



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/28/2021 4:29:48

MiTek USA, Inc.

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

Re: 2928314

SUMMIT/HAWTHORN RIDGE #134/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: I47835306 thru I47835368

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

Missouri COA: Engineering 001193



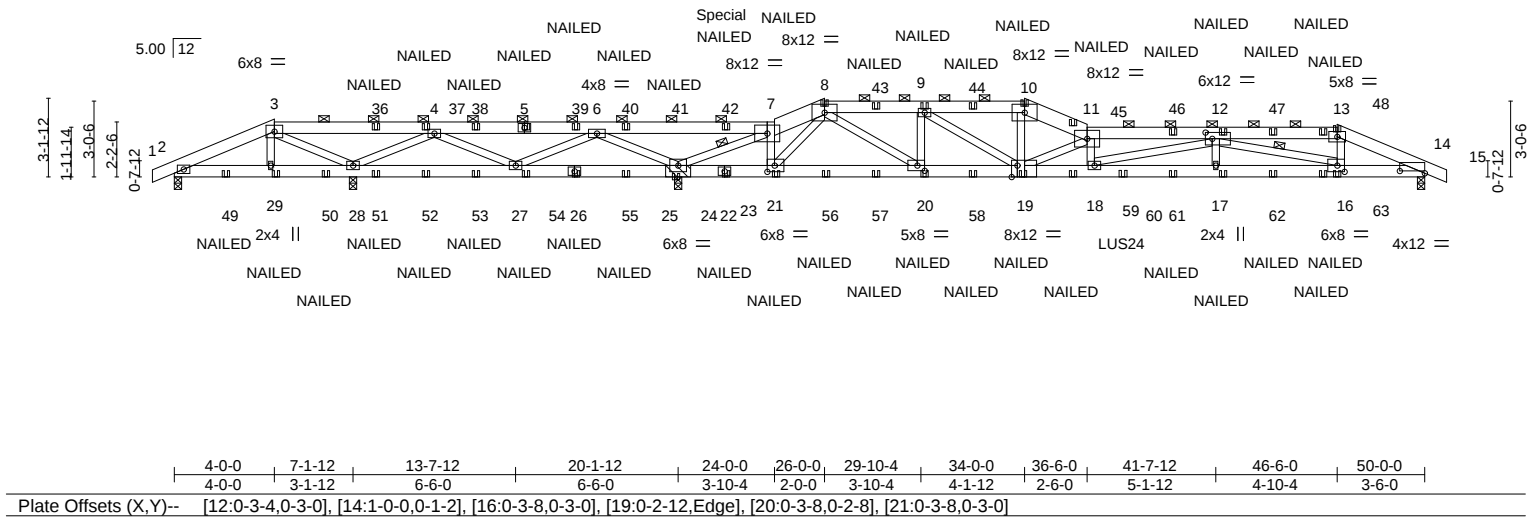
September 12, 2021

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A1	Roof Special Girder	1	1	I47835306

Builders FirstSource (Valley Center),	Valley Center, KS - 67147,	8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:35 2021 Page 1											
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-0A6F5xY8X_4mWJLNHh85DwOcQdBtMVznRdwyEyfKLC													
0-10-8	4-0-0	10-4-12	16-10-12	20-1-12	24-0-0	26-0-0	29-10-4	34-0-0	36-6-0	41-7-12	46-6-0	50-0-0	50-10-8
0-10-8	4-0-0	6-4-12	6-6-0	3-3-0	3-10-4	2-0-0	3-10-4	4-1-12	2-6-0	5-1-12	4-10-4	3-6-0	0-10-8
Scale = 1:92.1													



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 0.72	Vert(LL)	-0.46 17-18	>785	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.82 17-18	>437	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.89	Horz(CT)	0.07 14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 261 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 3-5,11-13,5-7: 2x6 SPF 2100F 1.8E, 7-8,10-11: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 3-5-12 oc purlins, except 2-0-0 oc purlins (3-0-4 max.): 3-7, 8-10, 11-13.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 19-22: 2x6 SPF No.2, 22-26: 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 5-2-9 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 7-24, 12-16

REACTIONS. All bearings 0-3-8 except (jt=length) 24=0-3-13 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 2=-26(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 28 except 24=-811(LC 4), 14=-335(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) except 2=527(LC 1), 28=682(LC 21), 24=4613(LC 1), 14=1887(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-640/52, 4-6=-438/1996, 6-7=-1166/6343, 7-8=-136/946, 8-9=-3441/713, 9-10=-4766/947, 10-11=-5061/995, 11-12=-8199/1558, 12-13=-3630/707, 13-14=-4075/773
 BOT CHORD 2-29=-37/576, 28-29=-37/552, 27-28=-657/97, 24-27=-3535/659, 21-24=-898/190, 20-21=-199/1017, 19-20=-657/3441, 18-19=-1526/8203, 17-18=-1324/7104, 16-17=-1324/7104, 14-16=-682/3741
 WEBS 3-29=-4/296, 3-28=-881/114, 7-24=-6060/1138, 9-20=-1296/294, 9-19=-291/1583, 10-19=-256/1467, 12-17=0/341, 12-16=-3635/692, 13-16=-189/1216, 4-28=-147/703, 4-27=-1559/432, 6-27=-205/1753, 6-24=-3312/665, 11-19=-4065/750, 12-18=-214/1144, 8-20=-558/2952, 7-21=-457/2522, 8-21=-2897/574

- NOTES-**
- 1) 2x6 SP 2400F 2.0E bearing block 12" long at jt. 24 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SP 2400F 2.0E.
 - 2) Unbalanced roof live loads have been considered for this design.
 - 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) All plates are 4x6 MT20 unless otherwise indicated.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28 except (jt=lb) 24=811, 14=335.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 37-11-4 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.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A1	Roof Special Girder	1	1	I47835306
Job Reference (optional)					

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Thu Sep 9 15:03:36 2021
Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-UMgdIHZmIICd8TwZrODNdQTZMqzQcpl705MTUgyfKLB

- NOTES-**
- Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 48 lb down and 32 lb up at 23-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-70, 3-7=-70, 7-8=-70, 8-10=-70, 10-11=-70, 11-13=-70, 13-15=-70, 30-33=-20
 - Concentrated Loads (lb)
 - Vert: 5=-47(F) 8=-83(F) 10=-83(F) 13=-3(F) 26=-24(F) 29=-170(F) 9=-83(F) 20=-81(F) 19=-81(F) 12=-34(F) 17=-46(F) 16=-103(F) 22=-208(F) 21=-175(F) 36=-47(F) 37=-47(F) 38=-47(F) 39=-47(F) 40=-47(F) 41=-91(F) 43=-83(F) 44=-83(F) 46=-34(F) 47=-34(F) 48=-34(F) 49=-106(F) 50=-177(F) 51=-24(F) 52=-24(F) 53=-24(F) 54=-24(F) 55=-24(F) 56=-81(F) 57=-81(F) 58=-81(F) 59=-175(F) 60=-215(F) 61=-48(F) 62=-46(F) 63=-46(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A2	Roof Special	1	1	I47835307

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:55 2021 Page 1

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0-10-8 6-0-0 10-4-5 16-9-7 20-1-12 26-0-0 28-0-0 32-0-0 34-8-6 39-8-6 44-8-6 50-0-0 50-10-8
0-10-8 6-0-0 4-4-5 6-5-2 3-4-5 5-10-4 2-0-0 4-0-0 2-8-6 5-0-0 5-0-0 5-3-10 0-10-8

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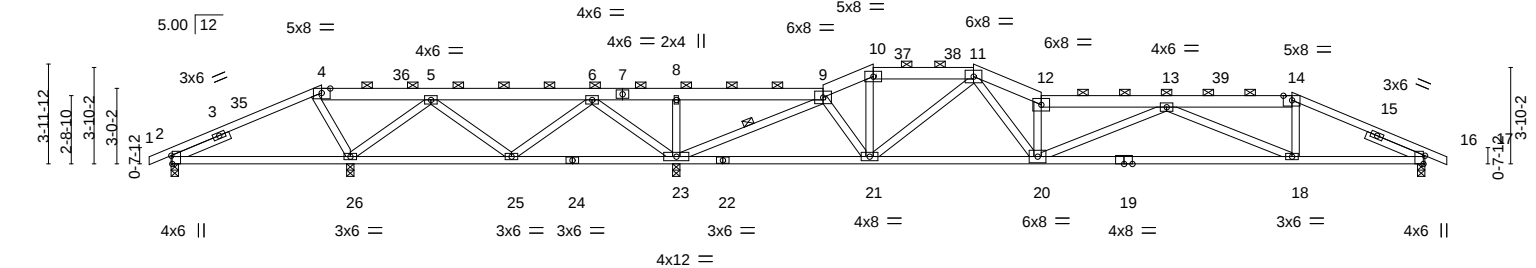


Plate Offsets (X,Y)--	[2:0-3-15,Edge], [4:0-4-2,Edge], [14:0-4-2,Edge], [16:0-3-15,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.31 18-20	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.69 18-20	>517	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.07 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 217 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
1-4,14-17: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
22-24: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-3-12 max.): 4-9, 10-11, 12-14.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-23

REACTIONS.

All bearings 0-3-8.
(lb) - Max Horz 2=33(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 23 except 26=217(LC 26)
Max Grav All reactions 250 lb or less at joint(s) except 2=491(LC 1), 26=391(LC 25),
16=1154(LC 1), 23=2814(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-440/145, 4-5=-329/140, 5-6=-42/784, 6-8=-305/2664, 8-9=-304/2665,
9-10=-712/163, 10-11=-637/165, 11-12=-2764/406, 12-13=-2615/367, 13-14=-1831/275,
14-16=-2057/274
BOT CHORD 2-26=-78/398, 25-26=-200/282, 23-25=-1504/204, 20-21=-155/1460, 18-20=-356/2737,
16-18=-191/1858
WEBS 9-23=-3042/438, 9-21=-63/1005, 11-21=-1103/145, 11-20=-202/1833, 12-20=-1244/215,
13-18=-1002/190, 14-18=-3/570, 8-23=-404/89, 5-26=-44/568, 5-25=-909/189,
6-25=-104/1074, 6-23=-1573/231

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 28-0-0, Exterior(2R) 28-0-0 to 31-0-0, Interior(1) 31-0-0 to 32-0-0, Exterior(2E) 32-0-0 to 34-8-6, Interior(1) 34-8-6 to 44-8-6, Exterior(2R) 44-8-6 to 47-8-6, Interior(1) 47-8-6 to 50-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 23 except (jt=lb) 26=217.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A3	Roof Special	1	1	I47835308

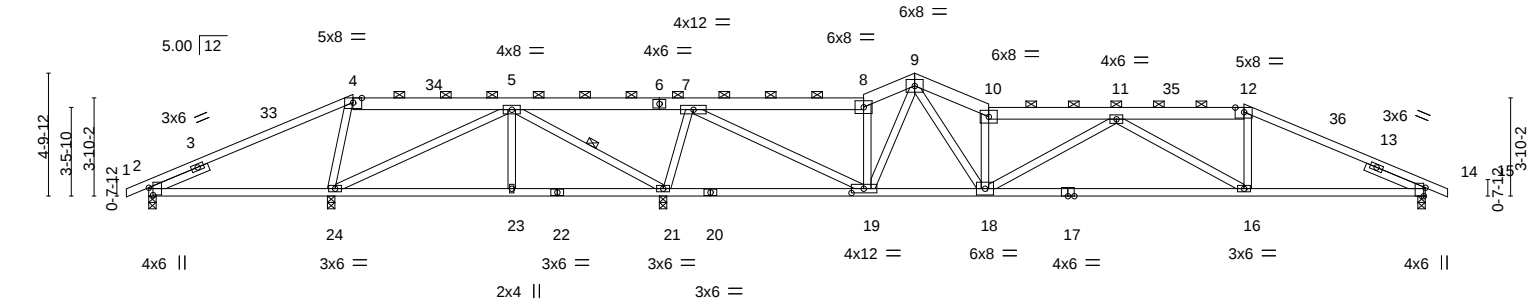
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:57 2021 Page 1

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0-10-8 8-0-0 14-0-14 21-4-0 28-0-0 30-0-0,32-10-13 37-10-13 42-10-13 50-0-0 50-10-8
0-10-8 8-0-0 6-0-14 7-3-2 6-8-0 2-0-0 2-10-13 5-0-0 5-0-0 7-1-3 0-10-8

Scale = 1:90.2



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A4	Roof Special	1	1	I47835309

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:58 2021 Page 1

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0-10-8 5-1-12 10-0-0 12-9-1 15-2-10 17-8-3 23-4-0 25-0-14 30-0-0 31-1-3 36-2-15 41-1-3 45-4-14 50-0-0 50-10-8
0-10-8 5-1-12 4-10-4 2-9-1 2-5-9 2-5-9 5-7-13 1-8-14 4-11-2 1-1-3 5-1-12 4-10-4 4-3-10 4-7-2 0-10-8

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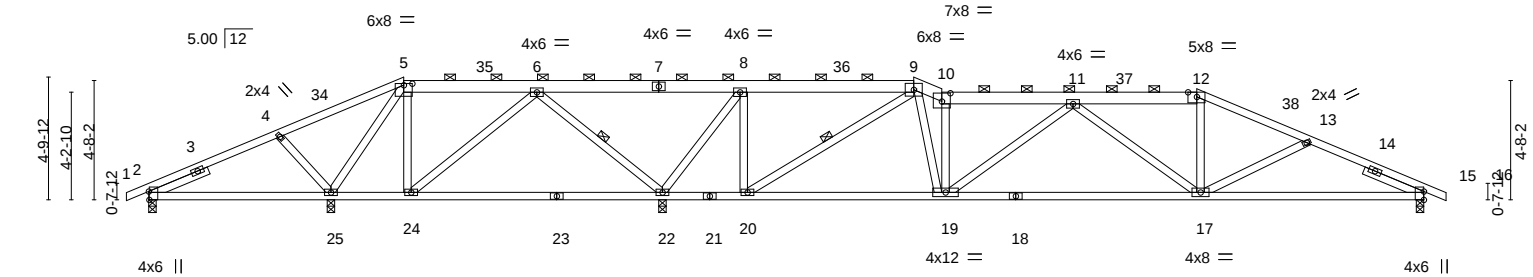


Plate Offsets (X,Y)--	[2:0-3-15,Edge], [5:0-4-0-0-0-12], [10:0-4-0-0-3-15], [12:0-4-2,Edge]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL) -0.20	17-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.45	17-19	>800	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.05	15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 226 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
1-5,12-16: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
21-23: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (5-9-3 max.); 5-9, 10-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-22, 9-20

REACTIONS.

All bearings 0-3-8.
(lb) - Max Horz 2=42(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 15 except 22=115(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 2=364(LC 25), 25=588(LC 25), 15=1156(LC 26), 22=2726(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-513/42, 6-8=-157/1730, 8-9=0/555, 9-10=-1331/226, 10-11=-1240/209,
11-12=-1606/254, 12-13=-1778/255, 13-15=-1982/287
BOT CHORD 22-24=-650/136, 20-22=-554/126, 19-20=-60/933, 17-19=-177/1706, 15-17=-206/1790
WEBS 4-25=-396/119, 10-19=-585/109, 11-19=-591/120, 12-17=0/384, 5-24=-312/96,
6-24=-40/703, 6-22=-1453/221, 9-20=-1772/217, 9-19=-105/1186, 8-20=-91/1023,
8-22=-1976/292

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior 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 13-0-0, Interior(1) 13-0-0 to 30-0-0, Exterior(2E) 30-0-0 to 31-1-3, Interior(1) 31-1-3 to 41-1-3, Exterior(2R) 41-1-3 to 44-1-3, Interior(1) 44-1-3 to 50-10-8 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 3x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 15 except (jt=lb) 22=115.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A6	Roof Special	1	1	I47835311

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:01 2021 Page 1
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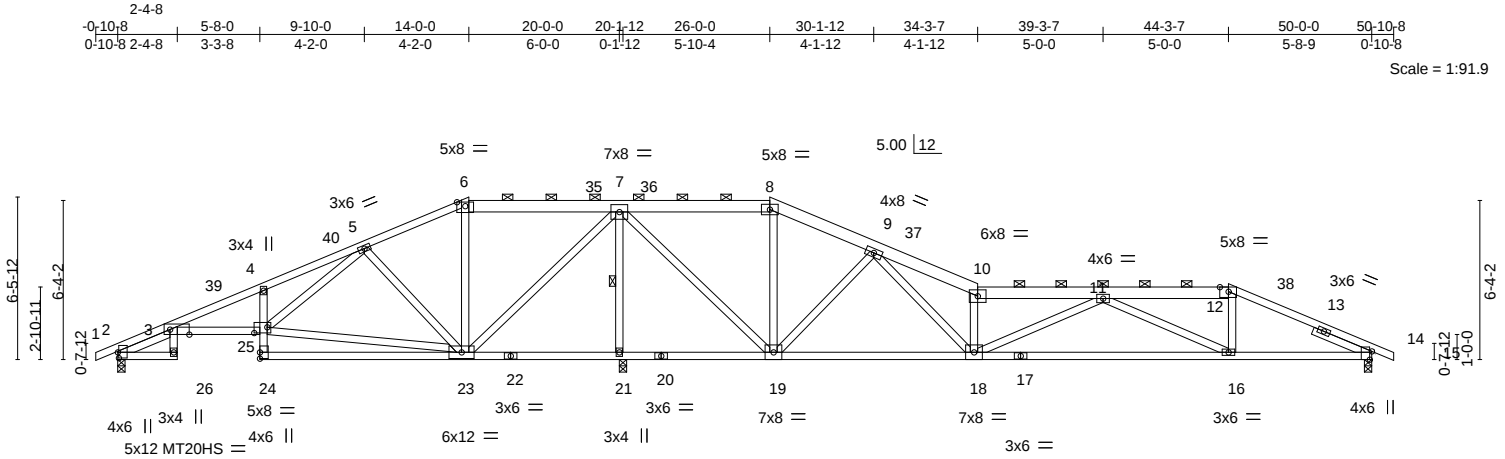


Plate Offsets (X,Y)--	[2:0-2,12,0-0-8], [3:0-9-3,Edge], [12:0-4-2,Edge], [14:0-3-15,Edge], [25:0-6-4,0-2-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.84	Vert(LL) -0.26	16-18	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.57	16-18	>630	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.71	Horz(CT) 0.15	21	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 241 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 12-15,1-6: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-11-0 max.): 6-8, 10-12.
BOT CHORD 2x4 SPF No.2 *Except* 20-22: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 7-21
SLIDER Left 2x4 SPF No.2 2-3-4, Right 2x4 SPF No.2 2-6-0	

REACTIONS.	(size) 2=0-3-8, 14=0-3-8, 21=0-3-8 Max Horz 2=97(LC 12) Max Uplift 2=62(LC 12), 14=241(LC 13), 21=361(LC 9) Max Grav 2=384(LC 25), 14=1097(LC 26), 21=3415(LC 1)
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FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-44/916, 7-8=-169/902, 8-9=-212/1001, 9-10=-2199/687, 10-11=-2053/613, 11-12=-1700/415, 12-14=-1908/426, 3-28=-650/181, 3-4=-383/503, 4-5=-329/481, 5-6=-87/1050
BOT CHORD 3-25=-462/350, 4-25=-339/140, 21-23=-2264/353, 19-21=-2264/353, 18-19=-696/665, 16-18=-569/2339, 14-16=-323/1720
WEBS 23-25=-625/103, 5-25=-175/733, 5-23=-521/184, 6-23=-697/105, 8-19=-581/114, 9-19=-1186/316, 9-18=-409/1958, 10-18=-1106/362, 11-18=-636/175, 11-16=-718/276, 12-16=-48/476, 7-21=-3280/492, 7-23=-255/1863, 7-19=-266/2136

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 4-1-8, Interior(1) 4-1-8 to 13-9-11, Exterior(2R) 13-9-11 to 18-9-11, Interior(1) 18-9-11 to 26-0-0, Exterior(2R) 26-0-0 to 31-0-0, Interior(1) 31-0-0 to 44-3-7, Exterior(2R) 44-3-7 to 49-4-0, Interior(1) 49-4-0 to 50-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=241, 21=361.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A7	ROOF SPECIAL	1	1	I47835312

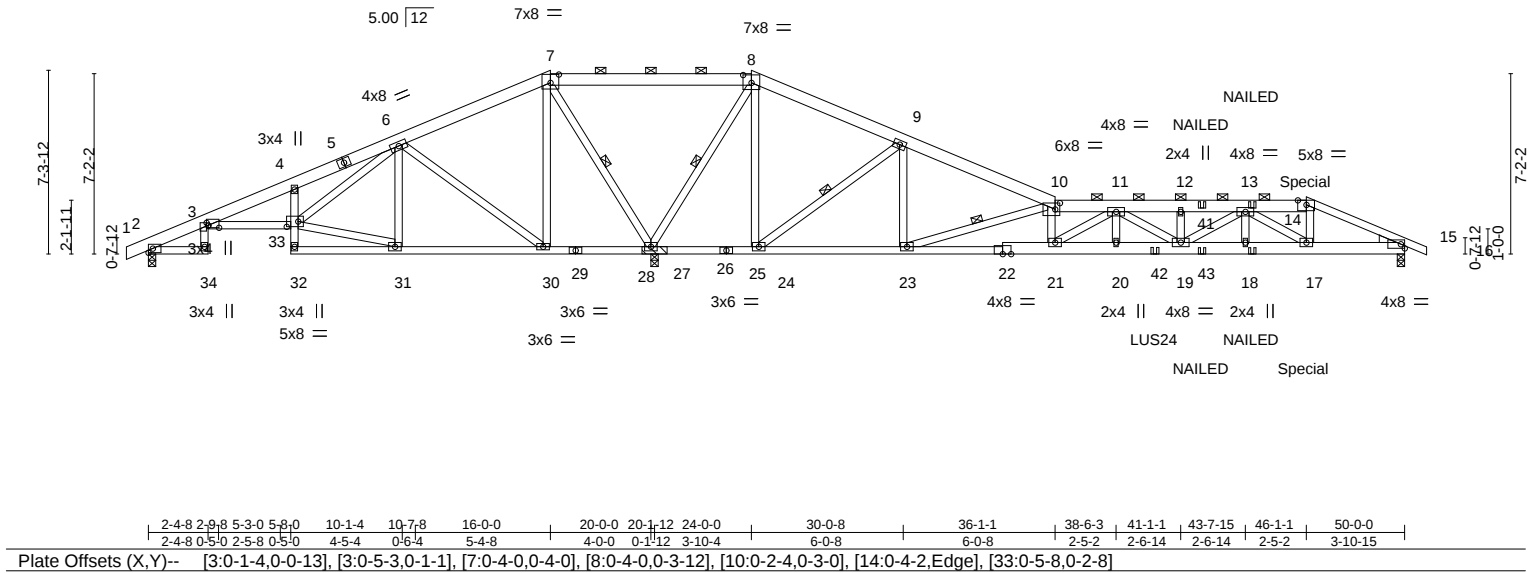
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:04 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-glMCBsvKiukfVn3yUHjxmKdHZ6XDAV6FSS8yU2yfKL9

0-10-8 2-9-8 5-3-0 10-1-4 10-7-8 16-0-0 24-0-0 30-0-8 36-1-1 38-6-3 41-1-1 43-7-15 46-1-1 50-0-0 50-10-8
0-10-8 2-9-8 2-5-8 4-10-4 0-6-4 5-4-8 8-0-0 6-0-8 6-0-8 2-5-2 2-6-14 2-6-14 2-5-2 3-10-15 0-10-8

Scale = 1:91.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.36 20-21 >991 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.55 20-21 >653 180				
BCLL	0.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	-0.18 27 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							
								Weight: 264 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 14-16: 2x4 SPF No.2, 1-5: 2x6 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied or 3-1-12 oc purlins, except 2-0-0 oc purlins (3-1-8 max.): 7-8, 10-14.
BOT CHORD	2x4 SPF No.2 *Except* 15-22: 2x6 SPF 2100F 1.8E, 22-25: 2x4 SPF 1650F 1.5E 25-29: 2x4 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 3-5-9 oc bracing.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 7-27, 8-27, 9-24, 10-23
WEDGE			
Right: 2x4 SP No.3			

