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

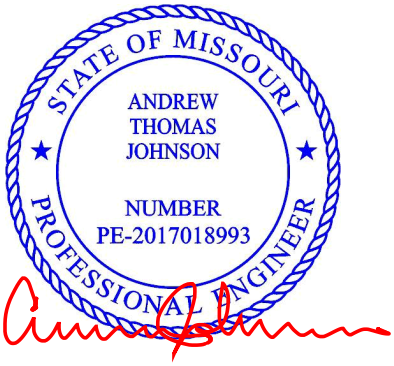
Re: 2686850
SUMMIT/WOODSIDE RIDGE #37/MO

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: I44976682 thru I44976756

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

Missouri COA: Engineering 001193



February 26,2021

Johnson, Andrew ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	B01	Hip Girder	1	1	I44976682

Job Reference (optional)

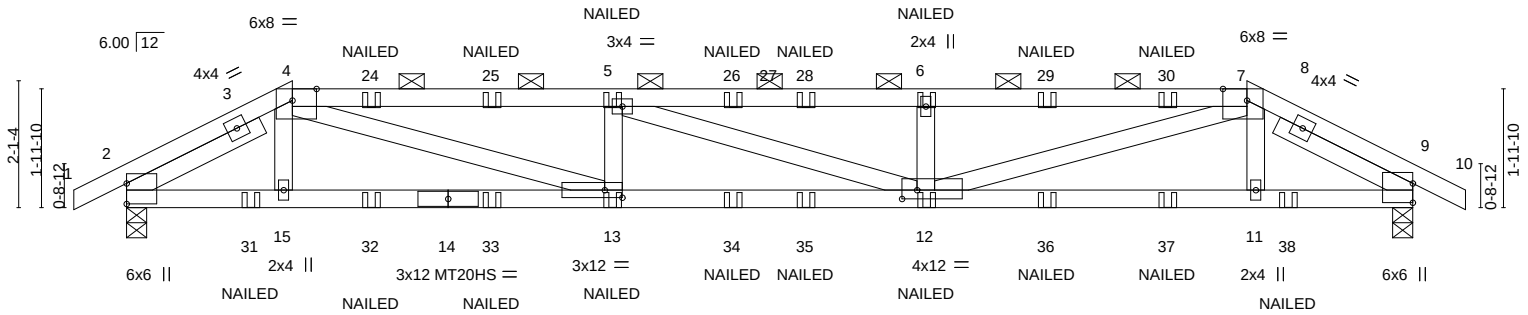
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:13 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-fy6k6bKXbyILunQQyrhcIiGO5wcKvzo9YFoGRkzhJYy

0-10-8 2-9-0 8-0-15 13-3-1 18-7-0 21-4-0 22-2-8

0-10-8 2-9-0 5-3-15 5-2-3 5-3-15 2-9-0 0-10-8

Scale = 1:38.2



2-9-0 8-0-15 13-3-1 18-7-0 21-4-0

2-9-0 5-3-15 5-2-3 5-3-15 2-9-0

Plate Offsets (X,Y)-- [4:0-4-13,Edge], [7:0-4-13,Edge], [12:0-3-0,0-1-12], [13:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.24	12-13	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.53	12-13	>481	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 93 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 4-7: 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP 2400F 2.0E *Except* 2-14: 2x4 SPF 1650F 1.5E

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 or 2-4-13 oc purlins, except 2-0-0 oc purlins (2-7-2 max.): 4-7.

BOT CHORD Rigid ceiling directly applied or 7-6-7 oc bracing.

REACTIONS. (size) 2=0-4-0, 9=0-4-0
Max Horz 2=-30(LC 13)
Max Uplift 2=-407(LC 8), 9=-407(LC 9)
Max Grav 2=1835(LC 1), 9=1835(LC 1)

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

TOP CHORD 2-4=-2846/643, 4-5=-5422/1259, 5-6=-5411/1257, 6-7=-5414/1258, 7-9=-2842/643

BOT CHORD 2-15=-545/2504, 13-15=-546/2491, 12-13=-1233/5419, 11-12=-531/2496, 9-11=-530/2508

WEBS 4-13=-748/3106, 5-13=-731/250, 6-12=-722/246, 7-12=-745/3093

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=407, 9=407.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
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: 1-4=-90, 4-7=-90, 7-10=-90, 16-20=-20

February 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

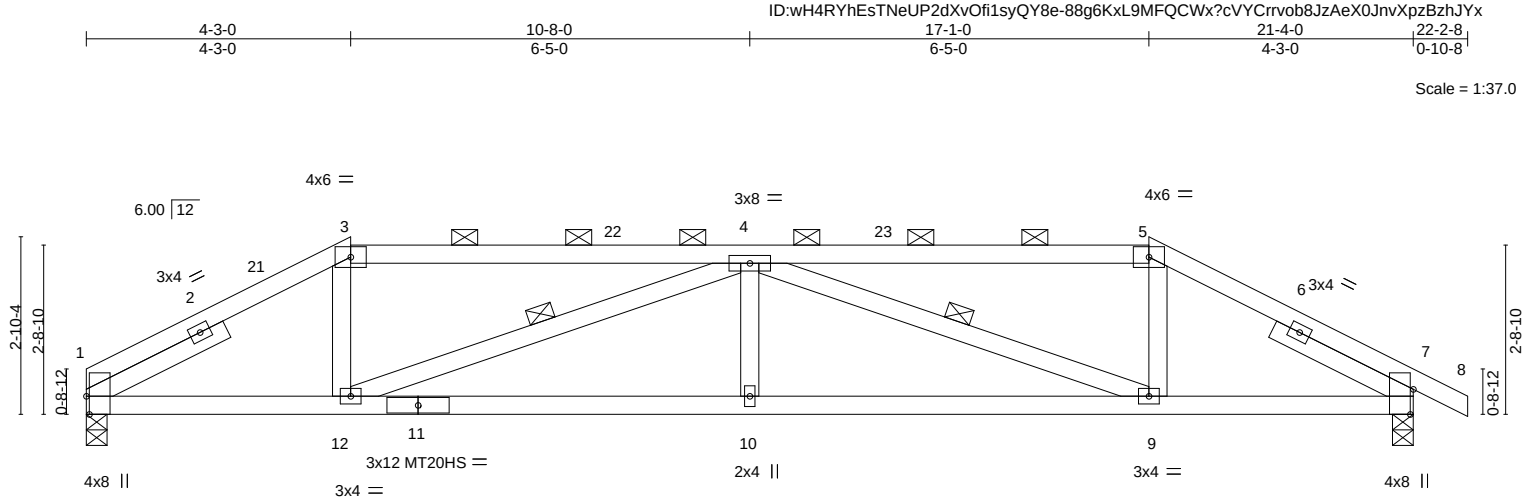
Concentrated Loads (lb)

Vert: 13=-41(F) 5=-57(F) 6=-57(F) 12=-41(F) 24=-57(F) 25=-57(F) 26=-57(F) 28=-57(F) 29=-57(F) 30=-57(F) 31=-192(F) 32=-41(F) 33=-41(F) 34=-41(F) 35=-41(F) 36=-41(F) 37=-41(F) 38=-192(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	B02	Hip	1	1	I44976683

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:14 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-88g6KxL9MFQCWx?cVYCrrvob8JzAeX0JnvXpzBzhJYx



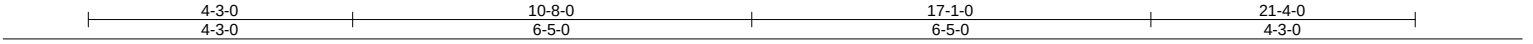


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [7:0-4-13,Edge]

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	0.72	Vert(LL)	-0.12	10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.28	9-10	>924	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 80 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
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, except 2-0-0 oc purlins (3-7-11 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-12, 4-9

REACTIONS. (size) 1=0-4-0, 7=0-4-0
Max Horz 1=-51(LC 17)
Max Uplift 1=-168(LC 12), 7=-189(LC 13)
Max Grav 1=1172(LC 1), 7=1254(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1879/301, 3-4=-1627/294, 4-5=-1616/277, 5-7=-1870/286
BOT CHORD 1-12=-225/1651, 10-12=-418/2752, 9-10=-418/2752, 7-9=-201/1641
WEBS 3-12=-26/480, 4-12=-1276/252, 4-10=0/289, 4-9=-1283/253, 5-9=-26/481

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 4-3-0, Exterior(2R) 4-3-0 to 8-5-15, Interior(1) 8-5-15 to 17-1-0, Exterior(2R) 17-1-0 to 21-4-0, Interior(1) 21-4-0 to 22-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=168, 7=189.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

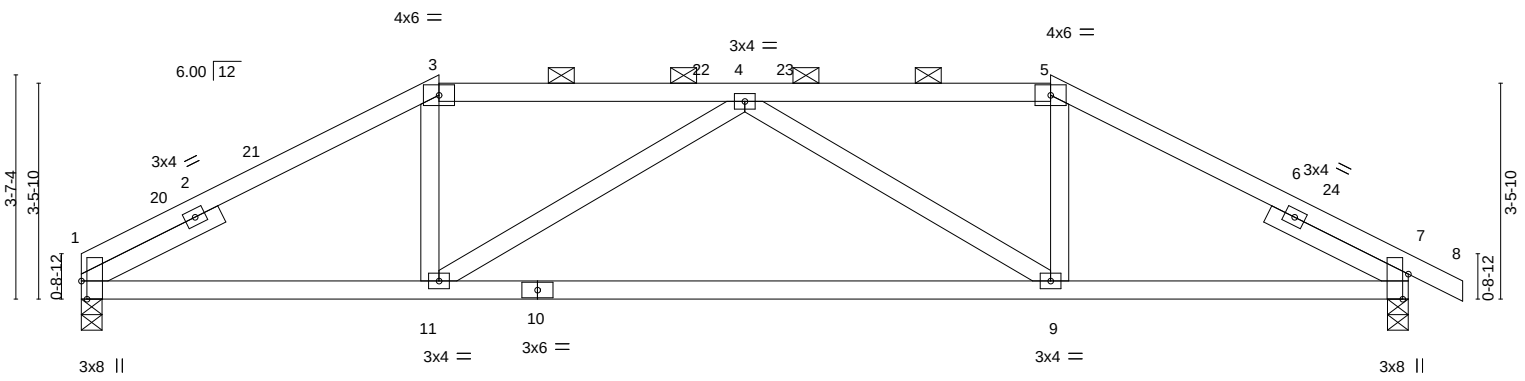
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	B03	Hip	1	1	I44976684
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:15 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-cKEUXGLn7ZY375ap3Gj4N7LrLjHqNzIS?ZHNVdzhJYw

5-9-0 | 10-8-0 | 15-7-0 | 21-4-0 | 22-2-8
5-9-0 | 4-11-0 | 4-11-0 | 5-9-0 | 0-10-8

Scale = 1:37.0



5-9-0 | 15-7-0 | 21-4-0
5-9-0 | 9-10-0 | 5-9-0

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [7:0-4-13,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	0.44	Vert(LL)	-0.26	9-11	>979	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.58	9-11	>439	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 77 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, except 2-0-0 oc purlins (4-3-13 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 7=0-4-0
Max Horz 1=-64(LC 17)
Max Uplift 1=-167(LC 12), 7=-187(LC 13)
Max Grav 1=1172(LC 1), 7=1254(LC 1)

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

TOP CHORD	1-3=-1841/282, 3-4=-1573/284, 4-5=-1565/283, 5-7=-1835/272
BOT CHORD	1-11=-186/1589, 9-11=-270/1987, 7-9=-162/1582
WEBS	3-11=-15/472, 4-11=-591/184, 4-9=-597/184, 5-9=-15/472

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 5-9-0, Exterior(2R) 5-9-0 to 9-11-15, Interior(1) 9-11-15 to 15-7-0, Exterior(2R) 15-7-0 to 19-9-15, Interior(1) 19-9-15 to 22-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 1=167, 7=187.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	B04	Hip	1	1	I44976685
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:16 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-4XotlcMQutgvlE9?dzFJwKu0S7je6SGcED0w23zhJYv

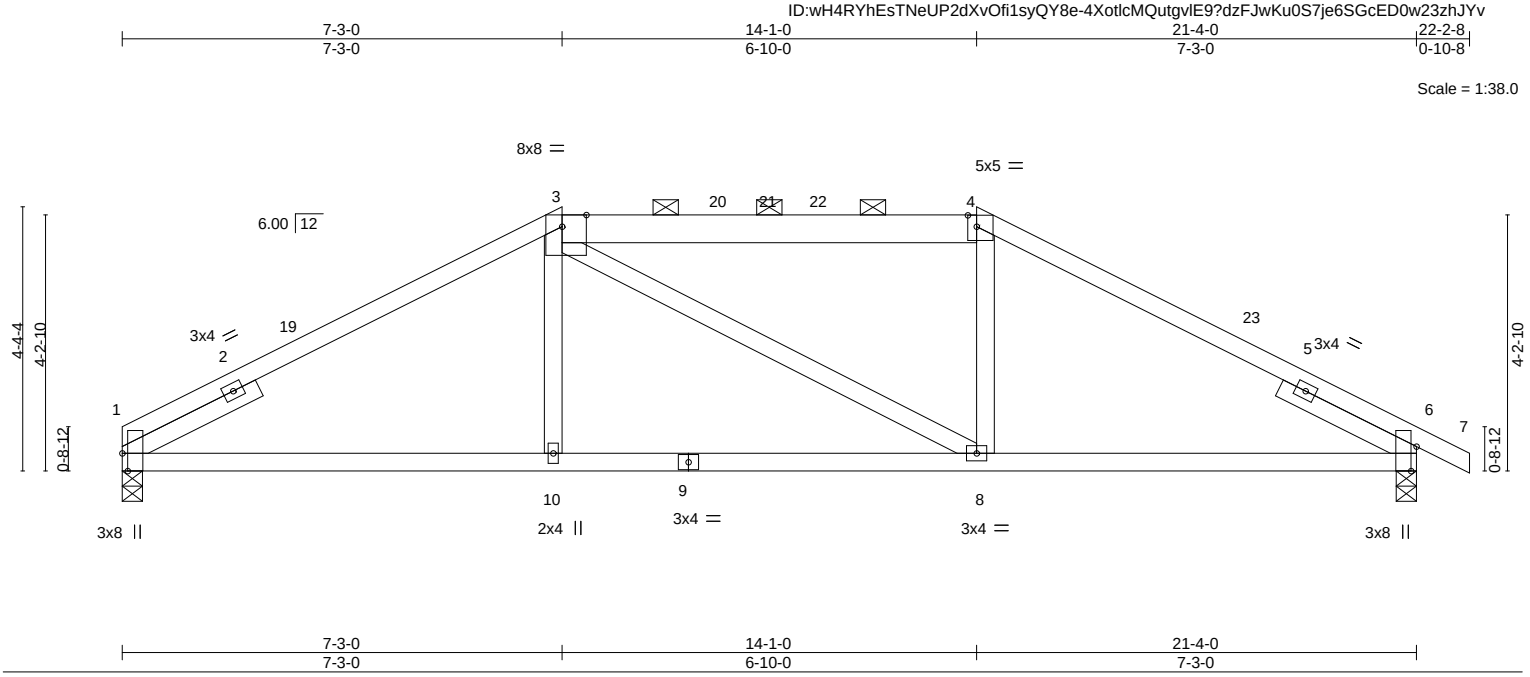


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [3:0-4-13,Edge], [4:0-1-12,0-2-4], [6:0-4-13,Edge]

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	0.42	Vert(LL)	-0.06	8-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.14	8-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 79 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x6 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, except 2-0-0 oc purlins (5-4-12 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 6=0-4-0
Max Horz 1=-78(LC 17)
Max Uplift 1=-164(LC 12), 6=-184(LC 13)
Max Grav 1=1172(LC 1), 6=1254(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1705/292, 3-4=-1479/314, 4-6=-1701/292
BOT CHORD 1-10=-179/1489, 8-10=-181/1484, 6-8=-167/1485
WEBS 3-10=0/282, 4-8=0/282

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 Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-3-0, Exterior(2R) 7-3-0 to 11-5-15, Interior(1) 11-5-15 to 14-1-0, Exterior(2R) 14-1-0 to 18-3-15, Interior(1) 18-3-15 to 22-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 1=164, 6=184.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	B05	Hip	1	1	I44976686

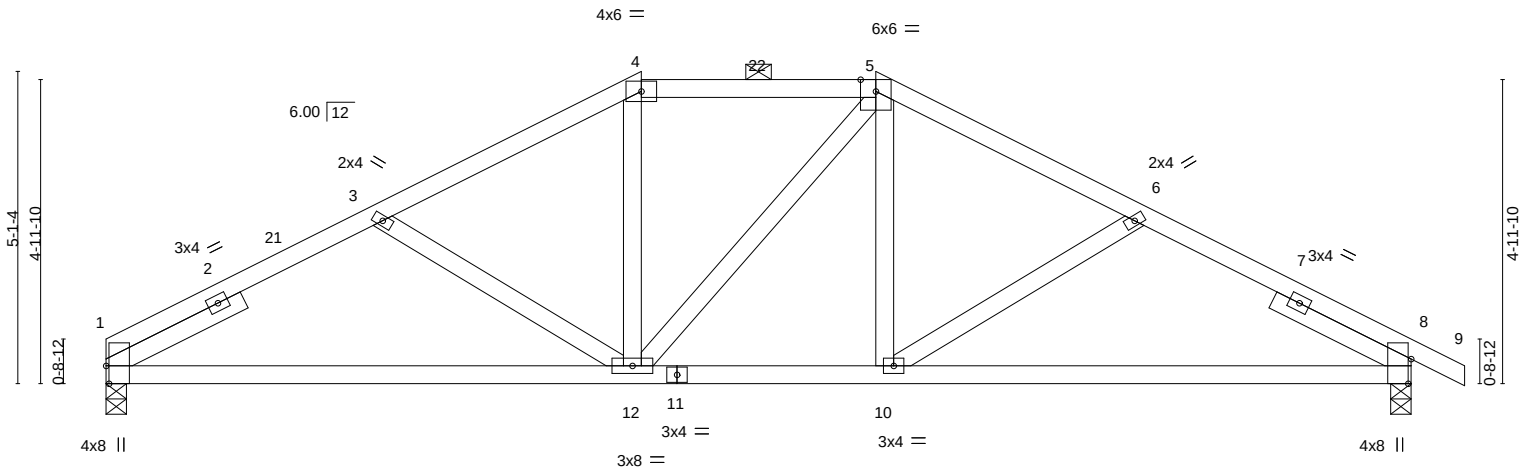
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:17 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-YjMFyyN2fAomNOkBBhmYTYQDrX1drwglTsmTaWzhJYu

4-6-4	8-9-0	12-7-0	16-9-12	21-4-0	22-2-8
4-6-4	4-2-12	3-10-0	4-2-12	4-6-4	0-10-8

Scale = 1:37.7



8-9-0	12-7-0	21-4-0
8-9-0	3-10-0	8-9-0

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [8:0-4-13,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	0.31	Vert(LL)	-0.10	10-19	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.21	10-19	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 86 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, except 2-0-0 oc purlins (5-0-4 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 8=0-4-0
Max Horz 1=-91(LC 13)
Max Uplift 1=-161(LC 12), 8=-182(LC 13)
Max Grav 1=1172(LC 1), 8=1254(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1797/325, 3-4=-1548/286, 4-5=-1311/291, 5-6=-1544/288, 6-8=-1789/328
BOT CHORD 1-12=-257/1564, 10-12=-125/1309, 8-10=-226/1554
WEBS 3-12=-307/156, 4-12=-26/308, 5-10=-31/306, 6-10=-299/154

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-9-0, Exterior(2E) 8-9-0 to 12-7-0, Exterior(2R) 12-7-0 to 16-11-8, Interior(1) 16-11-8 to 22-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 1=161, 8=182.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	B06	Hip	1	1	I44976687
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:18 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0vvdAIOgQUwd_YJNkOHn?lzNowOMaLRvhWV16yzhJYt

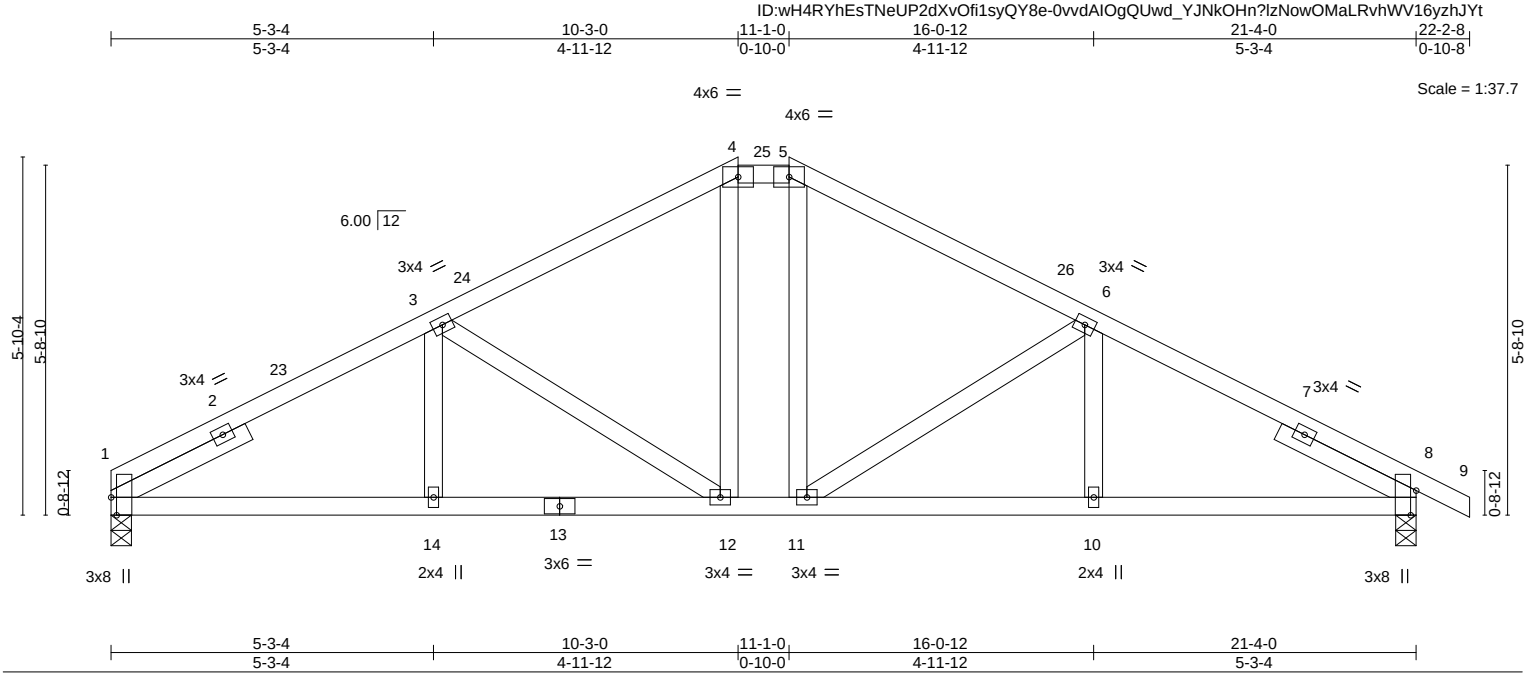


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [8:0-4-13,Edge]

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	0.36	Vert(LL)	-0.05	10-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.13	10-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 89 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, except 2-0-0 oc purlins (5-1-1 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 8=0-4-0
Max Horz 1=-104(LC 17)
Max Uplift 1=-158(LC 12), 8=-179(LC 13)
Max Grav 1=1172(LC 1), 8=1254(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1804/278, 3-4=-1406/266, 4-5=-1168/263, 5-6=-1405/261, 6-8=-1797/274
BOT CHORD 1-14=-242/1561, 12-14=-242/1561, 11-12=-86/1168, 10-11=-177/1553, 8-10=-177/1553
WEBS 3-12=-516/184, 4-12=-52/311, 5-11=-47/308, 6-11=-506/183

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 10-3-0, Exterior(2E) 10-3-0 to 11-1-0, Exterior(2R) 11-1-0 to 15-3-15, Interior(1) 15-3-15 to 22-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 1=158, 8=179.
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.

February 26,2021

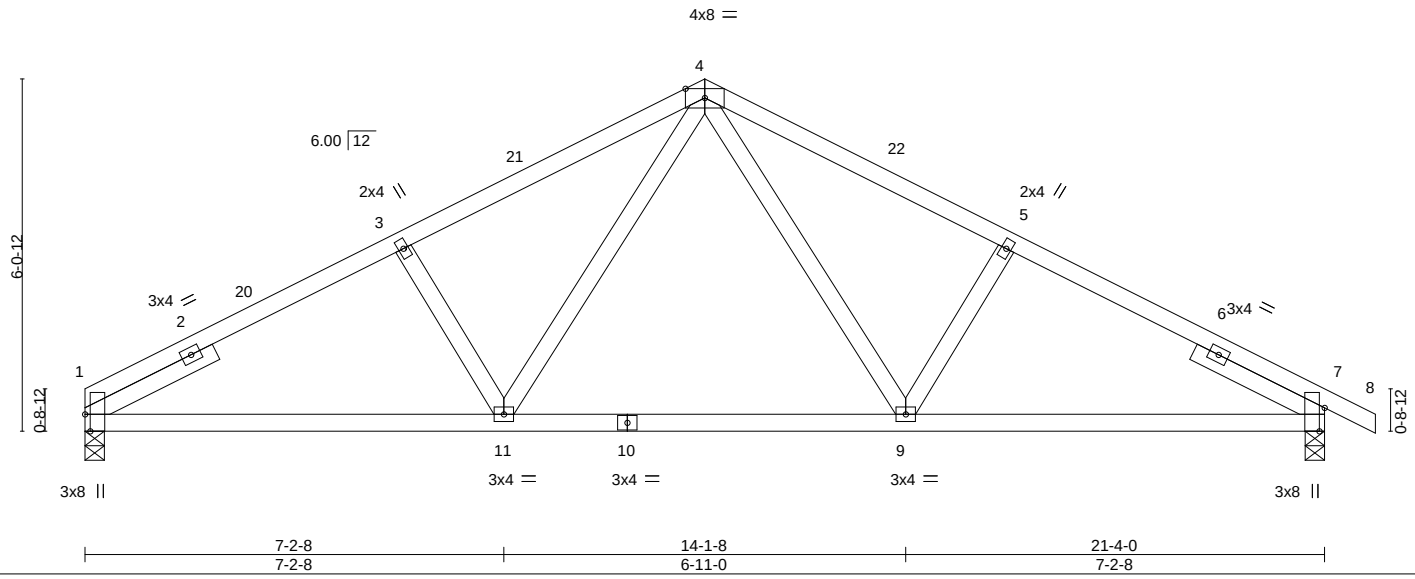
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	B07	Common	4	1	I44976688
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:19 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-U5T?NePIBo2Uciual5o0YzWX8KkhJq52wAFaeOzhJYs

5-5-12	10-8-0	15-10-4	21-4-0	22-2-8
5-5-12	5-2-4	5-2-4	5-5-12	0-10-8

Scale = 1:39.7



7-2-8	14-1-8	21-4-0
7-2-8	6-11-0	7-2-8

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [7:0-4-13,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	0.39	Vert(LL)	-0.06	9-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.17	9-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 81 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=0-4-0, 7=0-4-0
Max Horz 1=-109(LC 13)
Max Uplift 1=-157(LC 12), 7=-177(LC 13)
Max Grav 1=1172(LC 1), 7=1254(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1795/351, 3-4=-1636/370, 4-5=-1631/363, 5-7=-1790/345
BOT CHORD 1-11=-247/1553, 9-11=-92/1105, 7-9=-225/1545
WEBS 4-9=-126/545, 5-9=-387/189, 4-11=-127/553, 3-11=-392/190

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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 22-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 1=157, 7=177.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C01	HIP GIRDER	1	2	I44976689

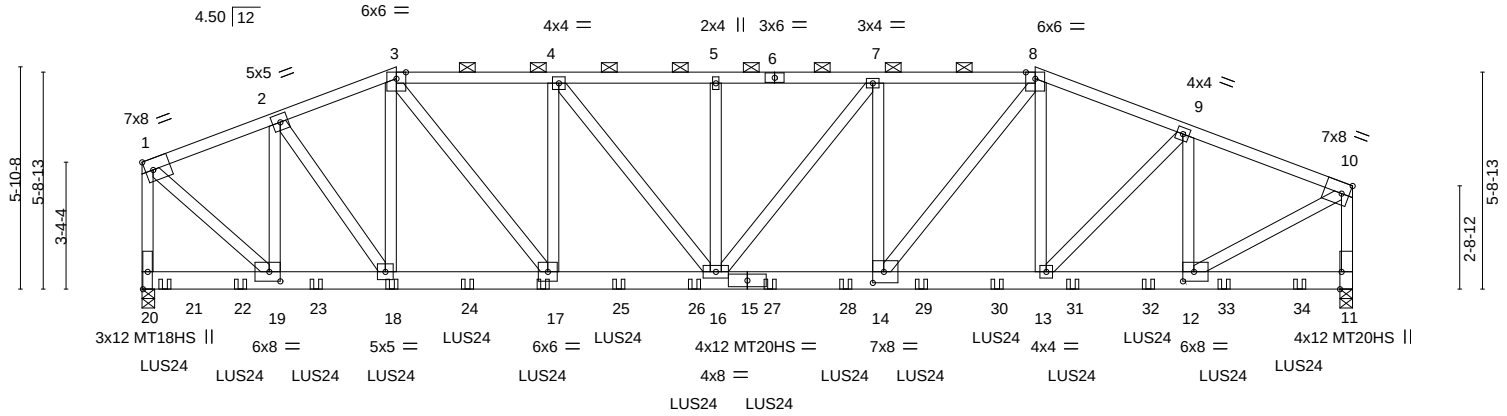
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:21 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-QUbmoKQYiPICr02yQWqUdOboK8RlnYQLOUkhjHzhJYq

3-6-1	6-8-11	10-10-7	15-2-0	19-5-9	23-7-5	27-7-15	32-0-0
3-6-1	3-2-9	4-1-13	4-3-9	4-3-9	4-1-13	4-0-9	4-4-1

Scale = 1:60.9



3-6-1	6-8-11	10-10-7	15-2-0	19-5-9	23-7-5	27-7-15	32-0-0
3-6-1	3-2-9	4-1-13	4-3-9	4-3-9	4-1-13	4-0-9	4-4-1

Plate Offsets (X,Y)-- [10:0-2-7,Edge], [11:0-5-8,Edge], [12:0-3-8,0-3-0], [14:0-3-8,0-3-8], [19:0-3-8,0-3-0]

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	0.73	Vert(LL)	-0.18	14-16	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.40	14-16	>949	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.07	11	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 411 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-10-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-3 max.): 3-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 20=0-4-0, 11=0-4-0
Max Horz 20=-95(LC 6)
Max Uplift 20=-1326(LC 4), 11=-1221(LC 5)
Max Grav 20=7000(LC 1), 11=6961(LC 1)

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

TOP CHORD 1-2=-5248/1014, 2-3=-7102/1386, 3-4=-9333/1756, 4-5=-10501/1895, 5-7=-10501/1895, 7-8=-10142/1803, 8-9=-8646/1540, 9-10=-7103/1247, 1-20=-6298/1220, 10-11=-6358/1129

BOT CHORD 18-19=-915/4862, 17-18=-1242/6687, 16-17=-1681/9329, 14-16=-1728/10138, 13-14=-1392/8081, 12-13=-1171/6588

WEBS 2-19=-3311/648, 2-18=-553/3103, 3-18=-1315/171, 3-17=-722/4389, 4-17=-2029/330, 4-16=-259/1917, 5-16=-378/120, 7-16=-215/648, 7-14=-1048/287, 8-14=-574/3453, 9-13=-332/2204, 9-12=-2315/425, 1-19=-1239/6455, 10-12=-1296/7448

NOTES-

1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 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) 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) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
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) except (jt=lb) 20=1326, 11=1221.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-7-4 from the left end to 6-7-4 to connect truss(es) to front face of bottom chord.

