



RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/06/2021

RE: 2651568
SUMMIT/WOODSIDE RIDGE #68/MO

MiTek USA, Inc.

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

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

Floor Load: N/A psf

This package includes 46 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45443850	A1	4/1/2021	27	I45443876	J1	4/1/2021
2	I45443851	A2	4/1/2021	28	I45443877	J2	4/1/2021
3	I45443852	A3	4/1/2021	29	I45443878	J3	4/1/2021
4	I45443853	A4	4/1/2021	30	I45443879	J4	4/1/2021
5	I45443854	A5	4/1/2021	31	I45443880	J5	4/1/2021
6	I45443855	A6	4/1/2021	32	I45443881	J6	4/1/2021
7	I45443856	A7	4/1/2021	33	I45443882	J7	4/1/2021
8	I45443857	A8	4/1/2021	34	I45443883	J8	4/1/2021
9	I45443858	A9	4/1/2021	35	I45443884	J9	4/1/2021
10	I45443859	A10	4/1/2021	36	I45443885	J10	4/1/2021
11	I45443860	A11	4/1/2021	37	I45443886	J11	4/1/2021
12	I45443861	A12	4/1/2021	38	I45443887	JG2	4/1/2021
13	I45443862	A13	4/1/2021	39	I45443888	JG3	4/1/2021
14	I45443863	A14	4/1/2021	40	I45443889	JG4	4/1/2021
15	I45443864	A15	4/1/2021	41	I45443890	JG5	4/1/2021
16	I45443865	AG1	4/1/2021	42	I45443891	JG6	4/1/2021
17	I45443866	AG2	4/1/2021	43	I45443892	L1	4/1/2021
18	I45443867	B1	4/1/2021	44	I45443893	L2	4/1/2021
19	I45443868	BG	4/1/2021	45	I45443894	L3	4/1/2021
20	I45443869	C1	4/1/2021	46	I45443895	V1	4/1/2021
21	I45443870	C2	4/1/2021				
22	I45443871	C3	4/1/2021				
23	I45443872	CJ1	4/1/2021				
24	I45443873	E1	4/1/2021				
25	I45443874	E2	4/1/2021				
26	I45443875	E3	4/1/2021				

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Builders FirstSource (Valley Center).

Truss Design Engineer's Name: Sevier, Scott

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

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



April 01, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443850
2651568	A1	COMMON	6	1		

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

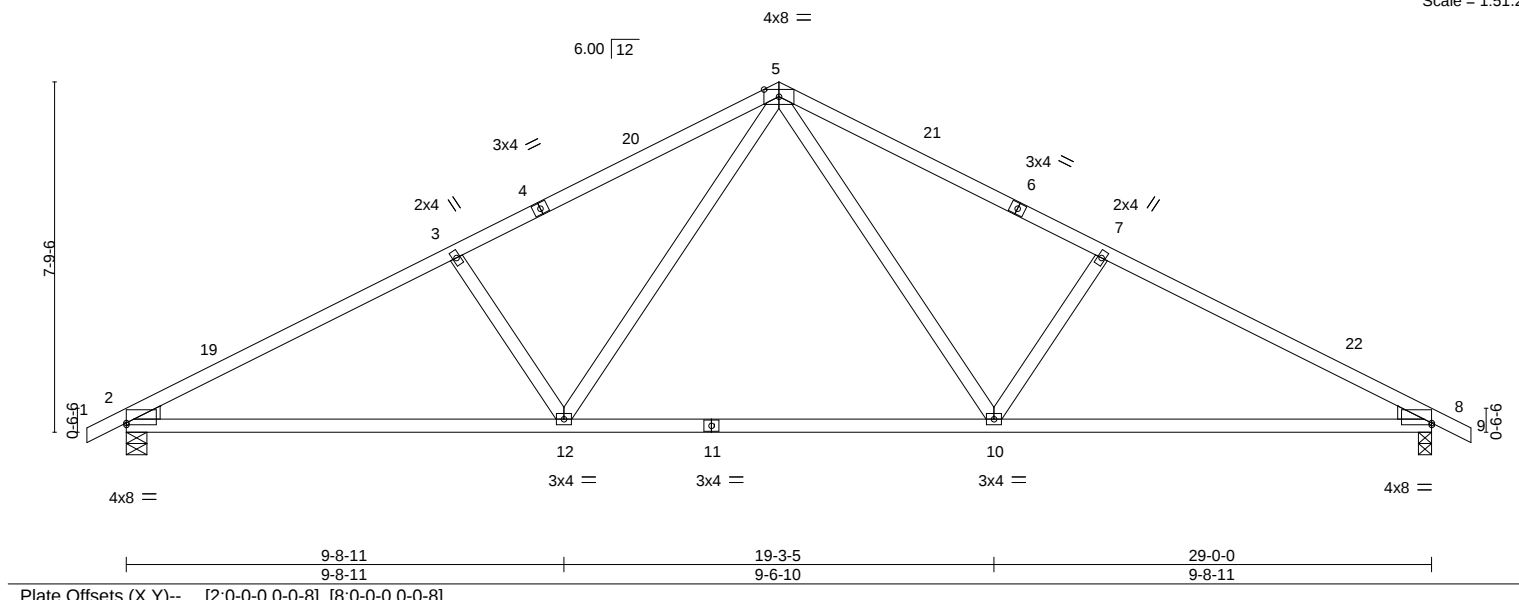
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ID: rppqz4GQgeekewmH4ljApzY2yE-1V53?xNcaOQwKG0MS3Tah6wis2tCINQsH?owh5zVRFc

Job Reference (optional)

0-10-8 7-4-0 14-6-0 21-8-0 29-0-0 29-10-8
0-10-8 7-4-0 7-2-0 7-2-0 7-4-0 0-10-8

Scale = 1:51.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.77	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.99	Vert(LL) -0.32 10-12 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.22	Vert(CT) -0.71 10-12 >487 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.08 8 n/a n/a		
	Code IRC2018/TPI2014			Weight: 104 lb	FT = 20%

LUMBER-

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

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

BRACING-

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

REACTIONS.

(size) 2=0-5-8, 8=0-3-8
Max Horz 2=-122(LC 13)
Max Uplift 2=-180(LC 12), 8=-180(LC 13)
Max Grav 2=1366(LC 1), 8=1366(LC 1)

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

TOP CHORD 2-3=-2282/301, 3-5=-2008/321, 5-7=-1995/325, 7-8=-2269/304
BOT CHORD 2-12=-292/1949, 10-12=-78/1289, 8-10=-191/1939
WEBS 5-10=-155/741, 7-10=-517/248, 5-12=-148/761, 3-12=-514/249

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-6-0, Exterior(2R) 14-6-0 to 17-6-0, Interior(1) 17-6-0 to 29-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 2 and 180 lb uplift at joint 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.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	145443851
2651568	A2	Roof Special	1	1		

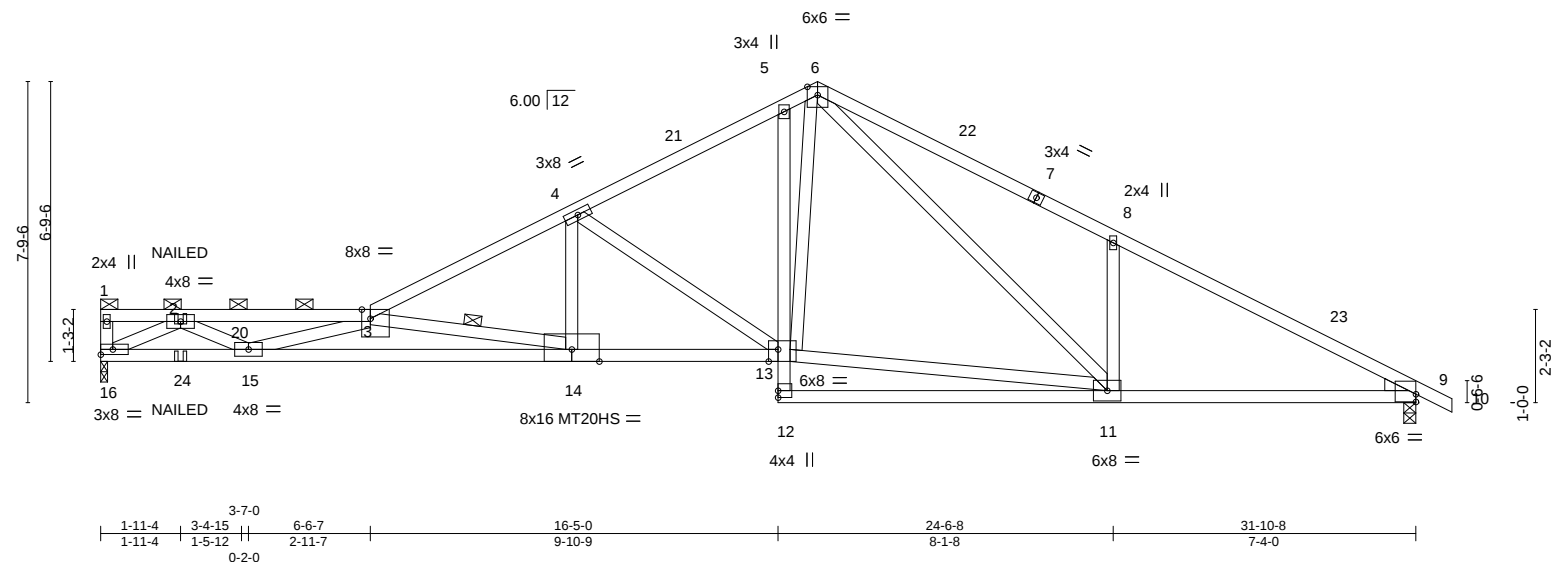
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID: rppqz4GQgeekewqmH4ljApzY2yE-1mdUalaHacZWttqdx8GZth7ZPvkVEudMB8PKnczVRFL

1-11-4	3-4-15	6-6-7	11-5-11	16-5-0	17-4-8	24-6-8	31-10-8	32-9-0
1-11-4	1-5-12	3-1-7	4-11-5	4-11-5	0-11-8	7-2-0	7-4-0	0-10-8

Scale = 1:55.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.41 14-15 >931 240	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.81 14-15 >471 180	MT20HS	148/108		
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.16 9 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 146 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 14-16: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Right: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 16=0-2-0, 9=0-3-8
 Max Horz 16=-147(LC 13)
 Max Uplift 16=-201(LC 12), 9=-192(LC 13)
 Max Grav 16=1427(LC 1), 9=1490(LC 1)

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

TOP CHORD 2-3=-4273/488, 3-4=-3433/426, 4-5=-2189/324, 5-6=-1972/340, 6-8=-2530/452, 8-9=-2539/311
 BOT CHORD 15-16=-395/2544, 14-15=-998/7046, 13-14=-370/3021, 9-11=-197/2175
 WEBS 11-13=-109/1561, 6-13=-197/1097, 6-11=-280/742, 8-11=-537/267, 2-16=-2794/383, 2-15=-157/2004, 4-14=-87/962, 4-13=-1384/281, 3-14=-4109/641, 3-15=-2930/505

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-0, Interior(1) 3-4-0 to 17-4-8, Exterior(2R) 17-4-8 to 20-6-12, Interior(1) 20-6-12 to 32-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 at joint(s) 16.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 201 lb uplift at joint 16 and 192 lb uplift at joint 9.
- 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.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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

Continued on page 2



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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443851
2651568	A2	Roof Special	1	1	Job Reference (optional)	

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

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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-70, 3-6=-70, 6-10=-70, 13-16=-20, 12-17=-20
- Concentrated Loads (lb)
 - Vert: 24=0(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	145443852
2651568	A3	Roof Special	1	1		

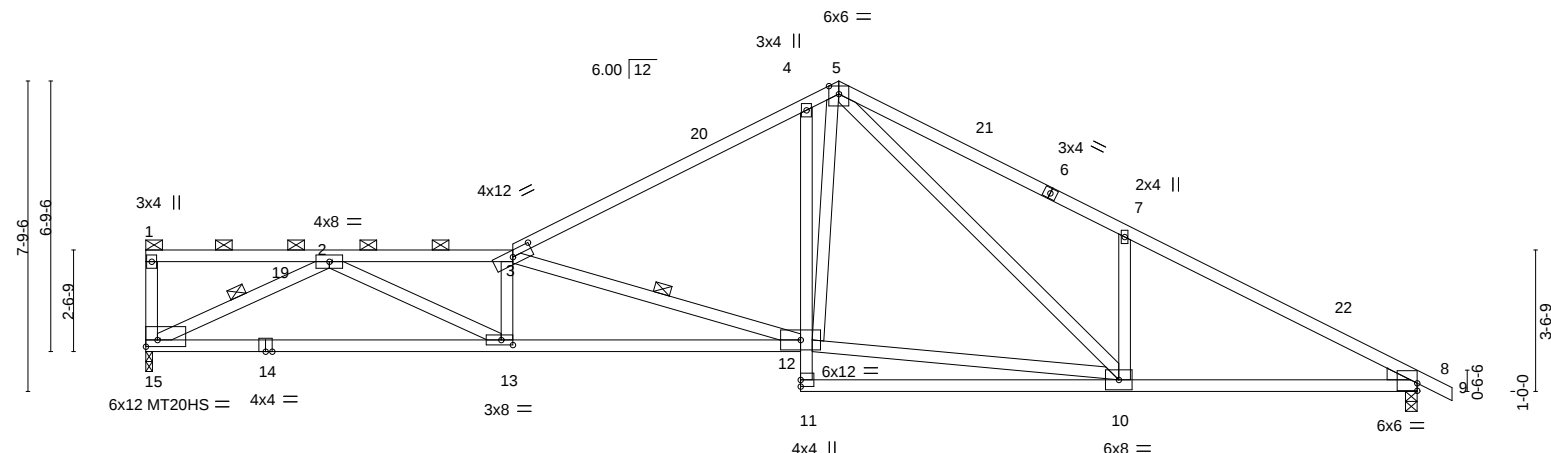
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID: rppqz4GQgeekewqmH4ljApzY2yE-z9kE_RcX6EpE6Bz03YJ1y6CvuiQviswfeSuRrVzVRFJ

4-7-3	9-2-7	16-5-0	17-4-8	24-6-8	31-10-8	32-9-0
4-7-3	4-7-3	7-2-9	0-11-8	7-2-0	7-4-0	0-10-8

Scale = 1:57.8



	9-2-7	16-5-0	24-6-8	31-10-8
	9-2-7	7-2-9	8-1-8	7-4-0

Plate Offsets (X,Y)-- [3:0-6-0,0-1-14], [8:0-0-0,0-2-4], [13:0-3-8,0-1-8], [15:Edge,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 0.98	Vert(LL)	-0.31 13-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.65 13-15	>586	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.13 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 142 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
14-15: 2x4 SP 2400F 2.0E, 12-14: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-7-4 max.): 1-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-15, 3-12

REACTIONS. (size) 15=0-2-0, 8=0-3-8
Max Horz 15=-156(LC 8)
Max Uplift 15=-198(LC 12), 8=-191(LC 13)
Max Grav 15=1427(LC 1), 8=1490(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4043/469, 3-4=-2262/312, 4-5=-2108/384, 5-7=-2530/451, 7-8=-2539/311
BOT CHORD 13-15=-324/2446, 12-13=-473/4082, 4-12=-412/233, 8-10=-191/2175
WEBS 2-15=-2585/413, 2-13=-168/1787, 3-13=-650/152, 3-12=-2264/341, 10-12=-95/1565,
5-12=-296/1333, 5-10=-280/741, 7-10=-537/267

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-0, Interior(1) 3-4-0 to 17-4-8, Exterior(2R) 17-4-8 to 20-6-12, Interior(1) 20-6-12 to 32-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - 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 at joint(s) 15.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 198 lb uplift at joint 15 and 191 lb uplift at joint 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.
 - 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.



April 1, 2021

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO
2651568	A4	Roof Special	1	1	I45443853

Builders FirstSource (Valley Center),

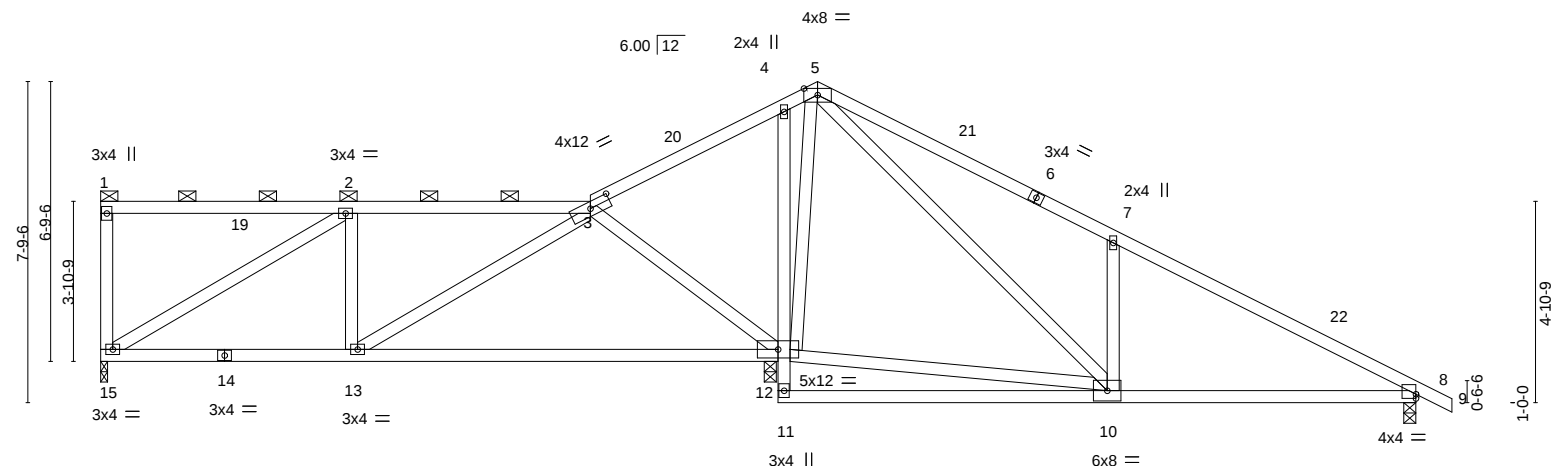
Valley Center, KS - 67147,

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ID: rppqz4GQgeekewqmH4ljApzY2yE-NkQNdTeQP9BozeibkhskaIqWCwTlvBk5KQ75SqzVRFG

6-0-15	11-10-7	16-5-0	17-4-8	24-6-8	31-10-8	32-9-0
6-0-15	5-9-7	4-6-9	0-11-8	7-2-0	7-4-0	0-10-8

Scale = 1:55.8



6-0-15	11-10-7	16-4-8	16-5-0	24-6-8	31-10-8
6-0-15	5-9-7	4-6-1	0-0-8	8-1-8	7-4-0

Plate Offsets (X,Y)--		[3:0-6-0,0-1-14], [8:0-0-0,0-1-4]			
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) -0.25 12-13 >790 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.50 12-13 >392 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.01 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 145 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 15=0-2-0, 8=0-3-8, 12=0-3-8
Max Horz 15=-191(LC 8)
Max Uplift 15=-135(LC 8), 8=-147(LC 13), 12=-172(LC 12)
Max Grav 15=602(LC 25), 8=655(LC 26), 12=1750(LC 1)

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

TOP CHORD 2-3=-666/122, 3-4=-34/498, 4-5=0/456, 5-7=-799/359, 7-8=-792/211
BOT CHORD 13-15=-48/664, 4-12=-272/112, 8-10=-95/624
WEBS 2-15=-736/164, 3-12=-711/192, 5-12=-1017/153, 5-10=-307/1059, 7-10=-568/269,
3-13=-15/540

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-0, Interior(1) 3-4-0 to 17-4-8, Exterior(2R) 17-4-8 to 20-6-12, Interior(1) 20-6-12 to 32-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at joint 15, 147 lb uplift at joint 8 and 172 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.



