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

Re: 3233392
SUMMIT/HIGHLAND MEADOWS #151/MO

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

Pages or sheets covered by this seal: I53110849 thru I53110918

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193

July 15,2022

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	A1	Monopitch Supported Gable	1	1	I53110849
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:28 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-Aqb6GOxjZobBbQMt56e?CF7gSNBsTmxjpYa0v2yy60b

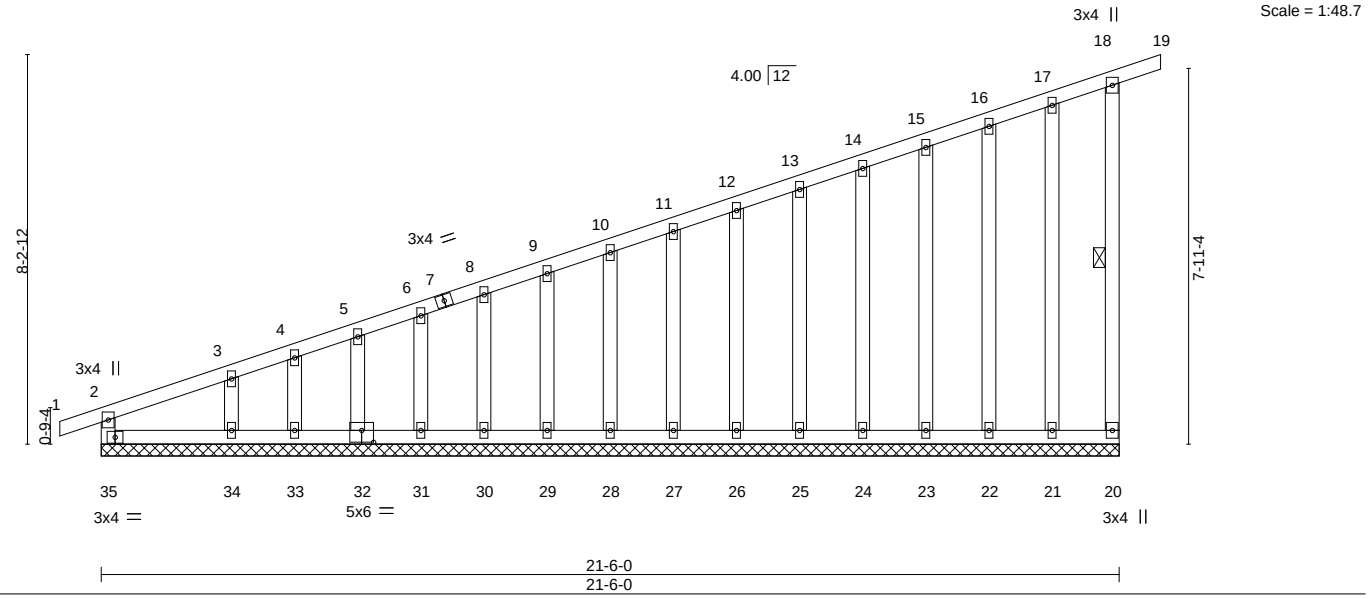


Plate Offsets (X,Y)-- [32:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.00	18	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	19	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 126 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 34-35,33-34,32-33.
WEBS	1 Row at midpt 18-20

REACTIONS. All bearings 21-6-0.
(lb) - Max Horz 35=320(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 20, 28, 29, 30, 31, 32, 27, 26, 25, 24, 23, 22, 21 except 34=-134(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 35, 20, 28, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22, 21

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-411/212, 3-4=-342/178, 4-5=-343/184, 5-6=-318/176, 6-8=-301/171, 8-9=-279/164, 9-10=-259/157

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 22-4-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Bearing at joint(s) 35 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 28, 29, 30, 31, 32, 27, 26, 25, 24, 23, 22, 21 except (jt=lb) 34=134.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	A2	Roof Special Structural Gable	1	1	I53110850

Job Reference (optional)

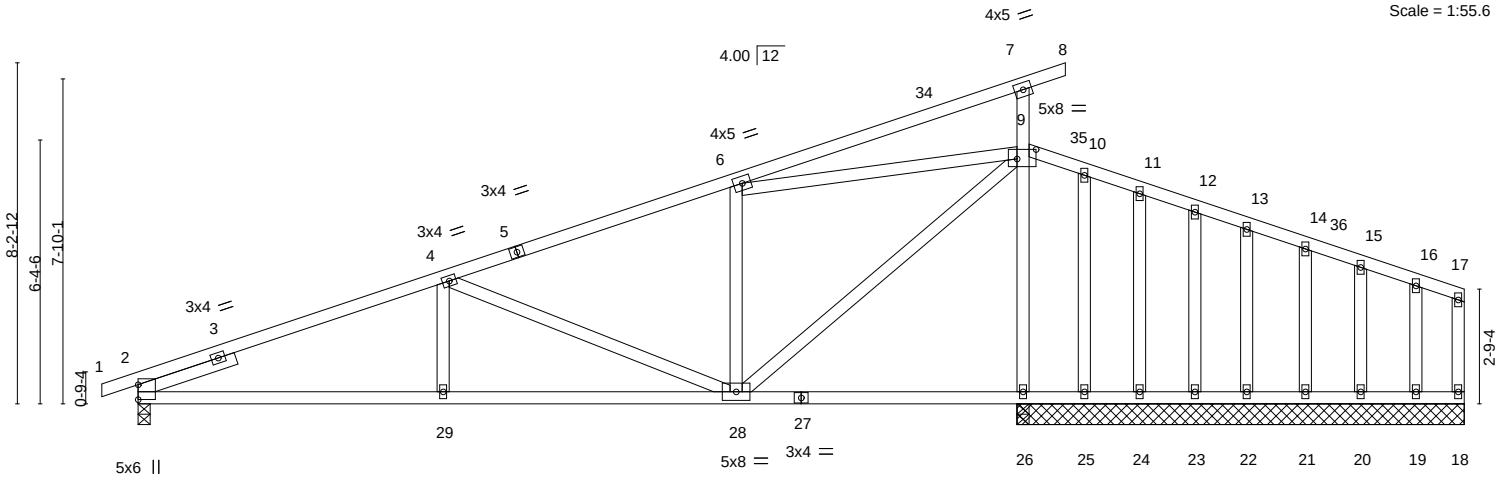
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:30 2022 Page 1

ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-6Cish4z_4PrvrjWGCXgTHgDy0Am2wVE0Gs37_wyy60Z

-0-10-8 7-4-5 14-5-3 21-6-0 26-7-4 32-0-0

0-10-8 7-4-5 7-0-13 7-0-13 5-1-4 5-4-12

Scale = 1:55.6



7-4-5 14-5-3 21-6-0 26-7-4 32-0-0

7-4-5 7-0-13 7-0-13 5-1-4 5-4-12

Plate Offsets (X,Y)-- [9:0-5-8,0-2-12]

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	0.56	Vert(LL)	-0.08	28-29	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.18	28-29	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.04	26	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 157 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-1-2 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 7-9
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 9-5-14 oc bracing: 2-29 9-7-1 oc bracing: 28-29.

REACTIONS. All bearings 10-9-8 except (jt=length) 2=0-3-8.

(lb) - Max Horz 2=225(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 22, 25, 24, 23, 21, 20, 19 except 26=-179(LC 12), 2=-191(LC 8), 18=-109(LC 25)

Max Grav All reactions 250 lb or less at joint(s) 22, 18, 25, 24, 23, 21, 20, 19 except 26=1127(LC 1), 26=1127(LC 1), 2=1008(LC 1)

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

TOP CHORD	2-4=-1765/310, 4-6=-1007/203, 9-26=-965/265, 7-9=-258/200
BOT CHORD	2-29=-378/1625, 28-29=-378/1625
WEBS	4-29=0/266, 4-28=-798/213, 6-28=-341/159, 6-9=-757/273, 9-28=-273/1216

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 25, 24, 23, 21, 20, 19 except (jt=lb) 26=179, 2=191, 18=109.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

July 15,2022

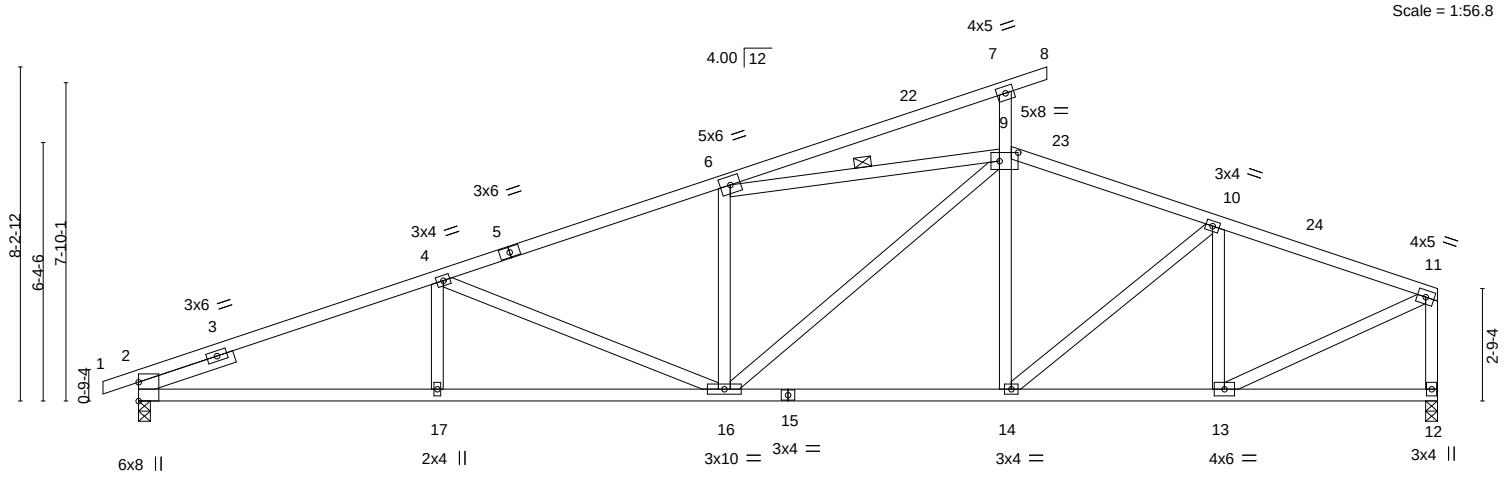
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	A3	Roof Special	10	1	I53110851
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:31 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-bOGEvP_crjzmSt5SmEBiqul2Ba1jf_8AVWpgWNyy60Y

-0-10-8	7-4-5	14-5-3	21-6-0	26-7-4	32-0-0
0-10-8	7-4-5	7-0-13	7-0-13	5-1-4	5-4-12

Scale = 1:56.8



7-4-5	14-5-3	21-6-0	26-7-4	32-0-0
7-4-5	7-0-13	7-0-13	5-1-4	5-4-12

Plate Offsets (X,Y)-- [9:0-5-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.22	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.43	16-17	>879	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.09	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 144 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 7-9
BOT CHORD	Rigid ceiling directly applied or 9-4-1 oc bracing.
WEBS	1 Row at midpt 6-9

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=225(LC 12)
Max Uplift 2=-260(LC 8), 12=-210(LC 9)
Max Grav 2=1502(LC 1), 12=1447(LC 1)

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

TOP CHORD	2-4=-3026/533, 4-6=-2434/474, 7-9=-258/203, 9-10=-1893/544, 10-11=-1677/429, 11-12=-1394/339
BOT CHORD	2-17=-594/2804, 16-17=-594/2804, 14-16=-349/1734, 13-14=-325/1543
WEBS	4-16=-632/184, 6-9=-2134/576, 9-16=-191/757, 10-14=-86/396, 10-13=-621/204, 11-13=-361/1668

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-14, Interior(1) 2-3-14 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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=260, 12=210.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B1	HIP GIRDER	1	2	I53110852

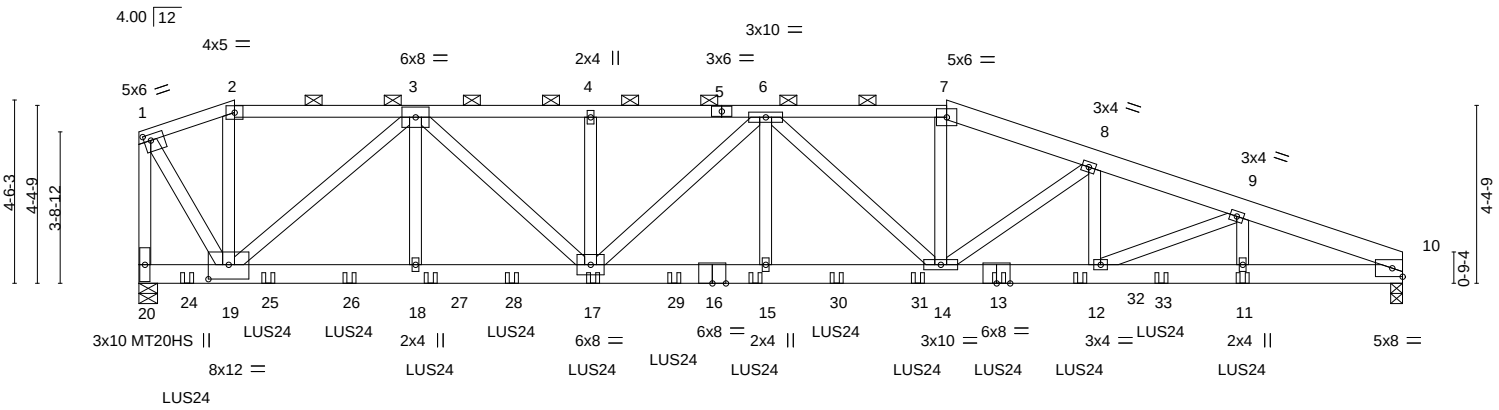
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:34 2022 Page 1

ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-?zyNXR0U8eLLKLq1RMlPRWNbro7OsJDcBU1K7hyy60V

2-4-4	6-9-12	11-1-8	15-5-4	19-10-12	23-6-8	27-2-4	31-1-8
2-4-4	4-5-8	4-3-12	4-3-12	4-5-8	3-7-12	3-7-12	3-11-4

Scale = 1:56.8



2-4-4	6-9-12	11-1-8	15-5-4	19-10-12	23-6-8	27-2-4	31-1-8
2-4-4	4-5-8	4-3-12	4-3-12	4-5-8	3-7-12	3-7-12	3-11-4

Plate Offsets (X,Y)-- [1:0-2-0,0-1-12], [19:0-6-0,0-4-4]

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	0.70	Vert(LL)	-0.25	14-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.44	14-15	>836	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 344 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 7-10: 2x6 SPF No.2

BOT CHORD 2x6 SPF 2100F 1.8E *Except* 10-13: 2x6 SP 2400F 2.0E

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-11 max.): 2-7.

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

REACTIONS. (size) 10=0-3-8, 20=0-5-8

Max Horz 20=-124(LC 27)

Max Uplift 10=-983(LC 5), 20=-1092(LC 4)

Max Grav 10=4624(LC 1), 20=5078(LC 1)

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

TOP CHORD 1-2=-2649/609, 2-3=-2497/583, 3-4=-9082/2033, 4-6=-9082/2033, 6-7=-9247/2065, 7-8=-9653/2133, 8-9=-10948/2378, 9-10=-10589/2273, 1-20=-4921/1066

BOT CHORD 18-19=-1395/6790, 17-18=-1395/6790, 15-17=-2092/9962, 14-15=-2092/9962, 12-14=-2191/10404, 11-12=-2093/9866, 10-11=-2093/9866

WEBS 2-19=-127/615, 3-19=-5700/1259, 3-18=-234/1243, 3-17=-685/3134, 4-17=-277/102, 6-17=-1207/267, 6-15=-217/1154, 6-14=-1125/256, 7-14=-559/2678, 8-14=-1564/373, 8-12=-194/1013, 9-12=-136/681, 1-19=-1026/4784

NOTES-

1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-7-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=983, 20=1092.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-2-4 from the left end to 27-2-4 to connect truss(es) to front face of bottom chord.

July 15,2022

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

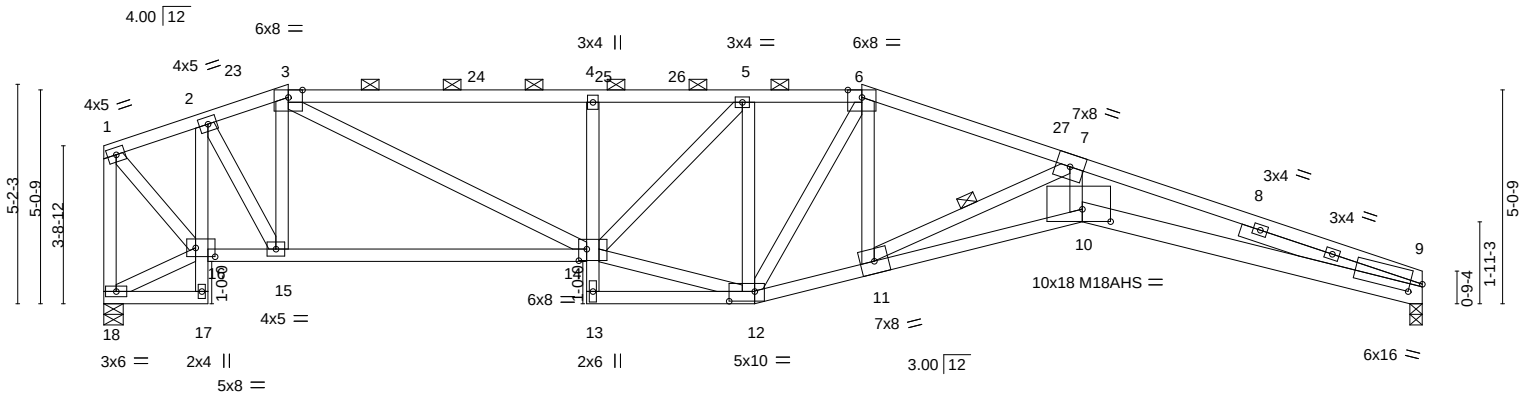
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-7=-70, 7-10=-70, 20-21=-20
   Concentrated Loads (lb)
   Vert: 17=-482(F) 15=-482(F) 11=-694(F) 13=-476(F) 24=-469(F) 25=-469(F) 26=-482(F) 27=-482(F) 28=-482(F) 29=-482(F) 30=-482(F) 31=-482(F) 32=-476(F) 33=-476(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B2	Hip	1	1	I53110853
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:38 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-ulBuNp3?Csrnoy7ogCpLcMYF?PSdo7SB65?YGTyy60R

2-5-8	4-4-4	11-4-13	15-4-6	17-10-12	23-1-3	24-4-6	31-1-8
2-5-8	1-10-12	7-0-9	3-11-9	2-6-6	5-2-7	1-3-3	6-9-2

Scale = 1:54.4



2-5-8	4-4-4	11-4-13	15-4-6	17-10-12	23-1-3	31-1-8
2-5-8	1-10-12	7-0-9	3-11-9	2-6-6	5-2-7	8-0-5

Plate Offsets (X,Y)-- [9:0-3-6,0-3-0], [10:0-8-0,0-3-8], [12:0-7-4,0-2-12], [14:0-2-4,0-3-4], [16:0-5-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.53	10-11	>696	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.97	10-11	>384	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.38	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 159 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 6-9: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 10-12: 2x4 SP 2400F 2.0E, 9-10: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 4-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-11

REACTIONS. (size) 9=0-3-8, 18=0-5-8
Max Horz 18=-117(LC 10)
Max Uplift 9=-243(LC 9), 18=-224(LC 8)
Max Grav 9=1394(LC 1), 18=1394(LC 1)

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

TOP CHORD	1-2=-960/228, 2-3=-1426/315, 3-4=-2758/579, 4-5=-2697/566, 5-6=-2268/510, 6-7=-2808/569, 7-9=-6878/1222, 1-18=-1352/270
BOT CHORD	2-16=-966/217, 15-16=-102/887, 14-15=-174/1400, 4-14=-464/166, 11-12=-419/2695, 10-11=-1059/6277, 9-10=-1110/6608
WEBS	2-15=-198/962, 3-15=-697/234, 3-14=-312/1565, 12-14=-324/2210, 5-14=-86/624, 5-12=-633/133, 6-12=-709/131, 6-11=-155/1121, 7-10=-448/2986, 1-16=-207/1297, 7-11=-3876/716

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 4-4-4, Exterior(2R) 4-4-4 to 8-9-1, Interior(1) 8-9-1 to 17-10-12, Exterior(2R) 17-10-12 to 22-3-9, Interior(1) 22-3-9 to 31-1-8 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) 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) 9=243, 18=224.
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.

July 15,2022

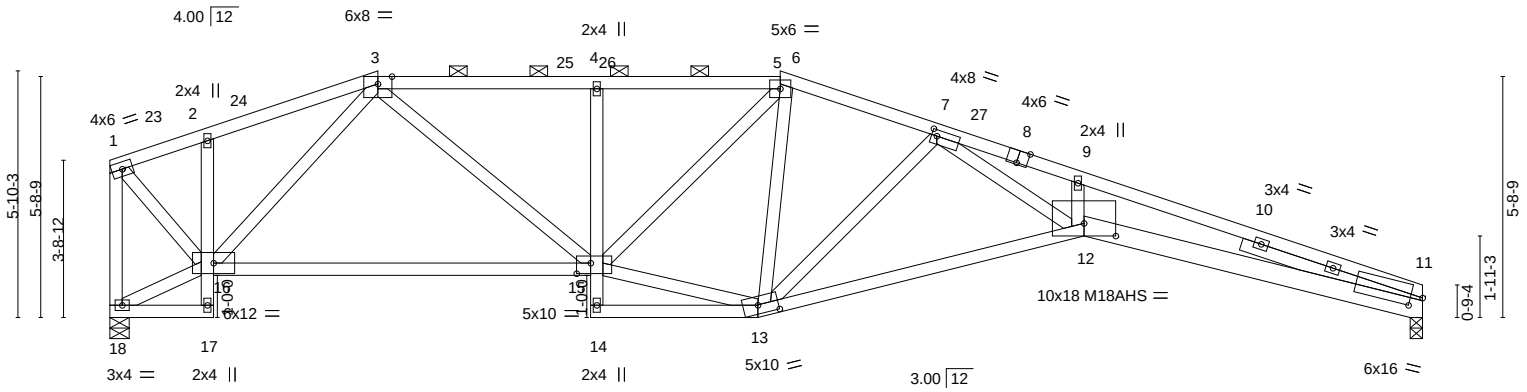
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B3	Hip	1	1	I53110854
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:39 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-MxlGa94dzAzdQ6i_EwLa8a5QGppIXWXLLll5ovyy60Q

2-5-8	6-4-4	11-4-13	15-10-12	19-7-5	23-1-3	23-4-6	31-1-8
2-5-8	3-10-12	5-0-9	4-5-15	3-8-9	3-5-14	0-3-3	7-9-2

Scale = 1:54.6



2-5-8	6-4-4	11-4-13	15-4-6	15-10-12	23-1-3	31-1-8
2-5-8	3-10-12	5-0-9	3-11-9	0-6-6	7-2-7	8-0-5

Plate Offsets (X,Y)-- [7:0-1-8,0-1-12], [8:0-3-0,Edge], [11:0-3-6,0-3-0], [12:0-9-0,0-3-10], [13:0-5-12,0-2-8], [15:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.51	12-13	>724	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-1.00	12-13	>373	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.37	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 152 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 5-8,8-11: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 12-13: 2x4 SPF 1650F 1.5E, 11-12: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except* 7-12: 2x4 SPF 1650F 1.5E
SLIDER	Right 2x4 SPF No.2 4-6-0

BRACING-

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

REACTIONS. (size) 11=0-3-8, 18=0-5-8
Max Horz 18=-109(LC 10)
Max Uplift 11=-238(LC 9), 18=-212(LC 8)
Max Grav 11=1394(LC 1), 18=1394(LC 1)

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

TOP CHORD	1-2=-974/219, 2-3=-1026/268, 3-4=-2329/512, 4-5=-2305/514, 5-6=-1922/448, 6-7=-2089/465, 7-9=-6855/1241, 9-11=-6968/1198, 1-18=-1389/250
BOT CHORD	15-16=-221/1542, 4-15=-428/150, 12-13=-530/3208, 11-12=-1087/6693
WEBS	3-15=-184/1091, 13-15=-236/2008, 5-15=-85/580, 1-16=-214/1362, 3-16=-901/259, 7-12=-677/4120, 7-13=-1650/345

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 6-4-4, Exterior(2R) 6-4-4 to 10-9-1, Interior(1) 10-9-1 to 15-10-12, Exterior(2R) 15-10-12 to 20-3-9, Interior(1) 20-3-9 to 31-1-8 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) Bearing at joint(s) 11 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) 11=238, 18=212.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B4	Hip	1	1	I53110855
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:40 2022 Page 1
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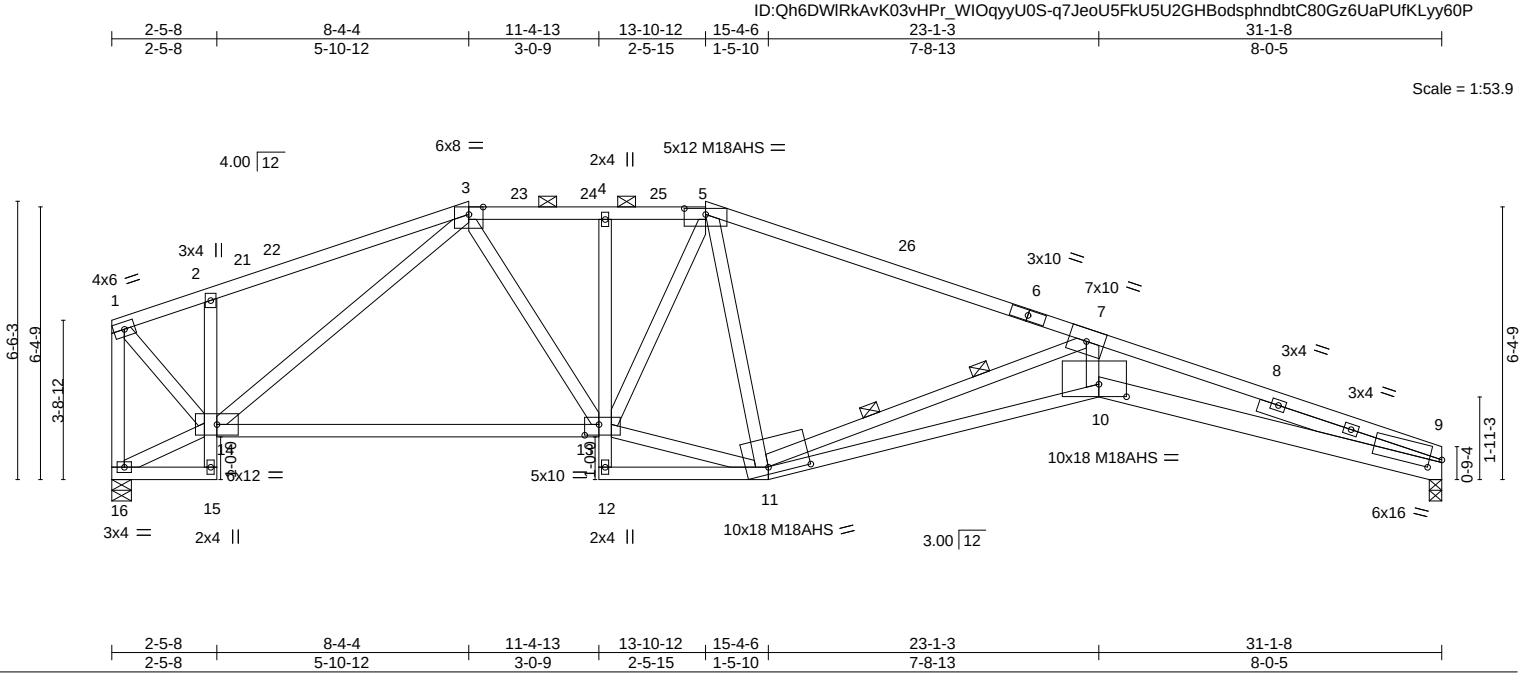

Plate Offsets (X,Y)-- [5:0-6-0,0-1-11], [9:0-3-6,0-3-0], [10:0-7-12,0-3-8], [11:0-11-12,0-2-0], [13:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.66	10-11	>560	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-1.23	10-11	>303	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.47	9	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* 5-6,6-9: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 10-11: 2x4 SP 2400F 2.0E, 9-10: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except* 7-11: 2x4 SPF 1650F 1.5E
SLIDER	Right 2x4 SPF No.2 4-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-2-4 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	2 Rows at 1/3 pts 7-11

REACTIONS. (size) 9=0-3-8, 16=0-5-8
Max Horz 16=-101(LC 10)
Max Uplift 9=-231(LC 9), 16=-199(LC 8)
Max Grav 9=1394(LC 1), 16=1394(LC 1)

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

TOP CHORD	1-2=-982/224, 2-3=-1097/304, 3-4=-1984/472, 4-5=-1958/470, 5-7=-2081/459, 7-9=-7093/1272, 1-16=-1380/248
BOT CHORD	2-14=-368/159, 13-14=-243/1640, 10-11=-1116/6497, 9-10=-1159/6827
WEBS	3-13=-101/748, 11-13=-240/2003, 5-13=-16/309, 7-11=-4757/886, 7-10=-450/3132, 1-14=-234/1400, 3-14=-870/234

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 8-4-4, Exterior(2R) 8-4-4 to 12-9-1, Interior(1) 12-9-1 to 13-10-12, Exterior(2R) 13-10-12 to 18-3-9, Interior(1) 18-3-9 to 31-1-8 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) The Fabrication Tolerance at joint 11 = 8%
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) 9 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) 9=231, 16=199.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B5	Hip	1	1	I53110856
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:42 2022 Page 1

