



MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: 2630107
Summit/43 Woodside Ridge/MO

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/18/2021

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: I44694246 thru I44694311

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

Missouri COA: Engineering 001193



February 5, 2021

Johnson, Andrew ,Engineer

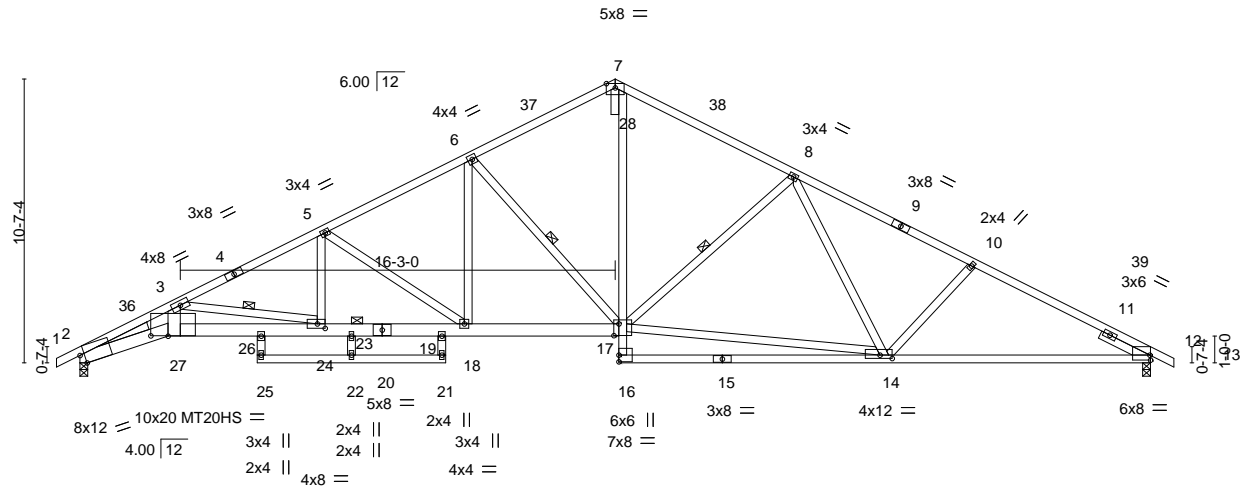
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694246
2630107	A1	Roof Special	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:10:58 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-kLGLNZaogv4jxOjhZLkouQCFzoSQbnWvmd_5RzoCbR



Scale = 1:86.1

Plate Offsets (X,Y)--		[2:0-2-0,Edge], [12:Edge,0-2-4], [14:0-5-7,0-1-8], [17:0-2-4,0-5-4], [24:0-3-8,0-2-0], [27:0-7-12,0-0-2]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.87	in (loc) l/defl L/d
TCDL 20.0	Lumber DOL 1.15	BC 0.85	Vert(LL) -0.31 17-18 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.93	Vert(CT) -0.73 14-16 >660 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.36 12 n/a n/a
			PLATES
			MT20 197/144
			MT20HS 148/108
			Weight: 215 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
7-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-27,20-27: 2x6 SPF 2100F 1.8E, 17-20: 2x6 SPF No.2
12-15: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except*
3-27: 2x6 SPF No.2

WEDGE

Left: 2x4 SP No.3

SLIDER Right 2x4 SPF No.2 2-0-0

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
Max Horz 2=186(LC 12)
Max Uplift 2=317(LC 12), 12=317(LC 13)
Max Grav 2=2270(LC 1), 12=2284(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7259/1125, 3-5=-4737/665, 5-6=-3646/514, 6-7=-2727/460, 7-8=-2815/463,
8-10=-3519/503, 10-12=-3827/526
BOT CHORD 2-27=-1152/6510, 26-27=-1125/6388, 24-26=-1114/6283, 23-24=-619/4081,
19-23=-619/4081, 18-19=-630/4187, 17-18=-376/3153, 7-17=-259/1876, 14-16=0/317,
12-14=-365/3313
WEBS 3-27=-192/1319, 14-17=-262/2658, 8-17=-859/312, 8-14=-54/340, 10-14=-428/218,
6-17=-1212/312, 6-18=-118/849, 5-18=-1249/307, 5-24=-68/627, 3-24=-2236/504

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-1-9, Exterior(2R) 20-1-9 to 23-1-9, Interior(1) 23-1-9 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 27 = 8%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 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 317 lb uplift at joint 2 and 317 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2



February 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694246
2630107	A1	Roof Special	1	1	Job Reference (optional)	

NOTES-

9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694247
2630107	A2	Roof Special	3	1		

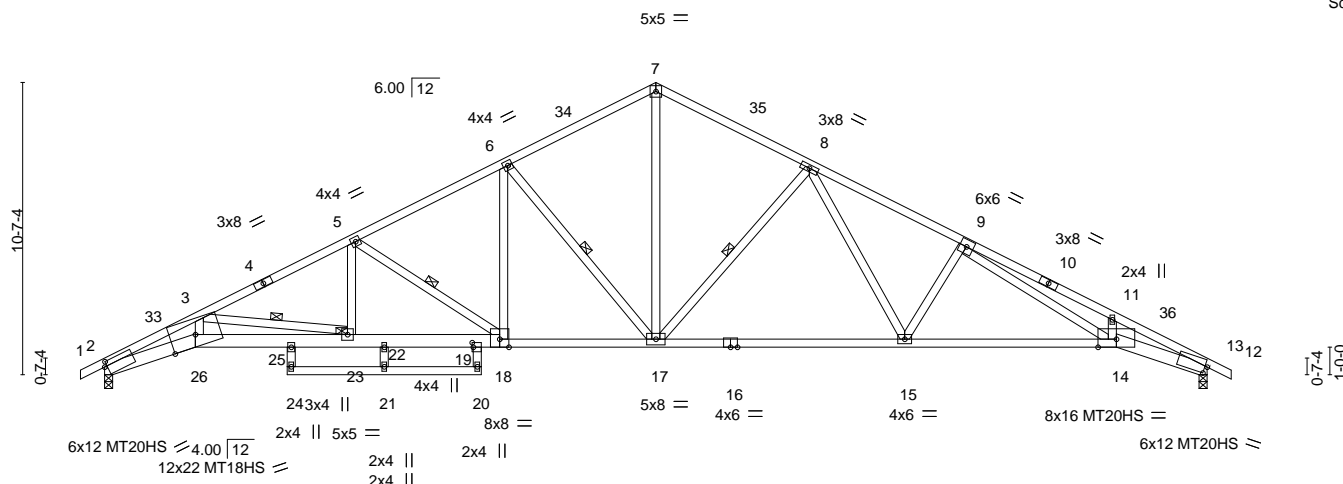
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:00 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-hjO5oFb2CWKRBit4gmngzrHa3c6n3lvC7465AJzoCbP

0-10-8 3-3-8 6-7-8 8-11-8 13-8-0 14-5-12 20-0-0 25-6-13 31-1-11 36-8-8 40-0-0 40-10-8
0-10-8 3-3-8 3-4-0 2-4-0 4-8-8 0-9-12 5-6-4 5-6-13 5-6-13 5-6-13 3-3-8 0-10-8

Scale = 1:83.6



	3-3-8	6-7-8	8-11-8	10-1-12	13-8-0	14-5-12	20-0-0	29-0-5	36-8-8	40-0-0
	3-3-8	3-4-0	2-4-0	1-2-4	3-6-4	0-9-12	5-6-4	9-0-5	7-8-3	3-3-8

Plate Offsets (X,Y)-- [2:0-1-3,0-2-1], [12:0-1-0,0-3-0], [19:0-2-0,0-0-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.90	Vert(LL)	-0.37 14-15	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.87 14-15	>554	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.49 12	n/a	n/a	MT18HS	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 213 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
2-26,18-26,12-14: 2x6 SPF 2100F 1.8E, 14-16: 2x4 SPF 1650F 1.5E	WEBS 1 Row at midpt 8-17, 6-17, 5-18, 3-23
WEBS 2x4 SPF No.2	JOINTS 1 Brace at Jt(s): 23

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7385/1139, 3-5=-4808/670, 5-6=-3649/516, 6-7=-2787/463, 7-8=-2788/462,
8-9=-4245/585, 9-11=-7279/1030, 11-12=-7434/926
BOT CHORD 2-26=-1163/6621, 25-26=-1106/6281, 23-25=-1094/6160, 22-23=-623/4134,
19-22=-623/4134, 18-19=-635/4238, 17-18=-374/3138, 15-17=-241/3134,
14-15=-399/4173, 12-14=-779/6668
WEBS 3-26=-195/1350, 7-17=-257/1893, 8-17=-1139/320, 8-15=-185/1170, 9-15=-944/272,
9-14=-456/2787, 6-17=-1153/321, 6-18=-128/787, 5-18=-1344/315, 5-23=-76/719,
3-23=-2054/477

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are MT20 plates unless otherwise indicated.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 317 lb uplift at joint 2 and 317 lb uplift at joint 12.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 5, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694248
2630107	A3	Hip	1	1		

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

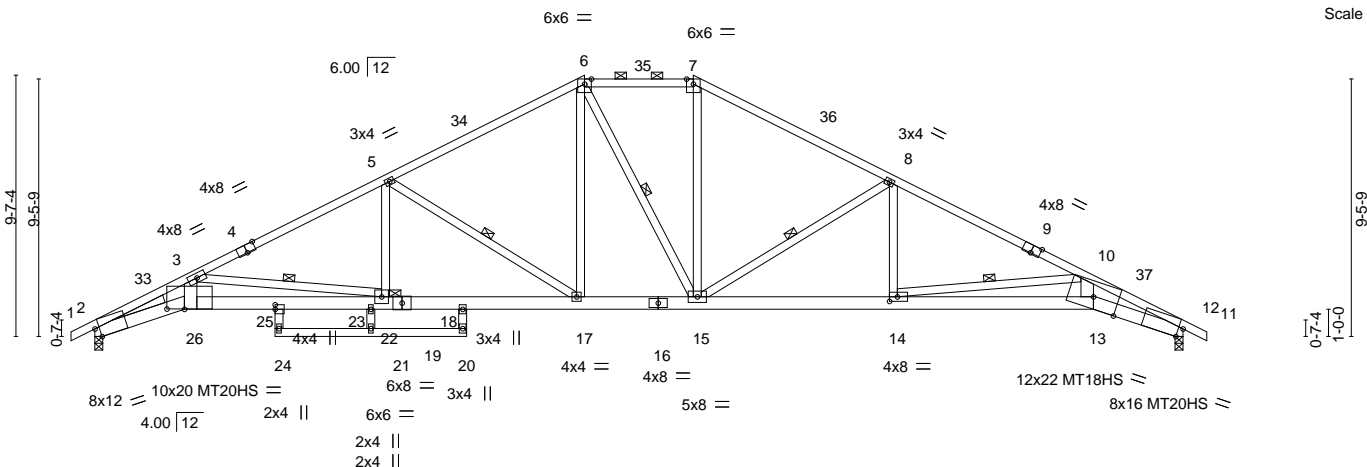
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:01 2021 Page 1

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Job Reference (optional)

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

Scale = 1:84.7



3-3-8 6-7-8 10-1-12 10-8-4 13-8-0 14-3-4 18-0-0 22-0-0 29-4-4 36-8-8 40-0-0
3-3-8 3-4-0 3-6-4 0-6-8 2-11-12 0-7-4 3-8-12 4-0-0 7-4-4 7-4-4 3-3-8

Plate Offsets (X,Y)-- [2:0-2-0,Edge], [4:0-4-0,Edge], [9:0-4-0,Edge], [11:0-2-0,Edge], [14:0-3-8,0-2-0], [25:0-2-0,0-0-0], [26:0-7-12,0-0-2]									
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	0.79	Vert(LL)	-0.36 17 >999 240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.79 13-14 >609 180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.50 11 n/a n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 213 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
6-7: 2x4 SPF No.2
BOT CHORD 2x6 SPF 2100F 1.8E *Except*
24-25,20-24,18-20: 2x4 SPF No.2, 16-19: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-26,10-13: 2x6 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-3-4 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-22, 6-15, 8-15, 10-14, 5-17
JOINTS 1 Brace at Jt(s): 22

REACTIONS.

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

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

TOP CHORD 2-3=-7344/1131, 3-5=-4449/613, 5-6=-3185/487, 6-7=-2693/479, 7-8=-3183/485,
8-10=-4503/577, 10-11=-7544/978
BOT CHORD 2-26=-1140/6597, 25-26=-1117/6479, 23-25=-1092/6337, 22-23=-1092/6337,
18-22=-519/3763, 17-18=-544/3907, 15-17=-235/2694, 14-15=-379/3957,
13-14=-793/6332, 11-13=-830/6787
WEBS 3-26=-177/1354, 3-22=-2597/579, 6-17=-148/875, 6-15=-251/245, 7-15=-121/863,
8-15=-1475/351, 8-14=-18/678, 10-14=-2397/450, 10-13=-105/1431, 5-17=-1419/364,
5-22=-29/645

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 26 = 4%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 321 lb uplift at joint 2 and 321 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2



February 5, 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/43 Woodside Ridge/MO	I44694248
2630107	A3	Hip	1	1	Job Reference (optional)	

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

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694249
2630107	A4	Hip	1	1	Job Reference (optional)	

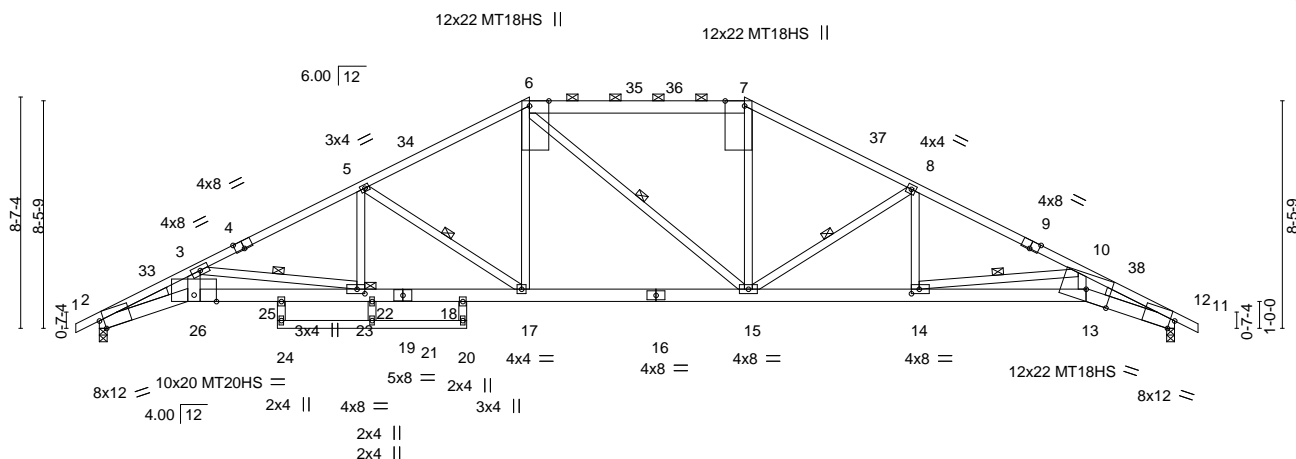
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:03 2021 Page 1

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0-10-8 3-3-8 6-7-8 9-8-12 13-8-0 16-0-0 24-0-0 30-4-4 36-8-8 40-0-0 40-10-8
0-10-8 3-3-8 3-4-0 3-1-4 3-11-4 2-4-0 8-0-0 6-4-4 6-4-4 3-3-8 0-10-8

Scale = 1:85.7



3-3-8 6-7-8 9-8-12 10-1-12 13-8-0 16-0-0 24-0-0 30-4-4 36-8-8 40-0-0
3-3-8 3-4-0 3-1-4 0-5-0 3-6-4 2-4-0 8-0-0 6-4-4 6-4-4 3-3-8

Plate Offsets (X,Y)--		[2:0-2-0,Edge], [4:0-4-0,Edge], [6:0-2-4,Edge], [7:0-2-4,Edge], [9:0-4-0,Edge], [11:0-2-0,Edge], [14:0-3-8,0-2-0], [23:0-3-8,0-2-0]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.35 15-17 >999	240	MT20 197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.79 15-17 >609	180	MT20HS 148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.48 11 n/a	n/a	MT18HS 197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 214 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 6-7: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-0-7 max.): 6-7.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 24-25,20-24,18-20: 2x4 SPF No.2, 16-19: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 3-26: 2x6 SPF No.2	WEBS 1 Row at midpt 6-15, 8-15, 10-14, 5-17, 3-23
WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 23

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=147(LC 12)
Max Uplift 2=319(LC 12), 11=319(LC 13)
Max Grav 2=2279(LC 1), 11=2279(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7320/1096, 3-5=-4609/634, 5-6=-3485/507, 6-7=-2996/495, 7-8=-3487/506,
8-10=-4682/597, 10-11=-7449/956
BOT CHORD 2-26=-1087/6570, 25-26=-1064/6449, 23-25=-1052/6324, 22-23=-544/3935,
18-22=-544/3935, 17-18=-556/4062, 15-17=-282/2995, 14-15=-408/4127,
13-14=-779/6358, 11-13=-809/6691
WEBS 3-26=-170/1344, 6-17=-116/849, 6-15=-253/256, 7-15=-81/845, 8-15=-1329/315,
8-14=-36/658, 10-14=-2255/407, 10-13=-103/1353, 5-17=-1261/327, 5-23=-51/605,
3-23=-2418/514

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 20-2-15,
Interior(1) 20-2-15 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 40-10-8 zone; cantilever left and right exposed ;
end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - The Fabrication Tolerance at joint 6 = 16%, joint 7 = 16%, joint 26 = 4%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 319 lb uplift at joint 2 and 319 lb uplift at
joint 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
conforms to ANSI/TPI 1.



February 5, 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/43 Woodside Ridge/MO	I44694249
2630107	A4	Hip	1	1	Job Reference (optional)	

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

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694250
2630107	A5	Hip	1	1		

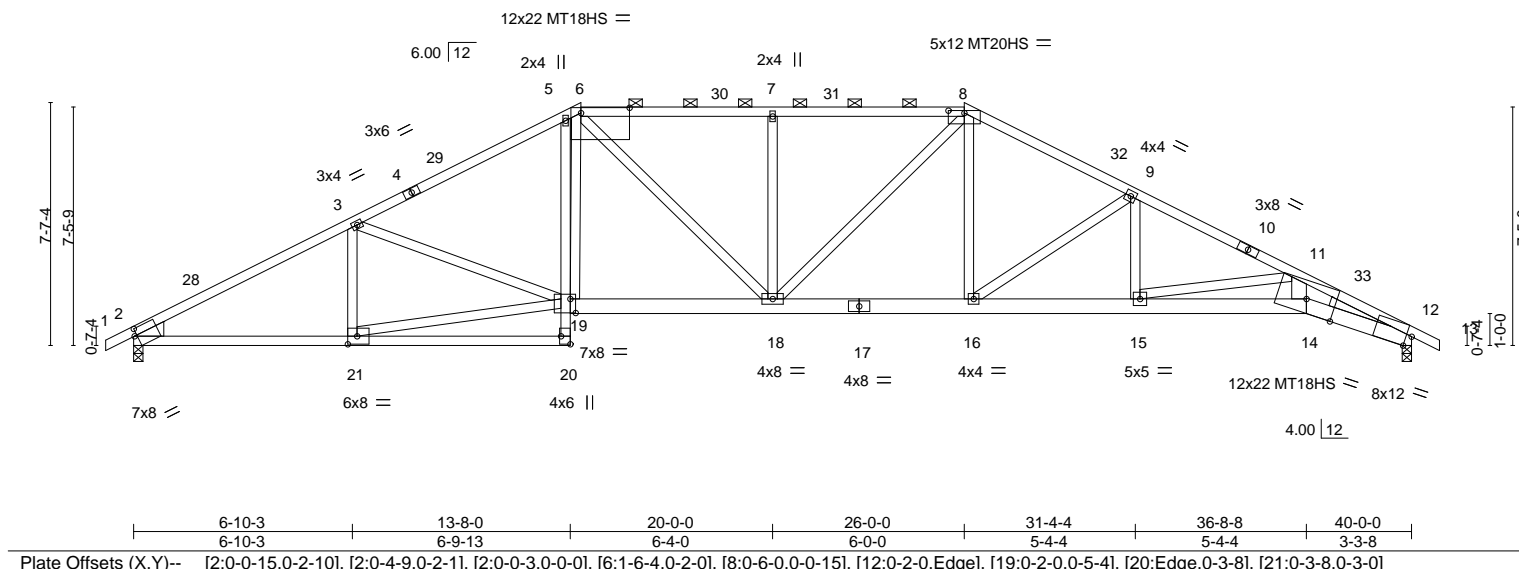
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:05 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-1hB_ryfB12zjHT1TJMRgv?PidrekzDxGMpsrXzoCbK

-0-10-8	6-10-3	13-8-0	14-0-0	20-0-0	26-0-0	31-4-4	36-8-8	40-0-0	40-10-8
0-10-8	6-10-3	6-9-13	0-4-0	6-0-0	6-0-0	5-4-4	5-4-4	3-3-8	0-10-8

Scale = 1:72.1



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 0.97	Vert(LL)	-0.31 16-18	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.68 16-18	>705	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.31 12	n/a	n/a	MT18HS	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 207 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
10-13: 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 2100F 1.8E *Except*
2-20: 2x4 SP 2400F 2.0E, 5-20: 2x4 SPF No.2, 17-19: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
11-14: 2x6 SPF No.2

WEDGE

Left: 2x6 SPF No.2, Right: 2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 12=0-3-8
Max Horz 2=129(LC 12)
Max Uplift 2=329(LC 12), 12=329(LC 13)
Max Grav 2=2279(LC 1), 12=2279(LC 1)

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

TOP CHORD 2-3=-3935/548, 3-5=-3831/547, 5-6=-3583/587, 6-7=-3672/550, 7-8=-3672/549,
8-9=-3780/529, 9-11=-4892/652, 11-12=-7390/980
BOT CHORD 2-21=-515/3394, 20-21=-29/318, 18-19=-358/3259, 16-18=-262/3278, 15-16=-438/4332,
14-15=-784/6204, 12-14=-828/6630
WEBS 3-21=-462/139, 19-21=-492/3117, 6-19=-183/699, 6-18=-162/745, 7-18=-646/200,
8-18=-164/733, 8-16=-105/766, 9-16=-1253/276, 9-15=-50/697, 11-15=-1905/353,
11-14=-117/1323

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 329 lb uplift at joint 2 and 329 lb uplift at joint 12.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheathing be applied directly to the bottom chord.



February 5, 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/43 Woodside Ridge/MO	I44694250
2630107	A5	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:05 2021 Page 2
ID:clow4Ylgf7iox0?ly?5BCcz33zm-1hB_ryfB12zjHTI1TJMRgv?PidrekzDxGMpsrXzoCbK

NOTES-

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/43 Woodside Ridge/MO	144694251
2630107	A6	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:06 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-VtIN2lgpoM5avdKE11tgD6Xd71C9TTi4V0ZPNzZoCbJ

0-10-8 1-7-8 2-3-8 7-1-12 12-0-0 20-0-0 28-0-0 32-4-4 36-8-8 40-0-0 40-10-8
0-10-8 1-7-8 0-8-0 4-10-4 4-10-4 8-0-0 8-0-0 4-4-4 4-4-4 3-3-8 0-10-8

Scale = 1:74.1

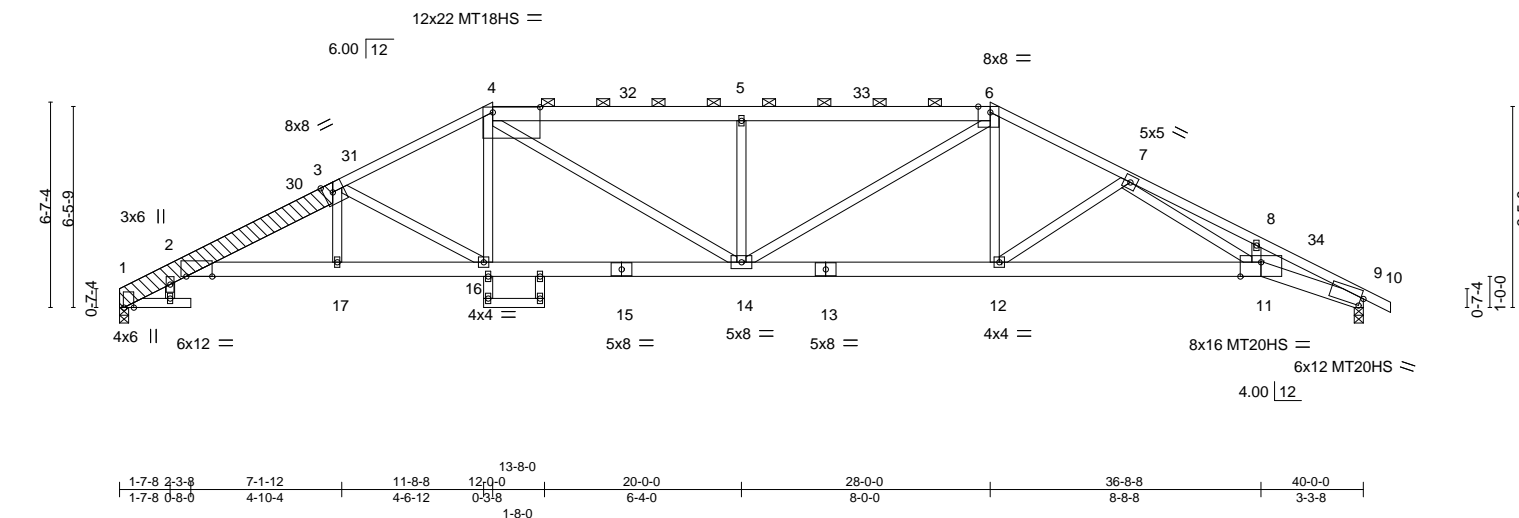


Plate Offsets (X,Y)--		[2:0-10-0,0-0-0], [3:0-3-8,Edge], [4:1-6-4,0-2-0], [6:0-4-10,Edge], [9:0-1-0,0-3-0], [11:0-8-0,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.32 11-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.74 11-12	>650	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.38 9	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 238 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x6 SPF No.2, 6-10: 2x4 SP 2400F 2.0E, 1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x6 SPF 2100F 1.8E *Except*
18-19,21-22: 2x4 SPF No.2, 13-15: 2x6 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x8 SP 2400F 2.0E
LBR SCAB 1-3 2x8 SP 2400F 2.0E one side

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 9=0-3-8
Max Horz 1=-116(LC 17)
Max Uplift 1=-300(LC 12), 9=-331(LC 13)
Max Grav 1=2215(LC 1), 9=2273(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-981/185, 2-3=-5115/721, 3-4=-4137/583, 4-5=-4482/626, 5-6=-4482/626,
6-7=-4196/575, 7-8=-7172/1032, 8-9=-7374/953
BOT CHORD 2-17=-674/4734, 16-17=-674/4748, 14-16=-414/3608, 12-14=-313/3667, 11-12=-495/4443,
9-11=-799/6597
WEBS 4-16=-76/738, 4-14=-253/1196, 5-14=-963/287, 6-14=-250/1134, 6-12=-85/849,
7-12=-914/245, 7-11=-365/2410, 3-17=0/279, 3-16=-1266/293

NOTES-

- Attached 7-11-3 scab 1 to 3, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 3-2-15 from end at joint 3, nail 2 row(s) at 2" o.c. for 3-0-5; starting at 0-0-15 from end at joint 3, nail 2 row(s) at 7" o.c. for 2-0-0.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-0-11, Interior(1) 3-0-11 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 28-0-0, Exterior(2R) 28-0-0 to 32-5-7, Interior(1) 32-5-7 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) 1, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 300 lb uplift at joint 1 and 331 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2



February 5, 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/43 Woodside Ridge/MO	I44694251
2630107	A6	Hip	1	1	Job Reference (optional)	

- NOTES-**
- 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.

