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

12/16/2020

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

Re: 2552987
Summit/19 Woodside

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

Pages or sheets covered by this seal: I43853153 thru I43853246

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

Missouri COA: Engineering 001193

December 4,2020

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/19 Woodside
2552987	A01	Hip Girder	1	1	I43853153

Job Reference (optional)

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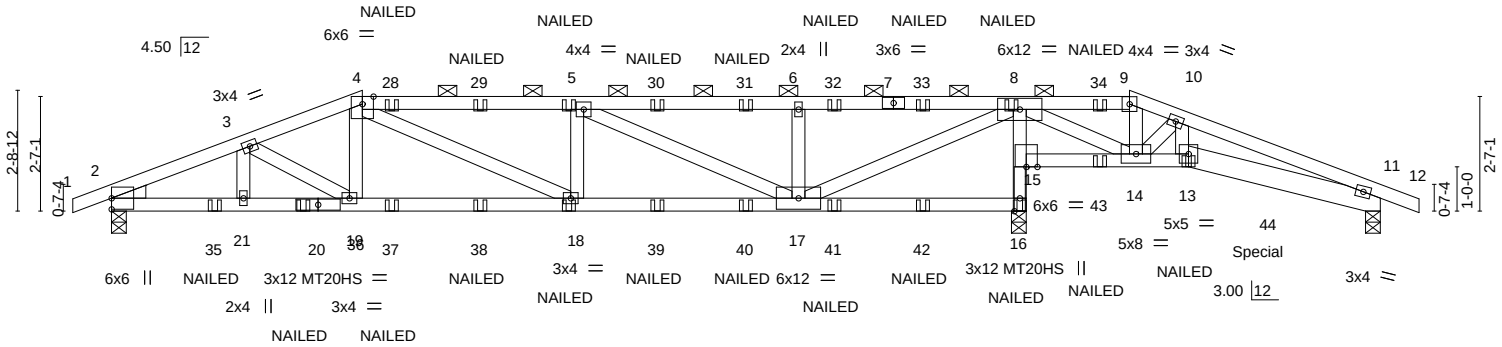
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:07 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-uQvisFC9RF0RDLEcu63PF9YCP9LaeJtMuQsbhSyCgM6

	2-11-12	5-8-0	10-6-4	15-6-4	20-8-0	23-0-0	24-4-0	28-8-0	29-6-8
0-10-8	2-11-12	2-8-4	4-10-4	5-0-0	5-1-12	2-4-0	1-4-0	4-4-0	0-10-8

Scale = 1:52.1



	2-11-12	5-8-0	10-6-4	15-6-4	20-8-0	23-0-0	24-4-0	28-8-0
	2-11-12	2-8-4	4-10-4	5-0-0	5-1-12	2-4-0	1-4-0	4-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.14	18	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.31	17-18	>784	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.07	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 110 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
13-15: 2x4 SPF No.2, 11-13: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-13 oc purlins, except
2-0-0 oc purlins (2-4-2 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 3-1-7 oc bracing.

REACTIONS. (size) 2=0-4-0, 16=0-4-0 (req. 0-4-2), 11=0-4-0
Max Horz 2=-37(LC 30)
Max Uplift 2=-255(LC 4), 16=-376(LC 5), 11=-113(LC 5)
Max Grav 2=1722(LC 21), 16=2635(LC 1), 11=601(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3137/454, 3-4=-3090/446, 4-5=-3544/536, 5-6=-2369/362, 6-8=-2369/362, 10-11=-1028/202
BOT CHORD 2-21=-415/2856, 19-21=-415/2856, 18-19=-387/2893, 17-18=-478/3540, 16-17=-522/98, 15-16=-2539/420, 8-15=-2425/414, 14-15=-936/174, 13-14=-126/825, 11-13=-146/962
WEBS 4-19=0/292, 4-18=-133/800, 5-17=-1299/214, 6-17=-556/194, 8-17=-439/3151, 8-14=-172/1231, 10-14=-869/168, 10-13=-69/575

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=6.0psf; 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=255, 16=376, 11=113.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 211 lb down and 59 lb up at 26-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-90, 4-9=-90, 9-12=-90, 16-22=-20, 13-15=-20, 13-25=-20
   Concentrated Loads (lb)
   Vert: 16=-38(F) 8=-60(F) 13=-171(F) 18=-38(F) 5=-60(F) 28=-60(F) 29=-60(F) 30=-60(F) 31=-60(F) 32=-60(F) 33=-60(F) 34=-27(F) 35=-189(F) 36=-183(F) 37=-38(F) 38=-38(F) 39=-38(F) 40=-38(F) 41=-38(F) 42=-38(F) 43=-75(F) 44=-211(F)

Job	Truss	Truss Type		Qty	Ply	Summit/19 Woodside
2552987	A02	Hip		1	1	I43853154
						Job Reference (optional)

RELEASE FOR CONSTRUCTION
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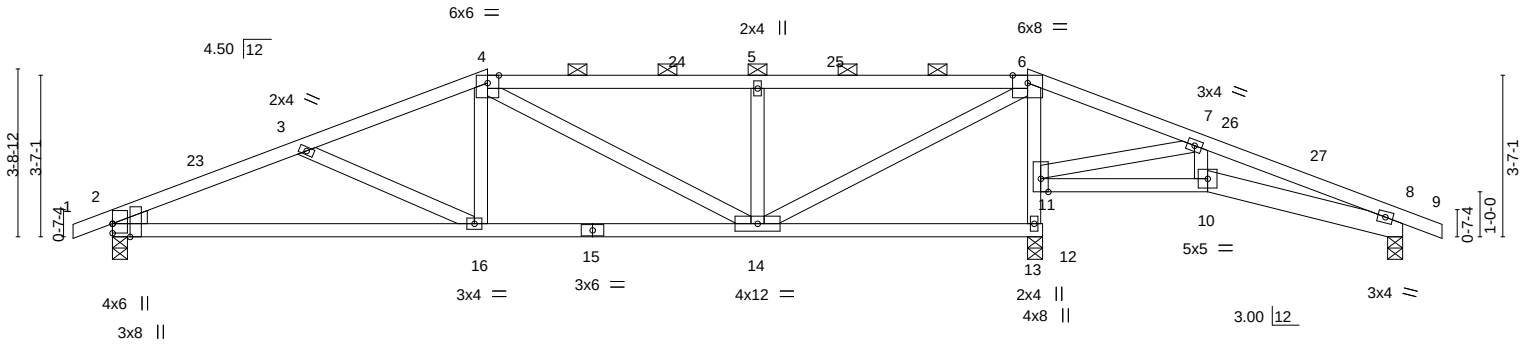
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:09 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-qo1SHxEPzsG9SeO??X6tKaecSz506I1fLkLilLyCgM4

-0-10-8	4-3-12	8-4-0	14-4-0	20-4-0	20-8-0	24-4-0	28-8-0	29-6-8
0-10-8	4-3-12	4-0-4	6-0-0	6-0-0	0-4-0	3-8-0	4-4-0	0-10-8

Scale = 1:51.2



8-4-0	14-4-0	20-8-0	24-4-0	28-8-0
8-4-0	6-0-0	6-4-0	3-8-0	4-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.08	14-16	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.17	16-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 108 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
8-10: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

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

REACTIONS. (size) 2=0-4-0, 13=0-4-0, 8=0-4-0
Max Horz 2=53(LC 16)
Max Uplift 2=-145(LC 8), 13=-134(LC 9), 8=-84(LC 9)
Max Grav 2=1173(LC 25), 13=1716(LC 1), 8=441(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2106/264, 3-4=-1780/218, 4-5=-1437/225, 5-6=-1437/225, 6-7=0/397, 7-8=-700/152
BOT CHORD 2-16=-235/1903, 14-16=-145/1628, 10-11=-94/570, 8-10=-96/625
WEBS 11-13=-1661/166, 6-11=-1420/174, 3-16=-293/104, 4-16=0/327, 5-14=-618/167, 7-11=-871/129, 7-10=0/263, 6-14=-181/1773

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=6.0psf; 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 8-4-0, Exterior(2R) 8-4-0 to 12-6-15, Interior(1) 12-6-15 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 29-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=145, 13=134.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	A03	Hip	1	1	I43853155

Job Reference (optional)

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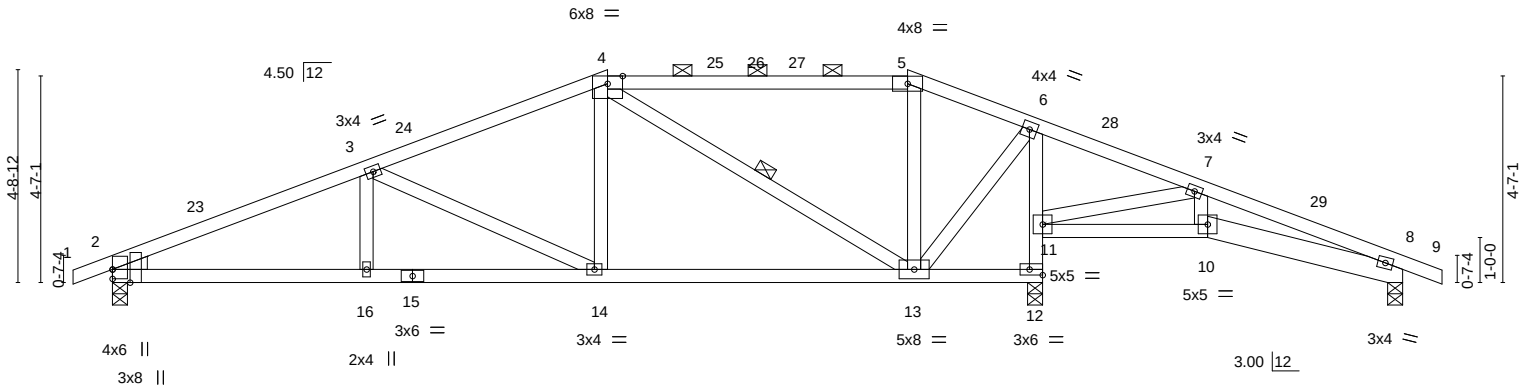
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:10 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-I?bqUHE2jAO04ozBZEd6snAlvNRKrmFoaO4GHnyCgM3

-0-10-8	5-7-12	11-0-0	17-8-0	20-8-0	24-4-0	28-8-0	29-6-8
0-10-8	5-7-12	5-4-4	6-8-0	3-0-0	3-8-0	4-4-0	0-10-8

Scale = 1:51.2



5-7-12	11-0-0	17-8-0	20-8-0	24-4-0	28-8-0
5-7-12	5-4-4	6-8-0	3-0-0	3-8-0	4-4-0

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [12: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	0.73	Vert(LL)	-0.07	14-16	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.15	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 113 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
8-10: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-5-7 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-13

REACTIONS. (size) 2=0-4-0, 12=0-4-0, 8=0-4-0
Max Horz 2=69(LC 16)
Max Uplift 2=-141(LC 8), 12=-107(LC 9), 8=-89(LC 9)
Max Grav 2=1171(LC 25), 12=1711(LC 1), 8=444(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2070/230, 3-4=-1463/200, 4-5=-523/150, 5-6=-569/139, 6-7=0/364, 7-8=-702/170
BOT CHORD 2-16=-219/1861, 14-16=-219/1861, 13-14=-104/1292, 11-12=-1734/111, 6-11=-1460/99, 10-11=-111/581, 8-10=-113/627
WEBS 3-14=-614/131, 4-14=0/449, 4-13=-913/110, 5-13=-324/83, 6-13=-66/1186, 7-11=-843/142

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=6.0psf; 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 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 17-8-0, Exterior(2R) 17-8-0 to 21-10-15, Interior(1) 21-10-15 to 29-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=141, 12=107.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside	
2552987	A04	Roof Special Girder	1	2	Job Reference (optional)	I43853156

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Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Dec 4 09:07:13 2020 Page 1
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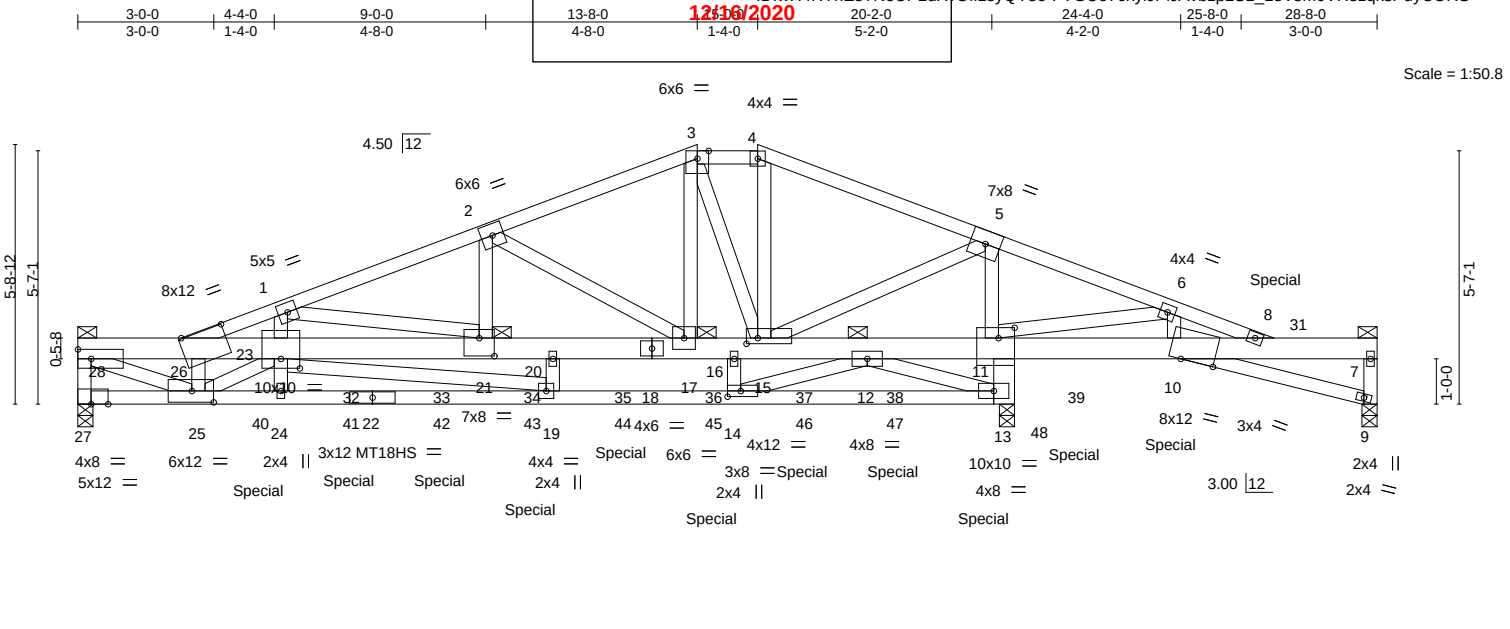