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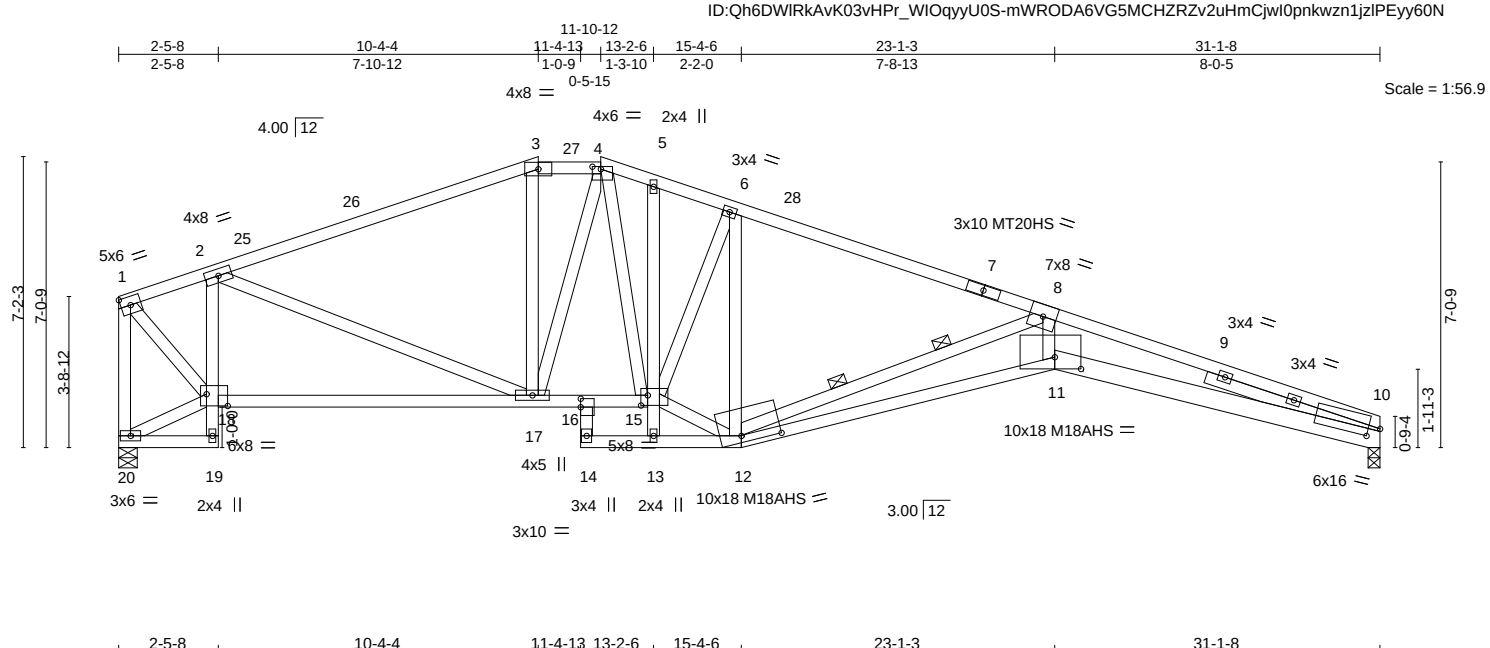


Plate Offsets (X,Y)-- [4:0-2-8,0-0-12], [10:0-3-6,0-3-0], [11:0-7-12,0-3-8], [12:0-11-12,0-2-0], [15:0-2-0,0-3-0], [16:0-2-8,0-0-0], [18:0-6-4,0-3-8]

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	0.86	Vert(LL)	-0.65	11-12	>574	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-1.20	11-12	>309	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.45	10	n/a	n/a	M18AHS	142/136
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 167 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 7-10: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 11-12: 2x4 SP 2400F 2.0E, 10-11: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except* 8-12: 2x4 SPF 1650F 1.5E
SLIDER	Right 2x4 SPF No.2 4-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-6 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied.
WEBS	2 Rows at 1/3 pts 8-12

REACTIONS. (size) 10=0-3-8, 20=0-5-8
Max Horz 20=-106(LC 17)
Max Uplift 10=-222(LC 9), 20=-183(LC 8)
Max Grav 10=1394(LC 1), 20=1394(LC 1)

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

TOP CHORD	1-2=-1006/222, 2-3=-1871/407, 3-4=-1689/427, 4-5=-1902/462, 5-6=-2036/479, 6-8=-2136/452, 8-10=-7028/1206, 1-20=-1355/229
BOT CHORD	2-18=-977/297, 17-18=-138/1046, 16-17=-204/1721, 15-16=-188/1482, 11-12=-1052/6428, 10-11=-1094/6760
WEBS	2-17=-133/718, 3-17=-85/283, 6-12=-280/95, 8-11=-427/3111, 4-17=-329/161, 1-18=-238/1438, 8-12=-4611/802, 5-15=-78/330, 12-15=-283/1914, 6-15=-473/186, 4-15=-173/609

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 10-4-4, Exterior(2E) 10-4-4 to 11-10-12 , Exterior(2R) 11-10-12 to 16-3-9, Interior(1) 16-3-9 to 31-1-8 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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=222, 20=183.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

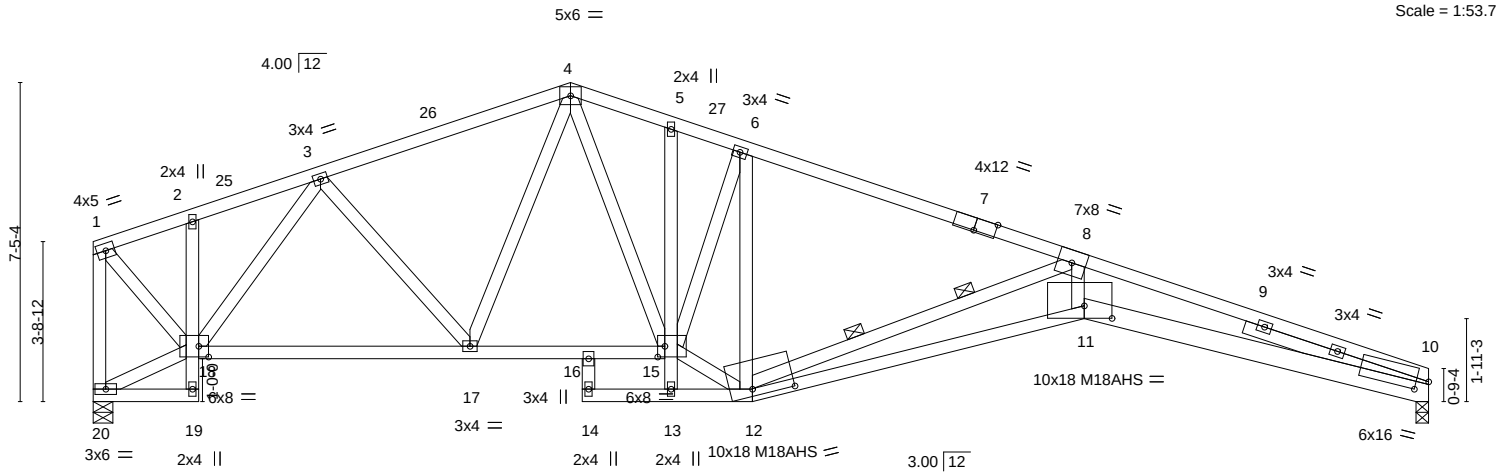
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B6	Roof Special	2	1	I53110857
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:43 2022 Page 1

ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-Ei?mQW770PU3vj0mTlPWJQF5yQ93TNFxGNjJxgyy60M

2-5-8	5-3-9	6-9-8	11-1-8	13-5-10	15-4-6	23-1-3	31-1-8
2-5-8	2-10-1	1-5-15	4-4-0	2-4-2	1-10-12	7-8-13	8-0-5

Scale = 1:53.7



2-5-8	8-9-6	11-4-13	13-5-10	15-4-6	23-1-3	31-1-8
2-5-8	6-3-14	2-7-7	2-0-13	1-10-12	7-8-13	8-0-5

Plate Offsets (X,Y)-- [7:0-6-0,Edge], [10:0-3-6,0-3-0], [11:0-7-12,0-3-8], [12:0-11-12,0-2-0], [15:0-2-0,0-3-0], [18:0-2-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.64	11-12	>577	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-1.20	11-12	>310	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.46	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 165 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	7-10: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	11-12: 2x4 SP 2400F 2.0E, 10-11: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except*
	8-12: 2x4 SPF 1650F 1.5E
SLIDER	Right 2x4 SPF No.2 4-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	2 Rows at 1/3 pts 8-12

REACTIONS. (size) 10=0-3-8, 20=0-5-8
Max Horz 20=-111(LC 17)
Max Uplift 10=-218(LC 9), 20=-177(LC 8)
Max Grav 10=1394(LC 1), 20=1394(LC 1)

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

TOP CHORD	1-2=-951/196, 2-3=-958/216, 3-4=-1764/382, 4-5=-1999/450, 5-6=-2116/463, 6-8=-2137/432, 8-10=-7016/1158, 1-20=-1367/225
BOT CHORD	17-18=-180/1454, 16-17=-166/1616, 15-16=-145/1471, 11-12=-1008/6417, 10-11=-1048/6748
WEBS	8-12=-4597/777, 8-11=-408/3108, 5-15=-77/280, 6-12=-436/95, 12-15=-265/2051, 6-15=-373/189, 4-15=-186/896, 3-17=-31/348, 3-18=-971/227, 1-18=-179/1317

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 11-1-8, Exterior(2R) 11-1-8 to 14-2-14, Interior(1) 14-2-14 to 31-1-8 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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=218, 20=177.
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.

July 15,2022

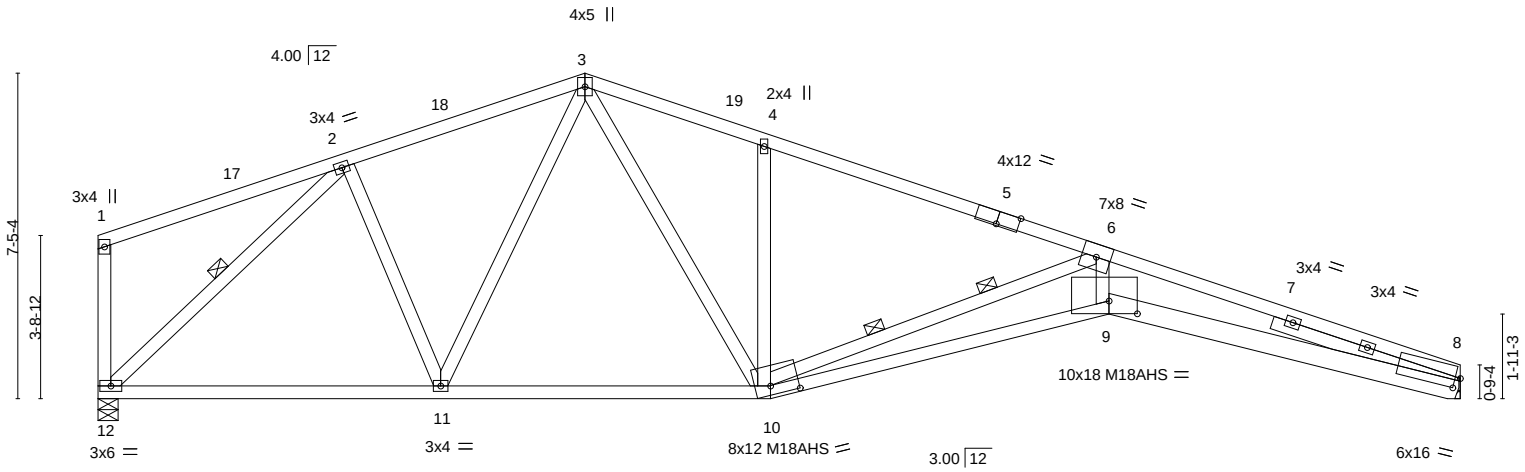
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B7	Roof Special	3	1	I53110858
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:44 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-ivZ9ds8mnicwWtby1TwlrdoH6qVGCqP4U1SsT6yy60L

5-8-8	11-1-8	15-4-6	23-1-3	31-1-8
5-8-8	5-5-0	4-2-14	7-8-13	8-0-5

Scale = 1:52.6



7-9-15	15-4-6	23-1-3	31-1-8
7-9-15	7-6-7	7-8-13	8-0-5

Plate Offsets (X,Y)-- [5:0-6-0,Edge], [8:0-1-6,0-3-0], [9:0-7-12,0-3-8], [10:0-7-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.65	9-10	>571	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-1.21	9-10	>307	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.43	8	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*
	3-5: 2x4 SPF 1650F 1.5E, 5-8: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	9-10: 2x4 SP 2400F 2.0E, 8-9: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except*
	6-10: 2x4 SPF 1650F 1.5E
SLIDER	Right 2x4 SPF No.2 4-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 2-12
	2 Rows at 1/3 pts 6-10

REACTIONS. (size) 12=0-5-8, 8=Mechanical
Max Horz 12=-111(LC 17)
Max Uplift 12=-177(LC 8), 8=-218(LC 9)
Max Grav 12=1394(LC 1), 8=1394(LC 1)

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

TOP CHORD	2-3=-1474/358, 3-4=-2158/505, 4-6=-2121/427, 6-8=-7035/1164
BOT CHORD	11-12=-150/1222, 10-11=-143/1387, 9-10=-1014/6435, 8-9=-1054/6767
WEBS	2-11=-6/388, 3-10=-261/1180, 4-10=-566/204, 6-10=-4635/787, 6-9=-411/3121, 2-12=-1635/321

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 11-1-8, Exterior(2R) 11-1-8 to 14-2-14, Interior(1) 14-2-14 to 31-1-8 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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=177, 8=218.
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.

July 15,2022

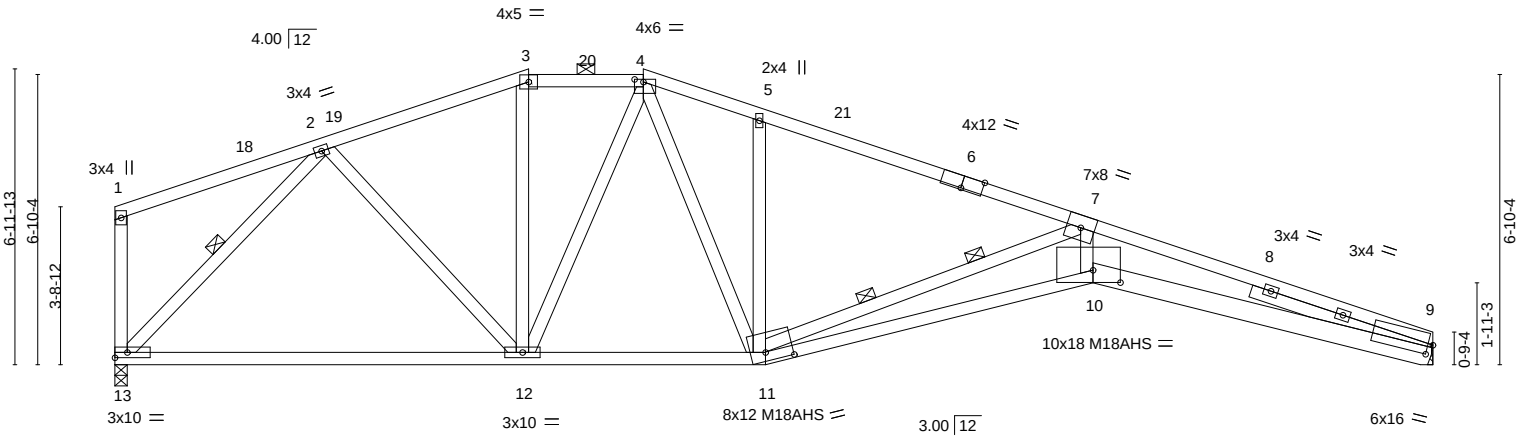
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B8	Hip	1	1	I53110859
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:45 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-A56XrC8OY0kn81A8bAR_OrKSrDrXxHgDjhCP0Zyy60K

5-0-6	9-9-4	12-5-12	15-4-6	23-1-3	31-1-8
5-0-6	4-8-14	2-8-8	2-10-10	7-8-13	8-0-5

Scale = 1:54.4



9-9-4	12-5-12	15-4-6	23-1-3	31-1-8
9-9-4	2-8-8	2-10-10	7-8-13	8-0-5

Plate Offsets (X,Y)-- [4:0-2-8,0-0-12], [6:0-6-0,Edge], [9:0-1-6,0-3-0], [10:0-7-12,0-3-8], [11:0-7-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.65	10-11	>575	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-1.21	10-11	>308	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.43	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 149 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	4-6: 2x4 SPF 1650F 1.5E, 6-9: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	10-11: 2x4 SP 2400F 2.0E, 9-10: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except*
	7-11: 2x4 SPF 1650F 1.5E
SLIDER	Right 2x4 SPF No.2 4-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-10-1 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 2-13
	2 Rows at 1/3 pts 7-11

REACTIONS. (size) 13=0-3-8, 9=Mechanical
Max Horz 13=-103(LC 17)
Max Uplift 13=-188(LC 8), 9=-225(LC 9)
Max Grav 13=1394(LC 1), 9=1394(LC 1)

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

TOP CHORD	2-3=-1549/384, 3-4=-1418/389, 4-5=-2150/529, 5-7=-2120/459, 7-9=-7029/1221
BOT CHORD	12-13=-171/1118, 11-12=-199/1562, 10-11=-1066/6429, 9-10=-1109/6761
WEBS	2-12=-33/516, 4-12=-462/132, 5-11=-554/215, 7-11=-4627/810, 7-10=-433/3125, 2-13=-1554/351, 4-11=-255/1049

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 9-9-4, Exterior(2E) 9-9-4 to 12-5-12, Exterior(2R) 12-5-12 to 16-10-9, Interior(1) 16-10-9 to 31-1-8 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=188, 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) 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.

July 15,2022

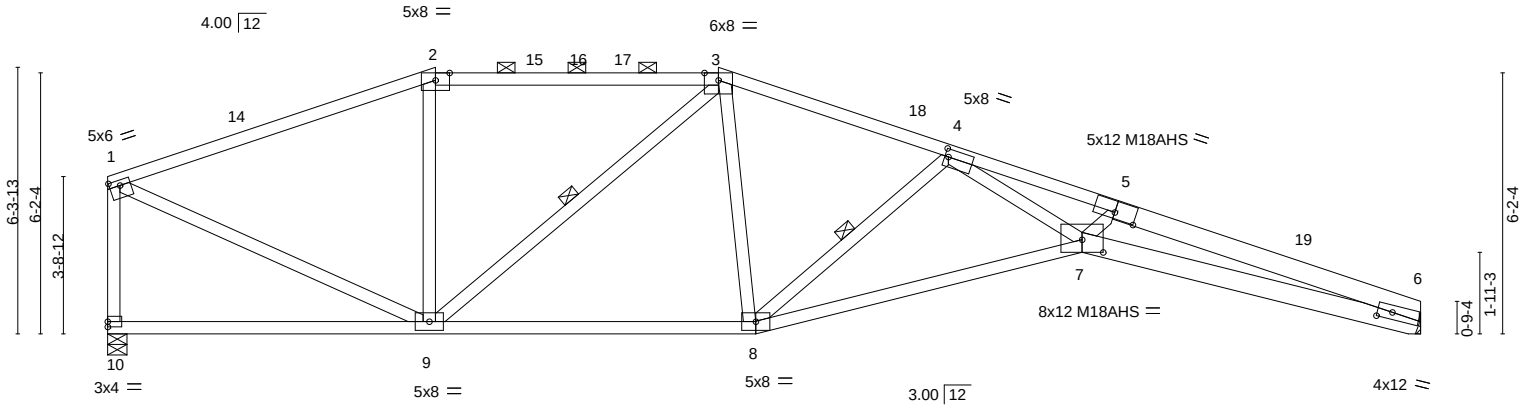
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B9	Hip	1	1	I53110860
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:46 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-fHgv2Y90JKsemBlL8uzDx2tcedBygi?NyLxzY?yy60J

7-9-4	14-5-12	19-11-3	25-4-9	31-1-8
7-9-4	6-8-8	5-5-7	5-5-7	5-8-15

Scale = 1:54.6



7-9-4	15-4-6	23-1-3	31-1-8
7-9-4	7-7-2	7-8-13	8-0-5

Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [4:0-1-0,0-2-4], [5:0-6-0,0-1-12], [6:0-4-3,0-2-0], [7:0-6-0,0-3-10]

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	0.84	Vert(LL)	-0.53	7-8	>706	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-1.01	7-8	>369	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.34	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 135 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	3-5: 2x4 SP 2400F 2.0E, 5-6: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	7-8: 2x4 SPF 1650F 1.5E, 6-7: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 10=0-5-8, 6=Mechanical
Max Horz 10=-105(LC 10)
Max Uplift 10=-203(LC 8), 6=-233(LC 9)
Max Grav 10=1394(LC 1), 6=1394(LC 1)

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

TOP CHORD	1-2=-1542/363, 2-3=-1393/387, 3-4=-2087/474, 4-5=-6769/1200, 5-6=-6853/1203, 1-10=-1321/309
BOT CHORD	8-9=-269/1840, 7-8=-563/3382, 6-7=-1094/6514
WEBS	3-9=-691/165, 3-8=-71/610, 4-8=-1826/379, 4-7=-600/3880, 1-9=-293/1450

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 7-9-4, Exterior(2R) 7-9-4 to 12-2-1, Interior(1) 12-2-1 to 14-5-12, Exterior(2R) 14-5-12 to 18-10-9, Interior(1) 18-10-9 to 31-1-8 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=203, 6=233.
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.

July 15,2022

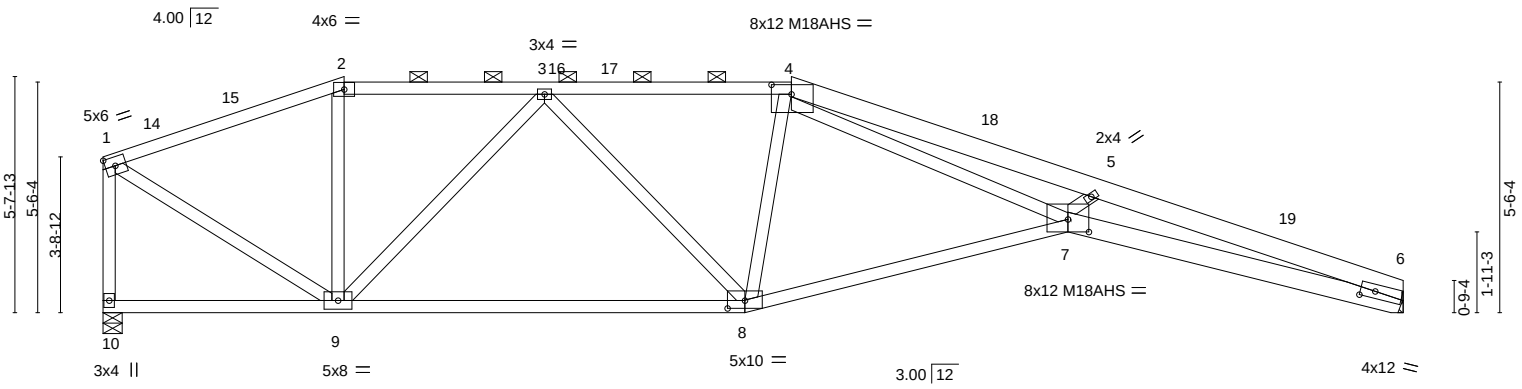
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B10	Hip	1	1	I53110861
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:35 2022 Page 1
ID:Qh6DWIRkAvK03vHPr_WIOqyyU0S-TAWIkn16vxTCxVPD?4Ge_kwmtBOTblhlQ8nuf8yy60U

5-9-4	10-6-13	15-4-6	16-5-12	23-7-14	31-1-8
5-9-4	4-9-9	4-9-9	1-1-6	7-2-2	7-5-10

Scale = 1:55.2



5-9-4	15-4-6	16-5-12	23-1-3	31-1-8
5-9-4	9-7-2	1-1-6	6-7-7	8-0-5

Plate Offsets (X,Y)-- [4:0-5-12,0-2-12], [6:0-4-3,0-2-0], [7:0-6-0,0-3-10], [8:0-5-0,0-2-4]

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	0.68	Vert(LL)	-0.62	7-8	>601	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-1.16	7-8	>322	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.39	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 136 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
6-7: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
4-7: 2x4 SPF 1650F 1.5E

BRACING-

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

REACTIONS. (size) 10=0-5-8, 6=Mechanical
Max Horz 10=-113(LC 10)
Max Uplift 10=-216(LC 8), 6=-239(LC 9)
Max Grav 10=1394(LC 1), 6=1394(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1362/310, 2-3=-1241/325, 3-4=-2101/478, 4-5=-6873/1249, 5-6=-7018/1268, 1-10=-1355/292
BOT CHORD 8-9=-295/1853, 7-8=-361/2307, 6-7=-1165/6685
WEBS 3-9=-947/230, 3-8=-60/397, 4-8=-632/178, 4-7=-810/4778, 1-9=-273/1425

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 5-9-4, Exterior(2R) 5-9-4 to 10-2-1, Interior(1) 10-2-1 to 16-5-12, Exterior(2R) 16-5-12 to 20-10-9, Interior(1) 20-10-9 to 31-1-8 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=216, 6=239.
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.

July 15,2022

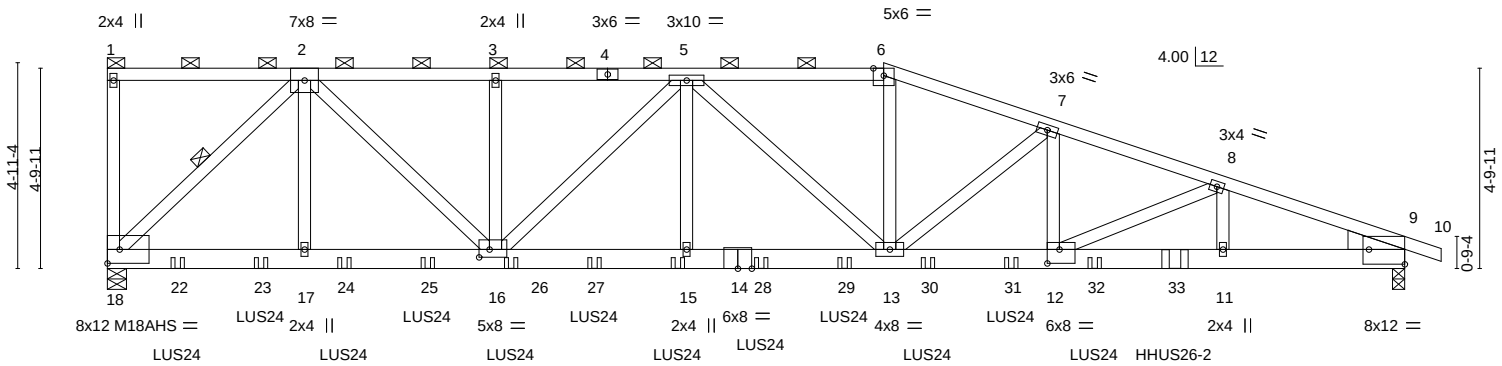
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	B11	HALF HIP GIRDER	1	2	I53110862

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:36 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-xM47y71kgFb3Ze_QZnntXxTuUbk6KFmvfnWRBayy60T

4-8-12	9-3-12	13-10-12	18-7-8	22-8-5	26-9-3	31-1-8	32-0-0
4-8-12	4-7-0	4-7-0	4-8-12	4-0-13	4-0-13	4-4-5	0-10-8

Scale = 1:55.3



4-8-12	9-3-12	13-10-12	18-7-8	22-8-5	26-9-3	31-1-8
4-8-12	4-7-0	4-7-0	4-8-12	4-0-13	4-0-13	4-4-5

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

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	0.88	Vert(LL)	-0.28	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.50	13-15	>745	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 322 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 6-10: 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-5 max.): 1-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-18

REACTIONS. (size) 18=0-5-8, 9=0-3-8
Max Horz 18=-177(LC 27)
Max Uplift 18=-1189(LC 5), 9=-1091(LC 5)
Max Grav 18=5421(LC 1), 9=4931(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8192/1843, 3-5=-8192/1843, 5-6=-9323/2098, 6-7=-9922/2207, 7-8=-11524/2541, 8-9=-10990/2419
BOT CHORD 17-18=-992/5051, 16-17=-992/5051, 15-16=-2028/9750, 13-15=-2028/9750, 12-13=-2318/10927, 11-12=-2226/10313, 9-11=-2226/10313
WEBS 2-18=-6973/1536, 2-17=-283/1466, 2-16=-958/4368, 3-16=-299/108, 5-16=-2167/483, 5-15=-272/1433, 5-13=-761/156, 6-13=-593/2822, 7-13=-1954/488, 7-12=-318/1497, 8-12=-139/777, 8-11=-399/104

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=1189, 9=1091.
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.

