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

Re: 2683898
SUMMIT/WOODSIDE RIDGE#115/MO

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

Pages or sheets covered by this seal: I45224737 thru I45224779

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

Missouri COA: Engineering 001193

March 18,2021

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A1	GABLE	1	1	I45224737

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:13 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-zv6KiMOCQ4dqVnqk8z_ZK2hpqhVCJJg2M0hpiszaIh8

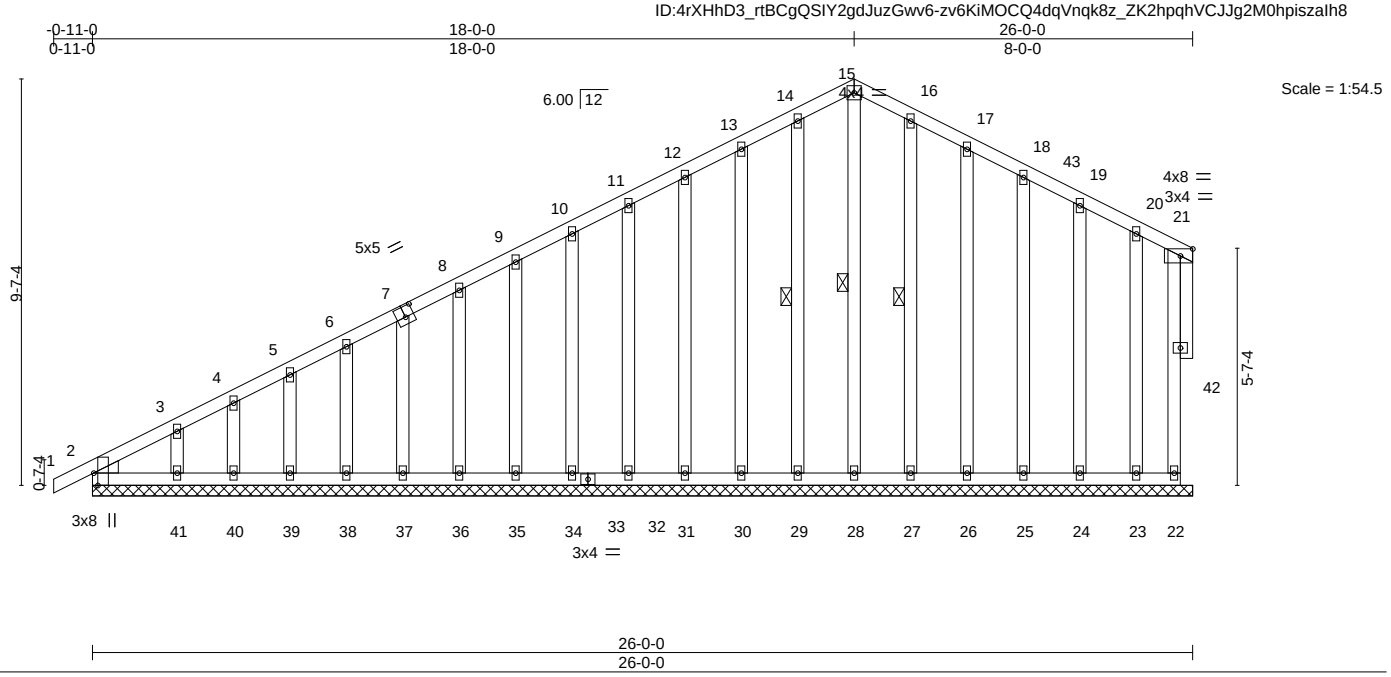


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [7:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	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	0.11	Horz(CT)	-0.00	22	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 189 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 6-0-0 oc bracing.
WEBS	1 Row at midpt 15-28, 14-29, 16-27

REACTIONS. All bearings 26-0-0.
(lb) - Max Horz 2=279(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 27, 26, 25, 24, 23
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 27, 26, 25, 24, 23

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-288/177, 13-14=-150/258, 14-15=-154/279, 15-16=-154/279, 16-17=-150/258

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 18-0-0, Corner(3R) 18-0-0 to 21-0-0, Exterior(2N) 21-0-0 to 25-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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 1-4-0 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, 22, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 27, 26, 25, 24, 23.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A2	COMMON	6	1	I45224738

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:26 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-5POFRoYMM3G_ZnKDOCjcMojv1woRs3qzMXK?ebzaIgx

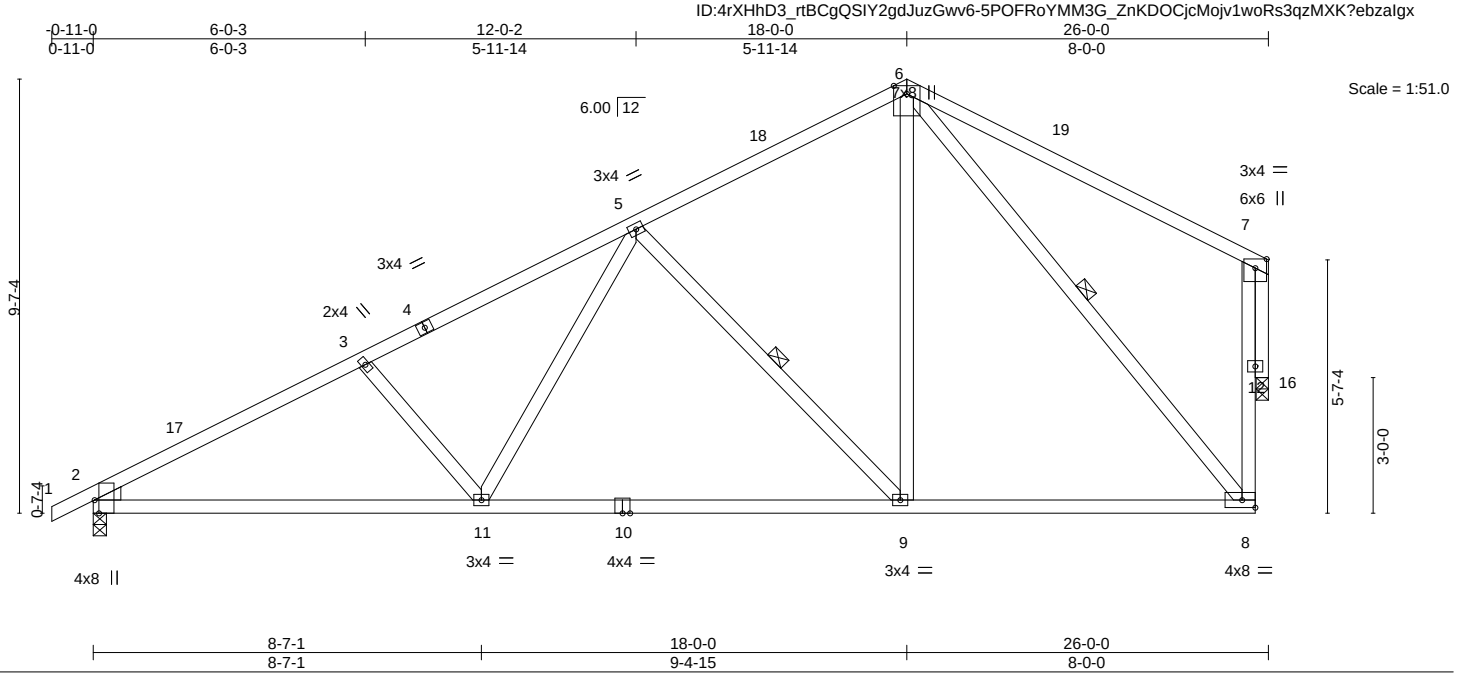


Plate Offsets (X,Y)-- [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.15	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.33	9-11	>927	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.15	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 119 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-9, 6-8

REACTIONS. (size) 2=0-3-8, 16=0-3-4
Max Horz 2=239(LC 12)
Max Uplift 2=-224(LC 12), 16=-185(LC 12)
Max Grav 2=1229(LC 1), 16=1136(LC 1)

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

TOP CHORD	2-3=-1949/350, 3-5=-1707/338, 5-6=-900/257, 8-12=-109/821, 7-12=-109/821
BOT CHORD	2-11=-459/1665, 9-11=-324/1207, 8-9=-172/721
WEBS	3-11=-346/205, 5-11=-95/502, 5-9=-730/291, 6-9=-133/708, 6-8=-963/174, 7-16=-1148/229

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 18-0-0, Exterior(2R) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 25-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=224, 16=185.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

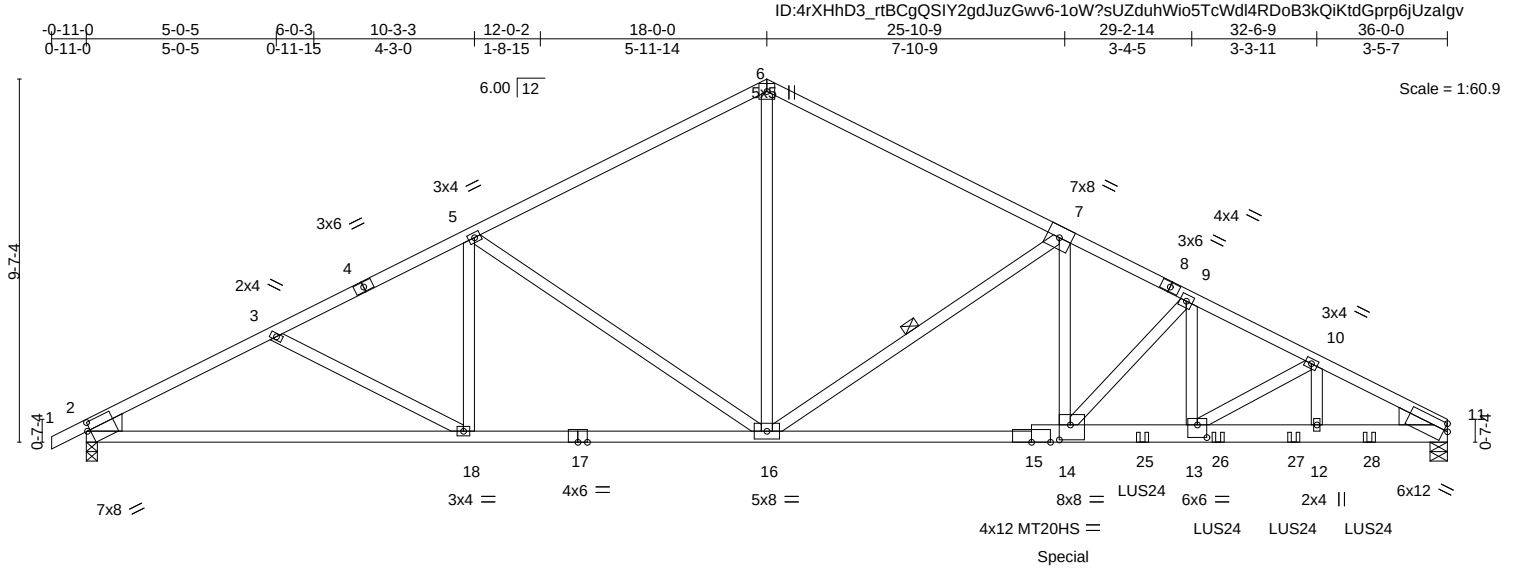
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A8	COMMON GIRDER	1	2	I45224739

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:28 2021 Page 1
ID:4rXHhD3_rtBCgQSlY2gdJuzGwv6-1oW?sUZduhWio5TcWdl4RDoB3kQiKtdGprp6jUzaIgv



6-0-3	10-3-3	12-0-2	18-0-0	25-10-9	29-2-14	32-6-9	36-0-0
6-0-3	4-3-0	1-8-15	5-11-14	7-10-9	3-4-5	3-3-11	3-5-7

Plate Offsets (X,Y)-- [2:0-0-15,0-2-10], [11:Edge,0-2-5], [13:0-3-0,0-4-0], [14:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.15	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.51	14-16	>855	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.15	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 326 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except* 8-11: 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 11-15: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x6 SPF No.2 , Right: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-16

REACTIONS. (size) 2=0-3-8, 11=0-5-8
Max Horz 2=175(LC 12)
Max Grav 2=3190(LC 1), 11=6598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5882/0, 3-5=-5730/0, 5-6=-5185/0, 6-7=-5181/0, 7-9=-10676/0, 9-10=-11971/0, 10-11=-11927/0
BOT CHORD 2-18=0/5112, 16-18=0/5108, 14-16=0/9548, 13-14=0/10684, 12-13=0/10566, 11-12=0/10566
WEBS 6-16=0/3994, 7-16=-6109/0, 7-14=0/5443, 9-14=-1663/320, 9-13=-311/1612, 10-12=-752/0, 10-13=0/882, 5-18=-108/264, 5-16=-742/390, 3-18=-39/320

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 3 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates 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) This truss 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) 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 27-11-4 from the left end to 33-11-4 to connect truss(es) to front face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4225 lb down at 25-10-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

March 18,2021

Continued on page 2

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-70, 6-11=-70, 19-22=-20
   Concentrated Loads (lb)
   Vert: 14=-4225(F) 25=-565(F) 26=-565(F) 27=-565(F) 28=-565(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A9	Common	4	1	I45224740

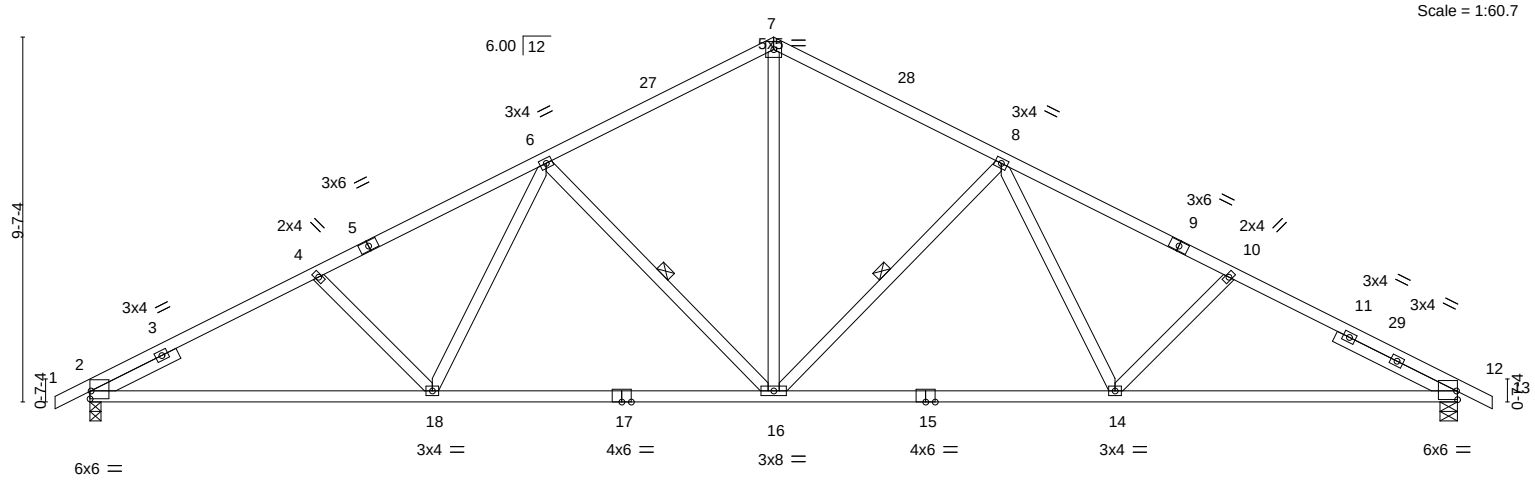
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:29 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-V_4N3qaFf_eZQF2o4KGJzQLRP7og3VaP2VZgFwzalgu

-0-11-0	6-0-3	12-0-2	18-0-0	23-11-14	29-11-13	36-0-0	36-11-0
0-11-0	6-0-3	5-11-14	5-11-14	5-11-14	5-11-14	6-0-3	0-11-0

Scale = 1:60.7



9-0-3	18-0-0	26-11-13	36-0-0
9-0-3	8-11-13	8-11-13	9-0-3

Plate Offsets (X,Y)-- [2:Edge,0-2-8], [12:Edge,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.18	16-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.40	16-18	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.13	12	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
SLIDER	Left 2x4 SPF No.2 -t 2-6-0, Right 2x4 SPF No.2 -t 3-6-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 12=0-5-8
Max Horz 2=167(LC 12)
Max Uplift 2=-289(LC 12), 12=-290(LC 13)
Max Grav 2=1677(LC 1), 12=1684(LC 1)

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

TOP CHORD	2-4=-2734/470, 4-6=-2538/447, 6-7=-1850/401, 7-8=-1850/400, 8-10=-2520/443, 10-12=-2681/466
BOT CHORD	2-18=-489/2375, 16-18=-327/2036, 14-16=-206/2029, 12-14=-316/2343
WEBS	7-16=-197/1183, 8-16=-702/285, 8-14=-66/409, 10-14=-262/187, 6-16=-710/286, 6-18=-69/422, 4-18=-283/191

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 18-0-0, Exterior(2R) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 36-11-0 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) 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) except (jt=lb) 2=289, 12=290.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A9A	ROOF SPECIAL	1	1	I45224741

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:31 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-SMC7UVcVAcuHfYCBBlJn3rQmbxT7XKoiVp2mKpzaIgs

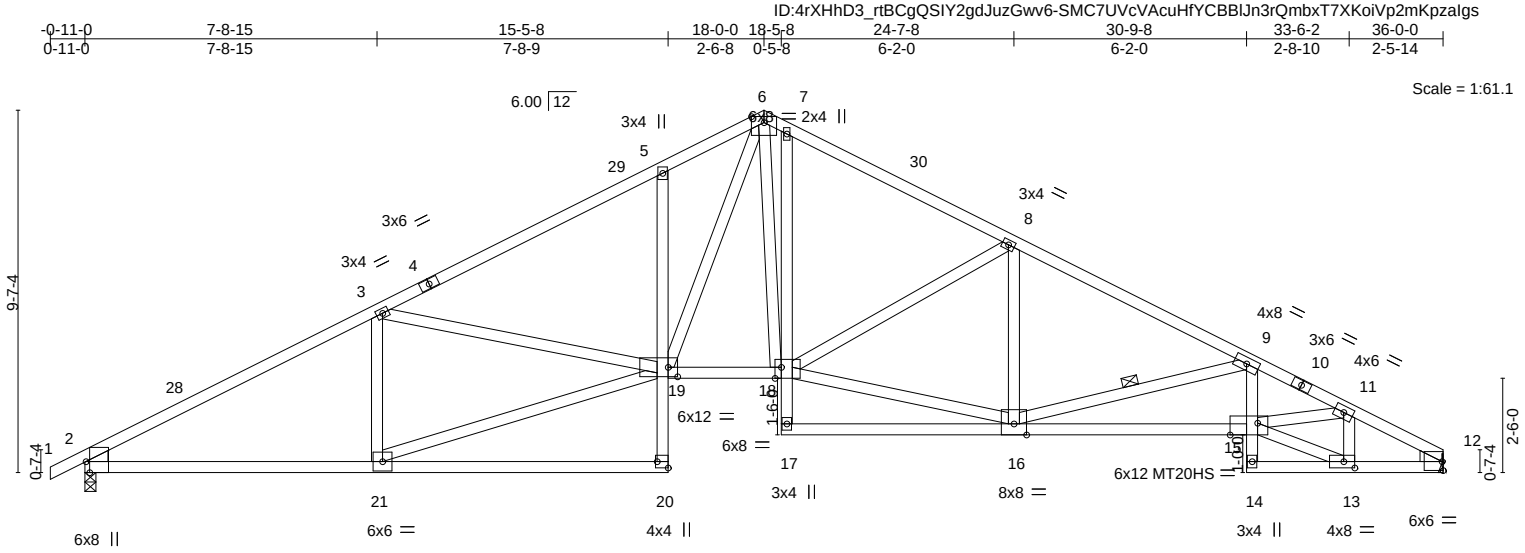


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [12:Edge,0-2-13], [13:0-3-8,0-2-0], [15:0-8-12,Edge], [18:0-2-0,Edge], [19:0-3-0,0-3-0], [20:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.27	18-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.50	20-21	>871	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.26	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 181 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
15-17: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-16

