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

05/14/2021

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

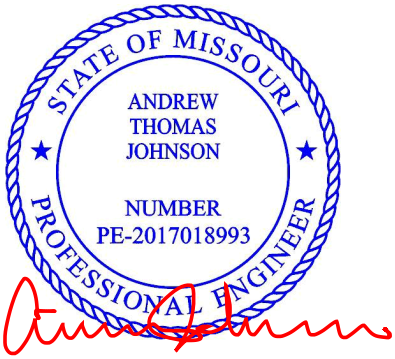
Re: 2719855
Summit/141 Woodside

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: I45783304 thru I45783389

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

Missouri COA: Engineering 001193



April 23,2021

Johnson, Andrew ,Engineer

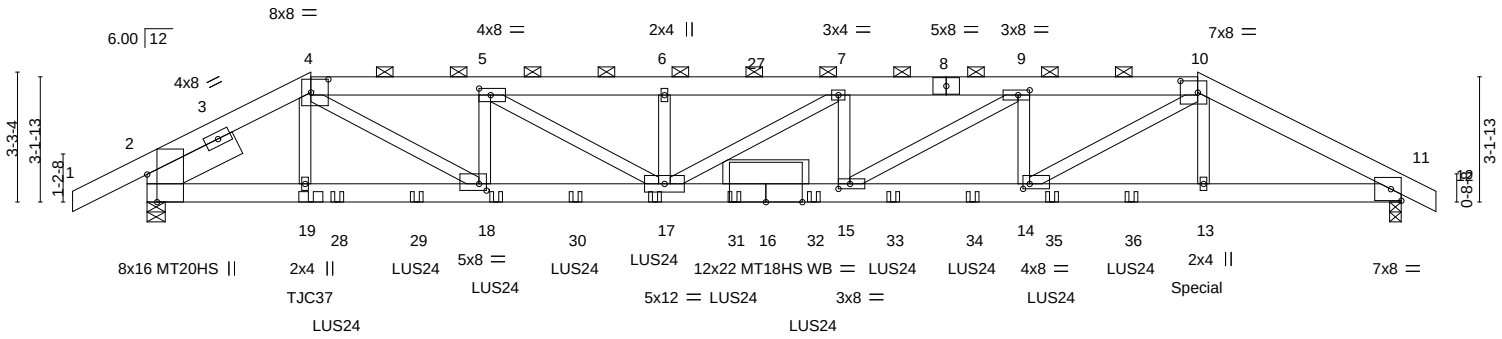
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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/141 Woodside
2719855	A01	Hip Girder	1	1	I45783304
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:32 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-Bf9M0rFAVAgK0y6IGL2t_Xlc7bQMUsP7aegWeQzOB5z

-1-10-8	4-1-8	8-6-1	13-0-6	17-6-10	22-0-15	26-5-8	31-7-0	32-5-8
1-10-8	4-1-8	4-4-9	4-6-5	4-6-5	4-6-5	4-4-9	5-1-8	0-10-8

Scale = 1:58.0



4-1-8	8-6-1	13-0-6	17-6-10	22-0-15	26-5-8	31-7-0
4-1-8	4-4-9	4-6-5	4-6-5	4-6-5	4-4-9	5-1-8

Plate Offsets (X,Y)-- [2:0-8-6,Edge], [4:0-5-4,0-4-0], [5:0-3-8,0-2-0], [9:0-3-8,0-1-8], [10:0-5-4,0-3-8], [14:0-2-0,0-1-8], [15:0-3-8,0-1-8], [18:0-2-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.48	15-17	>788	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.86	15-17	>441	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.16	11	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 179 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF 2100F 1.8E
BOT CHORD	2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except* 4-18,5-17,7-17,9-15,10-14: 2x4 SPF 1650F 1.5E
OTHERS	2x8 SP No.2
SLIDER	Left 2x8 SP 2400F 2.0E -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-1-9 oc purlins, except 2-0-0 oc purlins (2-8-3 max.): 4-10.
BOT CHORD	Rigid ceiling directly applied or 5-7-15 oc bracing.

REACTIONS. (size) 2=0-5-8, 11=0-3-8 (req. 0-4-5)
Max Horz 2=54(LC 12)
Max Uplift 2=-949(LC 8), 11=-942(LC 9)
Max Grav 2=3422(LC 1), 11=3408(LC 1)

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

TOP CHORD	2-4=-5249/1538, 4-5=-8333/2466, 5-6=-10203/3005, 6-7=-10203/3005, 7-9=-10471/3086, 9-10=-9026/2658, 10-11=-6555/1868
BOT CHORD	2-19=-1292/4484, 18-19=-1290/4474, 17-18=-2424/8331, 15-17=-3027/10471, 14-15=-2588/9025, 13-14=-1604/5746, 11-13=-1612/5780
WEBS	4-18=-1365/4567, 5-18=-1576/506, 5-17=-650/2198, 6-17=-296/131, 7-17=-332/208, 9-15=-520/1716, 9-14=-1266/421, 10-14=-1192/3923, 10-13=-177/652

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) WARNING: Required bearing size at joint(s) 11 greater than input bearing size.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=949, 11=942.
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.
10) Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 4-1-8 from the left end to connect truss(es) to front face of bottom chord, skewed 33.7 deg.to the left, sloping 0.0 deg. down.
11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-9-8 from the left end to 24-9-8 to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 581 lb down and 213 lb up at 26-5-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

LOAD CASE(S) Standard

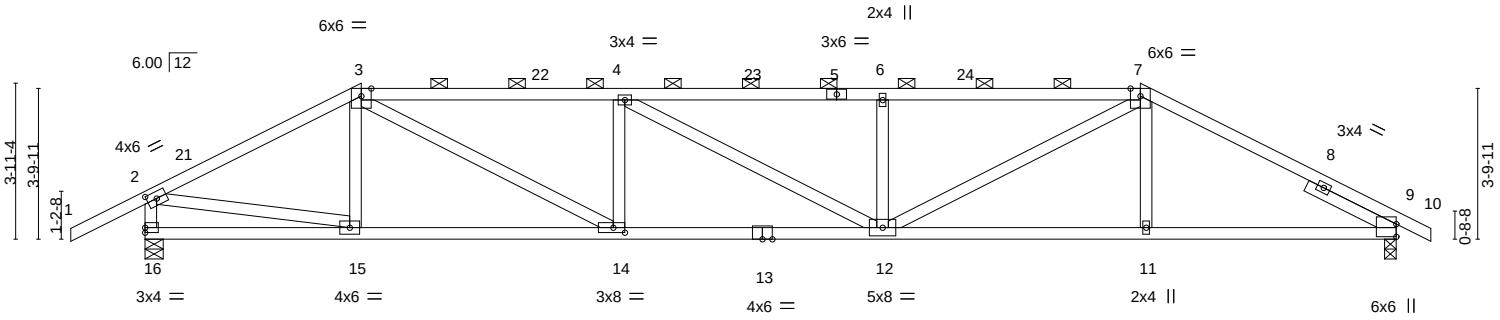
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-10=-70, 10-12=-70, 20-24=-20
   Concentrated Loads (lb)
   Vert: 19=-193(F) 18=-275(F) 17=-275(F) 13=-581(F) 28=-275(F) 29=-275(F) 30=-275(F) 31=-275(F) 32=-275(F) 33=-275(F) 34=-275(F) 35=-275(F) 36=-275(F)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	A02	Hip	1	1	I45783305
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:35 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-cEqUetH2n52vtQqtyTcac9N59pTRhHHZGcuAElzOB5w

-1-10-8	5-5-8	11-11-9	18-7-7	25-1-8	31-7-0	32-5-8
1-10-8	5-5-8	6-6-1	6-7-13	6-6-1	6-5-8	0-10-8

Scale = 1:58.2



5-5-8	11-11-9	18-7-7	25-1-8	31-7-0
5-5-8	6-6-1	6-7-13	6-6-1	6-5-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.22	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.42	12-14	>892	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 126 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 16=0-5-8, 9=0-3-8
Max Horz 16=-71(LC 10)
Max Uplift 16=-291(LC 12), 9=-273(LC 13)
Max Grav 16=1560(LC 1), 9=1472(LC 1)

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

TOP CHORD	2-3=-2047/377, 3-4=-3031/624, 4-6=-3140/644, 6-7=-3142/645, 7-9=-2364/429, 2-16=-1508/345
BOT CHORD	14-15=-315/1771, 12-14=-575/3029, 11-12=-319/2053, 9-11=-317/2057
WEBS	3-14=-345/1486, 4-14=-582/223, 6-12=-525/210, 7-12=-329/1338, 2-15=-303/1680

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-3-6, Interior(1) 1-3-6 to 5-5-8, Exterior(2R) 5-5-8 to 9-11-2, Interior(1) 9-11-2 to 25-1-8, Exterior(2R) 25-1-8 to 29-7-2, Interior(1) 29-7-2 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=291, 9=273.
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.

April 23,2021

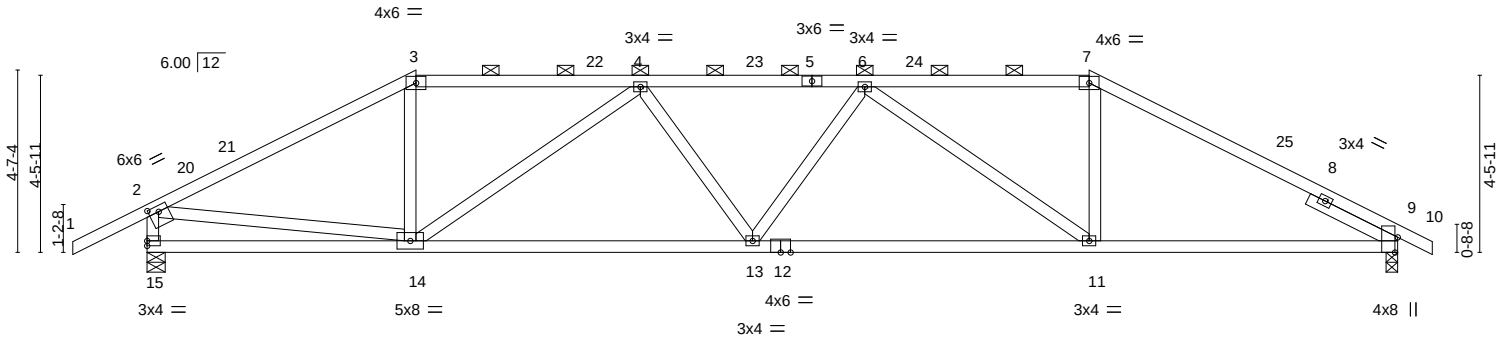
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	A03	Hip	1	1	I45783306
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:37 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-YcyF3ZJJJiIc7j_G3ue2haSUQcAw93jsjvNHJezOB5u

-1-10-8 | 6-9-8 | 12-5-8 | 18-1-8 | 23-9-8 | 31-7-0 | 32-5-8
1-10-8 | 6-9-8 | 5-8-0 | 5-8-0 | 5-8-0 | 7-9-8 | 0-10-8

Scale = 1:58.2



6-9-8 | 15-3-8 | 23-9-8 | 31-7-0
6-9-8 | 8-6-0 | 8-6-0 | 7-9-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.18	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.40	11-13	>945	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 124 lb	FT = 20%

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

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

REACTIONS. (size) 15=0-5-8, 9=0-3-8
Max Horz 15=-79(LC 10)
Max Uplift 15=-289(LC 12), 9=-272(LC 13)
Max Grav 15=1560(LC 1), 9=1472(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2095/347, 3-4=-1779/355, 4-6=-2642/480, 6-7=-1981/418, 7-9=-2318/407, 2-15=-1496/351
BOT CHORD 14-15=-142/262, 13-14=-448/2543, 11-13=-439/2618, 9-11=-262/2000
WEBS 3-14=-54/544, 4-14=-1024/269, 4-13=-43/259, 6-11=-913/261, 7-11=-74/656, 2-14=-260/1549

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-3-6, Interior(1) 1-3-6 to 6-9-8, Exterior(2R) 6-9-8 to 11-3-2, Interior(1) 11-3-2 to 23-9-8, Exterior(2R) 23-9-8 to 28-3-2, Interior(1) 28-3-2 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=289, 9=272.
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.

April 23,2021

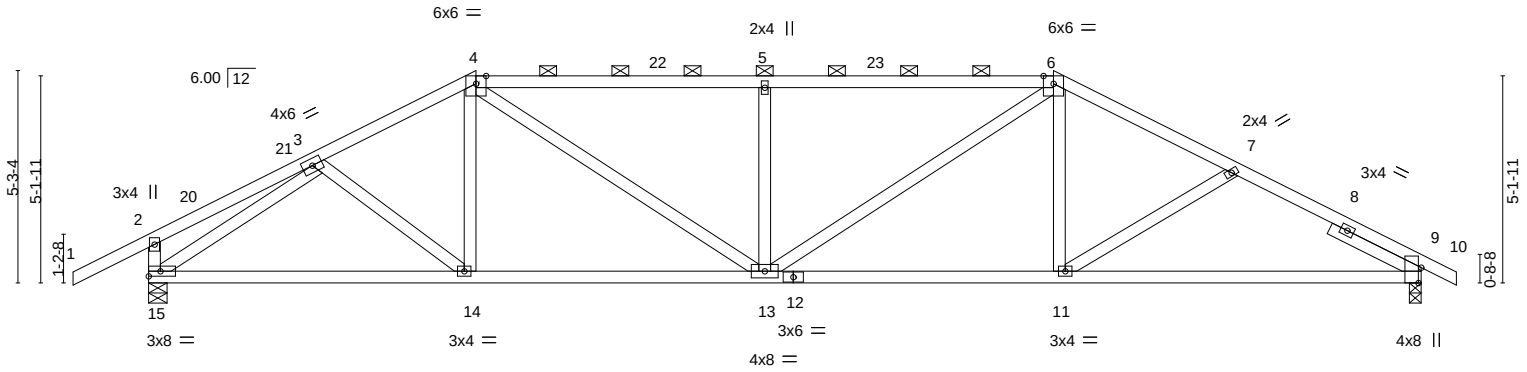
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	A04	Hip	1	1	I45783307
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:39 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-U?4?UFKZrKZKM18eBJgWm?YpyQsAd?C9BDsONWzOB5s

-1-10-8	4-2-8	8-1-8	15-3-8	22-5-8	26-10-8	31-7-0	32-5-8
1-10-8	4-2-8	3-11-0	7-2-0	7-2-0	4-5-0	4-8-8	0-10-8

Scale = 1:57.2



8-1-8	15-3-8	22-5-8	31-7-0
8-1-8	7-2-0	7-2-0	9-1-8

Plate Offsets (X,Y)-- [9:0-4-9,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	0.71	Vert(LL)	-0.15	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.28	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 133 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-9-14 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 15=0-5-8, 9=0-3-8
Max Horz 15=-88(LC 10)
Max Uplift 15=-288(LC 12), 9=-270(LC 13)
Max Grav 15=1560(LC 1), 9=1472(LC 1)

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

TOP CHORD	3-4=-1989/357, 4-5=-2362/444, 5-6=-2362/444, 6-7=-2167/400, 7-9=-2323/446, 2-15=-380/167
BOT CHORD	14-15=-299/1604, 13-14=-244/1747, 11-13=-208/1910, 9-11=-312/2015
WEBS	3-14=-63/302, 4-13=-205/829, 5-13=-587/238, 6-13=-188/667, 6-11=0/324, 3-15=-1845/321

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-3-6, Interior(1) 1-3-6 to 8-1-8, Exterior(2R) 8-1-8 to 12-7-2, Interior(1) 12-7-2 to 22-5-8, Exterior(2R) 22-5-8 to 27-0-5, Interior(1) 27-0-5 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=288, 9=270.
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.

April 23,2021

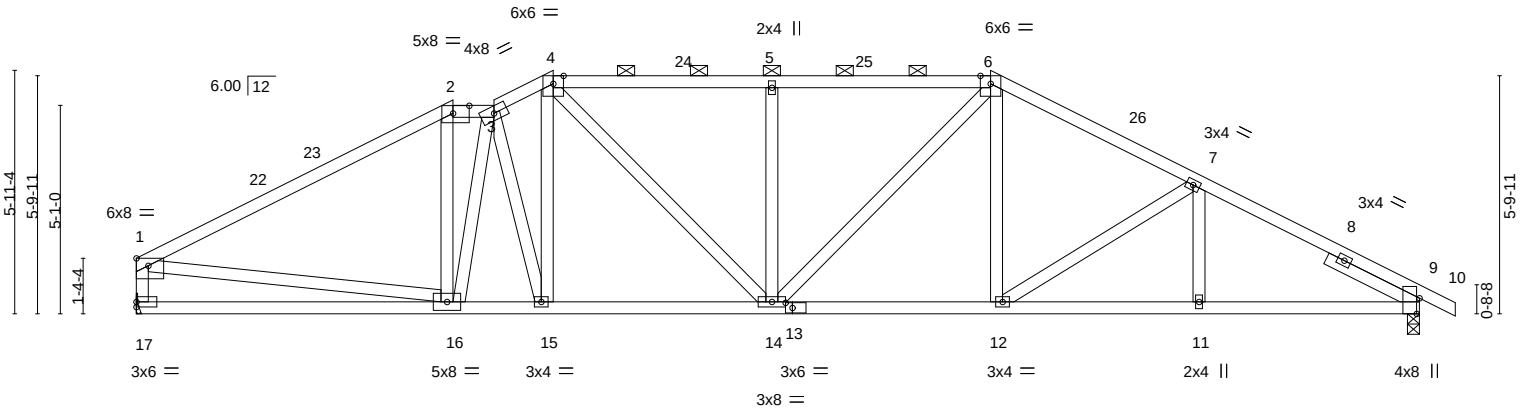
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	A05	Roof Special	1	1	I45783308
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:41 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-QOBlvwMpNxp2bLI1Ikj_rQd9?DXY50nSeXLUSPzOB5q

7-8-11	8-8-11	10-2-0	15-6-0	20-10-0	25-11-0	31-3-8	32-2-0
7-8-11	1-0-0	1-5-5	5-4-0	5-4-0	5-1-0	5-4-8	0-10-8

Scale = 1:56.2



7-8-11	10-2-0	15-6-0	20-10-0	25-11-0	31-3-8
7-8-11	2-5-5	5-4-0	5-4-0	5-1-0	5-4-8

Plate Offsets (X,Y)-- [1:Edge,0-2-3], [2:0-4-12,0-2-4], [9:0-4-9,Edge], [13:0-2-0,0-1-8]

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	0.73	Vert(LL)	-0.12	14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.22	14-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 148 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-1 max.): 2-3, 4-6.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 17=Mechanical, 9=0-3-8
Max Horz 17=-107(LC 10)
Max Uplift 17=-184(LC 12), 9=-208(LC 13)
Max Grav 17=1401(LC 1), 9=1464(LC 1)

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

TOP CHORD	1-2=-2032/382, 2-3=-1717/401, 3-4=-1908/430, 4-5=-2018/445, 5-6=-2018/445, 6-7=-2057/416, 7-9=-2322/414, 1-17=-1319/274
BOT CHORD	16-17=-139/331, 15-16=-231/1786, 14-15=-209/1734, 12-14=-211/1780, 11-12=-298/2015, 9-11=-298/2015
WEBS	2-16=-44/432, 3-16=-501/127, 4-15=-80/264, 4-14=-116/521, 5-14=-439/178, 6-14=-126/474, 6-12=-49/311, 7-12=-290/173, 1-16=-182/1417

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-5, Interior(1) 3-3-5 to 7-8-11, Exterior(2E) 7-8-11 to 8-8-11, Interior(1) 8-8-11 to 10-2-0, Exterior(2R) 10-2-0 to 13-3-9, Interior(1) 13-3-9 to 20-10-0, Exterior(2R) 20-10-0 to 23-11-9, Interior(1) 23-11-9 to 32-2-0 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=184, 9=208.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

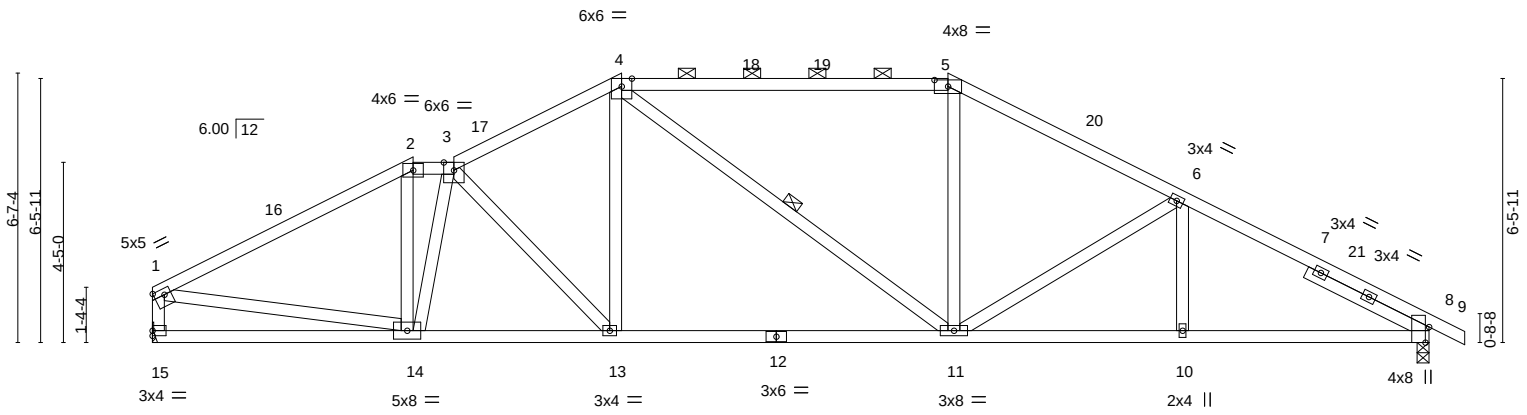
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	A06	ROOF SPECIAL	1	1	I45783309
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:43 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-NmJWKcN4vY3mreRQQ9lSwriVt1FRZwml6rqbWHzOB5o

6-4-11	7-4-11	11-6-0	19-6-0	25-3-0	31-3-8	32-2-0
6-4-11	1-0-0	4-1-5	8-0-0	5-9-0	6-0-8	0-10-8

Scale = 1:56.5



6-4-11	11-6-0	19-6-0	25-3-0	31-3-8
6-4-11	5-1-5	8-0-0	5-9-0	6-0-8

Plate Offsets (X,Y)-- [1:Edge,0-1-12], [5:0-4-0,0-1-15], [8:0-4-9,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	0.71	Vert(LL)	-0.14	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.32	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 141 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 4-5: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 -t 3-4-1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-11 max.): 2-3, 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-11

REACTIONS. (size) 15=Mechanical, 8=0-3-8
Max Horz 15=-115(LC 17)
Max Uplift 15=-197(LC 12), 8=-221(LC 13)
Max Grav 15=1401(LC 1), 8=1464(LC 1)

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

TOP CHORD	1-2=-2003/397, 2-3=-1708/403, 3-4=-1909/432, 4-5=-1690/408, 5-6=-1971/420, 6-8=-2400/427, 1-15=-1333/278
BOT CHORD	13-14=-310/1887, 11-13=-214/1660, 10-11=-293/2021, 8-10=-293/2021
WEBS	2-14=-40/551, 3-14=-749/130, 3-13=-325/158, 4-13=-56/426, 5-11=-13/407, 6-11=-399/207, 1-14=-221/1550

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-5, Interior(1) 3-3-5 to 6-4-11, Exterior(2E) 6-4-11 to 7-4-11, Interior(1) 7-4-11 to 11-6-0, Exterior(2R) 11-6-0 to 14-7-9, Interior(1) 14-7-9 to 19-6-0, Exterior(2R) 19-6-0 to 22-7-9, Interior(1) 22-7-9 to 32-2-0 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=197, 8=221.
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.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	A07	Roof Special	1	1	I45783310

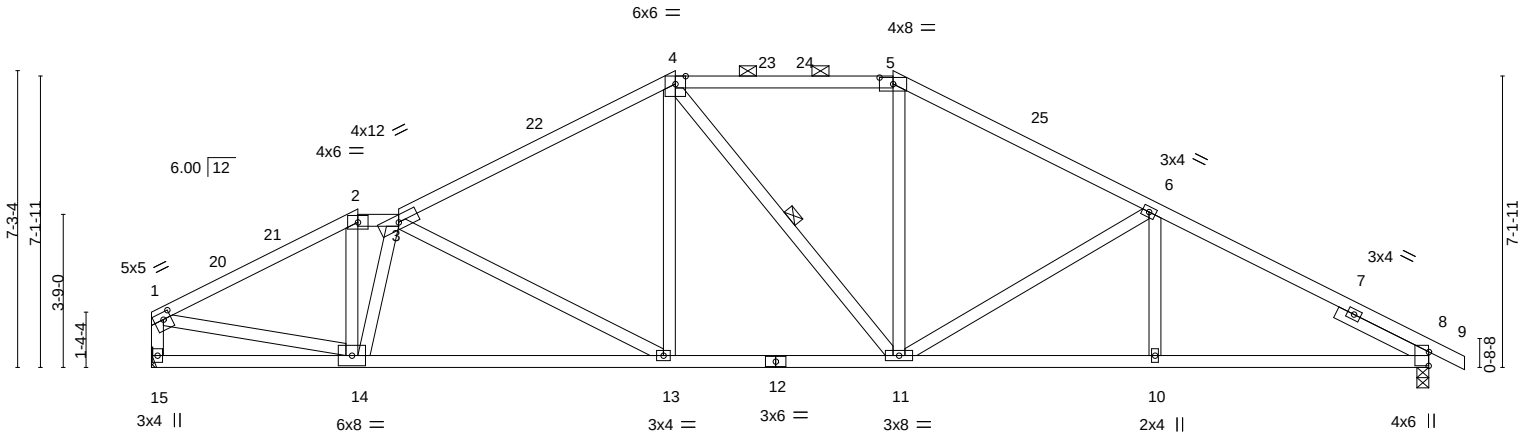
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:45 2021 Page 1

ID:q0zUiNd1SQn_5kyS6a2asYzcai1-J9RGIIPKRAJU4yboXanw0Gotgrws1of1Z9JibAzOB5m

5-0-11	6-0-11	12-10-0	18-2-0	24-7-0	31-3-8	32-2-0
5-0-11	1-0-0	6-9-5	5-4-0	6-5-0	6-8-8	0-10-8

Scale = 1:56.4



5-0-11	12-10-0	18-2-0	24-7-0	31-3-8
5-0-11	7-9-5	5-4-0	6-5-0	6-8-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.12	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.25	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 138 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-1-8 max.): 2-3, 4-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-11

REACTIONS. (size) 15=Mechanical, 8=0-3-8
Max Horz 15=-129(LC 17)
Max Uplift 15=-209(LC 12), 8=-233(LC 13)
Max Grav 15=1401(LC 1), 8=1464(LC 1)

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

TOP CHORD	1-2=-1961/374, 2-3=-1694/376, 3-4=-1860/407, 4-5=-1573/405, 5-6=-1859/413, 6-8=-2317/424, 1-15=-1355/269
BOT CHORD	13-14=-324/1957, 11-13=-174/1563, 10-11=-288/2008, 8-10=-288/2008
WEBS	2-14=-106/698, 3-14=-961/226, 3-13=-460/213, 4-13=-42/400, 5-11=-49/394, 6-11=-522/232, 1-14=-221/1588

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-5, Interior(1) 3-3-5 to 5-0-11, Exterior(2E) 5-0-11 to 6-0-11, Interior(1) 6-0-11 to 12-10-0, Exterior(2R) 12-10-0 to 15-11-9, Interior(1) 15-11-9 to 18-2-0, Exterior(2R) 18-2-0 to 21-3-9, Interior(1) 21-3-9 to 32-2-0 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=209, 8=233.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	A08	Roof Special	1	1	I45783311
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:46 2021 Page 1
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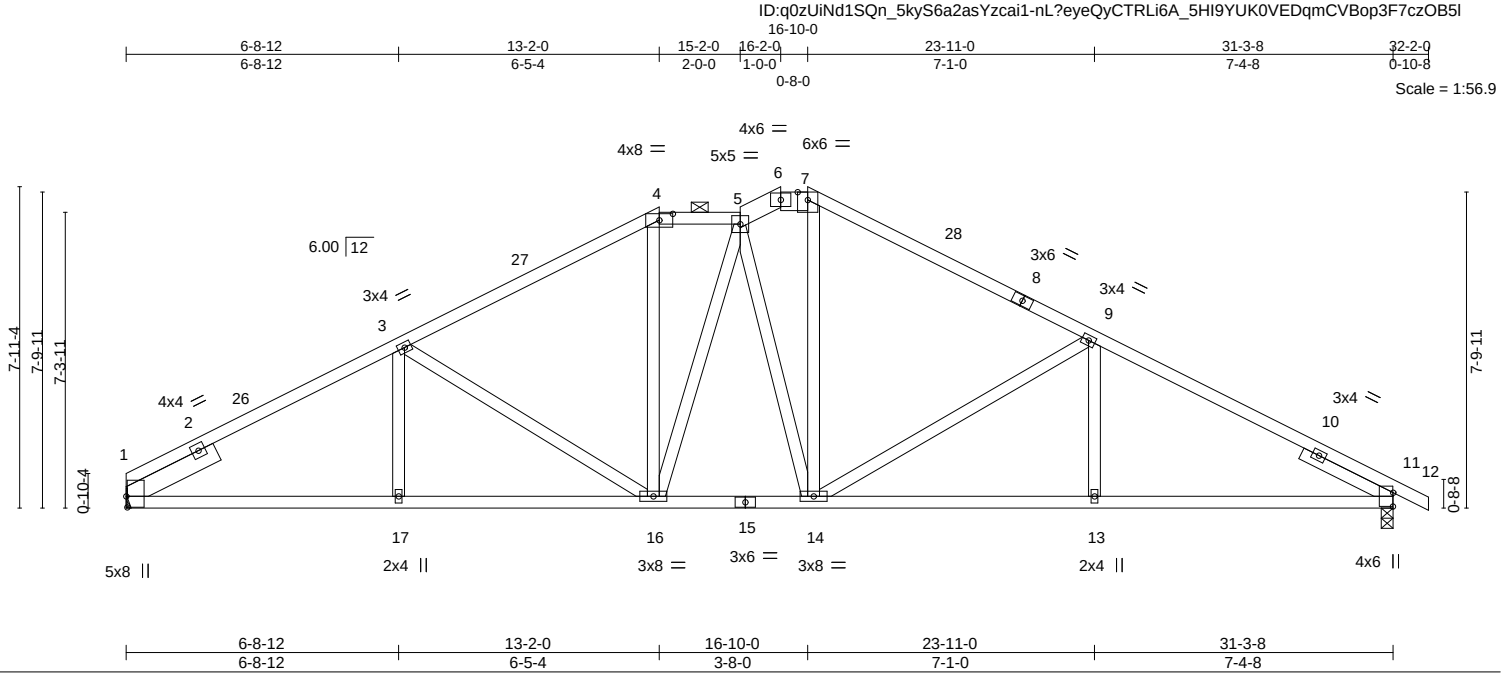


Plate Offsets (X,Y)-- [1:0-3-4,0-0-5], [4:0-4-0,0-1-15], [11:0-4-1,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.13	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.28	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.10	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 143 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 5-6,6-7: 2x6 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 2x4 SPF No.2 -t 2-6-0

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

REACTIONS. (size) 1=Mechanical, 11=0-3-8
Max Horz 1=-145(LC 13)
Max Uplift 1=-213(LC 12), 11=-244(LC 13)
Max Grav 1=1407(LC 1), 11=1470(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2248/392, 3-4=-1831/381, 4-5=-1550/382, 5-6=-1487/362, 6-7=-1500/382, 7-9=-1771/379, 9-11=-2316/397
BOT CHORD 1-17=-324/1932, 16-17=-324/1932, 14-16=-133/1554, 13-14=-260/2001, 11-13=-260/2001
WEBS 3-16=-485/221, 4-16=-47/379, 5-14=-447/112, 7-14=-119/715, 9-14=-622/254, 9-13=0/274

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-9, Interior(1) 3-1-9 to 13-2-0, Exterior(2E) 13-2-0 to 15-2-0, Interior(1) 15-2-0 to 16-2-0, Exterior(2E) 16-2-0 to 16-10-0, Exterior(2R) 16-10-0 to 19-11-9, Interior(1) 19-11-9 to 32-2-0 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=213, 11=244.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

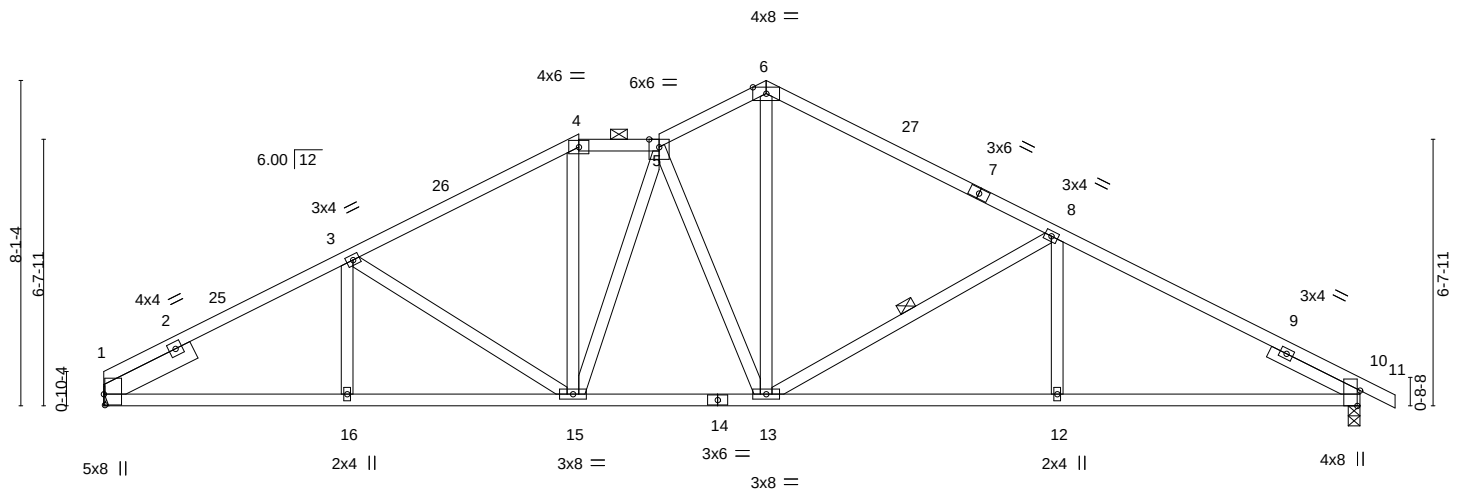
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside	I45783312
2719855	A09	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:48 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-jk7PNKRCk5h3xPKNCiLddvQMM2v8E8?UF7YMCVzOB5j

6-0-12	11-10-0	13-10-0	16-6-0	23-9-0	31-3-8	32-2-0
6-0-12	5-9-4	2-0-0	2-8-0	7-3-0	7-6-8	0-10-8

Scale = 1:57.4



6-0-12	11-10-0	16-6-0	23-9-0	31-3-8
6-0-12	5-9-4	4-8-0	7-3-0	7-6-8

Plate Offsets (X,Y)-- [1:0-3-4,0-0-5], [10:0-4-9,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	0.66	Vert(LL)	-0.14	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.29	12-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 139 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 2x4 SPF No.2 -t 2-6-0