Continued on page 2

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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 1-8-4 from the left end to 23-8-4 to connect truss(es) to back face of bottom chord.
12) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 25-7-6 from the left end to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-70, 6-10=-70, 18-19=-20
   Concentrated Loads (lb)
   Vert: 15=-539(B) 22=-539(B) 23=-539(B) 24=-539(B) 25=-539(B) 26=-539(B) 27=-539(B) 28=-539(B) 29=-539(B) 30=-534(B) 31=-534(B) 32=-534(B) 33=-1050(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	C1	Hip	1	1	I53110863
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:47 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-7TEHGuAe4d_VNLJXibUSTGQpK1cLPDUWB?hW4Ryy60I

0-10-8	6-0-0	12-10-4	19-8-8	25-8-8	26-7-0
0-10-8	6-0-0	6-10-4	6-10-4	6-0-0	0-10-8

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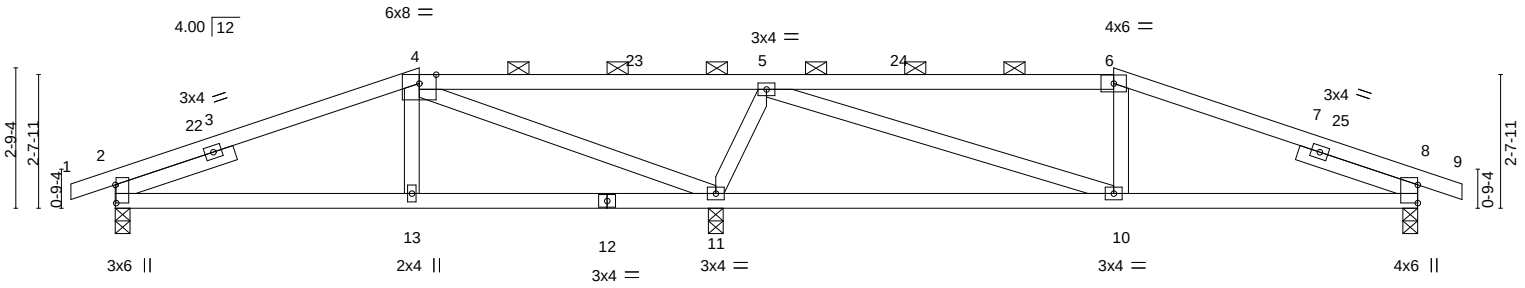

6-0-0	11-10-4	19-8-8	25-8-8
6-0-0	5-10-4	7-10-4	6-0-0

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

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	0.72	Vert(LL)	-0.08	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.18	10-11	>950	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 90 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 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-8-8 max.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 11=0-3-8, 8=0-3-8
Max Horz 2=34(LC 12)
Max Uplift 2=-123(LC 8), 11=-202(LC 8), 8=-142(LC 9)
Max Grav 2=527(LC 1), 11=1282(LC 1), 8=627(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-594/182, 4-5=0/342, 5-6=-827/235, 6-8=-857/219
BOT CHORD 2-13=-144/566, 11-13=-147/559, 8-10=-143/817
WEBS 4-11=-912/167, 5-11=-885/239, 5-10=-105/825

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 19-8-8, Exterior(2R) 19-8-8 to 23-11-7, Interior(1) 23-11-7 to 26-7-0 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) 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=123, 11=202, 8=142.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	C2	Roof Special	1	1	I53110864

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:48 2022 Page 1

ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-bgofTDBGrx6M?UujGI?h0Ty0rRww8jzgPfQ4ctyy60H

0-10-8	4-0-0	9-10-4	15-8-8	18-8-8	25-8-8	26-7-0
0-10-8	4-0-0	5-10-4	5-10-4	3-0-0	7-0-0	0-10-8

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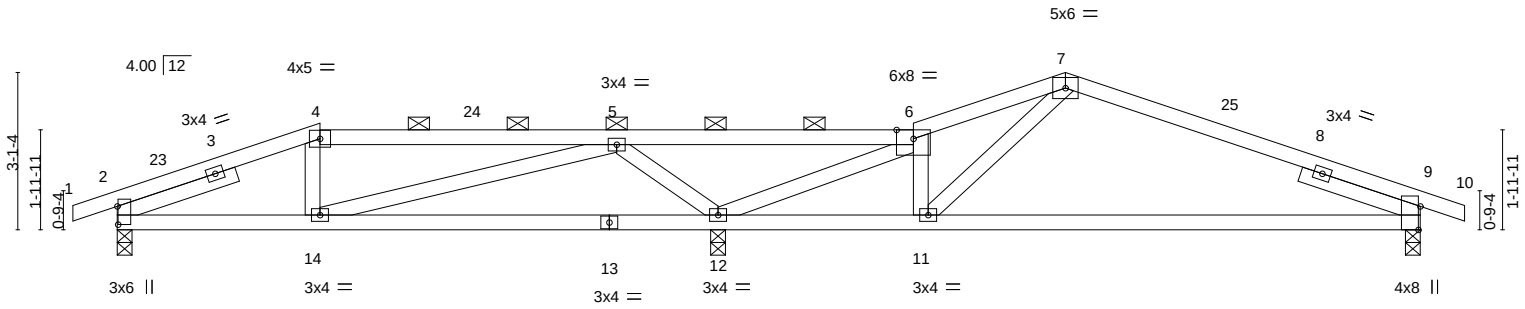

4-0-0	11-10-4	15-8-8	25-8-8
4-0-0	7-10-4	3-10-4	10-0-0

Plate Offsets (X,Y)-- [2:0-4-5,0-0-3], [9:0-5-9,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)	-0.18	11-21	>945	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.38	11-21	>442	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	-0.02	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 90 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 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 9=0-3-8
Max Horz 2=-42(LC 13)
Max Uplift 2=-112(LC 8), 12=-215(LC 8), 9=-127(LC 9)
Max Grav 2=524(LC 1), 12=1288(LC 1), 9=624(LC 1)

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

TOP CHORD	2-4=-759/150, 4-5=-714/163, 5-6=-133/568, 6-7=-821/190, 7-9=-757/186
BOT CHORD	2-14=-111/710, 11-12=-102/747, 9-11=-107/642
WEBS	5-14=-56/536, 5-12=-966/274, 6-12=-1362/263, 7-11=0/251

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2R) 4-0-0 to 7-0-0, Interior(1) 7-0-0 to 18-8-8, Exterior(2R) 18-8-8 to 21-8-8, Interior(1) 21-8-8 to 26-7-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=112, 12=215, 9=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.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	C3	Roof Special Girder	1	1	I53110865
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:49 2022 Page 1
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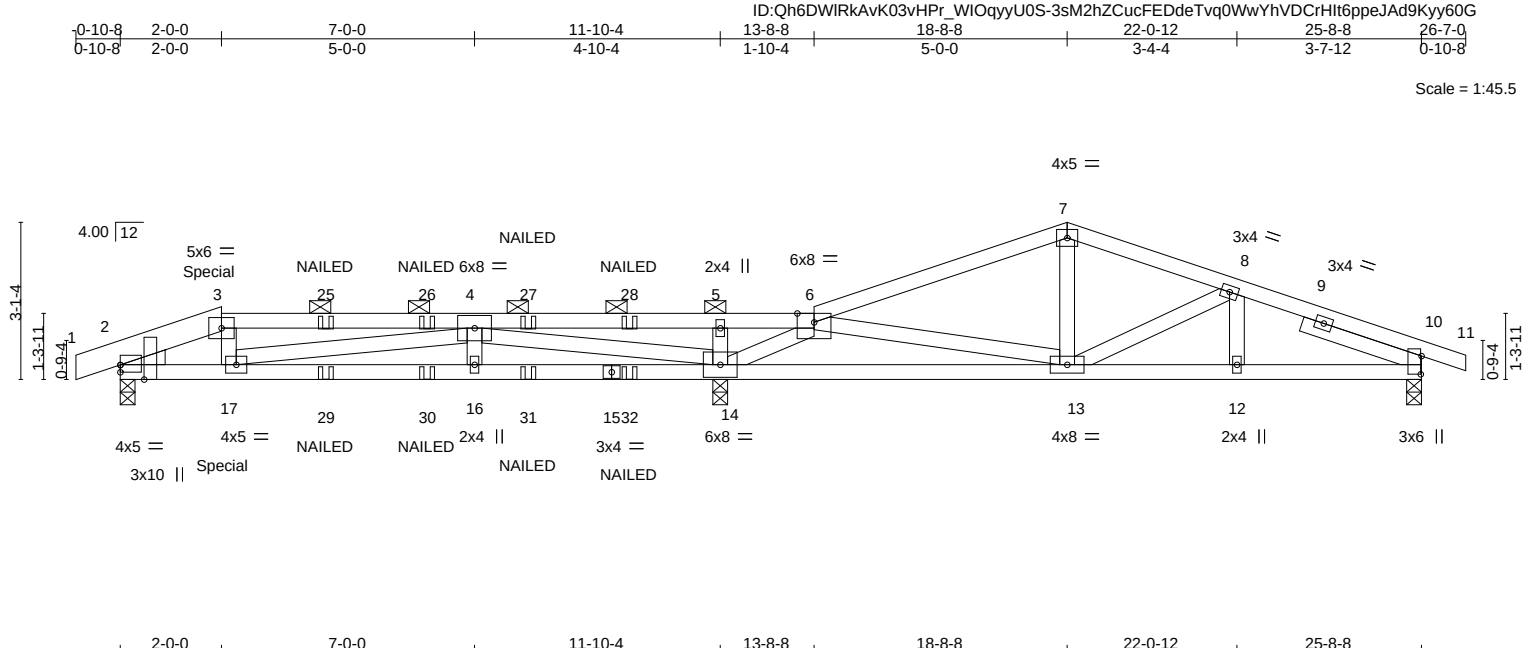

Plate Offsets (X,Y)-- [2:0-0-0,0-1-12], [2:0-3-7,Edge], [10:0-4-5,0-0-3]

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	0.50	Vert(LL)	-0.06	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.12	16-17	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 97 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-6-0

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

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 10=0-3-8
Max Horz 2=45(LC 8)
Max Uplift 2=-116(LC 4), 14=-214(LC 4), 10=-125(LC 26)
Max Grav 2=525(LC 21), 14=1308(LC 1), 10=604(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-876/158, 3-4=-824/153, 4-5=-137/690, 5-6=-152/741, 6-7=-701/130, 7-8=-671/128, 8-10=-859/164
BOT CHORD 2-17=-170/808, 16-17=-224/1102, 14-16=-224/1102, 12-13=-108/797, 10-12=-108/797
WEBS 4-17=-284/63, 4-14=-1783/355, 5-14=-276/86, 6-13=-17/535, 8-13=-255/96, 6-14=-982/203

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=116, 14=214, 10=125.
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) 78 lb down and 62 lb up at 2-0-0 on top chord, and 20 lb down and 2 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-6=-70, 6-7=-70, 7-11=-70, 18-21=-20
   Concentrated Loads (lb)
   Vert: 17=2(B) 29=1(B) 30=1(B) 31=1(B) 32=1(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	C4	Hip	1	1	I53110866
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:50 2022 Page 1
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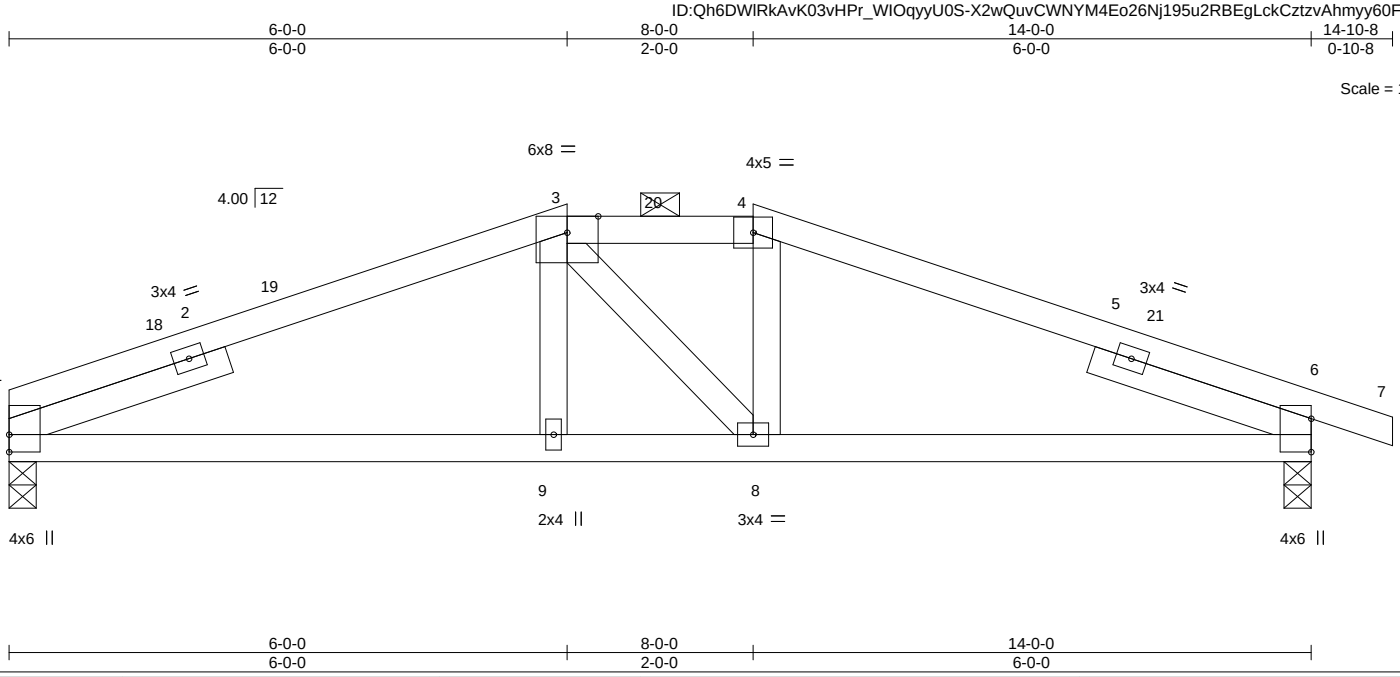

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	9-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	9-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 48 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 2-6-0, Right 2x4 SPF No.2 2-6-0

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

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=-40(LC 17)
Max Uplift 1=-96(LC 8), 6=-129(LC 9)
Max Grav 1=628(LC 1), 6=693(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-998/345, 3-4=-925/346, 4-6=-975/323
BOT CHORD 1-9=-267/935, 8-9=-268/930, 6-8=-237/930

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-0-0, Exterior(2E) 6-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 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) 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) 1 except (jt=lb) 6=129.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	C5	Hip Girder	1	1	I53110867
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:51 2022 Page 1
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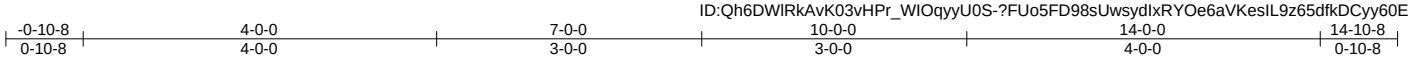

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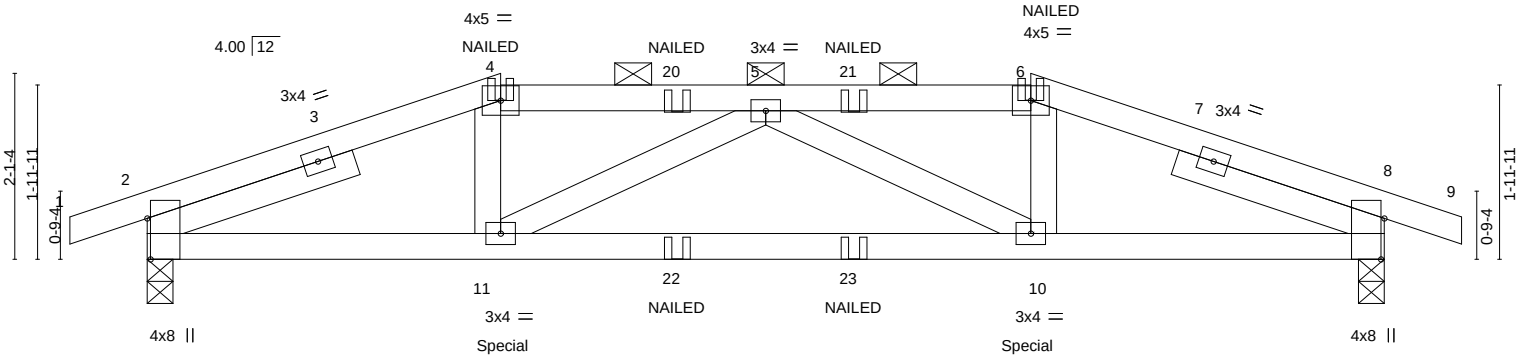

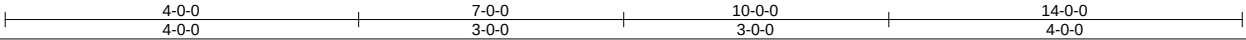

Plate Offsets (X,Y)-- [2:0-5-9,Edge], [8:0-5-9,Edge]

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	0.65	Vert(LL)	-0.13	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.27	10-11	>624	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 51 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 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=24(LC 8)
Max Uplift 2=-253(LC 4), 8=-253(LC 5)
Max Grav 2=1032(LC 1), 8=1032(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1920/454, 4-5=-1742/430, 5-6=-1743/430, 6-8=-1920/455
BOT CHORD 2-11=-400/1784, 10-11=-507/2138, 8-10=-377/1784
WEBS 4-11=-100/559, 6-10=-100/559, 5-11=-510/158, 5-10=-510/158

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 8=253.
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) 236 lb down and 97 lb up at 4-0-0, and 236 lb down and 97 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-6=-70, 6-9=-70, 12-16=-20
Concentrated Loads (lb)
Vert: 4=-34(B) 6=-34(B) 11=-236(B) 10=-236(B) 20=-34(B) 21=-34(B) 22=-37(B) 23=-37(B)

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	CJ1	Diagonal Hip Girder	1	1	I53110868

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:52 2022 Page 1

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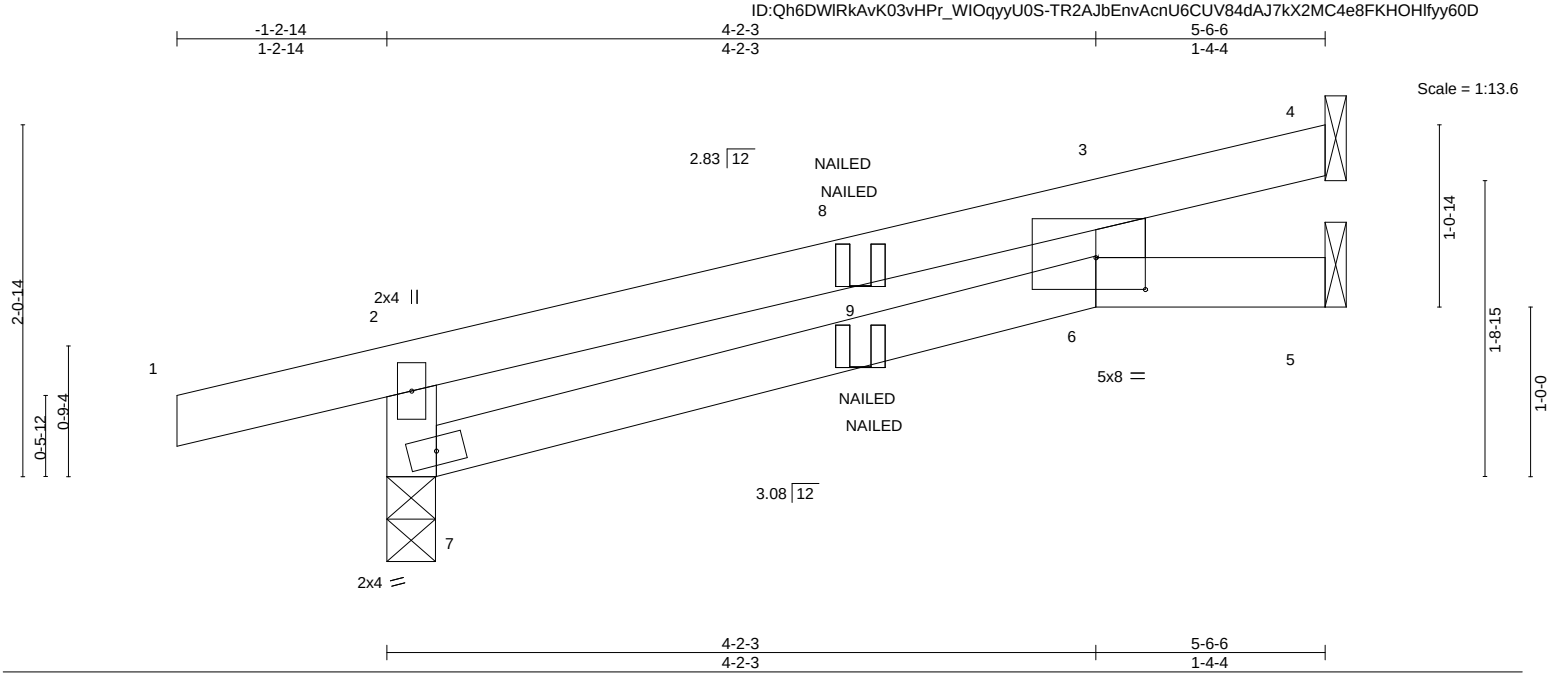

Plate Offsets (X,Y)-- [6:0-3-8,0-2-4]

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	0.43	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.09	6-7	>738	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.03	4	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 5-6-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-7
Max Horz 7=54(LC 4)
Max Uplift 4=-26(LC 8), 5=-24(LC 8), 7=-90(LC 4)
Max Grav 4=127(LC 1), 5=99(LC 1), 7=348(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-282/101

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) 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, 5, 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "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, 6-7=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 9=2(F=1, B=1)

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	CJ2	Diagonal Hip Girder	1	1	I53110869
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:53 2022 Page 1
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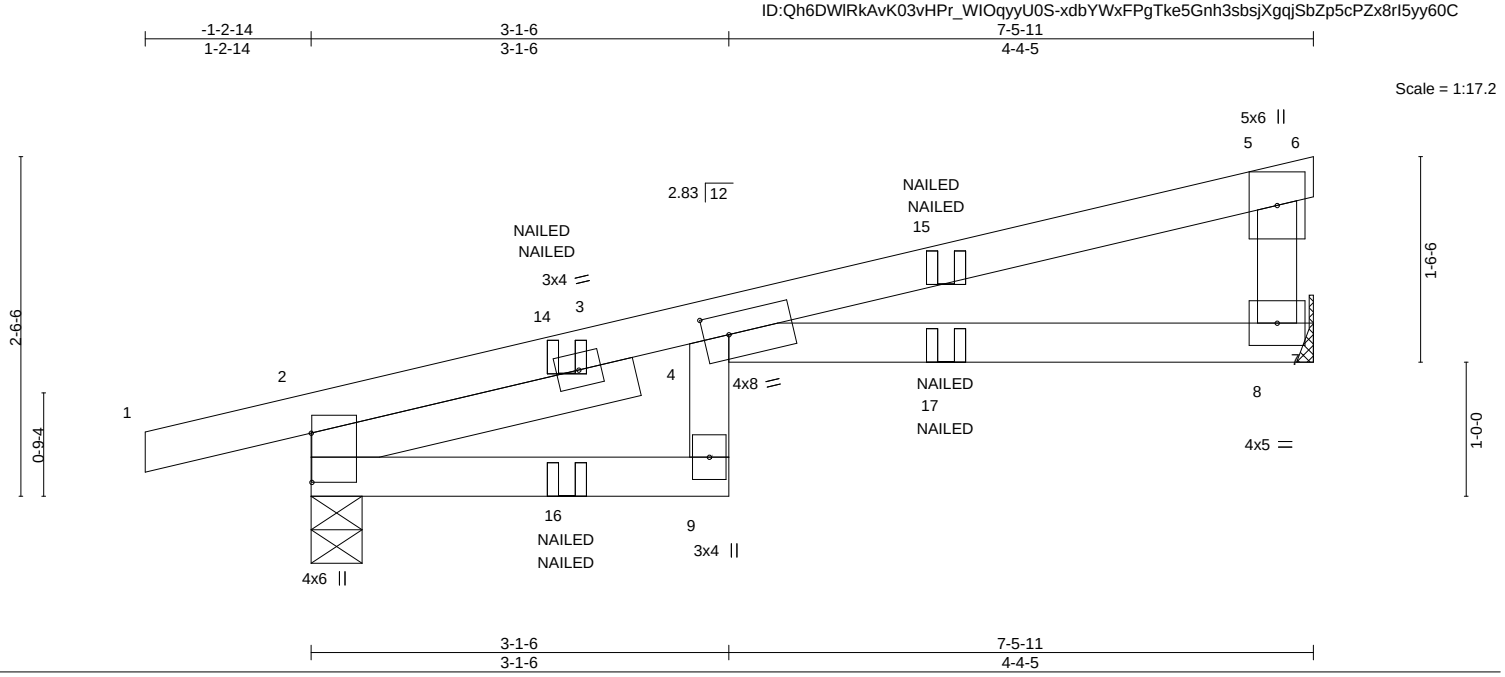

Plate Offsets (X,Y)-- [2:0-4-6,0-0-1], [4:0-2-4,0-1-14]

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	0.72	Vert(LL)	-0.16	4-8	>524	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.28	4-8	>307	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.13	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 27 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0

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) 8=Mechanical, 2=0-4-9
Max Horz 2=64(LC 22)
Max Uplift 8=-99(LC 8), 2=-117(LC 4)
Max Grav 8=369(LC 1), 2=435(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-11=-400/104, 4-5=-385/99
BOT CHORD 4-8=-98/374

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=117.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) "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=-70, 5-6=-20, 9-10=-20, 4-7=-20
Concentrated Loads (lb)
Vert: 15=-4(F=-2, B=-2) 16=8(F=4, B=4) 17=-62(F=-31, B=-31)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	CJ3	Diagonal Hip Girder	1	1	I53110870

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:54 2022 Page 1

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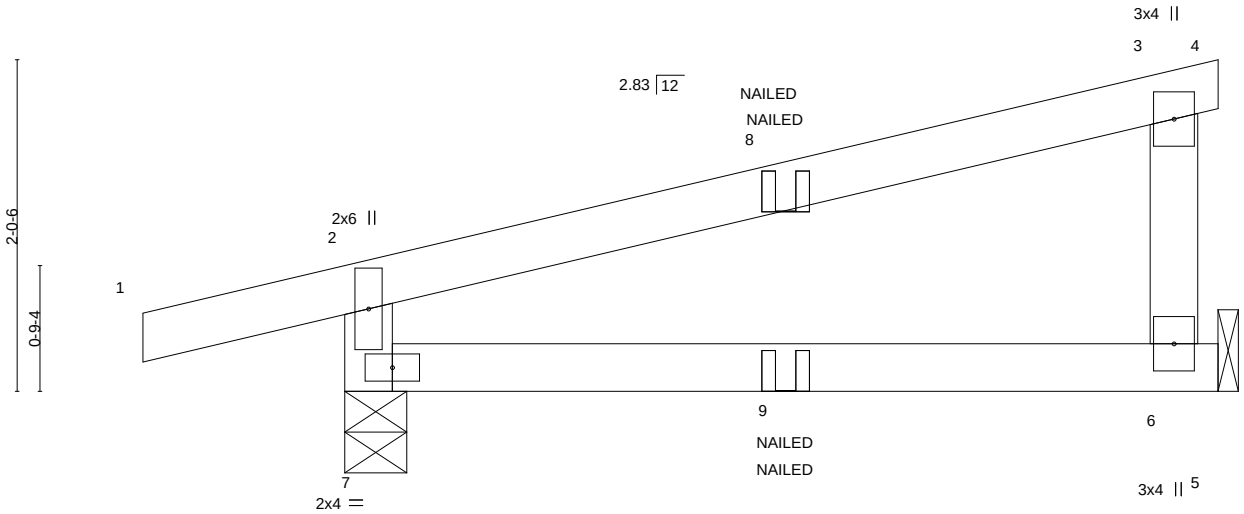

5-4-4 / 5-4-4

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	0.25	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.03	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=0-4-9, 6=Mechanical
Max Horz 7=69(LC 5)
Max Uplift 7=-93(LC 4), 6=-45(LC 8)
Max Grav 7=331(LC 1), 6=218(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-294/116

NOTES-

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-20, 5-7=-20
   Concentrated Loads (lb)
   Vert: 9=3(F=1, B=1)

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	CJ4	Diagonal Hip Girder	2	1	I53110871

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:55 2022 Page 1

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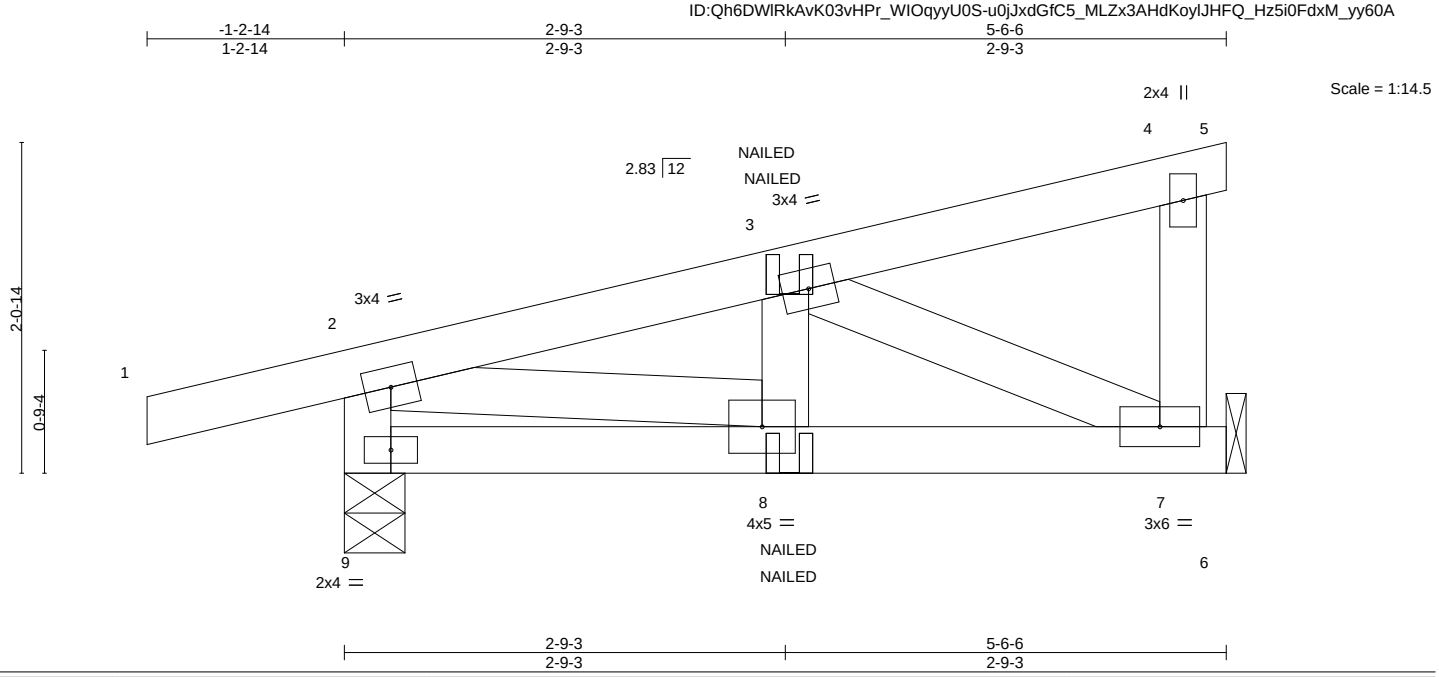