REACTIONS. (size) 2=0-3-8, 12=Mechanical
Max Horz 2=175(LC 16)
Max Uplift 2=-288(LC 12), 12=-267(LC 13)
Max Grav 2=1685(LC 1), 12=1619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2842/458, 3-5=-3081/508, 5-6=-3000/599, 6-7=-2515/537, 7-8=-2622/479, 8-9=-2992/499, 9-11=-4392/693, 11-12=-2672/441
BOT CHORD 2-21=-471/2438, 5-19=-390/217, 18-19=-195/2147, 15-16=-583/4054, 9-15=-67/741, 13-14=-59/260, 12-13=-351/2303
WEBS 3-21=-660/218, 19-21=-504/2507, 3-19=-12/312, 16-18=-302/2603, 8-18=-499/254, 9-16=-1518/363, 11-13=-1057/176, 13-15=-315/2210, 11-15=-202/1646, 6-19=-381/1316, 6-18=-313/1117

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-8-3, Interior(1) 2-8-3 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=288, 12=267.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A9B	COMMON	2	1	I45224742

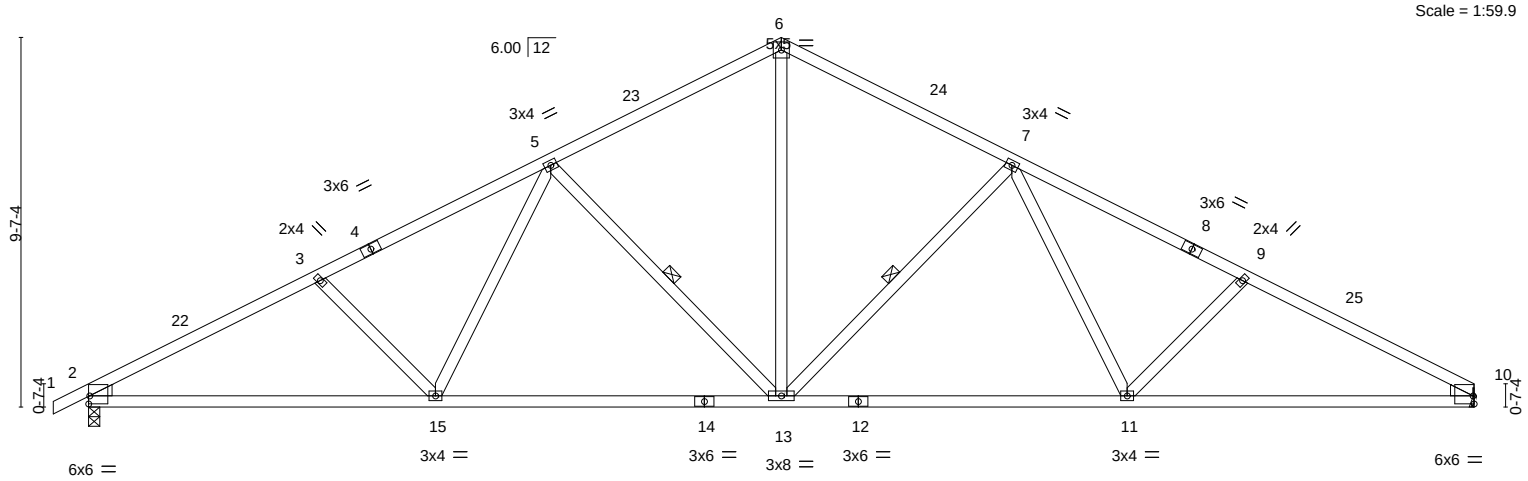
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:36 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-oK?0XDfe?8WalK58_Jvymv8ehyAACf4Rf5lX?0zaIgn

-0-11-0	6-0-3	12-0-2	18-0-0	23-11-14	29-11-13	36-0-0
0-11-0	6-0-3	5-11-14	5-11-14	5-11-14	5-11-14	6-0-3

Scale = 1:59.9



9-0-3	18-0-0	26-11-13	36-0-0
9-0-3	8-11-13	8-11-13	9-0-3

Plate Offsets (X,Y)-- [2:Edge,0-2-8], [10:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.20	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.43	13-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.13	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 144 lb	FT = 20%

LUMBER-

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

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

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=Mechanical
Max Horz 2=175(LC 12)
Max Uplift 2=-288(LC 12), 10=-267(LC 13)
Max Grav 2=1685(LC 1), 10=1619(LC 1)

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

TOP CHORD	2-3=-2867/483, 3-5=-2610/458, 5-6=-1890/416, 6-7=-1889/419, 7-9=-2615/467, 9-10=-2873/486
BOT CHORD	2-15=-511/2472, 13-15=-341/2081, 11-13=-235/2083, 10-11=-355/2480
WEBS	6-13=-208/1213, 7-13=-725/289, 7-11=-77/449, 9-11=-332/202, 5-13=-722/288, 5-15=-75/448, 3-15=-328/200

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-8-3, Interior(1) 2-8-3 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=288, 10=267.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A10	ROOF SPECIAL	1	1	I45224743

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:15 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-wHE471PTyhtYk5_6FO01PTm3NU?Zn6xLqKAwnkzaIh6

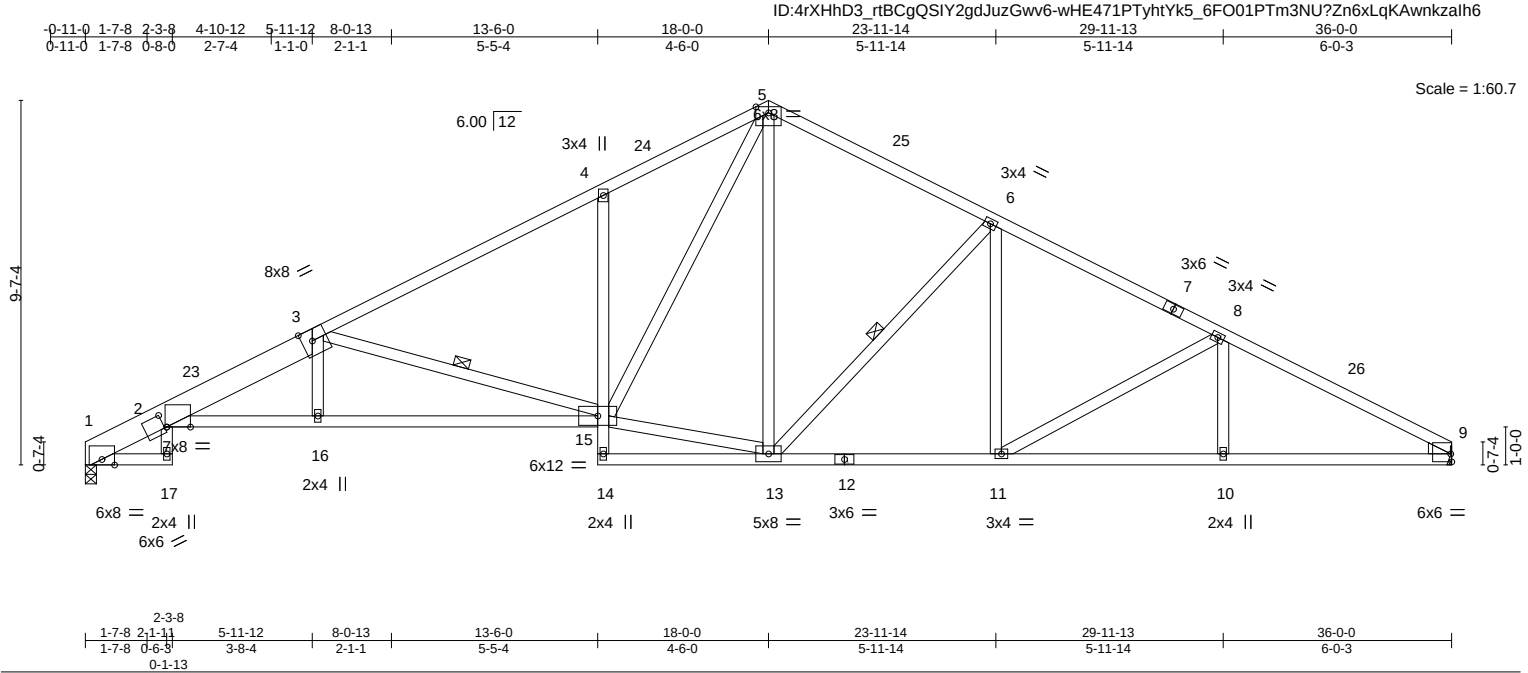


Plate Offsets (X,Y)-- [2:0-0-11,0-4-7], [2:0-7-8,0-0-0], [3:0-3-4,Edge], [9:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.26	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.53	15-16	>819	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 174 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-15: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-13, 3-15

REACTIONS. (size) 1=0-3-8, 9=Mechanical
Max Horz 1=163(LC 12)
Max Uplift 1=-263(LC 12), 9=-267(LC 13)
Max Grav 1=1621(LC 1), 9=1614(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-695/221, 2-3=-3900/671, 3-4=-2666/452, 4-5=-2581/557, 5-6=-1871/411, 6-8=-2427/432, 8-9=-2864/470
BOT CHORD 2-16=-729/3631, 15-16=-726/3643, 4-15=-430/242, 11-13=-219/2097, 10-11=-342/2470, 9-10=-342/2470
WEBS 13-15=-99/1534, 5-15=-381/1430, 5-13=-163/415, 6-13=-769/273, 6-11=-40/393, 8-11=-461/190, 3-16=0/310, 3-15=-1428/416

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 18-0-0, Exterior(2R) 18-0-0 to 21-0-0 , Interior(1) 21-0-0 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=263, 9=267.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

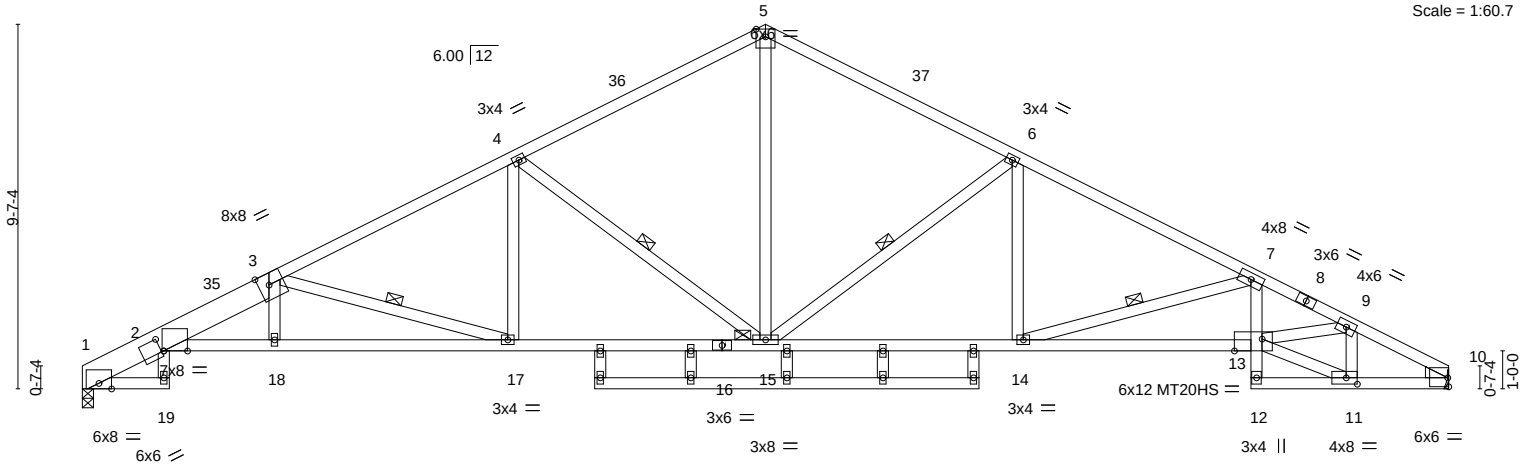
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A10A	ROOF SPECIAL	1	1	I45224744

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:17 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-sgLrYjRjTI7G_P8VNp3VUurP3IhoF?neHef1rdzalh4

0-11-0	2-3-8	5-2-8	7-10-12	11-4-4	13-6-0	18-0-0	23-7-8	24-7-12	30-9-8	33-5-5	36-0-0
0-11-0	2-3-8	2-11-0	2-8-4	3-5-8	2-1-12	4-6-0	5-7-8	1-0-4	6-1-12	2-7-13	2-6-11

Scale = 1:60.7



2-3-8	5-2-8	7-10-12	11-4-4	13-6-0	16-0-6	18-0-0	18-6-12	21-1-2	23-7-8	24-7-12	30-9-8	33-5-5	36-0-0
2-3-8	2-11-0	2-8-4	3-5-8	2-1-12	2-6-6	1-11-10	0-6-12	2-6-6	2-6-6	1-0-4	6-1-12	2-7-13	2-6-11

Plate Offsets (X,Y)-- [2:0-0-11,0-4-7], [2:0-7-8,Edge], [3:0-3-4,Edge], [10:Edge,0-2-13], [11:0-3-8,0-2-0], [13:0-8-12,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	0.55	Vert(LL)	-0.28	15-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.53	15-17	>807	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.33	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 180 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-16,13-16: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-15, 6-15, 7-14, 3-17
JOINTS 1 Brace at Jt(s): 15

REACTIONS. (size) 1=0-3-8, 10=Mechanical
Max Horz 1=163(LC 12)
Max Uplift 1=-263(LC 12), 10=-267(LC 13)
Max Grav 1=1621(LC 1), 10=1614(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-30=-695/221, 2-3=-4143/721, 3-4=-2967/492, 4-5=-2094/430, 5-6=-2094/432, 6-7=-2983/498, 7-9=-4379/693, 9-10=-2671/443
BOT CHORD 2-18=-794/3908, 17-18=-791/3921, 15-17=-419/2570, 14-15=-290/2590, 13-14=-578/4038, 7-13=-69/743, 11-12=-57/257, 10-11=-352/2302
WEBS 5-15=-202/1336, 9-11=-1080/180, 11-13=-320/2223, 9-13=-201/1641, 4-17=-47/516, 4-15=-994/324, 6-14=-37/530, 6-15=-1018/316, 7-14=-1508/352, 3-17=-1400/386

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-8-15, Interior(1) 3-8-15 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3 , Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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) 1 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) except (jt=lb) 1=263, 10=267.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

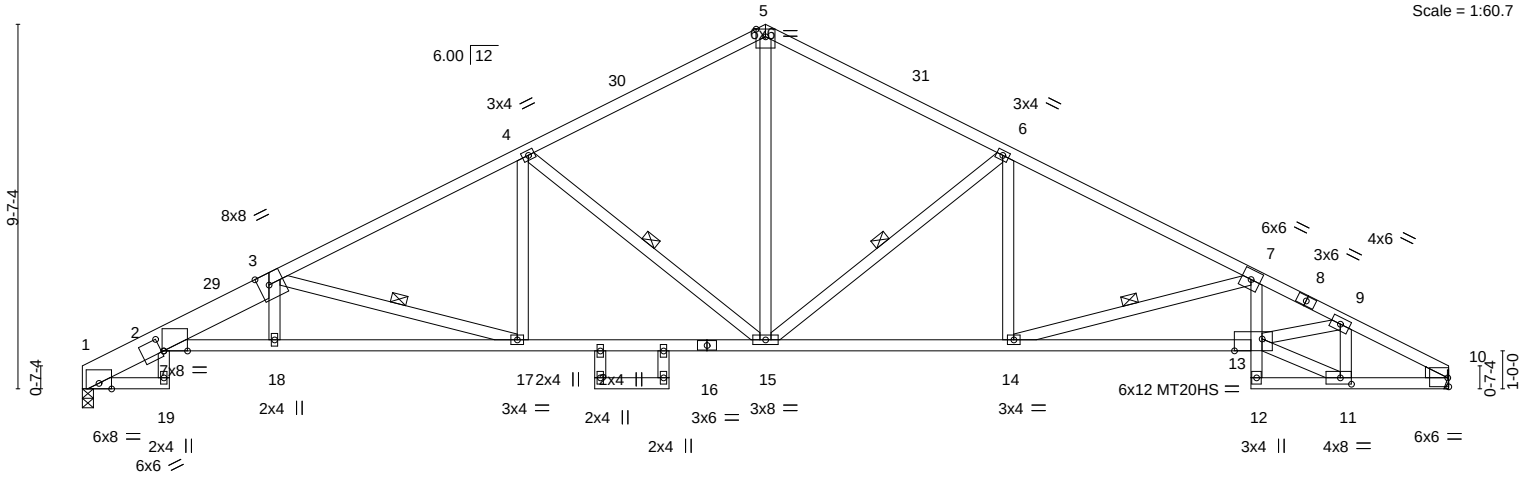
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A12	ROOF SPECIAL	3	1	I45224745

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:19 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-o3TbzPSz?wN_DiHtUE5zZJxlZ5M8jv6xlx88wVzaIh2

-0-11-0	2-3-8	5-0-12	7-10-12	11-9-0	13-6-0	15-5-8	18-0-0	24-4-12	30-9-8	33-3-8	36-0-0
0-11-0	2-3-8	2-9-4	2-10-0	3-10-4	1-9-0	1-11-8	2-6-8	6-4-12	6-4-12	2-6-0	2-8-8

Scale = 1:60.7



2-3-8	5-0-12	7-10-12	11-9-0	13-6-0	15-5-8	18-0-0	24-4-12	30-9-8	33-3-8	36-0-0
2-3-8	2-9-4	2-10-0	3-10-4	1-9-0	1-11-8	2-6-8	6-4-12	6-4-12	2-6-0	2-8-8

