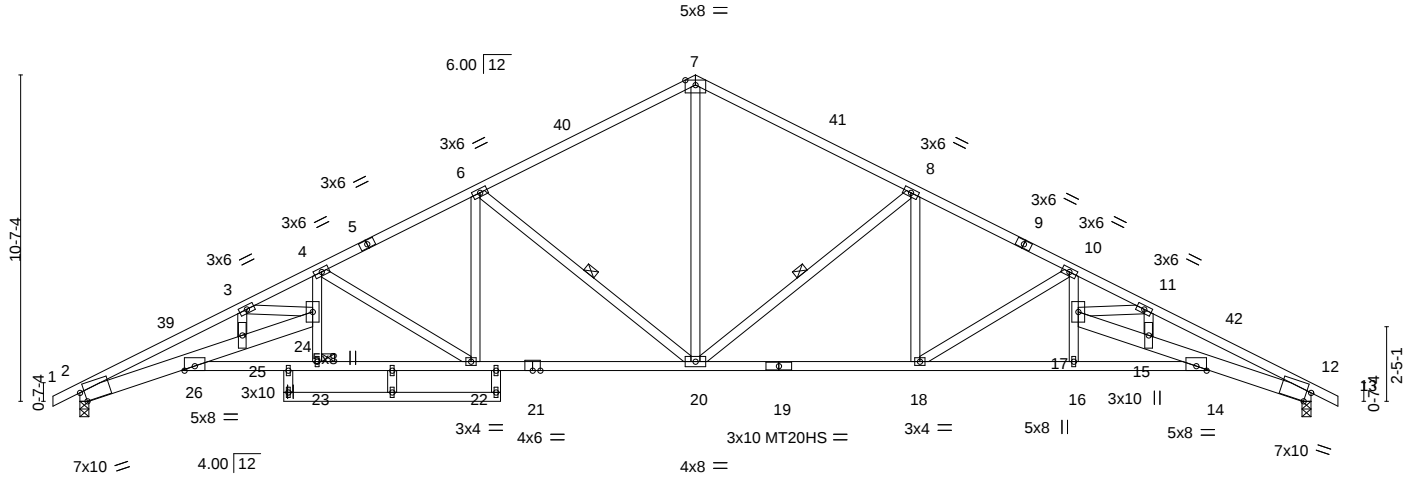


Plate Offsets (X,Y)-- [2:0-1-12,0-4-1], [12:0-1-12,0-4-1]

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 0.98	Vert(LL)	-0.37	20	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.85	20-22	>563	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.49	12	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 209 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-24,12-17: 2x6 SP 2400F 2.0E, 21-26,14-19: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-20, 6-20
JOINTS 1 Brace at Jt(s): 23

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
Max Horz 2=184(LC 16)
Max Uplift 2=-317(LC 12), 12=-317(LC 13)
Max Grav 2=2279(LC 1), 12=2279(LC 1)

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

TOP CHORD 2-3=-6579/1013, 3-4=-4888/704, 4-6=-3898/545, 6-7=-2835/475, 7-8=-2835/475,
8-10=-3898/541, 10-11=-4888/636, 11-12=-6579/852
BOT CHORD 2-26=-1024/5825, 25-26=-384/1701, 24-25=-356/1486, 23-26=-664/4378,
22-23=-662/4363, 20-22=-444/3415, 18-20=-294/3415, 16-18=-423/4363,
14-16=-428/4378, 15-17=-264/1485, 14-15=-276/1701, 12-14=-689/5825
WEBS 7-20=-221/1773, 8-18=-64/703, 8-20=-1293/334, 6-20=-1293/349, 6-22=-80/703,
4-22=-1112/255, 4-24=-119/729, 10-18=-1112/225, 10-17=-89/729, 3-25=-90/681,
3-24=-1455/344, 11-15=-36/681, 11-17=-1455/259

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 12 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 317 lb uplift at joint 2 and 317 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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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/WOODSIDE RIDGE #34/MO
3172181	A3	Hip	1	1	I52026607

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

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ID:clow4Ylgf7iox0?ly?5BCCz33zm-SEzzWpKd2m_oPJVsKBPZYxN2XkXUSOV4SXJ71gzFHQV

0-10-8 3-3-8 6-7-8 6-8-4 10-8-4 13-8-0 14-3-4 18-0-0 22-0-0 29-2-0 29-4-4 33-3-12 36-8-8 40-0-0 40-10-8
0-10-8 3-3-8 3-4-0 0-0-12 4-0-0 2-11-12 0-7-4 3-8-12 4-0-0 7-2-0 0-2-4 3-11-8 3-4-12 3-3-8 0-10-8

Scale = 1:84.2

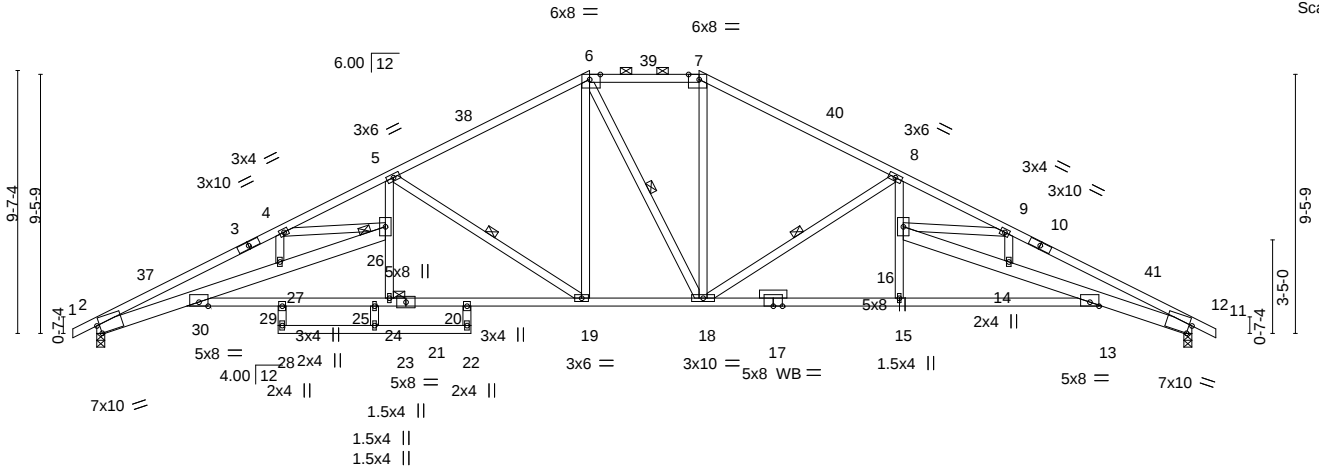


Plate Offsets (X,Y)--	[2:0-1-4,0-3-13], [6:0-4-10,Edge], [7:0-4-10,Edge], [11:0-1-4,0-3-13]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.37	19-20	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.84	19-20	>575	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.54	Horz(CT) 0.49	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 223 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
6-7: 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
2-26,11-16: 2x6 SP 2400F 2.0E, 28-29,22-28,20-22: 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-1-15 max.): 6-7.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 29-30, 13-15
WEBS 1 Row at midpt 6-18, 5-19, 8-18
JOINTS 1 Brace at Jt(s): 26, 24

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=165(LC 12)
Max Uplift 2=-321(LC 12), 11=-321(LC 13)
Max Grav 2=2279(LC 1), 11=2279(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-6356/985, 4-5=-4260/599, 5-6=-3151/484, 6-7=-2675/479, 7-8=-3147/482,
8-9=-4298/570, 9-11=-6407/869
BOT CHORD 2-30=-965/5599, 27-30=-469/2056, 26-27=-451/1880, 29-30=-510/3770, 25-29=-468/3641,
24-25=-468/3641, 20-24=-467/3637, 19-20=-508/3765, 18-19=-236/2678,
15-18=-357/3799, 13-15=-359/3803, 14-16=-366/1894, 13-14=-372/2072,
11-13=-693/5650
WEBS 6-19=-141/835, 6-18=-265/255, 7-18=-119/823, 5-19=-1277/321, 24-26=0/298,
5-26=-63/684, 15-16=0/302, 8-16=-58/719, 8-18=-1321/319, 4-27=-58/556,
4-26=-1811/431, 9-14=-23/563, 9-16=-1823/352

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 321 lb uplift at joint 2 and 321 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



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



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Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	A5	Hip	1	1	I52026609

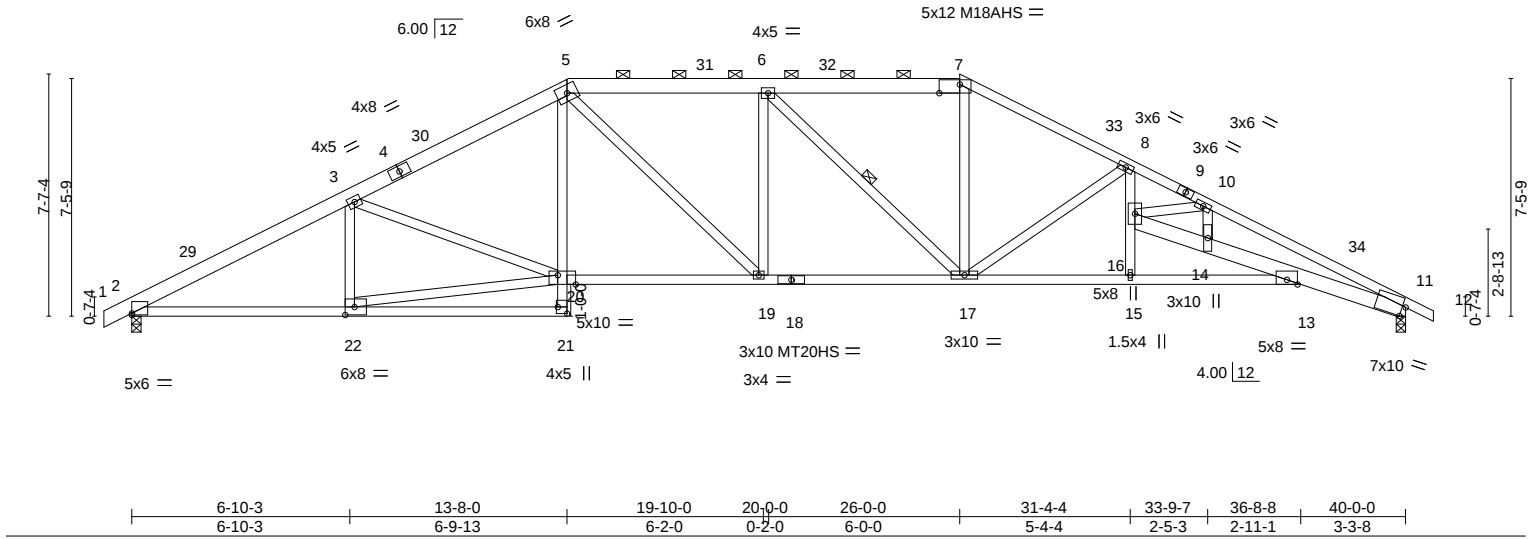
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:clow4Ylgf7iox0?ly?5BCcz33zm-KOCTMAN76_VDtpdZ1TVinXmULvVO8ifN9HLARzFHQR

0-10-8 6-10-3 13-8-0 14-0-0 19-10-0 20-0-0 26-0-0 31-4-4 33-9-7 36-8-8 40-0-0 40-10-8
0-10-8 6-10-3 6-9-13 0-4-0 5-10-0 0-2-0 6-0-0 5-4-4 2-5-3 2-11-1 3-3-8 0-10-8

Scale = 1:72.4



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.84	Vert(LL) -0.29 17 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.65 17-19 >735 180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.34 11 n/a n/a	M18AHS	142/136
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 212 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
7-9: 2x4 SPF No.2, 9-12: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
2-21: 2x4 SP 2400F 2.0E, 11-16: 2x6 SP 2400F 2.0E
13-18: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=131(LC 12)
Max Uplift 2=-265(LC 12), 11=-268(LC 13)
Max Grav 2=2279(LC 1), 11=2279(LC 1)

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

TOP CHORD 2-3=-4050/510, 3-5=-3837/526, 5-6=-3662/547, 6-7=-3247/505, 7-8=-3731/524,
8-10=-4689/608, 10-11=-6409/774
BOT CHORD 2-22=-412/3494, 5-20=-86/710, 19-20=-273/3307, 17-19=-305/3661, 15-17=-413/4154,
13-15=-416/4155, 14-16=-249/1514, 13-14=-258/1741, 11-13=-625/5655
WEBS 3-22=-406/120, 20-22=-400/3288, 3-20=-257/204, 7-17=-101/1133, 8-17=-1082/241,
8-16=-83/759, 6-19=-341/165, 6-17=-769/173, 5-19=-154/683, 10-14=-46/718,
10-16=-1505/246

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-8-0, Exterior(2R) 13-8-0 to 17-10-15, Interior(1) 17-10-15 to 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 265 lb uplift at joint 2 and 268 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



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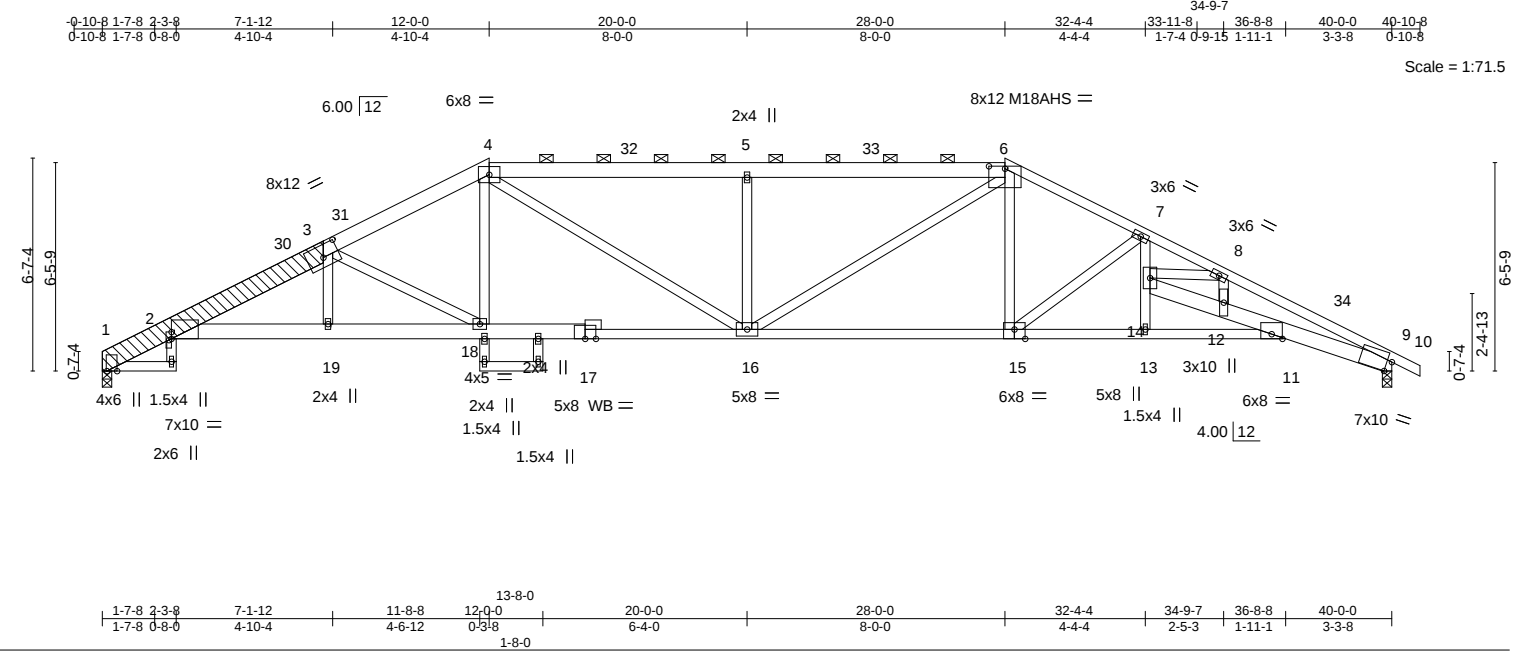


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	A6	HIP	1	1	I52026610

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:18:43 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-oCmsZWNmtd4V4Oq7k?kF_4_nlFT7c6pcp1uitzFHQQ



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL) -0.34	15-16	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.94	Vert(CT) -0.83	15-16	>577	180	M18AHS	142/136
BCLL 0.0	Rep Stress Incr YES	WB 0.71	Horz(CT) 0.41	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 237 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 6-10: 2x4 SPF 1650F 1.5E, 1-3: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-10-9 max.): 4-6.
BOT CHORD 2x4 SPF No.2 *Except* 2-17: 2x6 SPF 2100F 1.8E, 9-14: 2x6 SP 2400F 2.0E 11-15: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
LBR SCAB 1-3 2x8 SP 2400F 2.0E one side	

REACTIONS.	(size) 1=0-3-8, 9=0-3-8 Max Horz 1=-119(LC 17) Max Uplift 1=-215(LC 12), 9=-247(LC 13) Max Grav 1=2215(LC 1), 9=2273(LC 1)
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FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-981/162, 2-3=-5273/646, 3-4=-4187/548, 4-5=-4415/616, 5-6=-4420/619, 6-7=-4080/548, 7-8=-4956/634, 8-9=-6603/790
BOT CHORD	2-19=-503/4901, 18-19=-503/4917, 16-18=-373/3661, 15-16=-308/3568, 13-15=-447/4354, 11-13=-454/4366, 12-14=-219/1520, 11-12=-224/1741, 9-11=-648/5851
WEBS	4-18=-68/756, 4-16=-235/1066, 5-16=-896/276, 6-16=-246/1176, 6-15=-71/724, 3-19=0/290, 3-18=-1386/298, 7-14=-85/733, 7-15=-940/210, 8-12=-42/697, 8-14=-1422/211

- NOTES-**
- Attached 7-11-3 scab 1 to 3, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 3-2-15 from end at joint 3, nail 2 row(s) at 2" o.c. for 3-0-5; starting at 0-0-7 from end at joint 3, nail 2 row(s) at 7" o.c. for 2-0-0.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-0-11, Interior(1) 3-0-11 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 28-0-0, Exterior(2R) 28-0-0 to 32-4-4, Interior(1) 32-4-4 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 1, 9 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 215 lb uplift at joint 1 and 247 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 19,2022

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	A6	HIP	1	1	I52026610

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.530 s Dec 6 2021
MiTek Industries, Inc.
Wed May 18 11:18:43 2022
Page 2
ID:clow4Ylgf7iox0?ly?5BCcz33zm-oCmsZWNmtld4V4Oq7k?kF_4_nlFT7c6pcp1uitzFHQQ

- NOTES-**
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	A9	Hip Girder	1	2	I52026613

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:18:58 2022 Page 2
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NOTES-

- 10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 8-0-12 from the left end to 18-0-12 to connect truss(es) to front face of bottom chord.
- 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 20-0-0 from the left end to 25-11-4 to connect truss(es) to front face of bottom chord.
- 12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 27-11-4 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 13) 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 29-11-4 from the left end to 31-11-4 to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 816 lb down and 282 lb up at 6-0-0, and 306 lb down and 102 lb up at 11-10-4, and 800 lb down and 281 lb up at 33-11-4 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=-90, 3-4=-90, 4-11=-90, 11-14=-90, 26-27=-20, 24-30=-20, 22-33=-20
 - Concentrated Loads (lb)
 - Vert: 24=-306(F) 18=-306(F) 25=-816(F) 16=-800(F) 21=-306(F) 17=-306(F) 19=-306(F) 20=-306(F) 36=-307(F) 37=-307(F) 38=-306(F) 39=-306(F) 40=-306(F) 41=-306(F) 42=-306(F)

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	B1	Roof Special	3	1	I52026614

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

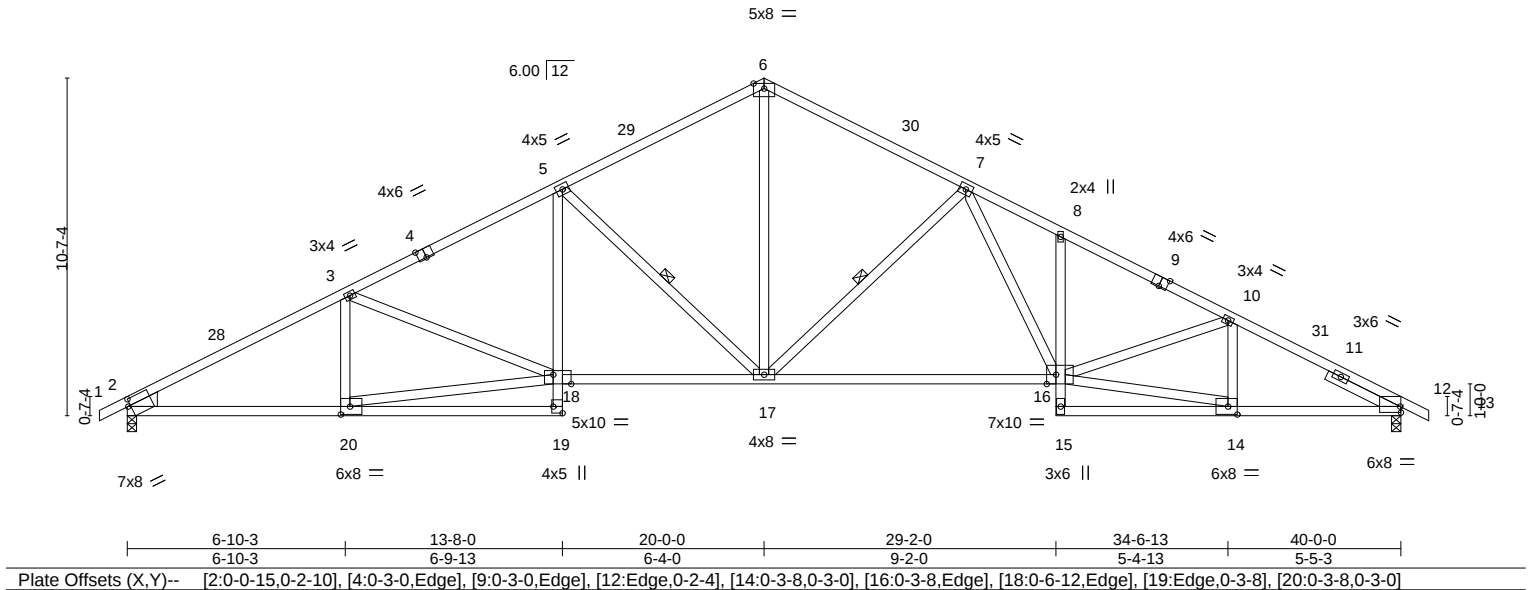
8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:00 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-pTIH8KbQtWmg1iB5cookRZHrNb1vbHCJWYeloOzFHQ9

