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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

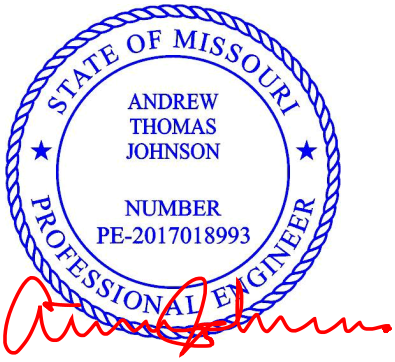
Re: 2685550
Summit/Woodside #53

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: I44972193 thru I44972229

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

Missouri COA: Engineering 001193



February 26,2021

Johnson, Andrew ,Engineer

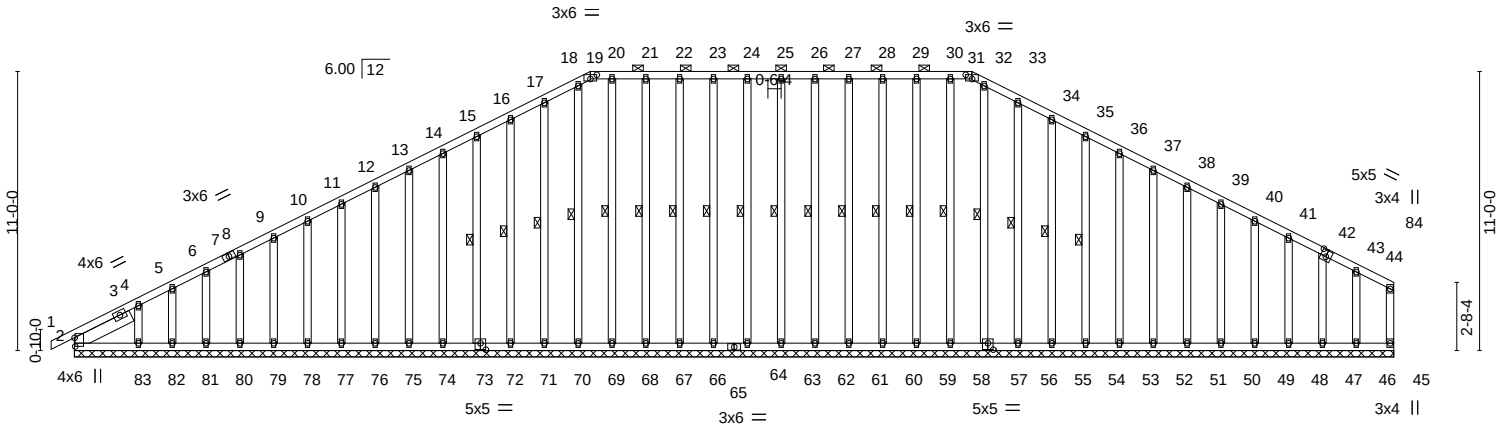
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 #53
2685550	A1	GABLE	1	1	I44972193
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:01 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-MvlhgudM0tXVxEAx3Nk4CLzUqXSrjOW0Luc?JWzhV?K

-0-11-0 20-4-0 35-4-8 52-0-0
0-11-0 20-4-0 15-0-8 16-7-8

Scale = 1:90.8



52-0-0
52-0-0

Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [19:0-3-0,0-2-0], [31:0-3-0,0-2-0], [42:0-2-8,0-3-0], [57:0-2-8,0-3-0], [73:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	45	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 446 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 2x6 SPF No.2 - 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 19-31.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 46-47,45-46.
WEBS	1 Row at midpt 24-64, 23-66, 22-67, 21-68, 20-69, 18-70, 17-71, 16-72, 15-73, 25-63, 26-62, 27-61, 28-60, 29-59, 30-58, 32-57, 33-56, 34-55, 35-54

REACTIONS. All bearings 52-0-0.
(lb) - Max Horz 2=186(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 73, 64, 66, 67, 68, 69, 71, 72, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 63, 62, 61, 60, 59, 58, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46
Max Grav All reactions 250 lb or less at joint(s) 45, 2, 73, 64, 66, 67, 68, 69, 70, 71, 72, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 14-15=-123/278, 15-16=-132/307, 16-17=-145/338, 17-18=-159/371, 18-19=-147/342, 19-20=-146/349, 20-21=-146/349, 21-22=-146/349, 22-23=-146/349, 23-24=-146/349, 24-25=-146/349, 25-26=-146/349, 26-27=-146/349, 27-28=-146/349, 28-29=-146/349, 29-30=-146/349, 30-31=-146/349, 31-32=-147/341, 32-33=-159/373, 33-34=-145/339, 34-35=-132/308, 35-36=-122/278

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 20-4-0, Corner(3R) 20-4-0 to 23-4-0, Exterior(2N) 23-4-0 to 35-4-8, Corner(3R) 35-4-8 to 38-6-4, Exterior(2N) 38-6-4 to 51-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 73, 64, 66, 67, 68, 69, 71, 72, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 63, 62, 61, 60, 59, 58, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46.

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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.

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A2	Piggyback Base	1	1	I44972194
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:15 2021 Page 1
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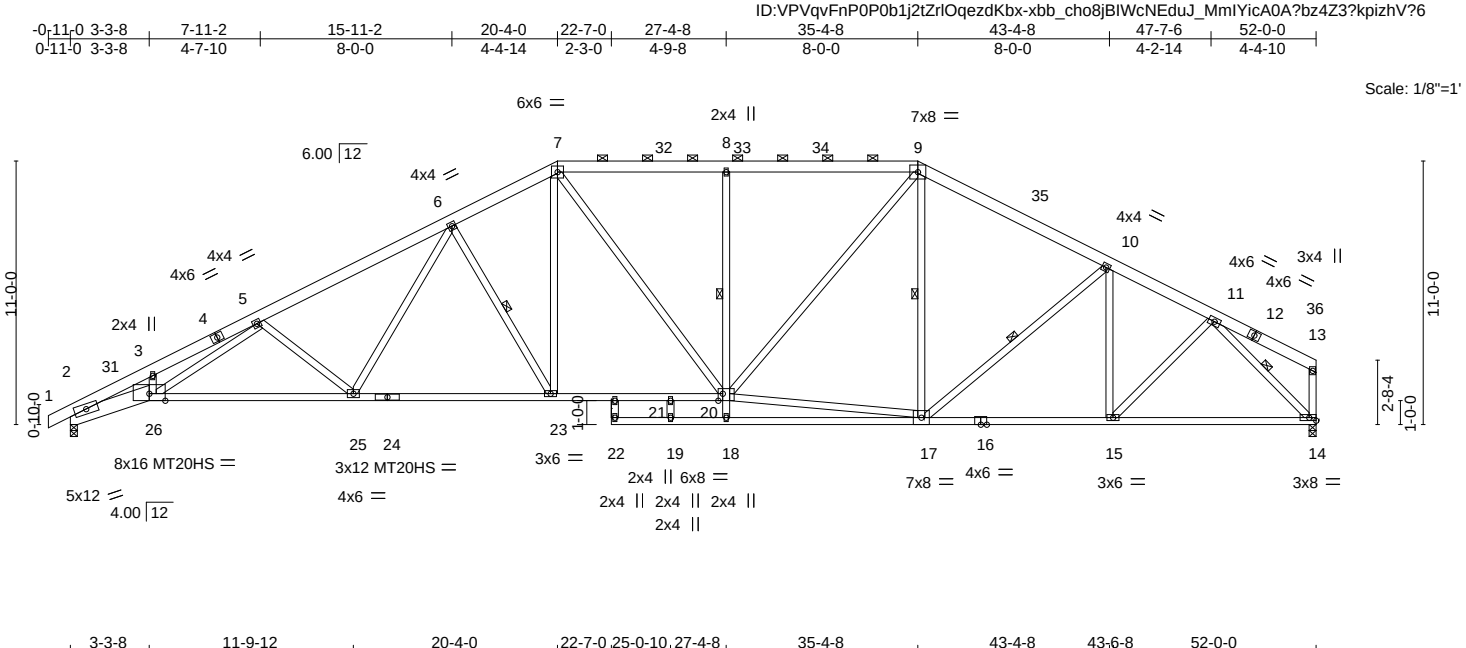

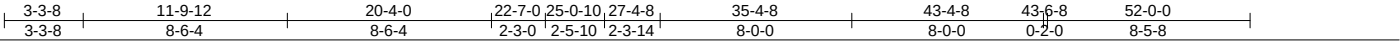

Plate Offsets (X,Y)-- [20:0-2-4,Edge]

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	0.85	Vert(LL)	-0.32	22	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.76	22	>815	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.33	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 322 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-26: 2x8 SP 2400F 2.0E, 24-26: 2x4 SPF 1650F 1.5E
	20-24,14-16: 2x4 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, and 2-0-0 oc purlins (3-9-3 max.): 7-9.
BOT CHORD	Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 21-23
WEBS	1 Row at midpt 6-23, 8-18, 9-17, 10-17, 11-14

REACTIONS. (size) 2=0-3-8, 14=0-3-8
Max Horz 2=156(LC 11)
Max Uplift 2=-66(LC 12), 14=-44(LC 13)
Max Grav 2=2425(LC 1), 14=2356(LC 1)

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

TOP CHORD	2-3=-7094/724, 3-5=-6732/744, 5-6=-4629/536, 6-7=-3542/483, 7-8=-3235/466, 8-9=-3238/468, 9-10=-2973/418, 10-11=-2927/367
BOT CHORD	2-26=-704/6285, 25-26=-553/4783, 23-25=-346/3559, 21-23=-241/3078, 20-21=-241/3078, 15-17=-253/2595, 14-15=-232/1993
WEBS	3-26=-6/531, 5-26=-165/1589, 5-25=-993/219, 6-25=-79/942, 6-23=-933/207, 7-23=-103/986, 7-20=-96/516, 18-20=0/276, 8-20=-582/140, 9-20=-88/1196, 10-15=-436/95, 11-15=-31/849, 11-14=-2808/324, 17-20=-205/2495

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 51-10-4 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) 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 100 lb uplift at joint(s) 2, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A3	Piggyback Base	1	1	I44972195
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:17 2021 Page 1
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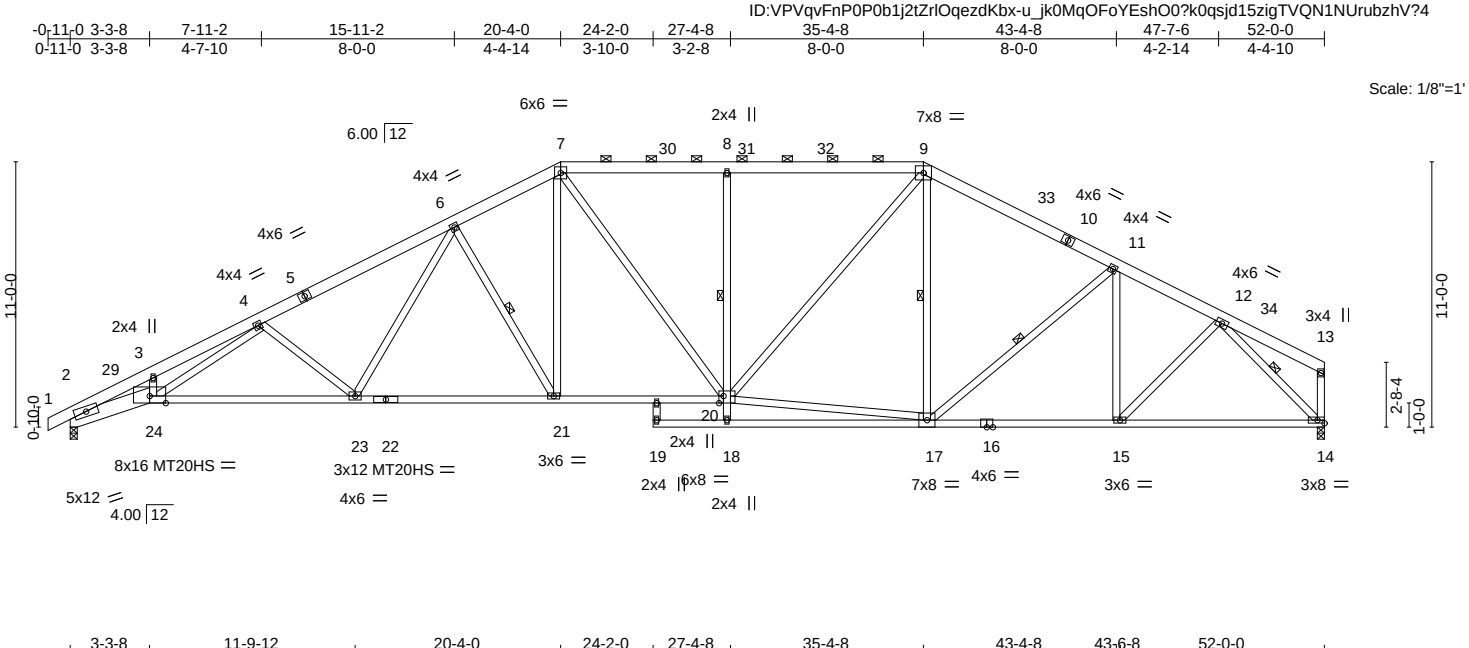

3-3-8	11-9-12	20-4-0	24-2-0	27-4-8	35-4-8	43-4-8	43-6-8	52-0-0
3-3-8	8-6-4	8-6-4	3-10-0	3-2-8	8-0-0	8-0-0	0-2-0	8-5-8

Plate Offsets (X,Y)-- [20:0-2-4,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	0.86	Vert(LL)	-0.32	23-24	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.67	23-24	>930	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.33	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 319 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-24: 2x8 SP 2400F 2.0E, 22-24: 2x4 SPF 1650F 1.5E
	20-22,14-16: 2x4 SP 2400F 2.0E
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.): 7-9.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-21, 8-18, 9-17, 11-17, 12-14

REACTIONS. (size) 2=0-3-8, 14=0-3-8
Max Horz 2=156(LC 11)
Max Uplift 2=-65(LC 12), 14=-42(LC 13)
Max Grav 2=2428(LC 1), 14=2362(LC 1)

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

TOP CHORD	2-3=-7102/721, 3-4=-6740/741, 4-6=-4636/533, 6-7=-3547/481, 7-8=-3250/461, 8-9=-3253/462, 9-11=-2984/413, 11-12=-2936/363
BOT CHORD	2-24=-701/6292, 23-24=-551/4789, 21-23=-344/3564, 20-21=-239/3082, 15-17=-250/2603, 14-15=-230/1998
WEBS	3-24=-6/531, 4-24=-165/1589, 4-23=-993/219, 6-23=-78/945, 6-21=-937/207, 7-21=-109/976, 7-20=-90/539, 18-20=0/295, 8-20=-583/140, 9-20=-86/1194, 11-15=-441/94, 12-15=-30/854, 12-14=-2814/321, 17-20=-202/2503

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 51-10-4 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) 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 100 lb uplift at joint(s) 2, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A4	Piggyback Base	3	1	I44972196
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:18 2021 Page 1
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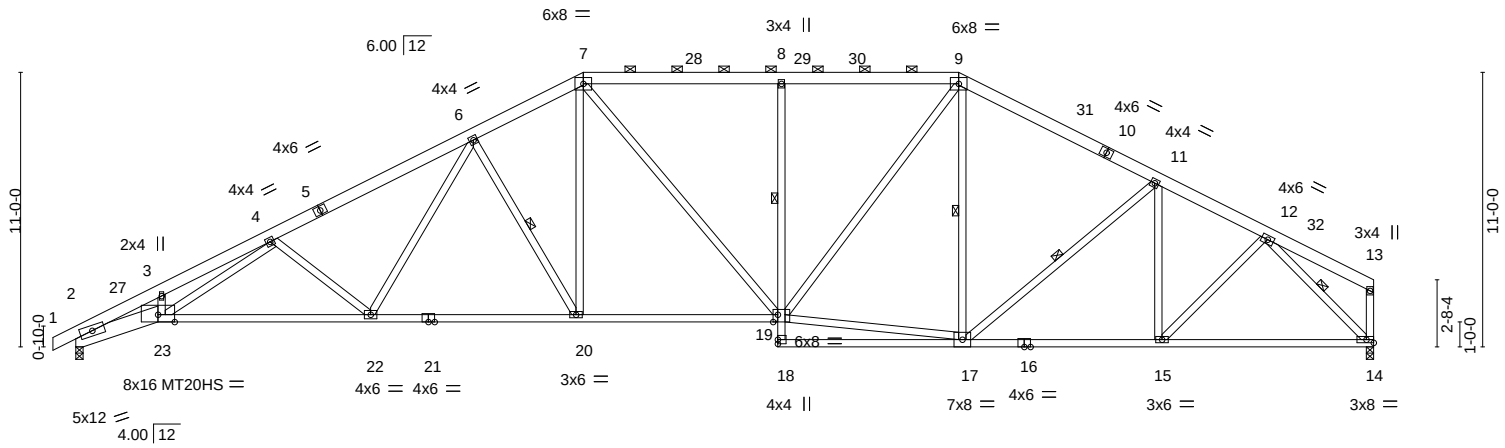
-0-11-0	3-3-8	7-11-2	15-11-2	20-4-0	28-1-8	35-4-8	43-4-8	47-7-6	52-0-0
0-11-0	3-3-8	4-7-10	8-0-0	4-4-14	7-9-8	7-3-0	8-0-0	4-2-14	4-4-10

Scale = 1:92.3



3-3-8	11-9-12	20-4-0	28-1-8	35-4-8	43-4-8	43-6-8	52-0-0
3-3-8	8-6-4	8-6-4	7-9-8	7-3-0	8-0-0	0-2-0	8-5-8