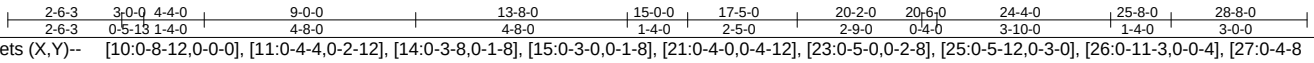

Plate Offsets (X,Y)-- [10:0-8-12,0-0-0], [11:0-4-4,0-2-12], [14:0-3-8,0-1-8], [15:0-3-0,0-1-8], [21:0-4-0,0-4-12], [23:0-5-0,0-2-8], [25:0-5-12,0-3-0], [26:0-11-3,0-0-4], [27:0-4-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.19	21-23	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.40	19-24	>612	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.10	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 347 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
9-10: 2x4 SPF No.2, 22-27,13-22: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2 *Except*
11-13: 2x6 SPF No.2, 25-28: 2x4 SPF 1650F 1.5E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-0-2 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, Except:
6-0-0 oc bracing: 10-11.
4-0-0 oc bracing: 26-28
6-0-0 oc bracing: 7-8
JOINTS 1 Brace at Jt(s): 28, 7, 21, 17, 12

REACTIONS. (size) 27=0-4-0, 9=0-4-0, 13=0-4-0
Max Horz 27=52(LC 12)
Max Uplift 27=-376(LC 8), 13=-874(LC 5)
Max Grav 27=5192(LC 1), 9=350(LC 22), 13=10258(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 27-28=-4822/381, 1-26=-12606/1152, 1-2=-8842/881, 2-3=-4165/449, 3-4=-2802/347, 4-5=-3100/359, 5-6=-262/3932, 6-8=-150/1581, 8-31=-160/1639, 7-9=-145/0
BOT CHORD 26-28=-9954/837, 23-26=-318/1552, 23-32=-361/3578, 32-33=-361/3578, 21-33=-361/3578, 21-34=-141/1014, 20-34=-141/1014, 20-35=-141/1014, 18-35=-141/1014, 17-18=-141/1014, 17-36=-3526/373, 16-36=-3526/373, 15-16=-3526/373, 15-37=-10420/901, 12-37=-10420/901, 12-38=-3950/318, 11-38=-3950/318, 11-39=-1449/170, 10-39=-1449/170, 8-10=-1517/132, 7-8=-153/0, 9-10=0/218, 25-27=-76/544, 25-40=-849/8878, 24-40=-849/8878, 24-41=-839/8898, 22-41=-839/8898, 22-42=-839/8898, 42-43=-839/8898, 19-43=-839/8898, 19-44=-677/7238, 44-45=-677/7238, 14-45=-677/7238, 14-46=-424/4472, 46-47=-424/4472, 47-48=-424/4472, 13-48=-424/4472
WEBS 1-23=-162/2704, 1-21=-2616/242, 2-21=-313/3746, 2-17=-5069/559, 3-17=-329/3779, 3-15=-2809/265, 4-15=-181/913, 6-10=-31/1117, 11-13=-8916/793, 5-11=-5777/534, 5-15=-507/6665, 14-16=-887/160, 19-20=0/383, 23-24=0/142, 6-11=-2393/190, 25-26=-4773/395, 19-23=-1695/165, 25-28=-878/10245, 23-25=-40/1291, 12-14=-269/2956, 12-13=-3969/388

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 26-25 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-7-0 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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 27, 9, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 376 lb uplift at joint 27 and 874 lb uplift at joint 13.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 699 lb down and 68 lb up at 26-0-12 on top chord, and 1099 lb down and 148 lb up at 4-0-12, 1099 lb down and 147 lb up at 6-0-12, 1099 lb down and 145 lb up at 8-0-12, 1099 lb down and 142 lb up at 10-0-12, 1099 lb down and 139 lb up at 12-0-12, 1141 lb down and 138 lb up at 14-0-12, 1141 lb down and 138 lb up at 16-0-12, 1141 lb down and 138 lb up at 18-0-12, 1141 lb down and 138 lb up at 20-0-12, and 665 lb down and 117 lb up at 22-0-12, and 689 lb down and 118 lb up at 24-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S)

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 3-26=-90, 3-4=-90, 4-8=-90, 26-28=-160, 10-11=-20, 7-8=-20, 9-10=-111, 25-27=-160, 13-25=-20
   Concentrated Loads (lb)
   Vert: 10=-643(B) 11=-1099(B) 23=-1099(B) 31=-666(B) 32=-1099(B) 33=-1099(B) 34=-1099(B) 35=-1099(B) 36=-1099(B) 37=-1099(B) 38=-1099(B) 39=-665(B)
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 3-26=-78, 3-4=-78, 4-8=-77, 26-28=-135, 10-11=-20, 7-8=-20, 9-10=-99, 25-27=-135, 13-25=-20
   Concentrated Loads (lb)
   Vert: 10=-672(B) 11=-1141(B) 23=-967(B) 31=-591(B) 32=-967(B) 33=-967(B) 34=-967(B) 35=-967(B) 36=-1141(B) 37=-1141(B) 38=-1141(B) 39=-583(B)
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
   Uniform Loads (plf)
   Vert: 3-26=-40, 3-4=-40, 4-8=-40, 26-28=-60, 10-11=-20, 7-8=-20, 9-10=-61, 25-27=-60, 13-25=-20
   Concentrated Loads (lb)
   Vert: 10=-468(B) 11=-783(B) 23=-783(B) 31=-501(B) 32=-783(B) 33=-783(B) 34=-783(B) 35=-783(B) 36=-783(B) 37=-783(B) 38=-783(B) 39=-468(B)
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-26=22, 3-4=25, 4-8=13, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
   Horz: 27-28=11, 3-26=-34, 4-8=25, 7-9=16, 9-10=5
   Concentrated Loads (lb)
   Vert: 10=77(B) 11=102(B) 23=112(B) 31=40(B) 32=111(B) 33=109(B) 34=106(B) 35=103(B) 36=102(B) 37=102(B) 38=102(B) 39=81(B)
5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-26=13, 3-4=25, 4-8=22, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
   Horz: 27-28=-16, 3-26=-25, 4-8=34, 7-9=-11, 9-10=5
   Concentrated Loads (lb)
   Vert: 10=77(B) 11=102(B) 23=112(B) 31=34(B) 32=111(B) 33=109(B) 34=106(B) 35=103(B) 36=102(B) 37=102(B) 38=102(B) 39=81(B)
6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-26=-16, 3-4=-14, 4-8=-25, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
   Horz: 27-28=22, 3-26=-24, 4-8=15, 7-9=6, 9-10=-5
   Concentrated Loads (lb)
   Vert: 10=118(B) 11=138(B) 23=148(B) 31=65(B) 32=147(B) 33=145(B) 34=142(B) 35=139(B) 36=138(B) 37=138(B) 38=138(B) 39=117(B)
7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-26=-25, 3-4=-14, 4-8=-16, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
   Horz: 27-28=-6, 3-26=-15, 4-8=24, 7-9=-22, 9-10=-5
   Concentrated Loads (lb)
   Vert: 10=118(B) 11=138(B) 23=148(B) 31=59(B) 32=147(B) 33=145(B) 34=142(B) 35=139(B) 36=138(B) 37=138(B) 38=138(B) 39=117(B)
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-26=25, 3-4=9, 4-8=9, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
   Horz: 27-28=6, 3-26=-37, 4-8=21, 7-9=14, 9-10=5
   Concentrated Loads (lb)
   Vert: 10=77(B) 11=102(B) 23=112(B) 31=43(B) 32=111(B) 33=109(B) 34=106(B) 35=103(B) 36=102(B) 37=102(B) 38=102(B) 39=81(B)
9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-26=9, 3-4=9, 4-8=25, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
   Horz: 27-28=-14, 3-26=-21, 4-8=37, 7-9=-6, 9-10=5
   Concentrated Loads (lb)
   Vert: 10=77(B) 11=102(B) 23=112(B) 31=32(B) 32=111(B) 33=109(B) 34=106(B) 35=103(B) 36=102(B) 37=102(B) 38=102(B) 39=81(B)
10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 3-26=14, 3-4=4, 4-8=4, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
   Horz: 27-28=6, 3-26=-26, 4-8=16, 7-9=14, 9-10=5
   Concentrated Loads (lb)
   Vert: 10=77(B) 11=102(B) 23=112(B) 31=46(B) 32=111(B) 33=109(B) 34=106(B) 35=103(B) 36=102(B) 37=102(B) 38=102(B) 39=81(B)
11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

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LOAD CASE(S)

Uniform Loads (plf)
Vert: 3-26=4, 3-4=4, 4-8=14, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
Horz: 27-28=-14, 3-26=-16, 4-8=26, 7-9=-6, 9-10=5
Concentrated Loads (lb)
Vert: 10=77(B) 11=102(B) 23=112(B) 31=40(B) 32=111(B) 33=109(B) 34=106(B) 35=103(B) 36=102(B) 37=102(B) 38=102(B) 39=81(B)

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-14, 3-4=-30, 4-8=-30, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
Horz: 27-28=17, 3-26=-26, 4-8=10, 7-9=3, 9-10=-5
Concentrated Loads (lb)
Vert: 10=118(B) 11=138(B) 23=148(B) 31=68(B) 32=147(B) 33=145(B) 34=142(B) 35=139(B) 36=138(B) 37=138(B) 38=138(B) 39=117(B)

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-30, 3-4=-30, 4-8=-14, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
Horz: 27-28=-3, 3-26=-10, 4-8=26, 7-9=-17, 9-10=-5
Concentrated Loads (lb)
Vert: 10=118(B) 11=138(B) 23=148(B) 31=58(B) 32=147(B) 33=145(B) 34=142(B) 35=139(B) 36=138(B) 37=138(B) 38=138(B) 39=117(B)

14) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 3-26=-40, 3-4=-40, 4-8=-40, 26-28=-60, 10-11=-20, 7-8=-20, 9-10=-61, 25-27=-60, 13-25=-20
Concentrated Loads (lb)
Vert: 10=-477(B) 11=-804(B) 23=-572(B) 31=-369(B) 32=-572(B) 33=-572(B) 34=-572(B) 35=-572(B) 36=-804(B) 37=-804(B) 38=-804(B) 39=-336(B)

15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-60, 3-4=-58, 4-8=-66, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=16, 3-26=-18, 4-8=11, 7-9=4, 9-10=-4
Concentrated Loads (lb)
Vert: 10=64(B) 11=55(B) 23=63(B) 31=16(B) 32=62(B) 33=60(B) 34=58(B) 35=56(B) 36=55(B) 37=55(B) 38=55(B) 39=63(B)

16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-66, 3-4=-58, 4-8=-60, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=-4, 3-26=-11, 4-8=18, 7-9=-16, 9-10=-4
Concentrated Loads (lb)
Vert: 10=64(B) 11=55(B) 23=63(B) 31=12(B) 32=62(B) 33=60(B) 34=58(B) 35=56(B) 36=55(B) 37=55(B) 38=55(B) 39=63(B)

17) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-58, 3-4=-70, 4-8=-70, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=13, 3-26=-20, 4-8=8, 7-9=2, 9-10=-4
Concentrated Loads (lb)
Vert: 10=64(B) 11=55(B) 23=63(B) 31=18(B) 32=62(B) 33=60(B) 34=58(B) 35=56(B) 36=55(B) 37=55(B) 38=55(B) 39=63(B)

18) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-70, 3-4=-70, 4-8=-58, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=-2, 3-26=-8, 4-8=20, 7-9=-13, 9-10=-4
Concentrated Loads (lb)
Vert: 10=64(B) 11=55(B) 23=63(B) 31=10(B) 32=62(B) 33=60(B) 34=58(B) 35=56(B) 36=55(B) 37=55(B) 38=55(B) 39=63(B)

19) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-15, 3-4=-12, 4-8=-12, 26-28=-24, 10-11=-12, 7-8=-12, 9-10=-24, 25-27=-24, 13-25=-12
Horz: 27-28=16, 3-26=3
Concentrated Loads (lb)
Vert: 10=45(B) 11=47(B) 23=57(B) 31=22(B) 32=55(B) 33=53(B) 34=51(B) 35=48(B) 36=47(B) 37=47(B) 38=47(B) 39=46(B)

20) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-12, 3-4=-12, 4-8=-15, 26-28=-24, 10-11=-12, 7-8=-12, 9-10=-24, 25-27=-24, 13-25=-12
Horz: 4-8=-3, 7-9=-16
Concentrated Loads (lb)
Vert: 10=45(B) 11=47(B) 23=57(B) 31=24(B) 32=55(B) 33=53(B) 34=51(B) 35=48(B) 36=47(B) 37=47(B) 38=47(B) 39=46(B)

21) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 3-26=-90, 3-4=-90, 4-8=-40, 26-28=-160, 10-11=-20, 7-8=-20, 9-10=-61, 25-27=-160, 13-25=-20
Concentrated Loads (lb)
Vert: 10=-665(B) 11=-1099(B) 23=-1099(B) 31=-699(B) 32=-1099(B) 33=-1099(B) 34=-1099(B) 35=-1099(B) 36=-1099(B) 37=-1099(B) 38=-1099(B) 39=-665(B)

22) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 3-26=-40, 3-4=-90, 4-8=-90, 26-28=-60, 10-11=-20, 7-8=-20, 9-10=-111, 25-27=-60, 13-25=-20
Concentrated Loads (lb)
Vert: 10=-643(B) 11=-1099(B) 23=-1099(B) 31=-666(B) 32=-1099(B) 33=-1099(B) 34=-1099(B) 35=-1099(B) 36=-1099(B) 37=-1099(B) 38=-1099(B) 39=-665(B)

23) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 3-26=-78, 3-4=-78, 4-8=-40, 26-28=-135, 10-11=-20, 7-8=-20, 9-10=-61, 25-27=-135, 13-25=-20

Continued on page 4

LOAD CASE(S)

Concentrated Loads (lb)
Vert: 10=-689(B) 11=-1141(B) 23=-967(B) 31=-616(B) 32=-967(B) 33=-967(B) 34=-967(B) 35=-967(B) 36=-1141(B) 37=-1141(B) 38=-1141(B) 39=-583(B)

24) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 3-26=-40, 3-4=-78, 4-8=-77, 26-28=-60, 10-11=-20, 7-8=-20, 9-10=-99, 25-27=-60, 13-25=-20
Concentrated Loads (lb)
Vert: 10=-672(B) 11=-1141(B) 23=-967(B) 31=-591(B) 32=-967(B) 33=-967(B) 34=-967(B) 35=-967(B) 36=-1141(B) 37=-1141(B) 38=-1141(B) 39=-583(B)

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=22, 3-4=25, 4-8=13, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
Horz: 27-28=11, 3-26=-34, 4-8=25, 7-9=16, 9-10=5
Concentrated Loads (lb)
Vert: 10=-370(B) 11=-589(B) 23=-523(B) 31=-410(B) 32=-522(B) 33=-539(B) 34=-562(B) 35=-584(B) 36=-589(B) 37=-589(B) 38=-589(B) 39=-364(B)

26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=13, 3-4=25, 4-8=22, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
Horz: 27-28=-16, 3-26=-25, 4-8=34, 7-9=-11, 9-10=5
Concentrated Loads (lb)
Vert: 10=-370(B) 11=-589(B) 23=-523(B) 31=-416(B) 32=-522(B) 33=-539(B) 34=-562(B) 35=-584(B) 36=-589(B) 37=-589(B) 38=-589(B) 39=-364(B)

27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-16, 3-4=-14, 4-8=-25, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
Horz: 27-28=22, 3-26=-24, 4-8=15, 7-9=6, 9-10=-5
Concentrated Loads (lb)
Vert: 10=-329(B) 11=-553(B) 23=-487(B) 31=-384(B) 32=-486(B) 33=-503(B) 34=-526(B) 35=-548(B) 36=-553(B) 37=-553(B) 38=-553(B) 39=-328(B)

28) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-25, 3-4=-14, 4-8=-16, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
Horz: 27-28=-6, 3-26=-15, 4-8=24, 7-9=-22, 9-10=-5
Concentrated Loads (lb)
Vert: 10=-329(B) 11=-553(B) 23=-487(B) 31=-390(B) 32=-486(B) 33=-503(B) 34=-526(B) 35=-548(B) 36=-553(B) 37=-553(B) 38=-553(B) 39=-328(B)

29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=25, 3-4=9, 4-8=9, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
Horz: 27-28=6, 3-26=-37, 4-8=21, 7-9=14, 9-10=5
Concentrated Loads (lb)
Vert: 10=-370(B) 11=-589(B) 23=-523(B) 31=-407(B) 32=-522(B) 33=-539(B) 34=-562(B) 35=-584(B) 36=-589(B) 37=-589(B) 38=-589(B) 39=-364(B)

30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=9, 3-4=9, 4-8=25, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
Horz: 27-28=-14, 3-26=-21, 4-8=37, 7-9=-6, 9-10=5
Concentrated Loads (lb)
Vert: 10=-370(B) 11=-589(B) 23=-523(B) 31=-417(B) 32=-522(B) 33=-539(B) 34=-562(B) 35=-584(B) 36=-589(B) 37=-589(B) 38=-589(B) 39=-364(B)

31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=14, 3-4=4, 4-8=4, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
Horz: 27-28=6, 3-26=-26, 4-8=16, 7-9=14, 9-10=5
Concentrated Loads (lb)
Vert: 10=-370(B) 11=-589(B) 23=-523(B) 31=-404(B) 32=-522(B) 33=-539(B) 34=-562(B) 35=-584(B) 36=-589(B) 37=-589(B) 38=-589(B) 39=-364(B)

32) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=4, 3-4=4, 4-8=14, 26-28=-13, 10-11=-12, 7-8=-12, 9-10=-19, 25-27=-13, 13-25=-12
Horz: 27-28=-14, 3-26=-16, 4-8=26, 7-9=-6, 9-10=5
Concentrated Loads (lb)
Vert: 10=-370(B) 11=-589(B) 23=-523(B) 31=-410(B) 32=-522(B) 33=-539(B) 34=-562(B) 35=-584(B) 36=-589(B) 37=-589(B) 38=-589(B) 39=-364(B)

33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-14, 3-4=-30, 4-8=-30, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
Horz: 27-28=17, 3-26=-26, 4-8=10, 7-9=3, 9-10=-5
Concentrated Loads (lb)
Vert: 10=-329(B) 11=-553(B) 23=-487(B) 31=-381(B) 32=-486(B) 33=-503(B) 34=-526(B) 35=-548(B) 36=-553(B) 37=-553(B) 38=-553(B) 39=-328(B)

34) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-30, 3-4=-30, 4-8=-14, 26-28=-71, 10-11=-20, 7-8=-20, 9-10=-67, 25-27=-71, 13-25=-20
Horz: 27-28=-3, 3-26=-10, 4-8=26, 7-9=-17, 9-10=-5
Concentrated Loads (lb)
Vert: 10=-329(B) 11=-553(B) 23=-487(B) 31=-392(B) 32=-486(B) 33=-503(B) 34=-526(B) 35=-548(B) 36=-553(B) 37=-553(B) 38=-553(B) 39=-328(B)

35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-60, 3-4=-58, 4-8=-66, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=16, 3-26=-18, 4-8=11, 7-9=4, 9-10=-4

Continued on page 5

LOAD CASE(S)

Concentrated Loads (lb)
Vert: 10=-579(B) 11=-985(B) 23=-805(B) 31=-541(B) 32=-804(B) 33=-816(B) 34=-834(B) 35=-850(B) 36=-985(B) 37=-985(B) 38=-985(B) 39=-515(B)

36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-66, 3-4=-58, 4-8=-60, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=-4, 3-26=-11, 4-8=18, 7-9=-16, 9-10=-4
Concentrated Loads (lb)
Vert: 10=-579(B) 11=-985(B) 23=-805(B) 31=-546(B) 32=-804(B) 33=-816(B) 34=-834(B) 35=-850(B) 36=-985(B) 37=-985(B) 38=-985(B) 39=-515(B)

37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-58, 3-4=-70, 4-8=-70, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=13, 3-26=-20, 4-8=8, 7-9=2, 9-10=-4
Concentrated Loads (lb)
Vert: 10=-579(B) 11=-985(B) 23=-805(B) 31=-539(B) 32=-804(B) 33=-816(B) 34=-834(B) 35=-850(B) 36=-985(B) 37=-985(B) 38=-985(B) 39=-515(B)

38) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-70, 3-4=-70, 4-8=-58, 26-28=-143, 10-11=-20, 7-8=-20, 9-10=-103, 25-27=-143, 13-25=-20
Horz: 27-28=-2, 3-26=-8, 4-8=20, 7-9=-13, 9-10=-4
Concentrated Loads (lb)
Vert: 10=-579(B) 11=-985(B) 23=-805(B) 31=-547(B) 32=-804(B) 33=-816(B) 34=-834(B) 35=-850(B) 36=-985(B) 37=-985(B) 38=-985(B) 39=-515(B)

39) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-15, 3-4=-12, 4-8=-12, 26-28=-24, 10-11=-12, 7-8=-12, 9-10=-24, 25-27=-24, 13-25=-12
Horz: 27-28=16, 3-26=3
Concentrated Loads (lb)
Vert: 10=-333(B) 11=-534(B) 23=-467(B) 31=-358(B) 32=-466(B) 33=-483(B) 34=-506(B) 35=-528(B) 36=-534(B) 37=-534(B) 38=-534(B) 39=-329(B)

40) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 3-26=-12, 3-4=-12, 4-8=-15, 26-28=-24, 10-11=-12, 7-8=-12, 9-10=-24, 25-27=-24, 13-25=-12
Horz: 4-8=-3, 7-9=-16
Concentrated Loads (lb)
Vert: 10=-333(B) 11=-534(B) 23=-467(B) 31=-356(B) 32=-466(B) 33=-483(B) 34=-506(B) 35=-528(B) 36=-534(B) 37=-534(B) 38=-534(B) 39=-329(B)

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	B01	Hip Girder	1	1	I43853157

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:15 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-fyOjY_IAYi1JBZs9MnDHZrucSO3kWyoXjfo0z?yCgM_

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

0-10-8	2-9-0	6-7-10	10-8-0	14-8-6	18-7-0	21-0-14
0-10-8	2-9-0	3-10-10	4-0-6	4-0-6	3-10-10	2-5-14

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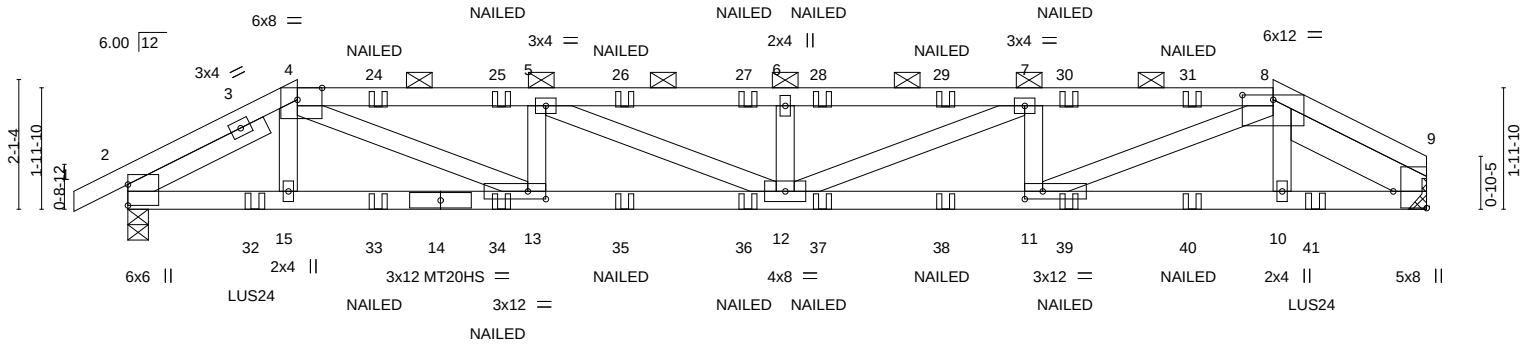


2-9-0	6-7-10	10-8-0	14-8-6	18-7-0	21-0-14
2-9-0	3-10-10	4-0-6	4-0-6	3-10-10	2-5-14

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.25	12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.56	12	>454	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 84 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-8: 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, Right 2x6 SPF No.2 2-6-13

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

REACTIONS. (size) 9=Mechanical, 2=0-4-0
Max Horz 2=36(LC 29)
Max Uplift 9=-564(LC 9), 2=-572(LC 8)
Max Grav 9=1753(LC 1), 2=1820(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2756/822, 4-5=-4797/948, 5-6=-5521/1011, 6-7=-5521/1011, 7-8=-4687/912, 8-9=-634/351
BOT CHORD 2-15=-718/2421, 13-15=-698/2412, 12-13=-936/4793, 11-12=-889/4683, 10-11=-630/2283, 9-10=-649/2298
WEBS 4-15=-243/392, 4-13=-275/2629, 5-13=-891/197, 5-12=-105/808, 6-12=-481/141, 7-12=-141/925, 7-11=-921/206, 8-11=-294/2649, 8-10=-221/398