REACTIONS. (size) 2=0-3-8, 27=0-3-8, 15=0-3-8
Max Horz 2=67(LC 8)
Max Uplift 2=444(LC 22), 27=-225(LC 5), 15=-256(LC 9)
Max Grav 2=205(LC 18), 27=4256(LC 1), 15=1567(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-36=-79/265, 3-4=-399/2169, 4-6=-365/2127, 6-7=-151/2205, 7-8=-157/3082,
8-9=-152/1955, 9-10=-136/826, 10-11=-3353/612, 11-12=-4854/903, 12-13=-4854/903,
13-14=-2610/489, 14-15=-2943/526
BOT CHORD 3-33=-2089/484, 4-33=-270/149, 30-31=-1476/283, 27-30=-1979/280, 24-27=-1765/219,
23-24=-733/151, 21-23=-575/3416, 20-21=-815/4603, 19-20=-815/4603, 18-19=-719/4160,
17-18=-719/4160, 15-17=-451/2676
WEBS 6-30=-850/97, 7-30=-12/589, 7-27=-2186/133, 8-27=-2611/210, 8-24=-113/1132,
9-24=-1765/267, 9-23=-120/1146, 10-23=-3481/574, 10-21=-104/854, 14-17=-115/905,
11-21=-1604/322, 11-20=-96/434, 11-19=-162/732, 13-19=-168/829, 13-17=-1859/331,
6-31=-18/457, 31-33=-1379/261, 6-33=-610/401

NOTES-

- 2x4 SP 2400F 2.0E bearing block 12" long at jt. 27 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SP 2400F 2.0E.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 4x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=444, 27=225, 15=256.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

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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September 12, 2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A7	ROOF SPECIAL	1	1	I47835312
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:04 2021 Page 2
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NOTES-

- 10) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent at 40-0-12 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.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 235 lb down and 136 lb up at 46-1-1 on top chord, and 112 lb down and 37 lb up at 45-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-70, 3-7=-70, 7-8=-70, 8-10=-70, 10-14=-70, 14-16=-70, 34-35=-20, 3-33=-20, 32-38=-20
 - Concentrated Loads (lb)
 - Vert: 14=-117(B) 17=-112(B) 18=-41(B) 13=-61(B) 41=-61(B) 42=-580(B) 43=-41(B)

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A9	Common	1	1	I47835314

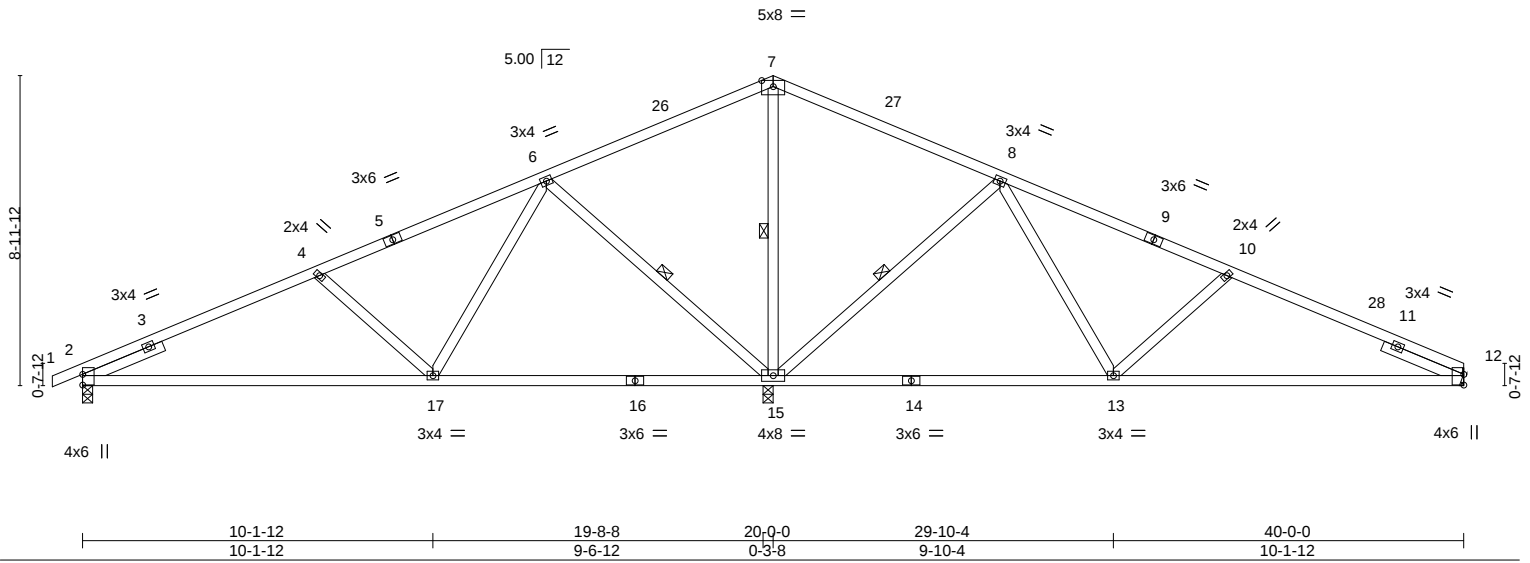
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:07 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-4K1LpuxD?p6EMEnX9PHeOzFwEJZdNyth8QNc4NyfKL6

-0-10-8	6-10-5	13-5-3	20-0-0	26-6-13	33-1-11	40-0-0
0-10-8	6-10-5	6-6-13	6-6-13	6-6-13	6-6-13	6-10-5

Scale = 1:66.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.49	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.68	Vert(LL) -0.15 13-24 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.34	Vert(CT) -0.32 13-24 >751 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.02 15 n/a n/a		
	Code IRC2018/TPI2014			Weight: 159 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 14-16: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 2-6-0, 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 7-15, 8-15, 6-15

REACTIONS.

(size) 2=0-3-8, 15=0-3-8, 12=Mechanical
 Max Horz 2=143(LC 16)
 Max Uplift 2=-125(LC 12), 15=-247(LC 12), 12=-128(LC 13)
 Max Grav 2=791(LC 25), 15=2288(LC 1), 12=730(LC 26)

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

TOP CHORD 2-4=-1043/188, 4-6=-751/135, 6-7=-33/651, 7-8=-15/651, 8-10=-759/185,
 10-12=-1061/238
 BOT CHORD 2-17=-238/963, 15-17=-87/319, 13-15=-90/324, 12-13=-151/973
 WEBS 7-15=-867/112, 8-15=-922/271, 8-13=-65/622, 10-13=-496/200, 6-15=-921/271,
 6-17=-67/617, 4-17=-492/202

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=125, 15=247, 12=128.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 12, 2021

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A10	Roof Special	4	1	I47835315

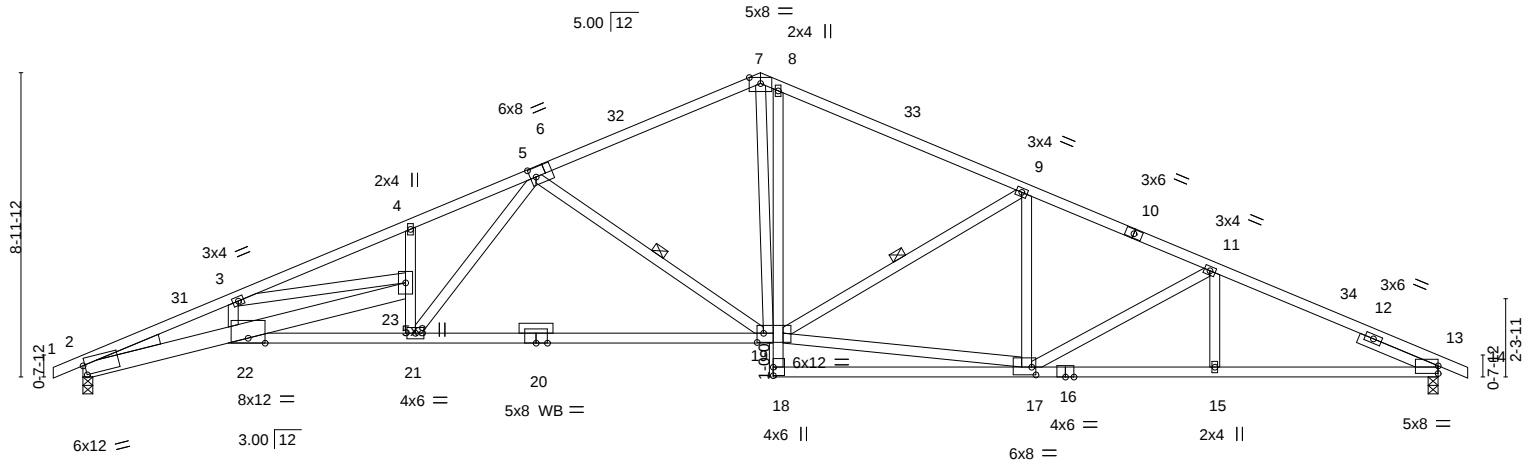
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:37 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-yZD?WdaP3bKuldVmP6kcAe?htEFiLHAGEI6116yfKLa

0-10-8 4-3-8 9-8-0 12-1-12 20-0-0 20-4-8 26-9-13 27-10-4 33-3-3 40-0-0 40-10-8
0-10-8 4-3-8 5-4-8 2-5-12 7-10-4 0-4-8 6-5-5 1-0-7 5-4-14 6-8-13 0-10-8

Scale = 1:68.0



	4-3-8	9-8-0	12-1-12	20-4-8	27-10-4	30-0-8	33-3-3	40-0-0
	4-3-8	5-4-8	2-5-12	8-2-12	7-5-12	2-2-4	3-2-11	6-8-13

Plate Offsets (X,Y)-- [2:0-0-11,0-3-7], [6:0-2-0,0-3-4], [13:Edge,0-2-11], [17:0-1-8,0-2-12], [19:0-2-4,0-3-4]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.93	Vert(LL)	-0.47	19-21	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-1.11	19-21	>433	180	
BCLL 0.0	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.35	13	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
									Weight: 194 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
2-23: 2x6 SPF 2100F 1.8E, 20-22,13-16: 2x4 SPF 1650F 1.5E	WEBS 1 Row at midpt 9-19, 5-19
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
WEDGE	
Left: 2x4 SP No.3	
SLIDER Right 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=138(LC 12), 13=-248(LC 13)
Max Uplift 2=-248(LC 12), 13=-248(LC 13)
Max Grav 2=1861(LC 1), 13=1861(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6173/879, 3-4=-4353/527, 4-5=-4375/603, 5-7=-2617/389, 7-8=-2584/441,
8-9=-2749/398, 9-11=-3171/413, 11-13=-3537/454
BOT CHORD 2-22=-903/5663, 22-23=-383/1630, 21-22=-526/4075, 19-21=-394/3266, 8-19=-320/258,
15-17=-337/3192, 13-15=-337/3192
WEBS 3-22=-13/418, 7-19=-282/1552, 17-19=-222/2856, 9-19=-622/222, 5-19=-1127/297,
11-17=-403/142, 21-23=-836/238, 4-23=-342/134, 5-21=-181/1213, 3-23=-1638/395

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=248, 13=248.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 12, 2021

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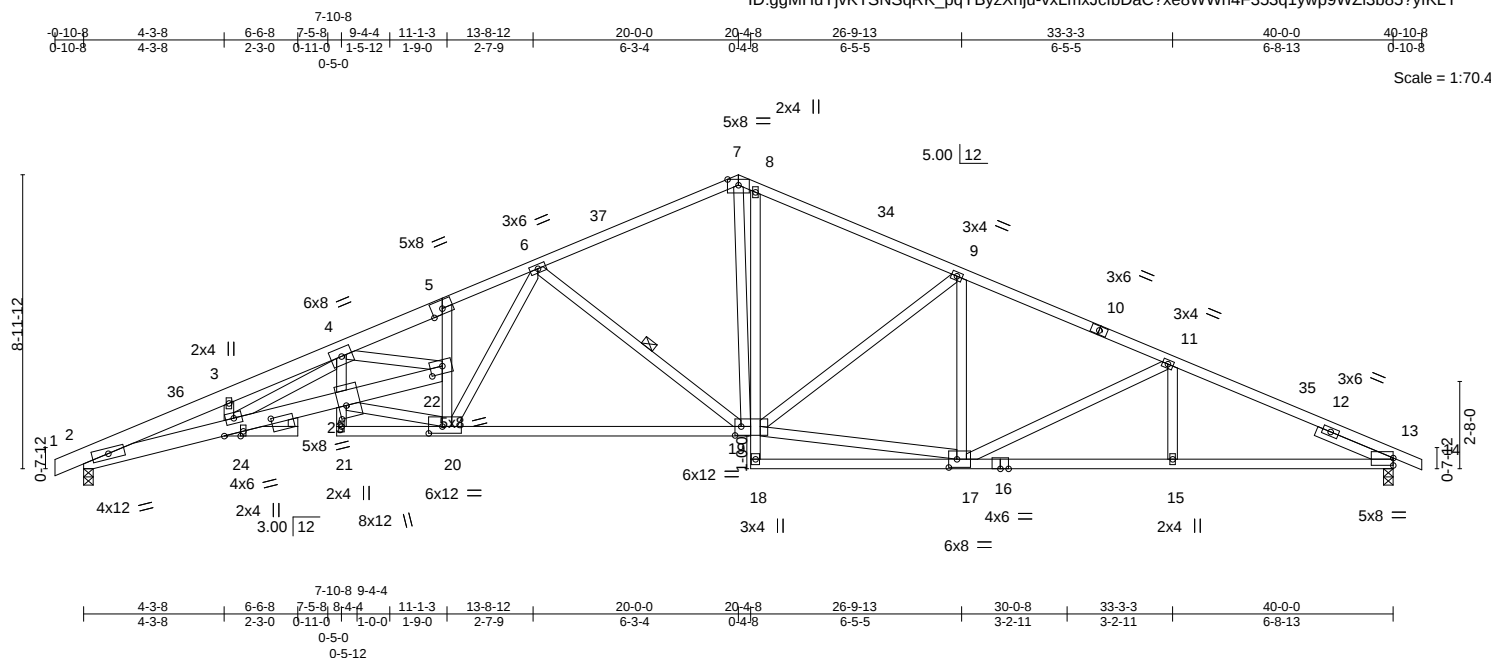
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:39 2021 Page 1
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Scale = 1:70.4



LUMBER- TOP CHORD 2x4 SPF No.2 *Except* 1-5: 2x6 SPF No.2 BOT CHORD 2x4 SPF No.2 *Except* 2-22: 2x6 SPF 2100F 1.8E, 13-16: 2x4 SPF 1650F 1.5E WEBS 2x4 SPF No.2 SLIDER Right 2x4 SPF No.2 2-6-0		BRACING- TOP CHORD Structural wood sheathing directly applied. BOT CHORD Rigid ceiling directly applied. Except: 9-8-0 oc bracing: 23-24 WEBS 1 Row at midpt 6-19	
REACTIONS. (size) 2=0-3-8, 13=0-3-8 Max Horz 2=141(LC 12) Max Uplift 2=-248(LC 12), 13=-248(LC 13) Max Grav 2=1861(LC 1), 13=1861(LC 1)			
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
TOP CHORD 7-8=-2528/427, 8-9=-2724/402, 9-11=-3100/409, 11-13=-3553/456, 2-3=-6863/952, 3-4=-6742/992, 4-5=-4037/506, 5-6=-3948/532, 6-7=-2601/392			
BOT CHORD 2-24=-973/6353, 23-24=-1038/7397, 22-23=-568/3504, 19-20=-371/3196, 8-19=-138/281, 15-17=-340/3209, 13-15=-340/3209			
WEBS 17-19=-211/2770, 9-19=-569/213, 11-17=-519/169, 20-22=-1777/320, 4-23=-240/2102, 7-19=-239/1461, 6-19=-1096/280, 4-22=-3518/571, 20-23=-463/3860, 4-24=-1123/82, 6-20=-132/951			

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) 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 (jt=lb) 2=248, 13=248.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 12, 2021



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A11	Roof Special	2	1	147835317

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:40 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-N8v88fcHMWj3c5DK4EIJGdC4RIFycXjxjKhdRyfKLX

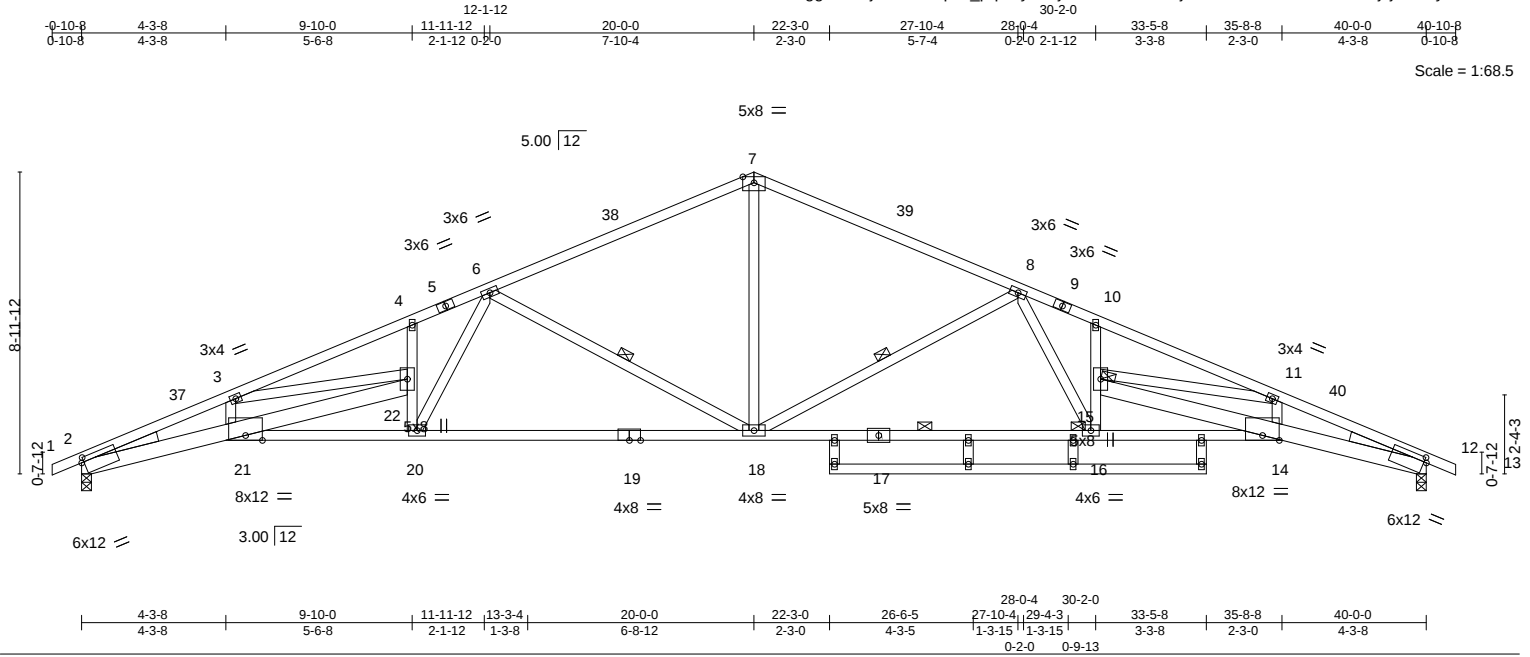


Plate Offsets (X,Y)-- [2:0-0-14,0-1-11], [12:0-0-14,0-1-11]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.93	Vert(LL)	-0.51	18	>934	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.94	Vert(CT)	-1.06	16-18	>453	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.90	Horz(CT)	0.49	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 205 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-22,12-15: 2x6 SPF 2100F 1.8E
19-21,14-17,17-19: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
9-11-0 oc bracing: 20-21
10-0-0 oc bracing: 16-18, 14-16
WEBS 1 Row at midpt 6-18, 8-18
JOINTS 1 Brace at Jt(s): 15, 16

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
Max Horz 2=138(LC 12)
Max Uplift 2=-248(LC 12), 12=-248(LC 13)
Max Grav 2=1861(LC 1), 12=1861(LC 1)

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

TOP CHORD 2-3=-6194/880, 3-4=-4304/530, 4-6=-4275/575, 6-7=-2708/391, 7-8=-2708/390,
8-10=-4275/532, 10-11=-4304/486, 11-12=-6194/758
BOT CHORD 2-21=-904/5685, 21-22=-394/1720, 20-21=-516/4009, 18-20=-447/3502, 16-18=-317/3502,
14-16=-345/4009, 14-15=-318/1720, 12-14=-650/5685
WEBS 3-21=-4/419, 11-14=0/419, 7-18=-113/1447, 6-18=-1259/334, 20-22=-736/181,
6-20=-113/946, 15-16=-736/160, 11-15=-1708/326, 3-22=-1708/397, 8-16=-93/946,
8-18=-1259/319

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 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 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 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 100 lb uplift at joint(s) except (jt=lb) 2=248, 12=248.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 12, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A12	Hip	1	1	I47835318

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:42 2021 Page 1

ID:ggMHuYjvKTSNSgRK_pqYByzXhju-JW1uZLeXu8znsONjCfKnthjXrFzS0df?O1poiKyfKLV
 -0-10-8 4-3-8 11-1-12 18-0-0 21-7-0 22-0-0 29-0-0 30-0-0 35-8-8 40-0-0 40-10-8
 0-10-8 4-3-8 6-10-4 6-10-4 3-7-0 0-5-0 7-0-0 1-0-0 5-8-8 4-3-8 0-10-8

Scale = 1:72.2

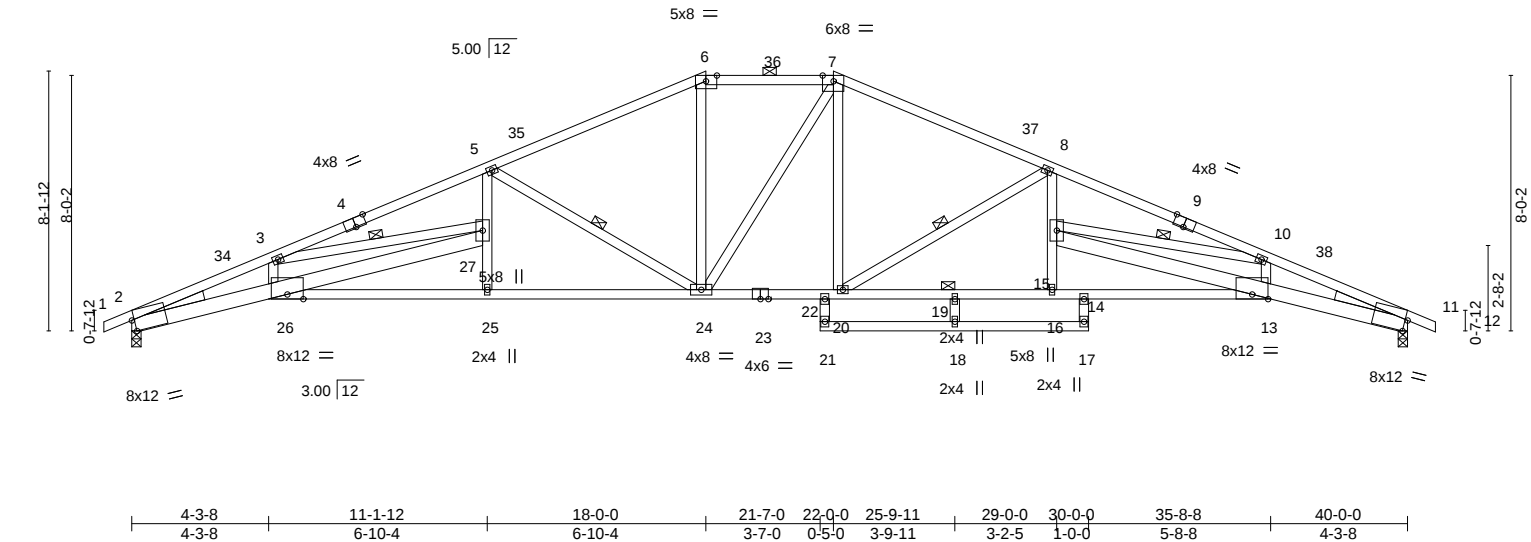


Plate Offsets (X,Y)--	[2:0-0-15,Edge], [4:0-4-0,Edge], [6:0-4-2,Edge], [7:0-4-2,Edge], [9:0-4-0,Edge], [11:0-0-15,Edge]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.98	Vert(LL) -0.52	22-24	>928	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.96	Vert(CT) -0.93	22-24	>517	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.47	Horz(CT) 0.49	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 212 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2 *Except*	2-0-0 oc purlins (3-4-13 max.): 6-7.
WEBS 2x4 SPF No.2	Rigid ceiling directly applied. Except:
WEDGE Left: 2x4 SP No.3 , Right: 2x4 SP No.3	10-0-0 oc bracing: 25-26, 13-14
	1 Row at midpt 5-24, 8-20, 10-15, 3-27
	JOINTS 1 Brace at Jt(s): 19