February 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 8-7-4 from the left end to 22-7-4 to connect truss(es) to front face of bottom chord.
13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 24-7-4 from the left end to 30-7-4 to connect truss(es) to front face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-90, 3-8=-90, 8-10=-90, 11-20=-20
   Concentrated Loads (lb)
   Vert: 18=-609(F) 17=-609(F) 21=-615(F) 22=-609(F) 23=-609(F) 24=-609(F) 25=-609(F) 26=-724(F) 27=-724(F) 28=-724(F) 29=-724(F) 30=-724(F) 31=-645(F) 32=-645(F) 33=-645(F) 34=-645(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C02	Roof Special	1	1	I44976690
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:22 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-vg98?gRATjQ3T9c9zELjAb8y1YkUW2oUc8TEFjzhJYp

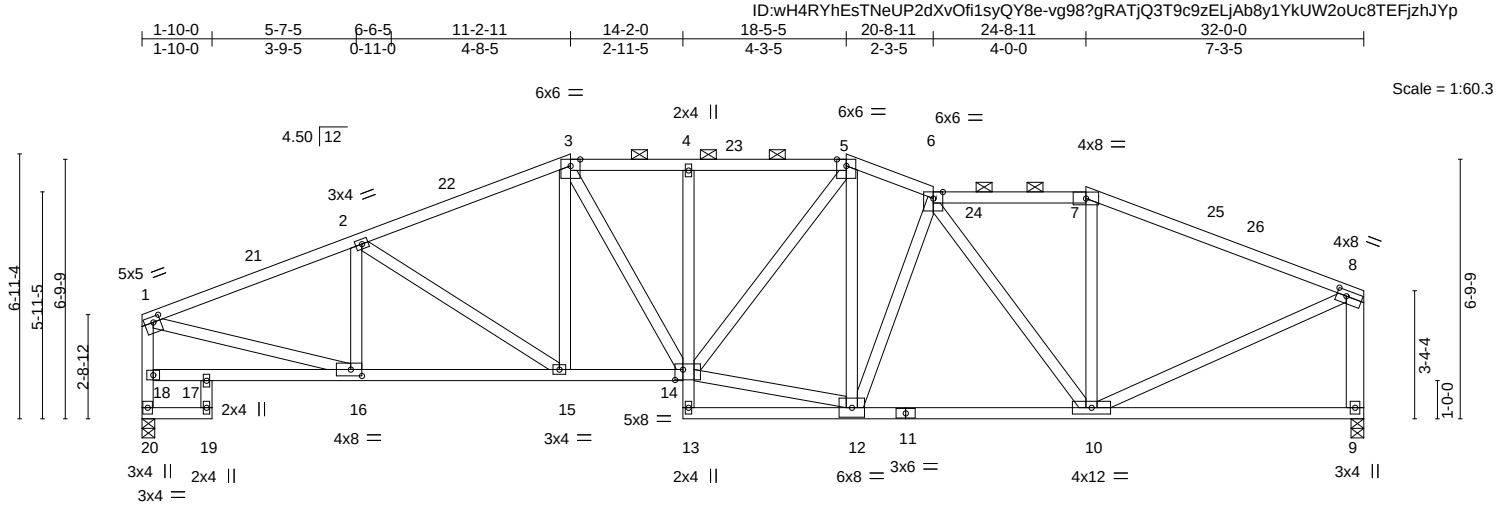


Plate Offsets (X,Y)-- [1:0-2-4,0-1-12], [8:0-3-0,0-1-12], [14:0-2-8,0-3-4], [16:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.11	4	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.24	4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 170 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
8-9: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-4-14 max.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 20=0-4-0, 9=0-4-0
Max Horz 20=89(LC 11)
Max Uplift 20=-257(LC 8), 9=-281(LC 9)
Max Grav 20=1739(LC 1), 9=1739(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2537/430, 2-3=-2522/451, 3-4=-2478/481, 4-5=-2474/482, 5-6=-2242/423, 6-7=-1700/338, 7-8=-1924/318, 18-20=-1705/270, 1-18=-1665/269, 8-9=-1669/306
BOT CHORD 17-18=-116/252, 16-17=-178/272, 15-16=-446/2301, 14-15=-395/2278, 4-14=-413/122, 10-12=-377/2187
WEBS 3-14=-109/537, 12-14=-345/1992, 5-14=-125/727, 6-12=-358/142, 6-10=-829/149, 8-10=-262/1740, 2-16=-494/151, 1-16=-307/2199

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 11-2-11, Exterior(2R) 11-2-11 to 14-3-12, Interior(1) 14-3-12 to 18-5-5, Exterior(2E) 18-5-5 to 20-8-11, Interior(1) 20-8-11 to 24-8-11, Exterior(2R) 24-8-11 to 27-8-11, Interior(1) 27-8-11 to 31-9-4 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
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) 20=257, 9=281.
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.

February 26,2021

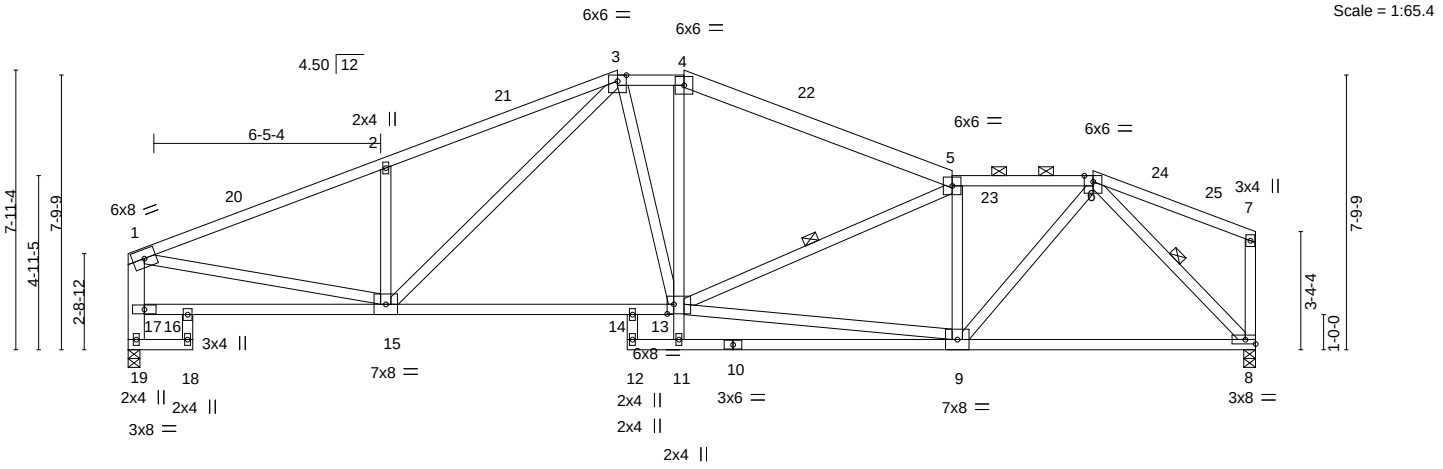
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C03	Roof Special	1	1	I44976691
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:23 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-NtjWD?SpE0Yw5JBLXxtyipg97x4FFYJeroDoo9zhJYo

1-10-0	7-3-12	13-10-11	15-9-5	23-4-11	27-4-11	32-0-0
1-10-0	5-5-12	6-6-15	1-10-11	7-7-5	4-0-0	4-7-5

Scale = 1:65.4



1-10-0	7-3-12	14-2-0	15-9-5	23-4-11	27-4-11	32-0-0
1-10-0	5-5-12	6-10-4	1-7-5	7-7-5	4-0-0	4-7-5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.12	8-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.31	14-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.10	8	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* 4-5: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* 1-19: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-6-13 max.): 3-4, 5-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-13, 6-8

REACTIONS. (size) 19=0-4-0, 8=0-4-0
Max Horz 19=77(LC 9)
Max Uplift 19=-236(LC 8), 8=-262(LC 9)
Max Grav 19=1739(LC 1), 8=1739(LC 1)

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

TOP CHORD	1-2=-2680/421, 2-3=-2663/509, 3-4=-2153/426, 4-5=-2391/417, 5-6=-2323/376, 17-19=-1680/249, 1-17=-1651/262
BOT CHORD	16-17=-173/438, 15-16=-209/383, 14-15=-338/2078, 13-14=-338/2078, 8-9=-261/1420
WEBS	1-15=-319/2162, 2-15=-642/254, 11-13=0/375, 4-13=-47/364, 5-9=-1252/257, 6-9=-174/1443, 3-15=-200/561, 9-13=-386/2315, 5-13=-386/144, 3-13=-97/492, 6-8=-1979/339

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) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 13-10-11, Exterior(2E) 13-10-11 to 15-9-5, Exterior(2R) 15-9-5 to 18-9-5, Interior(1) 18-9-5 to 27-4-11, Exterior(2R) 27-4-11 to 30-4-11, Interior(1) 30-4-11 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 19=236, 8=262.
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.

February 26,2021

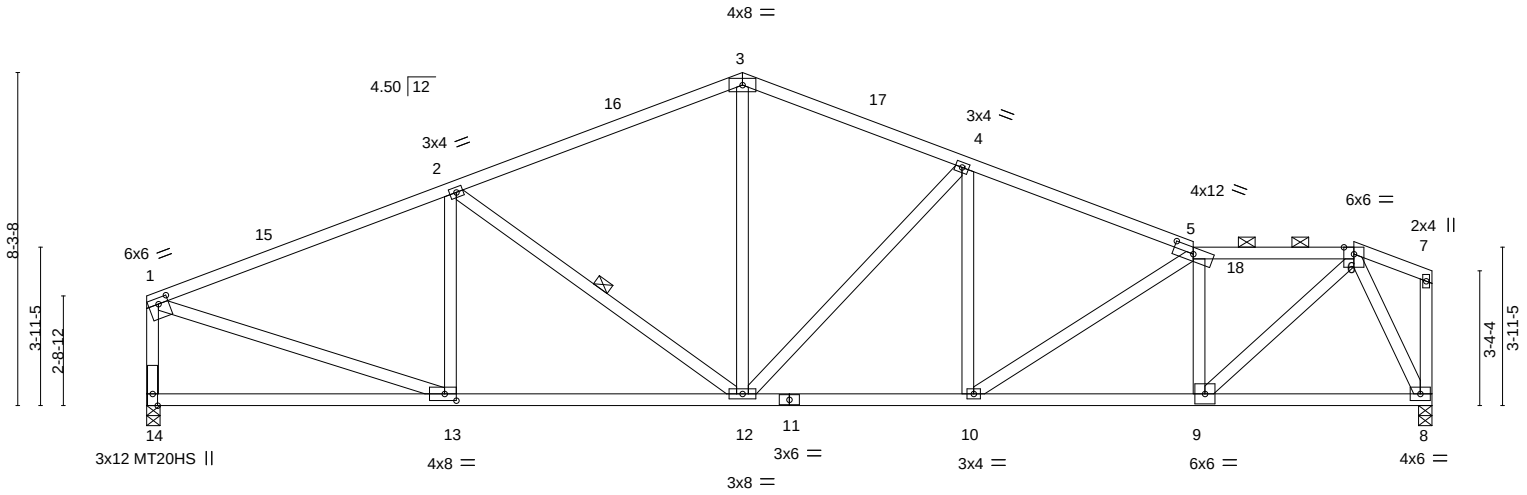
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C04	Roof Special	1	1	I44976692
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:24 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-r3HuQLSR?KgniTmX5fOBF0DJRLQj_vNn4SyLKczhJYn

7-6-12	14-10-0	20-5-5	26-0-11	30-0-11	32-0-0
7-6-12	7-3-4	5-7-5	5-7-5	4-0-0	1-11-5

Scale = 1:57.4



7-6-12	14-10-0	20-5-5	26-0-11	30-0-11	32-0-0
7-6-12	7-3-4	5-7-5	5-7-5	4-0-0	1-11-5

Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [5:0-6-0,0-1-15], [13:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.10	10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.23	12-13	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 151 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-8-12 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-12

REACTIONS. (size) 14=0-4-0, 8=0-4-0
Max Horz 14=73(LC 9)
Max Uplift 14=-230(LC 12), 8=-256(LC 9)
Max Grav 14=1744(LC 1), 8=1744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2229/311, 2-3=-2004/346, 3-4=-1967/351, 4-5=-2457/360, 5-6=-2220/316, 1-14=-1669/256
BOT CHORD 12-13=-323/1989, 10-12=-322/2214, 9-10=-347/2269, 8-9=-159/807
WEBS 2-13=-478/145, 2-12=-419/171, 3-12=-98/782, 4-12=-730/202, 5-9=-1247/231, 6-9=-254/1963, 1-13=-236/1971, 6-8=-1800/308

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 14-10-0, Exterior(2R) 14-10-0 to 17-10-0, Interior(1) 17-10-0 to 30-0-11, Exterior(2E) 30-0-11 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=230, 8=256.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

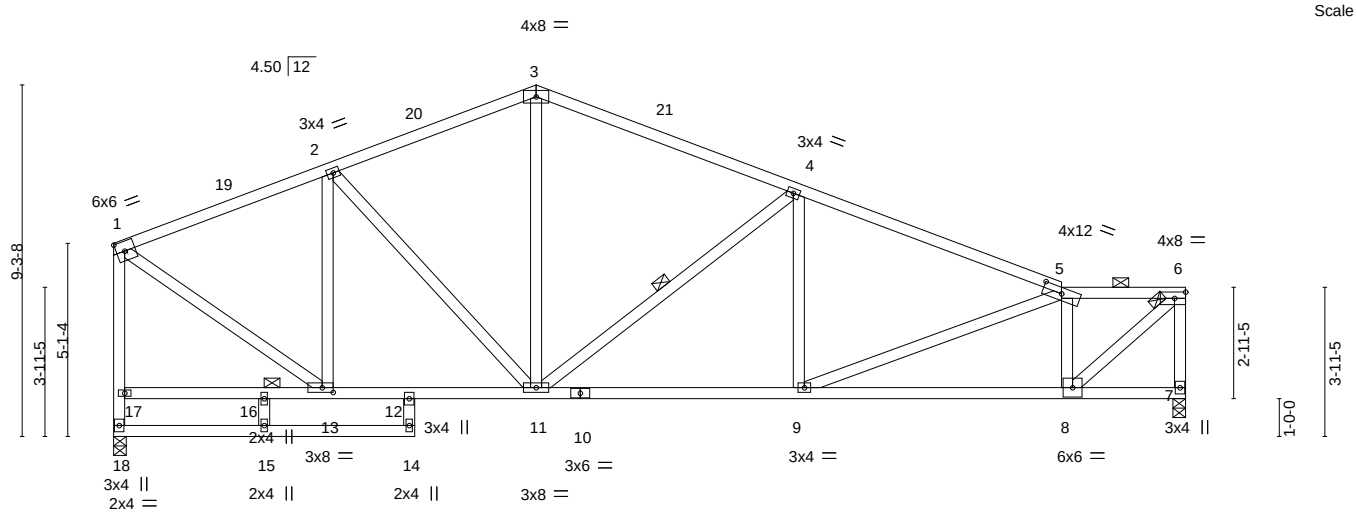
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C05	Roof Special	1	1	I44976693
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:25 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-JFrGehT3mdoeKdLkfMvQnEmVAlnajRfxI6ius2zhJYm

5-7-14	7-11-8	11-2-0	18-1-5	25-0-11	28-4-0
5-7-14	2-3-10	3-2-8	6-11-5	6-11-5	3-3-5

Scale = 1:60.9



3-11-12	5-7-14	7-11-8	11-2-0	18-1-5	25-0-11	28-4-0
3-11-12	1-8-2	2-3-10	3-2-8	6-11-5	6-11-5	3-3-5

Plate Offsets (X,Y)-- [5:0-6-0,0-1-15], [13:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.07	9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.18	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 147 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-4-8 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-11
JOINTS 1 Brace at Jt(s): 6, 16

REACTIONS. (size) 7=0-4-0, 18=0-4-0
Max Horz 18=-141(LC 10)
Max Uplift 7=-234(LC 13), 18=-205(LC 8)
Max Grav 7=1542(LC 1), 18=1542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1354/256, 2-3=-1506/312, 3-4=-1537/318, 4-5=-2183/326, 5-6=-1589/217, 6-7=-1519/233, 17-18=-1499/242, 1-17=-1478/238
BOT CHORD 12-13=-153/1169, 11-12=-219/1195, 9-11=-297/1945, 8-9=-267/1656
WEBS 3-11=-65/495, 4-11=-829/227, 5-9=-42/310, 5-8=-1293/260, 6-8=-309/2097, 2-11=-43/300, 2-13=-722/161, 1-13=-202/1411

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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0 , Interior(1) 14-2-0 to 28-2-4 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
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) 7=234, 18=205.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C06	ROOF SPECIAL	1	1	I44976694
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:26 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-nSOfr1UhXxwVynwwC4QfKRIdf932SvN4XmRSOUzhJYI

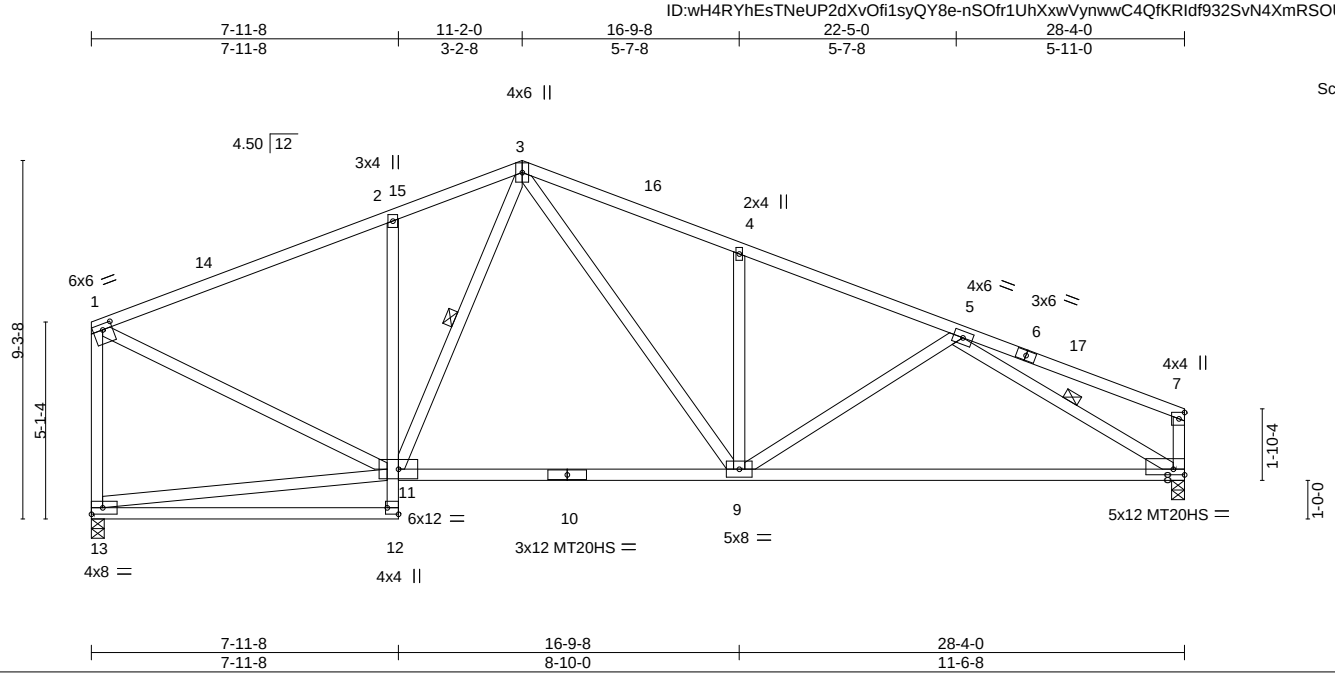


Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [8:Edge,0-1-12], [12:Edge,0-3-8]

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	0.88	Vert(LL)	-0.33	8-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.69	8-9	>487	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 142 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
8-10: 2x4 SPF 1650F 1.5E
WEBS 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 3-11, 5-8

REACTIONS. (size) 13=0-4-0, 8=0-4-0
Max Horz 13=-148(LC 10)
Max Uplift 13=-206(LC 8), 8=-228(LC 13)
Max Grav 13=1542(LC 1), 8=1542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1553/291, 2-3=-1494/360, 3-4=-2077/408, 4-5=-2067/329, 5-7=-308/63, 1-13=-1472/245, 7-8=-323/83
BOT CHORD 2-11=-599/235, 9-11=-141/1294, 8-9=-294/1895
WEBS 4-9=-542/206, 3-9=-231/1004, 3-11=-123/272, 5-8=-2019/343, 1-11=-201/1446

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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0 , Interior(1) 14-2-0 to 28-2-4 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=206, 8=228.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

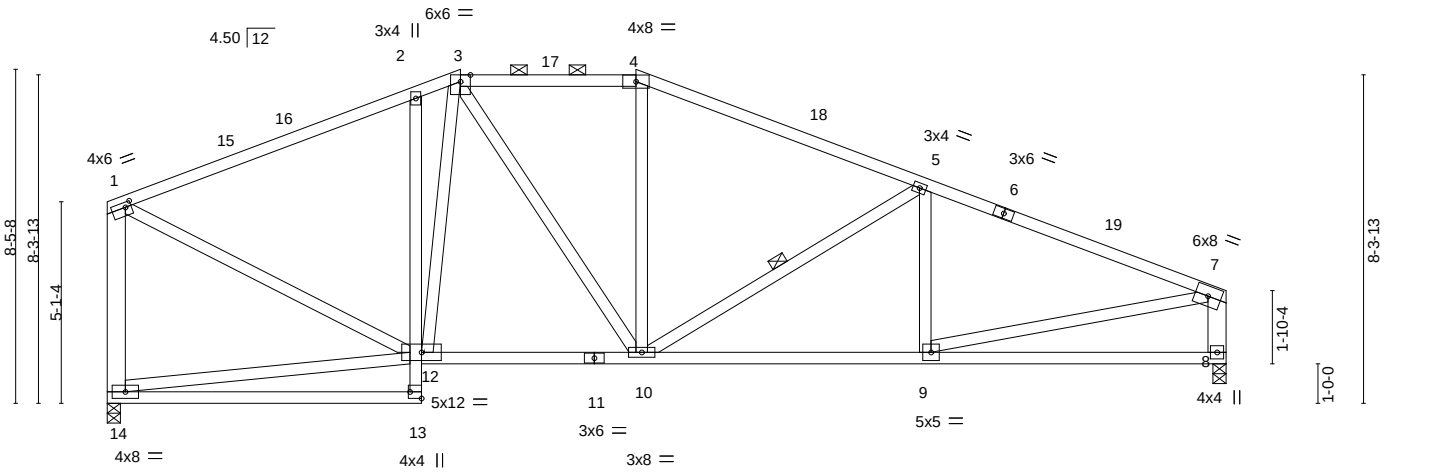
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C07	HIP	1	1	I44976695
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:27 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Fey12NVJIF3MZxV6mnxutfrp8ZSoBM9DmQB?xwzhJYk

7-11-8 | 8-11-5 | 13-4-11 | 20-8-9 | 28-4-0
7-11-8 | 0-11-13 | 4-5-5 | 7-3-15 | 7-7-7

Scale = 1:58.3



7-11-8 | 13-4-11 | 20-8-9 | 28-4-0
7-11-8 | 5-5-3 | 7-3-15 | 7-7-7

Plate Offsets (X,Y)-- [1:0-1-12,0-1-8], [13: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	0.71	Vert(LL)	-0.09	13-14	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.19	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 151 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
1-14,7-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-4-14 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-10

REACTIONS. (size) 14=0-4-0, 8=0-4-0
Max Horz 14=-159(LC 10)
Max Uplift 14=-228(LC 8), 8=-233(LC 9)
Max Grav 14=1533(LC 1), 8=1533(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1526/294, 2-3=-1460/352, 3-4=-1551/342, 4-5=-1777/328, 5-7=-2254/355, 1-14=-1458/250, 7-8=-1456/260
BOT CHORD 2-12=-569/241, 10-12=-158/1300, 9-10=-296/2010
WEBS 3-10=-134/539, 5-10=-572/195, 5-9=-255/120, 7-9=-247/1832, 1-12=-196/1404

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) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 8-11-5, Exterior(2E) 8-11-5 to 13-4-11, Exterior(2R) 13-4-11 to 17-7-9, Interior(1) 17-7-9 to 28-1-4 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
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) 14=228, 8=233.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	C08	HIP GIRDER	1	2	I44976696

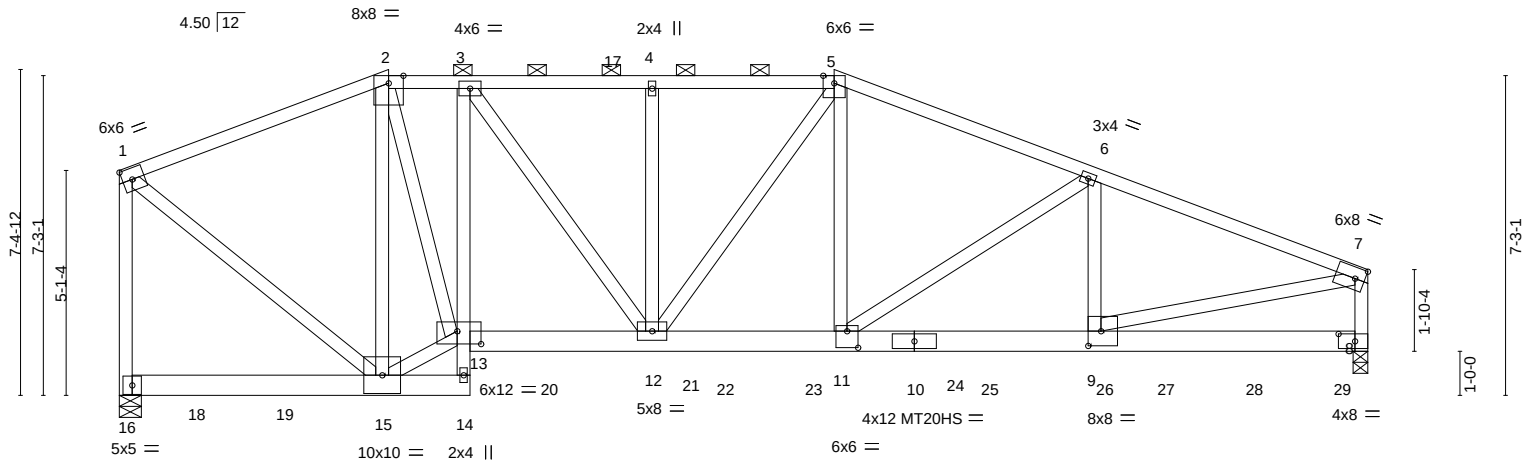
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:29 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-B14nT3WZqsJ3pEfVuC_My4wAXM8gf8WWDkg6?pzhJYi

3-2-7	6-1-5	7-11-8	12-1-1	16-2-11	22-1-9	28-4-0
3-2-7	2-10-15	1-10-3	4-1-9	4-1-9	5-10-15	6-2-7

Scale = 1:52.3



6-1-5	7-11-8	12-1-1	16-2-11	22-1-9	28-4-0
6-1-5	1-10-3	4-1-9	4-1-9	5-10-15	6-2-7

Plate Offsets (X,Y)-- [8:0-4-8,0-2-0], [9:0-3-8,0-4-0], [11:0-3-0,0-4-8], [13:0-6-8,0-3-8]

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	0.65	Vert(LL)	-0.15	9-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.32	9-11	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 338 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 5-7: 2x4 SPF 1650F 1.5E

BOT CHORD 2x6 SPF 2100F 1.8E *Except* 14-16: 2x6 SPF No.2, 3-14: 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-10 max.): 2-5.