Plate Offsets (X,Y)-- [19:0-2-4,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	0.84	Vert(LL)	-0.32	22-23	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.66	22-23	>936	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.33	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 314 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-23: 2x8 SP 2400F 2.0E, 21-23: 2x4 SPF 1650F 1.5E
	19-21,14-16: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-9-4 max.): 7-9.
BOT CHORD	Rigid ceiling directly applied. Except:
	1 Row at midpt 8-19
WEBS	1 Row at midpt 6-20, 9-17, 11-17, 12-14

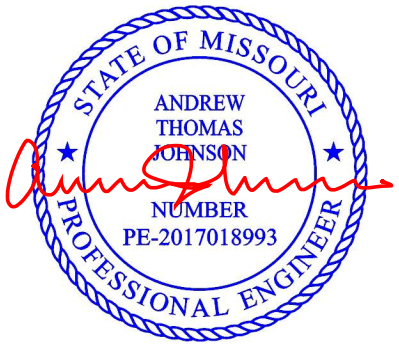
REACTIONS. (size) 2=0-3-8, 14=0-3-8
Max Horz 2=156(LC 11)
Max Uplift 2=-78(LC 12), 14=-54(LC 13)
Max Grav 2=2398(LC 1), 14=2333(LC 1)

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

TOP CHORD	2-3=-7009/760, 3-4=-6650/777, 4-6=-4562/564, 6-7=-3479/510, 7-8=-3155/491, 8-9=-3145/490, 9-11=-2931/434, 11-12=-2897/380
BOT CHORD	2-23=-736/6210, 22-23=-580/4721, 20-22=-370/3500, 19-20=-267/3028, 8-19=-579/139, 15-17=-266/2569, 14-15=-240/1971
WEBS	3-23=-10/525, 4-23=-170/1574, 4-22=-992/221, 6-22=-80/939, 6-20=-916/204, 7-20=-106/971, 7-19=-100/460, 17-19=-203/2385, 9-19=-111/1189, 11-15=-430/100, 12-15=-37/845, 12-14=-2777/336

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 51-10-4 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) 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 100 lb uplift at joint(s) 2, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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 #53
2685550	A5	PIGGYBACK BASE	3	1	I44972197
					Job Reference (optional)

8.430 s Nov 18 2020 MiTek Industries, Inc. Fri Feb 26 08:49:17 2021 Page 1
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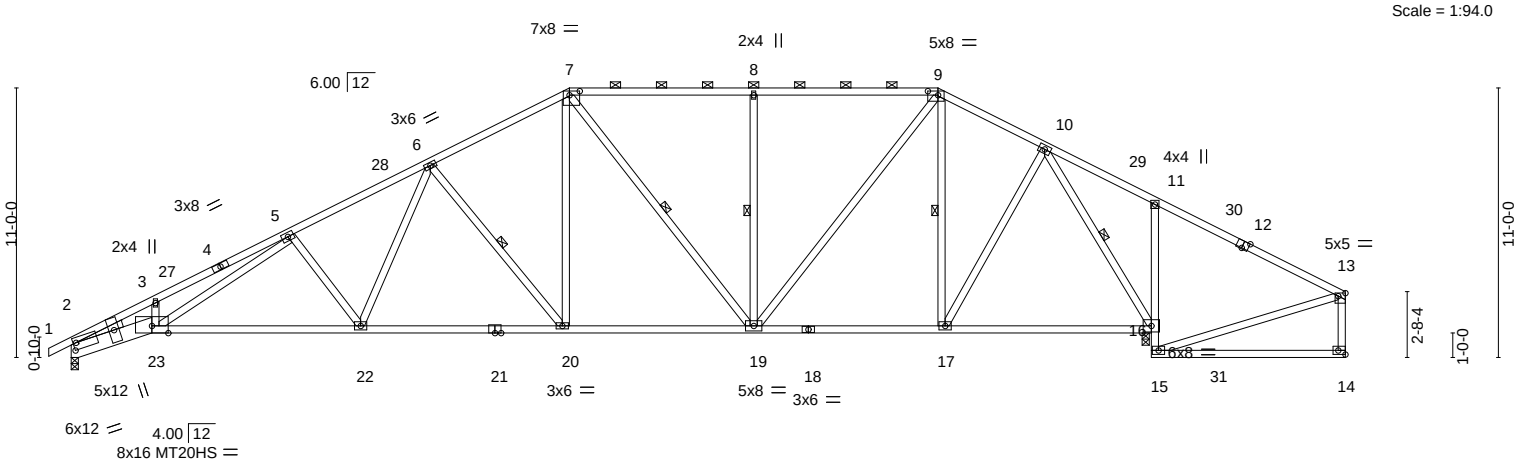
-0-11-0 3-3-8 | 8-11-11 | 14-7-13 | 20-4-0 | 27-10-4 | 35-4-8 | 39-8-12 | 44-1-0 | 52-0-0
0-11-0 3-3-8 | 5-8-3 | 5-8-3 | 5-8-3 | 7-6-4 | 7-6-4 | 4-4-4 | 4-4-4 | 7-11-0

Scale = 1:94.0



3-3-8 | 11-9-12 | 20-4-0 | 27-10-4 | 35-4-8 | 44-0-0 | 44-1-0 | 52-0-0
3-3-8 | 8-6-4 | 8-6-4 | 7-6-4 | 7-6-4 | 8-7-8 | 0-1-0 | 7-11-0

Plate Offsets (X,Y)-- [2:0-1-7,0-3-8], [7:0-5-0,0-2-0], [9:0-5-0,0-2-0], [12:0-3-0,Edge], [13:Edge,0-1-8], [14: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	0.78	Vert(LL)	-0.28	22-23	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.57	22-23	>925	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.22	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 273 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 4-7,1-4: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except* 2-23: 2x8 SP 2400F 2.0E, 21-23,16-18: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed, except end verticals, and 2-0-0 oc purlins (2-11-15 max.): 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-20, 7-19, 8-19, 9-17, 10-16

REACTIONS. (size) 2=0-3-8, 16=0-3-8
Max Horz 2=206(LC 11)
Max Uplift 2=-308(LC 12), 16=-338(LC 13)
Max Grav 2=1996(LC 1), 16=2735(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5506/922, 3-27=-5465/991, 4-27=-5426/998, 4-5=-5399/1016, 5-28=-3511/581, 6-28=-3348/609, 6-7=-2513/474, 7-8=-1993/383, 8-9=-1993/383, 9-10=-1458/261, 10-29=-272/513, 11-29=-287/384, 11-30=-297/529, 12-30=-312/418, 12-13=-333/397
BOT CHORD 2-23=-946/4930, 22-23=-622/3469, 21-22=-417/2738, 20-21=-417/2738, 19-20=-244/2155, 18-19=-130/1263, 17-18=-130/1263, 16-17=-79/758, 15-16=-300/249, 11-16=-473/226
WEBS 5-23=-398/1698, 5-22=-694/251, 6-22=-143/824, 6-20=-907/272, 7-20=-144/858, 7-19=-302/126, 8-19=-590/210, 9-19=-222/1209, 9-17=-728/238, 10-17=-159/1010, 10-16=-2278/437, 13-15=-487/451

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-3-6, Interior(1) 4-3-6 to 20-4-0, Exterior(2R) 20-4-0 to 27-10-4, Interior(1) 27-10-4 to 35-4-8, Exterior(2R) 35-4-8 to 42-8-12, Interior(1) 42-8-12 to 51-10-4 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) All plates are 4x6 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 308 lb uplift at joint 2 and 338 lb uplift at joint 16.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

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

February 26,2021

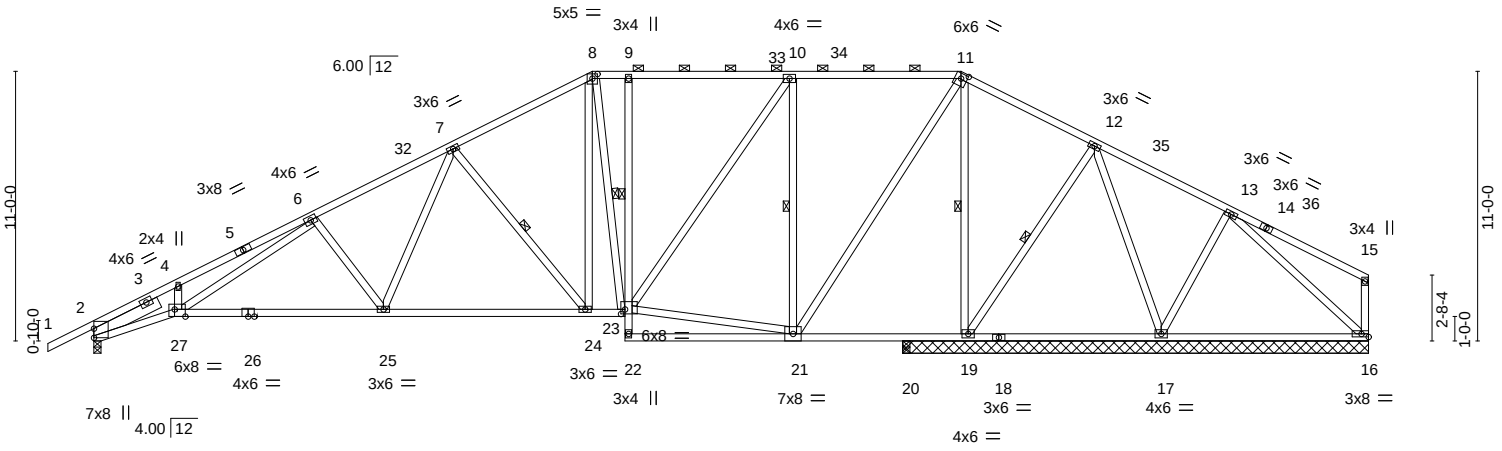
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A6	Piggyback Base	1	1	I44972198
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:22 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-ExWd44tX3KBXySGzoHc?ZmKx3_SW8hJ6AfCcZozhV??

1-10-8	3-3-8	8-11-11	14-7-13	20-4-0	21-8-0	28-6-4	35-4-8	40-9-13	46-3-3	52-0-0
1-10-8	3-3-8	5-8-3	5-8-3	5-8-3	1-4-0	6-10-4	6-10-4	5-5-5	5-5-5	5-8-13

Scale = 1:94.0



3-3-8	11-9-12	20-4-0	21-8-0	28-6-4	33-3-8	35-4-8	43-6-8	52-0-0
3-3-8	8-6-4	8-6-4	1-4-0	6-10-4	4-9-4	2-1-0	8-2-0	8-5-8

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [8:0-2-8,0-2-4], [11:0-3-0,0-2-7], [23:0-2-0,0-2-4], [27:0-5-4,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	0.65	Vert(LL)	-0.21	25-27	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.48	25-27	>830	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.15	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 292 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 2-27: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2 *Except* 10-21,11-19: 2x4 SPF 1650F 1.5E
SLIDER	Left 2x6 SPF No.2 -t 3-0-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11.
BOT CHORD	Rigid ceiling directly applied. Except: 1 Row at midpt 9-23
WEBS	1 Row at midpt 7-24, 8-23, 10-21, 11-19, 12-19

REACTIONS. All bearings 19-0-0 except (jt=length) 2=0-3-8, 20=0-3-8.
(lb) - Max Horz 2=197(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 20 except 2=-217(LC 12), 19=-500(LC 12), 17=-355(LC 25), 16=-264(LC 25)
Max Grav All reactions 250 lb or less at joint(s) 16, 20 except 2=1376(LC 25), 19=3363(LC 1), 17=338(LC 26)

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

TOP CHORD	2-4=-3403/609, 4-6=-3228/680, 6-7=-1824/341, 7-8=-887/238, 8-9=-598/236, 9-10=-600/238, 11-12=-184/1390, 12-13=-72/681
BOT CHORD	2-27=-659/2997, 25-27=-376/1911, 24-25=-183/1259, 23-24=-84/694, 9-23=-366/128, 20-21=-1130/335, 19-20=-1130/335, 17-19=-791/235, 16-17=-393/128
WEBS	4-27=0/300, 6-27=-332/1157, 6-25=-610/240, 7-25=-130/751, 7-24=-879/273, 8-24=-133/800, 8-23=-640/111, 10-23=-262/1203, 10-21=-1506/326, 11-21=-333/1926, 11-19=-2620/402, 12-19=-780/190, 12-17=-167/825, 13-17=-508/184, 13-16=-138/588

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 3-5-4, Interior(1) 3-5-4 to 20-4-0, Exterior(2R) 20-4-0 to 27-8-4, Interior(1) 27-8-4 to 35-4-8, Exterior(2R) 35-4-8 to 42-8-12, Interior(1) 42-8-12 to 51-10-4 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) The Fabrication Tolerance at joint 11 = 12%
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 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 100 lb uplift at joint(s) 20 except (jt=lb) 2=217, 19=500, 17=355, 16=264.
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

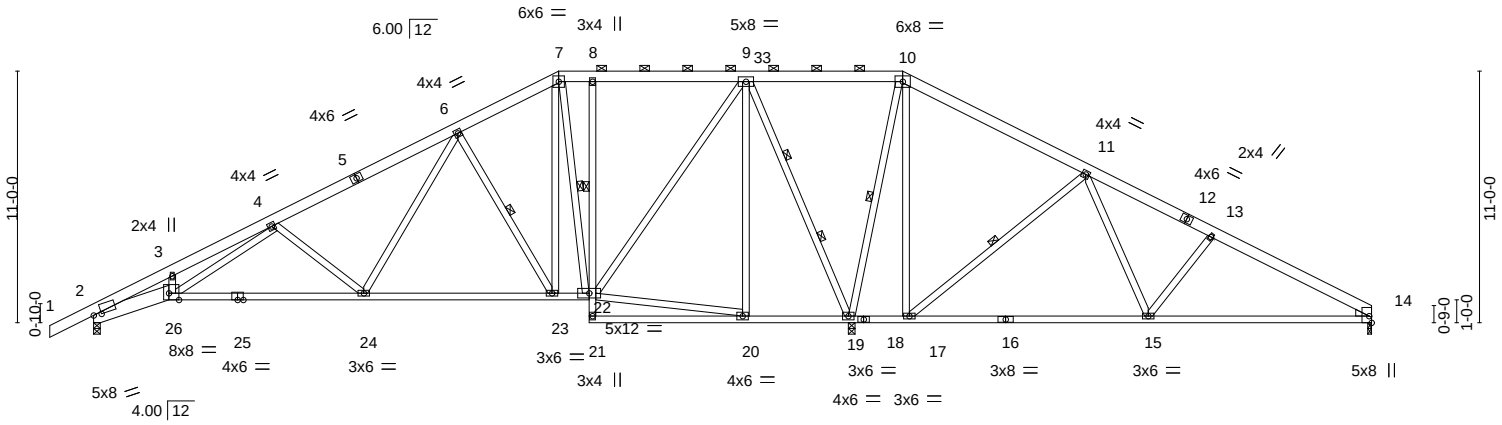
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A7	PIGGYBACK BASE GIRDE	1	1	I44972199
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:23 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-i84?HQu9qeJOacr9M_7E5_t8fOn_t83FPJx95EzhV?_

1-11-0	3-3-8	7-11-2	15-11-2	20-4-0	21-8-0	28-6-4	35-4-8	43-4-8	48-10-3	55-10-8
1-11-0	3-3-8	4-7-10	8-0-0	4-4-14	1-4-0	6-10-4	6-10-4	8-0-0	5-5-11	7-0-5

Scale = 1:100.7



3-3-8	11-9-12	20-4-0	21-8-0	28-6-4	33-1-12	35-4-8	46-1-5	55-10-8
3-3-8	8-6-4	8-6-4	1-4-0	6-10-4	4-7-8	2-2-12	10-8-13	9-9-3

Plate Offsets (X,Y)-- [2:0-4-3,0-0-8], [14:Edge,0-1-5], [26:0-5-4,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)	-0.22	15-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.45	15-17	>603	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.09	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 346 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-26: 2x8 SP 2400F 2.0E, 18-21: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-13 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 5-10-1 oc bracing. Except:
1 Row at midpt 8-22
WEBS 1 Row at midpt 6-23, 7-22, 10-19, 11-17
2 Rows at 1/3 pts 9-19

REACTIONS. (size) 2=0-3-8, 19=0-3-8, 14=0-2-0
Max Horz 2=117(LC 7)
Max Uplift 2=-67(LC 8), 19=-41(LC 8), 14=-79(LC 9)
Max Grav 2=1288(LC 21), 19=3497(LC 1), 14=626(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3163/178, 3-4=-3012/220, 4-6=-1621/136, 6-7=-671/129, 7-8=-398/124, 8-9=-397/124, 9-10=0/1258, 10-11=-23/1118, 11-13=-514/449, 13-14=-763/366
BOT CHORD 2-26=-222/2790, 24-26=-167/1923, 23-24=-33/953, 22-23=-7/497, 8-22=-382/77, 19-20=-490/110, 17-19=-902/134, 15-17=-535/165, 14-15=-279/631
WEBS 4-26=-65/959, 4-24=-766/158, 6-24=-27/781, 6-23=-886/145, 7-23=-55/875, 7-22=-706/5, 20-22=-487/86, 9-22=-86/1311, 9-20=0/319, 9-19=-1937/84, 10-19=-1713/33, 10-17=-5/742, 11-17=-917/141, 11-15=0/607, 13-15=-426/96

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior 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) 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.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 14.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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