Job Reference (optional)

0-10-8 6-10-3 13-8-0 20-0-0 24-7-0 26-4-0 29-2-0 34-6-13 40-0-0 40-10-8
0-10-8 6-10-3 6-9-13 6-4-0 4-7-0 1-9-0 2-10-0 5-4-13 5-5-3 0-10-8

Scale = 1:72.4



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.81	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.98	Vert(LL) -0.26 16-17 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.78	Vert(CT) -0.72 16-17 >669 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.24 12 n/a n/a		
	Code IRC2018/TPI2014			Weight: 197 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-19,12-15: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x6 SPF No.2
SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-17, 7-17

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
Max Horz 2=-184(LC 17)
Max Uplift 2=-316(LC 12), 12=-318(LC 13)
Max Grav 2=2270(LC 1), 12=2284(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3908/522, 3-5=-3782/530, 5-6=-2808/474, 6-7=-2796/472, 7-8=-4166/603,
8-10=-4195/549, 10-12=-3785/515
BOT CHORD 2-20=-546/3379, 19-20=-26/282, 5-18=-86/651, 17-18=-419/3285, 16-17=-274/3206,
8-16=-367/130, 12-14=-372/3297
WEBS 3-20=-425/134, 18-20=-526/3132, 5-17=-1227/345, 6-17=-239/1826, 7-17=-1138/323,
7-16=-185/1096, 14-16=-338/3167, 10-16=-24/412, 10-14=-617/118

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 316 lb uplift at joint 2 and 318 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



May 19, 2022

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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/WOODSIDE RIDGE #34/MO	I52026615
3172181	B2	Roof Special	1	1	Job Reference (optional)	

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

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ID:clow4Ylgf7iox0?ly25BCcz33zm-HgsfLgb2equXfrmHAWJzznq3r?RFKmwSicOrLrzFHQ8

0-10-8	6-10-3	13-8-0	20-0-0	20-4-0	26-8-5	33-0-11	39-8-8
0-10-8	6-10-3	6-9-13	6-4-0	0-4-0	6-4-5	6-4-5	6-7-13

Scale = 1:72.7

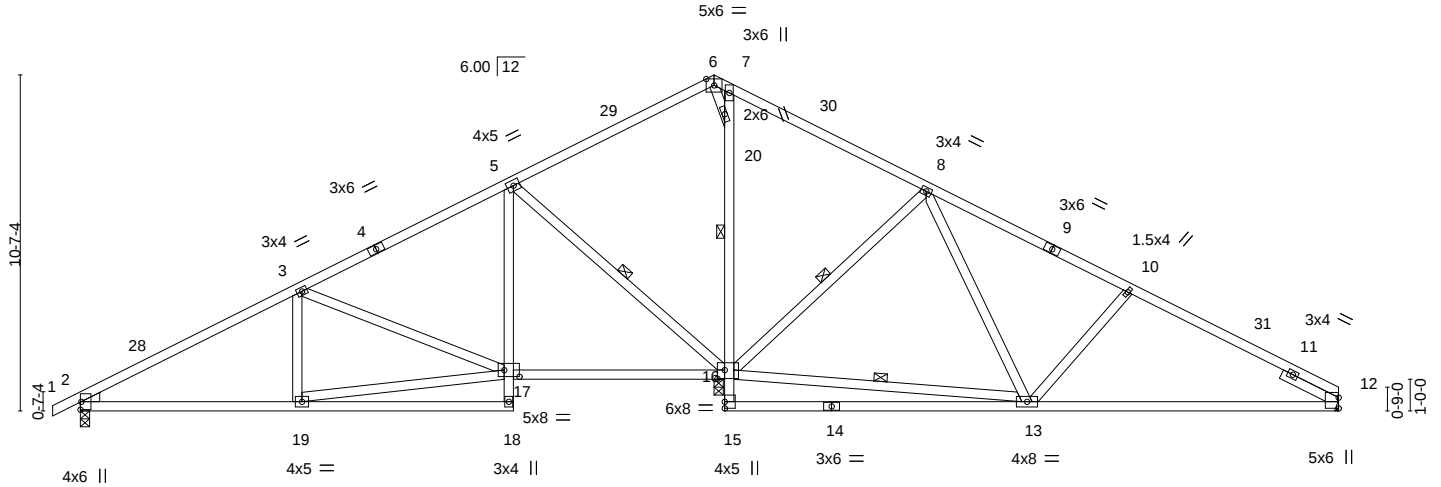


Plate Offsets (X,Y)--	[16:0-2-12,0-3-4], [17:0-5-12,0-2-8]
-----------------------	--------------------------------------

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	-0.15 13-15	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.29 13-15	>791	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.65	Horz(CT)	0.03 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 186 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 16-17: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except:
 1 Row at midpt 7-16
 WEBS 1 Row at midpt 5-16, 13-16, 8-16

REACTIONS.

(size) 2=0-3-8, 16=0-3-8, 12=Mechanical
 Max Horz 2=195(LC 12)
 Max Uplift 2=168(LC 12), 16=304(LC 12), 12=147(LC 13)
 Max Grav 2=1051(LC 25), 16=2649(LC 1), 12=854(LC 26)

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

TOP CHORD 2-3=-1453/222, 3-5=-761/157, 5-6=0/614, 6-7=0/657, 7-8=0/651, 8-10=-789/208,
 10-12=-1063/229
 BOT CHORD 2-19=-292/1196, 5-17=-62/570, 16-17=-99/576, 16-20=-1044/132, 7-20=-462/105,
 12-13=-122/942
 WEBS 17-19=-278/1125, 3-17=-716/211, 5-16=-1161/323, 13-16=-19/256, 8-16=-973/317,
 8-13=-110/677, 10-13=-552/232, 6-20=-668/116

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 39-8-8 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint 2, 304 lb uplift at joint 16 and 147 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



May 19, 2022

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026617
3172181	B4	Hip	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:05 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-9R5AB2eZi3Oz8T32PMOv8d_jzcofGbF2gEM3UczFHQ4

-0-10-8	4-8-15	9-5-8	16-0-0	20-4-0	24-0-0	31-8-8	39-8-8
0-10-8	4-8-15	4-8-9	6-6-8	4-4-0	3-8-0	7-8-8	8-0-0

Scale = 1:71.5

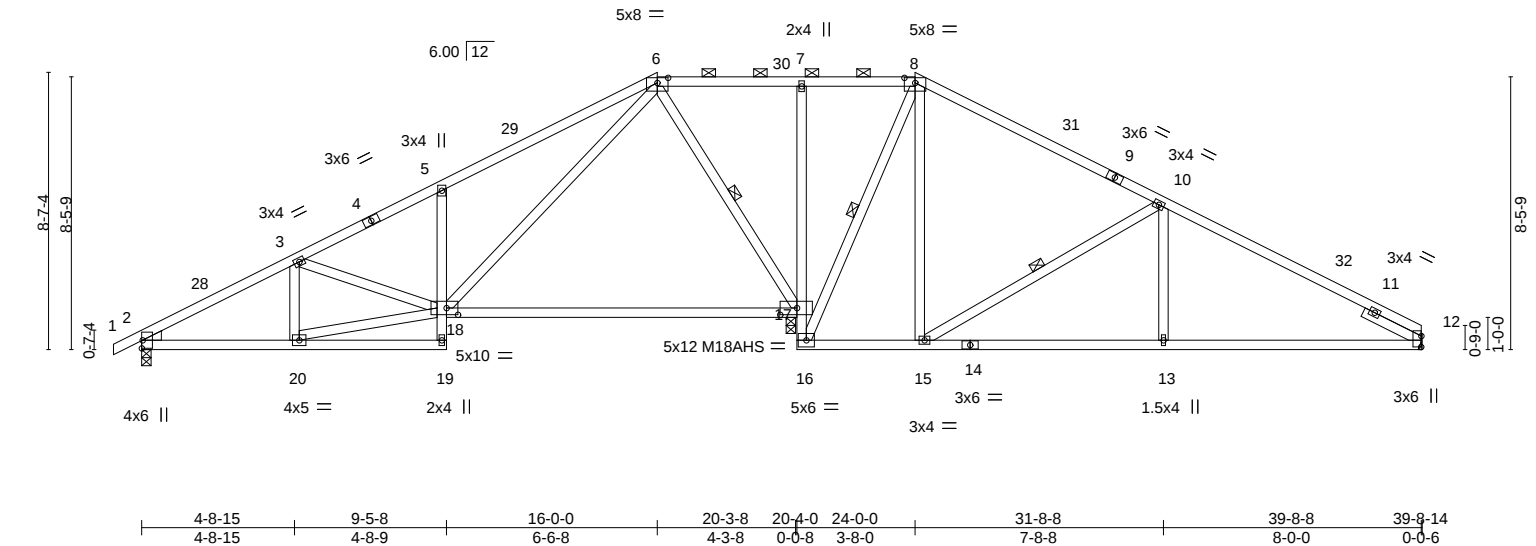


Plate Offsets (X,Y)--		[6:0-4-0,0-1-15], [8:0-4-0,0-1-15], [12:0-4-1,0-0-1], [17:0-6-4,0-2-8], [18:0-4-4,0-2-8]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 20.0	Lumber DOL	1.15
BCLL 0.0	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2018/TPI2014
	CSI.	
	TC	0.76
	BC	0.75
	WB	0.60
	Matrix-AS	
	DEFL.	
	Vert(LL)	-0.26 17-18 >946 240
	Vert(CT)	-0.53 17-18 >465 180
	Horz(CT)	0.03 17 n/a n/a
	PLATES	
	MT20	197/144
	M18AHS	142/136
	GRIP	
	Weight: 184 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 17-18: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (10-0-0 max.): 6-8.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 6-17, 10-15, 8-16

REACTIONS.

(size) 2=0-3-8, 17=0-3-8, 12=Mechanical
 Max Horz 2=158(LC 12)
 Max Uplift 2=-224(LC 12), 17=-203(LC 12), 12=-251(LC 13)
 Max Grav 2=1063(LC 25), 17=2495(LC 1), 12=935(LC 26)

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

TOP CHORD 2-3=-1550/341, 3-5=-1386/374, 5-6=-1490/519, 6-7=0/466, 7-8=0/463, 8-10=-373/332,
 10-12=-1196/418
 BOT CHORD 2-20=-383/1304, 5-18=-566/238, 16-17=-107/1093, 7-17=-344/126, 13-15=-274/1037,
 12-13=-274/1037
 WEBS 18-20=-304/1302, 6-17=-1150/242, 8-15=-95/657, 10-15=-1002/280, 10-13=0/334,
 8-16=-1197/133, 6-18=-352/1434

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 20-5-12, Interior(1) 20-5-12 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 2, 203 lb uplift at joint 17 and 251 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



May 19, 2022

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026618
3172181	B5	Hip	1	1	Job Reference (optional)	

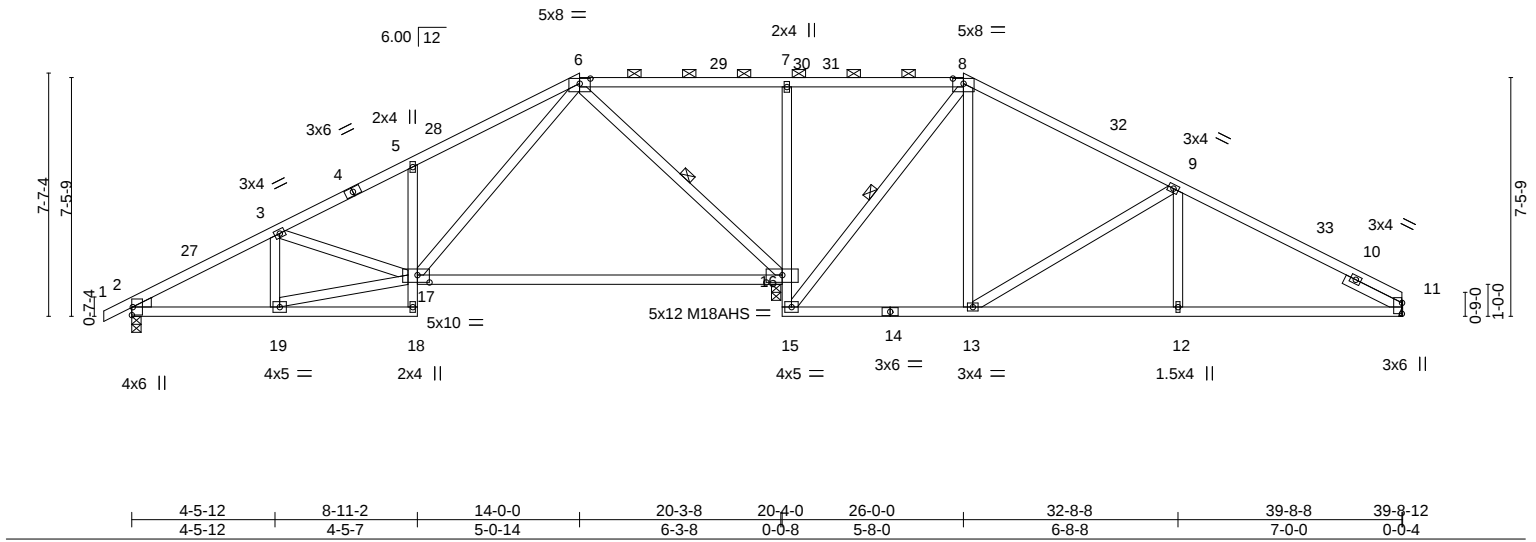
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:07 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-5pDwcjgDgegnmDRXnQND234OQTakR5L7YrAYUzFHQ2

-0-10-8	4-5-12	8-11-2	14-0-0	20-4-0	26-0-0	32-8-8	39-8-8	7-0-0
0-10-8	4-5-12	4-5-7	5-0-14	6-4-0	5-8-0	6-8-8		

Scale = 1:72.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.70	Vert(LL) -0.31	16-17	>800	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.78	Vert(CT) -0.62	16-17	>395	180	M18AHS	142/136
BCLL 0.0	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.03	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 177 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 16-17: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (10-0-0 max.): 6-8.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 6-16, 8-15

REACTIONS.

(size) 11=Mechanical, 2=0-3-8, 16=0-3-8
 Max Horz 2=140(LC 12)
 Max Uplift 11=-235(LC 13), 2=-226(LC 12), 16=-209(LC 12)
 Max Grav 11=940(LC 26), 2=1081(LC 25), 16=2460(LC 1)

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

TOP CHORD 2-3=-1595/348, 3-5=-1516/386, 5-6=-1559/491, 6-7=0/413, 7-8=0/415, 8-9=-589/323,
 9-11=-1252/391
 BOT CHORD 2-19=-375/1349, 5-17=-435/183, 16-17=-153/524, 15-16=-77/931, 7-16=-598/199,
 13-15=-58/388, 12-13=-261/1098, 11-12=-261/1098
 WEBS 3-19=-274/112, 17-19=-301/1384, 6-17=-265/1222, 6-16=-1187/234, 8-15=-1128/128,
 8-13=-71/573, 9-13=-819/235, 9-12=0/273

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 235 lb uplift at joint 11, 226 lb uplift at joint 2 and 209 lb uplift at joint 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 19, 2022

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026619
3172181	B6	Hip	1	1	Job Reference (optional)	

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

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ID:clow4Ylgf7iox0?ly?5BCcz33zm-wzaBsnlapWPq5hgbt1XnSJJ3BrYX877DWUIUI8zFHPy

-0-10-8	3-11-6	6-11-6	12-0-0	16-2-0	20-4-0	28-0-0	33-8-8	39-8-8	6-0-0
0-10-8	3-11-6	3-0-0	5-0-10	4-2-0	4-2-0	7-8-0	5-8-8	6-0-0	

Scale = 1:70.3

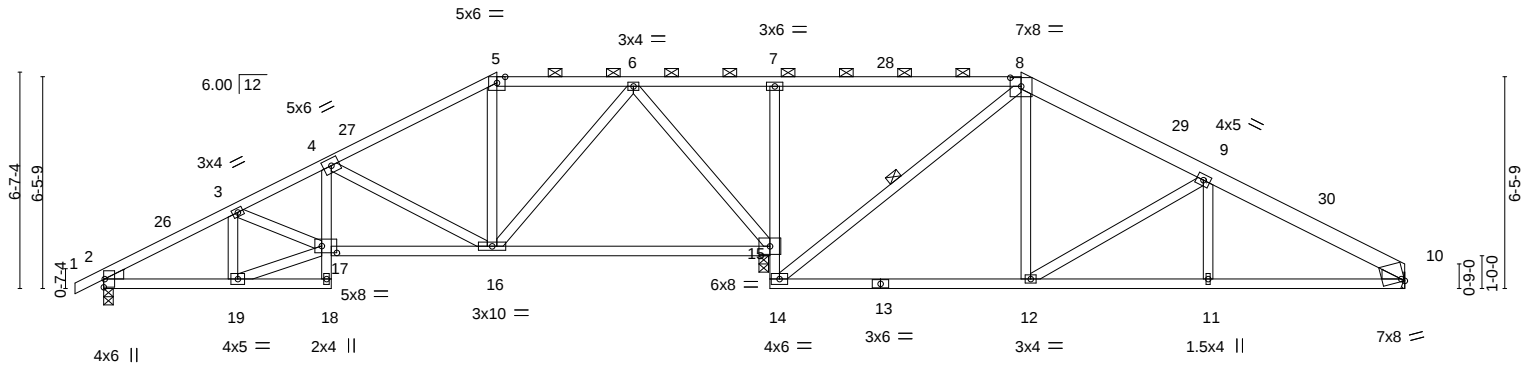


Plate Offsets (X,Y)--	[8:0-4-0-0-3-3], [10:Edge,0-0-15], [17:0-5-8-0-2-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.87	Vert(LL)	-0.09 12-14	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.20 12-14	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.04 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 183 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
8-10: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
15-17: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 15=0-3-8, 10=Mechanical
Max Horz 2=121(LC 12)
Max Uplift 2=-185(LC 12), 15=-269(LC 9), 10=-190(LC 13)
Max Grav 2=1109(LC 25), 15=2399(LC 1), 10=964(LC 26)

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

TOP CHORD 2-3=-1636/267, 3-4=-1912/356, 4-5=-1110/227, 5-6=-903/236, 6-7=0/363, 7-8=0/326,
8-9=-864/249, 9-10=-1443/313
BOT CHORD 2-19=-289/1385, 4-17=-70/435, 16-17=-331/1734, 15-16=-59/439, 14-15=-42/812,
7-15=-604/191, 12-14=-30/670, 11-12=-205/1198, 10-11=-205/1198
WEBS 4-16=-942/278, 6-16=-93/729, 6-15=-1162/166, 8-12=-50/521, 9-12=-607/210,
3-19=-470/127, 17-19=-278/1335, 3-17=-26/327, 8-14=-1179/118

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-0, Interior(1) 16-2-0 to 28-0-0, Exterior(2R) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 39-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 2, 269 lb uplift at joint 15 and 190 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026620
3172181	B7	Hip	1	1	Job Reference (optional)	

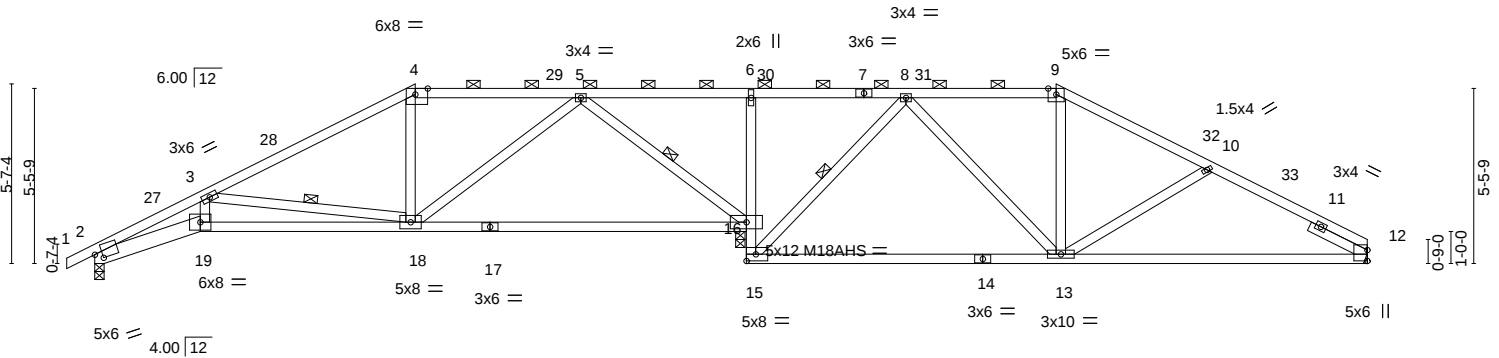
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:15 2022 Page 1

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0-10-8	3-3-8	10-0-0	15-2-0	20-4-0	25-3-12	30-0-0	34-8-8	39-8-8
0-10-8	3-3-8	6-8-8	5-2-0	5-2-0	4-11-12	4-8-4	4-8-8	5-0-0

Scale = 1:71.9



3-3-8	10-0-0	15-2-0	20-3-8	20-4-0	25-3-12	30-0-0	39-8-8	39-8-10
3-3-8	6-8-8	5-2-0	5-1-8	0-0-8	4-11-12	4-8-4	9-8-8	0-0-2
Plate Offsets (X,Y)-- [2:0-2-13,0-2-2], [4:0-4-10,Edge]								

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.19	16-18	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.95	Vert(CT) -0.40	13-15	>572	180	M18AHS	142/136
BCLL 0.0	Rep Stress Incr YES	WB 0.36	Horz(CT) 0.12	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 162 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-19: 2x6 SPF No.2, 16-17: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (5-0-3 max.): 4-9.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 3-18, 8-15, 5-16

REACTIONS.