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=6.0psf; 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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=564, 2=572.
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-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 17-2-8 oc max. starting at 2-0-12 from the left end to 19-3-4 to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	B01	Hip Girder	1	1	I43853157

Job Reference (optional)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-90, 4-8=-90, 8-9=-90, 16-20=-20
   Concentrated Loads (lb)
   Vert: 24=-57(F) 25=-57(F) 26=-57(F) 27=-57(F) 28=-57(F) 29=-57(F) 30=-57(F) 31=-57(F) 32=-197(F) 33=-41(F) 34=-41(F) 35=-41(F) 36=-41(F) 37=-41(F) 38=-41(F) 39=-41(F) 40=-41(F) 41=-197(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

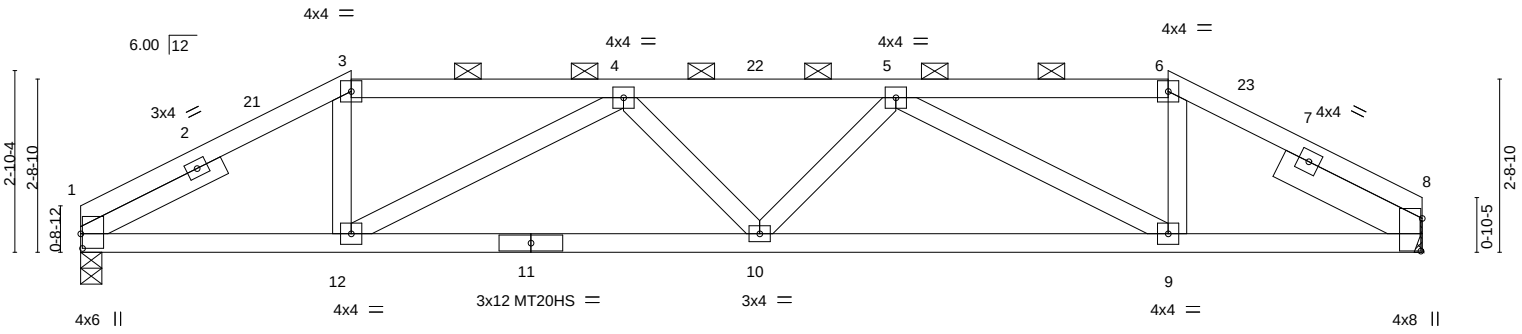
Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	B02	Hip	1	1	I43853158

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:16 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-79y6lKJoJ09AojQLwVkW62QrDnS3FR_hyJXaURyCgLz

4-3-0 | 8-6-5 | 12-11-11 | 17-1-0 | 21-0-14
4-3-0 | 4-3-5 | 4-3-5 | 4-3-5 | 3-11-14

Scale = 1:36.2



4-3-0 | 10-8-0 | 17-1-0 | 21-0-14
4-3-0 | 6-5-0 | 6-5-0 | 3-11-14

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

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	0.49	Vert(LL)	-0.10	10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.24	9-10	>999	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 80 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-4-0, 8=Mechanical
Max Horz 1=35(LC 12)
Max Uplift 1=-90(LC 12), 8=-88(LC 13)
Max Grav 1=1159(LC 1), 8=1159(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1829/168, 3-4=-1569/172, 4-5=-2519/211, 5-6=-1481/166, 6-8=-1747/164
BOT CHORD 1-12=-119/1599, 10-12=-234/2462, 9-10=-223/2438, 8-9=-97/1512
WEBS 3-12=-5/565, 4-12=-1081/163, 5-9=-1145/166, 6-9=-6/579

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=6.0psf; 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 4-3-0, Exterior(2R) 4-3-0 to 8-6-5, Interior(1) 8-6-5 to 17-1-0, Exterior(2E) 17-1-0 to 21-0-14 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 1, 8.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	B03	Hip	1	1	I43853159

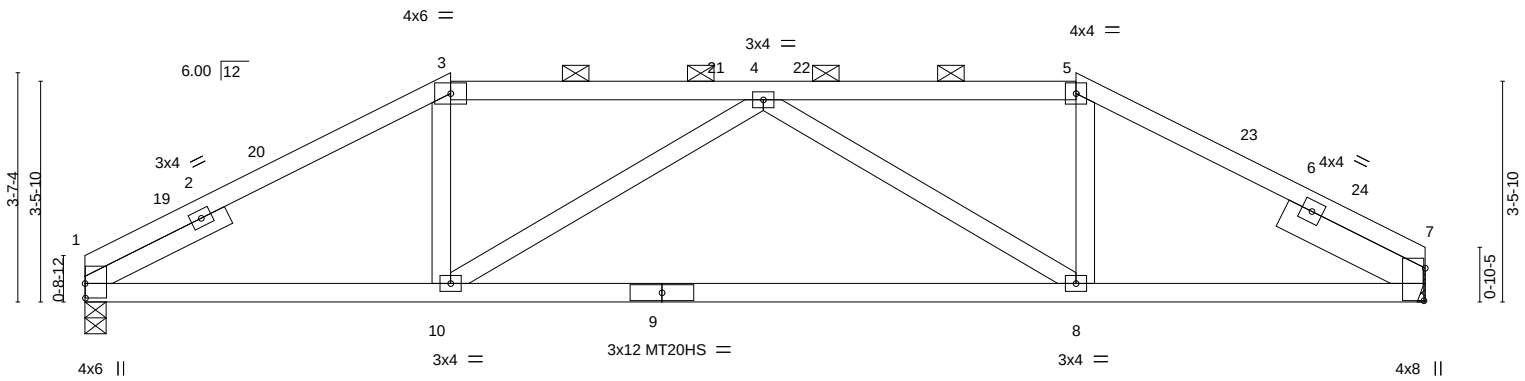
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:17 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-bLWUygKR4JH1Qt?XTCFlfGz?7Ble_wCqBzH70tyCgLy

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

5-9-0	10-8-0	15-7-0	21-0-14
5-9-0	4-11-0	4-11-0	5-5-14

Scale = 1:36.2



5-9-0	15-7-0	21-0-14
5-9-0	9-10-0	5-5-14

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

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	0.54	Vert(LL)	-0.26	8-10	>956	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.59	8-10	>428	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 77 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-4-0, 7=Mechanical
Max Horz 1=46(LC 12)
Max Uplift 1=-89(LC 12), 7=-87(LC 13)
Max Grav 1=1159(LC 1), 7=1159(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1817/155, 3-4=-1552/169, 4-5=-1492/165, 5-7=-1762/152
BOT CHORD 1-10=-88/1568, 8-10=-160/1946, 7-8=-74/1509
WEBS 3-10=0/464, 4-10=-568/154, 4-8=-628/155, 5-8=0/477

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=6.0psf; 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 5-9-0, Exterior(2R) 5-9-0 to 9-11-15, Interior(1) 9-11-15 to 15-7-0, Exterior(2R) 15-7-0 to 19-9-15, Interior(1) 19-9-15 to 21-0-14 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 1, 7.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	B04	Hip	1	1	I43853160

Job Reference (optional)

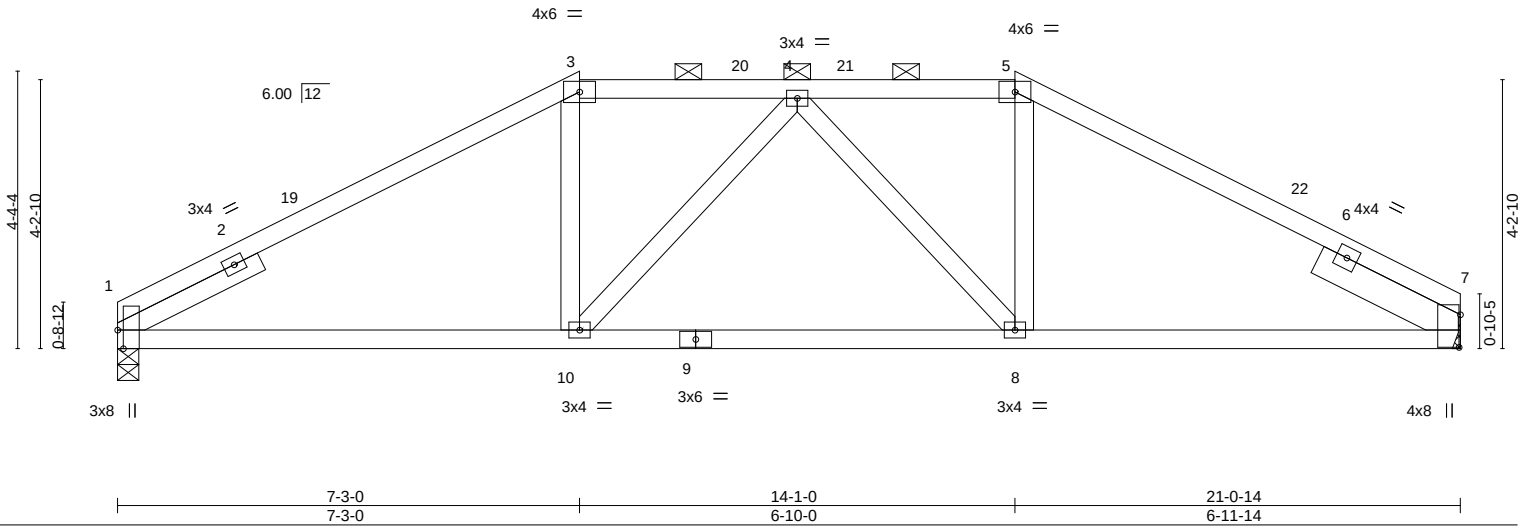
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:18 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-3X4sA0L3rdPu21aj1wm_BTWAgbBEjRv_Qd0hZJyCgLx

7-3-0 | 10-8-0 | 14-1-0 | 21-0-14
7-3-0 | 3-5-0 | 3-5-0 | 6-11-14

Scale = 1:36.2



7-3-0 | 14-1-0 | 21-0-14
7-3-0 | 6-10-0 | 6-11-14

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

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	0.56	Vert(LL)	-0.07	8-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.15	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 78 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-12 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 7=Mechanical
Max Horz 1=58(LC 12)
Max Uplift 1=-87(LC 12), 7=-85(LC 13)
Max Grav 1=1159(LC 1), 7=1159(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1669/174, 3-4=-1445/199, 4-5=-1402/196, 5-7=-1668/172
BOT CHORD 1-10=-87/1453, 8-10=-103/1554, 7-8=-78/1411
WEBS 3-10=0/356, 4-10=-307/95, 4-8=-359/94, 5-8=0/373

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=6.0psf; 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 7-3-0, Exterior(2R) 7-3-0 to 11-5-15, Interior(1) 11-5-15 to 14-1-0, Exterior(2R) 14-1-0 to 18-3-15, Interior(1) 18-3-15 to 21-0-14 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 1, 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	B05	Hip	1	1	I43853161

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:19 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOf1syQY8e-XjdENMLhcxXlfB9wbdHDkh2P9?VcSut7eHmE5myCgLw

RELEASE FOR CONSTRUCTION
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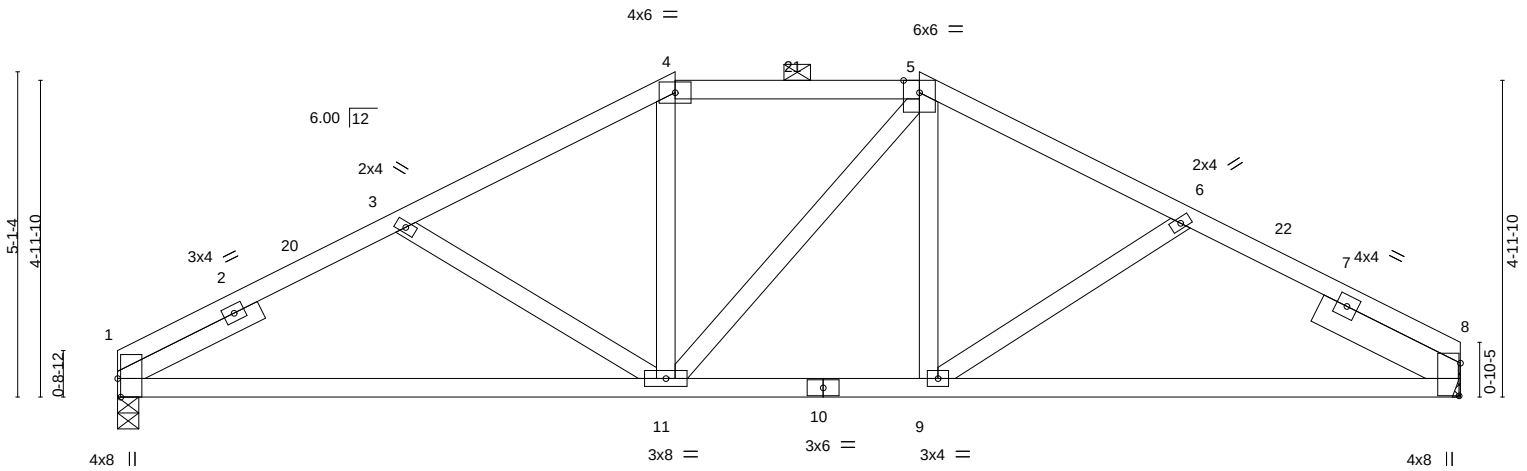
LEE'S SUMMIT, MISSOURI
12/16/2020

4-6-4 | 8-9-0 | 12-7-0 | 16-8-3 | 21-0-14
4-6-4 | 4-2-12 | 3-10-0 | 4-1-3 | 4-4-11