April 1, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	145443854
2651568	A5	Roof Special	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

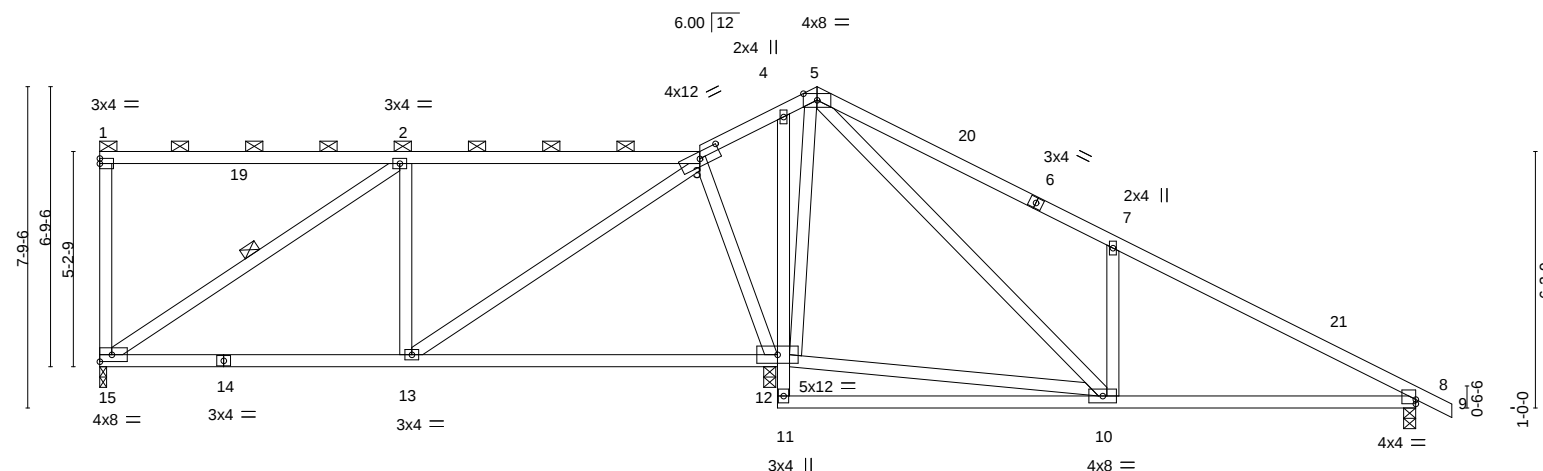
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:02:54 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-nw_lqof2ASJfboHnIONz7yNgNJpsee2FZ4se?GzVRFF

Job Reference (optional)

7-4-15	14-6-7	16-5-0	17-4-8	24-6-8	31-10-8	32-9-0
7-4-15	7-1-7	1-10-9	0-11-8	7-2-0	7-4-0	0-10-8

Scale = 1:55.8



7-4-15	14-6-7	16-5-0	24-6-8	31-10-8
7-4-15	7-1-7	1-10-1 0-0-8	8-1-8	7-4-0

Plate Offsets (X,Y)-- [3:0-6-0,0-1-14], [8:0-0-0,0-1-4]

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 0.69	Vert(LL)	-0.22 13-15	>883	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.44 13-15	>451	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 151 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 15=0-2-0, 8=0-3-8, 12=0-3-8
Max Horz 15=-225(LC 8)
Max Uplift 15=-159(LC 8), 8=-150(LC 13), 12=-137(LC 12)
Max Grav 15=651(LC 25), 8=674(LC 26), 12=1653(LC 1)

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

TOP CHORD 2-3=-589/136, 3-4=0/313, 4-5=0/384, 5-7=-821/359, 7-8=-830/217
BOT CHORD 13-15=-9/586, 8-10=-101/657
WEBS 2-15=-647/194, 3-13=-48/711, 3-12=-676/182, 5-12=-1011/171, 5-10=-296/1024, 7-10=-560/266

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-0, Interior(1) 3-4-0 to 17-4-8, Exterior(2R) 17-4-8 to 20-6-12, Interior(1) 20-6-12 to 32-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 15, 150 lb uplift at joint 8 and 137 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.



April 1, 2021

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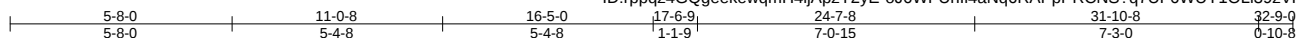
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	145443855
2651568	A6	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:02:56 2021 Page 1

ID:rppqz4GQgeekewqmH4ljApzY2yE-oJ6WFWUhi4aNq6RAPpPRCNS?7UF6WUY1OLi39zVRFD



Scale = 1:58.8

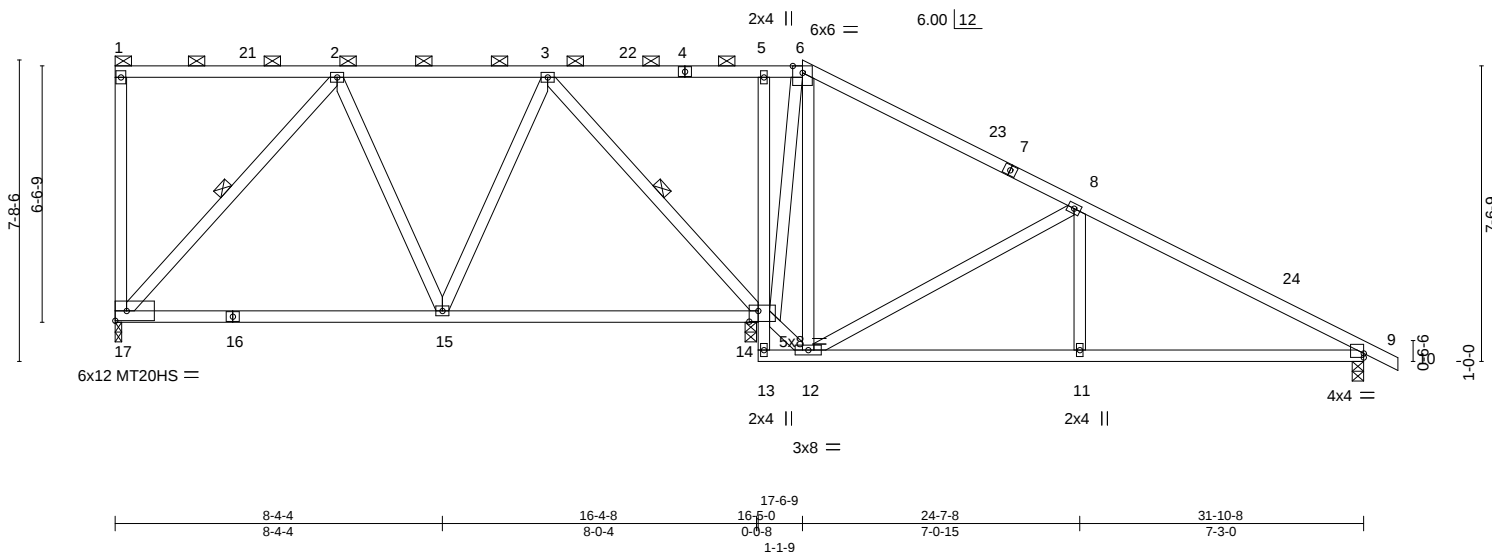


Plate Offsets (X,Y)-- [9:0-0-0,0-1-4], [14:0-2-12,0-3-4]

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 0.69	Vert(LL)	-0.39 15-17	>511	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.77 15-17	>257	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.01 14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 153 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-17, 3-14

REACTIONS.

(size) 17=0-2-0, 9=0-3-8, 14=0-3-8
Max Horz 17=-258(LC 8)
Max Uplift 17=-176(LC 8), 9=-157(LC 13), 14=-121(LC 8)
Max Grav 17=676(LC 25), 9=666(LC 1), 14=1593(LC 1)

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

TOP CHORD 2-3=-419/140, 8-9=-818/232
BOT CHORD 15-17=-53/415, 14-15=-46/352, 5-14=-448/168, 11-12=-115/647, 9-11=-115/647
WEBS 2-17=-562/207, 3-15=0/256, 3-14=-717/136, 6-14=-672/192, 6-12=-138/483, 8-12=-793/231, 8-11=0/305

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-0, Interior(1) 3-4-0 to 17-6-9, Exterior(2R) 17-6-9 to 22-0-11, Interior(1) 22-0-11 to 32-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) All plates are 3x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 17.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 17, 157 lb uplift at joint 9 and 121 lb uplift at joint 14.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 1, 2021

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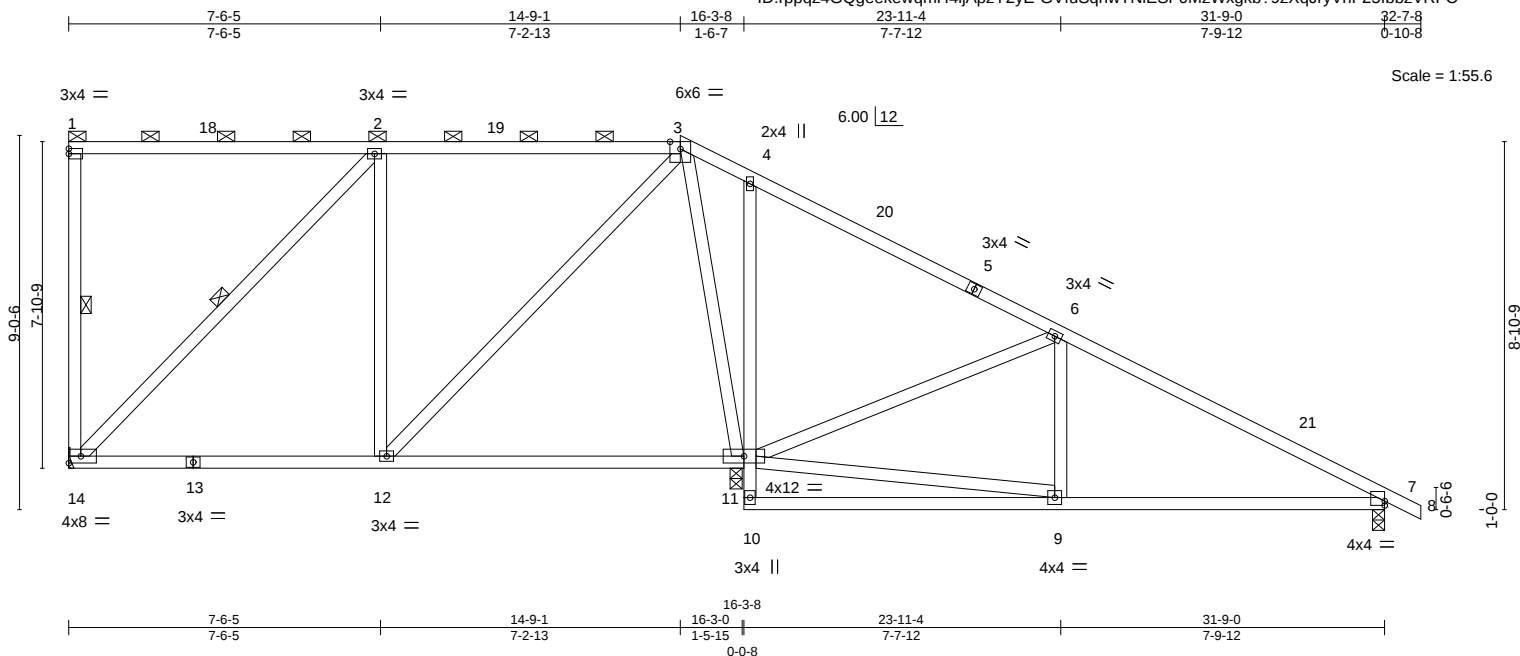
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443856
2651568	A7	Half Hip	1	1		

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:02:57 2021 Page 1

ID: rppqz4GQgeekewmH4ljApzY2yE-GVfuSghwTNIESF0MzWxgkb79zXqJryVhF25lbbzVRFC



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)	-0.29 12-14	>681	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.56 12-14	>349	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.01 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 155 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-14, 2-14

REACTIONS.

(size) 14=Mechanical, 7=0-3-8, 11=0-3-8
Max Horz 14=-308(LC 8)
Max Uplift 14=-196(LC 8), 7=-139(LC 13), 11=-125(LC 13)
Max Grav 14=698(LC 25), 7=669(LC 1), 11=1581(LC 1)

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

TOP CHORD 2-3=-432/171, 4-6=0/257, 6-7=-795/191
BOT CHORD 12-14=-54/437, 4-11=-324/171, 7-9=-72/620
WEBS 2-14=-573/205, 3-12=-67/550, 3-11=-730/128, 9-11=-75/640, 6-11=-820/255, 6-9=0/283

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-14, Interior(1) 3-3-14 to 14-9-1, Exterior(2R) 14-9-1 to 19-2-15, Interior(1) 19-2-15 to 32-7-8 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 196 lb uplift at joint 14, 139 lb uplift at joint 7 and 125 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 1, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

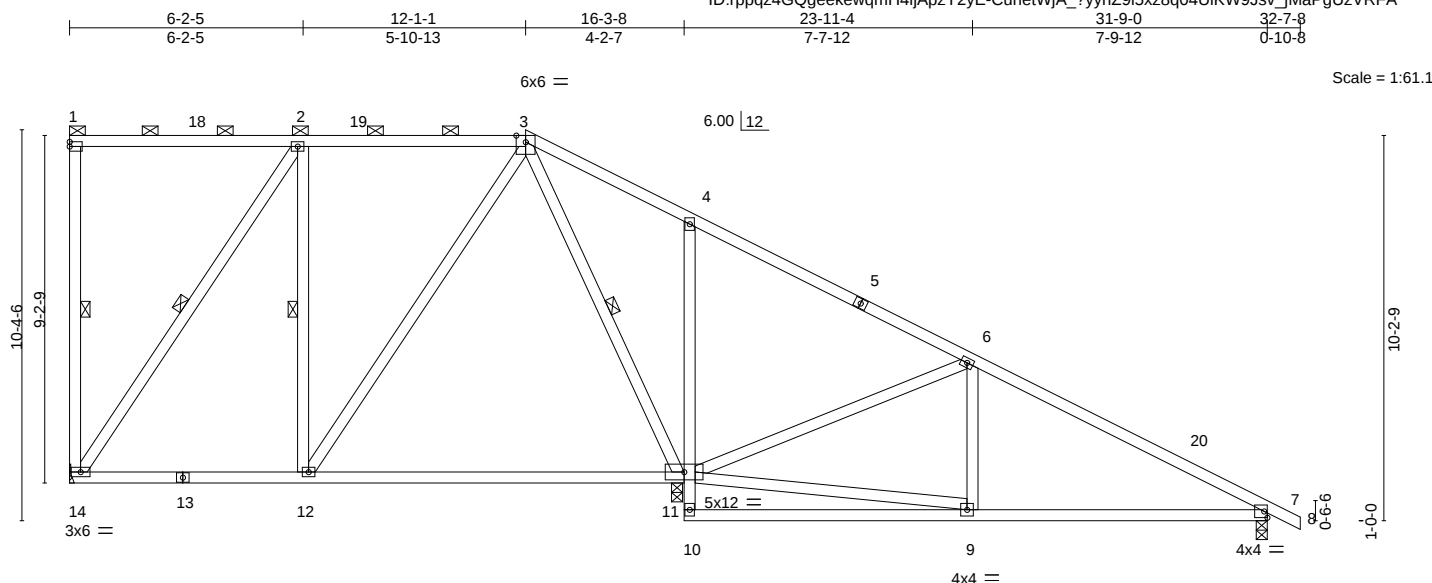
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	145443857
2651568	A8	Half Hip	1	1		

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

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ID: rppqz4G0geekewqmH4ljApzY2yE-CunetWjA_?yyhZ9l5xz8q04UikW9Jsv_jMaPgUzVRFA

Job Reference (optional)



	6-2-5	12-1-1	16-3-0	16-3-8	23-11-4	31-9-0	
	6-2-5	5-10-13	4-1-15	0-0-8	7-7-12	7-9-12	
LOADING (psf)	SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES
TCLL 25.0	Plate Grip DOL 1.15		TC 0.78		Vert(LL) -0.22 11-12 >898 240		MT20
TCDL 10.0	Lumber DOL 1.15		BC 0.64		Vert(CT) -0.44 11-12 >443 180		GRIP
BCLL 0.0	Rep Stress Incr YES		WB 0.95		Horz(CT) 0.01 7 n/a n/a		197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 161 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-14, 2-14, 2-12, 3-11

REACTIONS.

(size) 14=Mechanical, 7=0-3-8, 11=0-3-8
Max Horz 14=-358(LC 8)
Max Uplift 14=-202(LC 8), 7=-122(LC 13), 11=-181(LC 13)
Max Grav 14=667(LC 25), 7=652(LC 1), 11=1614(LC 1)

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

TOP CHORD 2-3=-318/172, 3-4=-9/252, 4-6=-13/275, 6-7=-775/161
BOT CHORD 12-14=-73/391, 4-11=-427/204, 7-9=-49/609
WEBS 2-14=-545/187, 3-12=-33/310, 3-11=-684/64, 9-11=-34/678, 6-11=-826/266, 6-9=0/272

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-14, Interior(1) 3-3-14 to 12-1-1, Exterior(2R) 12-1-1 to 16-6-1, Interior(1) 16-6-1 to 32-7-8 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 3x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 14, 122 lb uplift at joint 7 and 181 lb uplift at joint 11.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	145443858
2651568	A9	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:01 2021 Page 1

ID: rppqz4GQgeekewqmH4lApzY2yE-8GvPICIRWcCgxtJ7CM?cvR9s68FAnl0HAg3WkMzVRF8

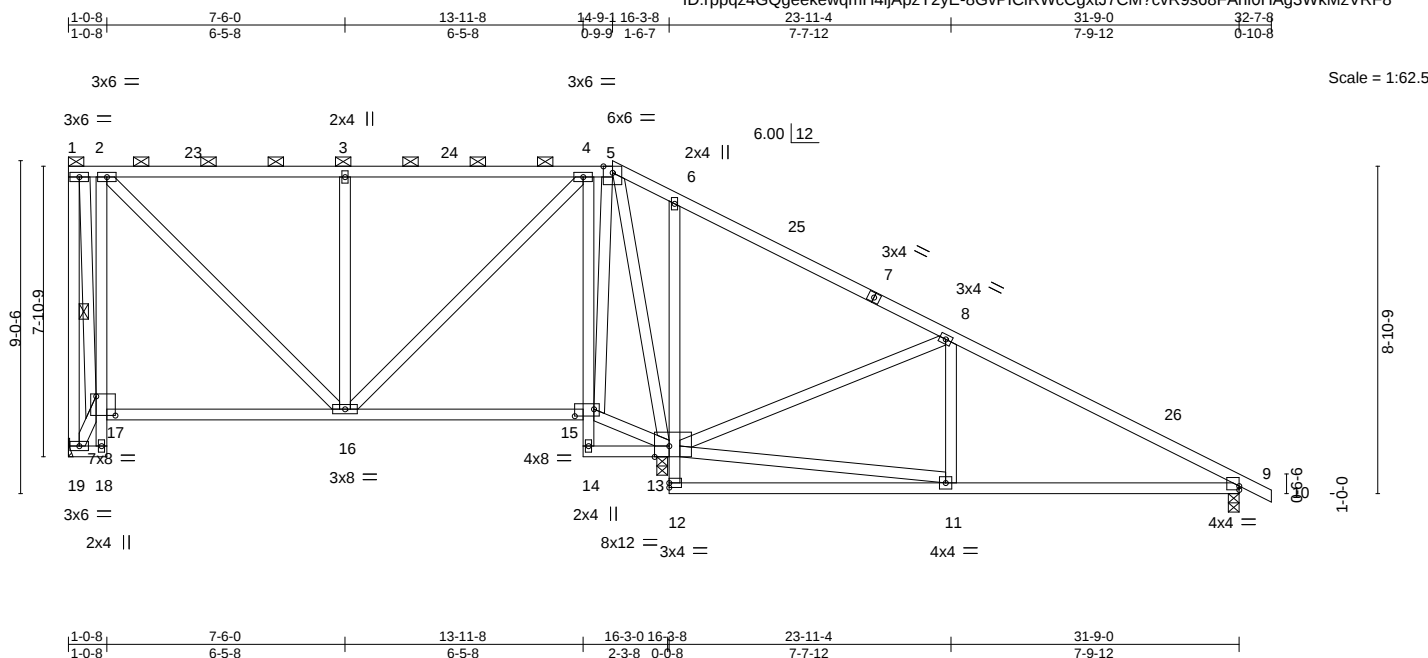


Plate Offsets (X,Y)-- [9:0-0-0,0-1-4], [13:0-4-12,Edge], [15:0-6-4,0-2-4], [17:0-6-4,0-6-4]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL 25.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.07 11-22	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.15 11-22	>999
BCLL 0.0	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.03 13	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS			
					PLATES	GRIP
					MT20	197/144
					Weight: 186 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-19

REACTIONS.