(size) 12=Mechanical, 2=0-3-8, 16=0-3-8
 Max Horz 2=105(LC 12)
 Max Uplift 12=-205(LC 13), 2=-209(LC 12), 16=-320(LC 9)
 Max Grav 12=960(LC 26), 2=1099(LC 25), 16=2418(LC 1)

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

TOP CHORD 2-3=-3292/719, 3-4=-1456/295, 4-5=-1199/315, 5-6=-9/456, 6-8=0/399, 8-9=-862/299,
 9-10=-1050/293, 10-12=-1396/360
 BOT CHORD 2-19=-712/2967, 18-19=-678/2794, 16-18=-148/693, 15-16=-117/938, 6-16=-484/147,
 13-15=-91/475, 12-13=-252/1197
 WEBS 3-19=-116/709, 3-18=-1616/480, 10-13=-400/173, 8-13=-28/603, 8-15=-1174/212,
 5-18=-71/657, 5-16=-1431/317

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 30-0-0, Exterior(2R) 30-0-0 to 34-2-15, Interior(1) 34-2-15 to 39-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 205 lb uplift at joint 12, 209 lb uplift at joint 2 and 320 lb uplift at joint 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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 Chesterfield, MO 63017

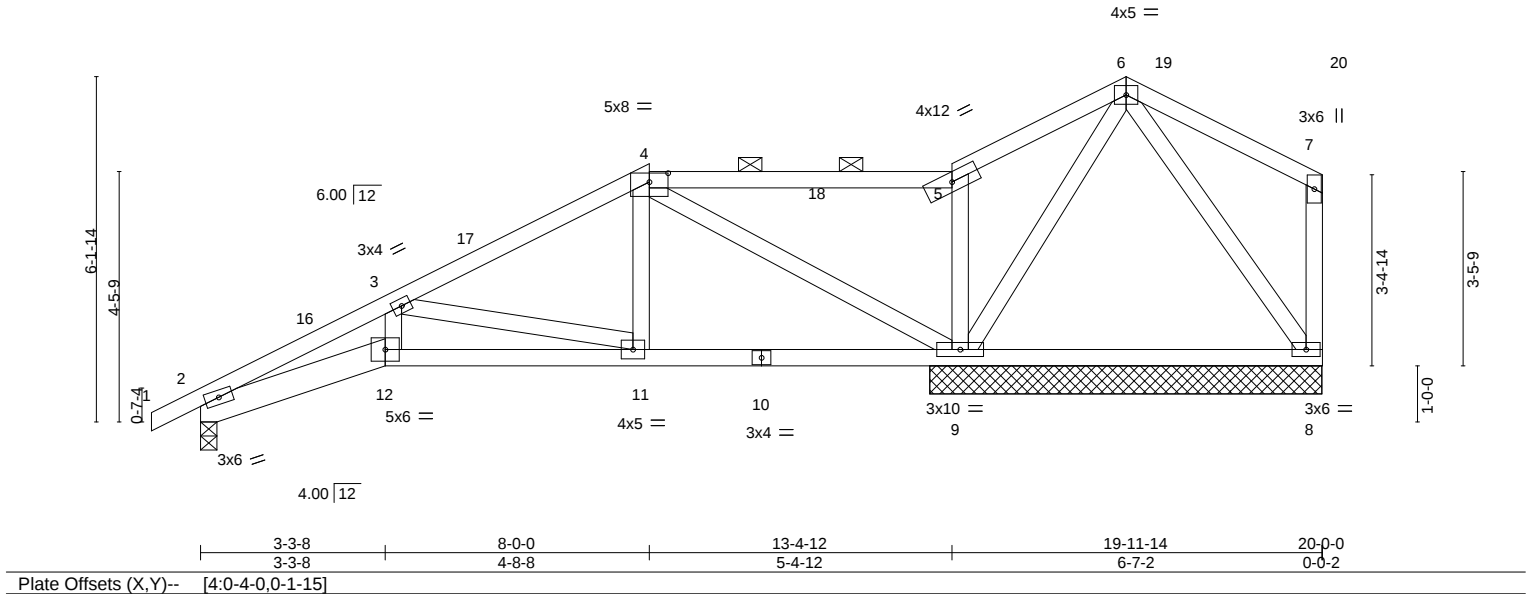
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026621
3172181	B8	Roof Special	1	1	Job Reference (optional)	

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

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0-10-8	3-3-8	8-0-0	13-4-12	16-6-0	20-0-0
0-10-8	3-3-8	4-8-8	5-4-12	3-1-4	3-6-0

Scale = 1:41.1



LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL) -0.05 11-12 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.41	Vert(CT) -0.11 11-12 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.85	Horz(CT) 0.04 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 87 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2 *Except*	2-0-0 oc purlins (10-0-0 max.): 4-5.
2-12: 2x6 SPF No.2	Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	

REACTIONS. All bearings 6-11-14 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=179(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2 except 8=199(LC 25), 9=319(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7, 8 except 2=664(LC 1), 9=1598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1583/348, 3-4=-557/119, 4-5=-205/601, 5-6=-197/728
BOT CHORD 2-12=-521/1407, 11-12=-488/1307, 9-11=-161/416
WEBS 3-12=-97/383, 3-11=-899/334, 4-11=-37/360, 4-9=-1171/344, 6-9=-909/273, 6-8=-98/308

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 19-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 7, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2 except (jt=lb) 8=199, 9=319.
- This truss 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.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026622
3172181	B9	Half Hip Girder	1	1	Job Reference (optional)	

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

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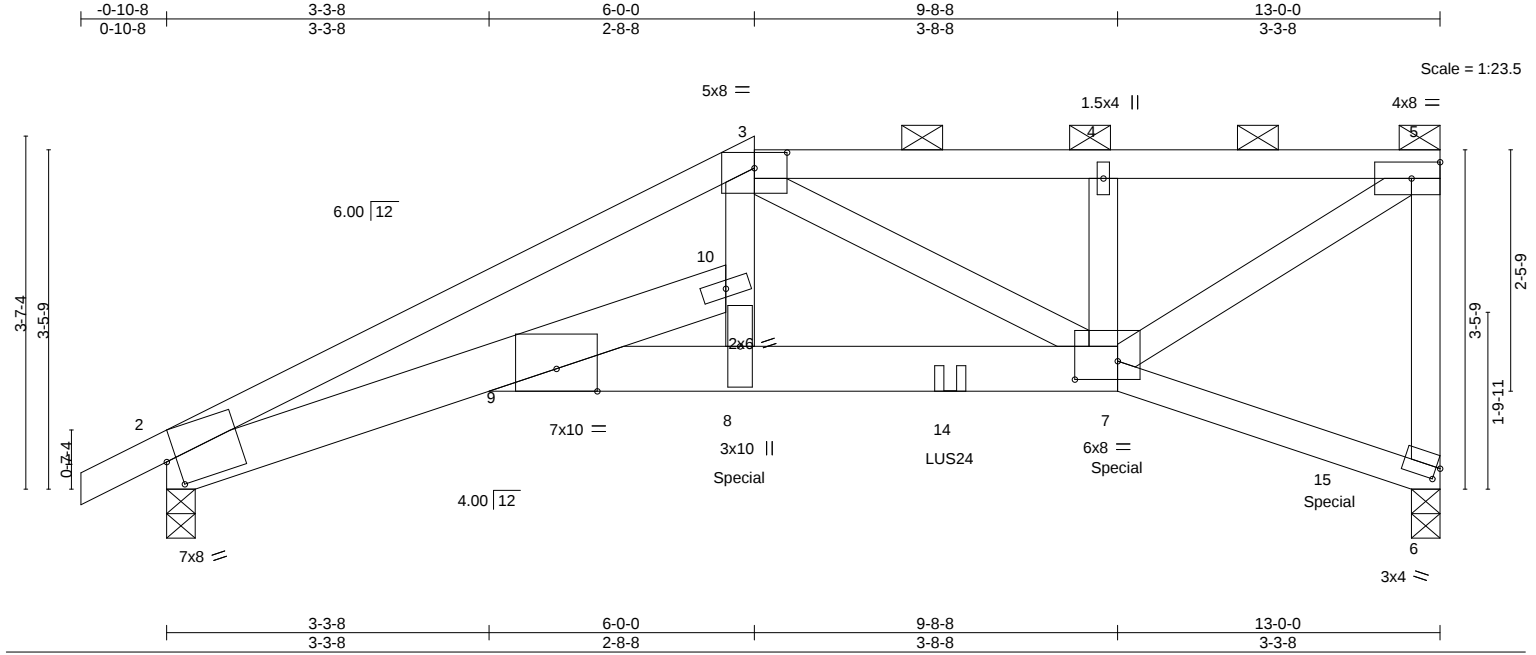


Plate Offsets (X,Y)--		[2:0-1-4,0-3-5], [3:0-4-0,0-1-15], [6:0-0-8,0-1-8], [7:0-5-4,0-2-4]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	-0.09 9-10	>999	240
TCDL 20.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.21 9-10	>749	180
BCLL 0.0	Rep Stress Incr	NO	WB 0.62	Horz(CT)	0.13 6	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 59 lb	FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
3-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-10: 2x6 SPF 2100F 1.8E, 7-9: 2x6 SPF No.2
WEBS 2x4 SPF No.2

REACTIONS.

(size) 6=0-3-8, 2=0-3-8
Max Horz 2=137(LC 28)
Max Uplift 6=489(LC 5), 2=323(LC 8)
Max Grav 6=1789(LC 1), 2=1449(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3678/896, 3-4=-2094/559, 4-5=-2067/549, 5-6=-1539/431
BOT CHORD 2-9=-884/3221, 9-10=-125/492, 8-9=-788/2819, 7-8=-812/2937
WEBS 3-7=-980/283, 4-7=-367/117, 5-7=-689/2471, 8-10=-86/484, 3-10=-438/1731

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 6, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=489, 2=323.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 8-0-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 827 lb down and 281 lb up at 5-10-4, and 306 lb down and 119 lb up at 9-8-8, and 307 lb down and 118 lb up at 12-0-0 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



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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/WOODSIDE RIDGE #34/MO
3172181	B9	Half Hip Girder	1	1	I52026622
Job Reference (optional)					

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

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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: 1-3=-90, 3-5=-90, 9-11=-20, 7-9=-20, 6-7=-20
- Concentrated Loads (lb)
- Vert: 10=-827(B) 7=-306(B) 14=-306(B) 15=-307(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	C1	ROOF SPECIAL GIRDER	1	2	I52026623

Builders FirstSource (Valley Center),
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- NOTES-**
- 10) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 4-0-0 oc max. starting at 4-0-12 from the left end to 18-0-12 to connect truss(es) to front face of bottom chord.
 - 11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 8-0-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
 - 12) Fill all nail holes where hanger is in contact with lumber.
 - 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1568 lb down and 403 lb up at 2-0-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 3-22=-90, 3-6=-90, 22-24=-160, 5-6=-160, 23-29=-160, 19-29=-110, 8-19=-20, 8-36=-110, 7-36=-160
 - Concentrated Loads (lb)
 - Vert: 10=-880(F) 12=-904(F) 9=-854(F) 21=-987(F) 22=-1543(F) 25=-1024(F) 26=-1024(F) 27=-900(F) 28=-855(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	C2	Hip	1	1	I52026624

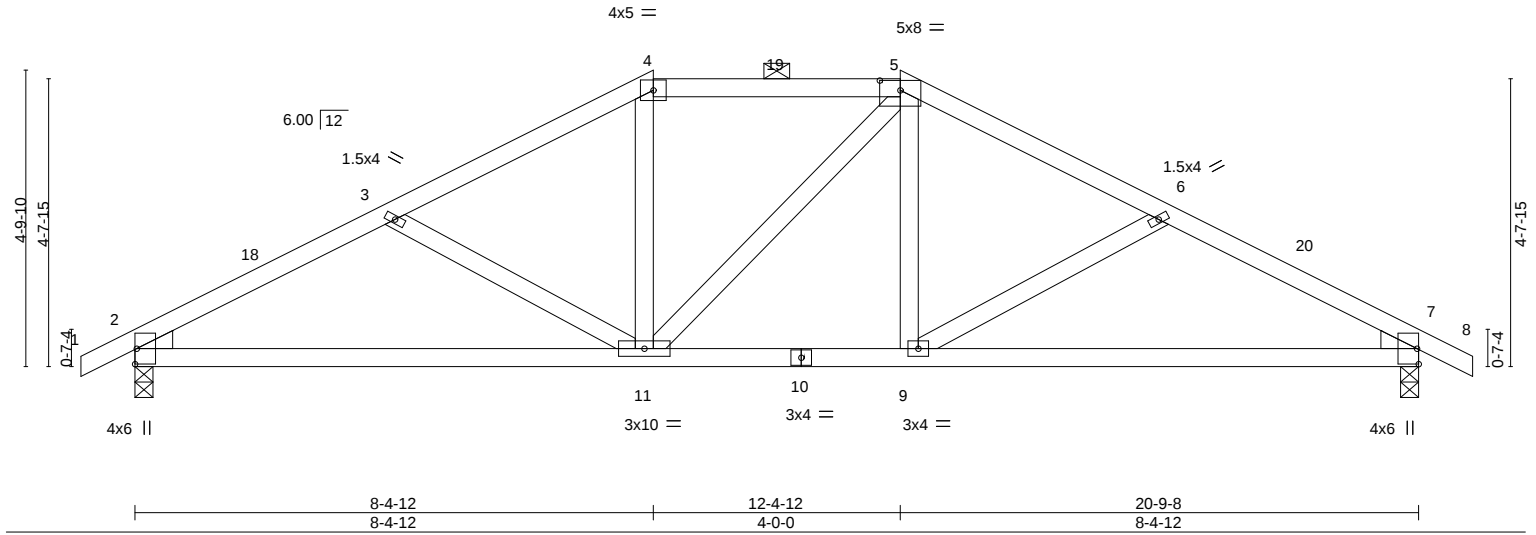
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:24 2022 Page 1

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0-10-8	4-2-9	8-4-12	12-4-12	16-6-15	20-9-8	21-8-0
0-10-8	4-2-9	4-2-3	4-0-0	4-2-3	4-2-9	0-10-8

Scale = 1:37.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.08 9-17 >999 240	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.18 9-17 >999 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.05 7 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 80 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 (4-11-8 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
 Max Horz 2=-80(LC 17)
 Max Uplift 2=-178(LC 12), 7=-178(LC 13)
 Max Grav 2=1222(LC 1), 7=1222(LC 1)

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

TOP CHORD 2-3=-1874/336, 3-4=-1556/288, 4-5=-1319/295, 5-6=-1555/288, 6-7=-1874/336
 BOT CHORD 2-11=-260/1602, 9-11=-130/1319, 7-9=-238/1602
 WEBS 3-11=-328/154, 4-11=-22/310, 5-9=-25/310, 6-9=-328/154

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-4-12, Exterior(2E) 8-4-12 to 12-4-12, Exterior(2R) 12-4-12 to 16-8-14, Interior(1) 16-8-14 to 21-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=178, 7=178.
- This truss 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.



May 19, 2022

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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/WOODSIDE RIDGE #34/MO
3172181	C3	Hip Girder	1	1	I52026625

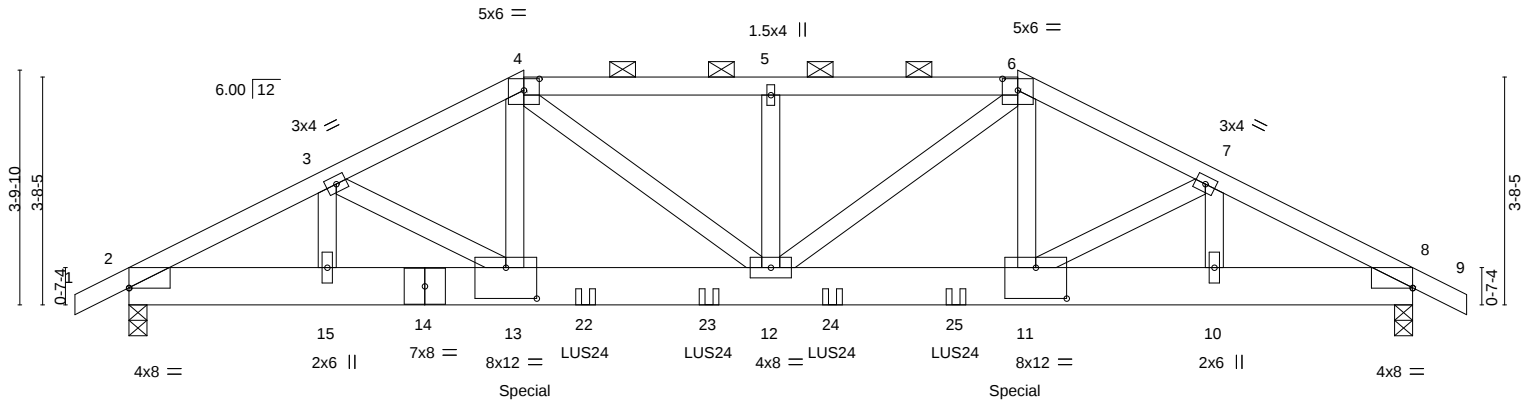
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:26 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-2Ts6bDvklW2_9hA58GGqU2MJ743qh8c8V?xgiuzFHPI

0-10-8	3-2-9	6-4-12	10-4-12	14-4-12	17-6-15	20-9-8	21-8-0
0-10-8	3-2-9	3-2-3	4-0-0	4-0-0	3-2-3	3-2-9	0-10-8

Scale = 1:37.3



3-2-9	6-4-12	10-4-12	14-4-12	17-6-15	20-9-8
3-2-9	3-2-3	4-0-0	4-0-0	3-2-3	3-2-9

Plate Offsets (X,Y)-- [2:0-0-0,0-0-1], [4:0-3-0,0-2-4], [6:0-3-0,0-2-4], [8:0-0-0,0-0-1], [11:0-6-0,0-6-0], [13:0-6-0,0-6-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.13	12	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.28	12	>906	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.33	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 123 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-6: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied or 2-1-2 oc purlins, except 2-0-0 oc purlins (2-8-14 max.): 4-6.
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) 2=0-3-8, 8=0-3-8
Max Horz 2=-62(LC 34)
Max Uplift 2=-653(LC 8), 8=-653(LC 9)
Max Grav 2=2768(LC 1), 8=2768(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4795/1151, 3-4=-5144/1280, 4-5=-5253/1279, 5-6=-5253/1279, 6-7=-5144/1280,
7-8=-4795/1153
BOT CHORD 2-15=-1030/4235, 13-15=-1030/4235, 12-13=-1080/4534, 11-12=-1018/4534,
10-11=-969/4235, 8-10=-969/4235
WEBS 3-15=-528/158, 3-13=-258/546, 4-13=-362/1351, 4-12=-263/1009, 5-12=-483/151,
6-12=-263/1009, 6-11=-362/1352, 7-11=-259/546, 7-10=-528/157

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=653, 8=653.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 7-4-12 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
 - 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 9-4-12 from the left end to 13-4-12 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 890 lb down and 308 lb up at 6-4-12, and 890 lb down and 308 lb up at 14-4-0 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).



May 19,2022

LOAD CASE(S) Standard

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

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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/WOODSIDE RIDGE #34/MO
3172181	C3	Hip Girder	1	1	I52026625

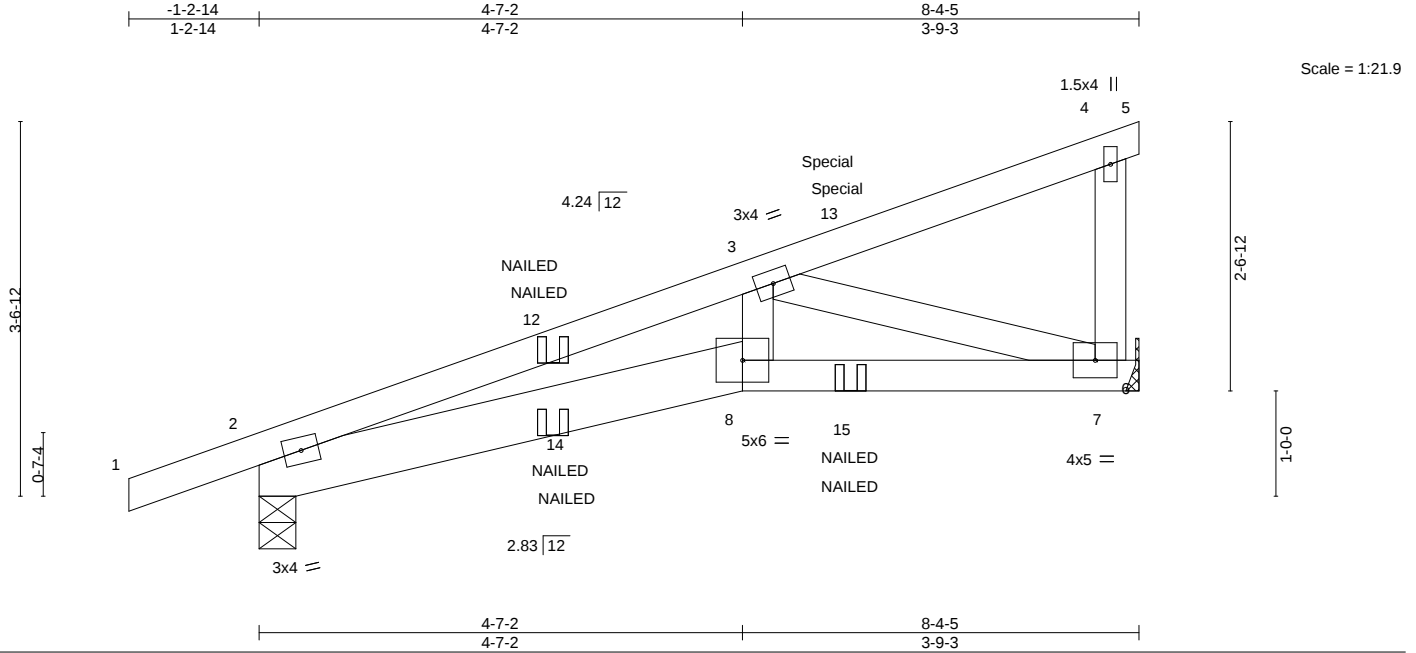
Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.530 s Dec 6 2021
MiTek Industries, Inc.
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Page 2
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LOAD CASE(S)
Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-6=-90, 6-9=-90, 16-19=-20
Concentrated Loads (lb)
Vert: 13=-890(B) 11=-890(B) 22=-328(B) 23=-328(B) 24=-328(B) 25=-328(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	CJ1	Diagonal Hip Girder	1	1	I52026626

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:27 2022 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.32	Vert(LL) -0.03	8	>999	240	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.36	Vert(CT) -0.06	8	>999	180		
BCLL 0.0	Lumber DOL 1.15	WB 0.28	Horz(CT) 0.03	7	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP						
	Code IRC2018/TPI2014						Weight: 31 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 or 4-11-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-4-3, 7=Mechanical
Max Horz 2=129(LC 5)
Max Uplift 2=-139(LC 4), 7=-134(LC 8)
Max Grav 2=606(LC 1), 7=549(LC 1)