Scale = 1:36.2



8-9-0 | 12-7-0 | 21-0-14
8-9-0 | 3-10-0 | 8-5-14

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

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	0.32	Vert(LL)	-0.10	11-14	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.21	11-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 86 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-0-13 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 8=Mechanical
Max Horz 1=71(LC 12)
Max Uplift 1=-84(LC 12), 8=-82(LC 13)
Max Grav 1=1159(LC 1), 8=1159(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1773/213, 3-4=-1522/182, 4-5=-1288/195, 5-6=-1480/181, 6-8=-1701/204
BOT CHORD 1-11=-164/1543, 9-11=-56/1273, 8-9=-130/1462
WEBS 3-11=-309/134, 4-11=0/301, 5-9=-0/273

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 8-9-0, Exterior(2E) 8-9-0 to 12-7-0, Exterior(2R) 12-7-0 to 16-9-14, Interior(1) 16-9-14 to 21-0-14 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 1, 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Summit/19 Woodside
2552987	B06	Hip		1	1	I43853162

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:20 2020 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0wBcbiMJNEfbHLk69LoSGubZuPpGBJgGtxWndCyCgLv

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

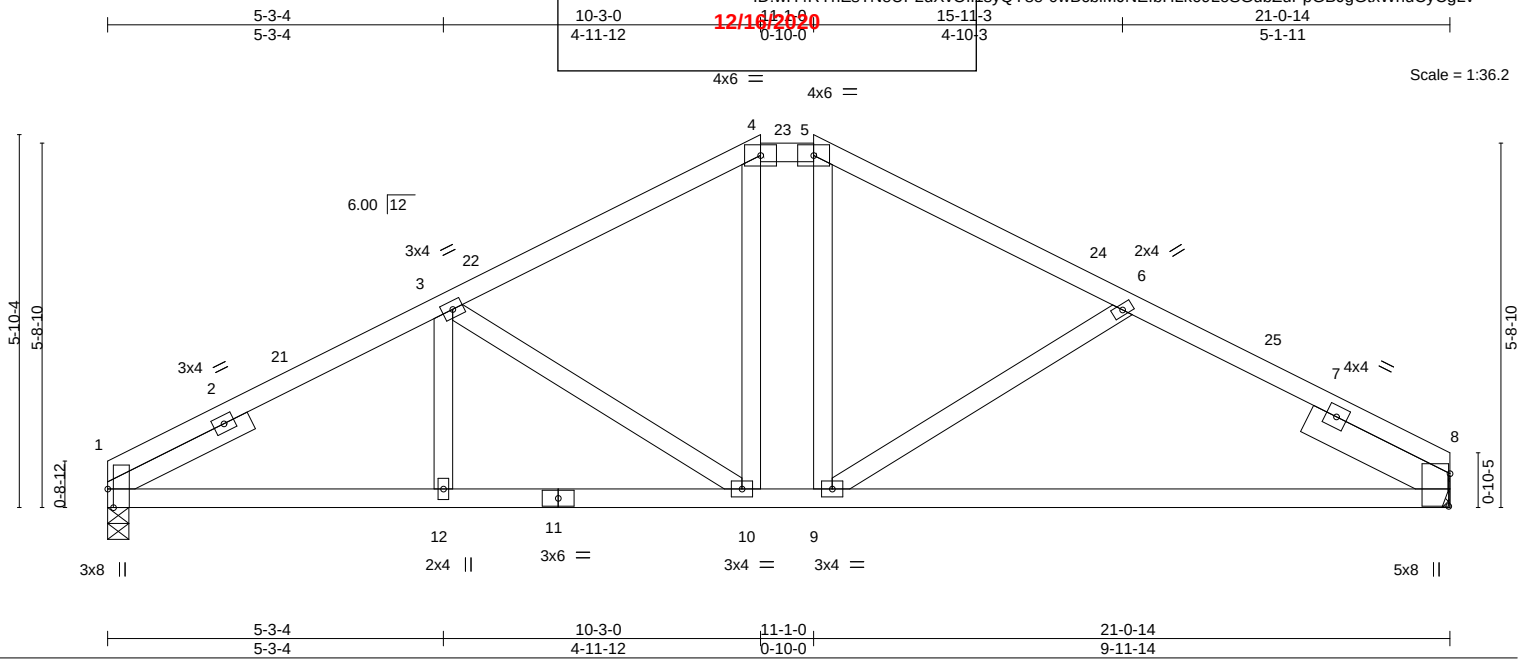


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [8:0-6-2,0-0-4]

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	0.38	Vert(LL)	-0.14	9-19	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.30	9-19	>849	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 86 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-4-0, 8=Mechanical
Max Horz 1=83(LC 12)
Max Uplift 1=-81(LC 12), 8=-79(LC 13)
Max Grav 1=1159(LC 1), 8=1159(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1779/161, 3-4=-1382/169, 4-5=-1148/171, 5-6=-1384/161, 6-8=-1694/185
BOT CHORD 1-12=-148/1539, 10-12=-148/1539, 9-10=-20/1148, 8-9=-104/1459
WEBS 3-10=-513/150, 4-10=-66/277, 5-9=0/421, 6-9=-412/159

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=6.0psf; 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 10-3-0, Exterior(2E) 10-3-0 to 11-1-0, Exterior(2R) 11-1-0 to 15-3-15, Interior(1) 15-3-15 to 21-0-14 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 1, 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	B07	Common	4	1	I43853163

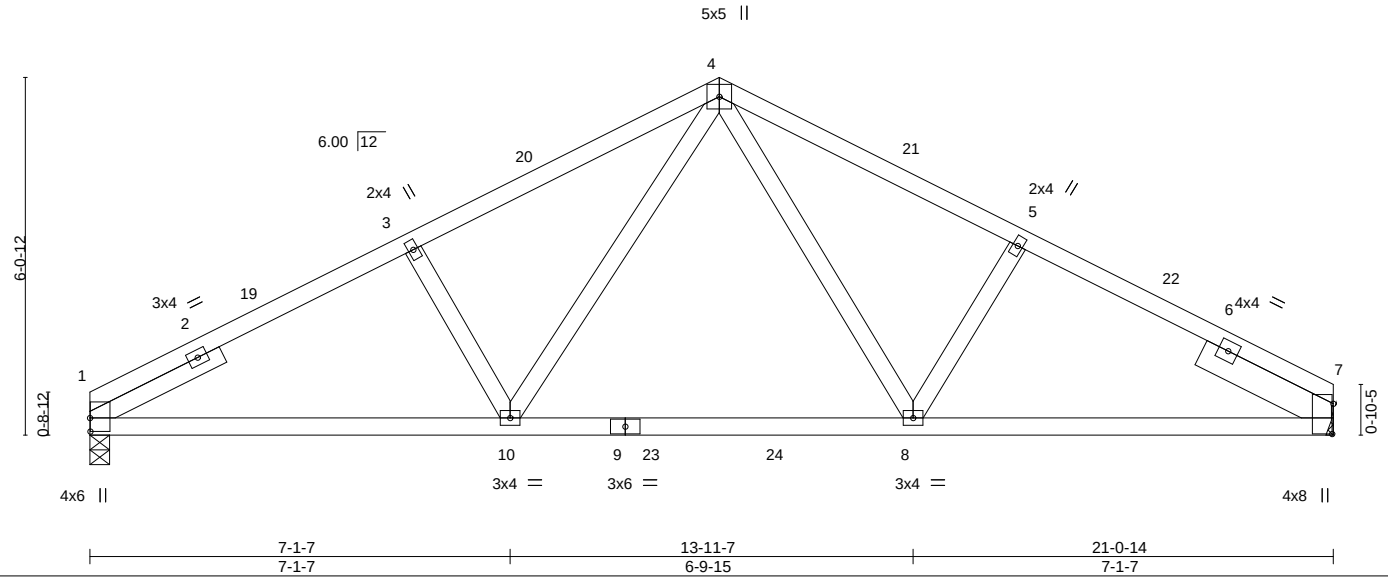
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:22 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-yIJN0OOZvsvJWeuVGlrwMJguQCXKfFFZKF?ui5yCgLt

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

5-5-12	10-8-0	15-8-11	21-0-14
5-5-12	5-2-4	5-0-11	5-4-3

Scale = 1:39.0



7-1-7	13-11-7	21-0-14
7-1-7	6-9-15	7-1-7

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

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	0.38	Vert(LL)	-0.11	8-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.21	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 81 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-4-0, 7=Mechanical
Max Horz 1=87(LC 12)
Max Uplift 1=-80(LC 12), 7=-78(LC 13)
Max Grav 1=1201(LC 2), 7=1201(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1825/229, 3-4=-1695/252, 4-5=-1629/244, 5-7=-1760/225
BOT CHORD 1-10=-153/1584, 8-10=-48/1119, 7-8=-134/1513
WEBS 3-10=-392/167, 4-10=-78/634, 4-8=-68/566, 5-8=-351/160

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=6.0psf; 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 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 21-0-14 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 1, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) 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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C01	HIP GIRDER	4	2	I43853164

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:24 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-uhR7Q3PqQT91my2tOAtORkl8U0Fo7zusoZU?mzyCgLr

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

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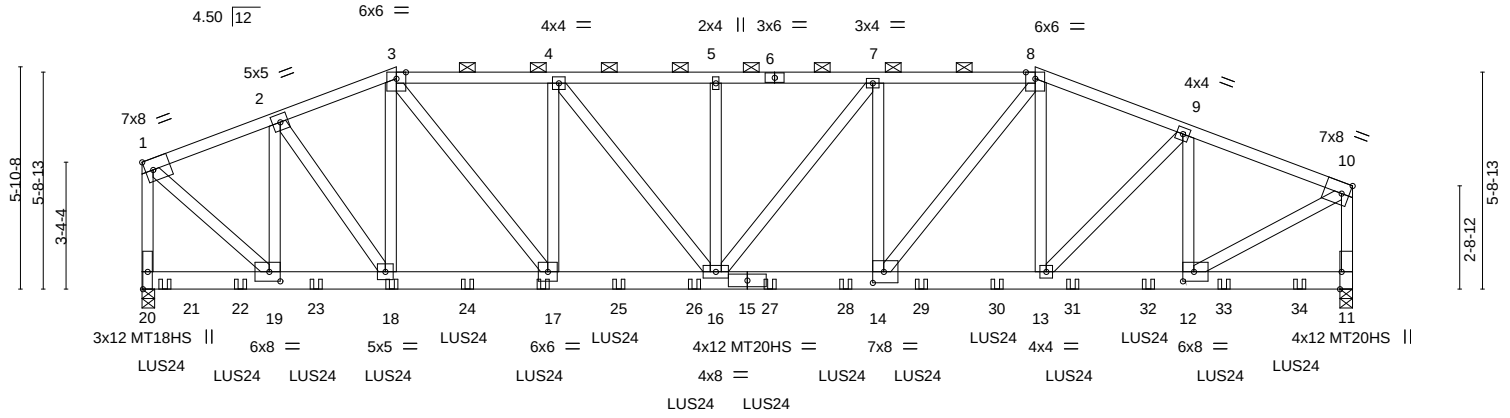


3-6-1	6-8-11	10-10-7	15-2-0	19-5-9	23-7-5	27-7-15	32-0-0
3-6-1	3-2-9	4-1-13	4-3-9	4-3-9	4-1-13	4-0-9	4-4-1

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.18	14-16	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.40	14-16	>949	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.07	11	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 411 lb	FT = 20%

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

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

REACTIONS. (size) 20=0-4-0, 11=0-4-0
Max Horz 20=-85(LC 6)
Max Uplift 20=-828(LC 4), 11=-723(LC 5)
Max Grav 20=7000(LC 1), 11=6961(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5248/639, 2-3=-7102/872, 3-4=-9333/1074, 4-5=-10501/1119, 5-7=-10501/1119, 7-8=-10142/1051, 8-9=-8646/907, 9-10=-7103/739, 1-20=-6298/771, 10-11=-6358/675
BOT CHORD 18-19=-568/4862, 17-18=-761/6687, 16-17=-1006/9329, 14-16=-983/10138, 13-14=-802/8081, 12-13=-695/6588
WEBS 2-19=-3311/414, 2-18=-328/3103, 3-18=-1315/86, 3-17=-404/4389, 4-17=-2029/185, 4-16=-106/1917, 5-16=-378/103, 7-16=-172/648, 7-14=-1048/228, 8-14=-318/3453, 9-13=-167/2204, 9-12=-2315/258, 1-19=-775/6455, 10-12=-760/7448

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=828, 11=723.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-7-4 from the left end to 6-7-4 to connect truss(es) to front face of bottom chord.