BRACING-

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

REACTIONS. (size) 1=Mechanical, 10=0-3-8
Max Horz 1=-149(LC 13)
Max Uplift 1=-241(LC 12), 10=-246(LC 13)
Max Grav 1=1407(LC 1), 10=1470(LC 1)

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

TOP CHORD	1-3=-2248/397, 3-4=-1925/391, 4-5=-1646/396, 5-6=-1627/391, 6-8=-1728/387, 8-10=-2315/409
BOT CHORD	1-16=-390/1933, 15-16=-390/1933, 13-15=-223/1689, 12-13=-254/2001, 10-12=-254/2001
WEBS	3-15=-380/181, 4-15=-51/418, 5-13=-673/228, 6-13=-209/1046, 8-13=-687/270, 8-12=0/283

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-9, Interior(1) 3-1-9 to 11-10-0, Exterior(2E) 11-10-0 to 13-10-0 , Interior(1) 13-10-0 to 16-6-0, Exterior(2R) 16-6-0 to 19-7-9, Interior(1) 19-7-9 to 32-2-0 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=241, 10=246.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

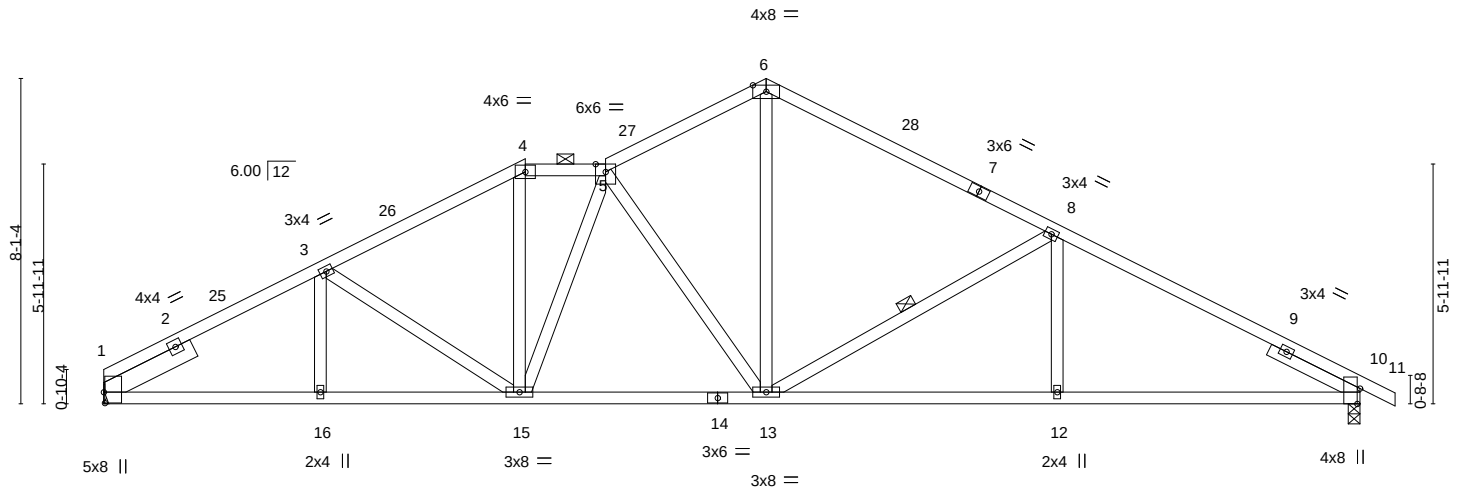
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	B01	Roof Special	1	1	I45783313
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:51 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-8JoX?LU5003dot2yuquKFX2u7FwKRUBwx5m0pqzOB5g

5-4-12	10-6-0	12-6-0	16-6-0	23-9-0	31-3-8	32-2-0
5-4-12	5-1-4	2-0-0	4-0-0	7-3-0	7-6-8	0-10-8

Scale = 1:57.4



5-4-12	10-6-0	16-6-0	23-9-0	31-3-8
5-4-12	5-1-4	6-0-0	7-3-0	7-6-8

Plate Offsets (X,Y)-- [1:0-3-4,0-0-5], [10:0-4-9,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	0.63	Vert(LL)	-0.14	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.29	12-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 137 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 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-2-12 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 8-13

REACTIONS. (size) 1=Mechanical, 10=0-3-8
Max Horz 1=-149(LC 13)
Max Uplift 1=-241(LC 12), 10=-246(LC 13)
Max Grav 1=1407(LC 1), 10=1470(LC 1)

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

TOP CHORD	1-3=-2239/400, 3-4=-1999/402, 4-5=-1737/401, 5-6=-1652/386, 6-8=-1730/389, 8-10=-2315/412
BOT CHORD	1-16=-397/1925, 15-16=-397/1925, 13-15=-273/1838, 12-13=-254/2001, 10-12=-254/2001
WEBS	3-15=-264/150, 4-15=-72/513, 5-15=-288/94, 5-13=-703/242, 6-13=-194/1032, 8-13=-688/272, 8-12=0/277

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-9, Interior(1) 3-1-9 to 10-6-0, Exterior(2E) 10-6-0 to 12-6-0, Interior(1) 12-6-0 to 16-6-0, Exterior(2R) 16-6-0 to 19-7-9, Interior(1) 19-7-9 to 32-2-0 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=241, 10=246.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

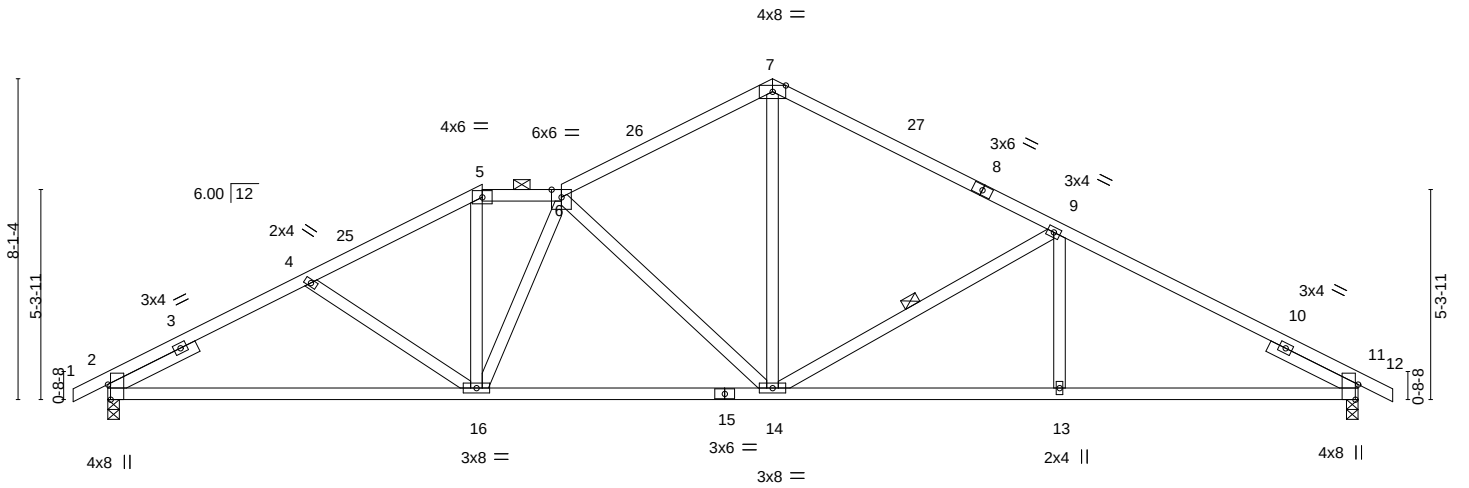
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	B02	Roof Special	1	1	I45783314
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:53 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-4hwlQ1VLYdKL2BCL?FxoKy7Et3dwvLBDPPF7tizOB5e

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

Scale = 1:58.2



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

Plate Offsets (X,Y)-- [2:0-4-9,Edge], [11:0-4-9,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	0.61	Vert(LL)	-0.14	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.28	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.10	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 132 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-1-10 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 9-14

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=138(LC 12)
Max Uplift 2=-264(LC 12), 11=-247(LC 13)
Max Grav 2=1483(LC 1), 11=1483(LC 1)

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

TOP CHORD	2-4=-2344/442, 4-5=-2151/408, 5-6=-1875/403, 6-7=-1723/380, 7-9=-1759/390, 9-11=-2337/411
BOT CHORD	2-16=-438/2035, 14-16=-332/2049, 13-14=-254/2020, 11-13=-254/2020
WEBS	5-16=-89/653, 6-16=-446/120, 6-14=-799/264, 7-14=-175/1024, 9-14=-685/272, 9-13=0/273

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-6, Interior(1) 2-3-6 to 9-5-8, Exterior(2E) 9-5-8 to 11-5-8, Interior(1) 11-5-8 to 16-9-8, Exterior(2R) 16-9-8 to 19-11-6, Interior(1) 19-11-6 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 11=247.
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.

April 23,2021

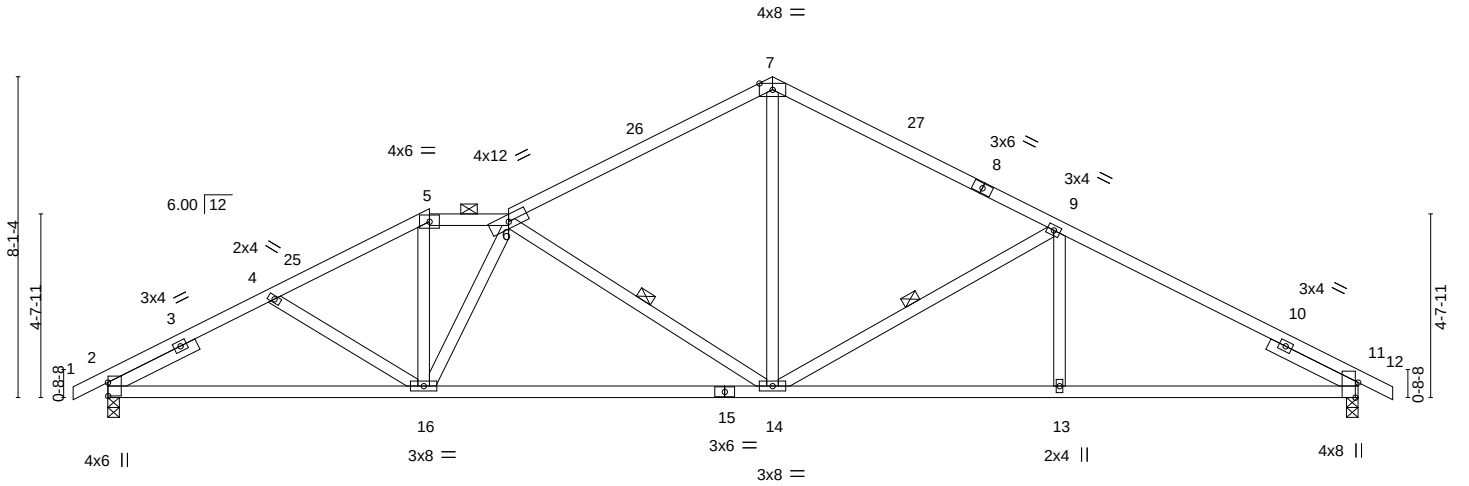
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	B03	Roof Special	1	1	I45783315
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:56 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-UGbQ33XDrYiwvexvgNUVybllfGgO6pTf5NUnU1zOB5b

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

Scale = 1:58.2



8-1-8	10-1-8	16-9-8	24-0-8	31-7-0
8-1-8	2-0-0	6-8-0	7-3-0	7-6-8

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [11:0-4-9,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	0.58	Vert(LL)	-0.15	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.36	14-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.10	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 130 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-8 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-14, 9-14

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=138(LC 12)
Max Uplift 2=-264(LC 12), 11=-247(LC 13)
Max Grav 2=1483(LC 1), 11=1483(LC 1)

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

TOP CHORD	2-4=-2348/438, 4-5=-2242/410, 5-6=-1960/400, 6-7=-1756/370, 7-9=-1765/384, 9-11=-2334/407
BOT CHORD	2-16=-446/2031, 14-16=-394/2234, 13-14=-253/2017, 11-13=-253/2017
WEBS	5-16=-110/740, 6-16=-624/162, 6-14=-907/302, 7-14=-149/988, 9-14=-678/273, 9-13=0/260

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-6, Interior(1) 2-3-6 to 8-1-8, Exterior(2E) 8-1-8 to 10-1-8, Interior(1) 10-1-8 to 16-9-8, Exterior(2R) 16-9-8 to 19-11-6, Interior(1) 19-11-6 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 11=247.
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.

April 23,2021

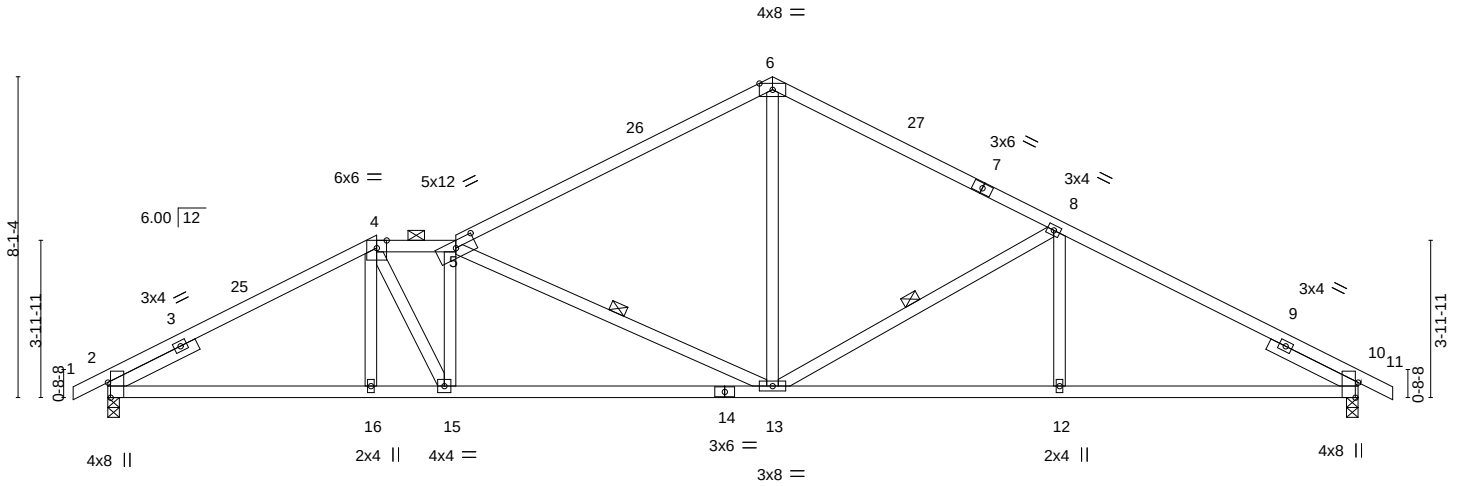
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside	I45783316
2719855	B04	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:08:58 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-QfjBTkZUN9ye8y5IooWz10q094LXahvyYhzuYwzOB5Z

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

Scale = 1:58.2



6-9-8	8-9-8	16-9-8	24-0-8	31-7-0
6-9-8	2-0-0	8-0-0	7-3-0	7-6-8

Plate Offsets (X,Y)-- [2:0-4-9,Edge], [5:0-6-0,0-2-1], [10:0-4-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.14	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.34	13-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 129 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=138(LC 12)
Max Uplift 2=-264(LC 12), 10=-247(LC 13)
Max Grav 2=1483(LC 1), 10=1483(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2342/420, 4-5=-2452/473, 5-6=-1785/364, 6-8=-1767/382, 8-10=-2333/402
BOT CHORD 2-16=-395/2029, 15-16=-395/2028, 13-15=-450/2481, 12-13=-251/2015, 10-12=-251/2015
WEBS 4-15=-138/953, 5-15=-721/183, 5-13=-1102/336, 6-13=-125/944, 8-13=-679/271, 8-12=0/264

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-6, Interior(1) 2-3-6 to 6-9-8, Exterior(2E) 6-9-8 to 8-9-8, Interior(1) 8-9-8 to 16-9-8, Exterior(2R) 16-9-8 to 19-11-6, Interior(1) 19-11-6 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 10=247.
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.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	B05	Roof Special	1	1	I45783317
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:00 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-N2rxuQbkvnCMNGFhvDZR7RvQXuz02abF0_S?dozOB5X

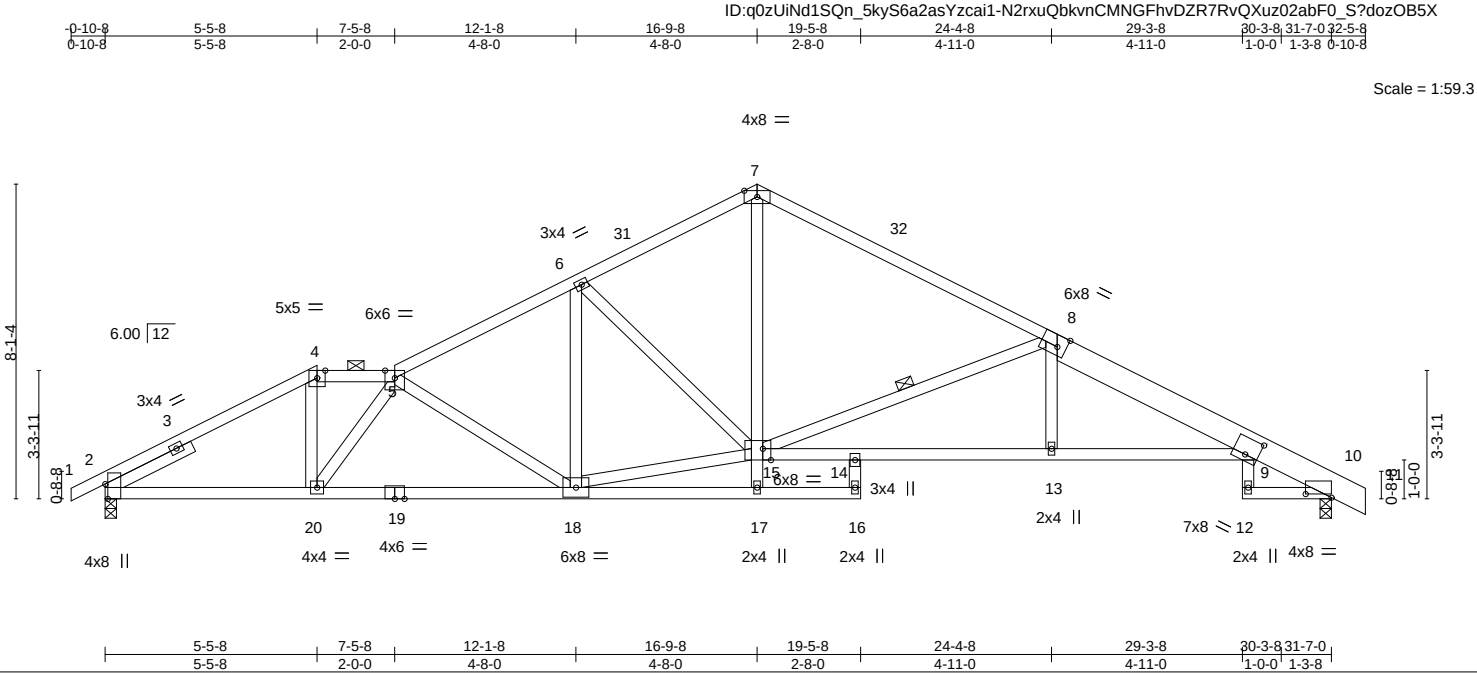


Plate Offsets (X,Y)-- [2:0-4-9,Edge], [8:0-2-12,Edge], [9:0-4-0,0-5-1], [10:0-8-0,0-1-2], [15:0-2-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.23	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.46	13-14	>824	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.23	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 156 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 8-11: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-0-8 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 8-15

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-145(LC 13)
Max Uplift 2=-264(LC 12), 10=-244(LC 13)
Max Grav 2=1483(LC 1), 10=1489(LC 1)

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

TOP CHORD	2-4=-2384/415, 4-5=-2031/405, 5-6=-2301/424, 6-7=-1909/383, 7-8=-2011/384, 8-9=-3066/494, 9-10=-597/146
BOT CHORD	2-20=-407/2075, 18-20=-493/2627, 14-15=-301/2779, 13-14=-360/2844, 9-13=-363/2834
WEBS	4-20=-102/922, 7-15=-184/1252, 8-15=-1251/373, 8-13=0/291, 15-18=-248/1911, 6-15=-531/217, 5-18=-773/230, 5-20=-1039/189

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-6, Interior(1) 2-3-6 to 5-5-8, Exterior(2E) 5-5-8 to 7-5-8, Interior(1) 7-5-8 to 16-9-8, Exterior(2R) 16-9-8 to 19-11-6, Interior(1) 19-11-6 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 10=244.
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.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside	I45783318
2719855	B06	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:02 2021 Page 1
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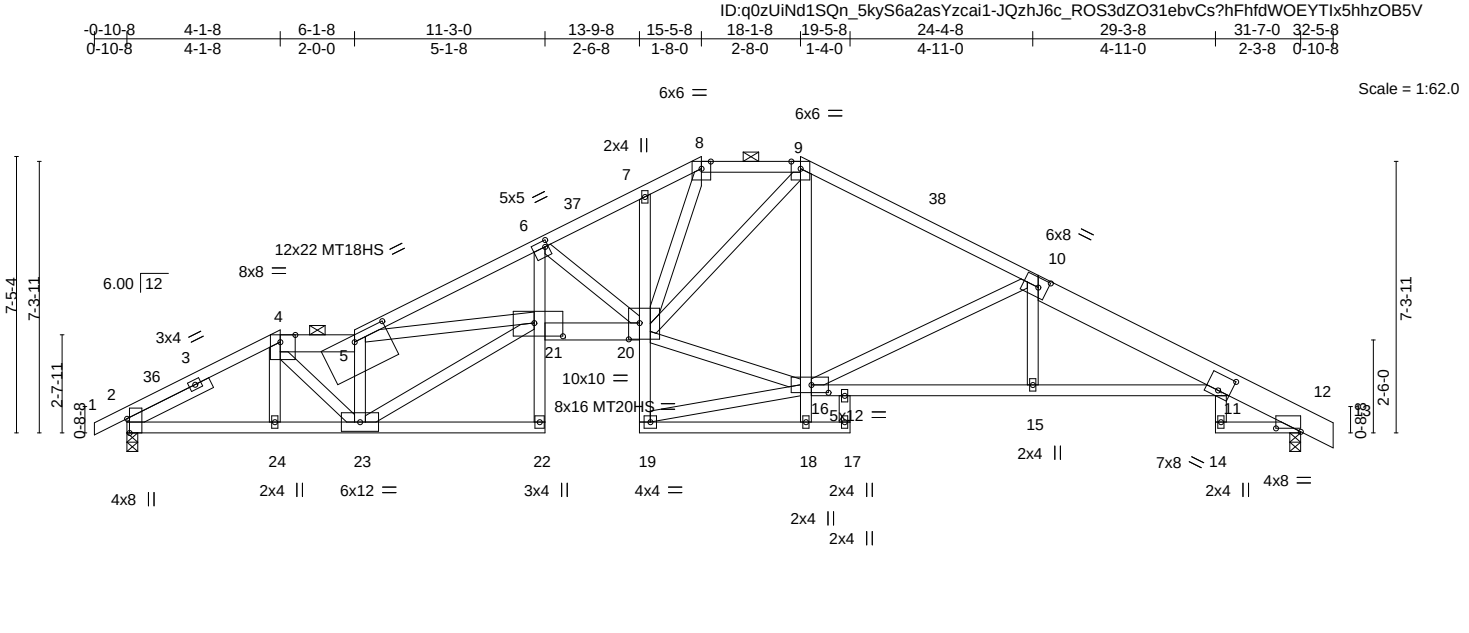


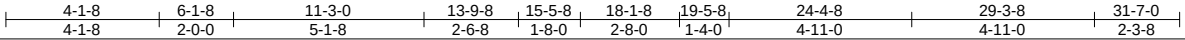


Plate Offsets (X,Y)-- [2:0-4-9,Edge], [4:0-4-13,Edge], [5:0-11-0,0-2-1], [6:0-1-0,0-2-0], [10:0-3-0,0-3-0], [11:0-4-0,0-5-1], [12:0-8-0,0-1-2], [16:0-5-8,0-2-8], [20:0-3-8,0-5-4], [21:0-9-4,0-4-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.40	21	>944	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.73	21	>520	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.44	12	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 181 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	4-5: 2x6 SPF No.2, 10-13: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	20-21: 2x6 SPF 2100F 1.8E
WEBS	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 (3-6-5 max.): 4-5, 8-9.
BOT CHORD	Rigid ceiling directly applied.

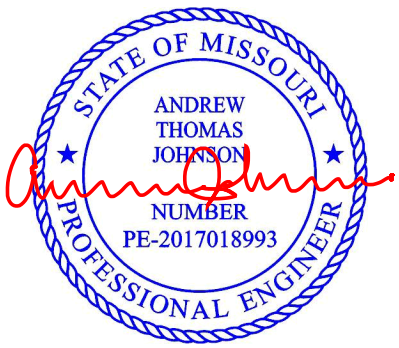
REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-132(LC 13)
Max Uplift 2=-252(LC 12), 12=-229(LC 13)
Max Grav 2=1491(LC 1), 12=1502(LC 1)

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

TOP CHORD	2-4=-2357/438, 4-5=-3035/557, 5-6=-5812/911, 6-7=-3346/590, 7-8=-3241/620,
	8-9=-2527/509, 9-10=-2203/435, 10-11=-3056/500, 11-12=-603/150
BOT CHORD	2-24=-396/2054, 23-24=-397/2057, 6-21=-372/2620, 20-21=-712/5084, 15-16=-355/2827,
	11-15=-357/2819
WEBS	4-23=-222/1466, 5-23=-2701/481, 21-23=-565/3225, 5-21=-239/2242, 6-20=-2712/501,
	10-16=-1054/288, 10-15=0/288, 16-20=-178/1964, 9-20=-178/968, 8-20=-212/1277

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-6, Interior(1) 2-3-6 to 4-1-8, Exterior(2E) 4-1-8 to 6-1-8, Interior(1) 6-1-8 to 15-5-8, Exterior(2E) 15-5-8 to 18-1-8, Exterior(2R) 18-1-8 to 21-3-6, Interior(1) 21-3-6 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=252, 12=229.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 23,2021

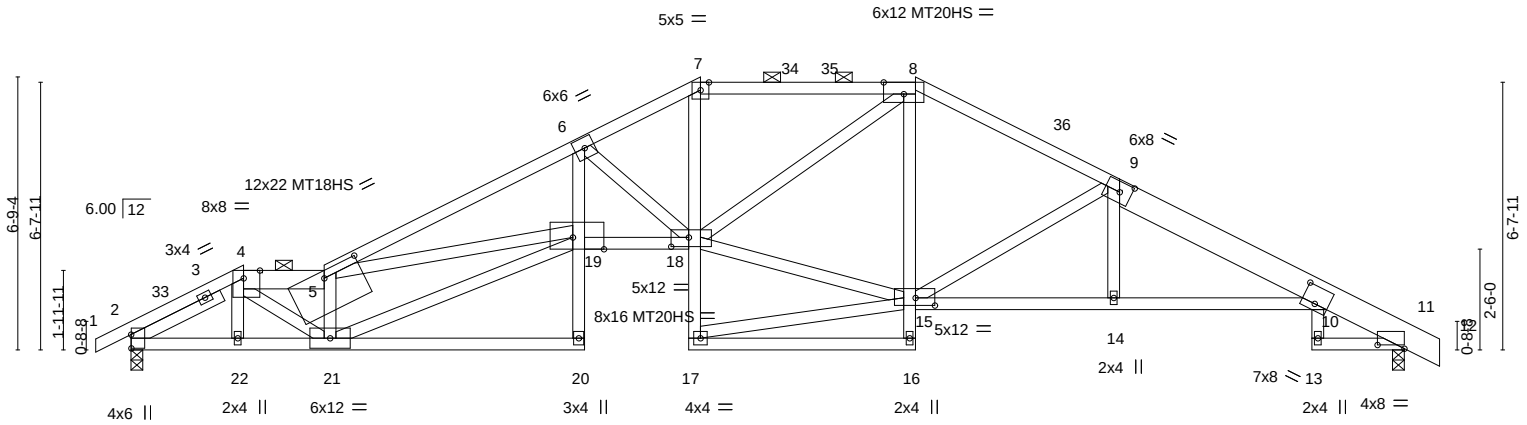
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	B07	Roof Special	1	1	I45783319
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:05 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-j?eqx8etjJqeU17eim8cqUdGrviZjlz_9G9mI0zOB5S

-0-10-8 2-9-8 4-9-8 11-3-0 13-9-8 14-1-8 19-5-8 24-4-8 29-3-8 31-7-0 32-5-8
0-10-8 2-9-8 2-0-0 6-5-8 2-6-8 0-4-0 5-4-0 4-11-0 4-11-0 2-3-8 0-10-8

Scale = 1:57.1



2-9-8 4-9-8 11-3-0 13-9-8 19-5-8 24-4-8 29-3-8 31-7-0
2-9-8 2-0-0 6-5-8 2-6-8 5-8-0 4-11-0 4-11-0 2-3-8

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [4:0-4-13,Edge], [5:0-11-0,0-2-1], [8:0-6-0,Edge], [9:0-3-8,0-3-0], [10:0-4-0,0-5-1], [11:0-8-0,0-1-2], [15:0-5-12,0-2-4], [18:0-5-4,0-2-12], [19:0-9-4,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	0.68	Vert(LL)	-0.35	18-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.63	16-17	>601	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.37	11	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 173 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 SPF No.2, 5-7: 2x4 SPF 1650F 1.5E
9-12: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
18-19: 2x4 SPF 1650F 1.5E
WEBS 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 (2-10-0 max.): 4-5, 7-8.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=-121(LC 13)
Max Uplift 2=-246(LC 12), 11=-223(LC 13)
Max Grav 2=1482(LC 1), 11=1487(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2251/419, 4-5=-3493/627, 5-6=-4763/792, 6-7=-3312/606, 7-8=-2856/558, 8-9=-2290/464, 9-10=-2979/521, 10-11=-597/153
BOT CHORD 2-22=-378/1959, 21-22=-379/1966, 6-19=-187/1457, 18-19=-559/4144, 14-15=-387/2749, 10-14=-389/2741
WEBS 7-18=-149/1120, 4-21=-329/1962, 5-21=-2429/467, 19-21=-607/3436, 5-19=-52/873, 6-18=-1606/353, 9-14=0/256, 9-15=-885/237, 15-18=-232/2036, 8-18=-178/1082

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-6, Interior(1) 2-3-6 to 2-9-8, Exterior(2E) 2-9-8 to 4-9-8, Interior(1) 4-9-8 to 14-1-8, Exterior(2R) 14-1-8 to 17-3-6, Interior(1) 17-3-6 to 19-5-8, Exterior(2R) 19-5-8 to 22-7-6, Interior(1) 22-7-6 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=246, 11=223.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

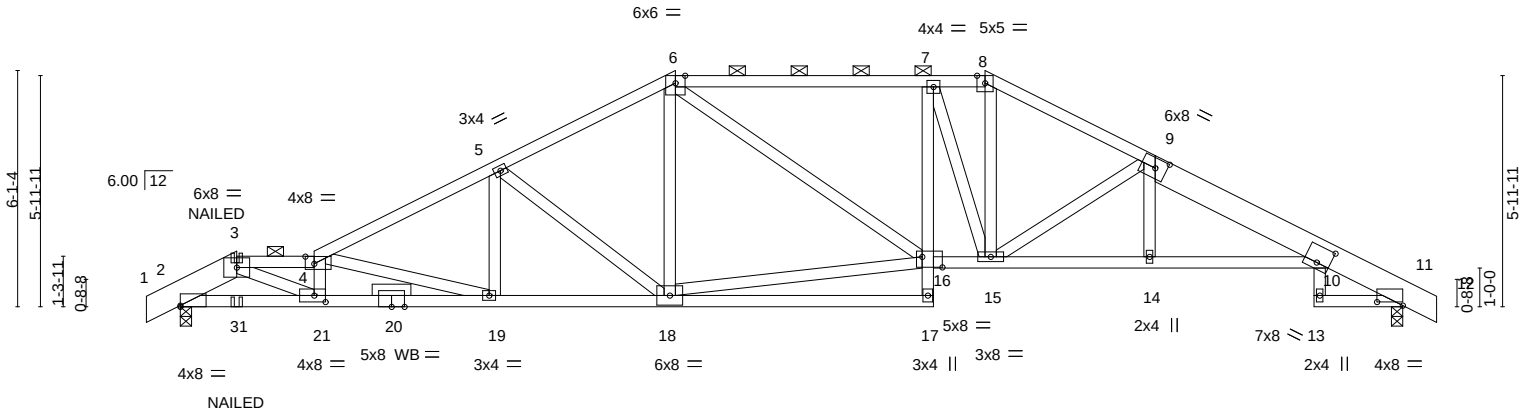
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside	I45783320
2719855	B08	Roof Special Girder	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:08 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-8aKza9hl0ECDLUsDNviJR7FjL6j4wAeQsEOQvLzOB5P

-0-10-8	1-5-8	3-5-8	8-1-8	12-9-8	19-5-8	20-9-8	25-0-8	29-3-8	31-7-0	32-5-8
0-10-8	1-5-8	2-0-0	4-8-0	4-8-0	6-8-0	1-4-0	4-3-0	4-3-0	2-3-8	0-10-8

Scale = 1:59.5



1-5-8	3-5-8	8-1-8	12-9-8	19-5-8	20-9-8	25-0-8	29-3-8	31-7-0
1-5-8	2-0-0	4-8-0	4-8-0	6-8-0	1-4-0	4-3-0	4-3-0	2-3-8

Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [4:0-2-12,0-2-4], [9:0-3-8,0-3-0], [10:0-4-0,0-5-1], [11:0-8-0,0-1-2], [16:0-6-4,0-3-4], [21:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.23	16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.45	17-18	>845	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.22	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 168 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-3,9-12: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 2-20,10-16,17-20: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-11-11 oc purlins, except 2-0-0 oc purlins (2-9-2 max.): 3-4, 6-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-7-5 oc bracing: 19-21.