REACTIONS.	(size)
Max Horz 2=123(LC 12)	2=0-3-8, 11=0-3-8
Max Uplift 2=-251(LC 12), 11=-251(LC 13)	
Max Grav 2=1861(LC 1), 11=1861(LC 1)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6274/880, 3-5=-4134/527, 5-6=-2985/423, 6-7=-2654/421, 7-8=-2966/424, 8-10=-4101/499, 10-11=-6274/768
BOT CHORD 2-26=-890/5764, 26-27=-422/2079, 25-26=-474/3726, 24-25=-469/3733, 22-24=-186/2637, 20-22=-174/2506, 19-20=-338/3573, 16-19=-338/3573, 14-16=-345/3568, 13-14=-358/3700, 13-15=-348/2106, 11-13=-661/5765
WEBS 3-26=0/415, 25-27=0/256, 5-27=-19/569, 5-24=-1236/291, 6-24=-70/737, 7-24=-233/256, 10-13=0/424, 7-20=-96/705, 8-15=-4/562, 8-20=-1224/274, 10-15=-1979/342, 3-27=-1948/409

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 27-7-14, Interior(1) 27-7-14 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 3x4 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, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=251, 11=251.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A13	Hip	1	1	147835319

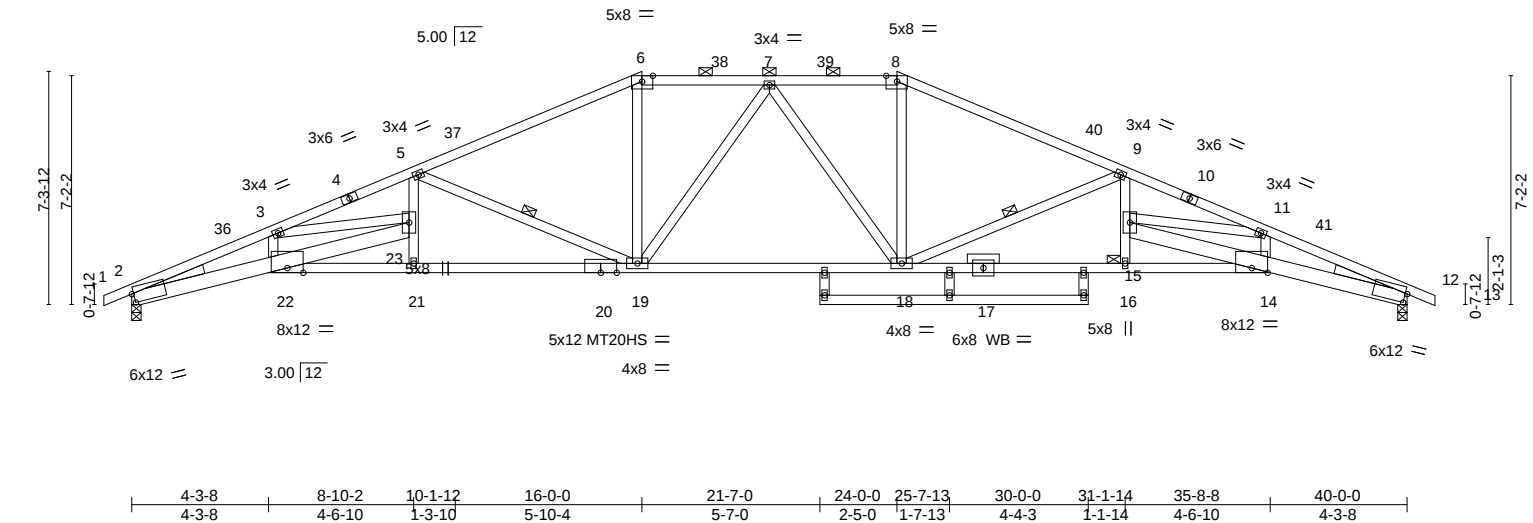
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:44 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-Fv9f_0foPIDV5iX6J4NFy6osX2fqUXMlrLlumCyfKLT

0-10-8 4-3-8 8-10-2 10-1-12 16-0-0 20-0-0 21-7-0 24-0-0 31-1-14 35-8-8 40-0-0 40-10-8
0-10-8 4-3-8 4-6-10 1-3-10 5-10-4 4-0-0 1-7-0 2-5-0 7-1-14 4-6-10 4-3-8 0-10-8

Scale = 1:72.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.51 18-19 >937 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.99 18-19 >484 180	MT20HS		148/108	
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.49 12 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
								Weight: 201 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-23,12-15: 2x6 SPF 2100F 1.8E
20-22,14-17,17-20: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
Max Horz 2=-109(LC 17)
Max Uplift 2=-253(LC 12), 12=-253(LC 13)
Max Grav 2=1861(LC 1), 12=1861(LC 1)

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

TOP CHORD 2-3=-6103/847, 3-5=-4604/611, 5-6=-3301/448, 6-7=-2947/447, 7-8=-2947/448,
8-9=-3301/449, 9-11=-4604/570, 11-12=-6102/750
BOT CHORD 2-22=-843/5590, 22-23=-282/1457, 21-22=-563/4179, 19-21=-557/4188, 18-19=-256/3048,
16-18=-433/4188, 14-16=-441/4179, 14-15=-224/1457, 12-14=-642/5590
WEBS 3-22=-26/460, 5-19=-1331/309, 6-19=-58/835, 8-18=-65/835, 11-14=-12/460,
9-18=-1331/291, 9-15=-19/579, 5-23=-35/579, 3-23=-1301/269, 7-19=-402/128,
7-18=-402/128, 11-15=-1301/218

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 21-7-14, Interior(1) 21-7-14 to 24-0-0, Exterior(2R) 24-0-0 to 29-7-14, Interior(1) 29-7-14 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 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 100 lb uplift at joint(s) except (jt=lb) 2=253, 12=253.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 12, 2021

Continued on page 2

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO	I47835319
2928314	A13	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:44 2021 Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-Fv9f_0foPIDV5iX6J4NFy6osX2fqUXMlrLlumCyfKLT

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.

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A15	Hip	1	1	I47835321

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:47 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-gUqnc2igib3y9Fh_CwyalQRkGgZhqjYJXZNxyfKLQ

Job Reference (optional)

-0-10-8 4-3-8 12-0-0 19-2-8 26-5-0 28-0-0 33-10-4 40-0-0 40-10-8
0-10-8 4-3-8 7-8-8 7-2-8 7-2-8 1-7-0 5-10-4 6-1-12 0-10-8

Scale = 1:71.0

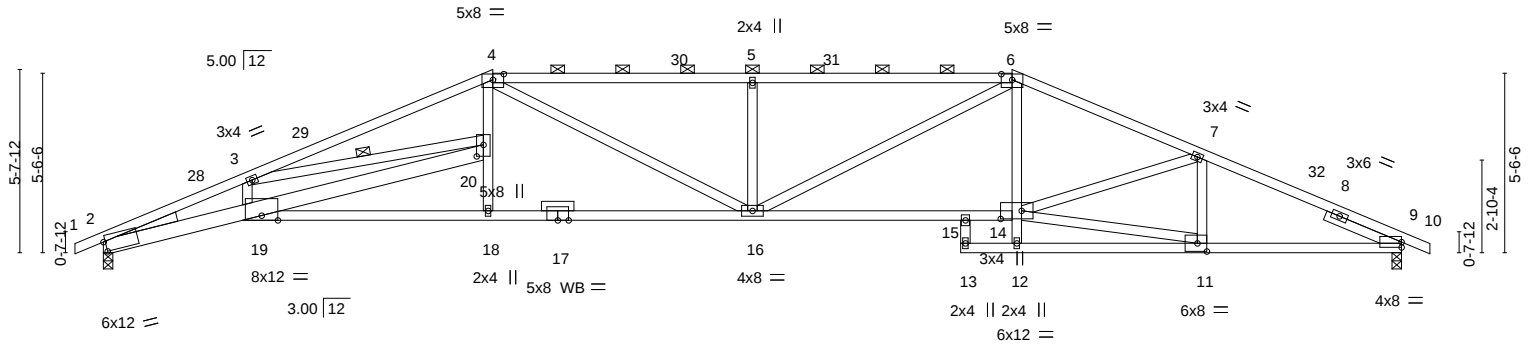


Plate Offsets (X,Y)--	[2:0-0-11,0-3-11], [4:0-4-0,0-2-2], [6:0-4-0,0-2-2], [9:Edge,0-1-15], [11:0-3-8,0-3-0], [14:0-7-12,0-3-0], [20:0-4-4,0-2-8]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) -0.44	15-16	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.96	Vert(CT) -0.83	15-16	>580	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.38	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 197 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
2-20: 2x6 SPF 2100F 1.8E, 13-15,14-17: 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-1-12 max.): 4-6.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 18-19
WEBS 1 Row at midpt 3-20

REACTIONS.

(size) 2=0-3-8, 9=0-3-8
Max Horz 2=83(LC 12)
Max Uplift 2=257(LC 12), 9=257(LC 13)
Max Grav 2=1861(LC 1), 9=1861(LC 1)

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

TOP CHORD 2-3=-6406/896, 3-4=-4063/527, 4-5=-4359/651, 5-6=-4359/651, 6-7=-3918/517,
7-9=-3549/478
BOT CHORD 2-19=-867/5894, 19-20=-468/2324, 18-19=-406/3602, 16-18=-402/3620, 15-16=-364/3587,
14-15=-303/3443, 9-11=-364/3204
WEBS 3-19=0/449, 18-20=0/303, 4-20=-11/608, 4-16=-205/1057, 5-16=-656/223,
6-16=-212/1065, 12-14=0/284, 6-14=-17/585, 7-11=-496/104, 11-14=-300/3022,
7-14=-44/611, 3-20=-2141/454

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 17-7-14, Interior(1) 17-7-14 to 28-0-0, Exterior(2R) 28-0-0 to 33-10-4, Interior(1) 33-10-4 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.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 9=257.
- This truss 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.

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



September 12, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2928314	Truss A16	Truss Type Hip	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #134/MO 147835322
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Builders First Source, Valley Center, KS 67147

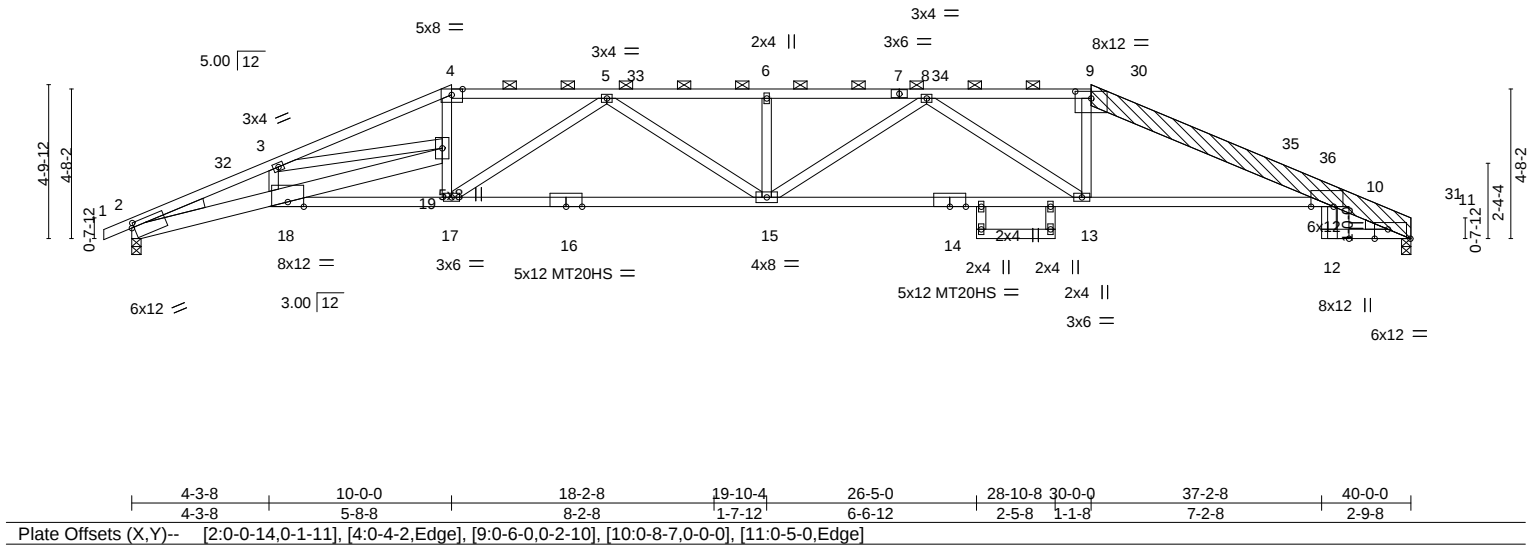
8.430 s Jul 16 2021 MiTek Industries, Inc. Fri Sep 10 14:35:06 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-6D6NpHxvMniQmdih5BUBE4suAhP1nRU5d7pxjryfADJ

Job Reference (optional)

0-10-8	4-3-8	10-0-0	14-10-4	15-5-11	19-10-4	20-11-5	24-10-4	26-5-0	28-10-8	30-0-0	37-2-8	40-0-0
0-10-8	4-3-8	5-8-8	4-10-4	0-7-7	4-4-9	1-1-1	3-10-15	1-6-12	2-5-8	1-1-8	7-2-8	2-9-8

Scale = 1:72.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.69 15	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-1.32 15-17	MT20HS	148/108		
BCLL	0.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.57 11				
BCDL	10.0	Code	IRC2018/TPI2014	Matrix	AS						
										Weight: 216 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x4 SPF 1650F 1.5E, 9-11: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-19: 2x6 SPF 2100F 1.8E, 16-18,10-14,14-16: 2x4 SPF 1650F 1.5E
10-12: 2x6 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x8 SP 2400F 2.0E
LBR SCAB 9-11 2x8 SP 2400F 2.0E one side
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 (2-1-9 max.): 4-9.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=75(LC 16)
Max Uplift 2=-242(LC 8), 11=-214(LC 9)
Max Grav 2=1862(LC 1), 11=1809(LC 3)

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

TOP CHORD 2-32=-6219/779, 3-32=-6128/796, 3-4=-4528/630, 4-5=-3969/584, 5-33=-5388/819,
6-33=-5388/819, 6-7=-5388/819, 7-34=-5388/819, 8-34=-5388/819, 8-9=-4112/599,
9-30=-4172/599, 30-35=-4301/572, 35-36=-4311/571, 10-36=-4365/568, 10-31=-687/106,
11-31=-867/108
BOT CHORD 2-18=-709/5709, 18-19=-311/1860, 17-18=-476/3892, 16-17=-695/4958, 15-16=-695/4958,
14-15=-692/5004, 13-14=-692/5004, 10-13=-485/4077
WEBS 3-18=-5/405, 17-19=-74/865, 4-19=-137/1331, 9-13=-70/879, 6-15=-353/122,
5-17=-1325/271, 5-15=-38/624, 8-13=-1204/256, 8-15=-30/573, 3-19=-1502/306

NOTES-

- Attached 11-1-0 scab 9 to 11, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-3 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 7-8-3 from end at joint 9, nail 2 row(s) at 2" o.c. for 3-1-9.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 15-7-14, Interior(1) 15-7-14 to 30-0-0, Exterior(2R) 30-0-0 to 35-7-14, Interior(1) 35-7-14 to 39-11-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



September 12, 2021

Continued on page 2

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO	I47835322
2928314	A16	Hip	1	1	Job Reference (optional)	

Builders First Source, Valley Center, KS 67147

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-6D6NpHxvMniQmdih5BUbE4suAhP1nRU5d7pxjryfADJ

8.430 s Jul 16 2021 MiTek Industries, Inc. Fri Sep 10 14:35:06 2021 Page 2

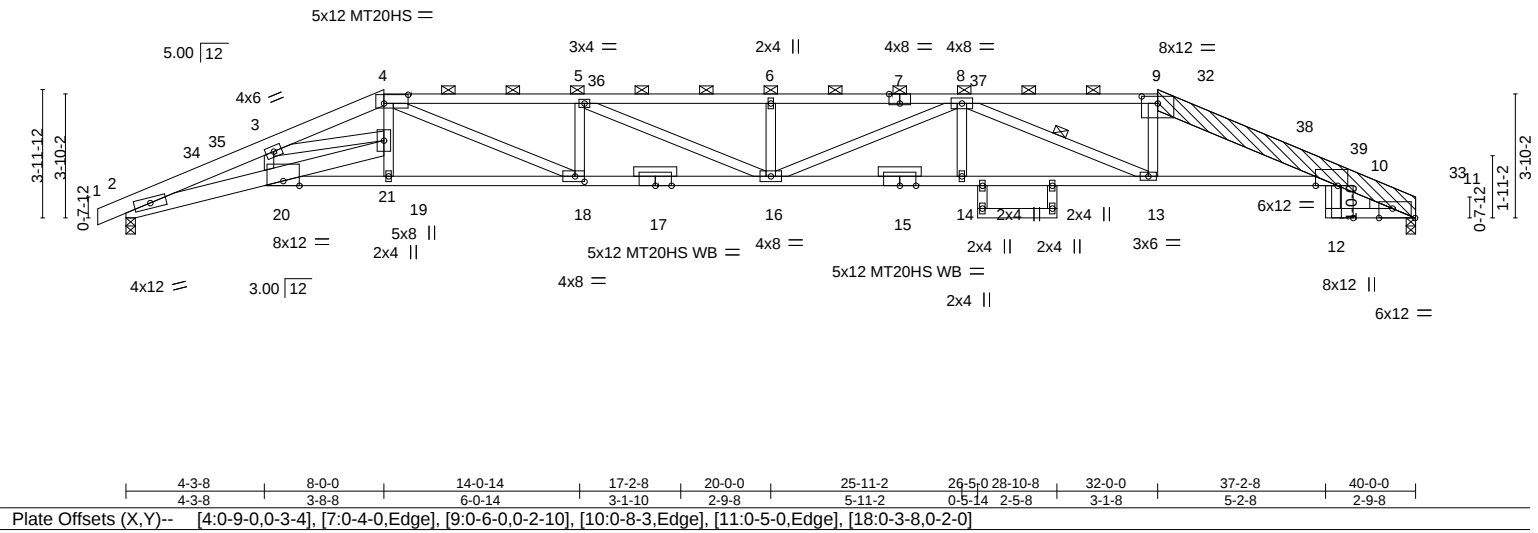
- NOTES-**
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 2 and 214 lb uplift at joint 11.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 2928314	Truss A17	Truss Type Hip	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #134/MO 147835323
Builders First Source, Valley Center, KS 67147					Job Reference (optional)

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-2BkbTKXuZ?ha2bk?k7TNFkDoDyTezk_XeRW2XNyf3HK
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Sep 10 10:28:41 2021 Page 1

0-10-8	4-3-8	8-0-0	14-0-14	20-0-0	25-11-2	26-5-0	28-10-8	32-0-0	37-2-8	40-0-0
0-10-8	4-3-8	3-8-8	6-0-14	5-11-2	5-11-2	0-5-14	2-5-8	3-1-8	5-2-8	2-9-8

Scale = 1:71.5



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO	I47835323
2928314	A17	Hip	1	1	Job Reference (optional)	

Builders First Source, Valley Center, KS 67147

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Sep 10 10:28:41 2021 Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-2BkbTKXuZ?ha2bK?k7TNFkDoDyTezk_XeRW2XNyf3HK

- NOTES-**
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A18	Hip Girder	1	2	I47835324

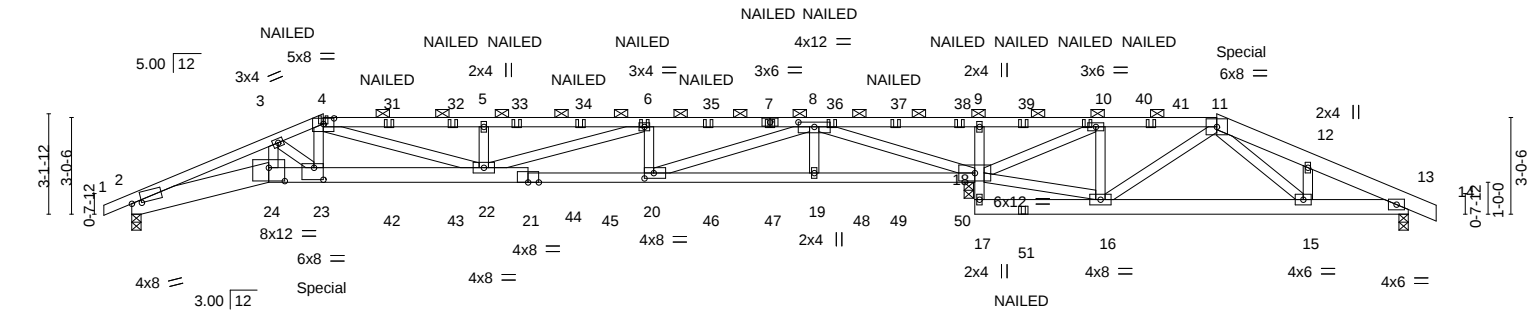
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:53 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-UeB2t5mRIWLDg4jqLT1Mp0gSegkX5UfdwF_tbByfKlK

0-10-8 4-3-8 6-0-0 11-0-6 16-2-8 21-4-10 26-5-0 30-4-4 34-0-0 36-10-4 40-0-0 40-10-8
0-10-8 4-3-8 1-8-8 5-0-6 5-2-2 5-2-2 5-0-6 3-11-4 3-7-12 2-10-4 3-1-12 0-10-8

Scale = 1:72.2



4-3-8	6-0-0	11-0-6	16-2-8	21-4-10	26-4-8	26-5-0	30-4-4	34-0-0	36-10-4	40-0-0
4-3-8	1-8-8	5-0-6	5-2-2	5-2-2	4-11-14	0-0-8	3-11-4	3-7-12	2-10-4	3-1-12

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL) -0.29 20-22 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.55 20-22 >578 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.90	Horz(CT) 0.12 18 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 367 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 1-4: 2x4 SPF No.2, 11-14: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-10 oc purlins, except
BOT CHORD 2x6 SPF No.2 *Except* 2-24: 2x8 SP 2400F 2.0E, 9-17: 2x4 SPF No.2	2-0-0 oc purlins (5-2-11 max.): 4-11.
WEBS 18-21: 2x4 SP 2400F 2.0E 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17,15-16,13-15.