Continued on page 2

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C01	HIP GIRDER	4	2	I43853164

Job Reference (optional)

NOTES-

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

LOAD CASE(S) Standard

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

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C02	Roof Special	1	1	I43853165

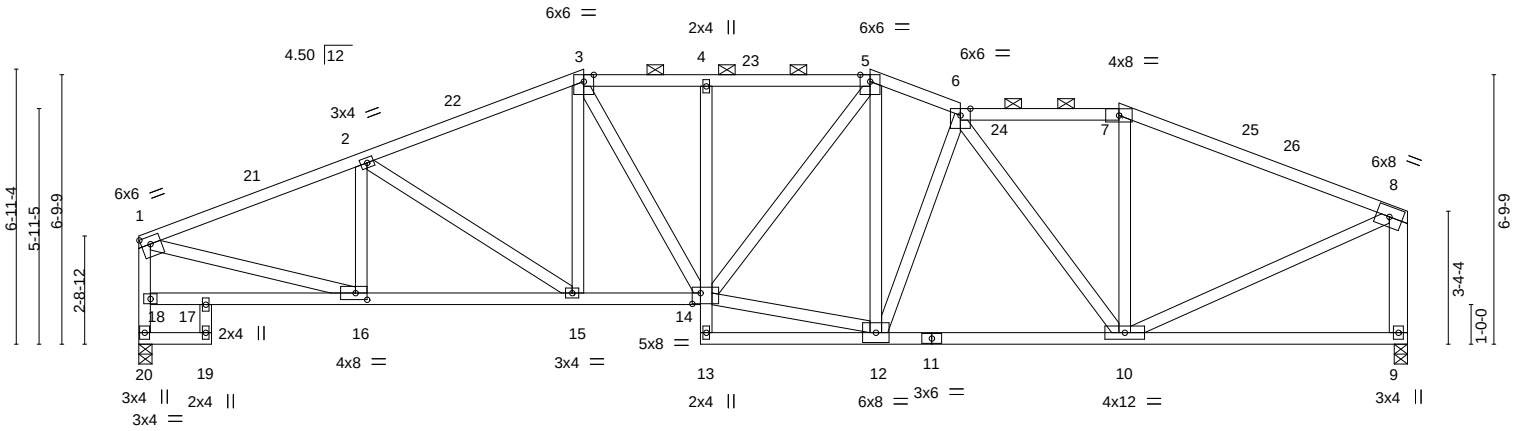
Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:26 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-q4YtrlR4y4Pl?GBGVbvsW9rTxpumbwW9Ftz6rsyCgLp

1-10-0	5-7-5	6-6-5	11-2-11	14-2-0	18-5-5	20-8-11	24-8-11	32-0-0
1-10-0	3-9-5	0-11-0	4-8-5	2-11-5	4-3-5	2-3-5	4-0-0	7-3-5

Scale = 1:58.1



1-10-0	5-7-5	11-2-11	14-2-0	18-5-5	20-8-11	24-8-11	32-0-0
1-10-0	3-9-5	5-7-5	2-11-5	4-3-5	2-3-5	4-0-0	7-3-5

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

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

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

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

REACTIONS. (size) 20=0-4-0, 9=0-4-0
Max Horz 20=80(LC 11)
Max Uplift 20=-141(LC 8), 9=-162(LC 9)
Max Grav 20=1739(LC 1), 9=1739(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2537/260, 2-3=-2522/281, 3-4=-2478/305, 4-5=-2474/306, 5-6=-2242/266, 6-7=-1700/215, 7-8=-1924/192, 18-20=-1705/158, 1-18=-1665/164, 8-9=-1669/200
BOT CHORD 16-17=-149/255, 15-16=-283/2301, 14-15=-236/2278, 4-14=-413/102, 10-12=-227/2187
WEBS 3-14=-78/537, 12-14=-209/1992, 5-14=-80/727, 6-12=-358/117, 6-10=-829/94, 8-10=-144/1740, 2-16=-494/131, 1-16=-164/2199

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 11-2-11, Exterior(2R) 11-2-11 to 14-3-12, Interior(1) 14-3-12 to 18-5-5, Exterior(2E) 18-5-5 to 20-8-11, Interior(1) 20-8-11 to 24-8-11, Exterior(2R) 24-8-11 to 27-8-11, Interior(1) 27-8-11 to 31-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=141, 9=162.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C03	Roof Special	1	1	I43853166

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:27 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-IG6G35RijOXcdPmS3JQ53NNg1DEXKQ1IUXifNlyCgLo

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

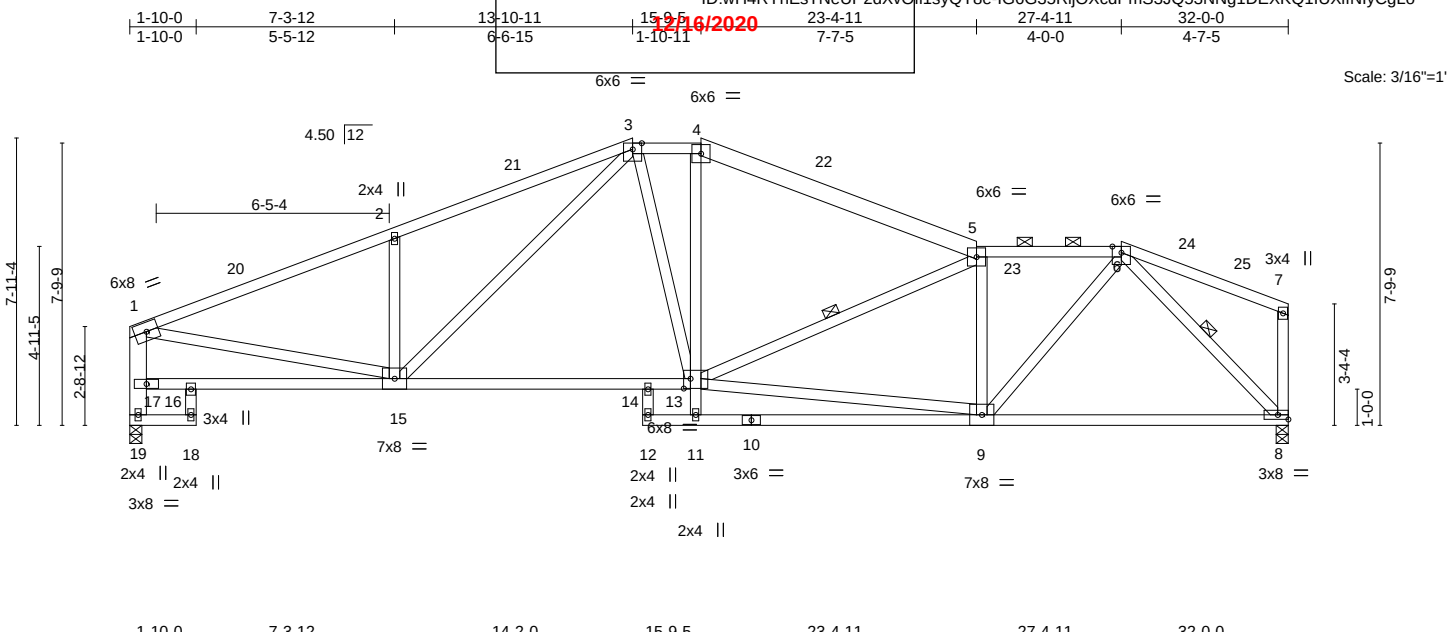


Plate Offsets (X,Y)-- [13:0-2-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.12	8-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.31	14-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 168 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 1-19: 2x6 SPF No.2

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

REACTIONS. (size) 19=0-4-0, 8=0-4-0
Max Horz 19=69(LC 11)
Max Uplift 19=-122(LC 8), 8=-146(LC 9)
Max Grav 19=1739(LC 1), 8=1739(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2680/247, 2-3=-2663/326, 3-4=-2153/270, 4-5=-2391/258, 5-6=-2323/215, 17-19=-1680/143, 1-17=-1651/162
BOT CHORD 16-17=-124/418, 15-16=-168/362, 14-15=-197/2078, 13-14=-197/2078, 8-9=-165/1420
WEBS 1-15=-180/2162, 2-15=-642/221, 11-13=0/375, 4-13=-10/364, 5-9=-1252/187, 6-9=-70/1443, 3-15=-154/561, 9-13=-229/2315, 5-13=-386/114, 3-13=-60/492, 6-8=-1979/211

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 13-10-11, Exterior(2E) 13-10-11 to 15-9-5, Exterior(2R) 15-9-5 to 18-9-5, Interior(1) 18-9-5 to 27-4-11, Exterior(2R) 27-4-11 to 30-4-11, Interior(1) 30-4-11 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=122, 8=146.
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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C04	Roof Special	1	1	I43853167

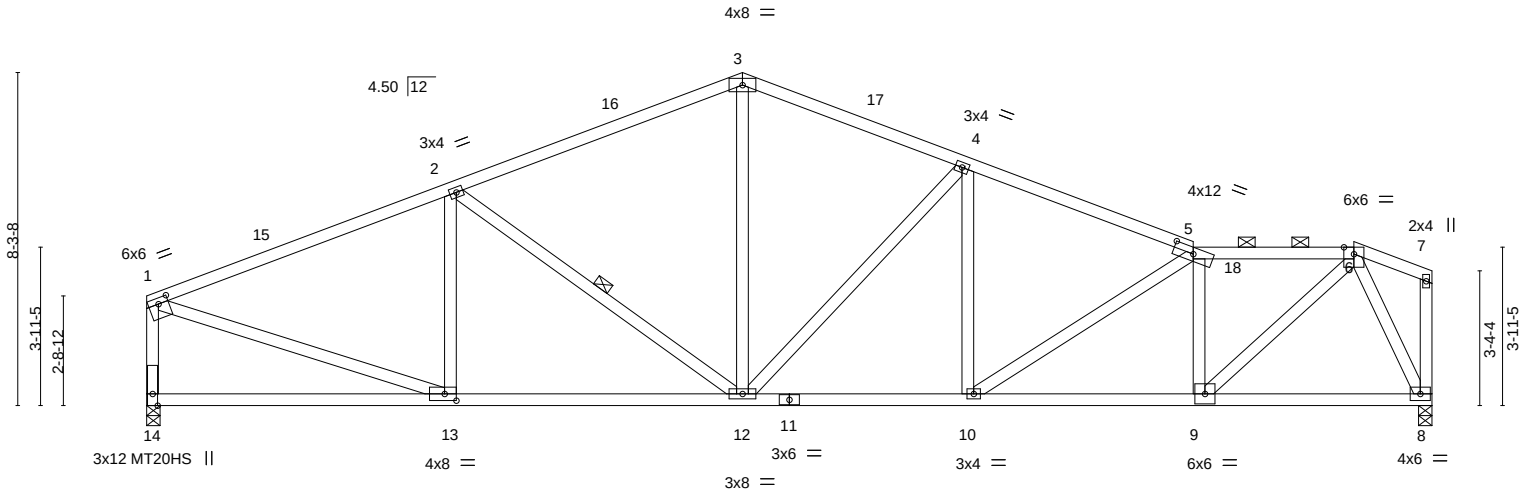
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:28 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-nSgeGRSKUifTEZLed0yKbawqLda?3n5SjBSDvkyCgLn

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

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

Scale = 1:57.4



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

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

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

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

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

REACTIONS. (size) 14=0-4-0, 8=0-4-0
Max Horz 14=65(LC 9)
Max Uplift 14=-117(LC 12), 8=-140(LC 9)
Max Grav 14=1744(LC 1), 8=1744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2229/172, 2-3=-2004/215, 3-4=-1967/219, 4-5=-2457/202, 5-6=-2220/167, 1-14=-1669/155
BOT CHORD 12-13=-188/1989, 10-12=-175/2214, 9-10=-193/2269, 8-9=-103/807
WEBS 2-13=-478/133, 2-12=-419/140, 3-12=-27/782, 4-12=-730/148, 5-9=-1247/160, 6-9=-121/1963, 1-13=-111/1971, 6-8=-1800/192

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=6.0psf; 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 14-10-0, Exterior(2R) 14-10-0 to 17-10-0, Interior(1) 17-10-0 to 30-0-11, Exterior(2E) 30-0-11 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=117, 8=140.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C05	Roof Special	1	1	I43853168

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:30 2020 Page 1
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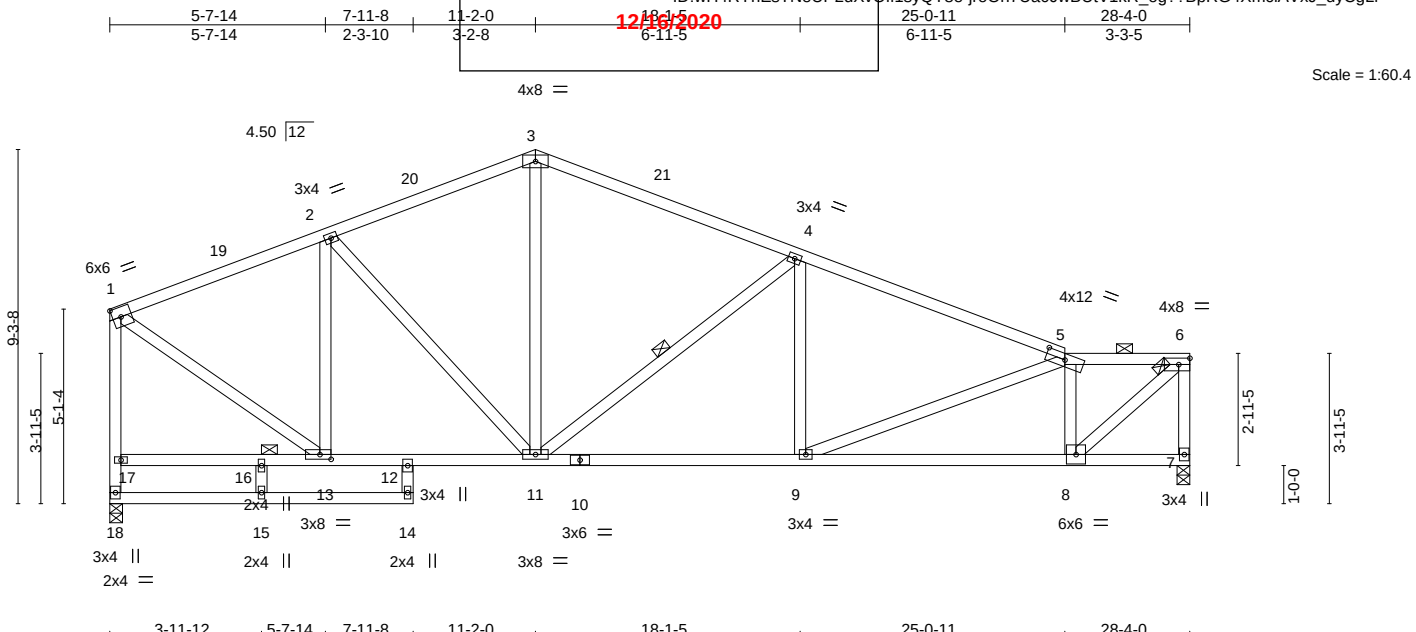