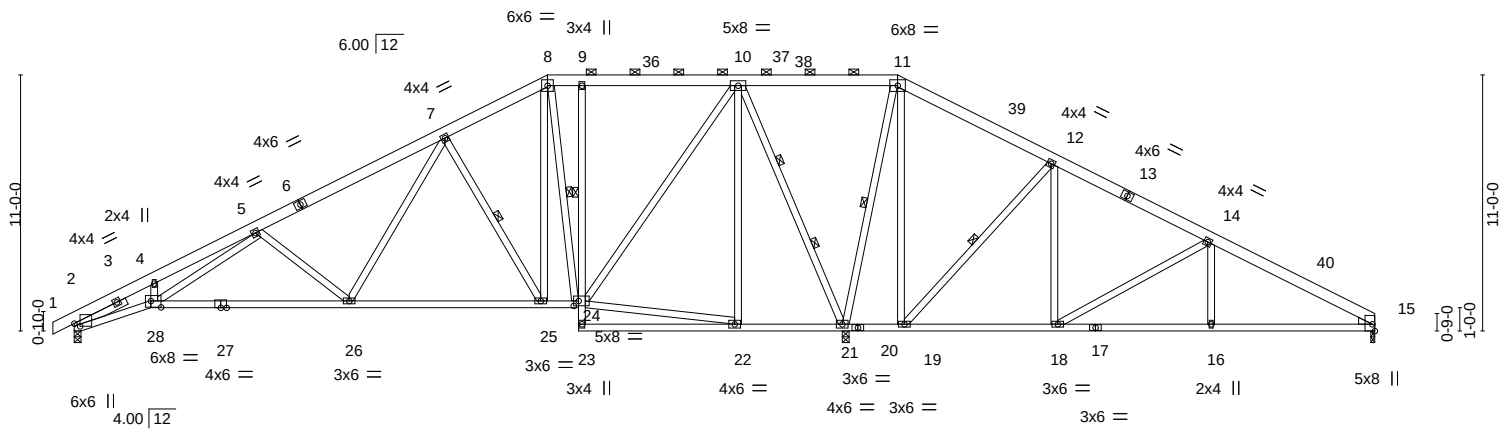
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A8	Piggyback Base	3	1	I44972200
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:25 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-fWCli5wPMFZ6pw?YTP9iAPyV_CUjL1XYsdQG97zhV_y

-0-11-0 3-3-8	7-11-2	15-11-2	20-4-0	21-8-0	28-6-4	35-4-8	42-1-5	48-10-3	55-10-8
0-11-0 3-3-8	4-7-10	8-0-0	4-4-14	1-4-0	6-10-4	6-10-4	6-8-13	6-8-13	7-0-5

Scale = 1:99.0



3-3-8	11-9-12	20-4-0	21-8-0	28-6-4	33-1-12	35-4-8	42-1-5	48-10-3	55-10-8
3-3-8	8-6-4	8-6-4	1-4-0	6-10-4	4-7-8	2-2-12	6-8-13	6-8-13	7-0-5

Plate Offsets (X,Y)-- [2:0-1-7,0-3-0], [15:Edge,0-1-5], [24:0-2-8,0-2-8], [28:0-5-4,0-3-4]

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	0.48	Vert(LL)	-0.16	26-28	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.36	26-28	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.11	21	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 350 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
20-23,15-17: 2x4 SP 2400F 2.0E
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, except
2-0-0 oc purlins (6-0-0 max.): 8-11.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 9-24
WEBS 1 Row at midpt 7-25, 8-24, 11-21, 12-19
2 Rows at 1/3 pts 10-21

REACTIONS. (size) 2=0-3-8, 21=0-3-8, 15=0-2-0
Max Horz 2=110(LC 11)
Max Uplift 2=-55(LC 12), 21=-48(LC 12), 15=-100(LC 25)
Max Grav 2=1170(LC 25), 21=3596(LC 1), 15=599(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3022/279, 4-5=-2794/322, 5-7=-1527/227, 7-8=-568/198, 8-9=-302/188, 9-10=-301/188, 10-11=0/1377, 11-12=-16/1234, 12-14=-117/802, 14-15=-744/466
BOT CHORD 2-28=-237/2689, 26-28=-168/1846, 25-26=-34/862, 24-25=-8/408, 9-24=-381/103, 21-22=-594/188, 19-21=-1020/230, 18-19=-697/136, 16-18=-372/610, 15-16=-372/610
WEBS 4-28=0/398, 5-28=-80/829, 5-26=-777/188, 7-26=-50/792, 7-25=-884/197, 8-25=-93/862, 8-24=-740/43, 22-24=-588/146, 10-24=-121/1347, 10-22=0/315, 10-21=-1973/211, 11-21=-1716/191, 11-19=-75/720, 12-19=-899/170, 12-18=-10/519, 14-18=-730/137, 14-16=0/278

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 55-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 2 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 at joint(s) 15.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 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.

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

February 26,2021

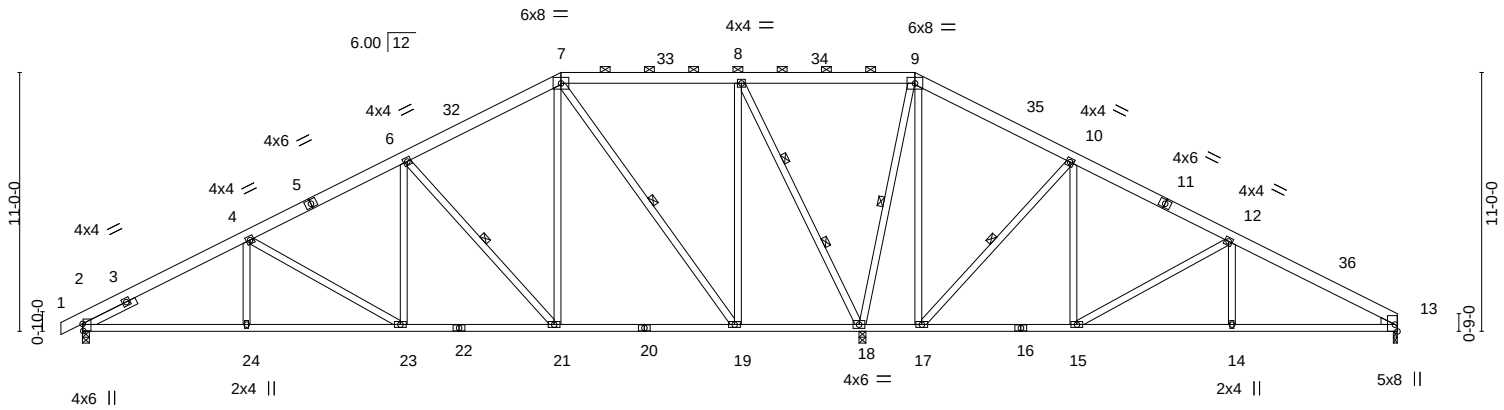
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A9	Piggyback Base	1	1	I44972201
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:26 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-7jm8vRx17ZhyR4ak17gxjcVgqcvc4Vdh5HAphZzhV_x

-0-11-0	6-11-11	13-7-13	20-4-0	27-10-4	35-4-8	42-1-5	48-10-3	55-10-8
0-11-0	6-11-11	6-8-3	6-8-3	7-6-4	7-6-4	6-8-13	6-8-13	7-0-5

Scale = 1:97.9



6-11-11	13-7-13	20-4-0	27-10-4	33-1-12	35-4-8	42-1-5	48-10-3	55-10-8
6-11-11	6-8-3	6-8-3	7-6-4	5-3-8	2-2-12	6-8-13	6-8-13	7-0-5

Plate Offsets (X,Y)-- [2:0-3-10,0-0-5], [13:Edge,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	0.47	Vert(LL)	-0.08	23-24	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.18	19-21	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.05	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 332 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except*
20-22: 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, except
2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-21, 7-19, 9-18, 10-17
2 Rows at 1/3 pts 8-18

REACTIONS. (size) 2=0-3-8, 18=0-3-8, 13=0-2-0
Max Horz 2=110(LC 11)
Max Uplift 2=-70(LC 12), 18=-13(LC 12), 13=-62(LC 13)
Max Grav 2=1343(LC 25), 18=3185(LC 1), 13=725(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2043/231, 4-6=-1542/230, 6-7=-928/224, 8-9=0/857, 9-10=0/708, 10-12=-384/269, 12-13=-1016/128
BOT CHORD 2-24=-145/1754, 23-24=-145/1754, 21-23=-70/1295, 19-21=-19/718, 17-18=-550/191, 14-15=-53/832, 13-14=-53/832
WEBS 4-24=0/256, 4-23=-545/112, 6-23=-2/448, 6-21=-847/167, 7-21=-64/777, 7-19=-1132/122, 8-19=-36/1045, 8-18=-1812/196, 9-18=-1477/177, 9-17=-76/707, 10-17=-891/168, 10-15=-8/510, 12-15=-688/134, 12-14=0/269

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 55-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 13.
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 #53
2685550	A10	Piggyback Base	4	1	I44972202
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:04 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-mURpIwgEJow4ohuWlVHnqzbtskH5wXFS1sqfwrzhV?H

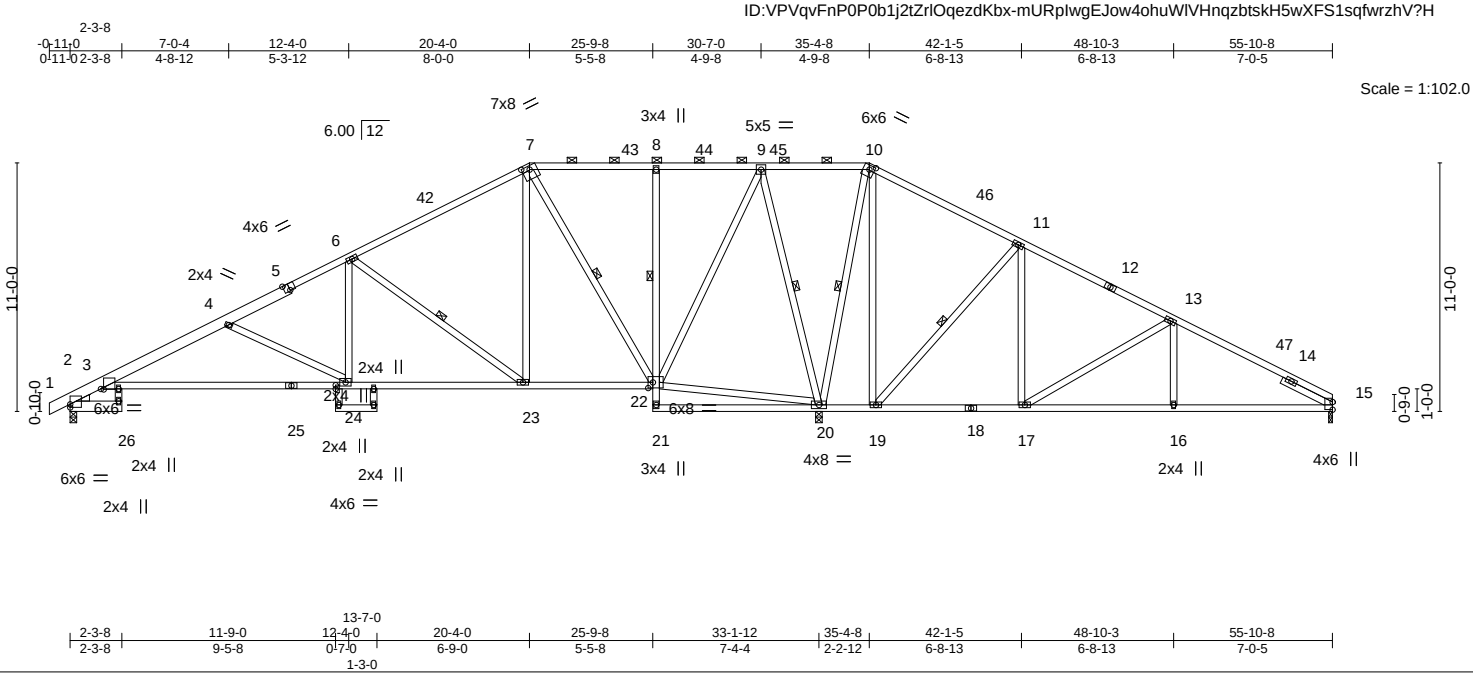


Plate Offsets (X,Y)-- [2:0-0-0,0-1-11], [3:0-1-8,0-0-4], [5:0-3-0,Edge], [7:0-4-0,0-1-15], [10:0-2-12,0-2-4], [22:0-2-8,0-3-0], [28:0-2-0,0-0-0]

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	0.63	Vert(LL)	-0.29	24-37	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.67	24-37	>596	180		
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.21	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 304 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-5: 2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except*
	2-26: 2x6 SPF No.2, 18-21: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
WEDGE	
Left: 2x4 SP No.3	
SLIDER	Right 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except
	2-0-0 oc purlins (10-0-0 max.): 7-10.
BOT CHORD	Rigid ceiling directly applied. Except:
	1 Row at midpt 8-22
WEBS	1 Row at midpt 6-23, 7-22, 9-20, 10-20, 11-19

REACTIONS. (size) 2=0-3-8, 20=0-3-8, 15=0-2-0
Max Horz 2=111(LC 9)
Max Uplift 2=-49(LC 12), 20=-45(LC 12), 15=-138(LC 25)
Max Grav 2=1171(LC 25), 20=3645(LC 1), 15=572(LC 26)

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

TOP CHORD	3-33=-462/87, 3-4=-2109/260, 4-6=-1490/213, 6-7=-578/185, 7-8=0/351, 8-9=0/353, 9-10=0/1413, 10-11=-12/1302, 11-13=-78/874, 13-15=-629/528
BOT CHORD	3-24=-172/1946, 23-24=-66/1239, 22-23=-12/391, 8-22=-378/92, 19-20=-1085/224, 17-19=-760/132, 16-17=-428/550, 15-16=-428/550
WEBS	6-23=-1034/177, 7-23=-46/726, 7-22=-1223/128, 20-22=-971/192, 9-22=-124/1532, 9-20=-1760/203, 10-20=-1660/193, 10-19=-92/698, 11-19=-916/171, 11-17=-8/524, 13-17=-729/136, 13-16=0/293, 6-24=0/607, 4-24=-791/137

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 1-11-5, Interior(1) 1-11-5 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 55-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 3x6 MT20 unless otherwise indicated.
5) The Fabrication Tolerance at joint 10 = 12%, joint 7 = 16%
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20 except (jt=lb) 15=138.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Continued on page 2

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

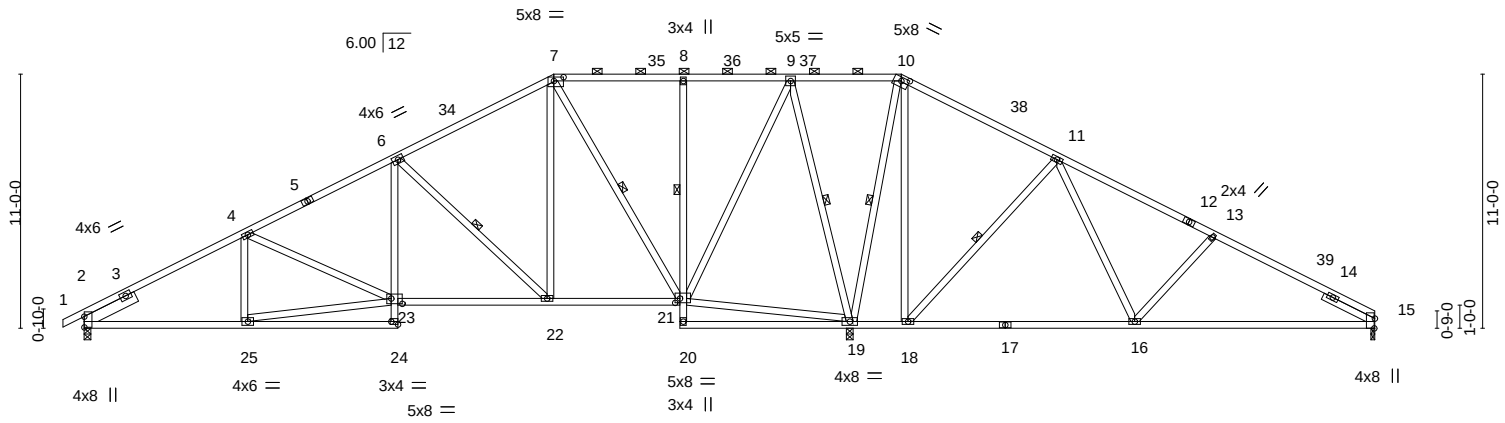
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	A11	Piggyback Base	1	1	I44972203
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:06 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-isYajchVrQAo1?2uswJFvOgEiY?JOSWlVAKm?jzhV?F

-0-11-0	6-11-4	13-7-0	20-4-0	25-9-8	30-7-0	35-4-8	42-1-5	48-10-3	55-10-8
0-11-0	6-11-4	6-7-12	6-9-0	5-5-8	4-9-8	4-9-8	6-8-13	6-8-13	7-0-5

Scale = 1:99.7



6-11-4	13-7-0	20-4-0	25-9-8	33-1-12	35-4-8	45-5-12	55-10-8
6-11-4	6-7-12	6-9-0	5-5-8	7-4-4	2-2-12	10-1-4	10-4-12

Plate Offsets (X,Y)-- [2:0-5-9,0-0-1], [7:0-5-0,0-2-0], [10:0-4-0,0-1-15], [15:0-5-1,Edge], [21:0-2-8,0-2-4], [23:0-5-12,0-2-12], [24: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	0.55	Vert(LL)	-0.17	16-32	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.36	16-32	>747	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.07	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 300 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	17-20: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 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 (6-0-0 max.): 7-10.
BOT CHORD	Rigid ceiling directly applied. Except:
	1 Row at midpt 8-21
WEBS	1 Row at midpt 6-22, 7-21, 9-19, 10-19, 11-18