REACTIONS.	(size) 2=0-3-8, 13=0-3-8, 18=0-3-8
	Max Horz 2=-47(LC 9)
	Max Uplift 2=-379(LC 4), 13=-171(LC 30), 18=-1025(LC 4)
	Max Grav 2=1972(LC 21), 13=231(LC 17), 18=4845(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-6644/1308, 3-4=-6379/1305, 4-5=-7099/1474, 5-6=-7096/1473, 6-8=-5509/1157, 8-9=-1177/5902, 9-10=-1167/5856, 10-11=-293/1762, 11-12=-226/334, 12-13=-244/313
BOT CHORD	2-24=-1172/6129, 23-24=-1151/6003, 22-23=-1151/5892, 20-22=-1090/5510, 19-20=-194/1166, 18-19=-194/1166, 9-18=-636/204, 16-17=-525/93, 15-16=-457/72, 13-15=-275/213
WEBS	3-24=-73/381, 4-23=-253/1366, 4-22=-276/1382, 5-22=-671/225, 6-22=-332/1671, 6-20=-1135/310, 8-20=-945/4603, 8-19=0/466, 8-18=-7421/1516, 10-16=-248/1506, 11-16=-1705/364, 16-18=-1346/287, 10-18=-4473/948, 11-15=-61/439

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-5-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=379, 13=171, 18=1025.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

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September 12, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	A18	Hip Girder	1	2	Job Reference (optional)

I47835324

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:03:53 2021 Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-UeB2t5mRIWLDg4jqLT1Mp0gSegkX5UfdwF_tbByfKlK

NOTES-

- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 506 lb down and 203 lb up at 34-0-0 on top chord, and 380 lb down and 123 lb up at 6-0-0, 101 lb down and 24 lb up at 6-0-12, 101 lb down and 24 lb up at 8-0-12, 101 lb down and 24 lb up at 10-0-12, 101 lb down and 24 lb up at 12-0-12, 101 lb down and 24 lb up at 14-0-12, 101 lb down and 24 lb up at 16-0-12, 101 lb down and 24 lb up at 18-0-12, 101 lb down and 24 lb up at 20-0-0, 101 lb down and 24 lb up at 21-11-4, and 101 lb down and 24 lb up at 23-11-4, and 101 lb down and 24 lb up at 25-11-4 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: 1-4=-70, 4-11=-70, 11-14=-70, 24-25=-20, 18-24=-20, 17-28=-20
 - Concentrated Loads (lb)
 - Vert: 4=-97(B) 7=-97(B) 11=-447(B) 23=-473(B=-380) 6=-97(B) 20=-93 31=-97(B) 32=-97(B) 33=-97(B) 34=-97(B) 35=-97(B) 36=-97(B) 37=-97(B) 38=-97(B) 39=-83(B) 40=-94(B) 41=-94(B) 42=-93 43=-93 44=-93 45=-93 46=-93 47=-93 48=-93 49=-93 50=-93 51=-81(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	B1	Common	3	1	I47835325

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:08 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-YWbj0Eym7E5zOMjj6otwAo8jj?j6UeqN46AdpyfKL5

Job Reference (optional)

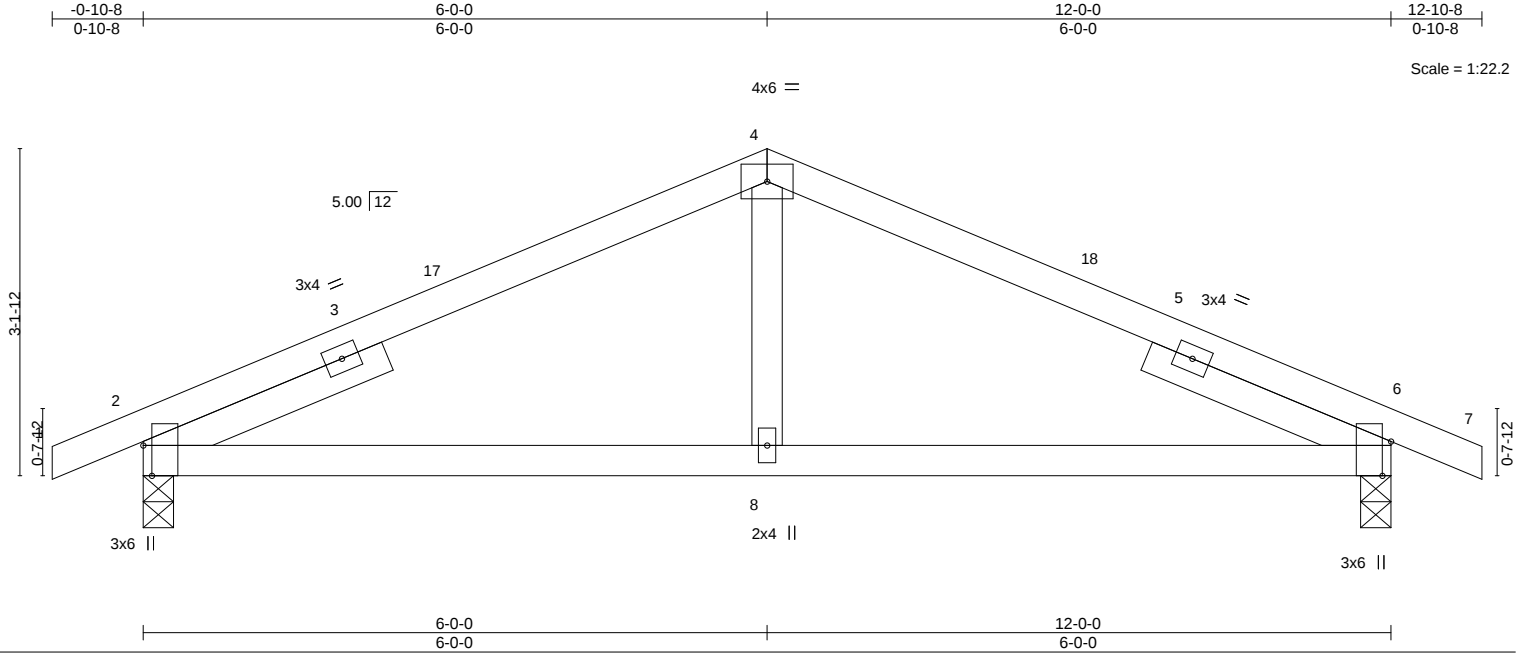


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [6:0-3-15,Edge]

LOADING (psf)	SPACING-	CSL.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL)	-0.04	8-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.31	Vert(CT)	-0.07	8-15	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						Weight: 40 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=45(LC 12)
Max Uplift 2=-86(LC 12), 6=-86(LC 13)
Max Grav 2=601(LC 1), 6=601(LC 1)

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

TOP CHORD 2-4=-706/257, 4-6=-706/257
BOT CHORD 2-8=-139/644, 6-8=-139/644

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 12, 2021

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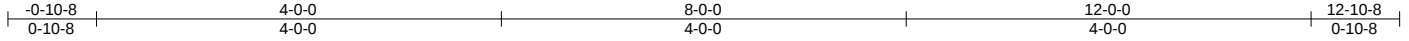
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	B2	Hip Girder	1	1	I47835326

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:10 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-VvjURv_5lkUoDiW5rXqL?btRRXcKaOC7qObHhlyfKL3



Scale = 1:22.8

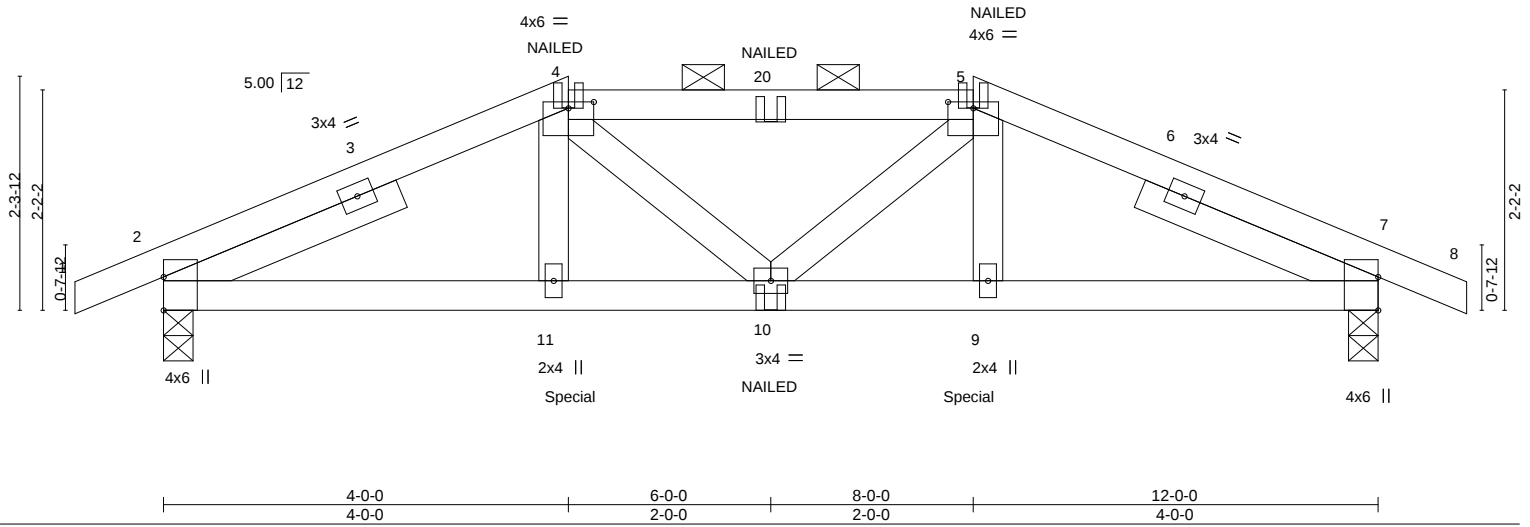


Plate Offsets (X,Y)-- [4:0-3-0,0-0-12], [5:0-3-0,0-0-12]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	2-0-0	TC 0.49	Vert(LL) -0.04	9-10	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.62	Vert(CT) -0.07	9-10	>999	180			
BCLL 0.0	Rep Stress Incr NO		WB 0.05	Horz(CT) 0.02	7	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 46 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-13 oc purlins, except
 2-0-0 oc purlins (4-3-12 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
 Max Horz 2=-31(LC 9)
 Max Uplift 2=-191(LC 8), 7=-191(LC 9)
 Max Grav 2=916(LC 1), 7=916(LC 1)

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

TOP CHORD 2-4=-1493/333, 4-5=-1417/303, 5-7=-1493/333
 BOT CHORD 2-11=-283/1364, 10-11=-282/1348, 9-10=-257/1348, 7-9=-258/1364

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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=191, 7=191.
- This truss 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) 232 lb down and 79 lb up at 4-0-0, and 232 lb down and 79 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-70, 4-5=-70, 5-8=-70, 12-16=-20
 Concentrated Loads (lb)
 Vert: 4=-47(B) 5=-47(B) 11=-232(B) 9=-232(B) 10=-24(B) 20=-47(B)



September 12, 2021

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

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

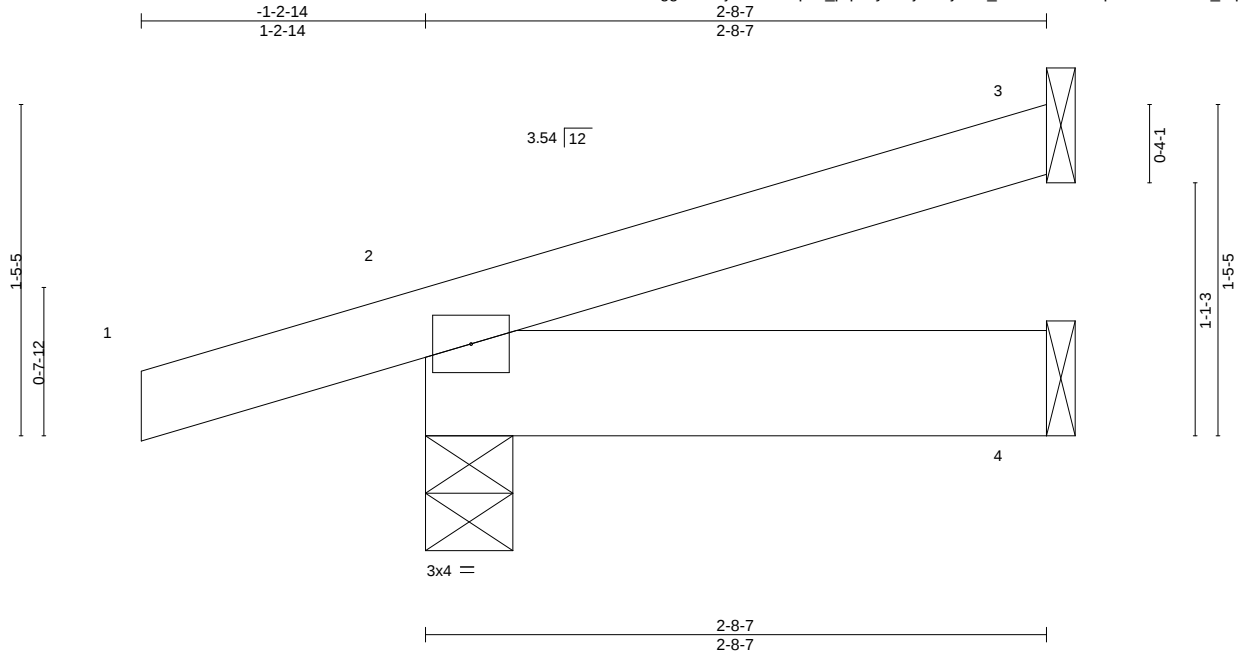


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	CJ1	Jack-Open	1	1	I47835327

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:10 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-VvjURv_5kUoDiW5rXqL?btXYXIXaO_7qObHhiyfKL3



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 0.10	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 10 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=46(LC 8)
Max Uplift 3=-25(LC 12), 2=-70(LC 8)
Max Grav 3=65(LC 1), 2=226(LC 1), 4=52(LC 3)

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

NOTES-

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



September 12, 2021

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

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

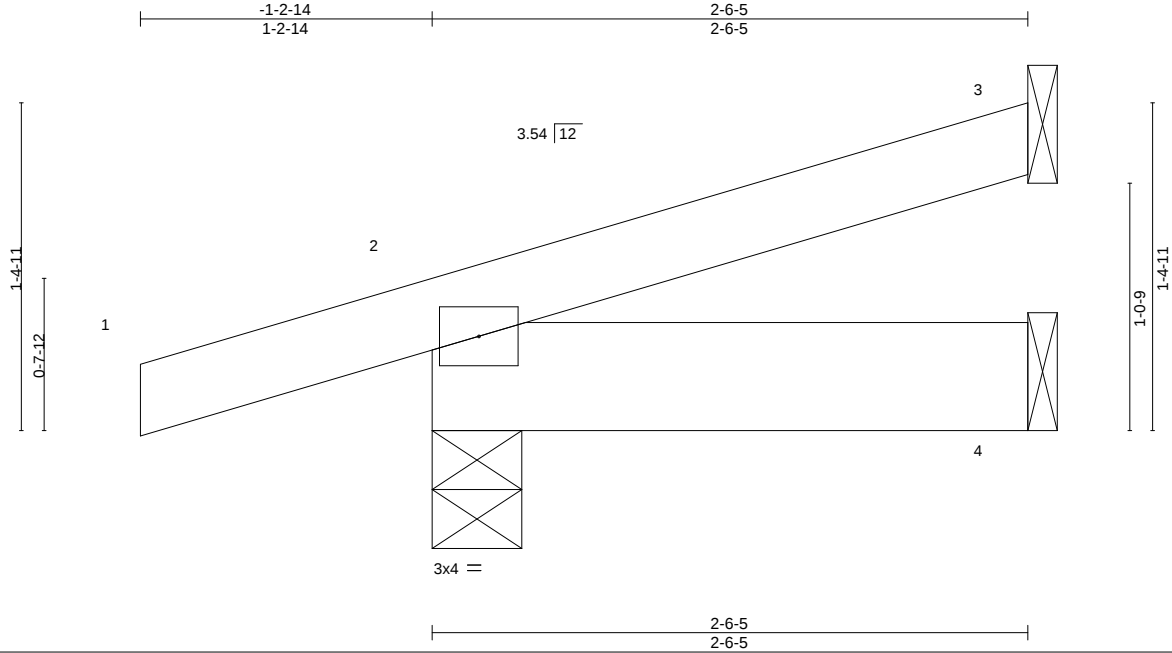


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	CJ2	Jack-Open	1	1	I47835328

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:11 2021 Page 1
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Scale = 1:9.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.10	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						Weight: 9 lb	FT = 20%
	Code IRC2018/TPI2014								

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=44(LC 8)
Max Uplift 3=-23(LC 12), 2=-70(LC 8)
Max Grav 3=59(LC 1), 2=219(LC 1), 4=48(LC 3)

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

NOTES-

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



September 12, 2021

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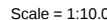
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:12 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-RlrEsb?MpLWS?gUyytp50yo8KpN2IUQH4NmayfKL1
1-2-14 2-8-7
1-2-14 2-8-7



LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x6 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 2-8-7 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS. (size) 2=0-4-9, 4=Mechanical Max Horz 2=43(LC 8) Max Uplift 2=-66(LC 8), 4=-28(LC 9) Max Grav 2=226(LC 1), 4=103(LC 1)			
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			

NOTES:-

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



September 12, 2021

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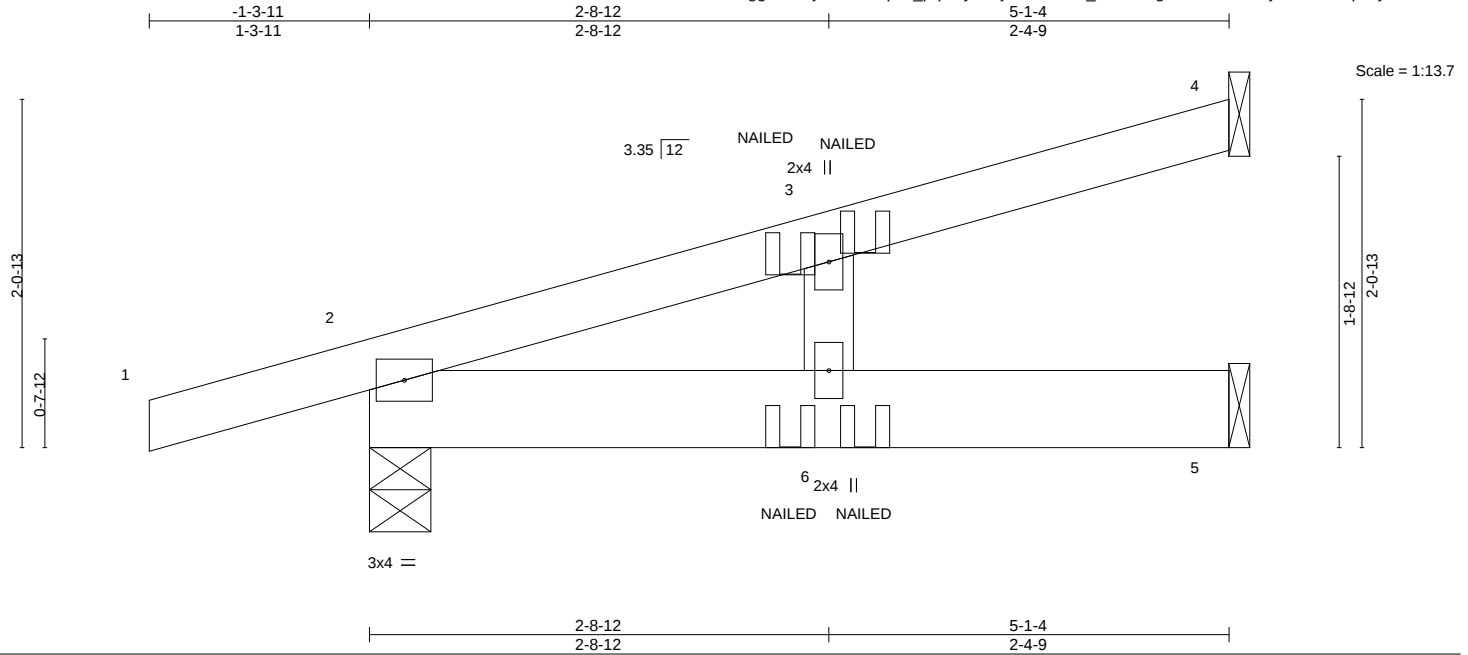


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	CJ4	Diagonal Hip Girder	1	1	147835330

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:13 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-vUPc3x0_aftN49FgWfO2dEV1Gkj0nITZWMqx1yfKLO



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) -0.02	6	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.03	6	>999	180			
BCLL 0.0	Rep Stress Incr NO	WB 0.02	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 18 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 5-1-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-4-6, 5=Mechanical
Max Horz 2=69(LC 4)
Max Uplift 4=-33(LC 8), 2=-94(LC 4), 5=-25(LC 8)
Max Grav 4=91(LC 1), 2=336(LC 1), 5=130(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-12(F=-2, B=-9)



September 12, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	CJ5	Diagonal Hip Girder	1	1	i47835331

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:14 2021 Page 1
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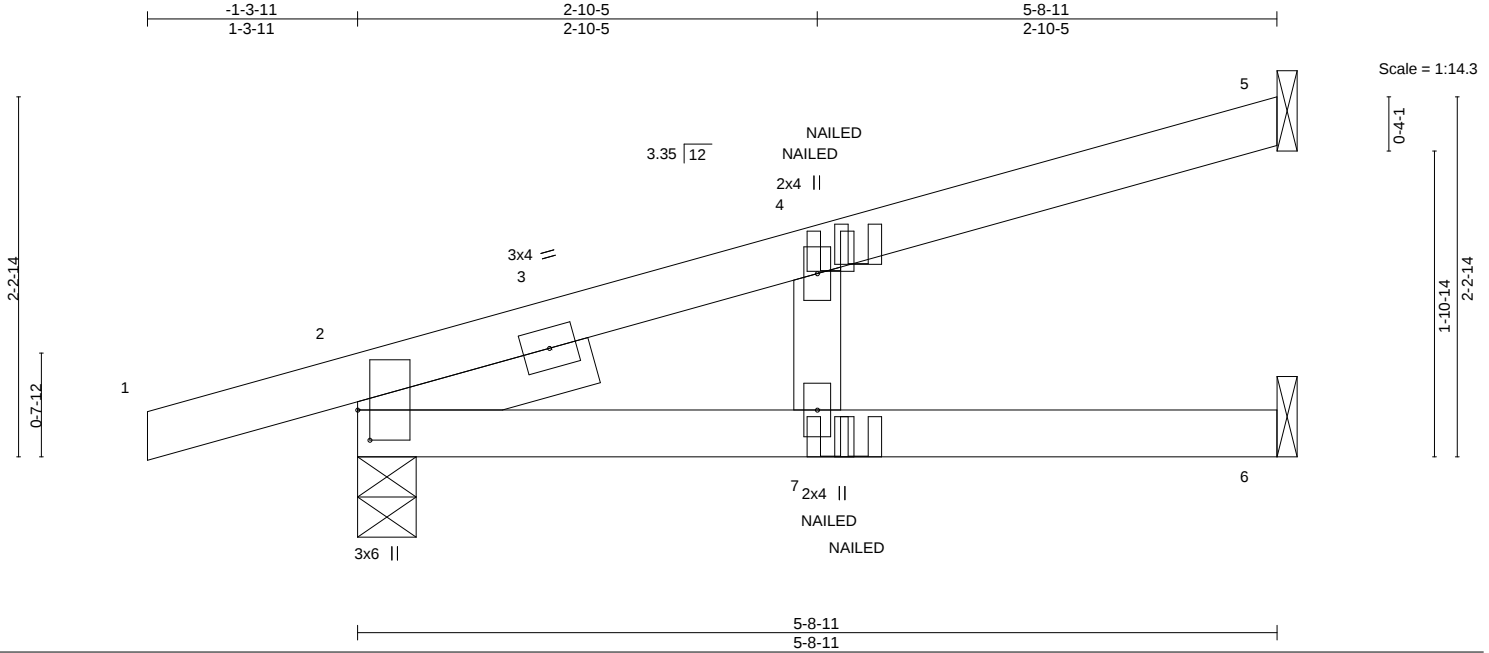


Plate Offsets (X,Y)-- [2:0-2-4,0-0-15]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.07	7	>952	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.13	7	>526	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.01	Horz(CT)	0.02	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 18 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 2=0-4-6, 6=Mechanical
Max Horz 2=76(LC 4)
Max Uplift 5=50(LC 8), 2=-93(LC 4), 6=-11(LC 8)
Max Grav 5=151(LC 1), 2=361(LC 1), 6=98(LC 1)

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

NOTES-

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



September 12, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	CJ6	Diagonal Hip Girder	1	1	I47835332

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:15 2021 Page 1

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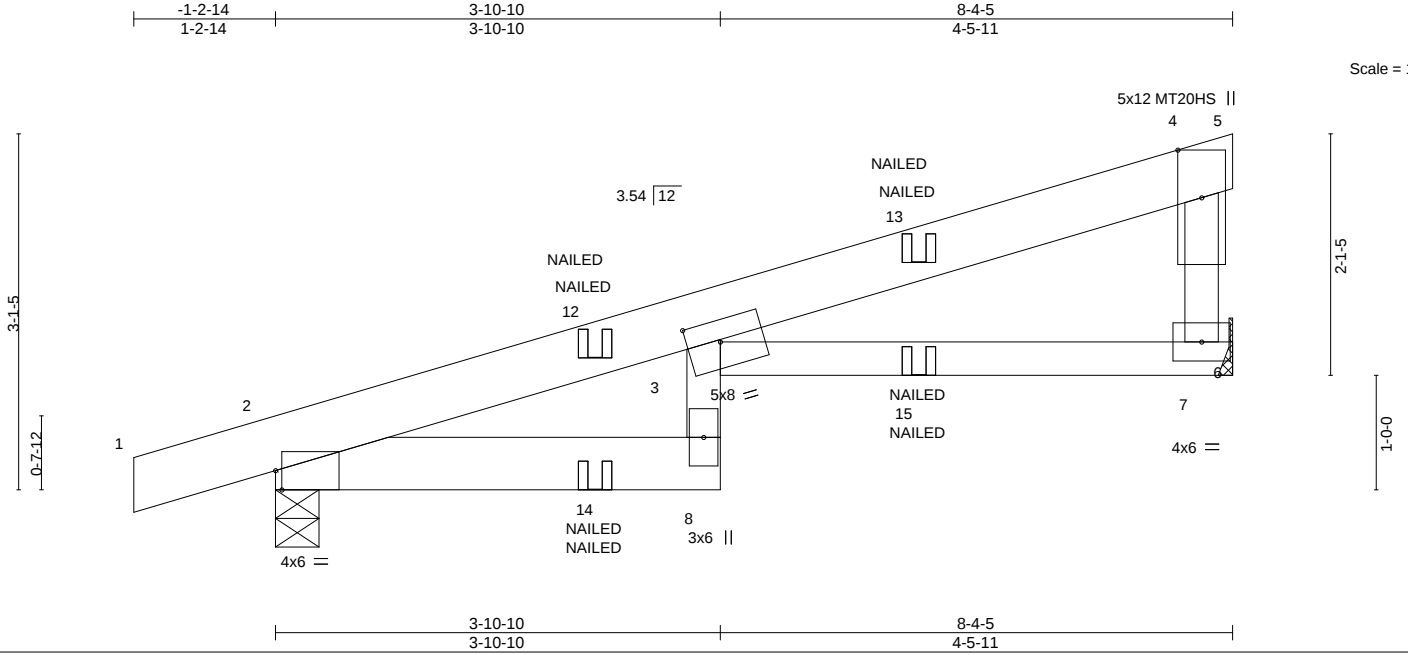