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694252
2630107	A7	HIP	1	1		

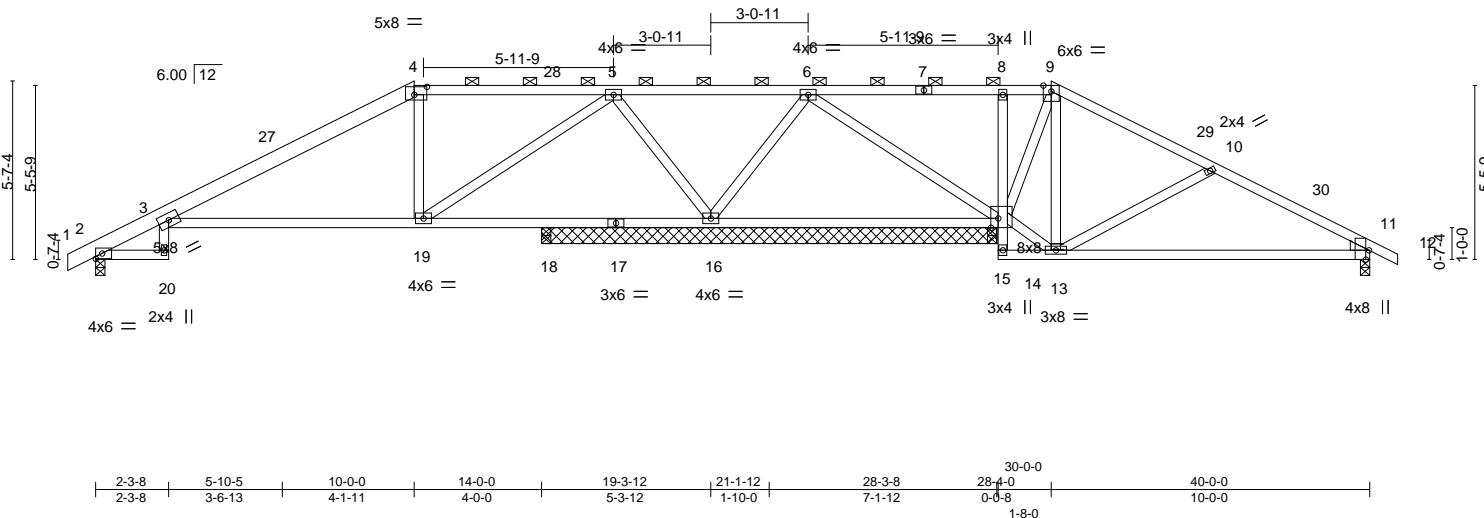
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:07 2021 Page 1

ID:clow4Yl9f7iox0?ly?5BCcz33zm-.3JlGehRZgDRWnvQakPvmK4oVRbkCtMEkglywPzoCbl

-0-10-8	2-3-8	5-10-5	10-0-0	16-3-1	22-4-7	28-4-0	30-0-0	34-11-13	40-0-0	49-10-8
0-10-8	2-3-8	3-6-13	4-1-11	6-3-1	6-1-5	5-11-9	1-8-0	4-11-13	5-0-3	0-10-8

Scale = 1:72.3



Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694253
2630107	A8	Hip	1	1		

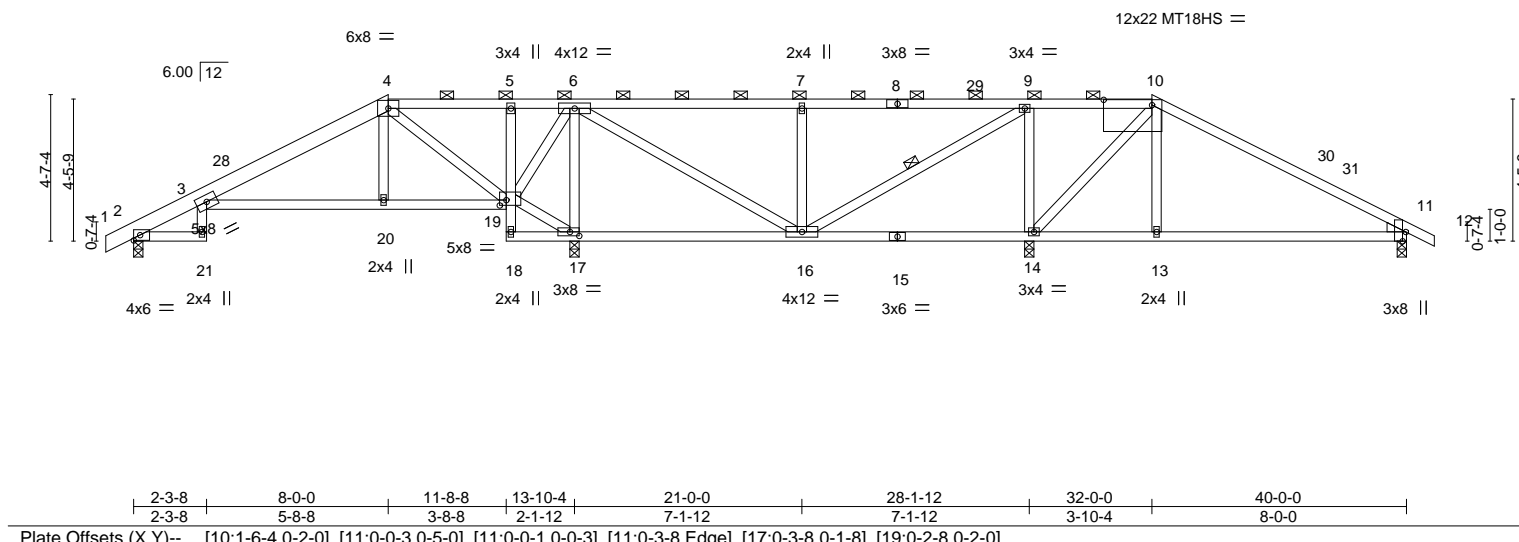
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:09 2021 Page 1

ID:clow4Ylgl7ioX0?ly?5BCcz33zm-wSRVhKih4HT9m43oi9RNrl97PEGYgqnXB_n3_lzoCbG

-0-10-8 2-3-8 | 8-0-0 | 11-8-8 | 13-10-4 | 21-0-0 | 28-1-12 | 32-0-0 | 40-0-0 | 40-10-8
0-10-8 2-3-8 | 5-8-8 | 3-8-8 | 2-1-12 | 7-1-12 | 7-1-12 | 3-10-4 | 8-0-0 | 0-10-8

Scale = 1:72.4



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 0.86	Vert(LL)	-0.10 13-27	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.25 13-27	>580	180	MT18HS	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.10 17	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 170 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
15-18: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 4-10.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-16

REACTIONS.

All bearings 0-3-8.
(lb) - Max Horz 2=80(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2 except 17=328(LC 9), 14=230(LC 8), 11=180(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 2=393(LC 1), 17=2432(LC 1), 14=1122(LC 26), 11=747(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-125/422, 4-5=-221/1258, 5-6=-220/1280, 6-7=-319/238, 7-9=-319/238, 10-11=-732/227
BOT CHORD 16-17=-1401/306, 13-14=-85/524, 11-13=-84/531
WEBS 4-19=-1307/238, 17-19=-1511/340, 6-17=-1588/285, 6-16=-233/1672, 7-16=-686/219, 9-14=-592/251, 10-14=-640/72, 10-13=0/280

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 13-10-4, Interior(1) 13-10-4 to 32-0-0, Exterior(2R) 32-0-0 to 37-7-14, Interior(1) 37-7-14 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 17=328, 14=230, 11=180.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694254
2630107	A9	Hip Girder	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:12 2021 Page 1

ID:clow4Ylglf7iox0?ly?5BCcz33zm-K16eJLlaNCrkdYnNNH_4TNnc0SI4t6Uzty0jbdzoCbD

0-10-8 2-3-8 6-0-0 8-10-4 11-8-8 13-10-4 18-7-7 23-4-9 28-1-12 31-0-14 34-0-0 36-11-13 40-0-0 40-10-8
0-10-8 2-3-8 3-8-8 2-10-4 2-10-4 2-1-12 4-9-3 4-9-3 4-9-3 2-11-2 2-11-2 2-11-13 3-0-3 0-10-8

Scale = 1:72.4

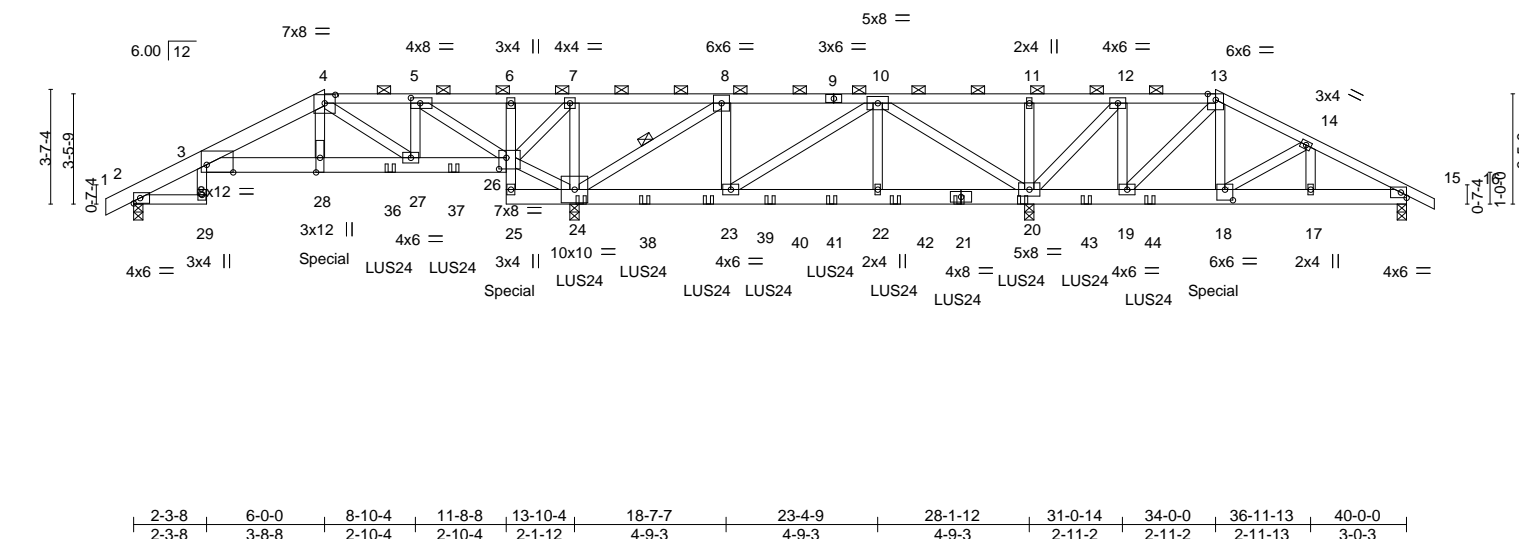


Plate Offsets (X,Y)-- [3:0-10-0,Edge], [4:0-4-0,0-3-3], [5:0-3-8,0-2-0], [18:0-3-0,0-4-0], [26:0-2-12,0-4-4]											
LOADING (psf)	SPACING	2-0-0	CSI	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.96	Vert(LL)	-0.11	3-28	>999	240	MT20	197/144	
TCDL 20.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.24	3-28	>707	180			
BCLL 0.0	Rep Stress Incr	NO	WB 0.90	Horz(CT)	0.15	15	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS								
										Weight: 211 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
3-26: 2x6 SPF 2100F 1.8E, 21-25,15-21: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-10 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 4-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 25-26,24-25,23-24.
WEBS 1 Row at midpt 8-24

REACTIONS.

All bearings 0-3-8 except (jt=length) 24=0-3-15 (input: 0-3-8).
(lb) - Max Horz 2=62(LC 29)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-217(LC 8), 24=-1200(LC 5), 20=-883(LC 4), 15=-223(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 2=955(LC 21), 24=4748(LC 21), 20=3533(LC 22), 15=980(LC 22)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-31=-461/160, 3-4=-1880/494, 4-5=-474/228, 5-6=-406/1757, 6-7=-415/1806,
7-8=-596/2547, 10-11=-205/980, 11-12=-205/980, 12-13=-323/135, 13-14=-1273/344,
14-15=-1424/340
BOT CHORD 3-28=-428/1681, 27-28=-407/1606, 26-27=-182/474, 25-26=-293/80, 24-25=-314/80,
22-23=-88/426, 20-22=-88/426, 19-20=-44/320, 18-19=-199/1047, 17-18=-249/1223,
15-17=-249/1223
WEBS 4-28=-343/1238, 4-27=-1519/415, 5-27=-339/1241, 5-26=-2604/673, 24-26=-2496/634,
7-26=-292/1072, 7-24=-1150/329, 8-24=-2837/703, 8-23=-253/1115, 10-23=-645/165,
10-22=-166/770, 10-20=-1670/443, 11-20=-386/121, 12-20=-1887/458, 12-19=-278/1137,
13-19=-1067/268, 13-18=-286/1049, 14-18=-264/166

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- WARNING: Required bearing size at joint(s) 24 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 2, 1200 lb uplift at joint 24, 883 lb uplift at joint 20 and 223 lb uplift at joint 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 8-0-12 from the left end to 31-11-4 to connect truss(es) to front face of bottom chord.
- On full end plates where hanger is in contact with lumber.



February 5, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694254
2630107	A9	Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:12 2021 Page 2
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- NOTES-**
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 816 lb down and 301 lb up at 6-0-0, and 306 lb down and 102 lb up at 11-10-4, and 800 lb down and 284 lb up at 33-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-90, 3-4=-90, 4-13=-90, 13-16=-90, 29-30=-20, 3-26=-20, 25-33=-20

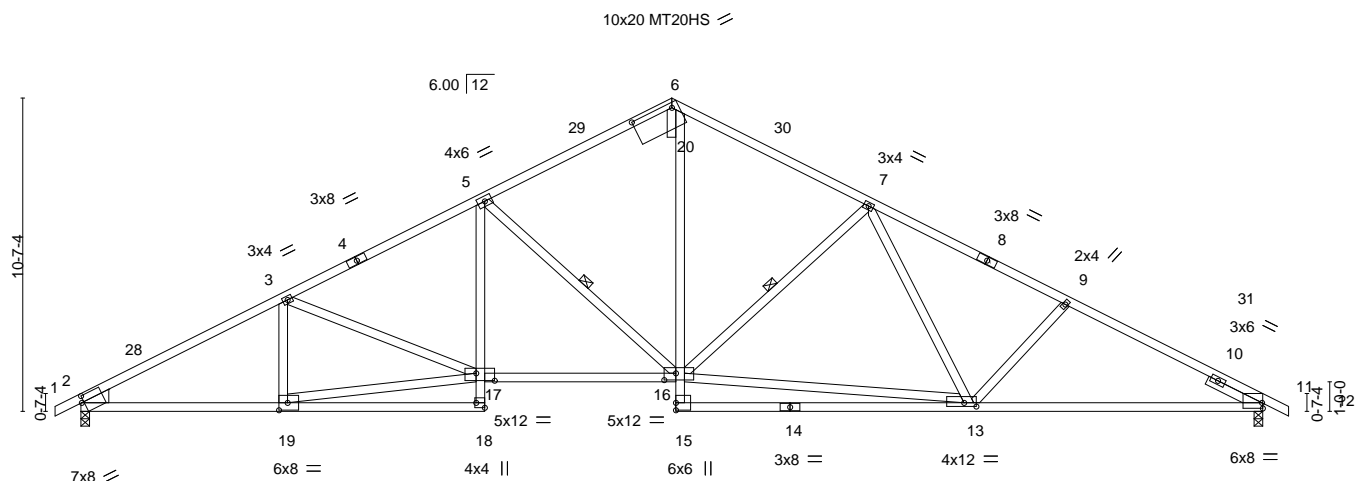
Concentrated Loads (lb)

Vert: 26=-306(F) 21=-306(F) 28=-816(F) 24=-306(F) 20=-306(F) 18=-800(F) 36=-307(F) 37=-307(F) 38=-306(F) 39=-306(F) 40=-306(F) 41=-306(F) 42=-306(F) 43=-306(F) 44=-306(F)

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:13 2021 Page 1
ID:cJow4Ylf7ioX0?lv=25BCcz33zm-oDq0WlIC8WzbEiMax?VJ?bKpCrZicbb66cIH73zoCbC

-0-10-8	6-10-3	13-8-0	20-0-0	26-7-14	33-3-13	40-0-8	40-10-8
0-10-8	6-10-3	6-9-13	6-4-0	6-7-14	6-7-14	6-8-3	0-10-8

Scale = 1:78.0



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 0.87	Vert(LL) -0.26 16-17 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.64 13-15 >752 180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.22 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 197 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4,8-12: 2x4 SPF 1650F 1.5E

BOT CHORD 2x4 SPF No.2 *Except*
2-18,11-14: 2x4 SP 2400F 2.0E

WEBS 2x4 SPF No.2

WEDGE

Left: 2x6 SPF No.2

SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=186(LC 12)
Max Uplift 2=-317(LC 12), 11=-317(LC 13)
Max Grav 2=2270(LC 1), 11=2284(LC 1)

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

TOP CHORD 2-3=-3918/522, 3-5=-3791/525, 5-6=-2759/457, 6-7=-2810/462, 7-9=-3519/503,
9-11=-3828/526

BOT CHORD 2-19=-549/3378, 5-17=-79/694, 16-17=-420/3293, 6-16=-244/1854, 11-13=-365/3313

WEBS 3-19=-438/137, 17-19=-517/3184, 5-16=-1270/339, 13-16=-260/2773, 7-16=-863/312,
7-13=-57/343, 9-13=-427/218

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-1-9, Exterior(2R) 20-1-9 to 23-1-9, Interior(1) 23-1-9 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 317 lb uplift at joint 2 and 317 lb uplift at joint 11.
- 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.



February 5, 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/43 Woodside Ridge/MO	144694256
2630107	B2	Roof Special	1	1	Job Reference (optional)	

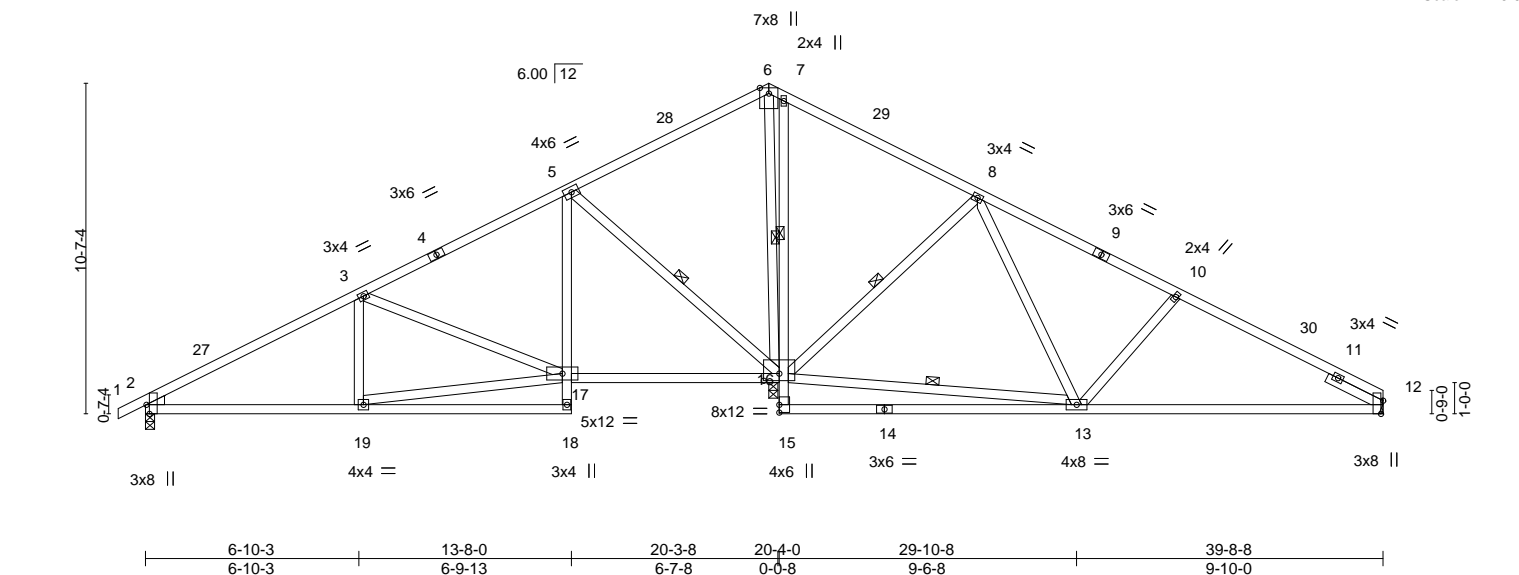
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:15 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-lcomxNnSg7DIU?Wy2QYn40PDQfHc3XoPZwEOCyz0CbA

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

Scale = 1:73.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.63	Vert(LL)	-0.14 13-15	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.29 13-15	>799	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.02 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 194 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except:
 1 Row at midpt 7-16
 WEBS 1 Row at midpt 5-16, 6-16, 13-16, 8-16

REACTIONS.