Plate Offsets (X,Y)-- [5:0-6-0,0-1-15], [13:0-3-8,0-1-8]

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

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

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

REACTIONS. (size) 7=0-4-0, 18=0-4-0
Max Horz 18=-126(LC 10)
Max Uplift 7=-130(LC 13), 18=-104(LC 8)
Max Grav 7=1542(LC 1), 18=1542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1354/166, 2-3=-1506/208, 3-4=-1537/213, 4-5=-2183/188, 5-6=-1589/111, 6-7=-1519/132, 17-18=-1499/146, 1-17=-1478/146
BOT CHORD 12-13=-83/1169, 11-12=-136/1195, 9-11=-166/1945, 8-9=-154/1656
WEBS 3-11=-14/495, 4-11=-829/165, 5-9=-23/310, 5-8=-1293/186, 6-8=-166/2097, 2-11=-26/300, 2-13=-722/125, 1-13=-110/1411

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0 , Interior(1) 14-2-0 to 28-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=130, 18=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) 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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C06	ROOF SPECIAL	1	1	I43853169

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:31 2020 Page 1
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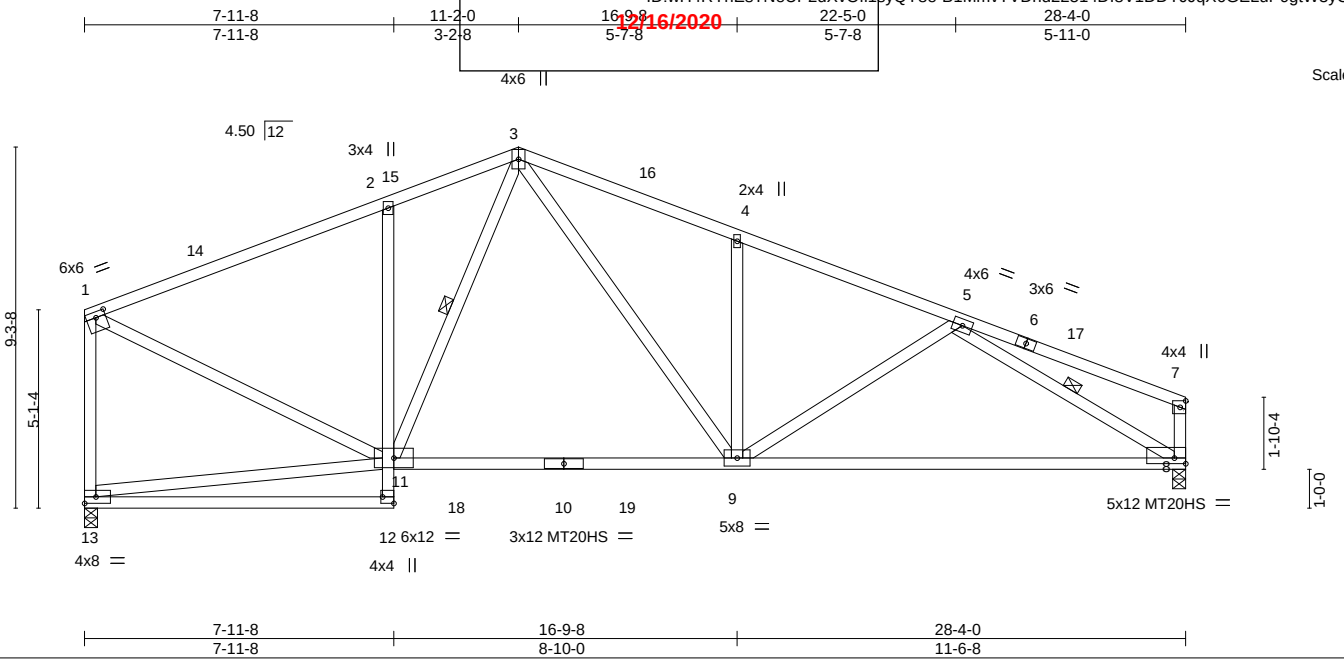


Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [8:Edge,0-1-12], [12:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.33	8-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.69	8-9	>487	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 142 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-11, 5-8

REACTIONS. (size) 13=0-4-0, 8=0-4-0
Max Horz 13=-133(LC 10)
Max Uplift 13=-106(LC 8), 8=-125(LC 13)
Max Grav 13=1616(LC 2), 8=1605(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1618/190, 2-3=-1572/251, 3-4=-2191/260, 4-5=-2183/189, 5-7=-354/32, 1-13=-1494/157, 7-8=-323/62
BOT CHORD 2-11=-599/204, 9-11=-62/1360, 8-9=-175/1942
WEBS 4-9=-542/178, 3-9=-146/1090, 3-11=-123/272, 5-8=-2019/231, 1-11=-108/1525

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=6.0psf; 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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0 , Interior(1) 14-2-0 to 28-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=106, 8=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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Summit/19 Woodside
2552987	C07	HIP		1	1	I43853170

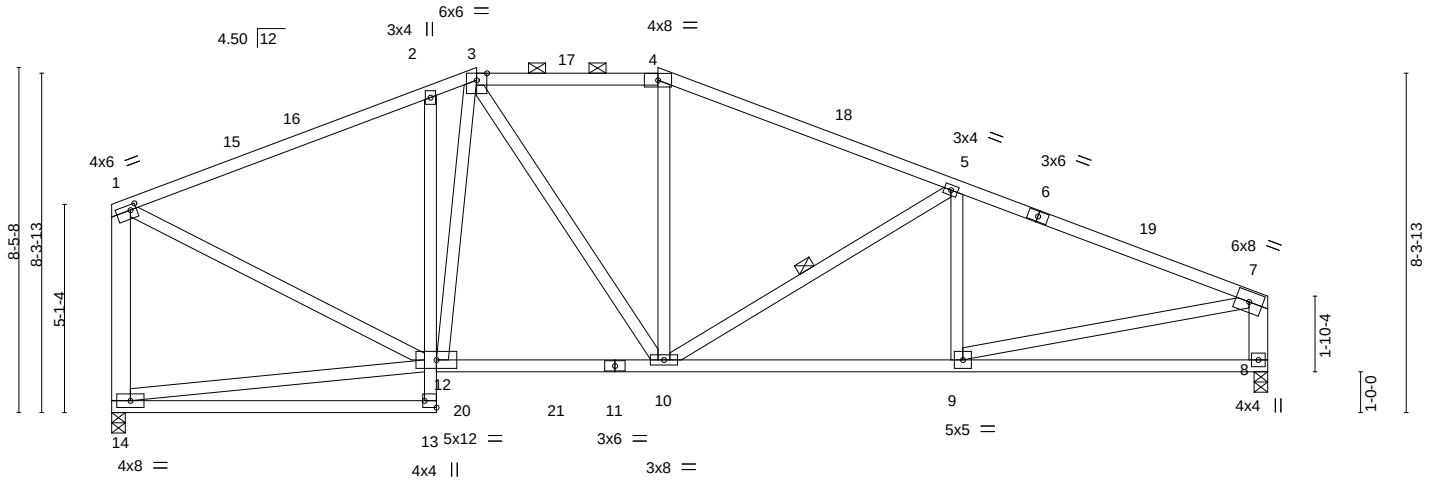
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:32 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-fEw96oVrYwAujBfQss0GlQ5WoEwZ?hw1epQQ2WyCgLj

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

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

Scale = 1:56.5



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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.09	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.21	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 151 lb	FT = 20%

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

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

REACTIONS. (size) 14=0-4-0, 8=0-4-0
Max Horz 14=-143(LC 10)
Max Uplift 14=-125(LC 8), 8=-130(LC 9)
Max Grav 14=1591(LC 2), 8=1580(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1563/195, 2-3=-1504/245, 3-4=-1614/226, 4-5=-1828/210, 5-7=-2307/210, 1-14=-1458/163, 7-8=-1456/170
BOT CHORD 2-12=-569/211, 10-12=-75/1353, 9-10=-162/2073
WEBS 3-10=-94/539, 5-10=-572/149, 5-9=-255/121, 7-9=-128/1886, 1-12=-107/1454

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 8-11-5, Exterior(2E) 8-11-5 to 13-4-11, Exterior(2R) 13-4-11 to 17-7-9, Interior(1) 17-7-9 to 28-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=125, 8=130.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	C08	HIP GIRDER	4	2	I43853171

Job Reference (optional)

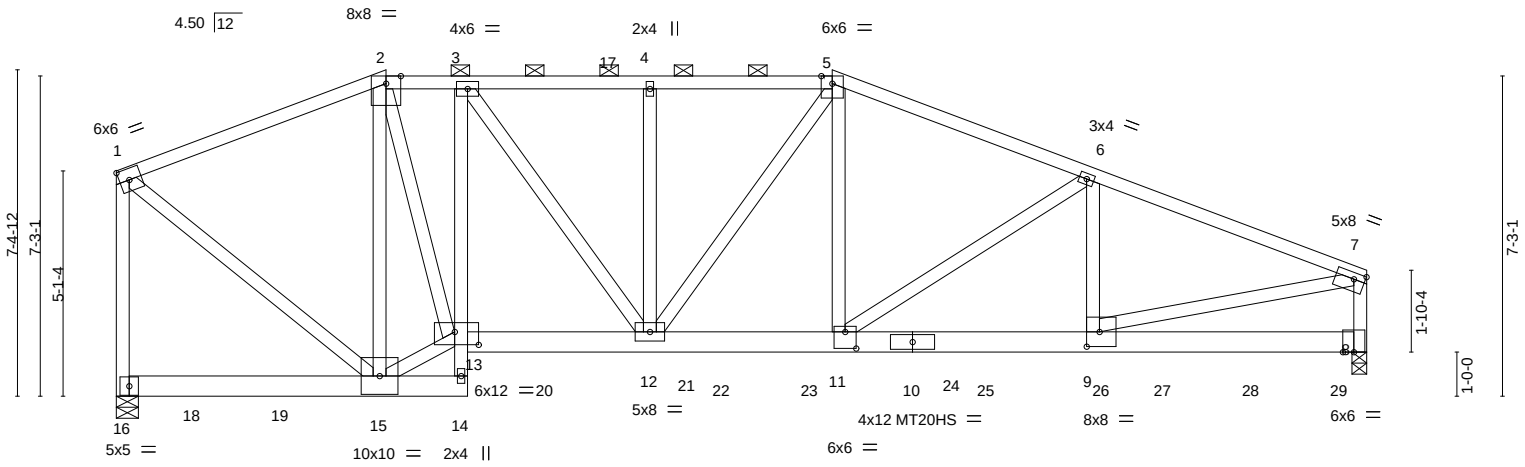
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:34 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-bc1vXUX54YQcyUoozH2krrAtC2eATTYK57vX7OyCgLh

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

Scale = 1:52.2



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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.15	9-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.32	9-11	>999	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 338 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 2100F 1.8E *Except*
14-16: 2x6 SPF No.2, 3-14: 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-11 max.): 2-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-4-0, 16=0-6-0
Max Horz 16=-148(LC 6)
Max Uplift 8=-789(LC 5), 16=-769(LC 4)
Max Grav 8=6387(LC 1), 16=6144(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4809/659, 2-3=-5958/823, 3-4=-7429/1018, 4-5=-7433/1020, 5-6=-7968/1082, 6-7=-8728/1115, 1-16=-5457/715, 7-8=-5218/686
BOT CHORD 14-15=-45/325, 3-13=-2354/345, 12-13=-701/6005, 11-12=-903/7341, 9-11=-1018/8085, 8-9=-73/448
WEBS 1-15=-706/5648, 2-15=-3718/464, 13-15=-534/4762, 2-13=-653/5274, 5-11=-306/2250, 6-11=-841/159, 6-9=-307/370, 7-9=-974/7875, 4-12=-521/127, 5-12=-22/322, 3-12=-344/2454

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 8, 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=789, 16=769.