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	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

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) 9=0-4-9, 7=Mechanical
Max Horz 9=71(LC 5)
Max Uplift 9=-94(LC 4), 7=-46(LC 8)
Max Grav 9=339(LC 1), 7=227(LC 1)

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

TOP CHORD	2-9=-314/102, 2-3=-291/44
BOT CHORD	7-8=-43/260
WEBS	2-8=-21/265, 3-7=-285/64

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) 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) 9, 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "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, 4-5=-20, 6-9=-20
   Concentrated Loads (lb)
   Vert: 8=2(F=1, B=1)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	CJ5	Jack-Open	1	1	I53110872
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:55 2022 Page 1
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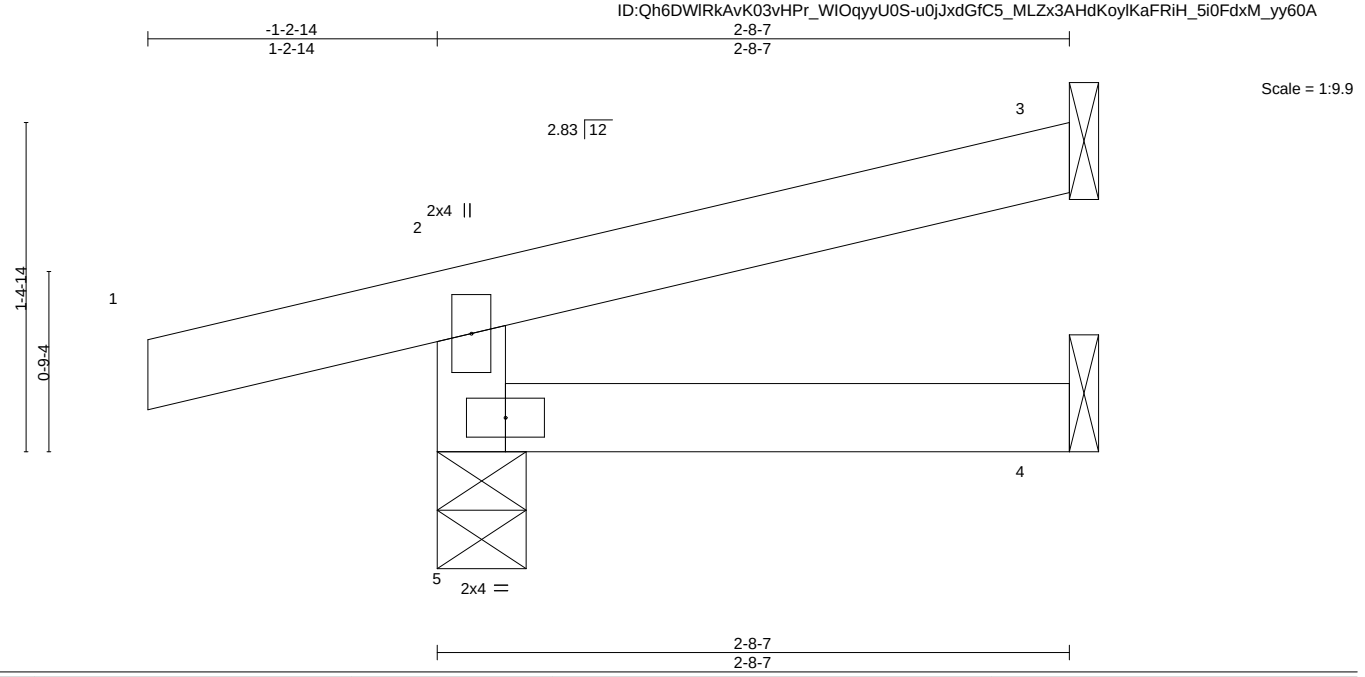

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=30(LC 8)
Max Uplift 5=-77(LC 8), 3=-27(LC 12)
Max Grav 5=236(LC 1), 3=65(LC 1), 4=45(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
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/HIGHLAND MEADOWS #151/MO
3233392	D1	Jack-Closed	4	1	I53110873

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:56 2022 Page 1

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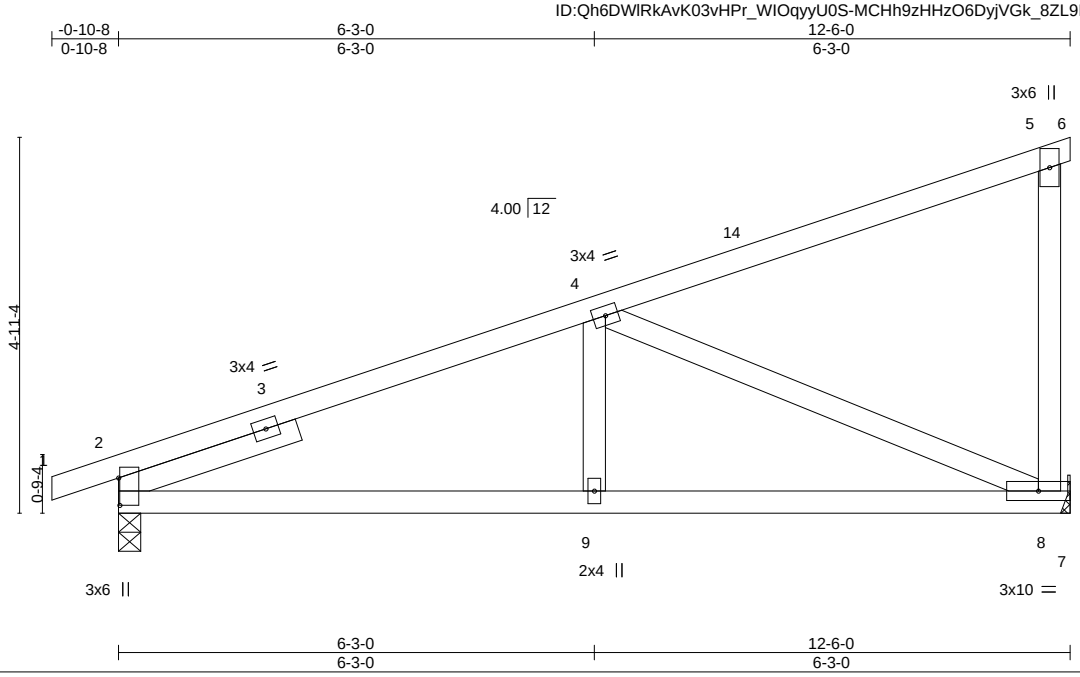

Plate Offsets (X,Y)-- [2:0-4-5,0-0-3]

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	0.33	Vert(LL)	-0.03	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.06	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 48 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 2-6-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 8=Mechanical
Max Horz 2=182(LC 11)
Max Uplift 2=-117(LC 8), 8=-117(LC 8)
Max Grav 2=614(LC 1), 8=559(LC 1)

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

TOP CHORD	2-4=-747/184
BOT CHORD	2-9=-305/757, 8-9=-305/757
WEBS	4-9=0/252, 4-8=-785/265

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-6-0 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) except (jt=lb) 2=117, 8=117.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	D2	Jack-Closed	2	1	I53110874

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:57 2022 Page 1

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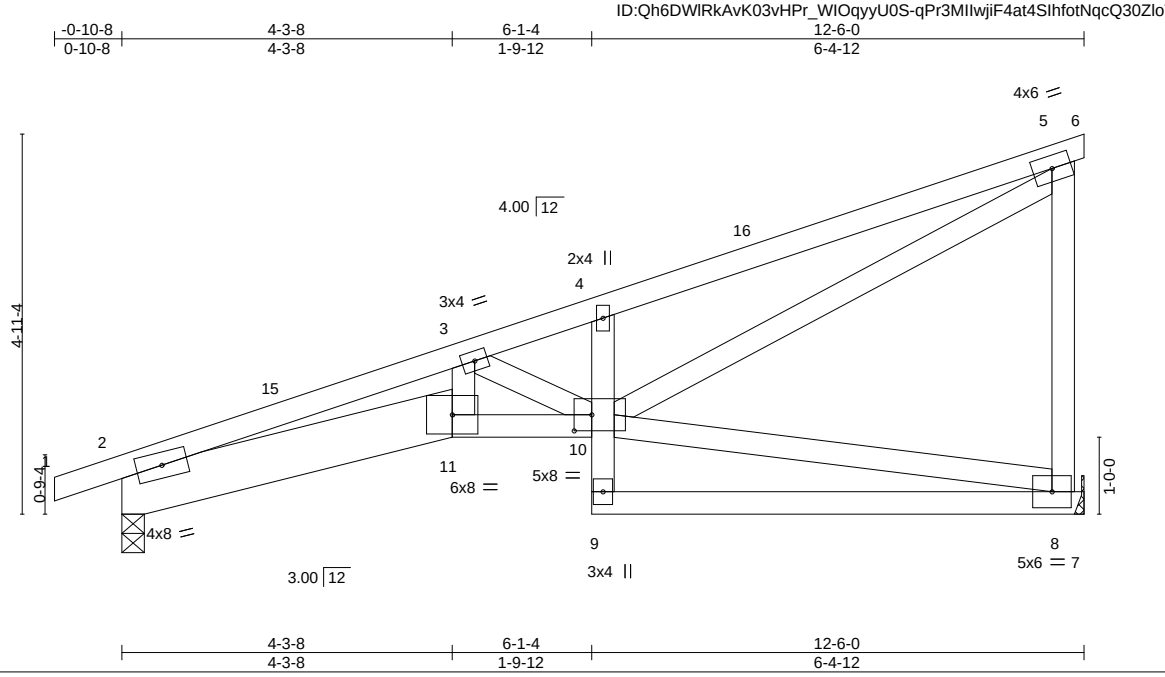

Plate Offsets (X,Y)-- [10:0-2-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.07	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.12	10-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 64 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-11: 2x8 SP 2400F 2.0E
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, 2=0-3-8
Max Horz 2=182(LC 11)
Max Uplift 8=-116(LC 8), 2=-118(LC 8)
Max Grav 8=559(LC 1), 2=614(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1662/376, 3-4=-1194/254, 4-5=-1246/369, 5-8=-474/269
BOT CHORD 2-11=-605/1553, 10-11=-577/1486, 4-10=-366/221
WEBS 3-11=-92/271, 3-10=-389/126, 5-10=-495/1251

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-6-0 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=116, 2=118.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	D3	Jack-Closed	3	1	I53110875
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:57 2022 Page 1
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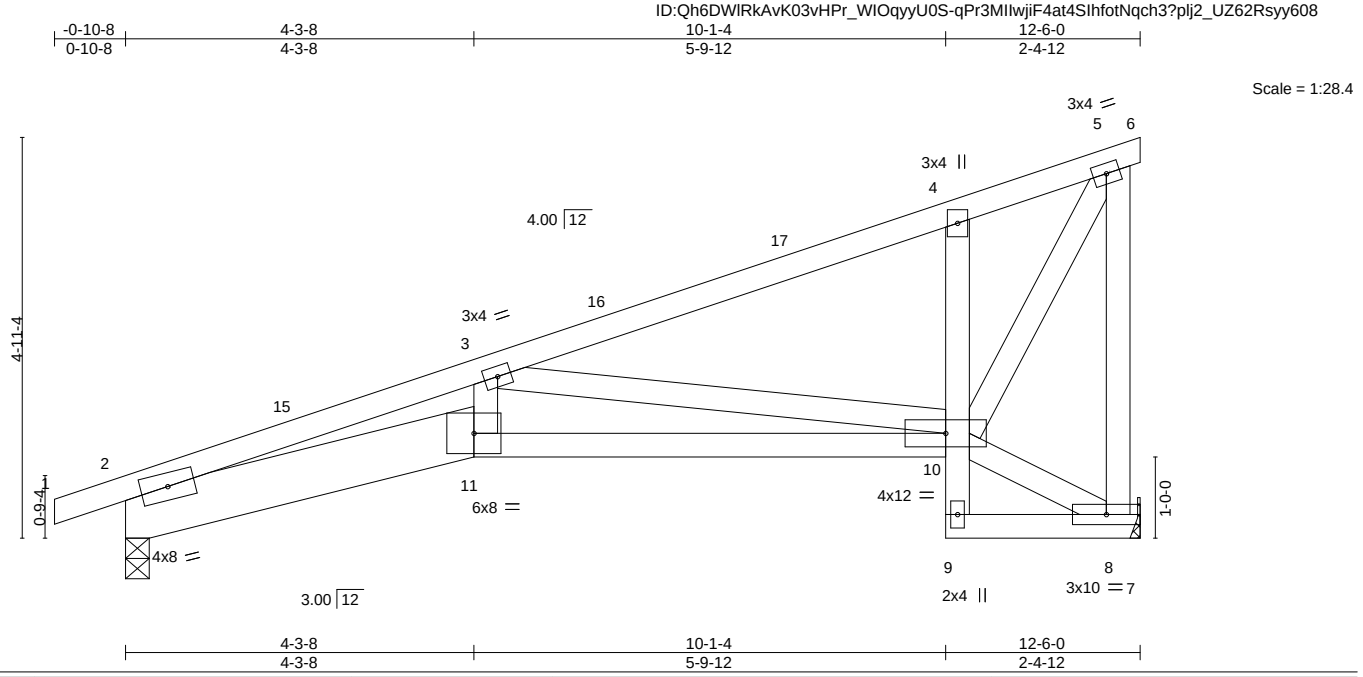

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.08	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.16	10-11	>918	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 62 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-11: 2x8 SP 2400F 2.0E
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, 2=0-3-8
Max Horz 2=182(LC 11)
Max Uplift 8=-116(LC 8), 2=-118(LC 8)
Max Grav 8=559(LC 1), 2=614(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1812/403, 3-4=-498/107, 4-5=-417/136, 5-8=-531/247
BOT CHORD 2-11=-633/1706, 10-11=-613/1630, 4-10=-341/230
WEBS 3-11=-60/372, 3-10=-1226/402, 5-10=-303/727

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-6-0 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=116, 2=118.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	D4	Half Hip	1	1	I53110876
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:58 2022 Page 1
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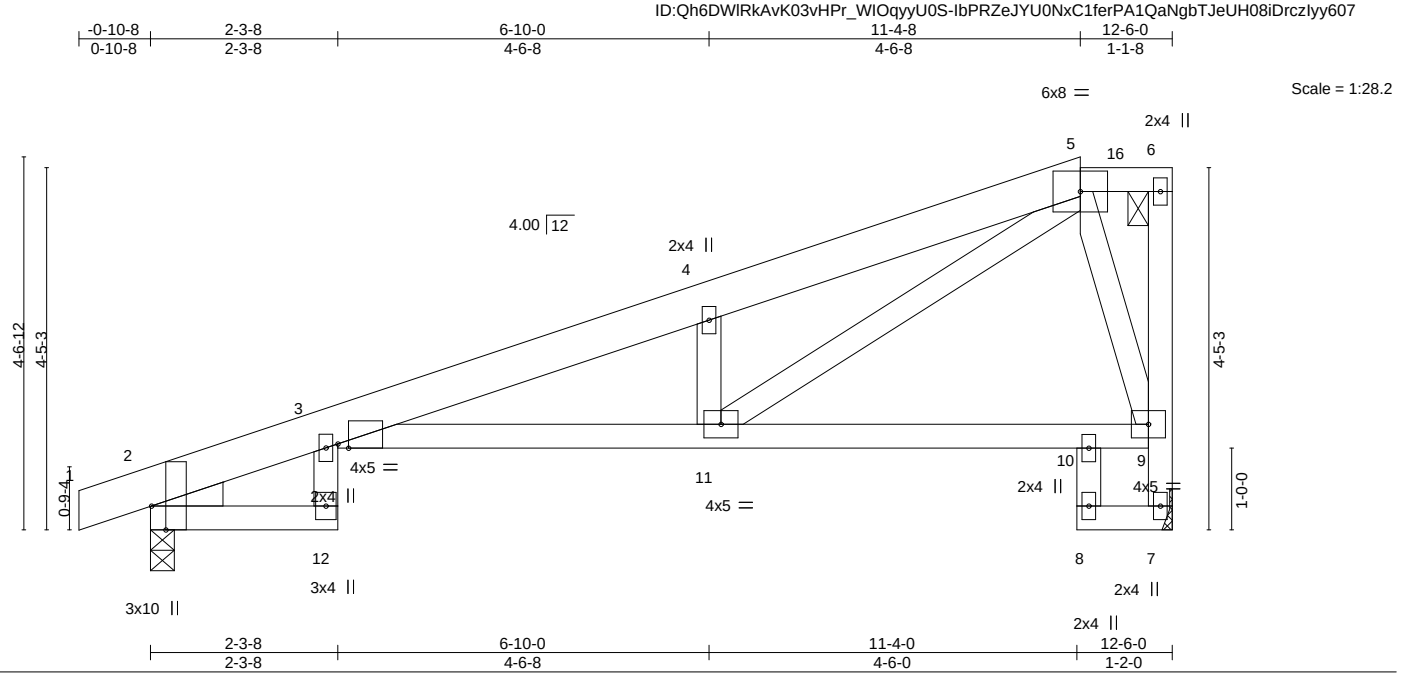

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-1-9,Edge]

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	0.78	Vert(LL)	-0.15	3-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.27	3-11	>549	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.16	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 58 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except* 5-6: 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=166(LC 11)
Max Uplift 7=-111(LC 8), 2=-122(LC 8)
Max Grav 7=554(LC 1), 2=619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-14=-310/71, 3-4=-1256/319, 4-5=-1334/431, 7-9=-533/230
BOT CHORD 3-11=-522/1208
WEBS 5-9=-512/291, 5-11=-472/1263, 4-11=-578/304

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 11-4-8, Exterior(2E) 11-4-8 to 12-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=111, 2=122.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	D5	Half Hip	1	1	I53110877
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:49:59 2022 Page 1
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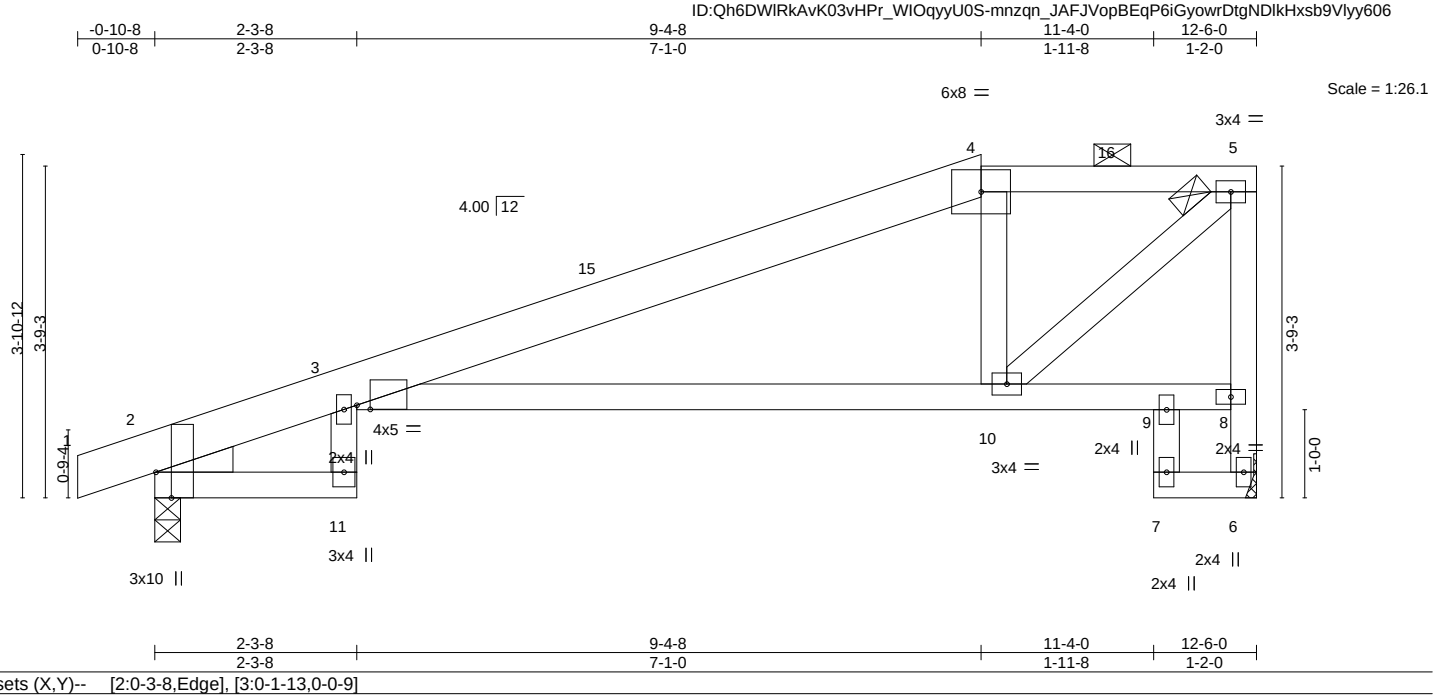

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-1-13,0-0-9]

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	0.78	Vert(LL)	-0.23	3-10	>633	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.45	3-10	>330	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.21	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 51 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except* 4-5: 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=139(LC 11)
Max Uplift 6=-108(LC 8), 2=-125(LC 8)
Max Grav 6=554(LC 1), 2=619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-13=-290/76, 3-4=-719/176, 4-5=-643/221, 6-8=-545/198, 5-8=-594/212
BOT CHORD 3-10=-305/665
WEBS 4-10=-369/235, 5-10=-333/879

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 9-4-8, Exterior(2E) 9-4-8 to 12-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=108, 2=125.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	D6	Half Hip	1	1	I53110878
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:00 2022 Page 1
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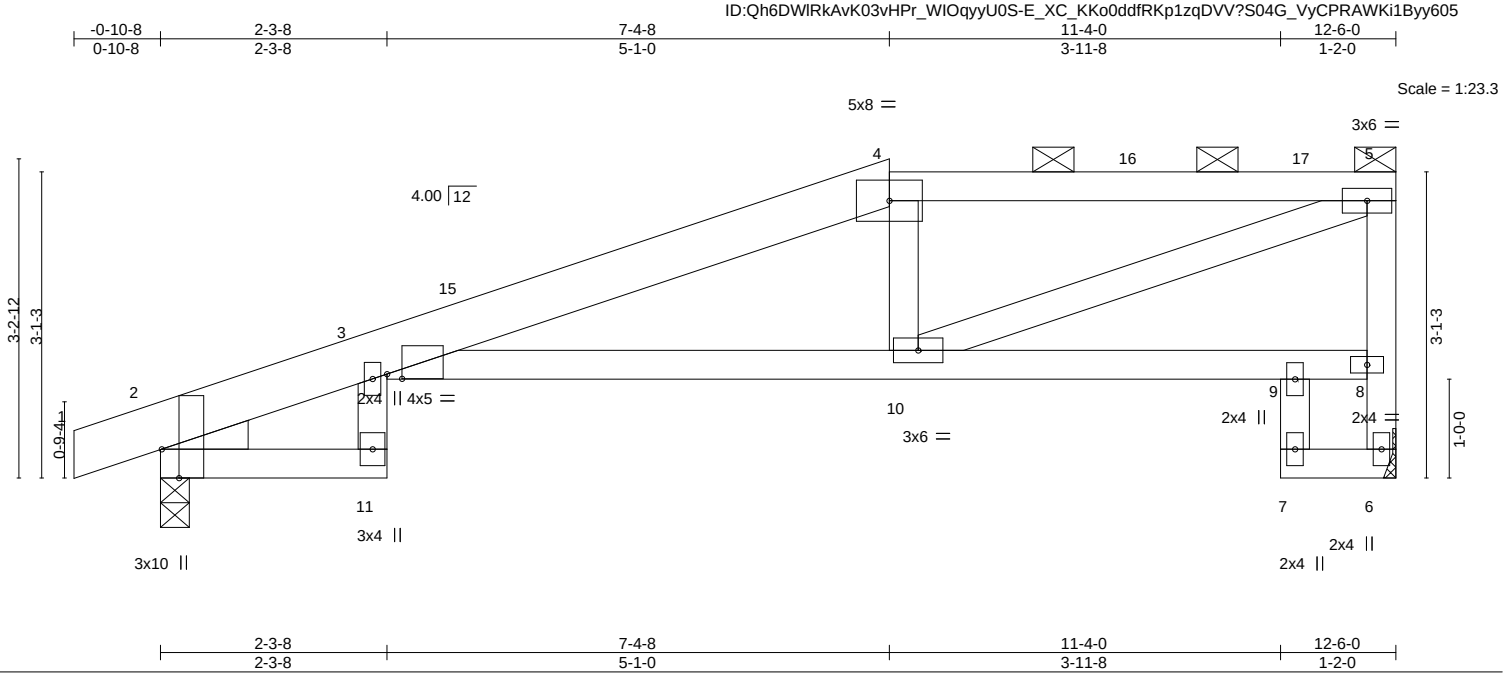

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-1-13,0-0-9]

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	0.78	Vert(LL)	-0.17	3-10	>894	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.31	3-10	>482	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.17	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 50 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except* 4-5: 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, except end verticals, and 2-0-0 oc purlins (5-6-9 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=112(LC 11)
Max Uplift 6=-105(LC 8), 2=-128(LC 8)
Max Grav 6=554(LC 1), 2=619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-13=-286/88, 3-4=-1099/330, 4-5=-1028/361, 6-8=-533/175, 5-8=-515/193
BOT CHORD 3-10=-431/1045
WEBS 5-10=-394/1026

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 7-4-8, Exterior(2R) 7-4-8 to 11-7-7, Interior(1) 11-7-7 to 12-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=105, 2=128.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	D7	HALF HIP GIRDER	1	2	I53110879

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:01 2022 Page 1

ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-iA4aCgLQnxlW3UODXXkk1D?AQgLKhg7aPA4Gadyy604

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

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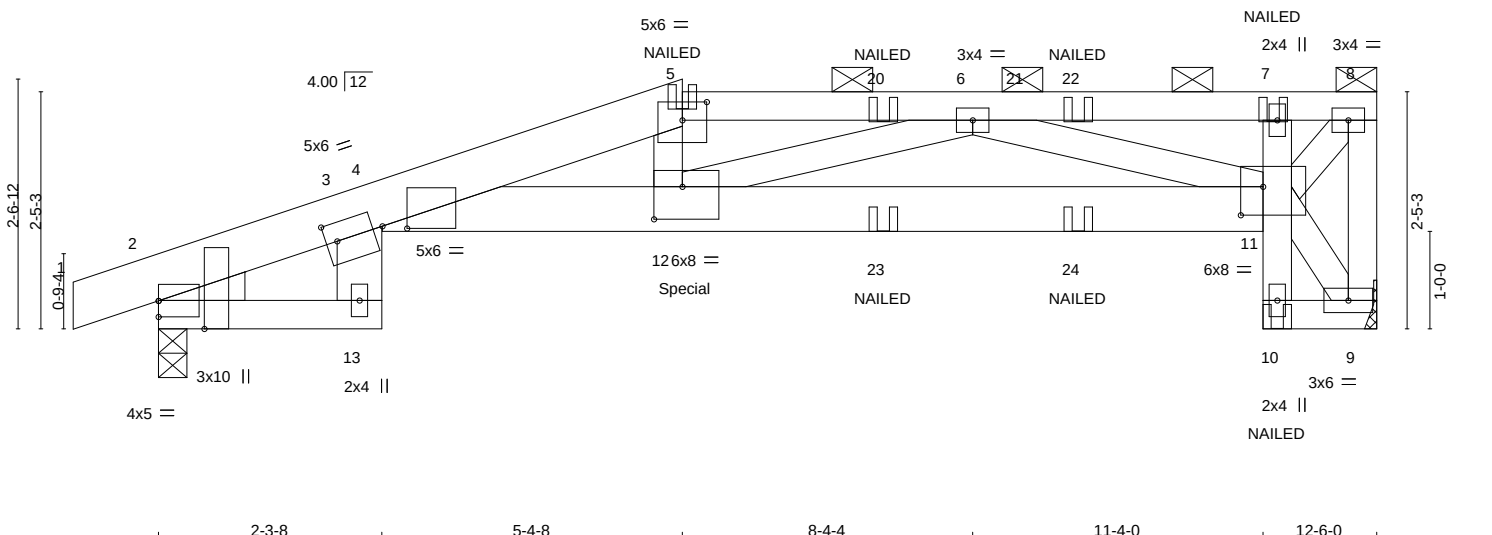

2-3-8	5-4-8	8-4-4	11-4-0	12-6-0
2-3-8	3-1-0	2-11-12	2-11-12	1-2-0

Plate Offsets (X,Y)-- [2:0-3-7,Edge], [3:0-1-6,0-2-4], [4:0-3-1,0-0-4], [5:0-3-0,0-2-4], [11:0-2-12,0-3-8], [12:0-3-8,0-4-0]

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	0.87	Vert(LL)	-0.09	12-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.16	12-19	>925	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 114 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except* 5-8: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 3-13,4-11: 2x6 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=86(LC 7)
Max Uplift 9=-262(LC 4), 2=-248(LC 4)
Max Grav 9=1070(LC 1), 2=985(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1061/257, 4-5=-3637/886, 5-6=-3424/854, 6-7=-1006/236, 7-8=-825/204, 8-9=-1013/251
BOT CHORD 2-13=-196/785, 4-12=-859/3512, 11-12=-719/2681, 7-11=-258/104
WEBS 5-12=-121/646, 8-11=-331/1283, 6-11=-1769/501, 6-12=-168/784