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=105(LC 36)
Max Uplift 2=-290(LC 8), 11=-213(LC 9)
Max Grav 2=1402(LC 1), 11=1485(LC 1)

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

TOP CHORD	2-3=-2221/428, 3-4=-4033/672, 4-5=-2855/422, 5-6=-2214/319, 6-7=-2298/286, 7-8=-2123/285, 8-9=-2470/289, 9-10=-3088/368, 10-11=-596/119
BOT CHORD	2-21=-431/1850, 19-21=-702/3885, 18-19=-377/2501, 15-16=-178/2291, 14-15=-234/2868, 10-14=-235/2860
WEBS	3-21=-332/2416, 4-21=-1068/198, 4-19=-1420/333, 5-19=-48/434, 5-18=-735/249, 6-18=-71/368, 16-18=-185/1737, 6-16=-113/599, 7-15=-637/184, 8-15=-139/1049, 9-15=-842/219

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=290, 11=213.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

April 23,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-8=-70, 8-10=-70, 10-12=-70, 17-22=-20, 16-25=-20, 13-28=-20

Concentrated Loads (lb)

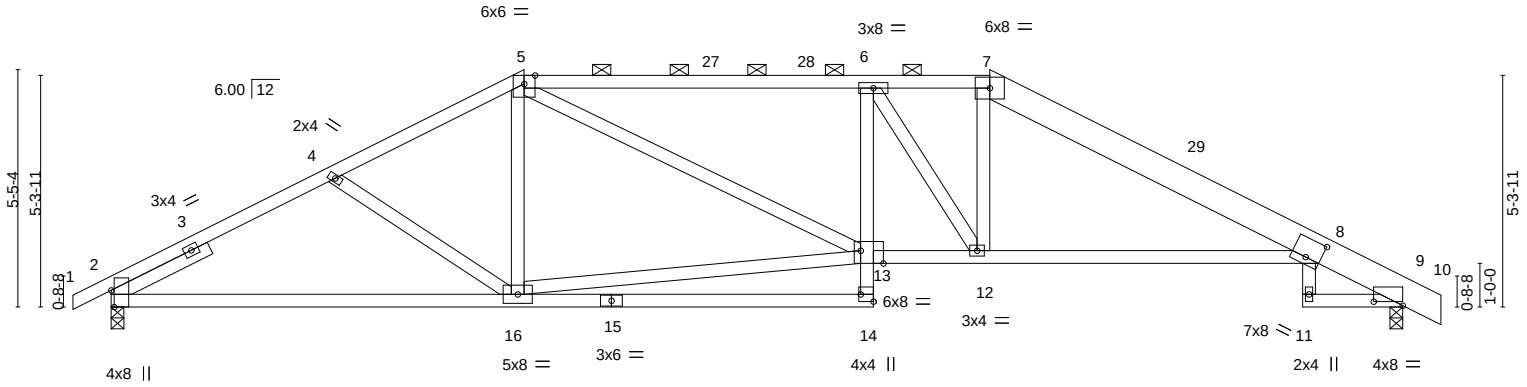
Vert: 3=41(B) 31=43(B)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside	I45783321
2719855	B09	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:09 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-cmuLnVhNnYL4yeRPxcDY_KnykW2MfhIa4u8zRnzOB5O

-0-10-8 5-1-9 9-5-8 17-5-8 20-1-8 27-3-8 29-7-0 30-5-8
0-10-8 5-1-9 4-3-15 8-0-0 2-8-0 7-2-0 2-3-8 0-10-8

Scale = 1:52.8



9-5-8 17-5-8 20-1-8 27-3-8 29-7-0
9-5-8 8-0-0 2-8-0 7-2-0 2-3-8

Plate Offsets (X,Y)-- [2:0-4-9,Edge], [8:0-4-0,0-5-1], [9:0-8-0,0-1-2], [13:0-6-4,Edge], [14:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.25	12-23	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.48	12-23	>741	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.22	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 144 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 5-7: 2x4 SPF 1650F 1.5E, 7-10: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 2-6-0

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

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-96(LC 13)
Max Uplift 2=-194(LC 12), 9=-191(LC 13)
Max Grav 2=1393(LC 1), 9=1399(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2164/387, 4-5=-1989/357, 5-6=-2431/459, 6-7=-2226/406, 7-8=-2456/378, 8-9=-557/137
BOT CHORD 2-16=-265/1875, 14-16=0/268, 12-13=-270/2401, 8-12=-226/2208
WEBS 13-16=-217/1526, 5-13=-180/848, 6-12=-474/185, 7-12=-110/603

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-5-8, Exterior(2R) 9-5-8 to 13-8-7, Interior(1) 13-8-7 to 20-1-8, Exterior(2R) 20-1-8 to 24-4-7, Interior(1) 24-4-7 to 30-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=194, 9=191.
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.

April 23,2021

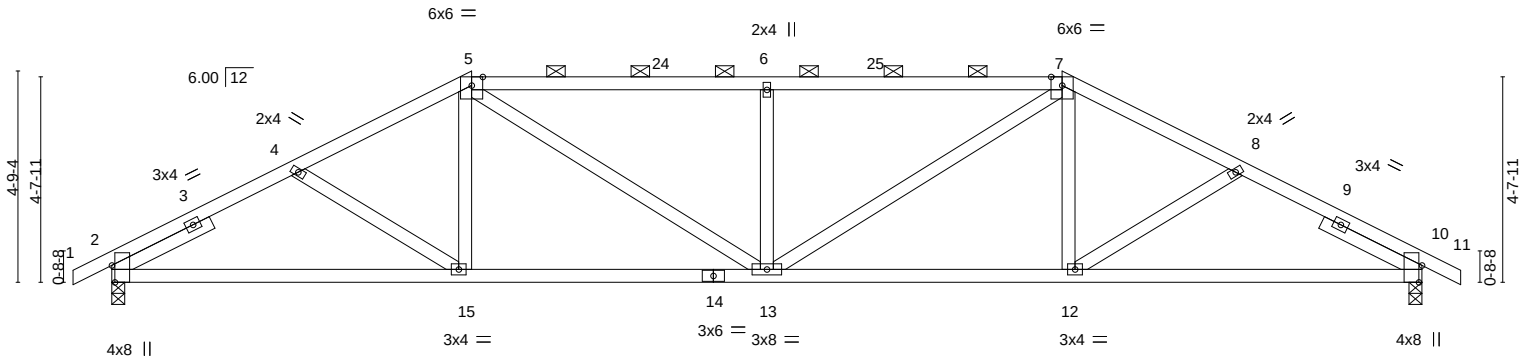
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	B10	Hip	1	1	I45783322
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:12 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-0LZTPXkG4Tjfp69_ckmFczPUGj8Fs3e0msMd26zOB5L

-0-10-8	4-2-8	8-1-8	14-9-8	21-5-8	25-4-8	29-7-0	30-5-8
0-10-8	4-2-8	3-11-0	6-8-0	6-8-0	3-11-0	4-2-8	0-10-8

Scale = 1:52.0



8-1-8	14-9-8	21-5-8	29-7-0
8-1-8	6-8-0	6-8-0	8-1-8

Plate Offsets (X,Y)-- [2:0-4-9,Edge], [10:0-4-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.14	13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.26	13-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 119 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-1-15 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=77(LC 12)
Max Uplift 2=-251(LC 12), 10=-251(LC 13)
Max Grav 2=1393(LC 1), 10=1393(LC 1)

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

TOP CHORD	2-4=-2167/407, 4-5=-2062/371, 5-6=-2344/432, 6-7=-2344/432, 7-8=-2062/371, 8-10=-2167/407
BOT CHORD	2-15=-360/1875, 13-15=-269/1826, 12-13=-202/1826, 10-12=-283/1875
WEBS	5-15=0/275, 5-13=-186/723, 6-13=-545/221, 7-13=-186/723, 7-12=0/275

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-1-8, Exterior(2R) 8-1-8 to 12-4-7, Interior(1) 12-4-7 to 21-5-8, Exterior(2R) 21-5-8 to 25-6-4, Interior(1) 25-6-4 to 30-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=251, 10=251.
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.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	B11	HIP GIRDER	1	1	I45783323
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:14 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-ykhEqDlWc4zM3PJNk9pjhNVofXmBKrLJEArk7_zOB5J

-0-10-8	3-6-8	6-9-8	12-0-15	17-6-1	22-9-8	26-0-8	29-7-0	30-5-8
0-10-8	3-6-8	3-3-0	5-3-7	5-5-3	5-3-7	3-3-0	3-6-8	0-10-8

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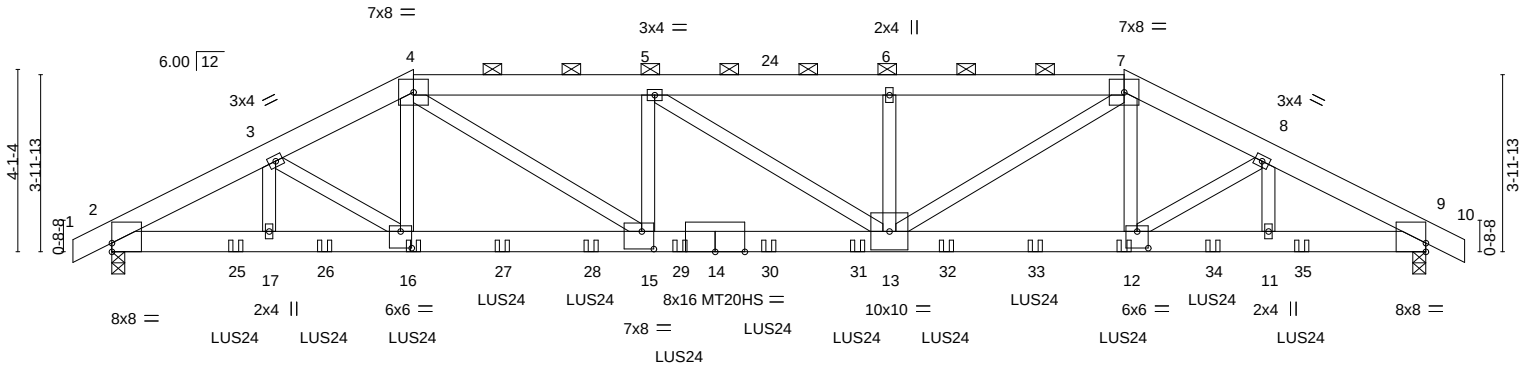

3-6-8	6-9-8	12-0-15	17-6-1	22-9-8	26-0-8	29-7-0
3-6-8	3-3-0	5-3-7	5-5-3	5-3-7	3-3-0	3-6-8

Plate Offsets (X,Y)-- [2:0-0-0,0-2-6], [9:0-0-0,0-2-6], [12:0-3-0,0-4-8], [15:0-3-4,0-4-12], [16:0-3-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.32	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.58	13-15	>614	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.14	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 159 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 4-7: 2x6 SPF 2100F 1.8E
BOT CHORD	2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-8 oc purlins, except 2-0-0 oc purlins (3-0-12 max.): 4-7.
BOT CHORD	Rigid ceiling directly applied or 6-4-2 oc bracing.

REACTIONS. (size) 2=0-3-8 (req. 0-5-0), 9=0-3-8 (req. 0-5-1)
Max Horz 2=66(LC 8)
Max Uplift 2=-1073(LC 8), 9=-1122(LC 9)
Max Grav 2=3956(LC 1), 9=4000(LC 1)

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

TOP CHORD	2-3=-7011/1911, 3-4=-7022/1943, 4-5=-8618/2436, 5-6=-8621/2442, 6-7=-8622/2443, 7-8=-7049/1976, 8-9=-7078/1988
BOT CHORD	2-17=-1688/6138, 16-17=-1688/6138, 15-16=-1701/6288, 13-15=-2385/8617, 12-13=-1690/6312, 11-12=-1691/6198, 9-11=-1691/6198
WEBS	3-16=-154/372, 4-16=-298/1089, 4-15=-871/2880, 5-15=-452/186, 6-13=-408/167, 7-13=-846/2857, 7-12=-324/1112, 8-12=-109/330

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) WARNING: Required bearing size at joint(s) 2, 9 greater than input bearing size.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1073, 9=1122.
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.
10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-9-8 from the left end to 26-9-8 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-7=-70, 7-10=-70, 18-21=-20
   Concentrated Loads (lb)
   Vert: 16=-393(B) 12=-393(B) 25=-404(B) 26=-388(B) 27=-393(B) 28=-393(B) 29=-393(B) 30=-393(B) 31=-393(B) 32=-393(B) 33=-393(B) 34=-388(B) 35=-457(B)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	C01	ROOF SPECIAL GIRDER	1	2	I45783324
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:18 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-rVxkgao1fJToY1d8z?tfrDfQT882GgXu9opyGlzOB5F

-1-10-8	4-0-0	8-0-0	12-0-0	16-0-0	20-0-0	24-0-0	26-10-4	30-0-0	31-10-8
1-10-8	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	2-10-4	3-1-12	1-10-8

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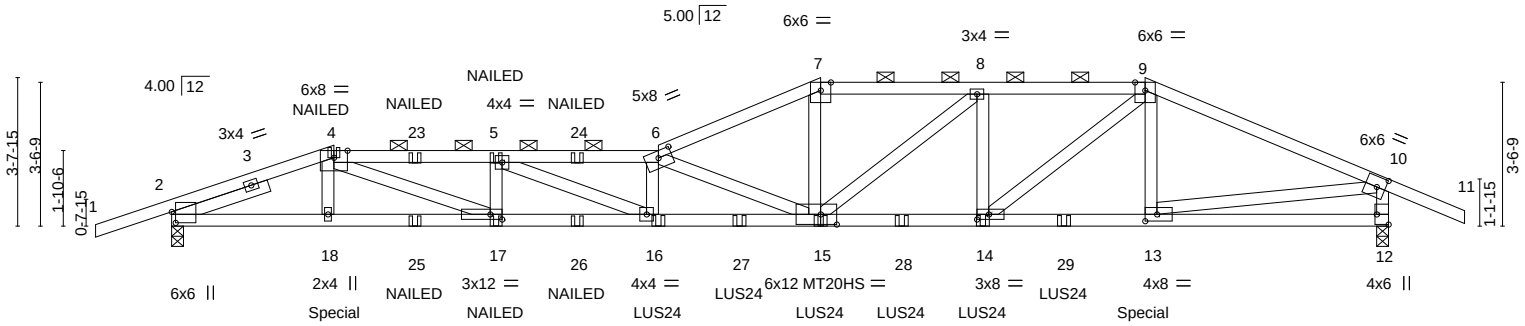

4-0-0	8-0-0	12-0-0	16-0-0	20-0-0	24-0-0	26-10-4	30-0-0
4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	2-10-4	3-1-12

Plate Offsets (X,Y)-- [2:0-3-4,0-1-3], [6:0-4-0,0-2-1], [10:0-2-9,0-3-0], [12:Edge,0-3-8], [13:0-3-8,0-2-0], [14:0-3-8,0-1-8], [15:0-4-12,0-3-0], [17:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.52	15-16	>695	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.92	15-16	>391	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.12	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 259 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 4-6,7-9: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E *Except* 2-15: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-8-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-15 max.): 4-6, 7-9.
BOT CHORD	Rigid ceiling directly applied or 9-10-12 oc bracing.

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=58(LC 33)
Max Uplift 2=-743(LC 4), 12=-787(LC 5)
Max Grav 2=2882(LC 1), 12=3122(LC 1)

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

TOP CHORD	2-4=-6332/1515, 4-5=-11194/2740, 5-6=-13566/3383, 6-7=-7976/2068, 7-8=-7331/1926, 8-9=-6718/1822, 9-10=-5256/1396, 10-12=-3059/808
BOT CHORD	2-18=-1385/5946, 17-18=-1393/5954, 16-17=-2687/11190, 15-16=-3350/13614, 14-15=-1720/6716, 13-14=-1206/4776, 12-13=-90/285
WEBS	4-17=-1397/5653, 5-17=-1841/565, 5-16=-698/2561, 6-16=-588/219, 6-15=-6784/1647, 7-15=-719/2831, 8-15=-209/827, 8-14=-966/246, 9-14=-667/2573, 10-13=-1168/4554

NOTES-

1) n/a
2) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 2 rows at 0-7-0 oc.
   Bottom chords connected as follows: 2x4 - 1 row at 0-5-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
3) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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) except (jt=lb) 2=743, 12=787.
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.

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NOTES-

12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 12-0-0 from the left end to 22-0-0 to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 223 lb down and 69 lb up at 4-0-0, and 631 lb down and 252 lb up at 23-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-6=-70, 6-7=-70, 7-9=-70, 9-10=-70, 10-11=-70, 12-19=-20
   Concentrated Loads (lb)
   Vert: 4=-79(F) 15=-290(F) 18=-223(F) 17=-48(F) 5=-79(F) 16=-282(F) 14=-290(F) 13=-631(F) 23=-79(F) 24=-82(F) 25=-48(F) 26=-51(F) 27=-285(F) 28=-290(F) 29=-290(F)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	C02	Roof Special	1	1	I45783325
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:20 2021 Page 1
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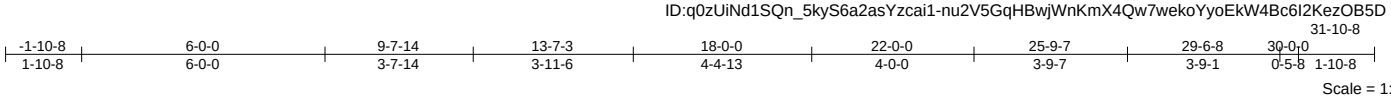

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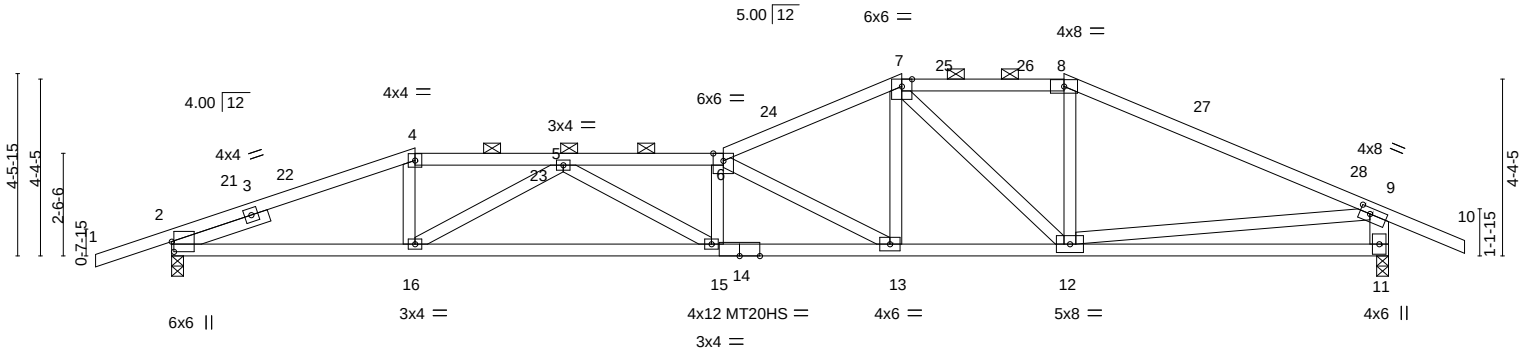

Plate Offsets (X,Y)-- [2:0-3-0,0-0-11], [9:0-3-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.32	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.64	15-16	>561	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.12	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 122 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-14: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2 *Except*
	9-11: 2x6 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=72(LC 16)
Max Uplift 2=-346(LC 8), 11=-209(LC 9)
Max Grav 2=1470(LC 1), 11=1488(LC 1)

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

TOP CHORD	2-4=-2918/689, 4-5=-2674/671, 5-6=-4289/1030, 6-7=-2585/670, 7-8=-1877/544, 8-9=-2149/535, 9-11=-1405/473
BOT CHORD	2-16=-592/2720, 15-16=-870/3831, 13-15=-951/4295, 12-13=-471/2296, 11-12=-132/439
WEBS	4-16=-114/759, 5-16=-1345/369, 5-15=-87/529, 6-13=-2226/536, 7-13=-238/1115, 7-12=-704/172, 8-12=-46/462, 9-12=-308/1453

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 18-0-0, Exterior(2R) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 25-0-0, Interior(1) 25-0-0 to 31-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=346, 11=209.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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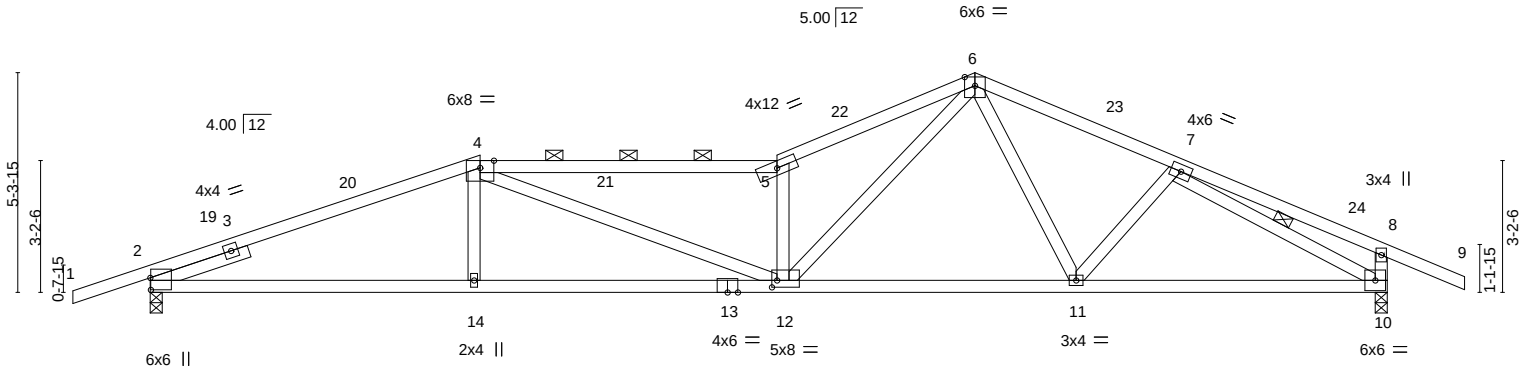
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	C03	Roof Special	1	1	I45783326
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:22 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-jGAFWysXjXzE0ewvCryb03q7JlViCWQU4Qn9PXzOB5B

-1-10-8	8-0-0	15-2-6	20-0-0	24-10-4	30-0-0	31-10-8
1-10-8	8-0-0	7-2-6	4-9-10	4-10-4	5-1-12	1-10-8

Scale = 1:55.9



8-0-0	15-2-6	22-5-7	30-0-0
8-0-0	7-2-6	7-3-1	7-6-9

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.26	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.52	12-14	>694	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 120 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 4-5: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-4-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=88(LC 16)
Max Uplift 2=-339(LC 8), 10=-227(LC 13)
Max Grav 2=1474(LC 1), 10=1486(LC 1)

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

TOP CHORD	2-4=-2883/664, 4-5=-3430/831, 5-6=-3704/932, 6-7=-2046/524, 7-8=-254/95, 8-10=-403/204
BOT CHORD	2-14=-557/2680, 12-14=-560/2674, 11-12=-299/1753, 10-11=-358/1834
WEBS	4-14=0/277, 4-12=-186/816, 5-12=-1869/531, 6-12=-552/2333, 6-11=-52/267, 7-10=-1949/478

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 31-10-8 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=339, 10=227.
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.

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Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	C04	Roof Special	1	1	I45783327
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:23 2021 Page 1
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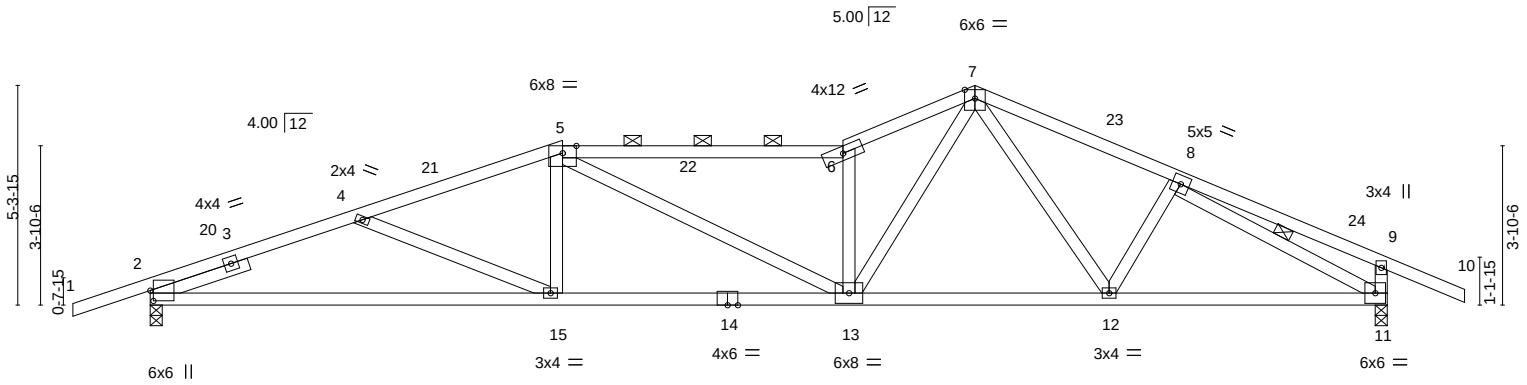
-1-10-8	5-1-12	10-0-0	16-9-10	20-0-0	24-10-4	30-0-0	31-10-8
1-10-8	5-1-12	4-10-4	6-9-10	3-2-6	4-10-4	5-1-12	1-10-8

Scale = 1:55.9



10-0-0	16-9-10	23-3-1	30-0-0
10-0-0	6-9-10	6-5-7	6-8-15

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.22	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.40	13-15	>905	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 124 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 5-6: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-1-15 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 8-11

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=88(LC 16)
Max Uplift 2=-346(LC 8), 11=-227(LC 13)
Max Grav 2=1474(LC 1), 11=1486(LC 1)

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

TOP CHORD	2-4=-2842/697, 4-5=-2665/631, 5-6=-2740/700, 6-7=-2973/783, 7-8=-2057/541, 9-11=-397/206
BOT CHORD	2-15=-602/2639, 13-15=-500/2504, 12-13=-303/1747, 11-12=-358/1842
WEBS	5-15=0/338, 5-13=-88/275, 6-13=-1525/455, 7-13=-443/1794, 7-12=-77/271, 8-11=-1970/474

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 31-10-8 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=346, 11=227.
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.

April 23,2021

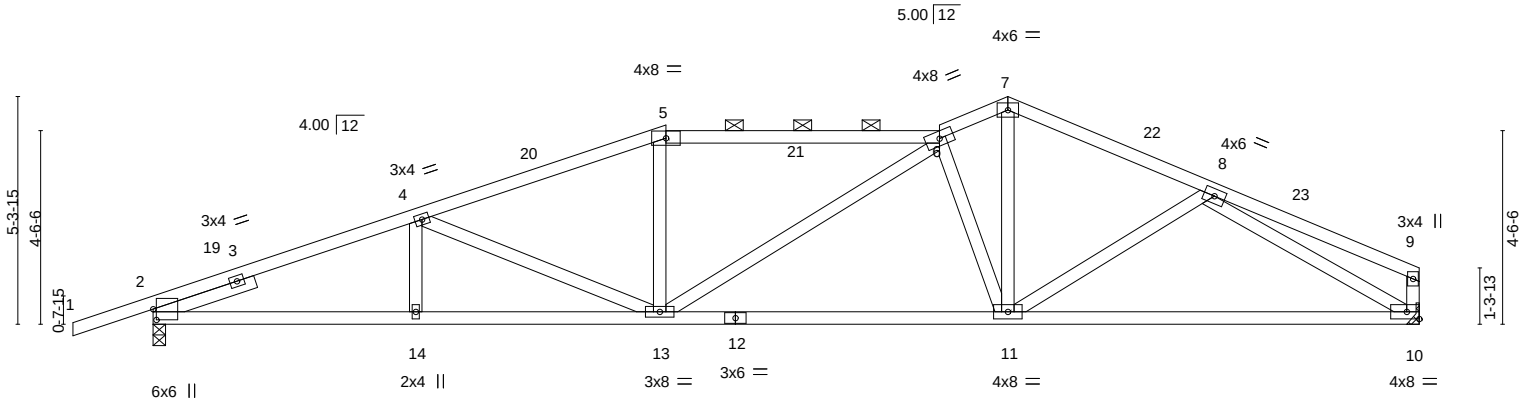
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside	I45783328
2719855	C05	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:26 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-c2PmMJv2nmUgVFEgRh0XAv_sWMr88Df4?1lNYIzOB57

-1-10-8	6-1-12	12-0-0	18-4-13	20-0-0	24-8-0	29-7-8
1-10-8	6-1-12	5-10-4	6-4-13	1-7-3	4-8-0	4-11-8

Scale = 1:53.9



6-1-12	12-0-0	20-0-0	29-7-8
6-1-12	5-10-4	8-0-0	9-7-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.19	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.40	10-11	>883	180		
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 121 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=Mechanical
Max Horz 2=103(LC 16)
Max Uplift 2=-351(LC 8), 10=-181(LC 8)
Max Grav 2=1462(LC 1), 10=1322(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2834/652, 4-5=-2413/598, 5-6=-2249/598, 6-7=-1940/532, 7-8=-1944/495, 8-9=-302/69, 9-10=-256/85
BOT CHORD 2-14=-617/2634, 13-14=-617/2634, 11-13=-462/2160, 10-11=-415/1730
WEBS 4-13=-440/161, 5-13=0/343, 6-11=-1224/368, 7-11=-315/1328, 8-10=-1795/472

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 29-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=351, 10=181.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ01	Diagonal Hip Girder	1	1	I45783329

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:28 2021 Page 1
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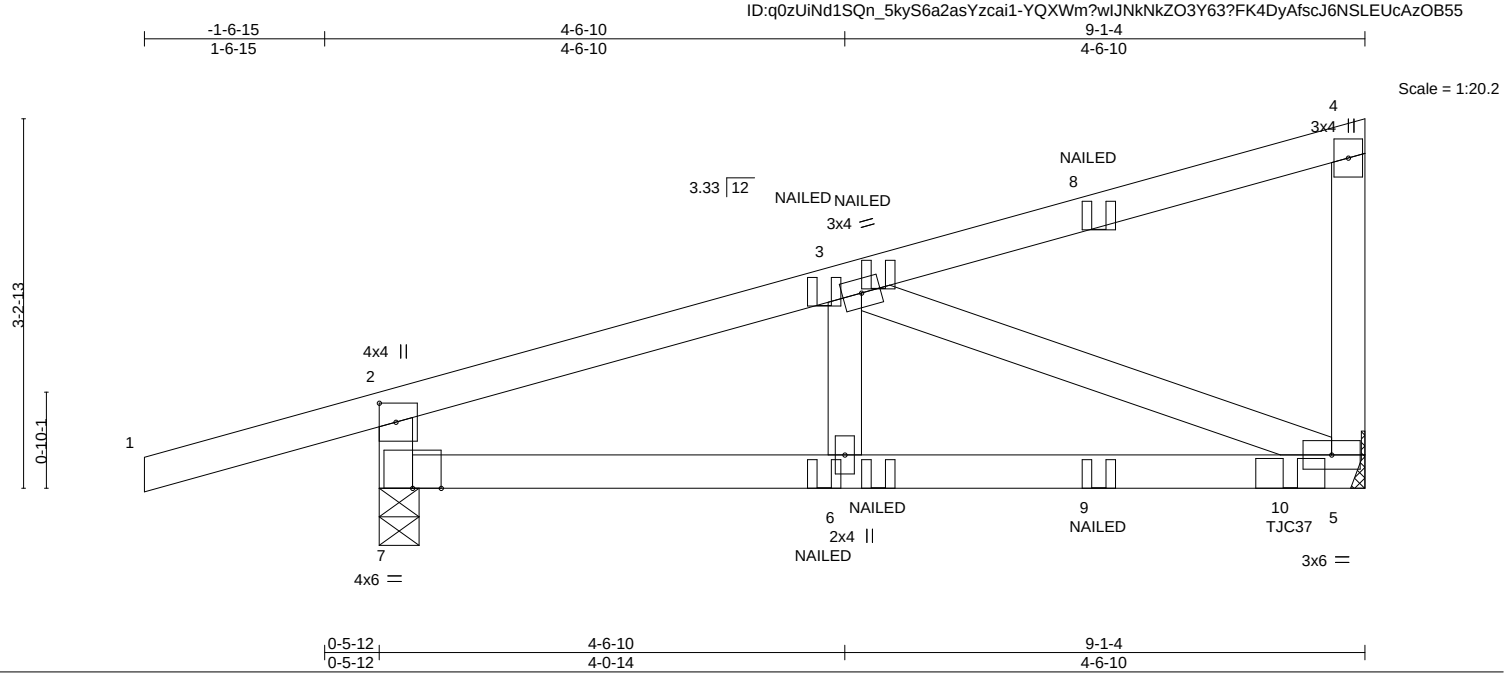

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.04	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.08	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 33 lb	FT = 20%

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

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

REACTIONS. (size) 7=0-4-3, 5=Mechanical
Max Horz 7=136(LC 5)
Max Uplift 7=-193(LC 4), 5=-189(LC 8)
Max Grav 7=573(LC 1), 5=605(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-494/194, 2-3=-546/125
BOT CHORD 6-7=-159/472, 5-6=-159/472
WEBS 3-5=-454/150

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=193, 5=189.
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) Use Simpson Strong-Tie TJC37 (6 nail 90-150) or equivalent at 8-5-7 from the left end to connect truss(es) to back face of bottom chord, skewed 56.3 deg.to the right, sloping 0.0 deg. down.
8) Fill all nail holes where hanger is in contact with lumber.
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, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=3(F=-1, B=3) 8=-23(F) 9=-17(F) 10=-237(B)

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ02	Diagonal Hip Girder	1	1	I45783330

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:33 2021 Page 1
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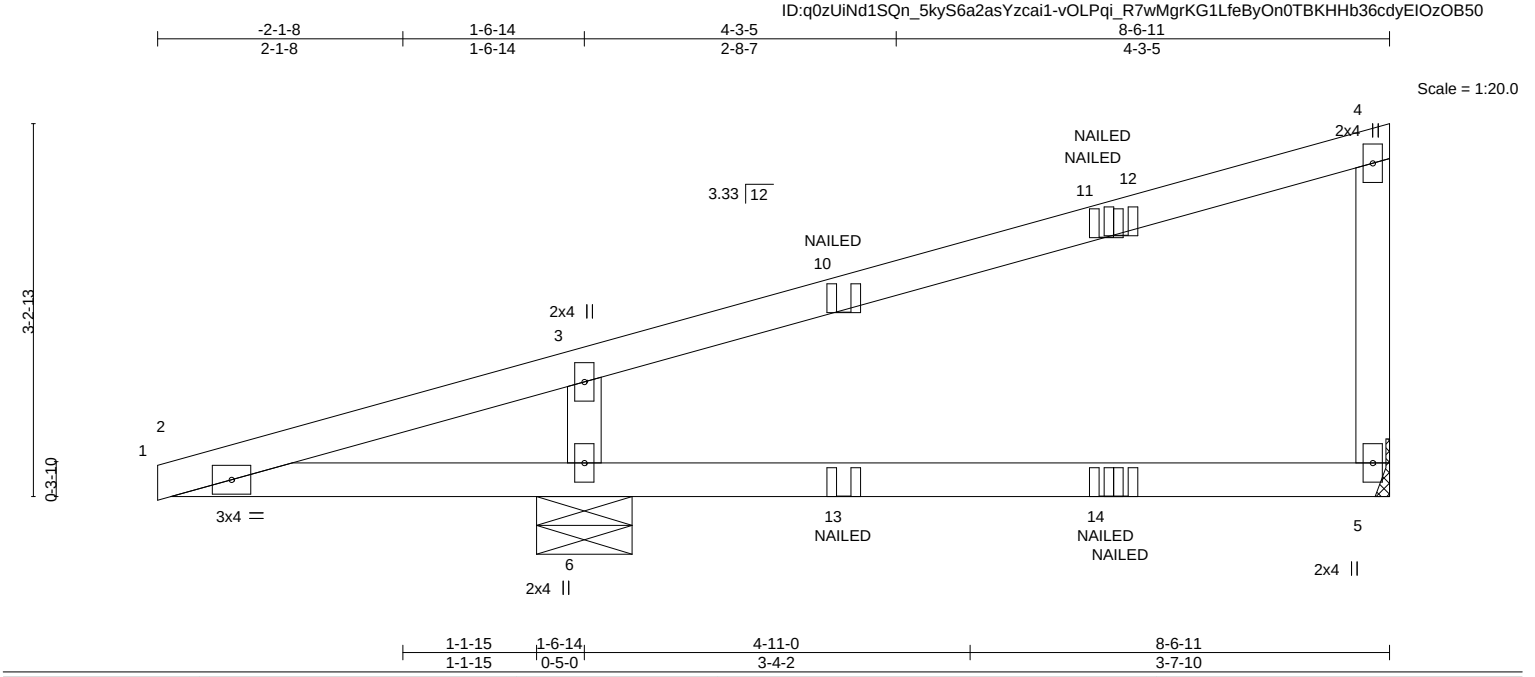