(size) 19=Mechanical, 13=0-3-8, 9=0-3-8
Max Horz 19=-308(LC 8)
Max Uplift 19=-191(LC 8), 13=-117(LC 13), 9=-144(LC 13)
Max Grav 19=642(LC 25), 13=1692(LC 1), 9=612(LC 1)

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

TOP CHORD 1-19=-608/131, 2-3=-403/142, 3-4=-403/142, 5-6=0/320, 6-8=0/406, 8-9=-674/200
BOT CHORD 2-17=-676/371, 16-17=-187/347, 4-15=-750/210, 6-13=-406/189, 9-11=-80/512
WEBS 17-19=-287/485, 1-17=-96/671, 2-16=-174/424, 3-16=-491/171, 4-16=-84/536, 5-15=-148/778, 5-13=-770/77, 11-13=-107/485, 8-13=-847/249, 8-11=0/305

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-14, Interior(1) 3-3-14 to 14-9-1, Exterior(2R) 14-9-1 to 19-2-15, Interior(1) 19-2-15 to 32-7-8 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 191 lb uplift at joint 19, 117 lb uplift at joint 13 and 144 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.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	145443859
2651568	A10	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc.
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Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-vGKarJQ7edwMptK8hvxWry4SGfOKh0ESBdm8qtzVRFY

1-0-8

1-0-8

7-6-0

6-5-8

13-11-8

6-5-8

16-3-8

2-4-0

17-5-1

1-1-9

24-6-0

7-0-15

31-9-0

7-3-0

32-7-8

0-10-8

Scale = 1:58.4

The diagram illustrates a half-hip roof truss system. Key features include:

- Members:** Various sizes of lumber are specified for different parts of the truss, such as 2x4 for top and bottom chords, 3x4 for web members, and 4x4 for verticals. Larger sizes like 6x8 and 8x8 are used for the main rafters.
- Dimensions:** Horizontal dimensions at the top and bottom indicate plate offsets for different sections of the truss.
- Scale:** The drawing is scaled at 1:58.4.
- Labels:** Members are numbered (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28) and sized accordingly.

Plate Offsets (X,Y)--		[7:0-4-6,Edge], [10:Edge,0-1-4], [15:0-2-12,0-3-4], [17:0-6-0,0-2-8], [19:0-6-4,0-6-4]									
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	0.55	Vert(LL)	-0.05 12-24	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.12 12-24	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.03 15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 174 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 1-7.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 21=Mechanical, 10=0-3-8, 15=0-3-8
Max Horz 21=-258(LC 8)
Max Uplift 21=-180(LC 8), 10=-166(LC 13), 15=-109(LC 8)
Max Grav 21=647(LC 25), 10=642(LC 26), 15=1634(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-21=-591/109, 2-3=-512/150, 3-4=-512/150, 6-7=0/295, 9-10=-769/252
BOT CHORD 2-19=-682/332, 18-19=-143/296, 4-17=-652/167, 6-15=-647/117, 12-13=-132/603,
10-12=-132/603
WEBS 19-21=-248/424, 1-19=-103/688, 2-18=-183/487, 3-18=-499/176, 4-18=-96/571,
15-17=-281/135, 6-17=-101/653, 7-15=-975/175, 7-13=-101/503, 9-13=-796/230,
9-12=0/308

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-14, Interior(1) 3-3-14 to 17-5-1, Exterior(2R) 17-5-1 to 21-10-15, Interior(1) 21-10-15 to 32-7-8 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 180 lb uplift at joint 21, 166 lb uplift at joint 10 and 109 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.
- 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.

The image shows a circular professional engineer seal for the State of Missouri. The seal contains the following information:

- State of Missouri** (around the top edge)
- SCOTT M. SEVIER** (in the center)
- NUMBER** (above the license number)
- PE-2001018807** (the license number)
- PROFESSIONAL ENGINEER** (around the bottom edge)

April 1,2021

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

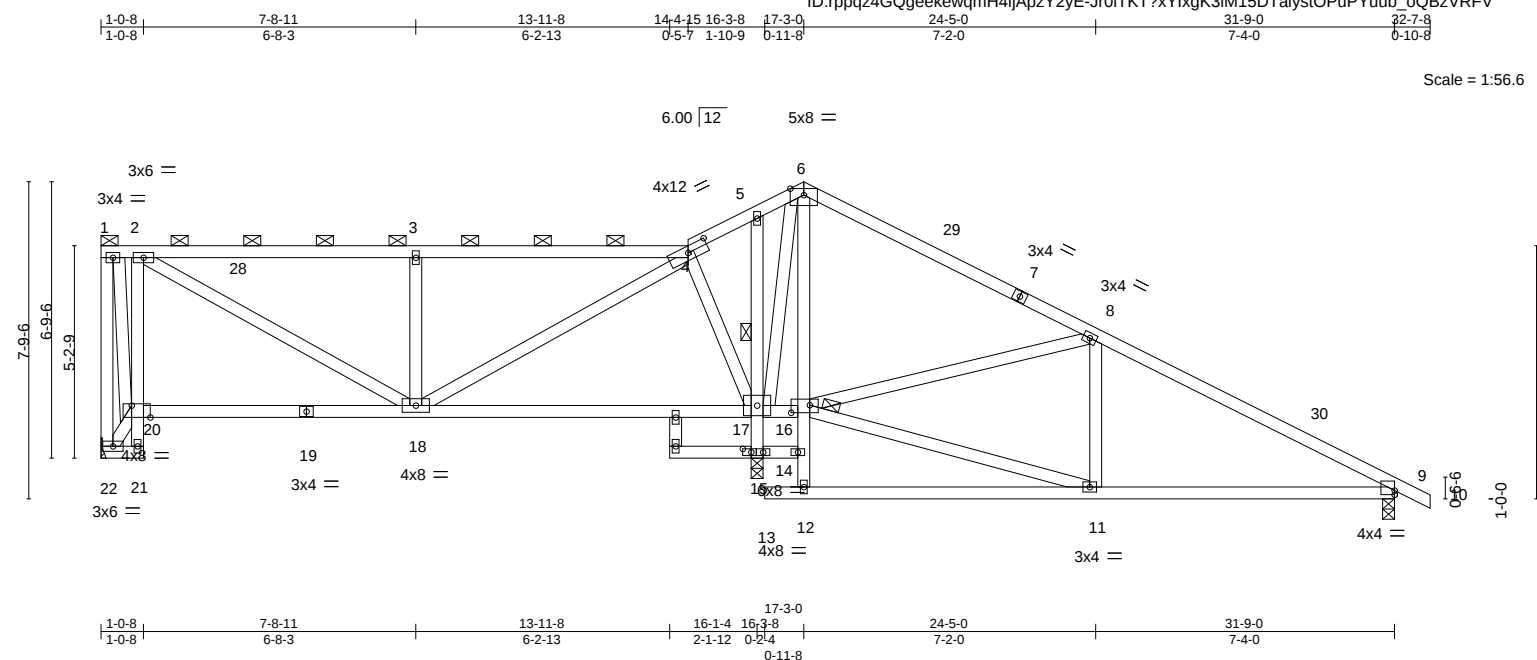


Plate Offsets (X,Y)-- [4:0-6:0,0-1-14], [9:0-0:0,0-1-4], [15:0-2-8,0-1-0], [16:0-5-8,0-2-4], [20:0-5-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.09	18-20	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.20	18-20	>955	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 164 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-4.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-15
JOINTS	1 Brace at Jt(s): 1, 16

REACTIONS.

(size) 22=Mechanical, 9=0-3-8, 15=0-3-8
Max Horz 22=225(LC 8)
Max Uplift 22=156(LC 8), 9=-152(LC 13), 15=-124(LC 12)
Max Grav 22=614(LC 25), 9=687(LC 26), 15=1717(LC 1)

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

TOP CHORD 1-22=566/4, 2-3=639/114, 3-4=641/115, 4-5=0/432, 5-6=0/518, 6-8=71/294,
8-9=864/221

BOT CHORD 2-20=682/298, 18-20=94/293, 9-11=104/688

WEBS 20-22=195/378, 1-20=26/719, 2-18=171/525, 3-18=511/179, 4-18=64/866,
6-16=47/392, 15-17=1706/146, 4-17=649/175, 6-17=1063/124, 11-16=100/704,
8-16=802/253

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-14, Interior(1) 3-3-14 to 17-3-0, Exterior(2R) 17-3-0 to 20-5-2, Interior(1) 20-5-2 to 32-7-8 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 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 22, 152 lb uplift at joint 9 and 124 lb uplift at joint 15.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 1, 2021



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

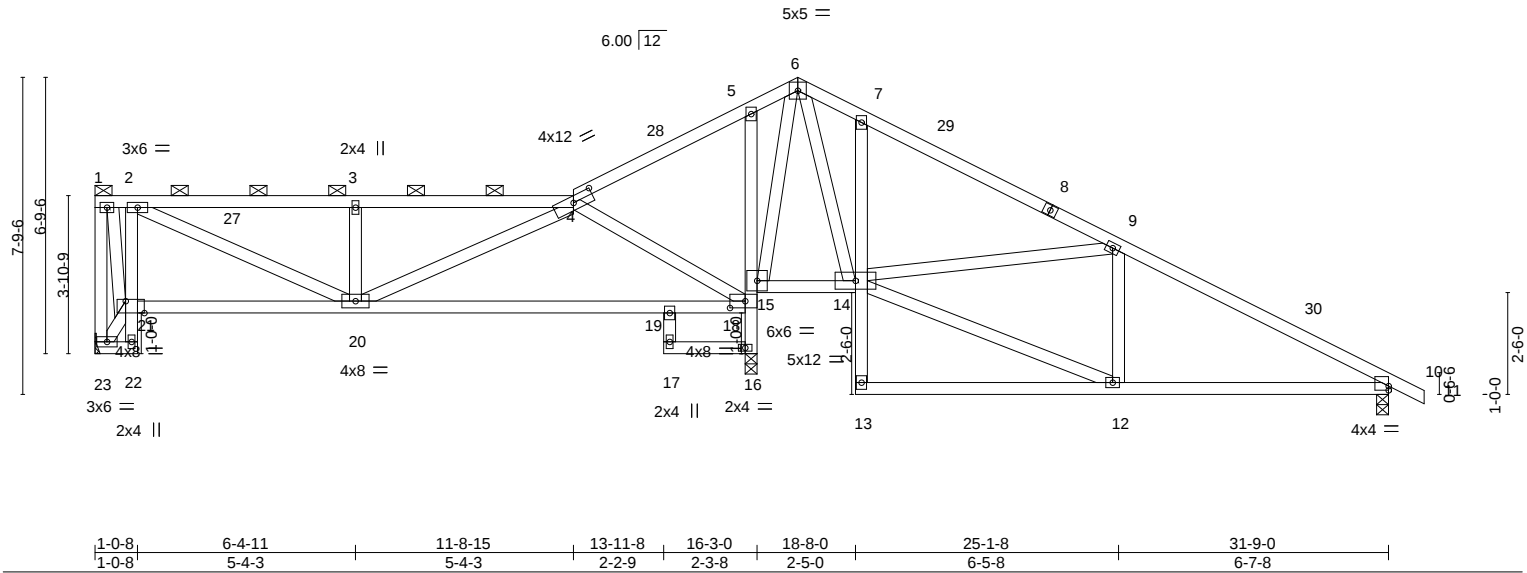
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443861
2651568	A12	Roof Special	1	1		

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:02:41 2021 Page 1

ID:rppqz4GQgeekewqmH4ljApzY2yE-kQir6MVuEThVXonH19ew5DKVU4PS5rWKaZDS1WzVRFS

1-0-8	6-4-11	11-8-15	13-11-8	16-3-0	17-3-0 18-8-0	25-1-8	31-9-0	32-7-8
1-0-8	5-4-3	5-4-3	2-2-9	2-3-8	1-0-0 1-5-0	6-5-8	6-7-8	0-10-8

Scale = 1:56.6



1-0-8	6-4-11	11-8-15	13-11-8	16-3-0	18-8-0	25-1-8	31-9-0
1-0-8	5-4-3	5-4-3	2-2-9	2-3-8	2-5-0	6-5-8	6-7-8
Plate Offsets (X, Y)-- [4:0-6-0,0-1-14], [10:0-0-0,0-1-4], [18:0-4-8,0-2-0], [21:0-5-8,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44		L/d
TCDL	10.0	Lumber DOL	1.15	BC	0.55		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS			
				PLATES		GRIP	
				MT20		197/144	
				Weight: 156 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (5-7-15 max.): 1-4.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS.	(size) 23=Mechanical, 10=0-3-8, 16=0-3-8
	Max Horz 23=-191(LC 8)
	Max Uplift 23=-130(LC 8), 10=-146(LC 13), 16=-182(LC 12)
	Max Grav 23=625(LC 25), 10=704(LC 26), 16=1659(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-23=-541/17, 2-3=-949/107, 3-4=-951/108, 4-5=-85/445, 5-6=-7/396, 6-7=-276/181, 7-9=-348/150, 9-10=-924/212
BOT CHORD	2-21=-645/214, 20-21=-47/332, 19-20=-8/450, 18-19=0/486, 16-18=-1619/199, 15-18=-1156/145, 5-15=-272/131, 7-14=-329/155, 10-12=-102/746
WEBS	21-23=-180/281, 1-21=-54/634, 2-20=-155/791, 3-20=-410/146, 4-20=-50/615, 12-14=-118/772, 9-14=-609/215, 4-18=-818/195, 6-15=-790/59, 6-14=-201/741

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-14, Interior(1) 3-3-14 to 17-3-0, Exterior(2R) 17-3-0 to 20-5-2, Interior(1) 20-5-2 to 32-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 16 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 130 lb uplift at joint 23, 146 lb uplift at joint 10 and 182 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.



April 1,2021

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		MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443862
2651568	A13	Roof Special	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

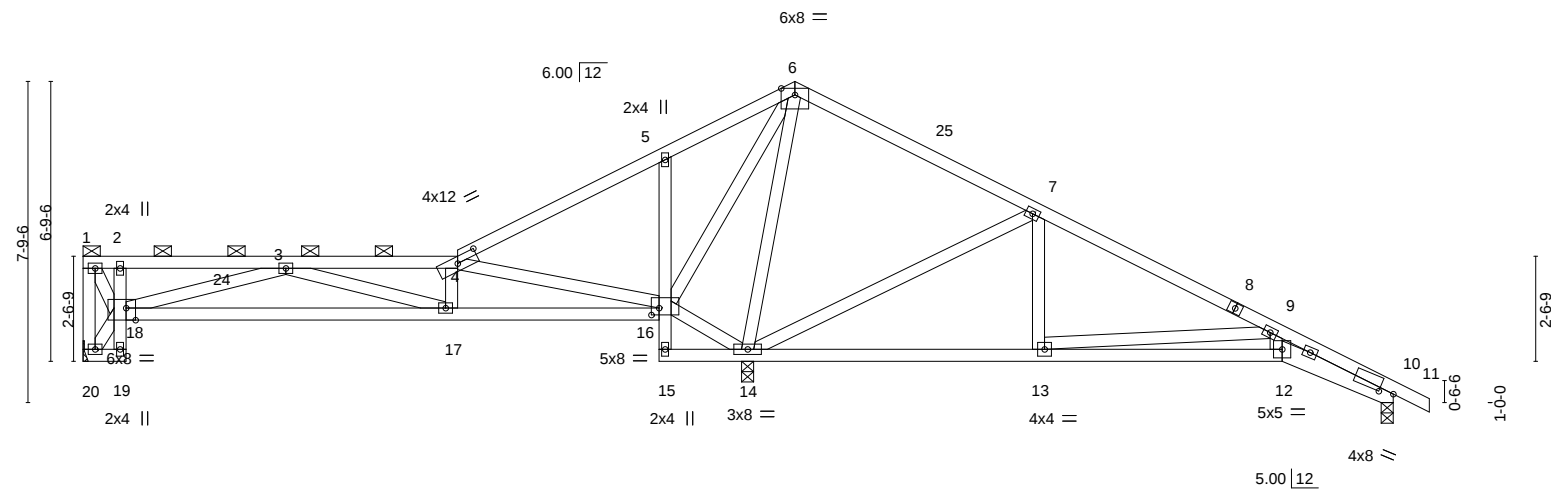
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:02:43 2021 Page 1

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Job Reference (optional)

1-0-8	4-10-15	9-0-15	13-11-8	17-3-0	23-1-14	29-0-11	31-9-0	32-7-8
1-0-8	3-10-7	4-1-15	4-10-9	3-3-8	5-10-14	5-10-14	2-8-5	0-10-8

Scale = 1:55.8



1-0-8	9-0-15	13-11-8	16-1-4	23-1-14	29-0-11	31-9-0
1-0-8	8-0-7	4-10-9	2-1-12	7-0-10	5-10-14	2-8-5

Plate Offsets (X,Y)-- [4:0-6-0,0-1-14], [10:0-4-4,0-0-13], [16:0-2-4,0-2-0], [18:0-2-12,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	-0.11 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.18 17-18	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.05 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 143 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
10-12: 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 (6-0-0 max.): 1-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 20=Mechanical, 10=0-3-8, 14=0-3-8
Max Horz 20=-156(LC 8)
Max Uplift 20=-99(LC 8), 10=-129(LC 13), 14=-227(LC 12)
Max Grav 20=423(LC 25), 10=522(LC 26), 14=2164(LC 1)

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

TOP CHORD 1-20=-415/29, 1-2=-258/38, 2-3=-366/31, 3-4=-302/545, 4-5=-103/1159, 5-6=-16/1141,
6-7=-50/942, 7-9=-387/405, 9-10=-1745/406
BOT CHORD 17-18=-187/790, 16-17=-577/272, 5-16=-324/150, 13-14=-337/273, 12-13=-349/1562,
10-12=-341/1679
WEBS 18-20=-93/275, 1-18=-67/493, 3-18=-444/237, 3-17=-733/143, 4-17=0/393,
4-16=-985/189, 14-16=-1063/242, 6-14=-1195/164, 7-14=-849/226, 7-13=0/364,
9-13=-1298/339, 9-12=0/384

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-14, Interior(1) 3-3-14 to 17-3-0, Exterior(2R) 17-3-0 to 20-5-2,
Interior(1) 20-5-2 to 32-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces
& MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 3x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 10 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 99 lb uplift at joint 20, 129 lb uplift at joint 10 and 227 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.