REACTIONS. (size) 2=0-3-8, 19=0-3-8, 15=0-2-0
Max Horz 2=110(LC 11)
Max Uplift 2=-67(LC 12), 19=-20(LC 12), 15=-67(LC 13)
Max Grav 2=1296(LC 25), 19=3301(LC 1), 15=681(LC 26)

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

TOP CHORD	2-4=-1907/222, 4-6=-1647/234, 6-7=-899/210, 9-10=0/984, 10-11=0/856, 11-13=-562/268, 13-15=-804/161
BOT CHORD	2-25=-139/1632, 6-23=-4/491, 22-23=-80/1403, 21-22=-15/686, 8-21=-383/97, 18-19=-689/205, 16-18=-382/147, 15-16=-99/712
WEBS	23-25=-133/1538, 4-23=-295/94, 6-22=-960/179, 7-22=-63/792, 7-21=-1053/113, 19-21=-597/170, 9-21=-120/1442, 9-19=-1672/197, 10-19=-1498/164, 10-18=-71/741, 11-18=-869/190, 11-16=-35/641, 13-16=-475/153

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 55-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 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 #53
2685550	A12	GABLE I I	1	1	I44972204
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:13 2021 Page 1
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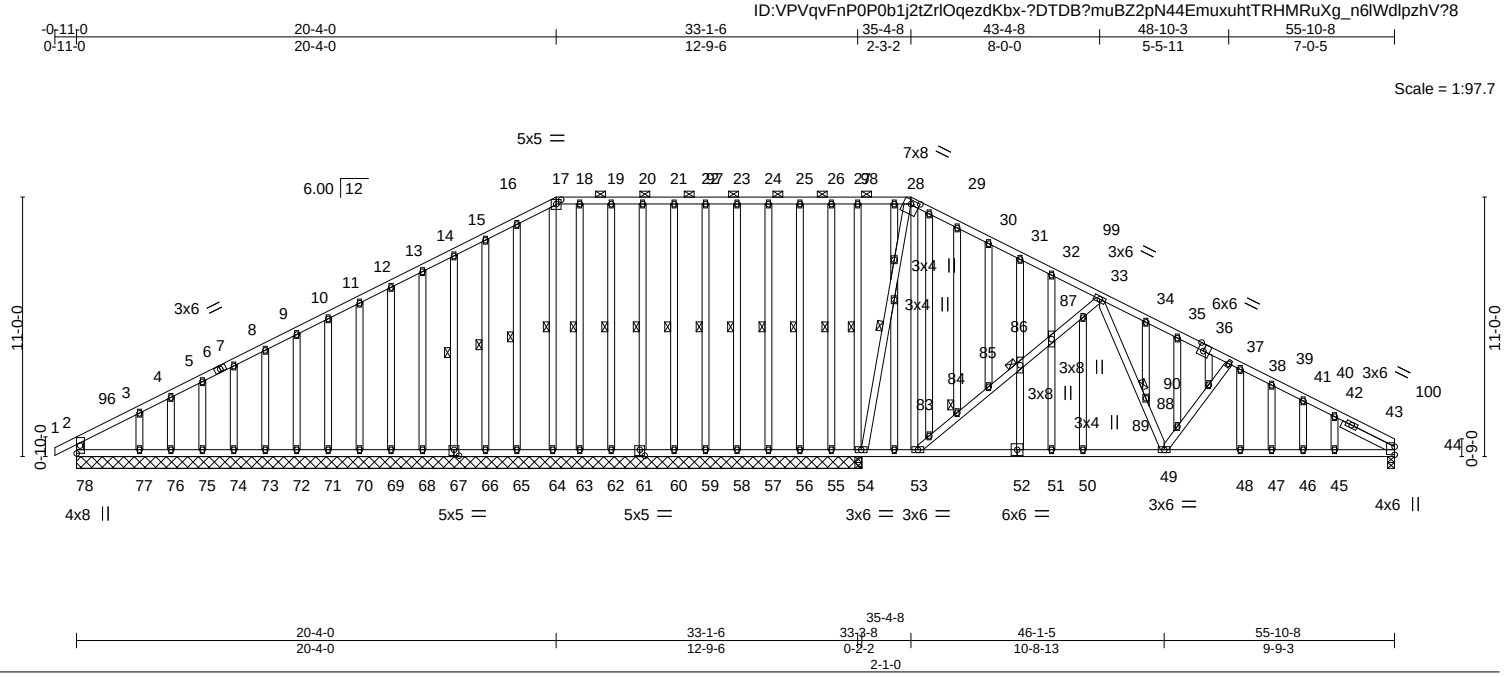

Plate Offsets (X,Y)-- [17:0-2-8,0-2-4], [28:0-4-4,0-2-0], [36:0-2-12,Edge], [61:0-2-8,0-3-0], [67:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.14	52	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.26	52	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	-0.01	54	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 485 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	Right 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 (10-0-0 max.): 17-28.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 17-64, 27-54, 14-67, 15-66, 16-65, 18-63, 19-62, 20-61, 21-60, 22-59, 23-58, 24-57, 25-56, 26-55, 28-54
JOINTS	1 Brace at Jt(s): 83, 85, 88

REACTIONS. All bearings 33-3-8 except (jt=length) 44=0-3-8.
(lb) - Max Horz 78=118(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 78, 54, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 62, 61, 60, 59, 58, 57, 56, 55, 44
Max Grav All reactions 250 lb or less at joint(s) 78, 64, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 63, 62, 61, 60, 59, 58, 57, 56, 55 except 54=1206(LC 26), 54=1205(LC 1), 77=286(LC 1), 44=930(LC 1)

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

TOP CHORD	2-3=-120/255, 33-34=-962/255, 34-35=-1023/244, 35-37=-1036/220, 37-38=-1080/220, 38-39=-1158/231, 39-40=-1283/236, 40-41=-1293/218, 41-42=-1316/202, 42-44=-1335/180
BOT CHORD	52-53=-36/738, 51-52=-38/741, 50-51=-38/741, 49-50=-38/741, 48-49=-123/1153, 47-48=-123/1153, 46-47=-123/1153, 45-46=-123/1153, 44-45=-123/1153
WEBS	28-53=-119/797, 53-83=-910/174, 83-84=-917/169, 84-85=-885/154, 85-86=-832/162, 86-87=-974/176, 33-87=-803/164, 33-88=-65/398, 49-88=-65/447, 49-89=-478/124, 89-90=-417/93, 38-90=-444/105, 28-54=-1169/135

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 35-4-8, Exterior(2R) 35-4-8 to 39-7-7, Interior(1) 39-7-7 to 55-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 78, 54, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 62, 61, 60, 59, 58, 57, 56, 55, 44.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	B1	Common	4	1	I44972205
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:28 2021 Page 1
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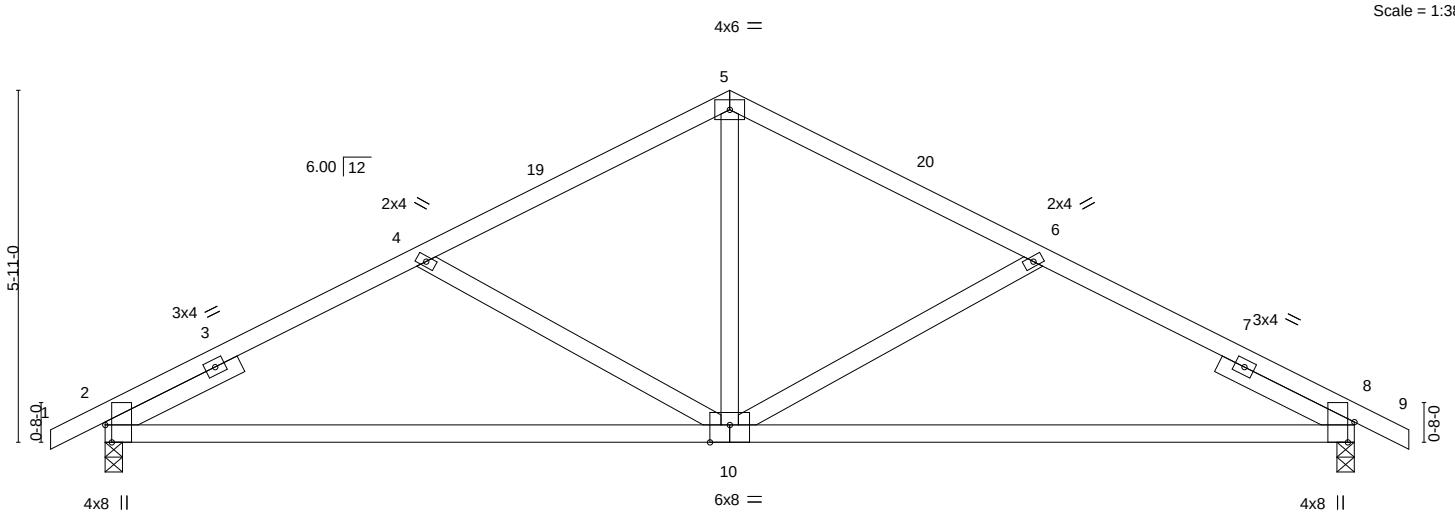
0-11-0 5-4-12 10-6-0 15-7-4 21-0-0 21-11-0
0-11-0 5-4-12 5-1-4 5-1-4 5-4-12 0-11-0

Scale = 1:38.7



10-6-0 21-0-0
10-6-0 10-6-0

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [8:0-4-1,Edge], [10:0-4-0,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	0.26	Vert(LL)	-0.15	10-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.32	10-13	>788	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 78 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) 2=0-3-8, 8=0-3-8
Max Horz 2=-90(LC 17)
Max Uplift 2=-135(LC 12), 8=-135(LC 13)
Max Grav 2=1009(LC 1), 8=1009(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1344/294, 4-5=-1125/239, 5-6=-1125/239, 6-8=-1344/294
BOT CHORD 2-10=-199/1251, 8-10=-184/1251
WEBS 5-10=-64/572, 6-10=-403/183, 4-10=-403/183

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 21-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=135, 8=135.
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 #53
2685550	B2	Common Supported Gable	1	1	I44972206

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:29 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-XIRGYTzwQU3XIXJJiFEeLF7Icp0WH358nFOTIuzhV_u

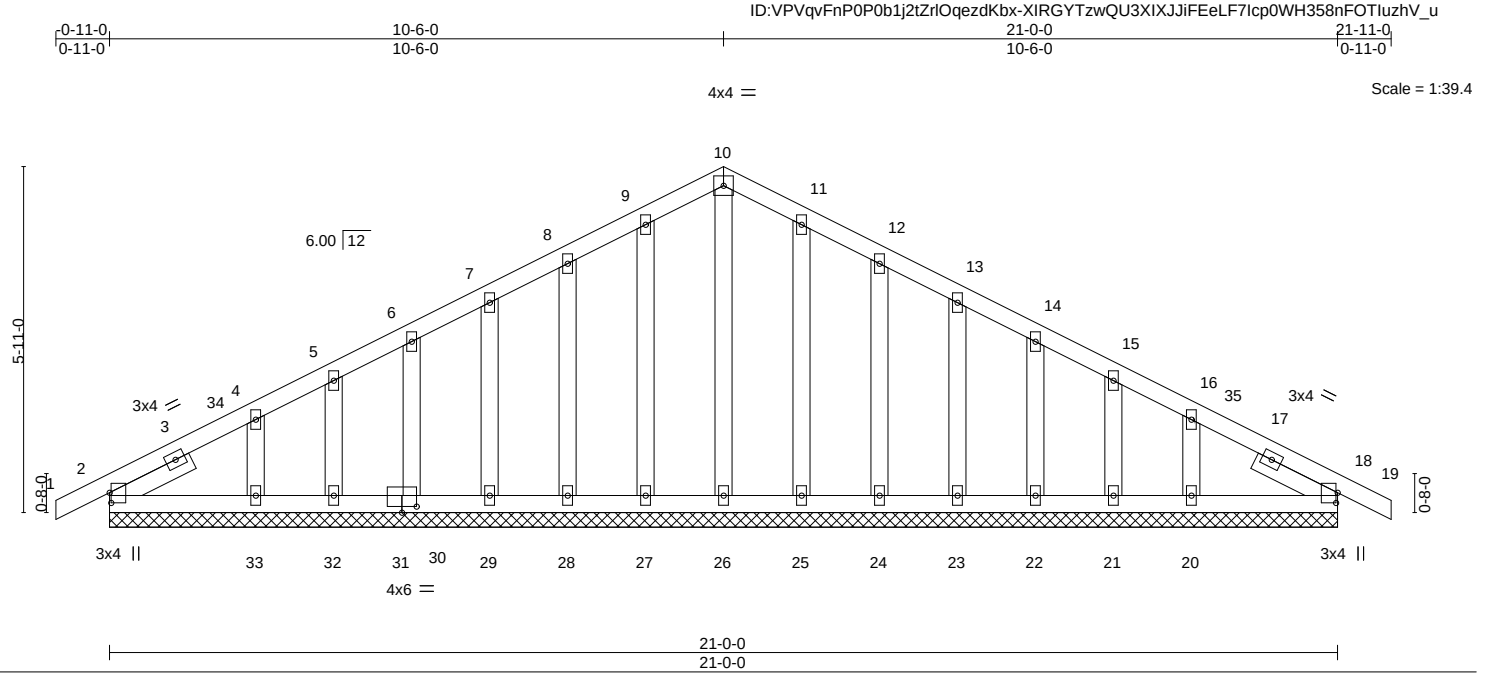


Plate Offsets (X,Y)-- [2:0-2-1,0-0-5], [18:0-2-1,0-0-5], [31:0-3-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	18	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 105 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
OTHERS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 1-6-7, Right 2x4 SPF No.2 -t 1-6-7

BRACING-

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

REACTIONS. All bearings 21-0-0.
(lb) - Max Horz 2=-90(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20, 18
Max Grav All reactions 250 lb or less at joint(s) 2, 26, 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20, 18

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 10-6-0, Corner(3R) 10-6-0 to 13-6-0, Exterior(2N) 13-6-0 to 21-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20, 18.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	C1	Common Supported Gable	1	1	I44972207
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:30 2021 Page 1
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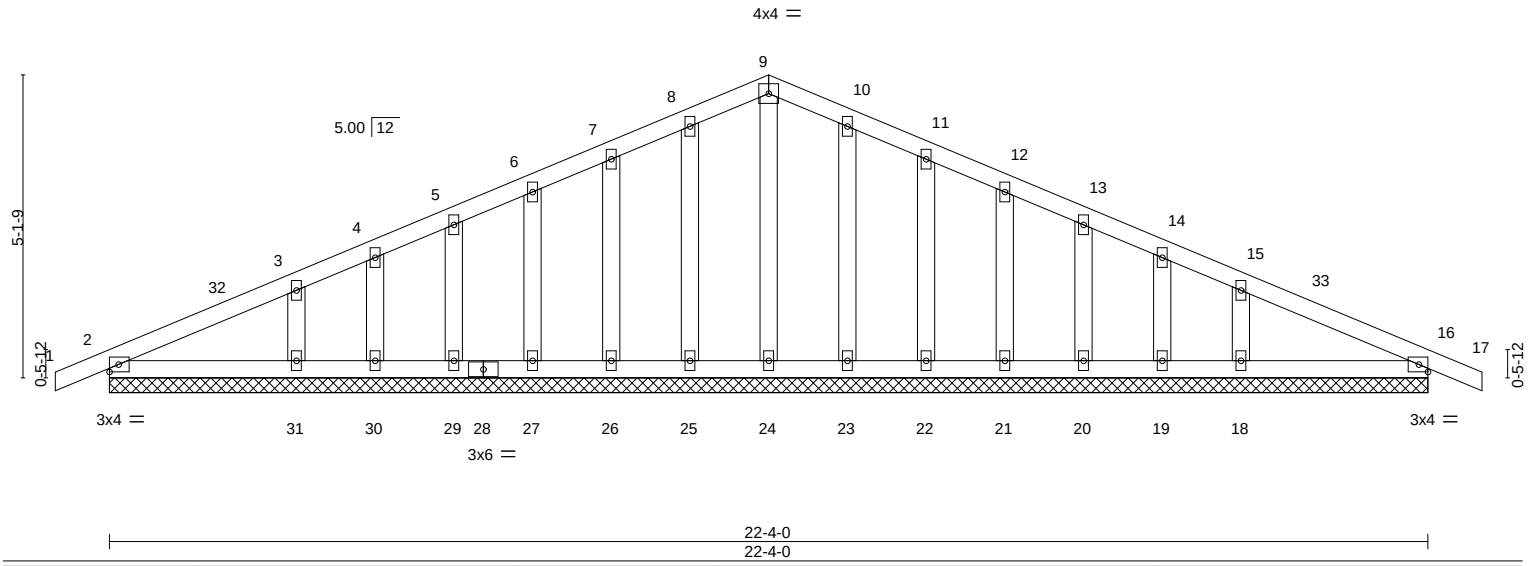


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	17	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	17	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 97 lb	FT = 20%

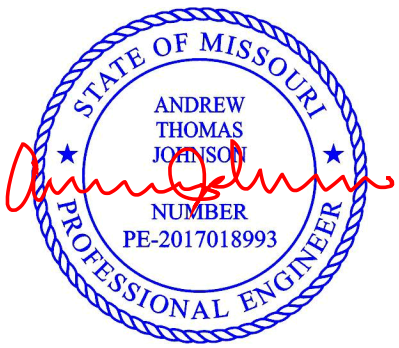
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. All bearings 22-4-0.
(lb) - Max Horz 2=-80(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 29, 30, 23, 22, 21, 20, 19, 16 except 31=272(LC 25), 18=272(LC 26)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 11-2-0, Corner(3R) 11-2-0 to 14-2-0, Exterior(2N) 14-2-0 to 23-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	D1	Hip Girder	1	1	I44972208
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:33 2021 Page 1
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-0-11-0	2-0-0	6-0-0	10-0-0	12-0-0	12-11-0
0-11-0	2-0-0	4-0-0	4-0-0	2-0-0	0-11-0