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.12	5-6	>692	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.18	5-6	>465	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 29 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 6=0-9-15
Max Horz 6=111(LC 7)
Max Uplift 5=-72(LC 5), 6=-245(LC 4)
Max Grav 5=217(LC 1), 6=697(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-516/254

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=245.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) "NAILED" indicates 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-20, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 10=37(B) 11=-5(F) 14=-6(F=-14, B=8)

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ03	Jack-Open Girder	2	1	I45783331
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:35 2021 Page 1
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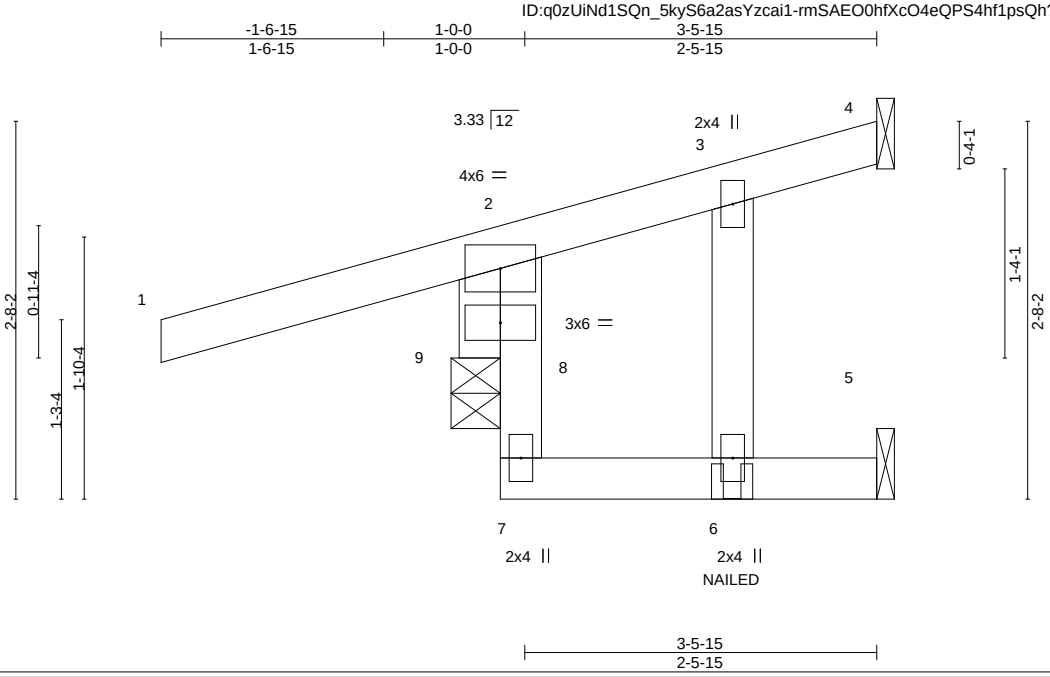

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-5-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 9=0-4-3
Max Horz 9=52(LC 21)
Max Uplift 4=-32(LC 8), 5=-15(LC 8), 9=-158(LC 4)
Max Grav 4=56(LC 1), 5=32(LC 3), 9=341(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-373/200

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 9=158.
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, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-11(F)

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ05	Jack-Open	1	1	I45783332
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:39 2021 Page 1
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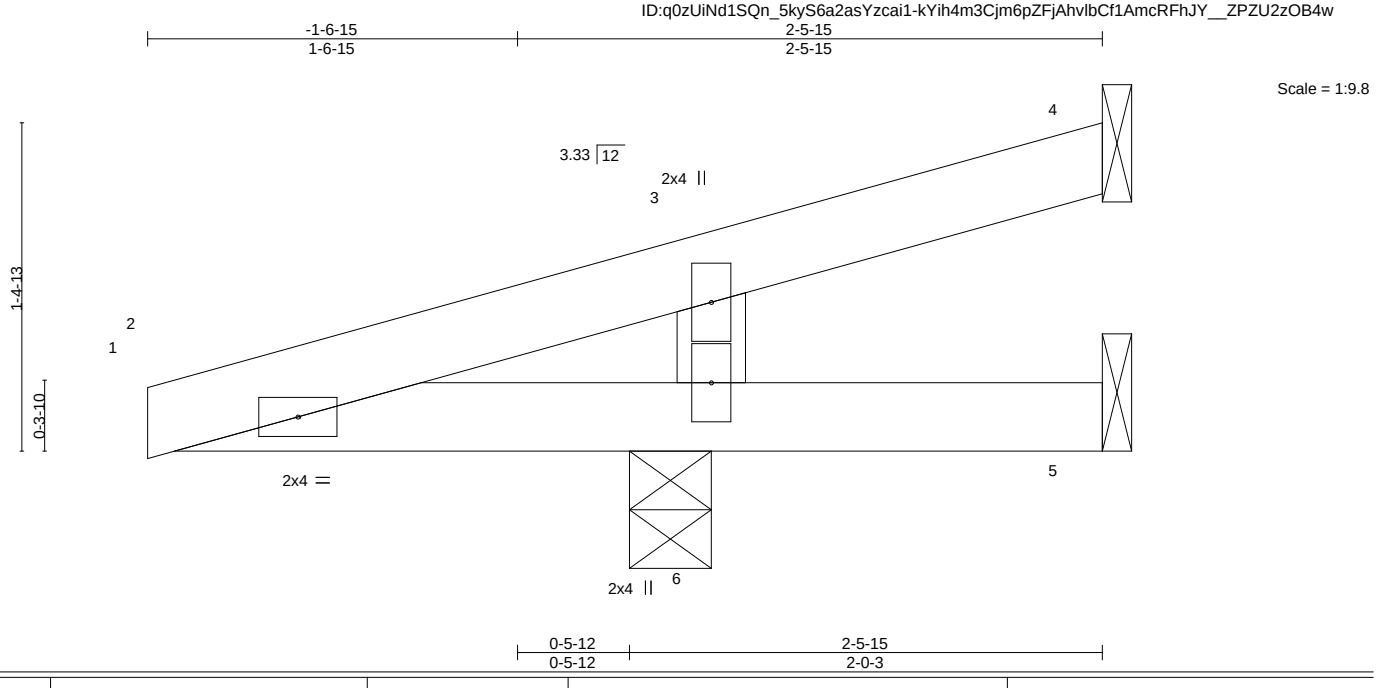

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.00	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							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 2-5-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 6=0-4-3
Max Horz 6=45(LC 8)
Max Uplift 4=-32(LC 3), 5=-57(LC 1), 6=-164(LC 8)
Max Grav 4=5(LC 8), 5=33(LC 8), 6=431(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-253/370

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 6=164.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ06	Jack-Open	1	1	I45783333

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:41 2021 Page 1
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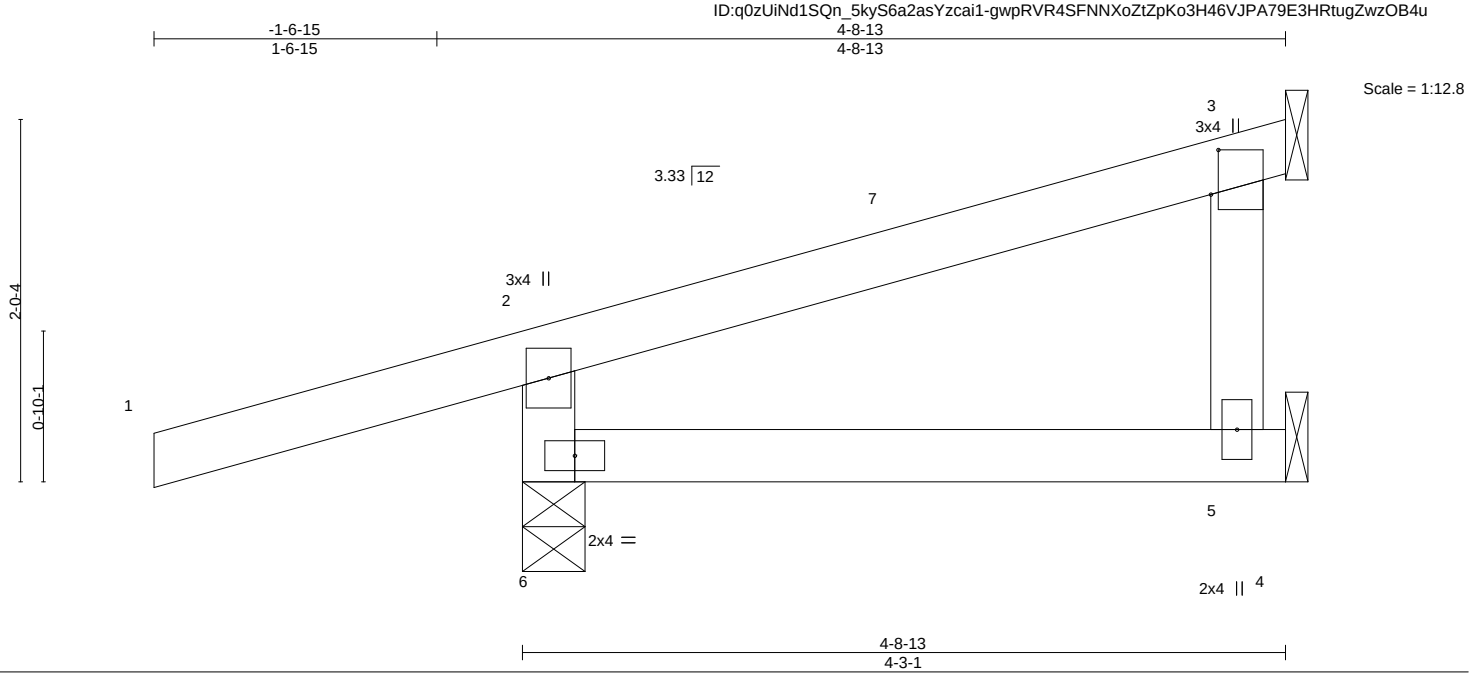

Plate Offsets (X,Y)-- [3:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-4-3, 5=Mechanical, 3=Mechanical
Max Horz 6=67(LC 8)
Max Uplift 6=-145(LC 8), 3=-49(LC 12)
Max Grav 6=371(LC 1), 5=79(LC 3), 3=98(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-324/338

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-6-15 to 2-8-0, Exterior(2R) 2-8-0 to 4-5-9 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 6=145.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ07	Jack-Open Girder	1	1	I45783334

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:43 2021 Page 1

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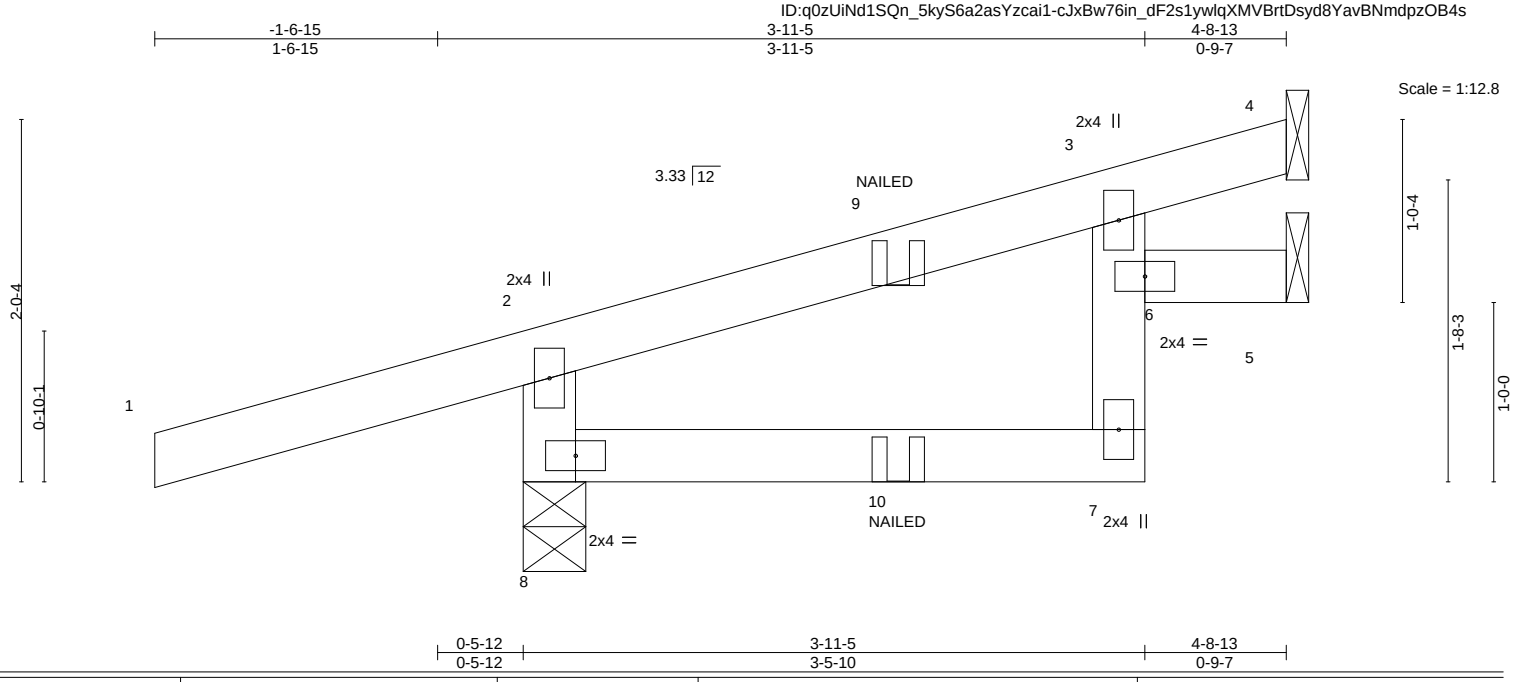

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-8-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-4-3, 4=Mechanical, 5=Mechanical
Max Horz 8=69(LC 4)
Max Uplift 8=-147(LC 4), 4=-24(LC 4), 5=-19(LC 8)
Max Grav 8=376(LC 1), 4=80(LC 1), 5=59(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-334/157

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 8=147.
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, 2-4=-70, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 10=4(B)

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ08	Diagonal Hip Girder	1	1	I45783335
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:47 2021 Page 1
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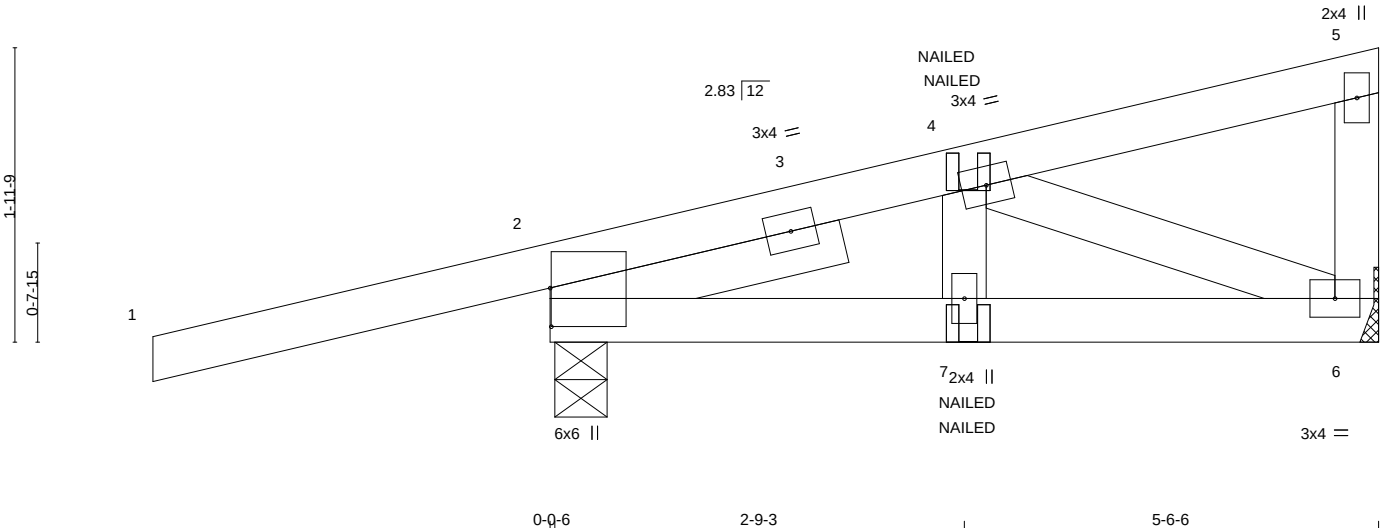

0-0-6 0-0-6 | 2-9-3 2-8-13 | 5-6-6 2-9-3

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 23 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-3, 6=Mechanical
Max Horz 2=77(LC 7)
Max Uplift 2=-188(LC 4), 6=-42(LC 8)
Max Grav 2=480(LC 1), 6=203(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=188.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-70, 6-8=-20
Concentrated Loads (lb)
Vert: 7=-13(F)

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ09	Jack-Open	1	1	I45783336
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:48 2021 Page 1
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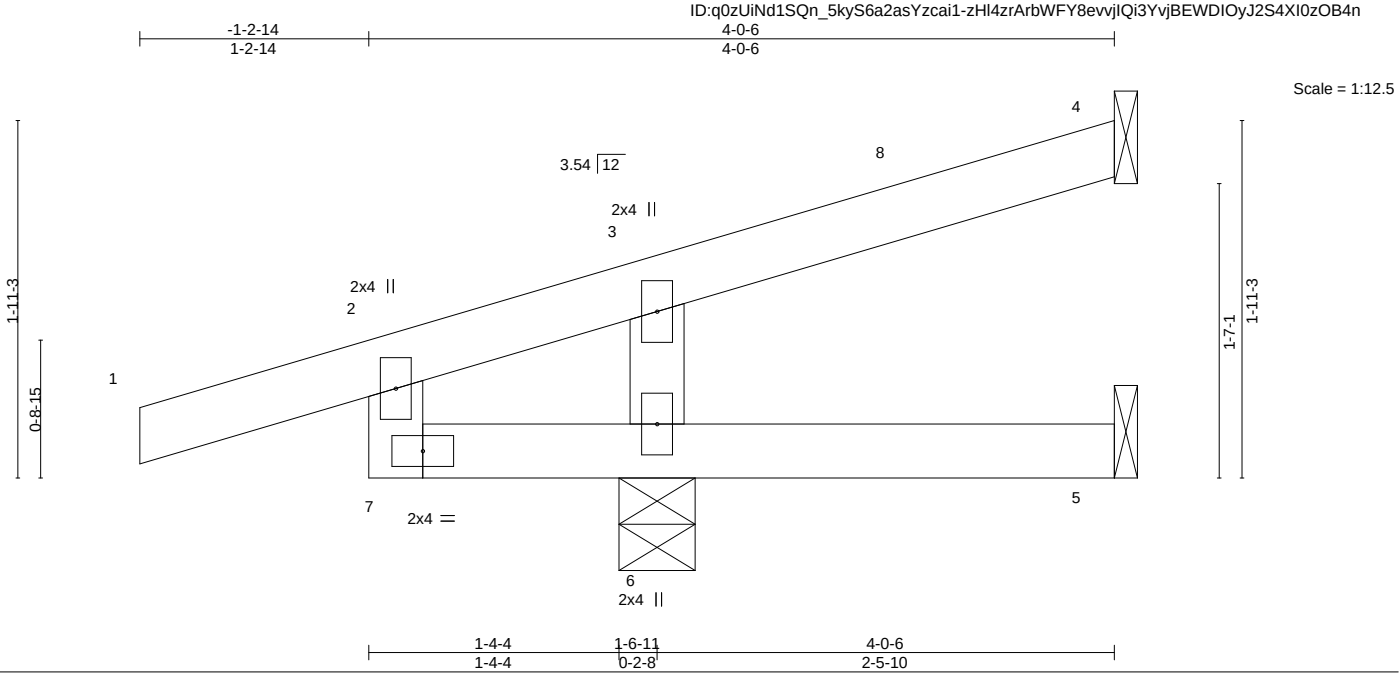

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.01	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 6=0-4-15
Max Horz 6=60(LC 8)
Max Uplift 4=-25(LC 12), 5=-33(LC 1), 6=-185(LC 8)
Max Grav 4=19(LC 1), 5=32(LC 8), 6=454(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-278/311

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-14 to 3-0-1, Exterior(2R) 3-0-1 to 3-11-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 6=185.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ10	Diagonal Hip Girder	1	1	I45783337
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:51 2021 Page 1
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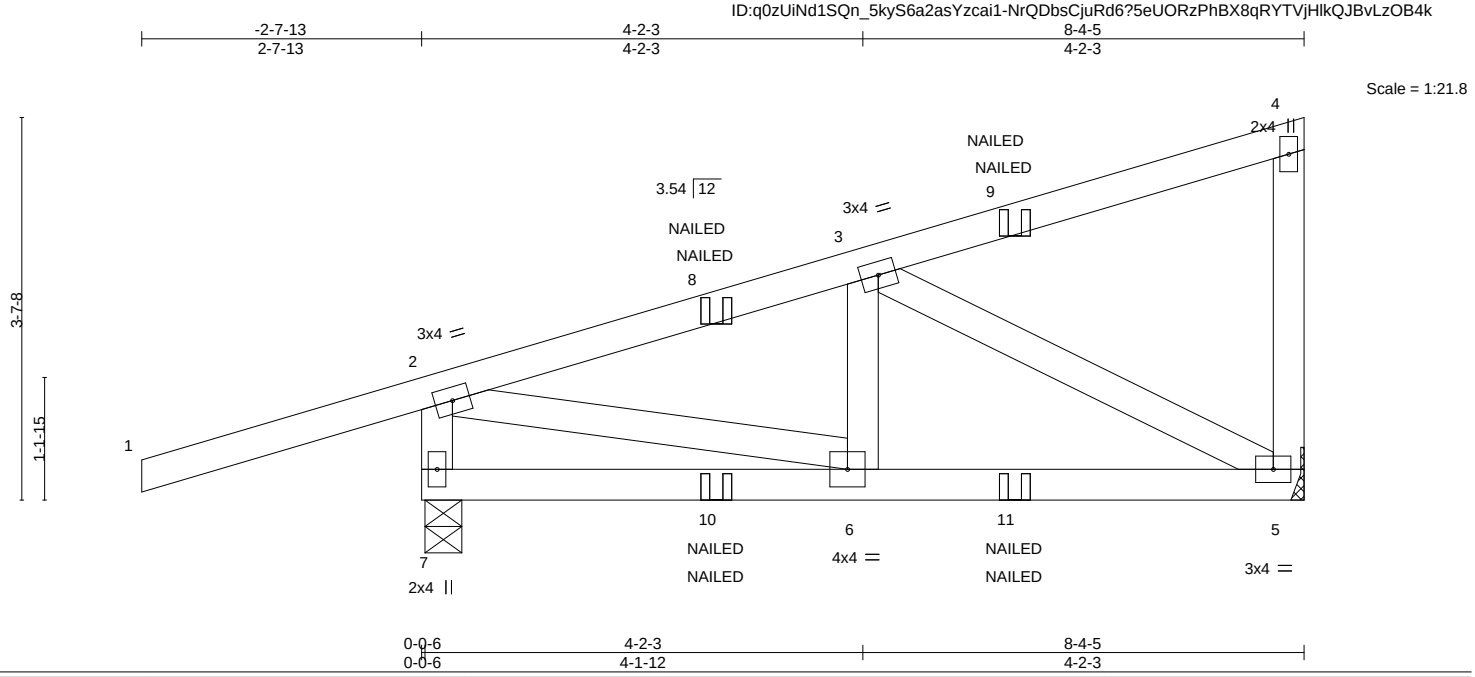

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.03	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 38 lb	FT = 20%

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

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

REACTIONS. (size) 7=0-4-3, 5=Mechanical
Max Horz 7=156(LC 5)
Max Uplift 7=-225(LC 4), 5=-113(LC 5)
Max Grav 7=598(LC 21), 5=369(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-572/235, 2-3=-426/106
BOT CHORD 5-6=-162/357
WEBS 2-6=-80/366, 3-5=-402/152

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=225, 5=113.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 8=71(F) 9=-53(B) 10=-3(B) 11=-39(F=-6, B=-33)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ11	Diagonal Hip Girder	2	1	I45783338
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:54 2021 Page 1
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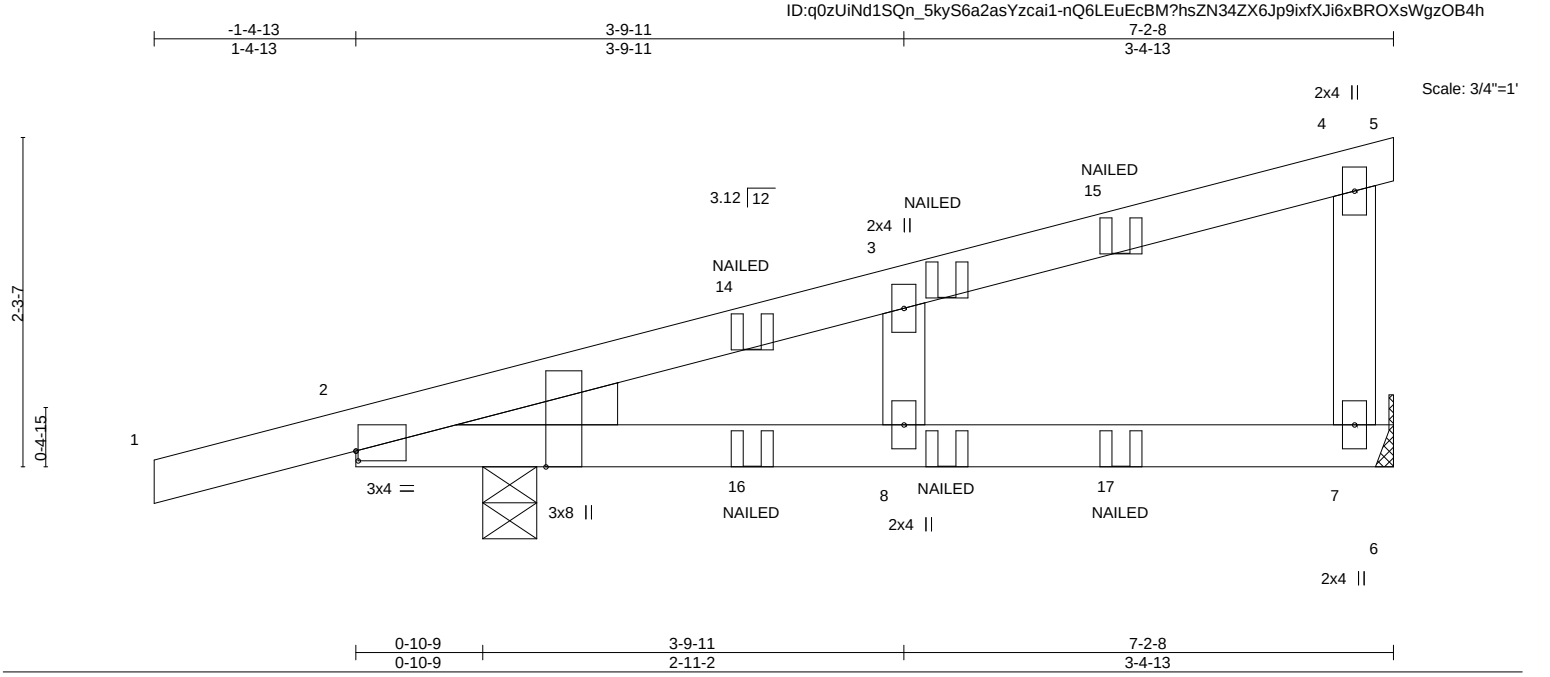

Plate Offsets (X,Y)-- [2:0-0-3,0-0-13], [2:0-1-5,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.07	8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.14	8	>603	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 23 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-8
Max Horz 2=96(LC 4)
Max Uplift 7=-72(LC 8), 2=-144(LC 4)
Max Grav 7=264(LC 1), 2=484(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=144.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-20, 6-9=-20
Concentrated Loads (lb)
Vert: 8=11(B) 15=-5(F) 16=-3(F) 17=-17(F)

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	CJ12	Diagonal Hip Girder	2	1	I45783339

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:55 2021 Page 1
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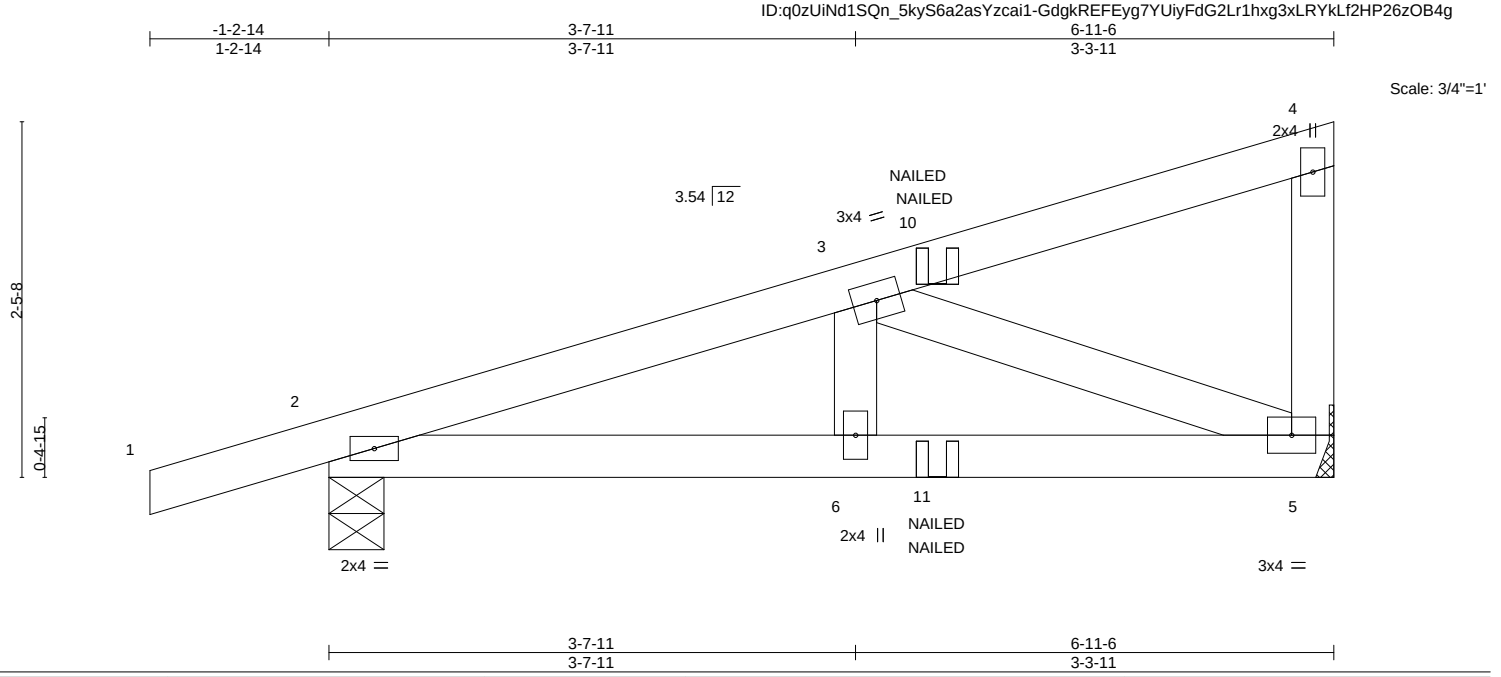

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 24 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-9, 5=Mechanical
Max Horz 2=99(LC 7)
Max Uplift 2=-120(LC 4), 5=-73(LC 8)
Max Grav 2=408(LC 1), 5=310(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-549/101
BOT CHORD 2-6=-108/501, 5-6=-108/501
WEBS 3-5=-535/137

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=120.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 11=-20(F=-10, B=-10)

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	D01	Common	1	1	I45783340
					Job Reference (optional)

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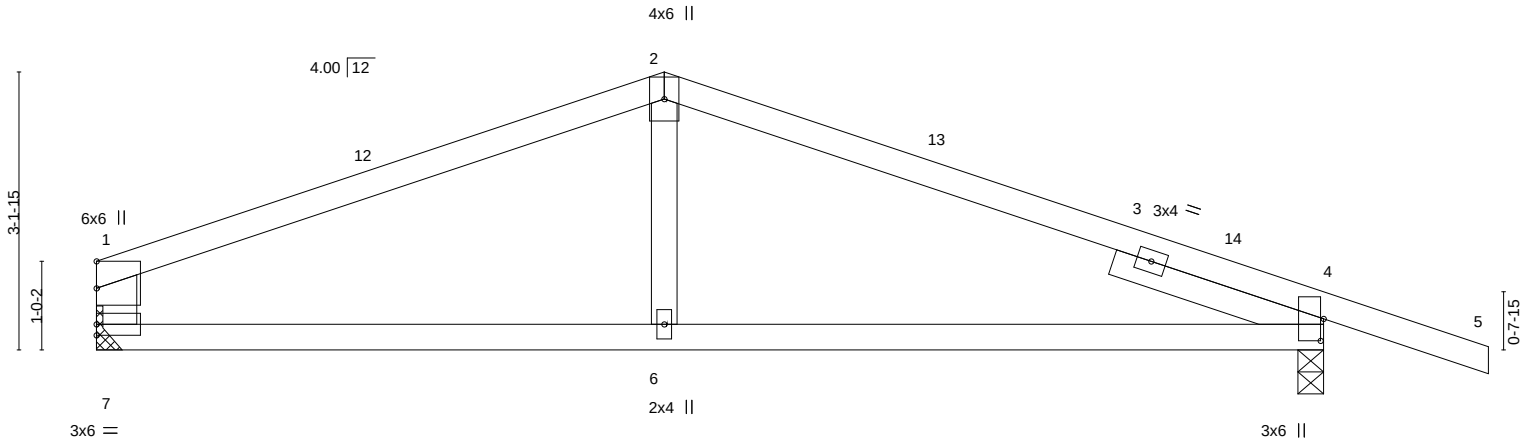
6-5-8 | 13-11-8 | 15-10-0
6-5-8 | 7-6-0 | 1-10-8

Scale = 1:26.2



6-5-8 | 13-11-8
6-5-8 | 7-6-0

Plate Offsets (X,Y)-- [4:0-3-0,0-0-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.12	6-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.23	6-10	>718	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.03	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 42 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
1-7: 2x6 SPF No.2
SLIDER Right 2x4 SPF No.2 -t 2-6-0

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

REACTIONS. (size) 7=Mechanical, 4=0-3-8
Max Horz 4=-64(LC 17)
Max Uplift 7=-110(LC 8), 4=-203(LC 9)
Max Grav 7=609(LC 1), 4=758(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-899/325, 2-4=-818/304, 1-7=-514/225
BOT CHORD 6-7=-260/776, 4-6=-260/776

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 6-5-8, Exterior(2R) 6-5-8 to 9-5-8, Interior(1) 9-5-8 to 15-10-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=110, 4=203.
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.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	D02	Hip Girder	1	1	I45783341