(size) 2=0-3-8, 16=0-3-8, 12=Mechanical
 Max Horz 2=195(LC 12)
 Max Uplift 2=159(LC 12), 16=323(LC 12), 12=157(LC 13)
 Max Grav 2=990(LC 25), 16=2771(LC 1), 12=826(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1329/203, 3-5=-608/134, 5-6=0/757, 6-7=0/617, 7-8=0/799, 8-10=-732/229,
 10-12=-1007/251
 BOT CHORD 2-19=-276/1087, 5-17=-62/569, 16-17=-77/435, 7-16=-534/165, 12-13=-140/892
 WEBS 17-19=-263/1030, 3-17=-746/216, 5-16=-1143/320, 6-16=-713/112, 8-16=-993/313,
 8-13=-108/692, 10-13=-556/231

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 2, 323 lb uplift at joint 16 and 157 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 5, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694257
2630107	B3	HIP	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:16 2021 Page 1

ID:clow4Ylgt7iox0?ly?5BCcz33zm-DoM99jo4RRL95959c730dDyOf3dGox0Zoa_xkOzoCb9

-0-10-8	4-8-15	9-5-8	13-8-12	18-0-0	20-4-0	22-0-0	27-9-11	33-7-5	39-8-8
0-10-8	4-8-15	4-8-9	4-3-4	4-3-4	2-4-0	1-8-0	5-9-11	5-9-11	6-1-3

Scale = 1:73.1

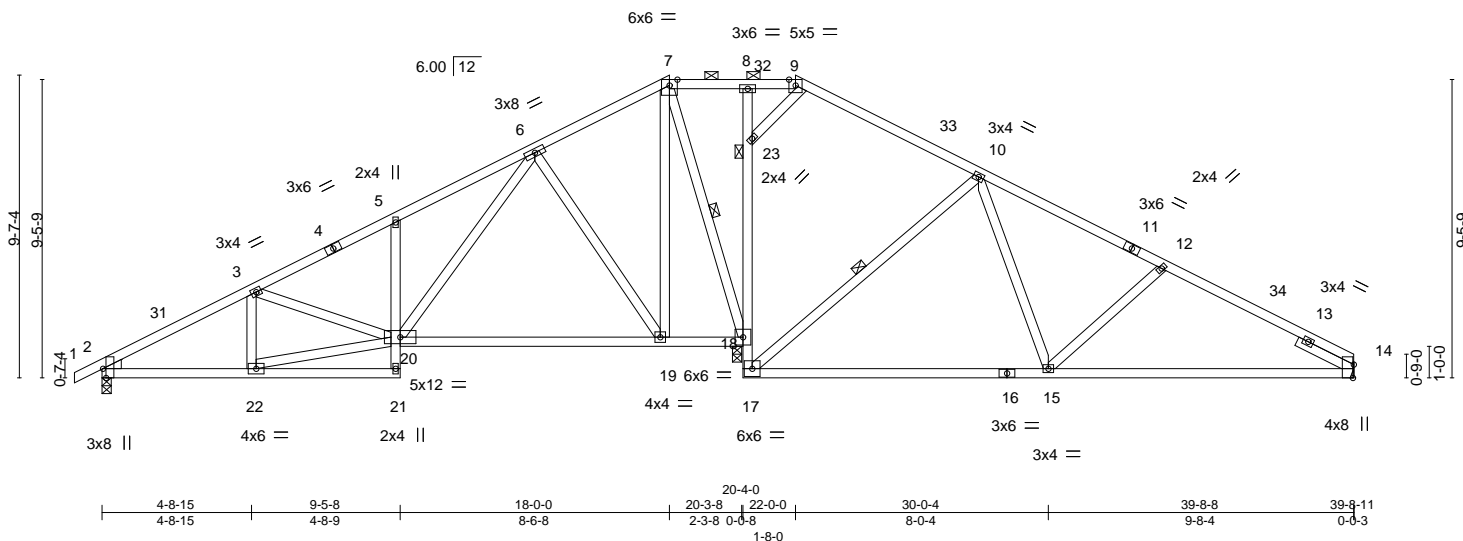


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [14:0-5-1,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.17 15-17 >999 240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.36 15-17 >634 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.03 18 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 193 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 "Except"
 18-20: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (10-0-0 max.): 7-9.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 7-18, 10-17
 JOINTS 1 Brace at Jt(s): 23

REACTIONS.

(size) 2=0-3-8, 18=0-3-8, 14=Mechanical
 Max Horz 2=175(LC 12)
 Max Uplift 2=178(LC 12), 18=294(LC 12), 14=207(LC 13)
 Max Grav 2=1096(LC 25), 18=2451(LC 1), 14=973(LC 26)

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

TOP CHORD 2-3=-1621/255, 3-5=-1456/264, 5-6=-1462/360, 7-8=-12/334, 8-9=0/472, 9-10=-29/355,
 10-12=-1030/314, 12-14=-1315/354
 BOT CHORD 2-22=-326/1370, 5-20=-407/170, 19-20=-85/589, 17-18=-147/746, 18-23=-662/95,
 8-23=-346/60, 15-17=-67/642, 14-15=-236/1165
 WEBS 20-22=-298/1359, 6-20=-263/1099, 6-19=-903/287, 7-19=-148/859, 7-18=-1073/205,
 10-17=-1009/283, 10-15=-60/604, 12-15=-473/203, 9-23=-403/65

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 2, 294 lb uplift at joint 18 and 207 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



February 5, 2021

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

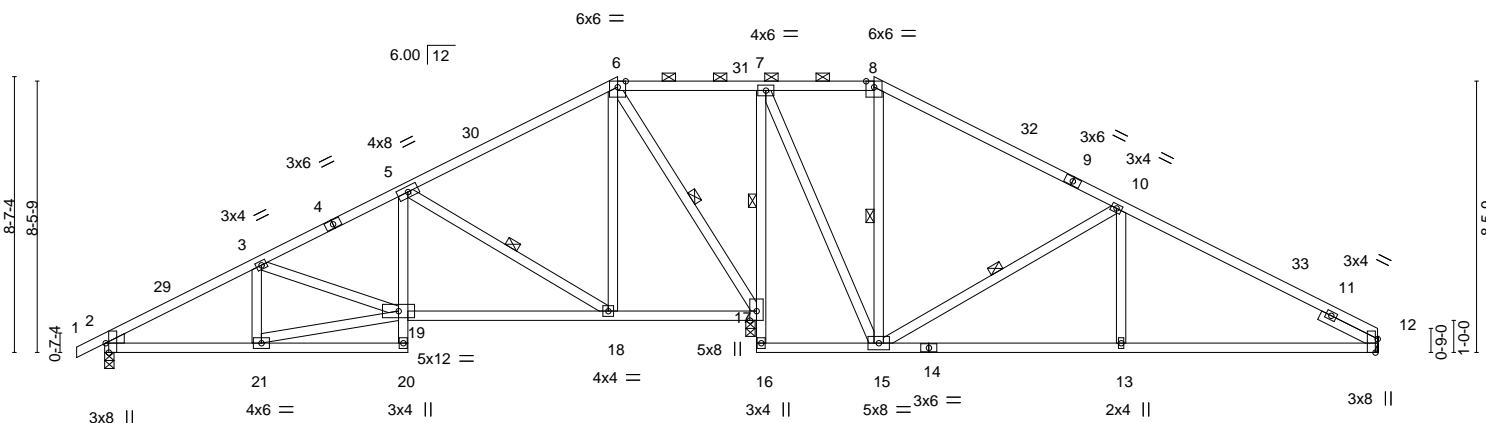
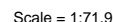
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:18 2021 Page 1

3:240 3 Mar 9 2020 MINTER INDUSTRIES, INC. 11:11:16 2021 Page 1
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- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 20-5-12, Interior(1) 20-5-12 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 39-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 209 lb uplift at joint 2, 233 lb uplift at joint 17 and 235 lb uplift at joint 12.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5, 2021



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694259
2630107	B5	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:19 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-dN1HnIqzkMkkydpjHGcjFsatjGjV?JO?UXCbLjzoCb6

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

Scale = 1:71.9

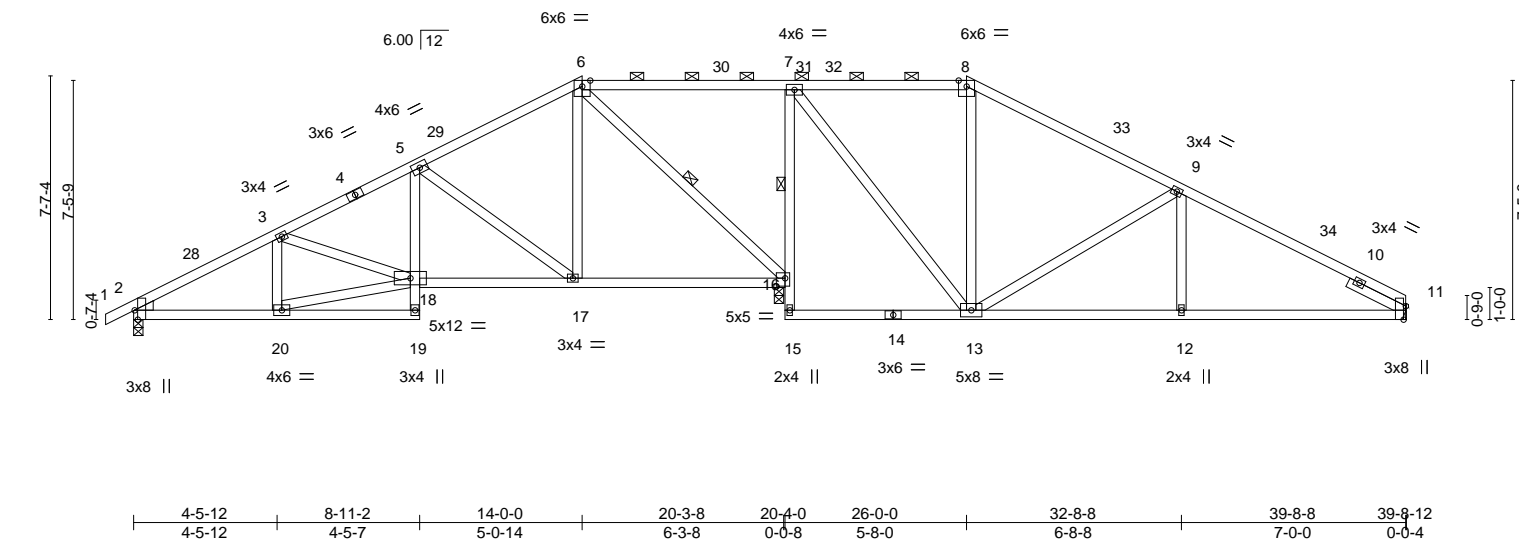


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-0-3,0-5-0], [2:0-0-1,0-0-3], [1:1-0-5-1,Edge], [16:0-3-4,0-3-0]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.05	17-18	>999	240	MT20	197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.11	17-18	>999	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04	16	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 182 lb	FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 "Except"
 16-18: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

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

REACTIONS.

(size) 11=Mechanical, 2=0-3-8, 16=0-3-8
 Max Horz 2=140(LC 12)
 Max Uplift 11=223(LC 13), 2=-215(LC 12), 16=233(LC 12)
 Max Grav 11=975(LC 26), 2=1114(LC 25), 16=2392(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1658/327, 3-5=-1581/374, 5-6=-819/258, 6-7=-7/326, 7-8=-472/313, 8-9=-661/298,
 9-11=-1319/368
 BOT CHORD 2-20=-356/1404, 5-18=-64/433, 17-18=-321/1363, 16-17=-110/630, 7-16=-1440/243,
 12-13=-241/1157, 11-12=-241/1157
 WEBS 3-20=-273/121, 18-20=-342/1326, 5-17=-888/258, 6-17=-91/632, 6-16=-1203/214,
 7-13=-143/1084, 8-13=-289/50, 9-13=-813/238, 9-12=0/268

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 223 lb uplift at joint 11, 215 lb uplift at joint 2 and 233 lb uplift at joint 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694260
2630107	B6	Hip	1	1	Job Reference (optional)	

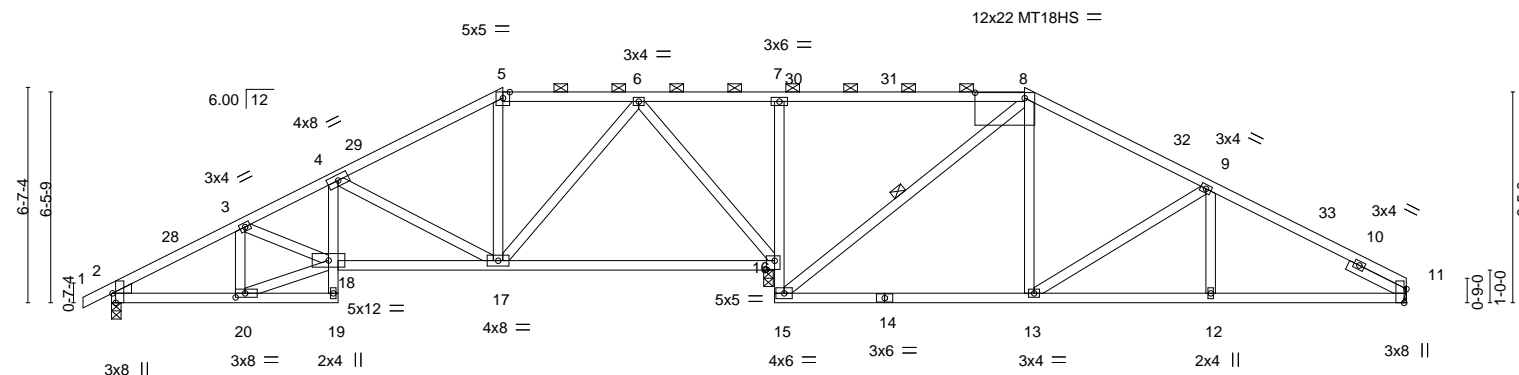
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:21 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-Zm92CQsDGz_SCwz6PgfbKHf9R4LATBKlyrhPbzoCb4

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

Scale = 1:70.7



	3-11-6	6-11-6	12-0-0	20-3-8	20-4-0	28-0-0	33-8-8	39-8-8	39-8-9
	3-11-6	3-0-0	5-0-10	8-3-8	0-0-8	7-8-0	5-8-8	6-0-0	0-0-1

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-0-3,0-5-0], [2:0-0-1,0-0-3], [8:1-6-4,0-2-0], [11:0-5-1,Edge], [16:0-3-0,0-3-4], [20:0-3-8,0-1-8]

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 0.92	Vert(LL)	-0.09 13-15	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.20 13-15	>999	180	MT18HS	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.04 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 177 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 "Except"
16-18: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-0-0

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

REACTIONS. (size) 11=Mechanical, 2=0-3-8, 16=0-3-8
Max Horz 2=122(LC 12)
Max Uplift 11=208(LC 13), 2=-214(LC 12), 16=-271(LC 9)
Max Grav 11=960(LC 26), 2=1106(LC 25), 16=2407(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1629/321, 3-4=-1902/437, 4-5=-1100/281, 5-6=-895/289, 6-7=0/359, 7-8=0/328,
8-9=-843/290, 9-11=-1318/343
BOT CHORD 2-20=-337/1379, 4-18=-78/434, 17-18=-404/1724, 16-17=-95/427, 15-16=-70/812,
7-16=-618/198, 13-15=-66/650, 12-13=-228/1164, 11-12=-228/1164
WEBS 4-17=-941/283, 6-17=-94/734, 6-16=-1164/250, 8-13=-41/520, 9-13=-596/189,
3-20=-468/148, 18-20=-326/1329, 3-18=-53/323, 8-15=-1172/161

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-0, Interior(1) 16-2-0 to 28-0-0, Exterior(2R) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 39-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 208 lb uplift at joint 11, 214 lb uplift at joint 2 and 271 lb uplift at joint 16.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694261
2630107	B7	Hip	1	1	Job Reference (optional)	

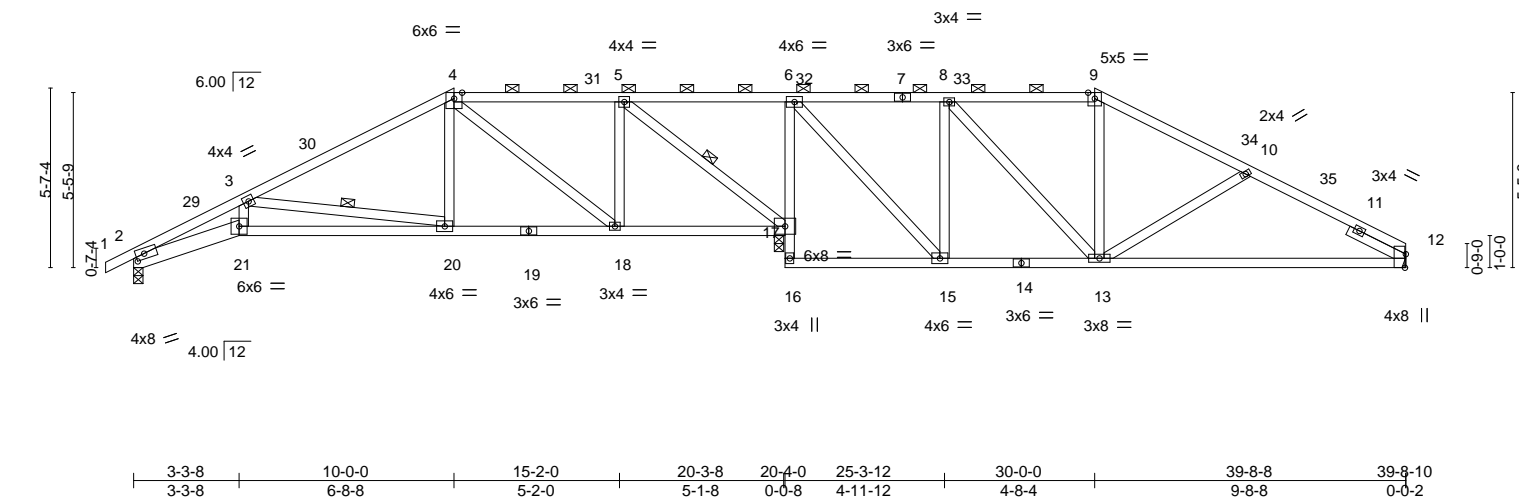
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:22 2021 Page 1

ID:clow4Ylgf7iox07ly75BCcz33zm-1yjQPmsr0H6Jp4YIzOAQtUCNCUe_CIArAVRFy2zoCb3

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

Scale = 1:71.9



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 0.73	Vert(LL)	-0.14 13-24	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.32 20-21	>759	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.12 17	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 172 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-21: 2x6 SPF No.2, 17-19: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (6-0-0 max.): 4-9.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 3-20, 5-17

REACTIONS.

(size) 12=Mechanical, 2=0-3-8, 17=0-3-8
 Max Horz 2=105(LC 12)
 Max Uplift 12=201(LC 13), 2=203(LC 12), 17=328(LC 9)
 Max Grav 12=949(LC 26), 2=1085(LC 25), 17=2450(LC 1)

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

TOP CHORD 2-3=-3250/681, 3-4=-1420/292, 4-5=-662/212, 5-6=-14/535, 6-8=-478/266,
 8-9=-826/297, 9-10=-1011/290, 10-12=-1313/356
 BOT CHORD 2-21=-676/2930, 20-21=-648/2757, 18-20=-199/1150, 17-18=-101/659, 6-17=-1421/256,
 15-16=-480/107, 13-15=-73/478, 12-13=-247/1175
 WEBS 3-21=-94/709, 3-20=-1612/453, 4-20=-31/465, 4-18=-648/127, 5-18=-21/459,
 5-17=-1482/276, 6-15=-198/1282, 8-15=-816/172, 8-13=-52/547, 10-13=-419/170

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 30-0-0, Exterior(2R) 30-0-0 to 34-2-15, Interior(1) 34-2-15 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 201 lb uplift at joint 12, 203 lb uplift at joint 2 and 328 lb uplift at joint 17.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694262
2630107	B8	Roof Special	1	1	Job Reference (optional)	

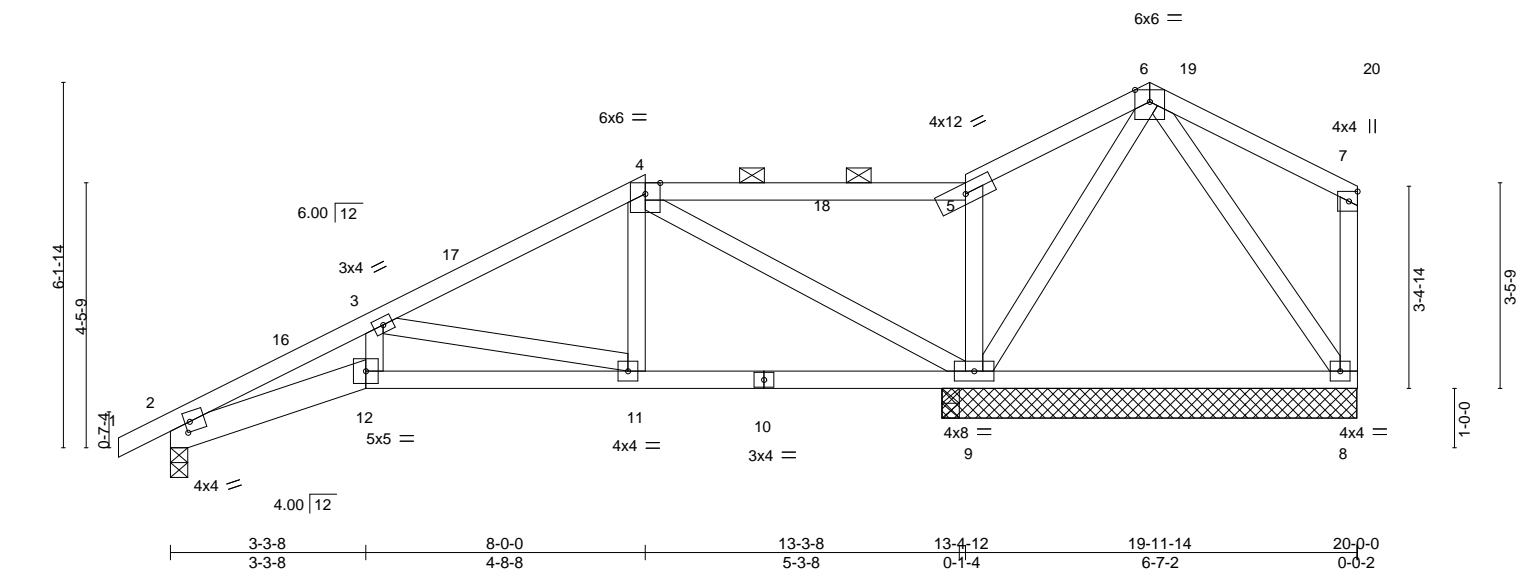
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:23 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-W8Hod6tTnaEARE7VW5hfPikcTt5Ax60aP9ApUUzoCb2

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

Scale = 1:38.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.05 11-12	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.11 11-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.85	Horz(CT)	0.04 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 87 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 "Except"
 2-12: 2x6 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

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

FORCES.