NOTES-

1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=262, 2=248.
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) "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) 403 lb down and 154 lb up at 5-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-70, 5-8=-70, 13-14=-20, 11-17=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 5=-73(B) 11=-64(B) 7=-75(B) 12=-403(B) 20=-73(B) 22=-73(B) 23=-62(B) 24=-62(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E1	Half Hip Girder	1	1	I53110880
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:02 2022 Page 1
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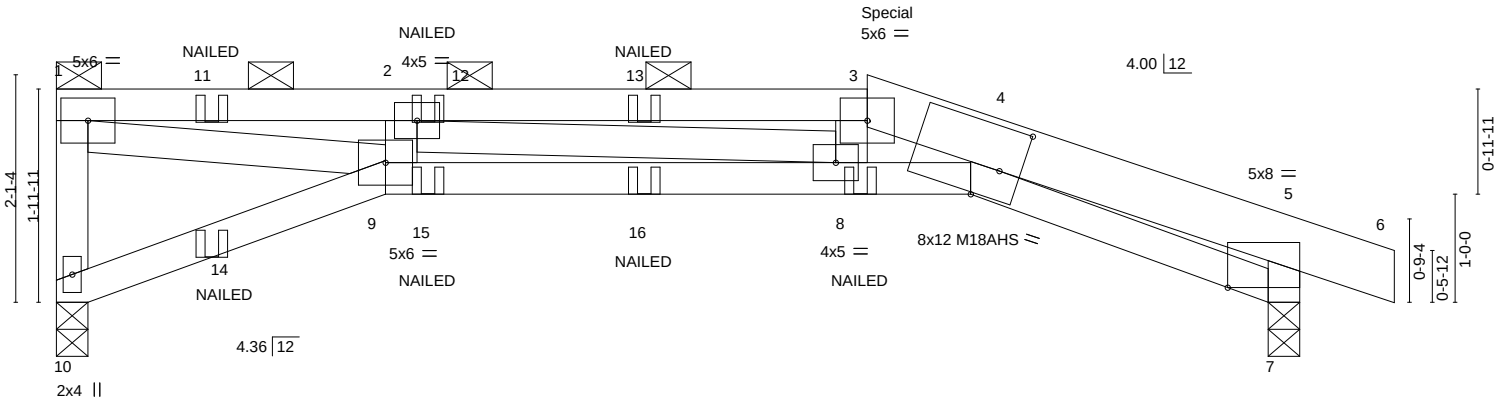
3-0-8	7-6-0	11-6-0	12-4-8
3-0-8	4-5-8	4-0-0	0-10-8

Scale = 1:21.3



3-0-8	7-6-0	8-5-8	11-6-0
3-0-8	4-5-8	0-11-8	3-0-8

Plate Offsets (X,Y)-- [4:0-4-8,0-8-4], [5:2-1-5,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	0.70	Vert(LL)	-0.17	8-9	>800	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.31	8-9	>437	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.23	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 45 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 3-6: 2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 4-9: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=-73(LC 6)
Max Uplift 10=-170(LC 4), 7=-188(LC 5)
Max Grav 10=714(LC 1), 7=754(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-664/161, 1-2=-2326/525, 2-3=-2882/648, 3-4=-2812/625, 4-5=-679/155, 5-7=-860/219
BOT CHORD 8-9=-496/2410, 4-8=-623/3022, 4-7=-95/476
WEBS 1-9=-512/2345, 2-9=-404/128, 3-8=-433/90, 2-8=-128/478

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 10, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=170, 7=188.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 124 lb down and 77 lb up at 7-6-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
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

July 15,2022

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, 4-5=-70, 5-6=-70, 9-10=-20, 4-9=-20, 4-7=-20

Concentrated Loads (lb)

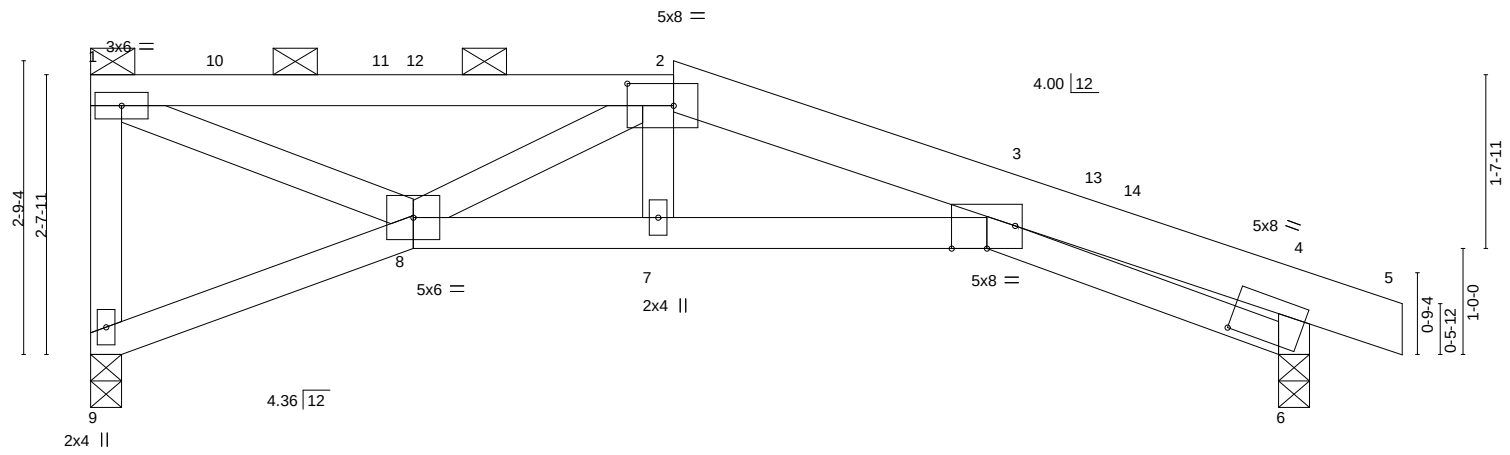
Vert: 3=-62(F) 2=-29(F) 8=-113(F=-42) 11=-37(F) 13=-29(F) 14=-34(F) 15=-42(F) 16=-42(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E2	Half Hip	1	1	I53110881
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:04 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-7lmjqiNJ4s74wy7oCgHRfrdkVuMEu1b058lwByyy601

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

Scale = 1:21.7



3-0-8	5-6-0	8-5-8	11-6-0
3-0-8	2-5-8	2-11-8	3-0-8

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

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	0.69	Vert(LL)	-0.12	3-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.23	3-7	>595	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.16	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 43 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 2-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 9=0-3-8, 6=0-3-8
Max Horz 9=-100(LC 10)
Max Uplift 9=-94(LC 9), 6=-126(LC 9)
Max Grav 9=501(LC 1), 6=579(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-476/168, 1-2=-698/210, 2-3=-1193/380, 3-4=-592/186, 4-6=-674/231
BOT CHORD 7-8=-305/1195, 3-7=-310/1192, 3-6=-102/444
WEBS 1-8=-156/714, 2-8=-567/271

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-6-0, Exterior(2R) 5-6-0 to 9-8-15, Interior(1) 9-8-15 to 12-4-8 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) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearing at joint(s) 9, 6 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) 9 except (jt=lb) 6=126.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E3	Half Hip	1	1	I53110882
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:05 2022 Page 1
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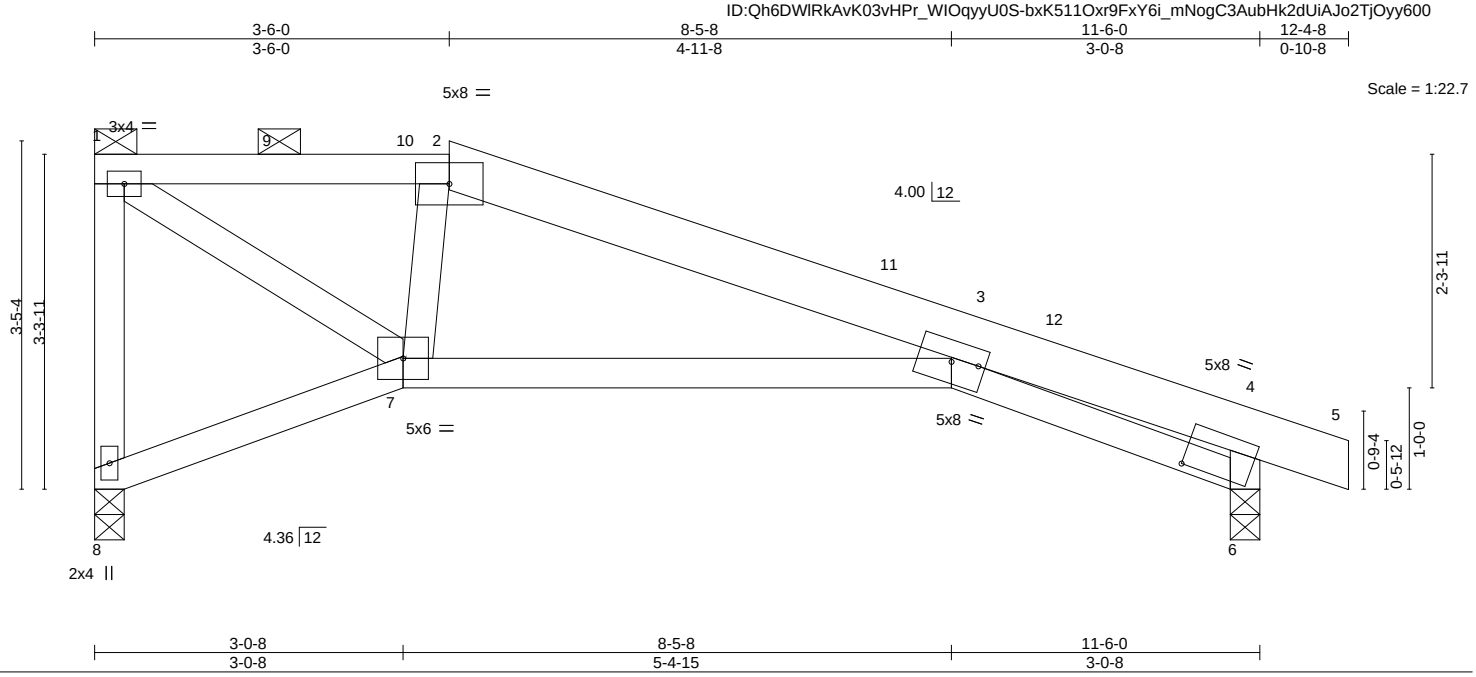


Plate Offsets (X,Y)-- [4:2-2-9,0-2-10]

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	0.73	Vert(LL)	-0.18	3-7	>751	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.34	3-7	>401	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.21	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 44 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 2-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-126(LC 8)
Max Uplift 8=-96(LC 9), 6=-123(LC 9)
Max Grav 8=501(LC 1), 6=579(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-500/159, 1-2=-620/184, 2-3=-724/190, 3-4=-592/149, 4-6=-674/211
BOT CHORD 3-7=-96/692, 3-6=-74/444
WEBS 1-7=-187/753, 2-7=-318/202

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-6-0, Exterior(2R) 3-6-0 to 7-8-15, Interior(1) 7-8-15 to 12-4-8 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) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearing at joint(s) 8, 6 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) 8 except (jt=lb) 6=123.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E4	Half Hip	1	1	I53110883

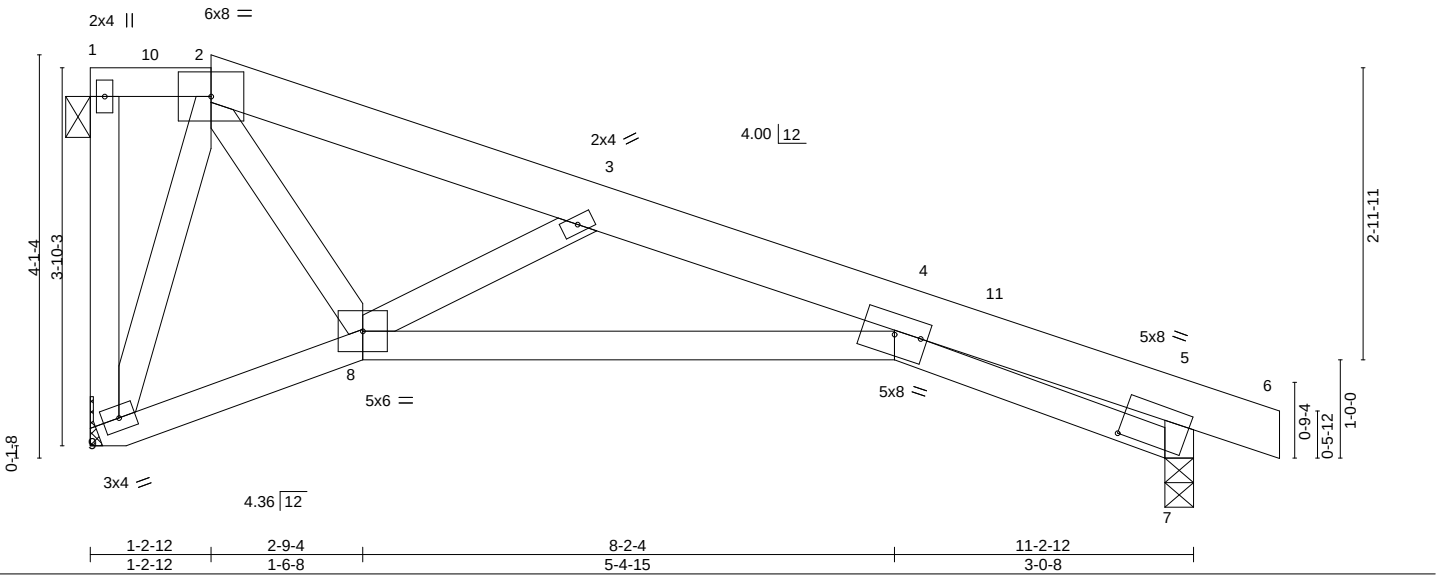
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:06 2022 Page 1

ID:Qh6DWIRkAvK03vHPr_WIOqyyU0S-37uTFNPZcTNo9FGBJ4KvkGi2yh4IMxZJYSn1Fryy60?

1-2-12	2-9-4	4-11-8	8-2-4	11-2-12	12-1-4
1-2-12	1-6-8	2-2-4	3-2-11	3-0-8	0-10-8

Scale = 1:23.5



1-2-12	2-9-4	8-2-4	11-2-12
1-2-12	1-6-8	5-4-15	3-0-8

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

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	0.75	Vert(LL)	-0.13	4-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.25	4-8	>535	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.16	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 50 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 9=Mechanical, 7=0-3-8
Max Horz 9=-151(LC 8)
Max Uplift 9=-97(LC 9), 7=-118(LC 9)
Max Grav 9=489(LC 1), 7=567(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-529/113, 3-4=-1145/250, 4-5=-575/122, 5-7=-658/196
BOT CHORD 4-8=-174/1157, 4-7=-62/431
WEBS 2-9=-518/186, 2-8=-68/595, 3-8=-811/270

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 1-2-12, Exterior(2R) 1-2-12 to 5-2-12, Interior(1) 5-2-12 to 12-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
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) 7 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) 9 except (jt=lb) 7=118.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E5	Roof Special	1	1	I53110884
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:06 2022 Page 1
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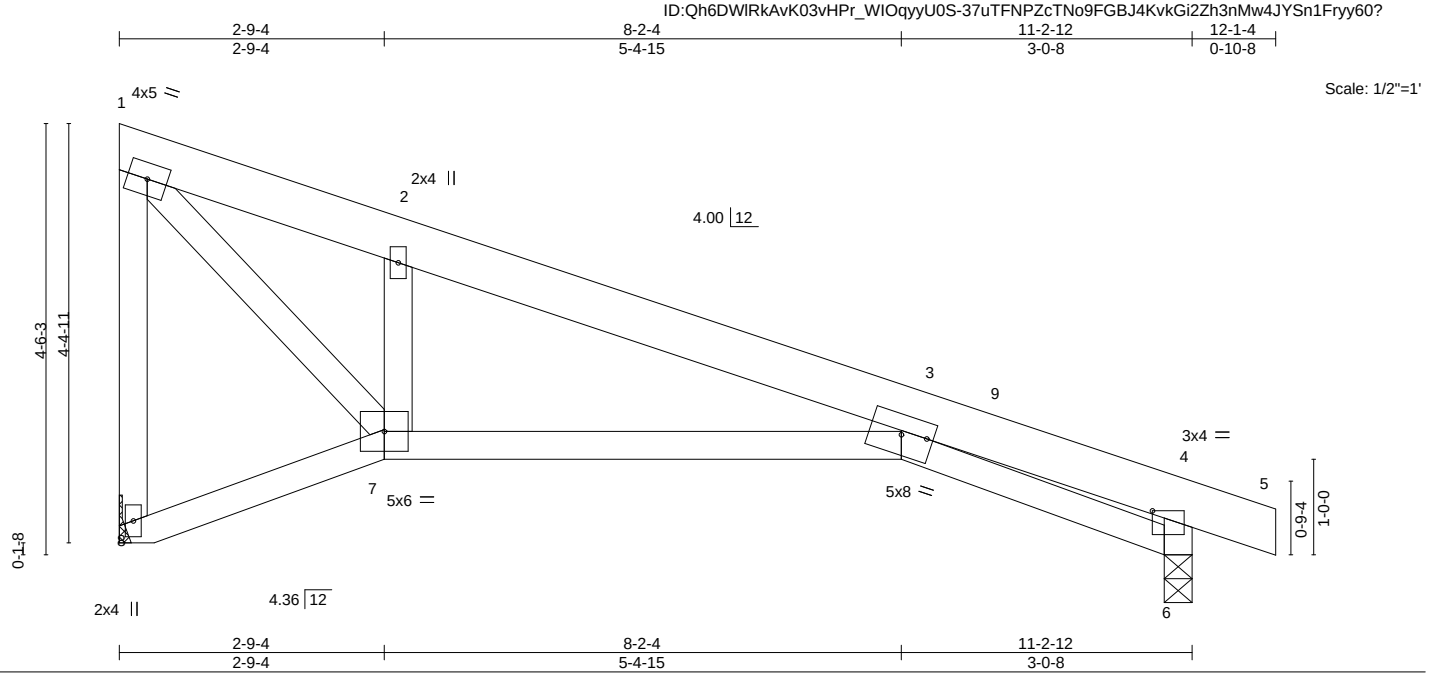

Plate Offsets (X,Y)-- [4:2-4-5,0-9-0]

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	0.71	Vert(LL)	-0.17	3-7	>758	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.32	3-7	>405	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.20	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 47 lb	FT = 20%

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

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

REACTIONS. (size) 8=Mechanical, 6=0-3-8
Max Horz 8=-162(LC 10)
Max Uplift 8=-102(LC 13), 6=-115(LC 9)
Max Grav 8=489(LC 1), 6=567(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-490/120, 1-2=-744/223, 2-3=-707/155
BOT CHORD 3-7=-45/678
WEBS 1-7=-224/982, 2-7=-634/238, 4-6=-474/183

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-11-0, Interior(1) 2-11-0 to 12-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 6 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=102, 6=115.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E6	Jack-Closed	8	1	I53110885

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:07 2022 Page 1

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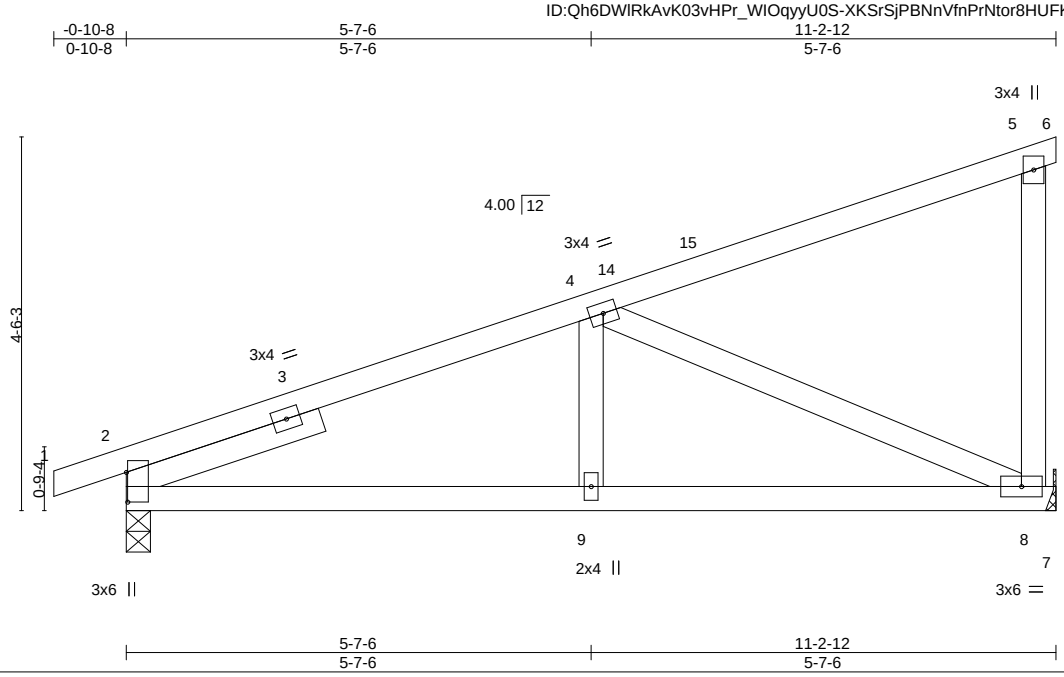


Plate Offsets (X,Y)-- [2:0-4-5,0-0-3]

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	0.26	Vert(LL)	-0.02	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 43 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 2-6-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 8=Mechanical
Max Horz 2=166(LC 11)
Max Uplift 2=-108(LC 8), 8=-105(LC 8)
Max Grav 2=557(LC 1), 8=502(LC 1)

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

TOP CHORD	2-4=-649/171
BOT CHORD	2-9=-292/657, 8-9=-292/657
WEBS	4-8=-683/256

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=108, 8=105.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E7	Half Hip	1	1	I53110886
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:08 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-?W?Dg3Qp84dWPZQZRVMNqhnWYVIrqqdc0mG7Jjyy6?z

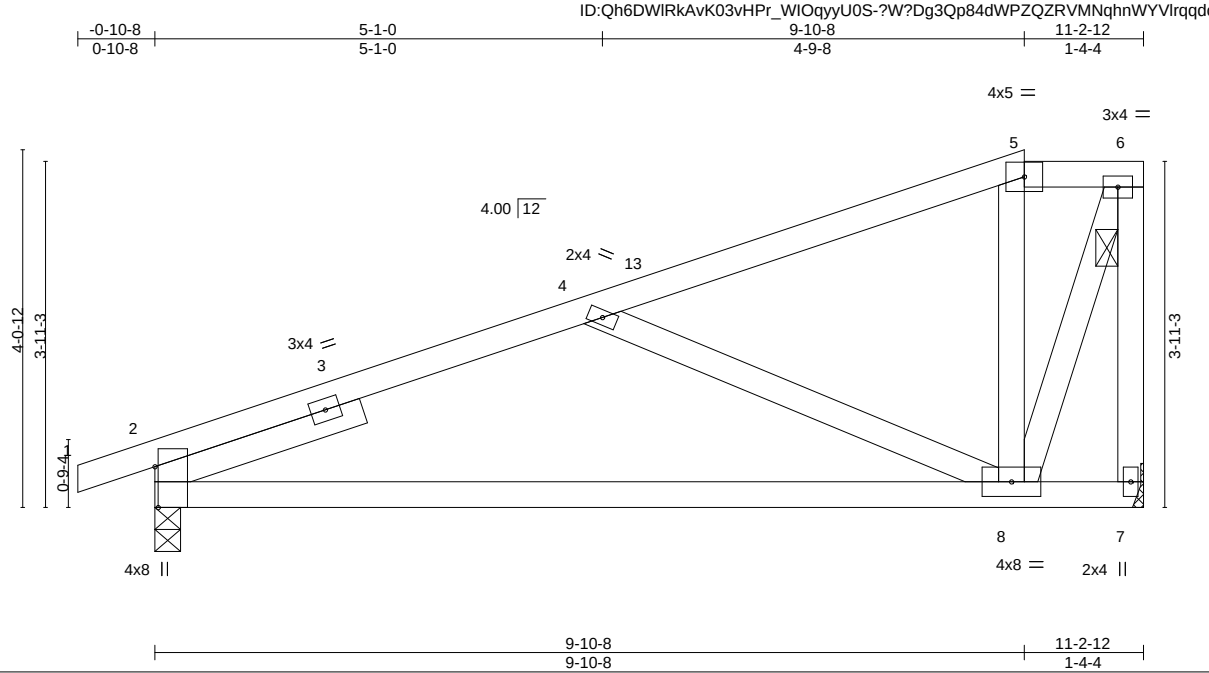


Plate Offsets (X,Y)-- [2:0-5-9,Edge]

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	0.23	Vert(LL)	-0.13	8-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.27	8-11	>499	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 48 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 2-6-0

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=144(LC 11)
Max Uplift 7=-99(LC 8), 2=-113(LC 8)
Max Grav 7=496(LC 1), 2=562(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-719/208, 4-5=-279/76, 6-7=-573/159
BOT CHORD 2-8=-353/670
WEBS 4-8=-500/264, 6-8=-223/624

NOTES-

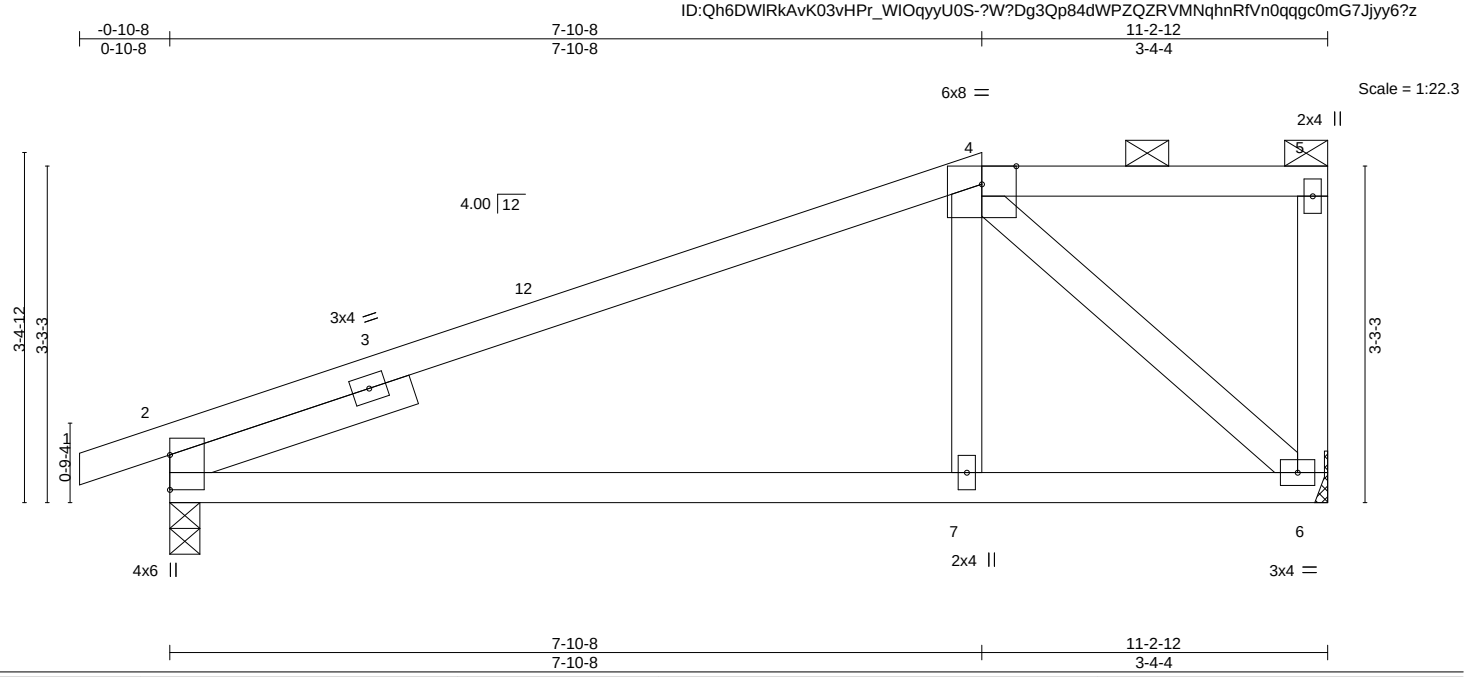
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-10-8, Exterior(2E) 9-10-8 to 11-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 7 except (jt=lb) 2=113.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E8	Half Hip	1	1	I53110887
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:08 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-?W?Dg3Qp84dWPZQZRVMNqhnRfVn0qqgc0mG7Jjyy6?z



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.07	7-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.15	7-10	>911	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.04	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 41 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=117(LC 11)
Max Uplift 2=-117(LC 8), 6=-96(LC 8)
Max Grav 2=562(LC 1), 6=496(LC 1)

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

TOP CHORD	2-4=-533/151
BOT CHORD	2-7=-253/496, 6-7=-253/487
WEBS	4-7=0/281, 4-6=-680/314

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-10-8, Exterior(2E) 7-10-8 to 11-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 6 except (jt=lb) 2=117.
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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E9	Half Hip	1	1	I53110888
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:09 2022 Page 1
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-0-10-8 / 0-10-8 | 5-10-8 / 5-10-8 | 11-2-12 / 5-4-4