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

REACTIONS. (size) 8=0-4-0, 16=0-6-0
Max Horz 16=-165(LC 6)
Max Uplift 8=-1225(LC 5), 16=-1186(LC 4)
Max Grav 8=6406(LC 1), 16=6146(LC 1)

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

TOP CHORD 1-2=-4813/987, 2-3=-5966/1237, 3-4=-7444/1535, 4-5=-7448/1536, 5-6=-7994/1631, 6-7=-8762/1708, 1-16=-5462/1081, 7-8=-5239/1038

BOT CHORD 14-15=-64/326, 3-13=-2363/500, 12-13=-1104/6013, 11-12=-1403/7365, 9-11=-1572/8118, 8-9=-104/448

WEBS 1-15=-1092/5653, 2-15=-3730/700, 13-15=-856/4766, 2-13=-1009/5288, 5-11=-481/2273, 6-11=-850/221, 6-9=-339/376, 7-9=-1514/7909, 4-12=-522/153, 5-12=-29/305, 3-12=-515/2465

NOTES-

1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc, 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) 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) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Bearing at joint(s) 8, 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=1225, 16=1186.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 703 lb down and 138 lb up at 1-8-12, 703 lb down and 155 lb up at 3-8-12, 703 lb down and 193 lb up at 5-8-12, 712 lb down and 128 lb up at 7-9-12, 671 lb down and 141 lb up at 9-8-12, 671 lb down and 141 lb up at 11-8-12, 671 lb down and 141 lb up at 13-8-12, 671 lb down and 141 lb up at 15-8-12, 671 lb down and 200 lb up at 17-8-12, 671 lb down and 162 lb up at 19-8-12, 643 lb down and 125 lb up at 21-8-12, 658 lb down and 129 lb up at 23-8-12, and 658 lb down and 136 lb up at 25-8-12, and 663 lb down and 135 lb up at 27-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-90, 2-5=-90, 5-7=-90, 14-16=-20, 8-13=-20
   Concentrated Loads (lb)
   Vert: 14=-712(F) 15=-703(F) 18=-703(F) 19=-703(F) 20=-671(F) 21=-671(F) 22=-671(F) 23=-671(F) 24=-671(F) 25=-671(F) 26=-643(F) 27=-658(F) 28=-658(F) 29=-663(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D01	HALF HIP GIRDER	1	1	I44976697

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:30 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-gDe9hPXCbARwQOEhRvVbUHTNAmSoOk1gSOPfXFzhJYh

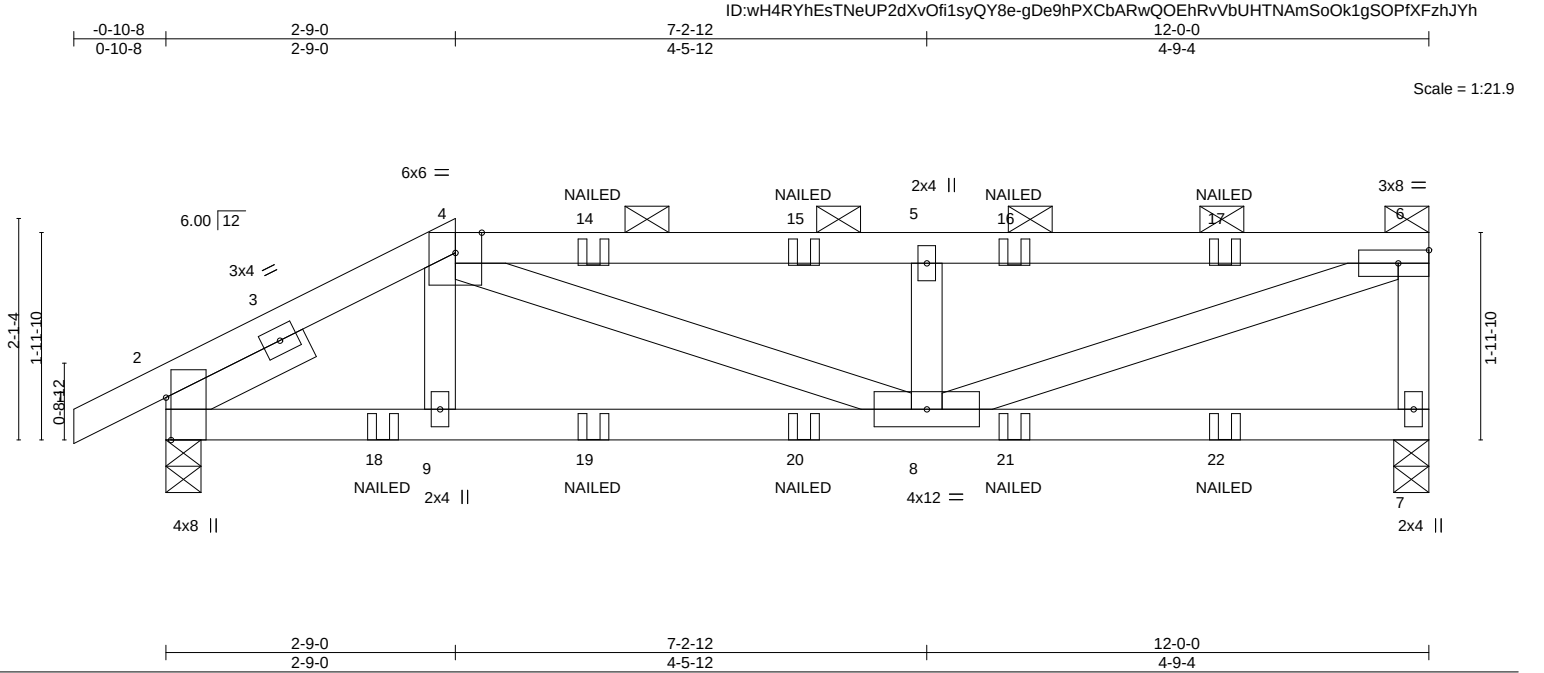


Plate Offsets (X,Y)-- [2:0-4-13,Edge]

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	0.53	Vert(LL)	-0.05	8-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.11	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 46 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-5-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-9 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-4-0, 2=0-4-0
Max Horz 2=72(LC 7)
Max Uplift 7=-211(LC 5), 2=-209(LC 8)
Max Grav 7=916(LC 1), 2=1050(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1433/304, 4-5=-1784/411, 5-6=-1781/409, 6-7=-837/218
BOT CHORD 2-9=-305/1248, 8-9=-305/1234
WEBS 4-8=-169/629, 5-8=-632/219, 6-8=-425/1800

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) 7=211, 2=209.
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) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-6=-90, 7-10=-20
Concentrated Loads (lb)
Vert: 14=-57(F) 15=-57(F) 16=-57(F) 17=-57(F) 18=-192(F) 19=-41(F) 20=-41(F) 21=-41(F) 22=-41(F)

February 26,2021

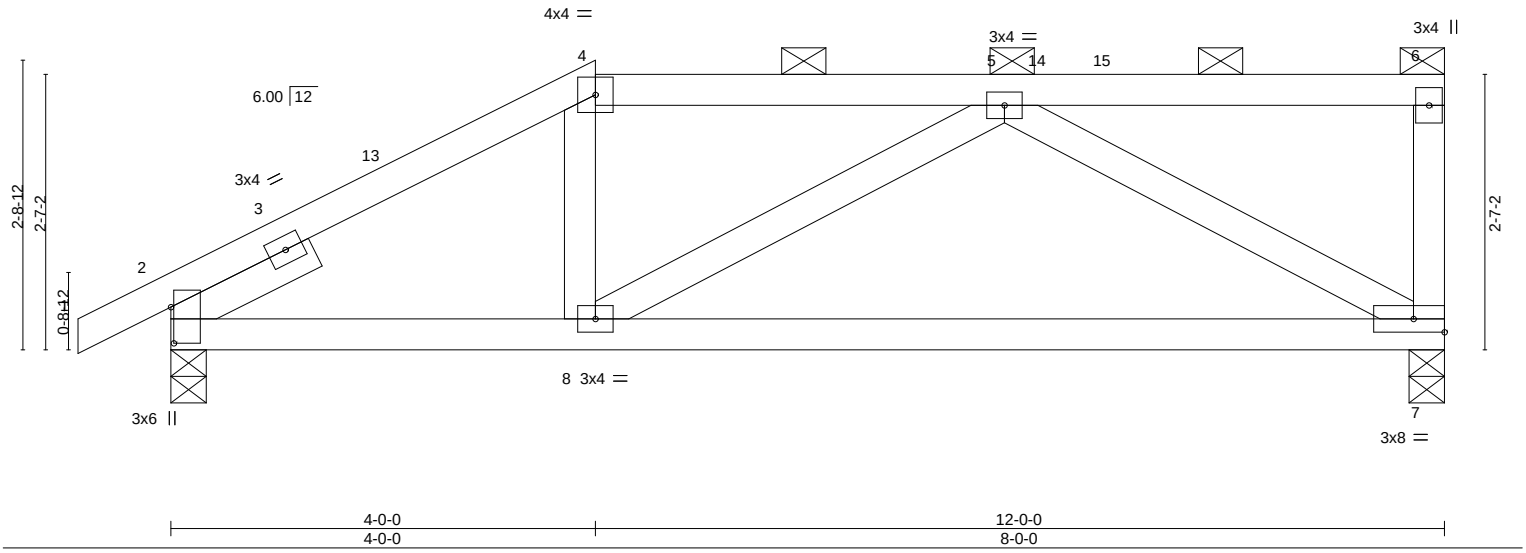
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D02	HALF HIP	1	1	I44976698
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:31 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-8PCYulYqMTZn2Yot?d0q1V?cfArP7DIph29D4izhJYg

-0-10-8 4-0-0 7-10-4 12-0-0
0-10-8 4-0-0 3-10-4 4-1-12

Scale = 1:21.7



4-0-0 12-0-0
4-0-0 8-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.10	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.22	7-8	>651	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	7	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 1-6-0

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

REACTIONS. (size) 2=0-4-0, 7=0-4-0
Max Horz 2=98(LC 11)
Max Uplift 2=-91(LC 12), 7=-119(LC 9)
Max Grav 2=734(LC 1), 7=649(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-922/220, 4-5=-769/227
BOT CHORD 2-8=-246/774, 7-8=-251/766
WEBS 5-7=-810/261

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2R) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 2 except (jt=lb) 7=119.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D03	HALF HIP	1	1	I44976699

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:32 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-ccmw64ZS7nhegiN4ZKX3aiYhiaDisb_yviumc8zhJYf

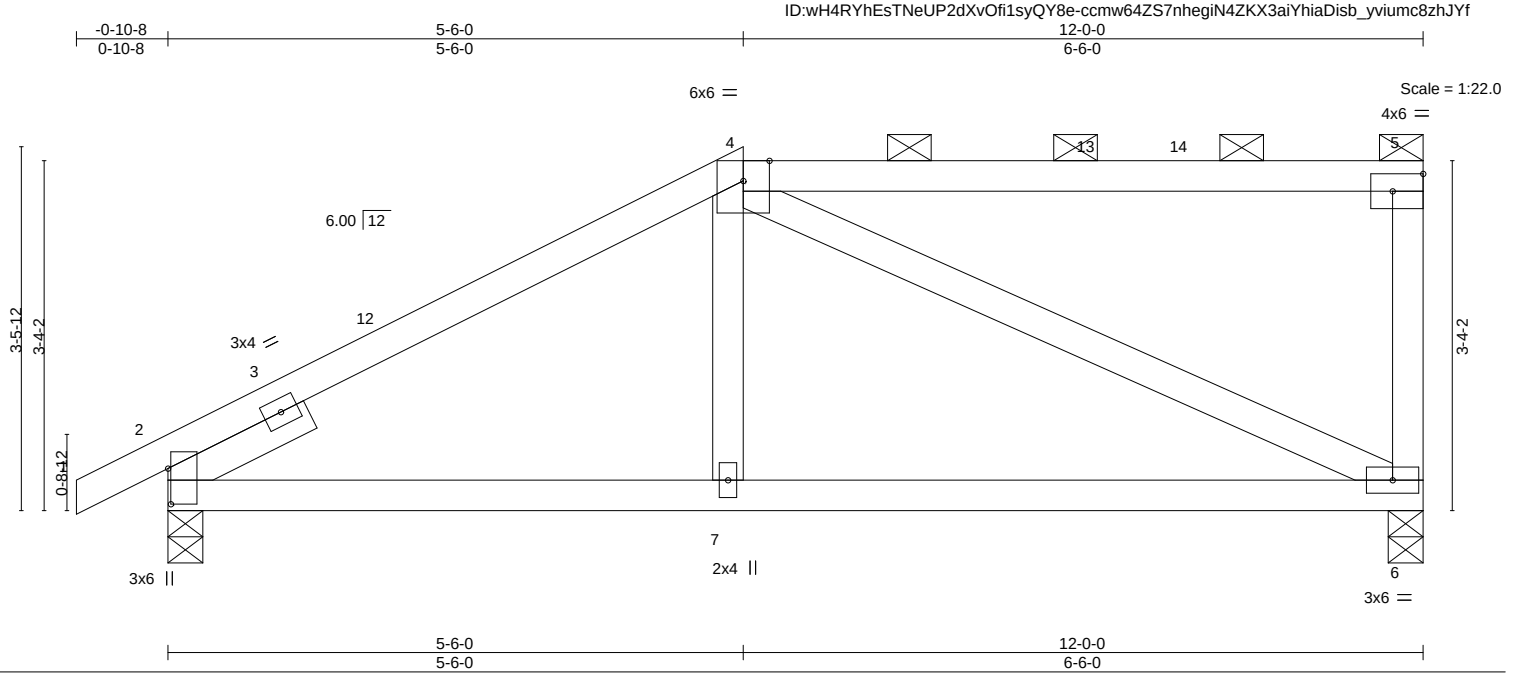


Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [5:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.09	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 45 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 1-6-0

BRACING-

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

REACTIONS. (size) 2=0-4-0, 6=0-4-0
Max Horz 2=129(LC 11)
Max Uplift 2=-103(LC 12), 6=-117(LC 9)
Max Grav 2=734(LC 1), 6=649(LC 1)

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

TOP CHORD	2-4=-851/212, 5-6=-292/112
BOT CHORD	2-7=-273/701, 6-7=-275/695
WEBS	4-6=-680/248

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-6-0, Exterior(2R) 5-6-0 to 9-8-15, Interior(1) 9-8-15 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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=103, 6=117.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D04	HALF HIP	1	1	I44976700

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:32 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-ccmw64ZS7nhegiN4ZKX3aiYjRaBbsdAyviumc8zhJYf

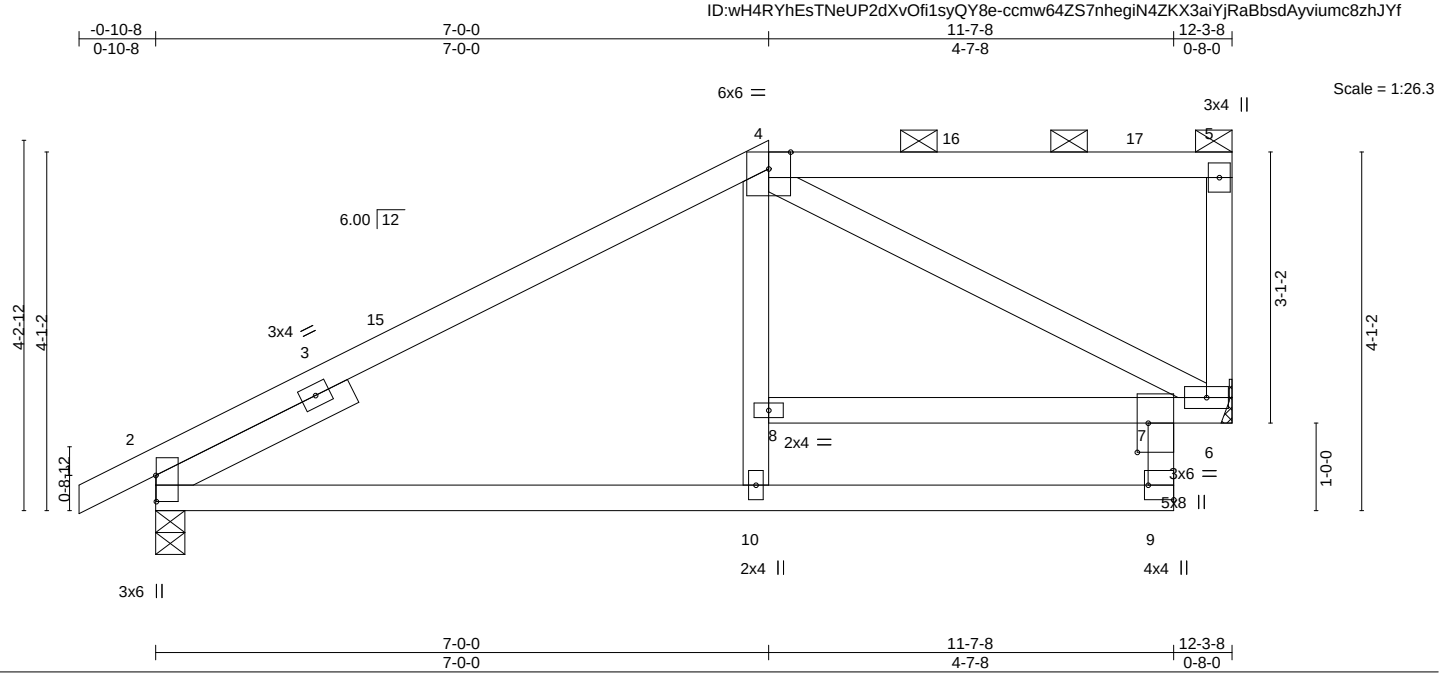


Plate Offsets (X,Y)-- [2:0-3-9,0-0-1], [7:0-4-0,0-1-8], [9:Edge,0-3-8]

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	0.54	Vert(LL)	0.07	10-13	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.16	10-13	>936	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 53 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 6=Mechanical, 2=0-4-0
Max Horz 2=139(LC 9)
Max Uplift 6=-116(LC 9), 2=-112(LC 12)
Max Grav 6=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-692/179
BOT CHORD 2-10=-235/588, 9-10=-145/393, 7-8=-125/259, 6-7=-270/652
WEBS 4-6=-732/274

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 12-1-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=116, 2=112.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D05	HALF HIP	1	1	I44976701
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:33 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-4oJIJQZ4u5pVHsyG722I6w5zNzX5b7268MeJ8azhJYe

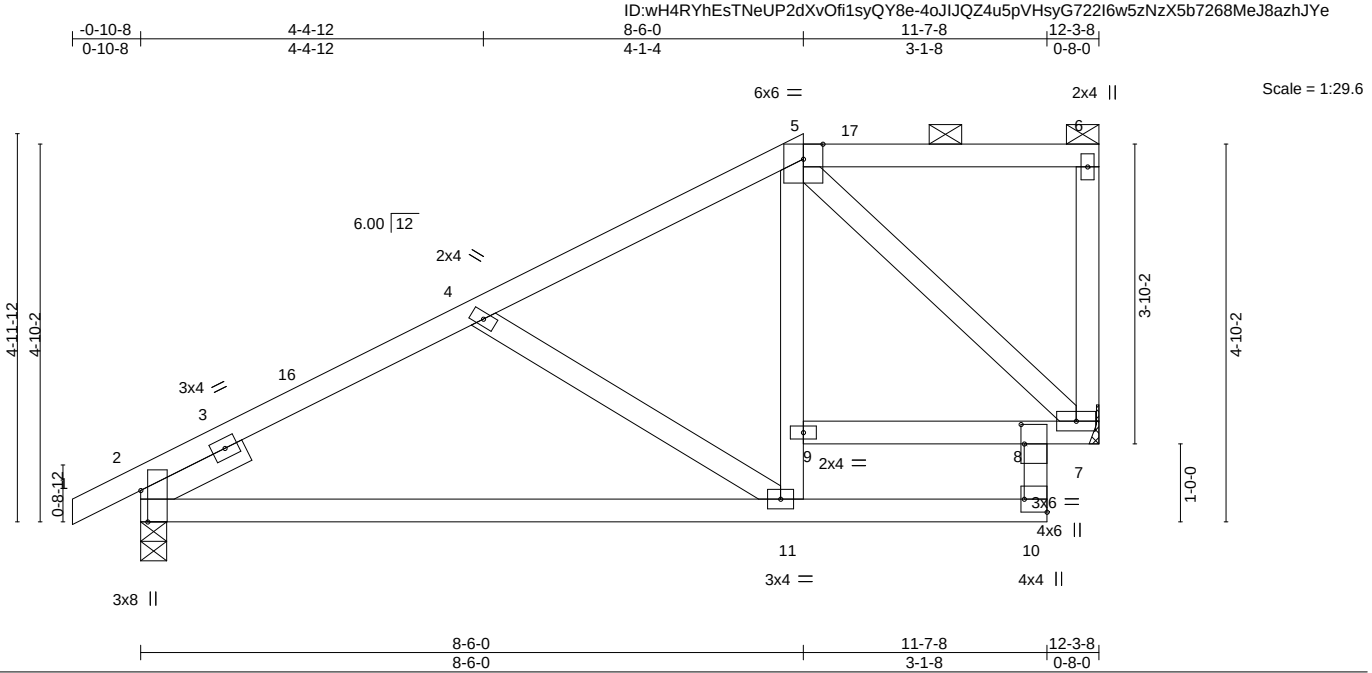


Plate Offsets (X,Y)-- [2:0-4-13,Edge], [8:0-3-0,0-0-8], [10:Edge,0-3-8]

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	0.21	Vert(LL)	-0.09	11-14	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.19	11-14	>781	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 56 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 1-6-0

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=170(LC 9)
Max Uplift 7=-111(LC 9), 2=-116(LC 12)
Max Grav 7=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-829/206, 4-5=-537/150
BOT CHORD 2-11=-345/736, 10-11=-134/306, 7-8=-190/423
WEBS 4-11=-389/196, 9-11=-26/352, 5-9=-25/325, 5-7=-586/208

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-6-0, Exterior(2E) 8-6-0 to 12-1-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=111, 2=116.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D06	HALF HIP	1	1	I44976702

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:34 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Y_tgXmaieOxMv?XSglZXf7d6BNqGKaXFN0Ntg1zhJYd

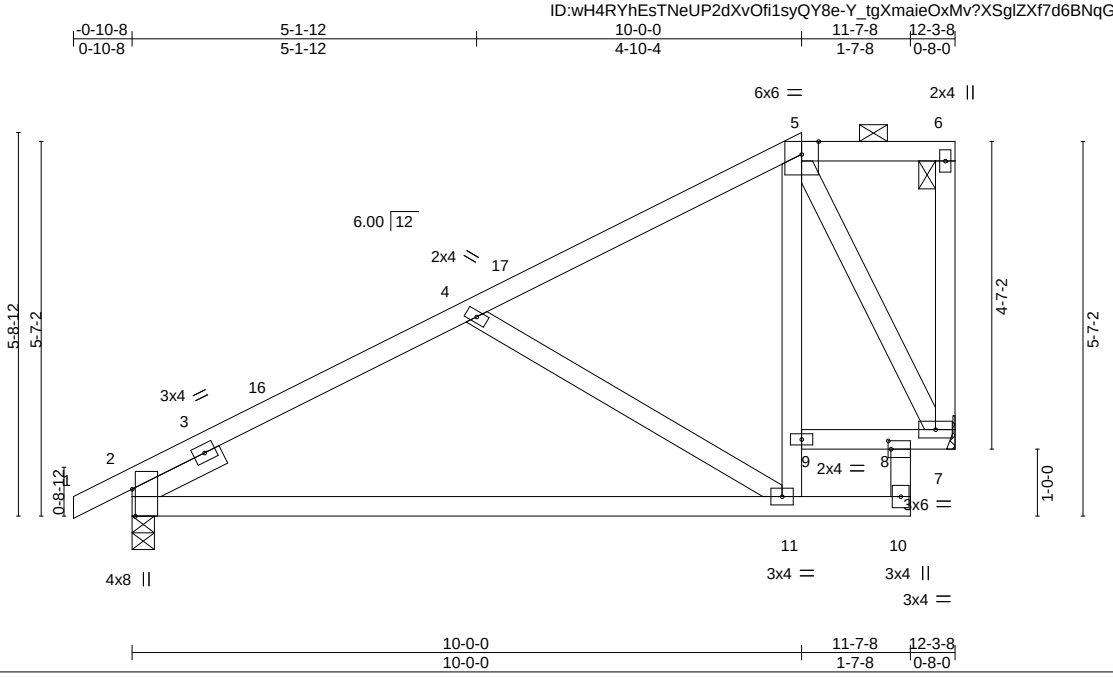


Plate Offsets (X,Y)-- [2:0-4-13,Edge], [8:0-0-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.16	11-14	>939	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.32	11-14	>456	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 57 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 1-6-0

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=201(LC 9)
Max Uplift 7=-114(LC 12), 2=-116(LC 12)
Max Grav 7=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-798/195, 4-5=-408/120
BOT CHORD 2-11=-331/705, 7-8=-137/270
WEBS 4-11=-509/231, 9-11=-26/499, 5-9=-48/427, 5-7=-605/198

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 12-1-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=114, 2=116.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D07	HALF HIP	1	1	I44976703

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:35 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0AR2k6bKPi3DX96fET4mBLAHCnCw3zWPcg7QDTzhJYc

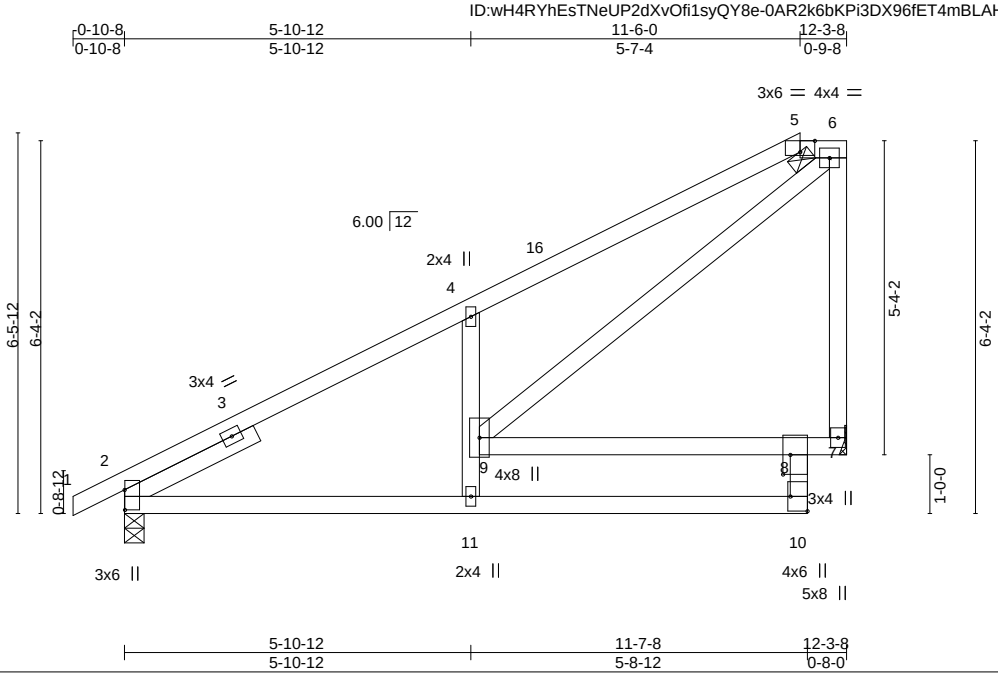


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [5:0-3-0,Edge], [8:0-4-0,0-1-8], [10:Edge,0-3-8]

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	0.38	Vert(LL)	-0.05	11-14	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.11	11-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 59 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=232(LC 9)
Max Uplift 7=-145(LC 12), 2=-112(LC 12)
Max Grav 7=665(LC 25), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-745/156, 4-5=-976/290, 5-6=-760/293, 6-7=-543/266
BOT CHORD 2-11=-284/666, 10-11=-134/421, 8-9=-429/167
WEBS 4-9=-573/310, 6-9=-367/999

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-6-0, Exterior(2E) 11-6-0 to 12-1-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=145, 2=112.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D08	JACK-CLOSED	5	1	I44976704
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:36 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-UN?QxScyA0B49JhroAc?kYjPIBYgoOZYqKs_lvzhJYb

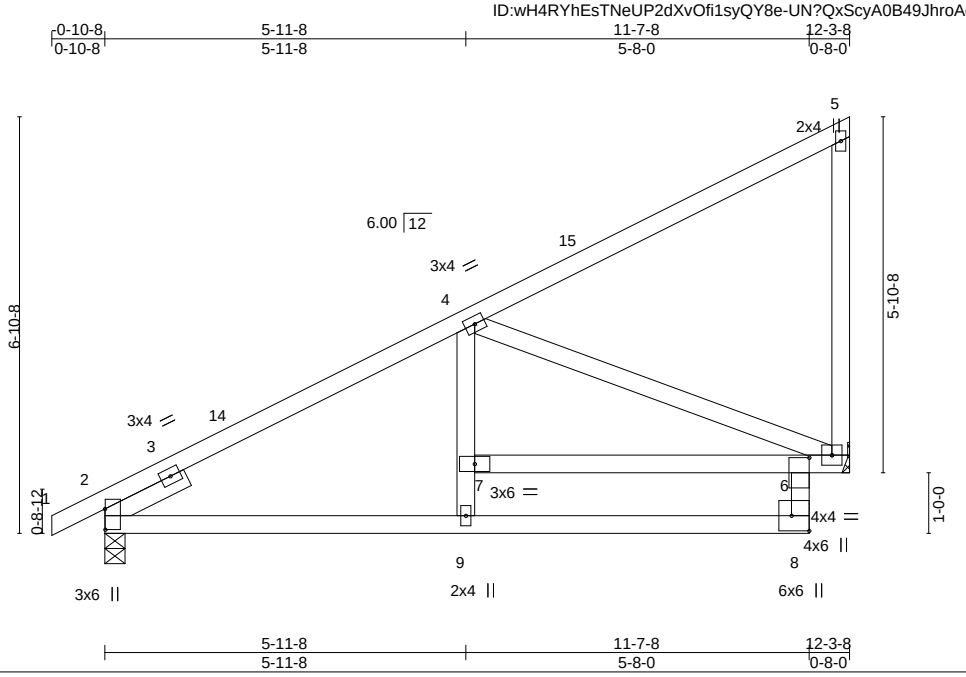


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [6:0-0-8,0-4-8], [8:Edge,0-3-8]

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	0.55	Vert(LL)	-0.06	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.11	9-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 57 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 1-6-0

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

REACTIONS. (size) 2=0-4-0, 6=Mechanical
Max Horz 2=225(LC 12)
Max Uplift 2=-57(LC 12), 6=-88(LC 12)
Max Grav 2=781(LC 1), 6=744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-846/8
BOT CHORD 2-9=-201/730, 8-9=-78/445, 6-8=-40/350, 6-7=-175/403
WEBS 4-7=0/289, 4-6=-910/271

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-12 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, 6.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D09	JACK-CLOSED	3	1	I44976705
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:36 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-UN?QxScyA0B49JhroAc?kYjR9BbyoQcYqKs_lvzhJYb

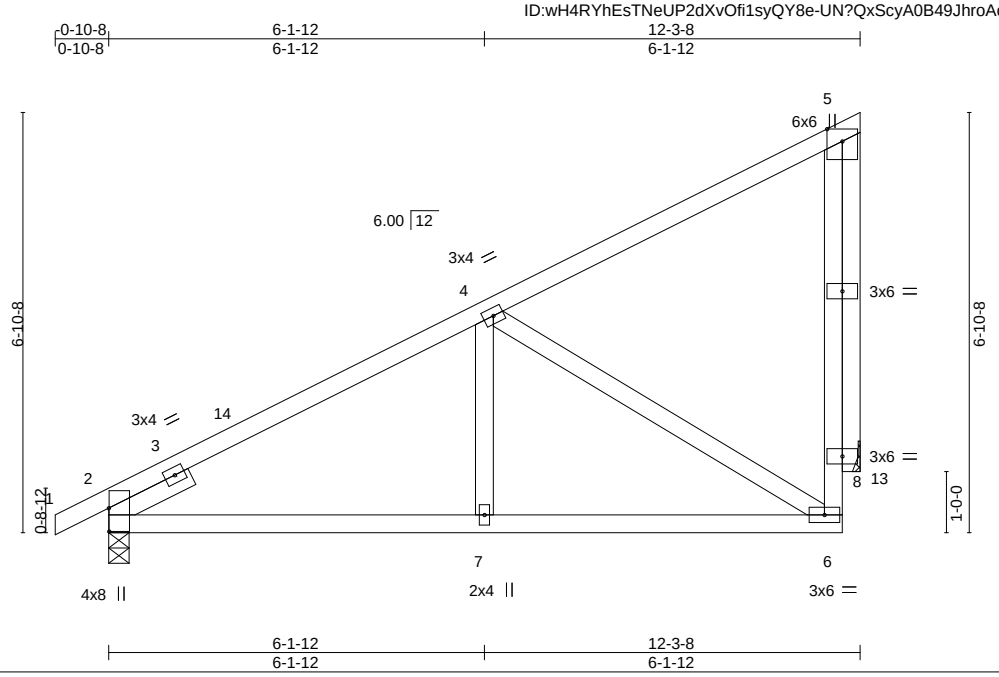


Plate Offsets (X,Y)-- [2:0-4-9,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.03	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	7-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 57 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 13=Mechanical
Max Horz 2=209(LC 12)
Max Uplift 2=-74(LC 12), 13=-117(LC 12)
Max Grav 2=754(LC 1), 13=629(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-803/48, 6-8=-88/435, 5-8=-88/435
BOT CHORD 2-7=-207/683, 6-7=-207/683
WEBS 4-7=0/253, 4-6=-729/215, 5-13=-631/164

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 except (jt=lb) 13=117.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D10	HALF HIP	1	1	I44976706

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:37 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-yZZp9ocbxJJxmTG1Mt7FHmFcubx9Xt?i3_cXHLzhJYa

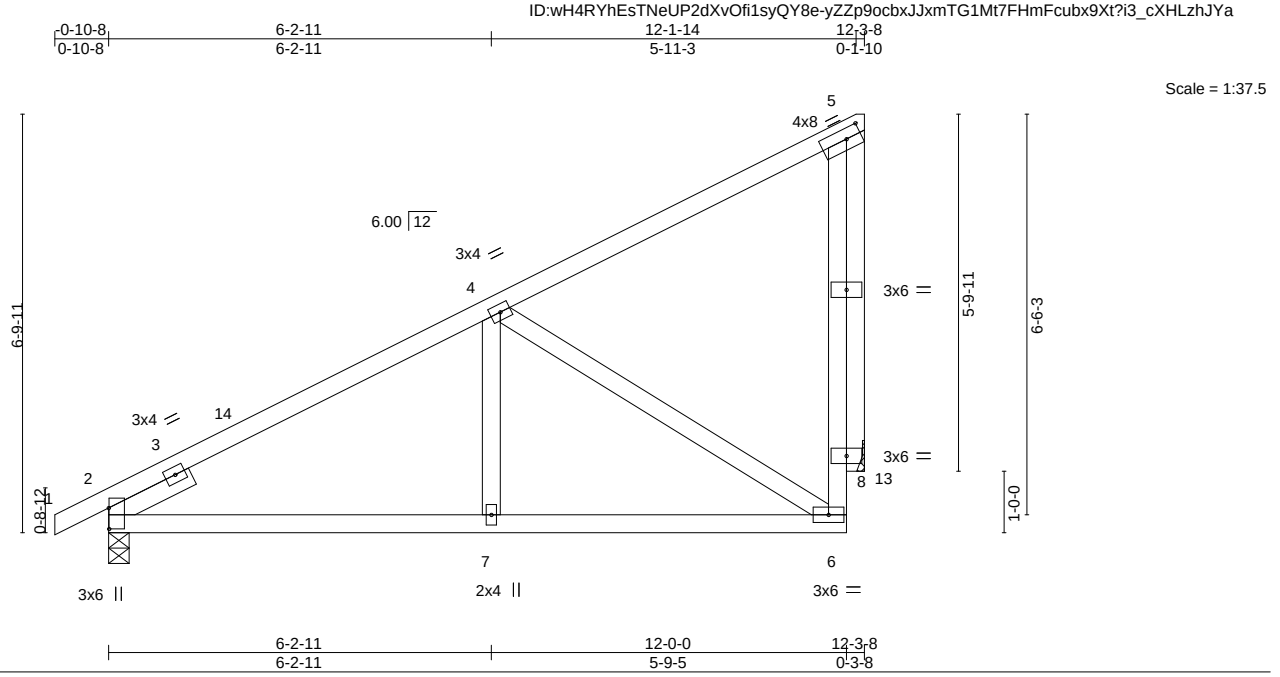


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [5:0-2-15,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	0.03	7-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.06	7-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 57 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 1-6-0