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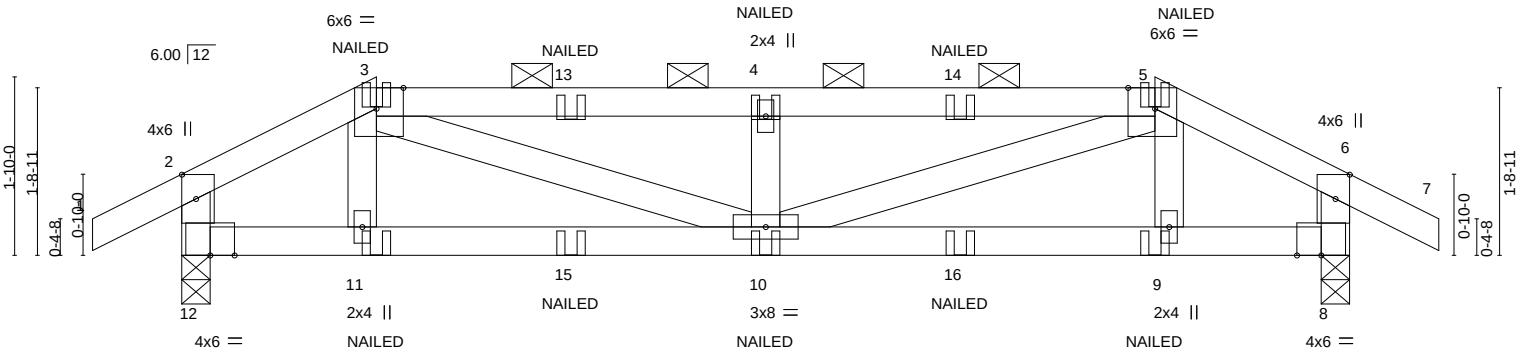

2-0-0	6-0-0	10-0-0	12-0-0
2-0-0	4-0-0	4-0-0	2-0-0

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [3:0-3-5,Edge], [5:0-3-5,Edge], [6:0-3-0,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	0.42	Vert(LL)	-0.04	10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.08	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 45 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, and 2-0-0 oc purlins (5-3-2 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=-37(LC 6)
Max Uplift 12=-131(LC 8), 8=-131(LC 9)
Max Grav 12=597(LC 1), 8=597(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-616/144, 3-4=-1145/275, 4-5=-1145/275, 5-6=-616/144, 2-12=-474/114, 6-8=-474/114
BOT CHORD 11-12=-117/493, 10-11=-121/500, 9-10=-108/500, 8-9=-104/493
WEBS 3-10=-164/692, 4-10=-357/125, 5-10=-165/692

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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) Bearing at joint(s) 12, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=131, 8=131.
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 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: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-12=-20
Concentrated Loads (lb)
Vert: 11=3(B) 10=1(B) 9=3(B) 15=1(B) 16=1(B)

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	D2	Hip	1	1	I44972209
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:34 2021 Page 1
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0-11-0 4-0-0 4-0-0 4-0-0 0-11-0

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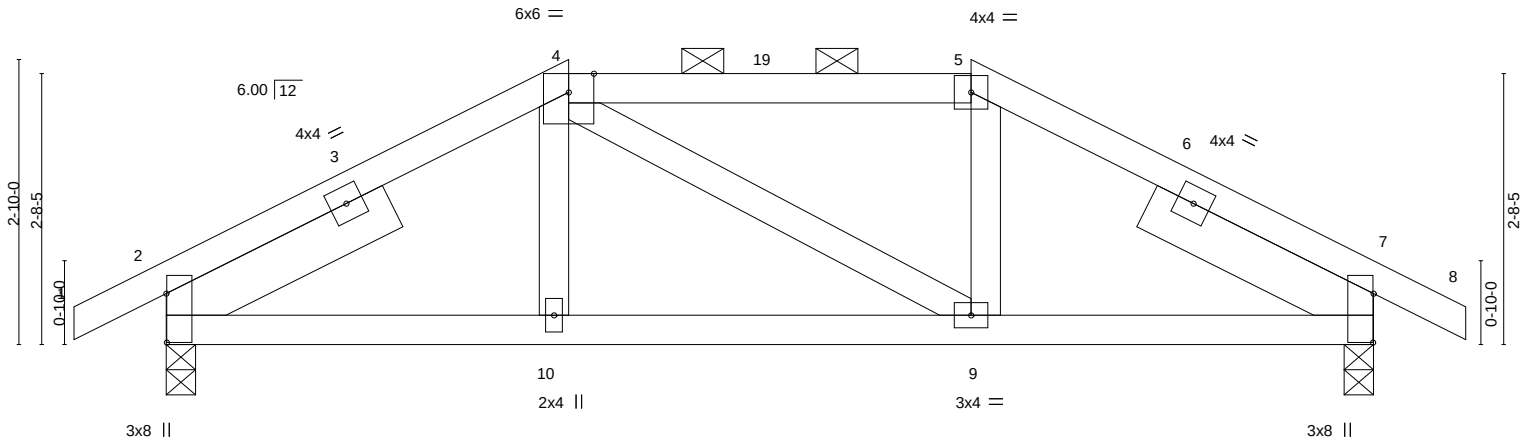

4-0-0 8-0-0 12-0-0
4-0-0 4-0-0 4-0-0

Plate Offsets (X,Y)-- [2:0-5-13,0-0-1], [7:0-5-13,0-0-1]

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	0.24	Vert(LL)	-0.02	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 50 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 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.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=38(LC 12)
Max Uplift 2=-88(LC 12), 7=-88(LC 13)
Max Grav 2=604(LC 1), 7=604(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-691/227, 4-5=-596/236, 5-7=-691/226
BOT CHORD 2-10=-124/600, 9-10=-125/596, 7-9=-126/600

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-0-0, Exterior(2E) 4-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-0-0, Interior(1) 12-0-0 to 12-11-0 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 100 lb uplift at joint(s) 2, 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
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 #53
2685550	D3	Common	3	1	I44972210
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:35 2021 Page 1
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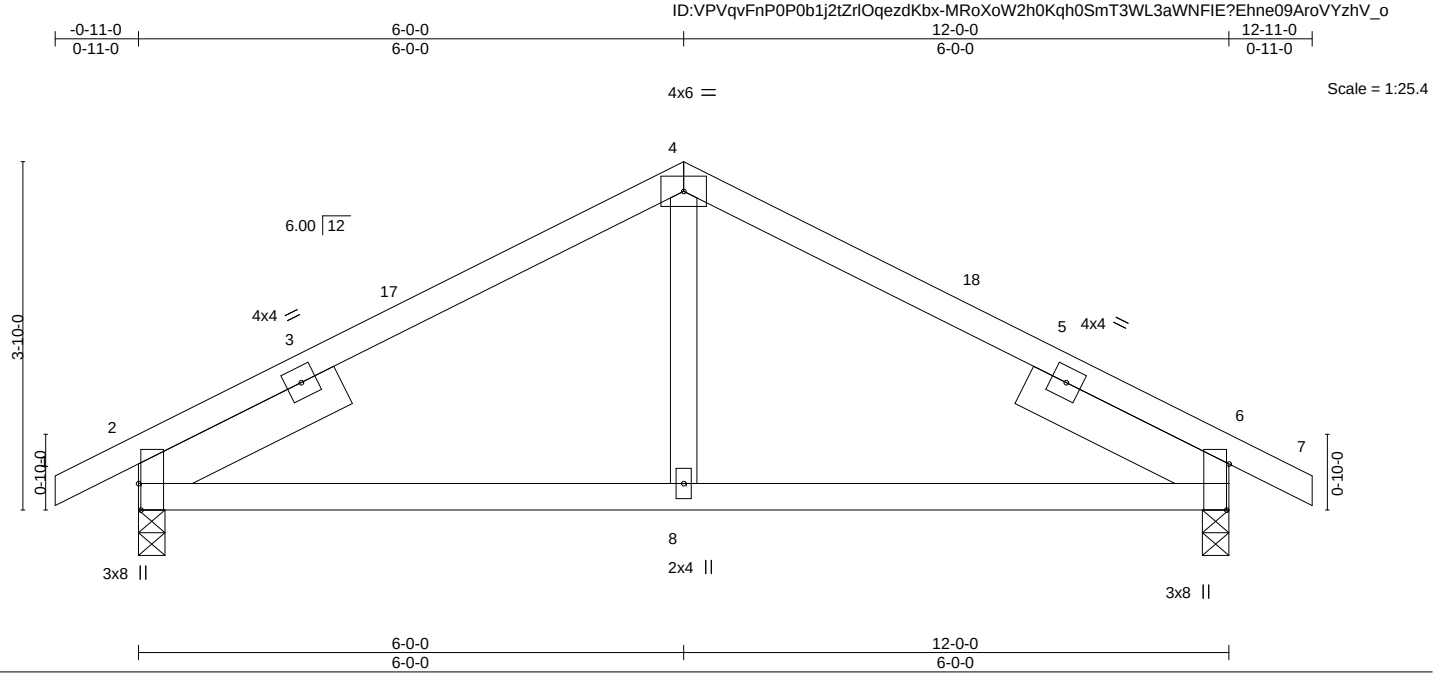

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [6:0-6-1,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.04	8-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	8-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 44 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 -t 2-6-0, Right 2x6 SPF No.2 -t 2-6-0

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=55(LC 12)
Max Uplift 2=-84(LC 12), 6=-84(LC 13)
Max Grav 2=604(LC 1), 6=604(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-588/233, 4-6=-588/233
BOT CHORD 2-8=-91/515, 6-8=-91/515

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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 #53
2685550	JD1	Jack-Open	2	1	I44972211
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:36 2021 Page 1
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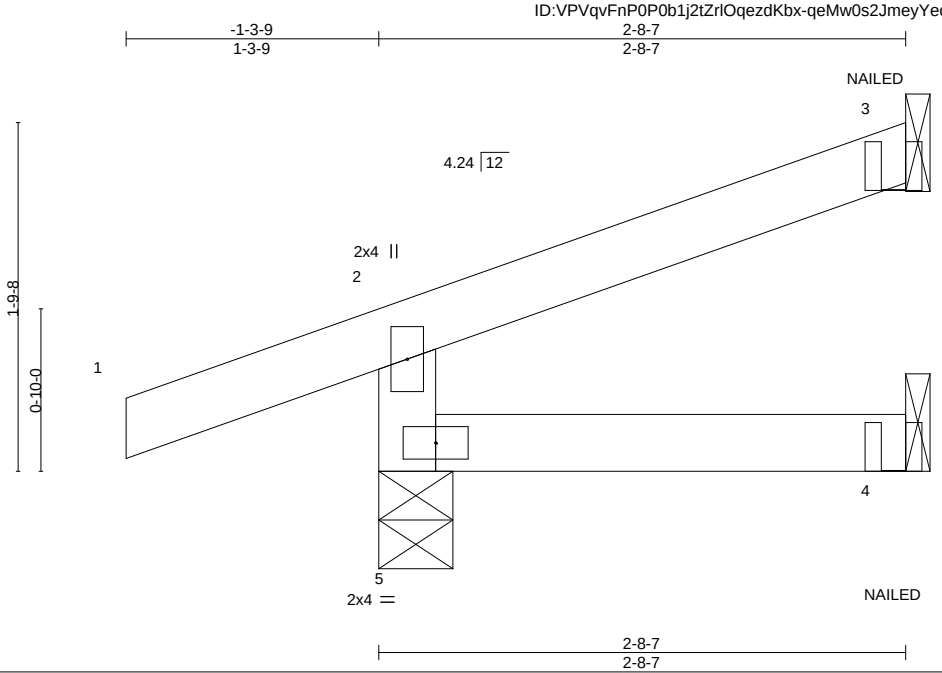

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 8 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 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=48(LC 8)
Max Uplift 5=-73(LC 8), 3=-41(LC 12), 4=-2(LC 12)
Max Grav 5=242(LC 1), 3=63(LC 1), 4=48(LC 3)

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

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

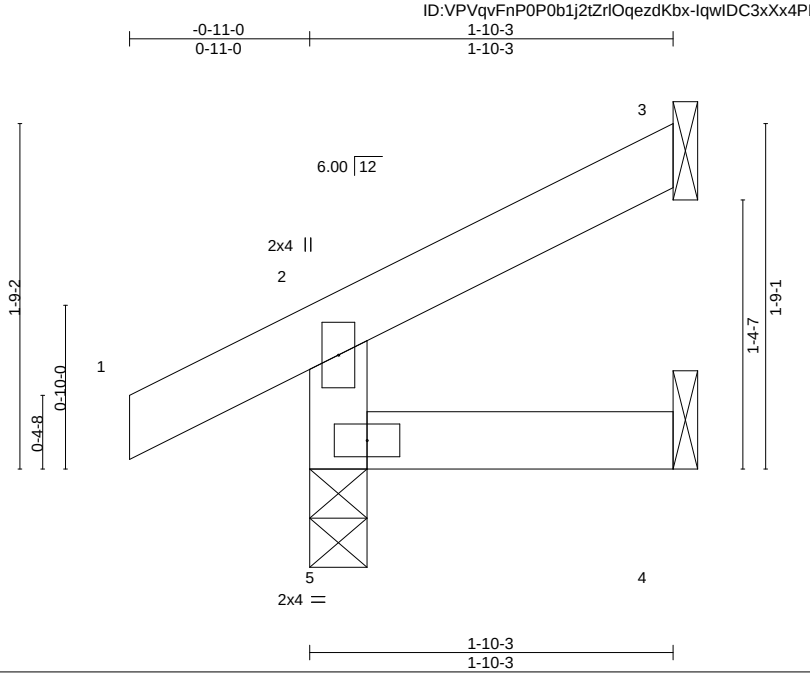
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 4=1(F)

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	JD2	Jack-Open	2	1	I44972212
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:37 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-IqwIDC3xXx4PFmwsAwNXfxSeD1lM9hzJdUKvaQzhV_m



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)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=40(LC 12)
Max Uplift 3=-27(LC 12), 4=-1(LC 12), 5=-20(LC 12)
Max Grav 3=40(LC 1), 4=30(LC 3), 5=174(LC 1)

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

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	JD3	Jack-Open	3	1	I44972213

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:37 2021 Page 1

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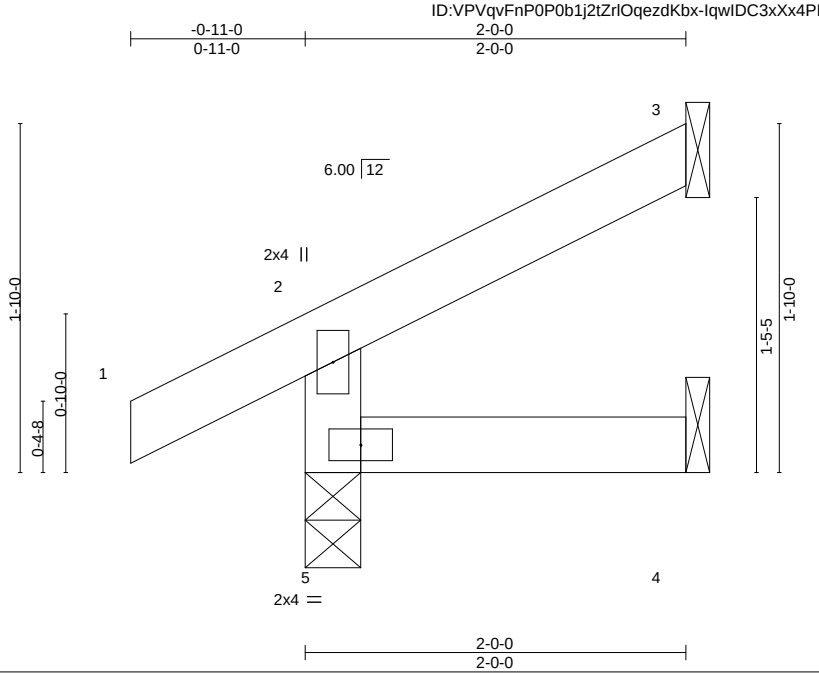

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=43(LC 12)
Max Uplift 3=-30(LC 12), 5=-20(LC 12)
Max Grav 3=47(LC 1), 4=33(LC 3), 5=179(LC 1)

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

NOTES-

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	LG1	GABLE	1	1	I44972214
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:38 2021 Page 1
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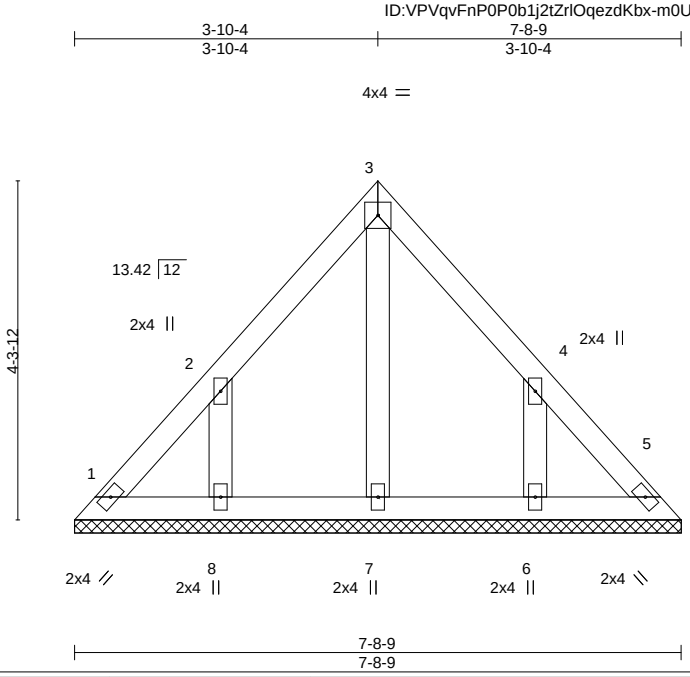