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

NOTES-

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



February 5, 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

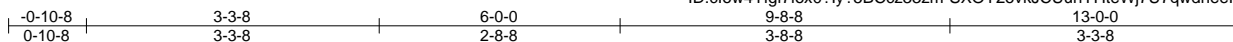
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694263
2630107	B9	Half Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:25 2021 Page 1

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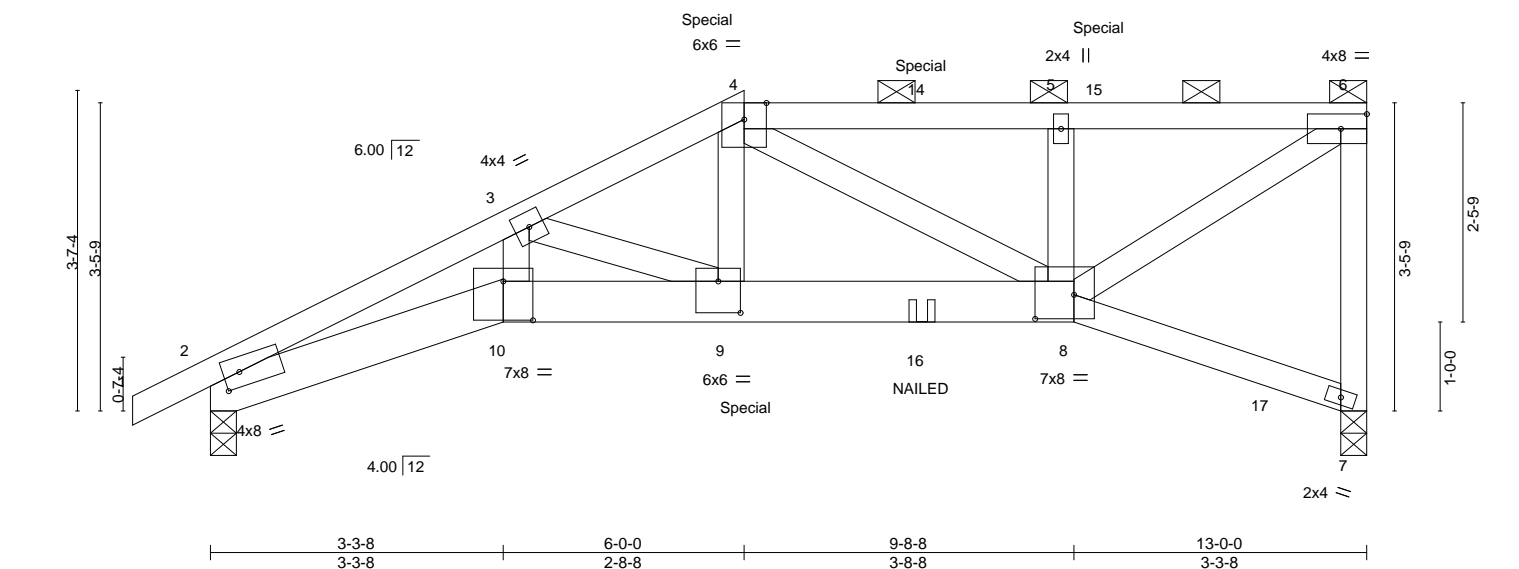


Plate Offsets (X,Y)-- [2:0-2-3,0-2-0], [8:0-5-4,0-3-4], [9:0-3-0,0-4-4], [10:0-4-0,0-5-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.08	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.18	9-10	>849	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 58 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 "Except"
 2-10: 2x6 SPF 2100F 1.8E, 8-10: 2x6 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-5 max.): 4-6.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
 Max Horz 2=137(LC 28)
 Max Uplift 2=290(LC 8), 7=323(LC 5)
 Max Grav 2=1313(LC 1), 7=1363(LC 1)

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

TOP CHORD 2-3=-3910/925, 3-4=-2865/700, 4-5=-1779/447, 5-6=-1727/428, 6-7=-1305/349
 BOT CHORD 2-10=-896/3493, 9-10=-845/3299, 8-9=-680/2510
 WEBS 3-10=-159/697, 3-9=-769/226, 4-9=-237/1078, 4-8=-856/239, 5-8=-707/252, 6-8=-549/2076

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 7 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=290, 7=323.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "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) 228 lb down and 135 lb up at 6-0-0, and 204 lb down and 135 lb up at 8-0-0, and 202 lb down and 136 lb up at 10-0-0 on top chord, and 527 lb down and 162 lb up at 6-0-0 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

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



February 5, 2021

Continued on page 2

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694263
2630107	B9	Half Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:25 2021 Page 2
ID:clow4Yl9f7iox0?ly?5BCcz33zm-SXOY2ovkJCUuhYHteWj7U7qwdheeP6qtsTfvYNzoCb0

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-90, 4-6=-90, 10-11=-20, 8-10=-20, 7-8=-20

Concentrated Loads (lb)

Vert: 4=-204(B) 8=-9 9=-527(B) 14=-204(B) 15=-202(B) 16=-6(B) 17=-30

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694264
2630107	C1	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

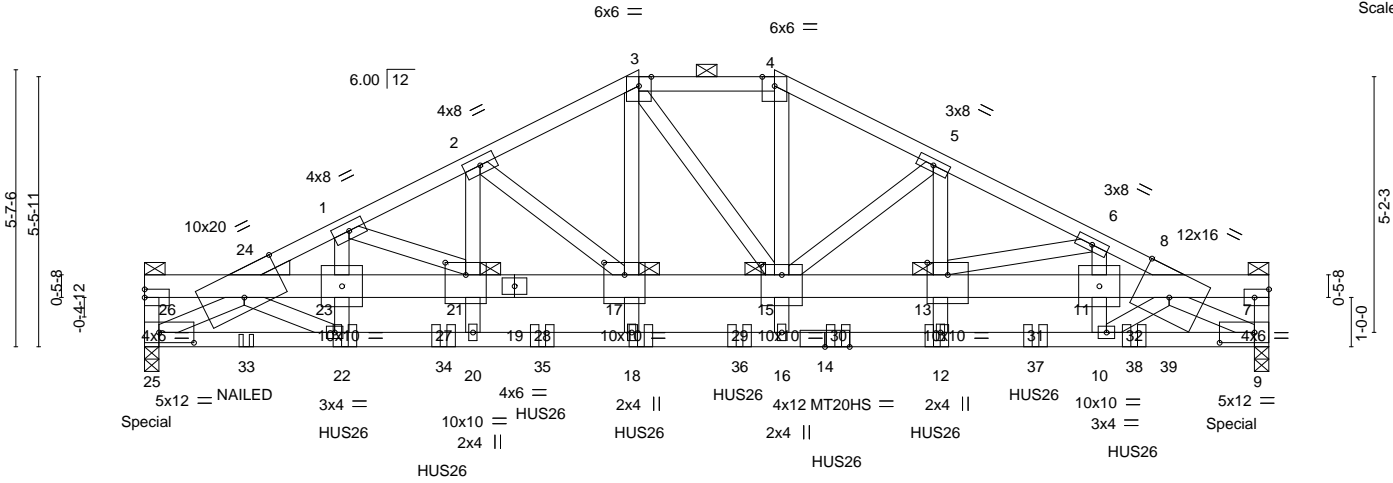
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:27 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-OwWJSUw_rpkbwrRGlxmbZXvFjVOptxIAKn80dFzoCb_

2-0-4	3-3-8	4-3-8	6-7-14	10-0-4	12-9-4	16-1-10	19-6-0	20-9-4	22-9-8
2-0-4	1-3-4	1-0-0	2-4-6	3-4-6	2-9-0	3-4-6	3-4-6	1-3-4	2-0-4

Scale = 1:46.7



2-0-4	3-3-8	4-3-8	6-7-14	10-0-4	12-9-4	16-1-10	19-6-0	20-9-4	22-9-8
2-0-4	1-3-4	1-0-0	2-4-6	3-4-6	2-9-0	3-4-6	3-4-6	1-3-4	2-0-4

Plate Offsets (X,Y)-- [7:Edge,0-2-0], [8:0-8-0,Edge], [9:0-8-8,0-2-8], [13:0-5-0,0-3-0], [15:0-5-0,0-2-8], [17:0-5-0,0-3-0], [21:0-5-0,0-3-0], [24:0-10-0,Edge], [25:0-8-8,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.16	17-21	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.32	17-21	>836	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.77	Horz(CT)	0.13	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 300 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 3-4: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-11 max.): 3-4.
BOT CHORD 2x6 SPF No.2 *Except* 9-14,14-25: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SPF No.2	6-0-0 oc bracing: 24-26, 7-8
WEDGE Left: 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 26, 7, 21, 17, 15, 13

REACTIONS.	(size)
25=0-3-8, 9=0-3-8	
Max Horz 25=-86(LC 27)	
Max Uplift 25=-1211(LC 8), 9=-1321(LC 9)	
Max Grav 25=7178(LC 1), 9=7165(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	25-26=-1006/145, 1-24=-13044/2435, 1-2=-10388/1937, 2-3=-7924/1511, 3-4=-6767/1390, 4-5=-7711/1544, 5-6=-9609/2008, 6-8=-11468/2436, 7-9=-1073/177
BOT CHORD	24-26=-487/70, 23-24=-161/1237, 21-23=-161/1237, 17-21=-1126/399, 15-17=-3301/753, 13-15=-1808/304, 11-13=-998/93, 8-11=-998/93, 7-8=-489/83, 22-25=-1970/10587, 20-22=-1951/10268, 18-20=-1951/10268, 16-18=-1951/10268, 12-16=-1952/10266, 10-12=-1952/10266, 9-10=-2056/10486
WEBS	1-21=-2142/441, 2-21=-460/2716, 2-17=-2838/558, 3-17=-595/3439, 3-15=-497/9, 4-15=-624/3028, 5-15=-2162/606, 5-13=-503/2027, 6-13=-1278/328, 6-11=-436/2064, 10-11=-70/383, 22-24=-617/21, 24-25=-11644/2136, 8-10=-514/172, 8-9=-11526/2275, 1-23=-518/2845, 22-23=-13/431

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-3-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-2-0 oc, Except member 24-25 2x4 - 1 row at 0-7-0 oc, member 8-9 2x4 - 1 row at 0-7-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2



February 5, 2021

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Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694264
2630107	C1	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

- NOTES-**
- 8) Bearing at joint(s) 25, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 25=1211, 9=1321.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 12) Use Simpson Strong-Tie HUS26 (14-16d Girder, 6-16d Truss) or equivalent at 4-0-12 from the left end to connect truss(es) to front face of bottom chord.
 - 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-0-12 from the left end to 20-0-12 to connect truss(es) to front face of bottom chord.
 - 14) Fill all nail holes where hanger is in contact with lumber.
 - 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down at 0-0-12, and 825 lb down and 158 lb up at 22-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 3-24=-90, 3-4=-90, 4-8=-90, 24-26=-160, 7-8=-160, 25-33=-160, 22-33=-110, 10-22=-20, 10-39=-110, 9-39=-160

Concentrated Loads (lb)

Vert: 17=-1024(F) 13=-915(F) 24=-147(F) 8=-825(F) 23=-2243(F) 27=-1024(F) 28=-1024(F) 29=-889(F) 30=-900(F) 31=-918(F) 32=-862(F)

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694265
2630107	C2	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:28 2021 Page 1

ID:clow4YlGf7iox0?ly?5BCcz33zm-s64hgqxc7sSY?0SJeHq6ISQoul2cXLKZRua8hzoCaz

0-10-8	4-2-9	8-4-12	14-4-12	18-6-15	22-9-8	23-8-0
0-10-8	4-2-9	4-2-3	6-0-0	4-2-3	4-2-9	0-10-8

Scale = 1:40.6

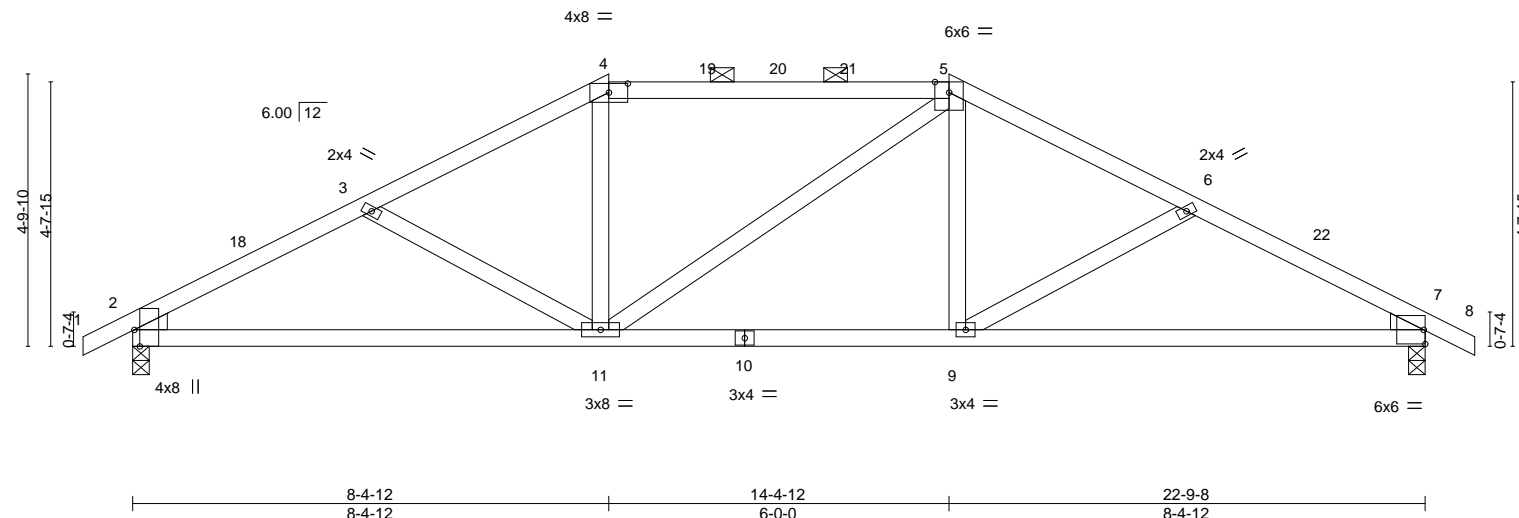


Plate Offsets (X, Y)--		[2:0-3-8,Edge], [2:0-0-3,0-5-0], [2:0-0-1,0-0-3], [4:0-4-0,0-1-15], [7:0-0-3,0-0-1], [7:0-5-0,0-0-3]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.66	in (loc) l/defl L/d
TCDL 20.0	Plate Grip DOL 1.15	BC 0.62	Vert(LL) -0.08 9-11 >999 240
BCLL 0.0	Lumber DOL 1.15	WB 0.14	Vert(CT) -0.17 9-17 >999 180
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.06 7 n/a n/a
	Code IRC2018/TPI2014		
			PLATES MT20
			GRIP 197/144
			Weight: 86 lb FT = 20%

LUMBER-

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

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
Max Horz 2=-80(LC 13)
Max Uplift 2=-195(LC 12), 7=-195(LC 13)
Max Grav 2=1332(LC 1), 7=1332(LC 1)

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

TOP CHORD 2-3=-2084/338, 3-4=-1799/298, 4-5=-1549/304, 5-6=-1799/298, 6-7=-2084/338
BOT CHORD 2-11=-286/1781, 9-11=-144/1549, 7-9=-239/1781
WEBS 3-11=-269/145, 4-11=-8/337, 5-9=-11/337, 6-9=-269/145

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-4-12, Exterior(2R) 8-4-12 to 12-7-11, Interior(1) 12-7-11 to 14-4-12, Exterior(2R) 14-4-12 to 18-8-14, Interior(1) 18-8-14 to 23-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=195, 7=195.
- This truss 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.



February 5, 2021

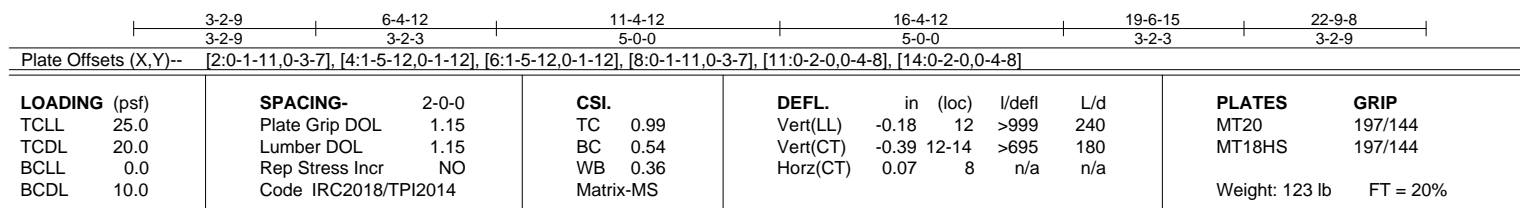
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16023 Swingley Ridge Rd
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:30 2021 Page 1
 ID:clow4Ylgf7iox0?ly?5BCCz33zm-oVCR5Vzs8k6AnJ9rR3JIBAXh?iSp4ONc0NlNgDazoCax
 0-10-8 3-2-9 6-4-12 11-4-12 16-4-12 19-6-15 22-9-8 23-8-0
 0-10-8 3-2-9 3-2-3 5-0-0 5-0-0 3-2-3 3-2-9 0-10-8
 Scale = 1:40.0




REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=62(LC 33)
 Max Uplift 2=-715(LC 8), 8=-715(LC 9)
 Max Grav 2=3042(LC 1), 8=3042(LC 1)

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

TOP CHORD	2-3=-5217/1246, 3-4=-5693/1409, 4-5=-6206/1503, 5-6=-6206/1503, 6-7=-5693/1409, 7-8=-5217/1247
BOT CHORD	2-15=-1112/4589, 14-15=-1112/4589, 12-14=-1200/5046, 11-12=-1147/5046, 10-11=-1051/4589, 8-10=-1051/4589
WEBS	3-15=-627/183, 3-14=-291/734, 4-14=-362/1353, 4-12=-378/1475, 5-12=-619/192, 6-12=-378/1475, 6-11=-362/1353, 7-11=-292/734, 7-10=-627/182

- NOTES-**

 - 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=715, 8=715.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 9) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 7-4-12 from the left end to 15-4-12 to connect truss(es) to back face of bottom chord.
 - 10) Fill all nail holes where hanger is in contact with lumber.
 - 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 890 lb down and 307 lb up at 6-4-12, and 890 lb down and 307 lb up at 16-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



February 5, 2021

Continued on page 2



February 5, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694266
2630107	C3	Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:30 2021 Page 2
ID:clow4YlGf7iox0?ly?5BCcz33zm-oVCR5Vzs8k6AnJ9rR3JIBAXh?iSp4ONc0lNgDazoCax

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-90, 4-6=-90, 6-9=-90, 16-19=-20
- Concentrated Loads (lb)
 - Vert: 14=-890(B) 12=-328(B) 11=-890(B) 22=-328(B) 23=-328(B) 24=-328(B) 25=-328(B)

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694267
2630107	CJ1	Diagonal Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:31 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-HhmqlrUv2E1PTk1_nqXkN41J6rrpswmFP6EI0zoCaw



Scale = 1:21.0

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 0.32	Vert(LL)	-0.03	8	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.06	8	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.28	Horz(CT)	0.03	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 31 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

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

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

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=139, 7=134.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 112 lb down and 92 lb up at 5-7-7, and 112 lb down and 92 lb up at 5-7-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-5=-40, 8-9=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 13=-140(F=-70, B=-70) 14=2(F=1, B=1)



February 5, 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

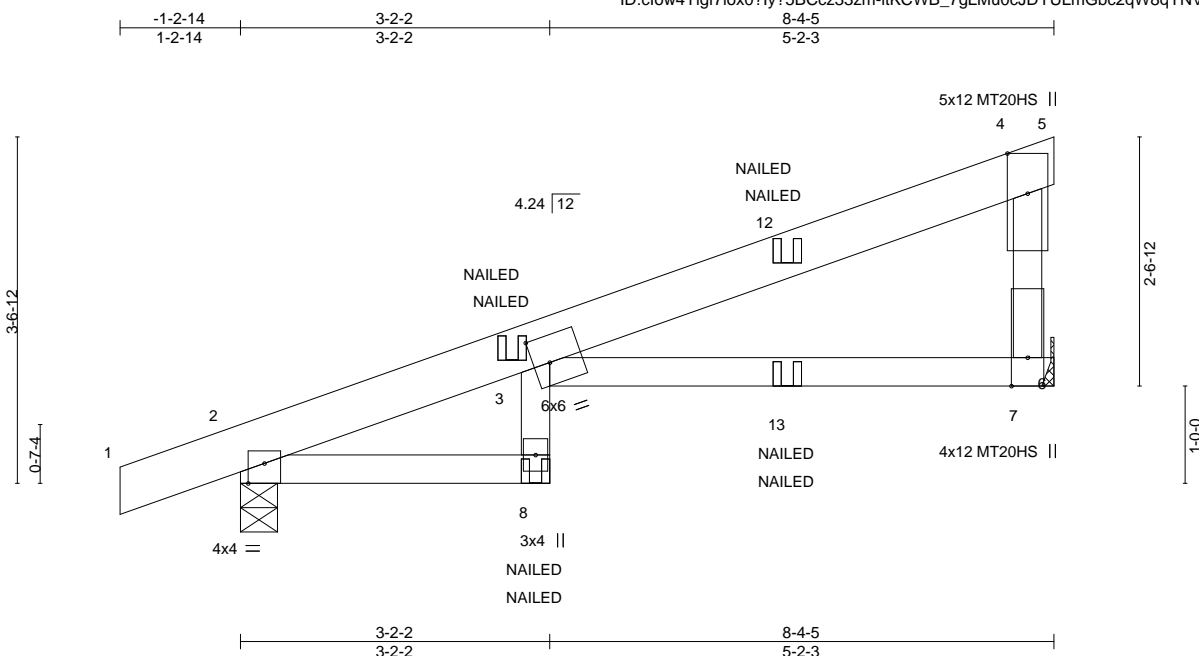


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694268
2630107	CJ2	Diagonal Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:32 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-ltKCWB_7gLMu0cJDYULmGbc2qW8qYNVvT3snHTzoCav



Scale = 1:23.7

Plate Offsets (X,Y)--		[2:0-2-0,Edge], [3:0-2-0,0-3-4]									
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	0.91	Vert(LL)	0.15 3-7	>663	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.30 3-7	>324	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.14 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 31 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
Max Horz 2=127(LC 5)
Max Uplift 7=154(LC 8), 2=160(LC 4)
Max Grav 7=538(LC 1), 2=608(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-285/56, 4-7=-360/126
BOT CHORD 3-7=-88/270

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=154, 2=160.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



February 5, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694269
2630107	CJ2A	Diagonal Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:33 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-D3tajX?IRfUlemuQ6Cs?po9NpvWmHn63jibKpvzoCau

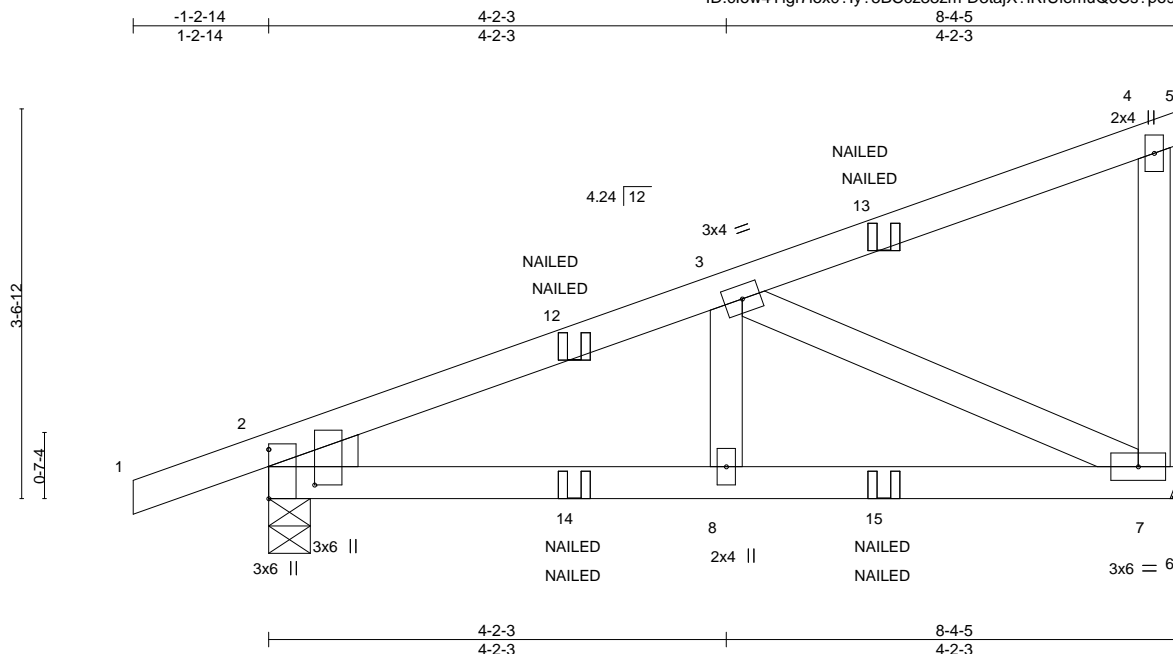


Plate Offsets (X,Y)--		[2:0-3-14,0-5-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.01	7-8	>999	240	MT20	197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.03	7-8	>999	180			
BCLL	0.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.01	7	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 32 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
Max Horz 2=149(LC 7)
Max Uplift 7=-154(LC 8), 2=-162(LC 4)
Max Grav 7=523(LC 1), 2=602(LC 1)

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

TOP CHORD 2-3=-740/181
BOT CHORD 2-8=-208/656, 7-8=-208/656
WEBS 3-7=-721/243

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=154, 2=162.
- 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=-90, 4-5=-40, 6-9=-20
Concentrated Loads (lb)
Vert: 13=-31(F=-16, B=-16) 14=-12(F=-6, B=-6) 15=-63(F=-31, B=-31)



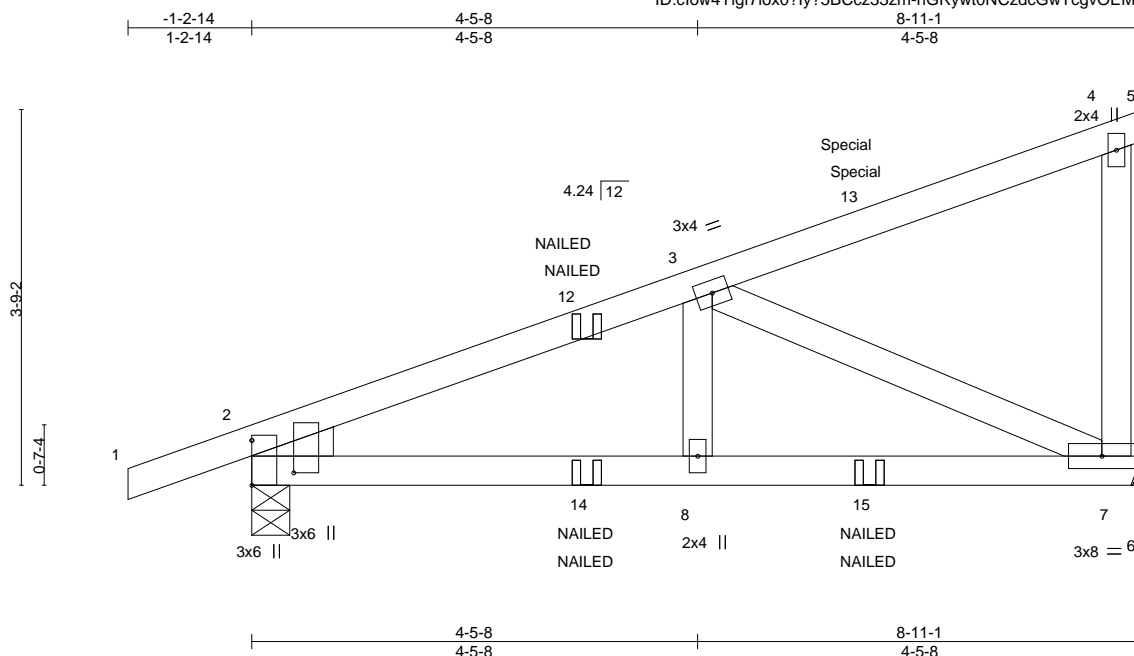
February 5, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



Scale = 1:23.0

Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.02	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.05	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 34 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
Max Horz 2=143(LC 24)
Max Uplift 7=-172(LC 8), 2=-168(LC 4)
Max Grav 7=590(LC 1), 2=645(LC 1)

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

TOP CHORD 2-3=-840/198
BOT CHORD 2-8=-232/748, 7-8=-232/748
WEBS 3-7=-820/272

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=172, 2=168.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down and 82 lb up at 6-2-3, and 80 lb down and 82 lb up at 6-2-3 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 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=90, 4-5=40, 6-9=20
Concentrated Loads (lb)
Vert: 13=68(F=34, B=34) 14=16(F=8, B=8) 15=72(F=36, B=36)