BRACING-

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

REACTIONS. (size) 2=0-4-0, 13=Mechanical
Max Horz 2=240(LC 12)
Max Uplift 2=-79(LC 12), 13=-183(LC 12)
Max Grav 2=754(LC 1), 13=629(LC 1)

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

TOP CHORD	2-4=-798/51, 6-8=-100/440, 5-8=-100/440
BOT CHORD	2-7=-205/677, 6-7=-205/677
WEBS	4-7=0/254, 4-6=-728/230, 5-13=-631/184

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 except (jt=lb) 13=183.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D11	HALF HIP	1	1	I44976707

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:38 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Rl7BM8dDidRoOdrDvbeUpzooJ_HOGNZrIeL4pozhJYZ

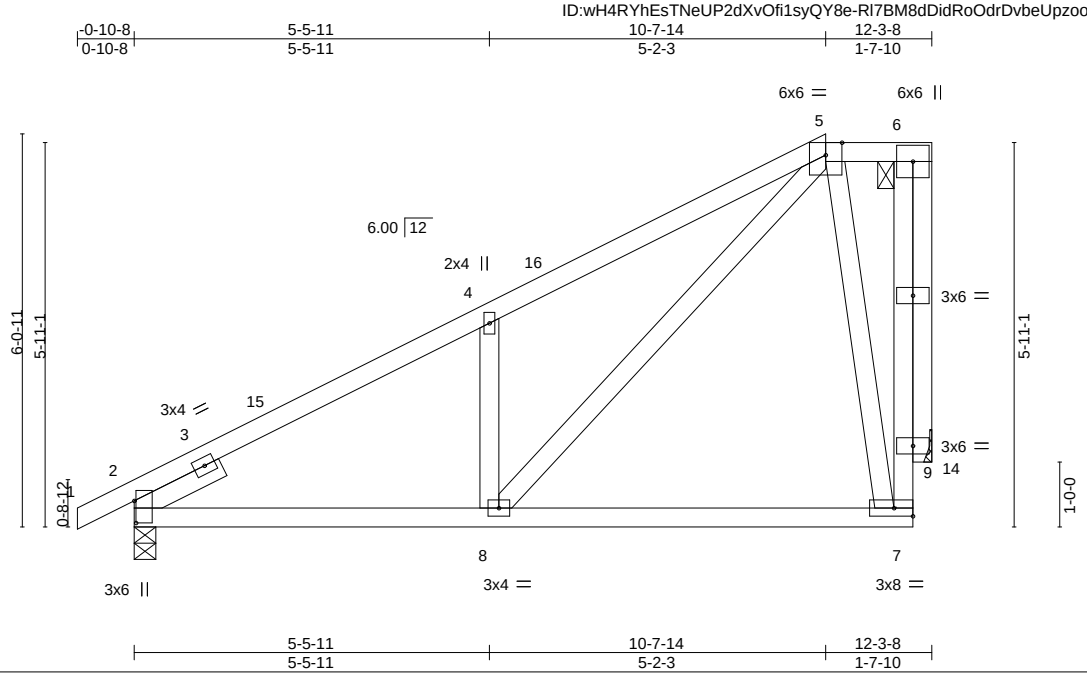


Plate Offsets (X,Y)-- [2:0-4-1,0-0-5]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.04	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	-0.01	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 61 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 14=Mechanical
Max Horz 2=212(LC 12)
Max Uplift 2=-91(LC 12), 14=-150(LC 12)
Max Grav 2=754(LC 1), 14=629(LC 1)

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

TOP CHORD	2-4=-877/82, 4-5=-910/215, 7-9=-253/649, 6-9=-253/649
BOT CHORD	2-8=-262/719
WEBS	4-8=-472/240, 5-8=-258/804, 5-7=-599/282, 6-14=-631/209

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-7-14, Exterior(2E) 10-7-14 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=150.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D12	HALF HIP	1	1	I44976708
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:38 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-RI7BM8dDidRoOdrDvbeUpzopM_EjGPjrIeL4pozhJYZ

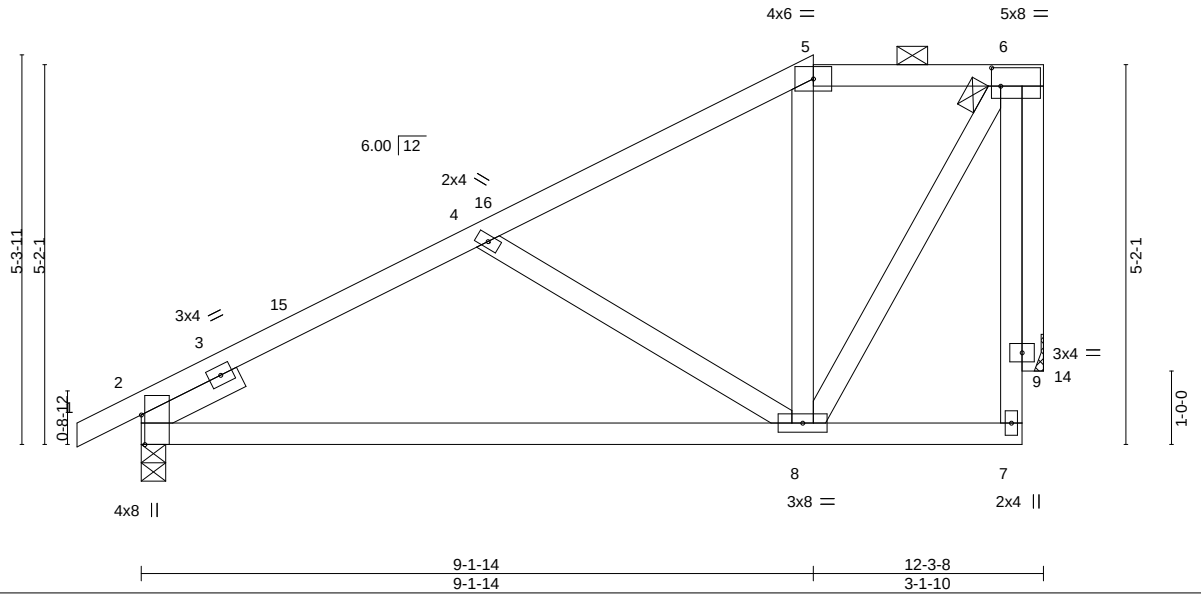


Plate Offsets (X,Y)-- [2:0-4-13,Edge], [6:0-1-8,0-3-0]

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	0.26	Vert(LL)	-0.11	8-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.22	8-12	>664	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 59 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 14=Mechanical
Max Horz 2=181(LC 12)
Max Uplift 2=-99(LC 12), 14=-115(LC 12)
Max Grav 2=754(LC 1), 14=629(LC 25)

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

TOP CHORD	2-4=-828/154, 4-5=-494/68, 5-6=-364/109
BOT CHORD	2-8=-301/732
WEBS	4-8=-440/208, 6-8=-184/611, 6-14=-632/186

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 Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-1-14, Exterior(2E) 9-1-14 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=115.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D13	HALF HIP	1	1	I44976709
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:39 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-vyhZaUerTxZf0nQQTI9jMBL_zOc_?qj_XI5eMEzhJYY

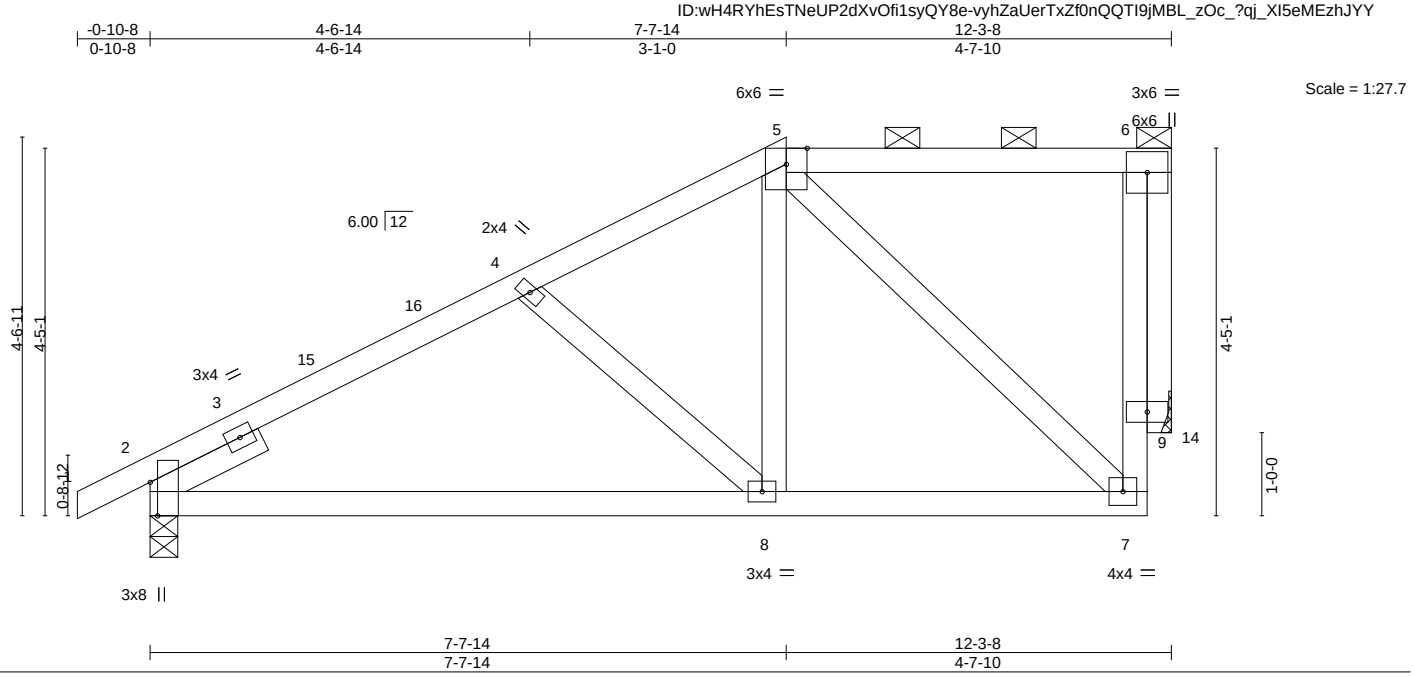


Plate Offsets (X,Y)-- [2:0-4-13,Edge]

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	0.27	Vert(LL)	-0.05	8-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.11	8-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 55 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 14=Mechanical
Max Horz 2=151(LC 12)
Max Uplift 2=-102(LC 12), 14=-97(LC 9)
Max Grav 2=754(LC 1), 14=629(LC 25)

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

TOP CHORD	2-4=-825/177, 4-5=-617/129, 7-9=-114/441, 6-9=-114/441
BOT CHORD	2-8=-292/721, 7-8=-162/489
WEBS	5-8=-53/357, 5-7=-570/174, 4-8=-292/168, 6-14=-635/182

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-7-14, Exterior(2E) 7-7-14 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=102.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D14	HALF HIP	1	1	I44976710

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:40 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-N8FxnpfTEEhVdw_c10gyuOt57owzkFC8lyqBugzhJYX

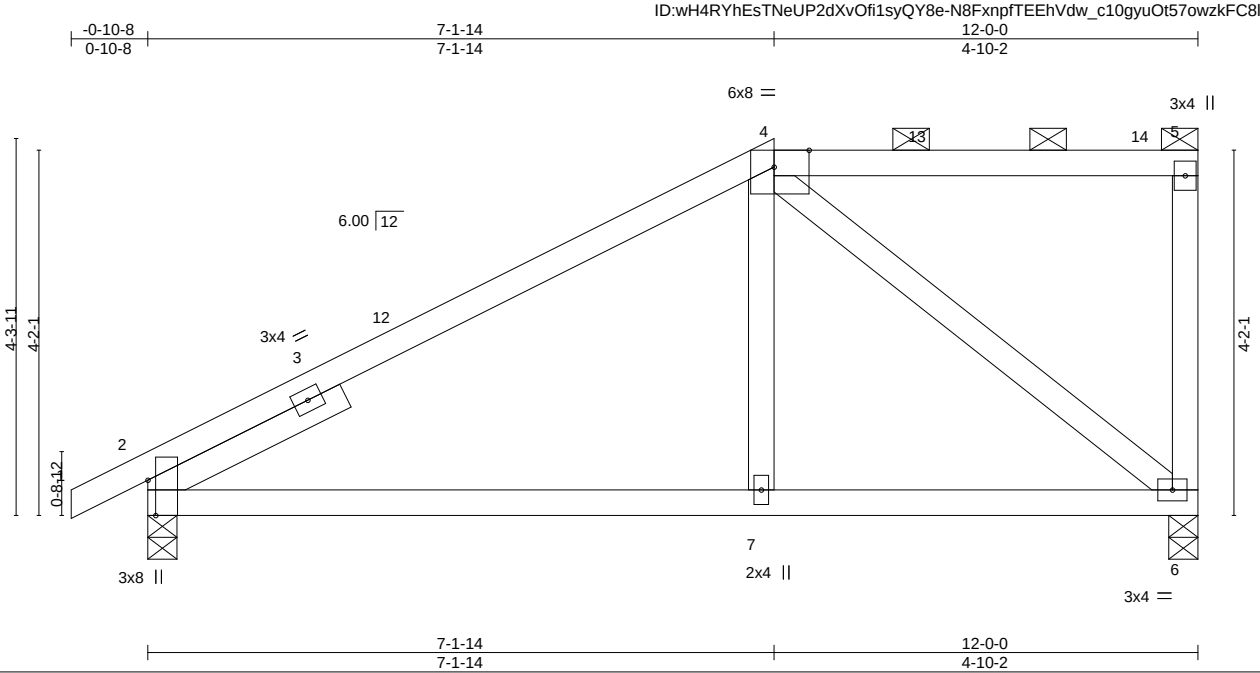


Plate Offsets (X,Y)-- [2:0-4-13,Edge], [4:0-4-13,Edge]

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	0.56	Vert(LL)	0.06	7-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13	7-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	2	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

BRACING-

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

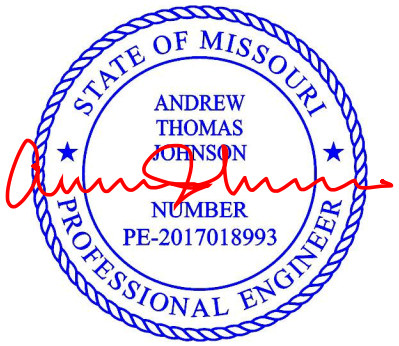
REACTIONS. (size) 2=0-4-0, 6=0-4-0
Max Horz 2=164(LC 11)
Max Uplift 2=-112(LC 12), 6=-113(LC 9)
Max Grav 2=734(LC 1), 6=649(LC 1)

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

TOP CHORD	2-4=-661/177
BOT CHORD	2-7=-257/563, 6-7=-258/556
WEBS	4-7=0/279, 4-6=-702/276

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-1-14, Exterior(2R) 7-1-14 to 11-4-13, Interior(1) 11-4-13 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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=112, 6=113.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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.

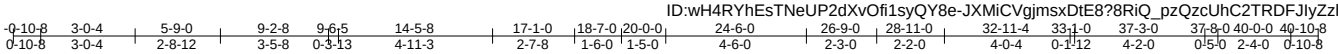


February 26,2021

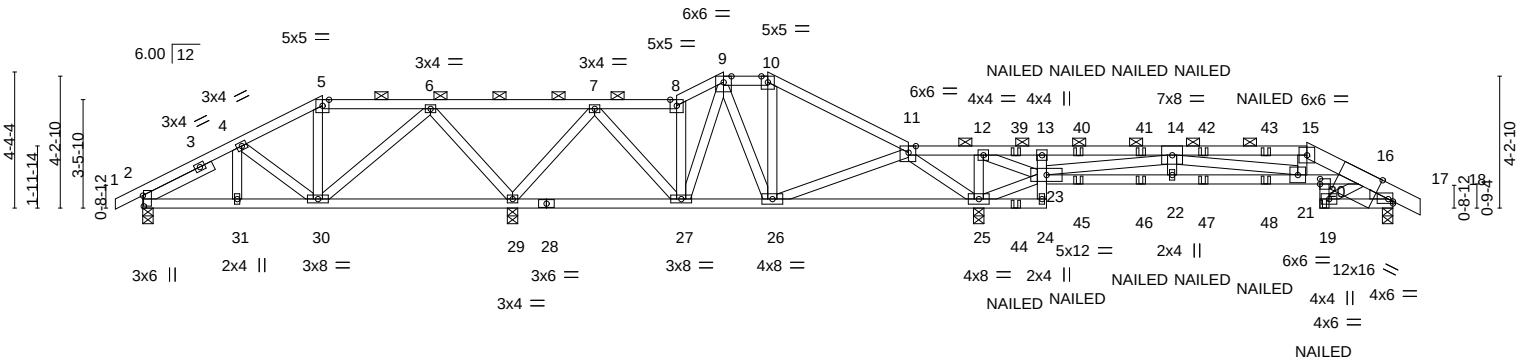
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D15	Roof Special Girder	1	1	I44976711
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:42 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-JXMiCVgjmsxDtE8?8RiQ_pzQzcUhC2TRDFJIyZzhJYV



Scale = 1:73.7



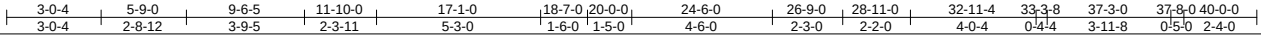


Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [11:0-2-13,Edge], [16:0-5-3,Edge], [17:0-0-0,0-0-13], [20:0-2-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.09	21-22	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.20	21-22	>778	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.06	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 175 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 15-18: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
WEDGE	
Right: 2x4 SPF No.2	
SLIDER	Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-8-10 oc purlins, except 2-0-0 oc purlins (3-4-13 max.): 5-8, 9-10, 11-15.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 9-0-0 oc bracing: 20-21

REACTIONS. All bearings 0-4-0.
(lb) - Max Horz 2=-74(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-115(LC 8), 17=-219(LC 9), 29=-372(LC 29), 25=-454(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 2=615(LC 21), 17=931(LC 22), 29=1488(LC 1), 25=2221(LC 1)

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

TOP CHORD	2-4=-615/142, 4-5=-509/119, 5-6=-415/126, 6-7=-140/502, 7-8=-293/154, 8-9=-327/180, 9-10=-317/212, 10-11=-428/199, 11-12=-368/1747, 12-13=-106/684, 13-14=-65/506, 14-15=-2113/505, 15-16=-2233/513, 16-17=-885/228
BOT CHORD	2-31=-138/571, 30-31=-138/571, 26-27=-67/309, 25-26=-741/277, 13-23=-407/131, 22-23=-482/2149, 21-22=-482/2149, 20-21=-418/2028, 16-20=-366/1788, 19-20=-49/278, 17-19=-122/582
WEBS	6-29=-921/255, 7-29=-838/294, 7-27=-119/383, 10-26=-256/91, 11-26=-193/963, 6-30=-83/402, 12-25=-634/189, 11-25=-1303/274, 23-25=-1715/451, 12-23=-296/1175, 15-21=-98/552, 14-23=-2702/614, 16-19=-399/81

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 115 lb uplift at joint 2, 219 lb uplift at joint 17, 372 lb uplift at joint 29 and 454 lb uplift at joint 25.
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) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

February 26,2021

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: 1-5=-90, 5-8=-90, 8-9=-90, 9-10=-90, 10-11=-90, 11-15=-90, 15-18=-90, 24-32=-20, 20-23=-20, 19-36=-20
   Concentrated Loads (lb)
   Vert: 20=-192(B) 39=-57(B) 40=-38(B) 41=-38(B) 42=-38(B) 43=-38(B) 44=-41(B) 45=-61(B) 46=-61(B) 47=-61(B) 48=-61(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D16	Roof Special	1	1	I44976712

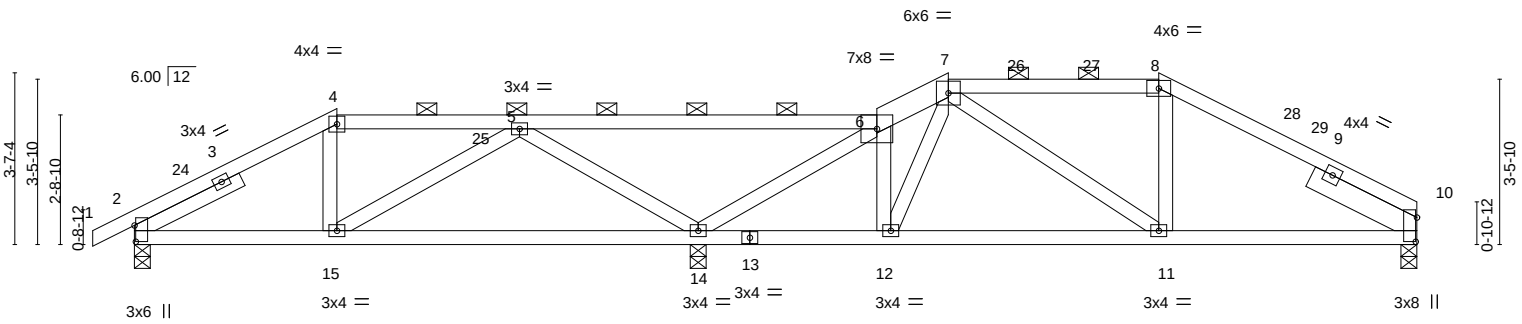
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:43 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-njw4PrhLX944UOjBi8EfW1VWD?zuxZfaRv3rV?zhJYU

-0-10-8	4-3-0	8-1-0	9-11-0	15-7-0	17-1-0	21-6-0	26-11-0
0-10-8	4-3-0	3-10-0	1-10-0	5-8-0	1-6-0	4-5-0	5-5-0

Scale: 1/4"=1'



4-3-0	11-10-0	15-7-0	17-1-0	21-6-0	26-11-0
4-3-0	7-7-0	3-9-0	1-6-0	4-5-0	5-5-0

Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [10:0-6-1,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.08	14-15	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.15	14-15	>931	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 106 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 6-7: 2x6 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 2x6 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-6, 7-8.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 10=0-4-0, 2=0-4-0, 14=0-4-0
Max Horz 2=68(LC 12)
Max Uplift 10=-106(LC 13), 2=-128(LC 12), 14=-235(LC 12)
Max Grav 10=727(LC 1), 2=602(LC 1), 14=1711(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-579/139, 4-5=-525/153, 5-6=-82/757, 6-7=-789/247, 7-8=-775/224, 8-10=-897/205
BOT CHORD 2-15=-121/524, 14-15=-161/372, 12-14=-134/621, 11-12=-109/598, 10-11=-117/773
WEBS 6-14=-1596/284, 5-14=-1313/308, 5-15=0/288

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-3-0, Exterior(2R) 4-3-0 to 7-3-0, Interior(1) 7-3-0 to 17-1-0, Exterior(2R) 17-1-0 to 20-1-0, Interior(1) 20-1-0 to 21-6-0, Exterior(2R) 21-6-0 to 24-6-0, Interior(1) 24-6-0 to 26-11-0 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) 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 106 lb uplift at joint 10, 128 lb uplift at joint 2 and 235 lb uplift at joint 14.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	D17	Roof Special Girder	1	1	I44976713

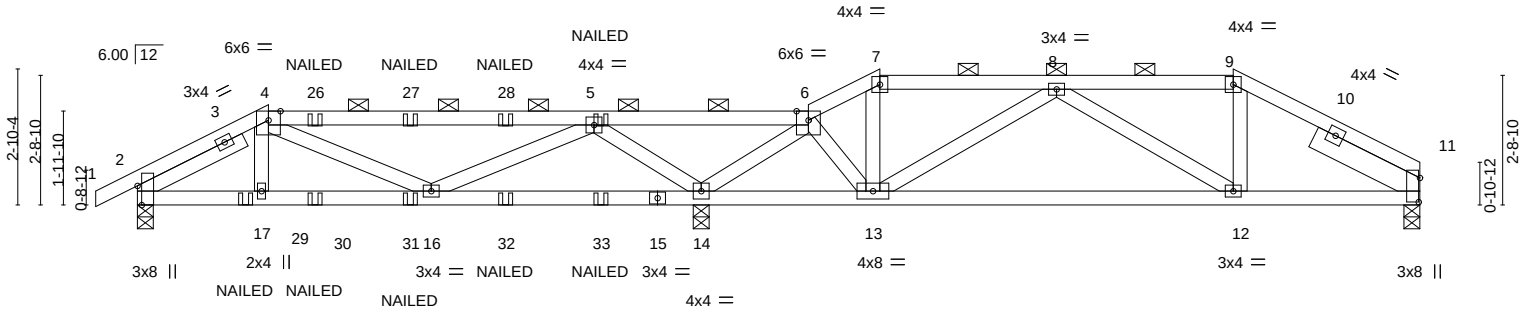
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:45 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-j62qqXjc3nKokitaqZG7bSbrypc6PXJtvDYyZuzhJYS

-0-10-8	2-9-0	6-2-0	9-7-0	10-3-11	14-1-0	15-7-0	19-3-8	23-0-0	26-11-0
0-10-8	2-9-0	3-5-0	3-5-0	0-8-11	3-9-5	1-6-0	3-8-8	3-8-8	3-11-0

Scale: 1/4"=1'



2-9-0	6-2-0	7-3-8	11-10-0	14-1-0	15-7-0	19-3-8	23-0-0	26-11-0
2-9-0	3-5-0	1-1-8	4-6-8	2-3-0	1-6-0	3-8-8	3-8-8	3-11-0

Plate Offsets (X,Y)-- [2:0-4-13,Edge], [11:0-6-1,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.09	12-13	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.19	12-13	>955	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 105 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 4-6: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0, Right 2x6 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-10-11 oc purlins, except 2-0-0 oc purlins (5-3-4 max.): 4-6, 7-9.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 11=0-4-0, 2=0-4-0, 14=0-4-0
Max Horz 2=55(LC 29)
Max Uplift 11=-108(LC 30), 2=-217(LC 8), 14=-376(LC 4)
Max Grav 11=670(LC 1), 2=869(LC 21), 14=2103(LC 1)

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

TOP CHORD	2-4=-1130/325, 4-5=-801/228, 5-6=-233/1362, 6-7=-440/242, 7-8=-363/215, 8-9=-749/161, 9-11=-881/170
BOT CHORD	2-17=-298/1031, 16-17=-297/1018, 14-16=-257/215, 13-14=-261/167, 12-13=-252/806, 11-12=-115/756
WEBS	5-14=-1846/481, 6-14=-1421/203, 6-13=-124/745, 5-16=-56/763, 8-13=-684/175

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 108 lb uplift at joint 11, 217 lb uplift at joint 2 and 376 lb uplift at joint 14.
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) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-90, 4-6=-90, 6-7=-90, 7-9=-90, 9-11=-90, 18-22=-20
   Concentrated Loads (lb)
   Vert: 5=-57(B) 26=-57(B) 27=-57(B) 28=-57(B) 29=-210(B) 30=-41(B) 31=-41(B) 32=-41(B) 33=-41(B)

February 26,2021

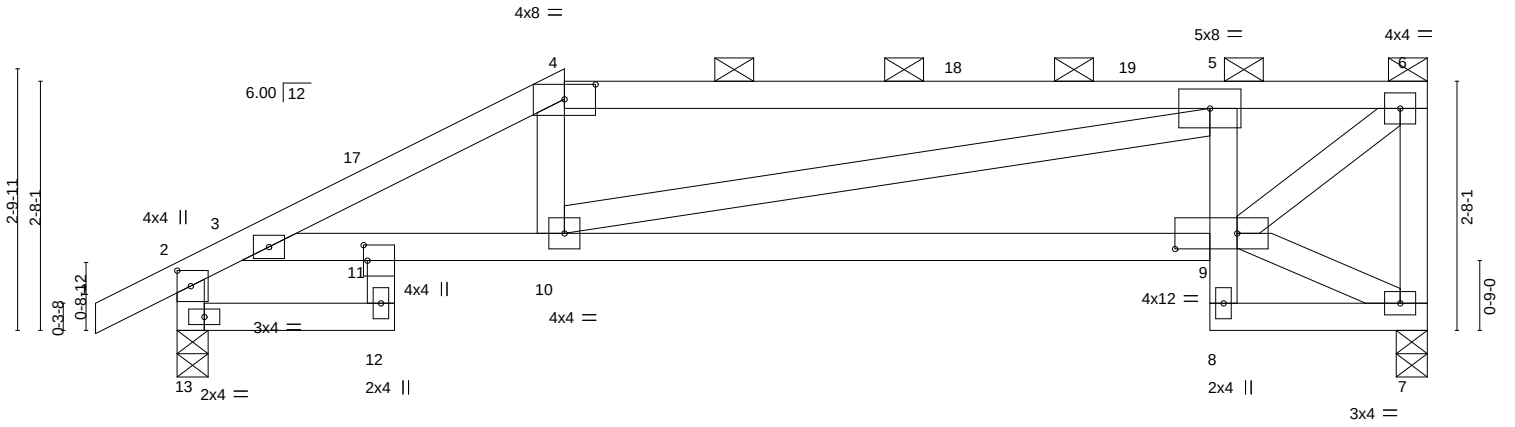
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E02	HALF HIP	1	1	I44976714
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:46 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-ClcC2tjEq4SfLrSmNGnM8f72DDxq8?o08tHW6KzhJYR

-0-10-8 | 2-4-0 | 4-1-14 | 11-1-0 | 13-5-0
0-10-8 | 2-4-0 | 1-9-14 | 6-11-2 | 2-4-0

Scale = 1:24.7



2-4-0 | 4-1-14 | 11-1-0 | 13-5-0
2-4-0 | 1-9-14 | 6-11-2 | 2-4-0

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [4:0-4-0,0-1-15], [9:0-8-0,0-2-0], [11:0-2-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.07	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.16	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 54 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 7=0-4-0, 13=0-4-0
Max Horz 13=106(LC 9)
Max Uplift 7=-133(LC 9), 13=-98(LC 12)
Max Grav 7=718(LC 1), 13=817(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-529/122, 3-4=-1505/329, 4-5=-1345/341, 5-6=-834/190, 6-7=-663/163, 2-13=-808/239
BOT CHORD 3-11=-229/1122, 10-11=-390/1355, 9-10=-259/1040, 5-9=-611/213
WEBS 4-10=0/267, 5-10=-137/310, 6-9=-251/1067

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-14, Exterior(2R) 4-1-14 to 8-4-13, Interior(1) 8-4-13 to 13-3-4 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
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) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 7 and 98 lb uplift at joint 13.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

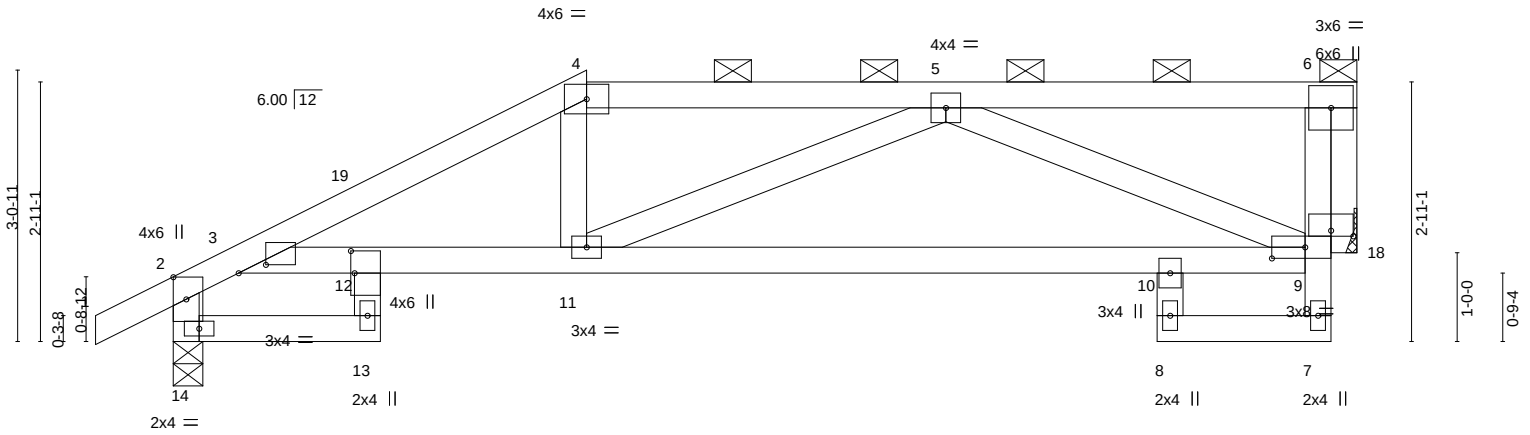
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E03	HALF HIP	1	1	I44976715
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:47 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-gUAbFDksbOaWz?1yx_IbgtgIWdFwtQuAMX13emzhJYQ