Plate Offsets (X,Y)-- [2:0-0-11,0-4-7], [2:0-7-8,Edge], [3:0-3-4,Edge], [10:Edge,0-2-13], [11:0-3-8,0-2-0], [13:0-8-12,0-3-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.28	15-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.53	15-17	>811	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.33	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 168 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-16,13-16: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-14, 6-15, 4-15, 3-17

REACTIONS. (size) 1=0-3-8, 10=Mechanical
Max Horz 1=163(LC 12)
Max Uplift 1=-263(LC 12), 10=-267(LC 13)
Max Grav 1=1621(LC 1), 10=1614(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-695/221, 2-3=-4158/726, 3-4=-2935/488, 4-5=-2088/432, 5-6=-2088/433, 6-7=-2950/494, 7-9=-4395/696, 9-10=-2687/445
BOT CHORD 2-18=-802/3925, 17-18=-798/3938, 15-17=-408/2536, 14-15=-283/2555, 13-14=-586/4068, 7-13=-68/753, 11-12=-61/252, 10-11=-352/2315
WEBS 6-14=-38/530, 9-11=-1147/185, 11-13=-320/2268, 9-13=-205/1664, 7-14=-1570/371, 5-15=-212/1357, 6-15=-1002/311, 4-15=-978/319, 4-17=-48/517, 3-18=0/253, 3-17=-1449/404

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-8-15, Interior(1) 3-8-15 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3 , Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=263, 10=267.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A13	ROOF SPECIAL	1	1	I45224746

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:21 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-kRbMO5UEXXdiS0RGcf7Rfk052v2zBpyECFdE_Ozalh0

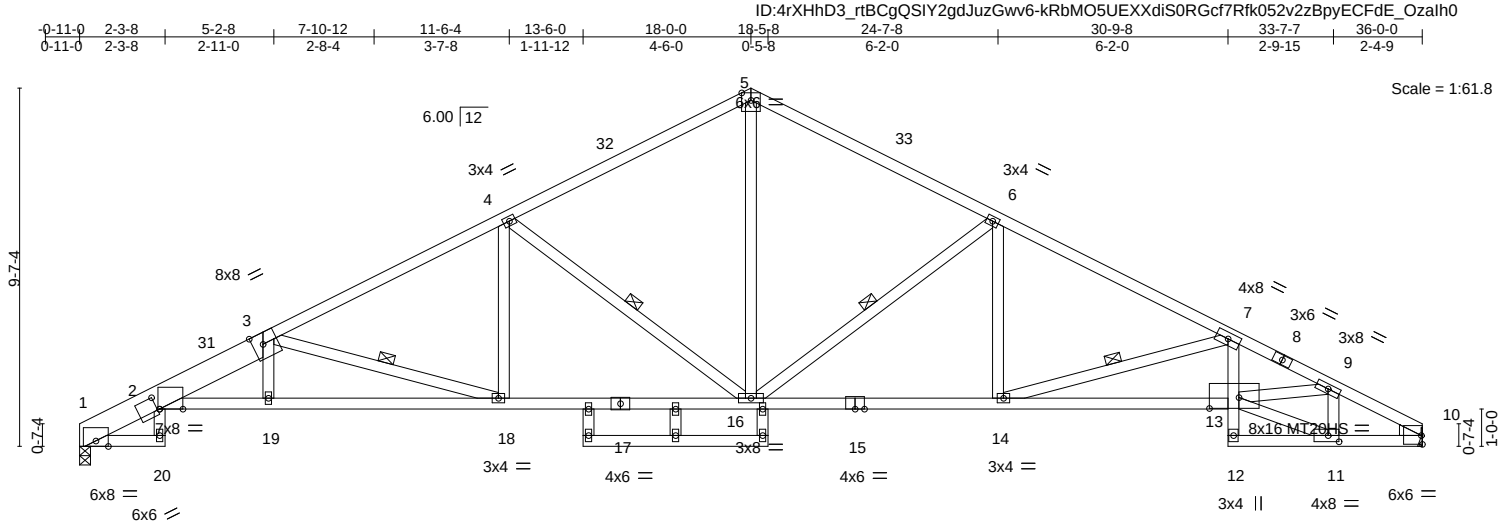


Plate Offsets (X,Y)-- [2:0-0-11,0-4-7], [2:0-7-8,Edge], [3:0-3-4,Edge], [10:Edge,0-2-13], [11:0-3-8,0-2-0], [13:0-9-8,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.28	16-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.54	16-18	>803	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.33	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 172 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x8 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except* 2-17,13-15: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

WEDGE Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

WEBS 1 Row at midpt 6-16, 7-14, 4-16, 3-18

REACTIONS. (size) 1=0-3-8, 10=Mechanical

Max Horz 1=163(LC 12)

Max Uplift 1=-263(LC 12), 10=-267(LC 13)

Max Grav 1=1621(LC 1), 10=1614(LC 1)

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

TOP CHORD 2-26=-695/221, 2-3=-4144/721, 3-4=-2964/492, 4-5=-2093/430, 5-6=-2094/432, 6-7=-2980/498, 7-9=-4367/691, 9-10=-2649/439

BOT CHORD 2-19=-795/3910, 18-19=-792/3922, 16-18=-418/2567, 14-16=-290/2587, 13-14=-577/4027, 7-13=-66/732, 11-12=-58/263, 10-11=-351/2283

WEBS 6-16=-1017/315, 6-14=-38/530, 7-14=-1498/352, 5-16=-203/1338, 4-16=-992/323, 4-18=-47/517, 3-18=-1404/388, 9-11=-1014/173, 11-13=-315/2173, 9-13=-200/1632

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-8-15, Interior(1) 3-8-15 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3 , Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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) 1 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) except (jt=lb) 1=263, 10=267.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	A15	GABLE	1	1	I45224747

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:24 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-90HU06W6qS?HJUArHnh8GNeim6HPOHOguDrvajzaIgz

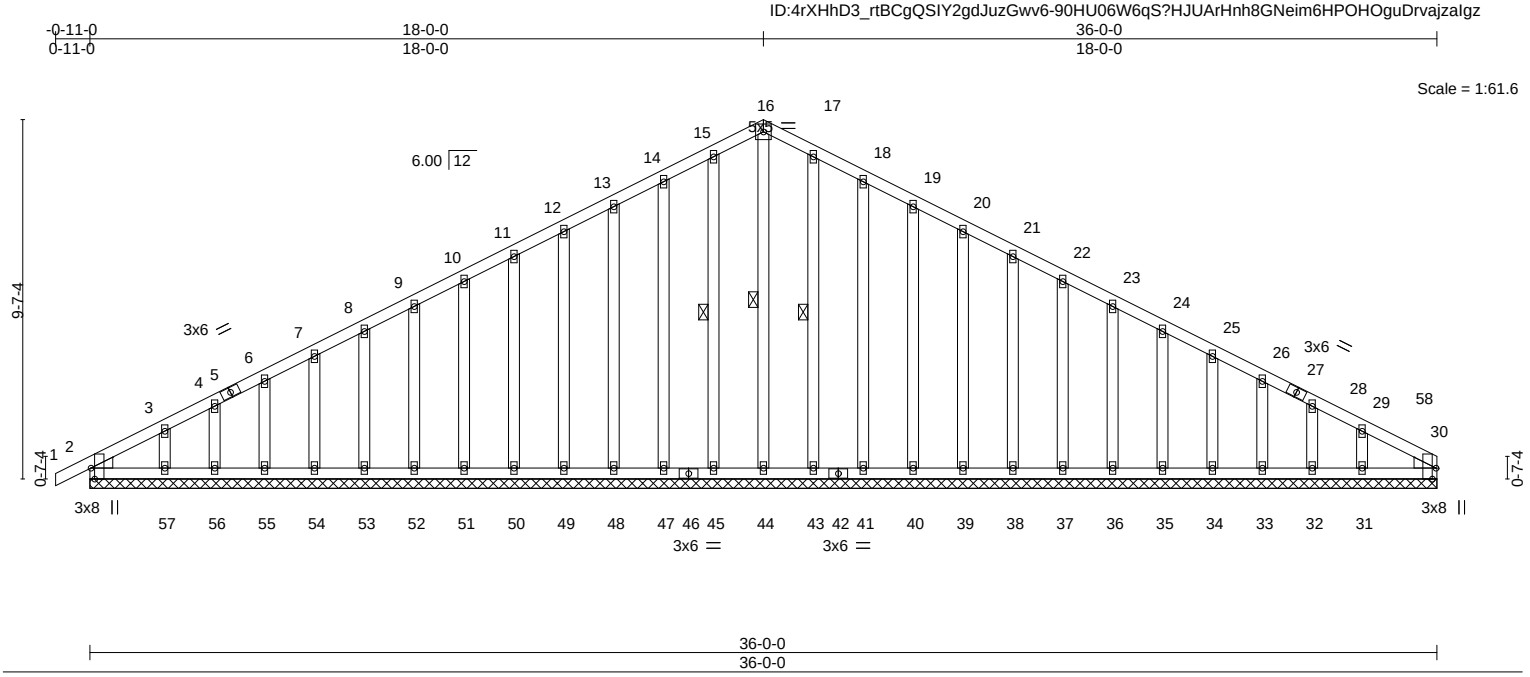


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [30:0-3-8,Edge]

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	0.07	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	30	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 229 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.
WEBS 1 Row at midpt 16-44, 15-45, 17-43

REACTIONS. All bearings 36-0-0.
(lb) - Max Horz 2=170(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31
Max Grav All reactions 250 lb or less at joint(s) 2, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 30, 31

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 14-15=-101/282, 15-16=-108/302, 16-17=-108/302, 17-18=-101/282

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 18-0-0, Corner(3R) 18-0-0 to 21-0-0, Exterior(2N) 21-0-0 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 1-4-0 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, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	B1	GABLE	1	1	I45224748

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:39 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-Dvh99FiWI3u8cnpjfRSfNXmIJ9OBP42tL3_BcLzaIgk

-0-11-0 6-6-0 13-0-0 13-11-0
0-11-0 6-6-0 6-6-0 0-11-0

Scale = 1:30.5

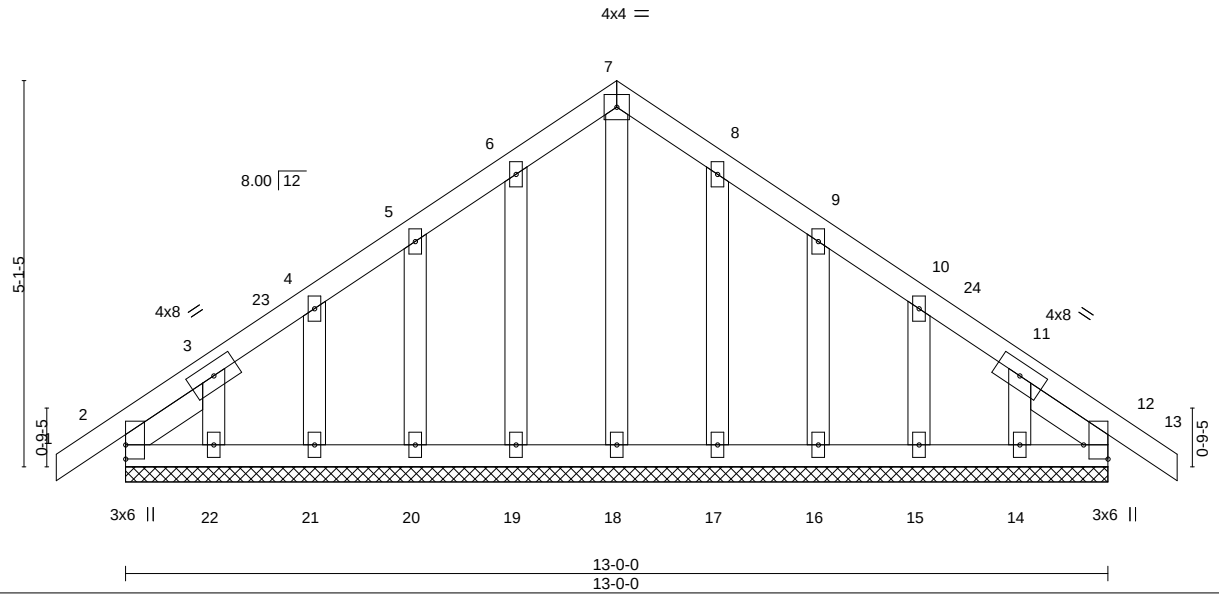


Plate Offsets (X,Y)-- [12:Edge,0-3-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	12	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	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 65 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 1-3-10, Right 2x4 SPF No.2 -t 1-3-10

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 13-0-0.
(lb) - Max Horz 2=129(LC 11)
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-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 6-6-0, Corner(3R) 6-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 13-11-0 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) 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 1-4-0 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, 12, 19, 20, 21, 22, 17, 16, 15, 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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	B2	ROOF SPECIAL	1	1	I45224749
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:41 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-9Iovawjmqg9ss5z6nsU7TyrYEz?EtzTApNTIgEzaIgi

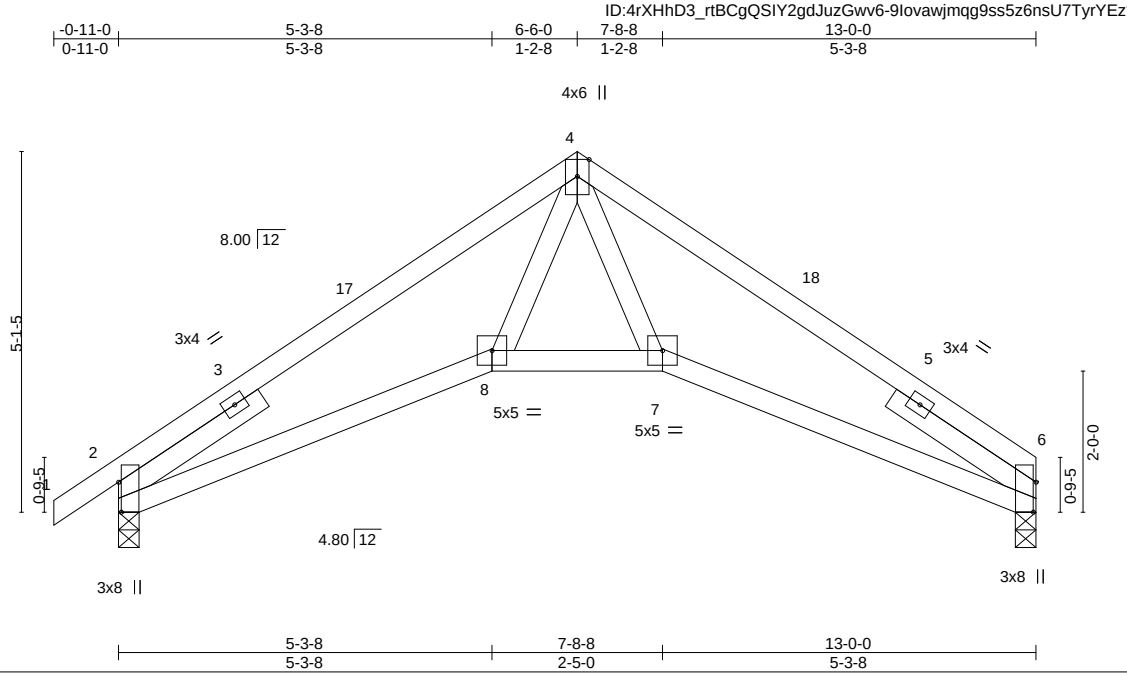


Plate Offsets (X,Y)-- [2:0-5-1,Edge], [6:0-5-1,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.03	7-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.06	8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 47 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 2-6-0, 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) 6=0-3-8, 2=0-3-8
Max Horz 2=124(LC 9)
Max Uplift 6=-88(LC 13), 2=-109(LC 12)
Max Grav 6=583(LC 1), 2=651(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1089/239, 4-6=-1093/242
BOT CHORD 2-8=-141/968, 7-8=-85/711, 6-7=-117/974
WEBS 4-7=-32/462, 4-8=-70/484

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearing at joint(s) 6, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=109.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	B3	Roof Special	4	1	I45224750

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:42 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-dUMIoGkPb_HjUFYIKZ?M?ANj?NLYcQjK10CsDgzaIgh

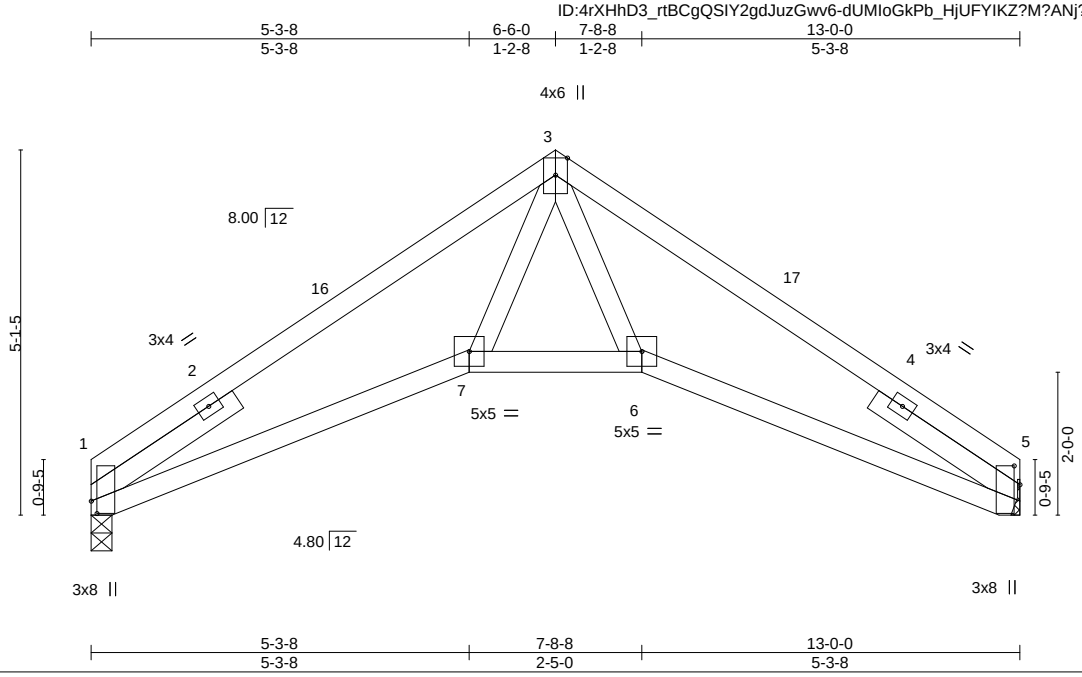


Plate Offsets (X,Y)-- [1:0-2-1,0-0-15], [5:0-3-3,0-0-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.03	7-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.06	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 46 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0, 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) 1=0-3-8, 5=Mechanical
Max Horz 1=-113(LC 8)
Max Uplift 1=-88(LC 12), 5=-88(LC 13)
Max Grav 1=585(LC 1), 5=585(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1100/241, 3-5=-1100/243
BOT CHORD 1-7=-142/981, 6-7=-86/717, 5-6=-118/981
WEBS 3-7=-71/493, 3-6=-32/461