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 29 lb	FT = 20%

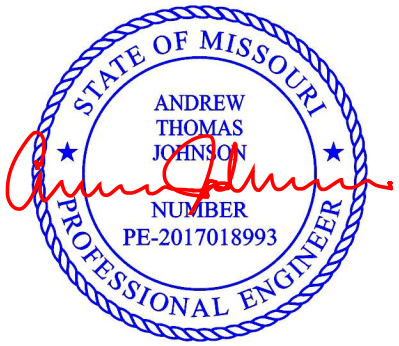
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. All bearings 7-8-9.
(lb) - Max Horz 1=-96(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-139(LC 12), 6=-139(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-4, Exterior(2R) 3-10-4 to 6-10-4 , Interior(1) 6-10-4 to 7-4-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=139, 6=139.
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 #53
2685550	P1	Common Supported Gable	1	1	I44972215

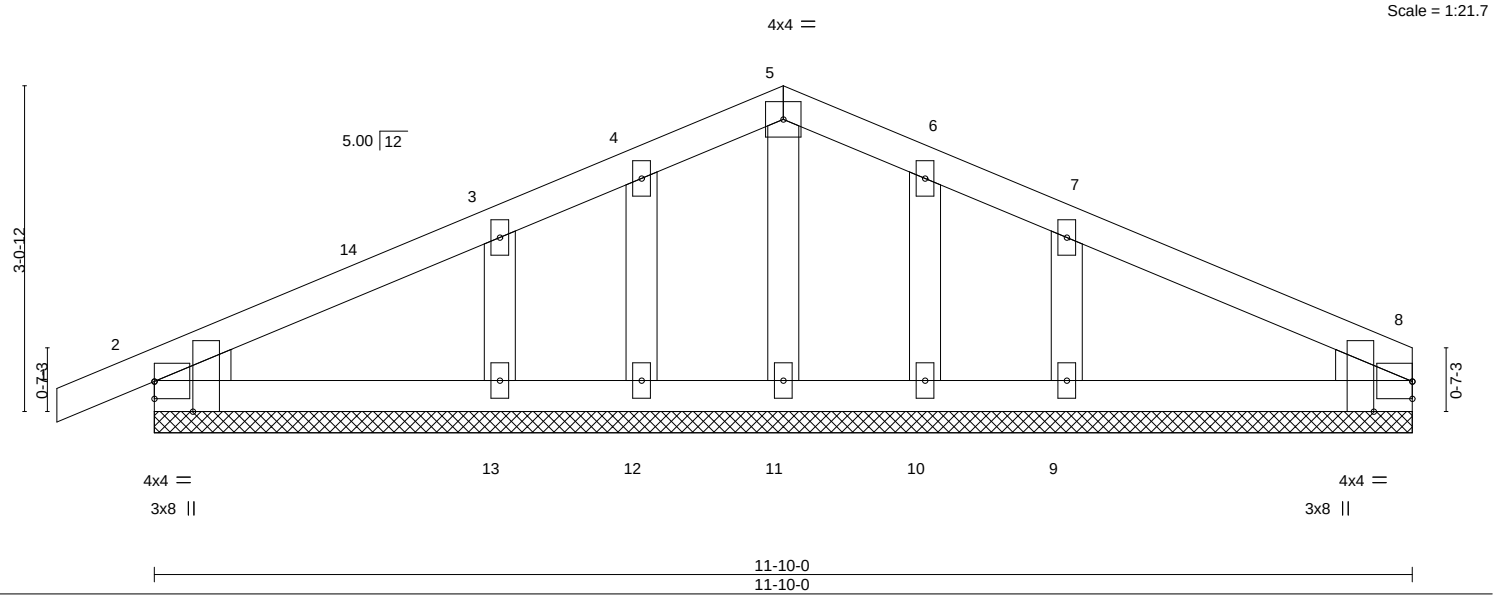
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:39 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-FD22eu5B3ZK6V34EILP?lMY_7rPNdbyc4op?eJzhV_k

-0-11-0 / 0-11-0 | 5-11-0 / 5-11-0 | 11-10-0 / 5-11-0

Scale = 1:21.7



11-10-0 / 11-10-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 42 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 11-10-0.

(lb) - Max Horz 2=46(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 13, 10, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 11, 12, 10, 8 except 13=281(LC 25), 9=303(LC 26)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 5-11-0, Corner(3R) 5-11-0 to 8-11-0, Exterior(2N) 8-11-0 to 11-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 13, 10, 9, 8.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	P2	GABLE	1	1	I44972216
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:41 2021 Page 1
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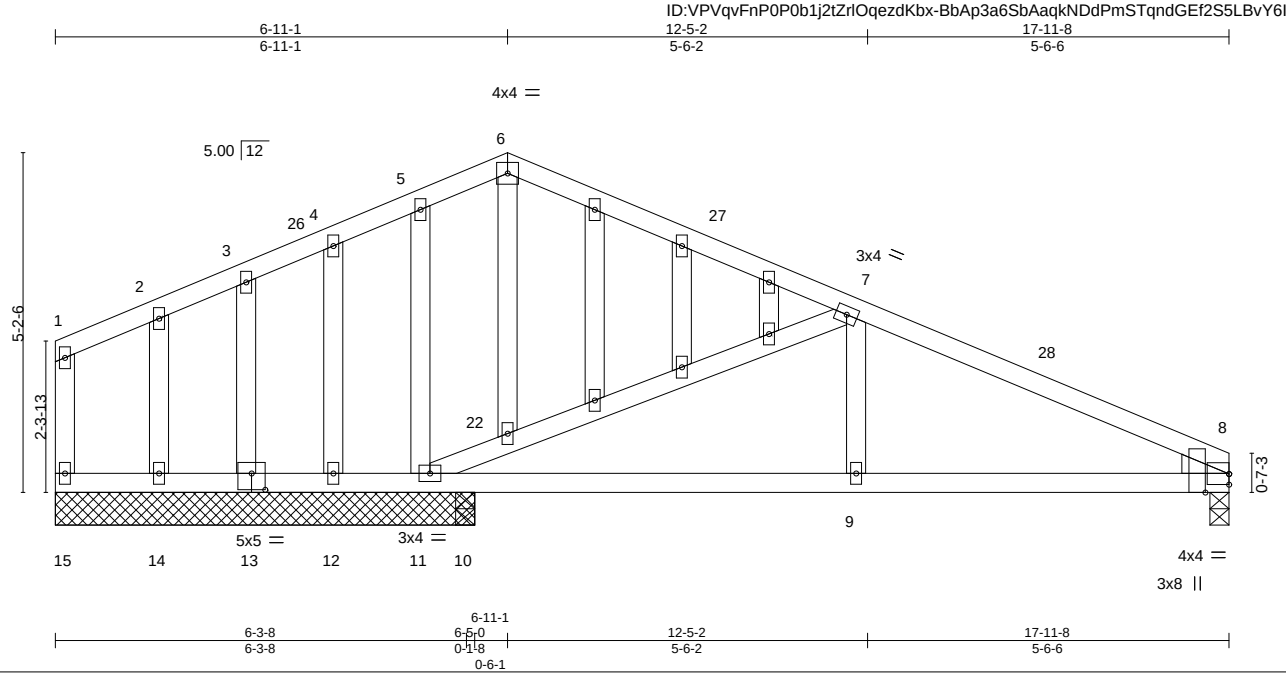

Plate Offsets (X,Y)-- [8:0-0-0,0-1-15], [8:0-3-6,Edge], [13:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.02	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 83 lb	FT = 20%

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

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

REACTIONS. All bearings 6-5-0 except (jt=length) 8=0-3-8, 10=0-3-8.
(lb) - Max Horz 15=-76(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 15, 8, 12, 13, 14 except 11=-145(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 15, 12, 13, 14 except 8=546(LC 1), 11=527(LC 1), 10=336(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-831/218
BOT CHORD 10-11=-141/716, 9-10=-141/716, 8-9=-141/716
WEBS 5-11=-281/69, 11-22=-772/215, 7-22=-735/204

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-11-1, Interior(1) 2-11-1 to 6-11-1, Exterior(2R) 6-11-1 to 9-11-1 , Interior(1) 9-11-1 to 17-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 8, 12, 13, 14 except (jt=lb) 11=145.
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.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	P3	Common	1	1	I44972217
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:42 2021 Page 1
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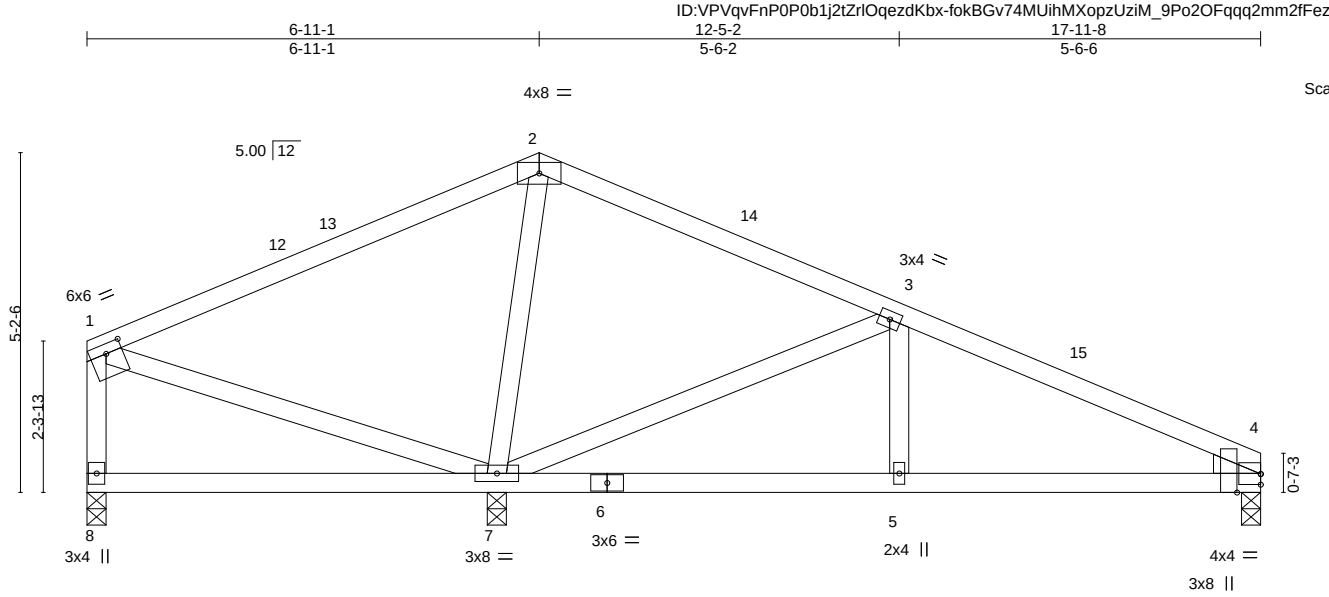

Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [4:0-0-0,0-1-15], [4:0-3-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.03	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 68 lb	FT = 20%

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

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

REACTIONS. (size) 8=0-3-8, 7=0-3-8, 4=0-3-8
Max Horz 8=-76(LC 17)
Max Uplift 8=-59(LC 12), 7=-97(LC 13), 4=-80(LC 13)
Max Grav 8=239(LC 25), 7=977(LC 1), 4=467(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-654/166
BOT CHORD 5-7=-95/554, 4-5=-95/554
WEBS 2-7=-517/151, 3-7=-695/183

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=15ft; 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 6-11-1, Exterior(2R) 6-11-1 to 9-11-1 , Interior(1) 9-11-1 to 17-11-8 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) 8, 7, 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 #53
2685550	PB1	GABLE	1	1	I44972218
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:44 2021 Page 1
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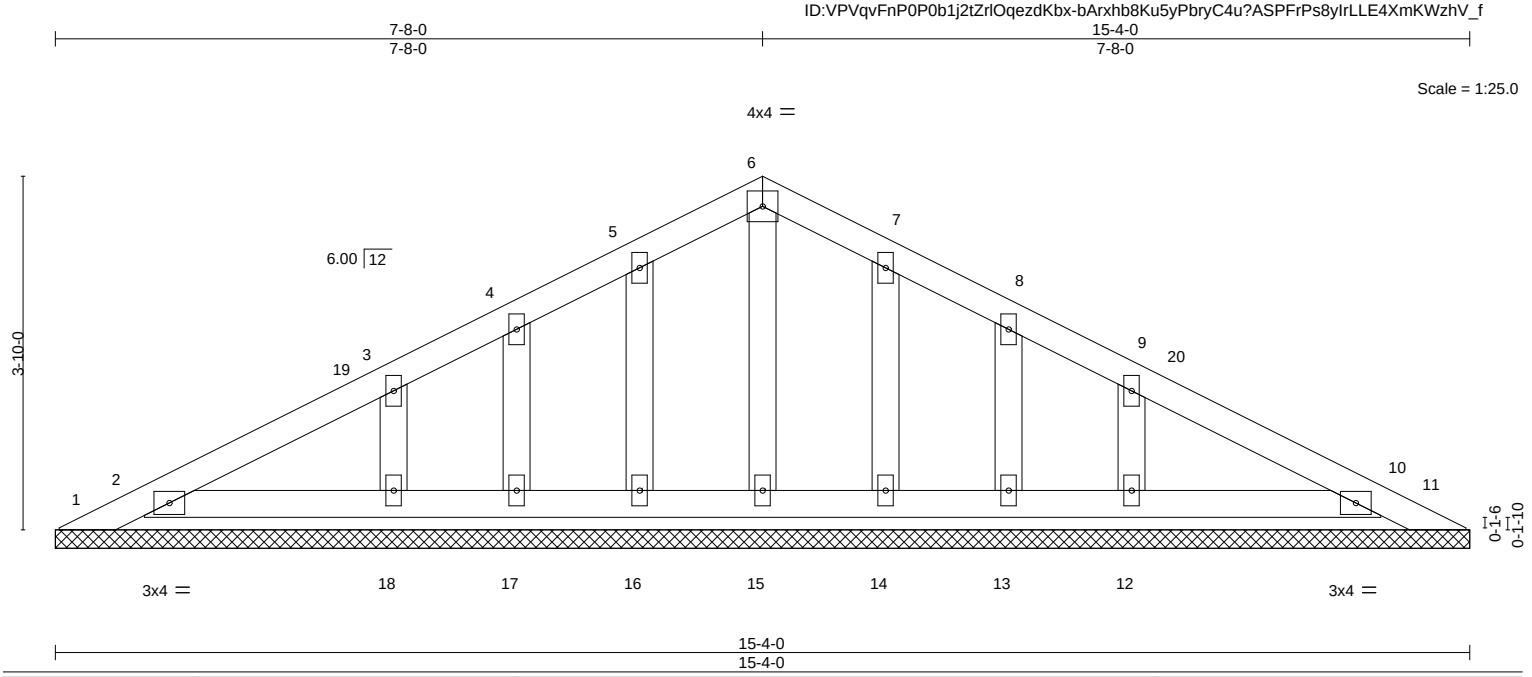

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

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

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

REACTIONS. All bearings 15-4-0.
(lb) - Max Horz 1=58(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 2, 10, 16, 17, 18, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 2, 10, 15, 16, 17, 18, 14, 13, 12

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

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	PB2	GABLE	19	1	I44972219

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:45 2021 Page 1

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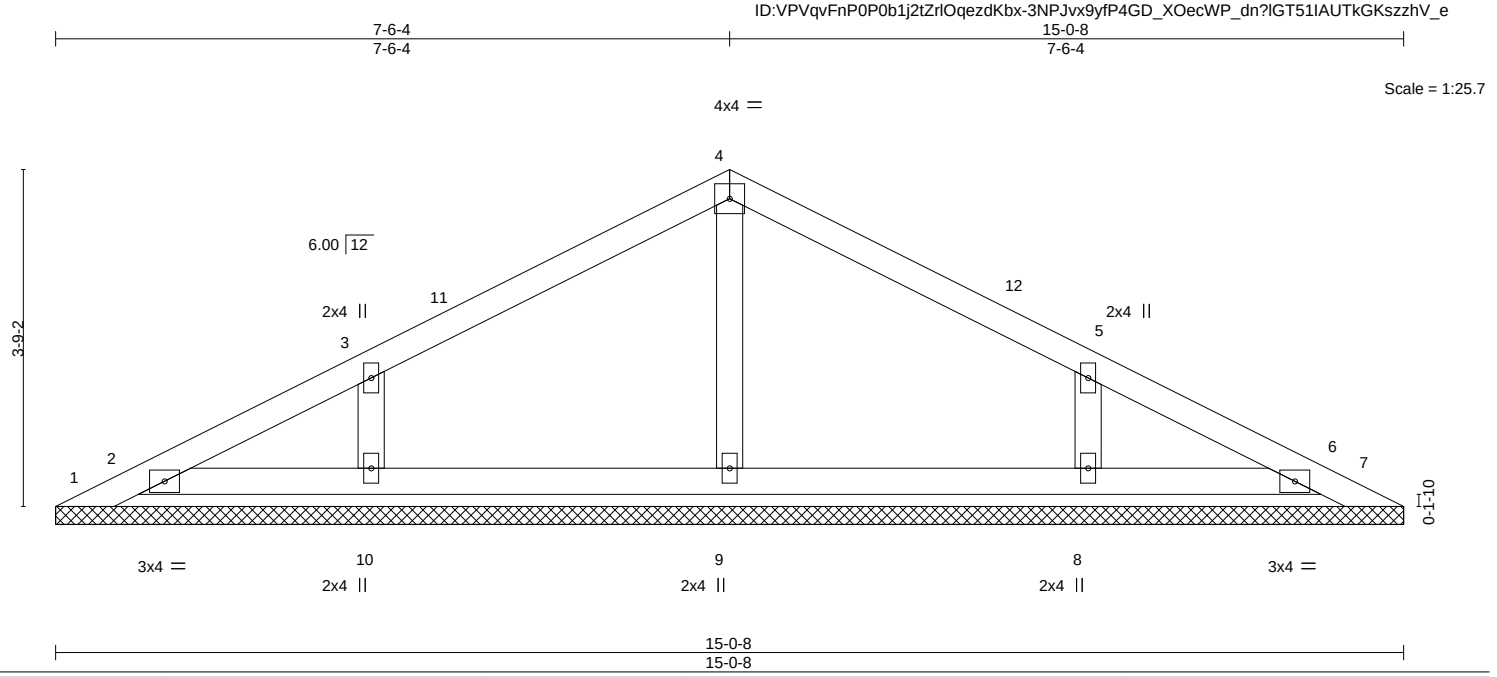