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

TOP CHORD 2-3=-1349/296
BOT CHORD 2-8=-320/1245, 7-8=-303/1168
WEBS 3-8=-37/335, 3-7=-1217/339

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 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) except (it=lb) 2=139, 7=134.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 112 lb down and 92 lb up at 5-7-7, and 112 lb down and 92 lb up at 5-7-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 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: 1-4=-90, 4-5=-40, 8-9=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 13=-140(F=-70, B=-70) 14=2(F=1, B=1)



May 19, 2022

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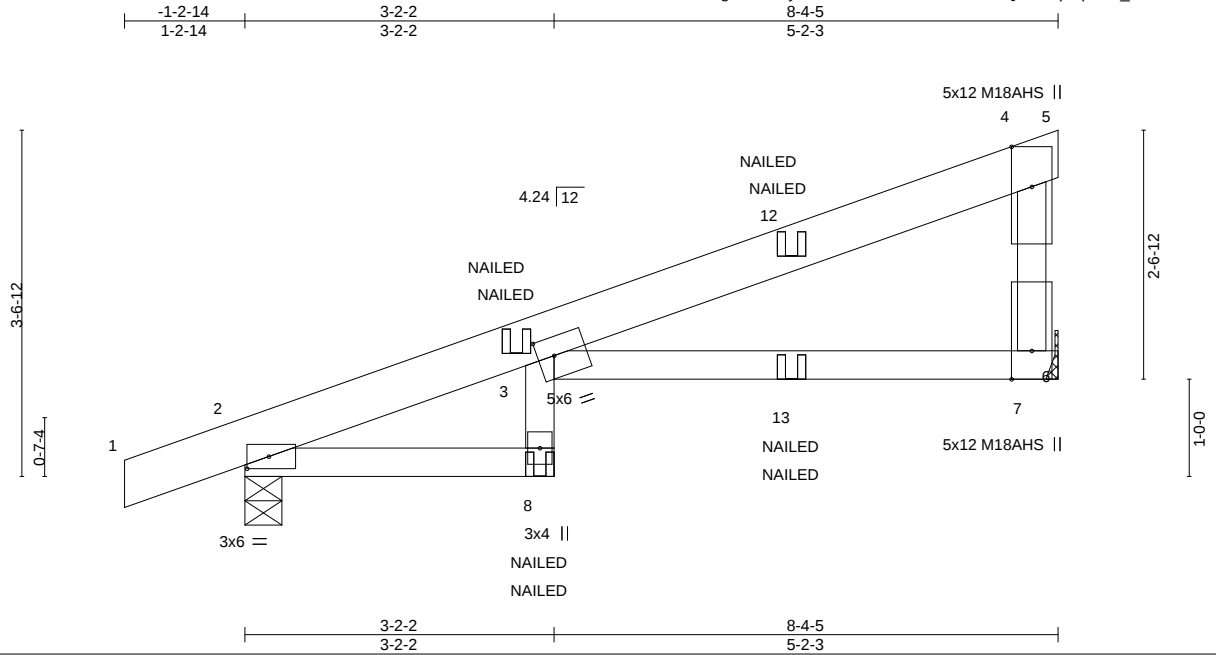


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	CJ2	Diagonal Hip Girder	1	1	I52026627

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:29 2022 Page 1
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Scale = 1:23.7

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.91	Vert(LL) 0.15	3-7	>668	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15		BC 0.57	Vert(CT) -0.30	3-7	>324	180		M18AHS	142/136
BCLL 0.0	Rep Stress Incr NO		WB 0.00	Horz(CT) 0.14	7	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 31 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, 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=127(LC 5)
Max Uplift 7=-152(LC 8), 2=-159(LC 4)
Max Grav 7=538(LC 1), 2=607(LC 1)

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

TOP CHORD 3-10=-251/33, 3-4=-285/54, 4-7=-360/124
BOT CHORD 3-7=-87/270

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=152, 2=159.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-4=-90, 4-5=-40, 8-9=-20, 3-6=-20
Concentrated Loads (lb)
Vert: 8=-12(F=-6, B=-6) 12=-10(F=-5, B=-5) 13=-106(F=-53, B=-53)



May 19, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	CJ2A	Diagonal Hip Girder	1	1	I52026628

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:30 2022 Page 1
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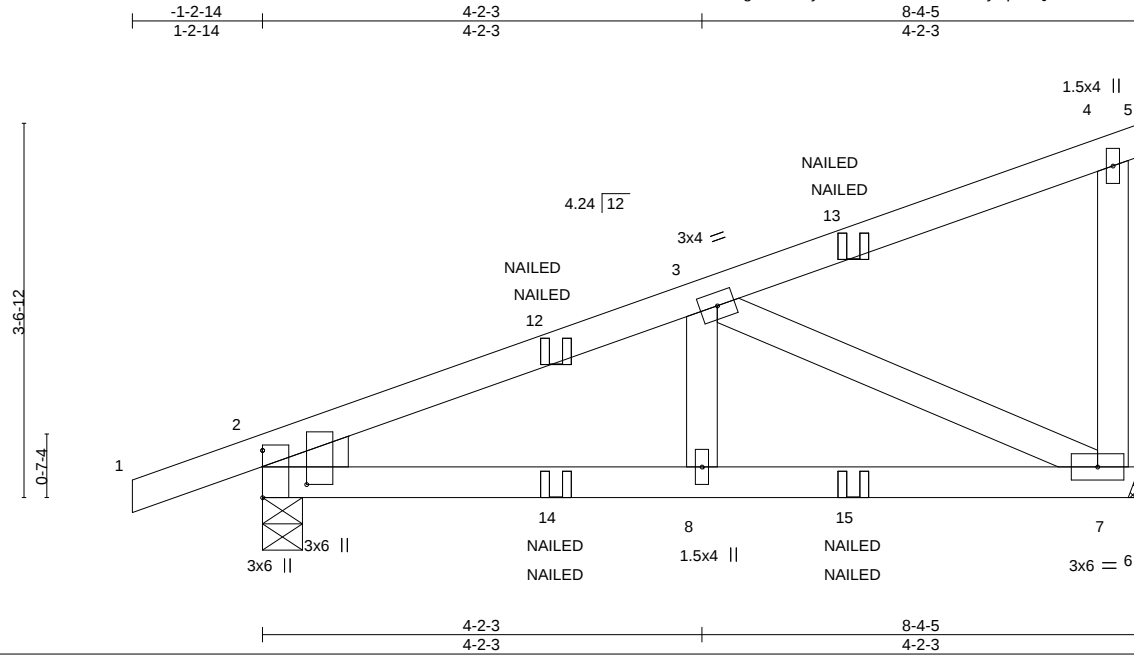


Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.29	Vert(LL) 0.02	7-8	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15		BC 0.37	Vert(CT) -0.04	7-8	>999	180			
BCLL 0.0	Rep Stress Incr NO		WB 0.23	Horz(CT) 0.01	7	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 32 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) 7=Mechanical, 2=0-4-9
Max Horz 2=149(LC 24)
Max Uplift 7=151(LC 8), 2=161(LC 4)
Max Grav 7=523(LC 1), 2=601(LC 1)

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

TOP CHORD 2-3=-740/178
BOT CHORD 2-8=-205/655, 7-8=-205/655
WEBS 3-7=-720/240

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 (it=lb) 7=151, 2=161.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-5=-40, 6-9=-20
Concentrated Loads (lb)
Vert: 13=-7(F=-3, B=-3) 14=-12(F=-6, B=-6) 15=-88(F=-44, B=-44)



May 19, 2022

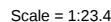
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:31 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-ORg?exzta2gGFT32wps?B63Fc5IBMQJteHfRO5zFHPg
1-2-14 4-5-8 8-11-1
1-2-14 4-5-8 4-5-8



May 19, 2022

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	CJ4	Diagonal Hip Girder	2	1	I52026630

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:33 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-Lqn13c_75fw_VmCR2EuTGX8eQvW6qObA6b8YS_zFHPe

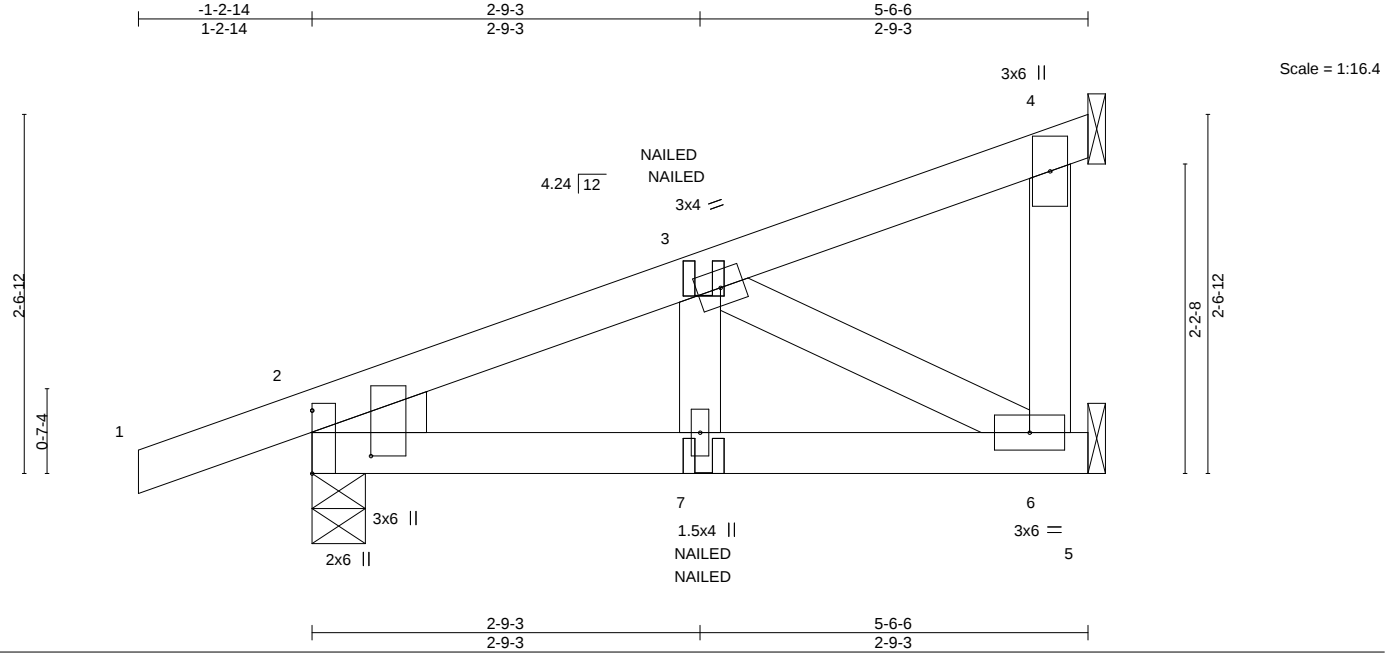


Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]

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 0.15	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	7	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 6=Mechanical, 2=0-4-9
Max Horz 2=102(LC 7)
Max Uplift 4=-27(LC 8), 6=-40(LC 8), 2=-113(LC 4)
Max Grav 4=96(LC 1), 6=191(LC 1), 2=418(LC 1)

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

TOP CHORD 2-3=-353/75
BOT CHORD 2-7=-80/309, 6-7=-80/309
WEBS 3-6=-347/109

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 6 except (jt=lb) 2=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-9(F=-6, B=-3)



May 19, 2022

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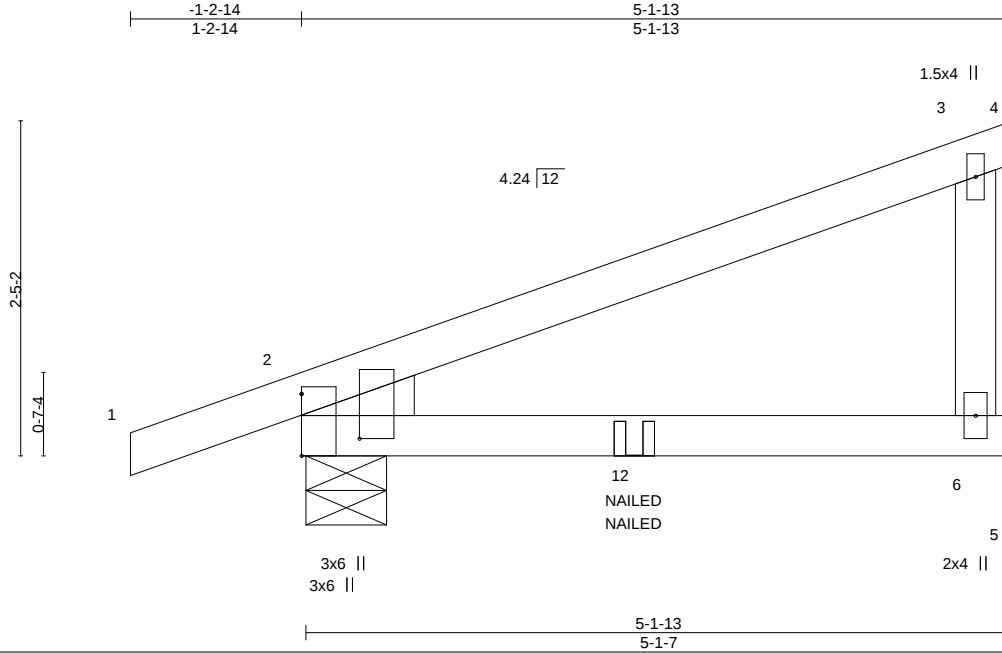
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	CJ5	Diagonal Hip Girder	2	1	I52026631

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:34 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-p0L8Gy?lsz2r7wndcxPipkhwJolZrJLFt5_QzFHPd



Scale = 1:16.7

Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.42	Vert(LL)	0.04	6-11	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.07	6-11	>862	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: 17 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 5-1-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-7-0
Max Horz 2=98(LC 7)
Max Uplift 6=-89(LC 8), 2=-146(LC 4)
Max Grav 6=281(LC 1), 2=466(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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) 6 except (jt=lb) 2=146.
- 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=-90, 3-4=-40, 5-7=-20
Concentrated Loads (lb)
Vert: 12=-82(F=-41, B=-41)



May 19, 2022

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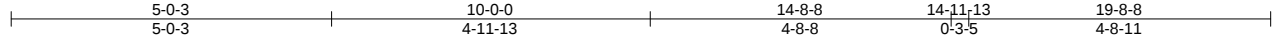


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026632
3172181	D1	Common	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:36 2022 Page 1
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Scale = 1:36.1

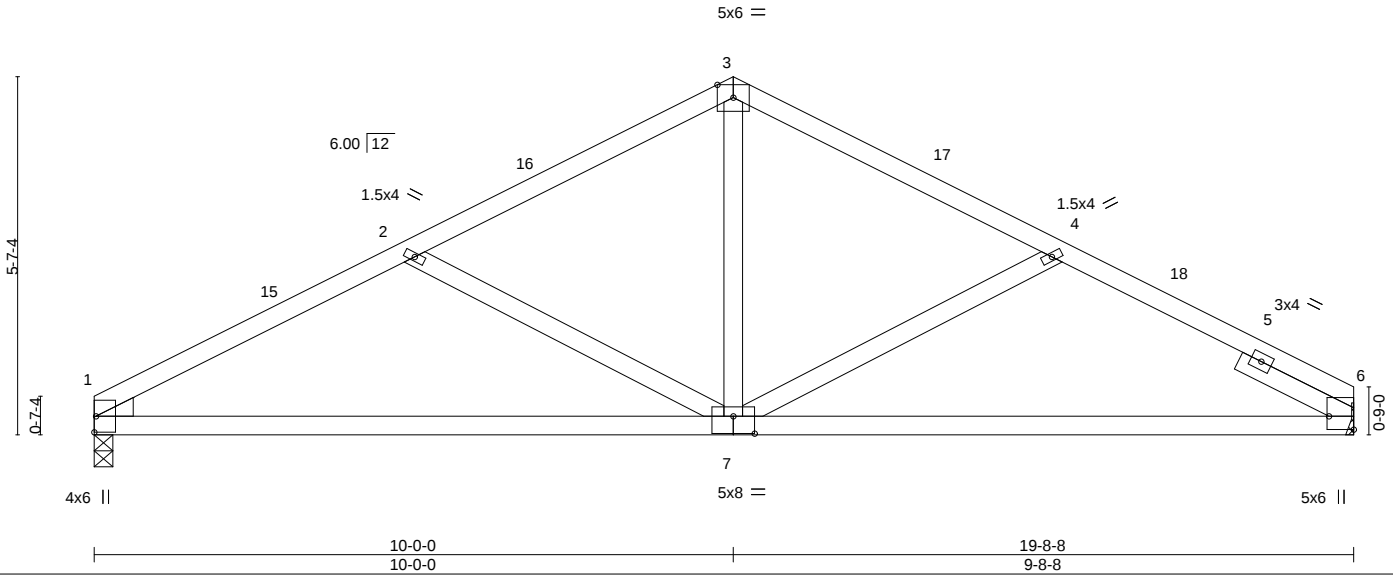


Plate Offsets (X,Y)-- [6:Edge,0-4-10], [7:0-4-0,0-3-4]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.36	Vert(LL)	-0.14	7-14	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.29	7-14	>817	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.05	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 69 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 1=0-3-8
Max Horz 1=92(LC 12)
Max Uplift 6=144(LC 13), 1=146(LC 12)
Max Grav 6=1084(LC 1), 1=1084(LC 1)

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

TOP CHORD 1-2=-1740/373, 2-3=-1293/294, 3-4=-1288/293, 4-6=-1639/363
BOT CHORD 1-7=-276/1485, 6-7=-255/1412
WEBS 2-7=-508/208, 3-7=-83/607, 4-7=-436/196

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-8-8 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.
- 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=144, 1=146.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



May 19, 2022

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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



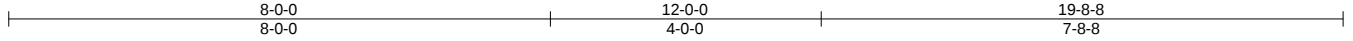
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	D1A	Hip	1	1	I52026633

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:37 2022 Page 1

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Scale = 1:34.0

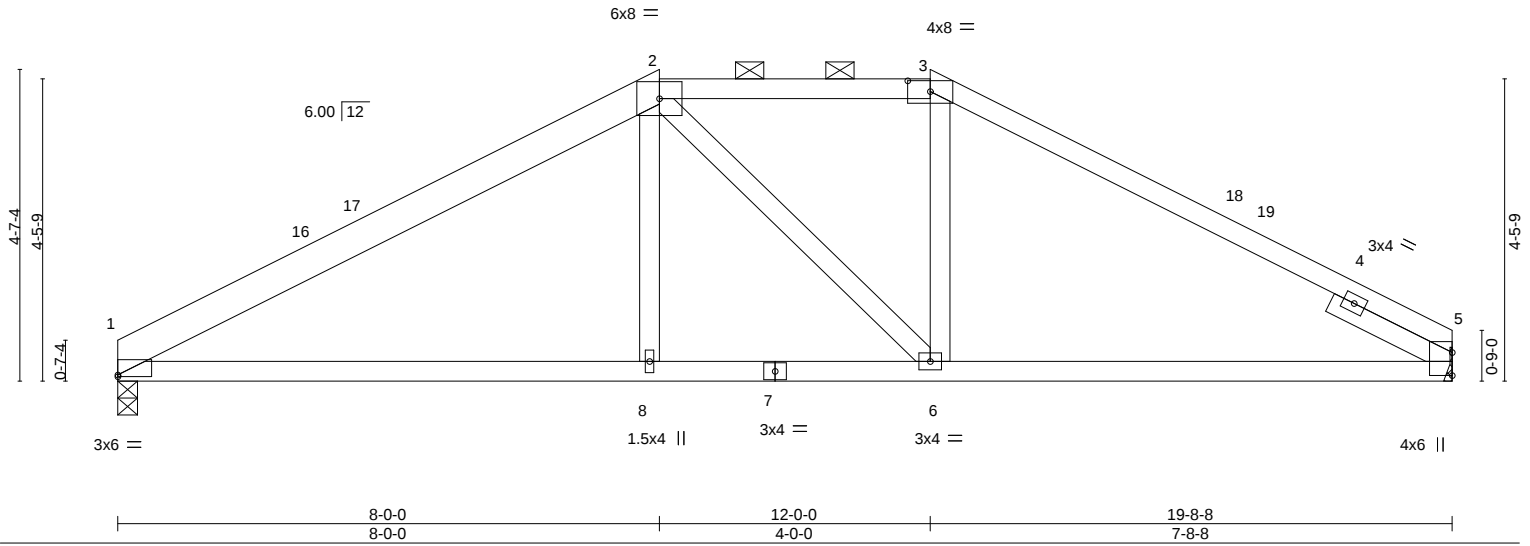


Plate Offsets (X,Y)-- [1:0-0-0,0-0-5], [3:0-4-0,0-1-15]

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.71	Vert(LL)	-0.07	8-11	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.18	8-11	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.03	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 71 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-2: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 5=Mechanical
Max Horz 1=76(LC 12)
Max Uplift 1=-132(LC 12), 5=-129(LC 13)
Max Grav 1=1084(LC 1), 5=1084(LC 1)

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

TOP CHORD 1-2=-1569/277, 2-3=-1271/312, 3-5=-1475/287
BOT CHORD 1-8=-172/1300, 6-8=-173/1296, 5-6=-167/1274
WEBS 3-6=-6/253

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-0-0, Exterior(2E) 8-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 19-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=132, 5=129.
- This truss 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.