Plate Offsets (X,Y)--		[2:0-0-11,Edge], [3:0-3-7,0-2-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82
TCDL 10.0	Lumber DOL	1.15	BC 0.48
BCLL 0.0	Rep Stress Incr	NO	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MR
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.14 8 >682 240
			Vert(CT) -0.25 8 >392 180
			Horz(CT) 0.10 7 n/a n/a
			PLATES
			MT20 197/144
			MT20HS 148/108
			Weight: 33 lb FT = 20%

LUMBER-

TOP CHORD 2x6 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 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=91(LC 5)
 Max Uplift 7=-118(LC 8), 2=-124(LC 4)
 Max Grav 7=452(LC 1), 2=493(LC 1)

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

TOP CHORD 3-4=-270/57, 4-7=-298/97
 BOT CHORD 3-7=-71/277

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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=118, 2=124.
- 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=-70, 3-4=-70, 4-5=-20, 8-9=-20, 3-6=-20
 Concentrated Loads (lb)
 Vert: 13=-6(F=-3, B=-3) 14=2(F=1, B=1) 15=-114(F=-57, B=-57)



September 12, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	CJ7	Diagonal Hip Girder	1	1	I47835333

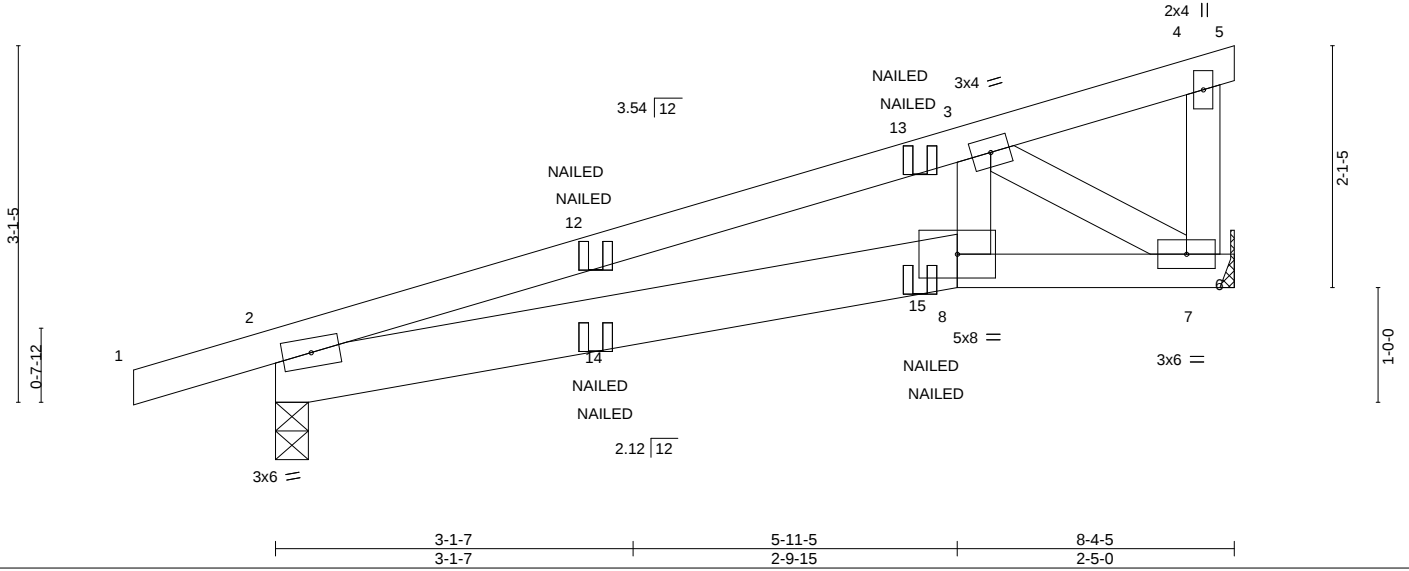
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:16 2021 Page 1

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Scale = 1:20.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) -0.01	8-11	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.03	8-11	>999	180			
BCLL 0.0	Rep Stress Incr NO	WB 0.11	Horz(CT) 0.01	7	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 30 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 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=0-3-7
 Max Horz 2=92(LC 5)
 Max Uplift 7=-95(LC 8), 2=-113(LC 4)
 Max Grav 7=409(LC 1), 2=474(LC 1)

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

TOP CHORD 2-3=-768/164
 BOT CHORD 2-8=-179/705, 7-8=-171/655
 WEBS 3-7=-754/215

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=113.
- 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: 1-4=-70, 4-5=-20, 8-9=-20, 6-8=-20
 Concentrated Loads (lb)
 Vert: 13=-30(F=-15, B=-15) 14=2(F=1, B=1) 15=-30(F=-15, B=-15)



September 12, 2021

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	CJ8	Diagonal Hip Girder	2	1	I47835334

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:17 2021 Page 1
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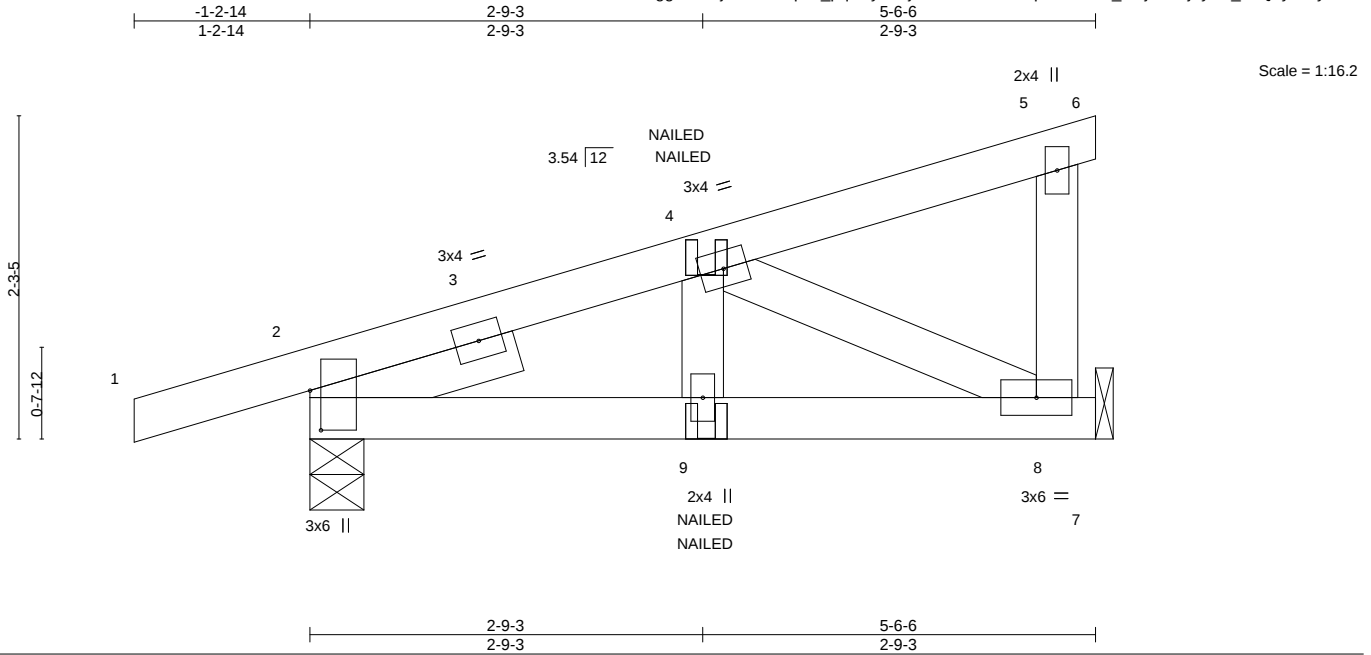


Plate Offsets (X,Y)-- [2:0-3-6,0-0-15]											
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	9	>999	240	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	9	>999	180			
BCLL 0.0	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	8	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
SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-

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

REACTIONS.

(size) 2=0-4-9, 8=Mechanical
Max Horz 2=78(LC 7)
Max Uplift 2=-87(LC 4), 8=-50(LC 8)
Max Grav 2=332(LC 1), 8=236(LC 1)

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

TOP CHORD 2-4=-262/46
BOT CHORD 2-9=-49/266, 8-9=-49/266
WEBS 4-8=-293/73

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
- 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: 1-5=-70, 5-6=-20, 7-10=-20
Concentrated Loads (lb)
Vert: 9=2(F=1, B=1)



September 12, 2021

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

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



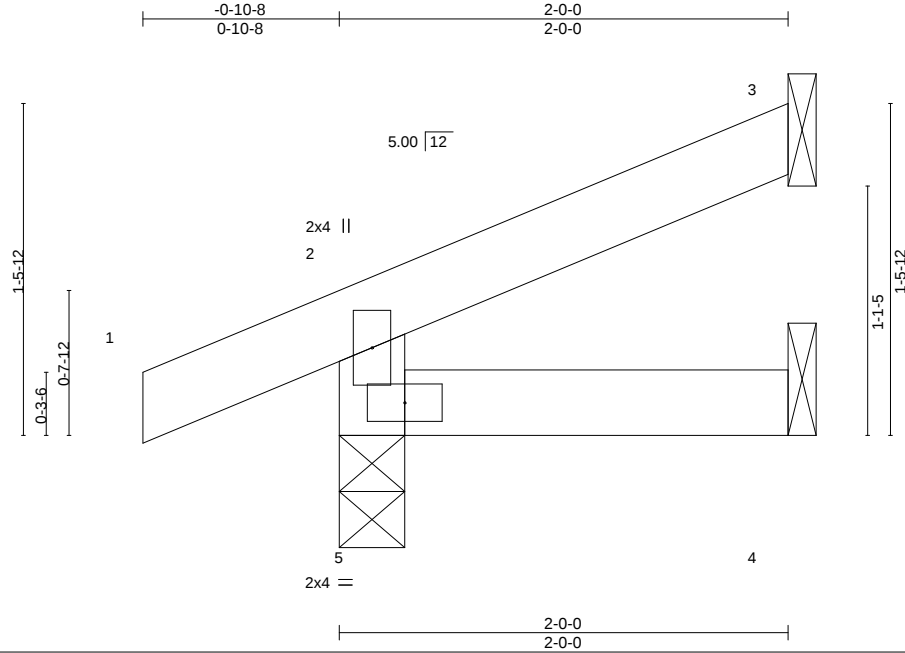
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J1	Jack-Open	2	1	I47835335

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:18 2021 Page 1

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Scale = 1:10.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	4-5	>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 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=36(LC 12)
Max Uplift 3=-25(LC 12), 5=-30(LC 8)
Max Grav 3=48(LC 1), 4=33(LC 3), 5=174(LC 1)

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

NOTES-

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



September 12, 2021

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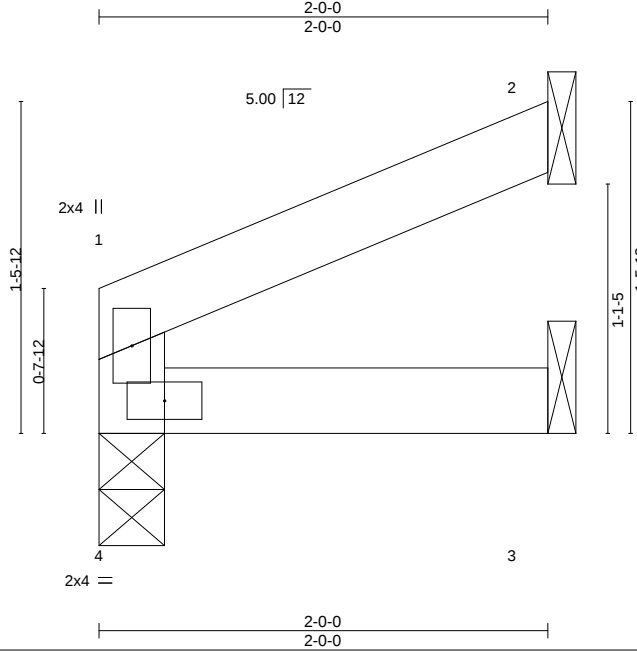
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J1A	JACK-OPEN	2	1	I47835336

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:27 2021 Page 1

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Scale = 1:10.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	4	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	3-4	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 5 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=Mechanical, 3=Mechanical, 4=0-3-8
Max Horz 4=26(LC 9)
Max Uplift 2=-28(LC 12), 4=-4(LC 12)
Max Grav 2=60(LC 1), 3=35(LC 3), 4=83(LC 1)

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

NOTES-

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



September 12, 2021

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Chesterfield, MO 63017

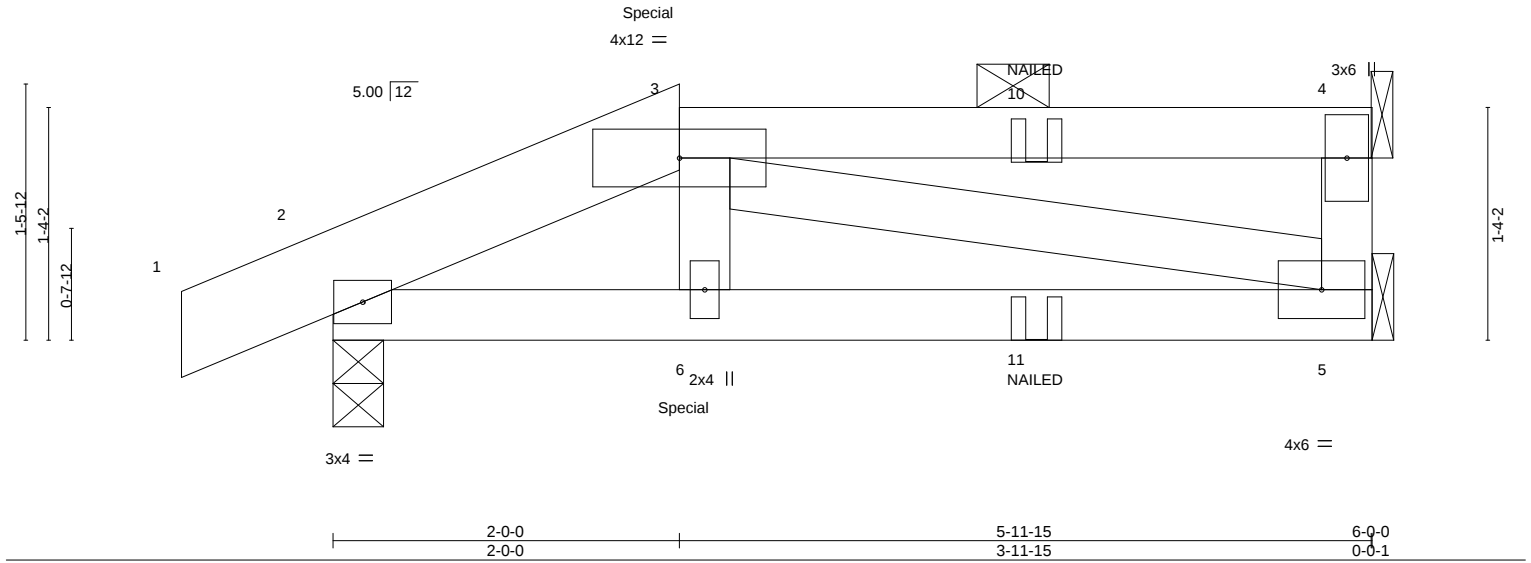
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J2	Half Hip Girder	1	1	I47835337

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:29 2021 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 0.31	Vert(LL) -0.01	5-6	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.02	5-6	>999	180			
BCLL 0.0	Rep Stress Incr NO	WB 0.09	Horz(CT) 0.00	4	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 23 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
3-4: 2x4 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, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=45(LC 7)
Max Uplift 2=-62(LC 8), 4=-48(LC 4)
Max Grav 5=137(LC 3), 2=333(LC 1), 4=135(LC 1)

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

TOP CHORD 2-3=-383/51
BOT CHORD 2-6=-57/325, 5-6=-52/333
WEBS 3-5=-345/46

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 30 lb down and 63 lb up at 2-0-0 on top chord, and 25 lb down at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-6(B) 11=1(B)



September 12, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J3	Half Hip	1	1	I47835338

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:34 2021 Page 1

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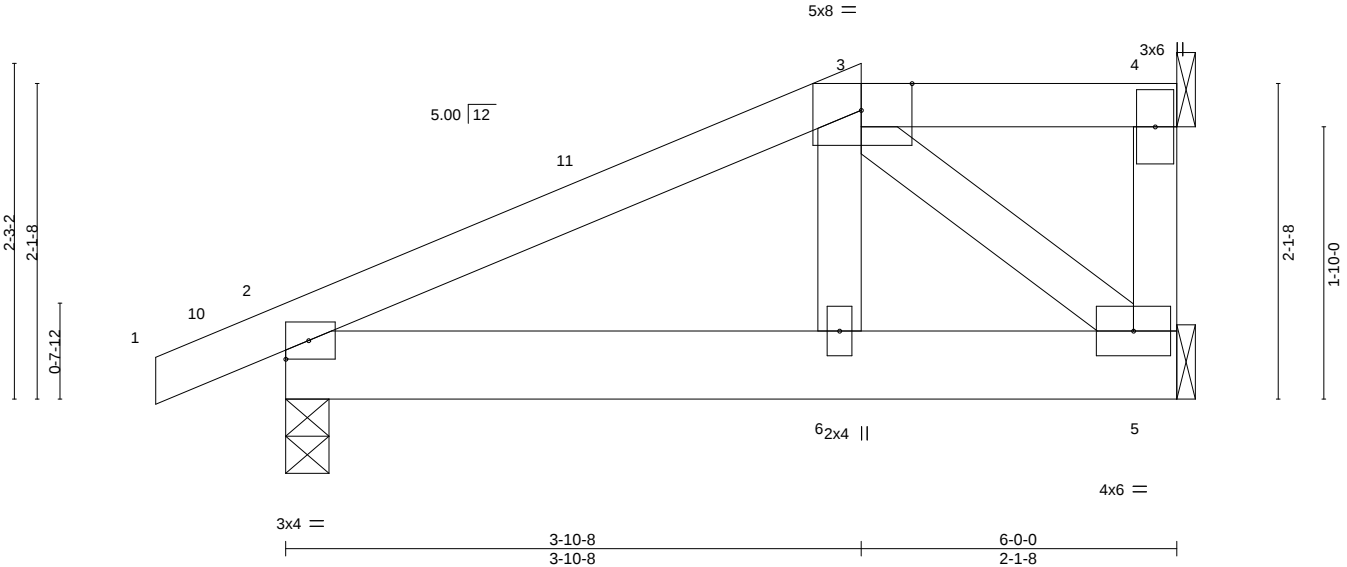


Plate Offsets (X,Y)-- [3:0-4-2,Edge]

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 0.14	Vert(LL)	-0.00	6-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	6-9	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 25 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x6 SPF No.2	2-0-0 oc purlins: 3-4.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 5=Mechanical, 4=Mechanical
Max Horz 2=71(LC 11)
Max Uplift 2=-55(LC 12), 5=-17(LC 9), 4=-25(LC 8)
Max Grav 2=329(LC 1), 5=190(LC 1), 4=69(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-277/96
WEBS 3-5=-269/163

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8, Exterior(2E) 3-10-8 to 5-10-4 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



September 12, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J4	Roof Special Girder	1	1	147835339

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:35 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-GjkwHThnPQeFjYwvHnCWtPoXcFQxiNpan953lyfKKg

Job Reference (optional)

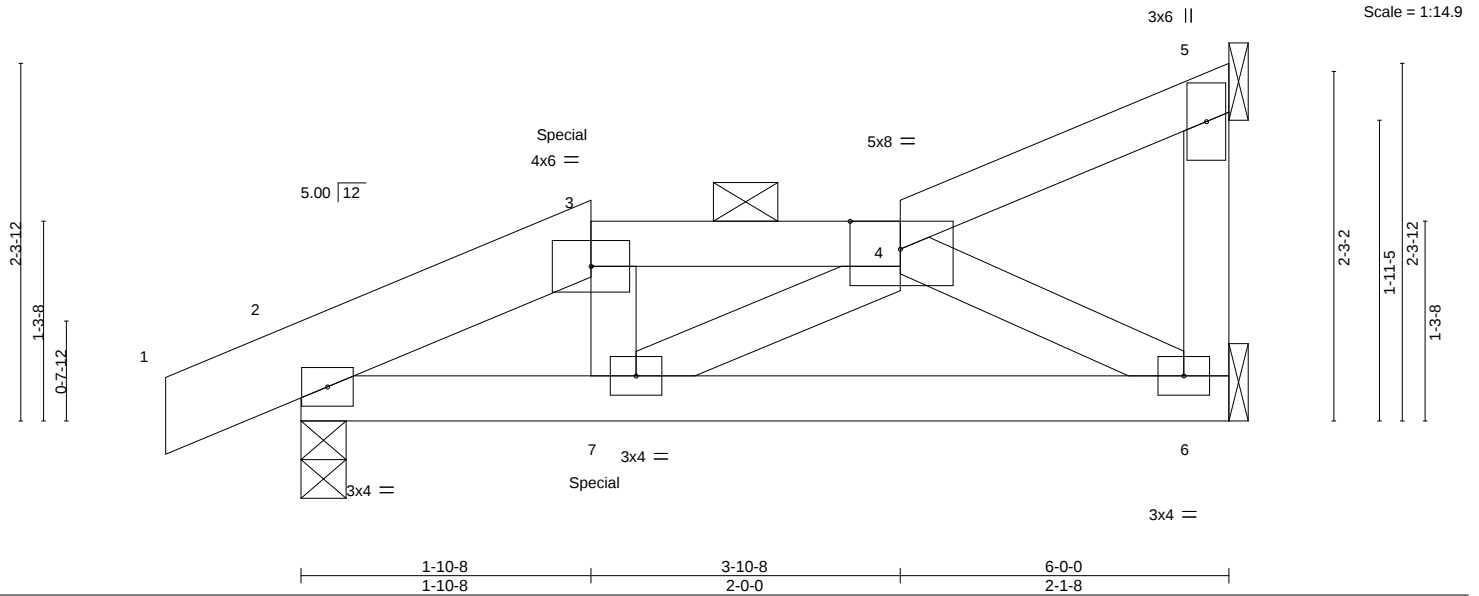


Plate Offsets (X,Y)-- [4:0-3-14,Edge]

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)	-0.01	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02	6-7	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 25 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 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, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=80(LC 7)
Max Uplift 6=-33(LC 8), 2=-68(LC 8), 5=-24(LC 8)
Max Grav 6=197(LC 1), 2=343(LC 1), 5=69(LC 1)

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

TOP CHORD 2-3=-414/62, 3-4=-362/64
BOT CHORD 2-7=-67/353, 6-7=-67/303
WEBS 4-6=-343/96

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) 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) 6, 2, 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.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 26 lb down and 58 lb up at 1-10-8 on top chord, and 27 lb down and 14 lb up at 1-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-5=-70, 6-8=-20
Concentrated Loads (lb)
Vert: 7=-20(F)



September 12, 2021

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

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

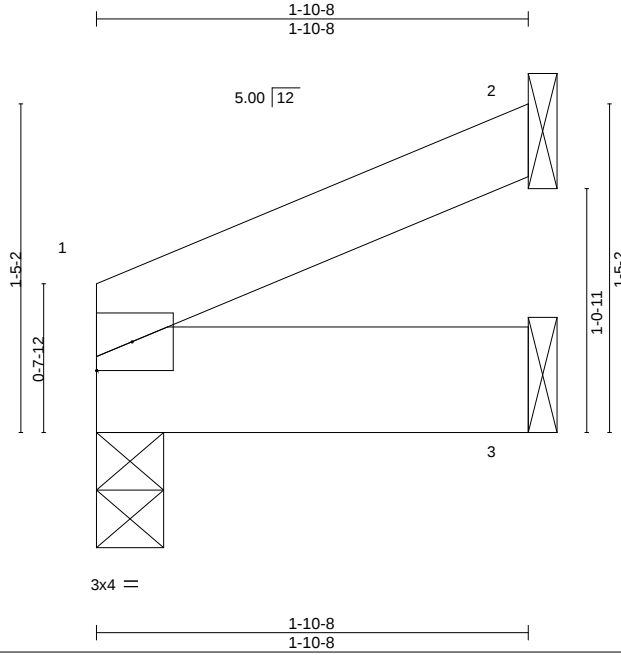


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J5	Jack-Open	1	1	I47835340

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:36 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-kvIJuolPAjm6KhV5M?IR34y_20dfg9QypRufbByfkKf