April 1, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443863
2651568	A14	Roof Special Girder	1	1	Job Reference (optional)	

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

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ID:rppqz4GQgeekewqmH4ljApzY2yE-8?NzkOXmWO34OFWsjlCdjryxLHQKI55nGWR6erzVRFP

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 5-10=-70, 11-17=-20, 11-18=-20
Concentrated Loads (lb)
Vert: 21=0(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443864
2651568	A15	Roof Special	1	1		

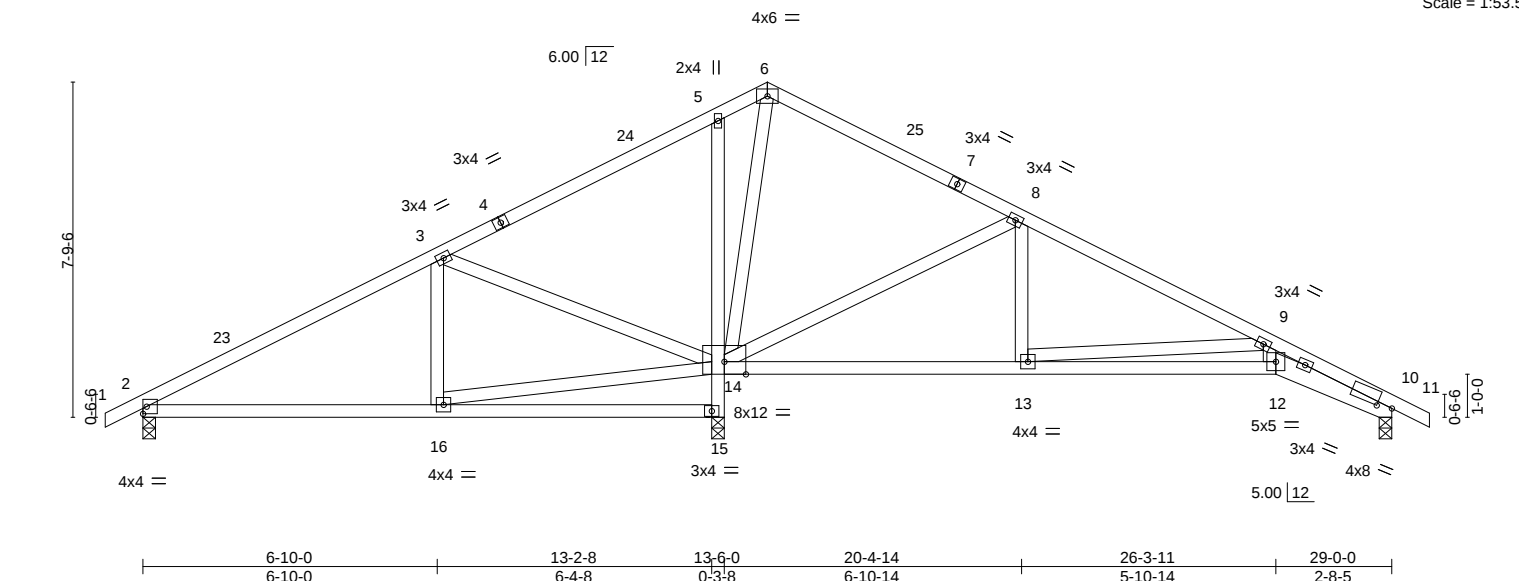
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:02:46 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-4OVk93Z12?JoeZgFqjE5oG2Kc58Dm_C3jqwDikzVRFN

0-10-8 6-10-0 13-6-0 14-6-0 20-4-14 26-3-11 29-0-0 29-10-8
0-10-8 6-10-0 6-8-0 1-0-0 5-10-14 5-10-14 2-8-5 0-10-8

Scale = 1:53.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.08 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.14 12-13	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.05 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 127 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
10-12: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 10=0-3-8, 15=0-3-8
Max Horz 2=122(LC 12)
Max Uplift 2=95(LC 12), 10=99(LC 13), 15=177(LC 13)
Max Grav 2=486(LC 25), 10=492(LC 26), 15=1939(LC 1)

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

TOP CHORD 2-3=-452/376, 3-5=-56/916, 5-6=-13/820, 6-8=-43/745, 8-9=-302/76, 9-10=-1523/245
BOT CHORD 2-16=-302/321, 14-15=-1889/232, 5-14=-361/153, 12-13=-192/1293, 10-12=-185/1443
WEBS 3-16=0/303, 14-16=-268/341, 3-14=-807/205, 6-14=-863/104, 8-14=-849/220,
8-13=0/372, 9-13=-1094/253, 9-12=0/436

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-6-0, Exterior(2R) 14-6-0 to 17-6-0, Interior(1) 17-6-0 to 29-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 10, 15 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 95 lb uplift at joint 2, 99 lb uplift at joint 10 and 177 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.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	I45443865
2651568	AG1	Common Supported Gable	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:03 2021 Page 1

ID:rppqz4GQgeekewqmH4ljApzY2yE-5f19jtmh2DSNAATWKn24_sFMty1ZFsdæ_YdpFzVRF6

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0-10-8 14-6-0 14-6-0 0-10-8

Scale = 1:51.4

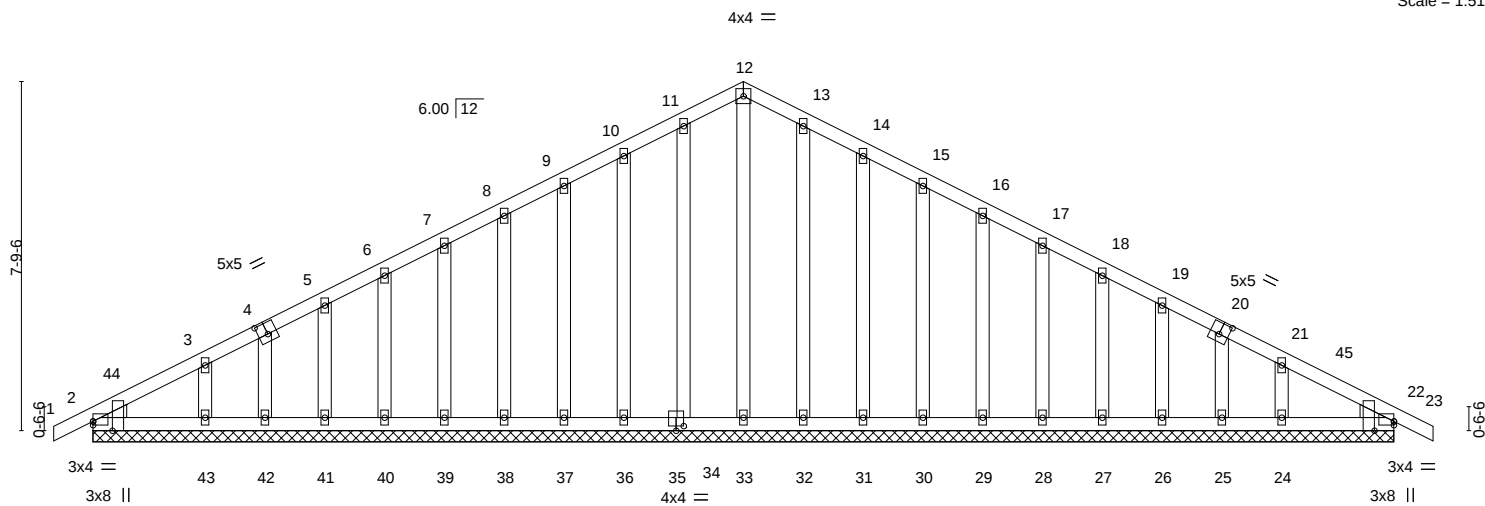


Plate Offsets (X,Y)--		[2:Edge,0-1-0], [2:0-2-8,Edge], [4:0-2-8,0-3-0], [20:0-2-8,0-3-0], [22:0-2-8,Edge], [22:0-0-0,0-1-0], [35:0-2-0,0-1-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) 0.00 22 n/r 120
BCLL 0.0	Rep Stress Incr YES	WB 0.13	Vert(CT) 0.00 22 n/r 120
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.01 22 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 162 lb	FT = 20%

LUMBER-

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

WEDGE

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

BRACING-

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

REACTIONS.

All bearings 29'-0" 0.

(lb) - Max Horz 2=-122(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 43, 32, 31, 30, 29, 28, 27, 26, 25, 24

Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 32, 31, 30, 29, 28, 27, 26, 25, 24, 22

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 14-6-0, Corner(3R) 14-6-0 to 17-6-0, Exterior(2N) 17-6-0 to 29-10-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1'-4" oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 43, 32, 31, 30, 29, 28, 27, 26, 25, 24.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	I45443866
2651568	AG2	Common Structural Gable	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:06 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-VEiILvoZL8qy1eC5?vbncUtle9ztS880KymHQazVRF3

0-10-8 7-4-0 7-9-9 13-2-8 14-6-0 21-8-0 29-0-0 29-10-8
0-10-8 7-4-0 0-5-9 5-4-15 1-3-8 7-2-0 7-4-0 0-10-8

4x4 =

Scale = 1:53.2

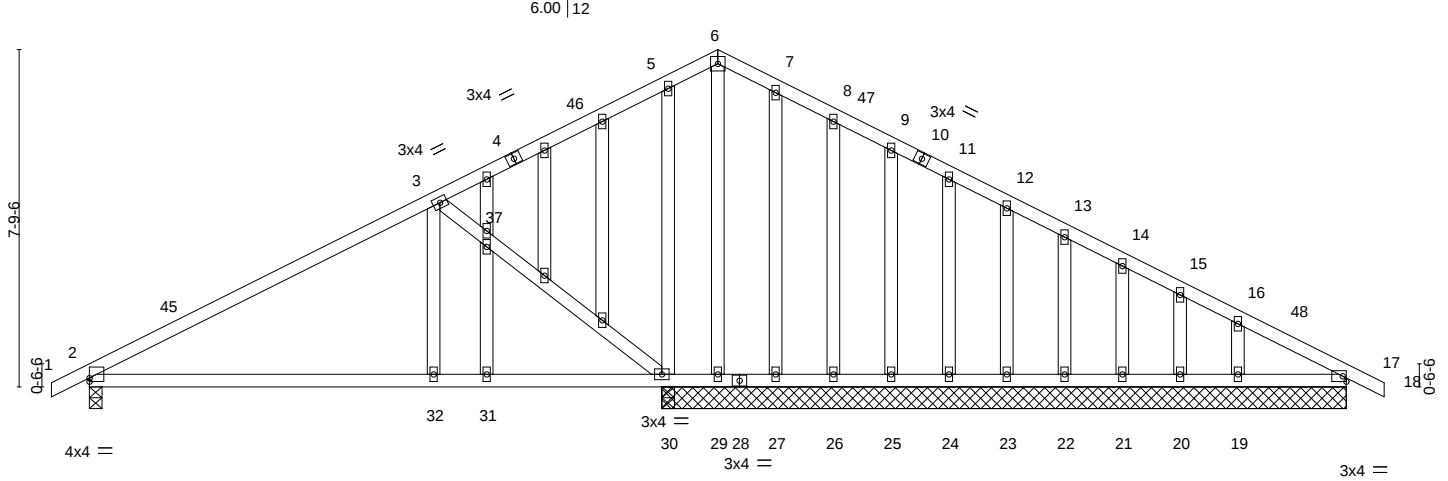


Plate Offsets (X,Y)--	[2:0-0-0,0-1-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.08 32-41	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.19 32-41	>837	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.47	Horz(CT)	0.02 2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 154 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

All bearings 15-9-8 except (jt=length) 2=0-3-8.

(lb) - Max Horz 2=122(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19 except 2=-112(LC 12), 30=-184(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 29, 27, 26, 25, 24, 23, 22, 21, 20, 19, 17, 17 except 2=656(LC 1), 30=705(LC 25), 30=703(LC 1)

FORCES.

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

TOP CHORD 2-3=-732/140
BOT CHORD 2-32=-129/554, 31-32=-129/554, 30-31=-129/554
WEBS 3-32=0/315, 3-37=-714/212, 30-37=-707/209

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-6-0, Exterior(2R) 14-6-0 to 17-6-0, Interior(1) 17-6-0 to 29-10-8 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- 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) 27, 26, 25, 24, 23, 22, 21, 20, 19 except (jt=lb) 2=112, 30=184.
- This truss 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.



April 1, 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

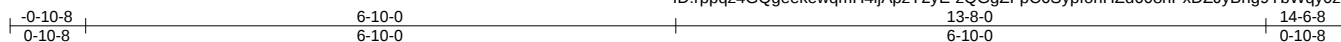
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	145443867
2651568	B1	Common	2	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:07 2021 Page 1

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4x8 =

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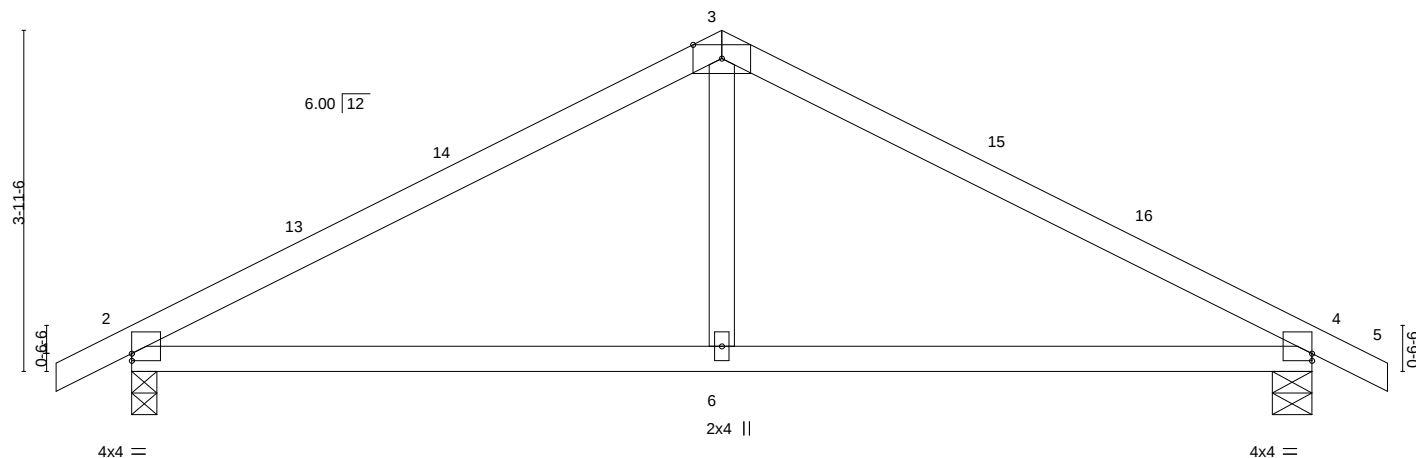


Plate Offsets (X,Y)--	[2:0-0-0,0-1-0], [4:0-0-0,0-1-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.06	6-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.11	6-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 39 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=0-5-8
Max Horz 2=61(LC 12)
Max Uplift 2=-94(LC 12), 4=-94(LC 13)
Max Grav 2=676(LC 1), 4=676(LC 1)

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

TOP CHORD 2-3=-844/244, 3-4=-844/244
BOT CHORD 2-6=-99/664, 4-6=-99/664
WEBS 3-6=0/300

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-10-0, Exterior(2R) 6-10-0 to 9-10-0, Interior(1) 9-10-0 to 14-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



April 1, 2021

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



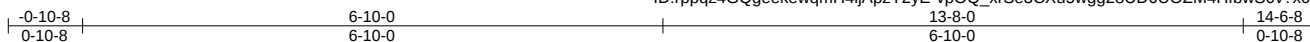
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443868
2651568	BG	Common Supported Gable	1	1	Job Reference (optional)	

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

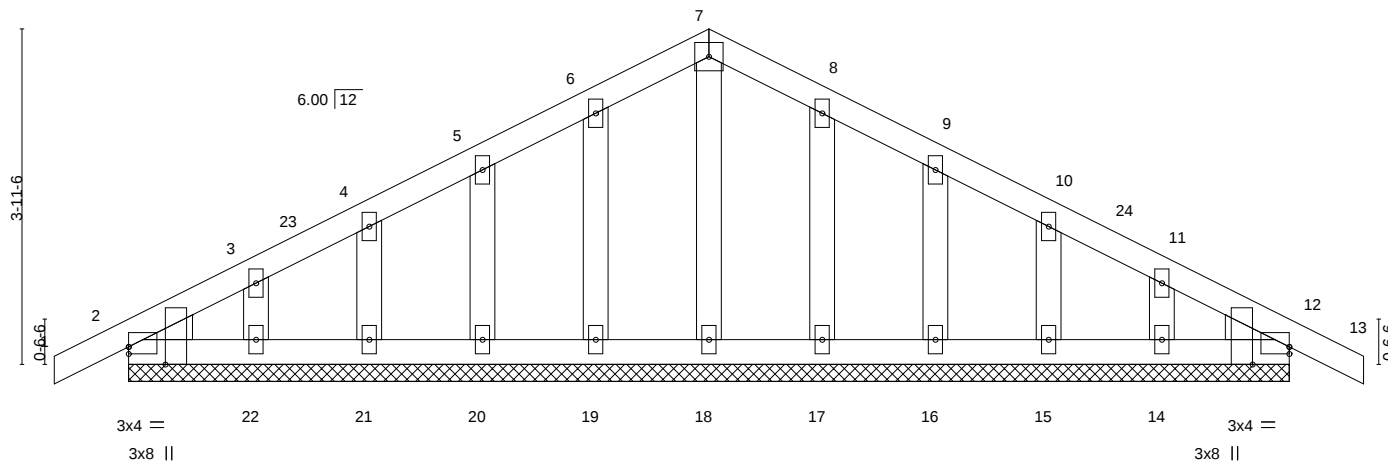
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:09 2021 Page 1

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4x4 =

Scale = 1:27.1



										13-8-0											
										13-8-0											
Plate Offsets (X,Y)--										[2:Edge,0-1-0], [2:0-2-8,Edge], [12:Edge,0-1-0], [12:0-2-8,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	0.05			Vert(LL)	-0.00	13	n/r		120		MT20		197/144		
TCDL	10.0	Lumber DOL		1.15		BC	0.02			Vert(CT)	-0.00	13	n/r		120						
BCLL	0.0	Rep Stress Incr		YES		WB	0.02			Horz(CT)	0.00	12	n/a		n/a						
BCDL	10.0	Code IRC2018/TPI2014				Matrix-S												Weight: 57 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-8-0.
(lb) - Max Horz 2--61(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-10-0, Corner(3R) 6-10-0 to 9-10-0, Exterior(2N) 9-10-0 to 14-6-8 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- 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, 12, 19, 20, 21, 22, 17, 16, 15, 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.