May 19, 2022

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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

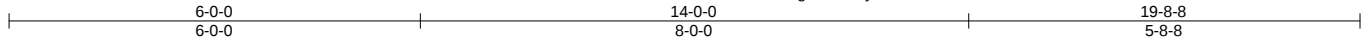
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	D2	Hip	1	1	I52026634

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:38 2022 Page 1

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Job Reference (optional)



Scale = 1:33.6

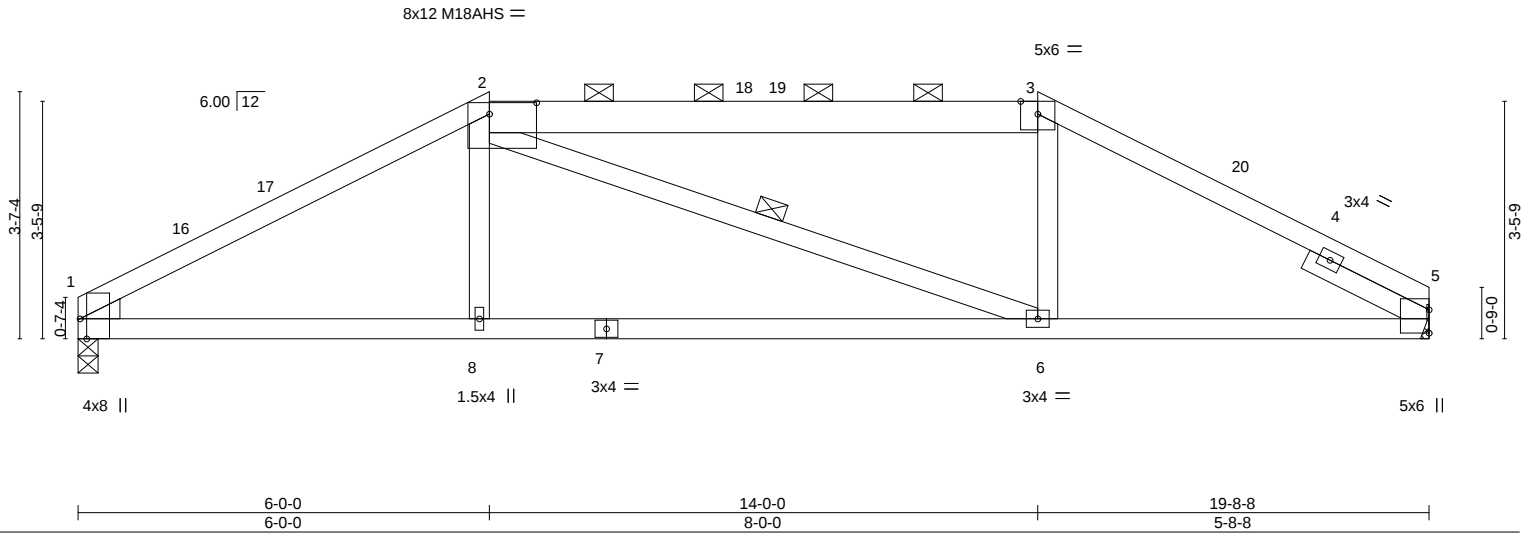


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [2:0-8-4,0-2-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.67	Vert(LL)	-0.12	6-8	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.30	6-8	>799	180	M18AHS	142/136
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.06	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 71 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-5-15 max.): 2-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-6

REACTIONS.

(size) 5=Mechanical, 1=0-3-8
Max Horz 1=55(LC 12)
Max Uplift 5=145(LC 13), 1=148(LC 12)
Max Grav 5=1084(LC 1), 1=1084(LC 1)

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

TOP CHORD 1-2=-1777/296, 2-3=-1431/300, 3-5=-1677/289
BOT CHORD 1-8=-204/1503, 6-8=-207/1496, 5-6=-187/1438
WEBS 2-8=0/294, 3-6=0/295

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-0-0, Exterior(2R) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 19-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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.
- 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) 5=145, 1=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.



May 19, 2022

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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



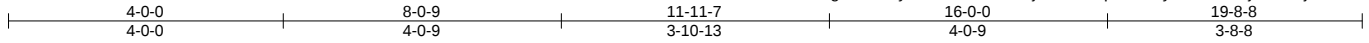
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	D3	Hip Girder	1	1	I52026635

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:40 2022 Page 1

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Scale = 1:33.5

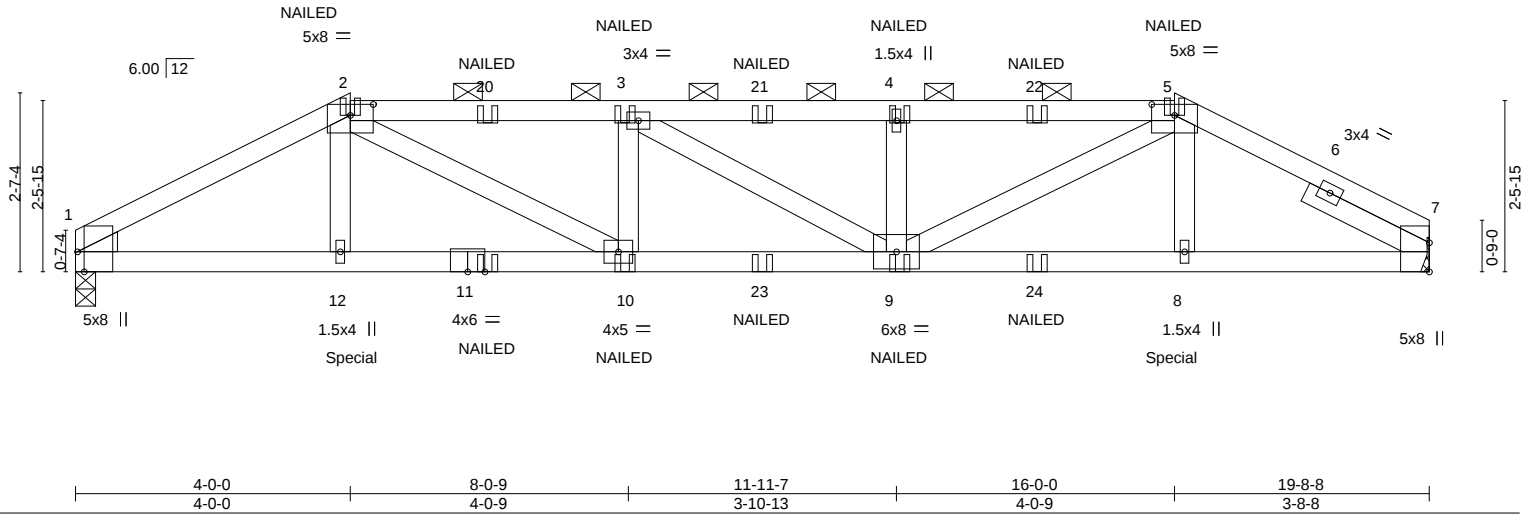


Plate Offsets (X,Y)--		[1:0-3-8,Edge], [2:0-4-0,0-1-15], [5:0-4-0,0-1-15]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.90	Vert(LL)	-0.14	9-10	>999	240	MT20	197/144	
TCDL	20.0	Lumber DOL		1.15		BC	0.96	Vert(CT)	-0.31	9-10	>772	180			
BCLL	0.0	Rep Stress Incr		NO		WB	0.39	Horz(CT)	0.08	7	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014				Matrix-MS							Weight: 73 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
SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-10 oc purlins, except
2-0-0 oc purlins (2-3-9 max.): 2-5.
BOT CHORD Rigid ceiling directly applied or 7-7-13 oc bracing.

REACTIONS. (size) 7=Mechanical, 1=0-3-8
Max Horz 1=37(LC 29)
Max Uplift 7=377(LC 9), 1=373(LC 8)
Max Grav 7=1595(LC 1), 1=1582(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2776/679, 2-3=-3655/922, 3-4=-3618/911, 4-5=-3620/912, 5-7=-2599/647
BOT CHORD 1-12=-588/2412, 10-12=-587/2399, 9-10=-901/3653, 8-9=-520/2248, 7-8=-520/2259
WEBS 2-12=-17/258, 2-10=-400/1483, 3-10=-506/193, 4-9=-528/197, 5-9=-425/1607

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=377, 1=373.
 - This truss 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) 215 lb down and 93 lb up at 4-0-0, and 215 lb down and 93 lb up at 15-11-4 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



May 19,2022

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	D3	Hip Girder	1	1	I52026635

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.530 s Dec 6 2021 MiTek Industries, Inc.
Wed May 18 11:19:40 2022
Page 2
ID:cIow4Ylgf7iox0?Iy?5BCcz33zm-eAjPX04WSpo?rrFnyCW62?xfsjiczT5CjAKPC4zFHPX

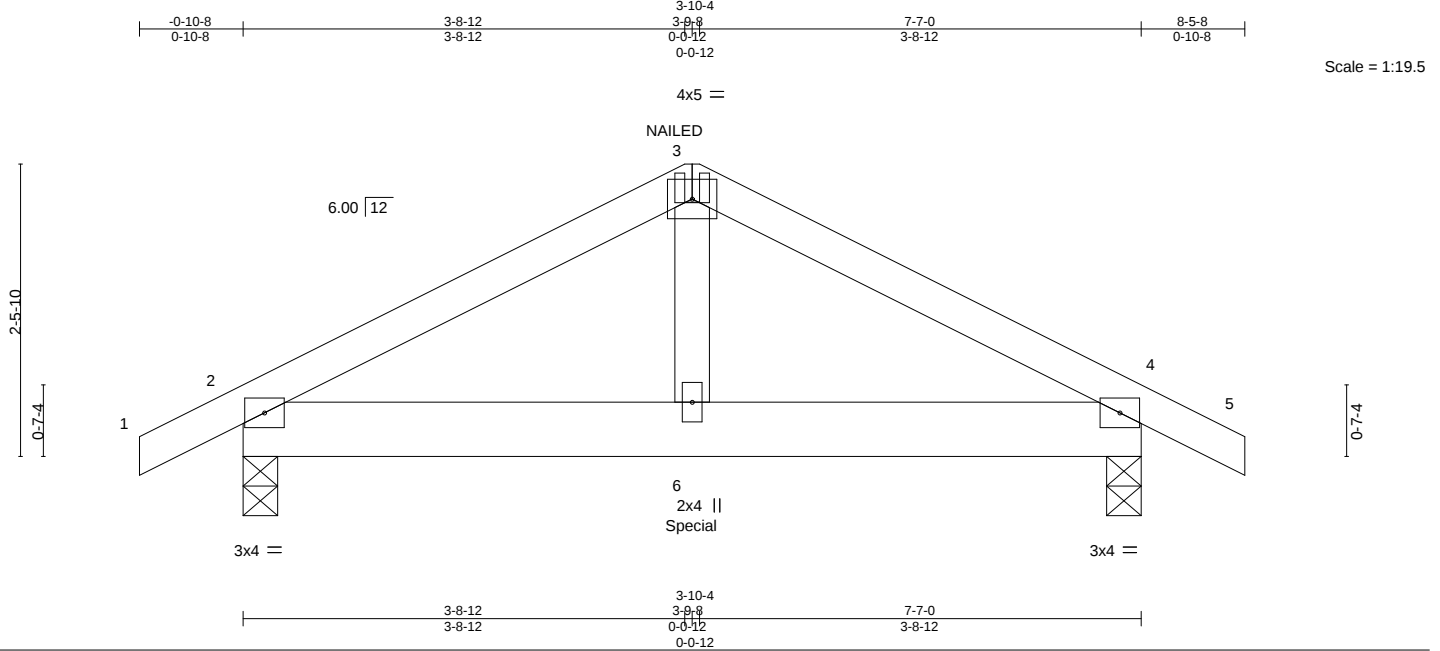
LOAD CASE(S)
Standard
Uniform Loads (plf)
Vert: 1-2=-90, 2-5=-90, 5-7=-90, 13-17=-20
Concentrated Loads (lb)
Vert: 2=-45(B) 5=-45(B) 11=-53(B) 12=-215(B) 10=-53(B) 3=-45(B) 4=-45(B) 9=-53(B) 8=-215(B) 20=-45(B) 21=-45(B) 22=-45(B) 23=-53(B) 24=-53(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	E1	Hip Girder	1	1	I52026636

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:41 2022 Page 1

ID:clow4YlGf7iox0?ly?5BCcz33zm-6MGnkl48D7wsS?pzWw1LbDU?r7CPI_FLyq4zkWzFHPW



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.01	6	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.02	6	>999	180			
BCLL 0.0	Rep Stress Incr NO	WB 0.14	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
Max Horz 2=-41(LC 34)
Max Uplift 2=-200(LC 8), 4=-200(LC 9)
Max Grav 2=789(LC 1), 4=789(LC 1)

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

TOP CHORD 2-3=-1055/301, 3-4=-1055/300
BOT CHORD 2-6=-228/870, 4-6=-228/870
WEBS 3-6=-170/586

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 (it=lb) 2=200, 4=200.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "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) 553 lb down and 258 lb up at 3-8-12 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-5=-90, 7-10=-20
Concentrated Loads (lb)
Vert: 3=-34(B) 6=-553(B)



May 19, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	E2	Common	1	1	IS2026637

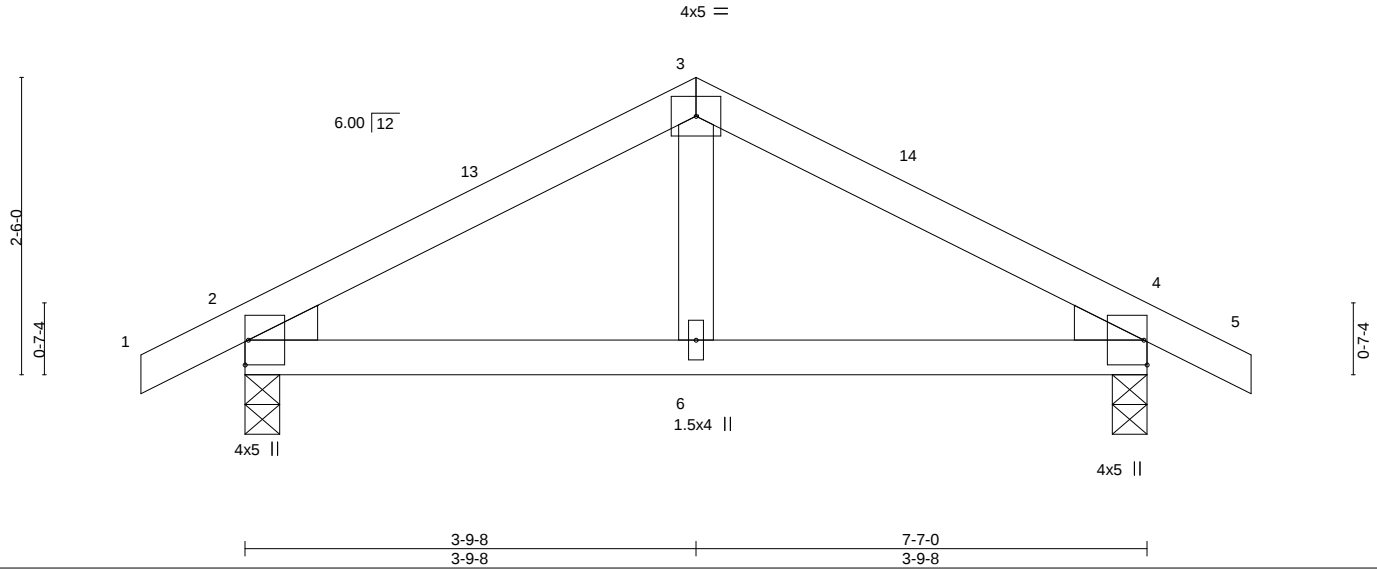
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:42 2022 Page 1

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Scale = 1:19.4



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 0.18	Vert(LL)	-0.01	6-9	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.17	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: 24 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
 Max Horz 2=41(LC 12)
 Max Uplift 2=-76(LC 12), 4=-76(LC 13)
 Max Grav 2=496(LC 1), 4=496(LC 1)

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

TOP CHORD 2-3=-484/221, 3-4=-484/221
 BOT CHORD 2-6=-83/368, 4-6=-83/368

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-8, Exterior(2R) 3-9-8 to 6-11-11, Interior(1) 6-11-11 to 8-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



May 19, 2022

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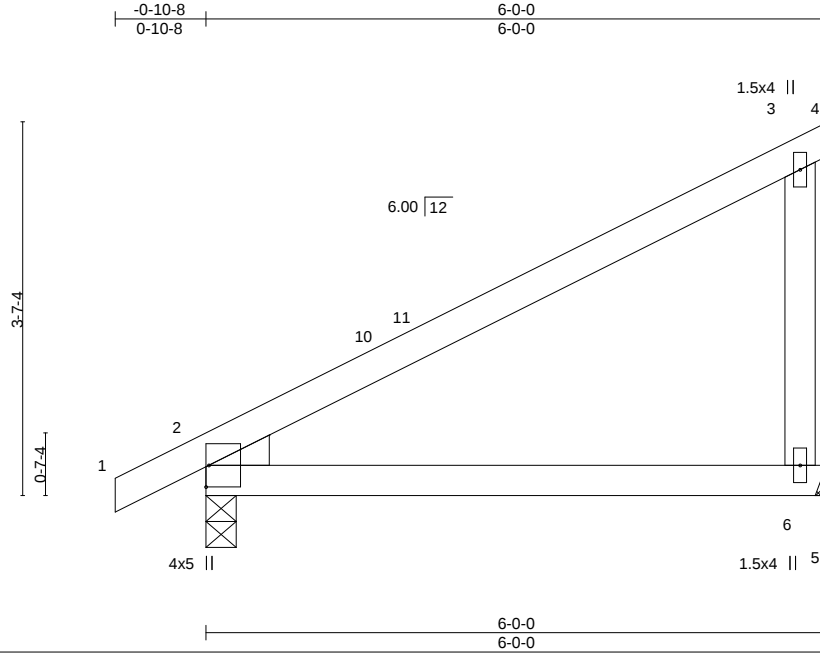
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J1	Jack-Closed	12	1	I52026638

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:43 2022 Page 1

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Scale = 1:22.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) 0.07	6-9	>924	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.41	Vert(CT) -0.14	6-9	>505	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.03	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						

Weight: 20 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
Max Horz 2=139(LC 11)
Max Uplift 6=-82(LC 12), 2=-59(LC 12)
Max Grav 6=326(LC 1), 2=399(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0 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
- 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) 6, 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.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J2	Jack-Closed	3	1	I52026639

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:54 2022 Page 1
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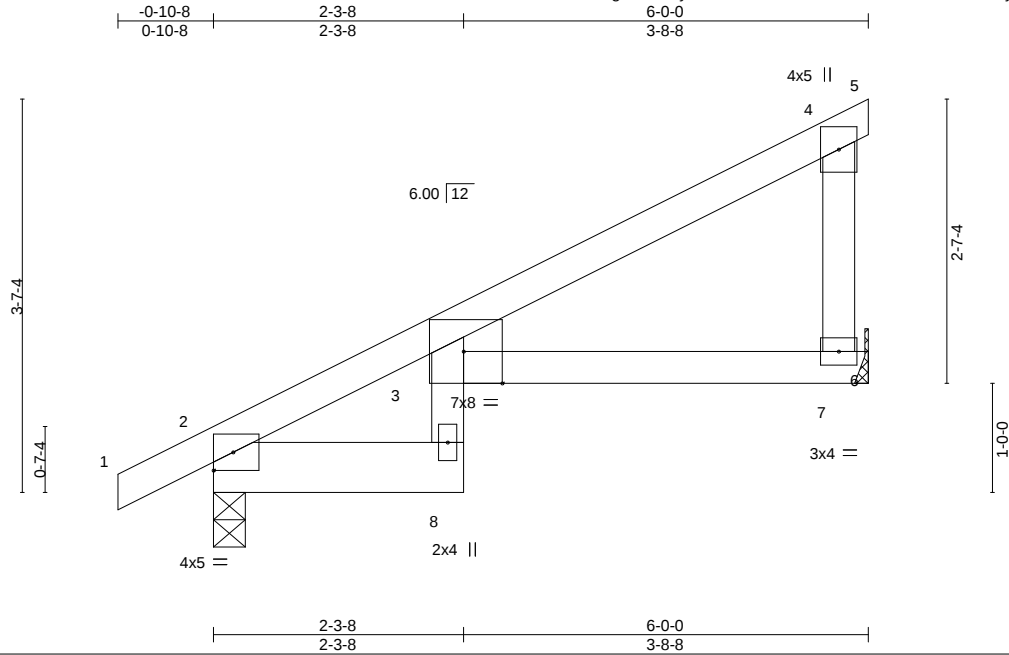


Plate Offsets (X,Y)-- [3:0-4-4,Edge]											
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.71		Vert(LL)	0.09 8	>743	240	MT20	197/144
TCDL 20.0		Lumber DOL	1.15	BC 0.56		Vert(CT)	-0.16 8	>439	180		
BCLL 0.0		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.10 7	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS						Weight: 21 lb	FT = 20%

LUMBER-

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

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=118(LC 9)
Max Uplift 7=-82(LC 12), 2=-58(LC 12)
Max Grav 7=327(LC 1), 2=401(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 6-0-0 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
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J3	Jack-Open	2	1	I52026640

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:56 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-AFgSuUGYhkpjllTsuZosiNbXSAKpjoCYoDGm9zFHPH



Scale = 1:15.7

Plate Offsets (X,Y)--		[2:0-1-7,0-1-8], [3:0-5-0,0-1-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.35
TCDL 20.0	Lumber DOL	1.15	BC 0.22
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MR
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.03 6 >999 240
			Vert(CT) -0.05 6 >999 180
			Horz(CT) 0.03 5 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 13 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 3-10-15 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=94(LC 12)
Max Uplift 4=-45(LC 12), 2=-37(LC 12), 5=-15(LC 12)
Max Grav 4=123(LC 1), 2=301(LC 1), 5=81(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 3-10-3 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) 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.



May 19, 2022

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



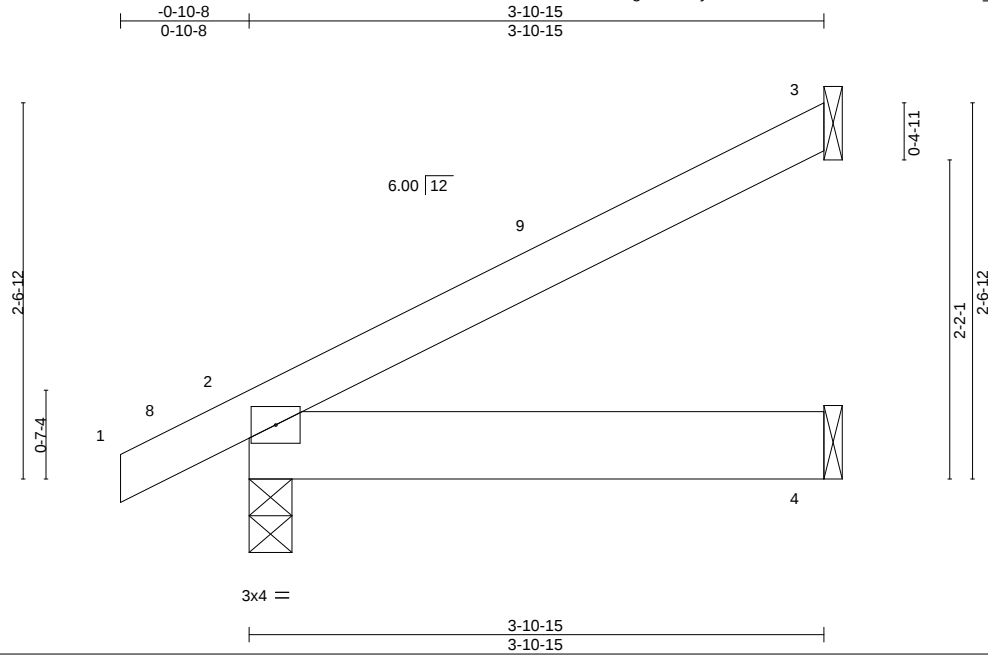
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J3A	Jack-Open	2	1	I52026641

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:58 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-6doCJ9HoDL4R?cdE0_rKnohwJ_2sBiirs_iMr1zFHPF



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) 0.01	4-7	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.01	4-7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 13 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=94(LC 12)
Max Uplift 3=-56(LC 12), 2=-38(LC 12), 4=-5(LC 12)
Max Grav 3=131(LC 1), 2=299(LC 1), 4=88(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 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, 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.