-0-10-8	2-4-0	4-7-14	8-8-7	11-1-0	13-4-0
0-10-8	2-4-0	2-3-14	4-0-9	2-4-9	2-3-0

Scale = 1:26.0



2-4-0	4-7-14	11-1-0	13-4-0
2-4-0	2-3-14	6-5-2	2-3-0

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [3:0-3-11,0-1-2], [9:0-3-0,0-0-12], [9:0-4-8,0-1-8], [12:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.08	10-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.17	10-11	>929	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 53 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, except end verticals, and 2-0-0 oc purlins (5-2-4 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 14=0-4-0, 18=Mechanical
Max Horz 14=87(LC 9)
Max Uplift 14=-98(LC 12), 18=-121(LC 9)
Max Grav 14=817(LC 1), 18=678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-574/111, 3-4=-1381/286, 4-5=-1201/300, 5-6=-254/1, 6-9=-95/495, 2-14=-802/234
BOT CHORD 13-14=-163/286, 3-12=-157/930, 11-12=-317/1216, 10-11=-288/1183, 9-10=-235/1206
WEBS 4-11=0/296, 5-9=-1038/339, 6-18=-697/146

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-7-14, Exterior(2R) 4-7-14 to 8-8-7, Interior(1) 8-8-7 to 12-10-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 14 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 98 lb uplift at joint 14 and 121 lb uplift at joint 18.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E04	HALF HIP	1	1	I44976716
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:47 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-gUAbFDksbOaWz?1yx_IbgtgIZdCstS_AMX13emzhJYQ

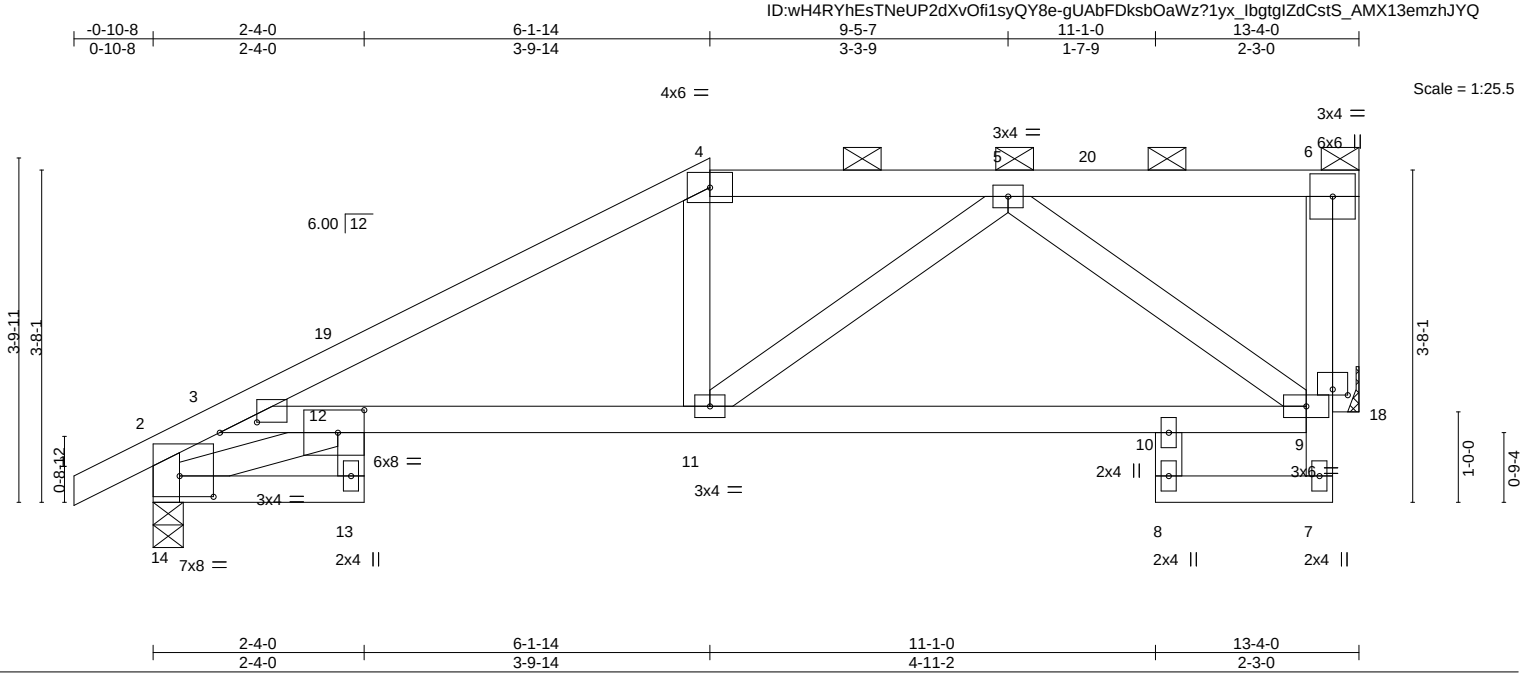


Plate Offsets (X,Y)-- [3:0-4-15,0-1-6], [9:0-2-0,0-0-12], [12:0-3-8,0-3-0], [14:0-4-8,0-2-12]

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	0.48	Vert(LL)	0.09	11-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.18	11-12	>875	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.07	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 58 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, except end verticals, and 2-0-0 oc purlins (5-7-7 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 14=0-4-0, 18=Mechanical
Max Horz 14=113(LC 12)
Max Uplift 14=-107(LC 12), 18=-116(LC 9)
Max Grav 14=817(LC 1), 18=678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-638/168, 3-4=-1161/246, 4-5=-991/279, 6-9=-116/523, 2-14=-803/233
BOT CHORD 13-14=-152/318, 3-12=-63/635, 11-12=-294/993, 10-11=-206/760, 9-10=-172/748
WEBS 5-9=-785/251, 5-11=-115/288, 6-18=-687/158

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-1-14, Exterior(2R) 6-1-14 to 10-4-13, Interior(1) 10-4-13 to 12-10-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 14 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 107 lb uplift at joint 14 and 116 lb uplift at joint 18.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E05	HALF HIP	1	1	I44976717
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:48 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-8hjzTZlULiiNb9c8VhpqD4DU?0b?cxWJbBmcADzhJYP

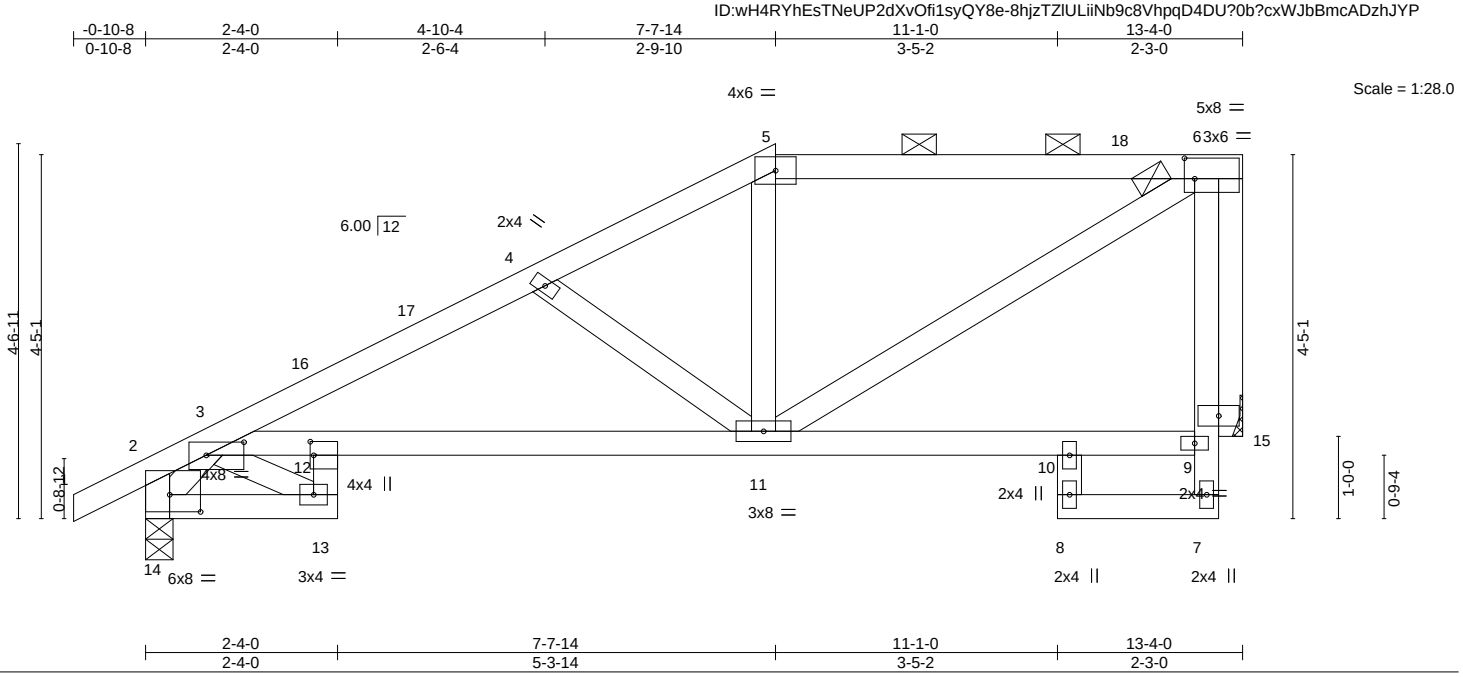


Plate Offsets (X,Y)-- [3:0-5-8,0-1-15], [6:0-1-8,0-3-0], [12:0-2-0,0-0-8], [14:0-4-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.09	11-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.21	11-12	>767	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.07	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 62 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 5-6: 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, except end verticals, and 2-0-0 oc purlins (5-9-4 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 14=0-4-0, 15=Mechanical
Max Horz 14=143(LC 12)
Max Uplift 14=-111(LC 12), 15=-109(LC 9)
Max Grav 14=817(LC 1), 15=678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1215/287, 4-5=-900/209, 5-6=-759/214, 2-14=-395/127
BOT CHORD 13-14=-242/432, 3-12=-310/891, 11-12=-392/1066
WEBS 6-11=-221/739, 4-11=-380/198, 3-14=-558/106, 3-13=-300/191, 6-15=-685/173

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-7-14, Exterior(2R) 7-7-14 to 11-10-13, Interior(1) 11-10-13 to 12-10-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 14 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 111 lb uplift at joint 14 and 109 lb uplift at joint 15.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E06	HALF HIP	1	1	I44976718
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:49 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-ctHLgum66?qECJBL3PK3mIlf3Qz9LO3TqrWAifzhJYO

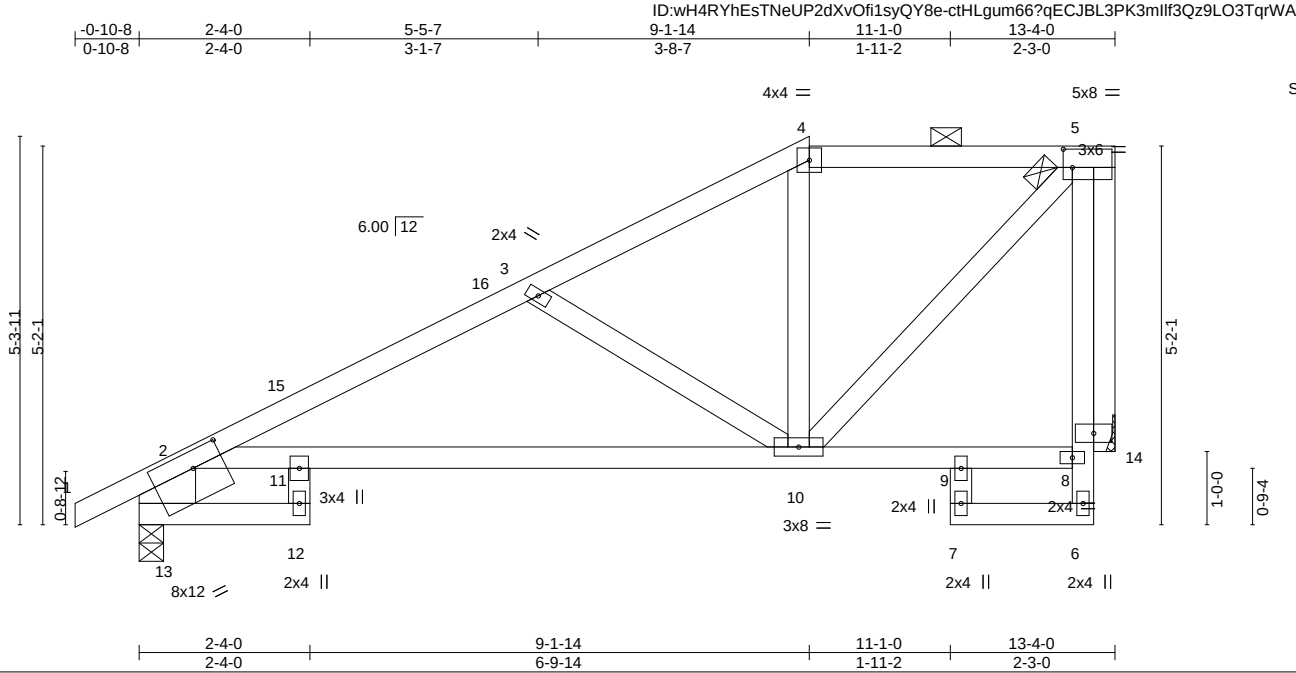


Plate Offsets (X,Y)-- [5:0-1-8,0-3-0], [13:0-5-0,0-2-12]

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	0.42	Vert(LL)	-0.12	10-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.29	10-11	>530	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.08	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 64 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-13: 2x10 SP 2400F 2.0E
OTHERS 2x4 SPF No.2

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

REACTIONS. (size) 13=0-4-0, 14=Mechanical
Max Horz 13=168(LC 12)
Max Uplift 13=-107(LC 12), 14=-105(LC 12)
Max Grav 13=827(LC 1), 14=662(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1106/243, 3-4=-682/140, 4-5=-538/161, 2-13=-807/180
BOT CHORD 2-11=-222/818, 10-11=-374/946
WEBS 5-10=-204/669, 3-10=-486/232, 5-14=-666/178

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-1-14, Exterior(2E) 9-1-14 to 12-10-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 13 and 105 lb uplift at joint 14.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E07	Half Hip	1	1	I44976719

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:50 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-43rjtEnktJy5qTlXc6sIIVIrLqN04nLc2VFjF5zhJYN

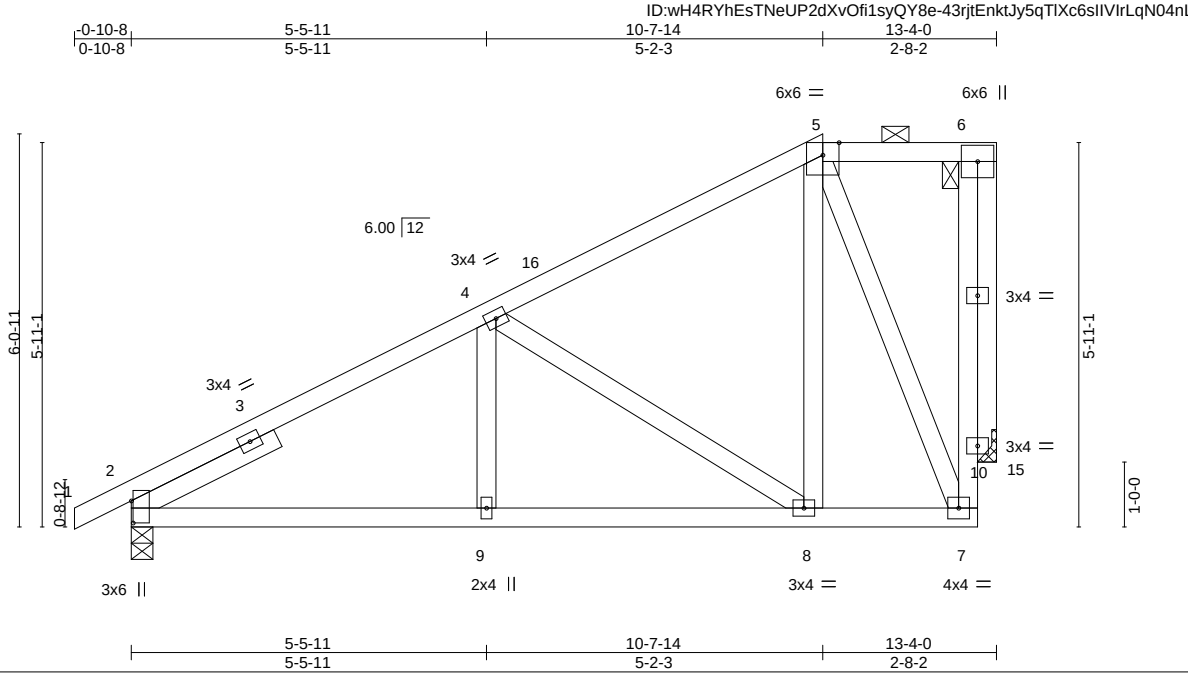


Plate Offsets (X,Y)-- [2:0-4-1,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.02	8-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 69 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=212(LC 12)
Max Uplift 2=-102(LC 12), 15=-142(LC 12)
Max Grav 2=806(LC 1), 15=691(LC 1)

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

TOP CHORD	2-4=-823/109, 4-5=-435/50, 7-10=-199/633, 6-10=-199/633
BOT CHORD	2-9=-279/808, 8-9=-279/808, 7-8=-107/281
WEBS	4-8=-610/202, 5-8=-66/392, 5-7=-652/212, 6-15=-692/199

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-7-14, Exterior(2E) 10-7-14 to 12-10-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 2 and 142 lb uplift at joint 15.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E08	Half Hip	1	1	I44976720
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:52 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0SzUlwo?PwCp3mvwkXumNwN97ex?YcJvWpkqJ_zhJYL

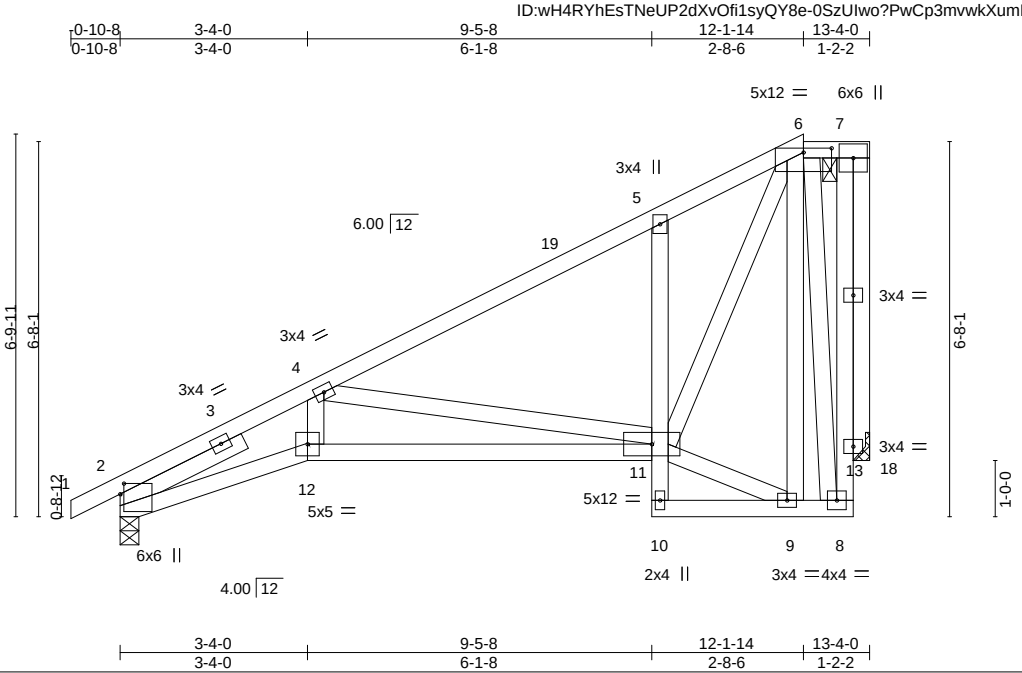


Plate Offsets (X,Y)-- [2:0-2-4,0-0-13], [6:0-6-0,0-0-15]

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	0.49	Vert(LL)	-0.07	11-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.19	11-12	>851	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.08	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 86 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 18=Mechanical
Max Horz 2=242(LC 12)
Max Uplift 2=-90(LC 12), 18=-180(LC 12)
Max Grav 2=806(LC 1), 18=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1896/385, 4-5=-687/66, 5-6=-639/168, 8-13=-181/532, 7-13=-181/532
BOT CHORD 2-12=-586/1706, 11-12=-548/1575, 5-11=-495/236
WEBS 4-12=-115/519, 4-11=-1050/378, 6-11=-311/931, 6-8=-476/157, 7-18=-692/222

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-14, Exterior(2E) 12-1-14 to 12-10-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 2 and 180 lb uplift at joint 18.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E09	JACK-CLOSED	3	1	I44976721
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:53 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-UeXsWGpdAEKfhwU6IEP?w8wIK1J2H8V2lTUNrQzhJYK

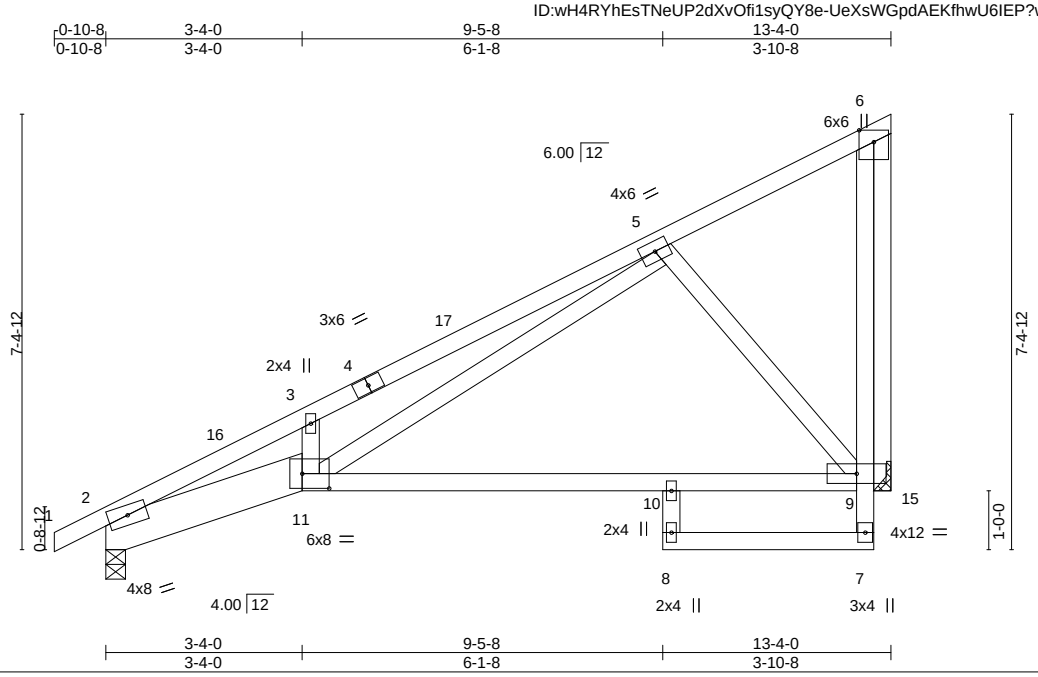


Plate Offsets (X,Y)-- [11:0-5-8,0-3-0]

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	0.59	Vert(LL)	-0.22	10-11	>720	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.51	10-11	>313	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.07	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 74 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-11: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=223(LC 12)
Max Uplift 2=-76(LC 12), 15=-121(LC 12)
Max Grav 2=806(LC 1), 15=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2039/260, 3-5=-2146/385, 6-9=-134/625
BOT CHORD 2-11=-460/1821, 10-11=-167/506, 9-10=-169/487
WEBS 3-11=-393/181, 5-9=-693/224, 5-11=-366/1596, 6-15=-692/167

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-10-12 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2 and 121 lb uplift at joint 15.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E10	JACK-CLOSED	1	1	I44976722
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:55 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-R1fcxyqtiraNwEeVPfRT?Z?gKr_glyeLCnzUwJzhJYI

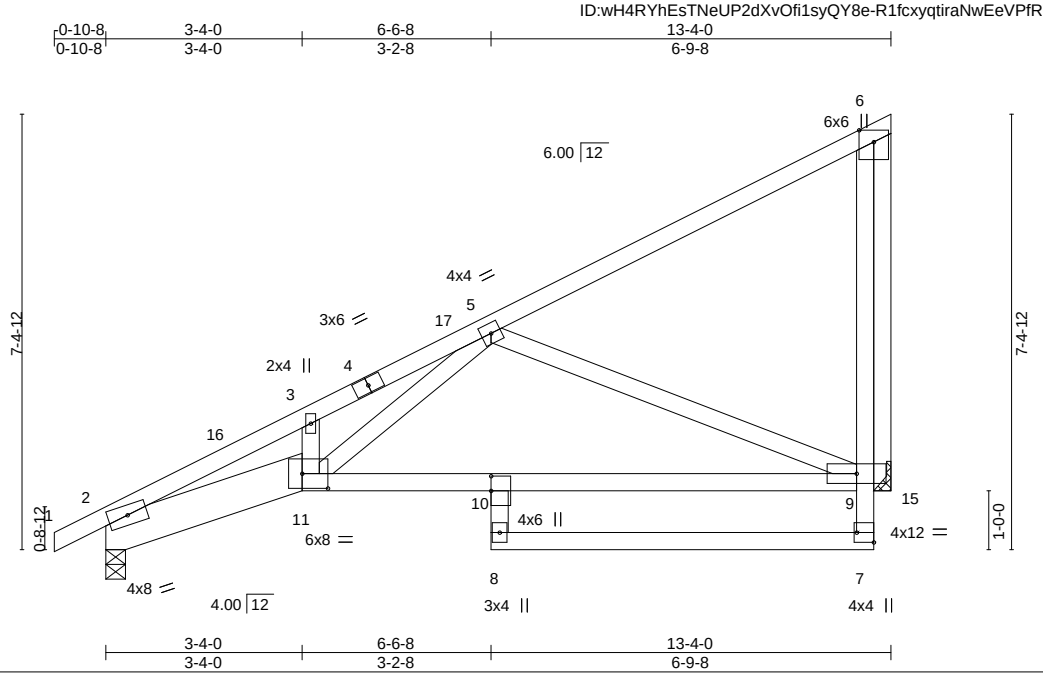


Plate Offsets (X,Y)-- [7:Edge,0-3-8], [10:0-3-0,0-0-0], [11:0-5-4,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.11	8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.26	10	>599	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.05	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 76 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-11: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=223(LC 12)
Max Uplift 2=-76(LC 12), 15=-121(LC 12)
Max Grav 2=806(LC 1), 15=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1924/224, 3-5=-1842/274, 6-9=-76/459
BOT CHORD 2-11=-421/1693, 10-11=-292/922, 9-10=-328/791
WEBS 5-11=-181/968, 5-9=-938/278, 6-15=-692/167

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-10-12 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2 and 121 lb uplift at joint 15.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E11	Jack-Closed	1	1	I44976723
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:56 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-vDC_8IrVT9iEYODhzNziYmYqVFPcUP1VRRi1SlzhJYH

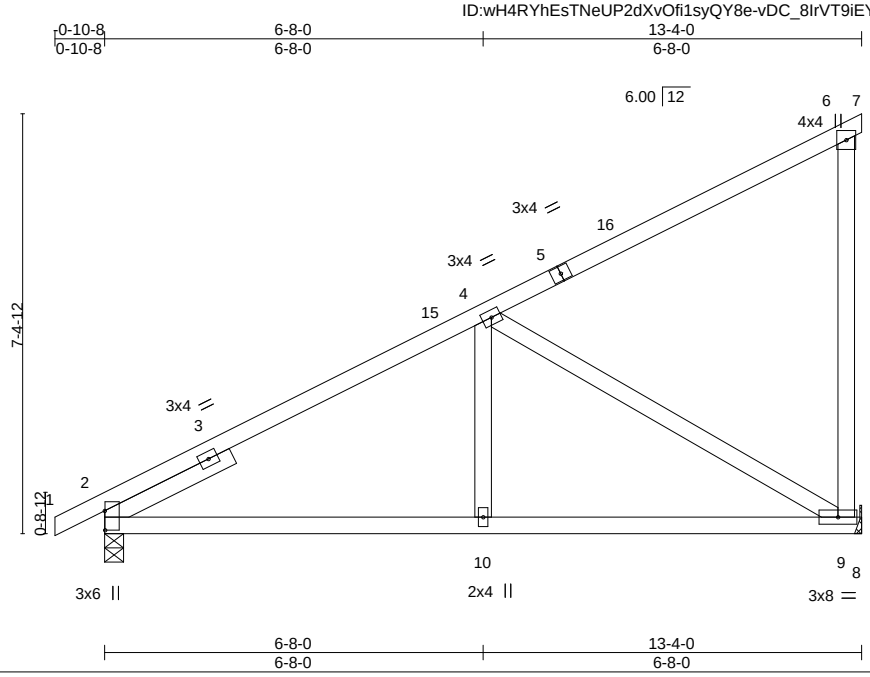


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.04	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.07	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 56 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 9=Mechanical
Max Horz 2=295(LC 11)
Max Uplift 2=-99(LC 12), 9=-108(LC 9)
Max Grav 2=800(LC 1), 9=732(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-718/171
BOT CHORD 2-10=-303/740, 9-10=-303/740
WEBS 4-10=0/284, 4-9=-830/252

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 2 and 108 lb uplift at joint 9.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E12	Half Hip	1	1	I44976724

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:57 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-NPmNLes7ETq5AYotX4Ux4_4?tflhDraef5Sb_BzhJYG

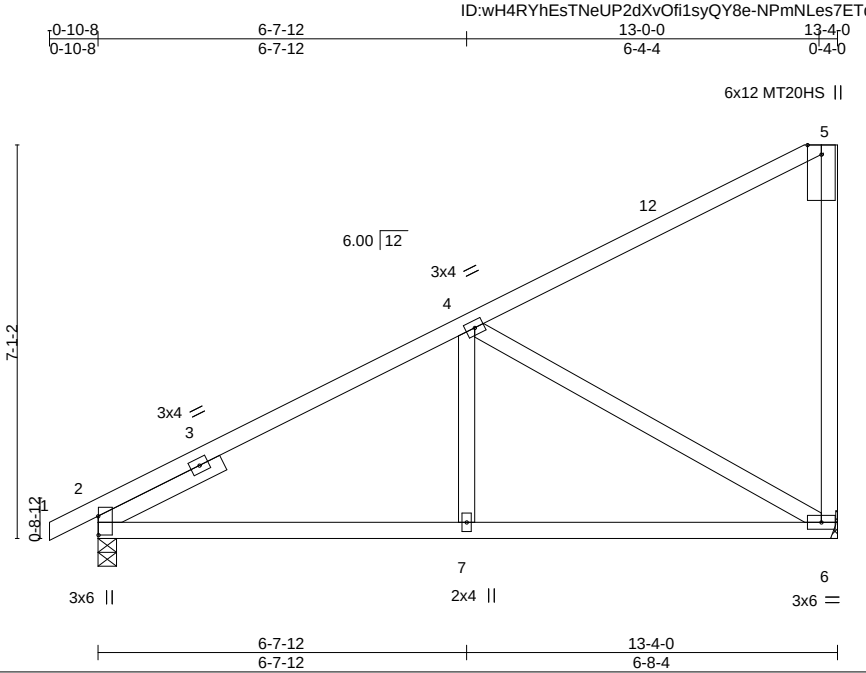


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.09	6-7	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 56 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 6=Mechanical
Max Horz 2=295(LC 11)
Max Uplift 2=-116(LC 12), 6=-173(LC 12)
Max Grav 2=807(LC 1), 6=723(LC 1)