April 1, 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/WOODSIDE RIDGE #68/MO	I45443869
2651568	C1	Common	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:12 2021 Page 1

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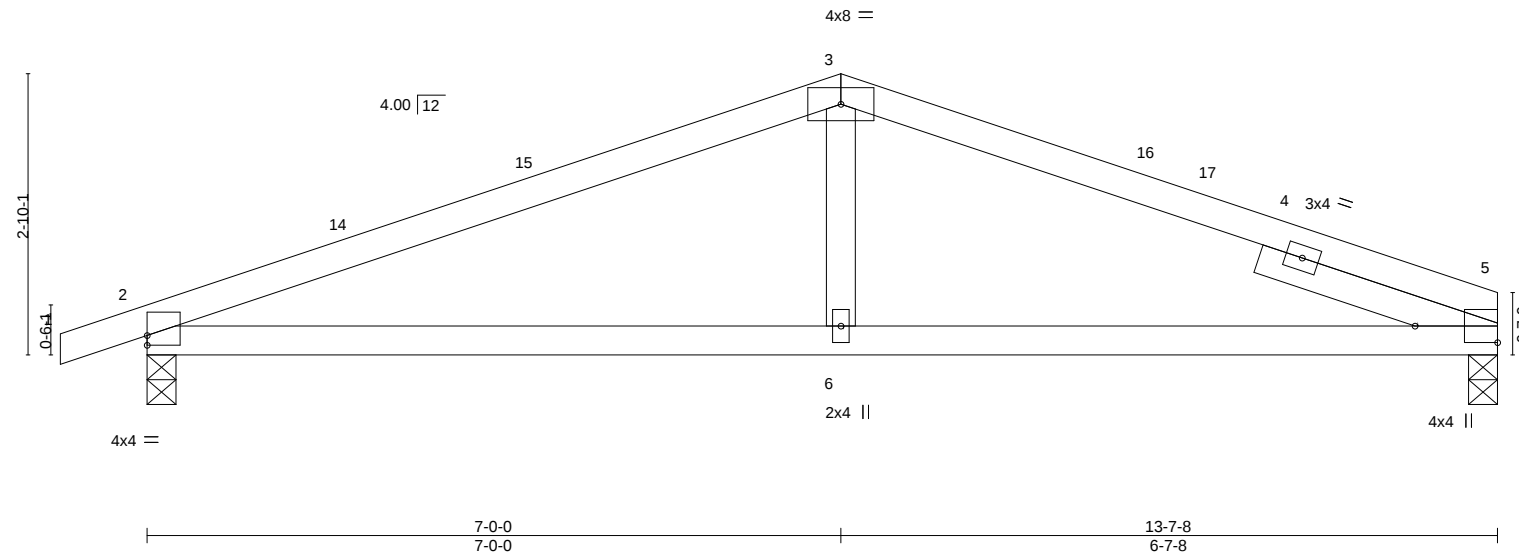


Plate Offsets (X,Y)-- [2:0-0-0,0-1-3], [5:Edge,0-10-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.07	6-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.13	6-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 39 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 2=0-3-8
 Max Horz 2=49(LC 12)
 Max Uplift 5=-87(LC 9), 2=-122(LC 8)
 Max Grav 5=611(LC 1), 2=676(LC 1)

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

TOP CHORD 2-3=-1064/303, 3-5=-1003/315
 BOT CHORD 2-6=-236/939, 5-6=-236/939
 WEBS 3-6=0/283

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 13-7-8 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) 5 except (jt=lb) 2=122.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	145443870
2651568	C2	Hip	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:14 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-GmBJ1evbSbrq?tpdTbkfwAC1ONc8KsuB9Bih6zVREx



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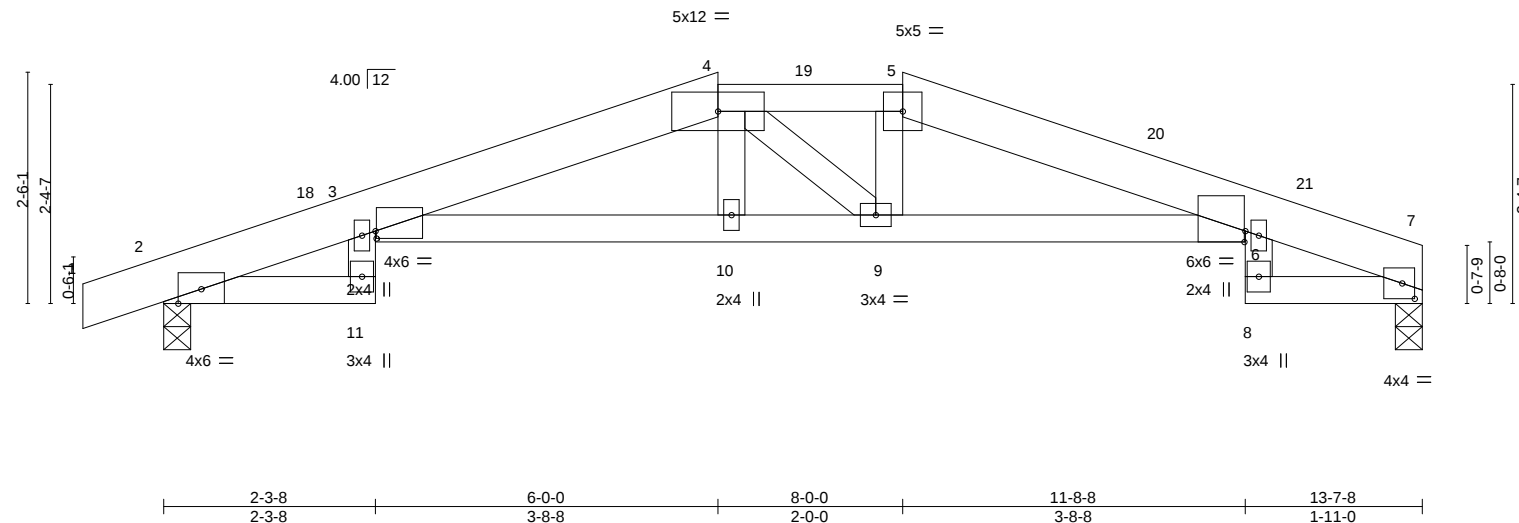


Plate Offsets (X,Y)--		[3:0-0-2,0-0-15], [6:0-0-2,Edge], [7:0-1-10,0-2-0]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2018/TPI2014
	CSI.	
	TC	0.88
	BC	0.80
	WB	0.04
	Matrix-AS	
	DEFL.	
	in (loc)	l/defl L/d
	Vert(LL)	-0.18 3-10 >903 240
	Vert(CT)	-0.33 3-10 >493 180
	Horz(CT)	0.19 7 n/a n/a
	PLATES	GRIP
	MT20	197/144
	Weight: 48 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied, except
4-5: 2x4 SPF No.2	2-0-0 oc purlins (4-7-6 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=43(LC 12)
Max Uplift 7=-93(LC 9), 2=-129(LC 8)
Max Grav 7=611(LC 1), 2=676(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-16=-339/116, 3-4=-1595/532, 4-5=-1520/504, 5-6=-1565/492, 6-7=-300/104
BOT CHORD 3-10=-481/1550, 9-10=-481/1557, 6-9=-426/1512

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 6-0-0, Exterior(2E) 6-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 13-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=129.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443871
2651568	C3	HIP GIRDER	1	2		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

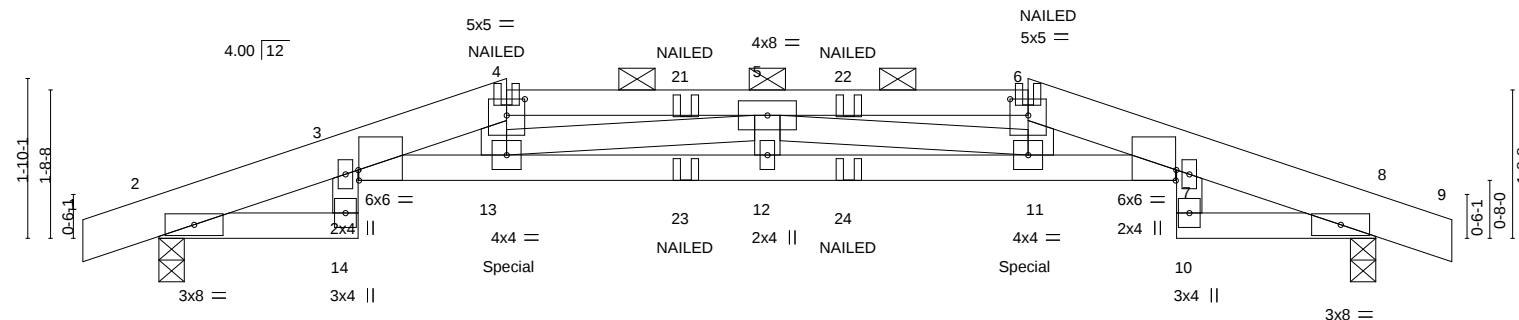
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:15 2021 Page 1

ID:rppqz4GQgeekewqmH4ljApzY2yE-kzlhE_vDDvzhc0Oq1FuTNkBnnus3JxLorSFDYzVREw

Job Reference (optional)

-0-10-8	2-3-8	4-0-0	7-0-0	10-0-0	11-8-8	14-0-0	14-10-8
0-10-8	2-3-8	1-8-8	3-0-0	3-0-0	1-8-8	2-3-8	0-10-8

Scale = 1:26.5



2-3-8	4-0-0	7-0-0	10-0-0	11-8-8	14-0-0
2-3-8	1-8-8	3-0-0	3-0-0	1-8-8	2-3-8

Plate Offsets (X,Y)-- [3:0-0-2,Edge], [4:0-2-8,0-2-4], [6:0-2-8,0-2-4], [7:0-0-1,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 0.90	Vert(LL)	-0.21	12	>798	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.38	12	>447	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.19	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 102 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
4-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
Max Horz 2=-25(LC 30)
Max Uplift 2=-250(LC 4), 8=-250(LC 5)
Max Grav 2=1067(LC 1), 8=1067(LC 1)

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

TOP CHORD 3-16=-530/142, 3-4=-4338/956, 4-5=-4298/962, 5-6=-4298/940, 6-7=-4338/937,
7-8=-530/142
BOT CHORD 3-14=-69/362, 3-13=-933/4356, 12-13=-1031/4861, 11-12=-1031/4861, 7-11=-894/4356,
7-10=-65/362
WEBS 4-13=-65/328, 5-13=-679/162, 5-11=-679/158, 6-11=-63/328

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=250, 8=250.
- This truss 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) 262 lb down and 103 lb up at 4-0-0, and 262 lb down and 103 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



April 1,2021

LOAD CASE(S) Standard

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443871
2651568	C3	HIP GIRDER	1	2	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:15 2021 Page 2
ID:rppqz4GQgeekewqmH4ljApzY2yE-kzlhE_vDDvzhc0Oq1lFuTNkBnnus3JxLorSFDYzVREw

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-7=-70, 7-9=-70, 14-15=-20, 3-7=-20, 10-18=-20
- Concentrated Loads (lb)
 - Vert: 4=-33(F) 6=-33(F) 13=-262(F) 11=-262(F) 21=-33(F) 22=-33(F) 23=-48(F) 24=-48(F)

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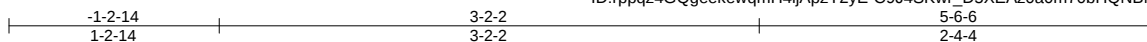
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443872
2651568	CJ1	Diagonal Hip Girder	2	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:16 2021 Page 1

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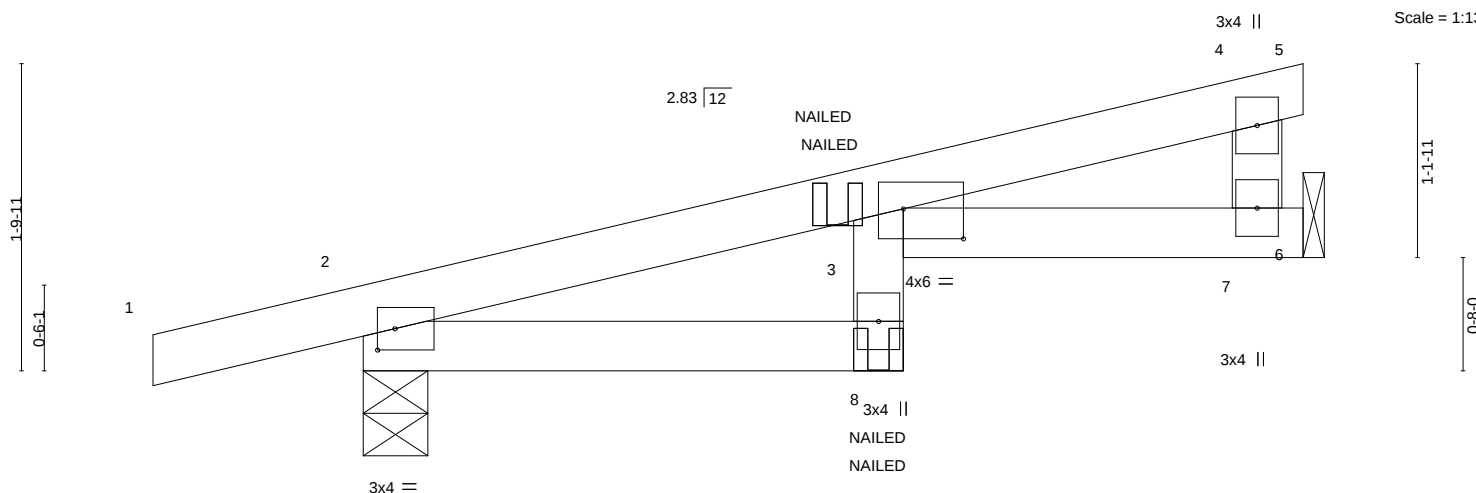


Plate Offsets (X,Y)--		[2:0-1-4,0-1-8], [3:0-4-4,0-2-2]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.06	8	>977	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.11	8	>554		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.05	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					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 5-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
Max Horz 2=47(LC 5)
Max Uplift 7=48(LC 8), 2=89(LC 4)
Max Grav 7=241(LC 1), 2=336(LC 1)

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

NOTES-

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

LOAD CASE(S) Standard

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



April 1, 2021

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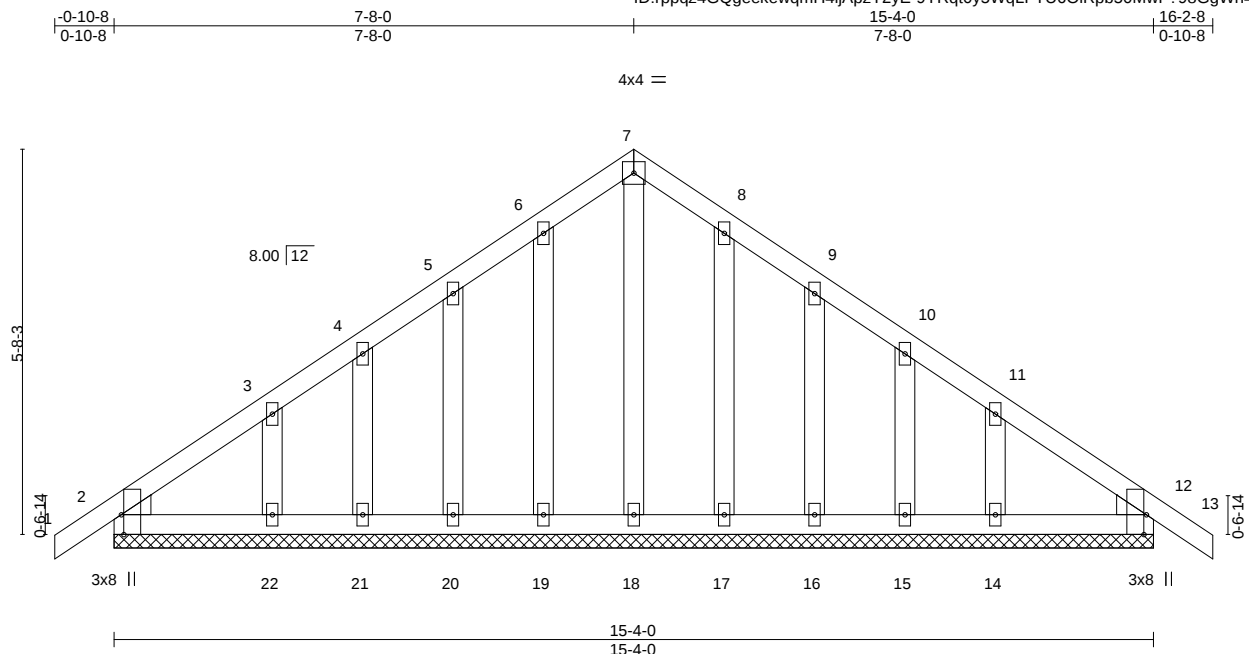
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443873
2651568	E1	Common Supported Gable	1	1		

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:18 2021 Page 1

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Scale = 1:34.0

Plate Offsets (X,Y)--		[2:0-3-8,Edge], [12:0-3-8,Edge]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC 0.05		Vert(LL) -0.00 12 n/r 120			MT20 197/144	
TCDL	10.0	Lumber DOL 1.15		BC 0.03		Vert(CT) 0.00 12 n/r 120				
BCLL	0.0	Rep Stress Incr YES		WB 0.06		Horz(CT) 0.00 12 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 75 lb FT = 20%	

LUMBER-

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

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

BRACING-

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

REACTIONS.

All bearings 15-4-0.

(lb) - Max Horz 2=-134(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14

Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-10-8 to 2-4-0, Exterior(2N) 2-4-0 to 7-8-0, Corner(3R) 7-8-0 to 10-8-0, Exterior(2N) 10-8-0 to 16-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- 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, 19, 20, 21, 22, 17, 16, 15, 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.



April 1,2021

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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/WOODSIDE RIDGE #68/MO
2651568	E2	Monopitch Supported Gable	1	1	I45443874
Job Reference (optional)					

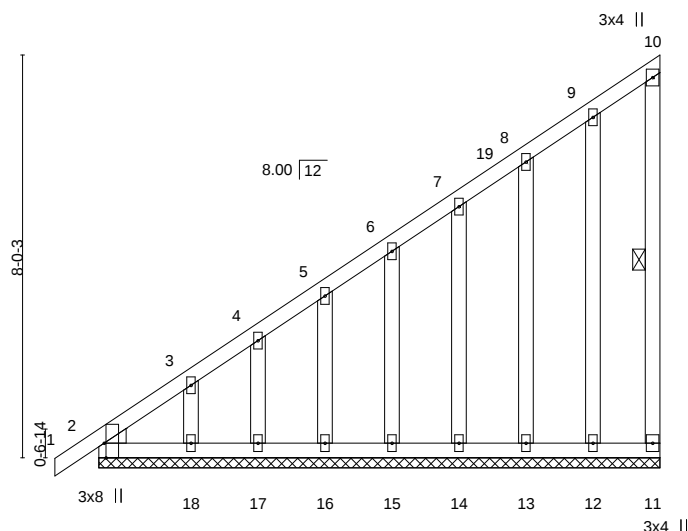
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:19 2021 Page 1

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



Scale = 1:45.9

Plate Offsets (X,Y)--		[2:0-3-8,Edge]	
LOADING (psf)		SPACING-	2-0-0
TCLL 25.0		Plate Grip DOL	1.15
TCDL 10.0		Lumber DOL	1.15
BCLL 0.0		Rep Stress Incr	YES
BCDL 10.0		Code	IRC2018/TPI2014
		CSI.	
		TC	0.34
		BC	0.17
		WB	0.13
		Matrix-S	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	0.00 1 n/r 120
		Vert(CT)	0.00 1 n/r 120
		Horz(CT)	0.00 11 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 70 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 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.
WEBS 1 Row at midpt 10-11

REACTIONS.