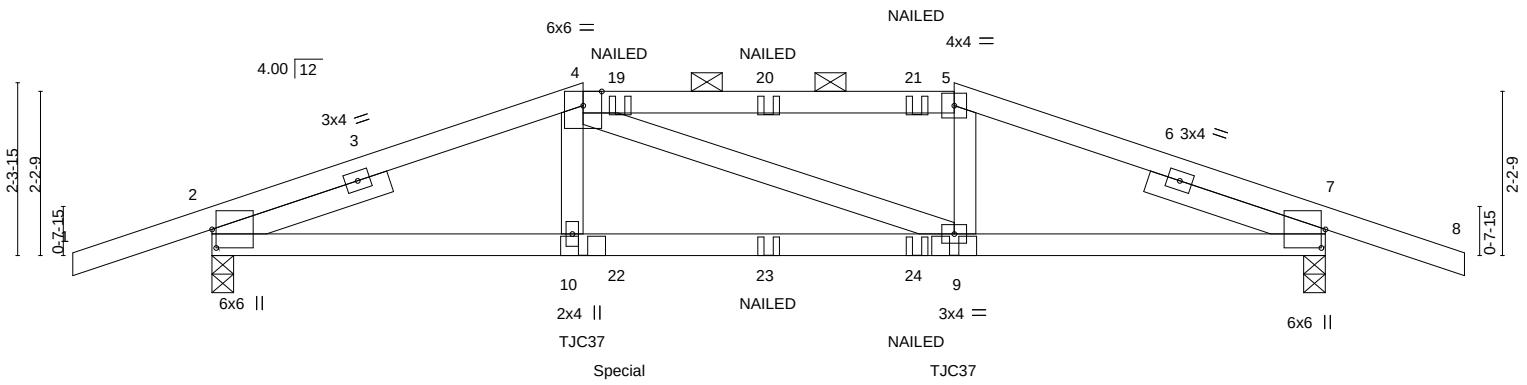
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:09:59 2021 Page 1

ID:q0zUiNd1SQn_5kyS6a2asYzcai1-8OvEHbIl?ve_yKF0s66H0tsTkg95NM7xagFdBtzOB4c

-1-10-8 / 1-10-8 | 5-0-0 / 5-0-0 | 10-0-0 / 5-0-0 | 15-0-0 / 5-0-0 | 16-10-8 / 1-10-8

Scale = 1:31.0



5-0-0 / 5-0-0 | 10-0-0 / 5-0-0 | 15-0-0 / 5-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.12	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.24	9-10	>740	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 55 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 4-5: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -t 2-6-0, Right 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-0-7 oc purlins, except 2-0-0 oc purlins (3-8-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=41(LC 4)
Max Uplift 2=-349(LC 4), 7=-349(LC 5)
Max Grav 2=1201(LC 1), 7=1201(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2248/560, 4-5=-2076/547, 5-7=-2248/560
BOT CHORD 2-10=-489/2101, 9-10=-488/2076, 7-9=-465/2101
WEBS 4-10=-14/368, 5-9=-26/369

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=349, 7=349.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Use Simpson Strong-Tie TJC37 (6 nail, 30-90) or equivalent at 5-0-0 from the left end to connect truss(es) to front face of bottom chord, skewed 51.3 deg.to the left, sloping 0.0 deg. down.
9) Use Simpson Strong-Tie TJC37 (6 nail 90-150) or equivalent at 10-0-0 from the left end to connect truss(es) to front face of bottom chord, skewed 51.3 deg.to the right, sloping 0.0 deg. down.
10) Fill all nail holes where hanger is in contact with lumber.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 42 lb down at 5-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) 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

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

April 23,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

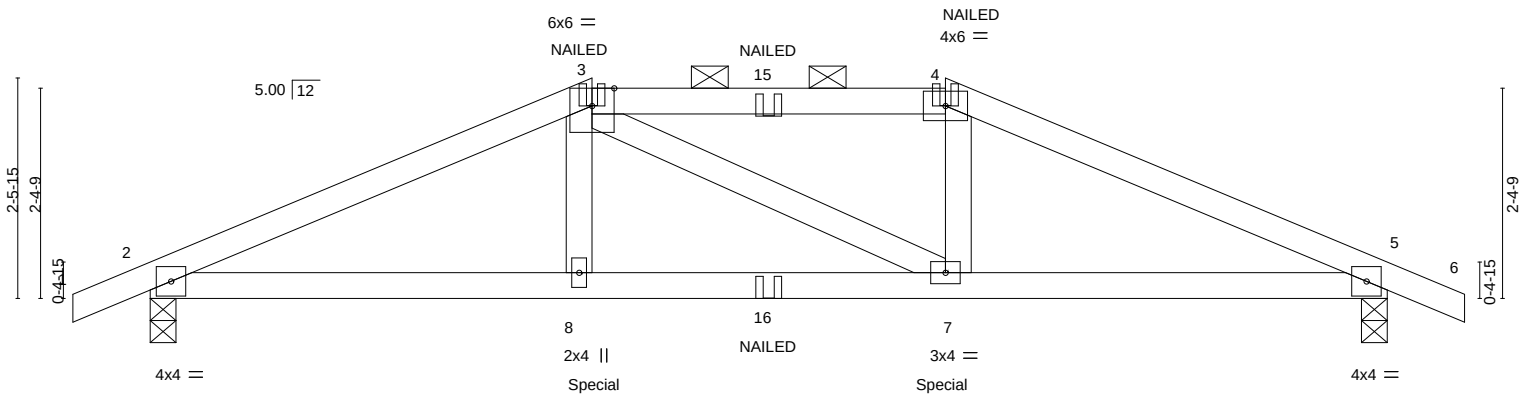
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-5=-70, 5-8=-70, 11-15=-20
   Concentrated Loads (lb)
   Vert: 10=-232(F) 9=-232(F) 19=-68(F) 20=-68(F) 21=-68(F) 22=-40(F) 23=-40(F) 24=-40(F)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	E01	Hip Girder	1	1	I45783342
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:04 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-VMi7KJMtqRGG358_ffiSjwZNIhtX2d?gkyyNt5zOB4X

-0-10-8 / 0-10-8 | 5-0-0 / 5-0-0 | 9-0-0 / 4-0-0 | 14-0-0 / 5-0-0 | 14-10-8 / 0-10-8

Scale = 1:26.1



5-0-0 / 5-0-0 | 9-0-0 / 4-0-0 | 14-0-0 / 5-0-0

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	0.59	Vert(LL)	-0.08	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.14	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.04	5	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 3-7-9 oc purlins, except 2-0-0 oc purlins (3-6-3 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 8-7-12 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=-42(LC 13)
Max Uplift 2=-273(LC 8), 5=-273(LC 9)
Max Grav 2=1163(LC 1), 5=1163(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2313/532, 3-4=-2056/518, 4-5=-2314/532
BOT CHORD 2-8=-466/2085, 7-8=-464/2055, 5-7=-426/2085
WEBS 3-8=-37/444, 4-7=-47/460

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=273, 5=273.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 327 lb down and 103 lb up at 5-0-0, and 327 lb down and 103 lb up at 8-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 9-12=-20
Concentrated Loads (lb)
Vert: 4=-82(B) 8=-327(B) 7=-327(B) 3=-82(B) 15=-82(B) 16=-45(B)

April 23,2021

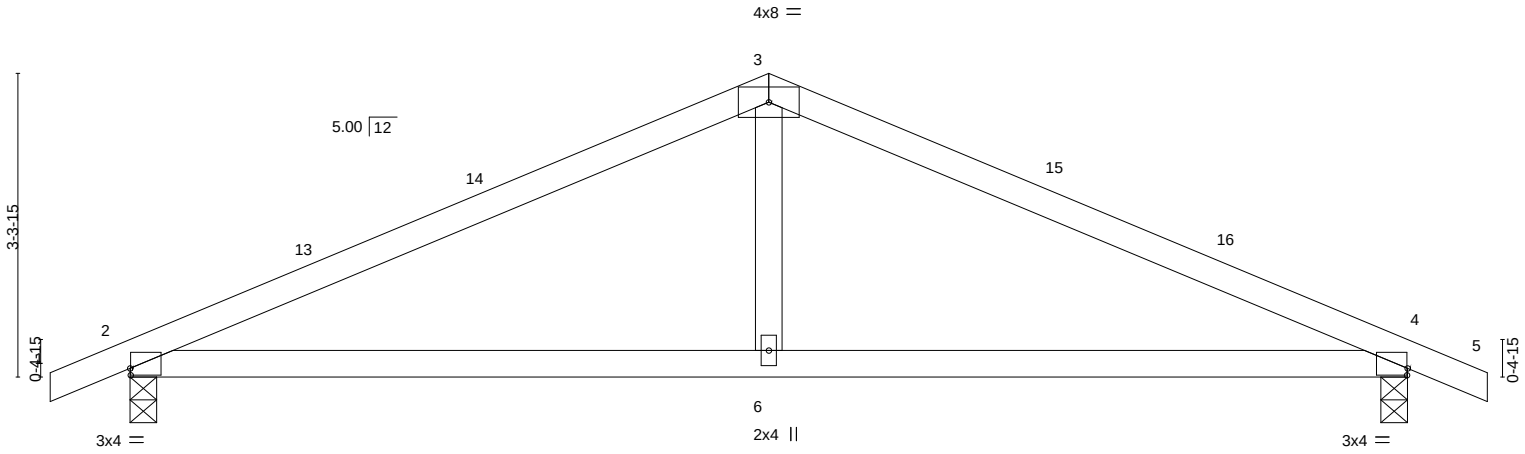
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	E02	Common	4	1	I45783343
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:06 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-Rkqul_O8M2W_IPHMn4kwoLejsUcOWW9zBGRUxzzOB4V

-0-10-8 0-10-8 | 7-0-0 7-0-0 | 14-0-0 7-0-0 | 14-10-8 0-10-8

Scale = 1:25.3



7-0-0 7-0-0 | 14-0-0 7-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.08	6-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.14	6-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 39 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=58(LC 16)
Max Uplift 2=-127(LC 12), 4=-127(LC 13)
Max Grav 2=691(LC 1), 4=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-998/329, 3-4=-998/329
BOT CHORD 2-6=-192/848, 4-6=-192/848
WEBS 3-6=0/312

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 14-10-8 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) 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=127, 4=127.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F01	Jack-Open	1	1	I45783344
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:09 2021 Page 1
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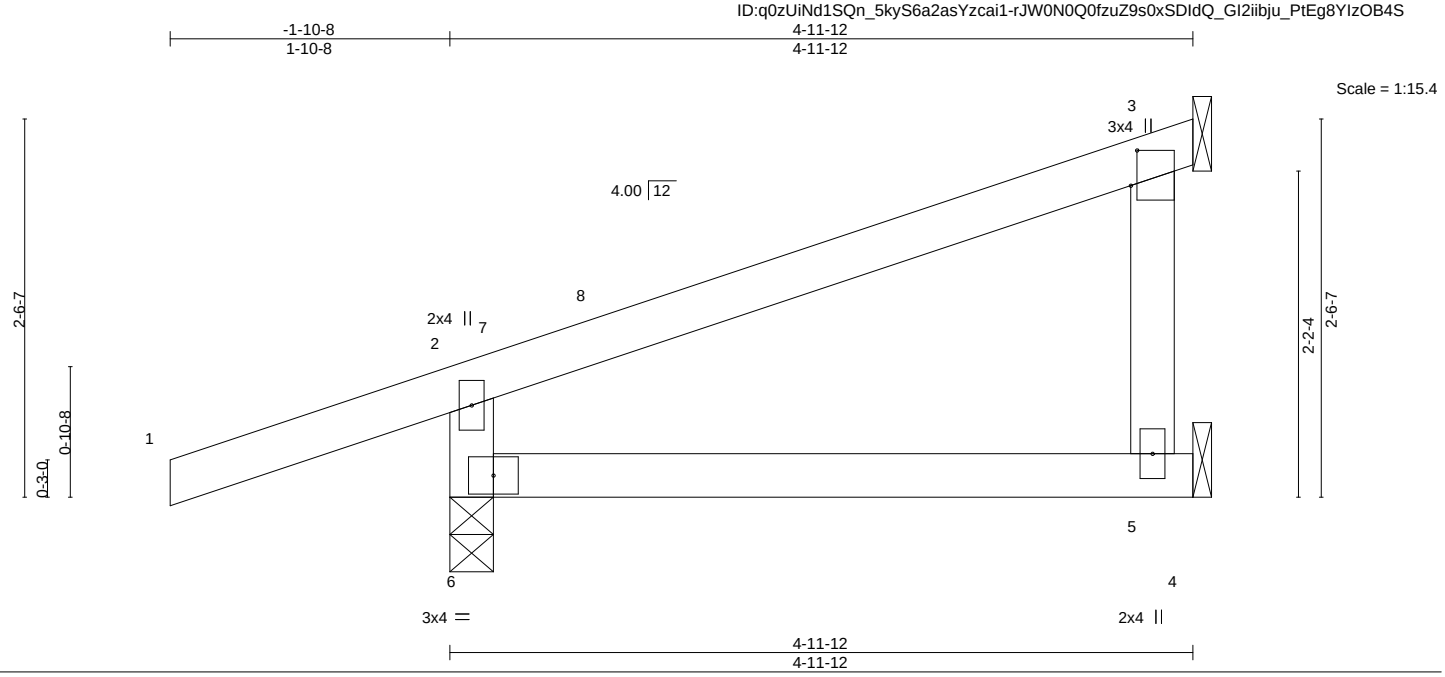

Plate Offsets (X,Y)-- [3:0-2-13,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 3=Mechanical, 6=0-3-8
Max Horz 6=88(LC 8)
Max Uplift 3=-65(LC 12), 6=-131(LC 8)
Max Grav 5=94(LC 3), 3=130(LC 1), 6=378(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-331/254

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 4-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 6=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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F02	Jack-Partial	11	1	I45783345
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:11 2021 Page 1
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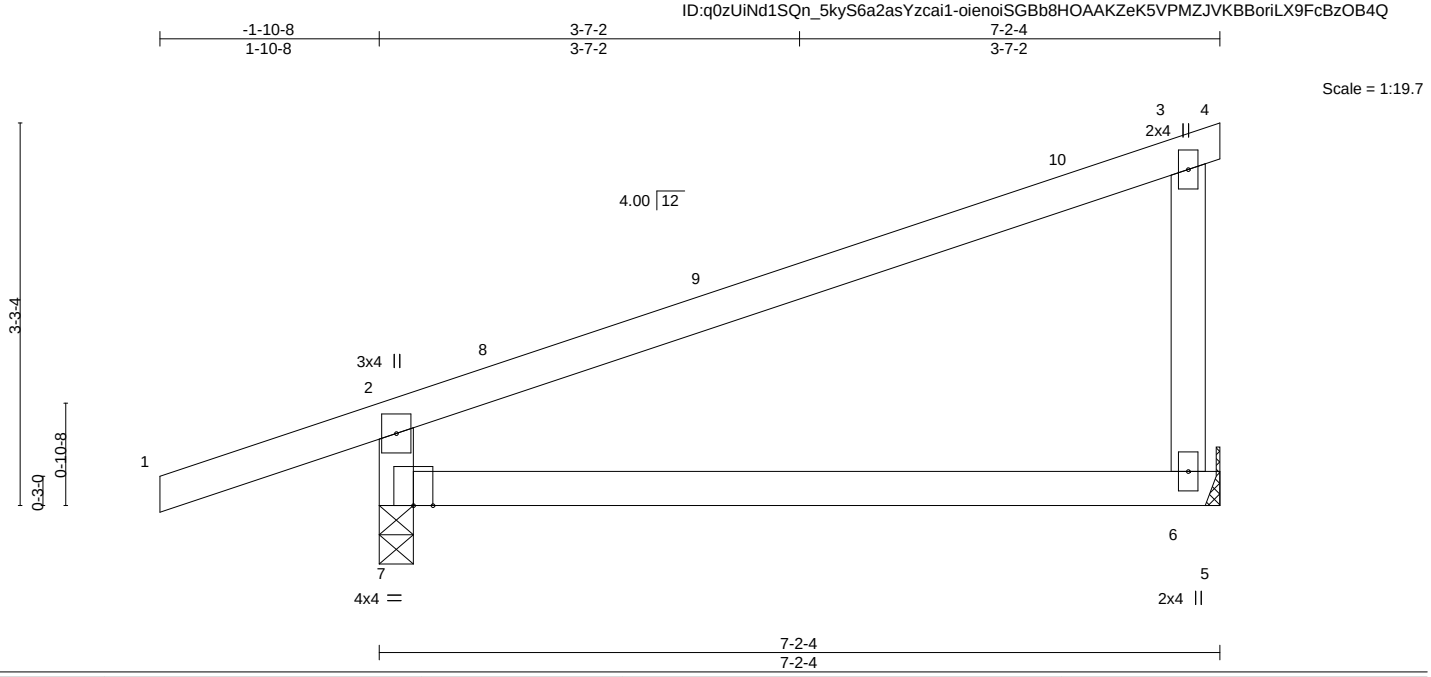

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.10	6-7	>853	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.21	6-7	>394	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 23 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 7=0-3-8
Max Horz 7=121(LC 8)
Max Uplift 6=-87(LC 8), 7=-141(LC 8)
Max Grav 6=295(LC 1), 7=467(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-405/281

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 7-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 7=141.
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.

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F03	Jack-Open	1	1	I45783346
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:14 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-CHJvQkU9TWXsGdvvFmuo71_6fjNKO9d81VNvDWzOB4N

-1-10-8 6-5-12
1-10-8 6-5-12

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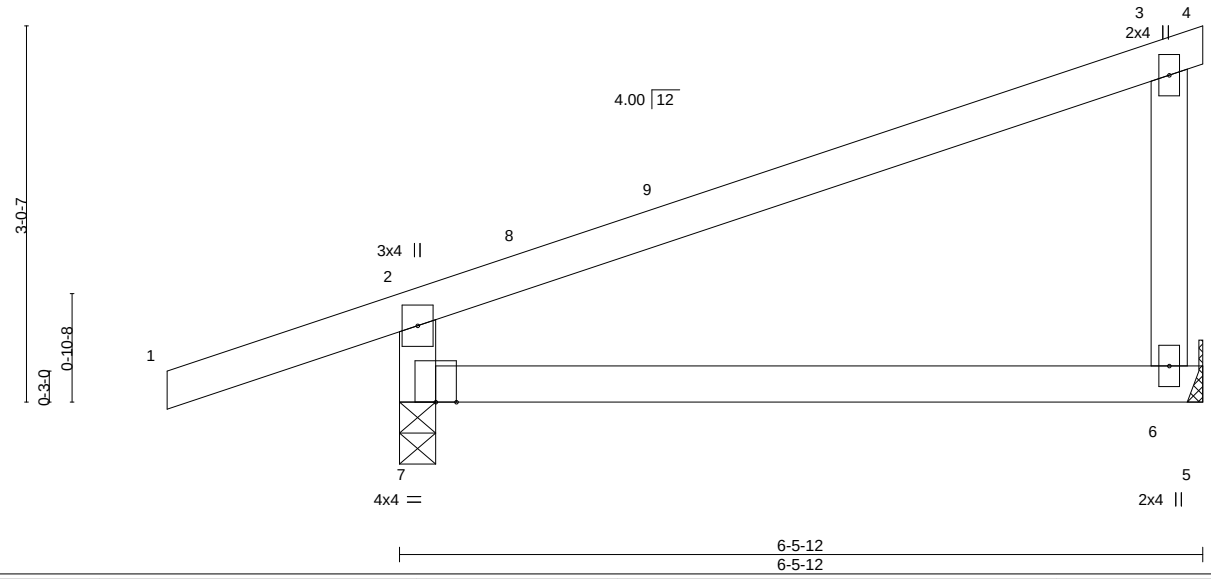


6-5-12
6-5-12

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	0.47	Vert(LL)	-0.06	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.13	6-7	>550	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 21 lb	FT = 20%

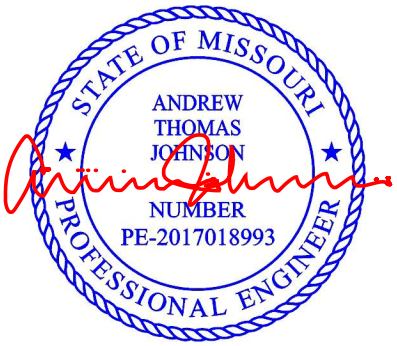
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 6=Mechanical, 7=0-3-8
Max Horz 7=112(LC 8)
Max Uplift 6=-79(LC 12), 7=-137(LC 8)
Max Grav 6=260(LC 1), 7=438(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-381/273

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 6-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 7=137.
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.



April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F04	Jack-Open	1	1	I45783347
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:17 2021 Page 1
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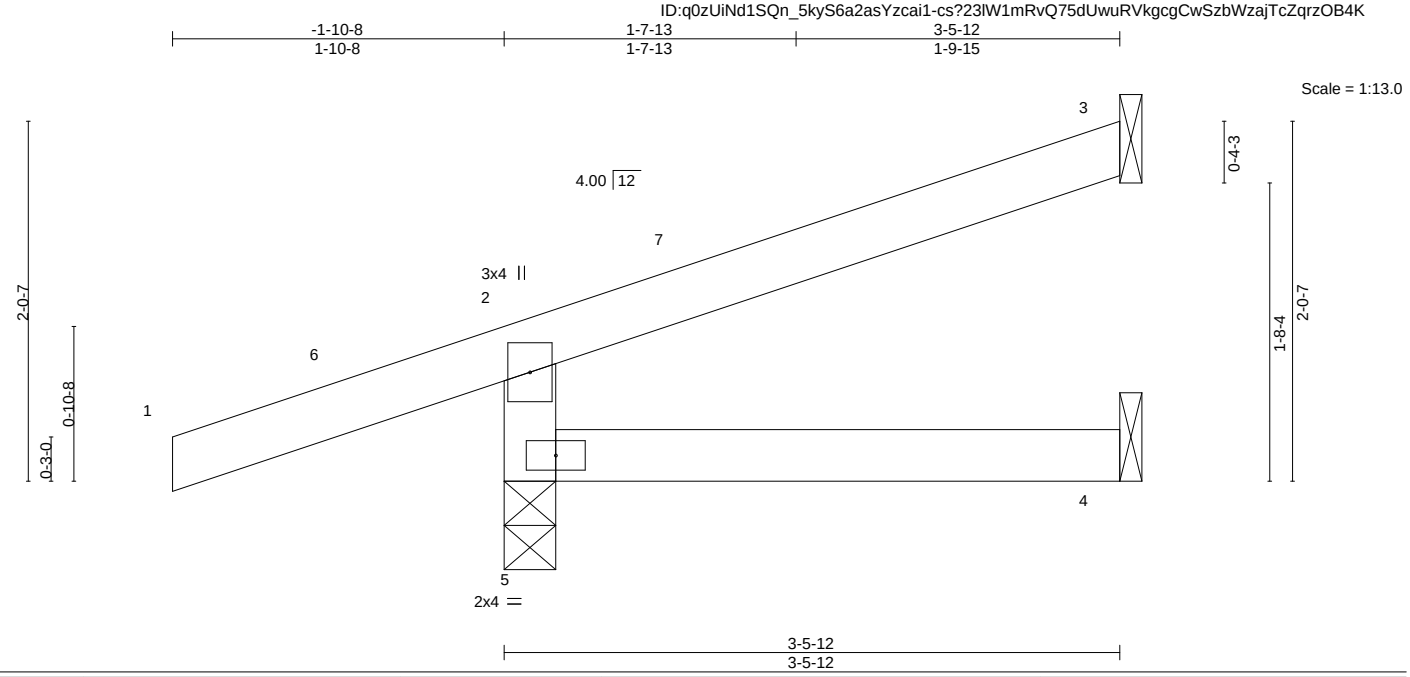

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 11 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-12 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=71(LC 8)
Max Uplift 3=-44(LC 12), 5=-127(LC 8)
Max Grav 3=80(LC 1), 4=57(LC 3), 5=332(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-290/235

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) 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 except (jt=lb) 5=127.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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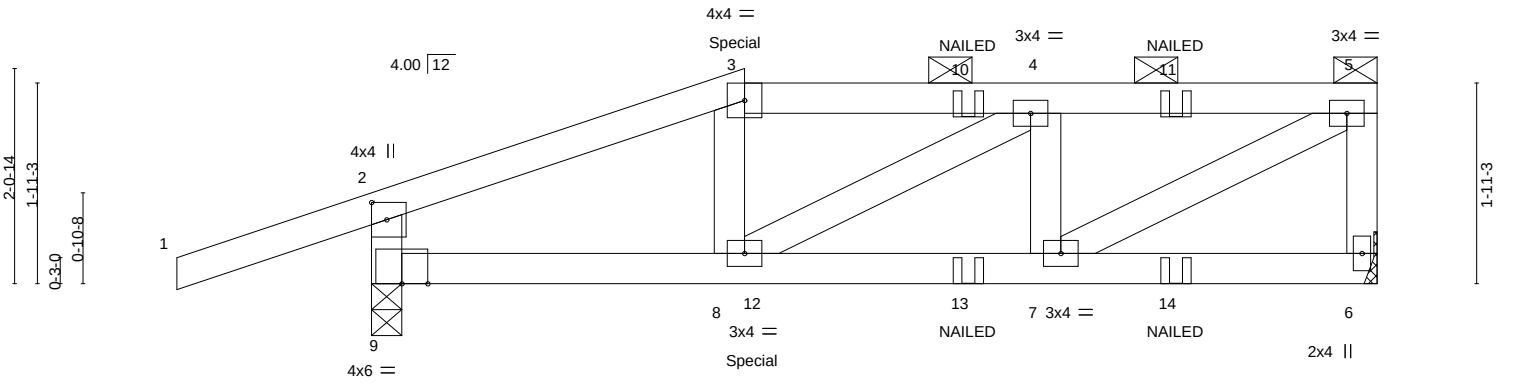
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F05	Half Hip Girder	1	1	I45783348
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:18 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-52ZQG5XfXk1HkFCgUcykHt8n3KjfKxoky7L7MHzOB4J

-1-10-8	3-7-2	6-5-15	9-8-4
1-10-8	3-7-2	2-10-13	3-2-5

Scale = 1:22.2



3-7-2	6-5-15	9-8-4
3-7-2	2-10-13	3-2-5

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

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.04	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.07	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 37 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 (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 9=0-3-8
Max Horz 9=83(LC 5)
Max Uplift 6=-121(LC 5), 9=-206(LC 4)
Max Grav 6=424(LC 1), 9=591(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-537/130, 3-4=-451/135, 4-5=-581/180, 5-6=-396/131, 2-9=-494/201
BOT CHORD 8-9=-155/452, 7-8=-185/581
WEBS 5-7=-187/635

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=121, 9=206.
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.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 106 lb up at 3-7-2 on top chord, and 46 lb down at 3-7-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 6-9=-20

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

April 23,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

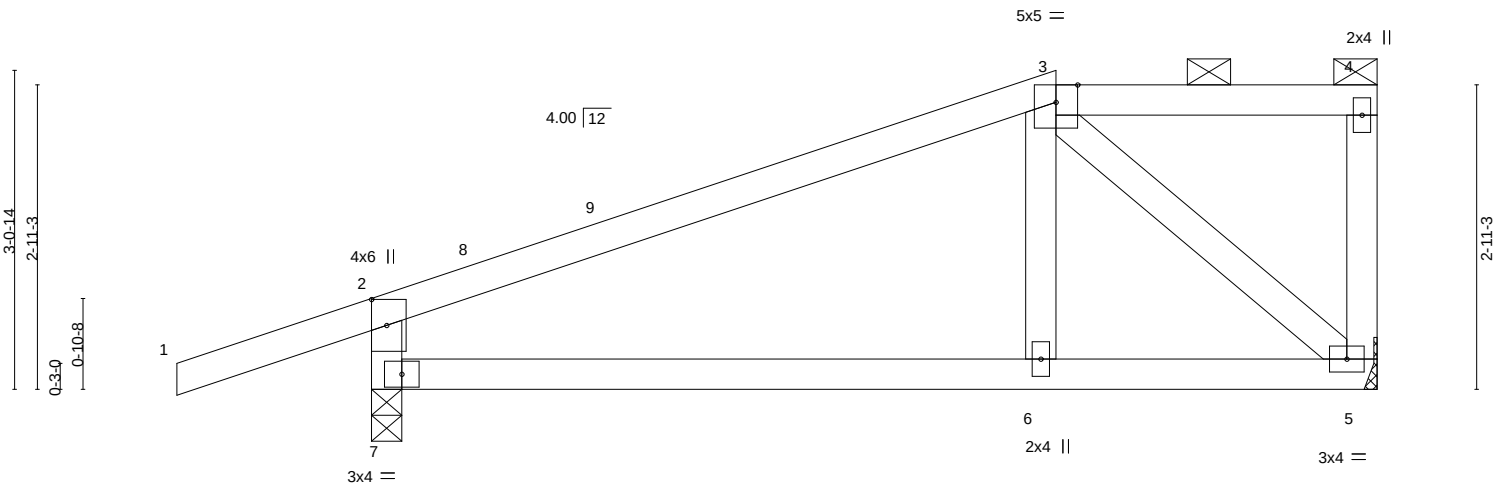
Vert: 3=-3(F) 8=-1(F) 10=-3(F) 11=-3(F) 12=-6(F) 13=-6(F) 14=-6(F)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F06	Half Hip	1	1	I45783349
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:20 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-1RgBhnYw3MH?_YM3b0_CMID9b8S4orc0PRqER9zOB4H

-1-10-8 / 1-10-8 | 6-7-2 / 6-7-2 | 9-8-4 / 3-1-2

Scale = 1:22.2



6-7-2 / 6-7-2 | 9-8-4 / 3-1-2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.04	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.07	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 35 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 7=0-3-8
Max Horz 7=128(LC 9)
Max Uplift 5=-94(LC 8), 7=-184(LC 8)
Max Grav 5=408(LC 1), 7=579(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-457/155, 2-7=-512/310
BOT CHORD 6-7=-265/360, 5-6=-267/355
WEBS 3-5=-473/322

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 6-7-2, Exterior(2E) 6-7-2 to 9-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 7 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) 5 except (jt=lb) 7=184.
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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F07	MONO TRUSS	8	1	I45783350
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:24 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-vCwhX8cQ7anRSAfqqs38W8OoJlkPkf2cK3oRaxzOB4D

-1-10-8 | 4-5-3 | 7-2-9 | 9-8-4
1-10-8 | 4-5-3 | 2-9-7 | 2-5-11

Scale = 1:24.3

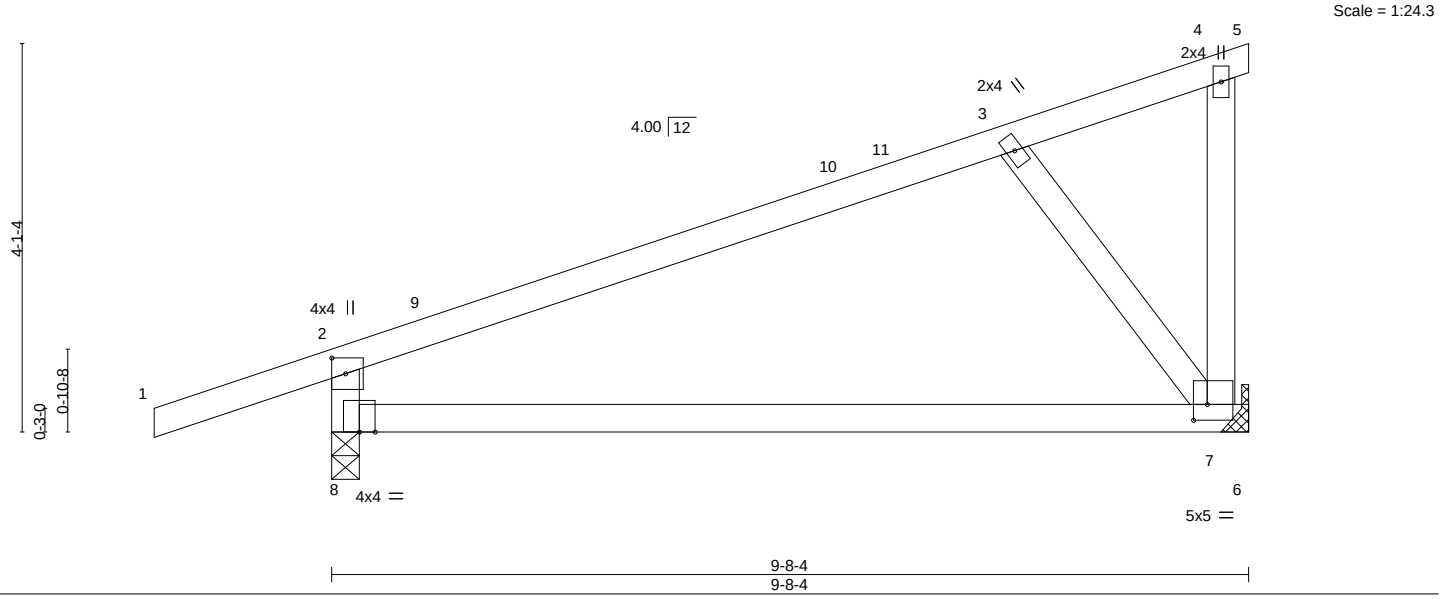

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [7:0-1-12,0-2-0]

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	0.52	Vert(LL)	-0.19	7-8	>590	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.38	7-8	>294	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 33 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 8=0-3-8
Max Horz 8=155(LC 8)
Max Uplift 7=-121(LC 8), 8=-158(LC 8)
Max Grav 7=413(LC 1), 8=573(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-384/85, 2-8=-484/286
BOT CHORD 7-8=-197/291
WEBS 3-7=-423/349

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 9-8-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=121, 8=158.
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.

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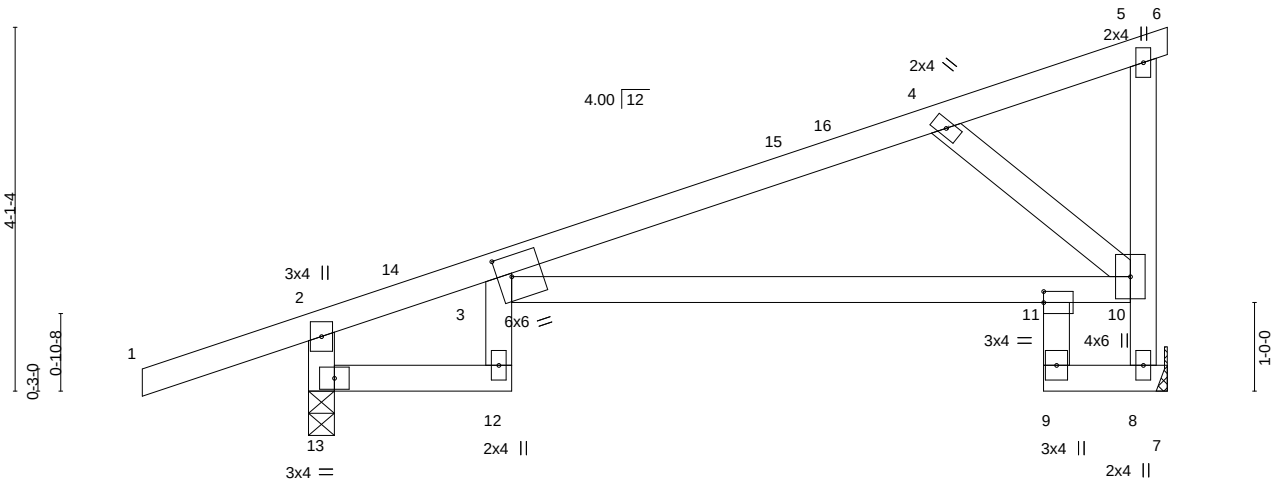
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F08	Jack-Closed	1	1	I45783351
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:31 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-CYrL?YhpTkgRoFiAkqhnJdBvqZ65slhexf?JK1zOB46

-1-10-8 | 2-3-8 | 7-2-5 | 8-3-8 | 9-8-4
1-10-8 | 2-3-8 | 4-10-13 | 1-1-3 | 1-4-12

Scale = 1:26.0



2-3-8 | 8-3-8 | 9-8-4
2-3-8 | 6-0-0 | 1-4-12

Plate Offsets (X,Y)-- [3:0-1-15,0-2-13], [11:0-0-0,0-1-8]

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	0.95	Vert(LL)	0.22	3-11	>514	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.42	3-11	>263	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.33	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 36 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 8=Mechanical, 13=0-3-8
Max Horz 13=155(LC 8)
Max Uplift 8=-121(LC 8), 13=-157(LC 8)
Max Grav 8=413(LC 1), 13=575(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-588/289, 3-4=-509/189
BOT CHORD 3-11=-298/476, 10-11=-322/638
WEBS 8-10=-330/251, 4-10=-537/374

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 9-8-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=121, 13=157.
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.