May 19, 2022

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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



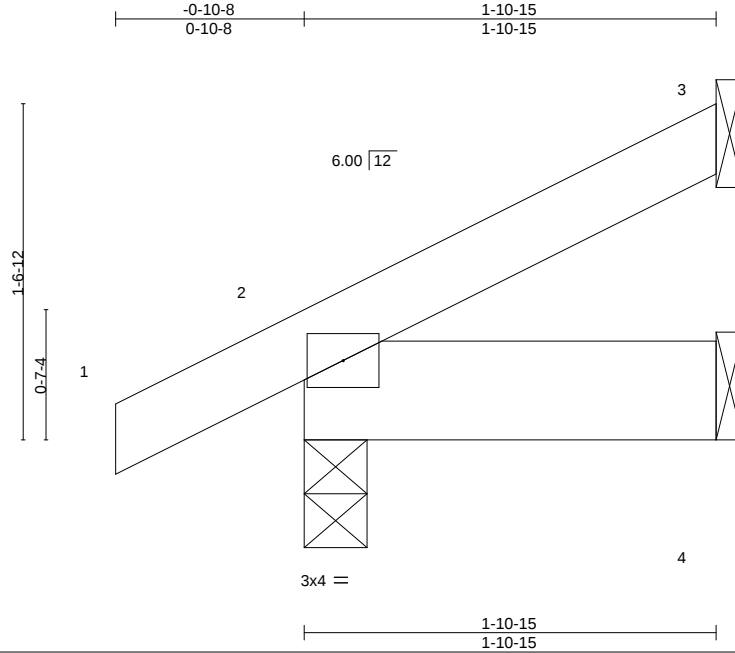
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J4	Jack-Open	7	1	I52026642

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:59 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-aqMaWVIR_fC1cmCQZhMZK0D65OPew9y?5eRwNUzFHPE



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	7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=54(LC 12)
Max Uplift 3=-26(LC 12), 2=-30(LC 12), 4=-3(LC 12)
Max Grav 3=58(LC 1), 2=201(LC 1), 4=40(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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.



May 19,2022

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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

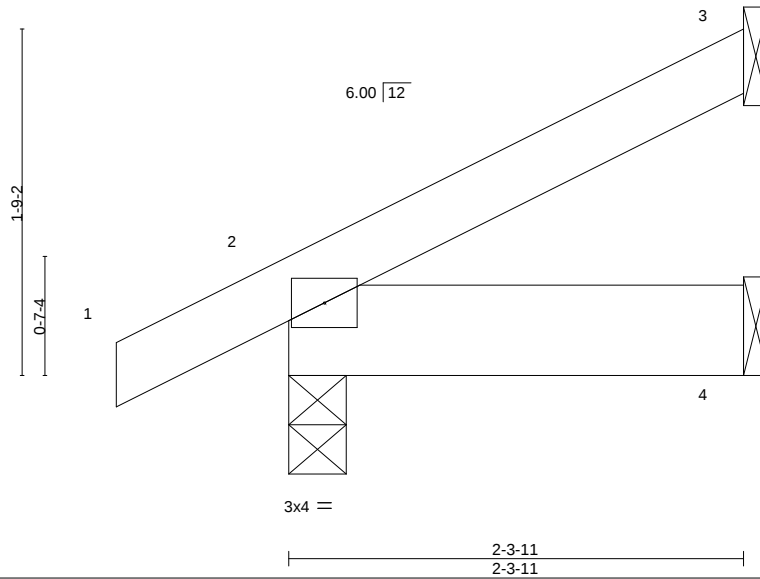
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J5	Jack-Open	4	1	I52026643

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:00 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-20wzjrJ3lyK9Ewmd7PtosDmHrnklfcB8JIBTvwzFHPD

-0-10-8 0-10-8 2-3-11 2-3-11

Scale = 1:11.7



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 0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 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 2-3-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=61(LC 12)
Max Uplift 3=-31(LC 12), 2=-31(LC 12), 4=-4(LC 12)
Max Grav 3=71(LC 1), 2=218(LC 1), 4=49(LC 3)

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

NOTES-

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



May 19, 2022

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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



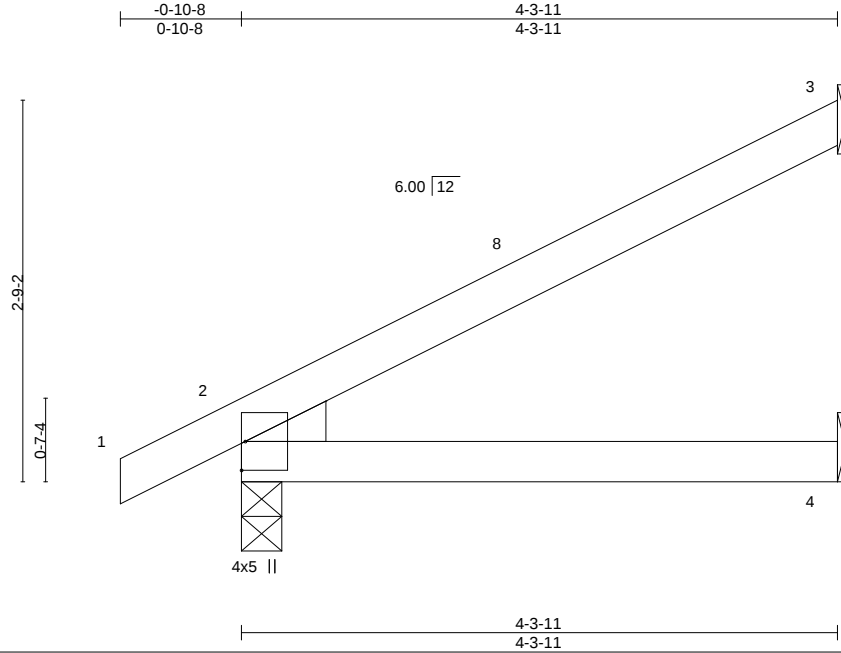
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J6	Jack-Open	4	1	I52026644

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:01 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-WCULxBKhVGS0s4Lph6O1PRJPGb1?O3RHYxw1RMzFHPC



Scale = 1:16.7

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 0.28	Vert(LL)	0.03	4-7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.04	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=102(LC 12)
Max Uplift 3=-68(LC 12), 2=-37(LC 12), 4=-2(LC 12)
Max Grav 3=161(LC 1), 2=320(LC 1), 4=83(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-2-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 19, 2022

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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



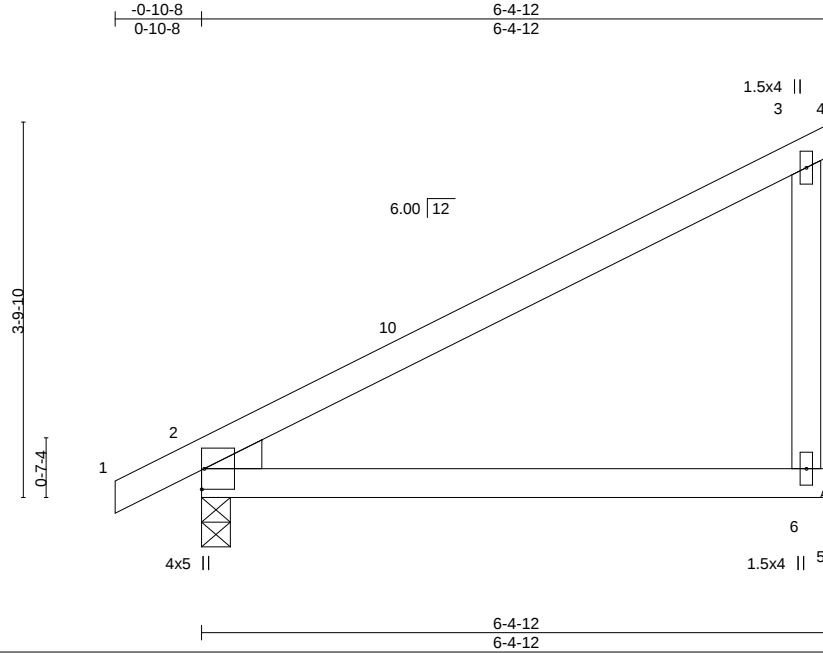
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J7	Jack-Closed	6	1	I52026645

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:02 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-_P2j8XLJGaatUDw?FqvGyerVdbJQ7VhRnbga_ozFHPB



Scale = 1:23.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) 0.09	6-9	>806	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.18	6-9	>417	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.03	2	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS							
								Weight: 21 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) 6=Mechanical, 2=0-3-8
Max Horz 2=147(LC 11)
Max Uplift 6=-87(LC 12), 2=-59(LC 12)
Max Grav 6=348(LC 1), 2=421(LC 1)

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

TOP CHORD 3-6=-253/225

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-4-12 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) 6, 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.



May 19, 2022

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



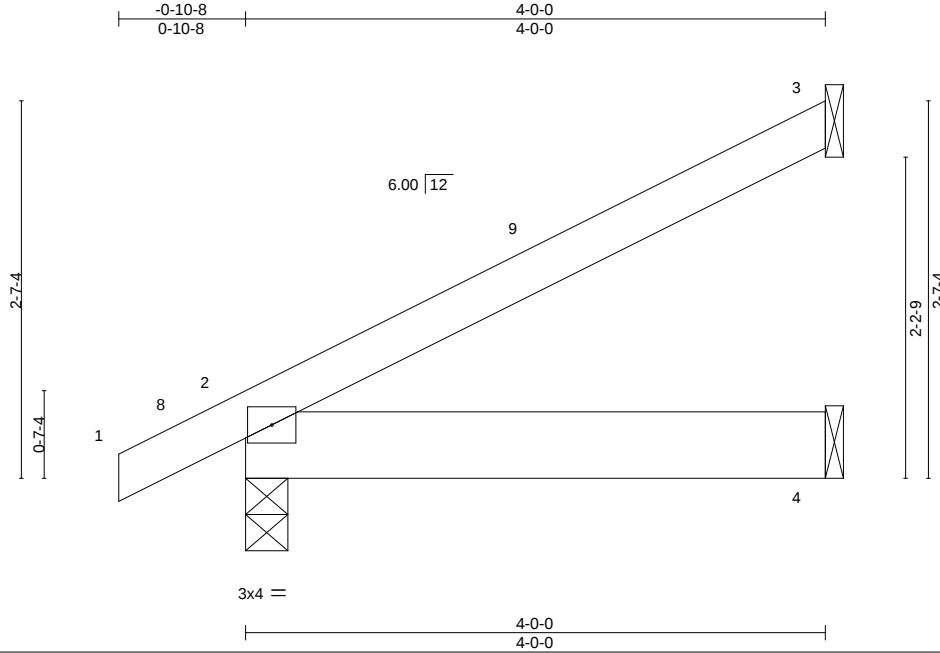
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J9	Jack-Open	7	1	I52026646

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:03 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-Sbb5MtLx1tik5NVCoXQVUsOm4?l_syxa?FP7WFzFHFA



Scale: 3/4"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) 0.01	4-7	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.01	4-7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS							

Weight: 14 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=96(LC 12)
Max Uplift 3=-58(LC 12), 2=-38(LC 12), 4=-5(LC 12)
Max Grav 3=135(LC 1), 2=304(LC 1), 4=90(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; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 19, 2022

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



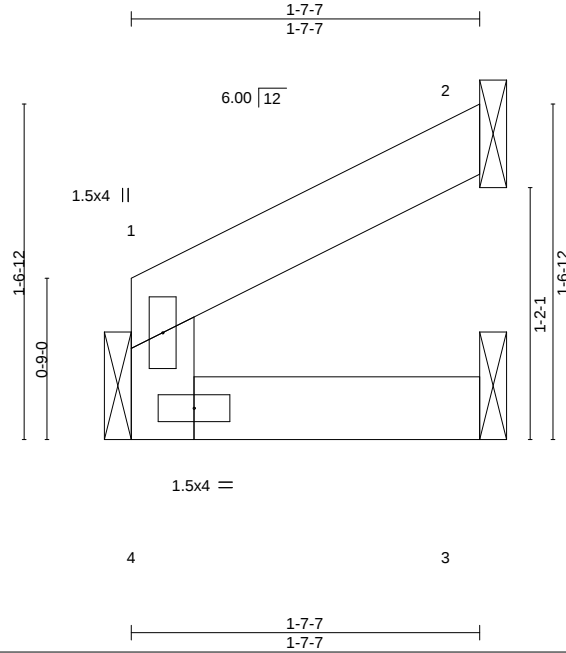
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J10	Jack-Open	1	1	I52026647

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:44 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-WxyvNN70W2JQJSYYB2b2Dr5ZLLHyvMEneoldLrzFHPT



Scale = 1:10.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	4	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	4	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 4 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=Mechanical, 3=Mechanical, 4=Mechanical
Max Horz 4=29(LC 9)
Max Uplift 2=-30(LC 12), 3=-2(LC 12)
Max Grav 2=61(LC 1), 3=29(LC 3), 4=80(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.



May 19,2022

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



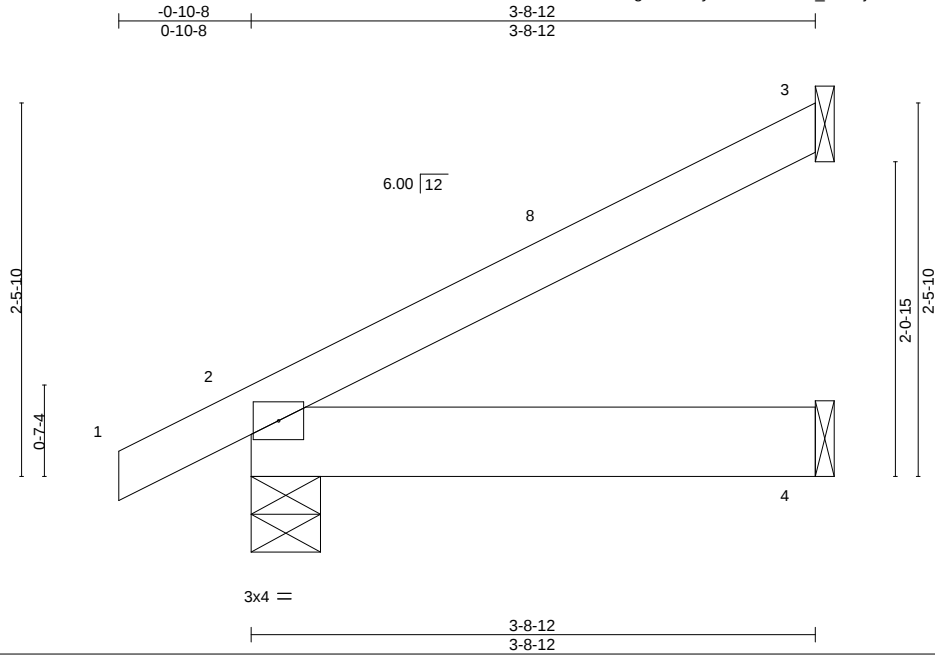
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J13	Jack-Open	1	1	I52026648

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:45 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-_7Wlaj7fHLRHxc7kl6Hl3eiwkc1epUxsS2AtHzFHPs



LOADING (psf)	SPACING-	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	4-7	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.11	Vert(CT) -0.01	4-7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 13 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical
Max Horz 2=90(LC 12)
Max Uplift 3=-53(LC 12), 2=-37(LC 12), 4=-5(LC 12)
Max Grav 3=124(LC 1), 2=290(LC 1), 4=84(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



May 19, 2022

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

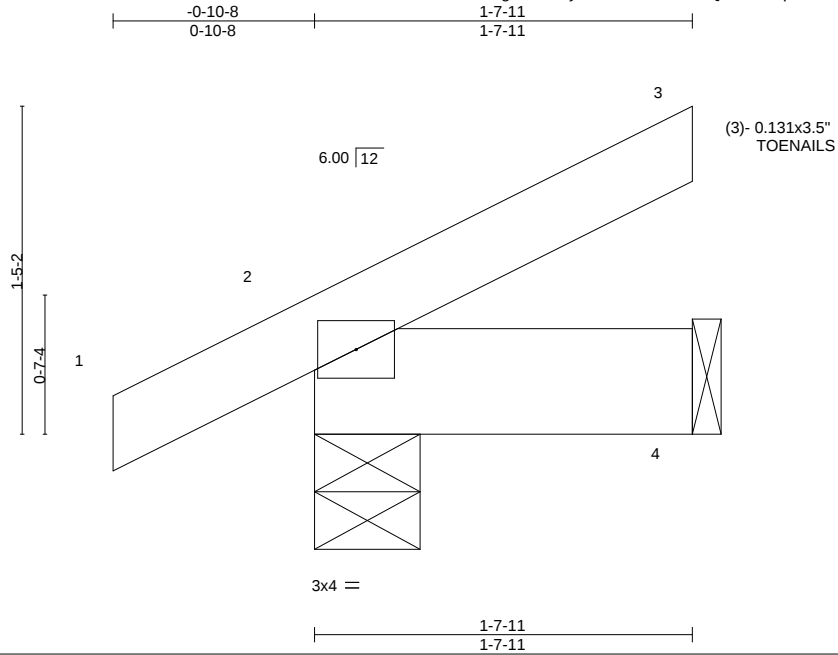


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J14	Jack-Closed	4	1	I52026649

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:48 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-PiBQCIAXZGps04sJQuf_NhGCuyeRrADNZQGrUczFHPP



Scale = 1:10.0

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 0.13	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-7-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-5-8, 4=Mechanical
Max Horz 2=45(LC 12)
Max Uplift 2=-28(LC 12), 4=-24(LC 9)
Max Grav 2=189(LC 1), 4=70(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; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.



May 19,2022

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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/WOODSIDE RIDGE #34/MO
3172181	J16	Jack-Open	1	1	I52026650

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:51 2022 Page 1

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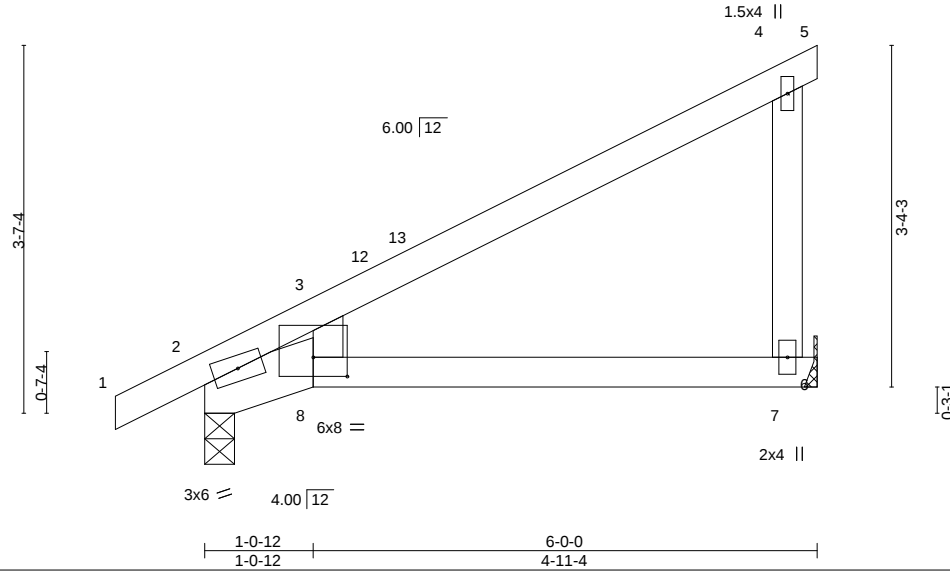


Plate Offsets (X,Y)-- [8:0-4-0,0-2-4]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	0.10	8	>707	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.15	8	>457	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.04	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=Mechanical
 Max Horz 2=137(LC 12)
 Max Uplift 2=-41(LC 12), 7=-99(LC 12)
 Max Grav 2=398(LC 1), 7=326(LC 1)

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

TOP CHORD 2-3=-351/68
 WEBS 3-8=-293/448, 4-7=-273/230

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0 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
- 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, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 19, 2022

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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/WOODSIDE RIDGE #34/MO
3172181	J17	Jack-Open	1	1	I52026651

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:51 2022 Page 1

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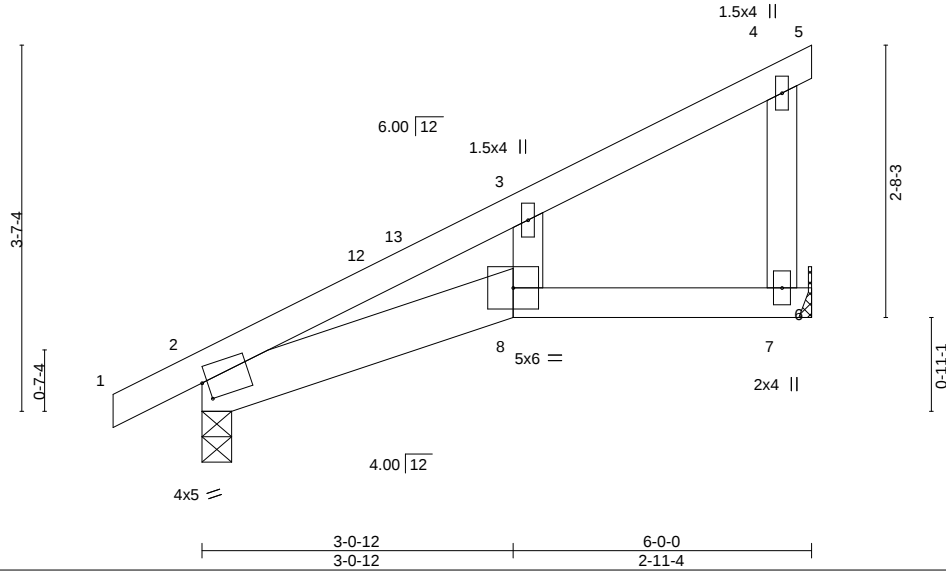


Plate Offsets (X,Y)-- [2:0-0-10,0-2-2]

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 0.80	Vert(LL)	0.15	8	>462	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.25	8	>272	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.08	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=Mechanical
 Max Horz 2=137(LC 12)
 Max Uplift 2=-41(LC 12), 7=-99(LC 12)
 Max Grav 2=398(LC 1), 7=326(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-7=-293/221

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0 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
- 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, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 19, 2022

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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/WOODSIDE RIDGE #34/MO
3172181	J18	Jack-Open	2	1	I52026652

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:52 2022 Page 1

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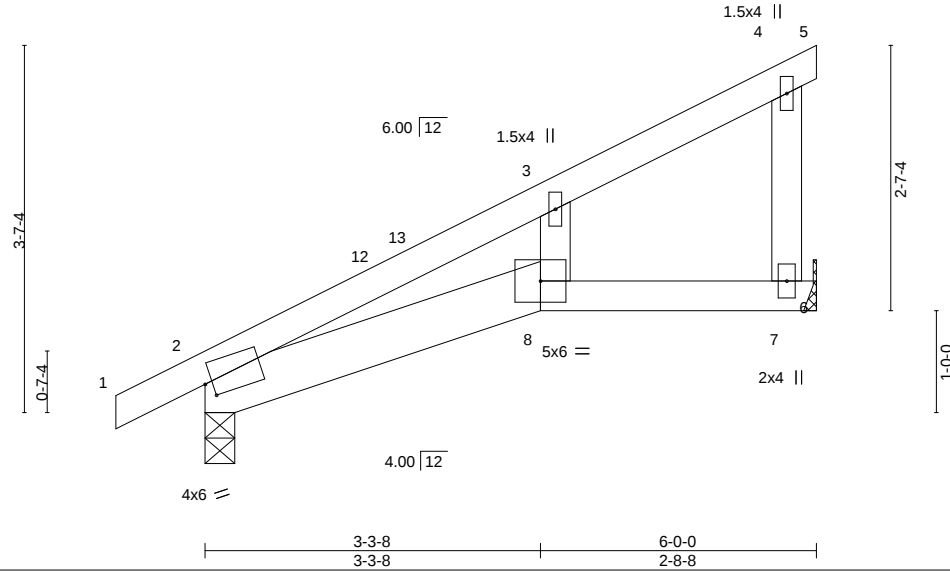


Plate Offsets (X,Y)-- [2:0-0-14,0-1-10]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	0.14	8	>490	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.24	8	>287	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.07	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=Mechanical
 Max Horz 2=137(LC 12)
 Max Uplift 2=-41(LC 12), 7=-99(LC 12)
 Max Grav 2=398(LC 1), 7=326(LC 1)

FORCES.