February 5, 2021



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694271
2630107	CJ4	Diagonal Hip Girder	2	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:35 2021 Page 1
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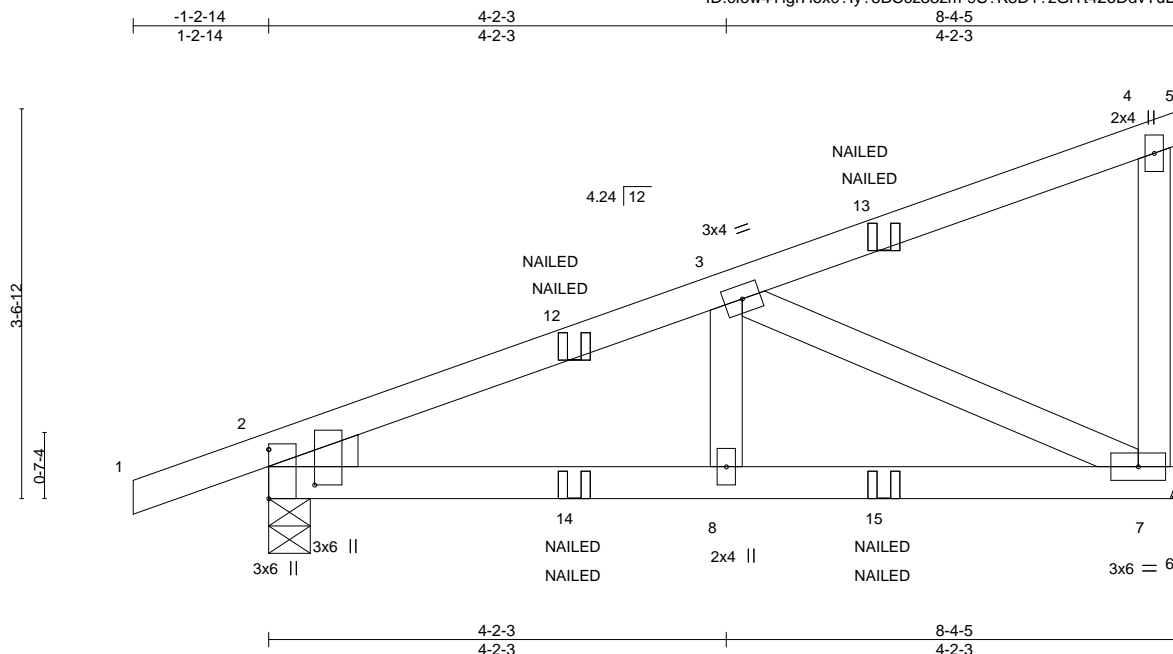


Plate Offsets (X,Y)--		[2:0-3-14,0-5-0]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.03	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 32 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
Max Horz 2=149(LC 7)
Max Uplift 7=-136(LC 8), 2=-152(LC 4)
Max Grav 7=488(LC 1), 2=585(LC 1)

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

TOP CHORD 2-3=-693/156
BOT CHORD 2-8=-185/612, 7-8=-185/612
WEBS 3-7=-673/217

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=136, 2=152.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "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=-90, 4-5=-40, 6-9=-20
Concentrated Loads (lb)
Vert: 13=-16(F) 14=-9(F=-6, B=-3) 15=-31(F=-31, B=1)



February 5, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694272
2630107	CJ5	Diagonal Hip Girder	2	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:35 2021 Page 1
						ID:clow4Ylgf7iox0?ly?5BCcz33zm-9S?K8D1?zGIt142oDdvTuDEg2jDRikFMA14RunzoCas
						Job Reference (optional)

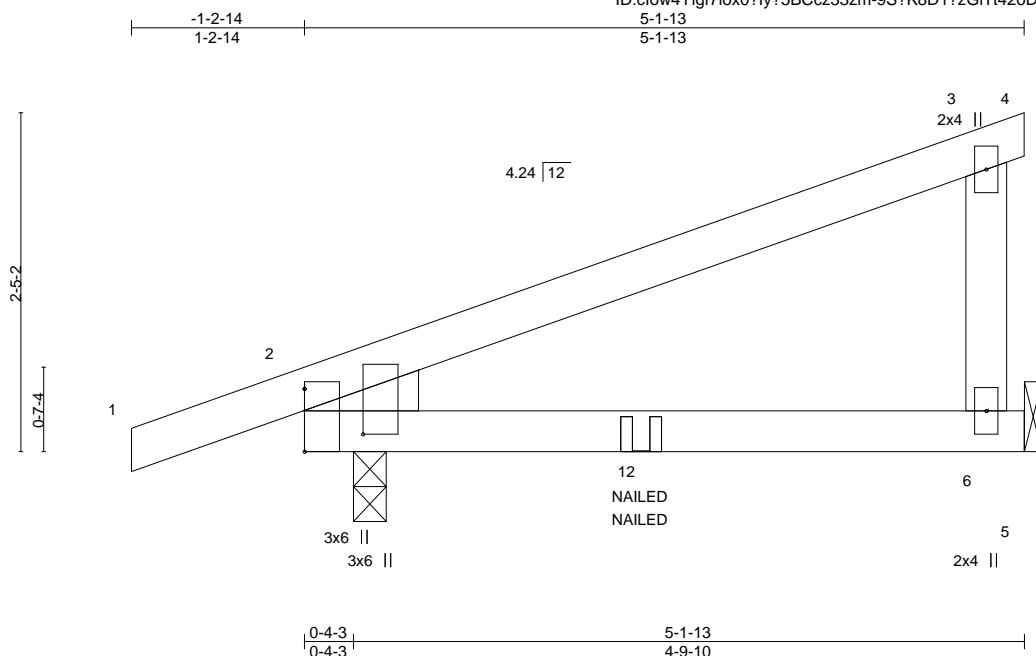


Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.04	6-11	>999	240	MT20	197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.06	6-11	>999	180			
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	2	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 17 lb	FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-2-13
 Max Horz 2=98(LC 7)
 Max Uplift 6=83(LC 8), 2=140(LC 4)
 Max Grav 6=267(LC 1), 2=455(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=140.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 Vert: 1-3=90, 3-4=40, 5-7=20
- Concentrated Loads (lb)
 Vert: 12=57(F=29, B=29)



February 5, 2021

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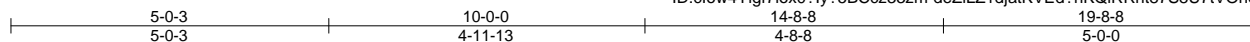
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694273
2630107	D1	Common	2	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:36 2021 Page 1

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Scale = 1:36.3

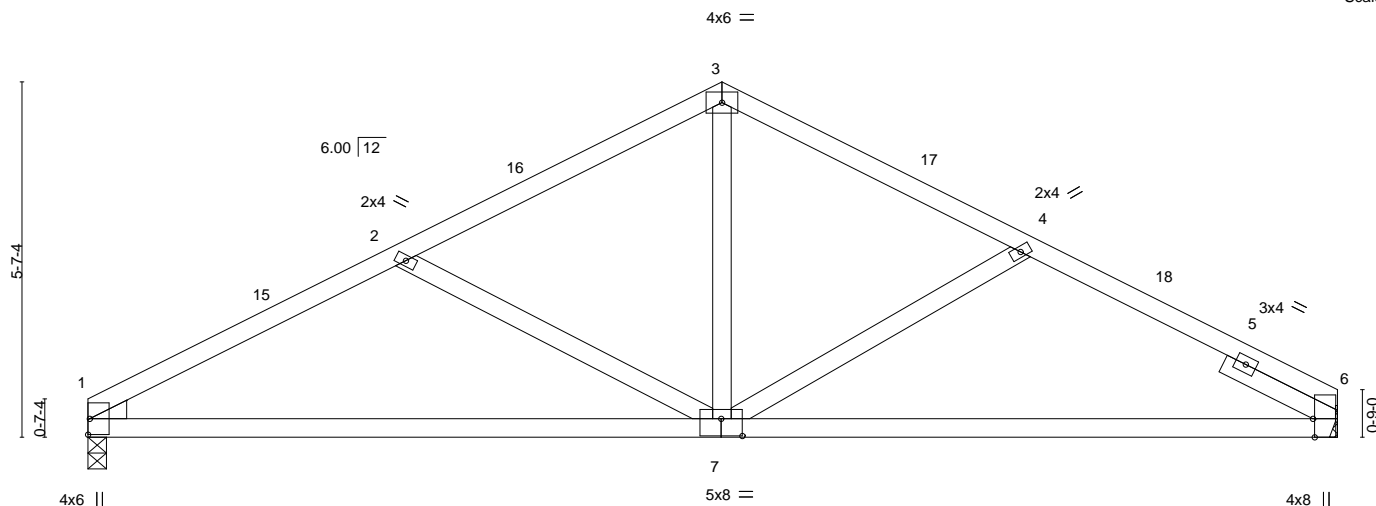


Plate Offsets (X,Y)--	[1:0-0-3,0-5-0], [1:0-0-1,0-0-3], [6:0-3-8,Edge], [7:0-4-0,0-3-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	-0.13	7-14	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.29	7-14	>829	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.04	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 69 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

TOP CHORD 1-2=-1742/374, 2-3=-1293/293, 3-4=-1280/295, 4-6=-1625/358
BOT CHORD 1-7=-276/1486, 6-7=-248/1396
WEBS 2-7=-509/208, 3-7=-90/614, 4-7=-428/192

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=144, 1=146.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 5, 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

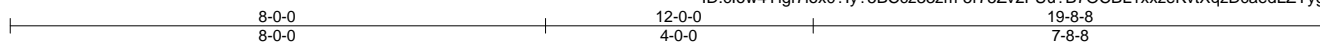
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694274
2630107	D2	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:37 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-5r75Zv2FUu?B7OCBL1xxzeKvtXqzDcaedLZYygzoCaq



Scale = 1:34.4

12x22 MT18HS =

4x8 =

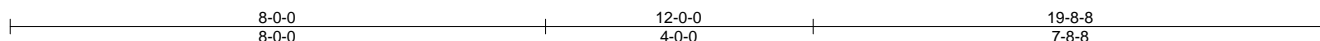
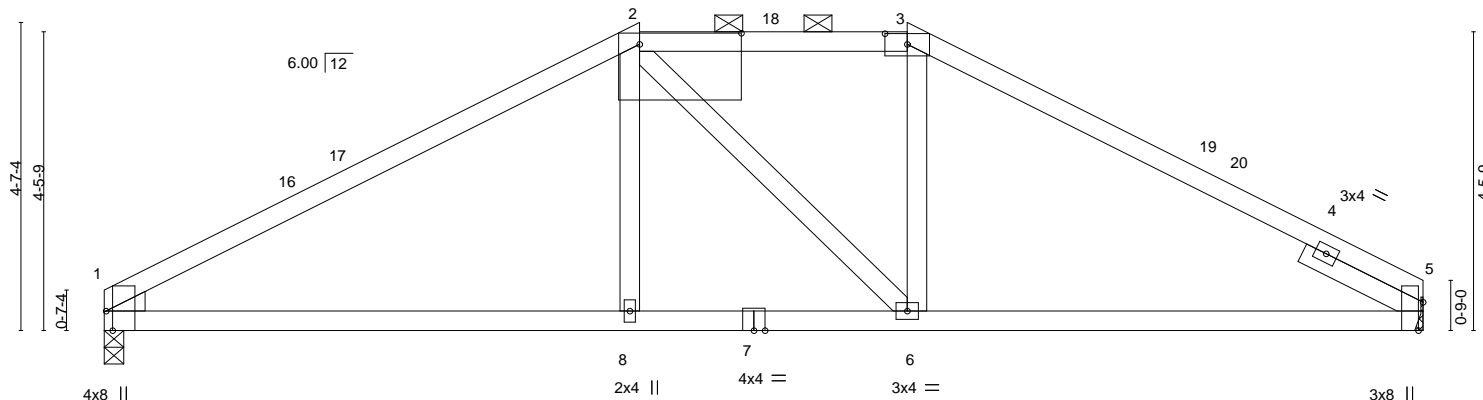


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [1:0-0-3,0-5-0], [1:0-0-1,0-0-3], [2:1-6-4,0-2-0], [3:0-4-0,0-1-15], [5:0-5-1,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	0.10 8-15 >999 240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.22 8-15 >999 180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.03 1 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 66 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (4-8-4 max.): 2-3.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	
Left: 2x4 SPF No.2	
SLIDER Right 2x4 SPF No.2 2-0-0	

REACTIONS. (size) 5=Mechanical, 1=0-3-8
Max Horz 1=73(LC 12)
Max Uplift 5=149(LC 13), 1=151(LC 12)
Max Grav 5=1084(LC 1), 1=1084(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1605/290, 2-3=-1265/312, 3-5=-1471/286
BOT CHORD 1-8=-179/1308, 6-8=-180/1303, 5-6=-166/1271
WEBS 2-8=0/254, 3-6=-21/250

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-0-0, Exterior(2E) 8-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 19-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=149, 1=151.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694275
2630107	D3	Hip Girder	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:39 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-2DFr_a4W0VfUhmLZSSzP33PGLKYPhUAx4f2f1ZzoCao

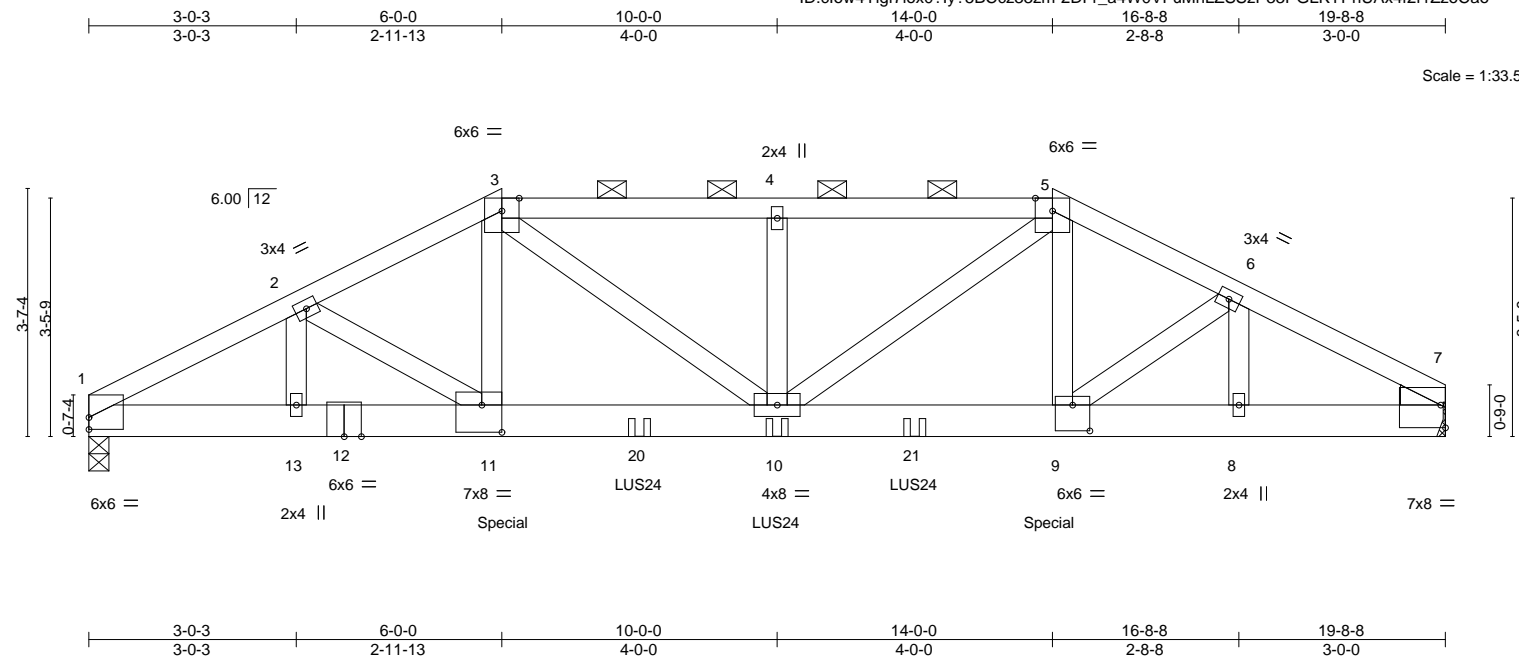


Plate Offsets (X,Y)--		[1:0-0,0-2-1], [7:Edge,0-3-15], [7:0-5-8,0-0-7], [7:0-0-7,0-0-3], [9:0-3-0,0-4-8], [11:0-3-8,0-4-12]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	in (loc) l/defl L/d
TCDL 20.0	Lumber DOL 1.15	BC 0.51	Vert(LL) -0.11 10 >999 240
BCLL 0.0	Rep Stress Incr NO	WB 0.26	Vert(CT) -0.24 10 >978 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	Horz(CT) 0.04 7 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 90 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 7=Mechanical
Max Horz 1=54(LC 29)
Max Uplift 1=522(LC 8), 7=531(LC 9)
Max Grav 1=2290(LC 1), 7=2326(LC 1)

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

TOP CHORD 1-2=-3985/928, 2-3=-4249/1033, 3-4=-4456/1054, 4-5=-4456/1054, 5-6=-4137/1008, 6-7=-3705/869
BOT CHORD 1-13=-840/3495, 11-13=-840/3495, 10-11=-878/3757, 9-10=-809/3674, 8-9=-729/3237, 7-8=-729/3237
WEBS 2-13=-429/130, 2-11=-233/490, 3-11=-264/1001, 3-10=-251/963, 4-10=-499/155, 5-10=-271/1061, 5-9=-239/886, 6-9=-224/693, 6-8=-595/161

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=522, 7=531.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) 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 8-0-0 from the left end to 12-0-0 to connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 766 lb down and 266 lb up at 6-0-0, and 766 lb down and 266 lb up at 13-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) 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



February 5, 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/43 Woodside Ridge/MO	I44694275
2630107	D3	Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:39 2021 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-90, 3-5=-90, 5-7=-90, 14-17=-20
- Concentrated Loads (lb)
 - Vert: 11=-766(B) 10=-306(B) 9=-766(B) 20=-306(B) 21=-306(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

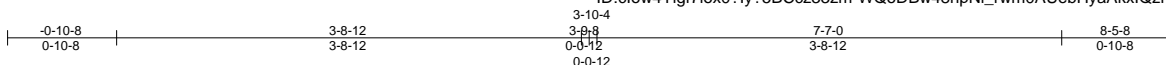
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694276
2630107	E1	Hip Girder	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:40 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-WQoDBw48npNI_rwm0AUebHyaAkxIQzN5JJoCZ?zoCan



Scale = 1:18.5

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 0.25	Vert(LL)	-0.01	6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.02	6	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.14	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
Max Horz 2=41(LC 30)
Max Uplift 2=196(LC 8), 4=196(LC 9)
Max Grav 2=775(LC 1), 4=775(LC 1)

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

TOP CHORD 2-3=-1028/292, 3-4=-1028/292
BOT CHORD 2-6=-221/847, 4-6=-221/847
WEBS 3-6=-158/552

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=196, 4=196.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 513 lb down and 241 lb up at 3-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-5=-90, 7-10=-20
Concentrated Loads (lb)
Vert: 3=-45(B) 6=-513(B)



February 5, 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/43 Woodside Ridge/MO	144694277
2630107	E2	Common	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:40 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-WQoDBw48npNL_rwm0AUebHybGkyQ?v5JJJoCZ?zoCan

-0-10-8	3-9-8	7-7-0	8-5-8
0-10-8	3-9-8	3-9-8	0-10-8

Scale = 1:17.7

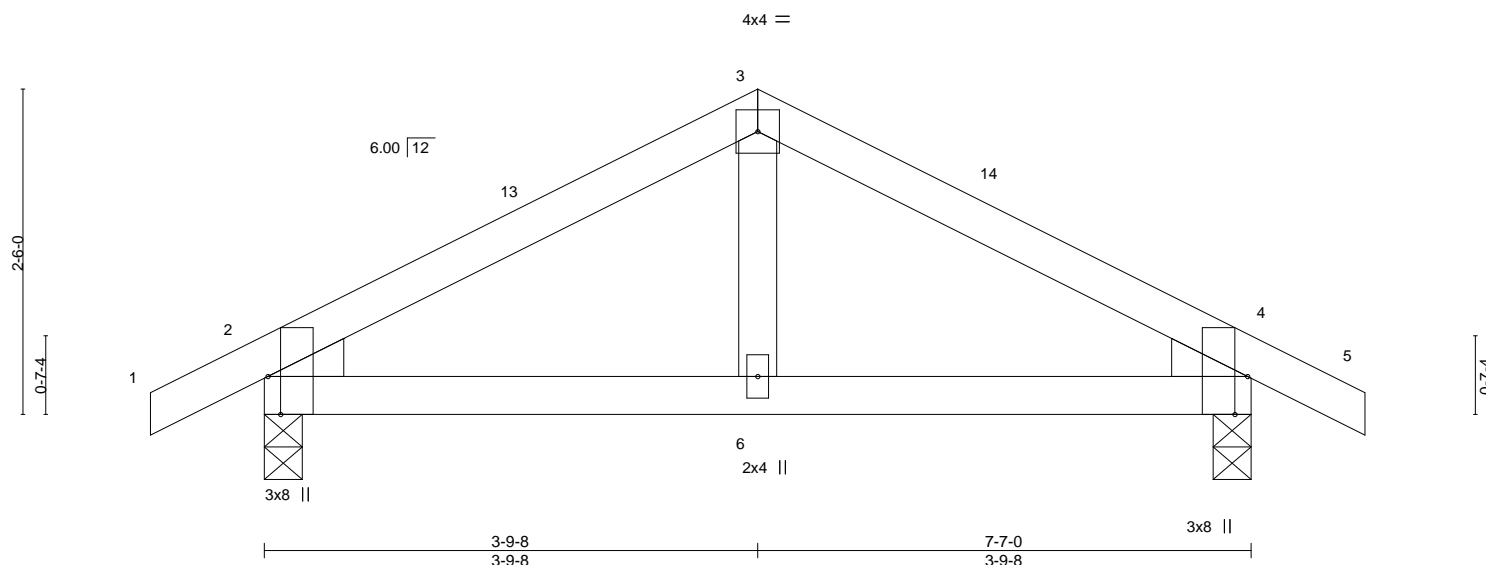


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [4:0-0-1,0-0-3], [4:0-0-3,0-5-0], [4:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	6-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.01	6-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 24 lb	FT = 20%

LUMBER-

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

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

BRACING-

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

REACTIONS.