April 23,2021

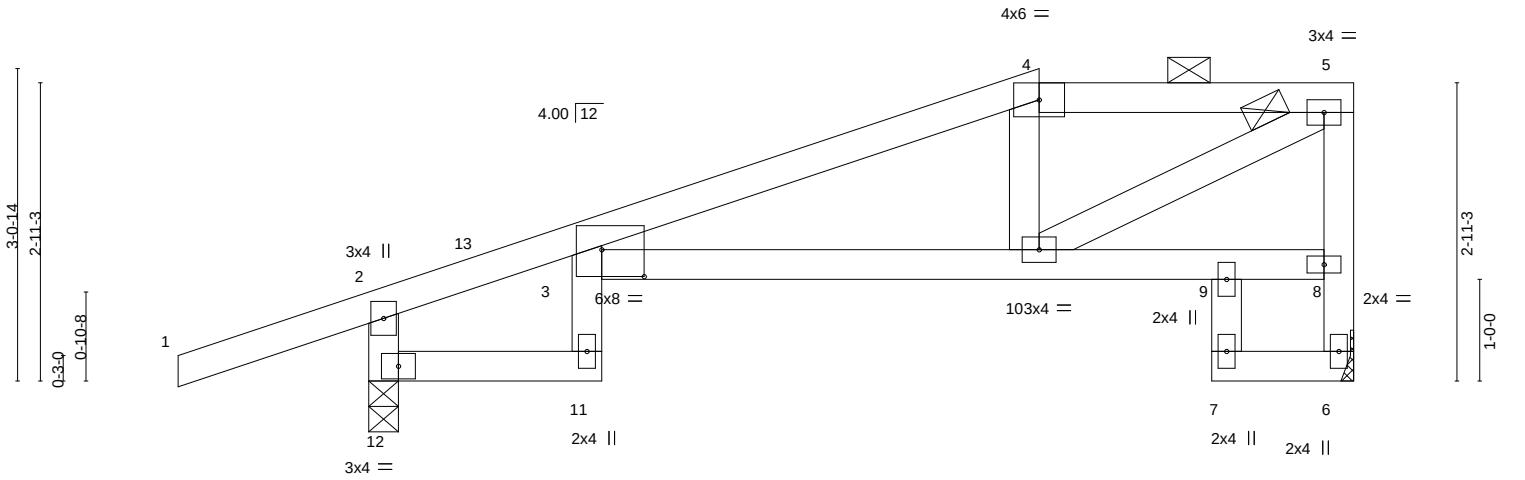
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F09	Half Hip	1	1	I45783352
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:33 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-8xz5PDj3?Lw91YsZsFjFO2GE0Nk?Kj8xPyUQOvzOB44

-1-10-8 | 2-3-8 | 6-7-2 | 8-3-8 | 9-8-4
1-10-8 | 2-3-8 | 4-3-10 | 1-8-6 | 1-4-12

Scale = 1:22.7



2-3-8 | 6-7-2 | 8-3-8 | 9-8-4
2-3-8 | 4-3-10 | 1-8-6 | 1-4-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	0.21	3-10	>548	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.31	3-10	>361	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.24	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 36 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 12=0-3-8
Max Horz 12=109(LC 8)
Max Uplift 6=-102(LC 8), 12=-175(LC 8)
Max Grav 6=408(LC 1), 12=581(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-678/322, 4-5=-647/376, 6-8=-397/201, 5-8=-418/230, 2-12=-594/302
BOT CHORD 3-10=-358/630
WEBS 5-10=-440/733

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 6-7-2, Exterior(2E) 6-7-2 to 9-6-8 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=102, 12=175.
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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Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	F10	Half Hip Girder	1	1	I45783353
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:35 2021 Page 1
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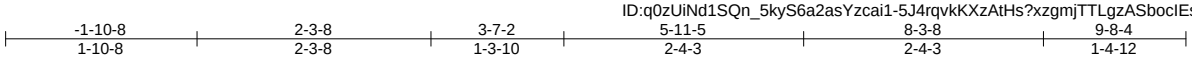

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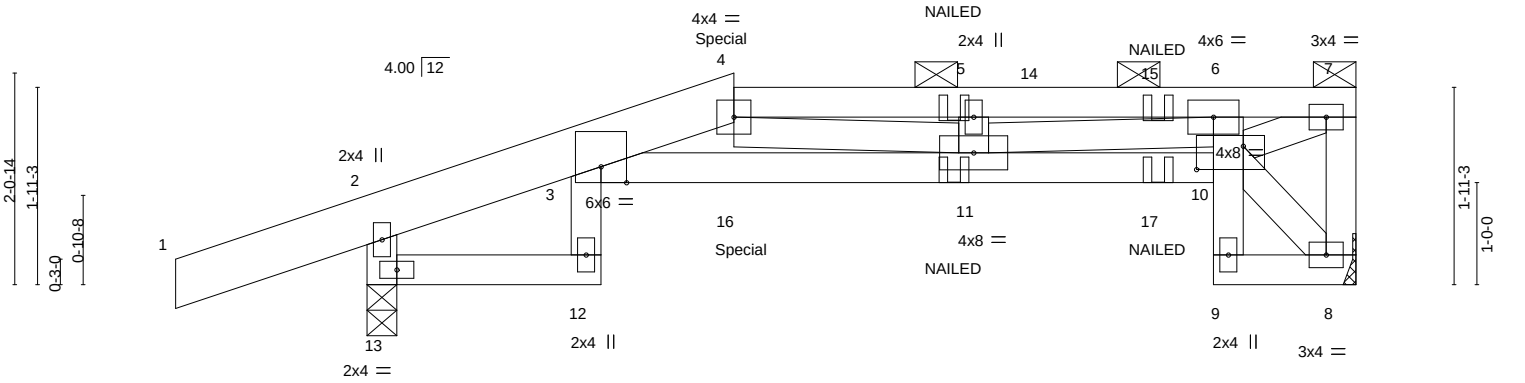

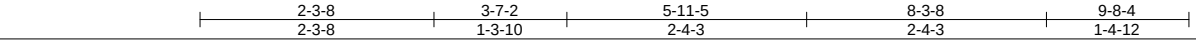

Plate Offsets (X,Y)-- [10:0-5-8,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	0.11	3-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.16	3-11	>685	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.14	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except* 4-7: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 8=Mechanical, 13=0-3-8
Max Horz 13=84(LC 7)
Max Uplift 8=-173(LC 5), 13=-256(LC 4)
Max Grav 8=477(LC 1), 13=636(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1705/676, 4-5=-1641/651, 5-6=-1641/651, 6-7=-756/299, 7-8=-410/167, 2-13=-629/270
BOT CHORD 3-11=-731/1740, 10-11=-440/1045, 6-10=-258/107
WEBS 7-10=-338/816, 6-11=-267/621

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=173, 13=256.
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.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 111 lb down and 60 lb up at 3-7-2 on top chord, and 58 lb down and 79 lb up at 3-7-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-7=-70, 12-13=-20, 3-10=-20, 8-9=-20
   Concentrated Loads (lb)
   Vert: 11=-34(B) 16=-58(B) 17=-34(B)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G01	Jack-Open	1	1	I45783354
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:37 2021 Page 1
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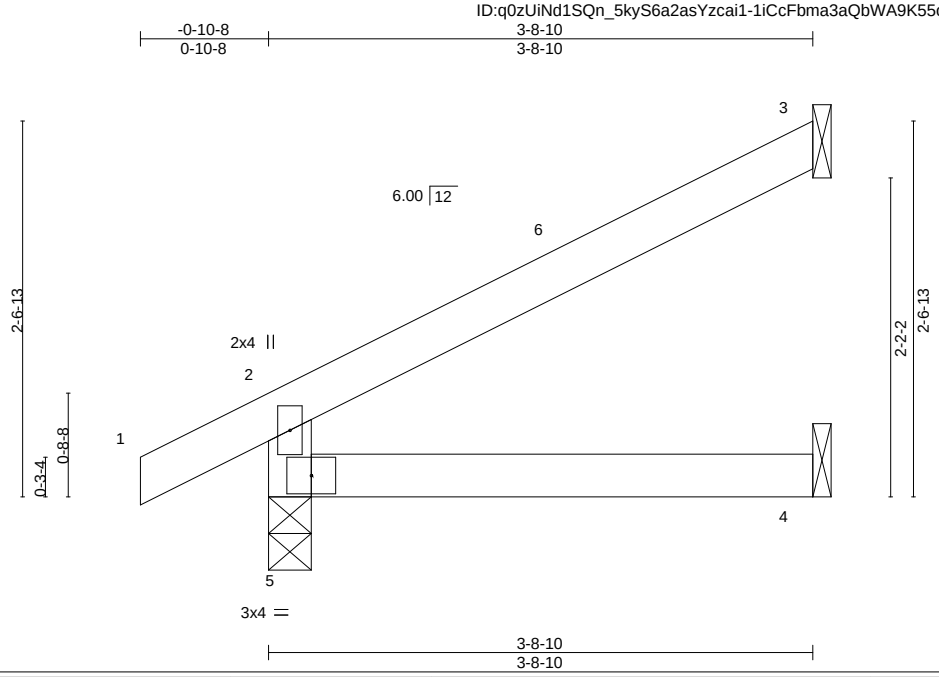

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 11 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-10 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=83(LC 12)
Max Uplift 3=-62(LC 12), 5=-34(LC 12)
Max Grav 3=107(LC 1), 4=66(LC 3), 5=240(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-7-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G02	Jack-Open	1	1	I45783355
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:38 2021 Page 1
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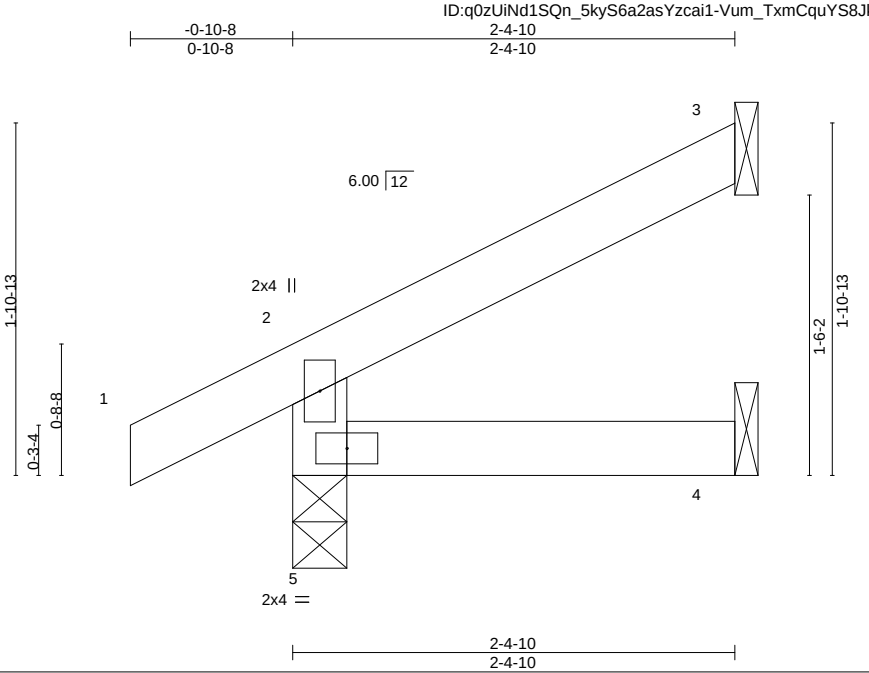

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 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 2-4-10 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=56(LC 12)
Max Uplift 3=-39(LC 12), 5=-29(LC 12)
Max Grav 3=60(LC 1), 4=40(LC 3), 5=186(LC 1)

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

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

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Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G03	Jack-Open	1	1	I45783356
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:39 2021 Page 1
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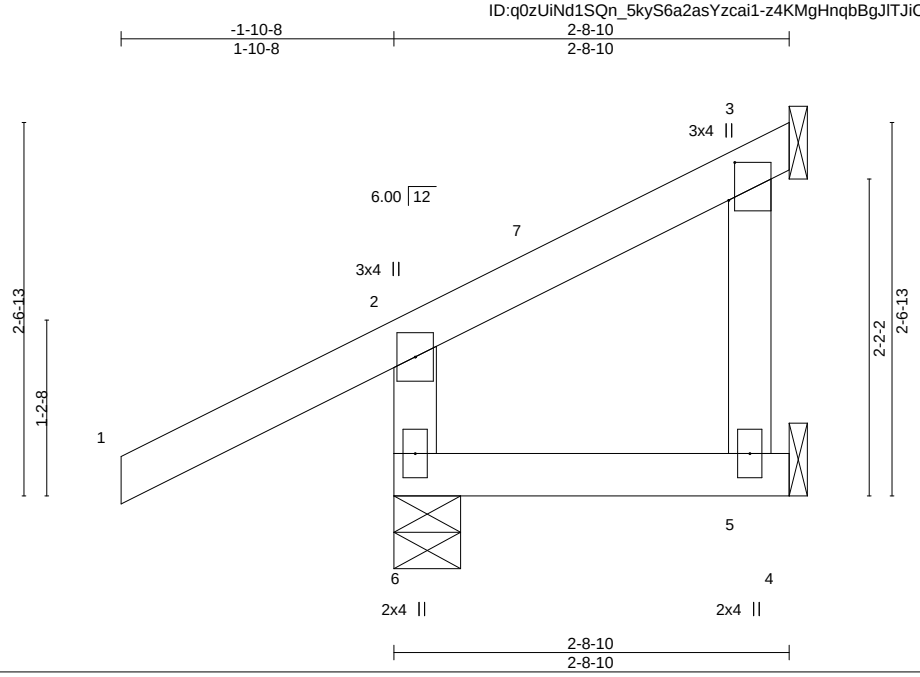

Plate Offsets (X,Y)-- [3:0-3-2,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 12 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 2-8-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-5-8, 5=Mechanical, 3=Mechanical
Max Horz 6=69(LC 9)
Max Uplift 6=-54(LC 12), 3=-37(LC 12)
Max Grav 6=307(LC 1), 5=50(LC 3), 3=34(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-268/217

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 2-5-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.
7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

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Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G04	Jack-Open	1	1	I45783357
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:40 2021 Page 1
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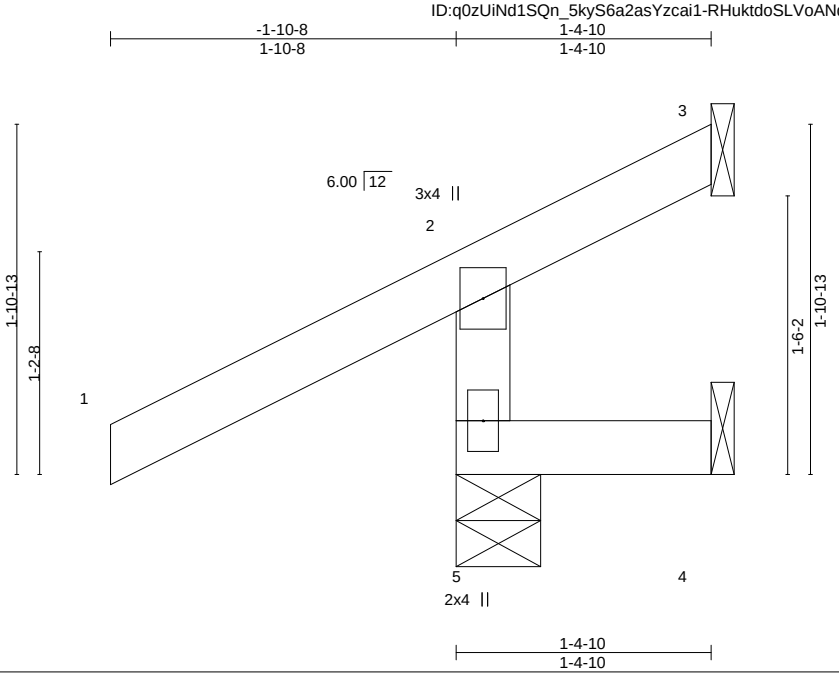

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 1-4-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
Max Horz 5=56(LC 9)
Max Uplift 5=-63(LC 12), 3=-46(LC 1), 4=-16(LC 1)
Max Grav 5=313(LC 1), 3=13(LC 8), 4=15(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-273/237

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

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Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G05	Jack-Open	3	1	I45783358
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:41 2021 Page 1
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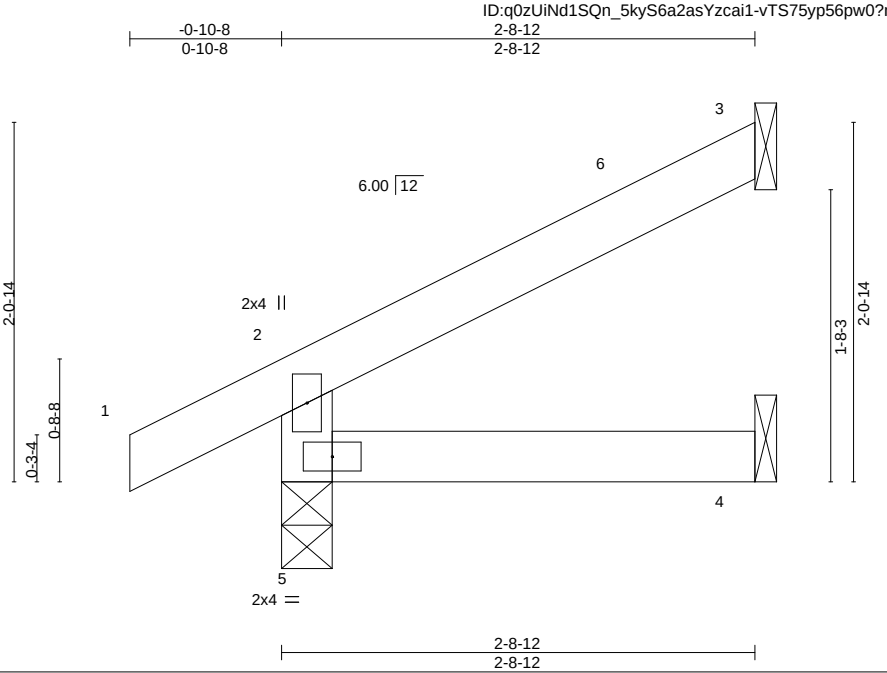

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 2-8-12 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=63(LC 12)
Max Uplift 3=-45(LC 12), 5=-30(LC 12)
Max Grav 3=73(LC 1), 4=47(LC 3), 5=199(LC 1)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G06	Jack-Open	3	1	I45783359
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:42 2021 Page 1
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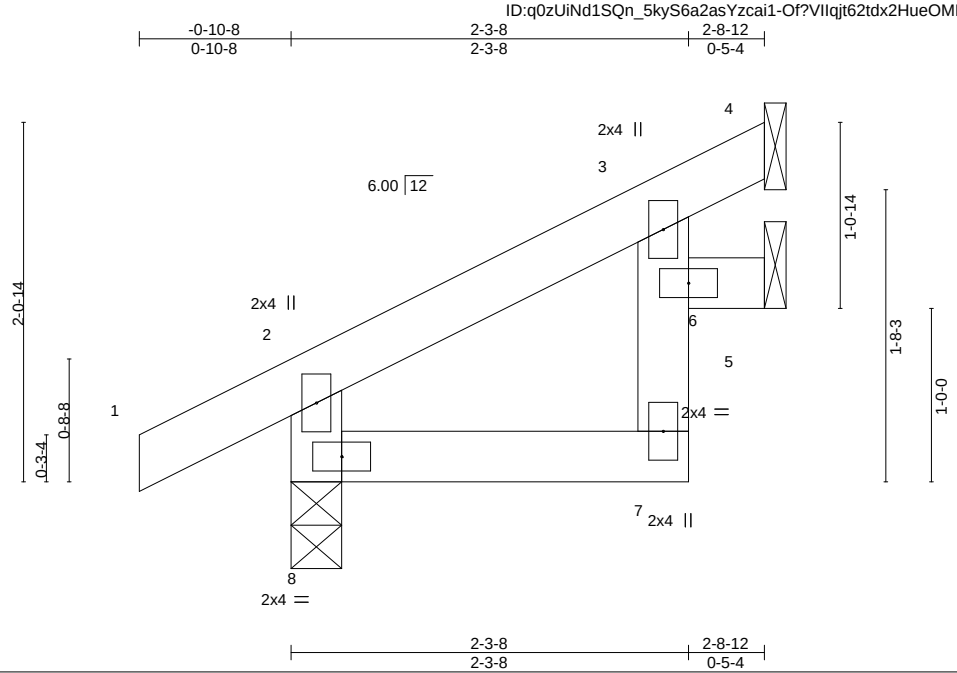

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							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 2-8-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 8=0-3-8
Max Horz 8=63(LC 12)
Max Uplift 4=-15(LC 12), 5=-30(LC 12), 8=-30(LC 12)
Max Grav 4=45(LC 1), 5=54(LC 1), 8=199(LC 1)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G07	Jack-Open	1	1	I45783360

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:43 2021 Page 1
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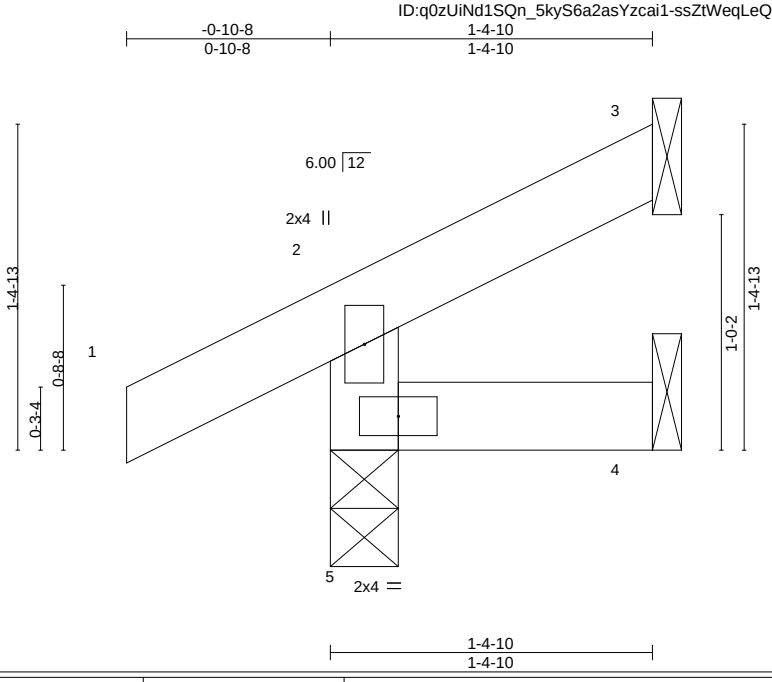

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 5 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-4-10 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=36(LC 12)
Max Uplift 3=-20(LC 12), 4=-1(LC 9), 5=-28(LC 12)
Max Grav 3=21(LC 1), 4=21(LC 3), 5=156(LC 1)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G08	Jack-Closed	3	1	I45783361
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:43 2021 Page 1
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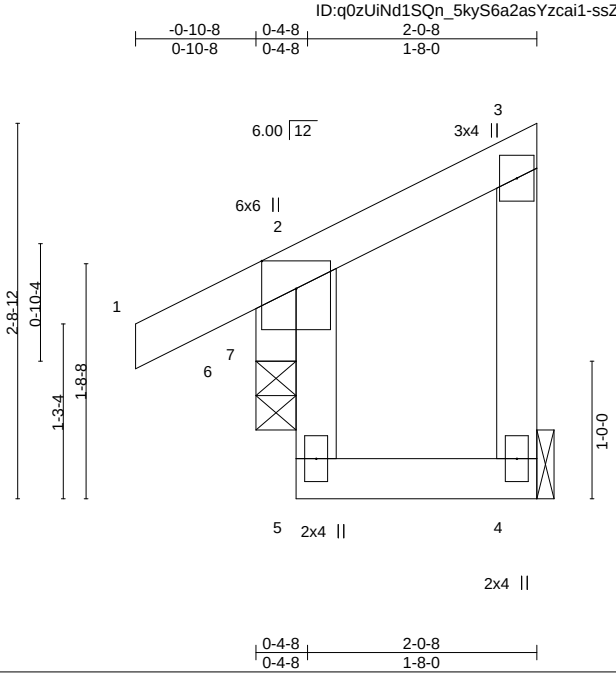

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.05	5	>437	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.07	5	>298	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.08	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 7=0-3-8
Max Horz 7=89(LC 11)
Max Uplift 4=-27(LC 12), 7=-31(LC 12)
Max Grav 4=58(LC 1), 7=168(LC 1)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	G09	Monopitch	2	1	I45783362

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:44 2021 Page 1
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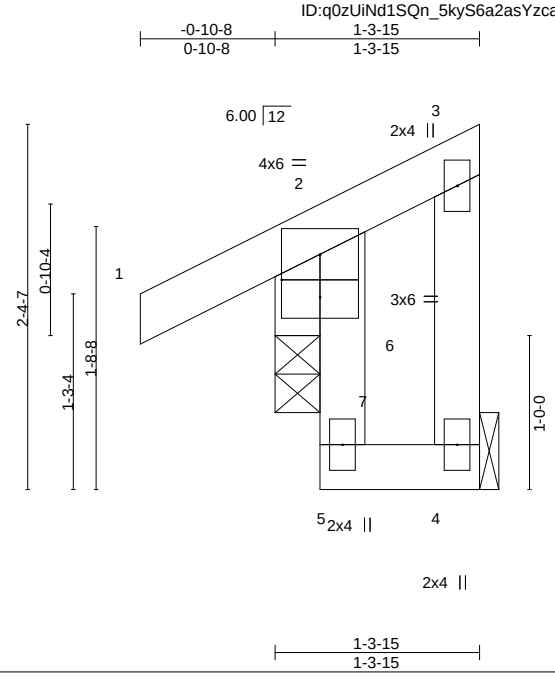

Plate Offsets (X,Y)-- [6:0-3-0,0-1-6]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	4	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
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-3-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 7=0-3-8
Max Horz 7=82(LC 11)
Max Uplift 4=-25(LC 12), 7=-21(LC 12)
Max Grav 4=26(LC 1), 7=133(LC 1)

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

NOTES-

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	H01	Hip Girder	1	2	I45783363

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:48 2021 Page 1

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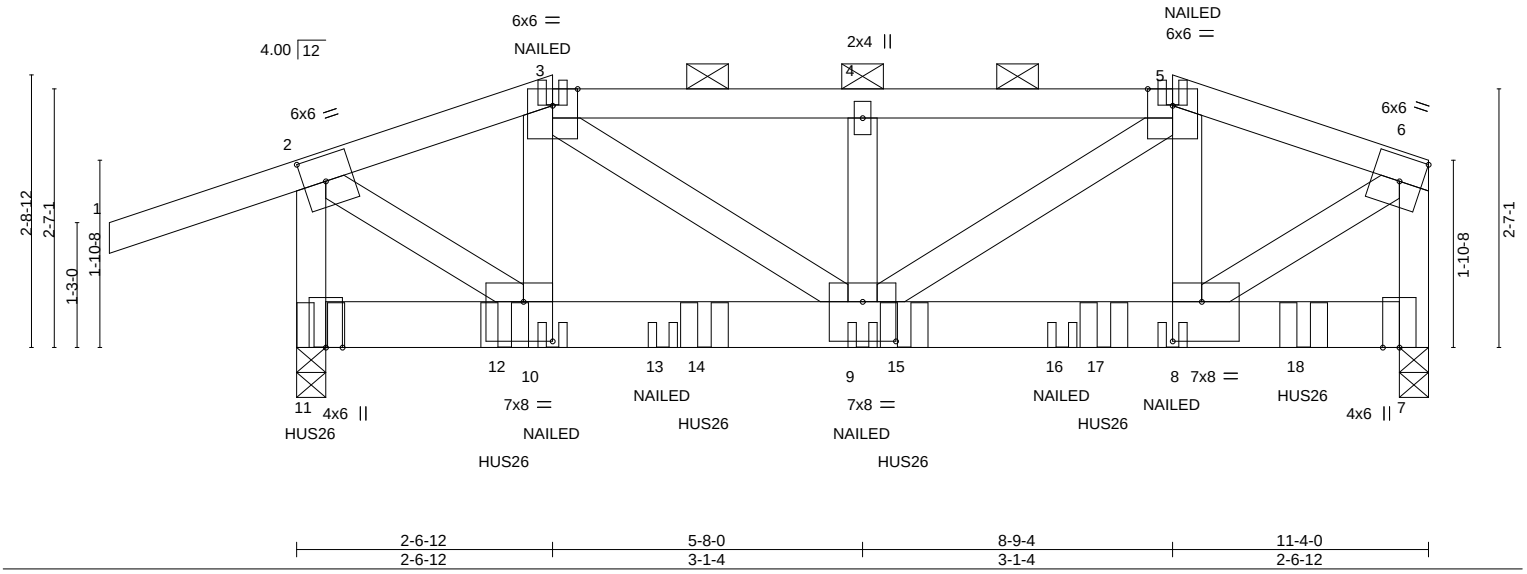
-1-10-8 | 2-6-12 | 5-8-0 | 8-9-4 | 11-4-0

1-10-8 | 2-6-12 | 3-1-4 | 3-1-4 | 2-6-12

Scale = 1:23.1



2-6-12 | 5-8-0 | 8-9-4 | 11-4-0

2-6-12 | 3-1-4 | 3-1-4 | 2-6-12

Plate Offsets (X,Y)-- [2:0-2-11,0-3-0], [8:0-3-8,0-4-12], [9:0-4-0,0-4-12], [10:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.05	9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.08	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 117 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-11 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=64(LC 5)
Max Uplift 11=-1045(LC 4), 7=-746(LC 5)
Max Grav 11=5306(LC 1), 7=4255(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3830/732, 3-4=-5619/1055, 4-5=-5619/1055, 5-6=-3953/708, 2-11=-3812/795, 6-7=-3708/681
BOT CHORD 9-10=-704/3649, 8-9=-691/3773
WEBS 3-10=-374/80, 3-9=-435/2445, 4-9=-426/137, 5-9=-446/2310, 5-8=-287/116, 2-10=-788/4324, 6-8=-784/4394

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) 11, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=1045, 7=746.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-1-12 from the left end to 10-1-0 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.