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

WEBS 4-7=-296/220

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0 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
- 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, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 19, 2022

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

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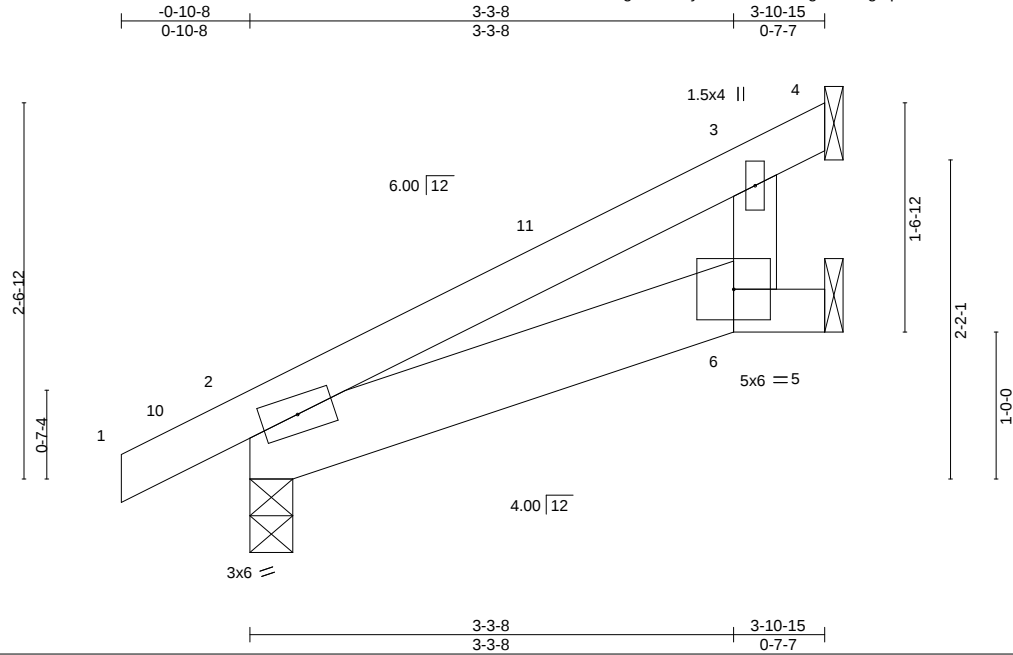


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	J19	Jack-Open	2	1	I52026653

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:53 2022 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.01	6	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.14	Vert(CT) -0.01	6-9	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.00	5	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 14 lb	FT = 20%

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 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=94(LC 12)
Max Uplift 4=-65(LC 12), 2=-36(LC 12)
Max Grav 4=197(LC 1), 2=299(LC 1), 5=11(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 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) 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) 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.



May 19, 2022

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/WOODSIDE RIDGE #34/MO
3172181	J20	Jack-Open	2	1	I52026654

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:19:56 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-AFgSuUGYhkpjllTsuZosiNbbUANqjoCYOgDgm9zFHPH

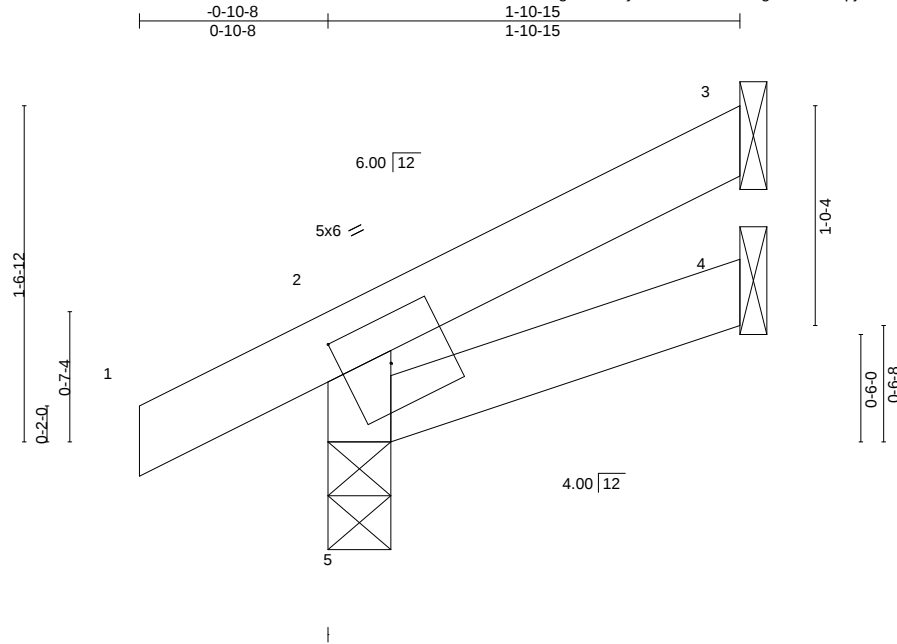


Plate Offsets (X,Y)-- [2:0-2-11,0-2-8]

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 0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	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 1-10-15 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=48(LC 12)
Max Uplift 3=-30(LC 12), 5=-30(LC 12)
Max Grav 3=57(LC 1), 4=31(LC 3), 5=215(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.



May 19, 2022

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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

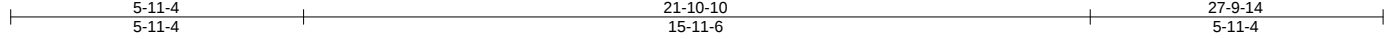
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	LG1	GABLE	1	1	I52026655

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:04 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-xn9TZDMZoBqbjX4OMFyk13xypP6hbN4kEv9h2hzFHP9

Job Reference (optional)



Scale = 1:46.7

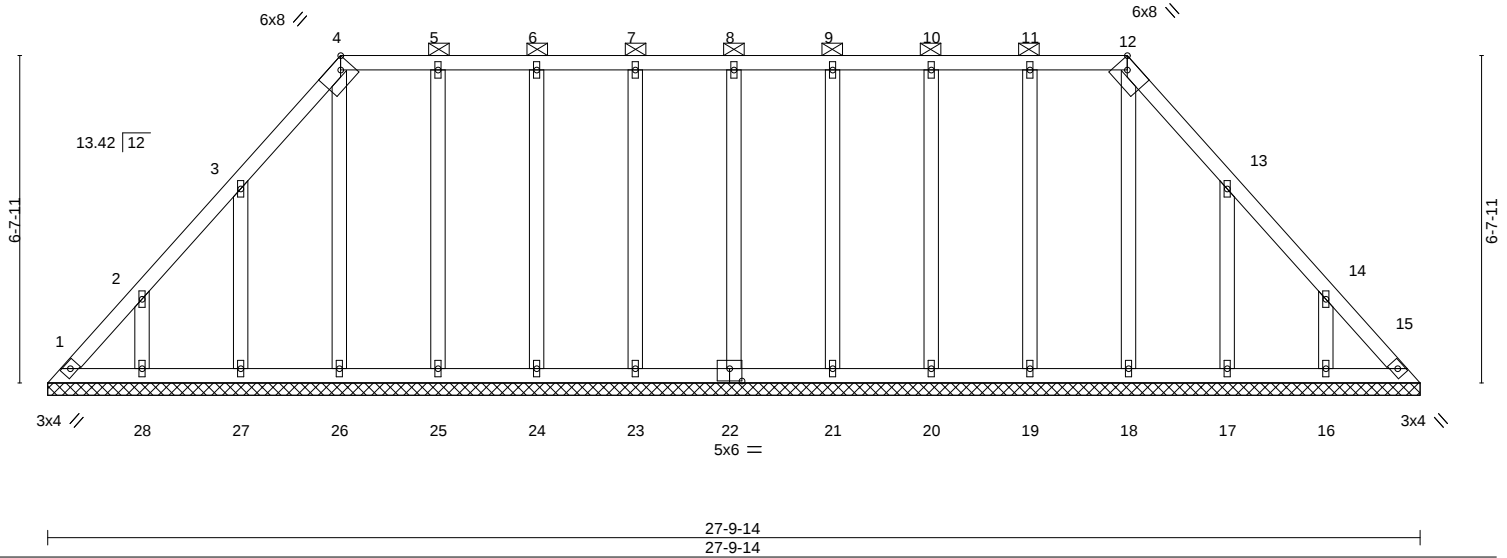


Plate Offsets (X,Y)-- [4:0-2-10,Edge], [12:0-2-10,Edge], [22:0-3-0,0-3-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01	15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 144 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 4-12.
OTHERS 2x4 SPF No.2	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 27-9-14.
 (lb) - Max Horz 1s=170(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except 27=-155(LC 12), 28=-140(LC 12), 17=-155(LC 13), 16=-141(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 28, 21, 20, 19, 18, 16 except 27=265(LC 19), 17=264(LC 20)

TRUSS DESIGNED FOR WIND LOADS IN THE PLANE OF THE TRUSS ONLY. FOR STUDS EXPOSED TO WIND (NORMAL TO THE FACE), SEE STANDARD INDUSTRY GABLE END DETAILS AS APPLICABLE, OR CONSULT QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1.

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-11-4, Exterior(2R) 5-11-4 to 9-10-15, Interior(1) 9-10-15 to 21-10-10, Exterior(2R) 21-10-10 to 25-10-15, Interior(1) 25-10-15 to 27-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 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, 15, 22, 23, 24, 25, 26, 21, 20, 19 except (jt=lb) 27=155, 28=140, 17=155, 16=141.
- This truss 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.



May 19,2022

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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

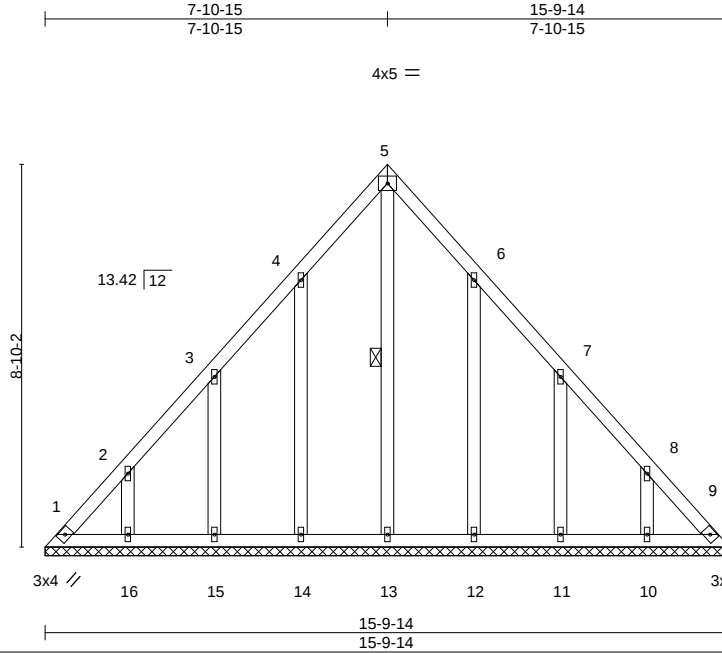


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	LG2	GABLE	1	1	I52026656

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:06 2022 Page 1
ID:cIow4Ylgf7ioX0?ly?5BCcz33zm-tAHE_vOqKo4JyrEnUg_C6U0ICCoY3HH1iDeo7azFHP7



LOADING (psf)	SPACING-	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 20.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a	-	n/a	999			
BCLL 0.0	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01	9	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 80 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

REACTIONS.

All bearings 15-9-14.
(lb) - Max Horz 1=-229(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-145(LC 12), 15=-145(LC 12), 16=-142(LC 12), 12=-143(LC 13), 11=-146(LC 13), 10=-141(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 15, 16, 11, 10 except 14=261(LC 19), 12=259(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-311/203, 8-9=-279/197

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 7-10-15, Exterior(2R) 7-10-15 to 10-10-15, Interior(1) 10-10-15 to 15-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 1.5x4 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, 9 except (jt=lb) 14=145, 15=145, 16=142, 12=143, 11=146, 10=141.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

TRUSS DESIGNED FOR WIND LOADS IN THE PLANE OF THE TRUSS ONLY. FOR STUDS EXPOSED TO WIND (NORMAL TO THE FACE), SEE STANDARD INDUSTRY GABLE END DETAILS AS APPLICABLE, OR CONSULT QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1.



May 19, 2022

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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

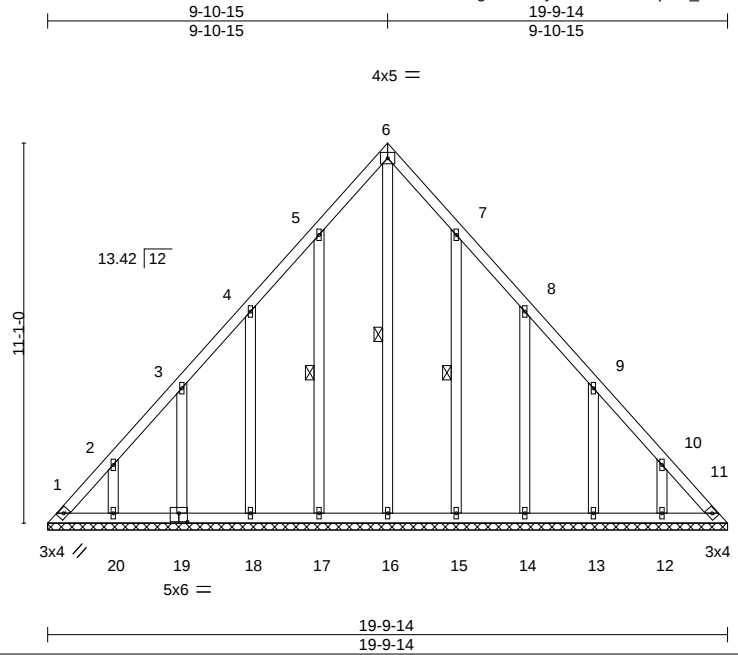
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	LG3	GABLE	1	1	I52026657

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:08 2022 Page 1

ID:clow4YlGf7ioX0?ly?5BCcz33zm-pYP_PaP4sQK0C8O9b40gBv5eY0TGXBpJ9X7uBSzFHP5

Job Reference (optional)



Scale = 1:67.2

Plate Offsets (X,Y)-- [19:0-3-0,0-3-0]

LOADING (psf)	SPACING-		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	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 112 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 6-16, 5-17, 7-15

REACTIONS.

All bearings 19-9-14.
(lb) - Max Horz 1=-289(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-131(LC 10), 17=-140(LC 12), 18=-147(LC 12), 19=-145(LC 12), 20=-144(LC 12), 15=-138(LC 13), 14=-148(LC 13), 13=-142(LC 13), 12=-142(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 18, 20, 14, 13, 12 except 1=297(LC 12), 11=262(LC 13), 16=256(LC 13), 17=259(LC 19), 19=254(LC 19), 15=257(LC 20)

TRUSS DESIGNED FOR WIND LOADS IN THE PLANE OF THE TRUSS ONLY. FOR STUDS EXPOSED TO WIND (NORMAL TO THE FACE), SEE STANDARD INDUSTRY GABLE END DETAILS AS APPLICABLE, OR CONSULT QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1.

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-415/264, 2-3=-287/214, 10-11=-370/256
BOT CHORD 1-20=-180/274, 19-20=-180/274, 18-19=-175/272, 17-18=-175/272, 16-17=-175/272, 15-16=-175/272, 14-15=-175/272, 13-14=-175/272, 12-13=-175/272, 11-12=-175/272

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 9-10-15, Exterior(2R) 9-10-15 to 12-10-15, Interior(1) 12-10-15 to 19-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 1.5x4 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) 11 except (jt=lb) 1=131, 17=140, 18=147, 19=145, 20=144, 15=138, 14=148, 13=142, 12=142.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 19, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	LG4	GABLE	1	1	I52026658

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:09 2022 Page 1

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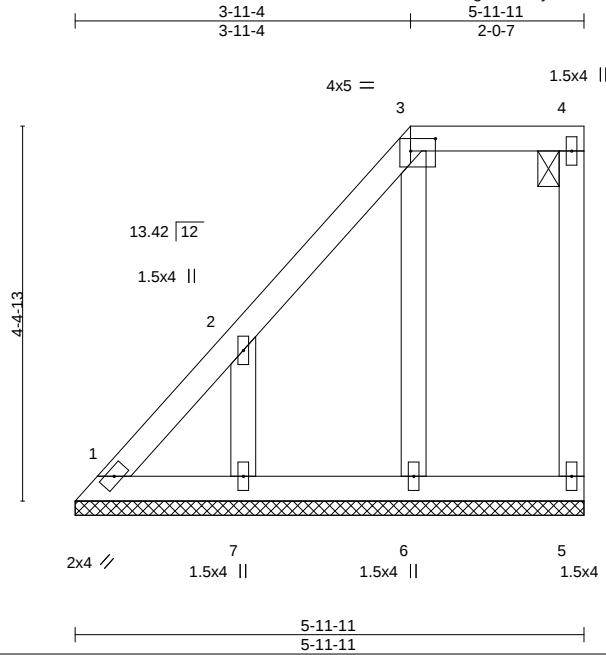


Plate Offsets (X,Y)-- [3:0-3-8,0-1-12]

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 0.15	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 26 lb	FT = 20%

LUMBER-

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

REACTIONS.

All bearings 5-11-11.
(lb) - Max Horz 1=164(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=164(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=275(LC 19)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=298/318
WEBS 2-7=285/184

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-11-4, Exterior(2E) 3-11-4 to 5-9-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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=164.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-11 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.

TRUSS DESIGNED FOR WIND LOADS IN THE PLANE OF THE TRUSS ONLY. FOR STUDS EXPOSED TO WIND (NORMAL TO THE FACE). SEE STANDARD INDUSTRY GABLE END DETAILS AS APPLICABLE, OR CONSULT QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1.



May 19,2022

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



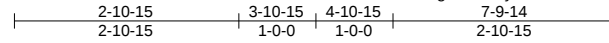
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	LG5	Lay-In Gable	1	1	I52026659

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:10 2022 Page 1

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Scale = 1:29.9

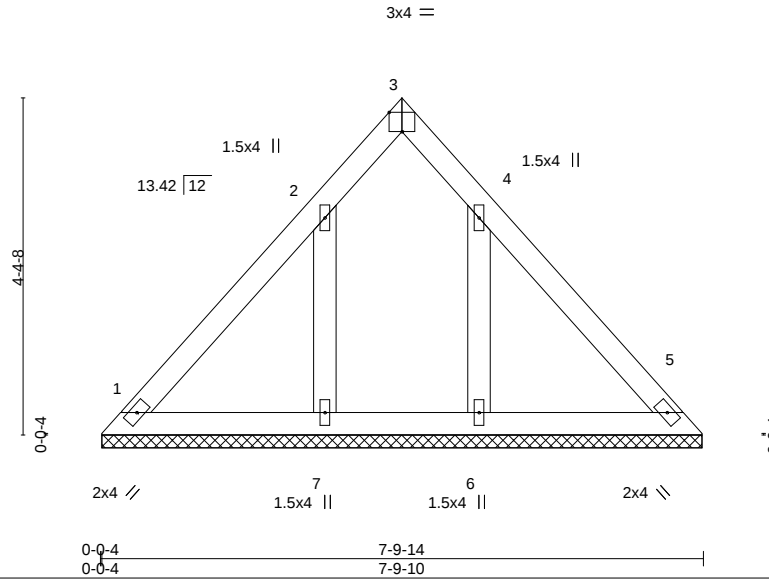


Plate Offsets (X,Y)-- [3:Edge,0-3-0]

LOADING (psf)	SPACING-		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 20.0	Lumber DOL	1.15	BC 0.04	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-P						Weight: 27 lb	FT = 20%

LUMBER-

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

REACTIONS.