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

TOP CHORD	2-4=-736/174
BOT CHORD	2-7=-296/758, 6-7=-296/758
WEBS	4-7=0/289, 4-6=-848/258

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-2-4 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) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 2 and 173 lb uplift at joint 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E13	Half Hip	1	1	I44976725

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:58 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-rcKlZztm?myynhN34o?AdBdDP24fyOYnulB8XezhJYF

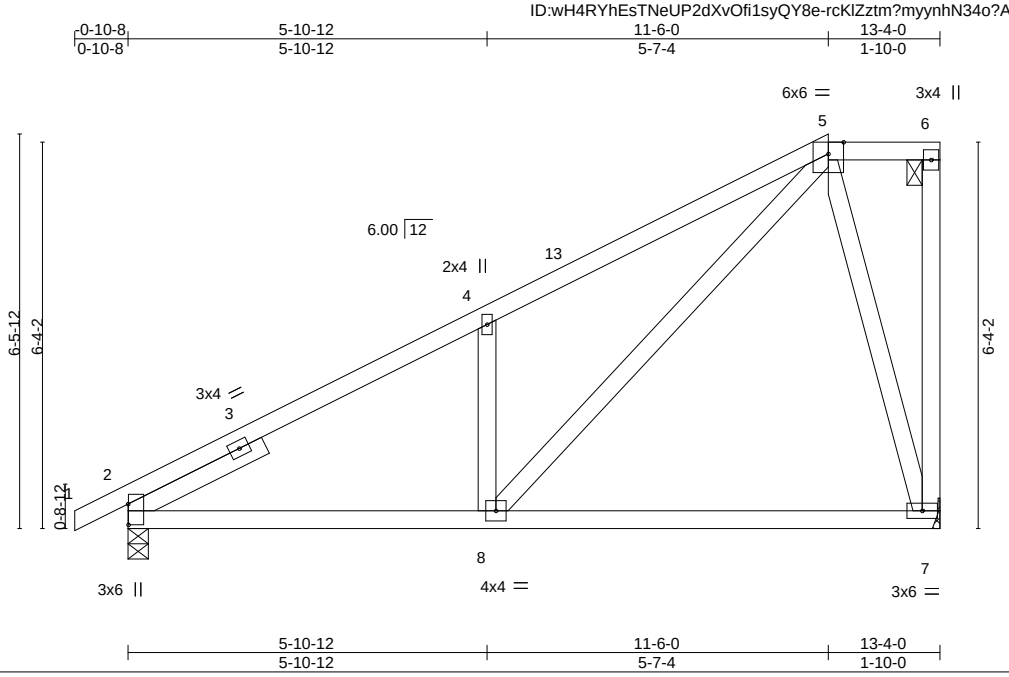


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.08	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.16	7-8	>990	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 62 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=254(LC 11)
Max Uplift 7=-135(LC 12), 2=-124(LC 12)
Max Grav 7=723(LC 1), 2=807(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-799/177, 4-5=-1003/298
BOT CHORD 2-8=-327/794
WEBS 4-8=-509/247, 5-7=-677/355, 5-8=-263/895

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-6-0, Exterior(2E) 11-6-0 to 13-2-4 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
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at joint 7 and 124 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	E14	Half Hip	1	1	I44976726
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 08:59:58 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-rcKlZztm?myynhN34o?AdBdDL21qyRbnulB8XezhJYF

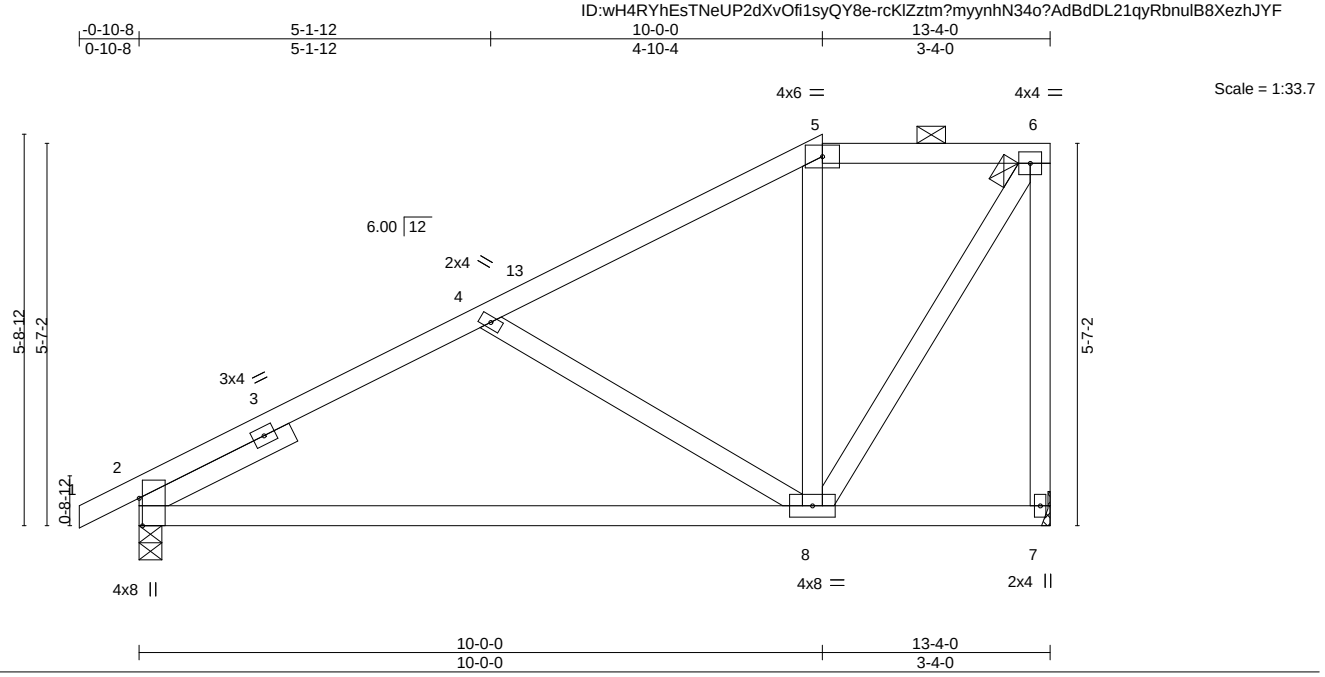


Plate Offsets (X,Y)-- [2:0-4-13,Edge]

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	0.32	Vert(LL)	-0.15	8-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.32	8-11	>500	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 60 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=223(LC 11)
Max Uplift 7=-118(LC 9), 2=-126(LC 12)
Max Grav 7=723(LC 25), 2=807(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-874/211, 4-5=-526/144, 5-6=-384/161, 6-7=-724/245
BOT CHORD 2-8=-372/800
WEBS 4-8=-493/213, 6-8=-247/711

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 13-2-4 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
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 7 and 126 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

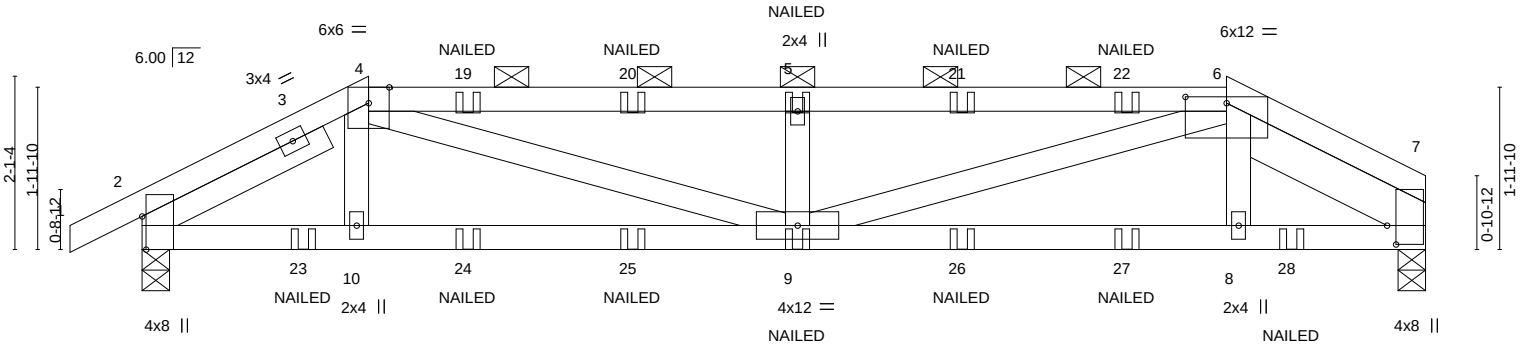
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	G01	Hip Girder	1	1	I44976727
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:00 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-n_SV_fu0XODg1?WSCD1eiciOIsfeQI04M3gFbWzhJYD

-0-10-8	2-9-0	7-11-8	13-2-0	15-7-0
0-10-8	2-9-0	5-2-8	5-2-8	2-5-0

Scale = 1:28.0



2-9-0	7-11-8	13-2-0	15-7-0
2-9-0	5-2-8	5-2-8	2-5-0

Plate Offsets (X,Y)-- [2:0-4-13,Edge], [6:0-6-0,0-0-15], [7:0-2-12,0-1-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.10	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.23	9-10	>815	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 62 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 2x6 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-6-2 oc purlins, except 2-0-0 oc purlins (2-1-2 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 9-5-3 oc bracing.

REACTIONS. (size) 7=0-4-0, 2=0-4-0
Max Horz 2=41(LC 29)
Max Uplift 7=-281(LC 9), 2=-297(LC 8)
Max Grav 7=1299(LC 1), 2=1364(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1996/446, 4-5=-3171/719, 5-6=-3171/719, 6-7=-253/93
BOT CHORD 2-10=-386/1767, 9-10=-386/1751, 8-9=-336/1628, 7-8=-336/1647
WEBS 4-10=-1/255, 4-9=-372/1530, 5-9=-769/261, 6-9=-397/1654, 6-8=-4/285

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 281 lb uplift at joint 7 and 297 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-6=-90, 6-7=-90, 11-15=-20
Concentrated Loads (lb)
Vert: 9=-41(F) 5=-57(F) 19=-57(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=-191(F) 24=-41(F) 25=-41(F) 26=-41(F) 27=-41(F) 28=-191(F)

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	H01	HIP GIRDER	1	1	I44976728

Job Reference (optional)

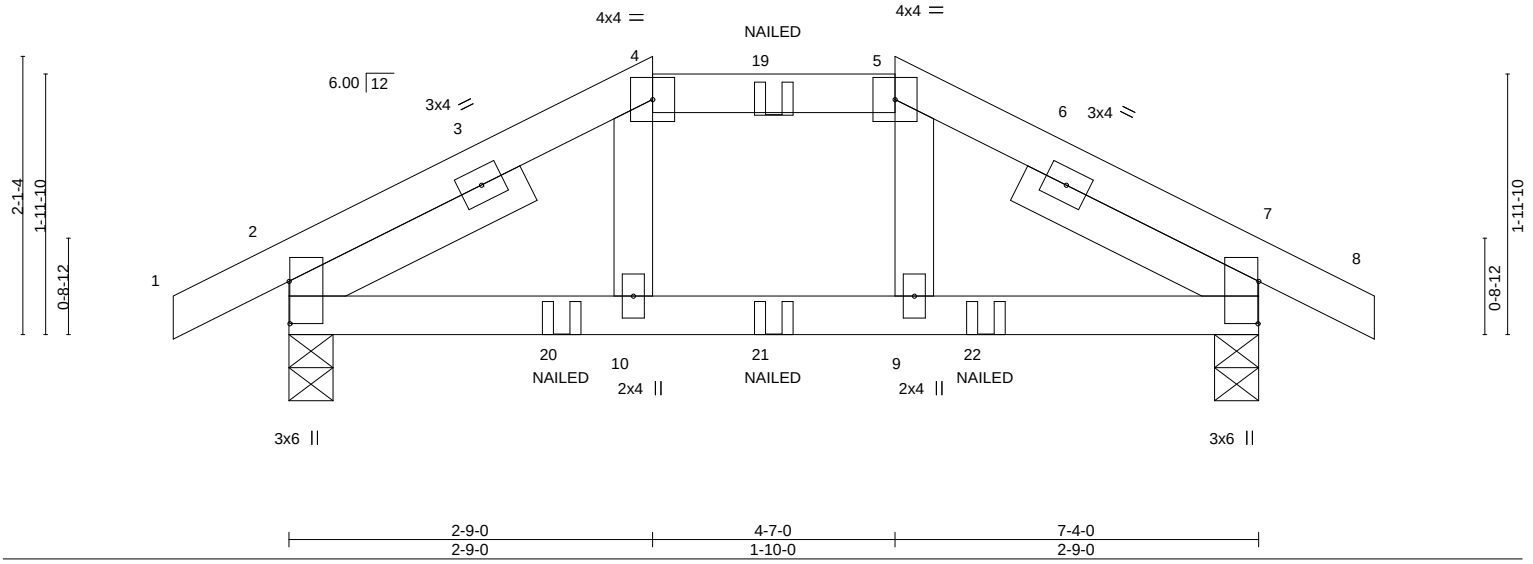
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:01 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-FB0tB?veIhLXe95emwYtFqFmEG6Q9roEajQo7yzhJYC

-0-10-8 2-9-0 4-7-0 7-4-0 8-2-8

0-10-8 2-9-0 1-10-0 2-9-0 0-10-8

Scale = 1:17.4



2-9-0 4-7-0 7-4-0

2-9-0 1-10-0 2-9-0

Plate Offsets (X,Y)-- [2:0-3-13,0-0-1], [7:0-3-13,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.02	9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 7=0-4-0
Max Horz 2=31(LC 33)
Max Uplift 2=-156(LC 8), 7=-156(LC 9)
Max Grav 2=723(LC 1), 7=723(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-807/191, 4-5=-692/171, 5-7=-807/191
BOT CHORD 2-10=-134/707, 9-10=-133/692, 7-9=-137/707

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 156 lb uplift at joint 2 and 156 lb uplift at joint 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-5=-90, 5-8=-90, 11-15=-20
Concentrated Loads (lb)
Vert: 19=-57(F) 20=-192(F) 21=-41(F) 22=-192(F)

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	H02	COMMON	4	1	I44976729
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:02 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-kNaGPLwG2?TOGJgrJd36n1owngVRuIQNpN9MgPzhJYB

-0-10-8 / 0-10-8 | 3-8-0 / 3-8-0 | 7-4-0 / 3-8-0 | 8-2-8 / 0-10-8

Scale = 1:19.5

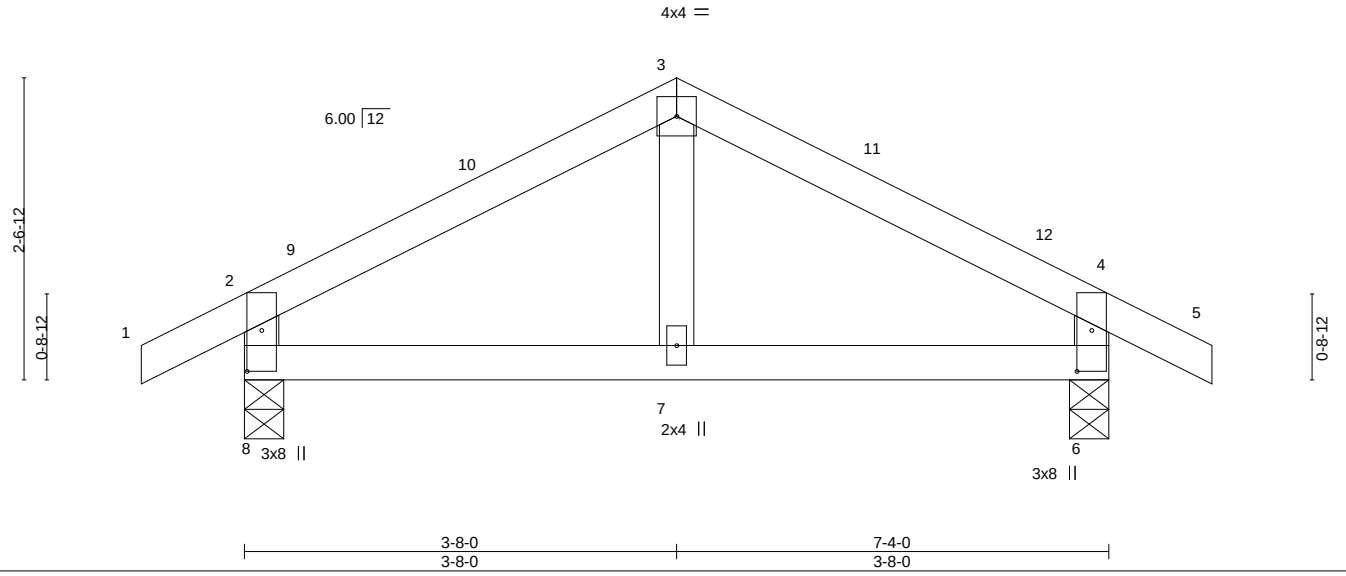


Plate Offsets (X,Y)-- [6:0-4-3,0-1-8], [8:0-4-3,0-1-8]

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	0.23	Vert(LL)	-0.01	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	7	>999	180		
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-AS							Weight: 23 lb	FT = 20%

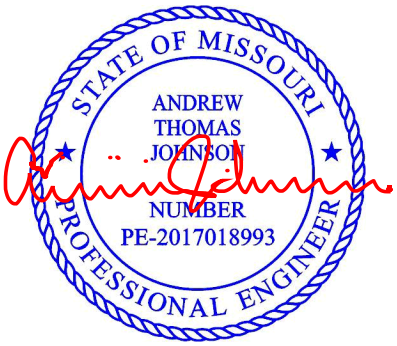
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 8=0-4-0, 6=0-4-0
Max Horz 8=-48(LC 10)
Max Uplift 8=-75(LC 12), 6=-75(LC 13)
Max Grav 8=479(LC 1), 6=479(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-414/196, 3-4=-414/196, 2-8=-426/246, 4-6=-426/245
BOT CHORD 7-8=-82/295, 6-7=-82/295

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 8-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 75 lb uplift at joint 8 and 75 lb uplift at joint 6.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

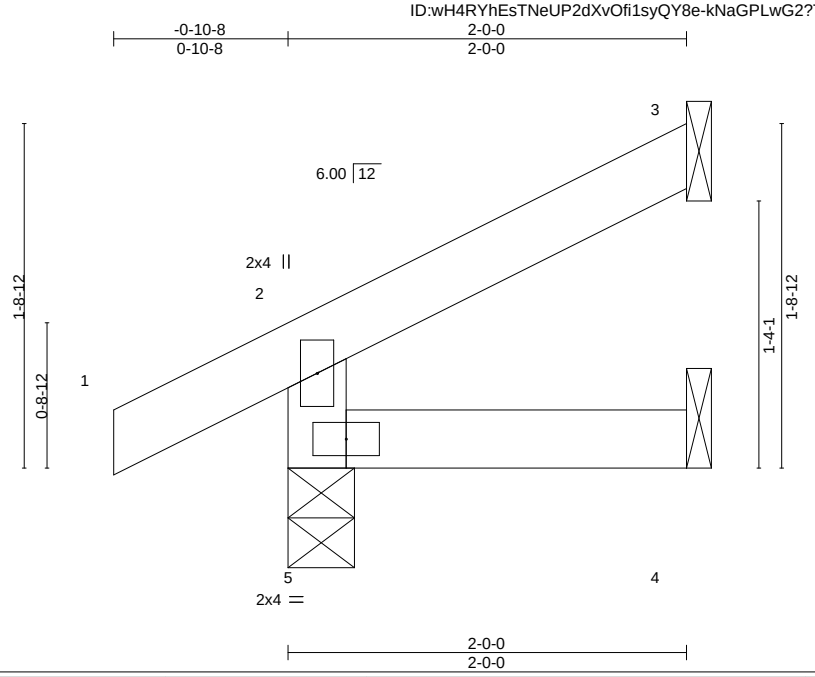


February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J01	JACK-OPEN	5	1	I44976730
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:02 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-kNaGPLwG2?TOGJgrJd36n1oywgXFuIrNpN9MgPzhJYB



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	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=48(LC 12)
Max Uplift 5=-28(LC 12), 3=-33(LC 12)
Max Grav 5=219(LC 1), 3=61(LC 1), 4=33(LC 3)

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

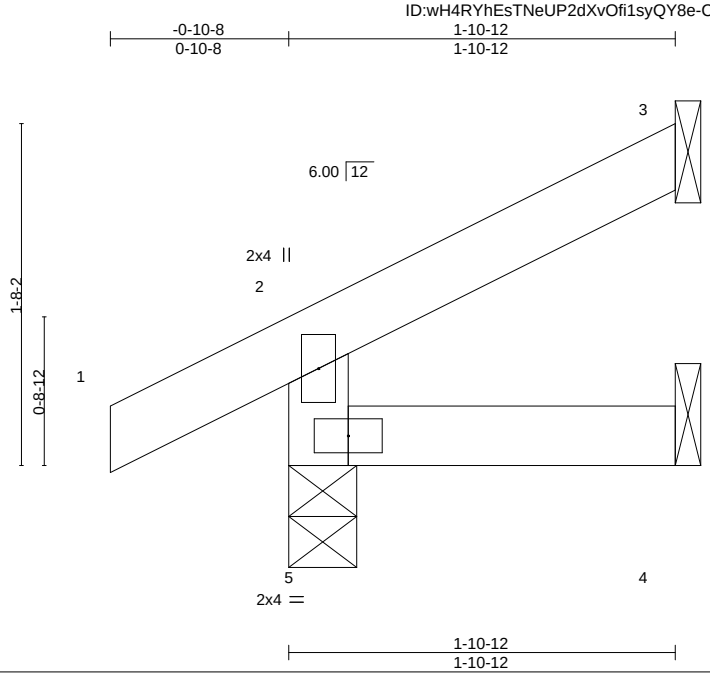
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 5 and 33 lb uplift at joint 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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J01A	Jack-Open	1	1	I44976731
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:03 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-CZ7echxupJbFuTF1tLbLKFK7g3tYdl5W21vvCrzhJYA



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	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=46(LC 12)
Max Uplift 5=-28(LC 12), 3=-31(LC 12)
Max Grav 5=214(LC 1), 3=56(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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 5 and 31 lb uplift at joint 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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J02	Jack-Open	6	1	I44976732
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:04 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-gmh0p1xXacj6VcqDR26atStGQTDVMCKgGgeSkHzhJY9

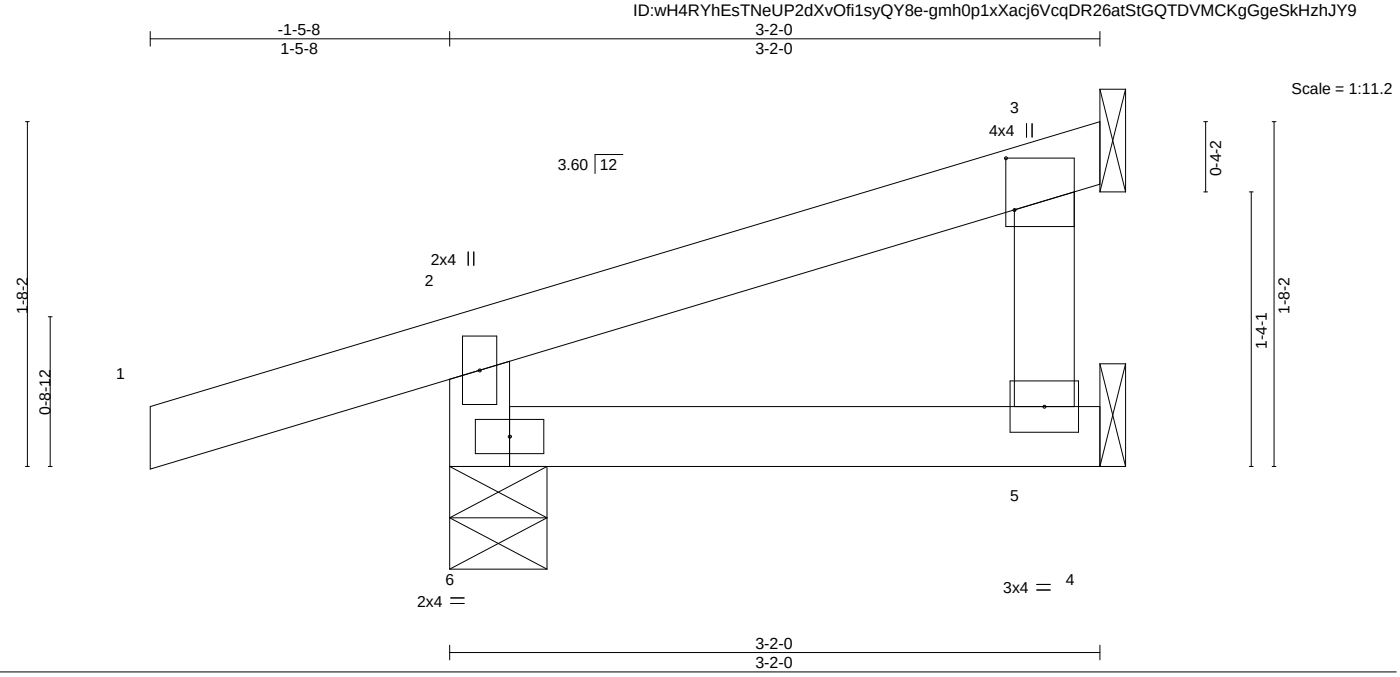


Plate Offsets (X,Y)-- [3:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	5-6	>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
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 6=0-5-11, 5=Mechanical, 3=Mechanical
Max Horz 6=52(LC 8)
Max Uplift 6=-104(LC 8), 3=-36(LC 12)
Max Grav 6=337(LC 1), 5=59(LC 3), 3=89(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-303/239

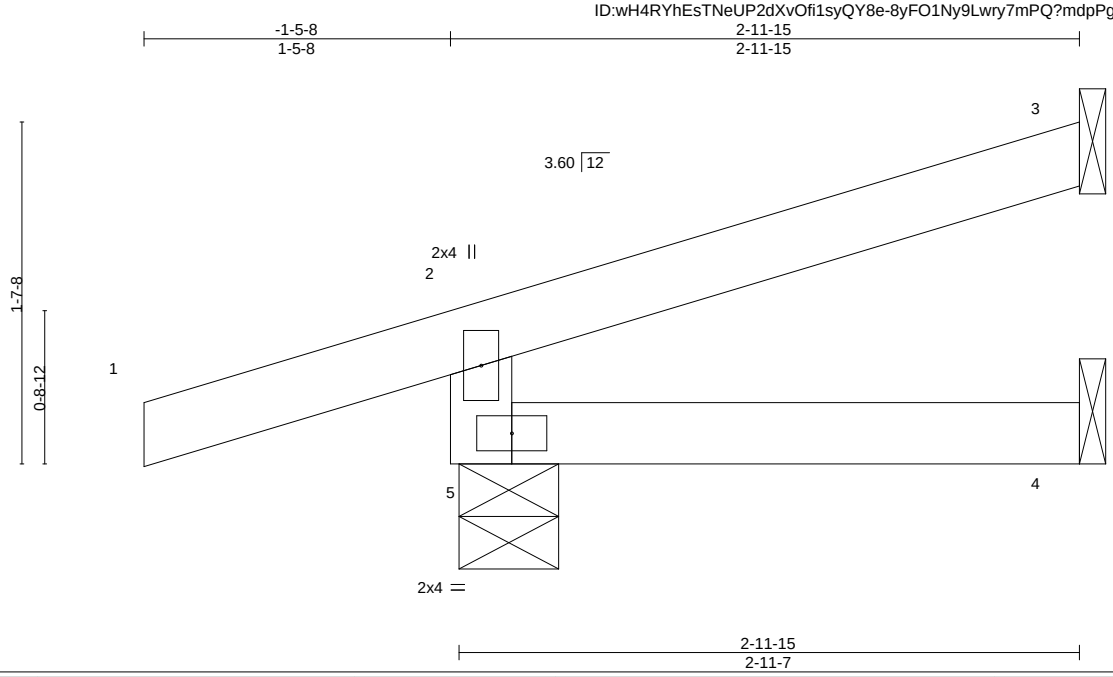
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 6 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 104 lb uplift at joint 6 and 36 lb uplift at joint 3.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J02A	Jack-Open	2	1	I44976733
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:05 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-8yFO1Ny9Lwry7mPQ?mdpPgQRAtYg5fapVKO0HkzhJY8



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)	-0.00	4-5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 9 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical
Max Horz 5=52(LC 8)
Max Uplift 5=-103(LC 8), 3=-36(LC 12)
Max Grav 5=339(LC 1), 3=91(LC 1), 4=48(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-304/240

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(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 5 and 36 lb uplift at joint 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.