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 0.03	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	6	>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 1-10-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=28(LC 12)
Max Uplift 1=-5(LC 12), 2=-21(LC 12), 3=-4(LC 12)
Max Grav 1=84(LC 1), 2=48(LC 1), 3=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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



September 12, 2021

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



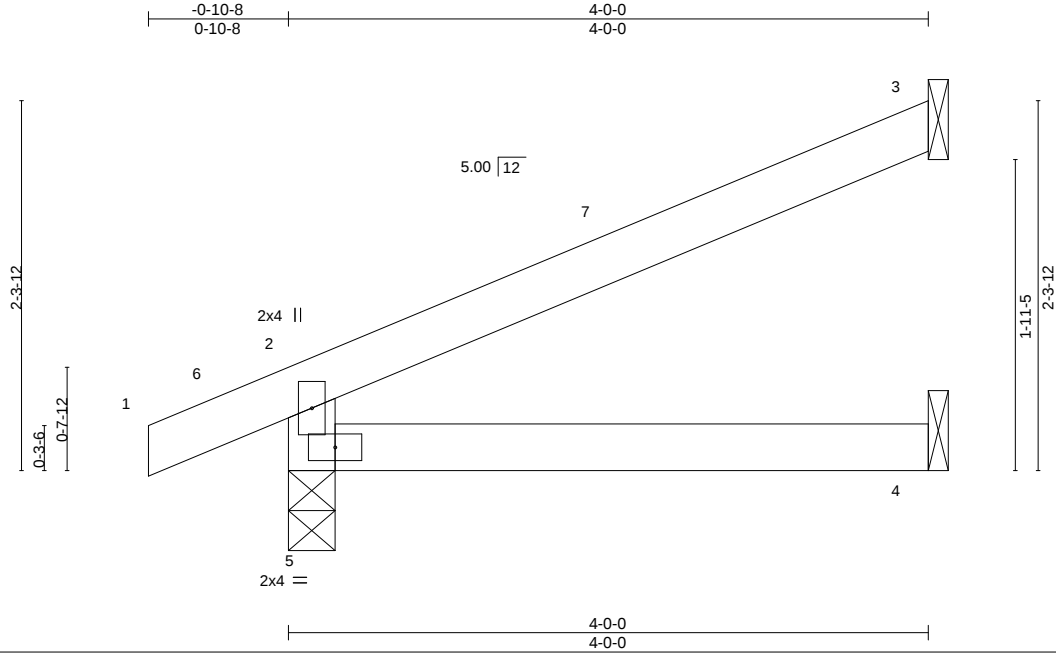
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J6	Jack-Open	9	1	I47835341

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:37 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-C5rh68l1x1uzyr4lwipgbIU7IPyNPcg515eC7eyfKKe



Scale = 1:14.4

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 0.19	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.02	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=66(LC 12)
Max Uplift 3=-53(LC 12), 5=-35(LC 12)
Max Grav 3=117(LC 1), 4=70(LC 3), 5=252(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 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) 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.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 12, 2021

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

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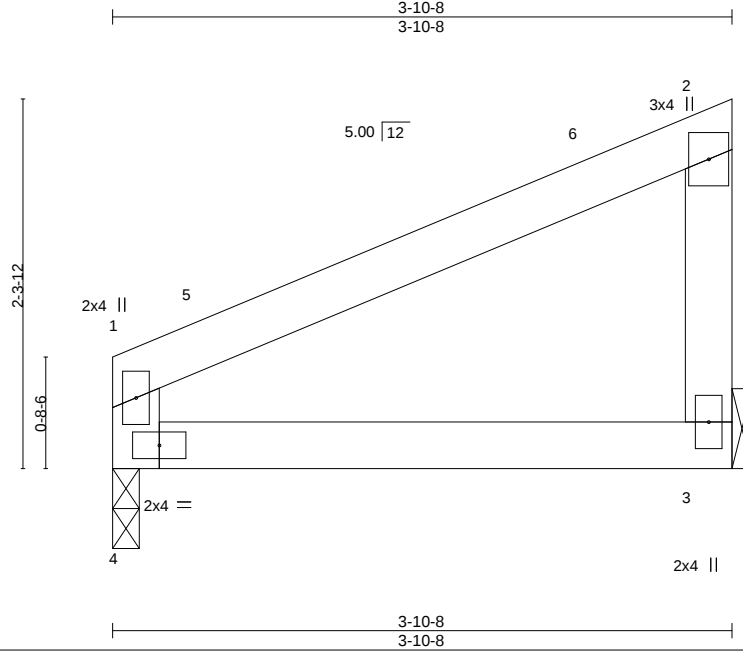
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J7	Jack-Open	1	1	I47835342

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-glP3JUJfL0qa?fUuQLv8V18plu83wFGIOlg4yfKKd



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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.18	Vert(LL)	-0.01	3-4	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT)	-0.01	3-4	>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-R						Weight: 12 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 4=0-2-0
Max Horz 4=74(LC 11)
Max Uplift 3=-38(LC 12), 4=-21(LC 12)
Max Grav 3=161(LC 1), 4=161(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 3-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 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.



September 12, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J8	Roof Special Girder	1	1	I47835343

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:40 2021 Page 1

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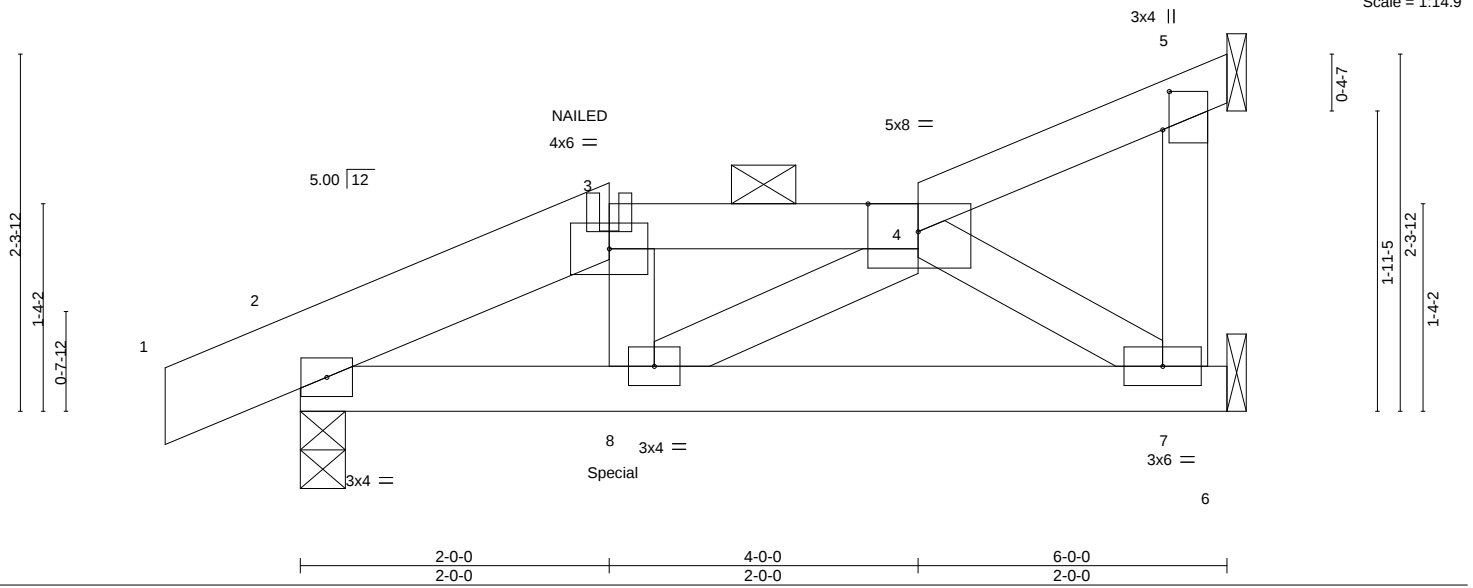


Plate Offsets (X,Y)-- [4:0-3-14,Edge], [5:0-3-0,0-0-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.08	Vert(LL)	-0.01	7-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02	7-8	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 25 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 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, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=Mechanical, 7=Mechanical, 2=0-3-8
Max Horz 2=78(LC 24)
Max Uplift 5=-21(LC 5), 7=-44(LC 8), 2=-85(LC 8)
Max Grav 5=61(LC 1), 7=228(LC 1), 2=373(LC 1)

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

TOP CHORD 2-3=-468/99, 3-4=-412/100
BOT CHORD 2-8=-101/402, 7-8=-73/294
WEBS 4-7=-349/107

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) 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) 5, 7, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 52 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-5=-70, 6-9=-20
Concentrated Loads (lb)
Vert: 8=-79(B)



September 12, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

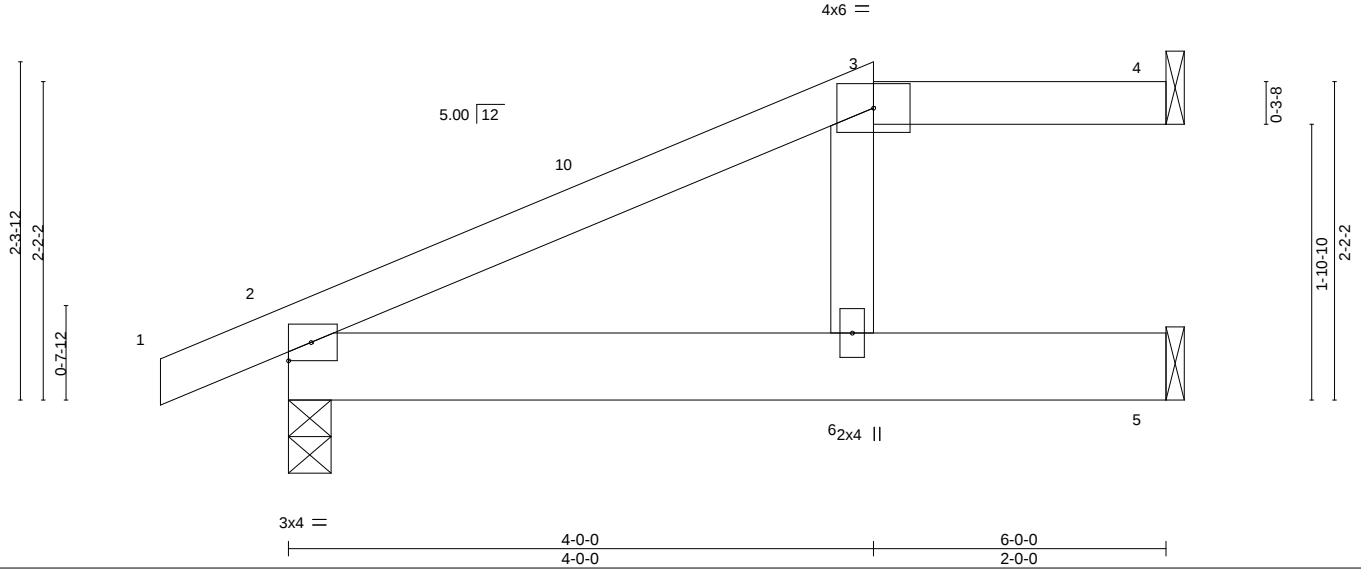
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J9	Jack-Open	2	1	l47835344

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:42 2021 Page 1
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Scale = 1:15.8



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) -0.04	6-9	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.07	6-9	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.04	4	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 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=69(LC 12)
Max Uplift 4=-24(LC 8), 2=-51(LC 12), 5=-23(LC 12)
Max Grav 4=68(LC 1), 2=333(LC 1), 5=195(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2E) 4-0-0 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

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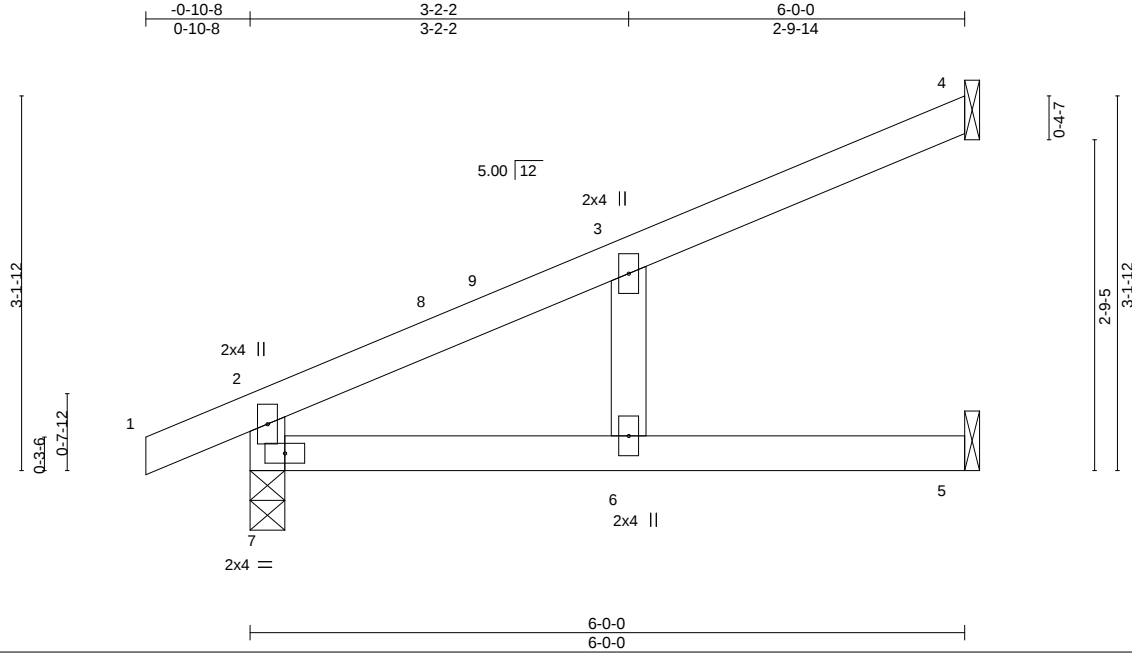
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J10	Jack-Open	6	1	I47835345

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:19 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-kemtK_5IAVdXo4iqswVstVI?I9kUBTwSvIHfVgyfKkw



Scale = 1:19.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0	TC 0.32	Vert(LL) 0.09	0.09	6	>774	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.42	Vert(CT) -0.14	-0.14	6	>482	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.03	0.03	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=97(LC 12)
Max Uplift 4=-56(LC 12), 5=-14(LC 12), 7=-44(LC 12)
Max Grav 4=153(LC 1), 5=101(LC 1), 7=338(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 12, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

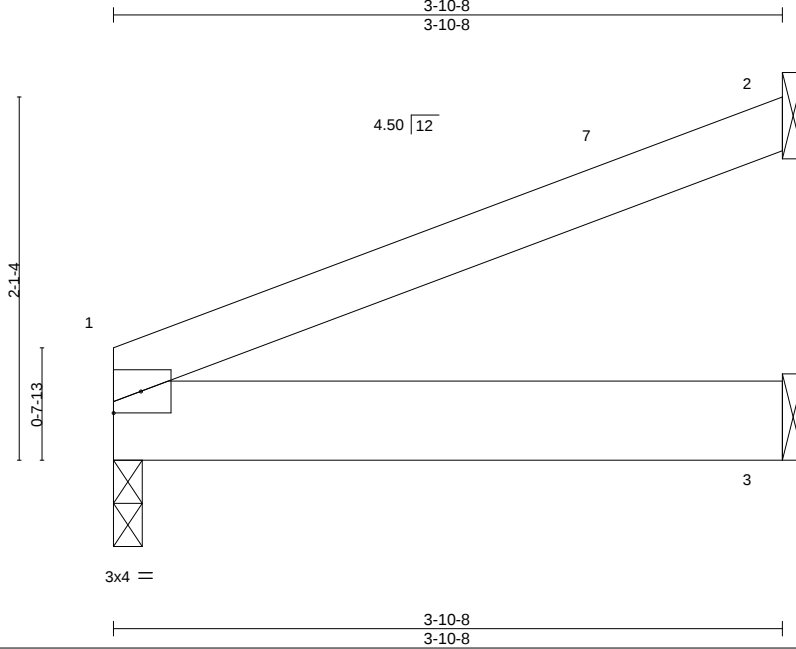
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J13	Jack-Open	1	1	I47835347

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:22 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-8DR0y07dTQ?5fYRPY229V7NZaMq8OqyubFVv5?yfKKt



Scale = 1:13.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0	TC 0.16	Vert(LL) 0.01	3-6	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) -0.01	3-6	>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: 12 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 3-10-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-2-0, 2=Mechanical, 3=Mechanical
Max Horz 1=52(LC 12)
Max Uplift 1=-17(LC 12), 2=-43(LC 12), 3=-1(LC 12)
Max Grav 1=172(LC 1), 2=104(LC 1), 3=81(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 12, 2021

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



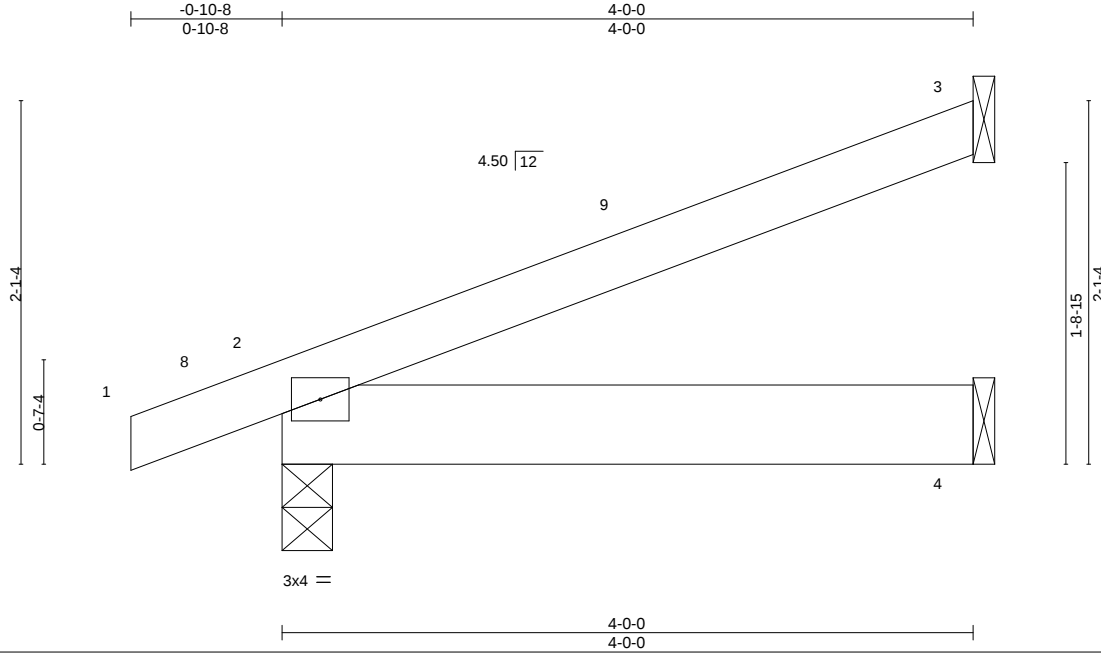
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J14	Jack-Open	3	1	I47835348

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:23 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-cP?OAM8FEk7yGi0b5mZO1LvKtmAS7HC2pvFTeSyfKks



Scale = 1:13.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) 0.01	4-7	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01	4-7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						Weight: 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 3=-43(LC 12), 2=-49(LC 8)
Max Grav 3=104(LC 1), 2=245(LC 1), 4=82(LC 3)

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

NOTES-

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



September 12, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J15	Jack-Open	2	1	I47835349

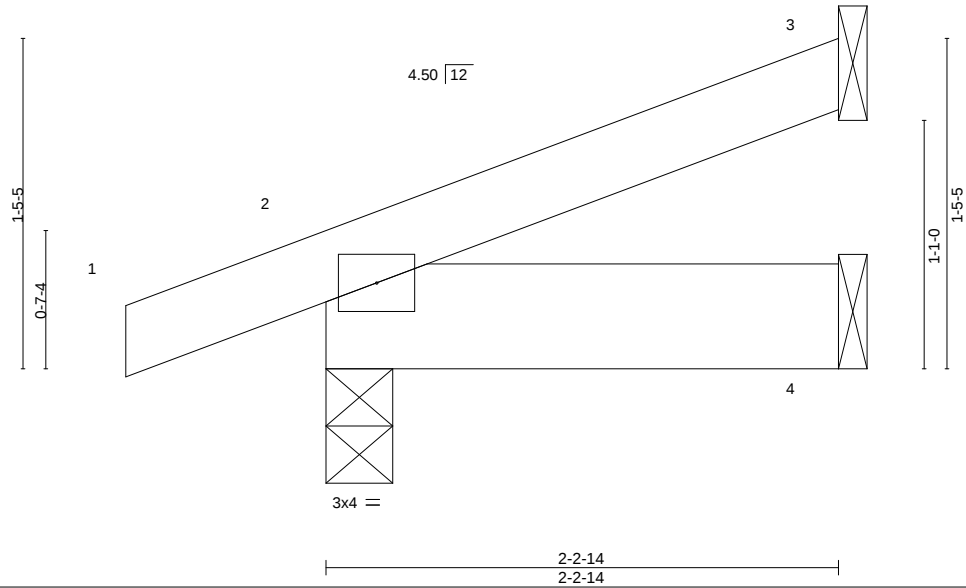
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:23 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-cP?OAM8FEk7yGi0b5mZO1Lvm?mBg7HC2pvFTeSyfKKs

-0-10-8 0-10-8 2-2-14 2-2-14

Scale = 1:10.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) -0.00	7	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-14 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=43(LC 8)
Max Uplift 3=-22(LC 12), 2=-43(LC 8), 4=-1(LC 12)
Max Grav 3=52(LC 1), 2=172(LC 1), 4=44(LC 3)

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

NOTES-

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



September 12, 2021

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

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

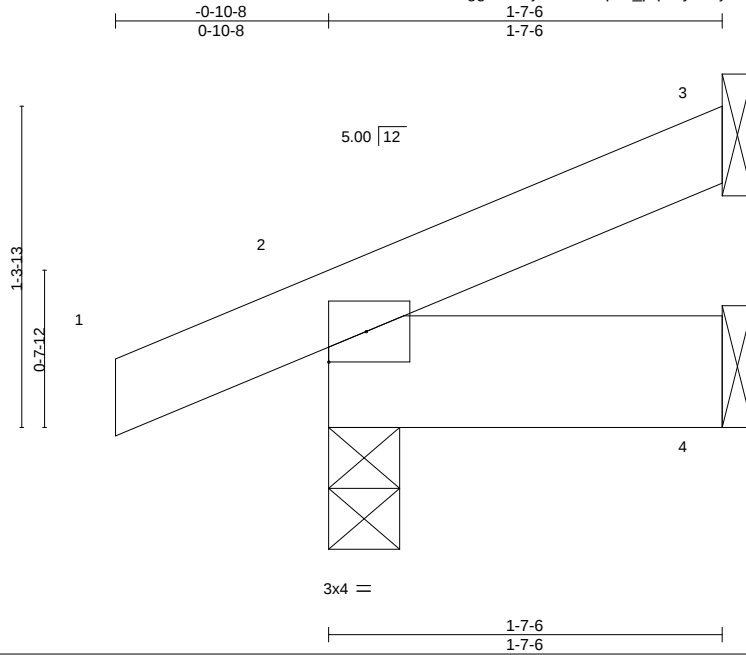


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J16	Jack-Open	1	1	I47835350

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:24 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-4bZmNi8t?1FpurbofT4daYSxIAX4skSB2Z_0AuyfKkr



Scale = 1:9.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.01	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: 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 1-7-6 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=36(LC 12)
Max Uplift 3=-17(LC 12), 2=-27(LC 8), 4=-1(LC 12)
Max Grav 3=37(LC 1), 2=150(LC 1), 4=31(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 12, 2021