All bearings 11-2-0.
(lb) - Max Horz 2=277(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 11, 2, 12, 13, 14, 15, 16, 17, 18
Max Grav All reactions 250 lb or less at joint(s) 11, 2, 12, 13, 14, 15, 16, 17, 18

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-570/366, 3-4=-462/305, 4-5=-411/281, 5-6=-357/255, 6-7=-304/229, 7-8=-250/203

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 1-10-0, Exterior(2N) 1-10-0 to 11-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2, 12, 13, 14, 15, 16, 17, 18.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	I45443875
2651568	E3	GABLE	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:20 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-5wYaHhzL2RbzjoGnpsr3ARSDCogAkRI4Y790umzVREr
2-1-0 6-5-9 10-10-2 15-4-0 16-2-8
2-1-0 4-4-9 4-4-9 4-5-14 0-10-8

Scale = 1:61.7

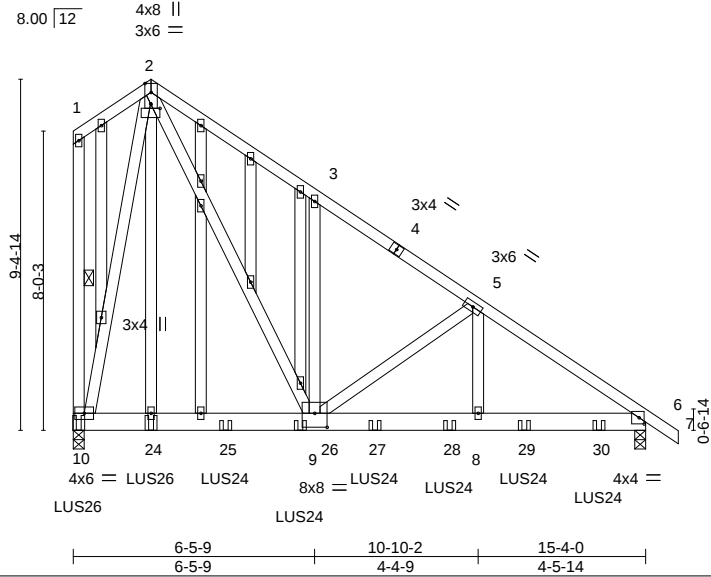


Plate Offsets (X,Y)-- [2:0-3-0,0-1-8], [6:0-1-10,0-2-0], [9:0-4-0,0-4-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.08	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.15	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 226 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 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.
WEBS 1 Row at midpt 1-10

REACTIONS.

(size) 10=0-3-8, 6=0-3-8
Max Horz 10=-313(LC 6)
Max Uplift 10=-943(LC 9), 6=-581(LC 9)
Max Grav 10=3387(LC 1), 6=2604(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2462/764, 3-5=-2447/625, 5-6=-3526/802
BOT CHORD 9-10=-181/448, 8-9=-586/2883, 6-8=-586/2883
WEBS 2-9=-1051/3466, 3-9=-351/202, 5-9=-1132/320, 5-8=-180/948, 2-10=-2024/555

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 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- 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) 10=943, 6=581.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 0-1-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 2-1-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-1-0 from the left end to connect truss(es) to front face of bottom chord.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443875
2651568	E3	GABLE	1	2	Job Reference (optional)	

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- NOTES-**
- 14) 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 12-1-0 from the left end to 14-1-0 to connect truss(es) to front face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) Studding applied to ply: 1(Front)

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-7=-70, 10-21=-20

Concentrated Loads (lb)

Vert: 10=-689(F) 24=-647(F) 25=-622(F) 26=-627(F) 27=-594(F) 28=-605(F) 29=-403(F) 30=-376(F)

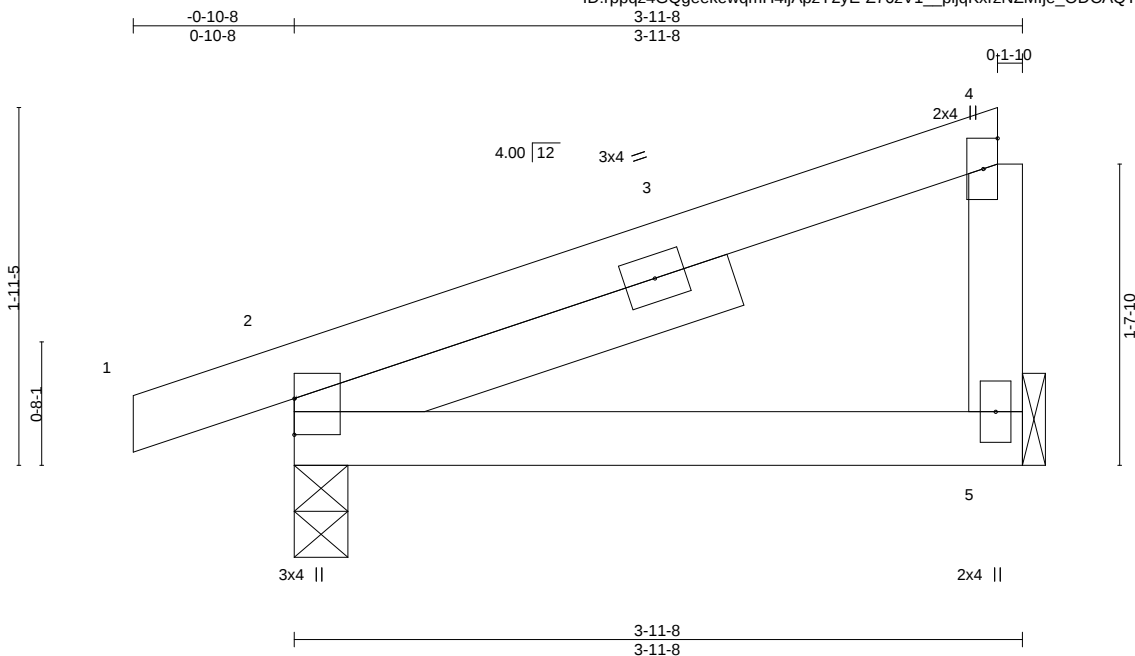
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443876
2651568	J1	MONOPITCH	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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ID:rppqz4GQgeekewqmH4ljApzY2yE-Z76zV1__pljqKxrzNZMlje_ODCAQT1BDmnvaRCzVREq



Scale = 1:12.5

Plate Offsets (X,Y)--		[2:Edge,0-0-0]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.01	5-8	>999	240	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.02	5-8	>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: 15 lb	FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=Mechanical, 2=0-3-8
 Max Horz 2=66(LC 11)
 Max Uplift 5=-36(LC 12), 2=-61(LC 8)
 Max Grav 5=165(LC 1), 2=240(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.



April 1, 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/WOODSIDE RIDGE #68/MO	I45443877
2651568	J2	MONOPITCH	6	1	Job Reference (optional)	

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

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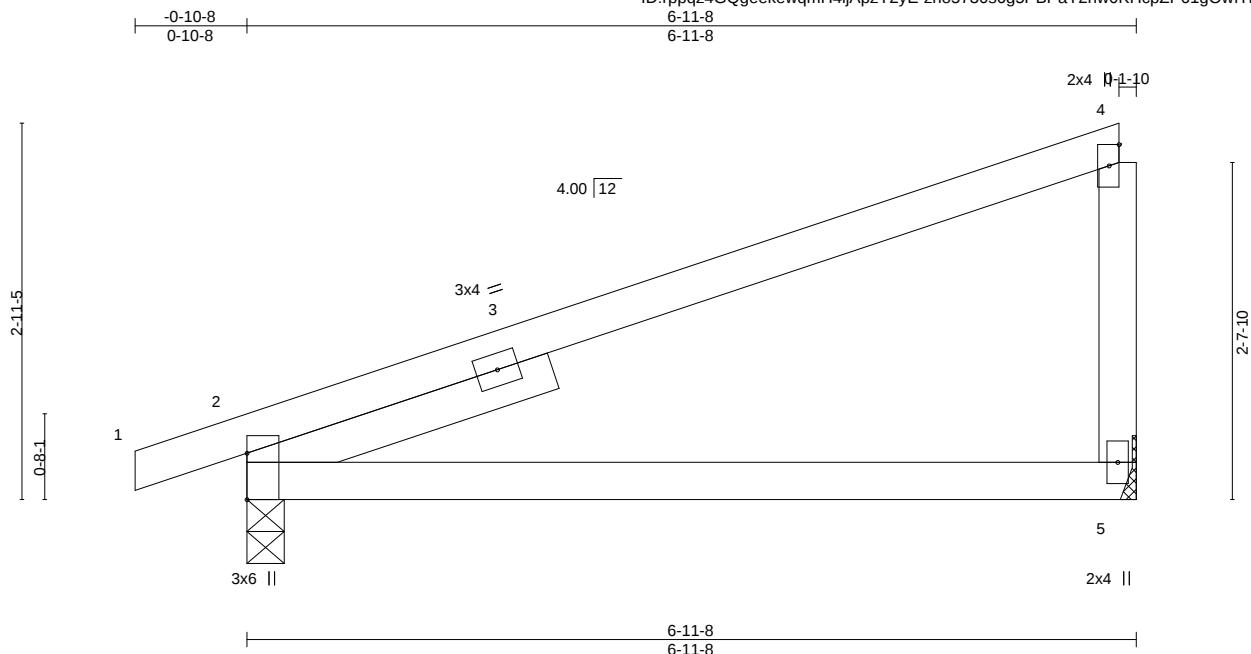


Plate Offsets (X,Y)-- [2:Edge,0-0-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	0.12	5-8	>704	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.21	5-8	>381	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 2=0-3-8
Max Horz 2=106(LC 11)
Max Uplift 5=64(LC 12), 2=81(LC 8)
Max Grav 5=303(LC 1), 2=372(LC 1)

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

TOP CHORD 2-4=-448/79

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443878
2651568	J3	Monopitch	4	1	Job Reference (optional)	

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

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ID: rppqz4GQgeekewqmH4ljApzY2yE-zho5730s6g5PBPaY2hw0KHcnuP58gOwfTl7E1XzVREn

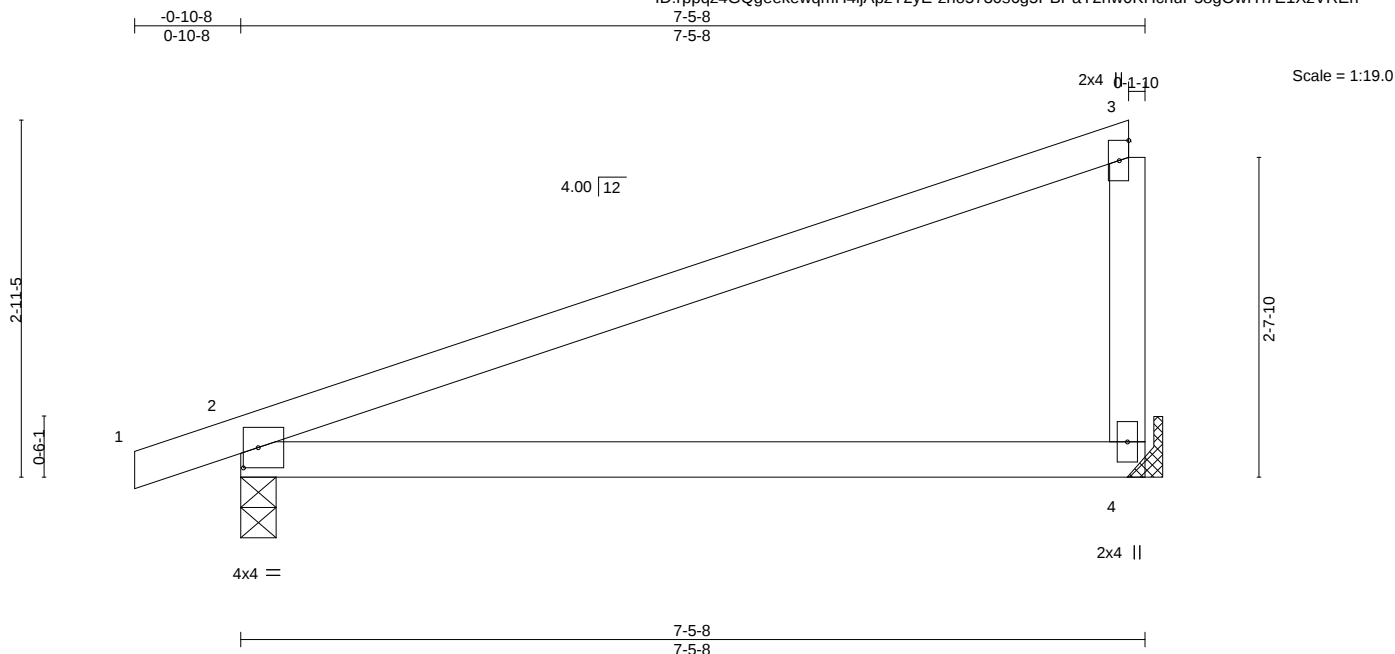


Plate Offsets (X,Y)--		[2:0-1-7,0-2-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	0.13	4-7	>666	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.28	4-7	>318	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 21 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=108(LC 11)
Max Uplift 4=67(LC 12), 2=85(LC 8)
Max Grav 4=325(LC 1), 2=394(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) This truss 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.



April 1, 2021

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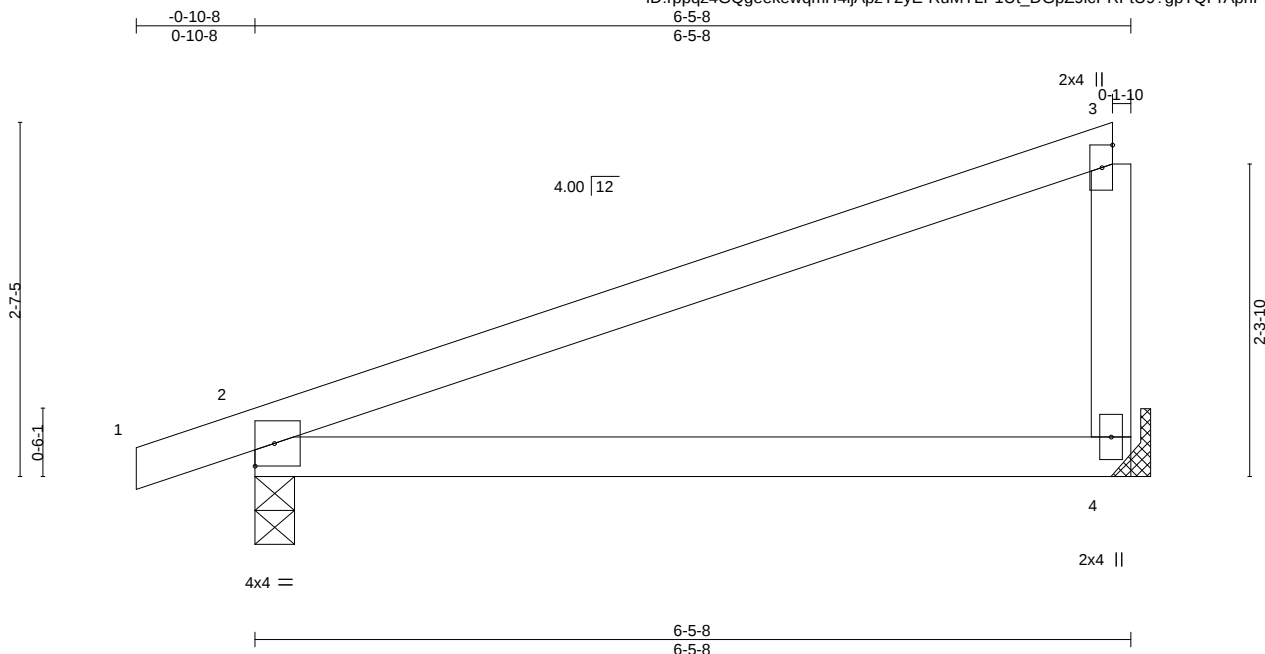
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443879
2651568	J4	Monopitch	6	1	Job Reference (optional)	

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

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ID: rppqz4GQgeekewqmH4ljApzY2yE-RuMTLP1Ut_DGpZ9lcPRFtU9?gpTQPrAphPtnazzVREm



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 0.55	Vert(LL)	0.08	4-7	>995	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.16	4-7	>485	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=95(LC 11)
Max Uplift 4=-58(LC 12), 2=-78(LC 8)
Max Grav 4=280(LC 1), 2=350(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) This truss 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.



April 1, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

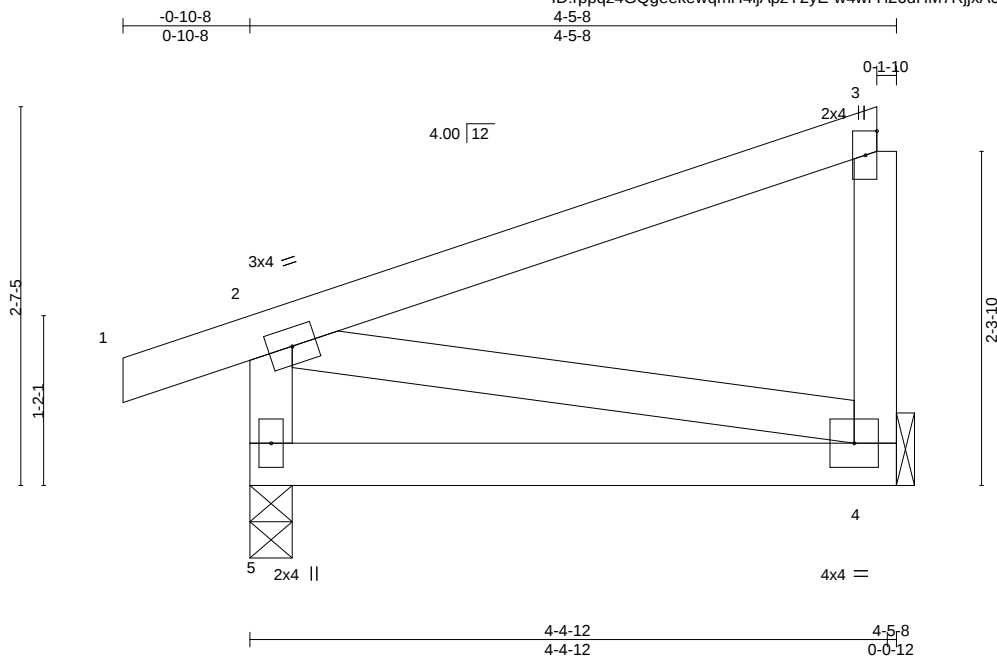
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443880
2651568	J5	Monopitch	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:26 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-w4wrYl26dHM7RjxA6yUQiiEzDsl8l_yw3cK6PzVREI



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	-0.02	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.04	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=0-3-8
Max Horz 5=94(LC 11)
Max Uplift 4=-40(LC 12), 5=-67(LC 8)
Max Grav 4=179(LC 1), 5=268(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



April 1, 2021

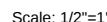
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:26 2021 Page 1
ID:rppqz4GOgeekewgmH4ljApzY2yE-w4wryl26dHM7RjixA6yUoiEADrd8HSyw3cK6PzVREI



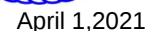
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 8=0-3-8, 6=0-3-8
 Max Horz 6=119(LC 9)
 Max Uplift 8=-83(LC 8), 6=-90(LC 12)
 Max Grav 8=319(LC 1), 6=487(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-257/164
BOT CHORD 3-6=-382/302

NOTES-

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



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

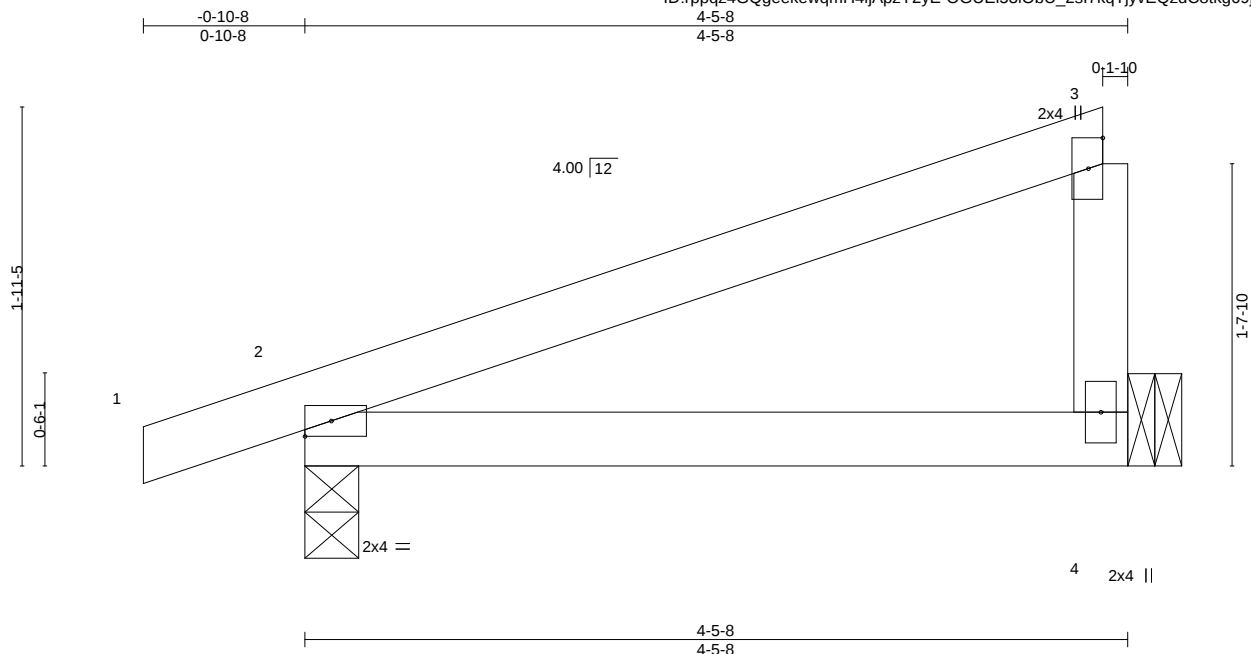
Job 2651568	Truss J7	Truss Type Monopitch	Qty 7	Ply 1	SUMMIT/WOODSIDE RIDGE #68/MO I45443882
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:27 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-OGUEI53lObU_2sl7kqTjyvEQzdC8tkg69jMueszVREk



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.02	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.03	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 13 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=68(LC 11)
Max Uplift 4=-39(LC 12), 2=-65(LC 8)
Max Grav 4=188(LC 1), 2=262(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 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.