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

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

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-8, Exterior(2R) 3-9-8 to 6-11-11, Interior(1) 6-11-11 to 8-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 5, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

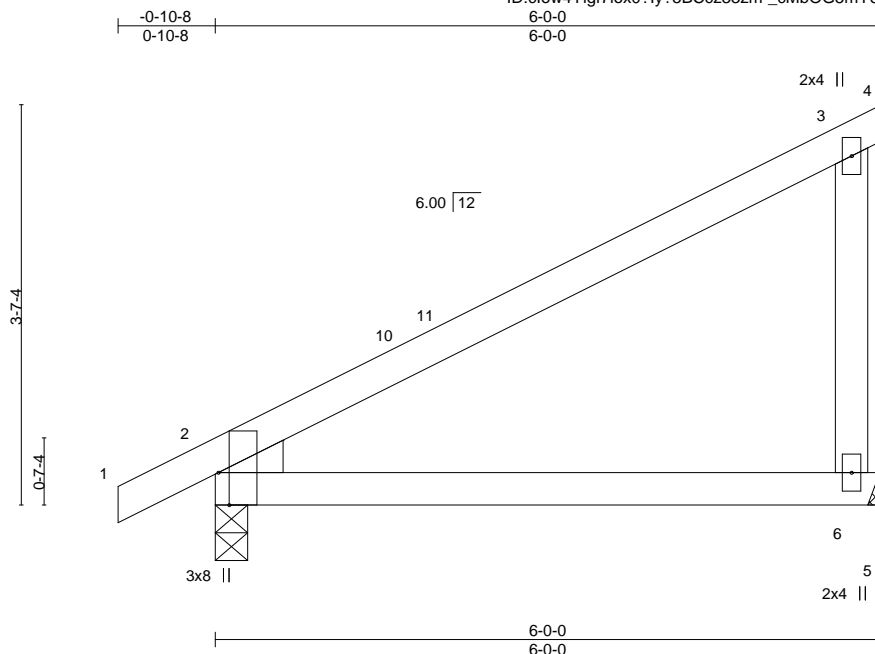
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694278
2630107	J1	Jack-Closed	17	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:41 2021 Page 1

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Scale = 1:20.7

Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.54
TCDL 20.0	Lumber DOL	1.15	BC 0.41
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL. in (loc) l/defl L/d
			Vert(LL) 0.07 6-9 >924 240
			Vert(CT) -0.14 6-9 >505 180
			Horz(CT) 0.03 2 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 20 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



February 5, 2021

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

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

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



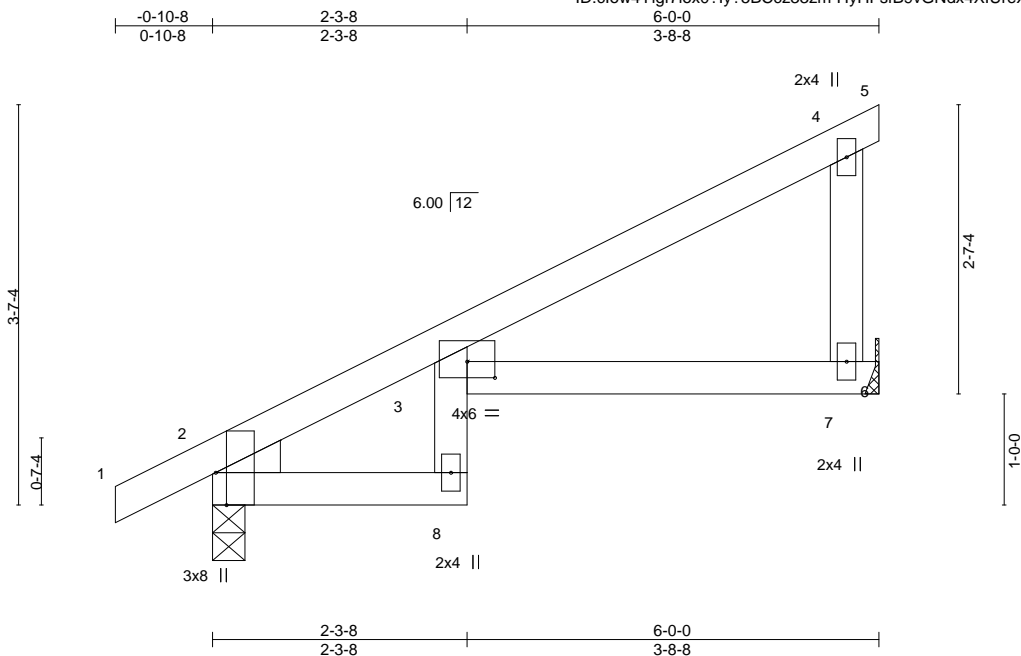
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694279
2630107	J2	Jack-Open	3	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:48 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-HyHFsB9vGNdx4XIUreXwzHpZyflcqG9YkdrXzoCaf



Scale = 1:20.7

Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [3:0-3-0,0-1-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.80
TCDL 20.0	Lumber DOL	1.15	BC 0.30
BCLL 0.0	Rep Stress Incr	YES	WB 0.04
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL. in (loc) l/defl L/d
			Vert(LL) 0.17 8 >399 240
			Vert(CT) -0.29 8 >236 180
			Horz(CT) 0.20 7 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 20 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=Mechanical
Max Horz 2=137(LC 12)
Max Uplift 2=-41(LC 12), 7=-99(LC 12)
Max Grav 2=400(LC 1), 7=327(LC 1)

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

WEBS 4-7=-284/223

NOTES-

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



February 5, 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

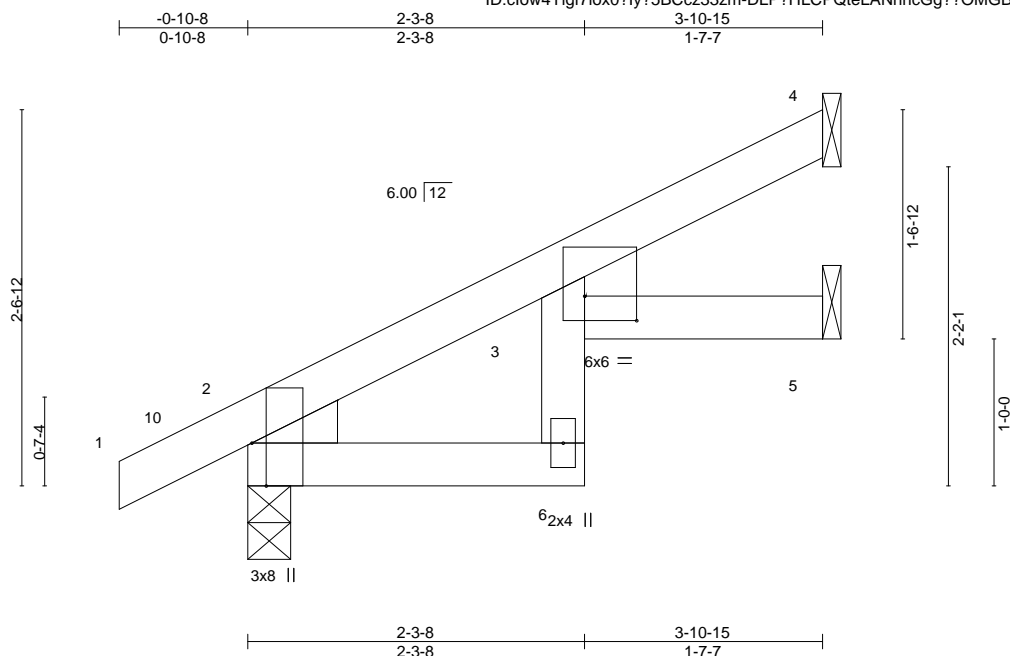
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO
2630107	J3	Jack-Open	2	1	144694280
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:50 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-DLP?HLCpQteLANhcgGg??OMGBmMQmWzZcsDkwQzoCad



Scale = 1:15.7

Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [3:0-4-4,0-2-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	0.03	6	>999	240	MT20
TCDL 20.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.05	6	>999	180	GRIP
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.04	5	n/a	n/a	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						
								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 or 3-10-15 oc purlins.

BOT CHORD

Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=94(LC 12)

Max Uplift 4=46(LC 12), 2=35(LC 12), 5=16(LC 12)

Max Grav 4=123(LC 1), 2=301(LC 1), 5=81(LC 1)

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

NOTES-

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



February 5, 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 2630107	Truss J3A	Truss Type Jack-Open	Qty 2	Ply 1	Summit/43 Woodside Ridge/MO 144694281
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

-0-10-8
0-10-8
 3-10-15
3-10-15

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:50 2021 Page 1
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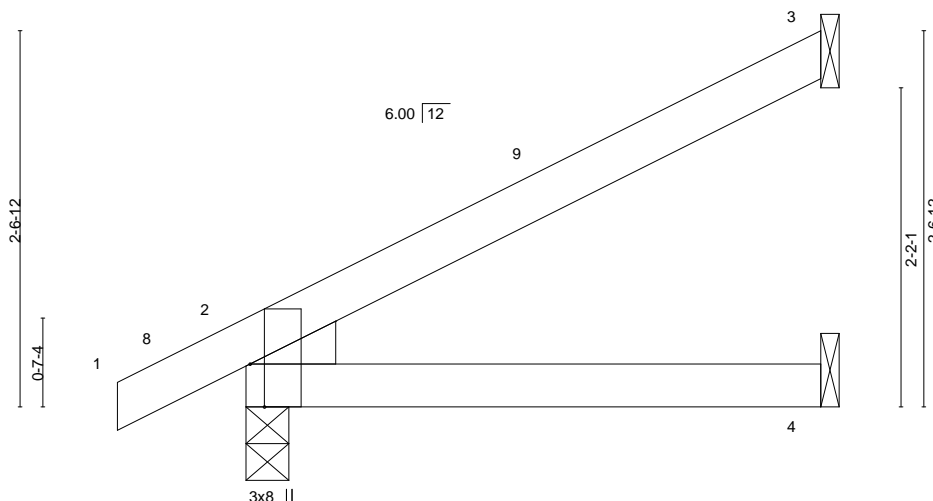


Plate Offsets (X,Y)--	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.03	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 11 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 or 3-10-15 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
 Max Horz 2=94(LC 12)
 Max Uplift 3=-60(LC 12), 2=-36(LC 12), 4=-3(LC 12)
 Max Grav 3=143(LC 1), 2=299(LC 1), 4=76(LC 3)

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

NOTES-

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



February 5, 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 2630107	Truss J4	Truss Type Jack-Open	Qty 4	Ply 1	Summit/43 Woodside Ridge/MO 144694282
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:51 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-hXzNVhD1BBmBoXGt9_BEYbvUAAIbVzCirWyHSszoCac



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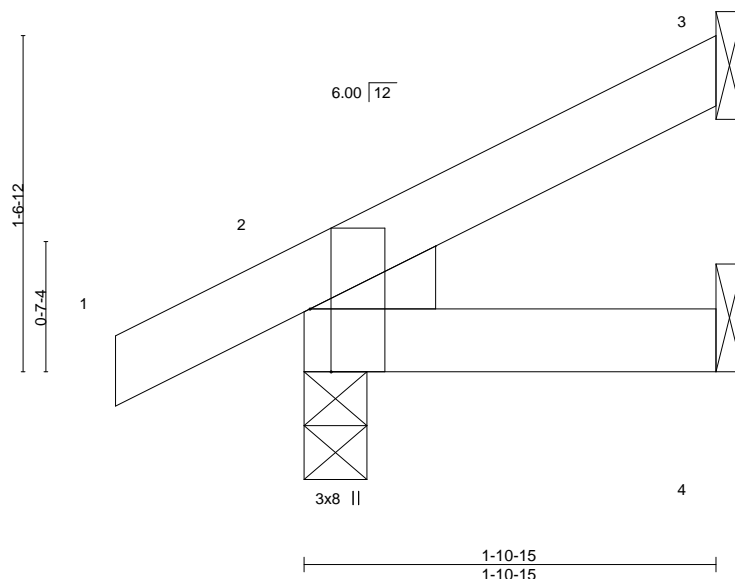


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 20.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 7 >999 240
			Vert(CT) -0.00 7 >999 180
			Horz(CT) 0.00 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 7 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 or 1-10-15 oc purlins.

BOT CHORD

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=54(LC 12)

Max Uplift 3=-27(LC 12), 2=-28(LC 12), 4=-4(LC 12)

Max Grav 3=60(LC 1), 2=201(LC 1), 4=35(LC 3)

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

NOTES-

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



February 5, 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/43 Woodside Ridge/MO	I44694283
2630107	J5	Jack-Open	4	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8,240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:52 2021 Page 1

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0-10-8

2-3-11
2-3-11

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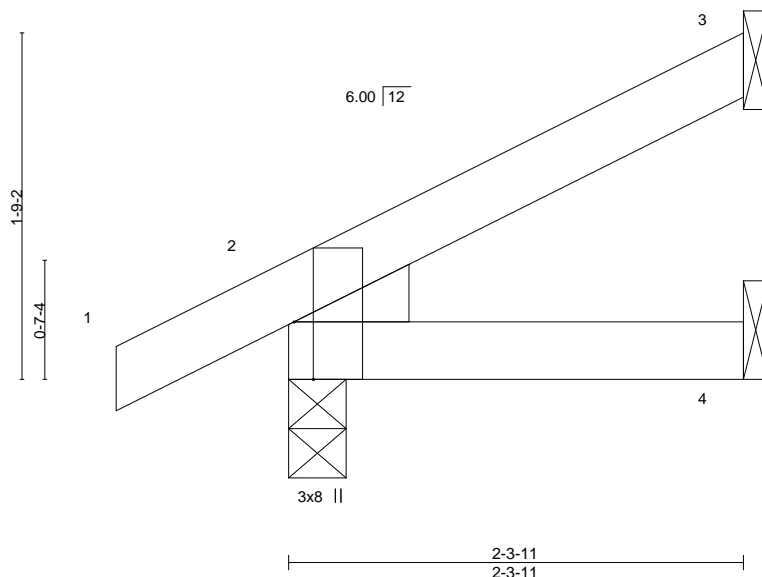


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 20.0	Lumber DOL	1.15	BC 0.05
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 7 >999 240
			Vert(CT) -0.00 7 >999 180
			Horz(CT) 0.00 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 8 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 or 2-3-11 oc purlins.

BOT CHORD

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=61(LC 12)

Max Uplift 3=33(LC 12), 2=29(LC 12), 4=4(LC 12)

Max Grav 3=75(LC 1), 2=218(LC 1), 4=42(LC 3)

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

NOTES-

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



February 5, 2021

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

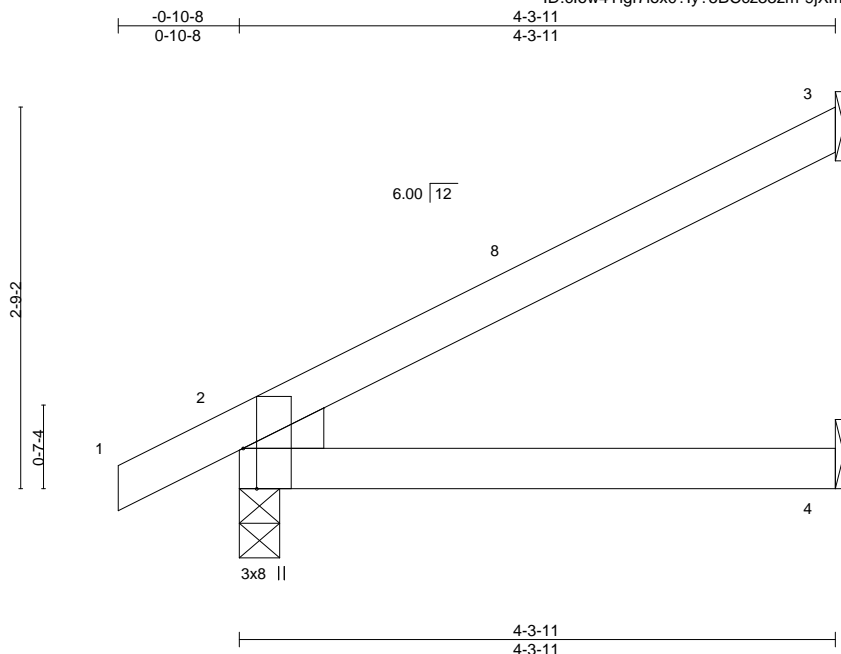
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2630107	Truss J6	Truss Type Jack-Open	Qty 4	Ply 1	Summit/43 Woodside Ridge/MO 144694284
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:52 2021 Page 1
ID:clow4Ylgr7iox0?ly?5BCcz33zm-9jXmi1EgyVu2Qhr3jhiT4pRcba1vEQss4Air_IzoCab



Scale = 1:16.7

Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28
TCDL 20.0	Lumber DOL	1.15	BC 0.22
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.03 4-7 >999 240
			Vert(CT) -0.04 4-7 >999 180
			Horz(CT) 0.01 2 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 12 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=102(LC 12)
Max Uplift 3=68(LC 12), 2=37(LC 12), 4=2(LC 12)
Max Grav 3=161(LC 1), 2=320(LC 1), 4=83(LC 3)

FORCES.

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

NOTES-

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



February 5, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694285
2630107	J7	Jack-Closed	7	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:53 2021 Page 1

ID:clow4YIgf7iox0?ly?5BCcz33zm-dw58wNEljo0v2rQGHPDid0_iyzJKzti?JqROXlzoCaa



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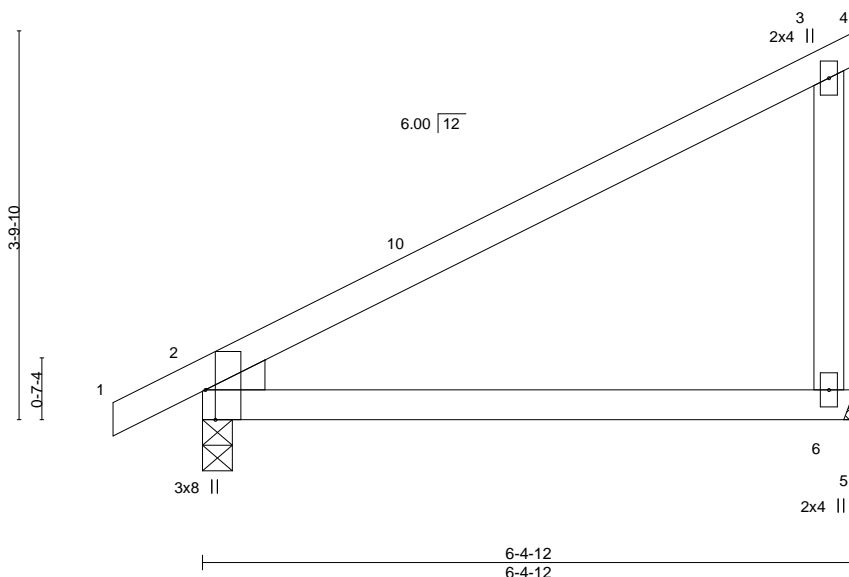


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.63
TCDL 20.0	Lumber DOL	1.15	BC 0.46
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.09 6-9 >806 240
			Vert(CT) -0.18 6-9 >417 180
			Horz(CT) 0.03 2 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 21 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
Max Horz 2=147(LC 11)
Max Uplift 6=87(LC 12), 2=59(LC 12)
Max Grav 6=348(LC 1), 2=421(LC 1)

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

TOP CHORD 3-6=-253/225

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-4-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 5, 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/43 Woodside Ridge/MO	144694286
2630107	J8	Jack-Open	2	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8,240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:54 2021 Page 1
						ID:c1ow4Yl9f7iox0?ly?5BCcz33zm-56fW7jFwU68mf??Sr6lxAEXzqNktiKy9XUBy3BzoCaZ
						Job Reference (optional)

-0-10-8 3-10-15
0-10-8 3-10-15

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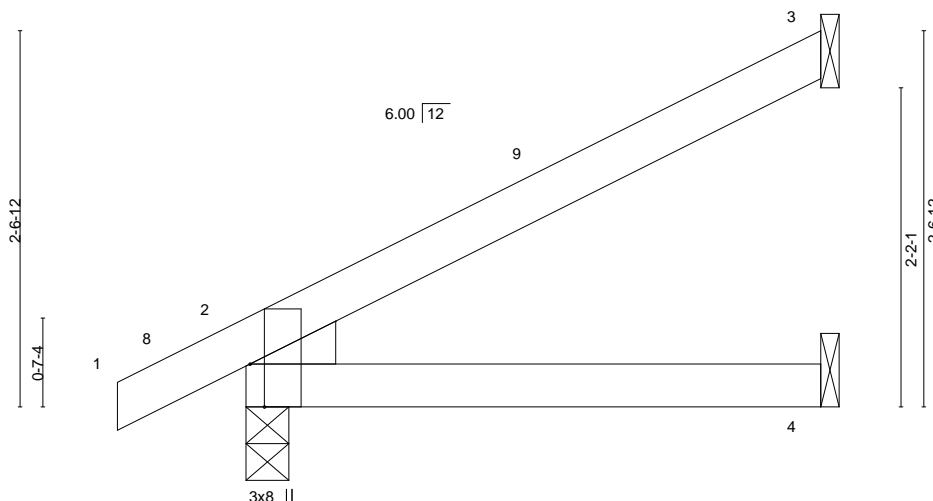


Plate Offsets (X,Y)--	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.03	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 11 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 or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=94(LC 12)
Max Uplift 3=-60(LC 12), 2=-36(LC 12), 4=-3(LC 12)
Max Grav 3=143(LC 1), 2=299(LC 1), 4=76(LC 3)

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

NOTES-

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



February 5, 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

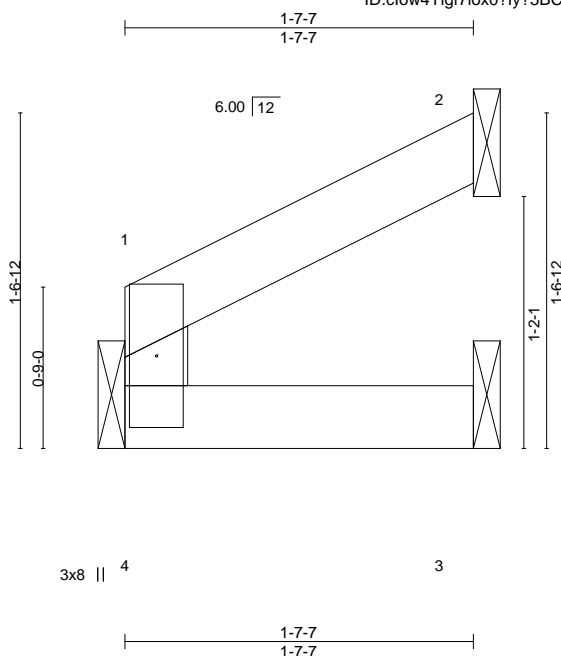
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO
2630107	J9	Jack-Open	1	1	I44694287
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:54 2021 Page 1

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Scale = 1:10.7

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

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



February 5, 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

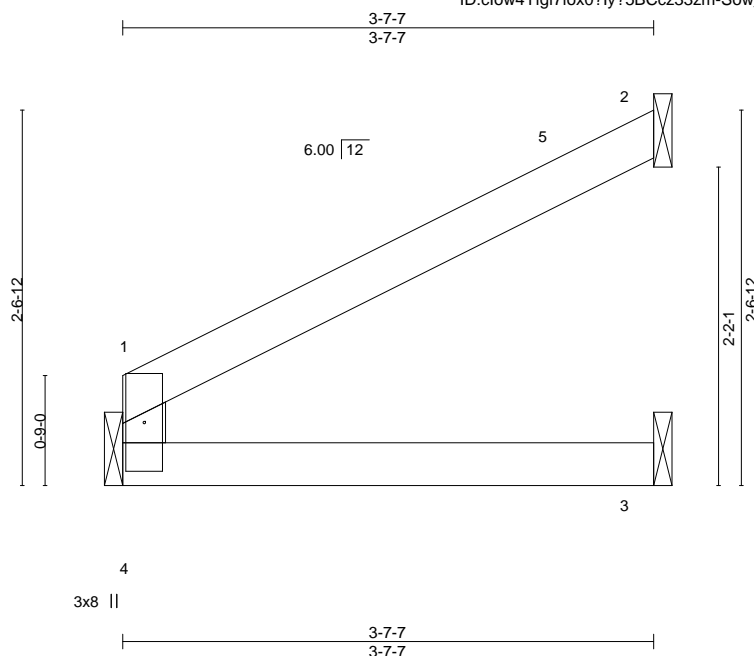
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694288
2630107	J10	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8,240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:42 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-Sow_cc6OJQdTD9488bX6gi1wzYetuv_NncHJetzoCal



Scale = 1:15.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.01 3-4	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02 3-4	>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-MR					Weight: 9 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins, except end verticals.

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

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical

Max Horz 4=62(LC 12)

Max Uplift 4=7(LC 12), 2=63(LC 12)

Max Grav 4=188(LC 1), 2=140(LC 1), 3=69(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-6-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 5, 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 2630107	Truss J11	Truss Type Jack-Open	Qty 3	Ply 1	Summit/43 Woodside Ridge/MO I44694289
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:42 2021 Page 1

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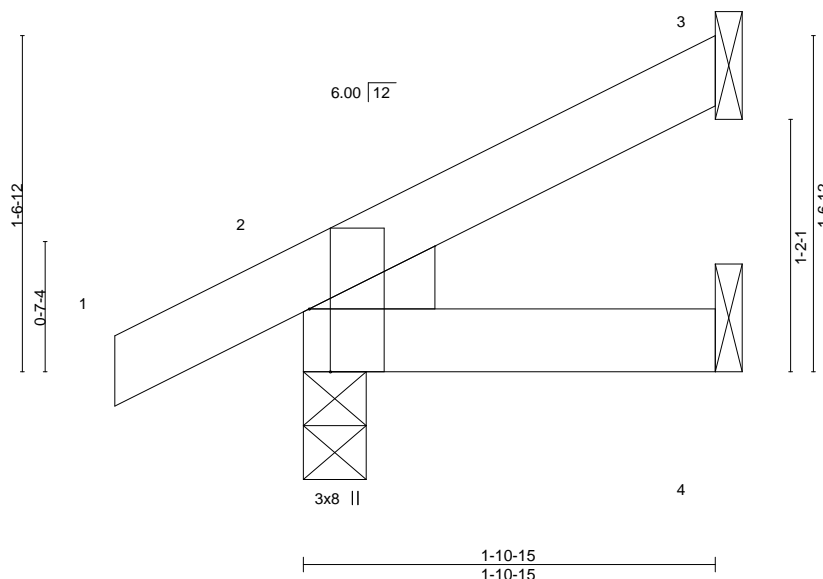


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 20.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 7 >999 240
			Vert(CT) -0.00 7 >999 180
			Horz(CT) 0.00 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 7 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

BOT CHORD

Structural wood sheathing directly applied or 1-10-15 oc purlins.