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



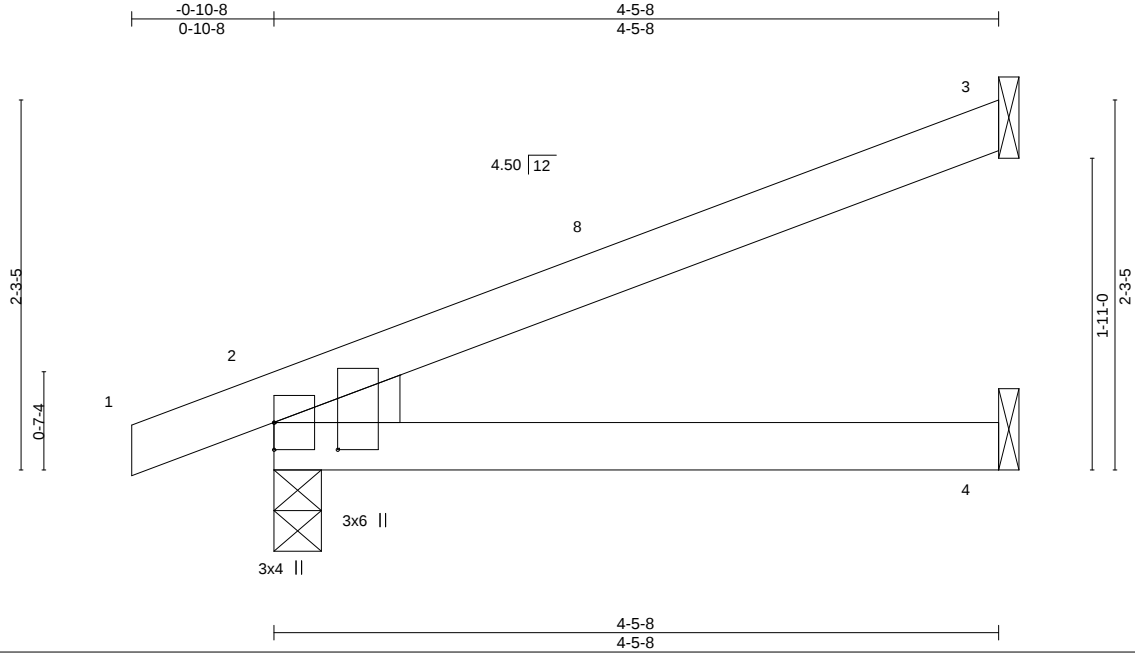
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J17	Jack-Open	3	1	I47835351

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:25 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-Yo79b29WmLNgW?9_DBcs6m?3baqPbAiKHDkZiKyfKKq



Scale = 1:14.2

Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.02 4-7 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	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: 13 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=72(LC 8)
Max Uplift 3=-52(LC 12), 2=-49(LC 8)
Max Grav 3=131(LC 1), 2=265(LC 1), 4=79(LC 3)

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

NOTES-

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



September 12, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

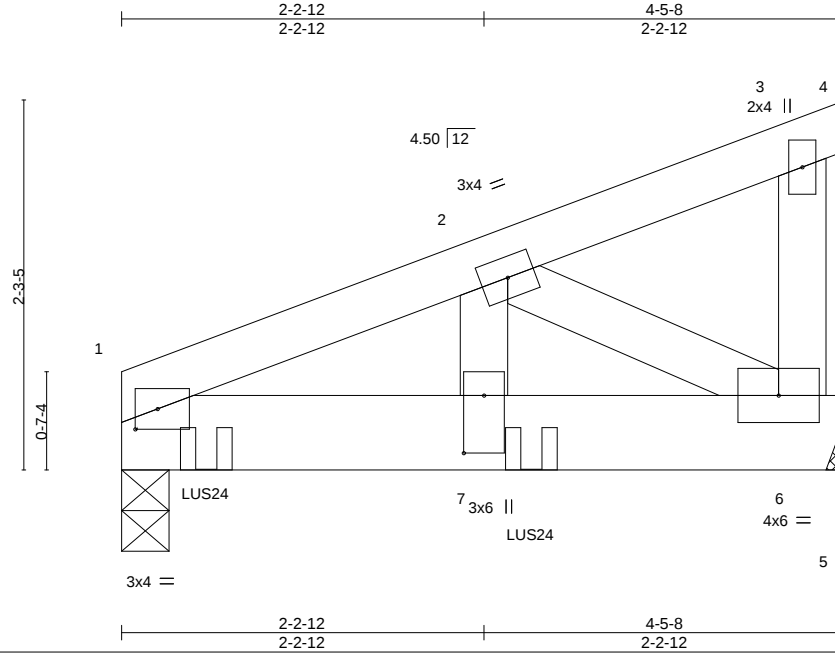
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J18	Jack-Closed Girder	1	1	I47835352

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:26 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-1_hXoOA8WfVX89kAnu75fzXGo_BvKbdUWtT7EnyfkKp



Scale = 1:14.2

Plate Offsets (X,Y)--		[1:0-1-10,0-1-8], [7:0-4-4,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSL.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08
TCDL 10.0	Lumber DOL	1.15	BC 0.12
BCLL 0.0	Rep Stress Incr	NO	WB 0.15
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.01 7 >999 240
			Vert(CT) -0.01 7 >999 180
			Horz(CT) 0.00 6 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 21 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 6=Mechanical
Max Horz 1=71(LC 27)
Max Uplift 1=-231(LC 8), 6=-156(LC 8)
Max Grav 1=1113(LC 1), 6=600(LC 1)

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

TOP CHORD 1-2=-905/215
BOT CHORD 1-7=-213/837, 6-7=-213/837
WEBS 2-7=-146/609, 2-6=-950/257

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=231, 6=156.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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 0-6-4 from the left end to 2-6-4 to connect truss(es) to front face of bottom chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-20, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-611(F) 10=-714(F)



September 12, 2021

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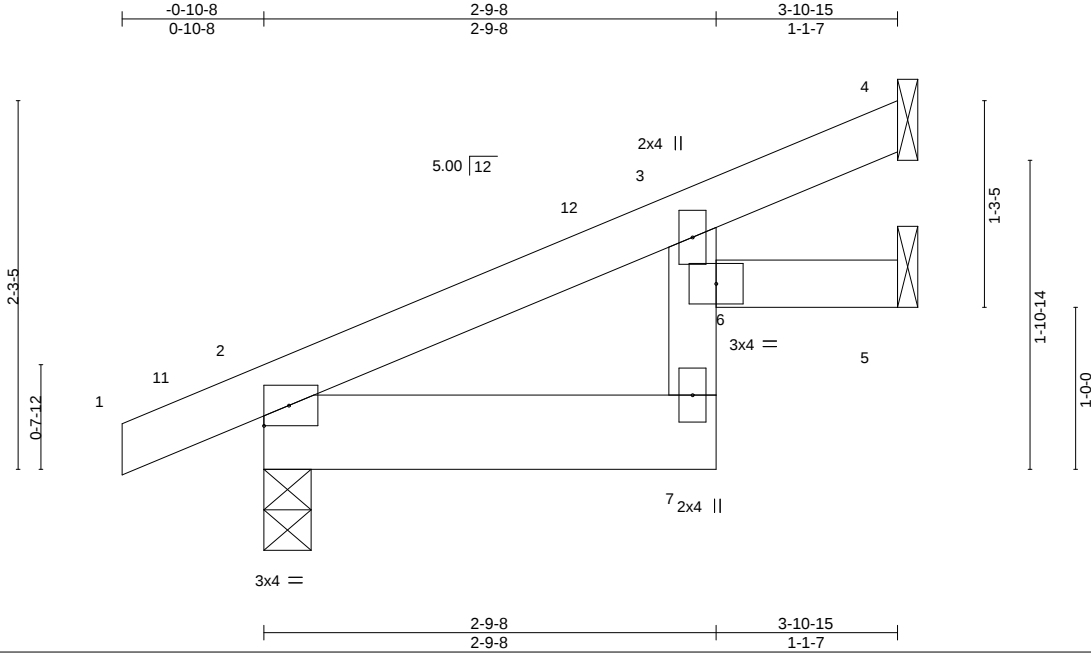
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J19	Jack-Open	2	1	l47835353

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:27 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-VAfV0jBmHyeOlJJKKceKCB4RWNWT34CdkXDgnDyfkKko



Scale = 1:14.2

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) -0.01	7	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) -0.01	7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	5	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR						Weight: 14 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-7: 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) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=70(LC 12)
Max Uplift 4=-28(LC 12), 2=-34(LC 12), 5=-18(LC 12)
Max Grav 4=81(LC 1), 2=241(LC 1), 5=85(LC 1)

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

NOTES-

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



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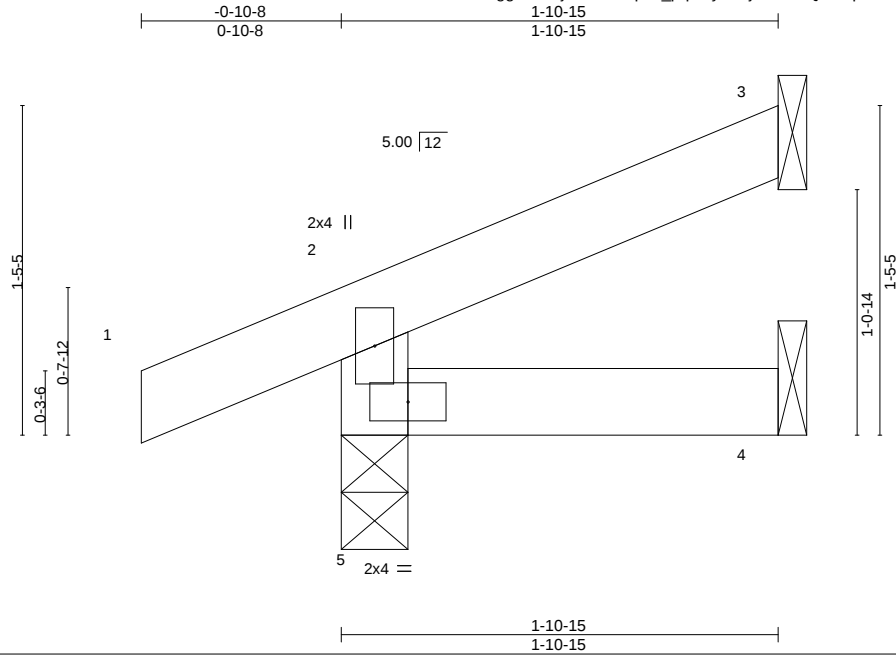


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J20	Jack-Open	6	1	I47835354
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:29 2021 Page 1
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Scale = 1:10.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=35(LC 12)
Max Uplift 3=-24(LC 12), 5=-31(LC 8)
Max Grav 3=44(LC 1), 4=31(LC 3), 5=171(LC 1)

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

NOTES-

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



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



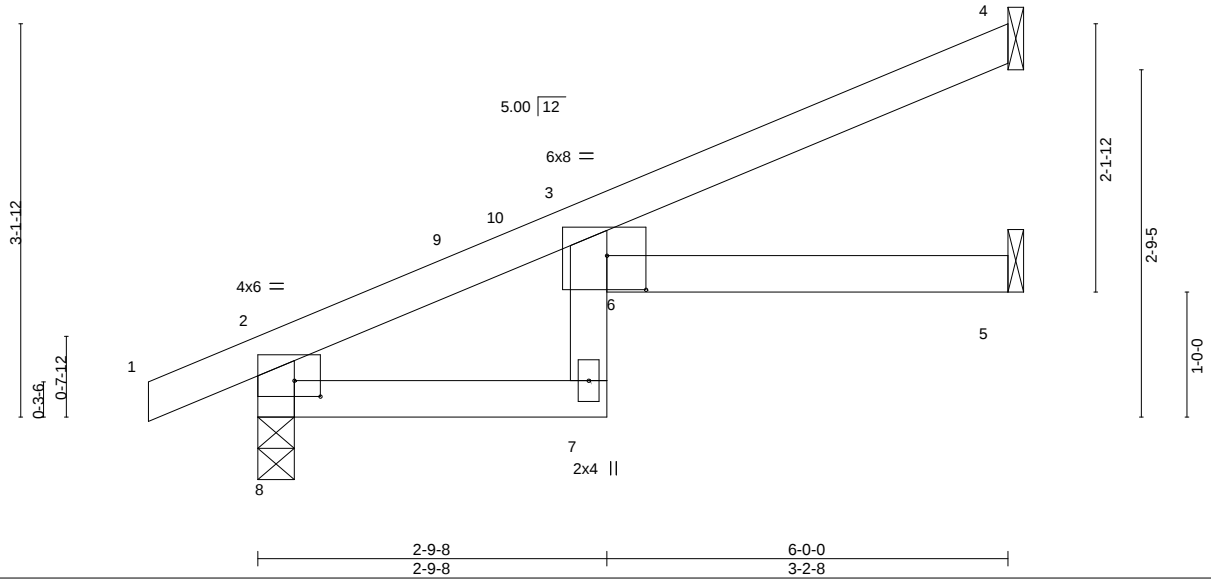
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J21	Jack-Open	3	1	I47835355

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:30 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-vlw2elDeat0zcm2x0kBlppiuGbUOGRx4QVRKNYyfkKI



Scale = 1:18.4

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	0.07	5-6	>962	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.12	5-6	>579	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.05	5	n/a	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 8=0-3-8
Max Horz 8=97(LC 12)
Max Uplift 4=62(LC 12), 5=8(LC 12), 8=44(LC 12)
Max Grav 4=164(LC 1), 5=97(LC 3), 8=338(LC 1)

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

TOP CHORD 2-8=-317/157, 2-3=-286/61

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 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) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



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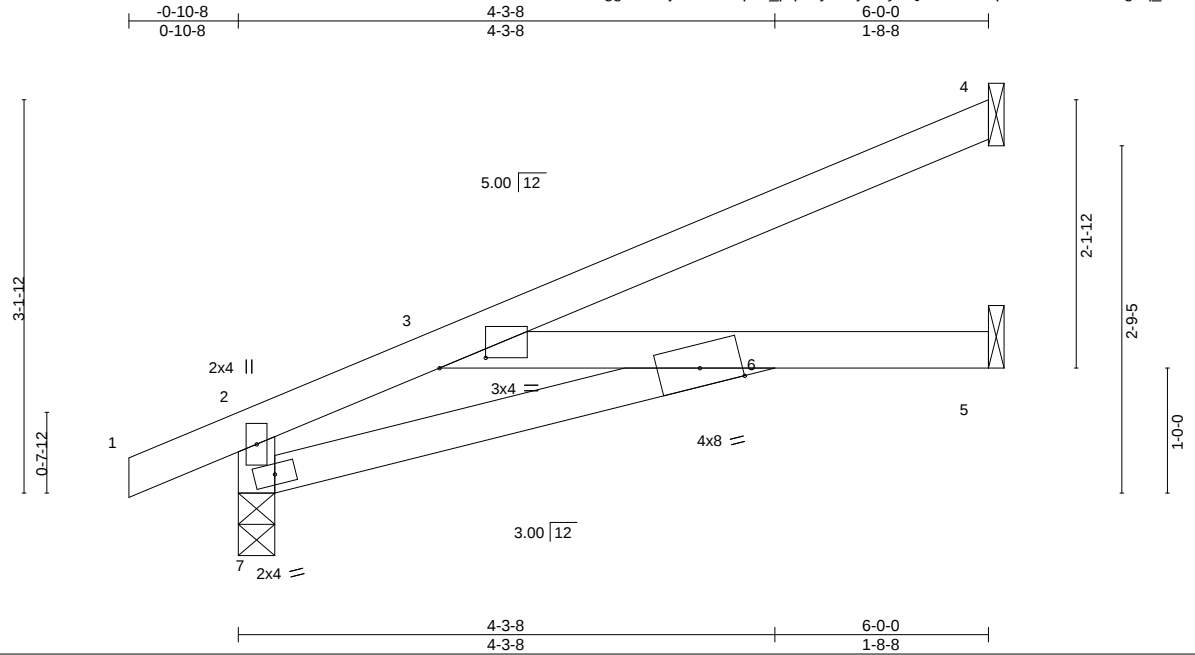
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J22	JACK-OPEN	11	1	I47835356

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:31 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-NyUQr5EGLB8qEwd8ZRiGM1E1g?q_uZDF9Buw_yfKKk



Scale = 1:18.4

Plate Offsets (X,Y)-- [3:0-4-7,0-1-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.46	Vert(LL)	-0.07	6-10	>931	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.15	6-10	>468	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.03	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 19 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=102(LC 12)
Max Uplift 4=-56(LC 12), 5=-4(LC 12), 7=-31(LC 12)
Max Grav 4=167(LC 1), 5=141(LC 3), 7=366(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-325/180

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-11, Interior(1) 2-3-11 to 5-11-4 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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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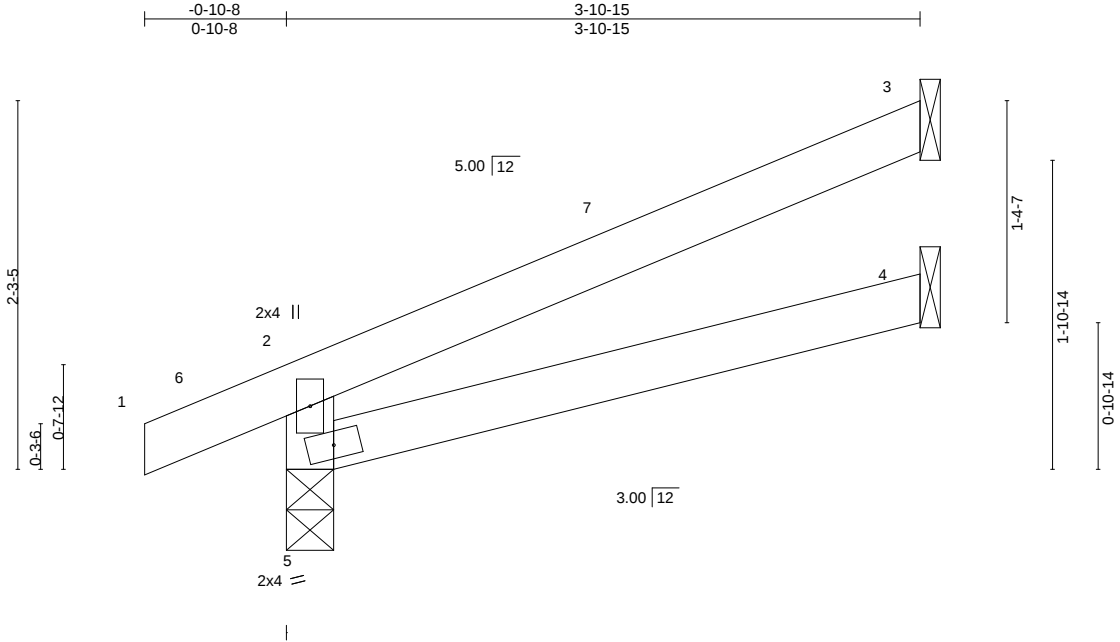
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J23	Jack-Open	2	1	I47835357

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:32 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-r82o3RFv6VGhs4CK79EVuEnFWOEGkLRMupwRSQyfKKj



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.02	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-15 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=64(LC 12)
Max Uplift 3=-51(LC 12), 5=-34(LC 12)
Max Grav 3=114(LC 1), 4=69(LC 3), 5=248(LC 1)

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

NOTES-

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



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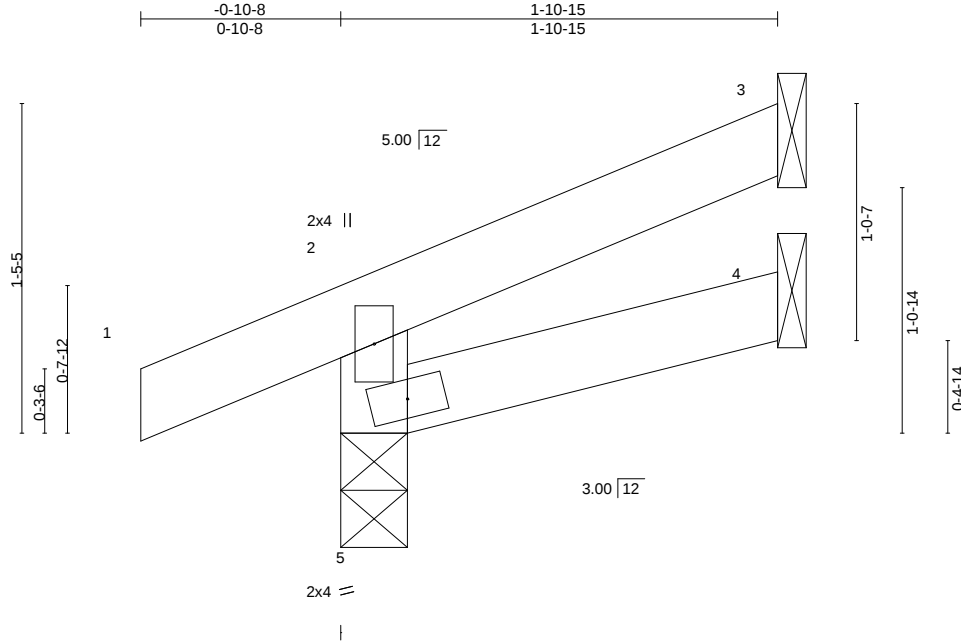
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J24	Jack-Open	2	1	I47835358

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:33 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-JKcAGnFXtoOYTEnWhslkRSKSCob?TohW7Tg_tyfKKi



Scale = 1:10.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-15 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=35(LC 12)
Max Uplift 3=-24(LC 12), 5=-30(LC 8)
Max Grav 3=44(LC 1), 4=31(LC 3), 5=171(LC 1)

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

NOTES-

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



September 12, 2021

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

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



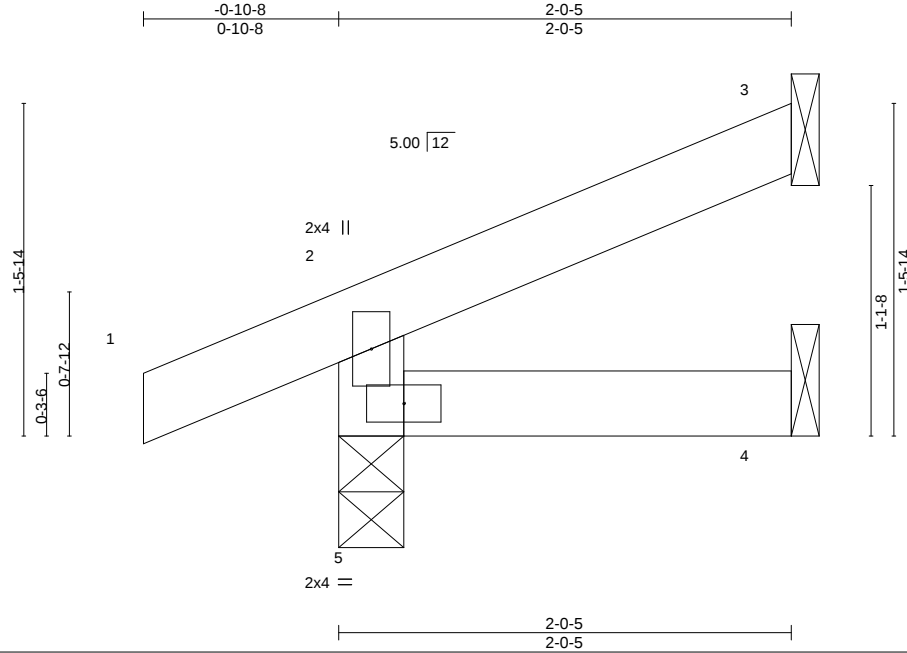
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	J25	Jack-Open	1	1	I47835359

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:33 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-JKcAGnFXtoOYTEnWhslkRSKSCob?TohW7Tg_tyfKKi



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) -0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	5	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR					Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=36(LC 12)
Max Uplift 3=-25(LC 12), 5=-31(LC 8)
Max Grav 3=47(LC 1), 4=33(LC 3), 5=173(LC 1)

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

NOTES-

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



September 12, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	LG1	GABLE	1	1	I47835360

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:46 2021 Page 1
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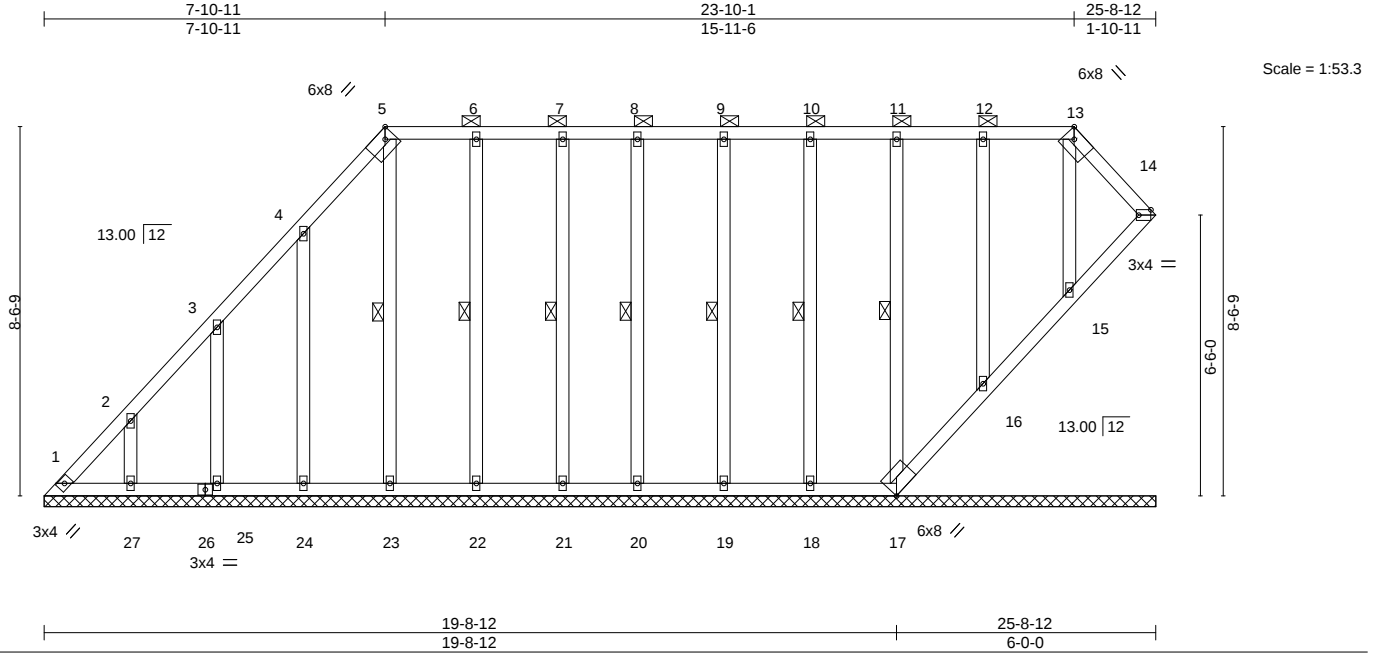


Plate Offsets (X,Y)--		[5:0-2-9,Edge], [13:0-2-9,Edge], [14:Edge,0-1-8]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB 0.11	Horz(CT)	-0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 154 lb	FT = 20%

LUMBER-

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

REACTIONS.