February 26,2021

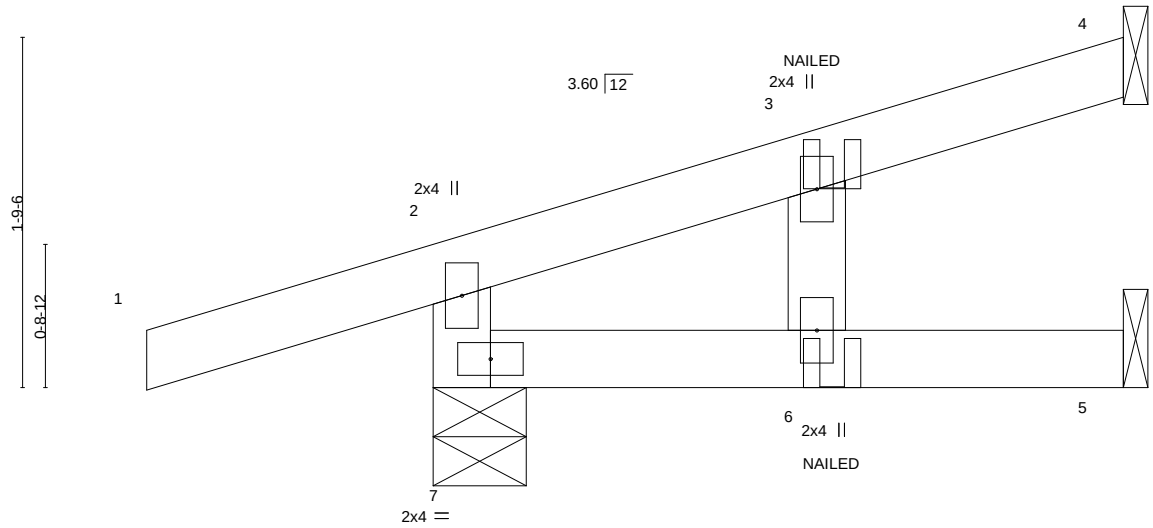
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J02B	Jack-Open Girder	1	1	I44976734 Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:06 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-c8pmEizn6Ezplw_cYT82ytycOHtyq6jzk_7ZpAzhJY7

-1-5-8 / 1-5-8 | 2-1-3 / 2-1-3 | 3-6-3 / 1-5-0

Scale = 1:11.7



3-6-3 / 3-6-3

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	0.25	Vert(LL)	0.01	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.00	4	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
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-5-11, 4=Mechanical, 5=Mechanical
Max Horz 7=59(LC 4)
Max Uplift 7=-107(LC 4), 4=-32(LC 8), 5=-8(LC 8)
Max Grav 7=361(LC 1), 4=95(LC 1), 5=58(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-294/105

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 7, 32 lb uplift at joint 4 and 8 lb uplift at joint 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-90, 2-4=-90, 5-7=-20

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J03	Half Hip Girder	6	1	I44976735
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:07 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-4KN9S2_PtX5gN4Zo6BfHU5Vn1hAMZZl6zet7LczhJY6

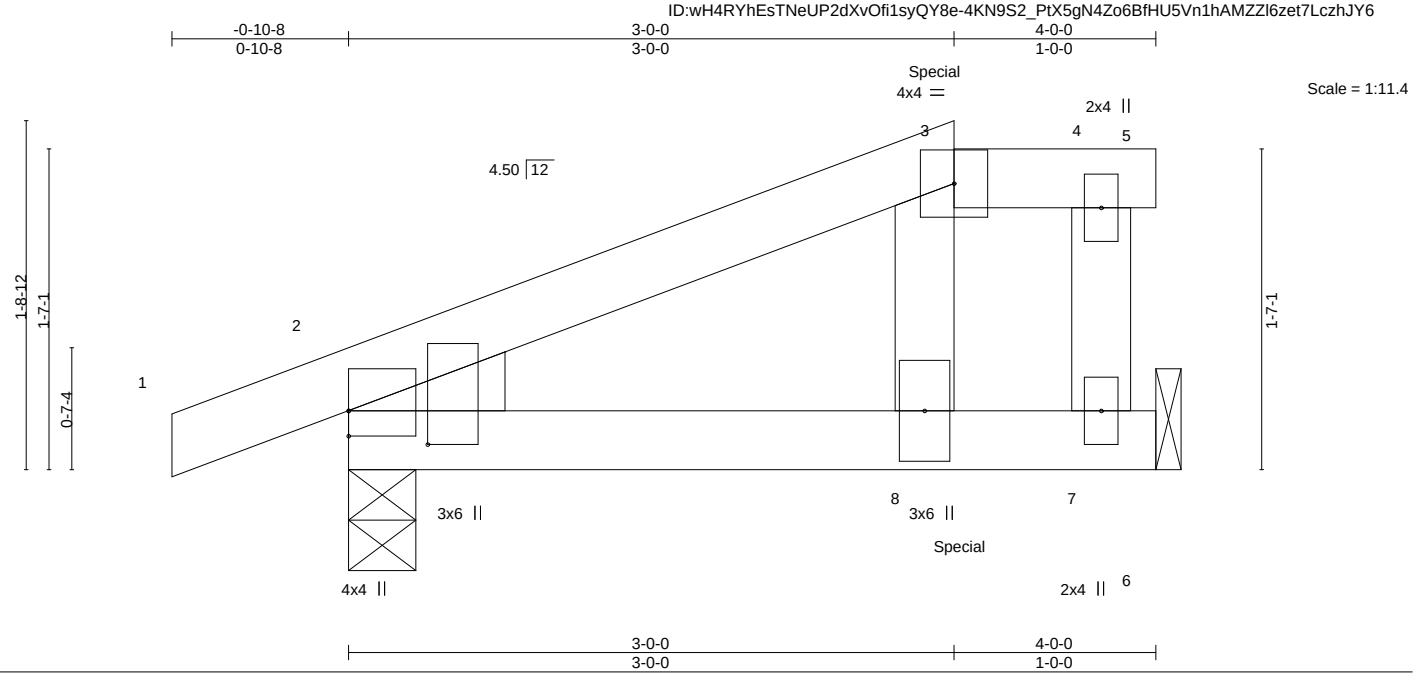


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

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	8-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.04	8-11	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 14 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=0-4-0, 7=Mechanical
Max Horz 2=55(LC 4)
Max Uplift 2=-67(LC 4), 7=-50(LC 4)
Max Grav 2=292(LC 1), 7=212(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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 2 and 50 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 78 lb up at 3-0-0 on top chord, and 31 lb down and 7 lb up at 3-0-0 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=-90, 3-4=-90, 4-5=-40, 6-9=-20
Concentrated Loads (lb)
Vert: 8=1(B)

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J03A	Half Hip Girder	2	1	I44976736
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:07 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-4KN9S2_PtX5gN4Zo6BfHU5VoAhAAZZl6zet7LczhJY6

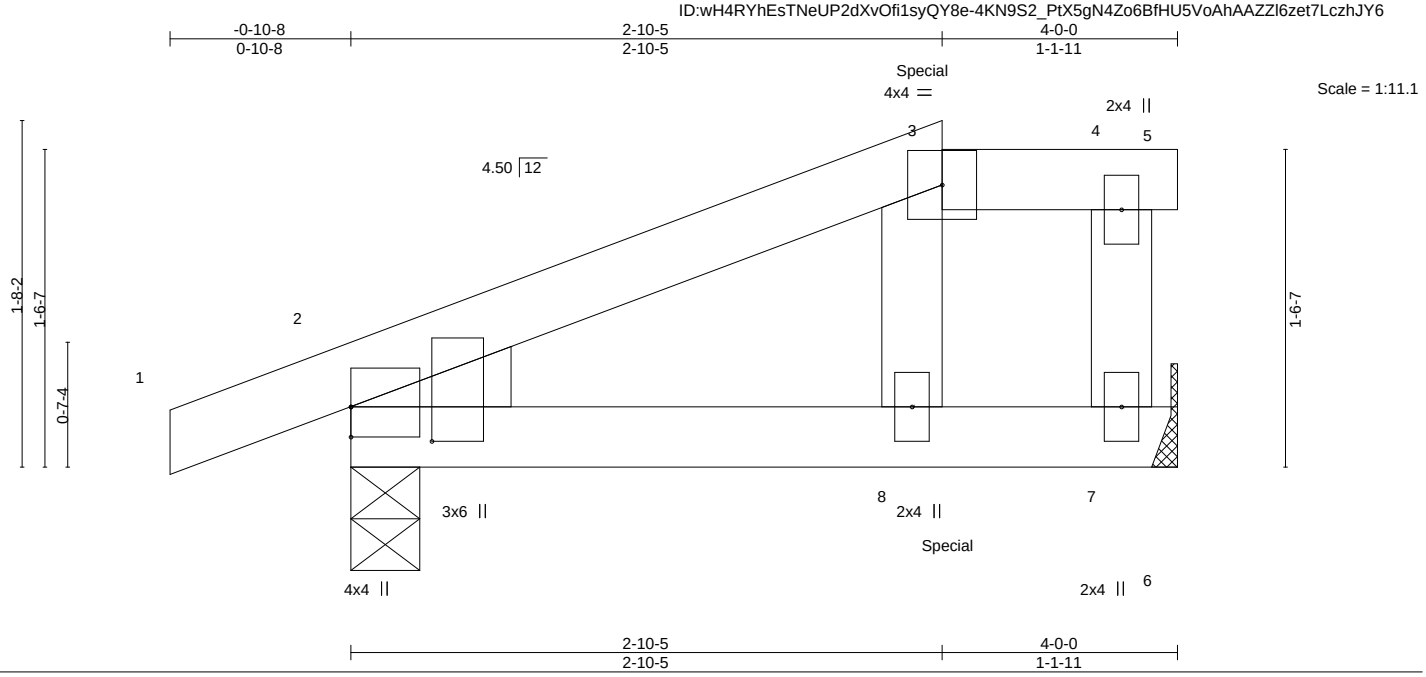


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

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	8-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.04	8-11	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=57(LC 7)
Max Uplift 7=-47(LC 5), 2=-72(LC 4)
Max Grav 7=211(LC 1), 2=292(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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 7 and 72 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 77 lb up at 2-10-5 on top chord, and 23 lb down and 7 lb up at 2-10-5 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=-90, 3-4=-90, 4-5=-40, 6-9=-20
Concentrated Loads (lb)
Vert: 8=3(B)

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J03B	Half Hip Girder	1	1	I44976737
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:08 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-YXxXfO_1erDX_E7_guAW1I2yB4V5I0_GBIcgt2zhJY5

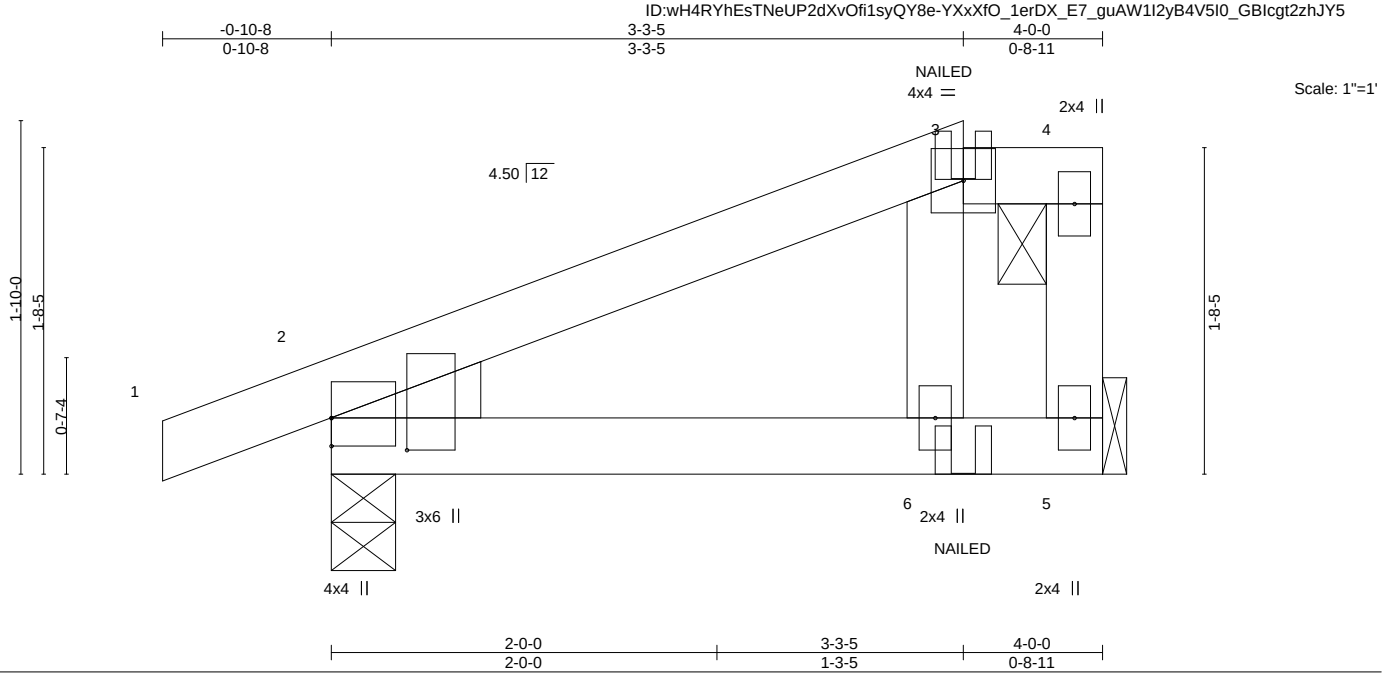


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	6-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.04	6-9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-4-0
Max Horz 2=64(LC 7)
Max Uplift 5=-54(LC 5), 2=-73(LC 4)
Max Grav 5=230(LC 1), 2=306(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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 5 and 73 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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=-90, 3-4=-90, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-3(F) 6=-29(F)

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J04	JACK-OPEN	18	1	I44976738

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:09 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0jVvtk?fP9LOcOiBEchlaWa7_UtP1TaPQyMDQVzhJY4

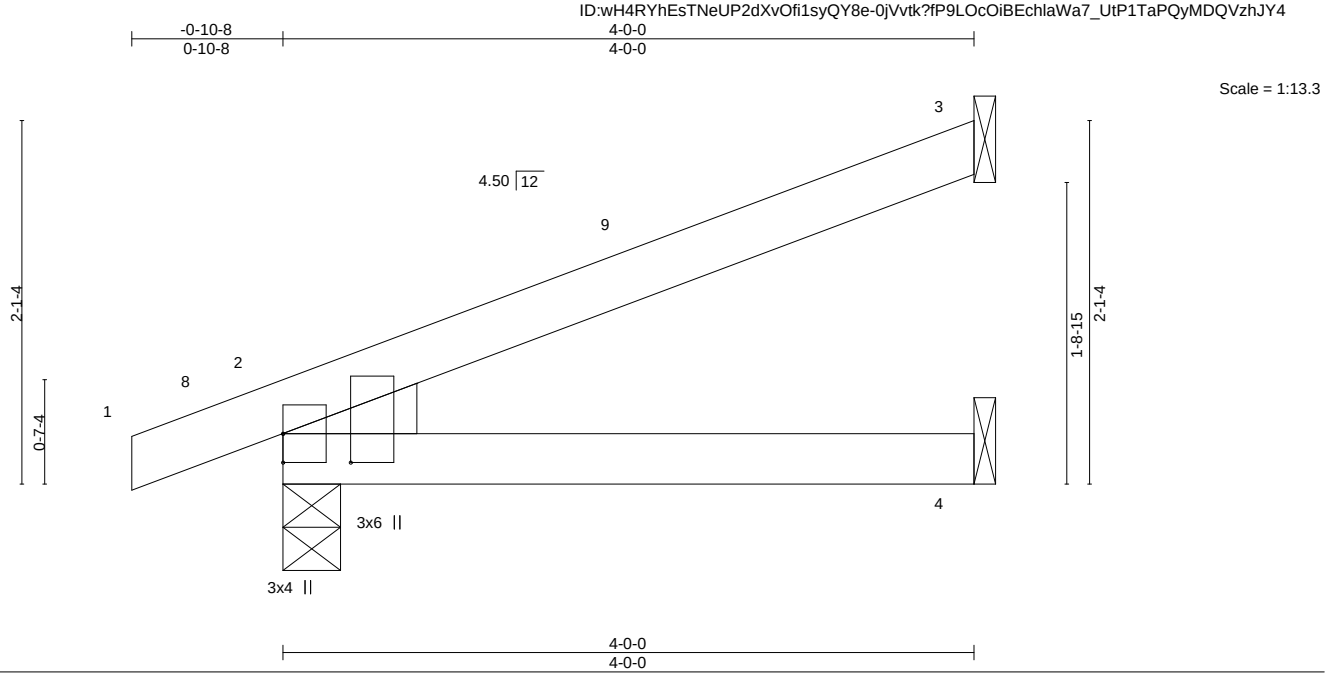


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
Max Horz 2=74(LC 8)
Max Uplift 3=-53(LC 12), 2=-59(LC 8), 4=-1(LC 12)
Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 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 53 lb uplift at joint 3, 59 lb uplift at joint 2 and 1 lb uplift at joint 4.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J10	JACK-OPEN	4	1	I44976739

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:09 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0jVvtk?fP9LOcOiBEchlaWa5DUt?1TaPQyMDQVzhJY4

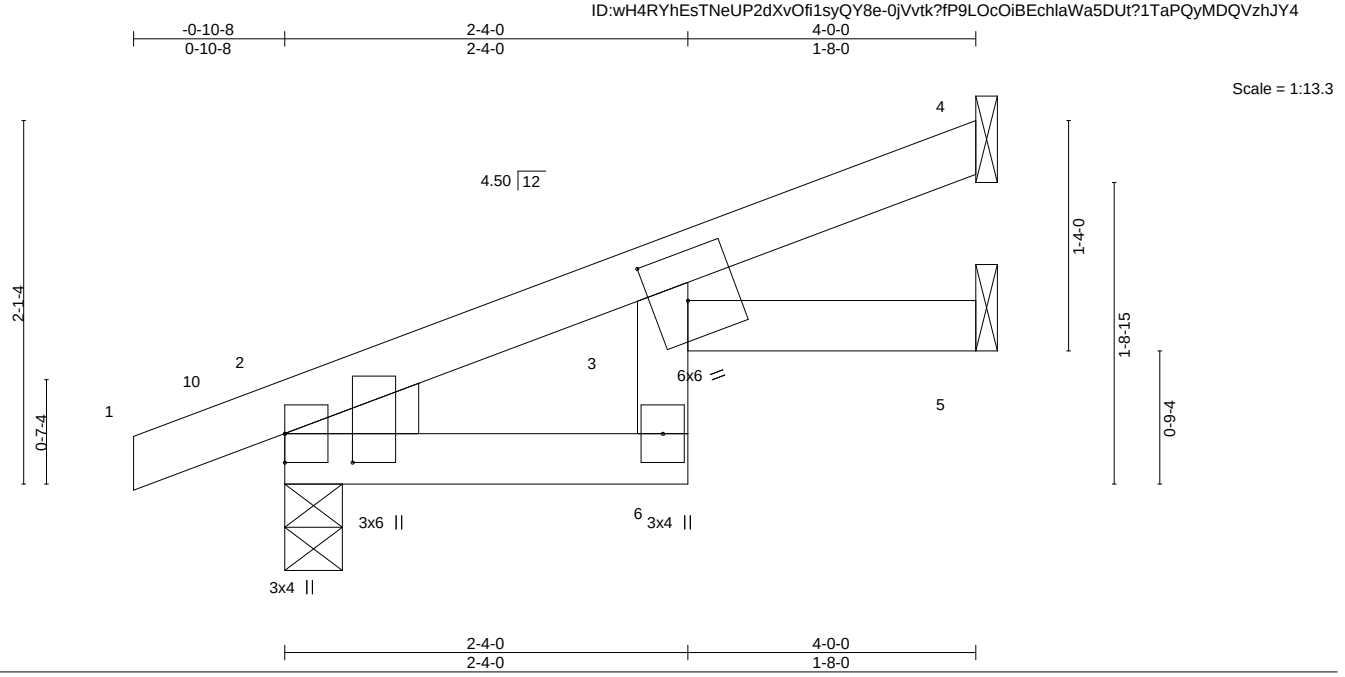


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11], [3:0-2-8,0-3-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	0.03	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.05	6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-0, 5=Mechanical
Max Horz 2=74(LC 8)
Max Uplift 4=-42(LC 12), 2=-58(LC 8), 5=-12(LC 12)
Max Grav 4=128(LC 1), 2=305(LC 1), 5=81(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-1, Interior(1) 2-1-1 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 42 lb uplift at joint 4, 58 lb uplift at joint 2 and 12 lb uplift at joint 5.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J11	Jack-Open	5	1	I44976740

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:10 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Vv3H440HASTFEXHNnJD_6j7IkuDemwqYfc5nyxzhJY3

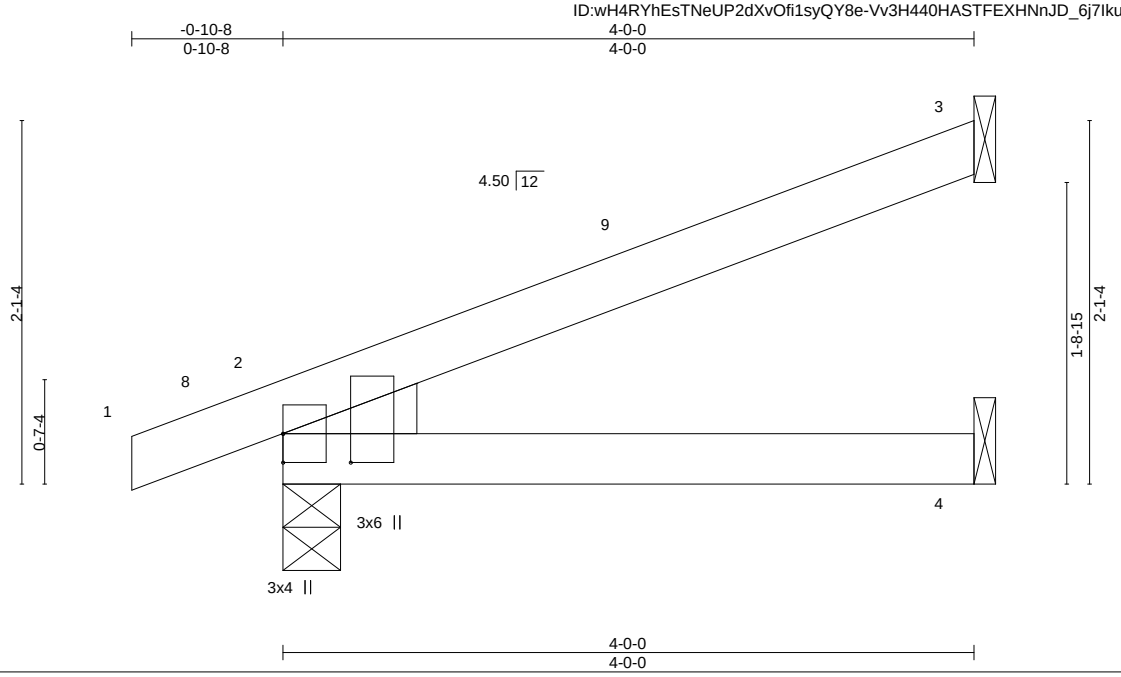


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
Max Horz 2=74(LC 8)
Max Uplift 3=-53(LC 12), 2=-59(LC 8), 4=-1(LC 12)
Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

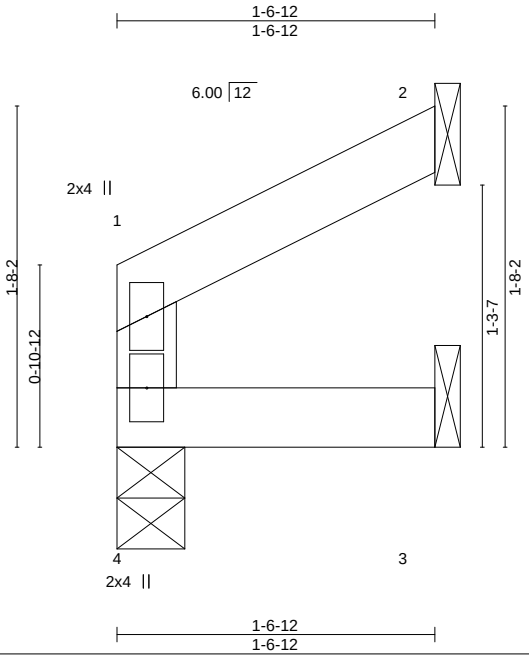
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C 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 53 lb uplift at joint 3, 59 lb uplift at joint 2 and 1 lb uplift at joint 4.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J12	Jack-Open	1	1	I44976741
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:11 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-z6cfIQ1wxmb6rhsZL0kDfxgWRIcLVN3itGrKUNzhJY2



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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-6-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-4-0, 2=Mechanical, 3=Mechanical
Max Horz 4=32(LC 9)
Max Uplift 2=-30(LC 12), 3=-2(LC 12)
Max Grav 4=77(LC 1), 2=59(LC 1), 3=28(LC 3)

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

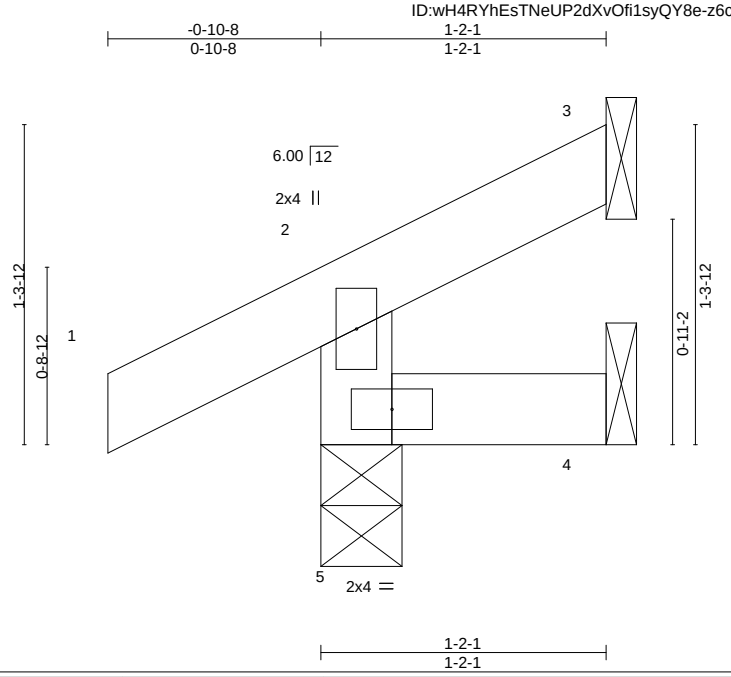
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions 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 30 lb uplift at joint 2 and 2 lb uplift at joint 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	J13	Jack-Open	1	1	I44976742
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:11 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-z6cfIQ1wxmb6rhsZL0kDfxgVfIcbVN3itGrKUNzhJY2



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	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 4 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-2-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=33(LC 9)
Max Uplift 5=-28(LC 12), 3=-15(LC 12), 4=-2(LC 9)
Max Grav 5=194(LC 1), 3=12(LC 19), 4=14(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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 5, 15 lb uplift at joint 3 and 2 lb uplift at joint 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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG01	GABLE	1	1	I44976743
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:12 2021 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-RIA1Vm2Yi4jzTrRmvkFSB8Cg1ixGEmIr6wau0qzhJY1

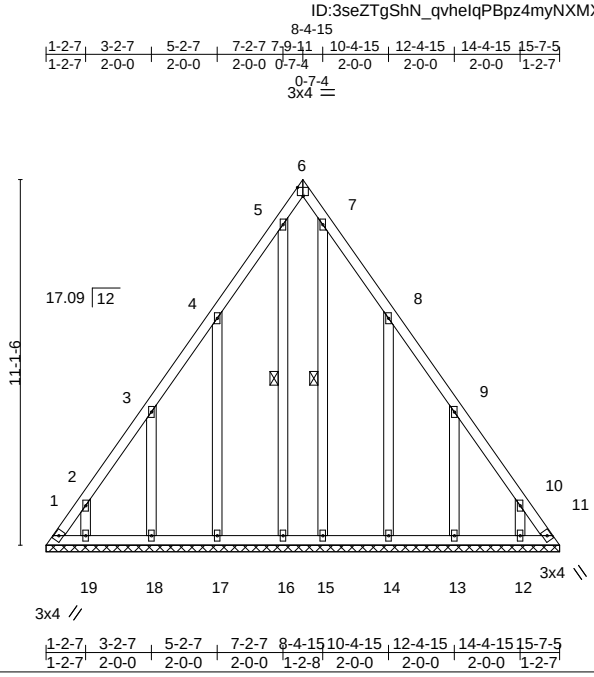


Plate Offsets (X,Y)-- [6:Edge,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 97 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-16, 7-15

REACTIONS. All bearings 15-7-5.
(lb) - Max Horz 1=-308(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 16, 15 except 1=-241(LC 10), 11=-210(LC 11), 18=-208(LC 12), 17=-230(LC 12), 14=-232(LC 13), 13=-208(LC 13), 19=-175(LC 12), 12=-175(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 16, 15, 19, 12 except 1=470(LC 12), 11=451(LC 13), 18=281(LC 19), 17=288(LC 19), 14=291(LC 20), 13=280(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-576/430, 2-3=-417/304, 9-10=-394/304, 10-11=-553/430
BOT CHORD 1-19=-244/330, 18-19=-244/330, 17-18=-244/330, 16-17=-244/330, 15-16=-244/330, 14-15=-244/330, 13-14=-244/330, 12-13=-244/330, 11-12=-244/330
WEBS 3-18=-285/226, 4-17=-309/247, 8-14=-309/249, 9-13=-285/225

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-2-7, Interior(1) 3-2-7 to 7-9-11, Exterior(2R) 7-9-11 to 10-9-11, Interior(1) 10-9-11 to 15-3-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 15 except (jt=lb) 1=241, 11=210, 18=208, 17=230, 14=232, 13=208, 19=175, 12=175.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG02	GABLE	1	1	I44976744
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:13 2021 Page 1

ID:3seZTgShN_qvheIqPBpz4myNXMX-vUkQi62ATNrq5?0yTRmhkMlkc5BNzD6?LaKRZGzhJY0

9-3-12
9-3-12

Scale = 1:78.6

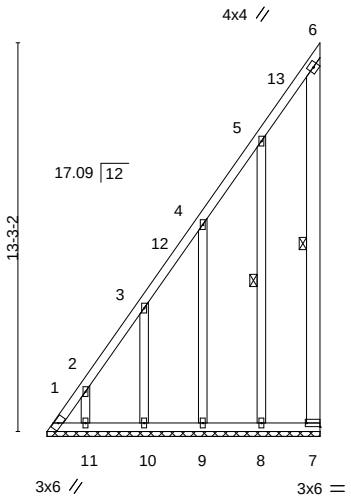


Plate Offsets (X,Y)-- [7:Edge,0-1-8]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-8-10 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-7, 5-8

REACTIONS. All bearings 9-3-12.
(lb) - Max Horz 1=439(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-336(LC 10), 7=-218(LC 11), 8=-219(LC 12), 9=-202(LC 12), 10=-214(LC 12), 11=-177(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7, 11 except 1=550(LC 12), 8=264(LC 19), 9=279(LC 19), 10=281(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1077/1064, 2-3=-926/930, 3-4=-724/742, 4-5=-545/581, 5-6=-273/302, 6-7=-258/209
WEBS 5-8=-406/309, 4-9=-327/252, 3-10=-310/256, 2-11=-252/217

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 9-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 336 lb uplift at joint 1, 218 lb uplift at joint 7, 219 lb uplift at joint 8, 202 lb uplift at joint 9, 214 lb uplift at joint 10 and 177 lb uplift at joint 11.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

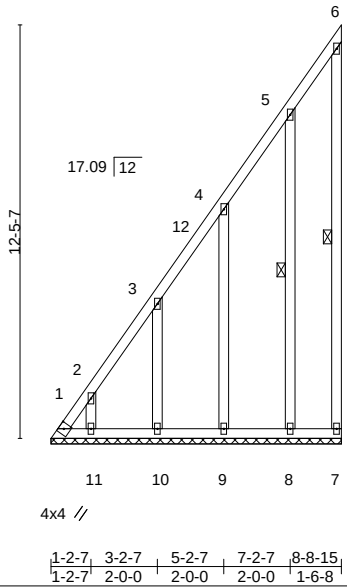
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG03	GABLE	1	1	I44976745
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:14 2021 Page 1

ID:3seZTgShN_qvheIqPBpz4myNXMX-NhIowS3oEhzhi9b809HwHZH?gVdHihr8aE3_5izhJY?

1-2-7 | 3-2-7 | 5-2-7 | 7-2-7 | 8-8-15
1-2-7 | 2-0-0 | 2-0-0 | 2-0-0 | 1-6-8

Scale = 1:69.4



1-2-7 | 3-2-7 | 5-2-7 | 7-2-7 | 8-8-15
1-2-7 | 2-0-0 | 2-0-0 | 2-0-0 | 1-6-8

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 65 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 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-7, 5-8

REACTIONS. All bearings 8-8-15.