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	B5	Flat Girder	1	2	I45224751

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:45 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-132QQImHtvfILiHt0iZ3do?FraFTpcjmj_RWp?zaIge

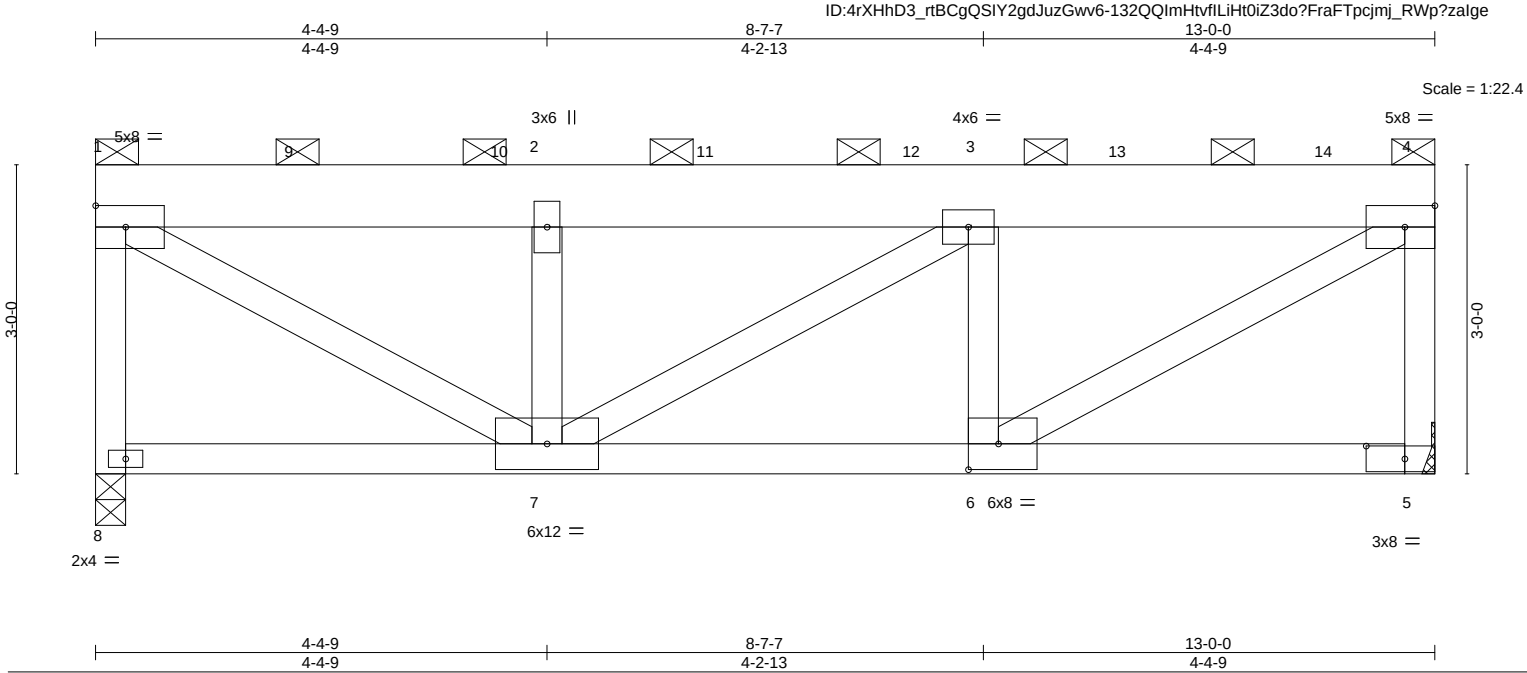


Plate Offsets (X,Y)-- [5:0-4-8,0-1-8], [6:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.09	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 160 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-4, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 5=Mechanical
Max Horz 8=-97(LC 4)
Max Grav 8=3742(LC 1), 5=4245(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-3681/0, 1-2=-4816/0, 2-3=-4816/0, 3-4=-4829/0, 4-5=-4181/0
BOT CHORD 6-7=0/4829
WEBS 1-7=0/5530, 2-7=-2778/0, 3-6=-2795/0, 4-6=0/5535

NOTES-
1) 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, 2x8 - 2 rows staggered 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.
2) 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.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
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) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
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) Load case(s) 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, 29, 30, 31, 32, 33, 34, 35, 36 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 23 lb up at 0-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

March 18,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 1=-33 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-58, 5-8=-20
Concentrated Loads (lb)
Vert: 1=-29 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-20, 5-8=-40
Concentrated Loads (lb)
Vert: 1=-30 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=17, 4-5=22
Concentrated Loads (lb)
Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=-22, 4-5=-17
Concentrated Loads (lb)
Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=28, 4-5=10
Concentrated Loads (lb)
Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=-10, 4-5=-28
Concentrated Loads (lb)
Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=14, 4-5=20
Concentrated Loads (lb)
Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=-20, 4-5=-14
Concentrated Loads (lb)
Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 5-8=-8
Horz: 1-8=7, 4-5=15
Concentrated Loads (lb)
Vert: 1=20 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 5-8=-8
Horz: 1-8=-15, 4-5=-7
Concentrated Loads (lb)
Vert: 1=20 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=26, 4-5=8
Concentrated Loads (lb)
Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=-8, 4-5=-26
Concentrated Loads (lb)
Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Continued on page 3

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-4=-20, 5-8=-20
Concentrated Loads (lb)
Vert: 1=-18 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=21, 4-5=7
Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-7, 4-5=-21
Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

17) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=19, 4-5=6
Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

18) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-6, 4-5=-19
Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

19) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 1-8=16
Concentrated Loads (lb)
Vert: 1=23 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

20) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 4-5=-16
Concentrated Loads (lb)
Vert: 1=23 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

21) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=17, 4-5=22
Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

22) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=-22, 4-5=-17
Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

23) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=28, 4-5=10
Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

24) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=-10, 4-5=-28
Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=14, 4-5=20
Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=-20, 4-5=-14
Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

Continued on page 4

LOAD CASE(S) Standard

27) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 5-8=-8
Horz: 1-8=7, 4-5=15
Concentrated Loads (lb)
Vert: 1=-62 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 5-8=-8
Horz: 1-8=-15, 4-5=-7
Concentrated Loads (lb)
Vert: 1=-62 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

29) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=26, 4-5=8
Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

30) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=-8, 4-5=-26
Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

31) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=21, 4-5=7
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

32) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-7, 4-5=-21
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

33) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=19, 4-5=6
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-6, 4-5=-19
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

35) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 1-8=16
Concentrated Loads (lb)
Vert: 1=-36 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

36) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 4-5=-16
Concentrated Loads (lb)
Vert: 1=-36 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	B6	GABLE	1	1	I45224752

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:48 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-SejZ2Jp9Aq1tCA?Shq6mFRdq1oTC07oCQyfAQKzaIgb

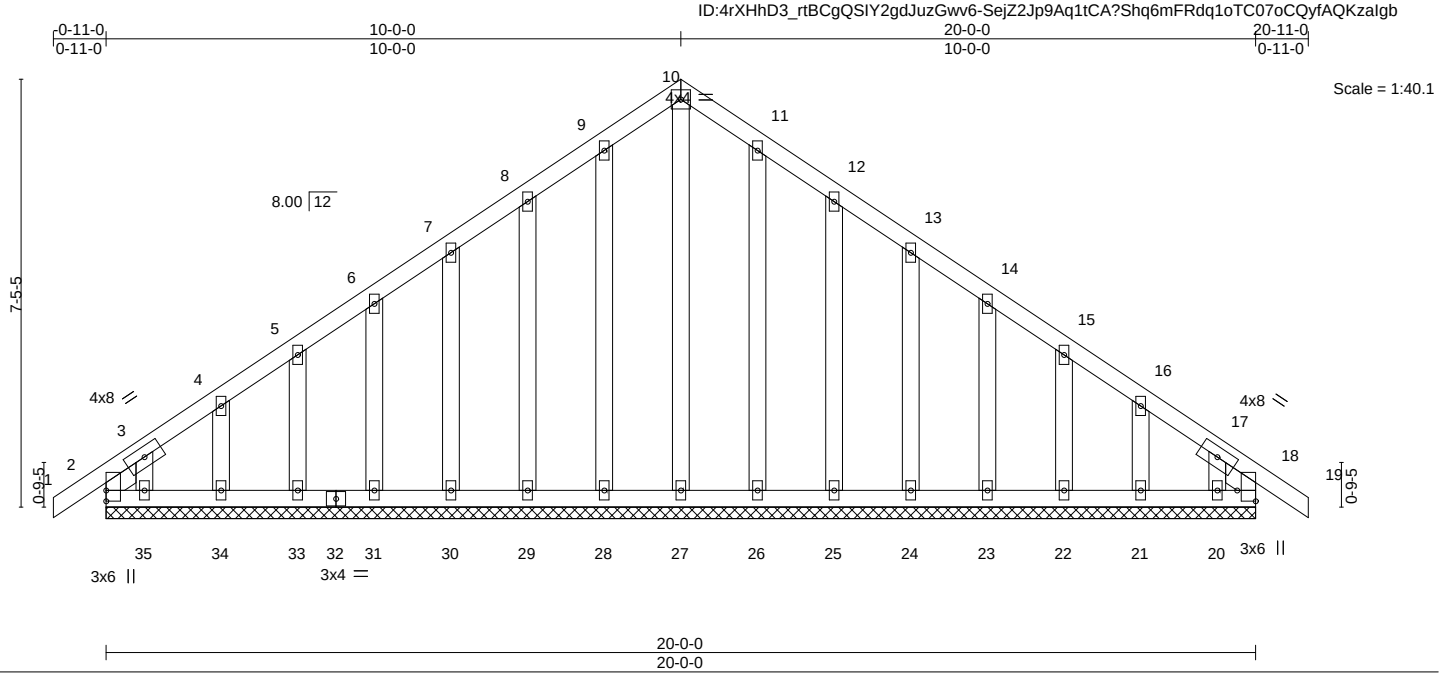


Plate Offsets (X,Y)-- [18:Edge,0-3-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	18	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	19	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 116 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
OTHERS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 0-8-7, Right 2x4 SPF No.2 -t 0-8-7

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 20-0-0.

(lb) - Max Horz 2=190(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 28, 29, 30, 31, 33, 34, 26, 25, 24, 23, 18, 22, 21 except 2=-113(LC 8), 35=-136(LC 12), 20=-112(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 33, 34, 35, 26, 25, 24, 23, 18, 22, 21, 20

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

TOP CHORD 2-3=-250/186

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-11-0 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) 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 1-4-0 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) 28, 29, 30, 31, 33, 34, 26, 25, 24, 23, 18, 22, 21 except (jt=lb) 2=113, 35=136, 20=112.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	B7	COMMON GIRDER	1	2	I45224753

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:50 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-O0rJT?qQiRHaRT9roF9EKsjzZb3EUvmVtG8HVCzaIgZ

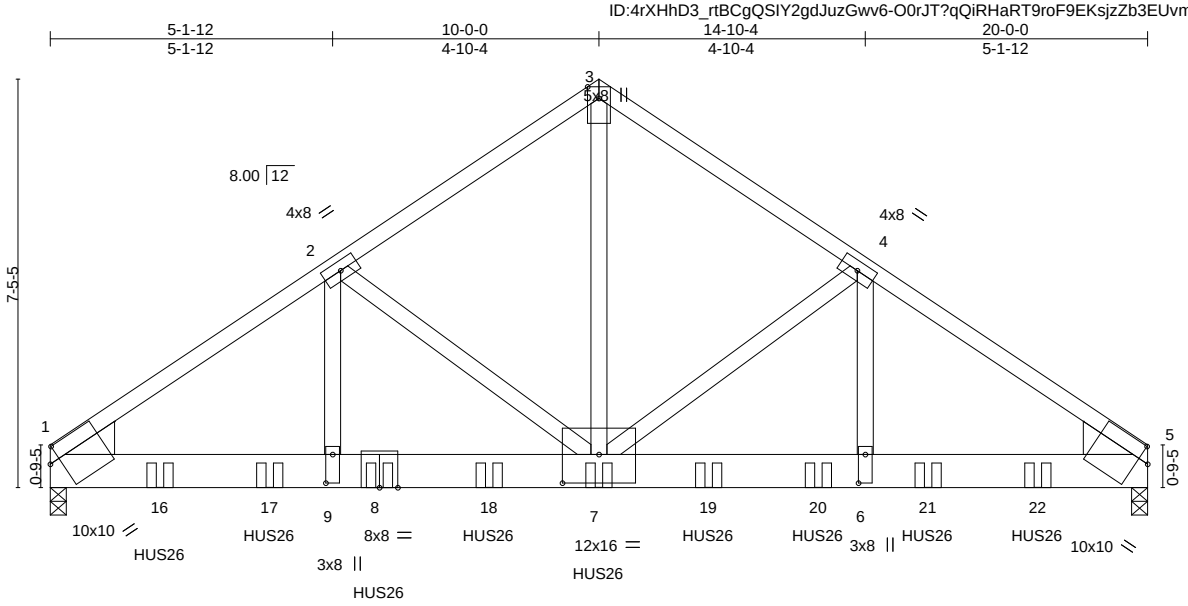


Plate Offsets (X,Y)-- [1:0-2-4,0-3-3], [5:0-2-4,0-3-3], [6:0-6-4,0-1-8], [7:0-8-0,0-6-4], [9:0-6-4,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.14	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.25	6-7	>955	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 246 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except*
3-7: 2x4 SPF 1650F 1.5E
WEDGE
Left: 2x8 SP No.2 , Right: 2x8 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-174(LC 25)
Max Uplift 1=-1378(LC 8), 5=-1377(LC 9)
Max Grav 1=8078(LC 1), 5=8081(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11045/1891, 2-3=-8018/1440, 3-4=-8018/1440, 4-5=-11049/1892
BOT CHORD 1-9=-1604/9092, 7-9=-1604/9092, 6-7=-1495/9096, 5-6=-1495/9096
WEBS 3-7=-1472/8445, 4-7=-3153/675, 4-6=-540/3296, 2-7=-3149/673, 2-9=-538/3292

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1378, 5=1377.
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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-0 from the left end to 18-0-0 to connect truss(es) to front face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

March 18,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

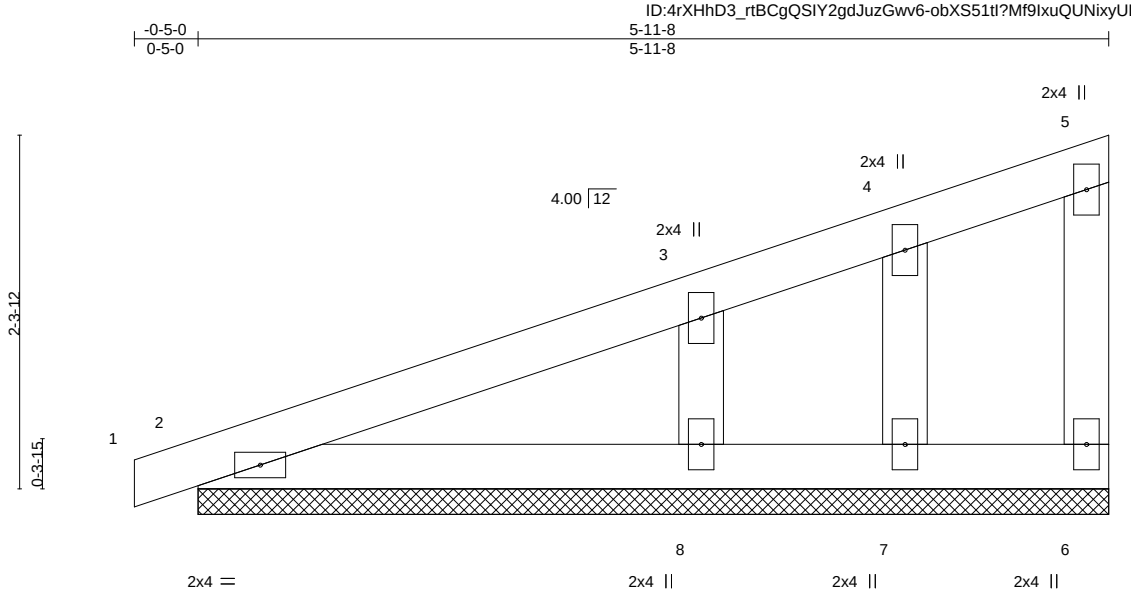
LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 10-13=-20
   Concentrated Loads (lb)
   Vert: 8=-1594(F) 7=-1594(F) 16=-1599(F) 17=-1594(F) 18=-1594(F) 19=-1594(F) 20=-1594(F) 21=-1599(F) 22=-1599(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	C1	GABLE	1	1	I45224754

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:53 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-obXS51tl?Mf9IxuQUNixyULfWp9jgQHxZENx6XzaIgW



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	0.07	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 5-11-8.
(lb) - Max Horz 2=90(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=304(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-8=-235/337

NOTES-

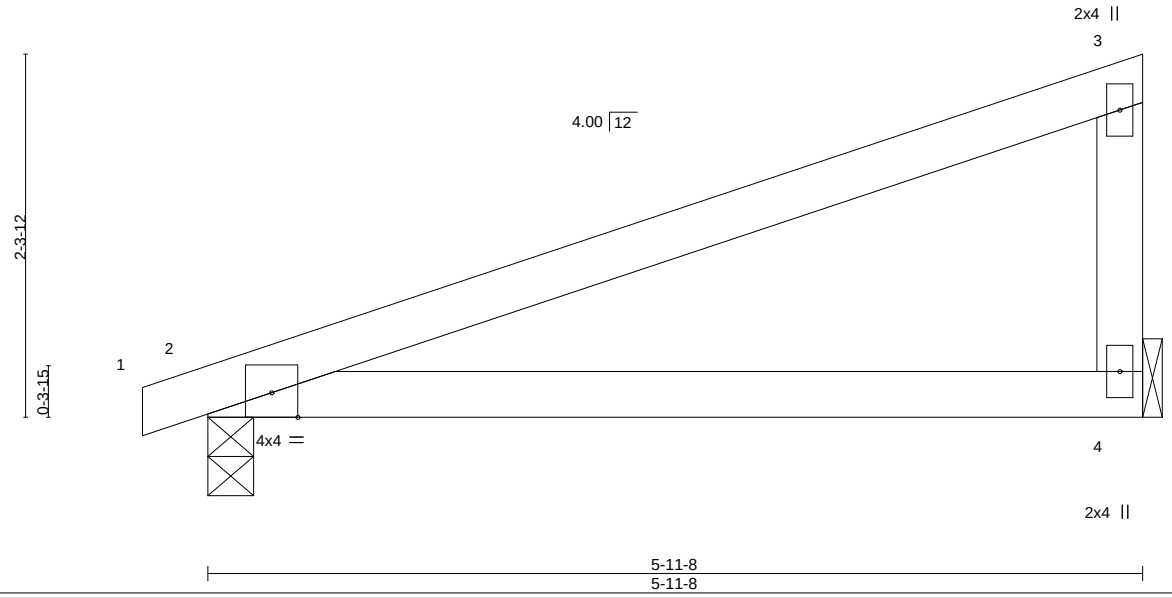
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-5-0 to 2-7-0, Exterior(2N) 2-7-0 to 5-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) 6, 2, 7, 8.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	C2	MONO TRUSS	6	1	I45224755
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:55 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-I_eCWjuYX_vtXE2obokP1vQw2cnY8JiE1Ys2AQzaIgU