Continued on page 2

April 23,2021

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 7-11=-20
   Concentrated Loads (lb)
   Vert: 10=1(F) 9=-38(F) 8=1(F) 11=-1398(B) 12=-1387(B) 13=-38(F) 14=-1387(B) 15=-1381(B) 16=-38(F) 17=-1381(B) 18=-1381(B)

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J01	Jack-Open	3	1	I45783364
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:48 2021 Page 1
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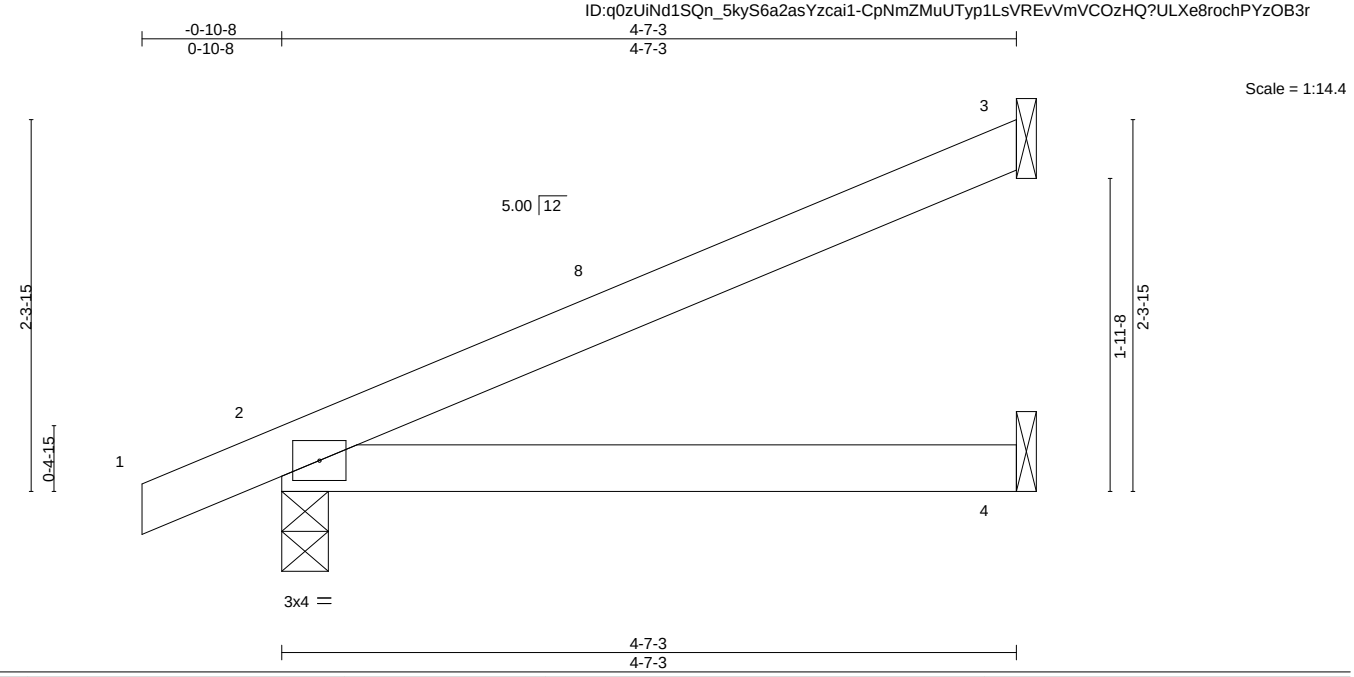

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	0.03	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=90(LC 12)
Max Uplift 3=-65(LC 12), 2=-51(LC 12)
Max Grav 3=138(LC 1), 2=271(LC 1), 4=82(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J02	Jack-Open	2	1	I45783365
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:49 2021 Page 1
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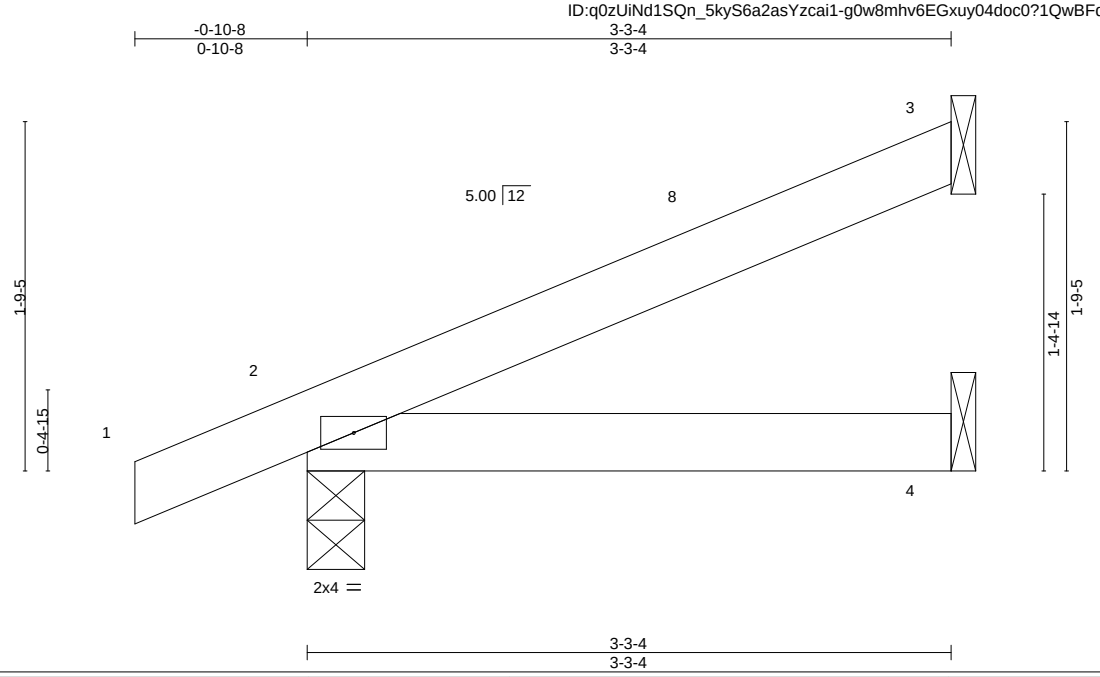

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 9 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=67(LC 12)
Max Uplift 3=-44(LC 12), 2=-43(LC 12)
Max Grav 3=93(LC 1), 2=214(LC 1), 4=58(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J03	Jack-Open	2	1	I45783366

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:50 2021 Page 1
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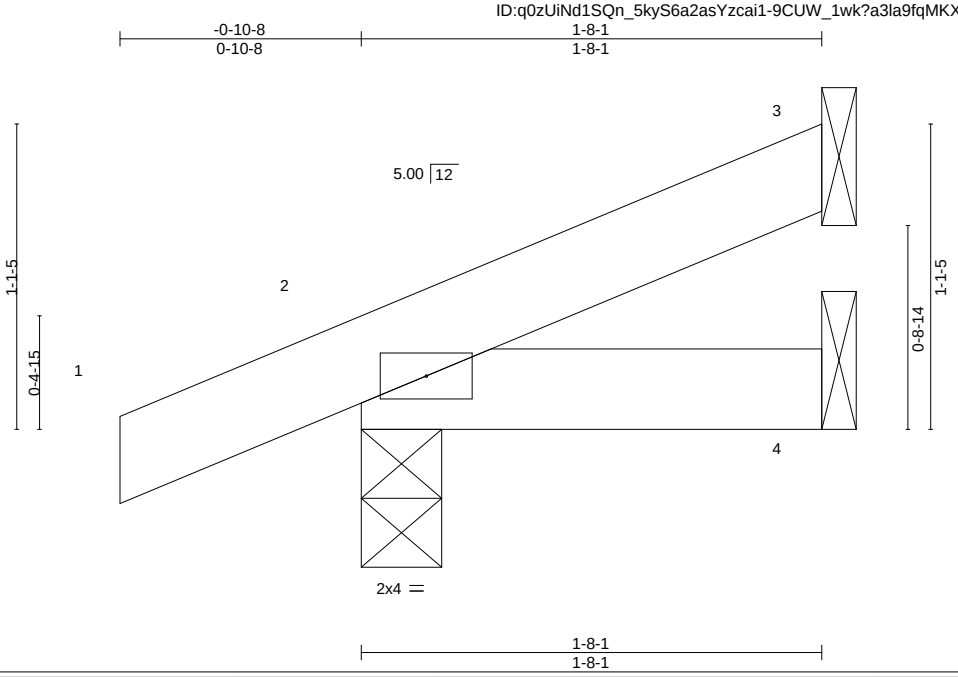

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 5 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-8-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=41(LC 12)
Max Uplift 3=-20(LC 12), 2=-37(LC 8)
Max Grav 3=41(LC 1), 2=152(LC 1), 4=28(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J04	Jack-Open	1	1	I45783367
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:51 2021 Page 1
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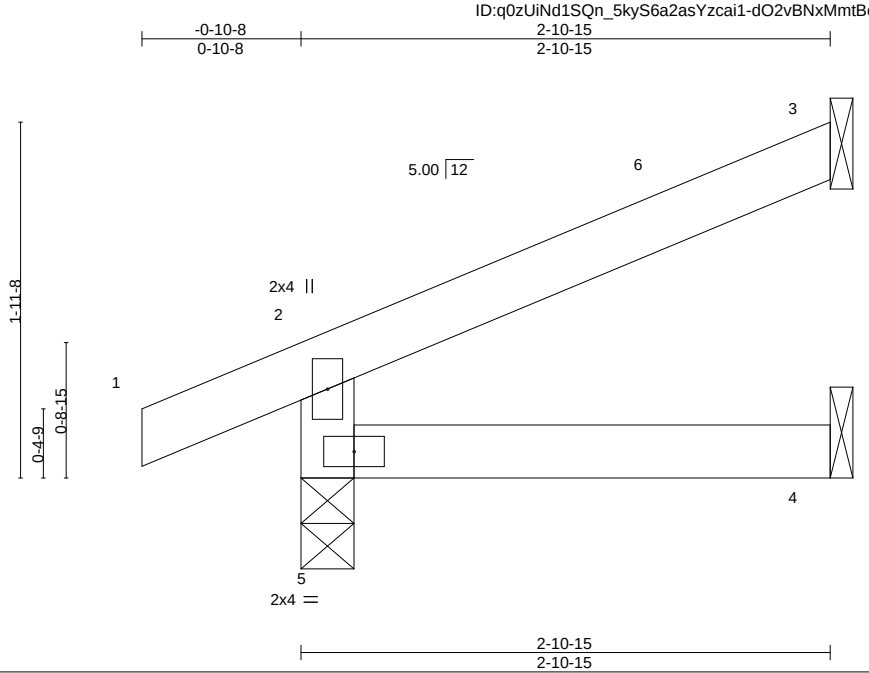

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	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 2-10-15 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=54(LC 12)
Max Uplift 3=-44(LC 12), 5=-36(LC 12)
Max Grav 3=80(LC 1), 4=50(LC 3), 5=207(LC 1)

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

NOTES-

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J05	Jack-Open	1	1	I45783368
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:52 2021 Page 1
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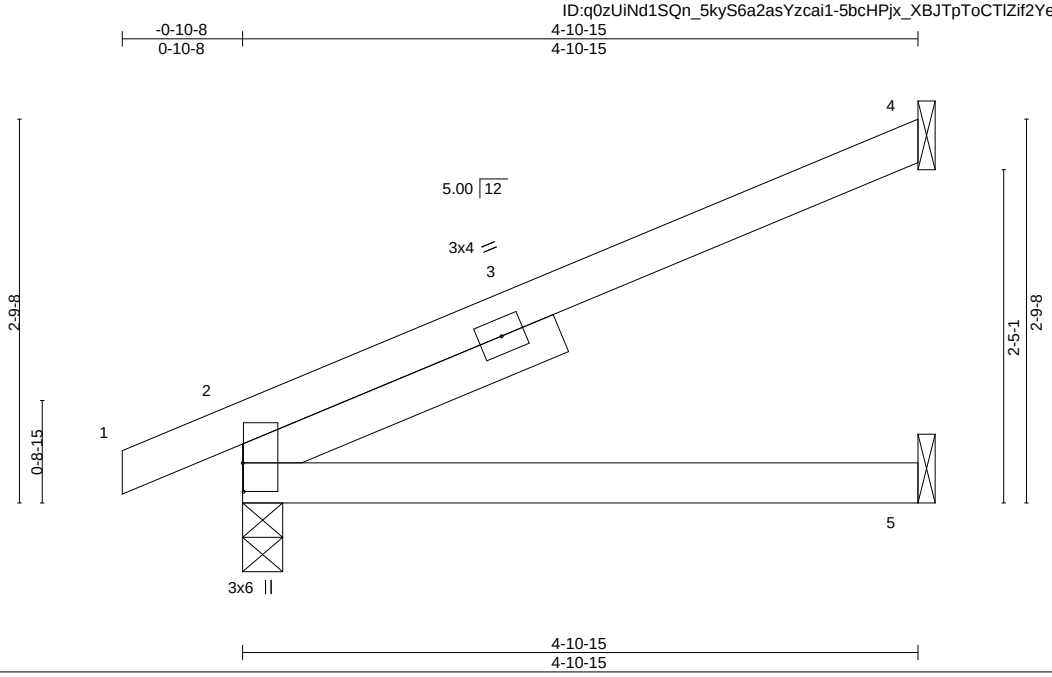

Plate Offsets (X,Y)-- [2:0-2-8,0-0-1]

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	0.32	Vert(LL)	0.04	5-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.05	5-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 16 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=95(LC 12)
Max Uplift 4=-75(LC 12), 2=-46(LC 12)
Max Grav 4=152(LC 1), 2=285(LC 1), 5=85(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J06	Jack-Open	1	1	I45783369
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:53 2021 Page 1
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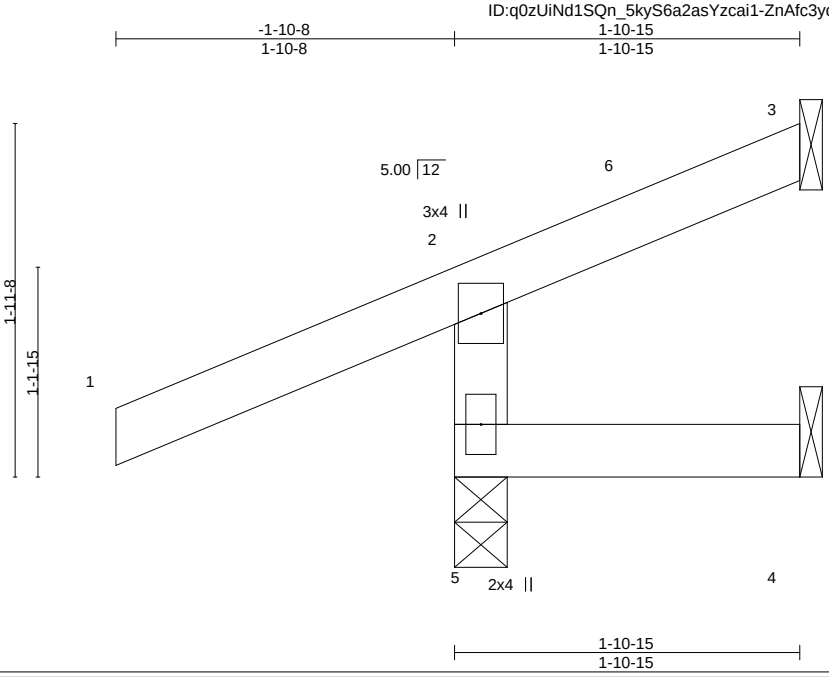

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 1-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=57(LC 9)
Max Uplift 5=-84(LC 8), 3=-19(LC 12), 4=-4(LC 1)
Max Grav 5=302(LC 1), 3=3(LC 17), 4=27(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-263/227

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 1-10-13 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 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.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J07	Jack-Open	1	1	I45783370
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:57 2021 Page 1
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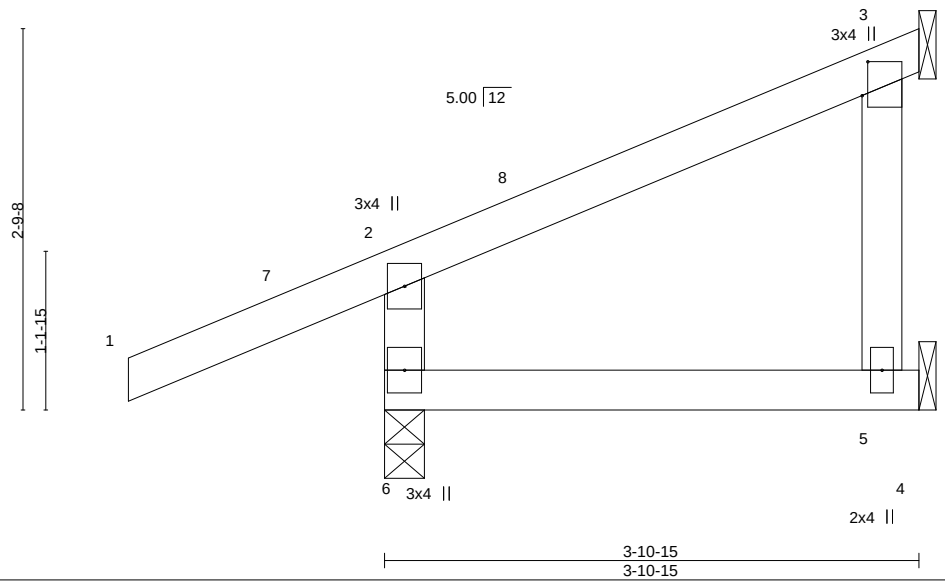

3-10-15 / 3-10-15

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

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 15 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-3-8, 5=Mechanical, 3=Mechanical
Max Horz 6=77(LC 9)
Max Uplift 6=-73(LC 8), 3=-56(LC 12)
Max Grav 6=339(LC 1), 5=74(LC 3), 3=88(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-298/233

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-7-11 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.
7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J08	Jack-Open	5	1	I45783371
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:10:58 2021 Page 1
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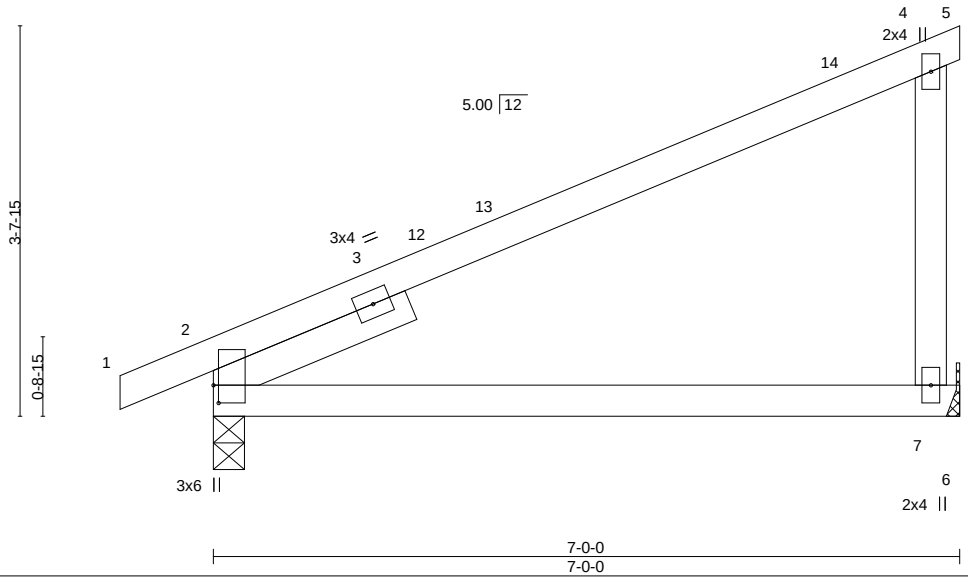

Plate Offsets (X,Y)-- [2:0-2-0,0-0-9]

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	0.62	Vert(LL)	0.11	7-10	>752	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.20	7-10	>396	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.05	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 24 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 7=Mechanical
Max Horz 2=126(LC 12)
Max Uplift 2=-58(LC 12), 7=-91(LC 12)
Max Grav 2=368(LC 1), 7=310(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-369/65

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J09	Half Hip	1	1	I45783372
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:00 2021 Page 1
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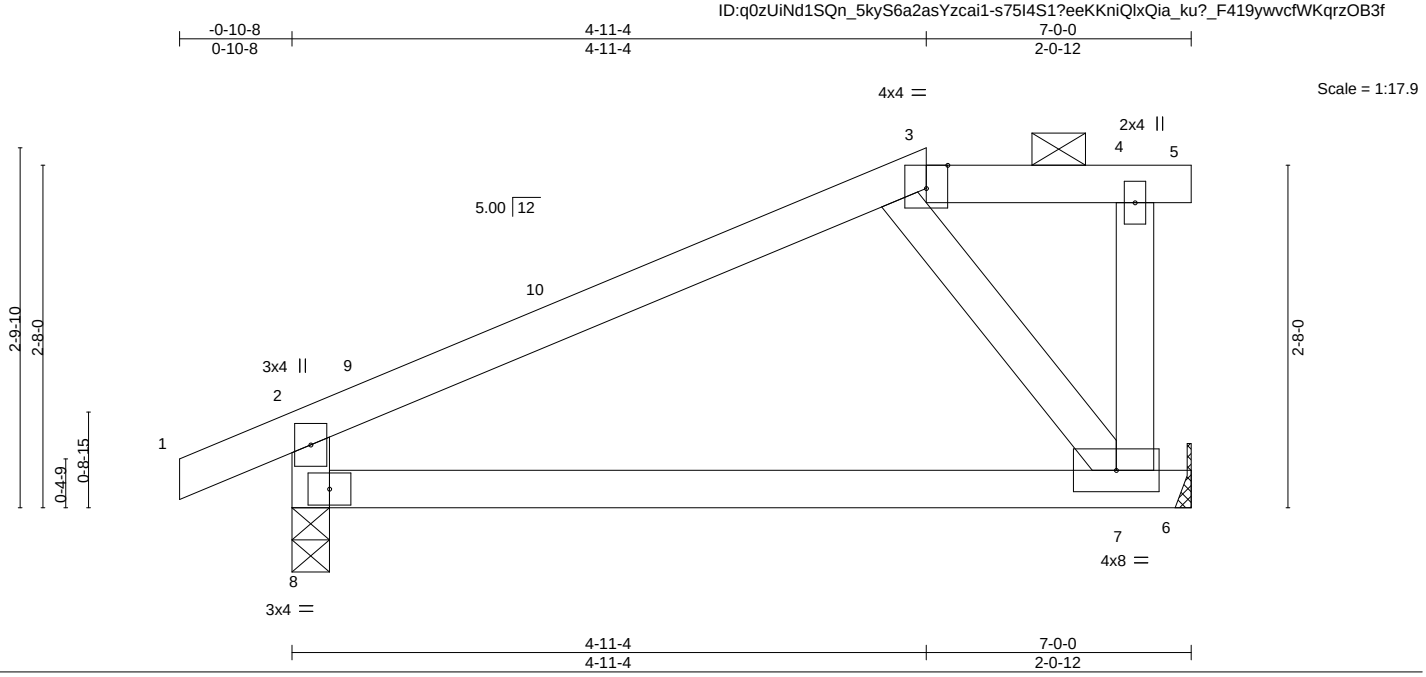

Plate Offsets (X,Y)-- [3:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.05	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.11	7-8	>772	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 23 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=109(LC 9)
Max Uplift 6=-71(LC 9), 8=-81(LC 12)
Max Grav 6=305(LC 1), 8=382(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-266/112, 2-8=-316/223
WEBS 3-7=-218/251

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J10	Half Hip Girder	1	1	I45783373
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:03 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-GinRiU4uxZive98KcYGHcNVYtT7oMIDLldl_RAzOB3c

-0-10-8 2-11-4 7-0-0
0-10-8 2-11-4 4-0-12

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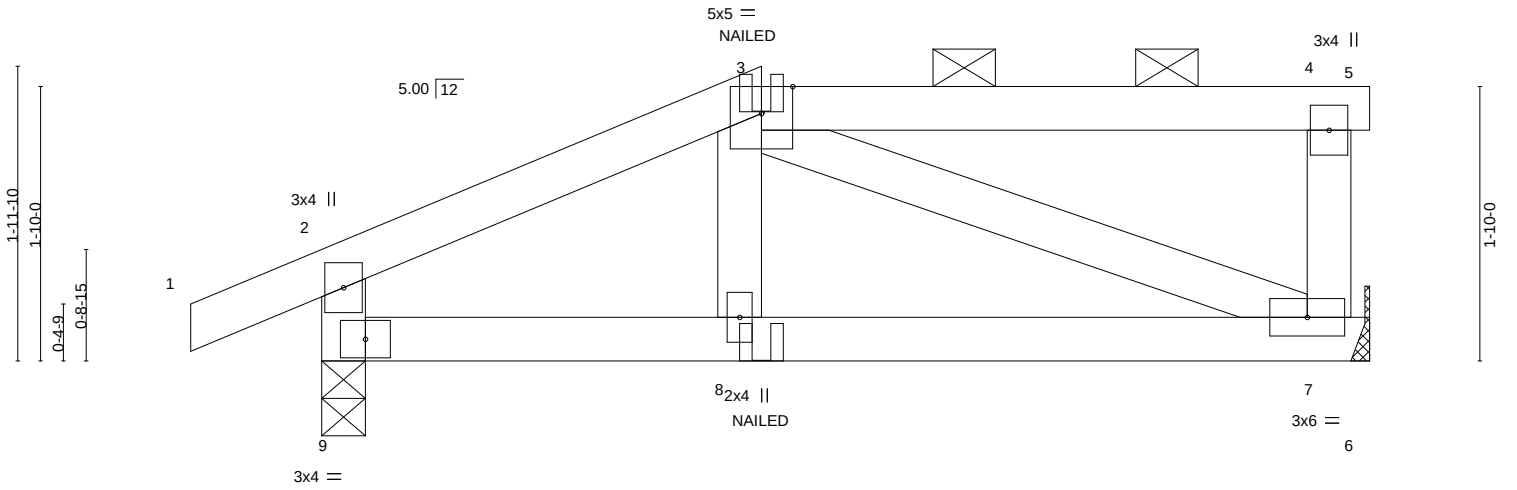

2-11-4 7-0-0
2-11-4 4-0-12

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	0.24	Vert(LL)	-0.01	8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.02	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 25 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 (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 9=0-3-8
Max Horz 9=73(LC 5)
Max Uplift 7=-74(LC 5), 9=-80(LC 4)
Max Grav 7=302(LC 1), 9=373(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-358/67, 2-9=-318/83
BOT CHORD 8-9=-85/288, 7-8=-87/286

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 9 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) 7, 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) 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, 3-4=-70, 4-5=-20, 6-9=-20

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J11	Jack-Open	1	1	I45783374
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:07 2021 Page 1
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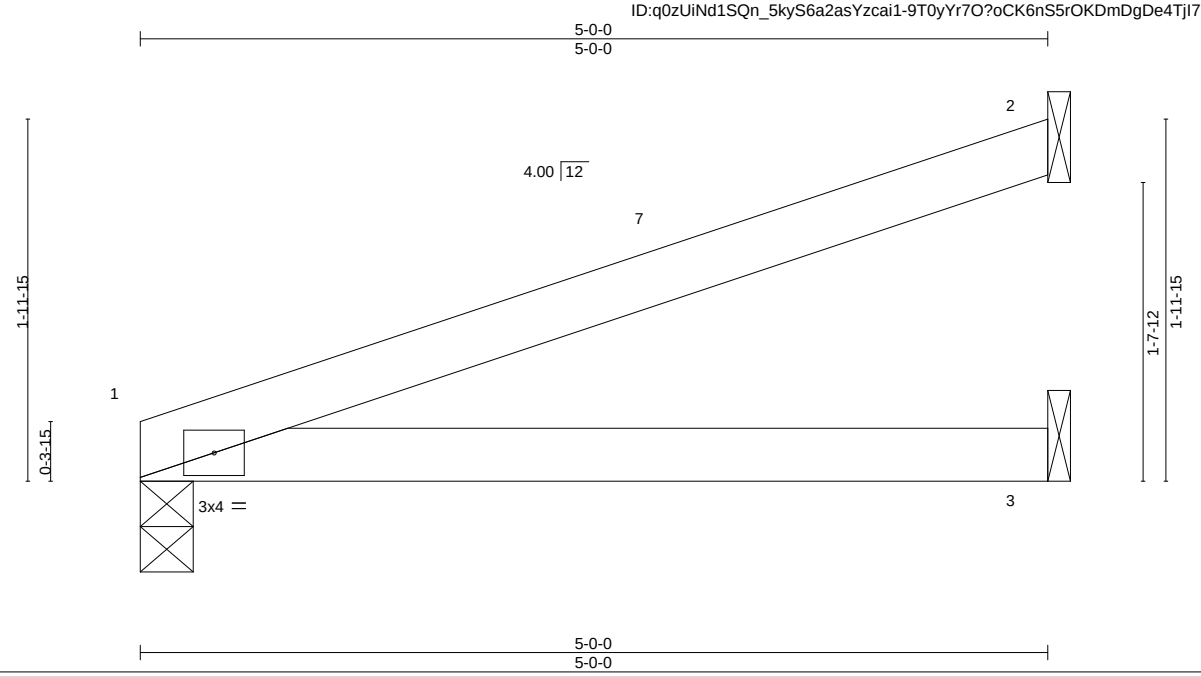

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	0.05	3-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.07	3-6	>859	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=67(LC 8)
Max Uplift 1=-39(LC 8), 2=-64(LC 8)
Max Grav 1=222(LC 1), 2=152(LC 1), 3=89(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J12	Jack-Open	3	1	I45783375

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:08 2021 Page 1
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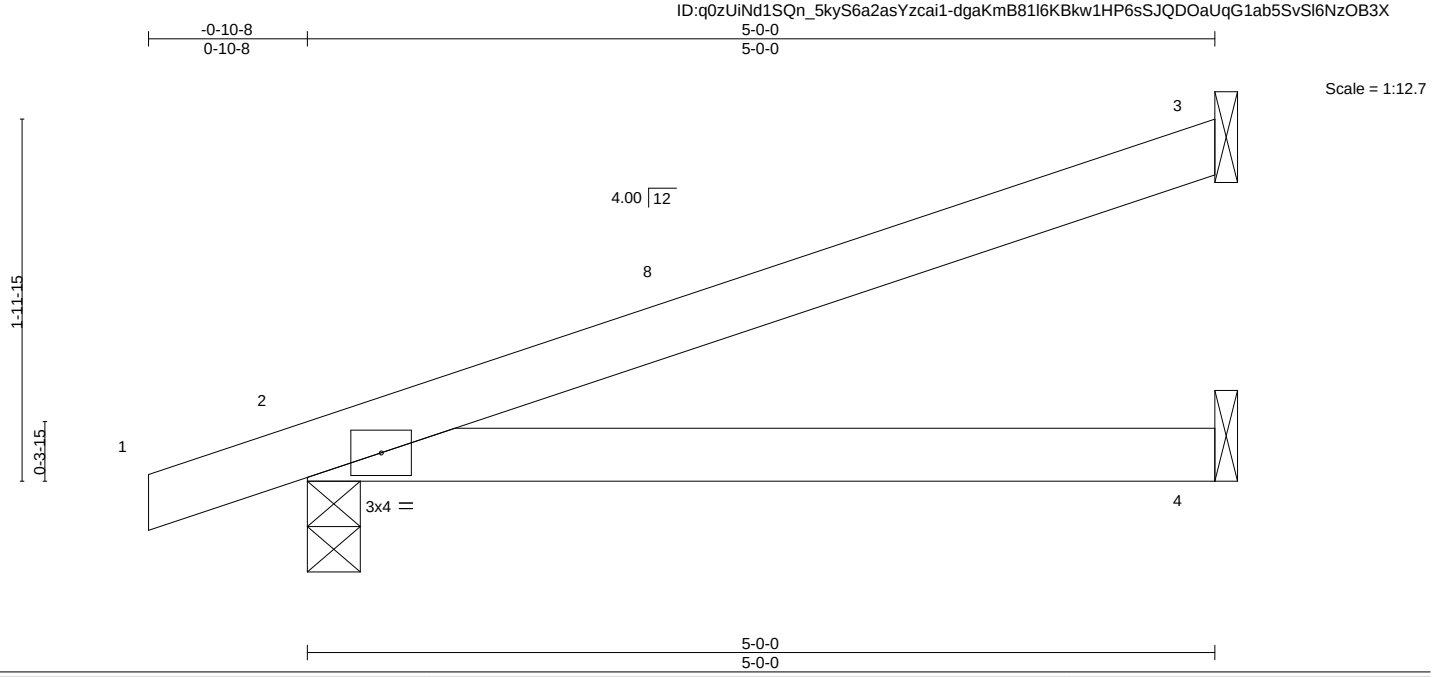

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.04	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.06	4-7	>917	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=83(LC 8)
Max Uplift 3=-63(LC 12), 2=-80(LC 8)
Max Grav 3=149(LC 1), 2=289(LC 1), 4=88(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J13	Jack-Open	1	1	I45783376
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:10 2021 Page 1
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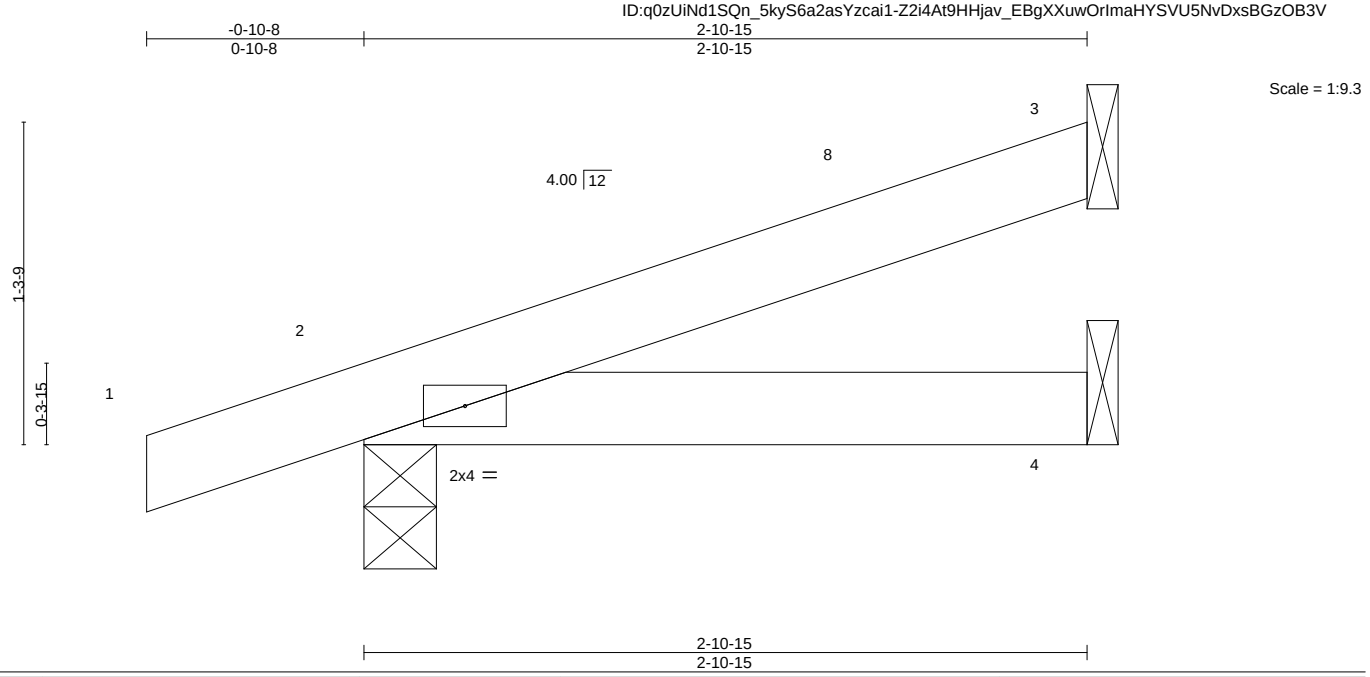

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 8 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 2-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=55(LC 8)
Max Uplift 3=-32(LC 12), 2=-66(LC 8)
Max Grav 3=78(LC 1), 2=199(LC 1), 4=50(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J14	Jack-Open	1	1	I45783377
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:12 2021 Page 1
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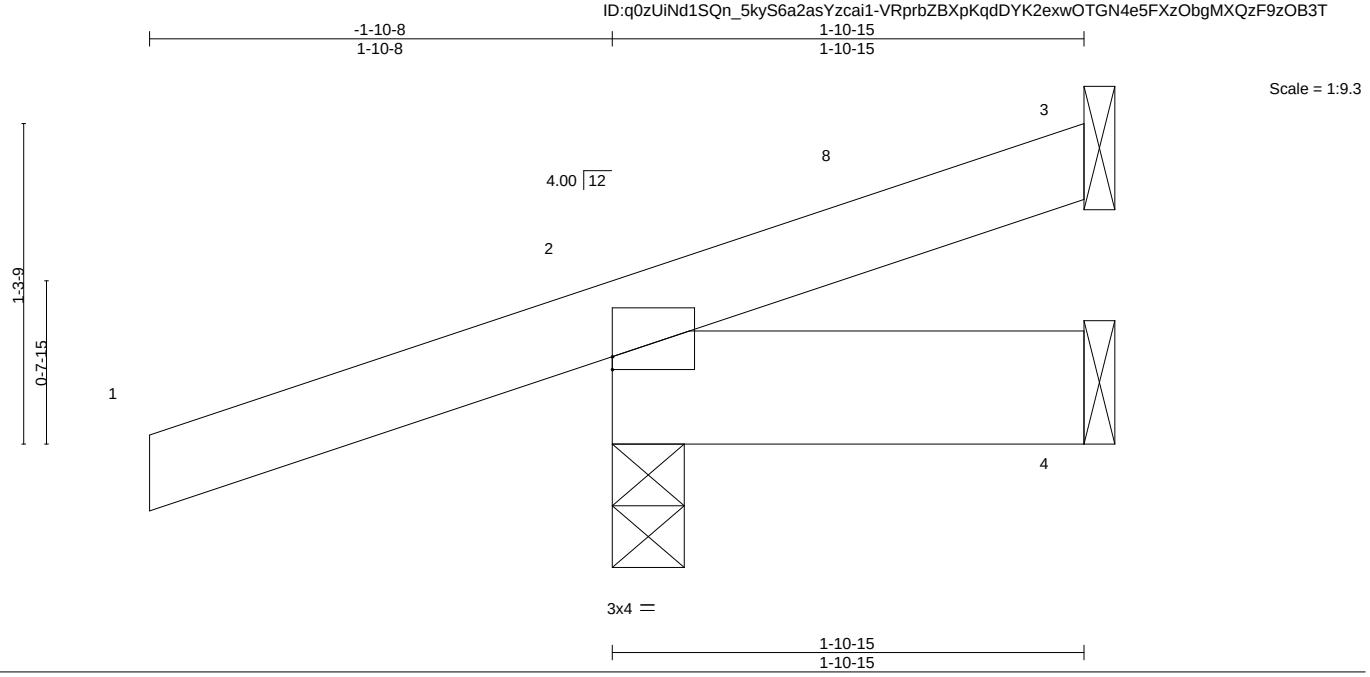

Plate Offsets (X,Y)-- [2:0-0-0,0-0-10]