(lb) - Max Horz 1=483(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-278(LC 10), 11=-174(LC 12), 10=-211(LC 12), 9=-211(LC 12), 8=-188(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 7, 11 except 1=669(LC 12), 10=282(LC 19), 9=281(LC 19), 8=254(LC 19)

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

TOP CHORD 1-2=-870/753, 2-3=-682/612, 3-4=-454/427

WEBS 2-11=-253/220, 3-10=-306/266, 4-9=-306/228, 5-8=-274/204

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(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 8-7-3 zone; cantilever left and right exposed ; end vertical left 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) 7 except (jt=lb) 1=278, 11=174, 10=211, 9=211, 8=188.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG04	GABLE	1	1	I44976746
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:15 2021 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-rtsA7n4Q??6YKJALaso9pnqApvzGRBFIoupYd8zhJY_

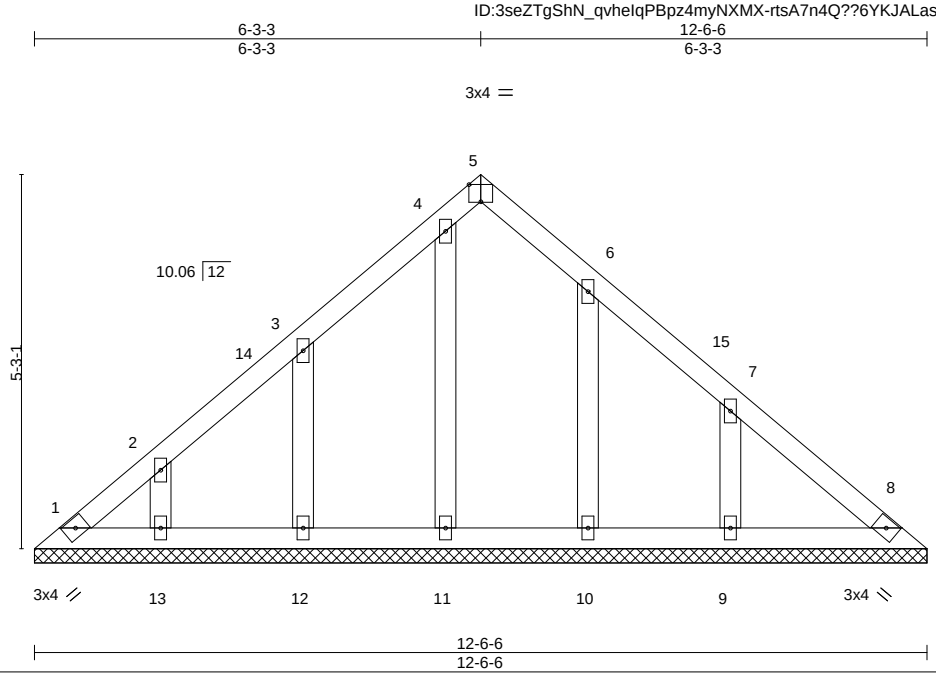


Plate Offsets (X,Y)-- [5:0-2-0,Edge]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 47 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 12-6-6.
(lb) - Max Horz 1=-128(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 13, 10 except 12=-114(LC 12), 9=-132(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 11, 12, 13, 10 except 9=299(LC 20)

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) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 6-3-3, Exterior(2R) 6-3-3 to 9-3-3, Interior(1) 9-3-3 to 12-1-9 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
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 13, 10 except (jt=lb) 12=114, 9=132.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG05	GABLE	1	1	I44976747
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:15 2021 Page 1
ID:3seZTgShN_qvhelqPBpz4myNXMX-rtsA7n4Q??6YKJALaso9pnq9wvz_RBSIoupYd8zhJY_

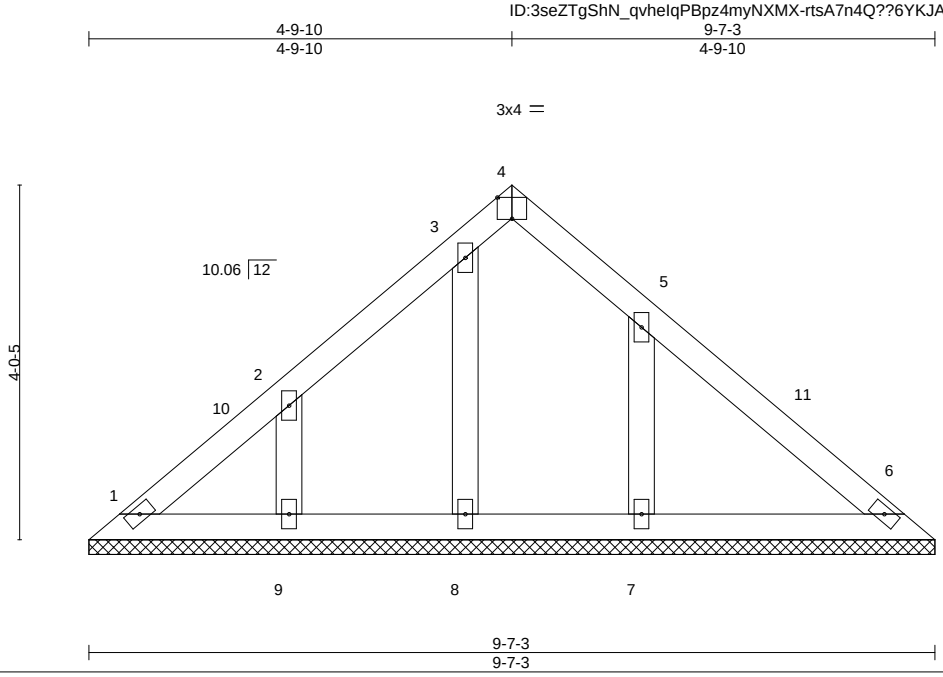


Plate Offsets (X,Y)-- [4:0-2-0,Edge]

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	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. All bearings 9-7-3.
(lb) - Max Horz 1=96(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8 except 9=-118(LC 12), 7=-134(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 8 except 9=264(LC 19), 7=347(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-7=-273/206

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) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 4-9-10, Exterior(2R) 4-9-10 to 7-9-10 , Interior(1) 7-9-10 to 9-2-6 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 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8 except (jt=lb) 9=118, 7=134.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

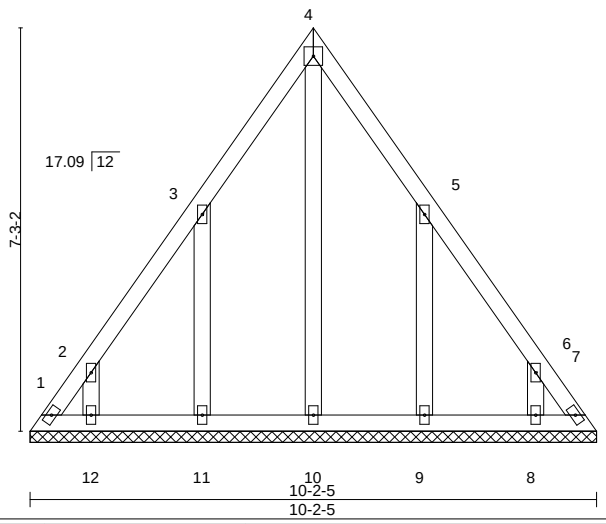
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG07	GABLE	1	1	I44976748
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:16 2021 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-J3QYL752lIEPySlX8aJOM_NLWJJbAdkR1YY58bzhJXz

5-1-3 10-2-5
5-1-3 5-1-3

4x4 =

Scale = 1:41.5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 49 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 10-2-5.
(lb) - Max Horz 1=197(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-140(LC 10), 7=-117(LC 11), 11=-222(LC 12), 12=-171(LC 12), 9=-221(LC 13), 8=-172(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 7, 10, 12, 8 except 1=261(LC 12), 11=300(LC 19), 9=299(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-320/226, 6-7=-303/226
WEBS 3-11=-312/240, 5-9=-312/239

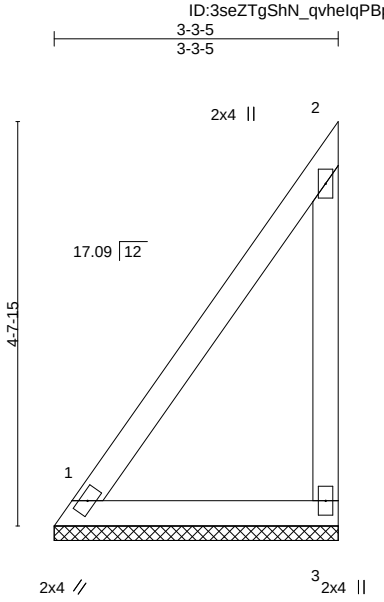
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-1-3, Interior(1) 3-1-3 to 5-1-3, Exterior(2R) 5-1-3 to 8-1-3, Interior(1) 8-1-3 to 9-10-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 1, 117 lb uplift at joint 7, 222 lb uplift at joint 11, 171 lb uplift at joint 12, 221 lb uplift at joint 9 and 172 lb uplift at joint 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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG08	Lay-In Gable	1	1	I44976749
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:17 2021 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-nG_wYT5gWcMFZcKjiHrduCvT4je8v5YaGCIeh1zhJXy



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.08	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: 14 lb	FT = 20%

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

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

REACTIONS. (size) 1=3-3-5, 3=3-3-5
Max Horz 1=160(LC 9)
Max Uplift 1=-42(LC 8), 3=-117(LC 9)
Max Grav 1=212(LC 20), 3=217(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-253/279, 2-3=-310/240

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(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 42 lb uplift at joint 1 and 117 lb uplift at joint 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	LG09	GABLE	1	1	I44976750
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:18 2021 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-GSXJmp6JHwU6BmuvF_MsRPSg86_oeXwkUs1CDTzhJXx

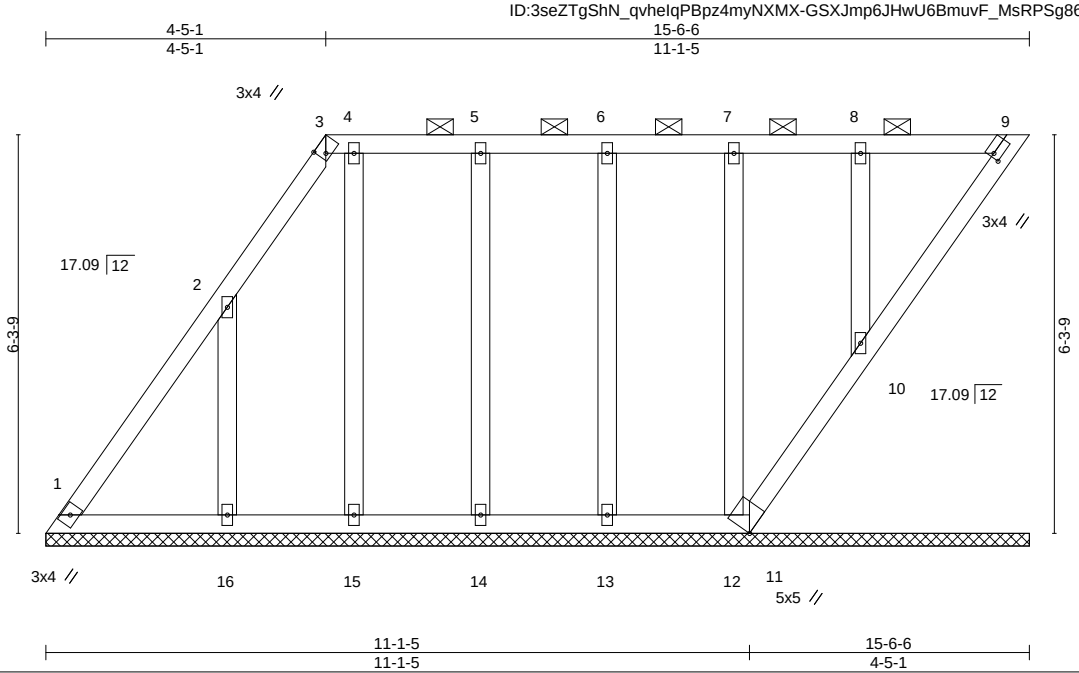


Plate Offsets (X,Y)-- [3:0-1-2,Edge], [9:0-0-12,0-1-8]

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 76 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-6-6.
(lb) - Max Horz 1=245(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 11, 15, 14, 13, 12, 10 except 16=-276(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 11, 15, 14, 13, 12 except 16=371(LC 19), 10=283(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-16=-357/280

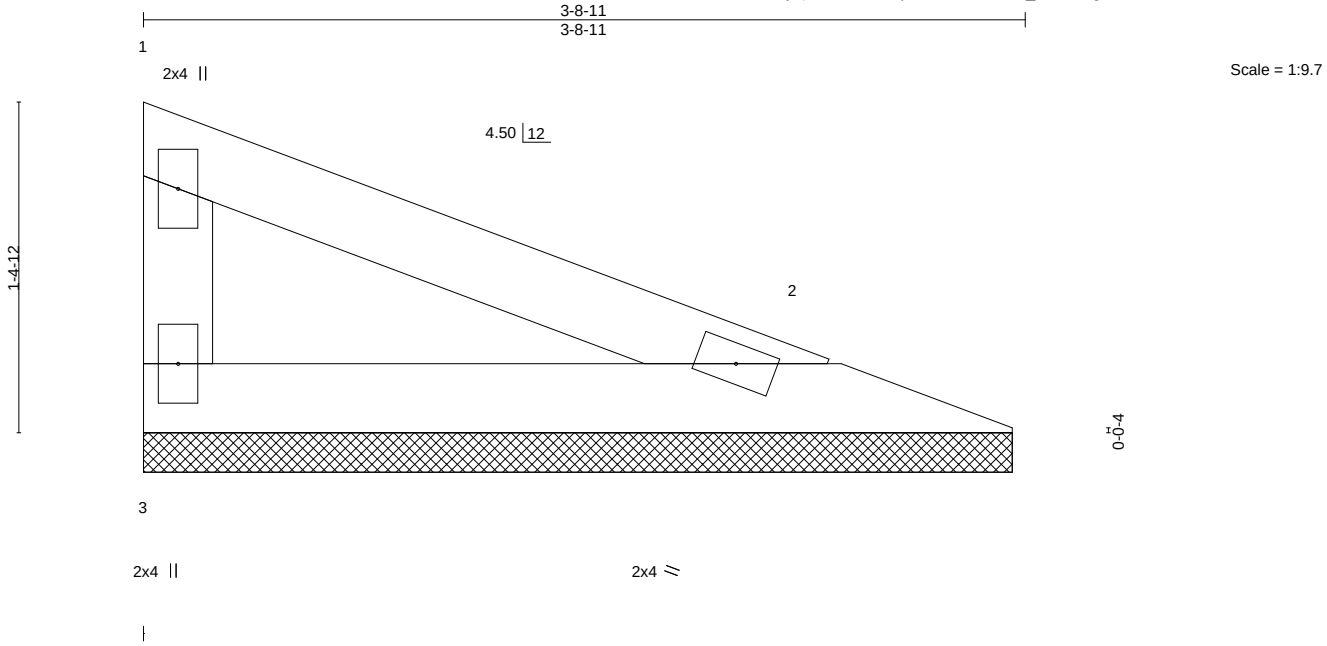
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-3-6, Interior(1) 3-3-6 to 4-5-1, Exterior(2R) 4-5-1 to 7-5-1, Interior(1) 7-5-1 to 15-3-0 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) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 11, 15, 14, 13, 12, 10 except (jt=lb) 16=276.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	V03	VALLEY	1	1	I44976751
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:18 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-GSXJmp6JHwU6BmuvF_MsRPSgh6zTeYokUs1CDTzhJXx



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	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

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

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

REACTIONS. (size) 3=3-8-0, 2=3-8-0
Max Horz 3=-47(LC 10)
Max Uplift 3=-32(LC 13), 2=-24(LC 13)
Max Grav 3=151(LC 1), 2=151(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) 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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	V04	GABLE	1	1	I44976752
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:19 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-ke5hz97x2DczpwT6pit5zd?pgWJ0N_GtjWnllwzhJXw

6-4-11
6-4-11

Scale = 1:15.4

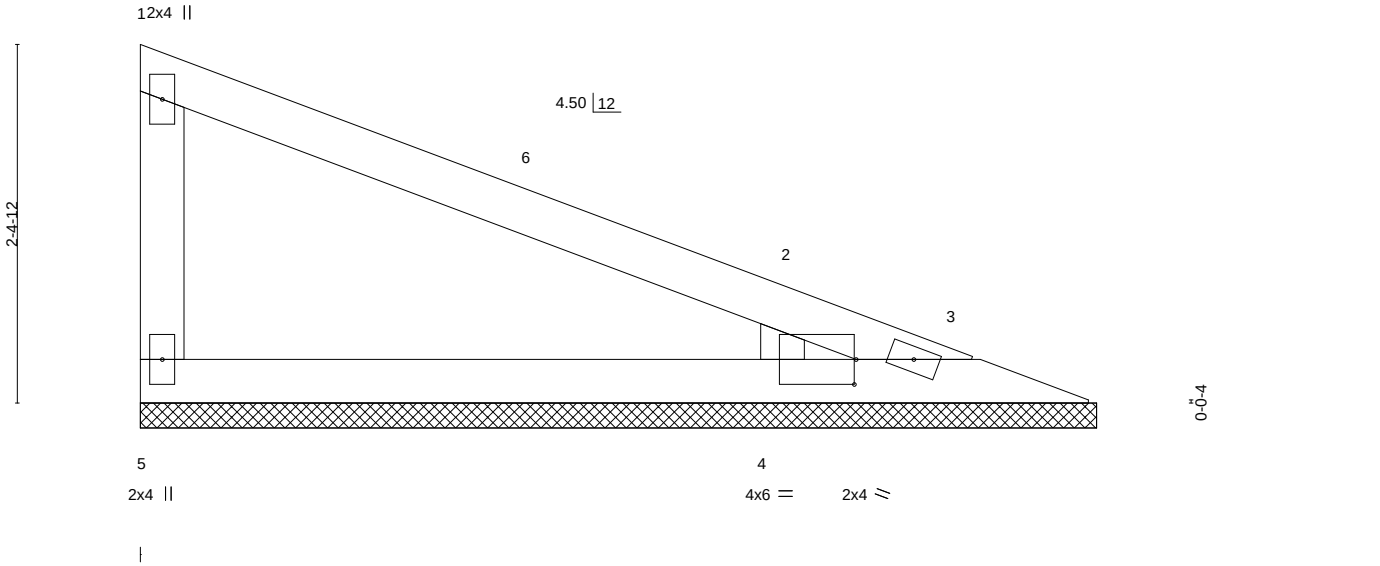


Plate Offsets (X,Y)-- [4:0-0-2,0-2-0]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 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) 5=6-4-11, 3=6-4-11, 4=6-4-11
Max Horz 5=-91(LC 8)
Max Uplift 5=-38(LC 13), 3=-78(LC 1), 4=-117(LC 13)
Max Grav 5=183(LC 1), 3=44(LC 13), 4=489(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-400/278

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-3-8, Interior(1) 4-3-8 to 5-6-10 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) 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) 5, 3 except (jt=lb) 4=117.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	V05	VALLEY	1	1	I44976753
					Job Reference (optional)

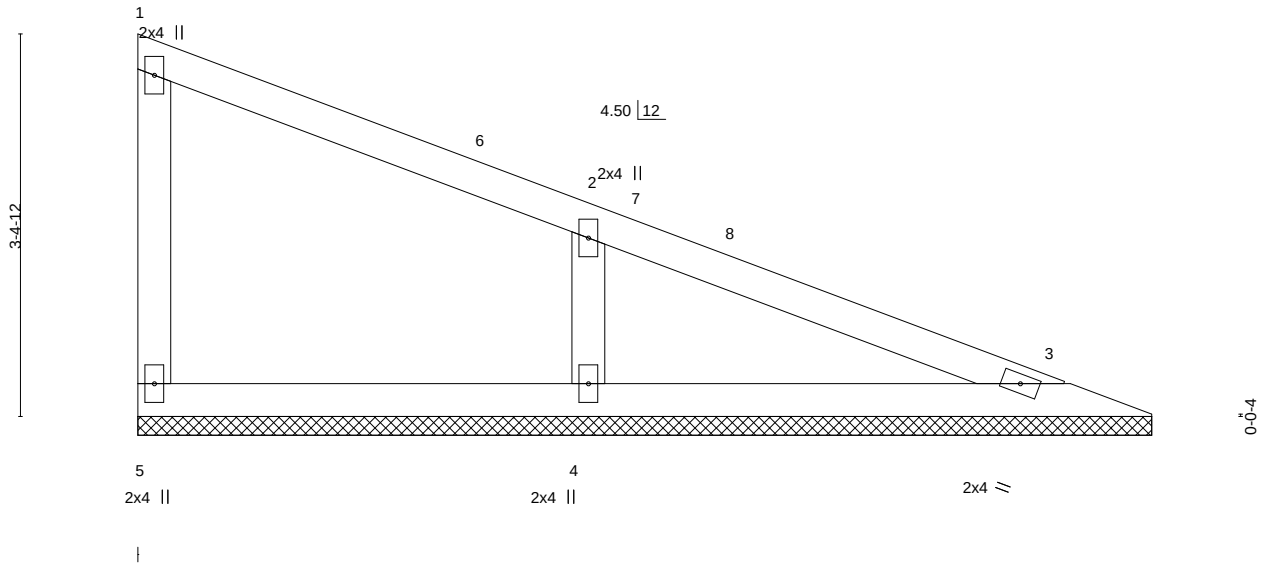
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:20 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Crf3AV8ZpXkqQ42INPOKWqX_ywey6RP1yAWJHMzhJXv

9-0-11

9-0-11

Scale = 1:20.5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 25 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) 5=9-0-0, 3=9-0-0, 4=9-0-0
Max Horz 5=-136(LC 8)
Max Uplift 5=-27(LC 8), 3=-13(LC 13), 4=-115(LC 9)
Max Grav 5=161(LC 1), 3=185(LC 1), 4=542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-434/231

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 8-2-10 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) 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) 5, 3 except (jt=lb) 4=115.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	V06	VALLEY	1	1	I44976754

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:20 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Crf3AV8ZpXkqQ42INPOKWqX1MweB6RI1yAWJHMzhJXv

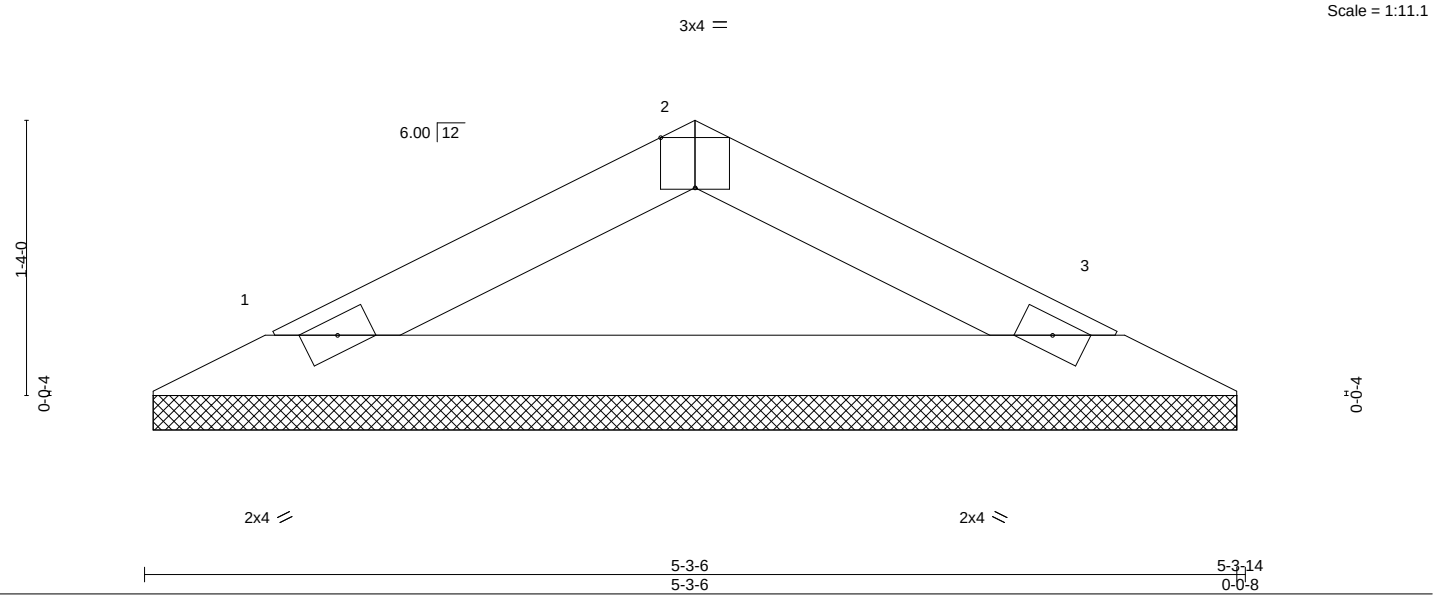


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	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

BRACING-

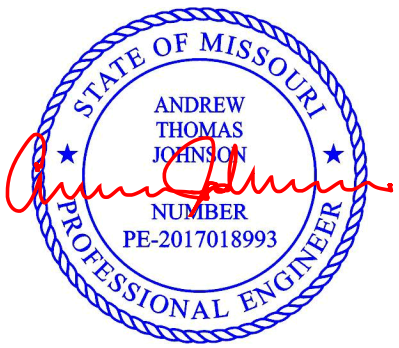
TOP CHORD Structural wood sheathing directly applied or 5-3-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-14, 3=5-2-14
Max Horz 1=18(LC 16)
Max Uplift 1=-30(LC 12), 3=-30(LC 13)
Max Grav 1=223(LC 1), 3=223(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.



February 26,2021

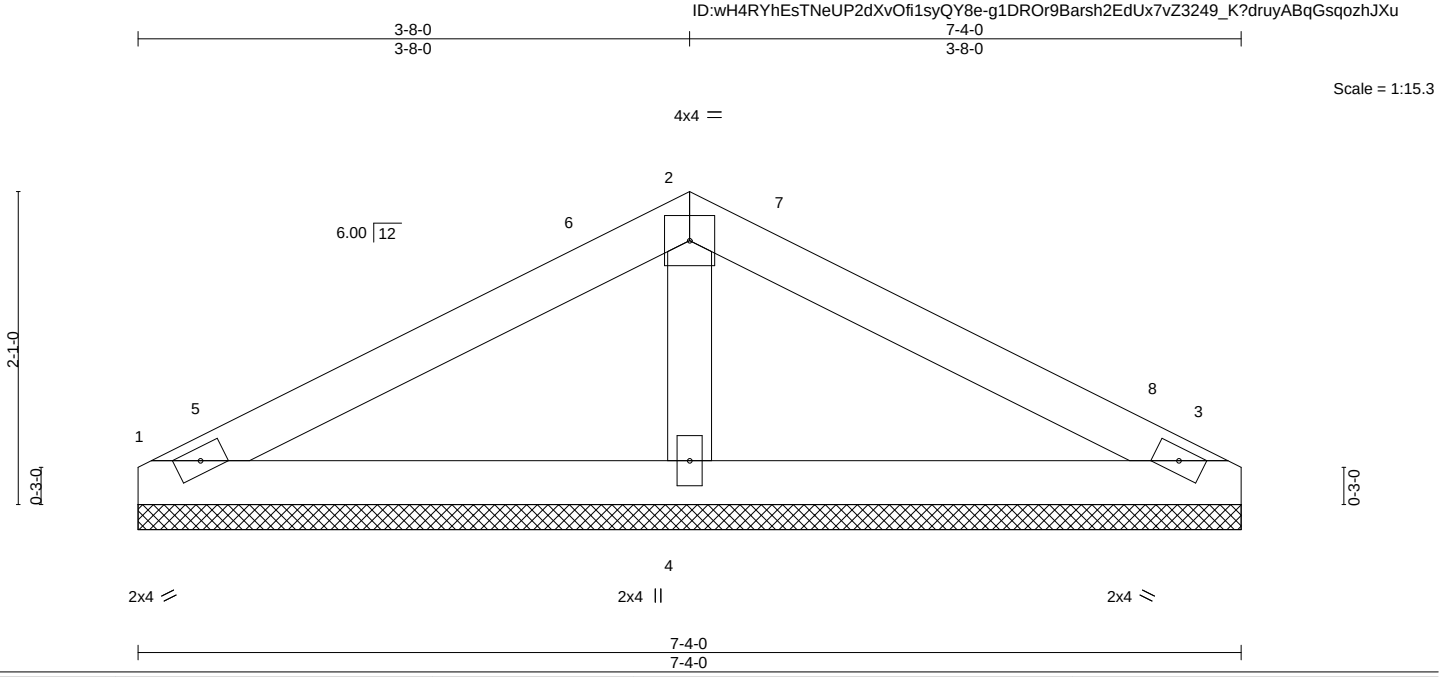
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	V07	VALLEY	1	1	I44976755

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:21 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-g1DROr9Barsh2EdUx7vZ3249_K?druyABqGsqozhJXu



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	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 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-4-0, 3=7-4-0, 4=7-4-0
Max Horz 1=31(LC 16)
Max Uplift 1=-41(LC 12), 3=-47(LC 13), 4=-22(LC 12)
Max Grav 1=200(LC 1), 3=200(LC 1), 4=375(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-286/165

NOTES-

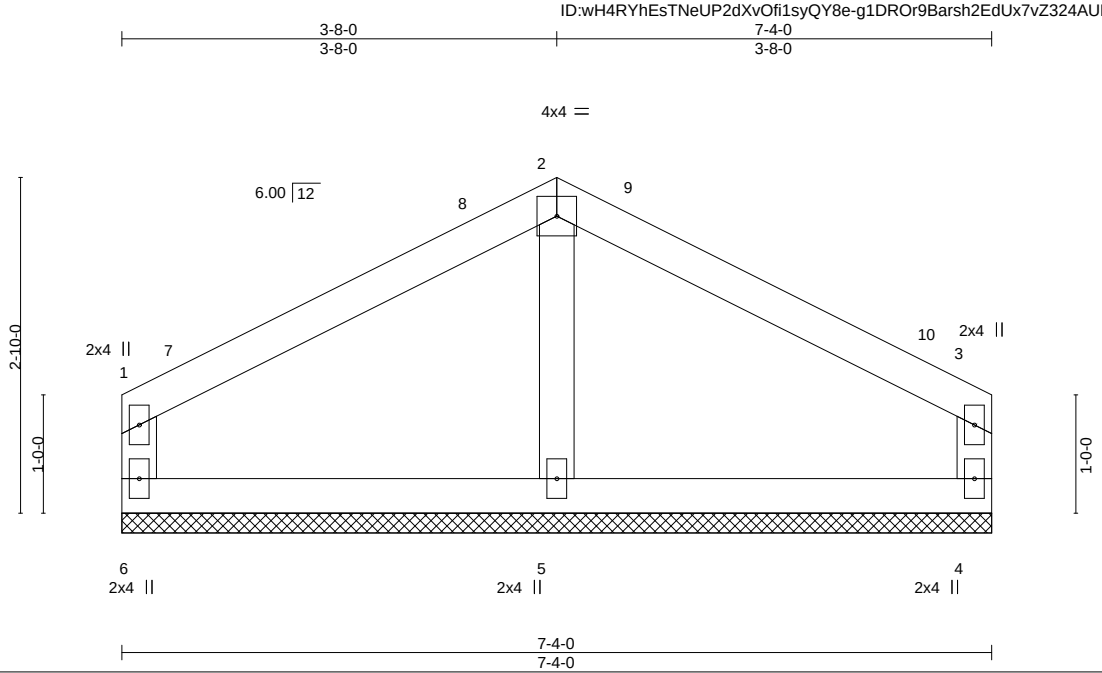
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-8-0, Exterior(2R)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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #37/MO
2686850	V08	VALLEY	1	1	I44976756
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 09:00:21 2021 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-g1DROr9Barsh2EdUx7vZ324AUK?jruxABqGsqozhJXu



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	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 22 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) 6=7-4-0, 4=7-4-0, 5=7-4-0
Max Horz 6=-52(LC 10)
Max Uplift 6=-52(LC 12), 4=-53(LC 13)
Max Grav 6=224(LC 1), 4=224(LC 1), 5=327(LC 1)

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

NOTES-

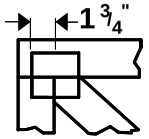
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-8-0, Exterior(2R)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

February 26,2021

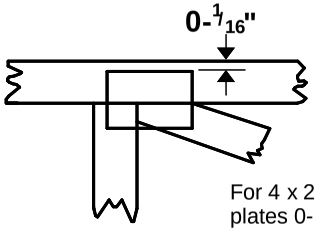
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

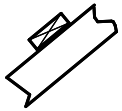
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

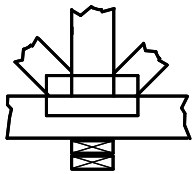
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

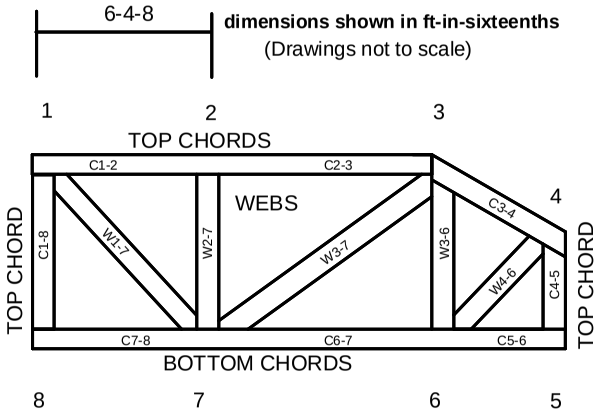


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.