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	0.07	4-7	>979	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.13	4-7	>548	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-AS							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 4=Mechanical
Max Horz 2=90(LC 11)
Max Uplift 2=-71(LC 8), 4=-66(LC 12)
Max Grav 2=292(LC 1), 4=261(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior(1) 2-7-0 to 5-9-12 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) 2, 4.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

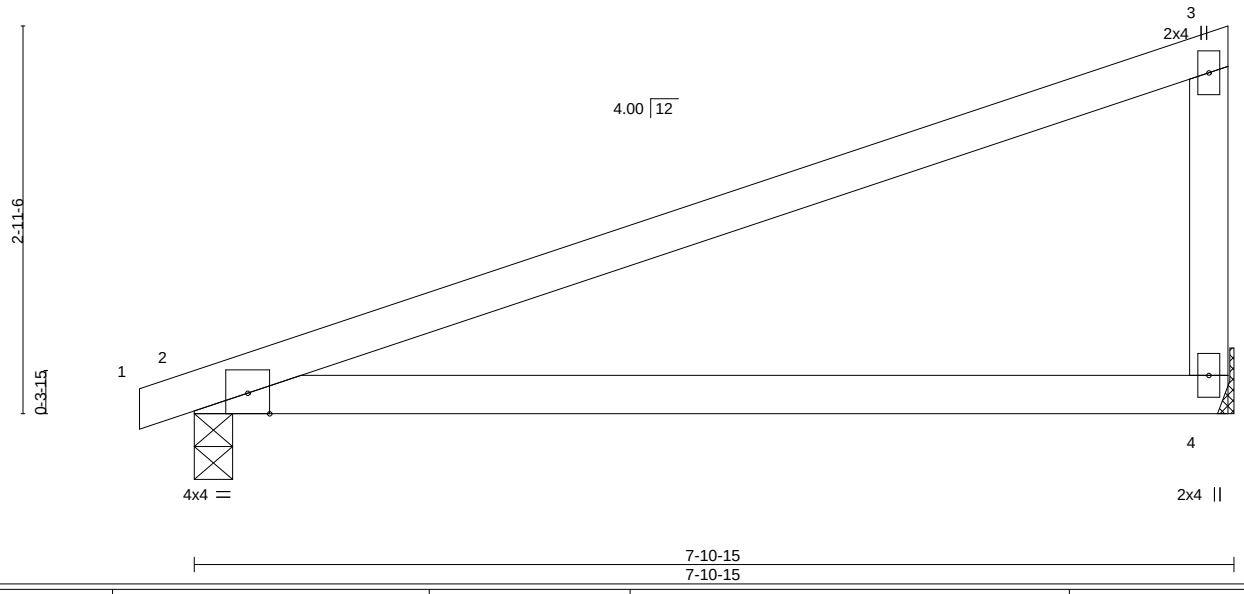
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	C3	MONO TRUSS	4	1	I45224756

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:56 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-DACak3vBIH2k9Oc_9VGeZ7z?403ltmLNFCbbiszaIgT

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

Scale = 1:17.5



7-10-15
7-10-15

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	0.20	4-7	>467	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.37	4-7	>249	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 22 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=Mechanical
Max Horz 2=113(LC 8)
Max Uplift 2=-79(LC 8), 4=-96(LC 12)
Max Grav 2=377(LC 1), 4=347(LC 1)

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

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

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	C4	GABLE	1	1	I45224757

Job Reference (optional)

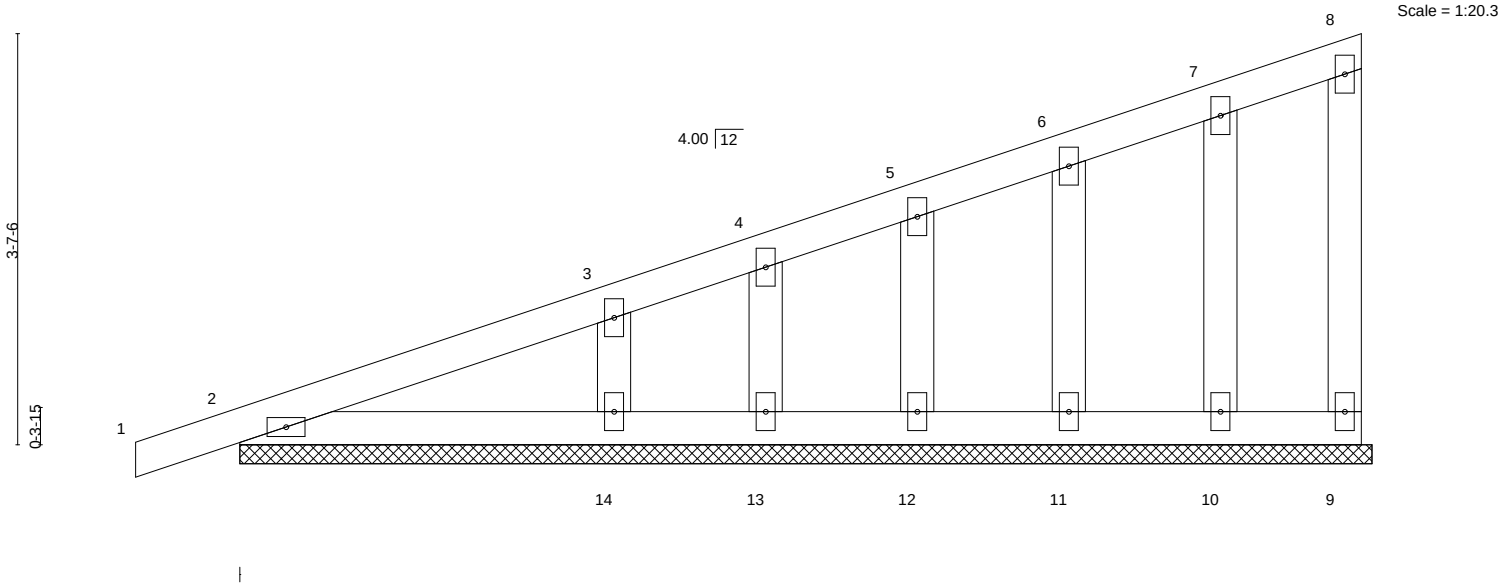
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:57 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-hNmzxOwp3bAbnYBBjDnt6KVLvQXkcDaXUsL8FIzaIgS

-0-11-0 9-10-6 9-11-8

0-11-0 9-10-6 0-1-2

Scale = 1:20.3



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	0.11	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	0.04	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 38 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.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 9-11-8.

(lb) - Max Horz 2=148(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 9, 10, 11, 12, 13, 14

Max Grav All reactions 250 lb or less at joint(s) 2, 9, 10, 11, 12, 13 except 14=287(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 9-8-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 2, 9, 10, 11, 12, 13, 14.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	C5	MONOPITCH	9	1	I45224758

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:58 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-9ZKL9kxRpvISOimNGwI6fY2OPqisLcqgjW4inlzaIgR

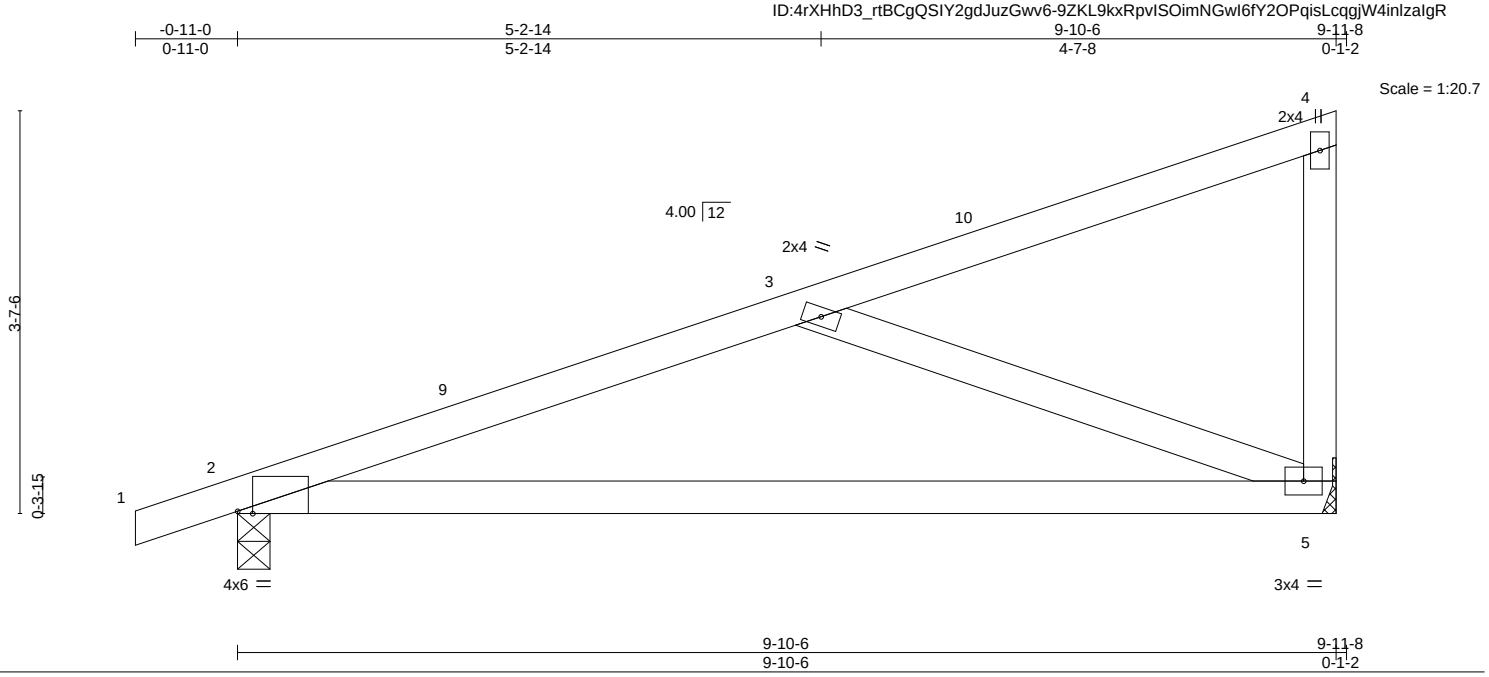


Plate Offsets (X,Y)-- [2:0-1-10,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.25	5-8	>476	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.51	5-8	>230	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 33 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, 5=Mechanical
Max Horz 2=149(LC 8)
Max Uplift 2=-118(LC 8), 5=-120(LC 12)
Max Grav 2=505(LC 1), 5=434(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-700/266
BOT CHORD 2-5=-379/659
WEBS 3-5=-700/403

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 9-8-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=118, 5=120.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	C6	GABLE	1	1	I45224759

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:42:59 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-dlujM4x3aCQJ0sLZqepLBlbgzD9745DqxAqFJBzalgQ

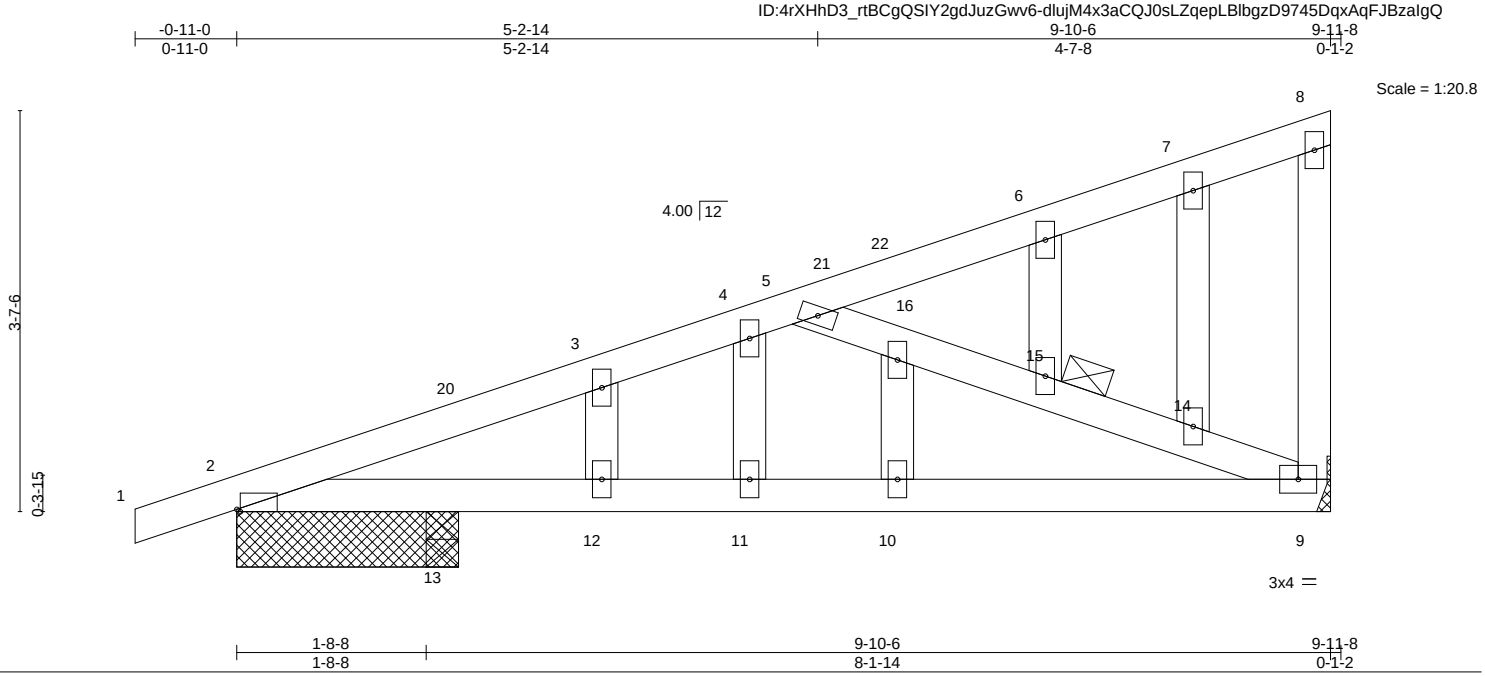


Plate Offsets (X,Y)-- [2:0-0-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.02	10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 41 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
JOINTS	1 Brace at Jt(s): 15

REACTIONS. (size) 2=2-0-0, 9=Mechanical, 13=0-3-8
Max Horz 2=149(LC 8)
Max Uplift 2=-75(LC 8), 9=-110(LC 8), 13=-64(LC 12)
Max Grav 2=315(LC 1), 9=390(LC 1), 13=234(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-613/157, 3-4=-600/186, 4-5=-521/163
BOT CHORD 2-13=-297/551, 12-13=-297/551, 11-12=-297/551, 10-11=-297/551, 9-10=-297/551
WEBS 5-16=-575/322, 15-16=-571/293, 14-15=-587/320, 9-14=-614/337

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 9-8-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13 except (jt=lb) 9=110.
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.

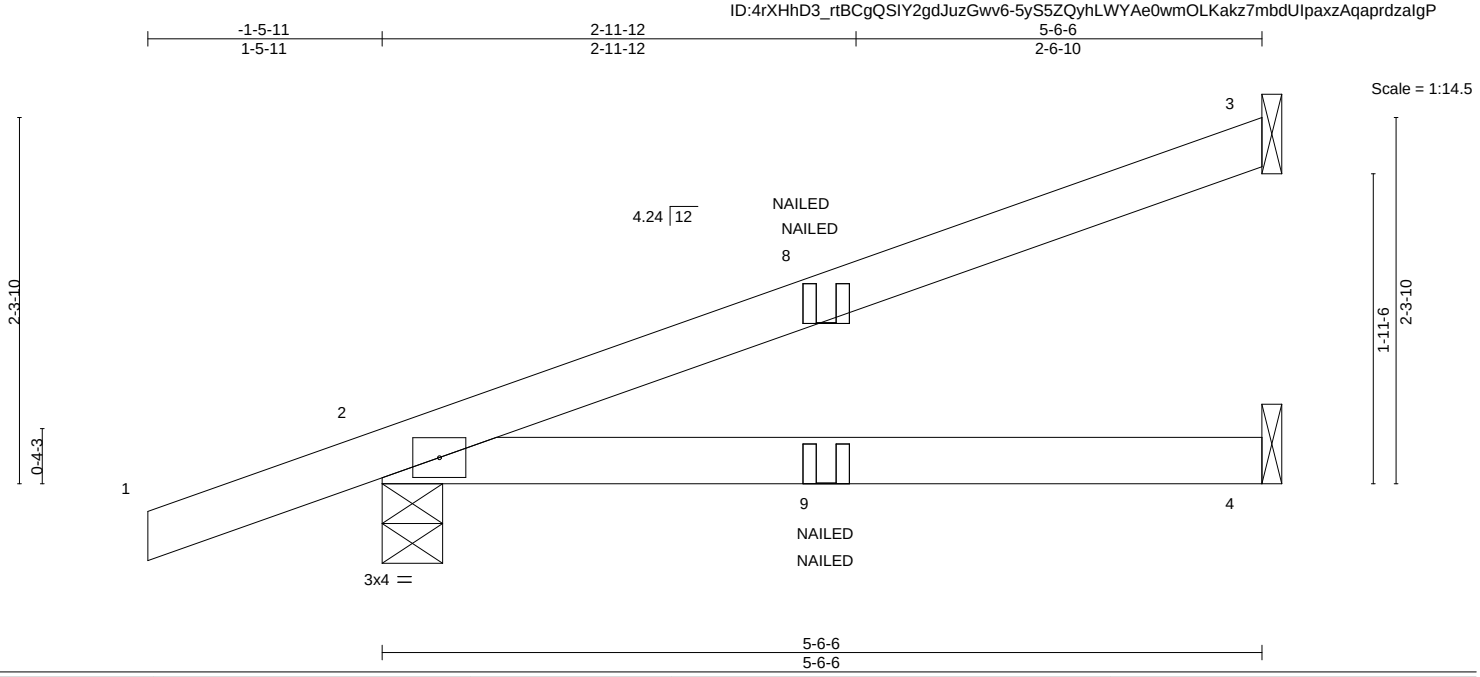
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	CJ1	Diagonal Hip Girder	2	1	I45224760

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:00 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-5yS5ZQyhLWYAe0wmOLKakz7mbdUIpaxzAqaprdzaIgP



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.05	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.10	4-7	>688	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=107(LC 4)
Max Uplift 3=-70(LC 8), 2=-113(LC 4)
Max Grav 3=161(LC 1), 2=366(LC 1), 4=100(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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) 3 except (jt=lb) 2=113.
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 guidlines.
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, 4-5=-20
Concentrated Loads (lb)
Vert: 9=-7(F=-3, B=-3)