April 1, 2021

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

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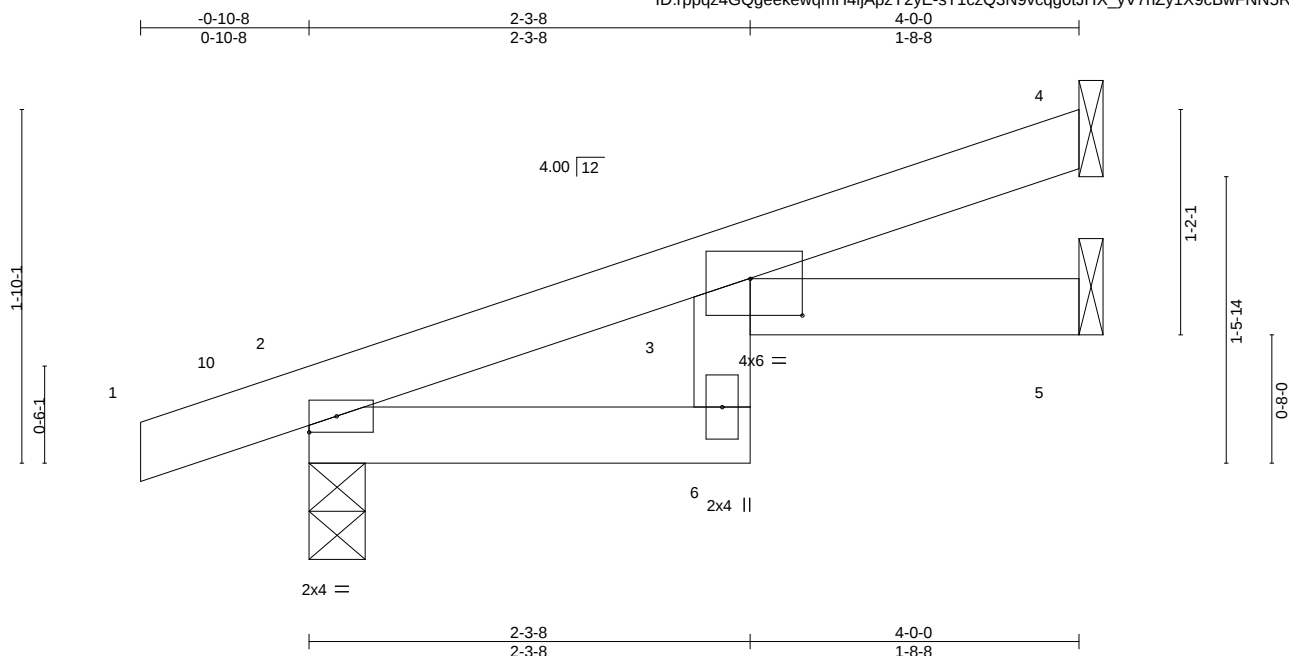
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443883
2651568	J8	Jack-Open	4	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:28 2021 Page 1

ID:rppqz4GQgeekewqmH4ljApzY2yE-sT1czQ3N9vcqg0tJHX_yV7nZy1X9cBwFNN5RAIzVREj



Scale: 1"=1'

Plate Offsets (X,Y)--		[3:0-3-4,0-2-5]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.03	6	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04	6	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	5	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 11 lb FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

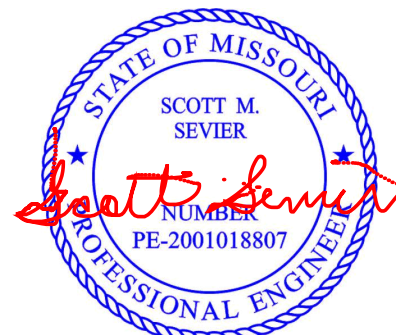
REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=62(LC 8)
Max Uplift 4=33(LC 12), 2=57(LC 8), 5=7(LC 12)
Max Grav 4=103(LC 1), 2=246(LC 1), 5=68(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-13, Interior(1) 2-0-13 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



April 1, 2021

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Chesterfield, MO 63017

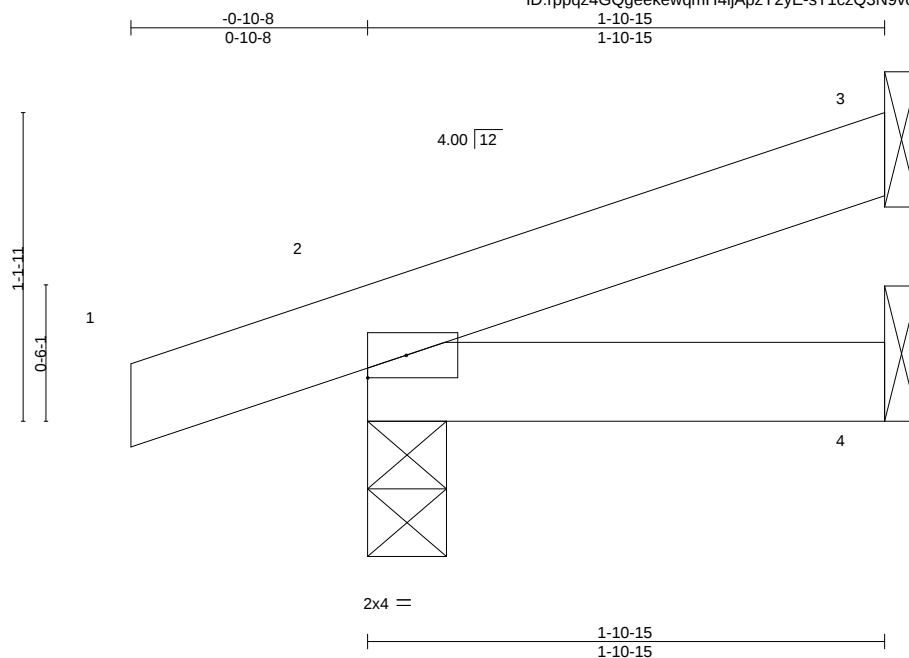
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443884
2651568	J9	Jack-Open	4	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:28 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-sT1czQ3N9vcqg0tJHX_yV7nd1ZbcBwFNN5RAIzVREj



Scale = 1:8.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 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=37(LC 8)
Max Uplift 3=-21(LC 12), 2=-48(LC 8)
Max Grav 3=51(LC 1), 2=161(LC 1), 4=33(LC 3)

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

NOTES-

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



April 1, 2021

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Chesterfield, MO 63017

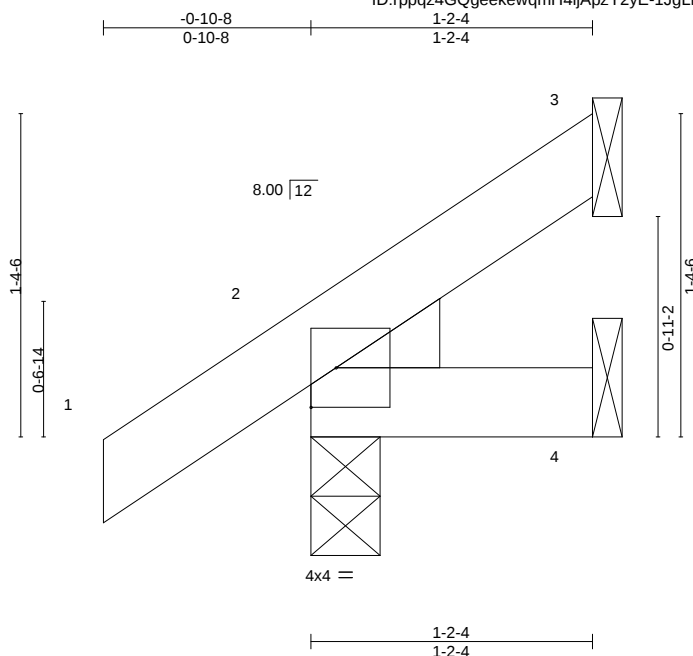
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443885
2651568	J10	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:22 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-1JgLiN?ca3rhy5QAxHtYFsXcCcWKcURN?Re7zezVREp



Scale = 1:9.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
								Weight: 5 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEDGE

Left: 2x4 SPF No.2

BRACING-

TOP CHORD

Structural wood sheathing directly applied or 1-2-4 oc purlins.

BOT CHORD

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

REACTIONS.

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

Max Horz 2=47(LC 12)

Max Uplift 3=-15(LC 12), 2=-18(LC 12), 4=-3(LC 12)

Max Grav 3=24(LC 19), 2=137(LC 1), 4=18(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss 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.



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

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



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Chesterfield, MO 63017

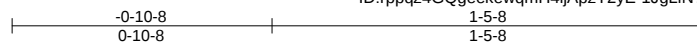
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443886
2651568	J11	MONOPITCH	4	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

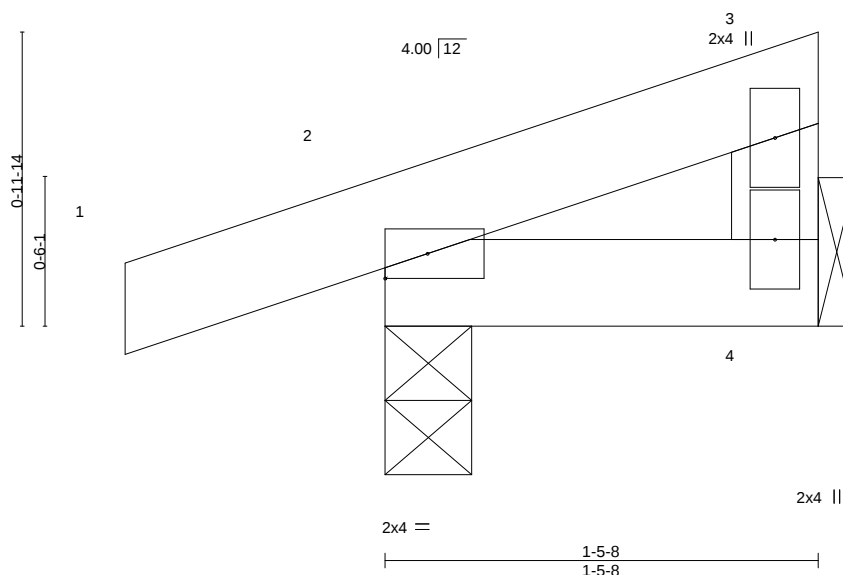
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:22 2021 Page 1

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Scale = 1:7.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 5 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=28(LC 11)
Max Uplift 4=8(LC 12), 2=51(LC 8)
Max Grav 4=39(LC 1), 2=141(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) 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.



April 1, 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

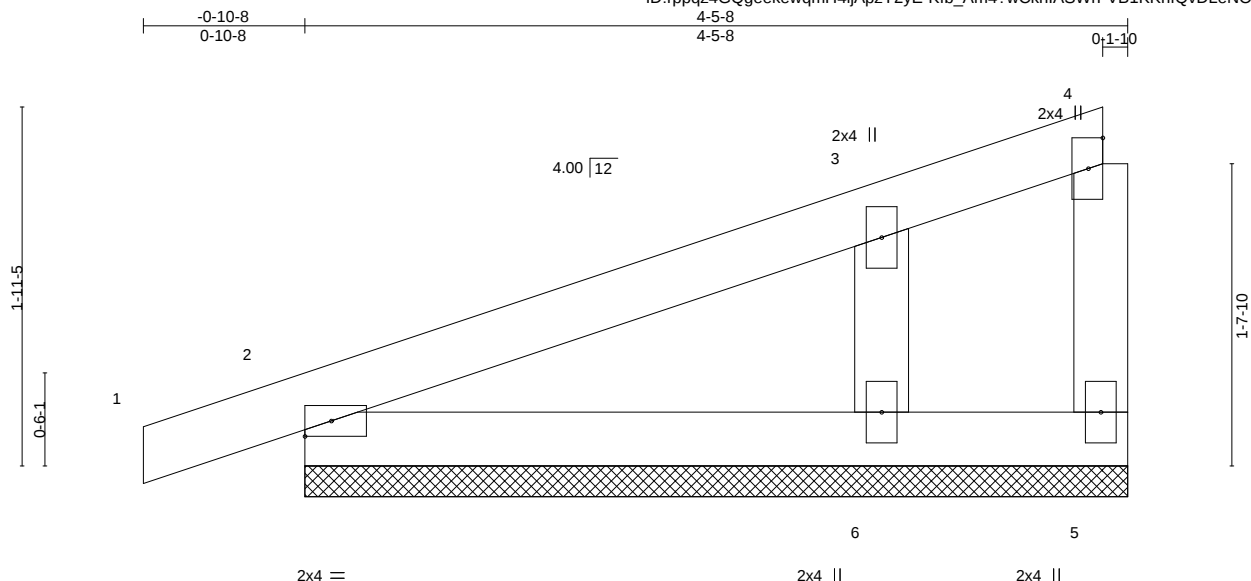
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443887
2651568	JG2	Monopitch Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:29 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-Kfb_Am4?wCkhlASWrFVB1KKnfQvDLnOc1r?jkzVREi



Scale = 1:12.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 14 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 4-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=4-5-8, 2=4-5-8, 6=4-5-8
Max Horz 2=67(LC 9)
Max Uplift 5=-13(LC 22), 2=-49(LC 8), 6=-64(LC 12)
Max Grav 5=8(LC 12), 2=187(LC 1), 6=271(LC 1)

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

WEBS 3-6=-206/289

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-3-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 1, 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



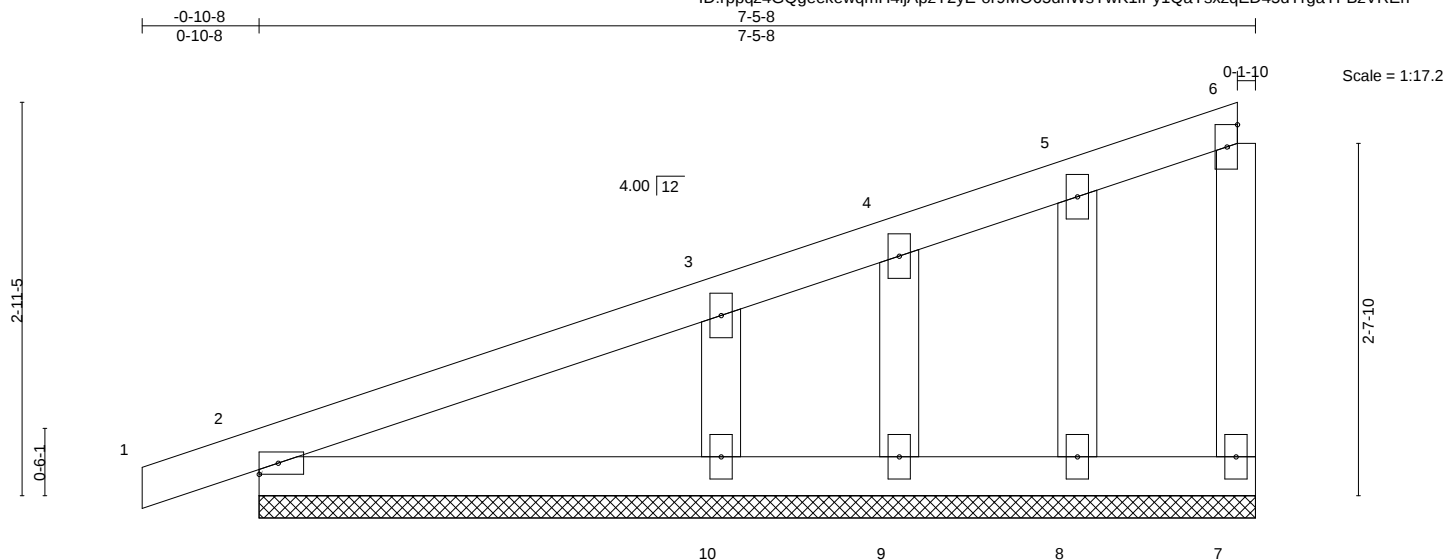
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443888
2651568	JG3	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:30 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-or9MO65dhWsYwk1iPy1QaYsxzqED45dYrgaYFBzVREh



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 7-5-8.

(lb) - Max Horz 2=107(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9, 10

Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8, 9 except 10=308(LC 1)

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

WEBS 3-10=-234/286

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-3-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 8, 9, 10.
- 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.