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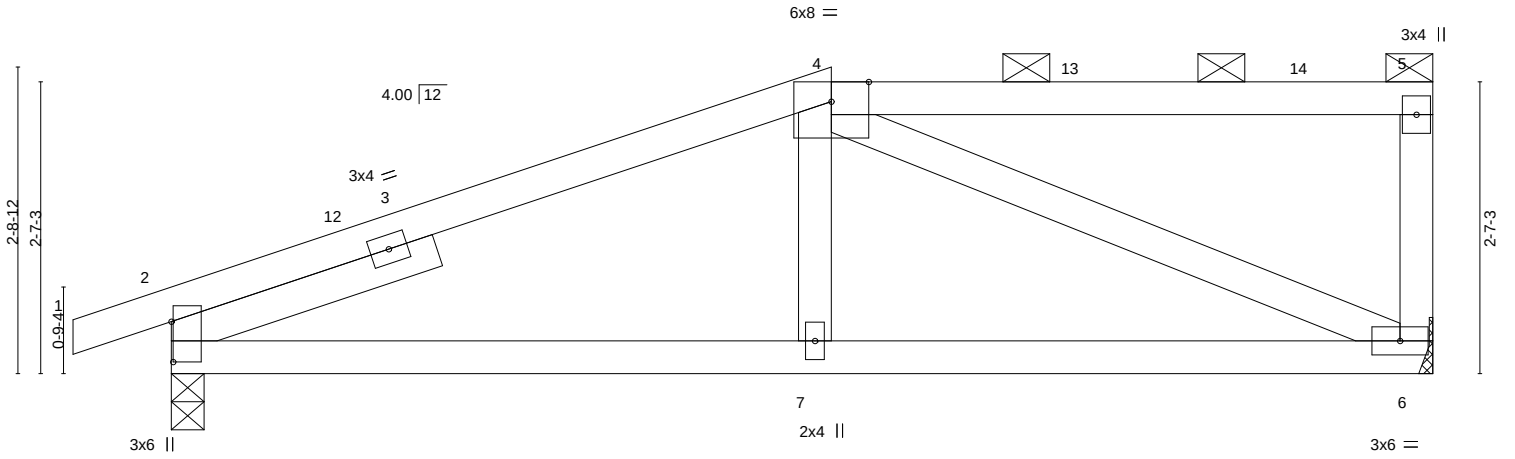

5-10-8 / 5-10-8 | 11-2-12 / 5-4-4

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

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	0.34	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 41 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=90(LC 11)
Max Uplift 2=-119(LC 8), 6=-93(LC 8)
Max Grav 2=562(LC 1), 6=496(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-686/237
BOT CHORD 2-7=-294/654, 6-7=-296/647
WEBS 4-6=-644/285

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-10-8, Exterior(2R) 5-10-8 to 10-1-7, Interior(1) 10-1-7 to 11-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 6 except (jt=lb) 2=119.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	E10	Half Hip Girder	1	1	I53110889

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:03 2022 Page 1

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0-10-8 3-10-8 3-6-6 3-9-14

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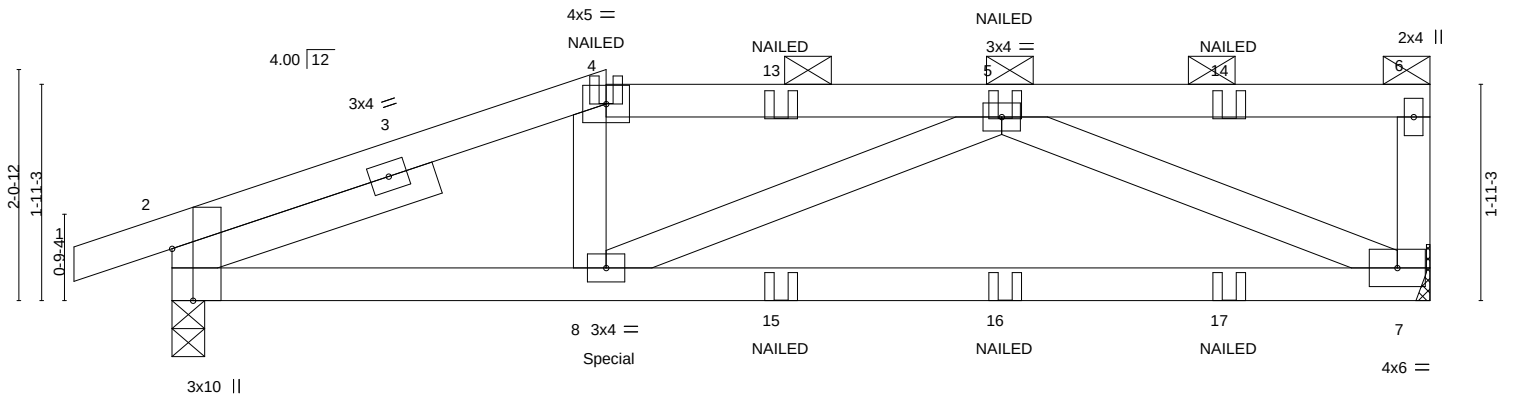

3-10-8 7-4-14 11-2-12

3-10-8 3-6-6 3-9-14

Plate Offsets (X,Y)-- [2:0-5-9,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	0.44	Vert(LL)	-0.12	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.26	7-8	>515	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 42 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 2-6-0

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=64(LC 7)
Max Uplift 7=-147(LC 4), 2=-185(LC 4)
Max Grav 7=714(LC 1), 2=795(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1388/272, 4-5=-1270/269
BOT CHORD 2-8=-250/1291, 7-8=-301/1133
WEBS 4-8=0/327, 5-7=-1151/327, 5-8=0/255

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=147, 2=185.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 212 lb down and 74 lb up at 3-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
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: 1-4=-70, 4-6=-70, 7-9=-20
   Concentrated Loads (lb)
   Vert: 4=-43(F) 8=-212(F) 5=-43(F) 13=-43(F) 14=-43(F) 15=-22(F) 16=-22(F) 17=-22(F)

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	G1	HALF HIP GIRDER	1	2	I53110890

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:10 2022 Page 1
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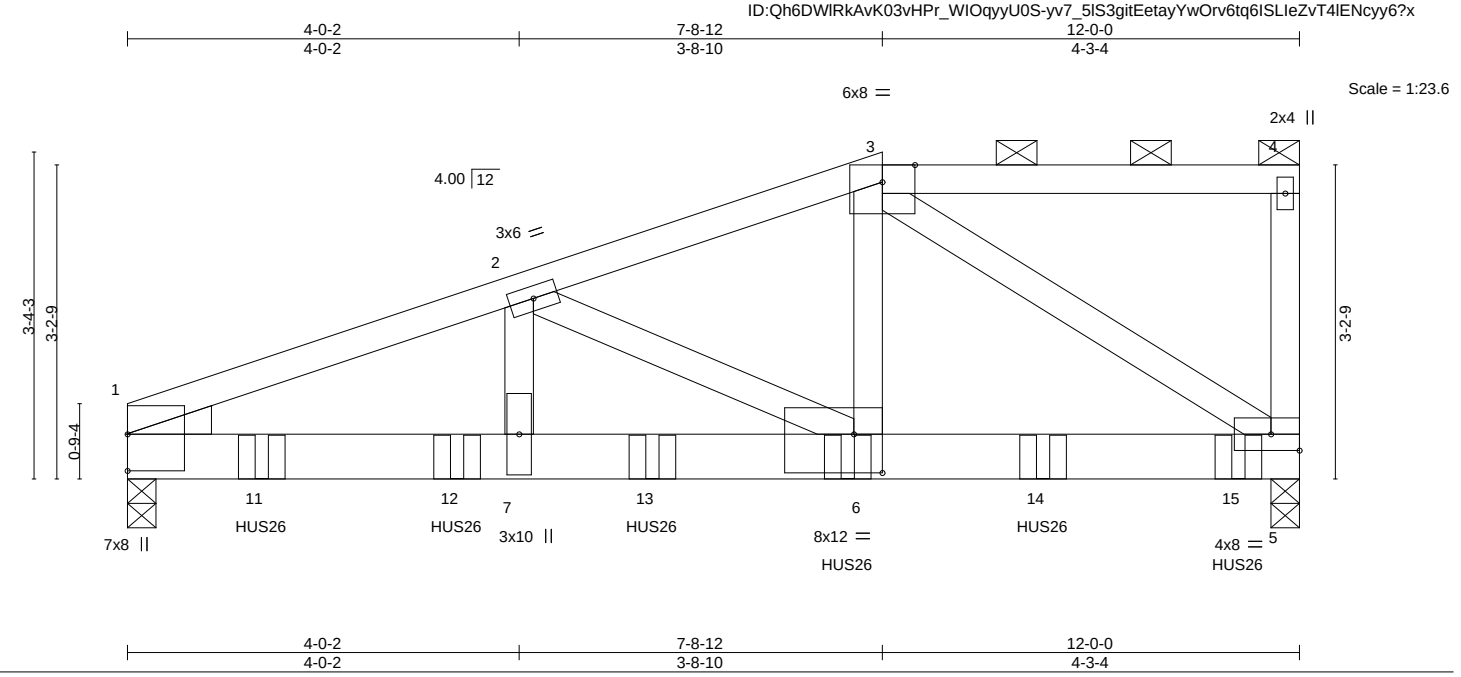

Plate Offsets (X,Y)-- [6:0-3-8,0-4-12]

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	0.36	Vert(LL)	-0.07	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.12	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 107 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

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

REACTIONS. (size) 5=0-3-8, 1=0-3-8
Max Horz 1=107(LC 28)
Max Uplift 5=-845(LC 4), 1=-748(LC 4)
Max Grav 5=4996(LC 1), 1=4320(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-7359/1275, 2-3=-5065/875
BOT CHORD 1-7=-1207/6928, 6-7=-1207/6928, 5-6=-774/4590
WEBS 2-7=-279/1705, 2-6=-2353/470, 3-6=-708/4376, 3-5=-5476/936

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=845, 1=748.
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 HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-4-8 from the left end to 11-4-8 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-4=-70, 5-8=-20
   Concentrated Loads (lb)
   Vert: 6=-1374(F) 11=-1374(F) 12=-1374(F) 13=-1374(F) 14=-1374(F) 15=-1379(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J1	Jack-Open	4	1	I53110891
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:11 2022 Page 1
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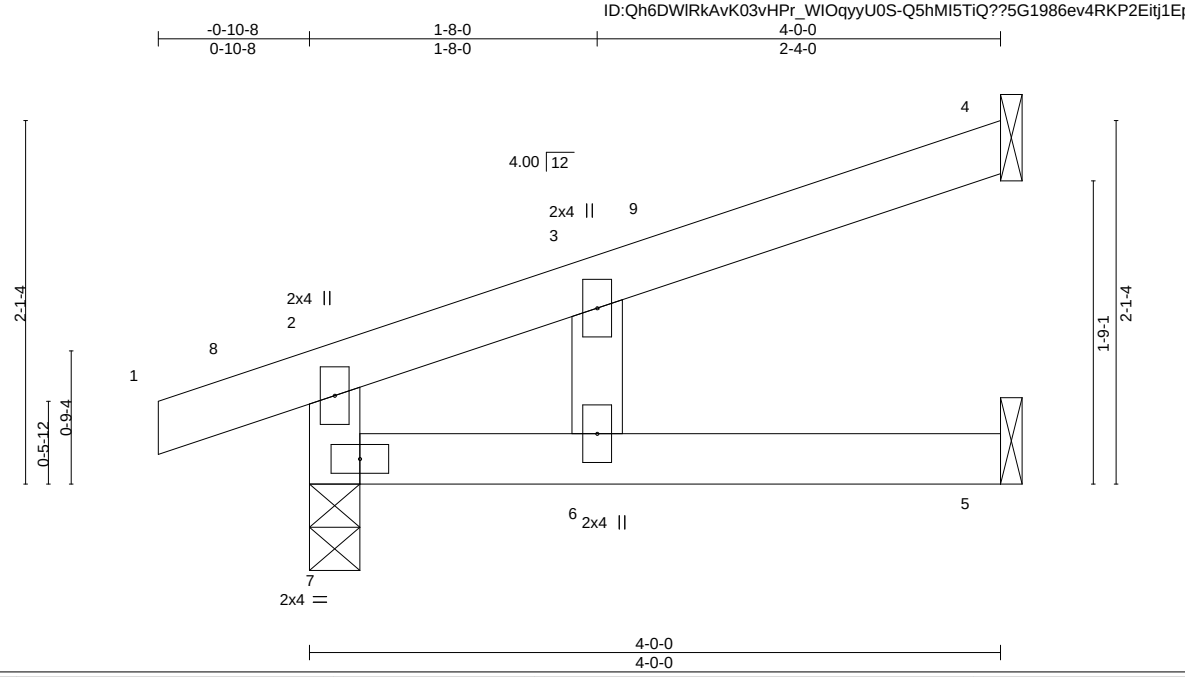

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.02	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	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, 7=0-3-8
Max Horz 7=55(LC 8)
Max Uplift 4=-39(LC 12), 5=-4(LC 12), 7=-58(LC 8)
Max Grav 4=104(LC 1), 5=65(LC 3), 7=252(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 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) 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, 5, 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J2	Jack-Open	3	1	I53110892

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:13 2022 Page 1

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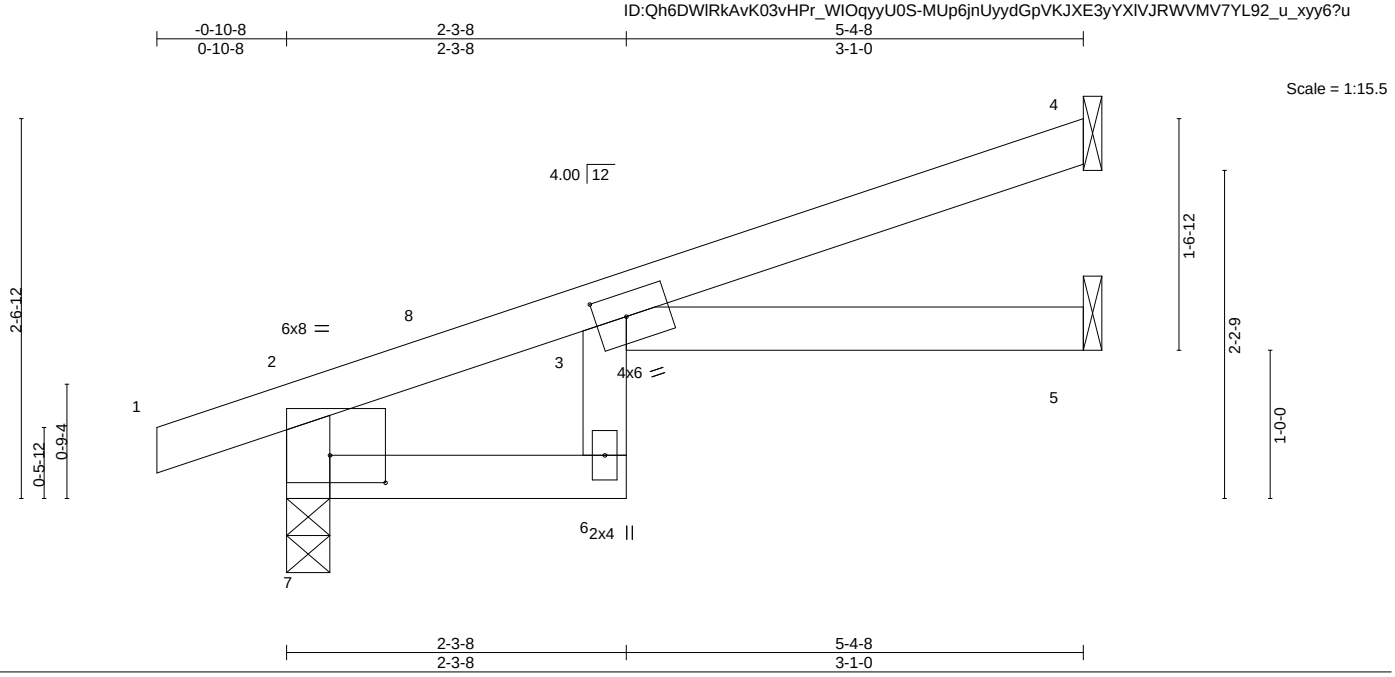

Plate Offsets (X,Y)-- [2:0-4-8,0-2-4], [3:0-2-8,0-1-14]

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	0.48	Vert(LL)	0.08	3-5	>773	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.11	3-5	>586	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							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, except end verticals.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=72(LC 8)
Max Uplift 4=-51(LC 12), 5=-6(LC 12), 7=-66(LC 8)
Max Grav 4=143(LC 1), 5=88(LC 3), 7=311(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-328/180

NOTES-

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J3	Jack-Open	1	1	I53110893
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:14 2022 Page 1
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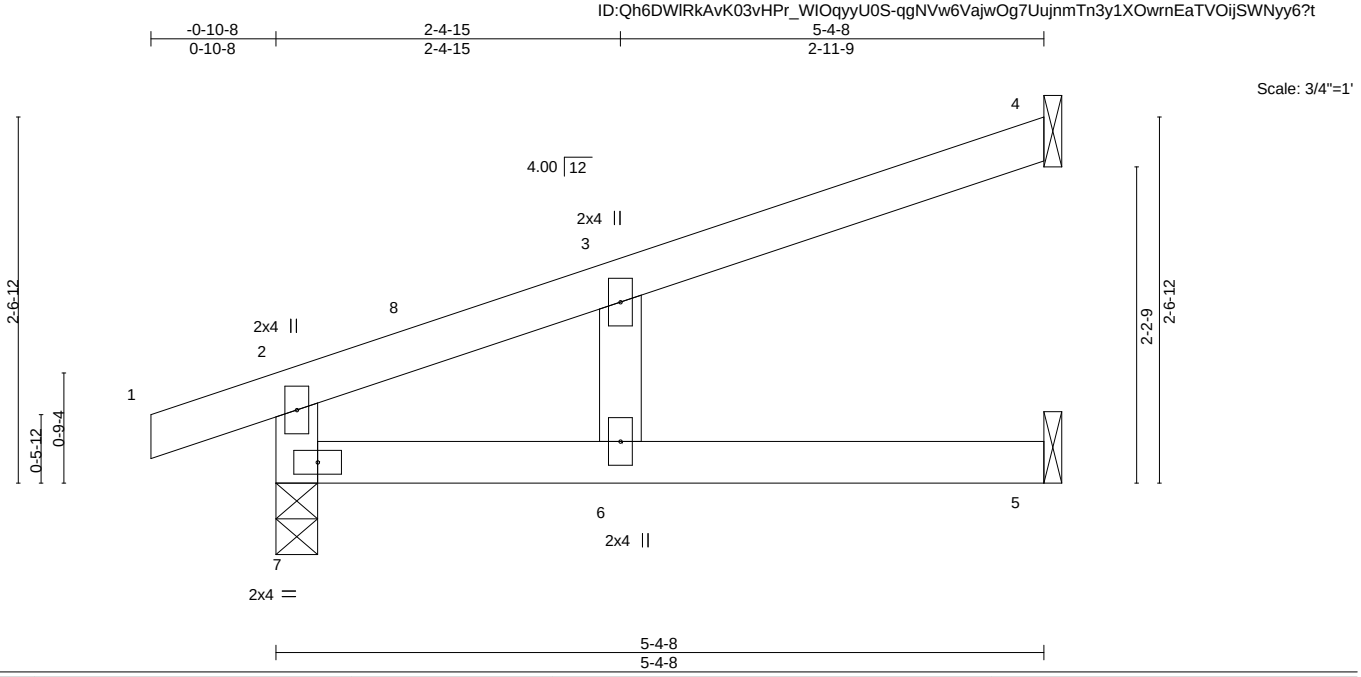

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.07	6	>932	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.09	5-6	>701	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.03	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=72(LC 8)
Max Uplift 4=-50(LC 12), 5=-7(LC 12), 7=-66(LC 8)
Max Grav 4=142(LC 1), 5=88(LC 3), 7=311(LC 1)

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

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J4	Jack-Open	4	1	I53110894

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:15 2022 Page 1

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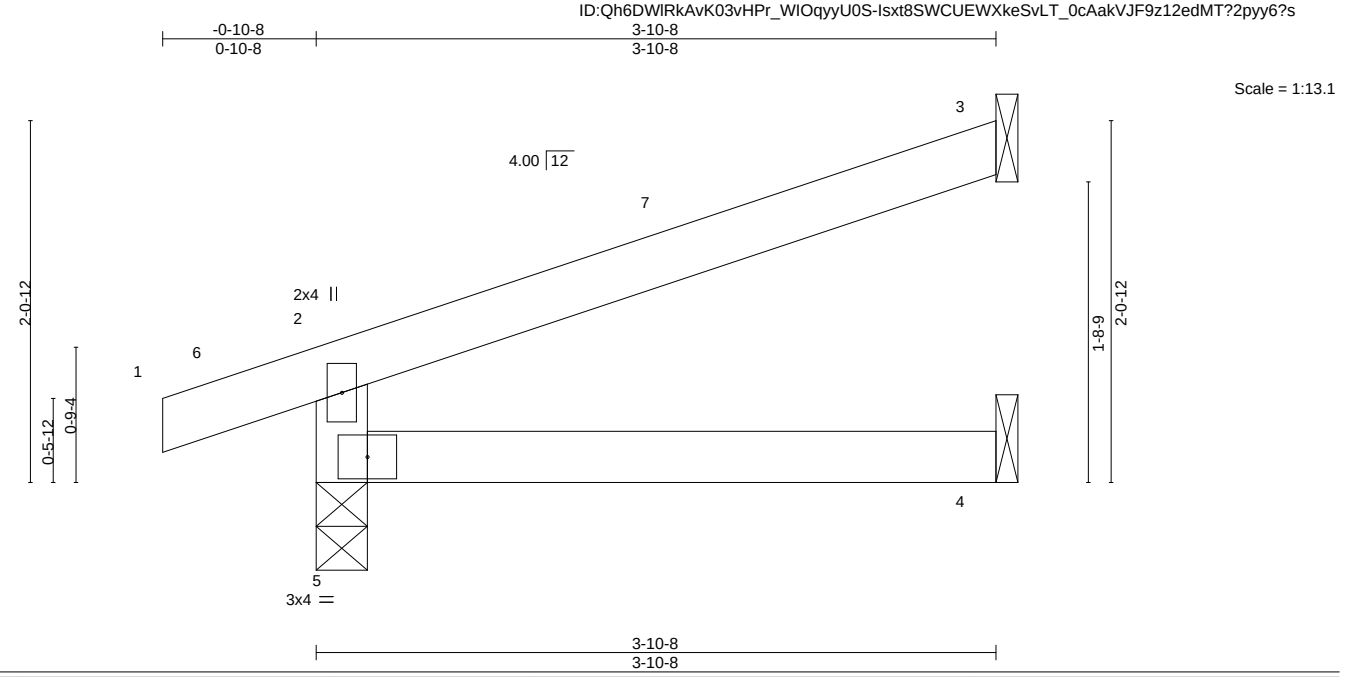

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	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 3-10-8 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 8)
Max Uplift 3=-47(LC 12), 5=-58(LC 8)
Max Grav 3=113(LC 1), 4=69(LC 3), 5=246(LC 1)

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

NOTES-

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J5	Jack-Open	5	1	I53110895

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:15 2022 Page 1
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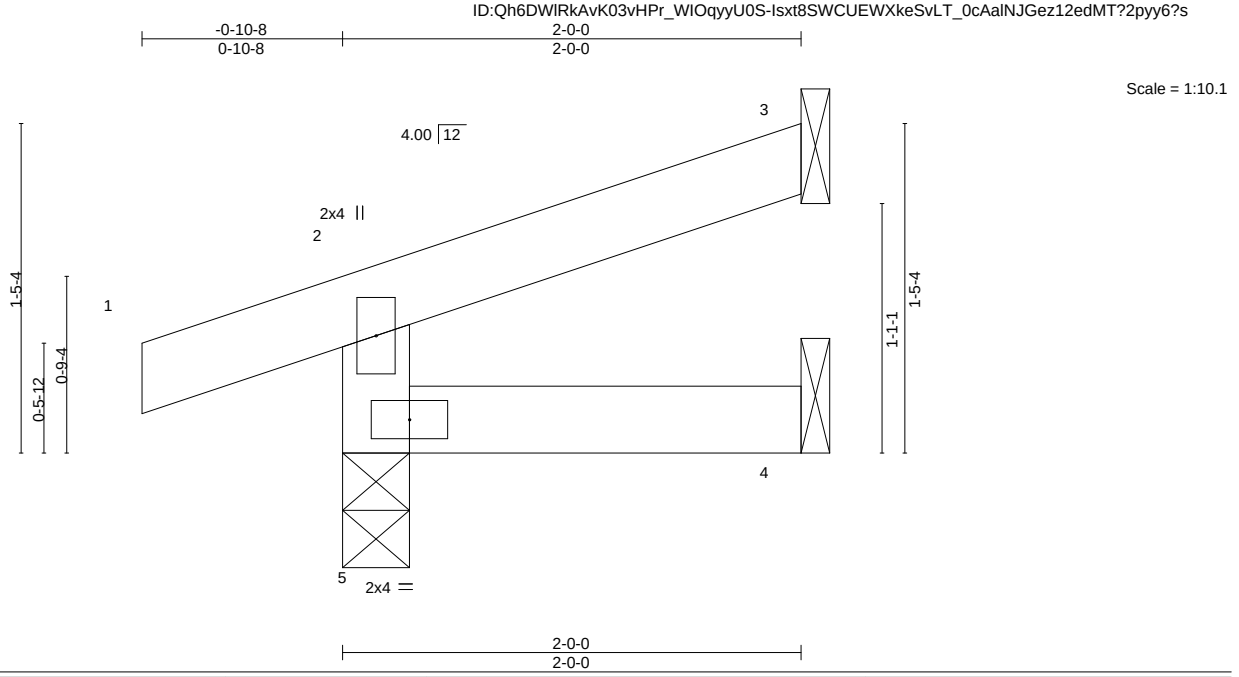

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=32(LC 9)
Max Uplift 3=-23(LC 12), 5=-51(LC 8)
Max Grav 3=48(LC 1), 4=33(LC 3), 5=174(LC 1)

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

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J6	Jack-Open	1	1	I53110896
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:16 2022 Page 1
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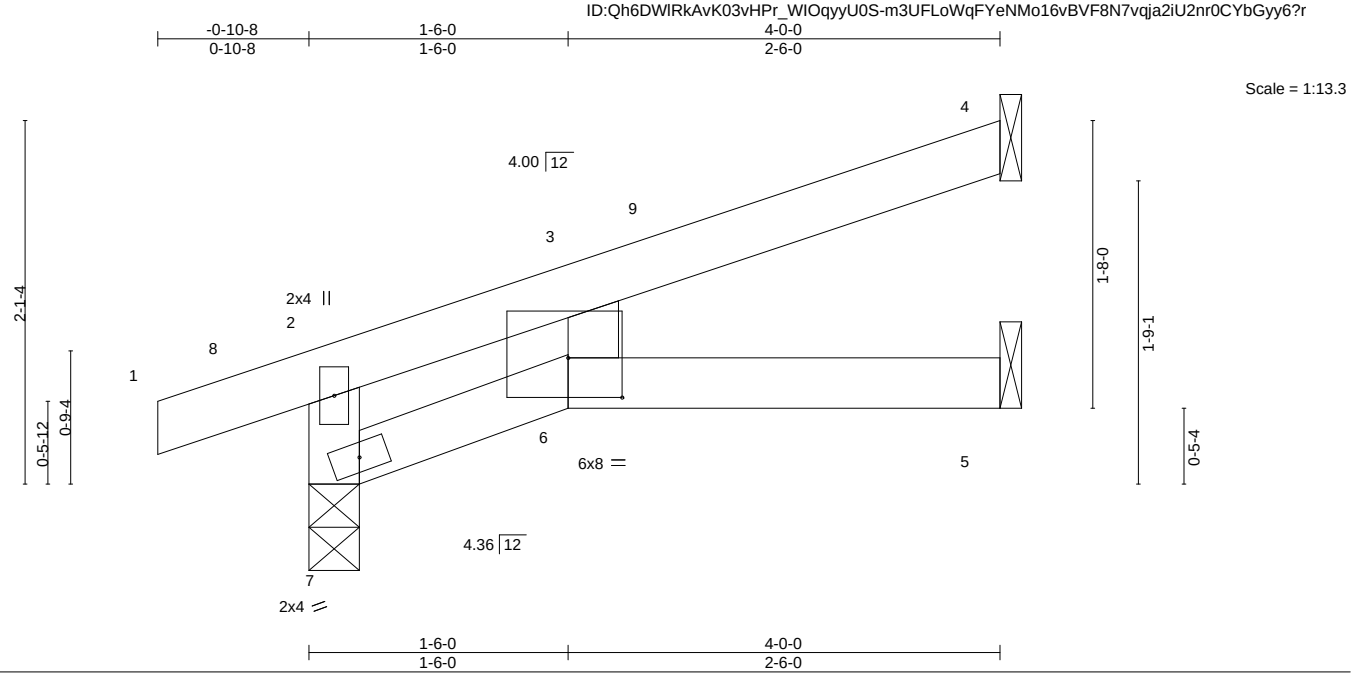

Plate Offsets (X,Y)-- [6:0-3-12,0-2-12]