March 18,2021

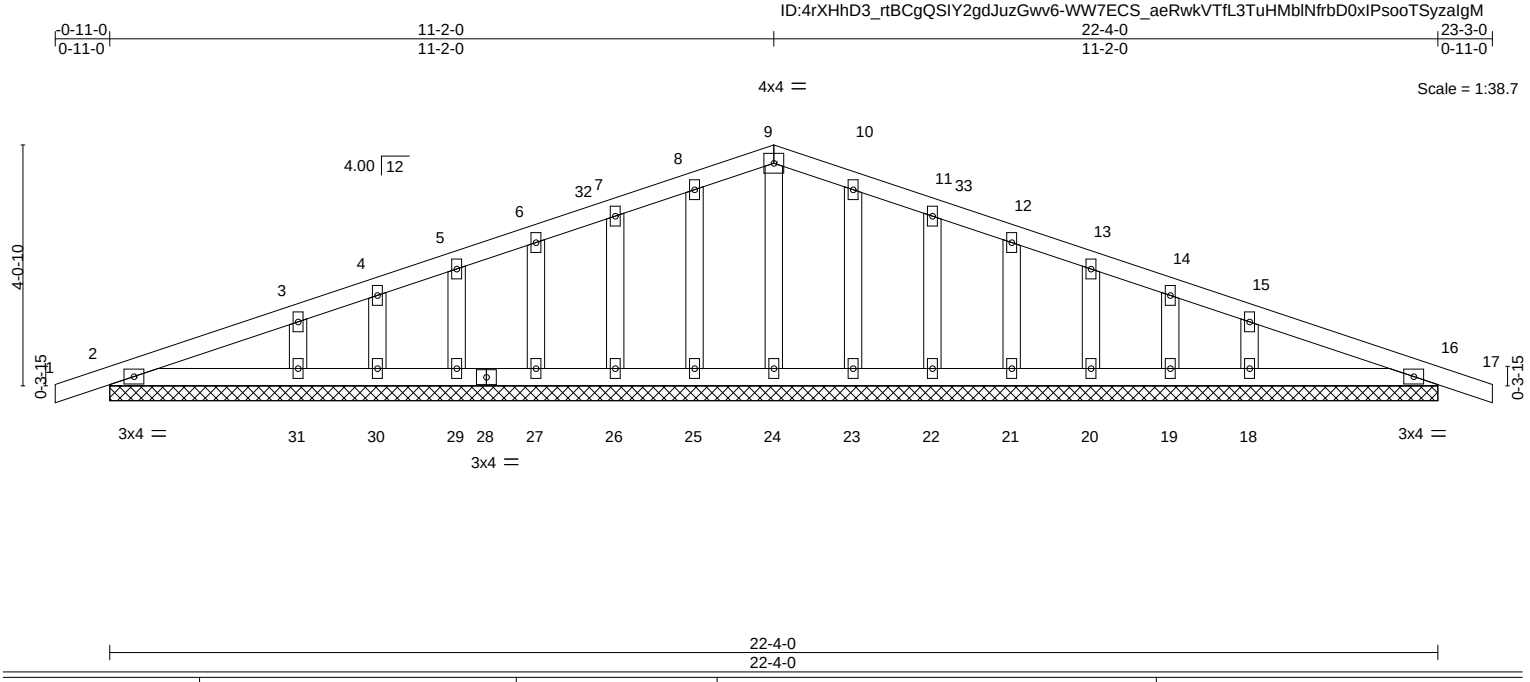
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	D1	GABLE	1	1	I45224761

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:03 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-WW7ECS_aeRwkVTfL3TuHMblNfrbD0xIPsooTSyzaIgM



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	17	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	17	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 85 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 22-4-0.

(lb) - Max Horz 2=-71(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 29, 30, 23, 22, 21, 20, 19, 16 except 31=273(LC 25), 18=273(LC 26)

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 11-2-0, Corner(3R) 11-2-0 to 14-2-0, Exterior(2N) 14-2-0 to 23-3-0 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) 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 1-4-0 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, 25, 26, 27, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16.
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.

March 18,2021

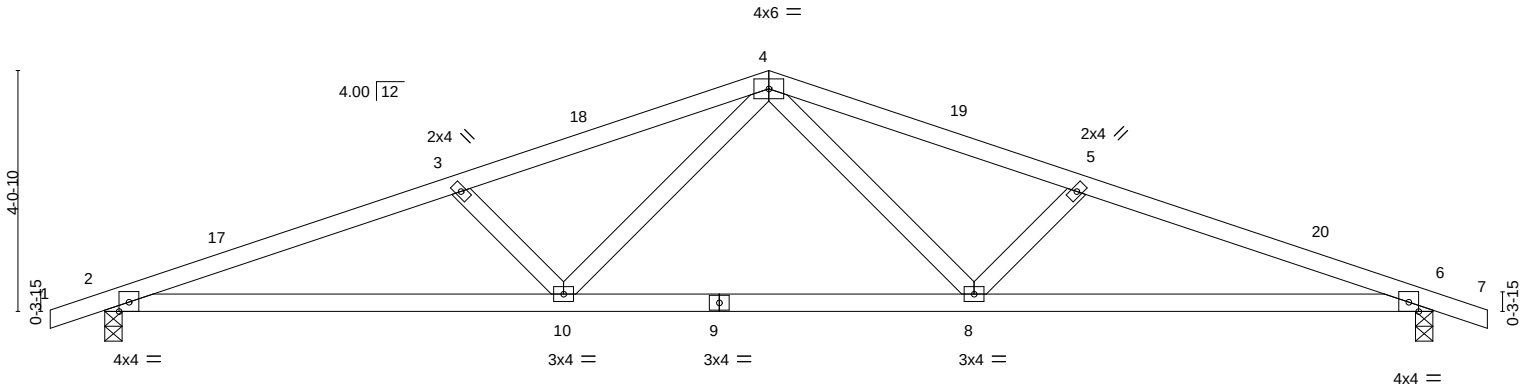
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	D2	Common	5	1	I45224762
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:05 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-SvF_d80qA2ASknojBuwlR0qePe5bUpciK6HaXrzaIgK

0-11-0 5-11-14 11-2-0 16-4-2 22-4-0 23-3-0
0-11-0 5-11-14 5-2-2 5-2-2 5-11-14 0-11-0

Scale = 1:38.7



7-8-9 14-7-7 22-4-0
7-8-9 6-10-13 7-8-9

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.13	10-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.26	10-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 72 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, 6=0-3-8
Max Horz 2=-71(LC 17)
Max Uplift 2=-227(LC 8), 6=-227(LC 9)
Max Grav 2=1069(LC 1), 6=1069(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2401/575, 3-4=-2118/515, 4-5=-2118/515, 5-6=-2401/575
BOT CHORD 2-10=-482/2248, 8-10=-277/1508, 6-8=-486/2248
WEBS 4-8=-127/672, 5-8=-456/201, 4-10=-127/672, 3-10=-456/201

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 23-3-0 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) 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) except (jt=lb) 2=227, 6=227.
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.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

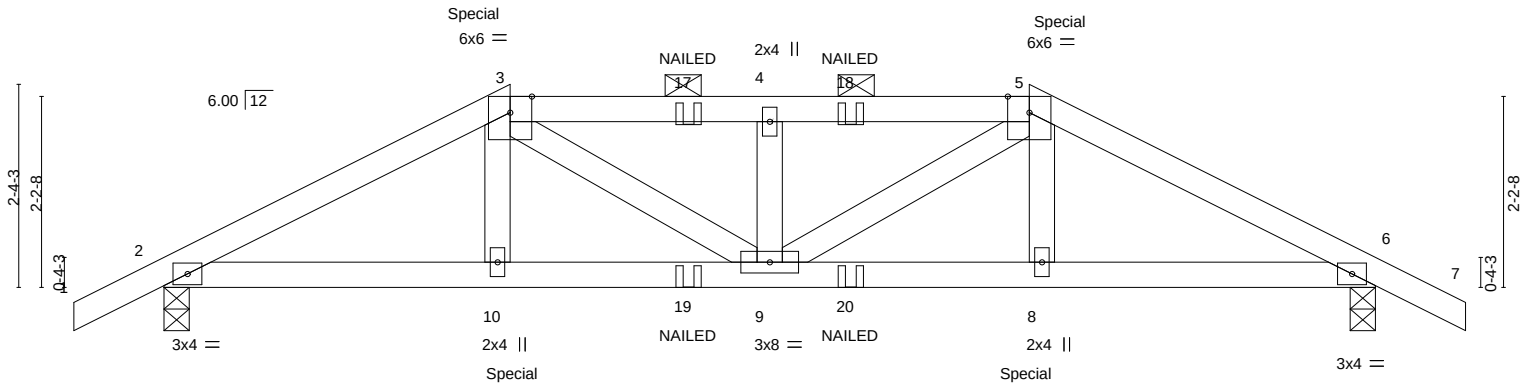
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	E1	Hip Girder	1	1	I45224763

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:08 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-sUx7F92iTzY1bEXIs1TS3fSCDsCRhBA803WE7AzaIgH

-1-0-8	4-0-0	7-0-0	10-0-0	14-0-0	15-0-8
1-0-8	4-0-0	3-0-0	3-0-0	4-0-0	1-0-8

Scale = 1:26.6



4-0-0	7-0-0	10-0-0	14-0-0
4-0-0	3-0-0	3-0-0	4-0-0

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	0.23	Vert(LL)	-0.05	9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.09	9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 49 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 4-4-6 oc purlins, except 2-0-0 oc purlins (4-3-5 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=42(LC 29)
Max Uplift 2=-214(LC 8), 6=-214(LC 9)
Max Grav 2=966(LC 1), 6=966(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1672/352, 3-4=-1797/403, 4-5=-1797/402, 5-6=-1672/353
BOT CHORD 2-10=-288/1459, 9-10=-291/1447, 8-9=-265/1447, 6-8=-261/1459
WEBS 3-9=-125/459, 4-9=-359/162, 5-9=-125/459

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=214, 6=214.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 166 lb down and 150 lb up at 4-0-0, and 166 lb down and 150 lb up at 10-0-0 on top chord, and 81 lb down at 4-0-0, and 81 lb down at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 11-14=-20
Concentrated Loads (lb)
Vert: 10=-79(F) 3=-107(F) 5=-107(F) 8=-79(F) 17=-45(F) 18=-45(F) 19=-33(F) 20=-33(F)

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

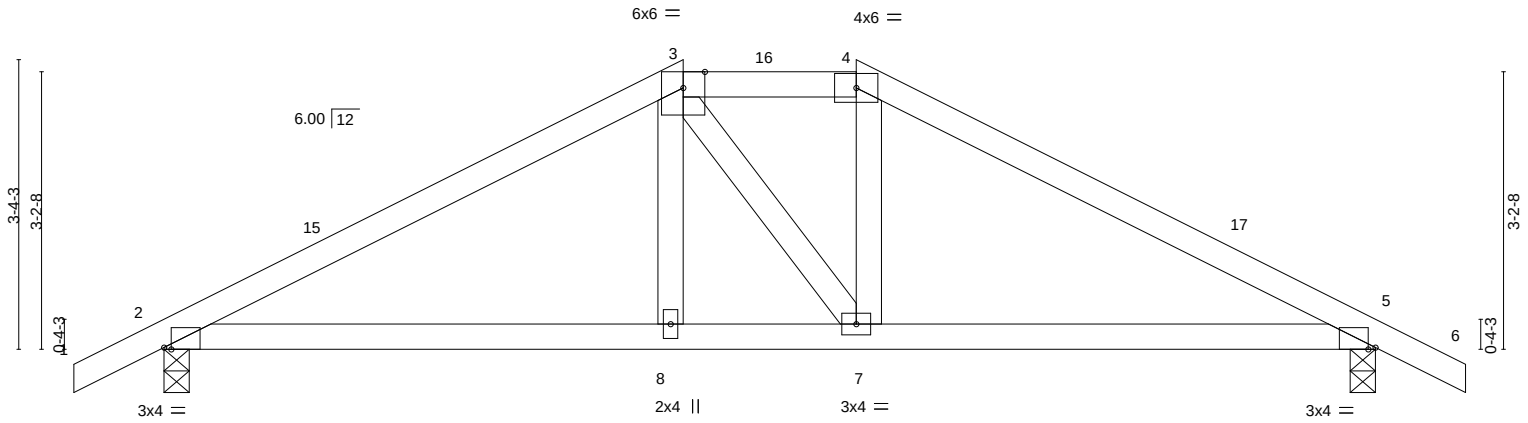
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	E2	Hip	1	1	I45224764

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:10 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-pt2tgr4z?bolqYhhzSWw84YWRftM96hRTN?KC2zaIgF

-1-0-8 1-0-8 | 6-0-0 6-0-0 | 8-0-0 2-0-0 | 14-0-0 6-0-0 | 15-0-8 1-0-8

Scale = 1:26.6



6-0-0 6-0-0 | 8-0-0 2-0-0 | 14-0-0 6-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04	8-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.09	8-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 47 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=61(LC 12)
Max Uplift 2=-131(LC 12), 5=-131(LC 13)
Max Grav 2=703(LC 1), 5=703(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-950/263, 3-4=-779/295, 4-5=-951/266
BOT CHORD 2-8=-136/784, 7-8=-136/778, 5-7=-142/784

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 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 15-0-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=131, 5=131.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	E3	Common	3	1	I45224765
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:11 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-H3cFtB5bmuwcSiGtX919gH4ew3CPuYXbi1kukVzaIgE

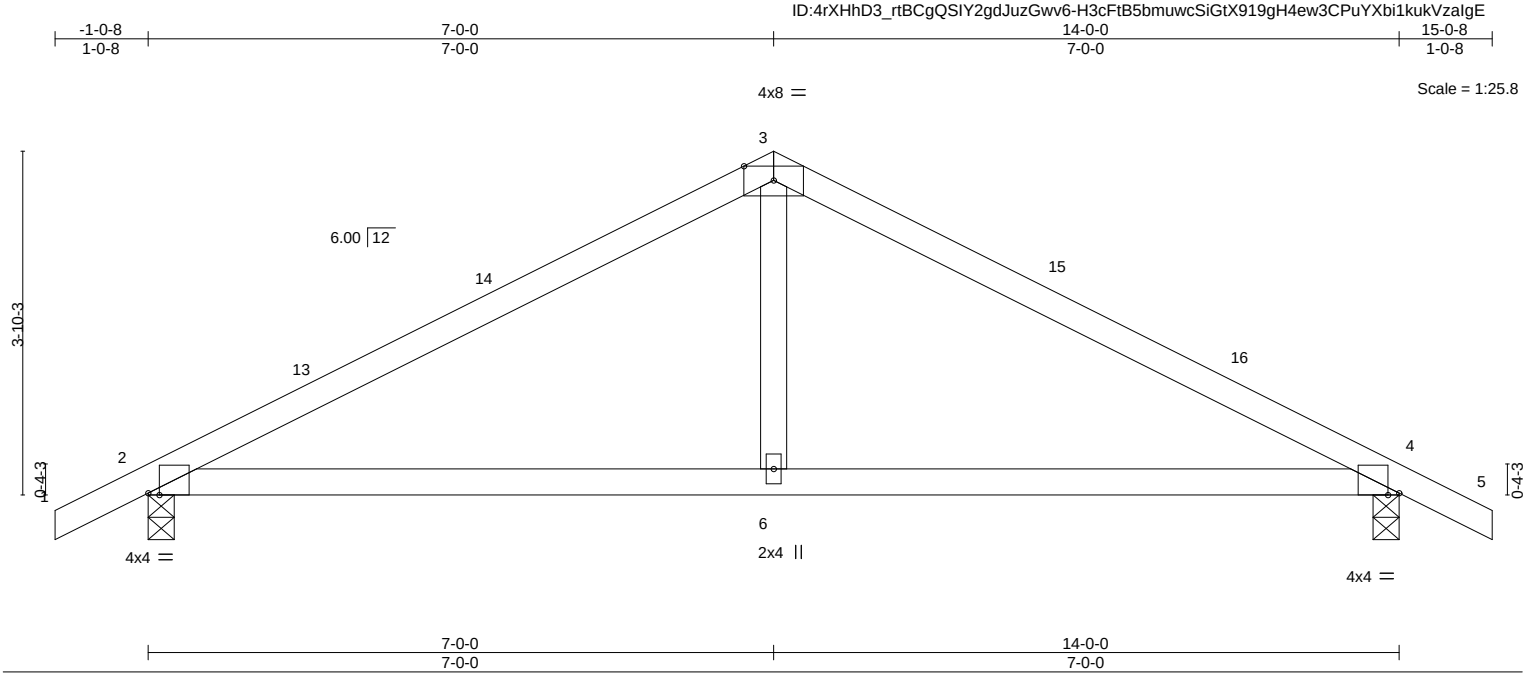


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [4:0-1-8,Edge]

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	0.52	Vert(LL)	-0.09	6-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.15	6-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 40 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=71(LC 12)
Max Uplift 2=-129(LC 12), 4=-129(LC 13)
Max Grav 2=703(LC 1), 4=703(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-903/299, 3-4=-903/299
BOT CHORD 2-6=-131/728, 4-6=-131/728
WEBS 3-6=0/321

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 15-0-8 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) except (jt=lb) 2=129, 4=129.
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.