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	0.24	Vert(LL)	0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=60(LC 8)
Max Uplift 3=-18(LC 12), 2=-130(LC 8), 4=-14(LC 1)
Max Grav 3=35(LC 1), 2=282(LC 1), 4=27(LC 8)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 1-10-13 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=130.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J15	Jack-Open	3	1	I45783378
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:13 2021 Page 1
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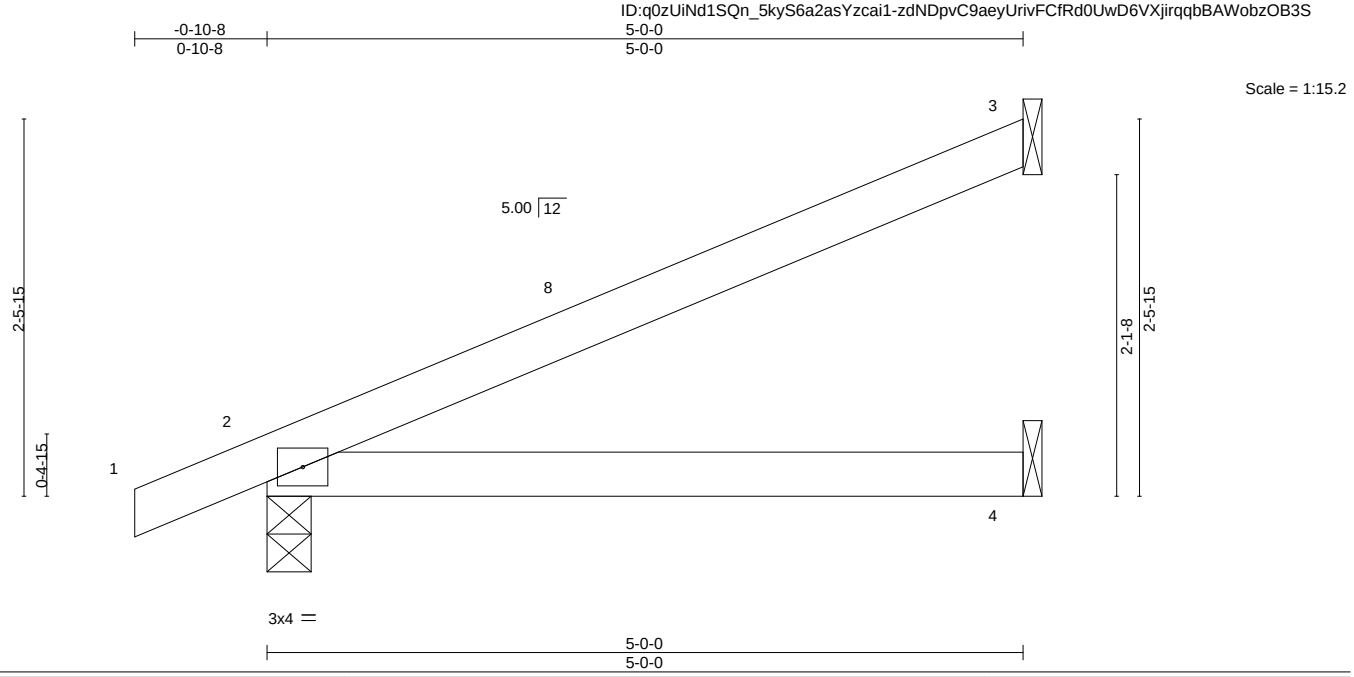

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	0.04	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	4-7	>954	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=97(LC 12)
Max Uplift 3=-72(LC 12), 2=-53(LC 12)
Max Grav 3=152(LC 1), 2=289(LC 1), 4=90(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J16	Jack-Open	4	1	I45783379
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:14 2021 Page 1
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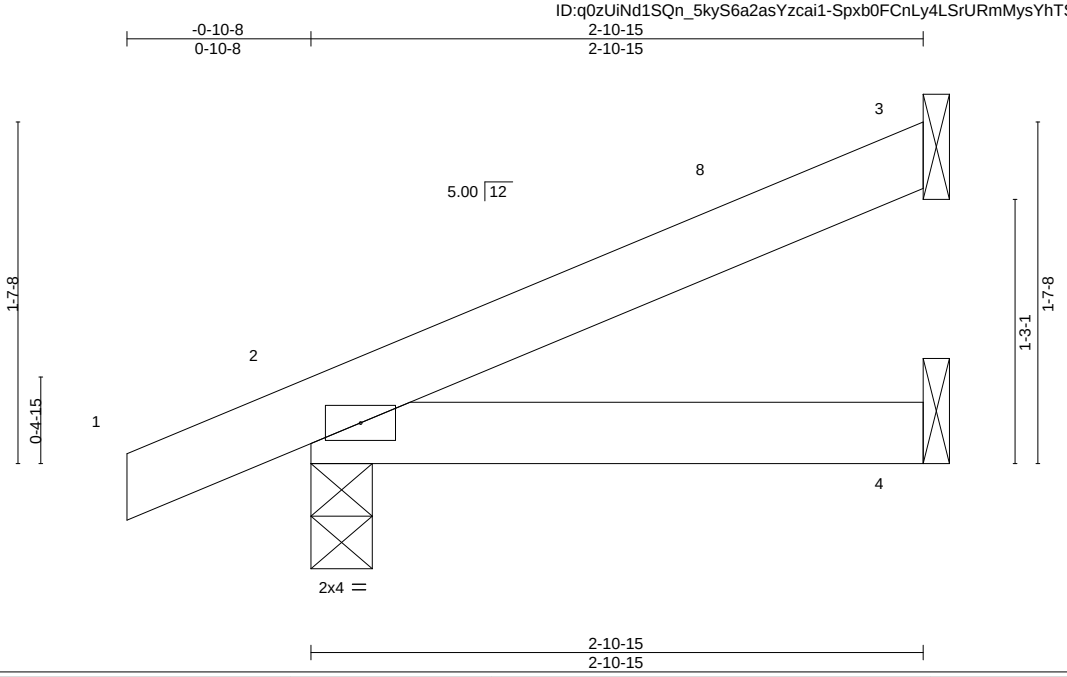

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 8 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 2-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=61(LC 12)
Max Uplift 3=-39(LC 12), 2=-41(LC 12)
Max Grav 3=81(LC 1), 2=199(LC 1), 4=51(LC 3)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	J17	Jack-Open	2	1	I45783380
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:15 2021 Page 1
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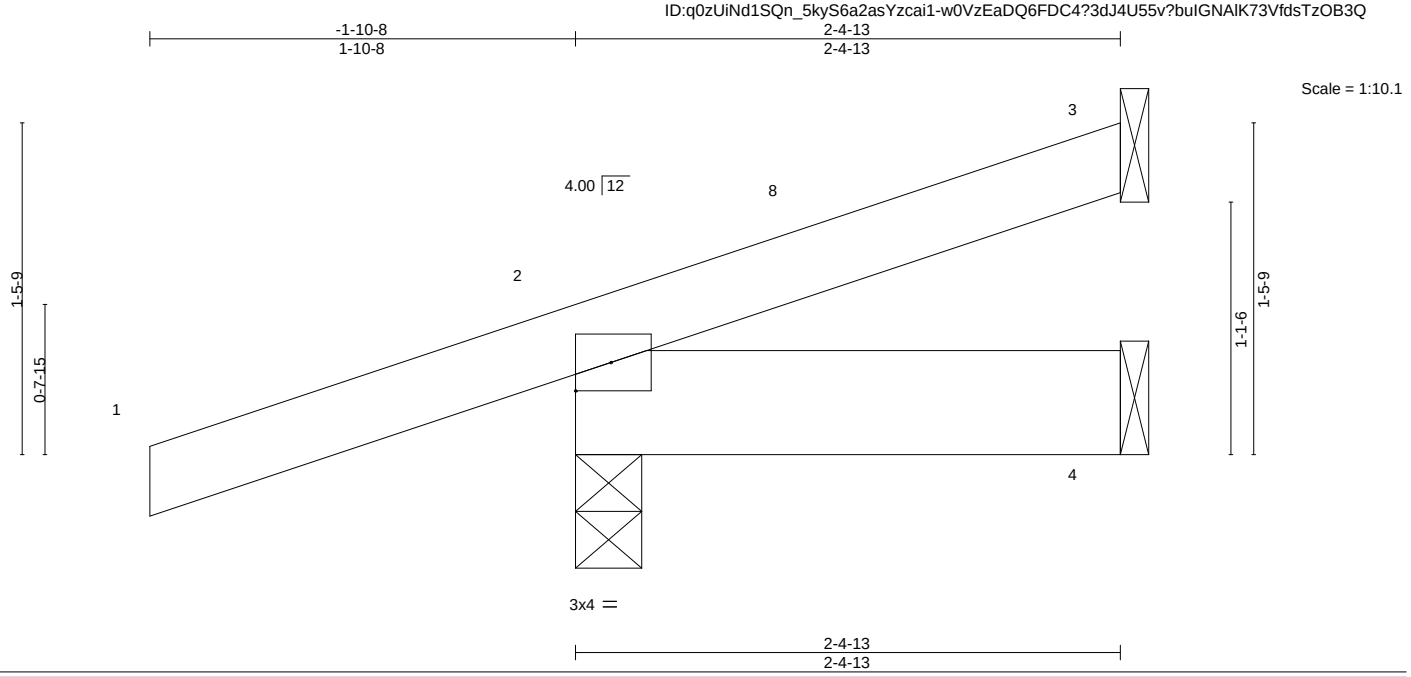

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 3=-25(LC 12), 2=-127(LC 8)
Max Grav 3=50(LC 1), 2=289(LC 1), 4=38(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 2-4-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=127.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	K01	Monopitch	4	1	I45783381
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:16 2021 Page 1
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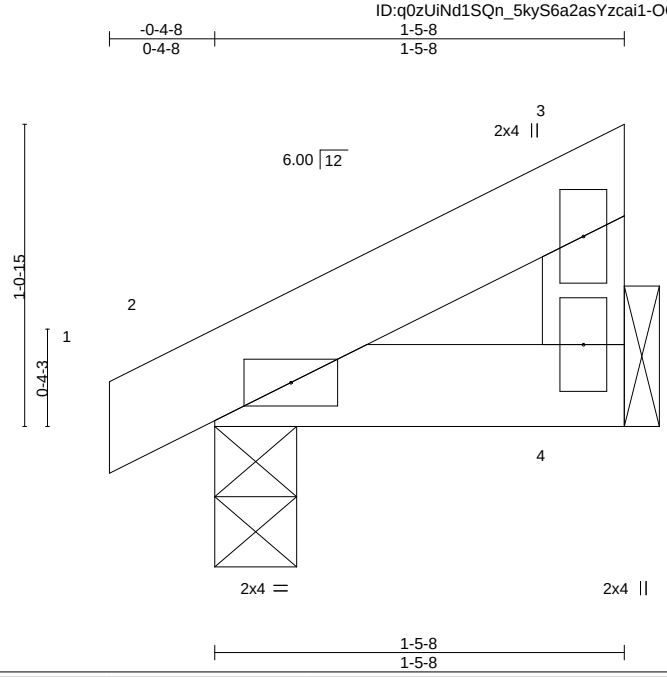

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 5 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=32(LC 11)
Max Uplift 4=-16(LC 12), 2=-20(LC 12)
Max Grav 4=55(LC 1), 2=89(LC 1)

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

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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	LG1	GABLE	1	1	I45783382
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:19 2021 Page 1
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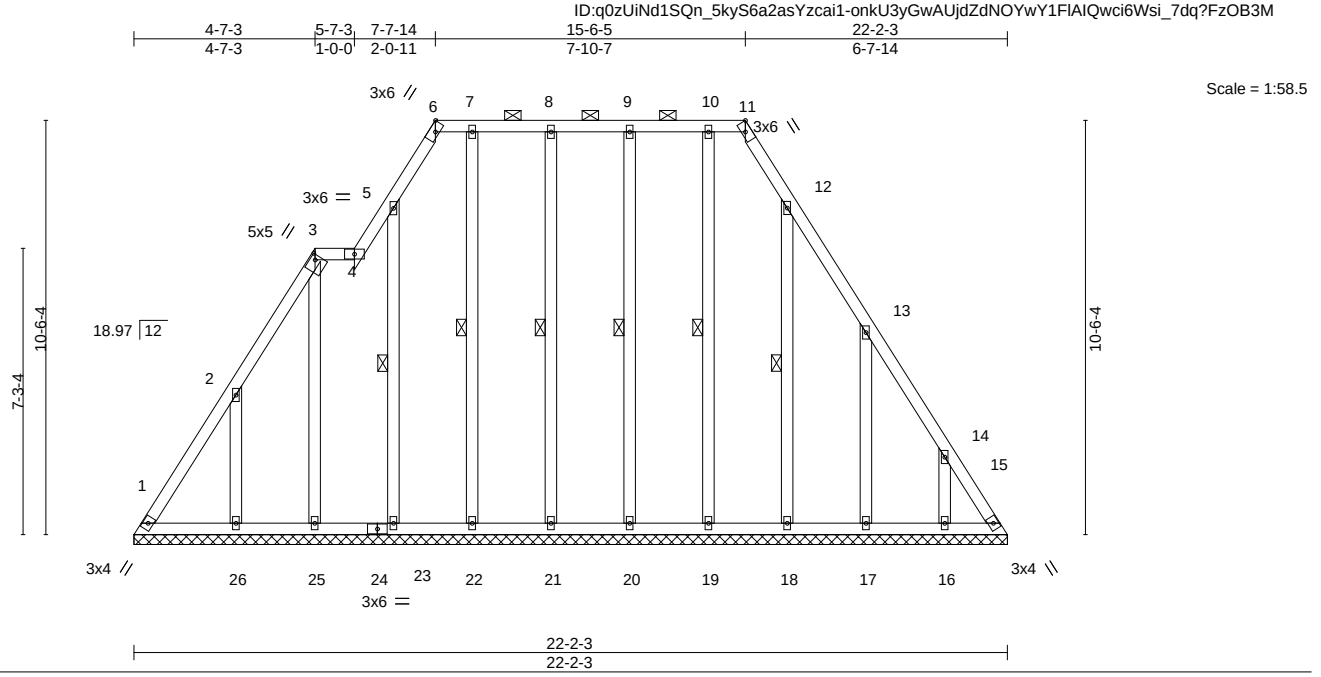

Plate Offsets (X,Y)-- [3:0-1-8,0-1-7], [6:0-2-15,Edge], [11:0-2-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 147 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4, 6-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-23, 7-22, 8-21, 9-20, 10-19, 12-18

REACTIONS. All bearings 22-2-3.
(lb) - Max Horz 1=302(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 23, 22, 21, 20, 19 except 1=-177(LC 10), 15=-240(LC 11), 26=-323(LC 12), 25=-190(LC 12), 18=-160(LC 13), 17=-271(LC 13), 16=-221(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 25, 23, 22, 21, 20, 19, 18, 16 except 1=410(LC 12), 15=468(LC 13), 26=329(LC 19), 17=262(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-505/359, 13-14=-357/239, 14-15=-563/397
BOT CHORD 1-26=-231/332, 25-26=-231/332, 23-25=-231/332, 22-23=-231/332, 21-22=-231/332, 20-21=-231/332, 19-20=-231/332, 18-19=-231/332, 17-18=-231/332, 16-17=-231/332, 15-16=-231/332
WEBS 2-26=-322/326, 13-17=-288/289

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-3 to 3-3-3, Interior(1) 3-3-3 to 4-7-3, Exterior(2E) 4-7-3 to 5-7-3, Interior(1) 5-7-3 to 7-7-14, Exterior(2R) 7-7-14 to 10-7-1, Interior(1) 10-7-1 to 15-6-5, Exterior(2R) 15-6-5 to 18-7-1, Interior(1) 18-7-1 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) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 22, 21, 20, 19 except (jt=lb) 1=177, 15=240, 26=323, 25=190, 18=160, 17=271, 16=221.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	LG2	GABLE	1	1	I45783383
					Job Reference (optional)

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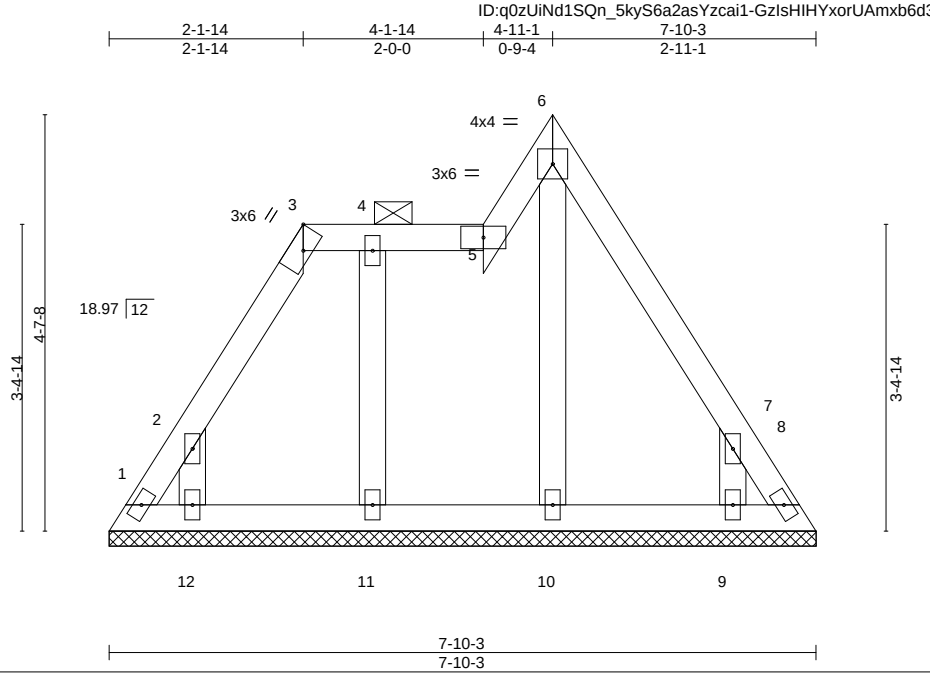

Plate Offsets (X,Y)-- [3:0-2-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%

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

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

REACTIONS. All bearings 7-10-3.
(lb) - Max Horz 1=-124(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 11 except 8=-138(LC 11), 12=-168(LC 12), 9=-225(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 10, 11, 12, 9

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 7-9=-266/239

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-3 to 4-1-14, Interior(1) 4-1-14 to 4-11-1, Exterior(2E) 4-11-1 to 7-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 11 except (jt=lb) 8=138, 12=168, 9=225.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	LG3	GABLE	1	1	I45783384

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:22 2021 Page 1
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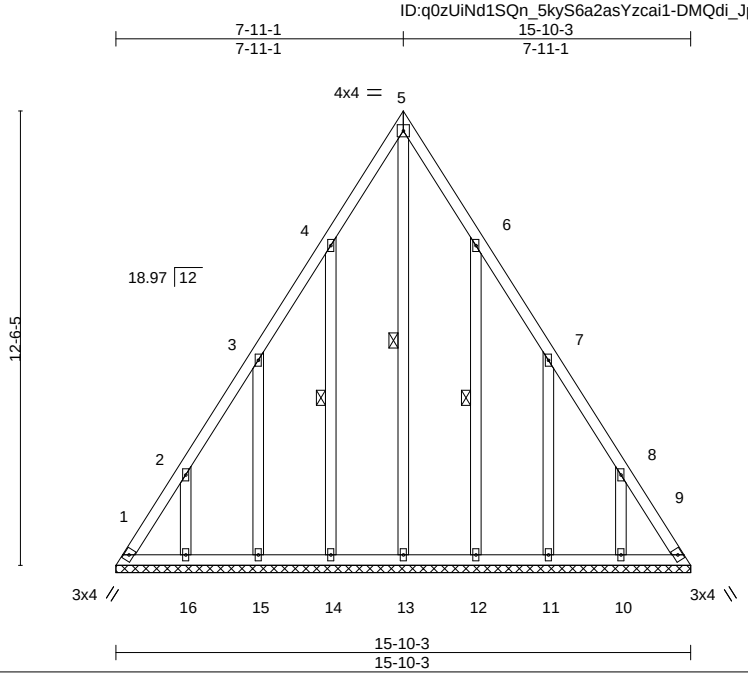

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 103 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-13, 4-14, 6-12

REACTIONS. All bearings 15-10-3.
(lb) - Max Horz 1=-357(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 13 except 1=-272(LC 10), 9=-234(LC 11), 14=-246(LC 12), 15=-248(LC 12), 16=-248(LC 12), 12=-244(LC 13), 11=-249(LC 13), 10=-248(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 1=493(LC 12), 9=470(LC 13), 13=279(LC 13), 14=266(LC 19), 15=250(LC 19), 16=257(LC 19), 12=264(LC 20), 11=251(LC 20), 10=257(LC 20)

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

TOP CHORD	1-2=-596/409, 2-3=-366/271, 7-8=-339/226, 8-9=-570/409
BOT CHORD	1-16=-246/346, 15-16=-246/346, 14-15=-246/346, 13-14=-246/346, 12-13=-246/346, 11-12=-246/346, 10-11=-246/346, 9-10=-246/346
WEBS	5-13=-273/221, 4-14=-268/262, 3-15=-279/268, 2-16=-265/253, 6-12=-268/261, 7-11=-279/268, 8-10=-265/253

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-3 to 3-3-3, Interior(1) 3-3-3 to 7-11-1, Exterior(2R) 7-11-1 to 10-11-1, Interior(1) 10-11-1 to 15-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 1=272, 9=234, 14=246, 15=248, 16=248, 12=244, 11=249, 10=248.
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.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	LG4	GABLE	1	1	I45783385
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:23 2021 Page 1
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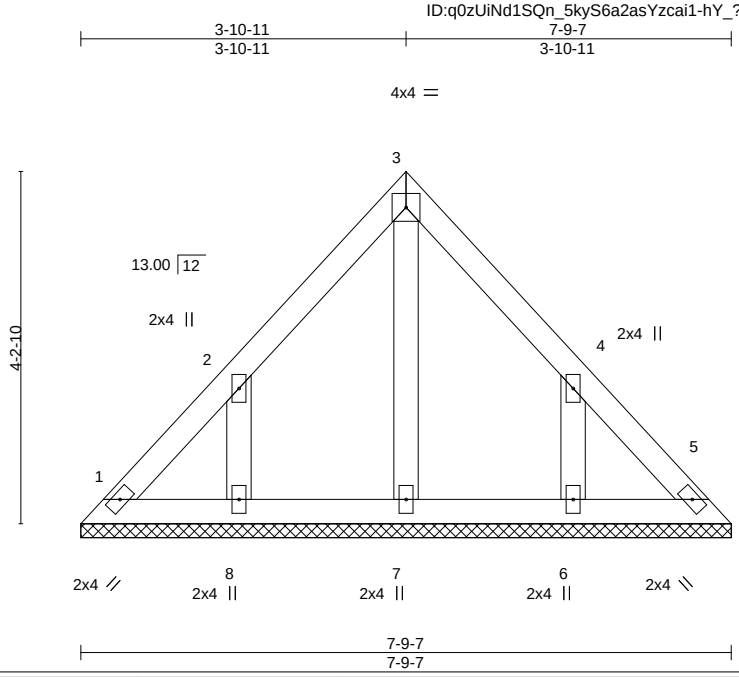

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 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. All bearings 7-9-7.
(lb) - Max Horz 1=103(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-154(LC 12), 6=-153(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 3-10-11, Exterior(2R) 3-10-11 to 6-10-11 , Interior(1) 6-10-11 to 7-5-7 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=154, 6=153.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	LG5	GABLE	1	1	I45783386
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:24 2021 Page 1
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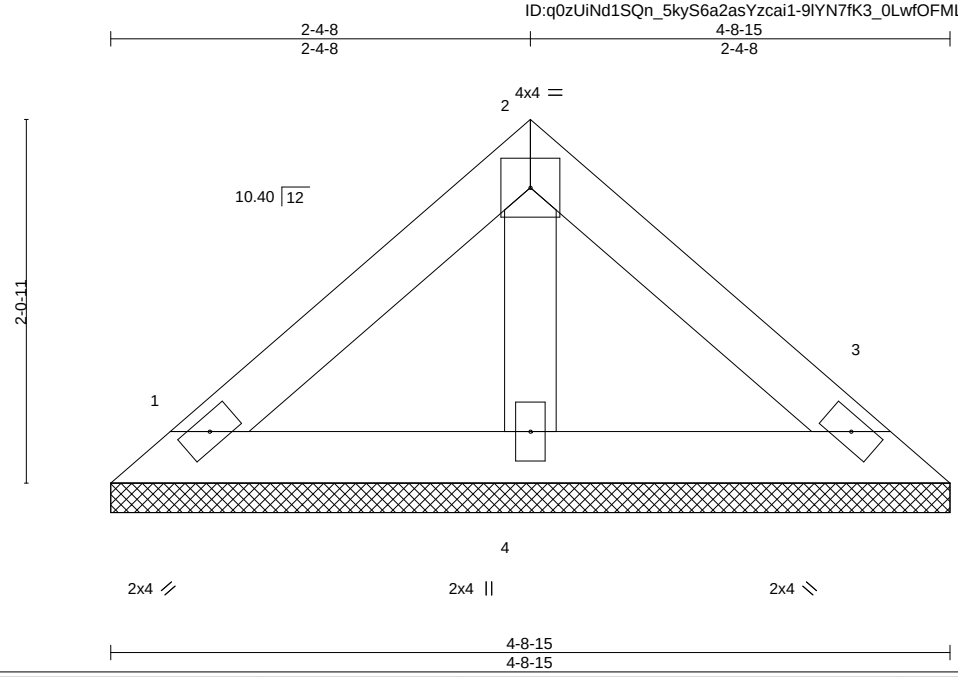


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 13 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 4-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-8-15, 3=4-8-15, 4=4-8-15
Max Horz 1=45(LC 11)
Max Uplift 1=-25(LC 13), 3=-29(LC 13), 4=-3(LC 12)
Max Grav 1=104(LC 1), 3=104(LC 1), 4=149(LC 1)

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

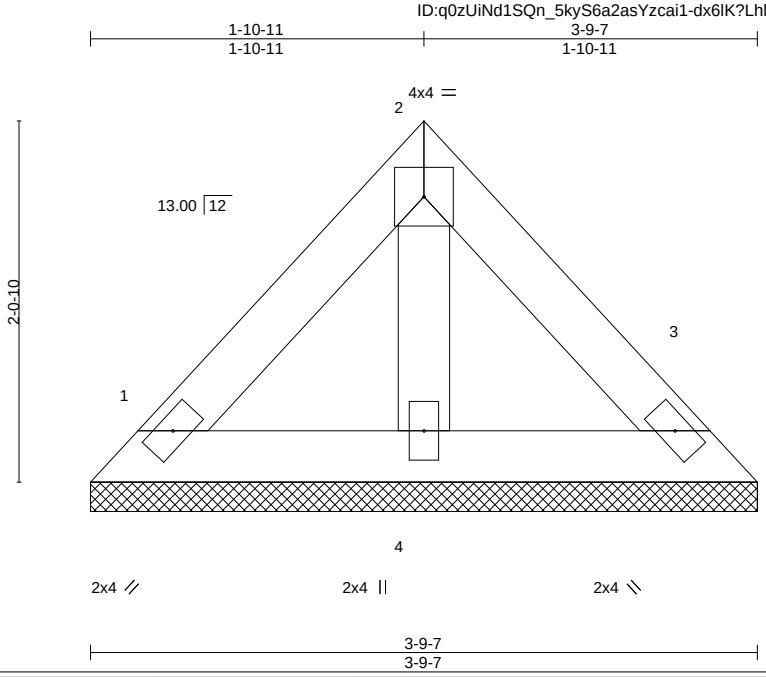
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical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

April 23,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	LG6	Lay-In Gable	1	1	I45783387
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:25 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-dx6lK?LhlKTnHYqYvAfRV0QLPKhtWGgbM249DuzOB3G



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	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-9-7, 3=3-9-7, 4=3-9-7
Max Horz 1=45(LC 9)
Max Uplift 1=-24(LC 13), 3=-22(LC 13)
Max Grav 1=87(LC 1), 3=87(LC 1), 4=107(LC 1)

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

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

April 23,2021

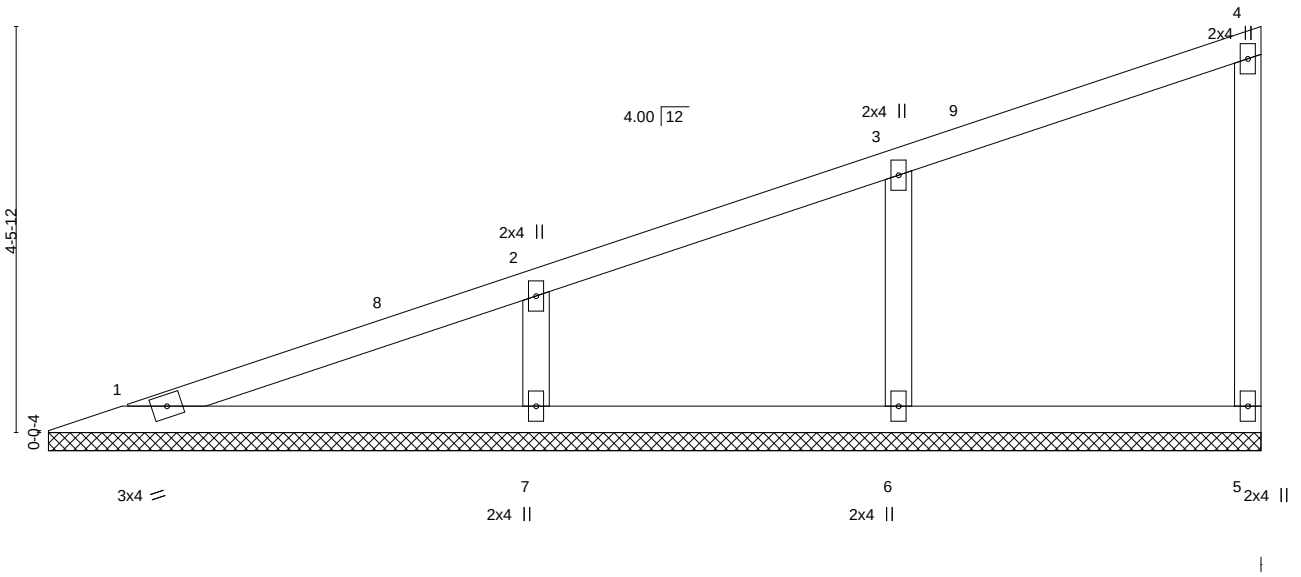
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	V01	Valley	1	1	I45783388
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:27 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-ZJDWlhMxHxjVWr_x0bhvaRVen8Kc_AWupMZGHnzOB3E

13-5-5
13-5-5

Scale = 1:25.4



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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 39 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 13-4-9.
(lb) - Max Horz 1=184(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=-121(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=361(LC 1), 7=436(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-284/168, 2-7=-330/183

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 13-3-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=121.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 23,2021

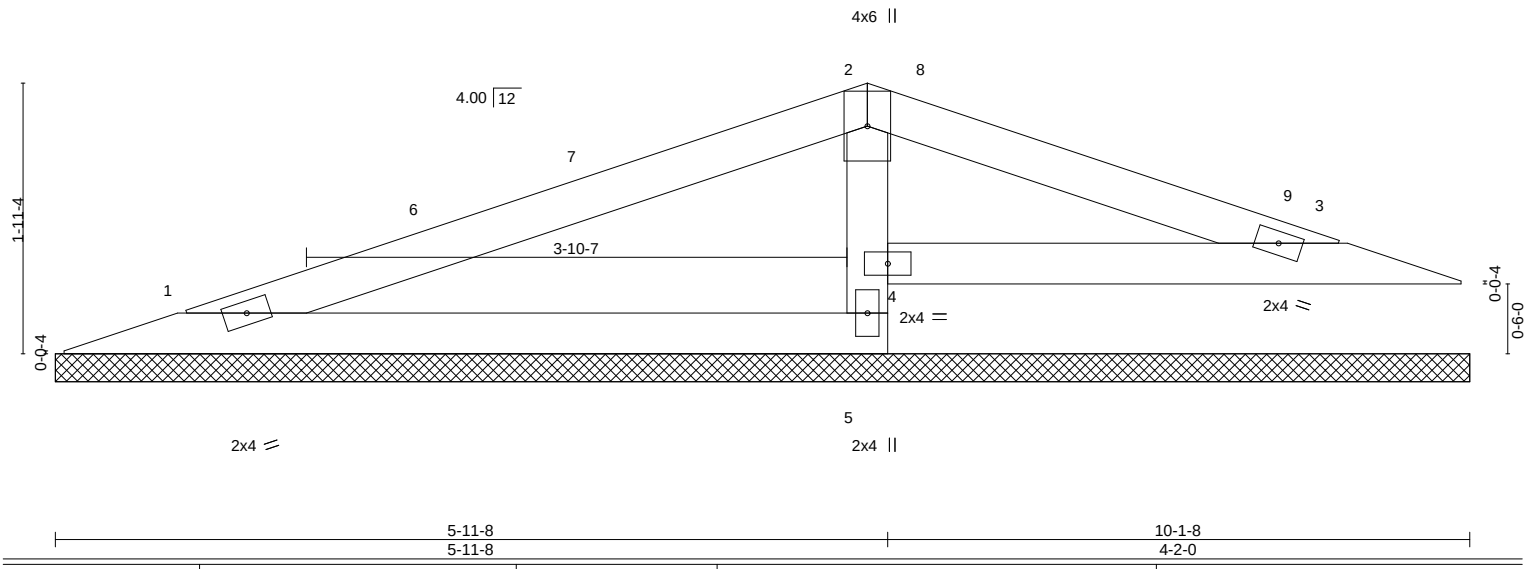
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/141 Woodside
2719855	V02	GABLE	1	1	I45783389
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Apr 22 11:11:30 2021 Page 1
ID:q0zUiNd1SQn_5kyS6a2asYzcai1-_uveNjPqas53NJiWijFcC378xLMTBX2KVKnwu6zOB3B

5-9-12 / 5-9-12 | 10-1-8 / 4-3-12

Scale = 1:16.5



5-11-8 / 5-11-8 | 10-1-8 / 4-2-0

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 23 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 6-0-0 oc bracing.

REACTIONS. All bearings 10-1-8.
(lb) - Max Horz 1=40(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 3, 4
Max Grav All reactions 250 lb or less at joint(s) 1, 3, 5 except 4=347(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-4=-304/251

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 5-9-12, Exterior(2R) 5-9-12 to 8-9-12 , Interior(1) 8-9-12 to 9-2-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 23,2021

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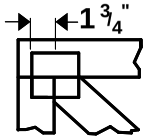
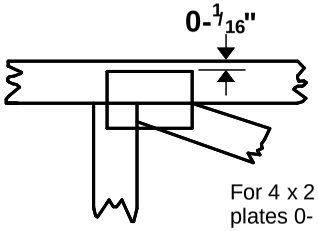
Symbols

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.

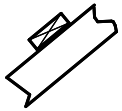
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

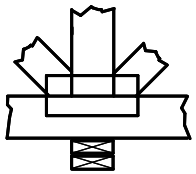
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

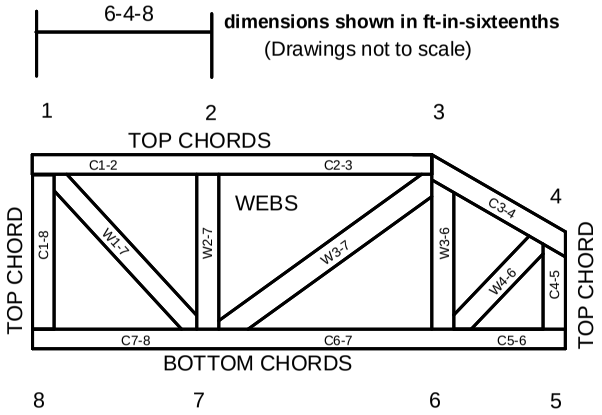


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.