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	0.15	Vert(LL)	0.02	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 11 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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, 7=0-3-8
Max Horz 7=54(LC 8)
Max Uplift 4=-41(LC 12), 5=-2(LC 12), 7=-58(LC 8)
Max Grav 4=107(LC 1), 5=64(LC 3), 7=252(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 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) 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, 5, 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J7	Jack-Open	3	1	I53110897
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:16 2022 Page 1
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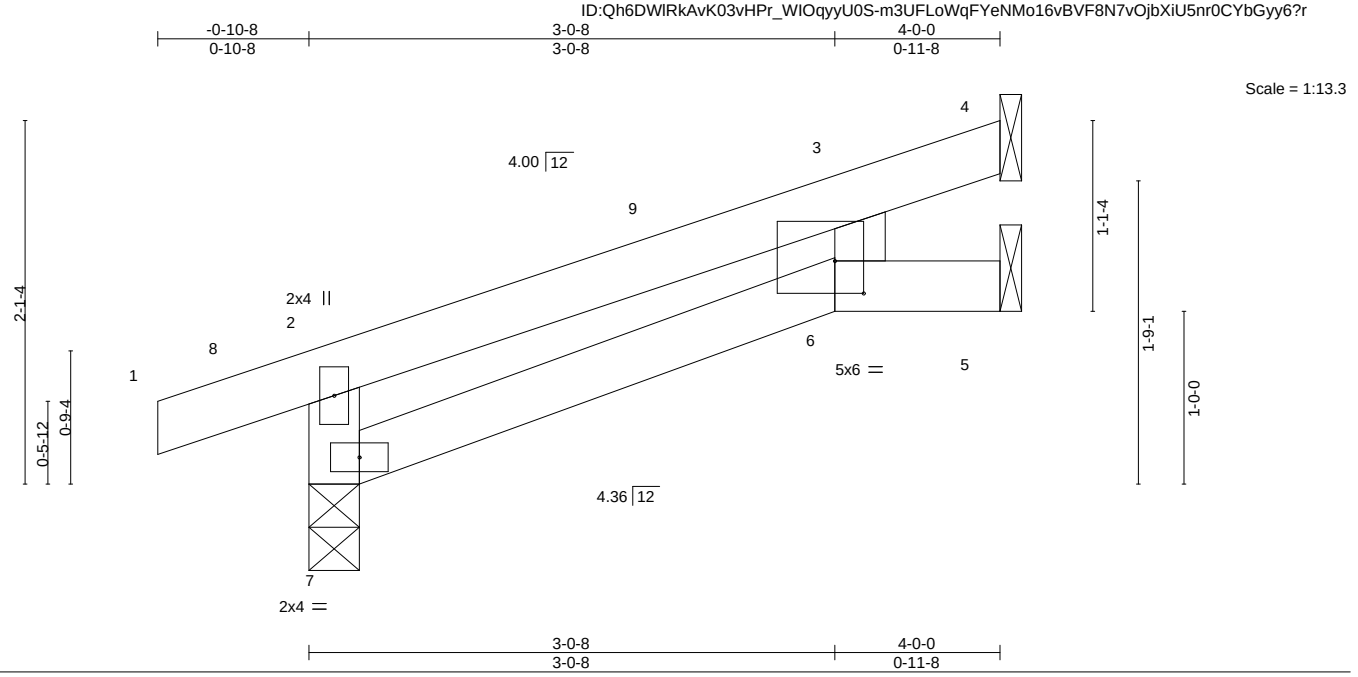

Plate Offsets (X,Y)-- [6:0-2-0,0-2-4]

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	0.18	Vert(LL)	0.02	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 11 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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, 7=0-3-8
Max Horz 7=54(LC 8)
Max Uplift 4=-27(LC 12), 5=-17(LC 12), 7=-58(LC 8)
Max Grav 4=99(LC 1), 5=62(LC 1), 7=252(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 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) 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, 5, 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J8	Jack-Open	2	1	I53110898
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:17 2022 Page 1
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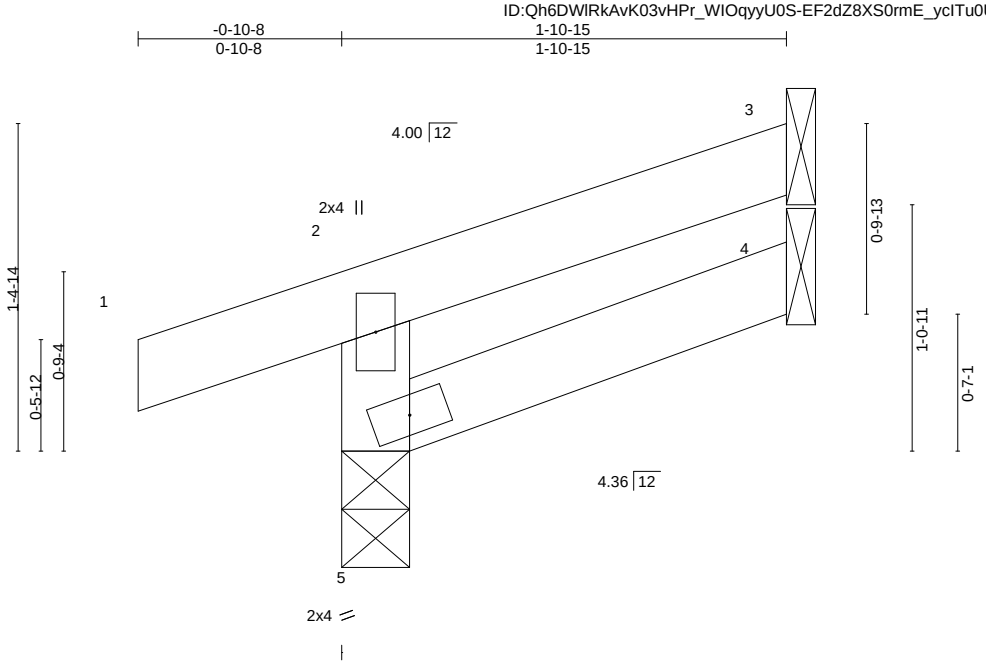

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=32(LC 9)
Max Uplift 3=-23(LC 12), 5=-50(LC 8)
Max Grav 3=44(LC 1), 4=31(LC 3), 5=171(LC 1)

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

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J9	Jack-Open	2	1	I53110899
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:18 2022 Page 1
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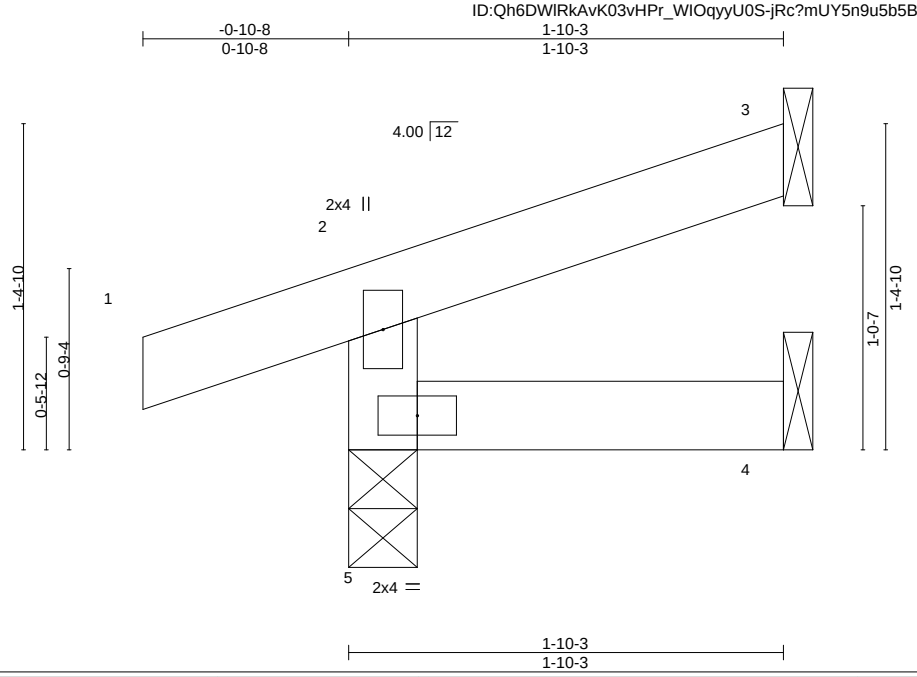

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=31(LC 9)
Max Uplift 3=-21(LC 12), 5=-51(LC 8)
Max Grav 3=42(LC 1), 4=30(LC 3), 5=169(LC 1)

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

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J10	Jack-Open	4	1	I53110900
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:11 2022 Page 1
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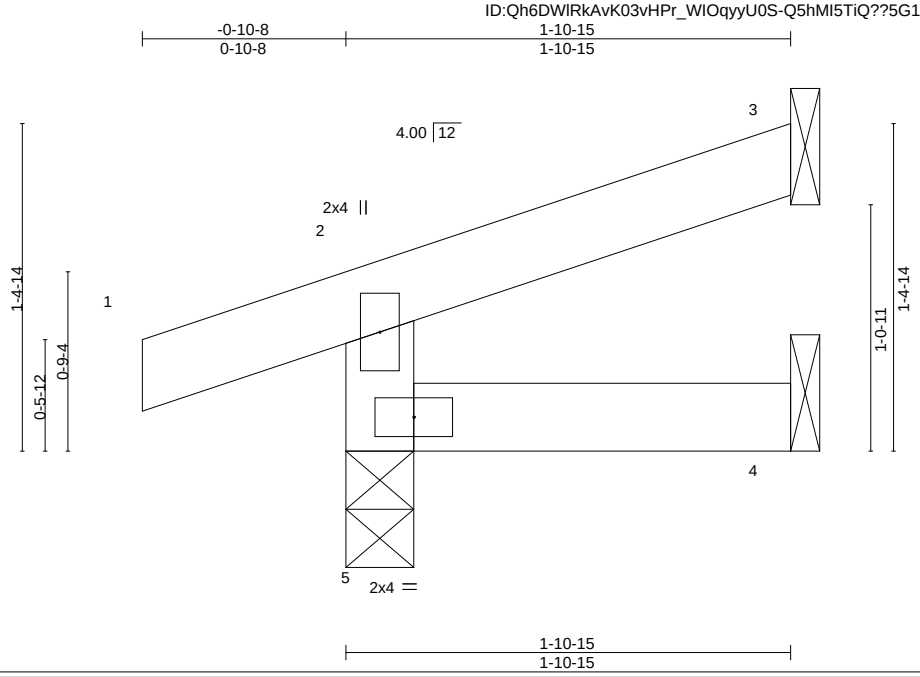

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-15 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=31(LC 9)
Max Uplift 3=-22(LC 12), 5=-51(LC 8)
Max Grav 3=44(LC 1), 4=32(LC 3), 5=171(LC 1)

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

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J11	Jack-Open	2	1	I53110901
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:12 2022 Page 1
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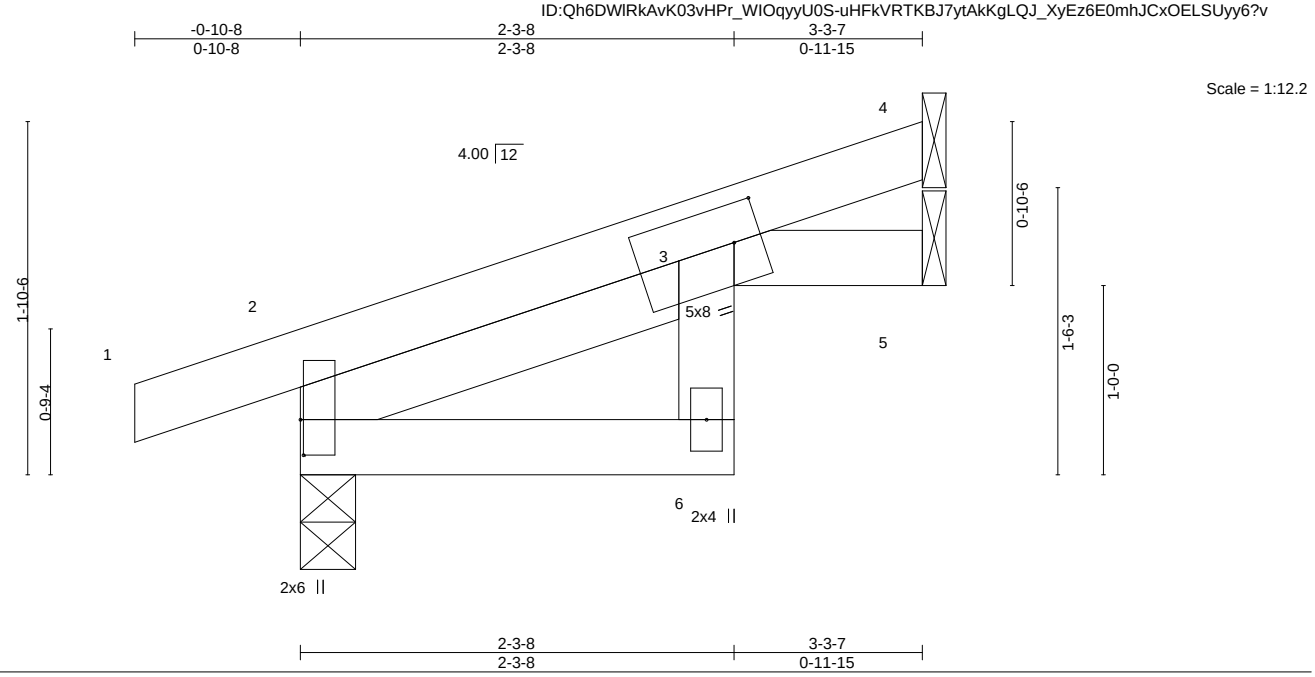

Plate Offsets (X,Y)-- [2:0-2-4,0-0-3], [3:0-1-12,0-2-7]

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	0.08	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	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 12 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-1-15

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=54(LC 8)
Max Uplift 4=-25(LC 12), 2=-49(LC 8), 5=-12(LC 12)
Max Grav 4=76(LC 1), 2=214(LC 1), 5=59(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-2-15, Interior(1) 2-2-15 to 3-2-11 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	J12	Jack-Open	2	1	I53110902

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:13 2022 Page 1

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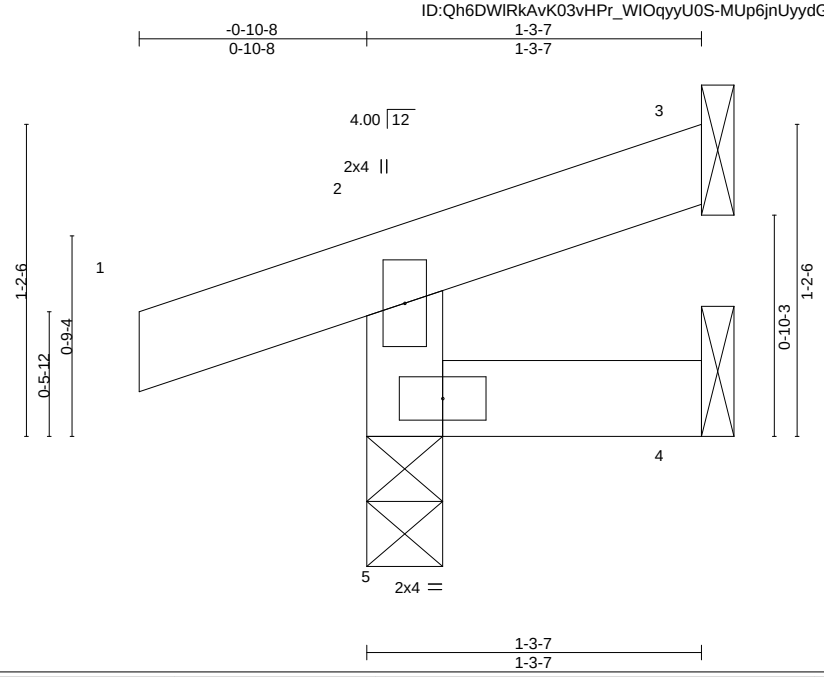

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 4 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-3-7 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=26(LC 9)
Max Uplift 3=-12(LC 12), 5=-52(LC 8)
Max Grav 3=15(LC 1), 4=19(LC 3), 5=155(LC 1)

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

NOTES-

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	L1	GABLE	1	1	I53110903
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:19 2022 Page 1
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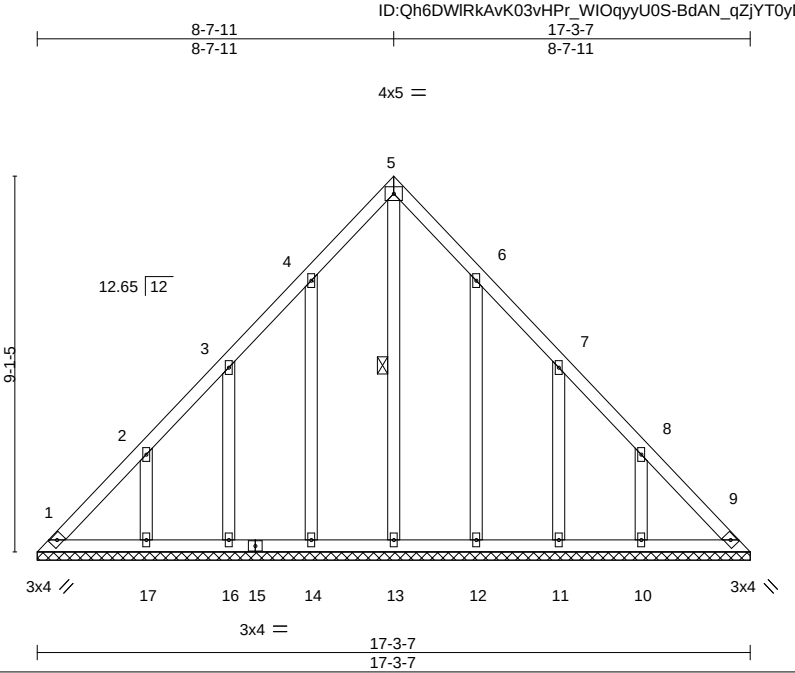

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 87 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

REACTIONS. All bearings 17-3-7.
(lb) - Max Horz 1=-208(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-117(LC 12), 16=-108(LC 12), 17=-141(LC 12), 12=-115(LC 13), 11=-109(LC 13), 10=-141(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 16, 17, 12, 11, 10

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-263/176

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-1 to 3-4-1, Interior(1) 3-4-1 to 8-7-11, Exterior(2R) 8-7-11 to 11-7-11, Interior(1) 11-7-11 to 16-11-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=117, 16=108, 17=141, 12=115, 11=109, 10=141.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	L2	GABLE	1	1	I53110904
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:20 2022 Page 1
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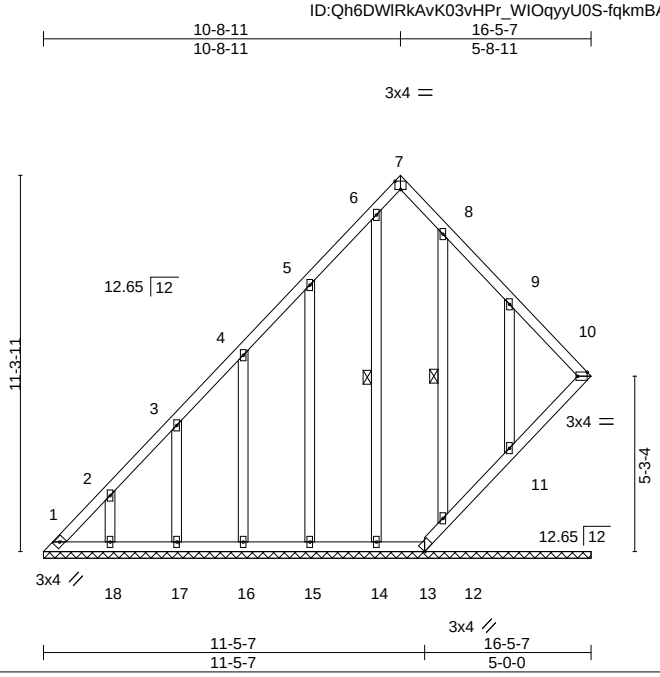

Plate Offsets (X,Y)-- [7:Edge,0-3-0], [10:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 96 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 6-14, 8-12

REACTIONS. All bearings 16-5-7.
(lb) - Max Horz 1=280(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 10, 14, 12 except 1=-107(LC 10), 13=-163(LC 13), 18=-116(LC 12), 17=-114(LC 12), 16=-111(LC 12), 15=-134(LC 12), 11=-153(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 13, 18, 17, 16, 15, 14, 12, 11 except 1=321(LC 12), 10=255(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-458/341, 2-3=-351/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-1 to 3-4-1, Interior(1) 3-4-1 to 10-8-11, Exterior(2R) 10-8-11 to 14-0-0, Interior(1) 14-0-0 to 16-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 10, 14, 12 except (jt=lb) 1=107, 13=163, 18=116, 17=114, 16=111, 15=134, 11=153.
7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 12, 11.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	L3	GABLE	1	1	I53110905
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:21 2022 Page 1
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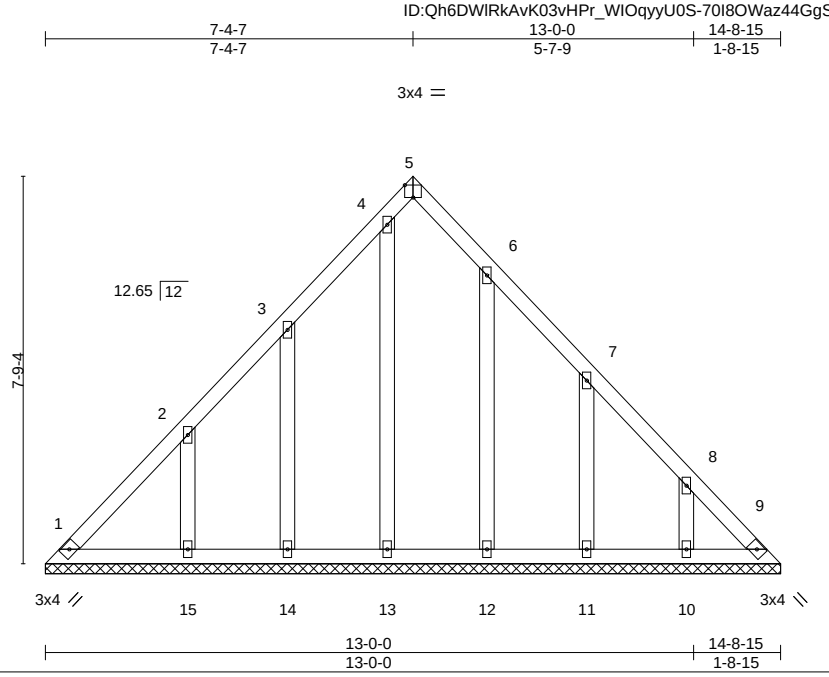

Plate Offsets (X,Y)-- [5:Edge,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 68 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 14-8-15.
(lb) - Max Horz 1=-177(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 13, 12 except 14=-121(LC 12), 15=-148(LC 12), 11=-127(LC 13), 10=-109(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 12, 11, 10 except 15=262(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-261/184, 8-9=-259/199

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-1 to 3-4-1, Interior(1) 3-4-1 to 7-4-7, Exterior(2R) 7-4-7 to 10-4-7, Interior(1) 10-4-7 to 14-4-14 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
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 13, 12 except (jt=lb) 14=121, 15=148, 11=127, 10=109.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	L4	GABLE	1	1	I53110906
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:21 2022 Page 1
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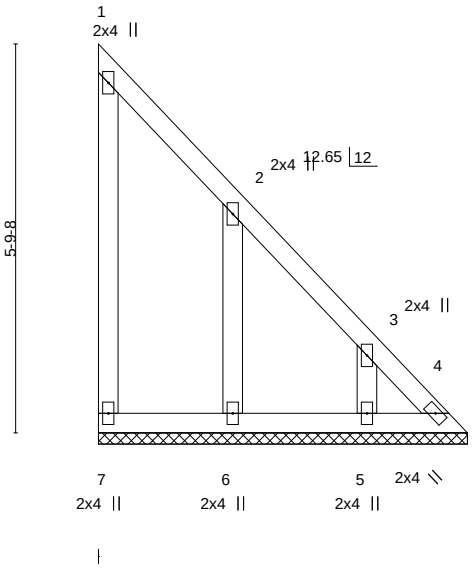
5-5-15
5-5-15

Scale = 1:34.3



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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 5-5-15.
(lb) - Max Horz 7=-189(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 7, 4, 5 except 6=-124(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 7, 4, 6, 5

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-266/272, 3-4=-359/359
BOT CHORD 6-7=-252/260, 5-6=-252/260, 4-5=-252/260

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 5-1-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) 7, 4, 5 except (jt=lb) 6=124.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	L5	GABLE	2	1	I53110907
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:22 2022 Page 1
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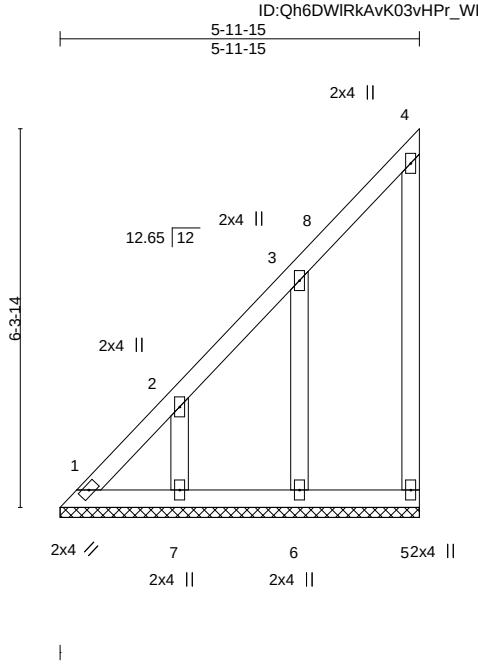

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-11-15.
(lb) - Max Horz 1=208(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 6=-121(LC 12), 7=-115(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-381/382, 2-3=-272/278

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-4-1 to 4-7-0, Exterior(2R) 4-7-0 to 5-10-3 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) 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 except (jt=lb) 6=121, 7=115.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	L6	Lay-In Gable	1	1	I53110908
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:23 2022 Page 1
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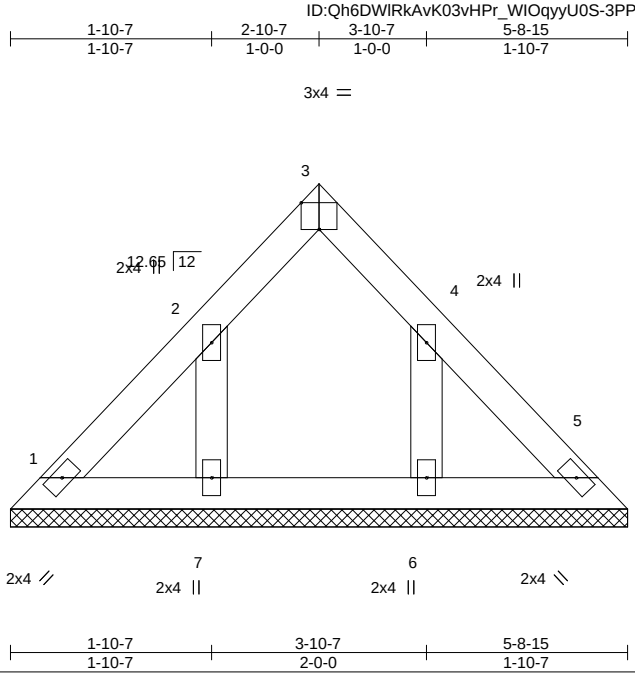


Plate Offsets (X,Y)-- [3:Edge,0-3-0]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	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	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-8-15.
(lb) - Max Horz 1=-64(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 7, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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) 7, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 15,2022

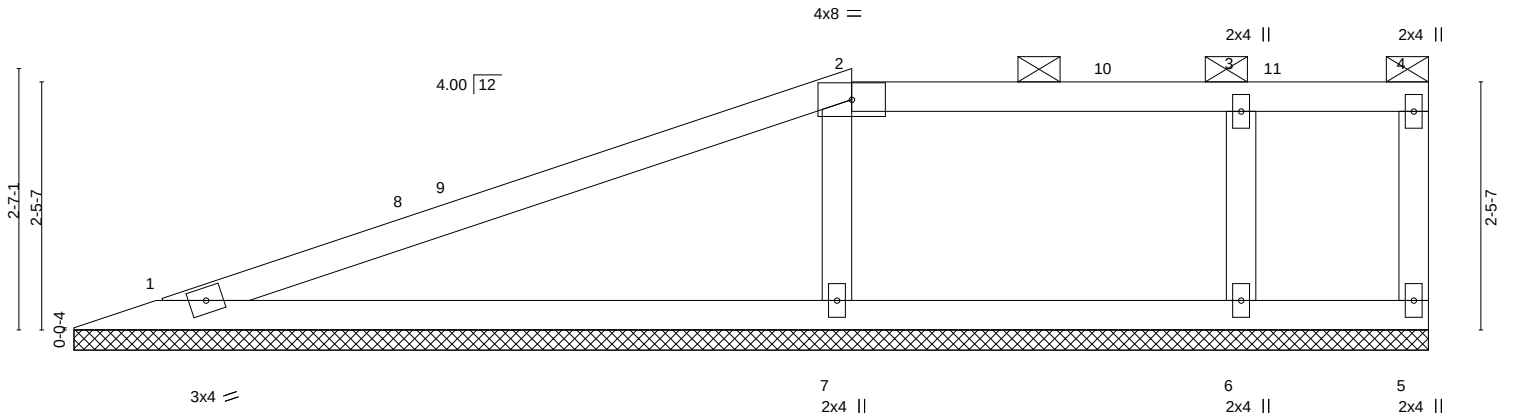
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V1	Valley	1	1	I53110909
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:23 2022 Page 1
ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-3PPupBcDchWOit4Sp97uxsvzzYx5rf3pSbPQLMyy6?k

7-9-2 13-5-10
7-9-2 5-8-8

Scale = 1:22.8



13-5-10
13-5-10

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	0.67	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 37 lb	FT = 20%

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

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

REACTIONS. All bearings 13-4-14.
(lb) - Max Horz 1=86(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=-110(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 5 except 1=257(LC 1), 7=588(LC 1), 6=278(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-423/249

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 7-9-2, Exterior(2R) 7-9-2 to 12-0-0, Interior(1) 12-0-0 to 13-3-14 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
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=110.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V2	Valley	1	1	I53110910

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:25 2022 Page 1

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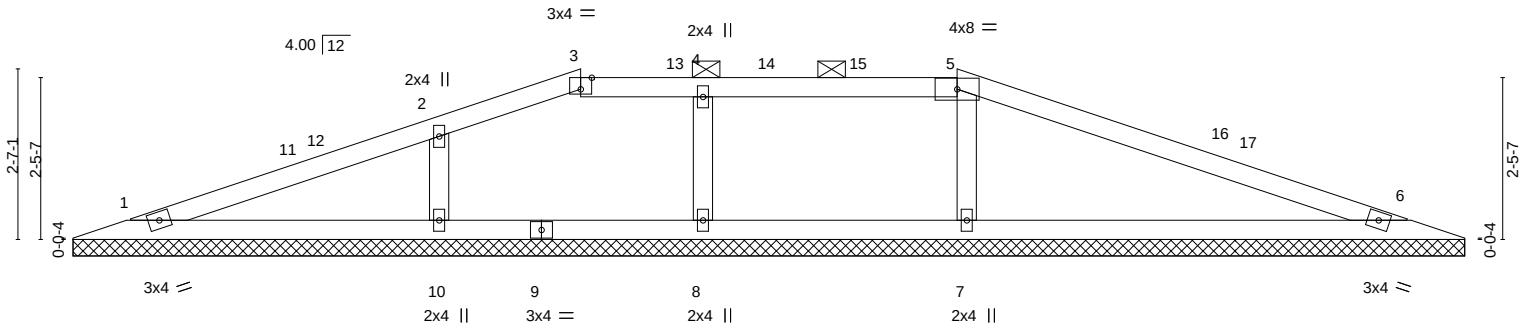
7-9-2 | 13-5-10 | 21-2-12

7-9-2 | 5-8-8 | 7-9-2

Scale = 1:34.9



0-0-12 | 21-2-12

0-0-12 | 21-2-0

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	0.67	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 53 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 21-1-4.