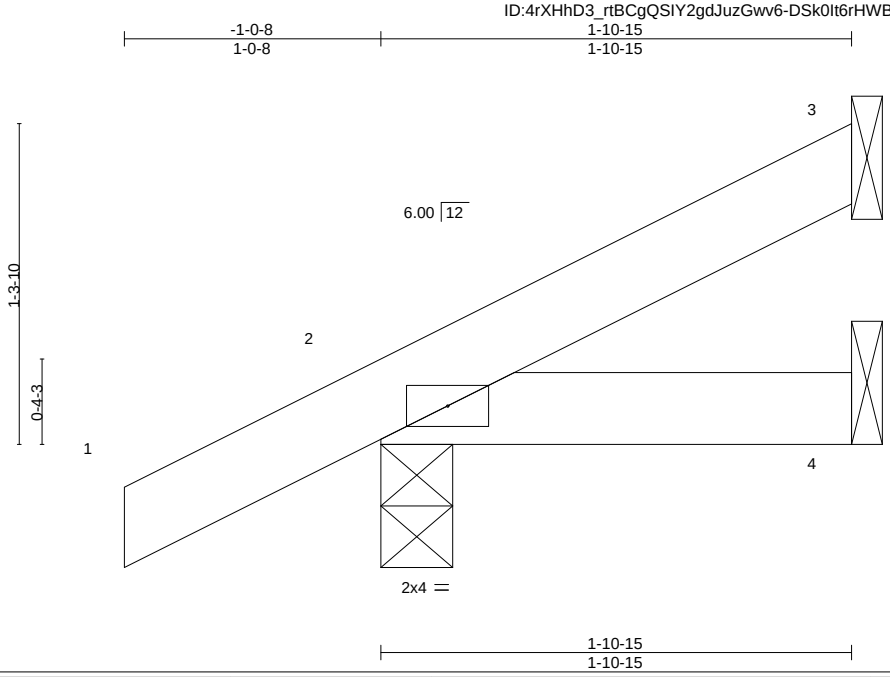
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	J1	Jack-Open	4	1	I45224766

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:13 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-DSk0lt6rHWBKi0QGfa3dmiA4Pt?2MS9u9LD?pNzaIgC



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 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=57(LC 12)
Max Uplift 3=-23(LC 12), 2=-41(LC 12)
Max Grav 3=46(LC 1), 2=178(LC 1), 4=31(LC 3)

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

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

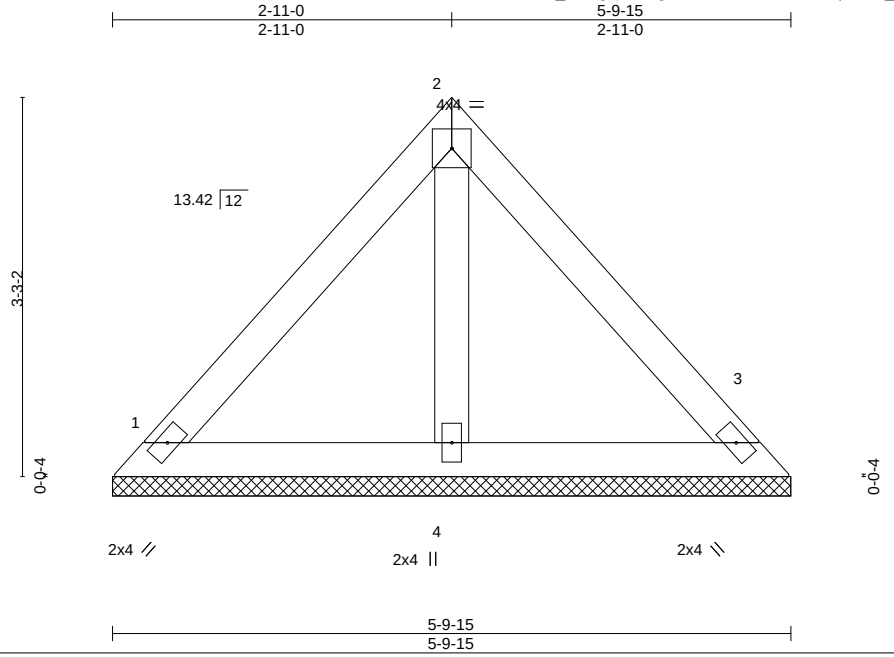
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	L1	GABLE	1	1	I45224767

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:14 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-heIOVC7T2pJAJ9_SCHaslwiEEGLp5v61O?zYLpzaIgB



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	0.06	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: 19 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 5-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-9-15, 3=5-9-15, 4=5-9-15
Max Horz 1=-78(LC 8)
Max Uplift 1=-42(LC 13), 3=-36(LC 13)
Max Grav 1=145(LC 1), 3=145(LC 1), 4=175(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

March 18,2021

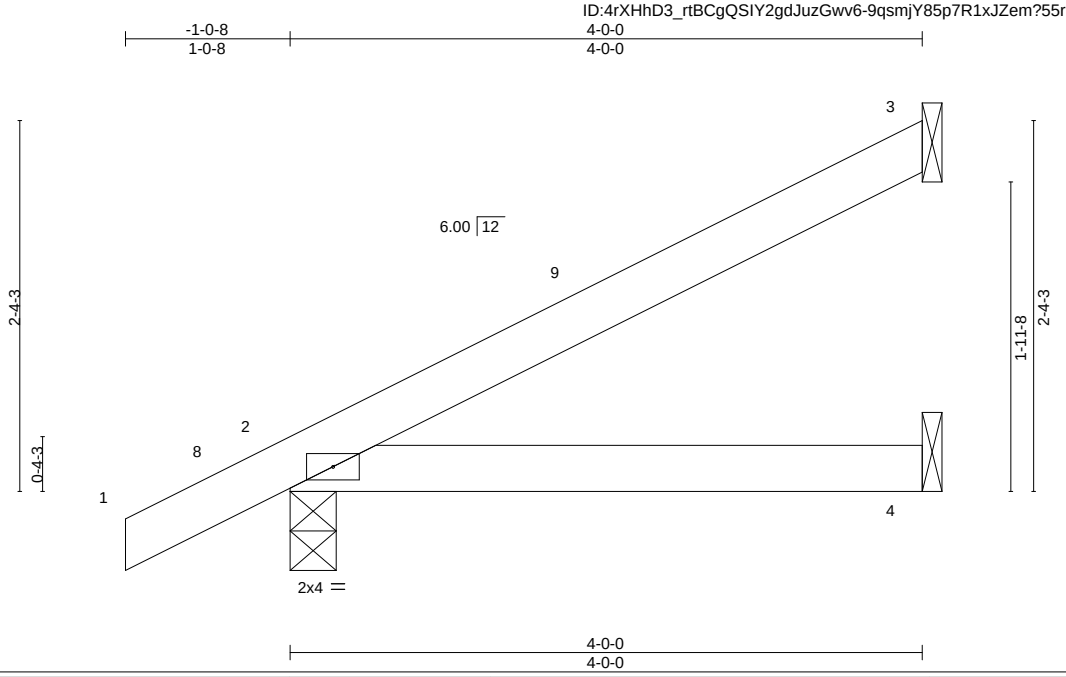
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	M1	Jack-Open	4	1	I45224768

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:15 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-9qsmjY85p7R1xJZem?55r7FO0gfdqMfAdfi5tGzaIgA



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 11 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=99(LC 12)
Max Uplift 3=-59(LC 12), 2=-47(LC 12)
Max Grav 3=115(LC 1), 2=260(LC 1), 4=72(LC 3)

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

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

March 18,2021

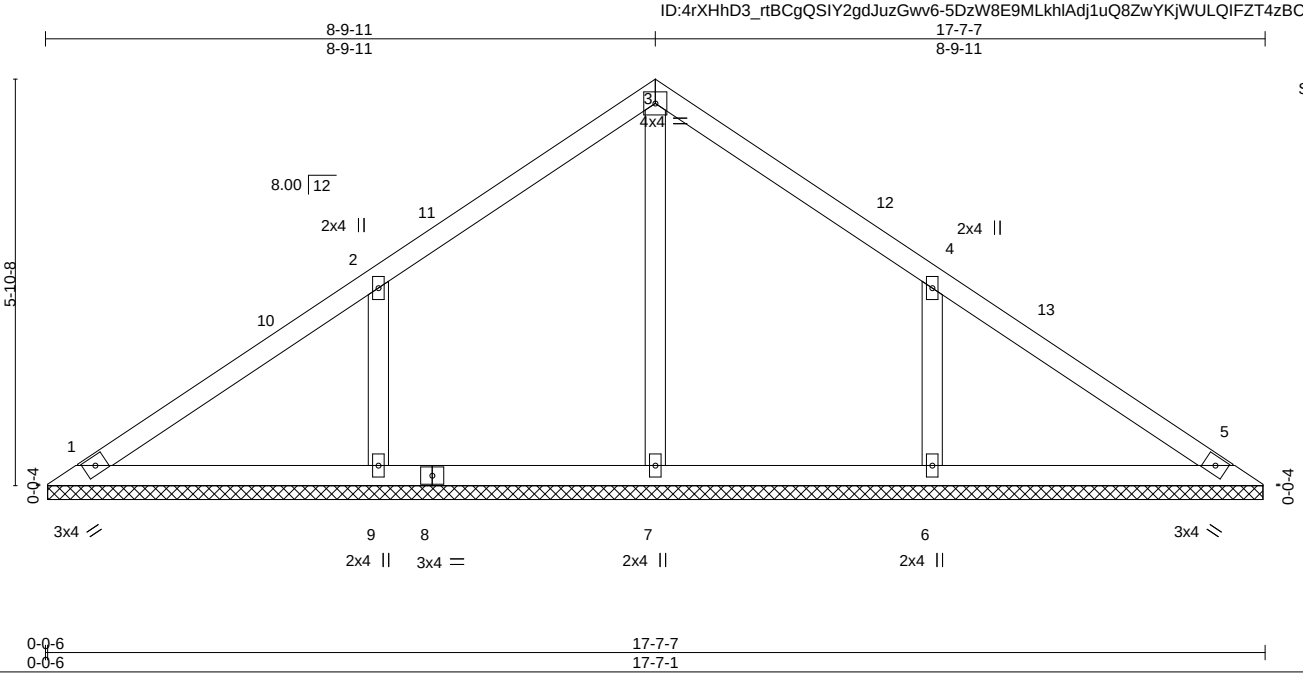
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V1	Valley	1	1	I45224769

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:17 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-5DzW8E9MLkhlAdj1uQ8ZwYKjWULQIFZT4zBCy8zaIg8



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)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 55 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 17-6-11.
(lb) - Max Horz 1=-145(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-197(LC 12), 6=-197(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=256(LC 1), 9=467(LC 19), 6=467(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-361/228, 4-6=-360/227

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 8-9-11, Exterior(2R) 8-9-11 to 11-9-11, Interior(1) 11-9-11 to 17-1-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=197, 6=197.
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.

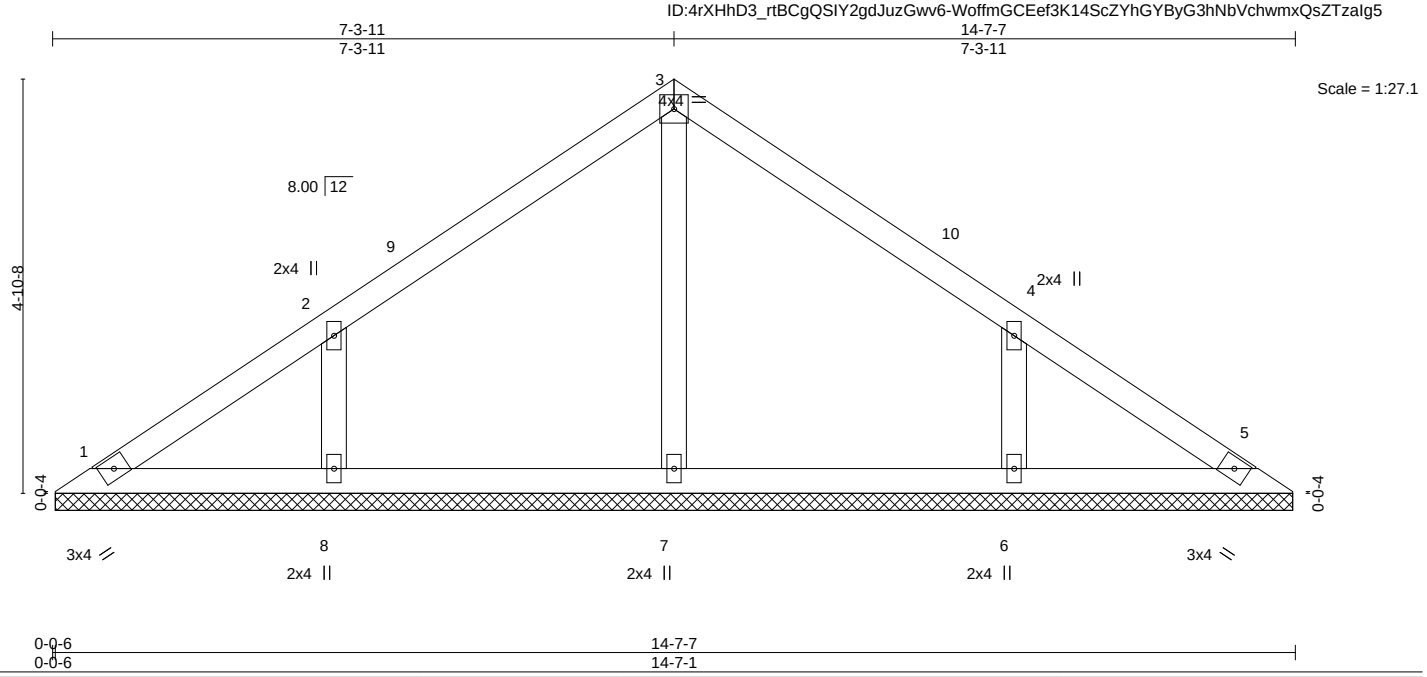
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V2	Valley	1	1	I45224770

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:20 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-WoffmGCEef3K14ScZYhGYByG3hNbVchwmxQsZTzaIg5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 44 lb	FT = 20%

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

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

REACTIONS. All bearings 14-6-11.
(lb) - Max Horz 1=119(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-162(LC 12), 6=-162(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=292(LC 1), 8=377(LC 19), 6=377(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-299/191, 4-6=-299/190

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-3-11, Interior(1) 3-3-11 to 7-3-11, Exterior(2R) 7-3-11 to 10-3-11, Interior(1) 10-3-11 to 14-1-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=162, 6=162.
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.

March 18,2021

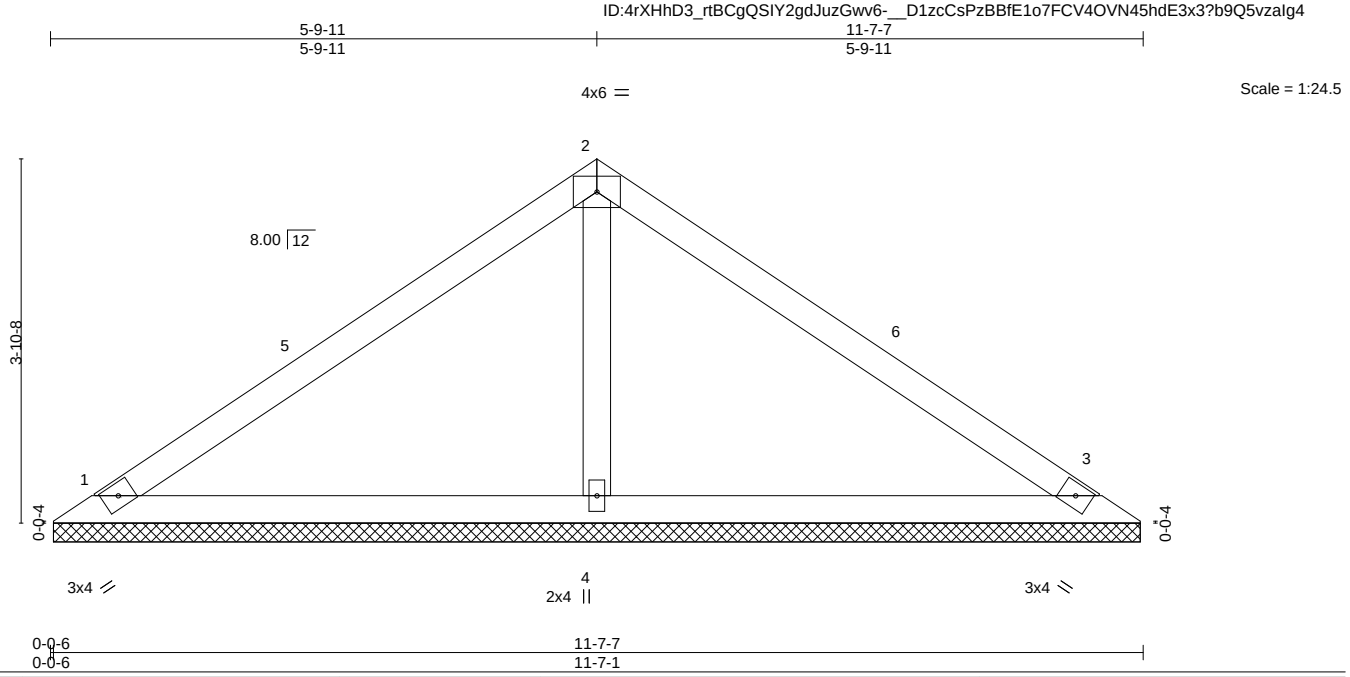
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V3	Valley	1	1	I45224771

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:21 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-__D1zcCsPzBBfE1o7FCV4OVN45hdE3x3?b9Q5vzaIg4



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	0.41	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=11-6-11, 3=11-6-11, 4=11-6-11
Max Horz 1=-93(LC 8)
Max Uplift 1=-51(LC 12), 3=-64(LC 13), 4=-47(LC 12)
Max Grav 1=236(LC 1), 3=236(LC 1), 4=488(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-325/121

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-9-11, Exterior(2R) 5-9-11 to 8-9-11 , Interior(1) 8-9-11 to 11-1-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 18,2021

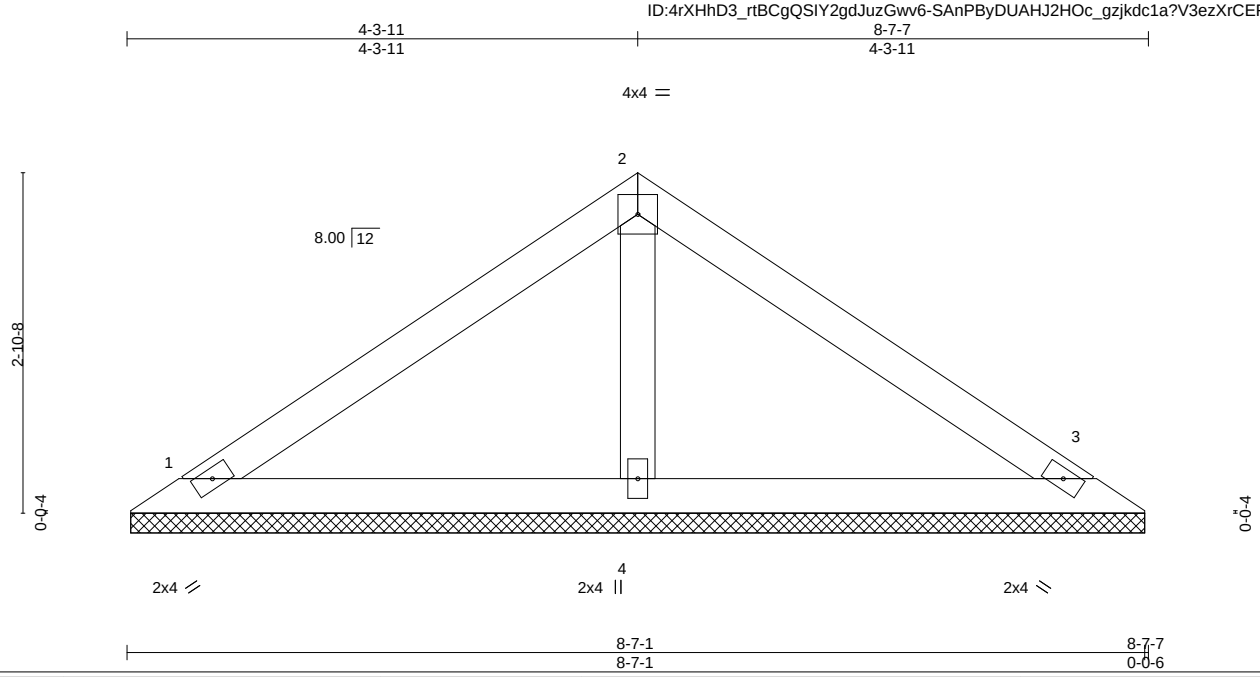
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V4	Valley	1	1	I45224772