All bearings 7-9-7.
(lb) - Max Horz 1=-108(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 6=-180(LC 13), 7=-182(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=320(LC 20), 7=322(LC 19)

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

WEBS 4-6=-313/201, 2-7=-313/203

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-15, Exterior(2R) 3-10-15 to 6-10-15, Interior(1) 6-10-15 to 7-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 180 lb uplift at joint 6 and 182 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
TRUSS DESIGNED FOR WIND LOADS IN THE PLANE OF THE TRUSS ONLY. FOR STUDS EXPOSED TO WIND (NORMAL TO THE FACE), SEE STANDARD INDUSTRY GABLE END DETAILS AS APPLICABLE, OR CONSULT QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1.



May 19, 2022

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

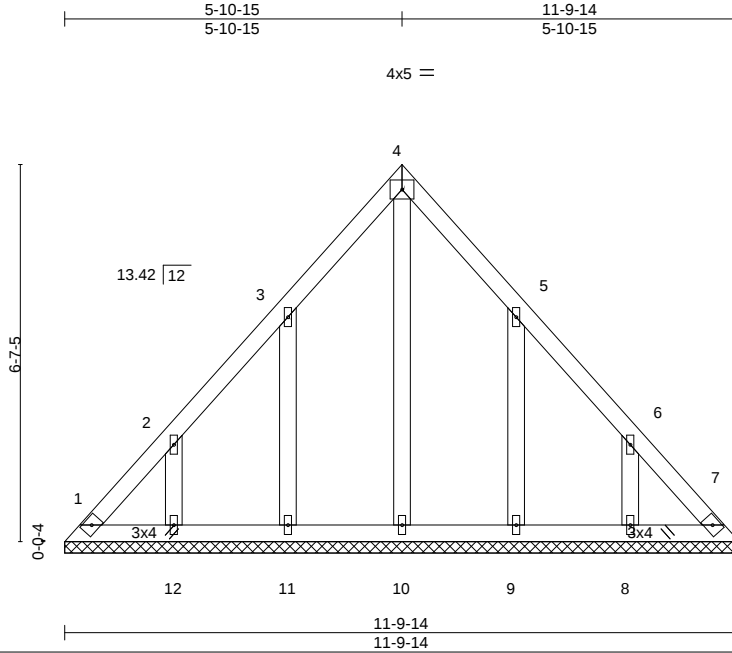


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	LG6	GABLE	1	1	I52026660

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:13 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-AWCtSITDhyzJlwG7OecruzoVa1AICT_3JpqtgzFHP0



4x5 =

Scale = 1:40.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.09	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 52 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-9-14.
(lb) - Max Horz 1=-168(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-150(LC 12), 12=-142(LC 12), 9=-149(LC 13), 8=-142(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 12, 8 except 11=262(LC 19), 9=261(LC 20)

TRUSS DESIGNED FOR WIND LOADS IN THE PLANE OF THE TRUSS ONLY. FOR STUDS EXPOSED TO WIND (NORMAL TO THE FACE), SEE STANDARD INDUSTRY GABLE END DETAILS AS APPLICABLE, OR CONSULT QUALIFIED BUILDING DESIGNER AS PER ANSI/TPI 1.

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-10-15, Exterior(2R) 5-10-15 to 8-10-15, Interior(1) 8-10-15 to 11-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=150, 12=142, 9=149, 8=142.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 19, 2022

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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

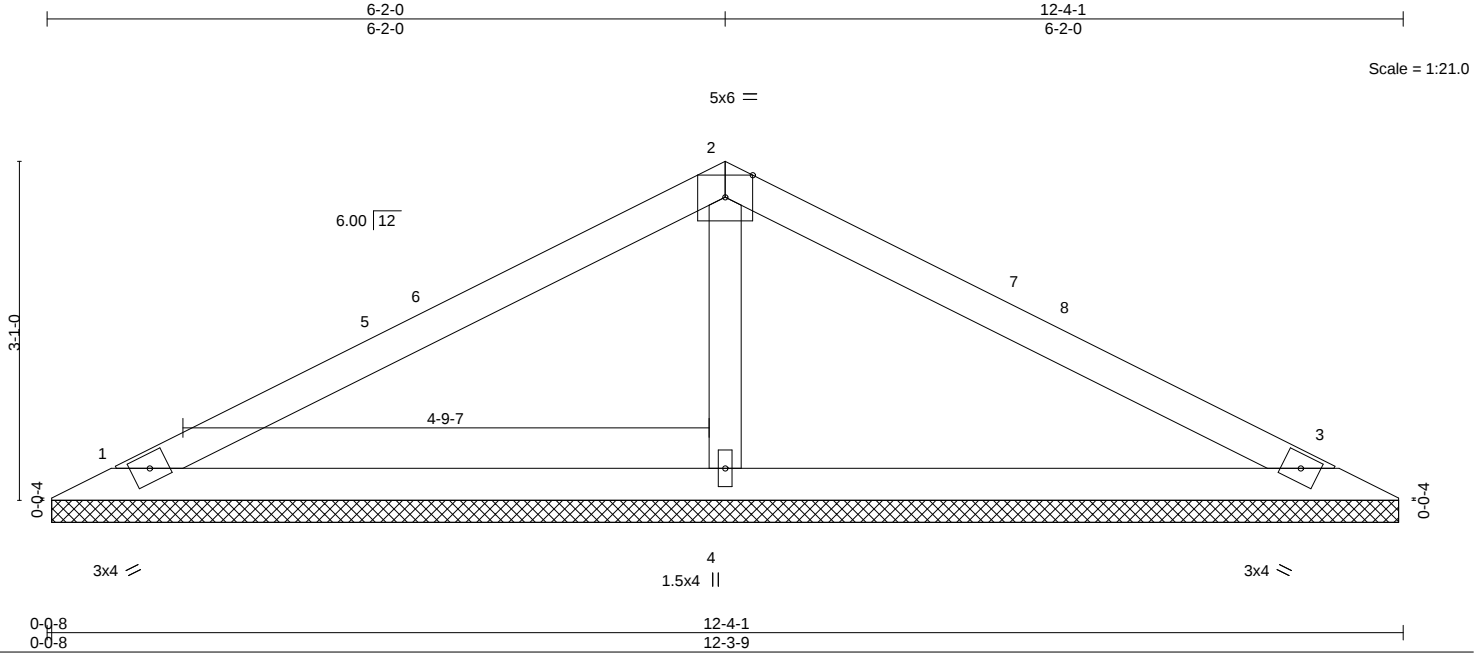


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	V1	Valley	1	1	I52026661

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:14 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-eimFgeUrSG5Aw3rJyL74RALZqRSDxwMCXTaDP6zFHP?



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.27	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 31 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=12-3-1, 3=12-3-1, 4=12-3-1
Max Horz 1=-49(LC 17)
Max Uplift 1=-54(LC 12), 3=-63(LC 13), 4=-57(LC 12)
Max Grav 1=283(LC 25), 3=283(LC 26), 4=659(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-481/200

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-2-0, Exterior(2R) 6-2-0 to 9-2-0, Interior(1) 9-2-0 to 11-8-8 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
- 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.



May 19, 2022

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

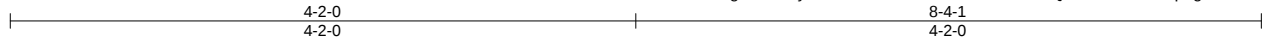


16023 Swingley Ridge Rd
Chesterfield, MO 63017

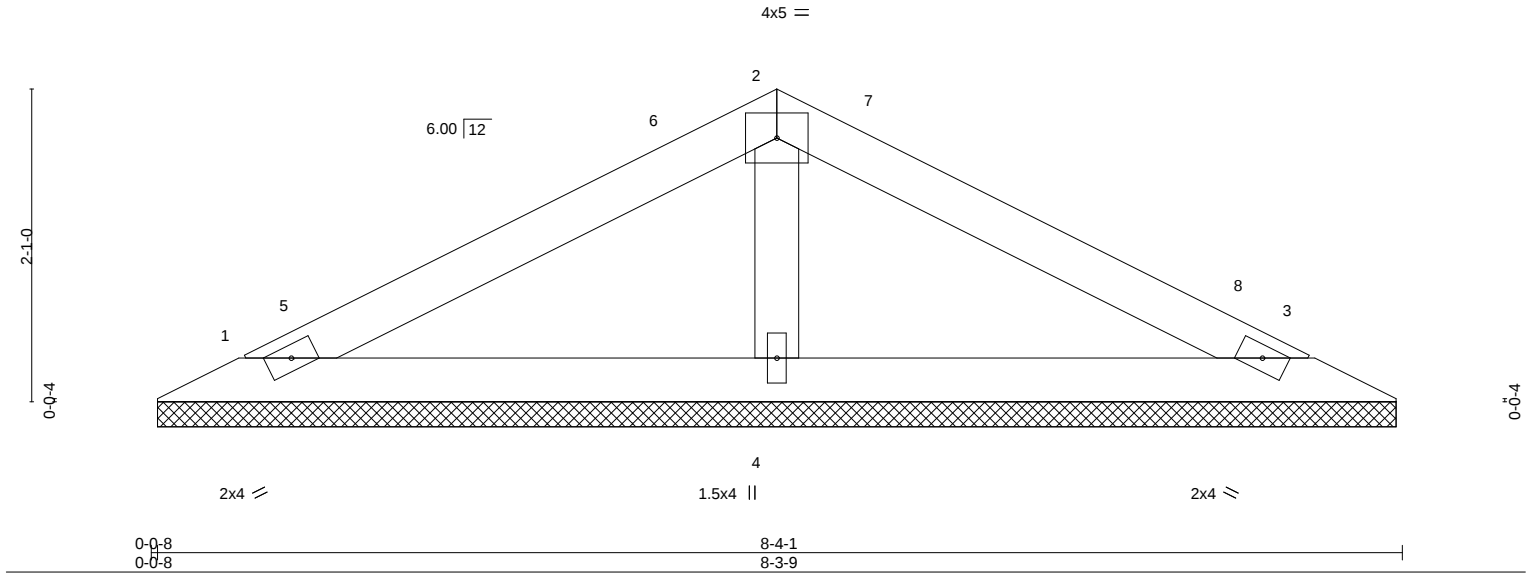
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	V2	Valley	1	1	I52026662

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:15 2022 Page 1
ID:clow4Ylgf7iox0?y?5BCcz33zm-6vKetZVTCZD1XDQVV3eJzOuoWqr2gOILm7JmxYzFHP_



Scale = 1:15.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.29	in (loc)	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-3-1, 3=8-3-1, 4=8-3-1
Max Horz 1=31(LC 16)
Max Uplift 1=-42(LC 12), 3=-48(LC 13), 4=-22(LC 12)
Max Grav 1=201(LC 1), 3=201(LC 1), 4=377(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-288/158

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-2-0, Exterior(2R) 4-2-0 to 7-2-0, Interior(1) 7-2-0 to 7-8-8 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
- 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.



May 19, 2022

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



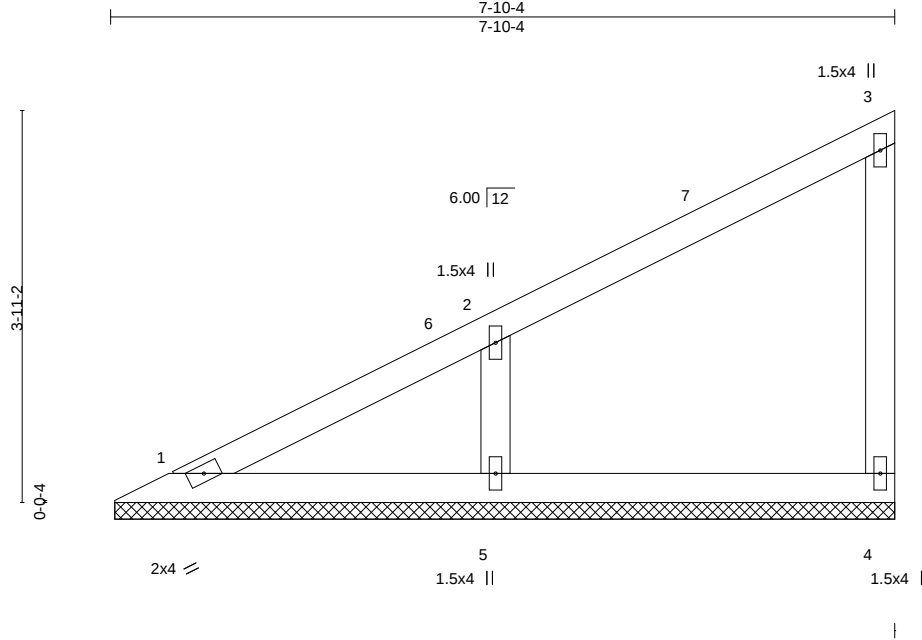
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	V3	Valley	1	1	I52026663

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:16 2022 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-a5u04JV5ztLu9N?i3m9YWbQzfEBHPKv?n3JS_zFHOz



Scale = 1:23.1

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 0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 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=7-9-12, 4=7-9-12, 5=7-9-12
Max Horz 1=148(LC 9)
Max Uplift 4=-31(LC 9), 5=-128(LC 12)
Max Grav 1=132(LC 20), 4=166(LC 1), 5=489(LC 1)

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

TOP CHORD 1-2=-251/176
WEBS 2-5=-400/265

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-10-4, Interior(1) 3-10-4 to 7-8-8 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
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=128.
- 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.



May 19, 2022

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

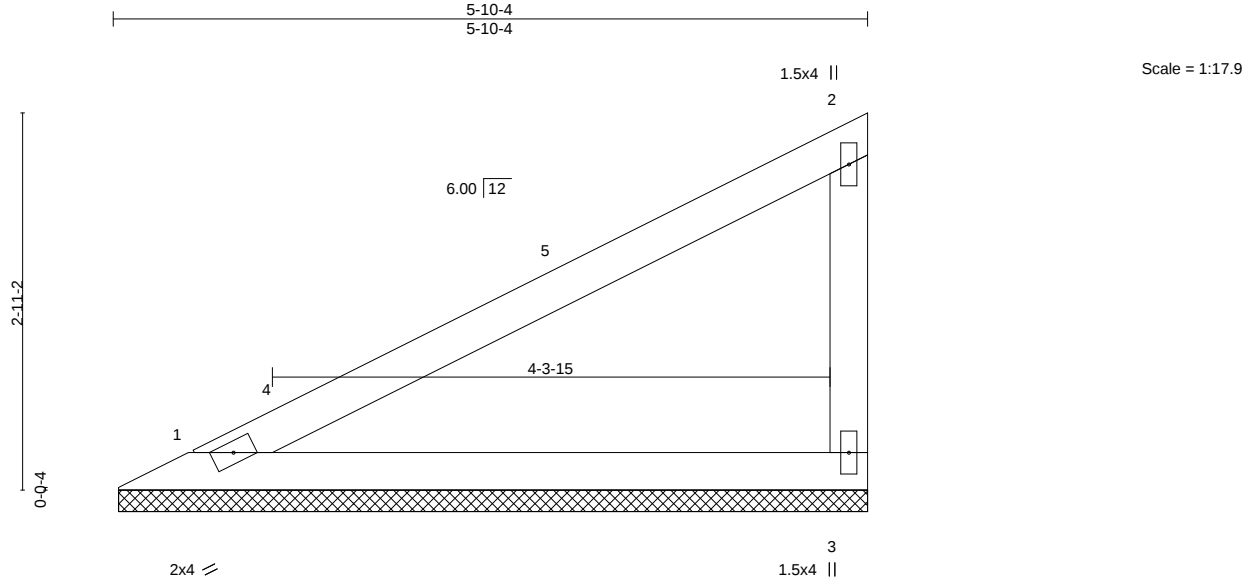


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	V4	Valley	1	1	I52026664

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:16 2022 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-a5u04JV5ztLu9N?i3m9YWbQtnE8kPr9V?n3JS_zFHOz



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)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=5-9-12, 3=5-9-12
Max Horz 1=106(LC 9)
Max Uplift 1=-38(LC 12), 3=-65(LC 12)
Max Grav 1=279(LC 1), 3=279(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



May 19, 2022

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

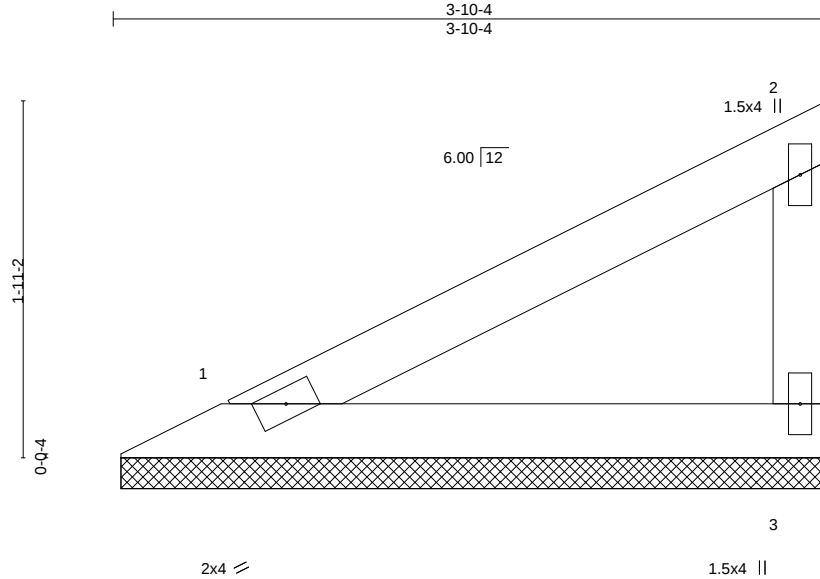


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO
3172181	V5	Valley	1	1	I52026665

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:17 2022 Page 1
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Scale = 1:12.4

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 0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.09	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: 10 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 3-10-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-9-12, 3=3-9-12
Max Horz 1=64(LC 9)
Max Uplift 1=-23(LC 12), 3=-40(LC 12)
Max Grav 1=169(LC 1), 3=169(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.



May 19,2022

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

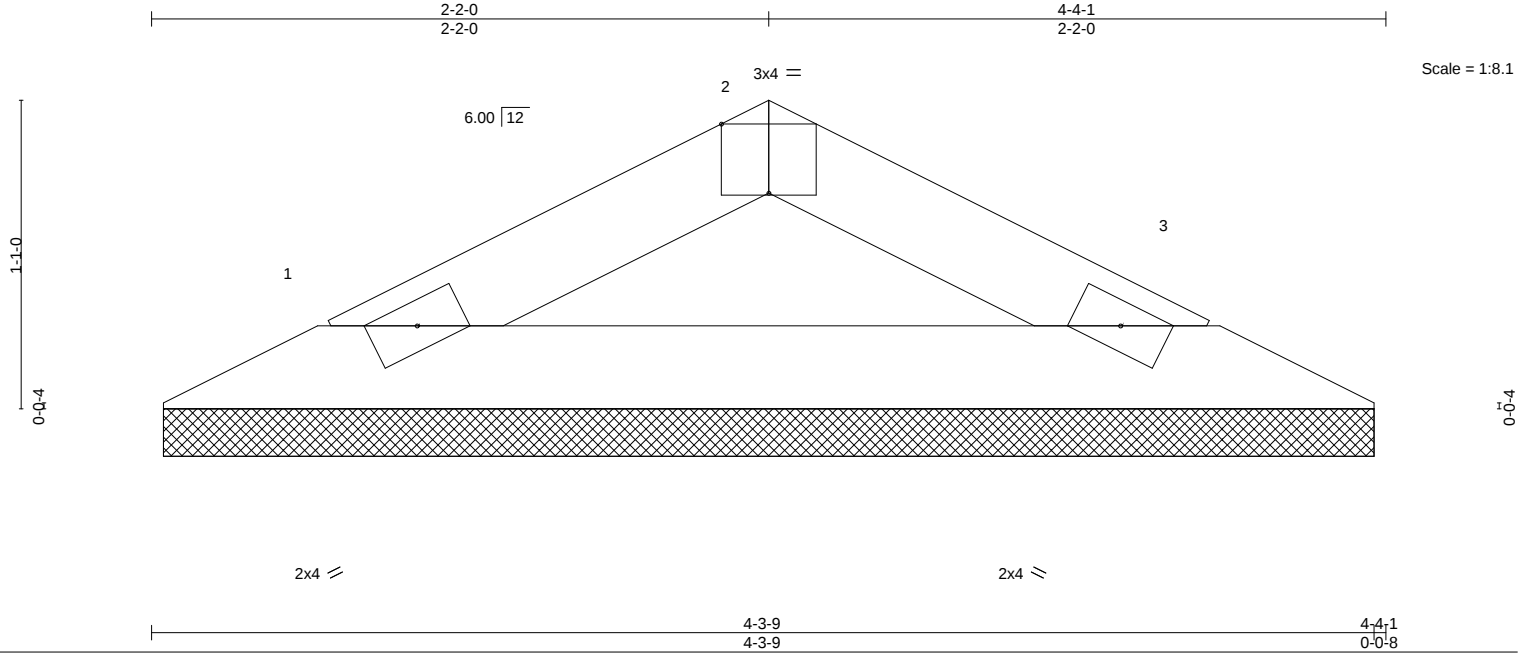


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #34/MO	I52026666
3172181	V7	Valley	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 11:20:18 2022 Page 1
ID:c1ow4Ylgf7iox0?ly?5BCcz33zm-WU?mV?XLVUbcOh84BBC0b0WNU2tp1foS5YQXtzFHOx



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00				
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							
								Weight: 9 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-3-1, 3=4-3-1
Max Horz 1=-14(LC 17)
Max Uplift 1=-23(LC 12), 3=-23(LC 13)
Max Grav 1=169(LC 1), 3=169(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

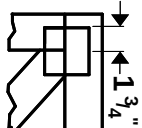
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



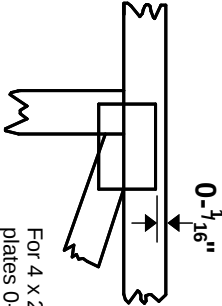
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 X 4

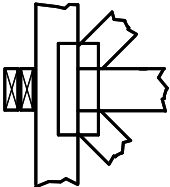
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



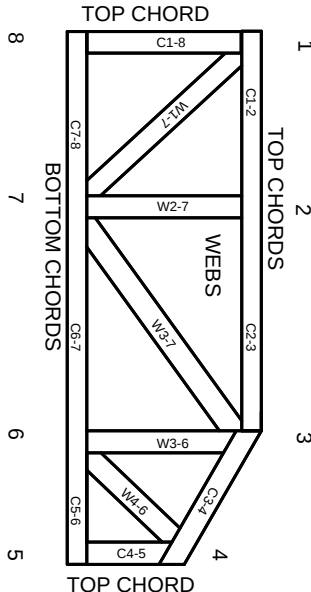
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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