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=54(LC 12)

Max Uplift 3=-27(LC 12), 2=-28(LC 12), 4=-4(LC 12)

Max Grav 3=60(LC 1), 2=201(LC 1), 4=35(LC 3)

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

NOTES-

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



February 5, 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

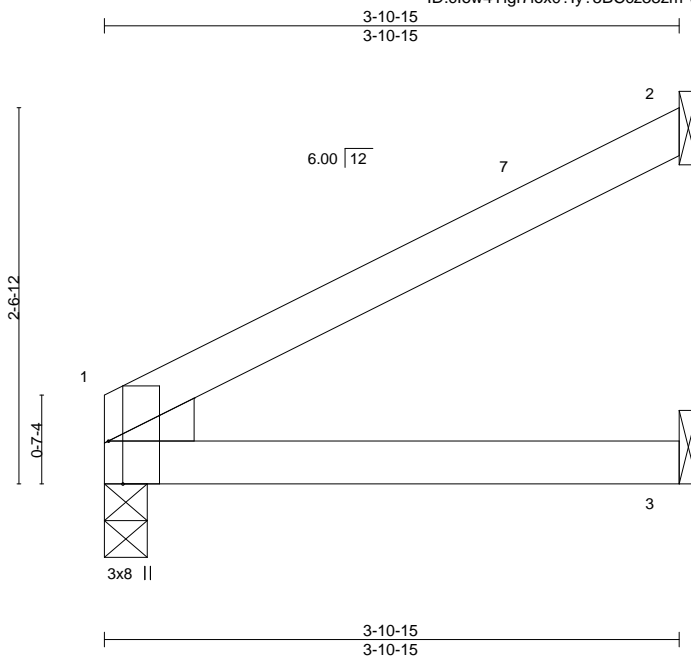
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694290
2630107	J12	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:43 2021 Page 1

ID:clow4Y1gf7iox0?ly?5BCcz33zm-w?UMpy704klKrJfLh12MDvZ5OxzdMEX?G0sAKzoCak



Scale = 1:15.7

Plate Offsets (X,Y)--		[1:0-0-1,0-0-3], [1:0-0-3,0-5-0], [1:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25
TCDL 20.0	Lumber DOL	1.15	BC 0.22
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.02 3-6 >999 240
			Vert(CT) -0.03 3-6 >999 180
			Horz(CT) 0.01 1 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 10 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 or 3-10-15 oc purlins.

BOT CHORD

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

REACTIONS.

(size) 2=Mechanical, 3=Mechanical, 1=0-3-8

Max Horz 1=79(LC 12)

Max Uplift 2=61(LC 12), 3=4(LC 12), 1=14(LC 12)

Max Grav 2=147(LC 1), 3=79(LC 3), 1=212(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 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) 2, 3, 1.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 5, 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 2630107	Truss J13	Truss Type Jack-Open	Qty 1	Ply 1	Summit/43 Woodside Ridge/MO 144694291
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:44 2021 Page 1

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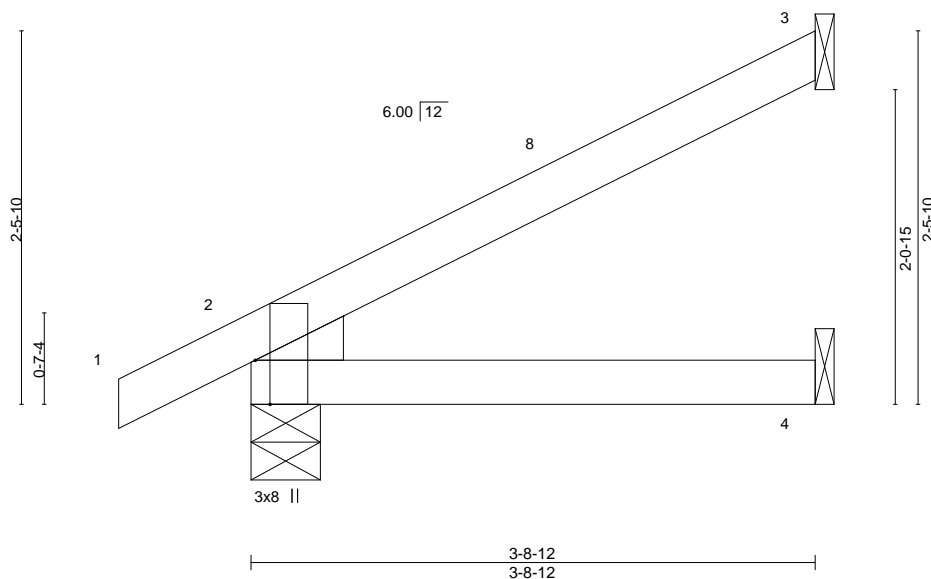


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21
TCDL 20.0	Lumber DOL	1.15	BC 0.17
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.02 4-7 >999 240
			Vert(CT) -0.02 4-7 >999 180
			Horz(CT) 0.01 2 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 11 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 or 3-8-12 oc purlins.

BOT CHORD

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

REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical

Max Horz 2=90(LC 12)

Max Uplift 3=-57(LC 12), 2=-35(LC 12), 4=-3(LC 12)

Max Grav 3=135(LC 1), 2=290(LC 1), 4=73(LC 3)

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

NOTES-

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



February 5, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2630107	Truss J14	Truss Type Jack-Closed	Qty 2	Ply 1	Summit/43 Woodside Ridge/MO I44694292
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:44 2021 Page 1
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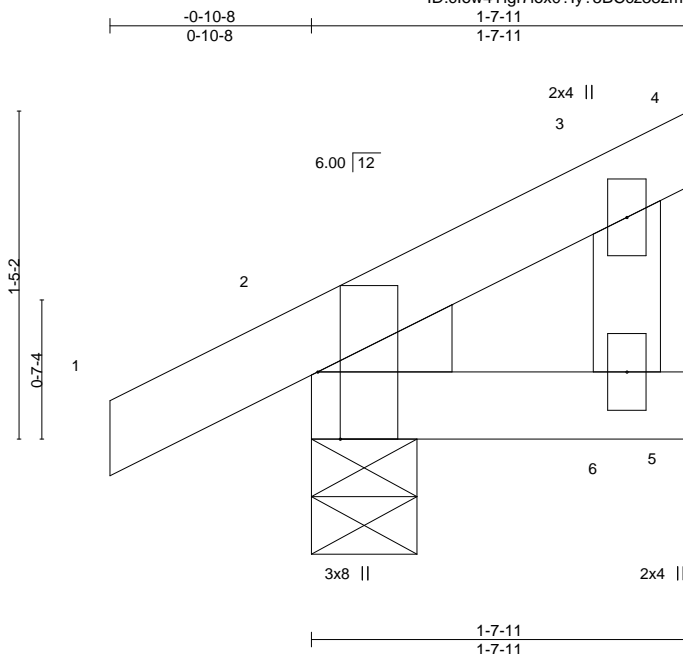


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 20.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL. in (loc) l/defl L/d
			Vert(LL) 0.00 9 >999 240
			Vert(CT) -0.00 9 >999 180
			Horz(CT) 0.00 2 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 7 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-5-8, 5=Mechanical
Max Horz 2=48(LC 11)
Max Uplift 2=-33(LC 12), 5=-19(LC 12)
Max Grav 2=188(LC 1), 5=57(LC 1)

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

NOTES-

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



February 5, 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/43 Woodside Ridge/MO
2630107	J15	Jack-Closed	2	1	I44694293
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:45 2021 Page 1

ID:clow4YIgf7iox0?ly?5BCcz33zm-sNc6Ee8HcL?24cpj4qIKfThi55FjqTaVzFCzoCai

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0-10-8

1-7-11
1-7-11

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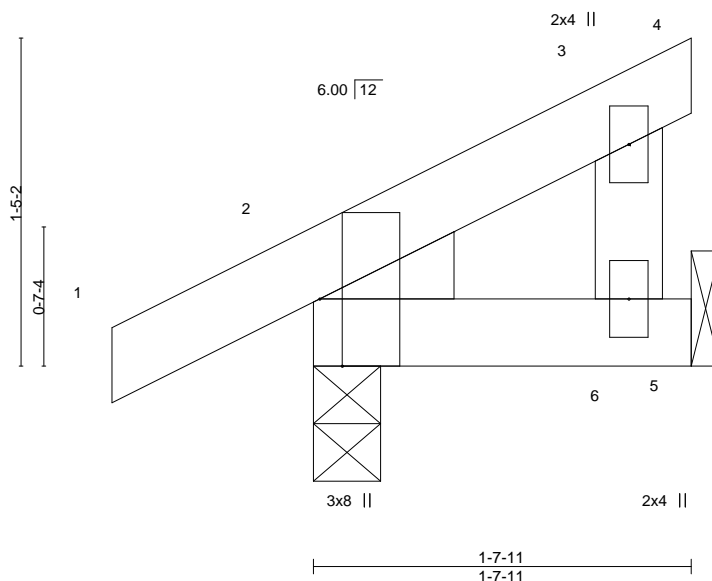


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 20.0	Lumber DOL	1.15	BC 0.04
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 9 >999 240
			Vert(CT) -0.00 9 >999 180
			Horz(CT) -0.00 2 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 7 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 5=48(LC 11)
Max Uplift 2=-33(LC 12), 5=-19(LC 12)
Max Grav 2=188(LC 1), 5=57(LC 1)

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

NOTES-

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



February 5, 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/43 Woodside Ridge/MO	144694294
2630107	J16	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:46 2021 Page 1

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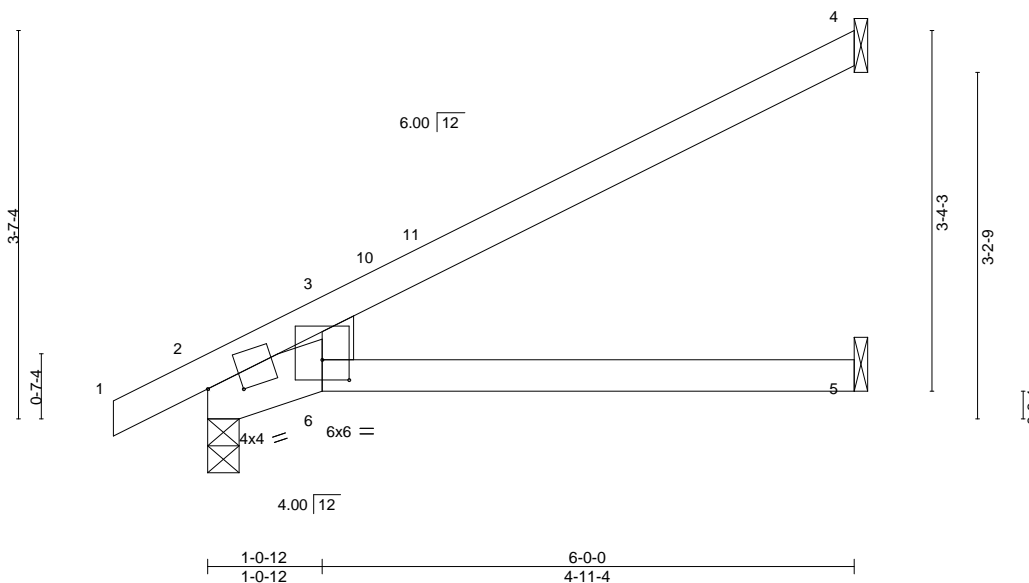


Plate Offsets (X,Y)-- [2:0-3-13,0-1-5], [3:0-1-12,0-0-14], [6:0-3-0,0-2-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	0.11	6	>651	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.17	6	>422	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.05	2	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 *Except*
 2-6: 2x6 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=136(LC 12)
 Max Uplift 4=116(LC 12), 2=46(LC 12)
 Max Grav 4=272(LC 1), 2=411(LC 1), 5=98(LC 3)

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

TOP CHORD 2-3=-370/71
 WEBS 3-6=-307/470

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=116.
- 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.



February 5, 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/43 Woodside Ridge/MO	144694295
2630107	J17	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:46 2021 Page 1

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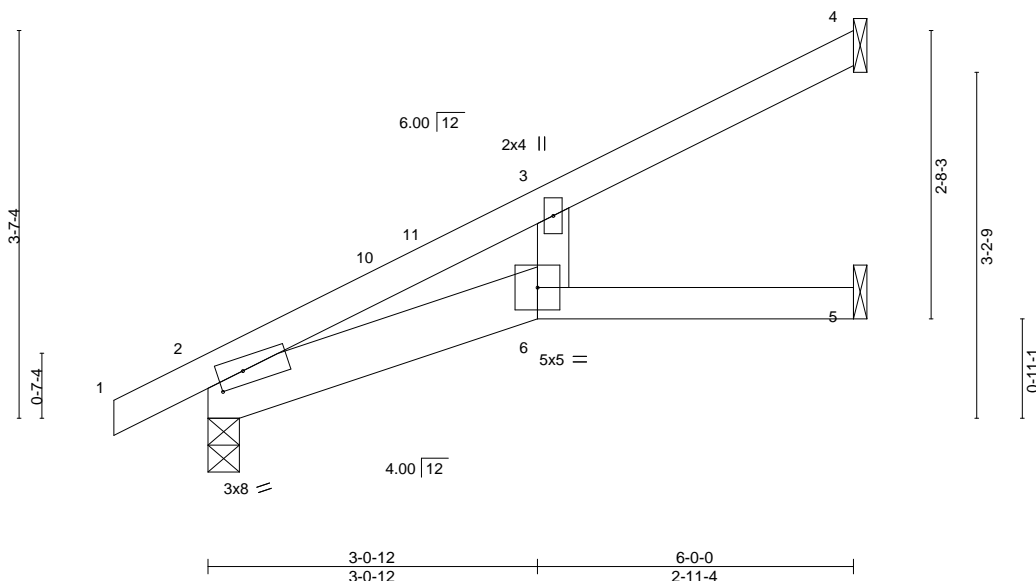


Plate Offsets (X,Y)--		[2:0-2-13,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	0.18	6	>399	240	MT20	197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.30	6	>235	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.09	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 *Except*
2-6: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=136(LC 12)
Max Uplift 4=-108(LC 12), 2=-46(LC 12)
Max Grav 4=292(LC 1), 2=411(LC 1), 5=58(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=108.
- 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.



February 5, 2021

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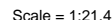
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:47 2021 Page 1
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BRACING-	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=107.
- 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.



February 5, 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

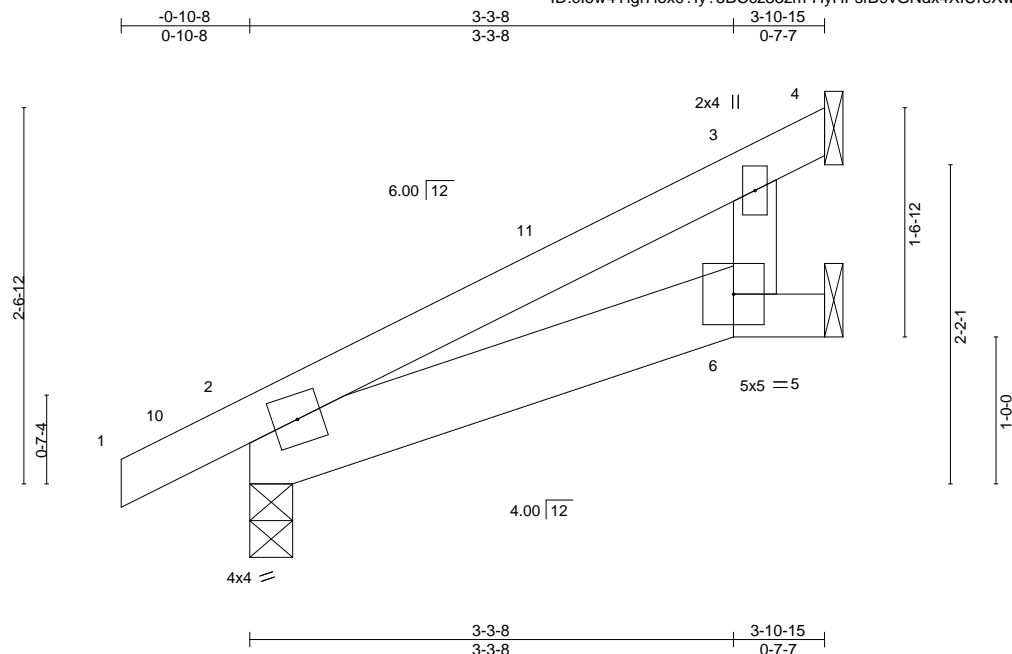
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694297
2630107	J19	Jack-Open	2	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:48 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-HyHfSfB9vGNdx4XIUreXwzHymyhDlc6G9YkdrXzoCaf



Scale = 1:15.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.01	6	>999	240	MT20
TCDL 20.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.01	6-9	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
								Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



February 5, 2021

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

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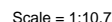
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:49 2021 Page 1
ID:clow4Ylqf7iox0?ly?5BCcz33zm-l8rd4?BngaVUZE6U2Z9mTAp9KM3C13jPOCTBOzzoCae

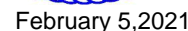


LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2		
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

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

NOTES-

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



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Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694299
2630107	LG1	GABLE	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:55 2021 Page 1

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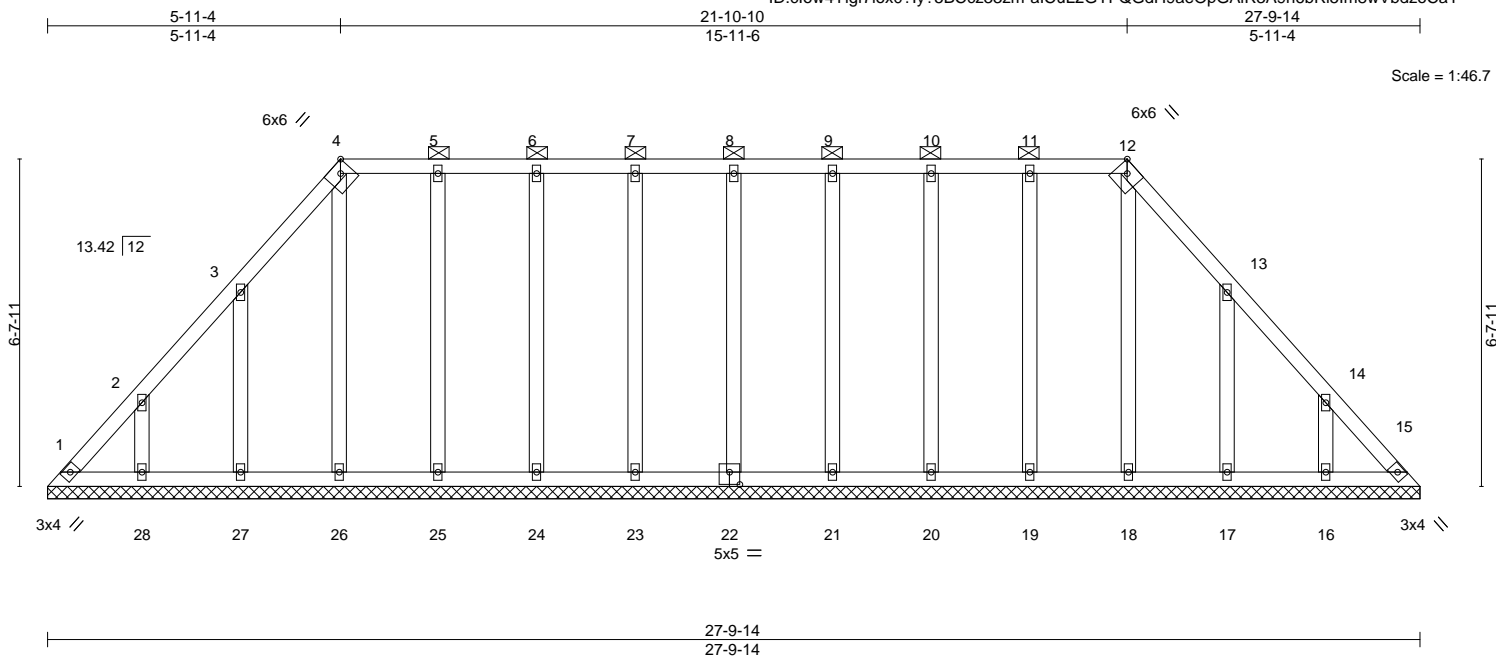


Plate Offsets (X,Y)-- [4:0-2-10,Edge], [12:0-2-10,Edge], [22:0-2-8,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 144 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-11-4, Exterior(2R) 5-11-4 to 9-10-15, Interior(1) 9-10-15 to 21-10-10, Exterior(2R) 21-10-10 to 25-10-15, Interior(1) 25-10-15 to 27-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 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=155, 28=140, 17=155, 16=141.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5, 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



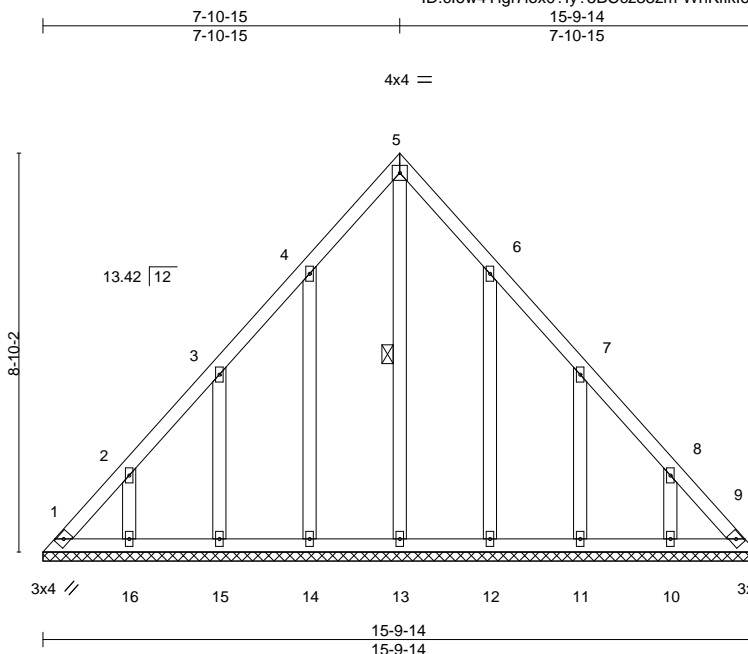
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO
2630107	LG2	GABLE	1	1	I44694300
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:57 2021 Page 1
ID:c1ow4Yl9f7iox0?ly?5BCcz33zm-WhKflklon1WLWSj1WEIens9WXborvfJbDSPcgWzoCaW



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 80 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

REACTIONS.

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

FORCES.

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

NOTES-

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



February 5, 2021

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



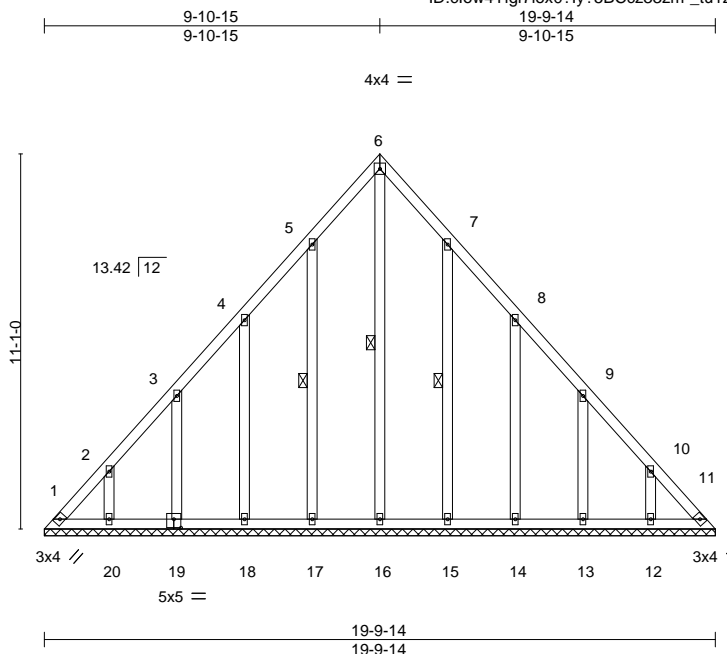
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694301
2630107	LG3	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8,240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:58 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-_tu1z4IQYLeC8clD4yptK4hh7_8we6akS699CyoCaV



Scale = 1:68.1

Plate Offsets (X,Y)-- [19:0-2-8,0-3-0]											
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	0.09	Vert(LL)	n/a	-	n/a	999	MT20 197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	11	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 112 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 5-17, 7-15

REACTIONS.

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

FORCES.