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:22 2021 Page 1

ID:4rXHhD3_rtBCgQSlY2gdJuzGwv6-SAnPByDUAHJ2HOc_gzjkdc1a?V3ezXrCEFvzdMzaIg3



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=8-6-11, 3=8-6-11, 4=8-6-11
Max Horz 1=67(LC 9)
Max Uplift 1=-46(LC 12), 3=-55(LC 13), 4=-15(LC 12)
Max Grav 1=186(LC 1), 3=186(LC 1), 4=316(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-3-11, Exterior(2R) 4-3-11 to 7-3-11 , Interior(1) 7-3-11 to 8-1-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

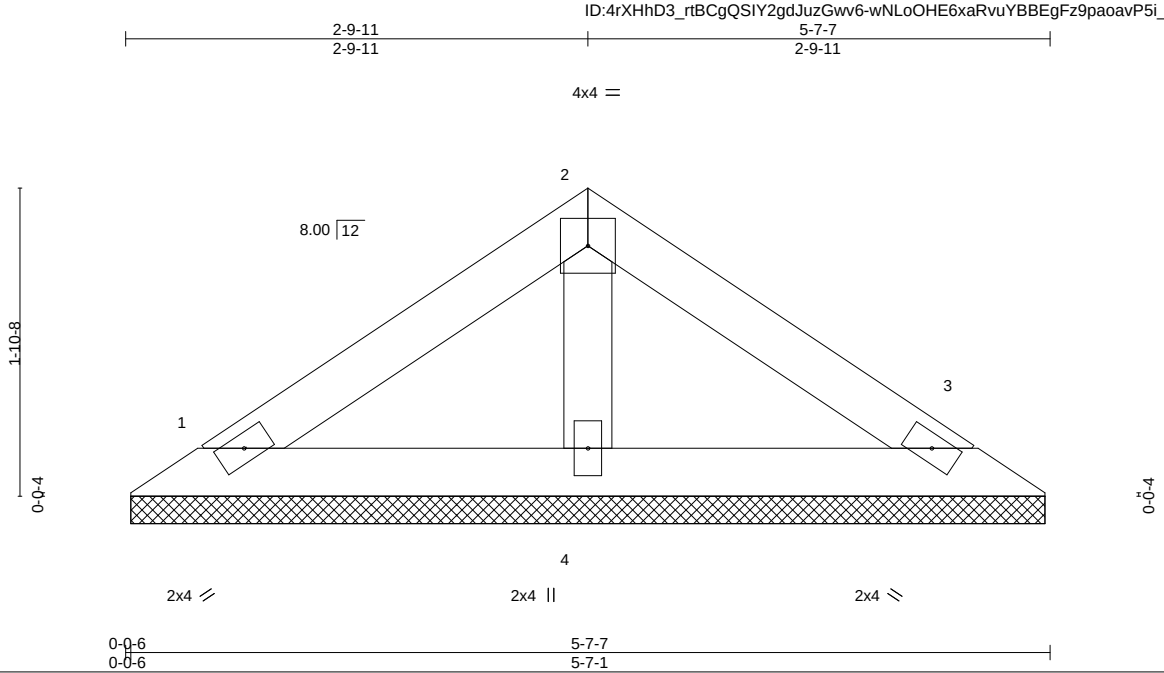
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V5	Valley	1	1	I45224773

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:23 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-wNLoOHE6xaRvuYBBEgFz9paoavP5i_NMTveW9ozaIg2



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	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: 14 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 5-7-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-6-11, 3=5-6-11, 4=5-6-11
Max Horz 1=-41(LC 8)
Max Uplift 1=-28(LC 12), 3=-33(LC 13), 4=-9(LC 12)
Max Grav 1=113(LC 1), 3=113(LC 1), 4=192(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

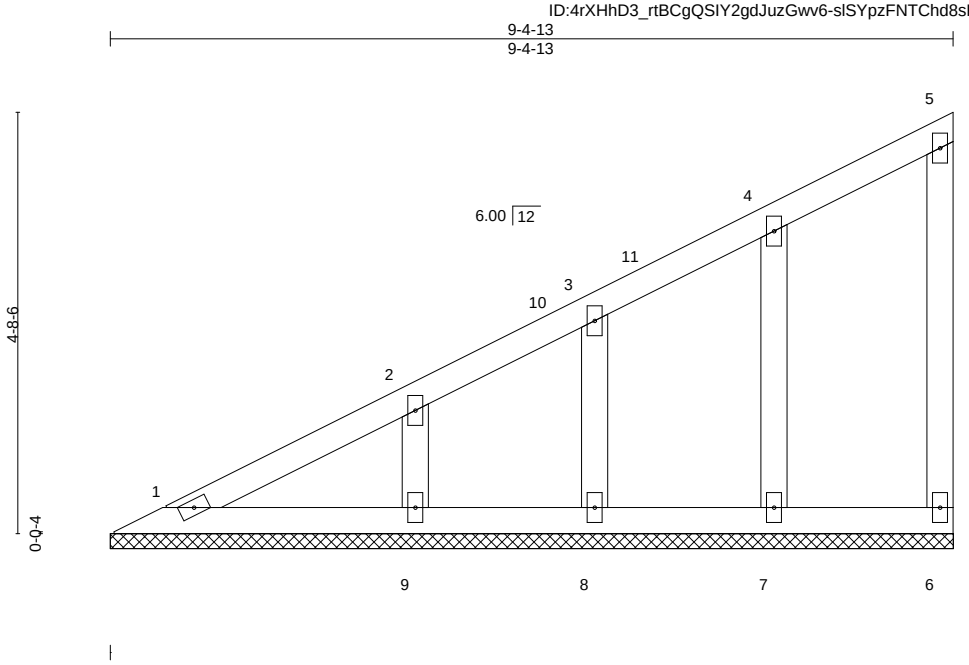
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V6	GABLE	1	1	I45224774

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:25 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-slSYpzFNTChd8sKZM5HRFEf8si5QAucfwD7dEhzaIg0



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	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	0.03	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 34 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 9-4-13.
(lb) - Max Horz 1=180(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8, 9
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 7, 8 except 9=260(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-279/173

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-4-13, Interior(1) 3-4-13 to 9-3-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 8, 9.
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.

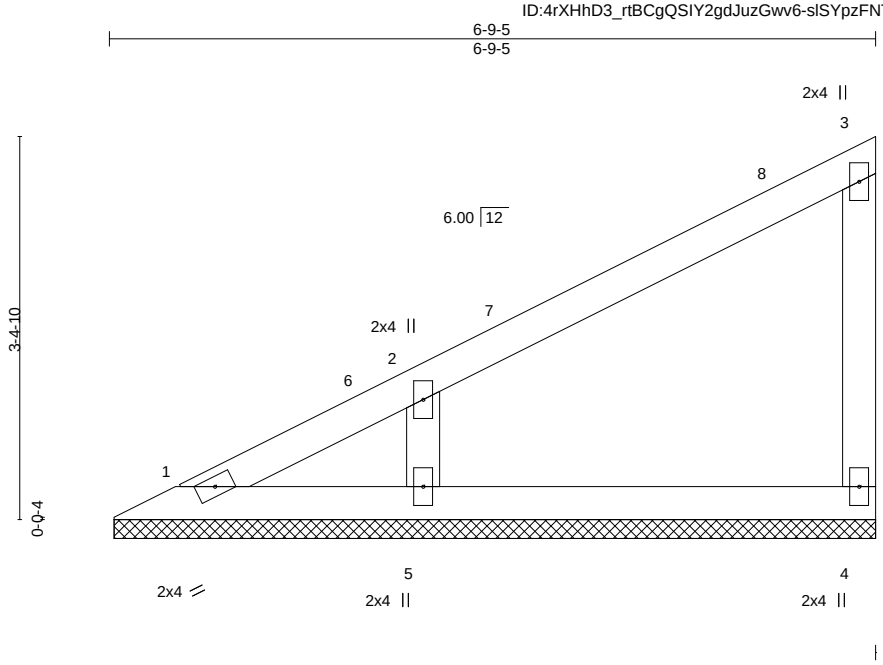
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V7	Valley	1	1	I45224775

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:25 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-slSYpzFNTChd8sKZM5HRFEf7hi4lAuOfwD7dEhzaIg0



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=6-8-13, 4=6-8-13, 5=6-8-13
Max Horz 1=125(LC 9)
Max Uplift 4=-29(LC 9), 5=-122(LC 12)
Max Grav 1=59(LC 20), 4=141(LC 1), 5=361(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-281/267

NOTES-

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

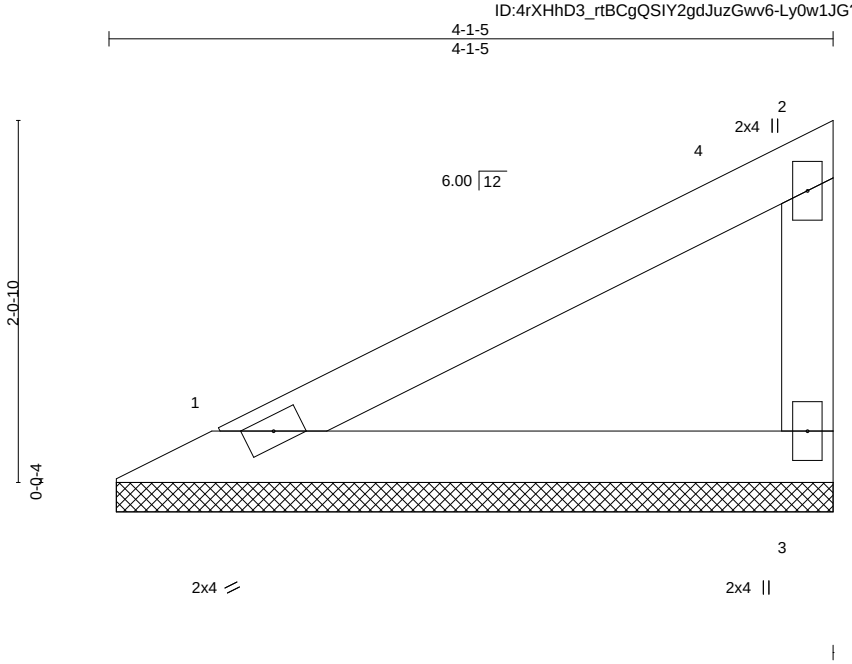
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V8	Valley	1	1	I45224776

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:26 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-Ly0w1JG?DVpUl?vlvpognSCH86QqvLNo9ttBm7zaIg?



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	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: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-1-5 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-0-13, 3=4-0-13
Max Horz 1=70(LC 9)
Max Uplift 1=-25(LC 12), 3=-43(LC 12)
Max Grav 1=150(LC 1), 3=150(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 3-11-9 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.

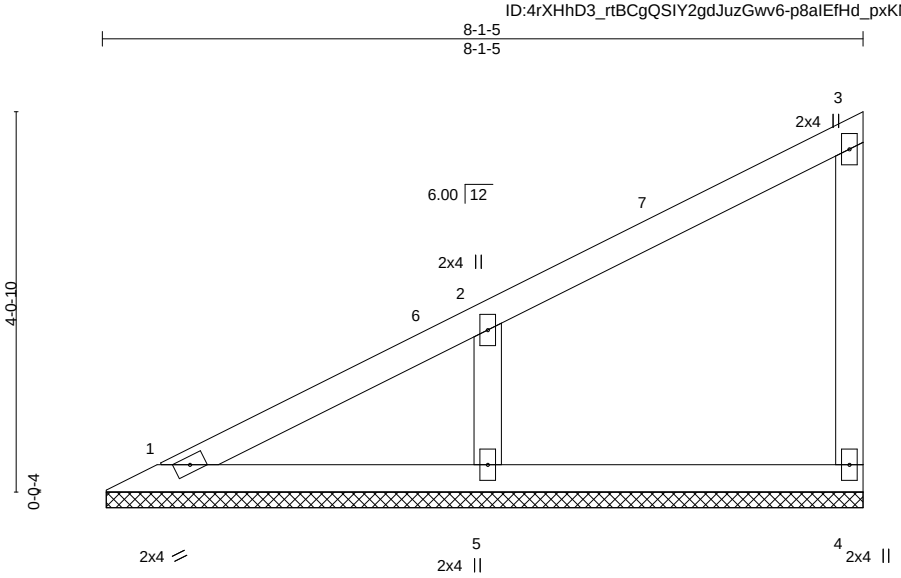
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V9	Valley	1	1	I45224777

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:27 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-p8aIEfHd_pxKN9UyTWJvKflSaWm_eouxNXckIZzaIg_



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=8-0-13, 4=8-0-13, 5=8-0-13
Max Horz 1=153(LC 9)
Max Uplift 4=-31(LC 9), 5=-129(LC 12)
Max Grav 1=119(LC 20), 4=134(LC 1), 5=413(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-255/160
WEBS 2-5=-321/268

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-11-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=129.
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.

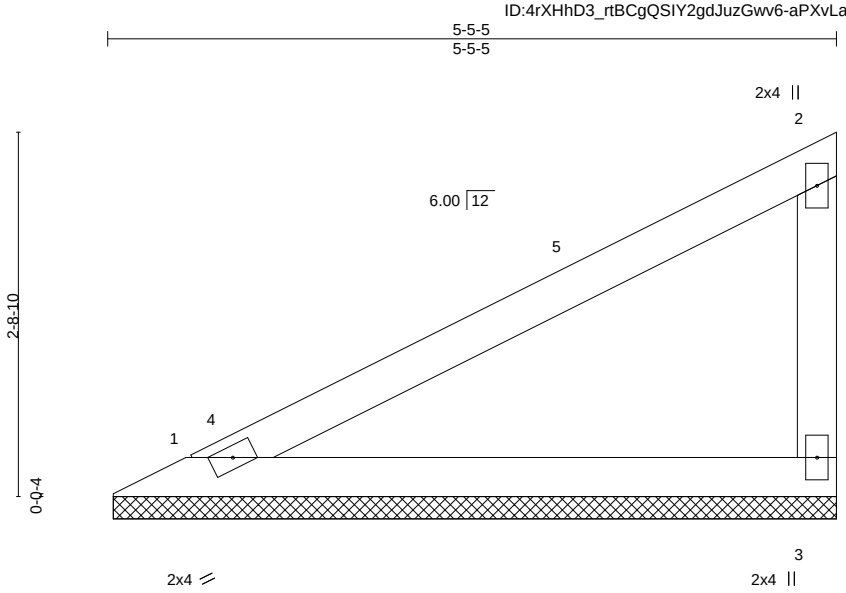
March 18,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V10	Valley	1	1	I45224778

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:18 2021 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-aPXvLaA_62pconIDR7foSmtsouf81jOdJdxmUbzaIg7



Scale = 1:17.2

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	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: 15 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 5-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-4-13, 3=5-4-13
Max Horz 1=97(LC 9)
Max Uplift 1=-35(LC 12), 3=-60(LC 12)
Max Grav 1=210(LC 1), 3=210(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-3-9 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.

March 18,2021

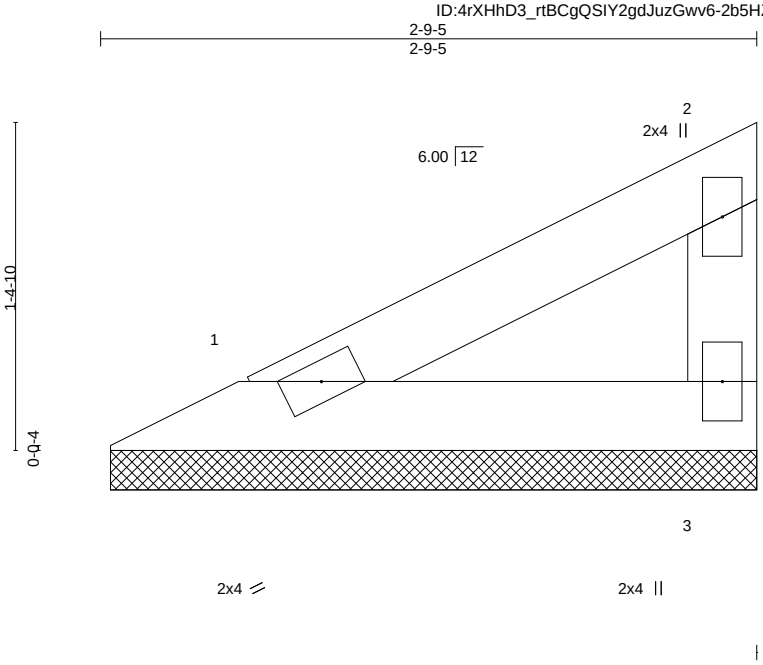
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE#115/MO
2683898	V11	Valley	1	1	I45224779

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 4 2021 MiTek Industries, Inc. Tue Mar 16 16:43:19 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-2b5HZwBctMxTQxtP?rA1?zQ60H2KmAemYHgJ01zaIg6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 7 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-9-5 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-8-13, 3=2-8-13
Max Horz 1=42(LC 9)
Max Uplift 1=-15(LC 12), 3=-26(LC 12)
Max Grav 1=90(LC 1), 3=90(LC 1)

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

NOTES-

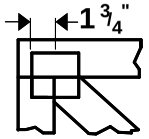
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown;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

March 18,2021

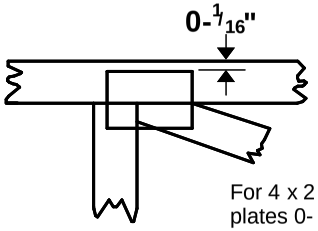
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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- 1/16" from outside edge of truss.

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

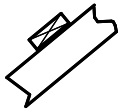
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

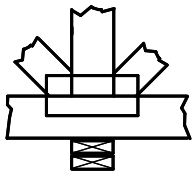
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

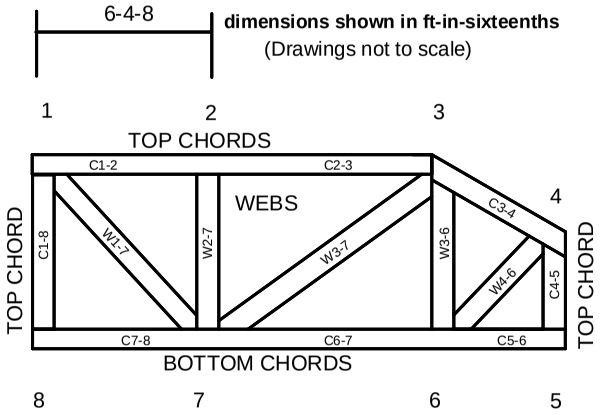


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21.The design does not take into account any dynamic or other loads other than those expressly stated.