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 15-0-8.
(lb) - Max Horz 1=57(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6 except 10=-104(LC 12), 8=-104(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6 except 9=320(LC 1), 10=350(LC 25), 8=350(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-278/179, 5-8=-278/179

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-6-4, Interior(1) 3-6-4 to 7-6-4, Exterior(2R) 7-6-4 to 10-6-4, Interior(1) 10-6-4 to 14-8-9 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6 except (jt=lb) 10=104, 8=104.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	PB3	GABLE	1	1	I44972220

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:47 2021 Page 1

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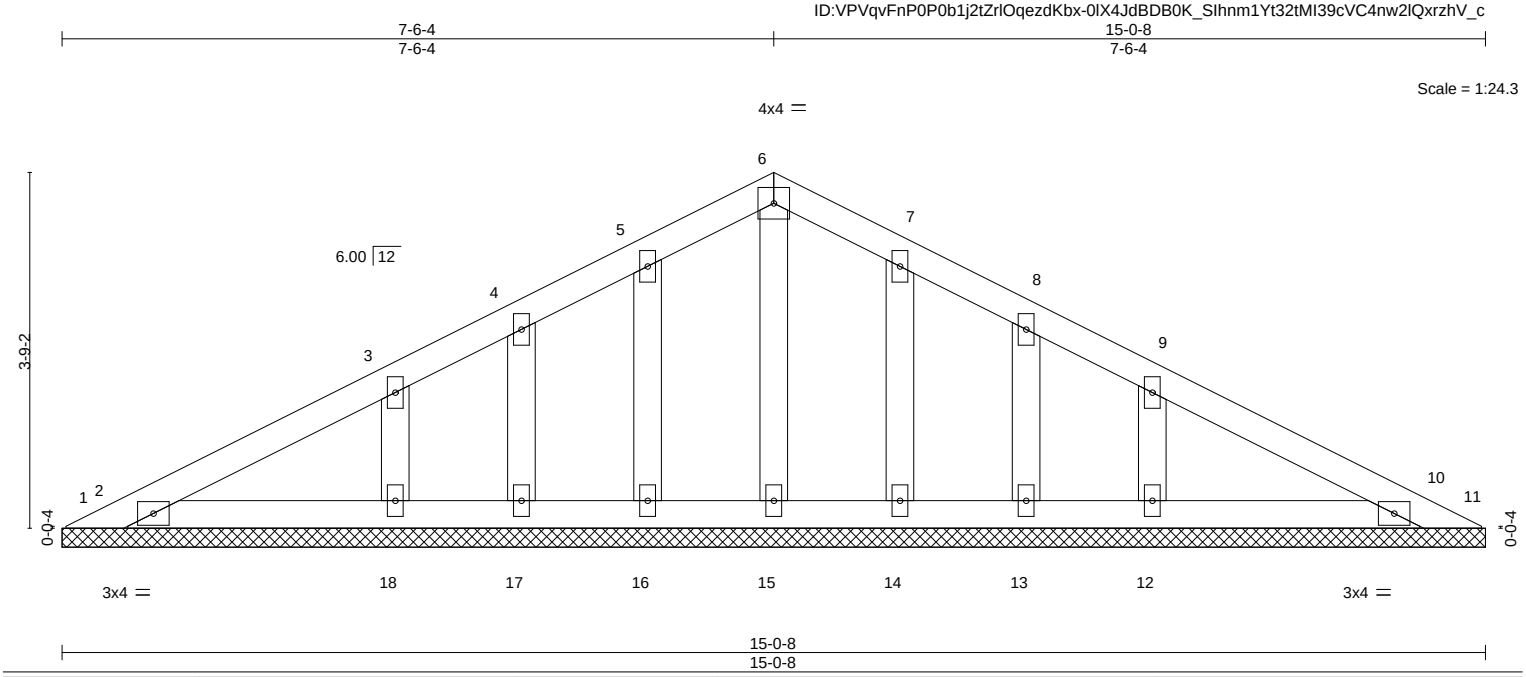

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 15-0-8.

(lb) - Max Horz 1=-57(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12 except 1=-130(LC 25), 11=-130(LC 26)
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 15, 16, 17, 18, 14, 13, 12 except 2=294(LC 1), 10=294(LC 1)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-4-3 to 3-6-4, Exterior(2N) 3-6-4 to 7-6-4, Corner(3R) 7-6-4 to 10-6-4, Exterior(2N) 10-6-4 to 14-8-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12 except (jt=lb) 1=130, 11=130.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	V1	Valley	1	1	I44972221
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:48 2021 Page 1
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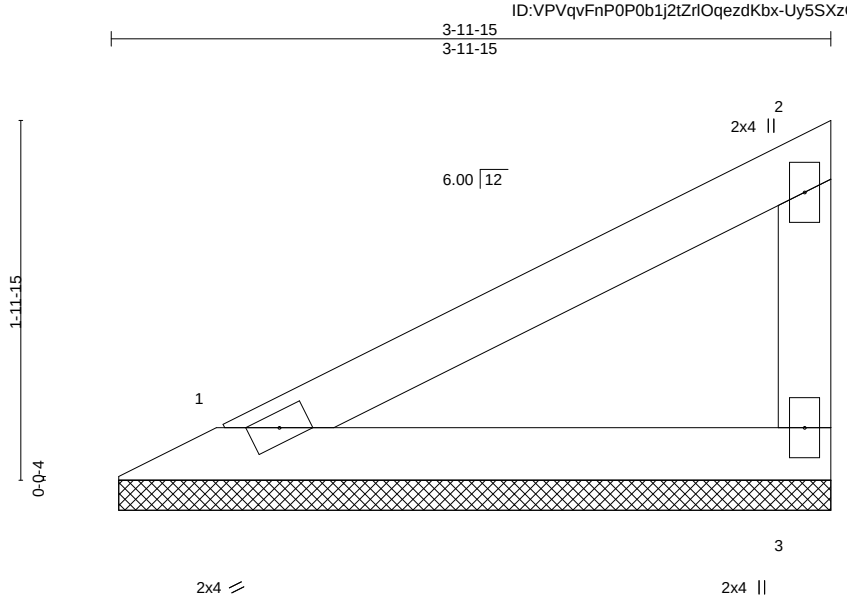

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-11-7, 3=3-11-7
Max Horz 1=60(LC 9)
Max Uplift 1=-19(LC 12), 3=-34(LC 12)
Max Grav 1=145(LC 1), 3=145(LC 1)

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

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	V2	Valley	1	1	I44972222
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:49 2021 Page 1
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2-3-15
2-3-15

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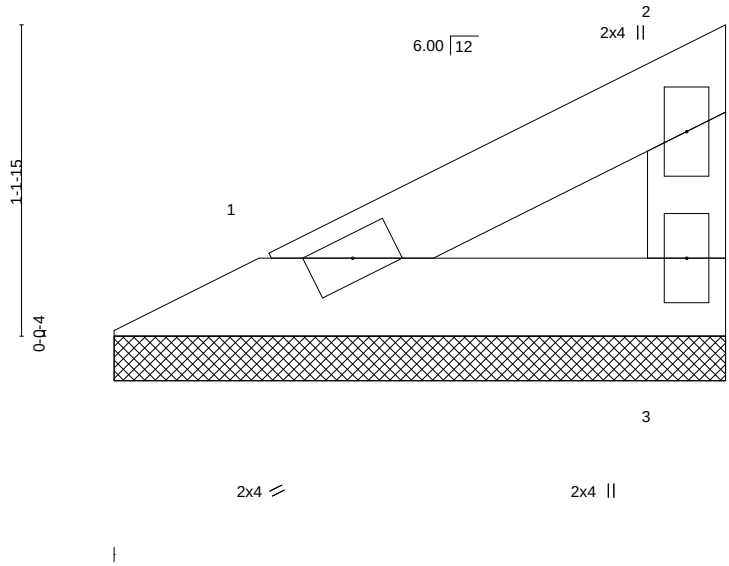

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 5 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-3-7, 3=2-3-7
Max Horz 1=29(LC 9)
Max Uplift 1=-9(LC 12), 3=-16(LC 12)
Max Grav 1=70(LC 1), 3=70(LC 1)

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

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	V3	Valley	1	1	I44972223
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:50 2021 Page 1
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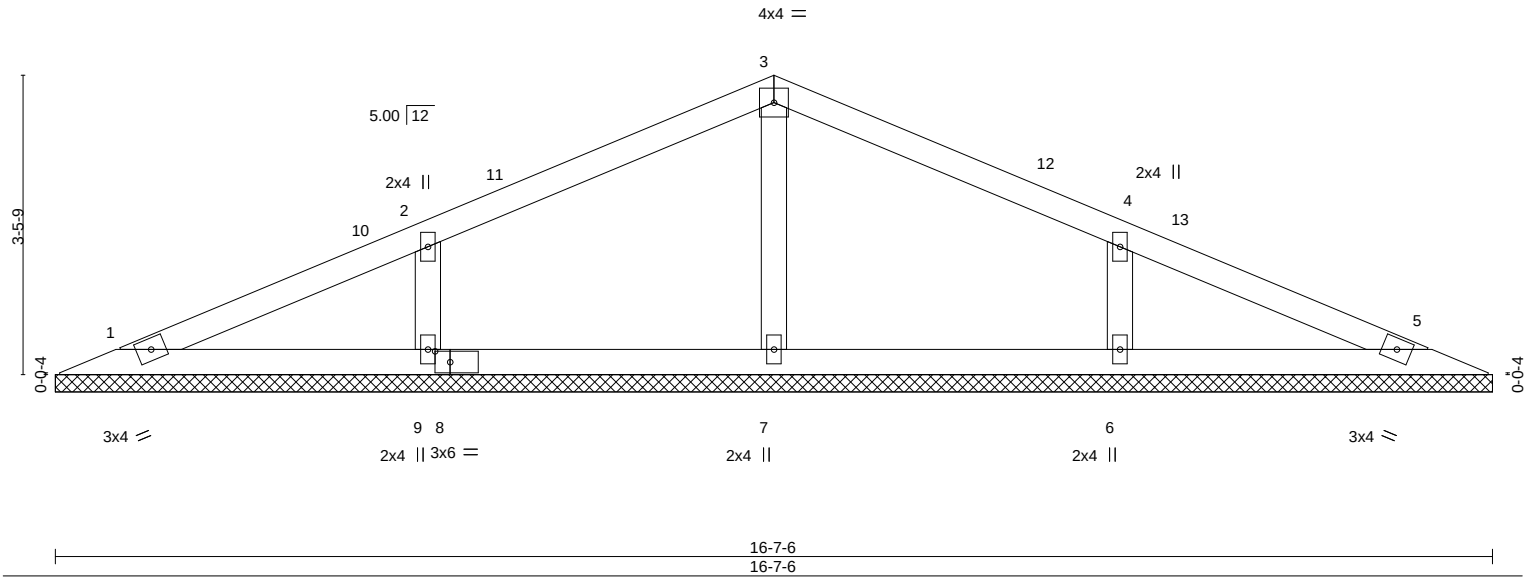

16-7-6
16-7-6

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

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 44 lb	FT = 20%

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

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

REACTIONS. All bearings 16-7-6.
(lb) - Max Horz 1=-50(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-106(LC 12), 6=-105(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=309(LC 1), 9=404(LC 25), 6=404(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-314/157, 4-6=-314/157

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 8-3-11, Exterior(2R) 8-3-11 to 11-3-11, Interior(1) 11-3-11 to 15-10-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=106, 6=105.
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 #53
2685550	V4	Valley	1	1	I44972224

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:50 2021 Page 1

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5-10-14 11-9-12

5-10-14 5-10-14

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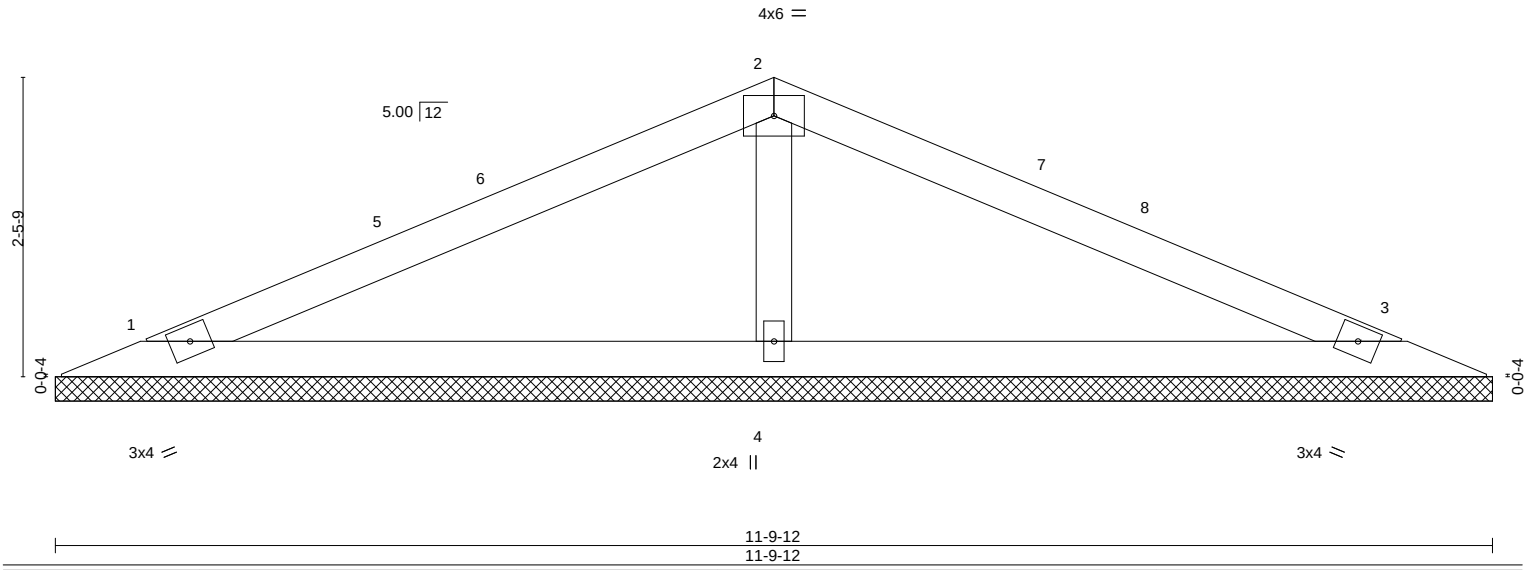

11-9-12

11-9-12

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	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=11-9-12, 3=11-9-12, 4=11-9-12
Max Horz 1=-34(LC 17)
Max Uplift 1=-40(LC 12), 3=-46(LC 13), 4=-39(LC 12)
Max Grav 1=210(LC 25), 3=210(LC 26), 4=519(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-364/179

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-10-14, Exterior(2R) 5-10-14 to 8-10-14 , Interior(1) 8-10-14 to 11-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 #53
2685550	V5	Valley	1	1	I44972225
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:51 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-uWmb9_EjEFrPxv_Y?tdpEu10ohS_R0RNrgje4czhV_Y