April 1, 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/WOODSIDE RIDGE #68/MO	I45443889
2651568	JG4	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:31 2021 Page 1

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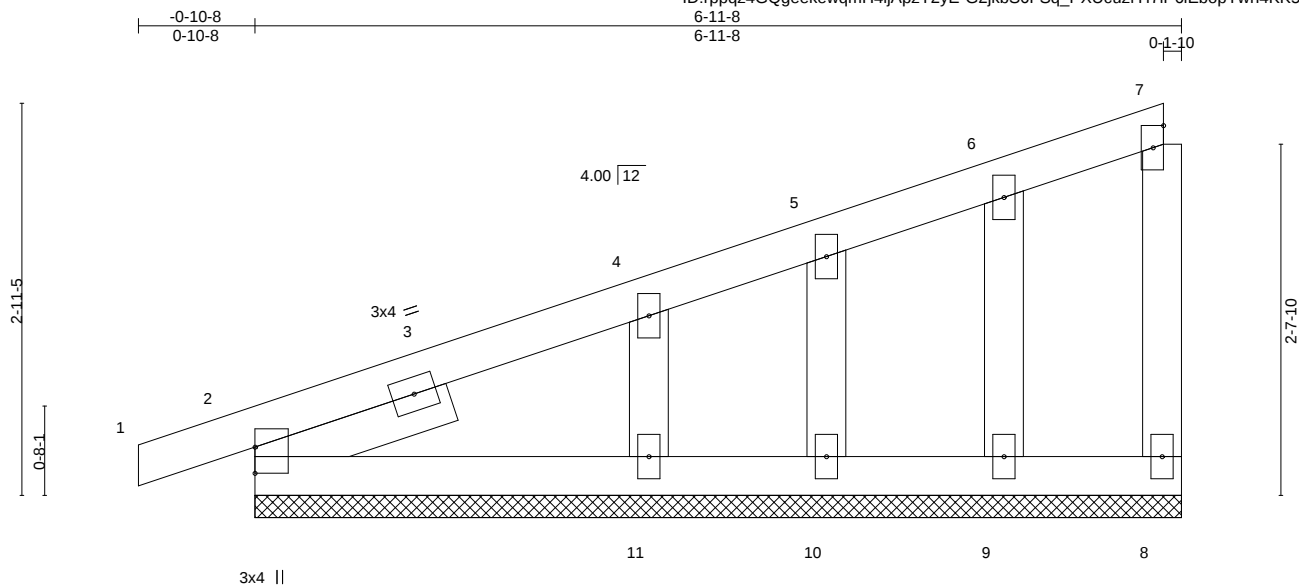


Plate Offsets (X,Y)--		[2:Edge,0-0-0]						PLATES	GRIP
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.00	1	n/r	120	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	1	n/r	120	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	8	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 27 lb
									FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 6-11-8.
 (lb) - Max Horz 2=104(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 9, 10, 11
 Max Grav All reactions 250 lb or less at joint(s) 8, 2, 9, 10, 11

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-11=183/272

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-9-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 9, 10, 11.
- 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.



April 1, 2021

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

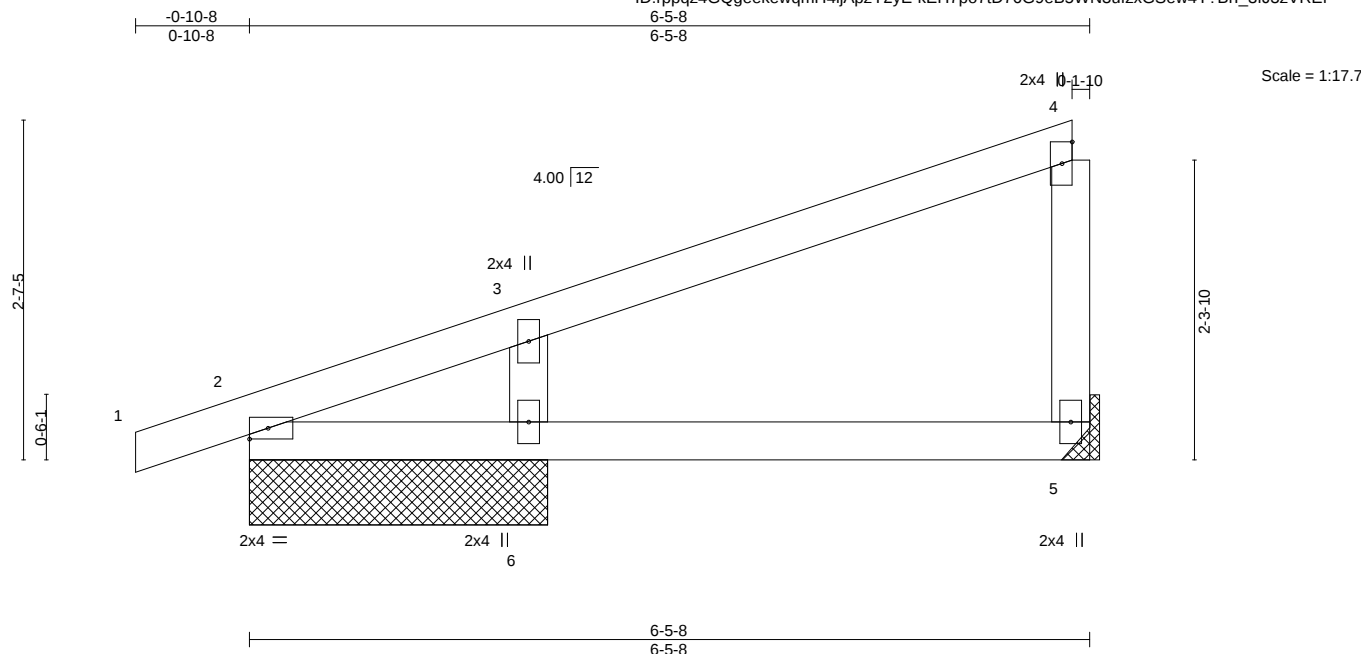
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.01 5-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.02 5-6	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS				Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

ONS. All bearings 2-3-8 except (jt=length) 5=Mechanical.
 (lb) - Max Horz 2=95(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 5, 2, 6
 Max Grav All reactions 250 lb or less at joint(s) 5, 2, 2 except 6=370(LC 1)

FORCES.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-296/264

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDF=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 6-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 1-4-0 oc.
- 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) 5, 2, 6, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



April 1, 2021

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

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



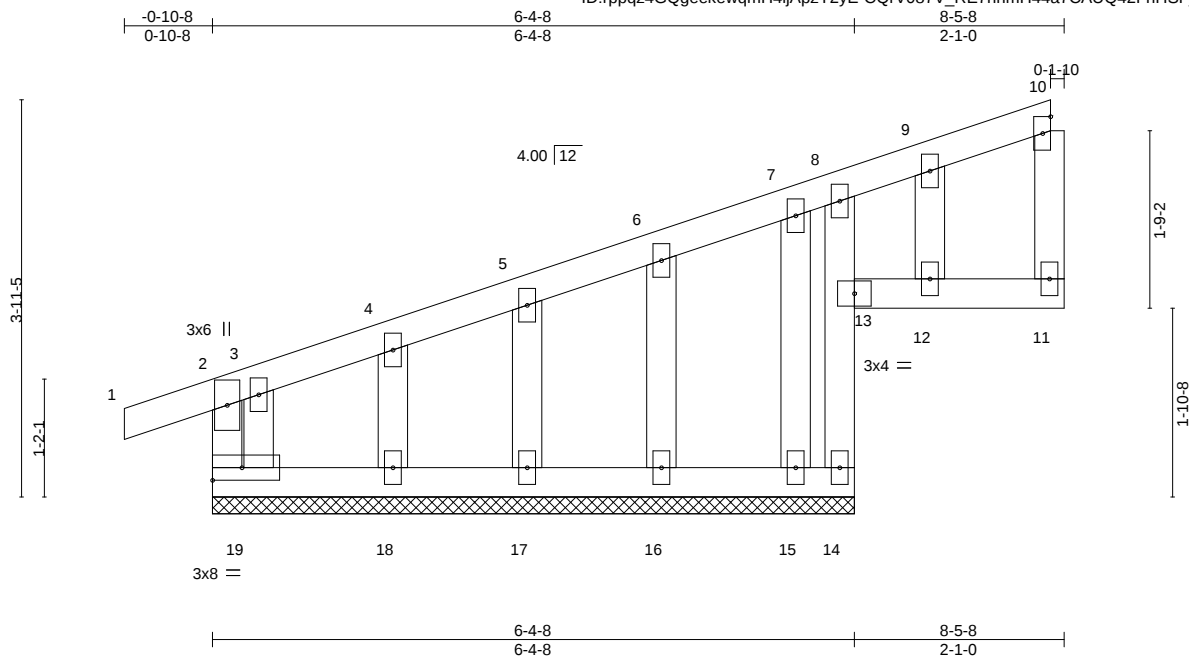
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443891
2651568	JG6	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:33 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-CQrV087V_RE7nmH44a7CAUQ42FnHSF_XepCsVzVREe



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.00	1	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.00	1	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.01	13	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 37 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 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 13-14.

REACTIONS.

All bearings 6-4-8.

(lb) - Max Horz 19=119(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 14, 15, 16, 17 except 13=143(LC 9), 18=118(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 19, 15, 16, 17, 18 except 13=377(LC 1)

FORCES.

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

TOP CHORD 2-19=-233/524, 3-4=-339/143, 7-8=-277/121

BOT CHORD 8-13=-307/670

WEBS 7-15=-312/91, 4-18=-147/318, 3-19=-639/254

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 8-3-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 15, 16, 17 except (jt=lb) 13=143, 18=118.
- 9) Non Standard bearing condition. Review required.
- 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.



April 1, 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

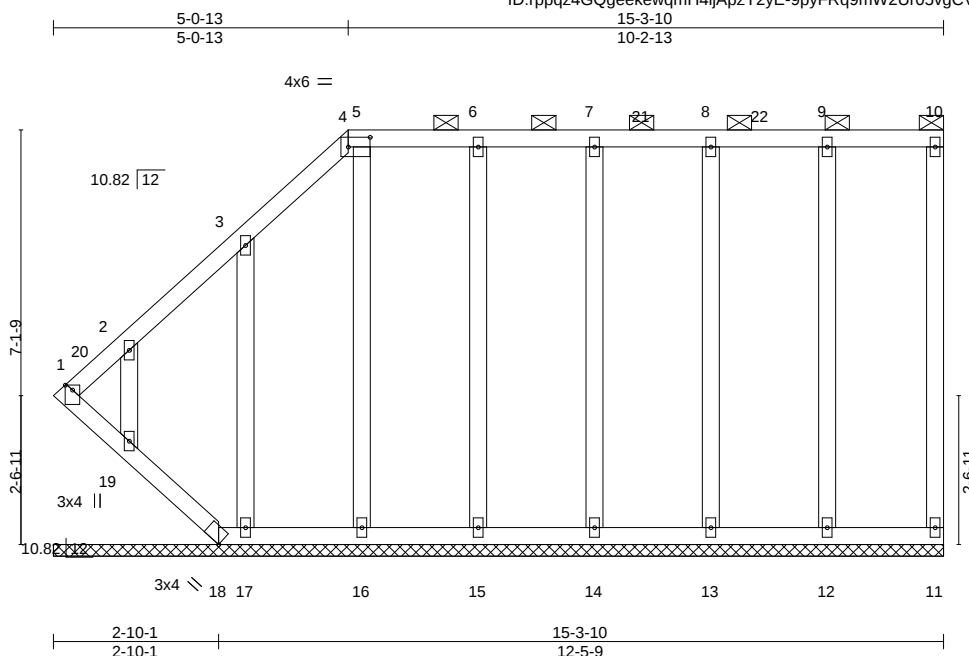
Job 2651568	Truss L1	Truss Type GABLE	Qty 2	Ply 1	SUMMIT/WOODSIDE RIDGE #68/MO I45443892
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:35 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-9pyFRq9mW2Ur05vgCVcbHbZn1rxmLMH_yIJwOzVREc



Scale = 1:39.6

Plate Offsets (X,Y)--		[4:0-4-8,0-2-0]									
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	0.24	Vert(LL)	n/a	-	n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.12	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr YES		WB	0.12	Horz(CT)	-0.00	11	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 90 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, and 2-0-0 oc purlins (6-0-0 max.): 4-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-19.

REACTIONS.

All bearings 15-3-10.
(lb) - Max Horz 1=220(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 18, 12, 13, 14, 15, 16, 17, 19
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 18, 12, 13, 14, 15, 16, 17, 19

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

TOP CHORD 1-2=-301/195

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-10 to 3-3-10, Interior(1) 3-3-10 to 5-0-13, Exterior(2R) 5-0-13 to 9-3-10, Interior(1) 9-3-10 to 15-1-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 18, 12, 13, 14, 15, 16, 17, 19.
- 7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 19.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 1, 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

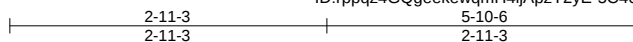
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO
2651568	L2	GABLE	1	1	I45443893
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

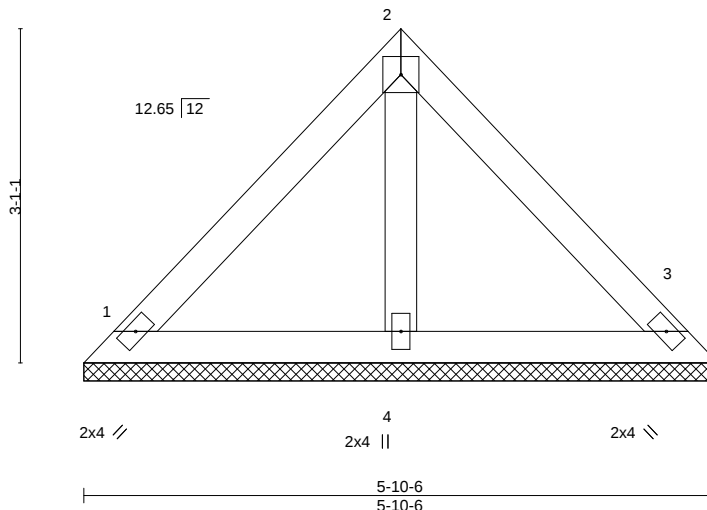
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:37 2021 Page 1

ID: rppqz4GQgeekewqmH4ljApzY2yE-5C40sVA02gkZFP32Jwf3M0f9NfeADGraSGnQ?HzVREa



4x4 =

Scale = 1:21.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 18 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 5-10-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-10-6, 3=5-10-6, 4=5-10-6
Max Horz 1=65(LC 11)
Max Uplift 1=33(LC 13), 3=30(LC 13)
Max Grav 1=143(LC 1), 3=143(LC 1), 4=180(LC 1)

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

NOTES-

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



April 1, 2021

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Chesterfield, MO 63017

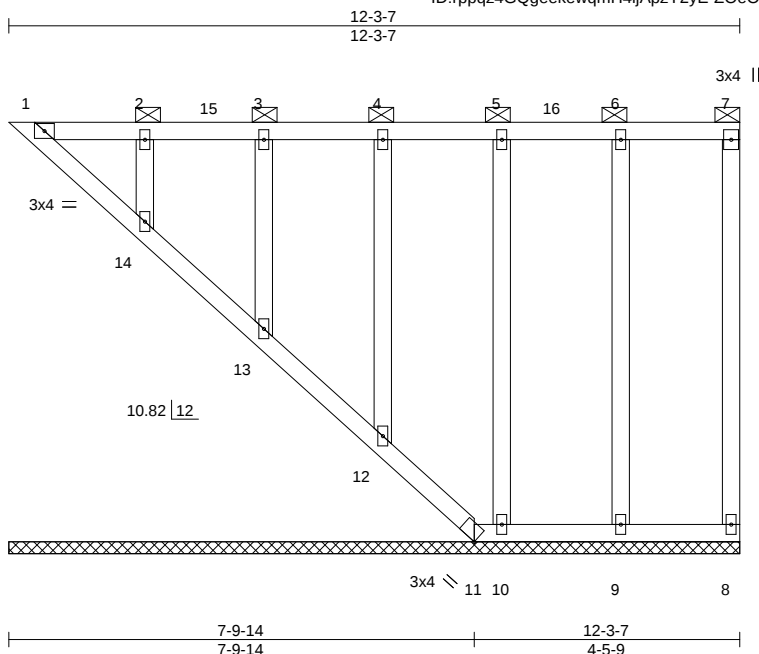
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	145443894
2651568	L3	GABLE	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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ID: rppqz4GQgeekewqmH4ljApzY2yE-ZOeO3rBepzsQtZeEteAlvEBIA3zTyYjhwWzXjzVREZ



Scale = 1:38.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	-0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 64 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 2-0-0 oc purlins (6-0-0 max.): 1-7, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 1-14.

REACTIONS.

All bearings 12-3-7.

(lb) - Max Horz 1=172(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 11, 9, 10, 12, 13, 14

Max Grav All reactions 250 lb or less at joint(s) 1, 8, 11, 9, 10, 12, 13, 14

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-4-9 to 3-4-9, Exterior(2) 3-4-9 to 9-1-11, Corner(3) 9-1-11 to 12-1-11 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
- 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, 8, 11, 9, 10, 12, 13, 14.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 12, 13, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 1, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #68/MO	I45443895
2651568	V1	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

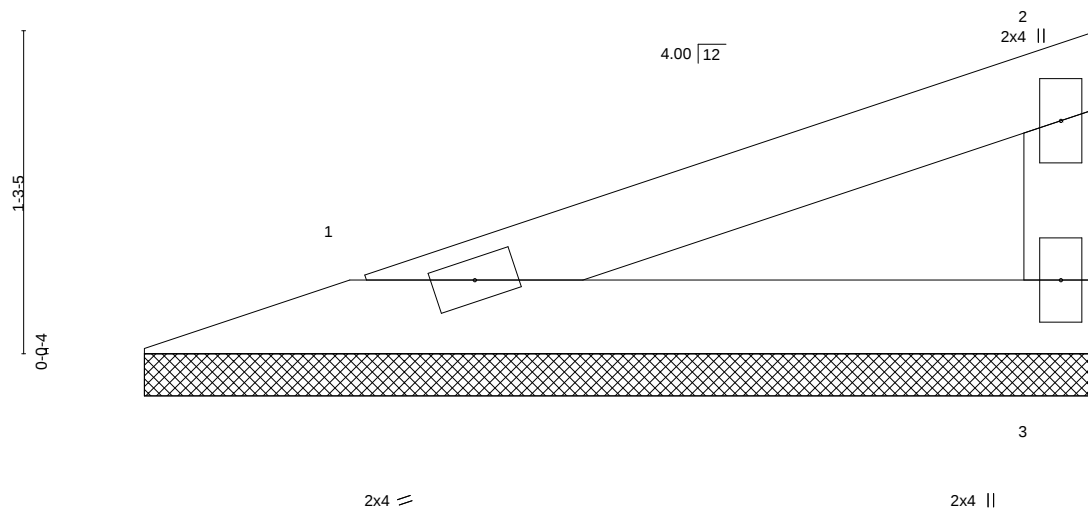
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Mar 31 11:03:39 2021 Page 1

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3-10-0

3-10-0

Scale = 1:9.1



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 0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 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 3-10-0 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=3-9-4, 3=3-9-4

Max Horz 1=37(LC 9)

Max Uplift 1=20(LC 8), 3=25(LC 12)

Max Grav 1=124(LC 1), 3=124(LC 1)

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

NOTES-

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



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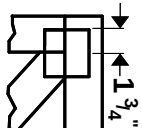
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



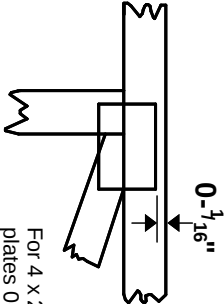
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

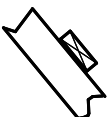
*** Plate location details available in MiTek 2012 software or upon request.**

PLATE SIZE

4 X 4

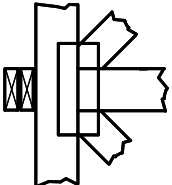
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



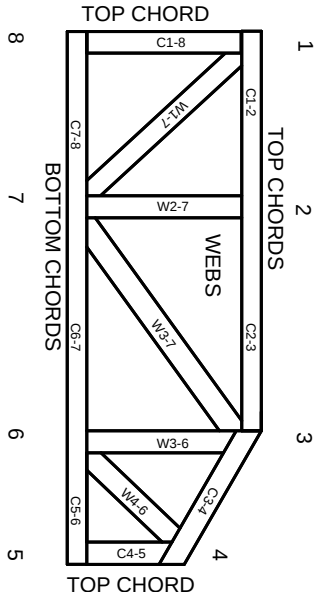
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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