(lb) - Max Horz 1=34(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8, 10 except 7=-104(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1 except 6=276(LC 1), 7=564(LC 26), 8=311(LC 25), 10=458(LC 1)

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

WEBS 5-7=-402/179, 4-8=-264/99, 2-10=-339/162

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 7-9-2, Exterior(2R) 7-9-2 to 12-0-0, Interior(1) 12-0-0 to 13-5-10, Exterior(2R) 13-5-10 to 17-8-8, Interior(1) 17-8-8 to 20-3-7 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) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 8, 10 except (jt=lb) 7=104.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V3	Valley	1	1	I53110911
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:26 2022 Page 1

ID:Qh6DWlRkAvK03vHPr_WIOqyyU0S-U_51SDe6ucuzZKo1UHhbYUXU5lyn20nG9Zd4xhyy6?h

7-9-2 9-5-10 17-2-12

7-9-2 1-8-8 7-9-2

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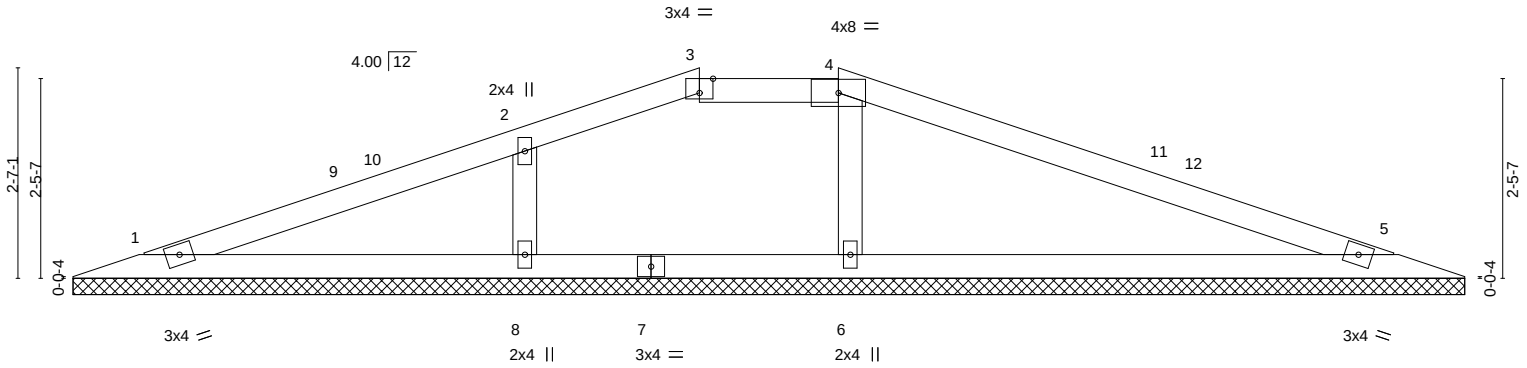

0-0-12 17-2-12

0-0-12 17-2-0

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	0.68	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 42 lb	FT = 20%

LUMBER-

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

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.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 17-1-4.
(lb) - Max Horz 1=-35(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8 except 6=-105(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=580(LC 1), 8=427(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-6=-428/214, 2-8=-338/175

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 7-9-2, Exterior(2E) 7-9-2 to 9-5-10, Exterior(2R) 9-5-10 to 13-8-8, Interior(1) 13-8-8 to 16-3-7 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) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8 except (jt=lb) 6=105.
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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V4	Valley	1	1	I53110912

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:26 2022 Page 1

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6-7-6 13-2-12

6-7-6 6-7-6

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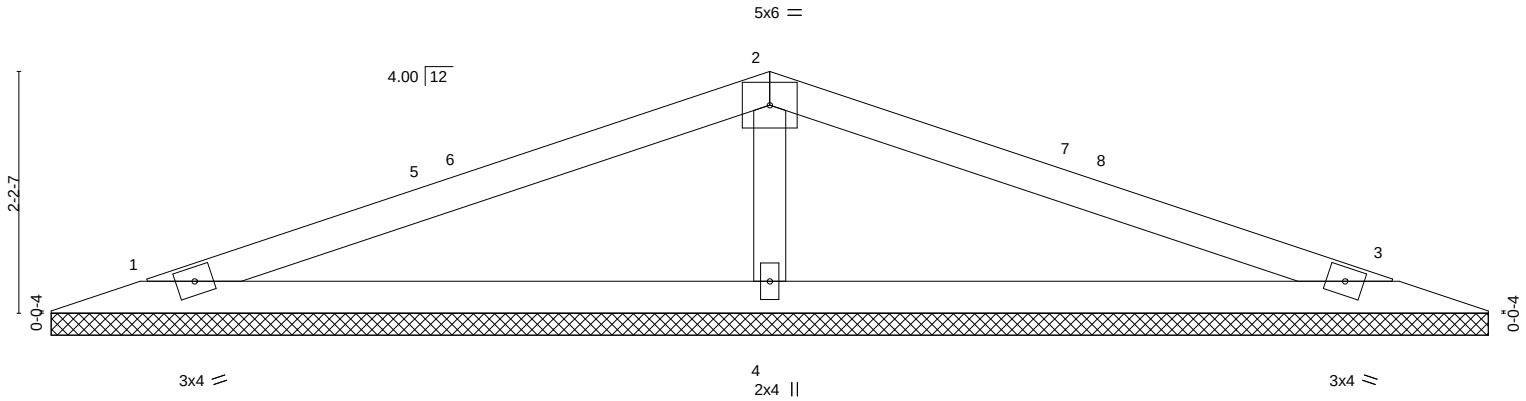

0-0-12 13-2-12

0-0-12 13-2-0

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	0.46	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 30 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=13-1-4, 3=13-1-4, 4=13-1-4
Max Horz 1=30(LC 16)
Max Uplift 1=-45(LC 8), 3=-49(LC 13), 4=-58(LC 8)
Max Grav 1=227(LC 25), 3=227(LC 26), 4=583(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-413/200

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 6-7-6, Exterior(2R) 6-7-6 to 9-7-6, Interior(1) 9-7-6 to 12-3-7 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, 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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V5	Valley	1	1	I53110913
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:27 2022 Page 1
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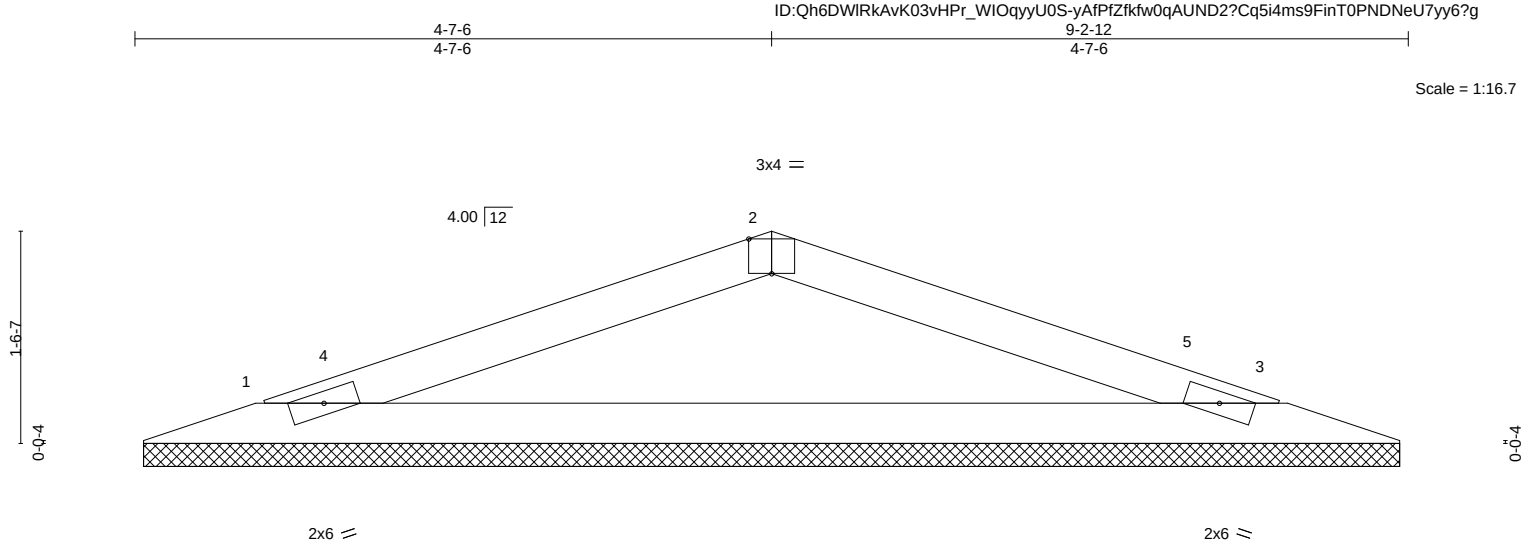

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	n/a	-	n/a	999		
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-S							Weight: 19 lb	FT = 20%

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

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

REACTIONS. (size) 1=9-1-4, 3=9-1-4
Max Horz 1=20(LC 12)
Max Uplift 1=-48(LC 8), 3=-48(LC 9)
Max Grav 1=331(LC 1), 3=331(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-506/323, 2-3=-506/323
BOT CHORD 1-3=-266/456

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 4-7-6, Exterior(2R) 4-7-6 to 7-7-6, Interior(1) 7-7-6 to 8-3-7 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, 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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V6	Valley	1	1	I53110914
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:28 2022 Page 1
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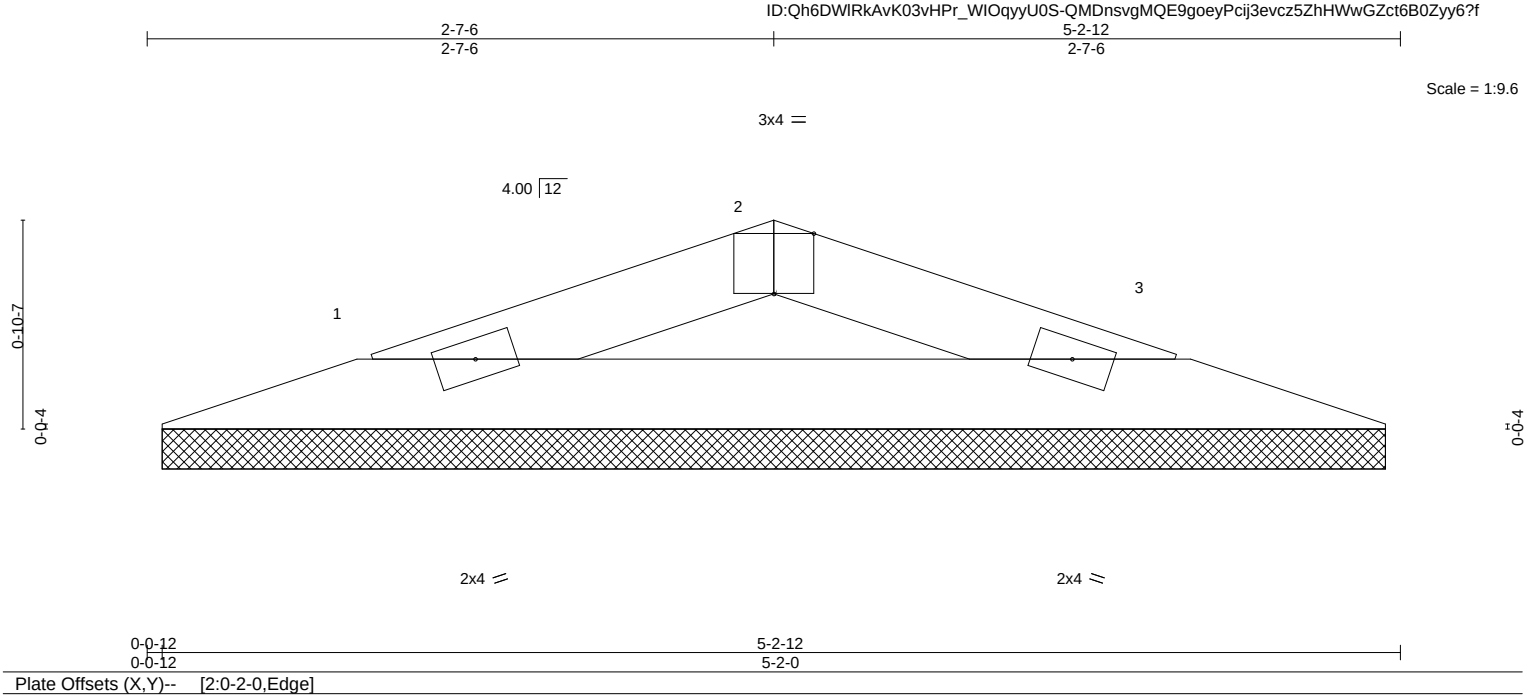

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-1-4, 3=5-1-4
Max Horz 1=9(LC 12)
Max Uplift 1=-22(LC 8), 3=-22(LC 9)
Max Grav 1=151(LC 1), 3=151(LC 1)

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

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V7	Valley	1	1	I53110915

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:28 2022 Page 1

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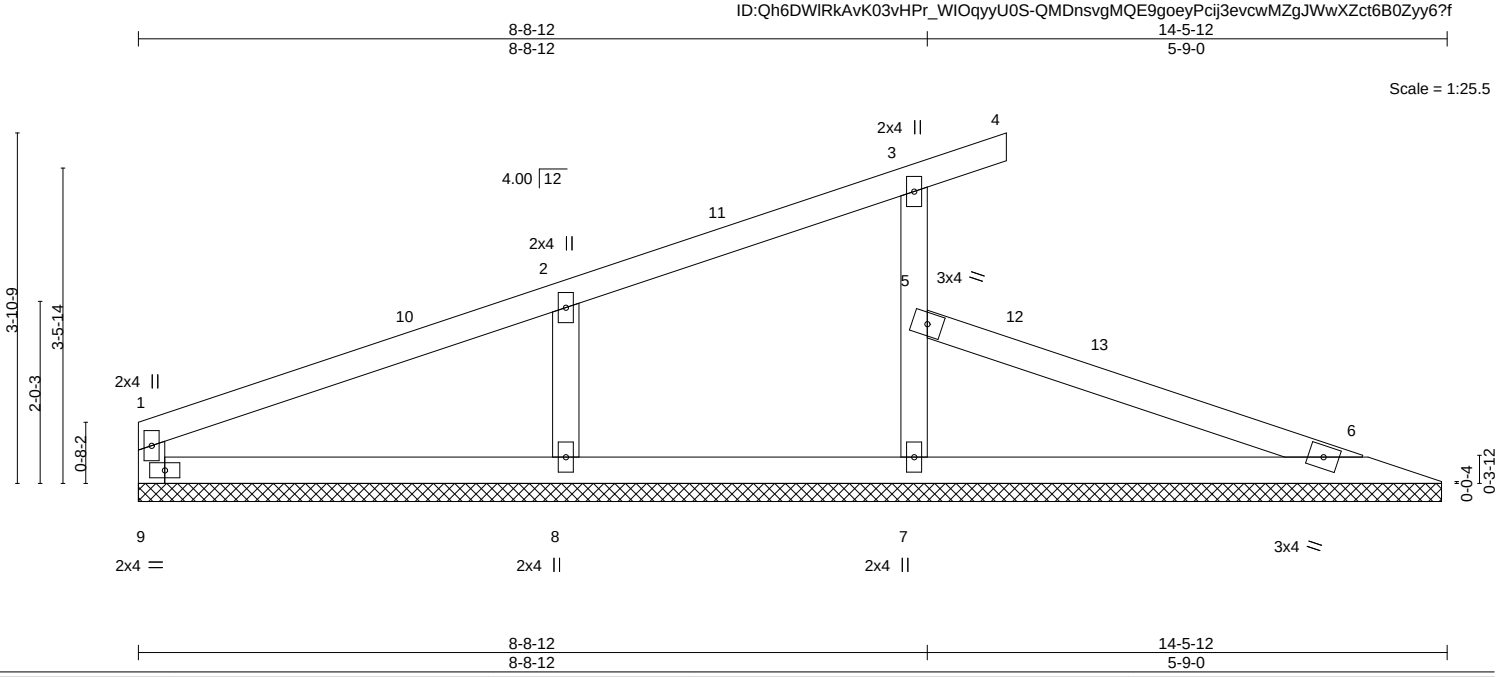

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.00	3	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.00	3	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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. Except: 6-0-0 oc bracing: 3-5
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 14-5-0.

(lb) - Max Horz 9=131(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 9, 7, 6 except 8=-120(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 9, 6 except 7=399(LC 1), 8=442(LC 1)

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

TOP CHORD 5-7=-292/224

WEBS 2-8=-340/148

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-6-8 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) 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) 9 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) 9, 7, 6 except (jt=lb) 8=120.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V8	Valley	1	1	I53110916

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:29 2022 Page 1

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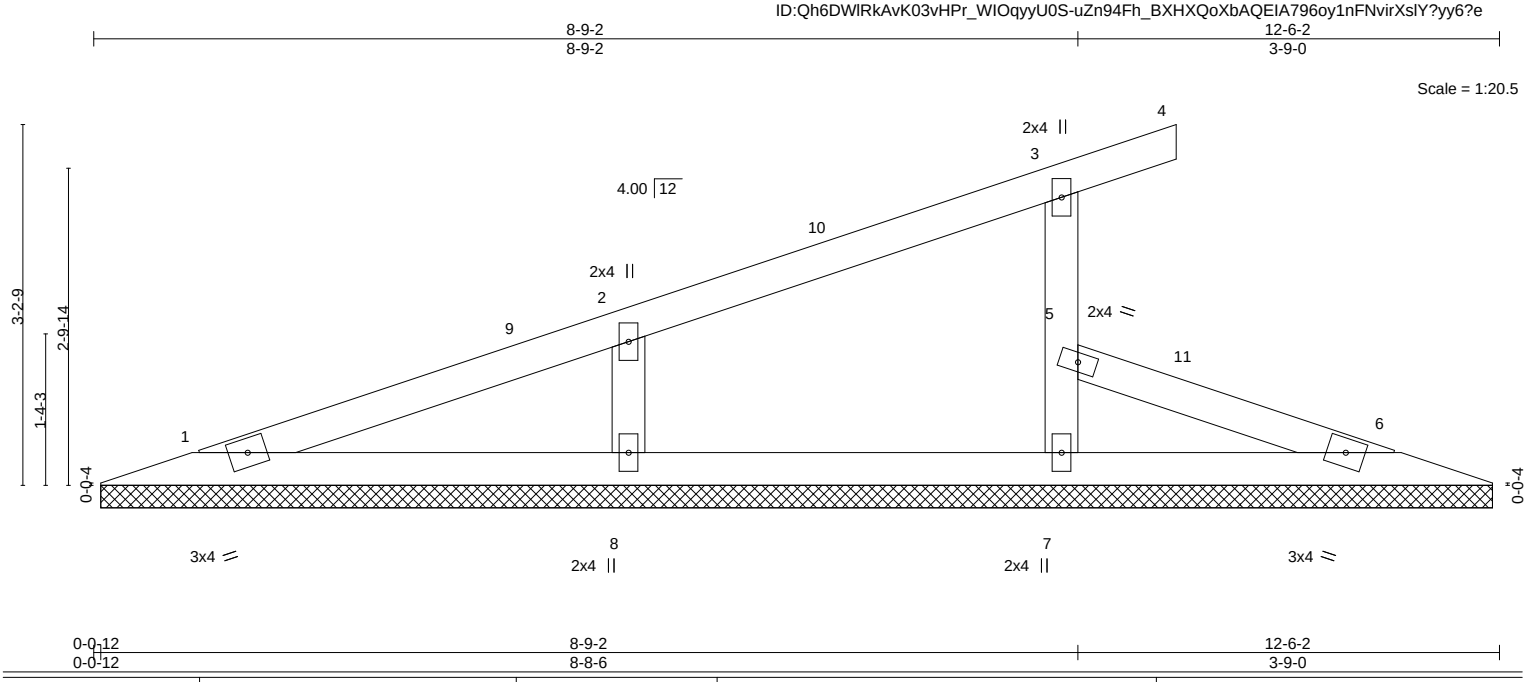

0-0-12 8-9-2 12-6-2

0-0-12 8-8-6 3-9-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.00	3	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
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. Except: 6-0-0 oc bracing: 3-5
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-4-10.

(lb) - Max Horz 1=142(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 6, 8

Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=319(LC 1), 8=401(LC 1)

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

WEBS 2-8=-306/137

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 11-6-14 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
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, 7, 6, 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.

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V9	Valley	1	1	I53110917

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:30 2022 Page 1

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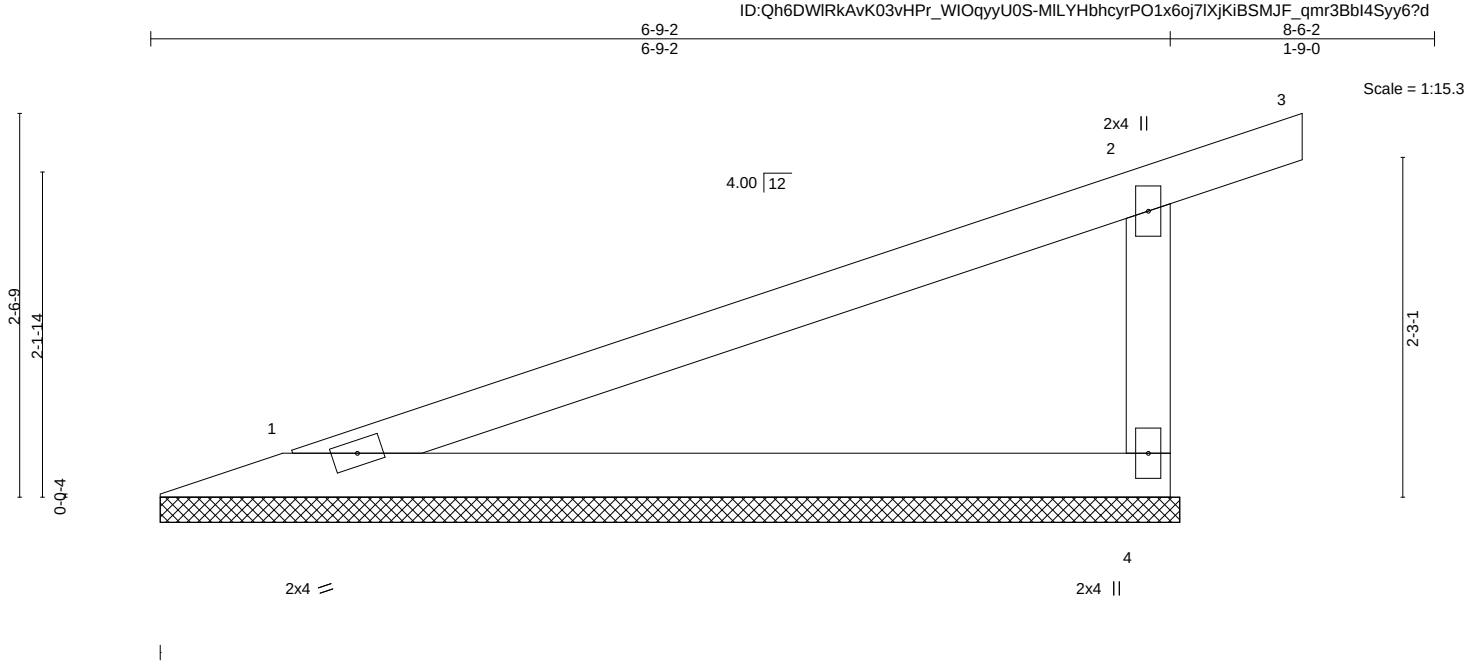

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.01	3	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	0.02	3	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=6-9-2, 4=6-9-2
Max Horz 1=89(LC 9)
Max Uplift 1=-35(LC 8), 4=-78(LC 12)
Max Grav 1=249(LC 1), 4=333(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-276/234

NOTES-

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

July 15,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HIGHLAND MEADOWS #151/MO
3233392	V10	Valley	1	1	I53110918

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jul 14 15:50:24 2022 Page 1

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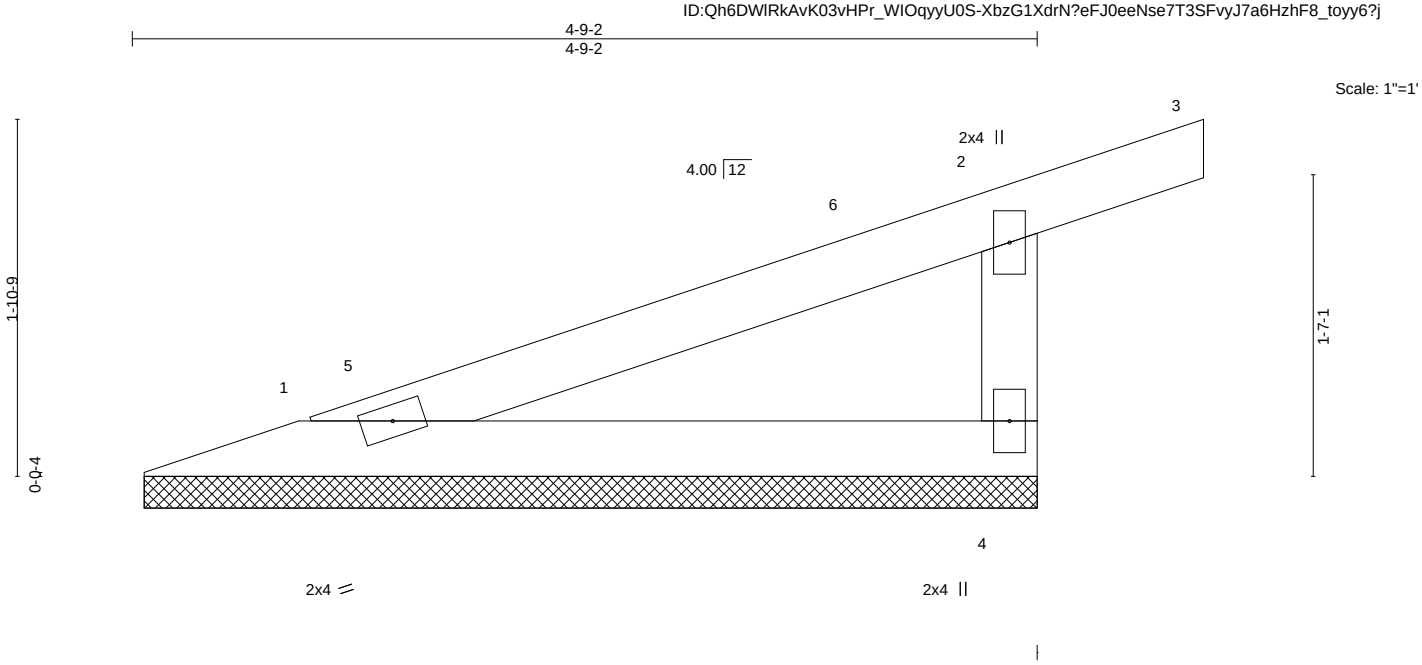


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.00	2	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.01	3	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							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 4-9-2 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-8-6, 4=4-8-6
Max Horz 1=62(LC 9)
Max Uplift 1=-19(LC 8), 4=-60(LC 12)
Max Grav 1=155(LC 1), 4=247(LC 1)

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

NOTES-

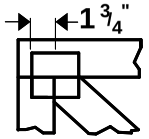
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 5-7-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C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

July 15,2022

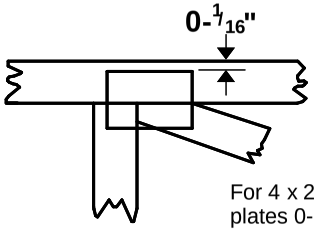
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

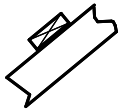
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

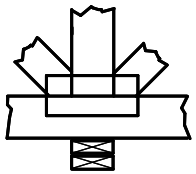
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

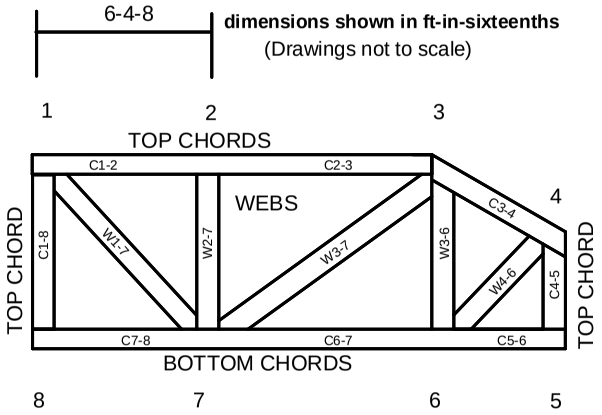


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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