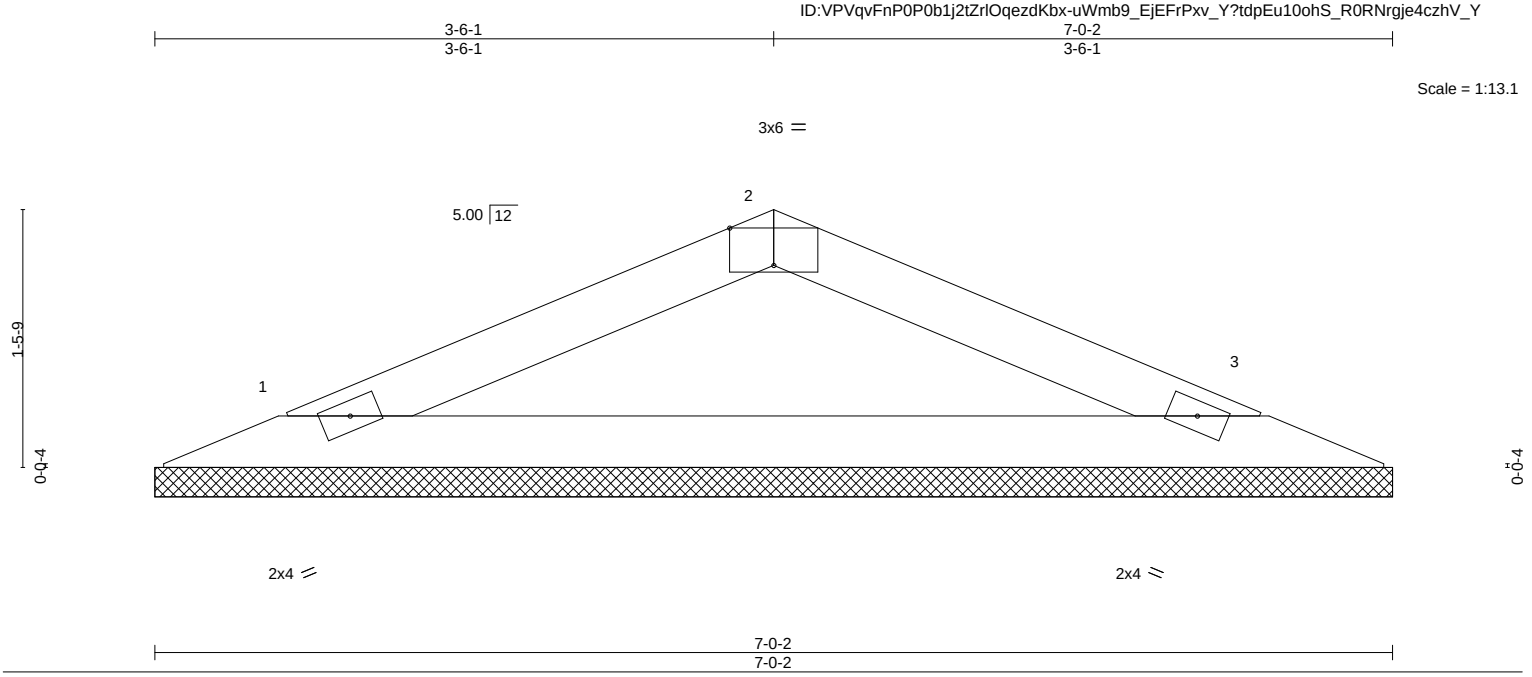

Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

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

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=7-0-2, 3=7-0-2
Max Horz 1=-18(LC 13)
Max Uplift 1=-32(LC 12), 3=-32(LC 13)
Max Grav 1=248(LC 1), 3=248(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-278/192, 2-3=-278/200

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	V6	Valley	1	1	I44972226
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:52 2021 Page 1
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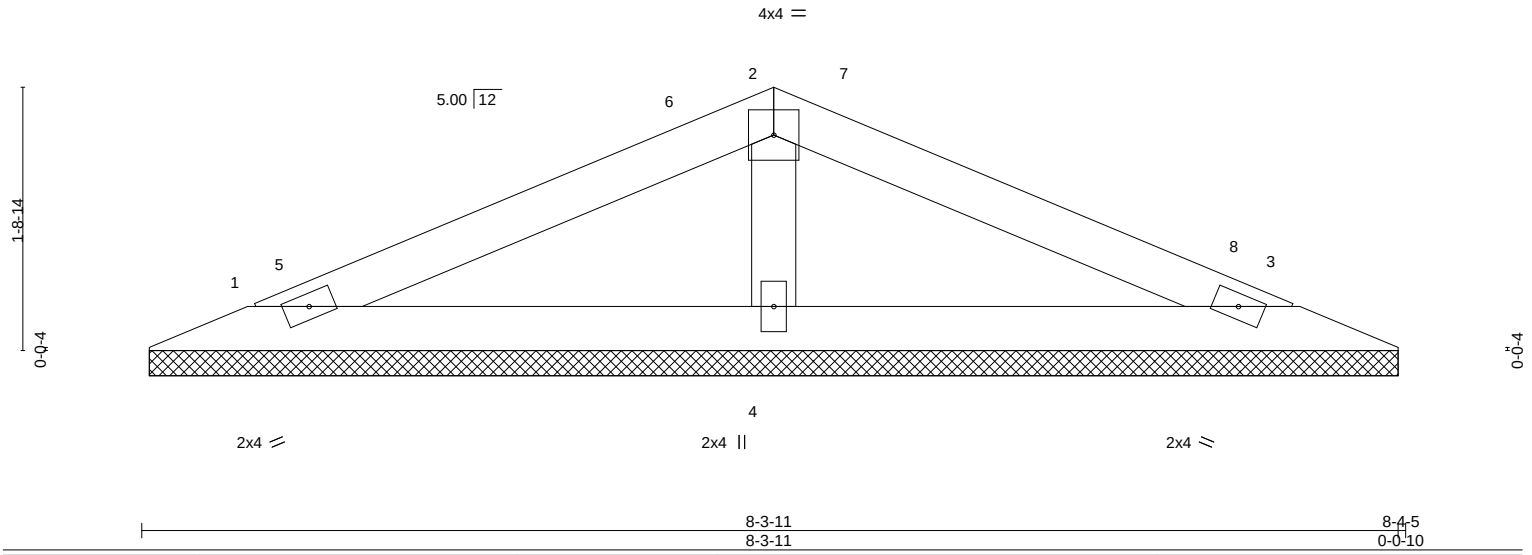
4-2-2 | 8-4-5
4-2-2 | 4-2-2

Scale = 1:15.2



8-3-11 | 8-4-5
8-3-11 | 0-0-10

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	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=8-3-1, 3=8-3-1, 4=8-3-1
Max Horz 1=23(LC 16)
Max Uplift 1=-32(LC 12), 3=-36(LC 13), 4=-15(LC 12)
Max Grav 1=153(LC 1), 3=153(LC 1), 4=311(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-2-2, Exterior(2R) 4-2-2 to 7-2-2, Interior(1) 7-2-2 to 7-7-4 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 #53
2685550	V7	Valley	1	1	I44972227
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:53 2021 Page 1
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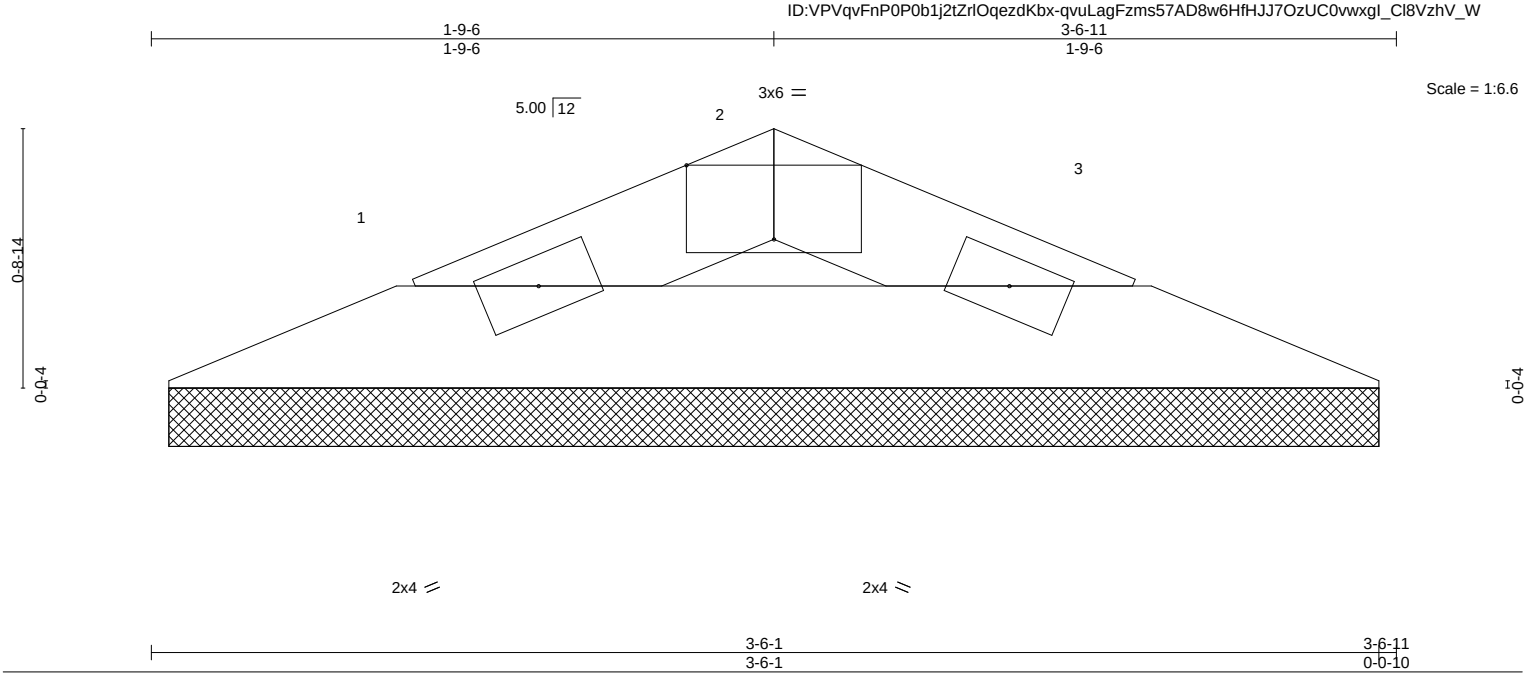

Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-5-8, 3=3-5-8
Max Horz 1=-7(LC 13)
Max Uplift 1=-12(LC 12), 3=-12(LC 13)
Max Grav 1=92(LC 1), 3=92(LC 1)

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

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

February 26,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Woodside #53
2685550	V8	Valley	1	1	I44972228
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:53 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-qvuLagFzms57AD8w6HfHJJ7JVU9Cvw3gI_Cl8VzhV_W

5-9-8 11-7-1
5-9-8 5-9-8

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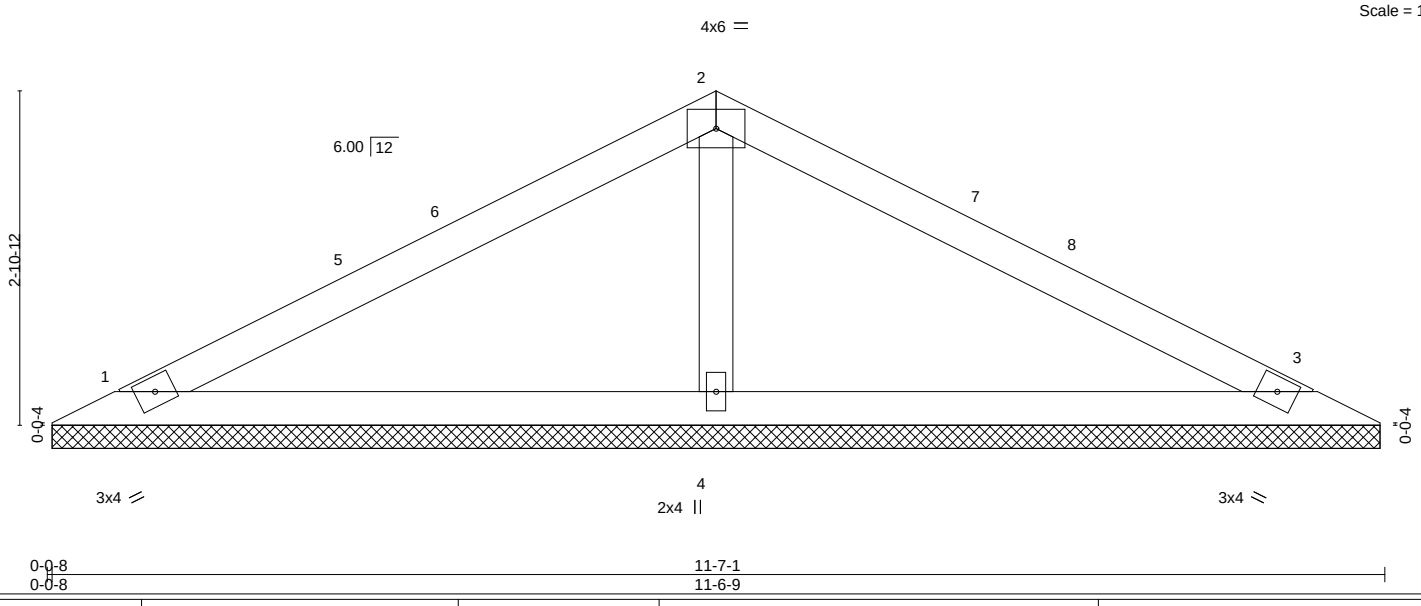

0-0-8 11-7-1
0-0-8 11-6-9

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 29 lb	FT = 20%

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

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

REACTIONS. (size) 1=11-6-1, 3=11-6-1, 4=11-6-1
Max Horz 1=-41(LC 13)
Max Uplift 1=-40(LC 12), 3=-48(LC 13), 4=-36(LC 12)
Max Grav 1=215(LC 25), 3=215(LC 26), 4=506(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-350/169

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-9-8, Exterior(2R) 5-9-8 to 8-9-8, Interior(1) 8-9-8 to 10-11-8 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) 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 #53
2685550	V9	Valley	1	1	I44972229
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 19:58:54 2021 Page 1
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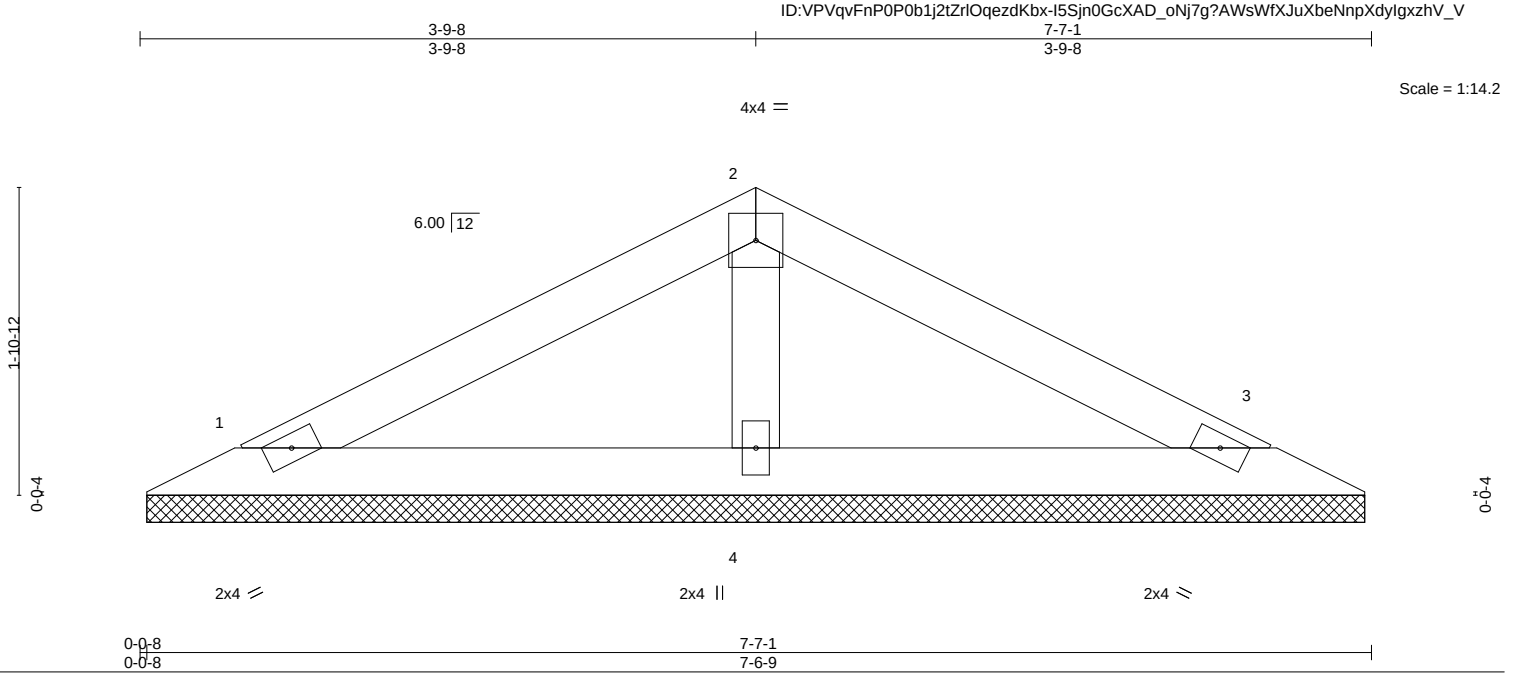


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

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

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

REACTIONS. (size) 1=7-6-1, 3=7-6-1, 4=7-6-1
Max Horz 1=25(LC 12)
Max Uplift 1=-30(LC 12), 3=-35(LC 13), 4=-11(LC 12)
Max Grav 1=145(LC 1), 3=145(LC 1), 4=279(LC 1)

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

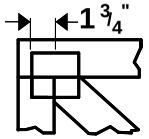
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical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

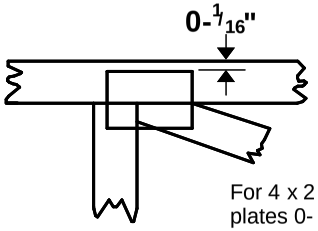
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

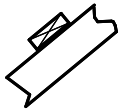
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

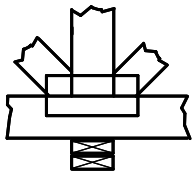
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

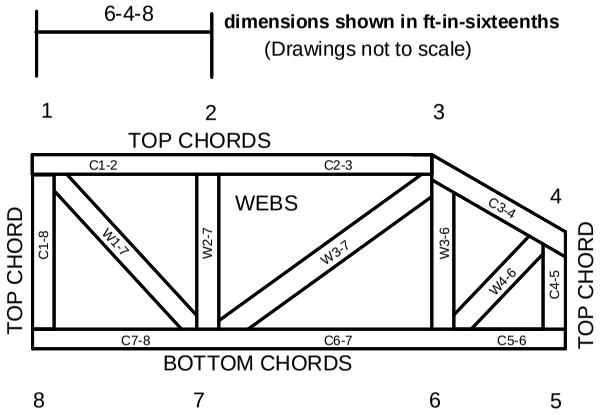


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.