All bearings 25-8-12.
(lb) - Max Horz 1=263(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 15, 16, 17, 18, 19, 20, 23, 22, 21 except 27=121(LC 12),
25=119(LC 12), 24=122(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 14, 15, 16, 17, 18, 19, 20, 27, 25, 24, 23, 22, 21

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=317/222

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-11, Exterior(2R) 7-10-11 to 12-0-0, Interior(1) 12-0-0 to 23-10-1, Exterior(2E) 23-10-1 to 25-6-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 14, 15, 16, 17, 18, 19, 20, 23, 22, 21 except (jt=lb) 27=121, 25=119, 24=122.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14, 15, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

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



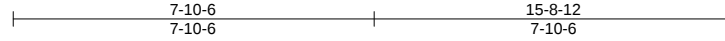
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	LG2	GABLE	1	1	I47835361

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:48 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-ND0rQvRxLPHmXP3WWFYcS1ZrjUYajZlpH0VykKt



4x6 =

Scale = 1:50.2

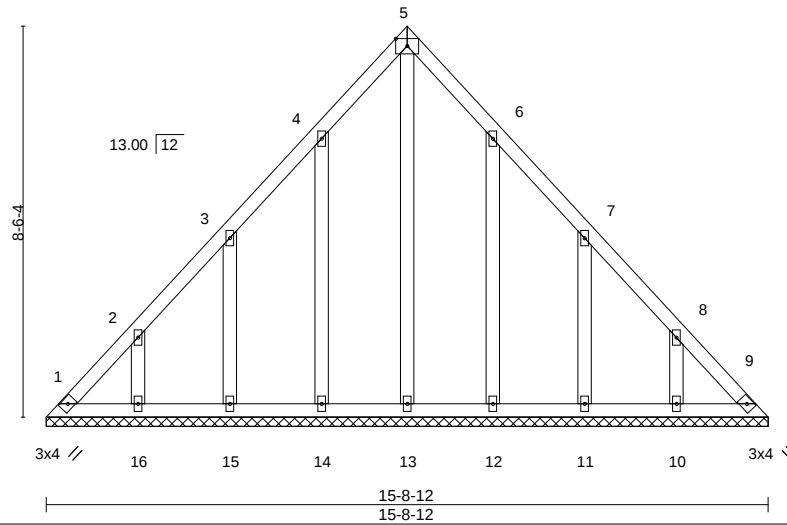


Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [3:0-0-0,0-0-0], [4:0-0-0,0-0-0], [5:Edge,0-1-15]

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 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 78 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 15-8-12.
(lb) - Max Horz 1=-196(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 10=-120(LC 13), 11=-122(LC 13), 12=-113(LC 13),
16=-120(LC 12), 15=-121(LC 12), 14=-115(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 10, 11, 12, 16, 15, 14

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-262/168

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 10=120, 11=122, 12=113, 16=120, 15=121, 14=115.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 12, 2021

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

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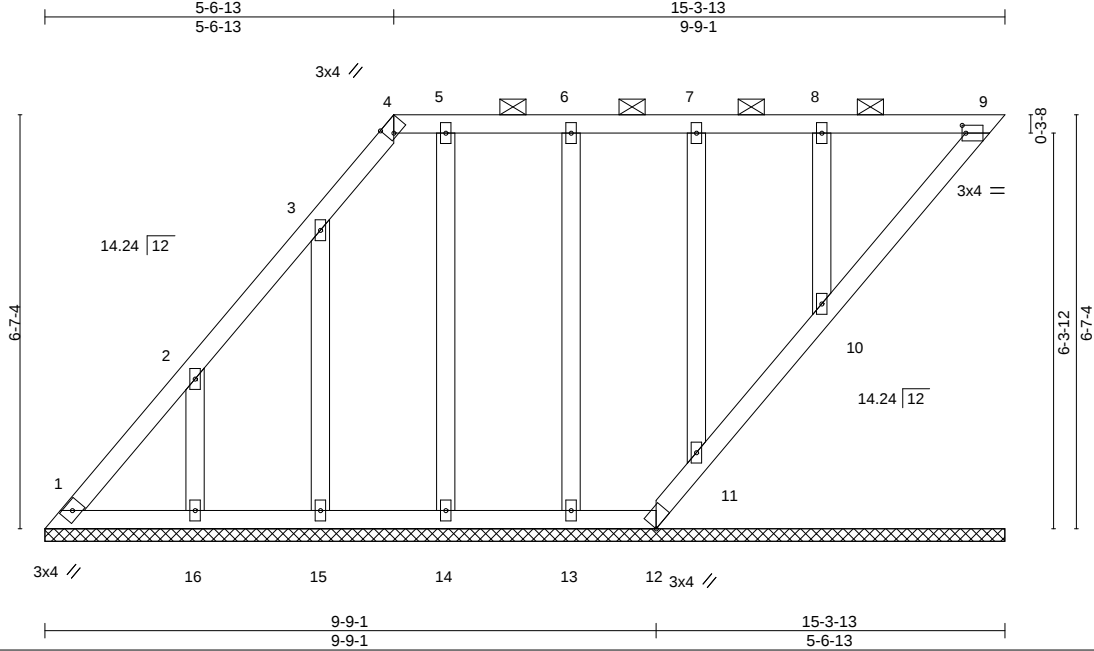


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	LG3	GABLE	1	1	147835362

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:50 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-Kc8bqbTBt1X70ranBxYjd1XMjIPWYTH01clO5NyfkKR



Scale = 1:36.8

Plate Offsets (X,Y)--		[4:0-1-5,Edge], [9:0-0-11,0-1-8]			
		9-9-1		15-3-13	
		9-9-1		5-6-13	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	in (loc) l/defl L/d	GRIP
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(LL) n/a - n/a 999	MT20 197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Vert(CT) n/a - n/a 999	
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S	Horz(CT) -0.00 9 n/a n/a	Weight: 72 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.): 4-9.
OTHERS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-3-13.
(lb) - Max Horz 1=233(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 14, 13, 11, 10 except 16=-163(LC 12), 15=-105(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 16, 15, 14, 13, 11 except 10=254(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-12 to 3-3-12, Interior(1) 3-3-12 to 5-6-13, Exterior(2R) 5-6-13 to 8-4-12, Interior(1) 8-4-12 to 15-0-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 12, 14, 13, 11, 10 except (jt=lb) 16=163, 15=105.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:51 2021 Page 1
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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.): 4-9.
OTHERS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

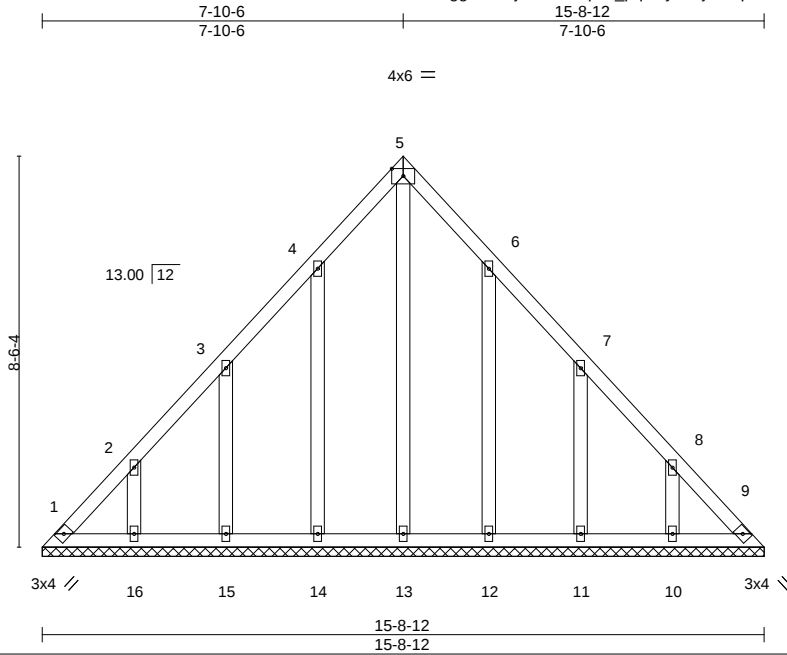
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-12 to 3-3-12, Interior(1) 3-3-12 to 5-1-14, Exterior(2R) 5-1-14 to 8-0-0, Interior(1) 8-0-0 to 14-7-15 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 12, 14, 13, 11, 10 except (jt=lb) 16=145, 15=111.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	LG5	GABLE	1	1	I47835364

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:53 2021 Page 1
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Scale = 1:50.2

Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [3:0-0-0,0-0-0], [4:0-0-0,0-0-0], [5:Edge,0-1-15]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 78 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 15-8-12.
(lb) - Max Horz 1=-196(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 10=-120(LC 13), 11=-122(LC 13), 12=-113(LC 13),
16=-120(LC 12), 15=-121(LC 12), 14=-115(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 10, 11, 12, 16, 15, 14

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-262/168

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 10=120, 11=122, 12=113, 16=120, 15=121, 14=115.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 12, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

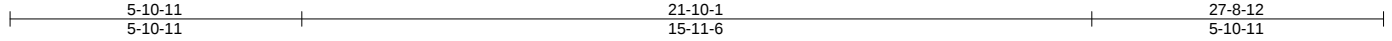
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	LG6	GABLE	1	1	I47835365

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

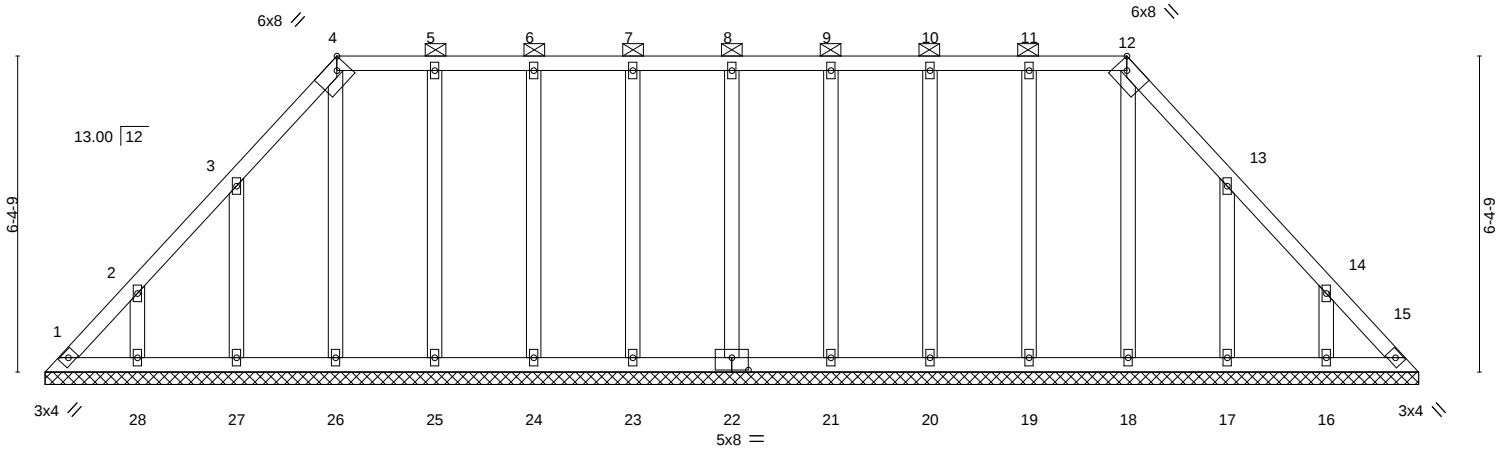
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:54 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-CNN6gyWiwF1ZUSiZQndoth37GmvuHMcyEGcE9yfkKN

Job Reference (optional)



Scale = 1:46.5



27-8-12									
27-8-12									
Plate Offsets (X,Y)-- [4:0-2-9,Edge], [12:0-2-9,Edge], [22:0-4-0,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL 25.0		Plate Grip DOL 1.15		TC 0.05	Vert(LL) n/a -	n/a	999	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.02	Vert(CT) n/a -	n/a	999		
BCLL 0.0		Rep Stress Incr YES		WB 0.10	Horz(CT) 0.01 15	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S				Weight: 140 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	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 27-8-12.
 (lb) - Max Horz 1=-145(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=-129(LC 12),
 28=-114(LC 12), 17=-129(LC 13), 16=-115(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17, 16

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 5-10-11, Exterior(2R) 5-10-11 to 9-10-6, Interior(1) 9-10-6 to 21-10-1, Exterior(2R) 21-10-1 to 25-10-6, Interior(1) 25-10-6 to 27-4-12 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
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except (jt=lb) 27=129, 28=114, 17=129, 16=115.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 12, 2021

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

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

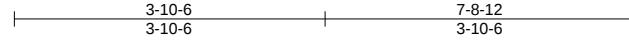


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	LG7	GABLE	1	1	I47835366

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:56 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-8IVt5eXyStHHkm1xXBf7tlnPd4SNMCzuPYlil1yfKKL



4x6 =

Scale = 1:28.6

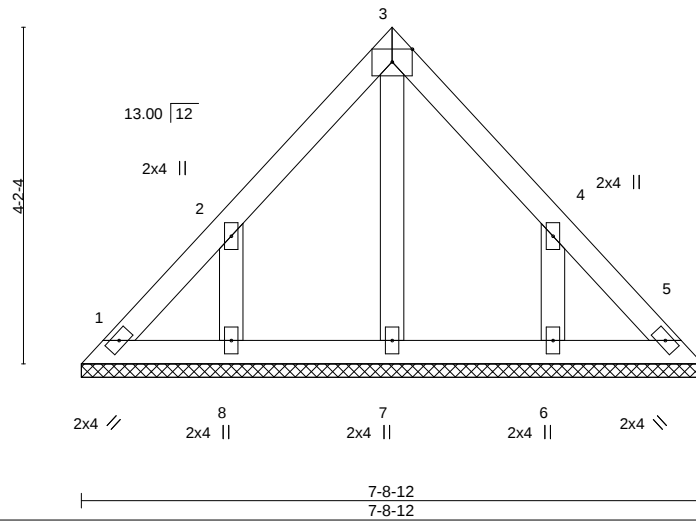


Plate Offsets (X,Y)-- [3:Edge,0-1-15]											
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.05		Vert(LL)	n/a -	n/a	999	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.02		Vert(CT)	n/a -	n/a	999		
BCLL 0.0		Rep Stress Incr	YES	WB 0.03		Horz(CT)	0.00 5	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P						Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 7-8-12.
(lb) - Max Horz 1=92(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=133(LC 12), 6=133(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 3-10-6, Exterior(2R) 3-10-6 to 6-10-6, Interior(1) 6-10-6 to 7-4-12 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=133, 6=133.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 12, 2021

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

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

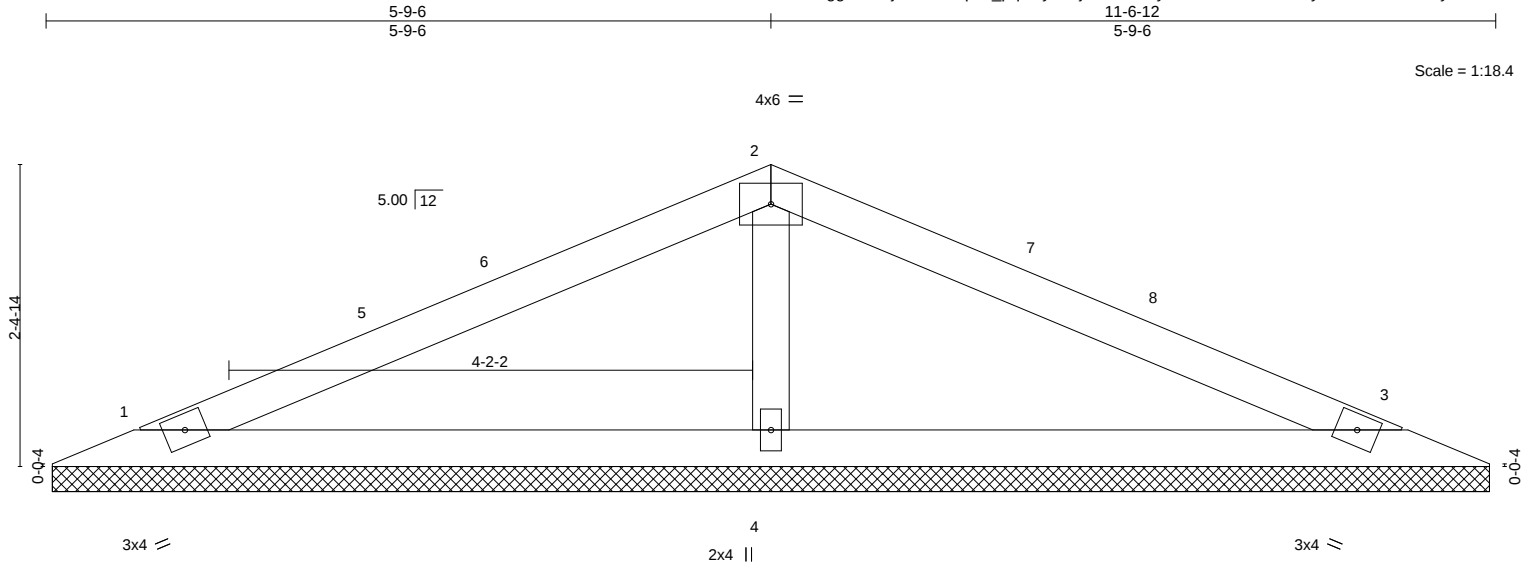


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	V1	Valley	1	1	I47835367

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:56 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-8IVt5eXyStHHkm1xXBf7tlnKy4PUMCbuPYlil1yfKKL



0-0-10	11-6-12
0-0-10	11-6-2

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 0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=11-5-8, 3=11-5-8, 4=11-5-8
Max Horz 1=33(LC 16)
Max Uplift 1=-39(LC 12), 3=-45(LC 13), 4=-38(LC 12)
Max Grav 1=205(LC 25), 3=205(LC 26), 4=506(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-355/178

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-9-6, Exterior(2R) 5-9-6 to 8-9-6, Interior(1) 8-9-6 to 10-9-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

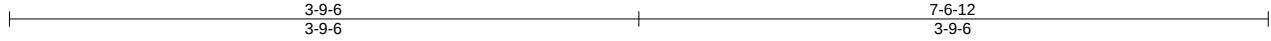
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #134/MO
2928314	V2	Valley	1	1	I47835368

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

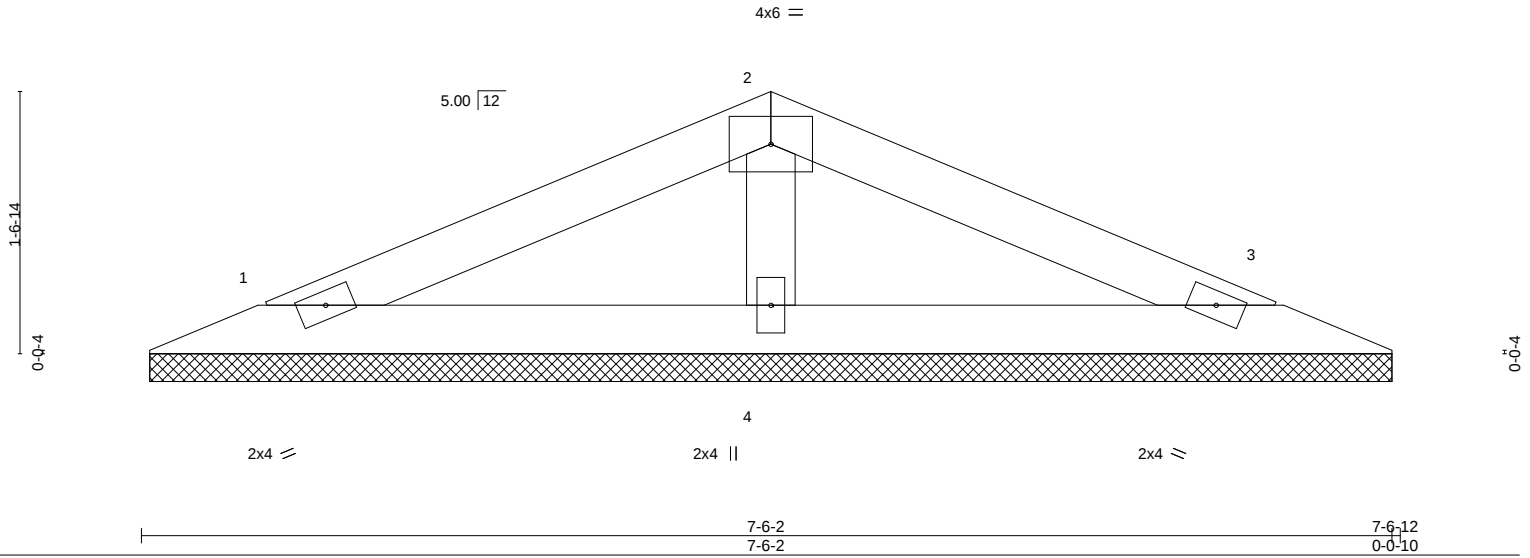
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 9 15:04:57 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-dy3FI_YaDAP8Mwc85vAMPVJYhTnn5fE2eCUGqUyfkKK

Job Reference (optional)



Scale = 1:13.8



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 0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-5-8, 3=7-5-8, 4=7-5-8
Max Horz 1=-20(LC 17)
Max Uplift 1=-29(LC 12), 3=-32(LC 13), 4=-13(LC 12)
Max Grav 1=135(LC 1), 3=135(LC 1), 4=275(LC 1)

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

NOTES-

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



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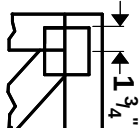
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



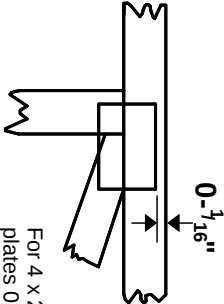
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

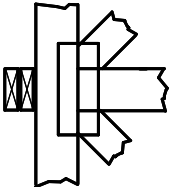
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



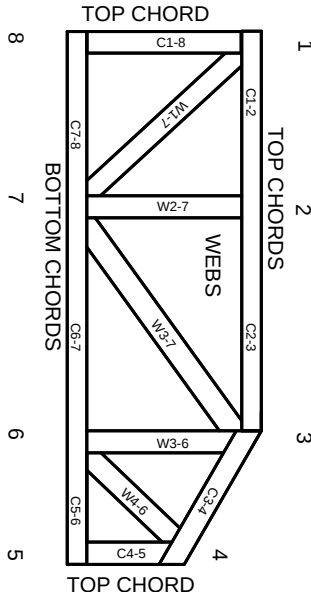
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.