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

NOTES-

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



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



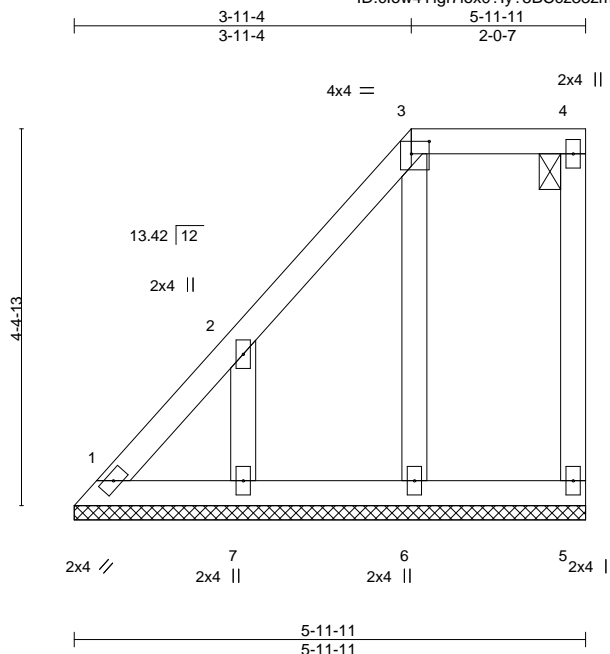
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO
2630107	LG4	GABLE	1	1	I44694302
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:59 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-S4SPAQJ3Jem3mmtPdfK6sHEroOTaNa8uhmujkOzoCaU



Scale = 1:26.9

Plate Offsets (X,Y)--		[3:0-2-8,0-1-12]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP	
TCLL 25.0		Plate Grip DOL 1.15		TC 0.15		Vert(LL) n/a -	n/a	999	MT20	197/144
TCDL 20.0		Lumber DOL 1.15		BC 0.03		Vert(CT) n/a -	n/a	999		
BCLL 0.0		Rep Stress Incr YES		WB 0.07		Horz(CT) 0.00 5	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P					Weight: 26 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

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

FORCES.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-11-4, Exterior(2E) 3-11-4 to 5-9-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=164.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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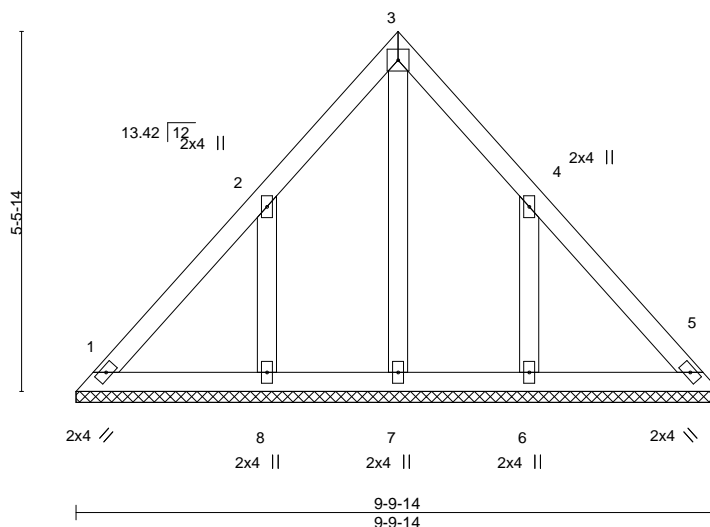


16023 Swingley Ridge Rd
Chesterfield, MO 63017

4-10-15	9-9-14
4-10-15	4-10-15

 $4 \times 4 =$

Scale = 1:35.1



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.10	Vert(LL) n/a - n/a 999	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.05	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 39 lb	FT = 20%

LUMBER-

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

ONS. All bearings 9-9-14.
(lb) - Max Horz 1=138(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=201(LC 12), 6=200(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=351(LC 19), 6=350(LC 20)

FORCES.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-320/212, 4-6=-320/211

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 4-10-15, Exterior(2R) 4-10-15 to 7-10-15, Interior(1) 7-10-15 to 9-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=201, 6=200.
- 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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Chesterfield, MO 63017

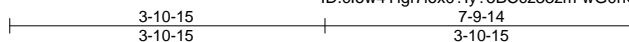
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO
2630107	LG6	GABLE	1	1	144694304
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

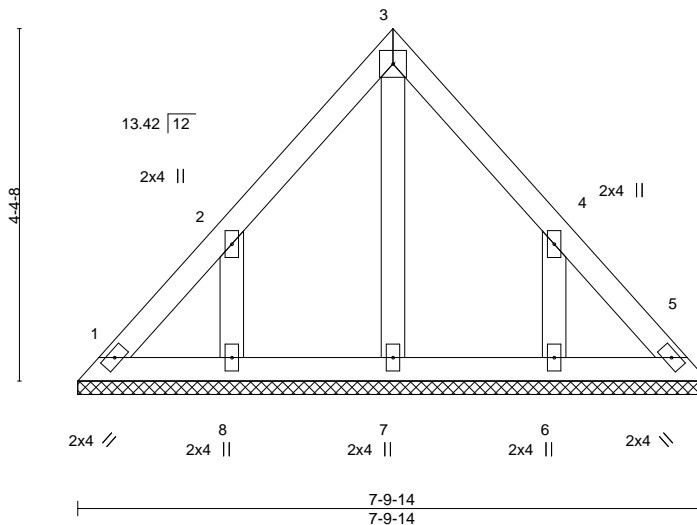
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:00 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-wG0nOmKh4yuwNwScBNrLPVn1popq62y1wQeGGrzoCaT



4x4 =

Scale = 1:28.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 7-9-14.
(lb) - Max Horz 1=-108(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-161(LC 12), 6=-161(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=274(LC 19), 6=273(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-275/178, 4-6=-275/178

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-15, Exterior(2R) 3-10-15 to 6-10-15, Interior(1) 6-10-15 to 7-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=161, 6=161.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 5, 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



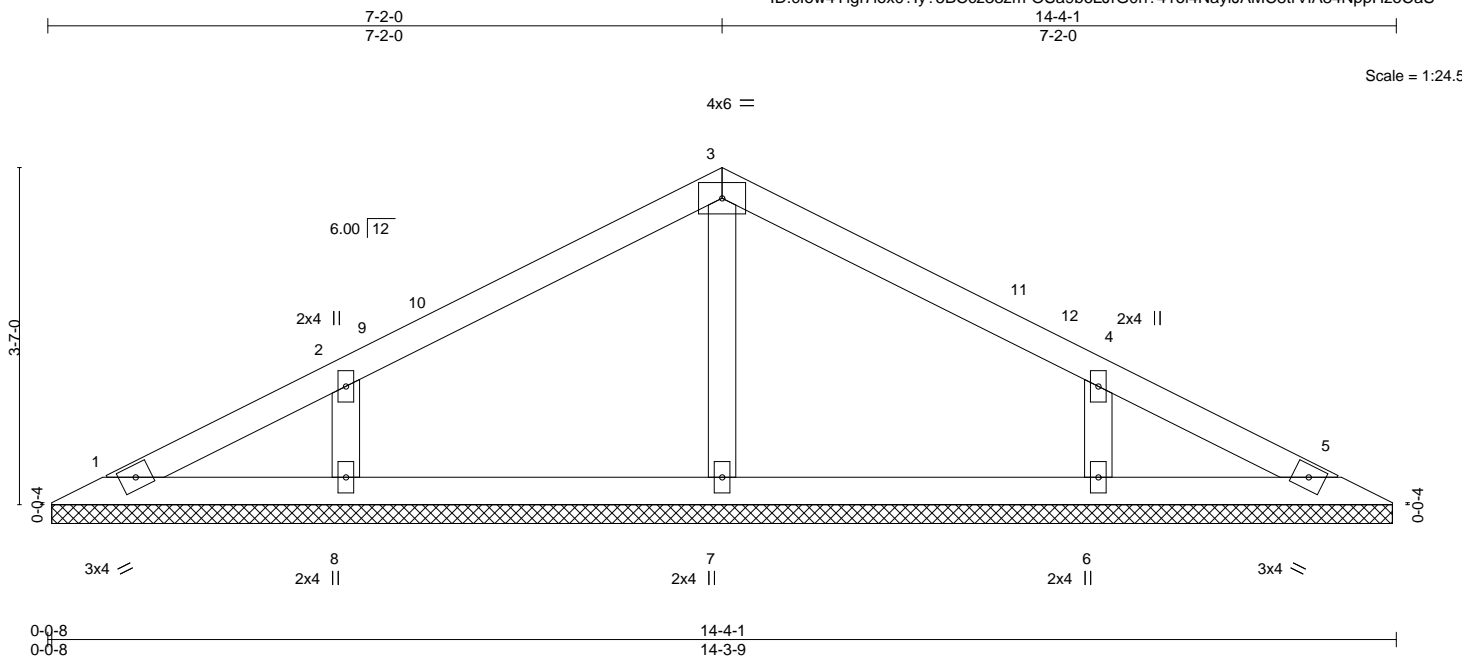
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694305
2630107	V1	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:01 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-OSa9b6LJrG0n?41ol4NayiJAMC8trViA84NppHzoCaS



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 39 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14-3-1.
(lb) - Max Horz 1=-58(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=-126(LC 12), 6=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=386(LC 1), 8=433(LC 25), 6=433(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-7=-303/73, 2-8=-359/196, 4-6=-359/196

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-2-0, Exterior(2R) 7-2-0 to 10-2-0, Interior(1) 10-2-0 to 13-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 8=126, 6=126.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 5, 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

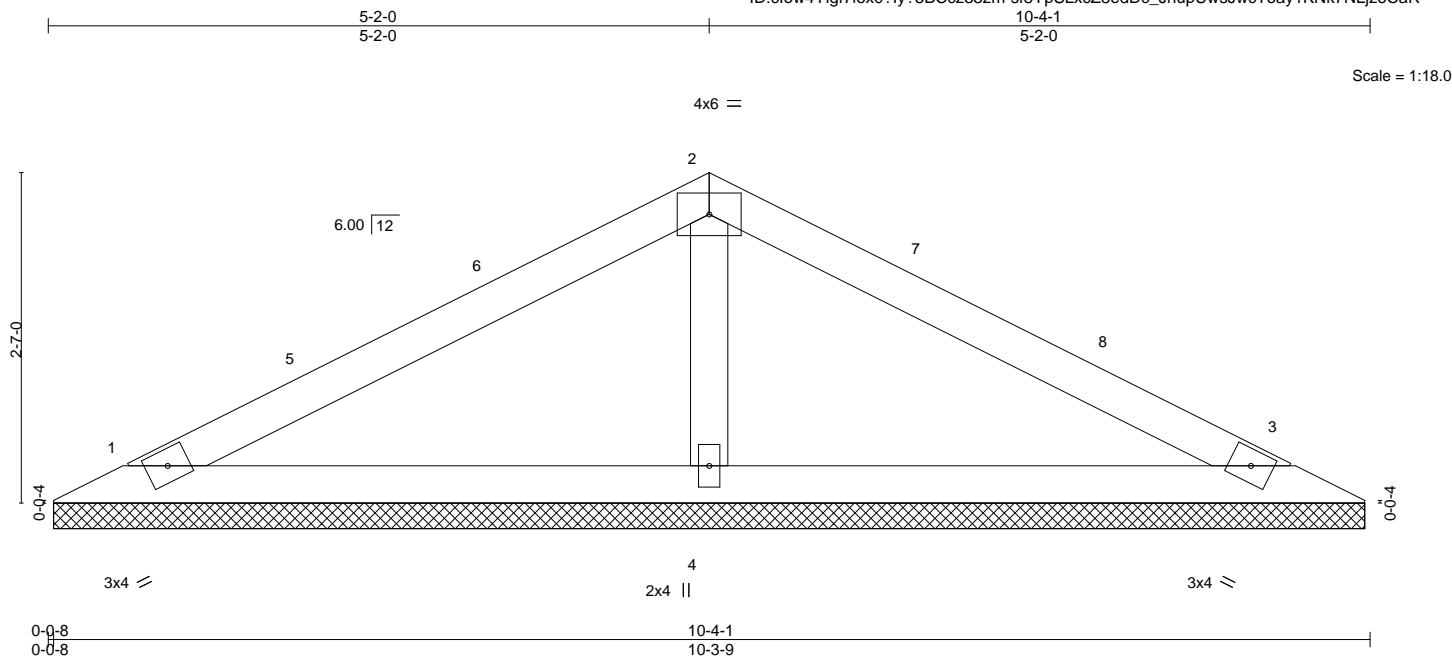


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694306
2630107	V2	Valley	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:02 2021 Page 1
ID:clow4Ylgf7iox0?ly?5BCcz33zm-sf8YpSLxcZ8edDc_JnupUwsJwcToay1KNk7NLjzoCaR



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 20.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 26 lb	FT = 20%

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

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

REACTIONS. (size) 1=10-3-1, 3=10-3-1, 4=10-3-1
Max Horz 1=40(LC 16)
Max Uplift 1=44(LC 12), 3=52(LC 13), 4=47(LC 12)
Max Grav 1=232(LC 25), 3=232(LC 26), 4=540(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-394/187

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-2-0, Exterior(2R) 5-2-0 to 8-2-0, Interior(1) 8-2-0 to 9-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 5, 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

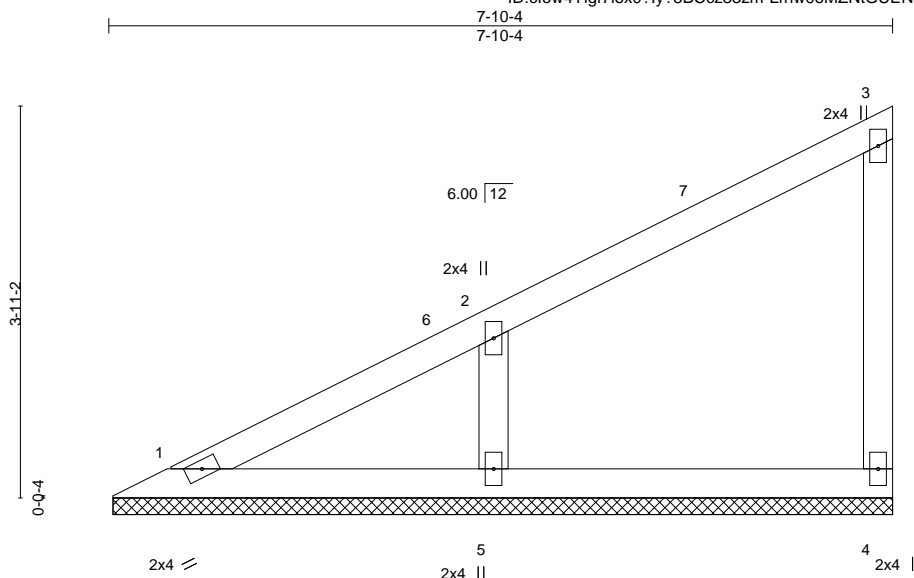
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO
2630107	V3	Valley	1	1	I44694307
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:03 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-LrhW0oMZNtGUENBBsVP217OV0?qEJOMTcOswtAzoCaQ



Scale = 1:23.1

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 0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-9-12, 4=7-9-12, 5=7-9-12
Max Horz 1=148(LC 9)
Max Uplift 4=31(LC 9), 5=128(LC 12)
Max Grav 1=132(LC 20), 4=166(LC 1), 5=489(LC 1)

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

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-10-4, Interior(1) 3-10-4 to 7-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=128.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 5, 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

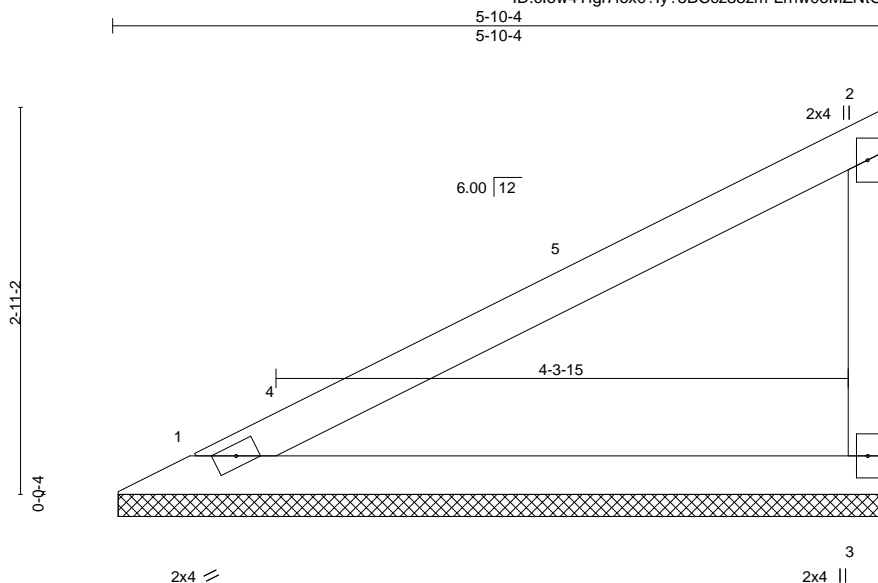
Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694308
2630107	V4	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:03 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-Lrhwo0MZNtGUENBBsVP217OP8?nhJOBTcOswtAzoCaQ



Scale = 1:17.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



February 5, 2021

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

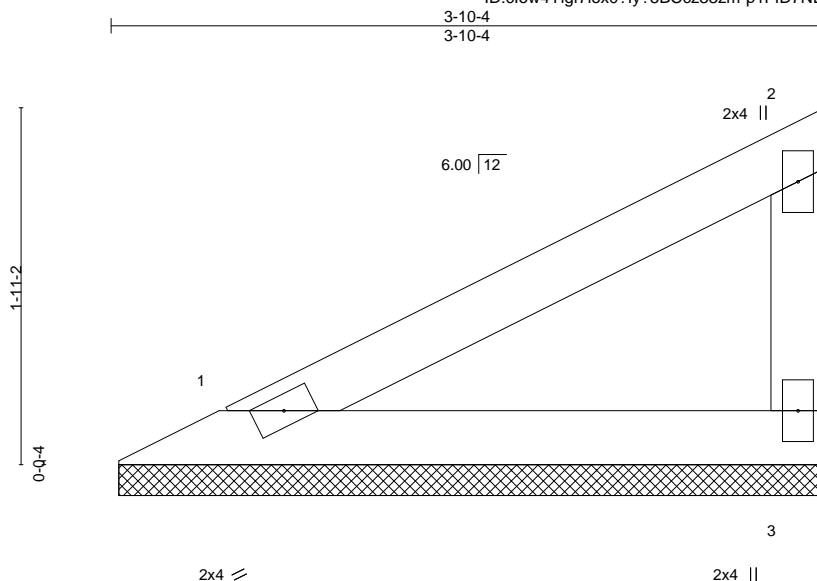
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2630107	Truss V5	Truss Type Valley	Qty 1	Ply 1	Summit/43 Woodside Ridge/MO I44694309
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:04 2021 Page 1
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Scale = 1:12.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 10 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



February 5, 2021

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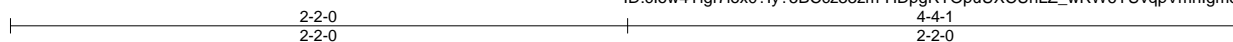
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	I44694310
2630107	V6	Valley	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:05 2021 Page 1

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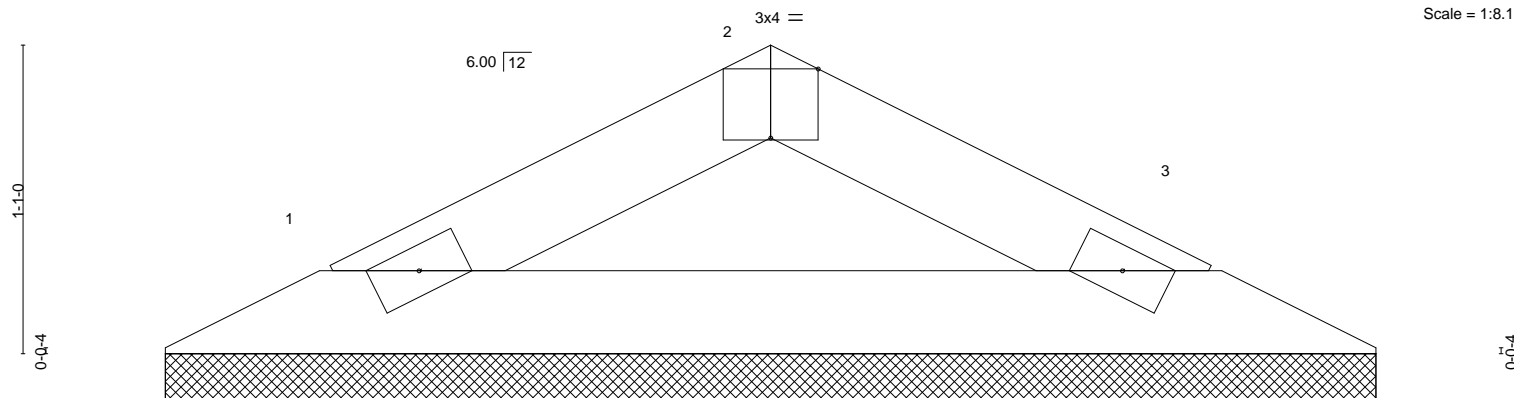


Plate Offsets (X,Y)-- [2:0-2-0,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a 999
TCDL 20.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a 999
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 9 lb	FT = 20%		

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-3-1, 3=4-3-1
Max Horz 1=14(LC 16)
Max Uplift 1=23(LC 12), 3=23(LC 13)
Max Grav 1=169(LC 1), 3=169(LC 1)

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

NOTES-

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



February 5, 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



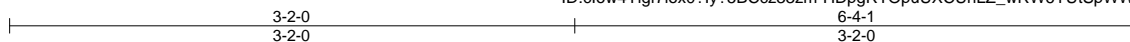
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/43 Woodside Ridge/MO	144694311
2630107	V7	Valley	1	1	Job Reference (optional)	

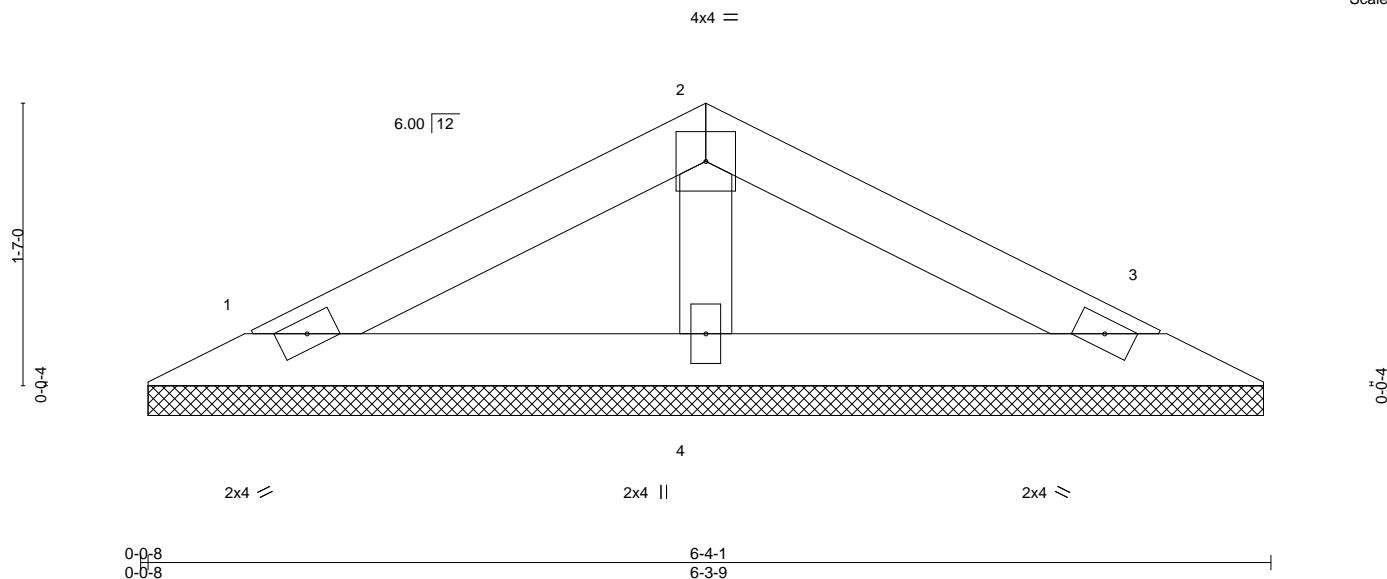
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:05 2021 Page 1

ID:clow4Ylgf7iox0?ly?5BCcz33zm-HDpgRTOpUUXCUhLZ_wRW6YUtSpWWnIGm3hL1y2zoCaO



Scale = 1:12.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.06	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: 15 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=6-3-1, 3=6-3-1, 4=6-3-1
Max Horz 1=22(LC 13)
Max Uplift 1=30(LC 12), 3=34(LC 13), 4=16(LC 12)
Max Grav 1=144(LC 1), 3=144(LC 1), 4=270(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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- This truss 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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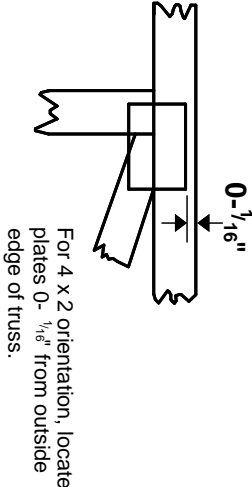
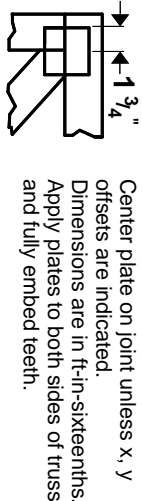
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

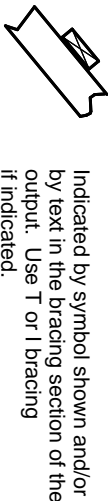
This symbol indicates the required direction of slots in connector plates.

PLATE SIZE

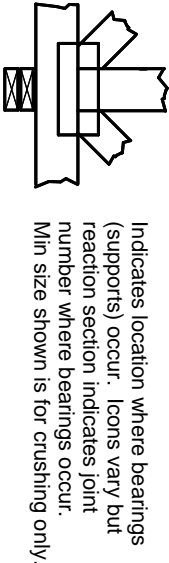
4 X 4

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

LATERAL BRACING LOCATION

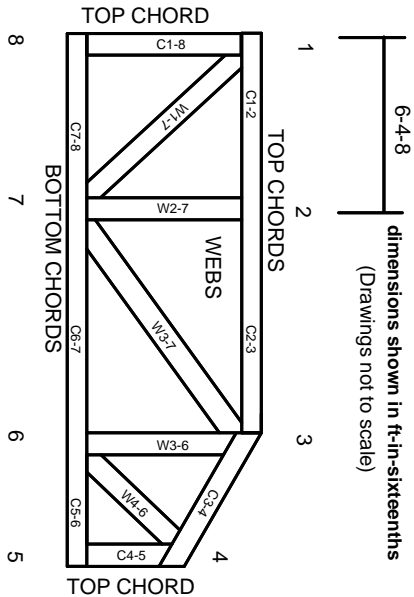


BEARING



Industry Standards:
ANSI/TPI 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



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/TPI 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.