Continued on page 2

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 705 lb down and 89 lb up at 1-8-12, 752 lb down and 105 lb up at 3-8-12, 705 lb down and 138 lb up at 5-8-12, 712 lb down and 78 lb up at 7-9-12, 671 lb down and 93 lb up at 9-8-12, 671 lb down and 93 lb up at 11-8-12, 671 lb down and 93 lb up at 13-8-12, 671 lb down and 93 lb up at 15-8-12, 667 lb down and 144 lb up at 17-8-12, 647 lb down and 109 lb up at 19-8-12, 643 lb down and 80 lb up at 21-8-12, 658 lb down and 82 lb up at 23-8-12, and 658 lb down and 89 lb up at 25-8-12, and 663 lb down and 88 lb up at 27-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-90, 2-5=-90, 5-7=-90, 14-16=-20, 8-13=-20
   Concentrated Loads (lb)
   Vert: 14=-712(F) 15=-705(F) 18=-705(F) 19=-705(F) 20=-671(F) 21=-671(F) 22=-671(F) 23=-671(F) 24=-667(F) 25=-647(F) 26=-643(F) 27=-658(F) 28=-658(F) 29=-663(F)

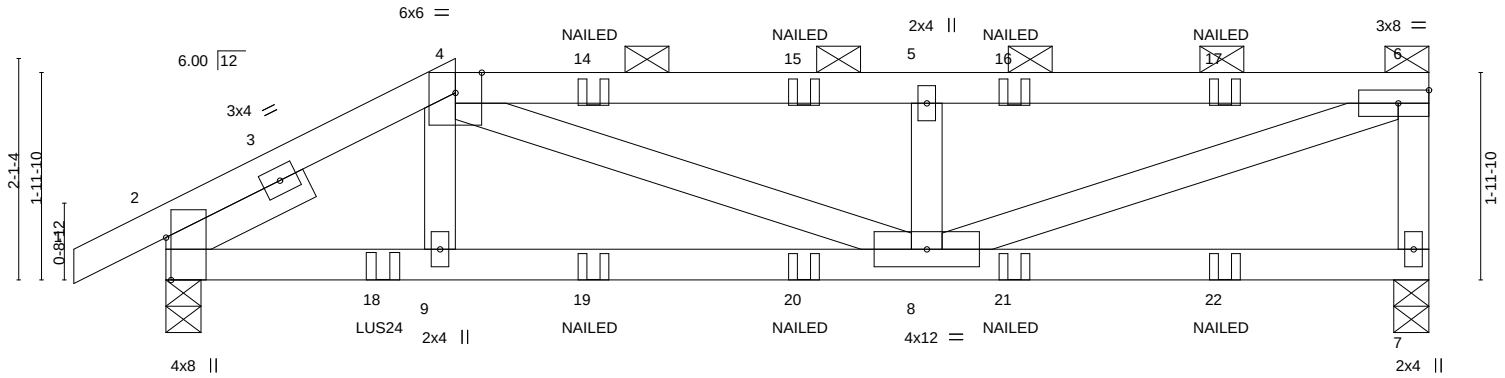
Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D01	HALF HIP GIRDER	1	1	I43853172

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:36 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Y?9fyAYLc9gKCoyB5i5CwGFFarHUxWDdYQOeBHyCgLf

-0-10-8 2-9-0 7-2-12 12-0-0
0-10-8 2-9-0 4-5-12 4-9-4

Scale = 1:21.9



2-9-0 7-2-12 12-0-0
2-9-0 4-5-12 4-9-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.05	8-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.11	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 46 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-8 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 7-7-9 oc bracing.

REACTIONS. (size) 7=0-4-0, 2=0-4-0
Max Horz 2=65(LC 7)
Max Uplift 7=-167(LC 5), 2=-416(LC 8)
Max Grav 7=916(LC 1), 2=1084(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1481/558, 4-5=-1786/366, 5-6=-1783/365, 6-7=-838/193
BOT CHORD 2-9=-531/1269, 8-9=-512/1239
WEBS 4-9=-233/414, 4-8=-75/627, 5-8=-632/186, 6-8=-385/1803

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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=167, 2=416.
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) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) to front face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-6=-90, 7-10=-20

December 4,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D01	HALF HIP GIRDER	1	1	I43853172

Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 14=-57(F) 15=-57(F) 16=-57(F) 17=-57(F) 18=-197(F) 19=-41(F) 20=-41(F) 21=-41(F) 22=-41(F)

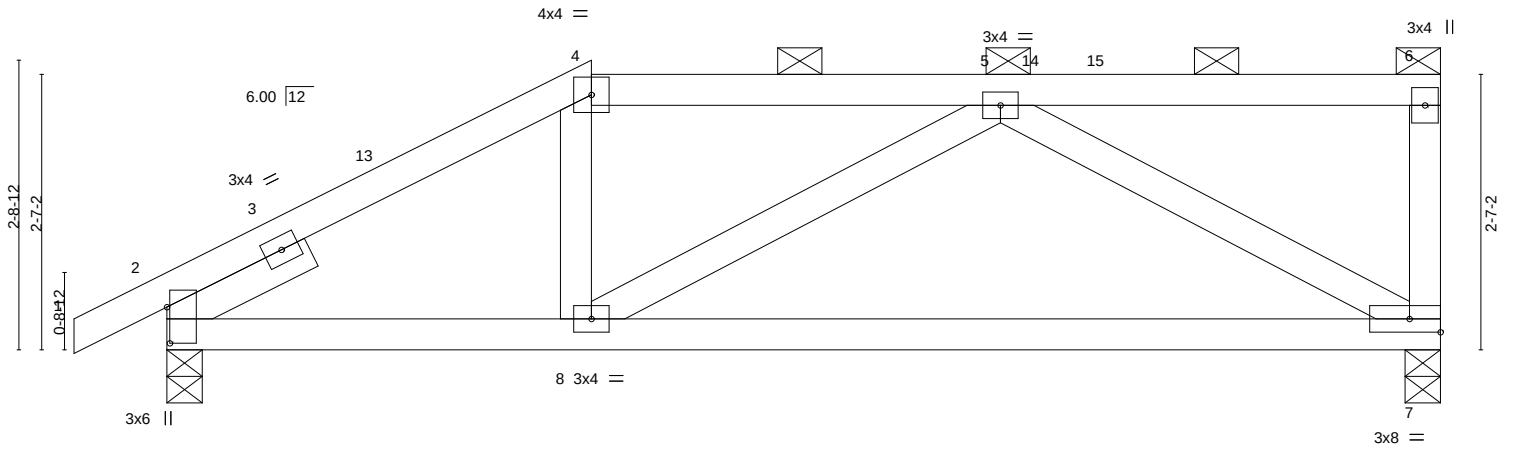
Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D02	HALF HIP	1	1	I43853173

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:37 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0Bj29WZzNToBpyXNePcRSUoT2Fg9g?Vmn47BkjyCgLe

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

Scale = 1:21.7



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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.10	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.22	7-8	>651	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 46 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 7=0-4-0
Max Horz 2=88(LC 11)
Max Uplift 2=-47(LC 12), 7=-73(LC 9)
Max Grav 2=734(LC 1), 7=649(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-922/146, 4-5=-769/159
BOT CHORD 2-8=-175/774, 7-8=-194/766
WEBS 5-7=-810/207

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=6.0psf; 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 8-2-15, Interior(1) 8-2-15 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) 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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D03	HALF HIP	1	1	I43853174

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:38 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-UNHQNsac7mw2R66aC77g?hLY5f2SPNCw0ktkG9yCgLd

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

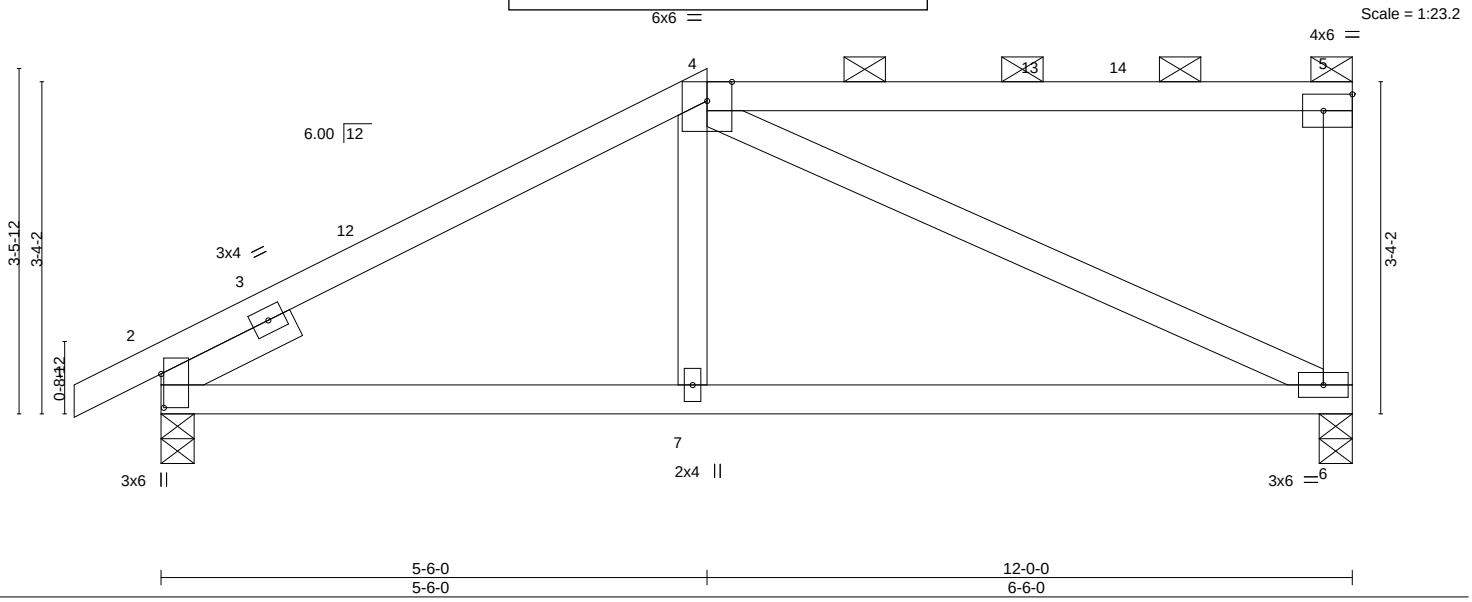


Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [5:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.09	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 45 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 6=0-4-0
Max Horz 2=116(LC 11)
Max Uplift 2=-58(LC 12), 6=-71(LC 9)
Max Grav 2=734(LC 1), 6=649(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-851/150, 5-6=-292/96
BOT CHORD 2-7=-207/701, 6-7=-210/695
WEBS 4-6=-680/187

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=6.0psf; 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 5-6-0, Exterior(2R) 5-6-0 to 9-8-15, Interior(1) 9-8-15 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D04	HALF HIP	1	1	I43853175

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:39 2020 Page 1
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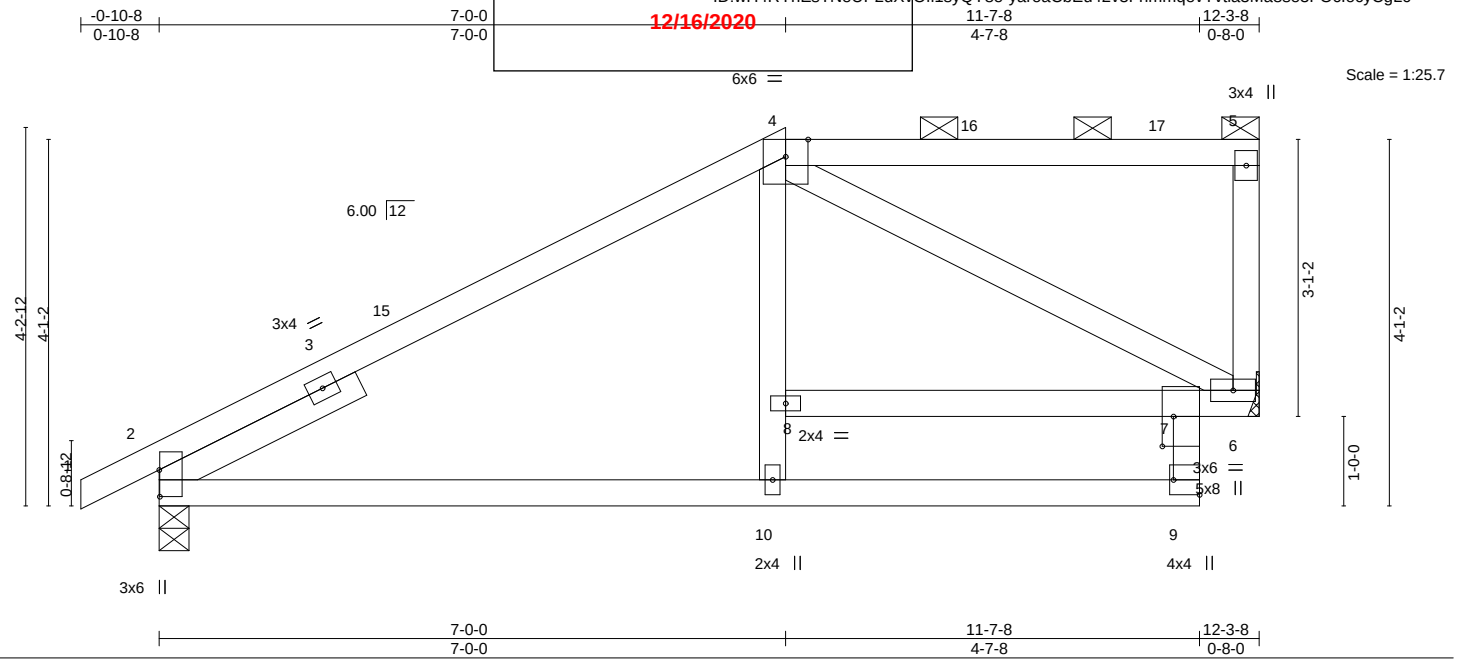

Plate Offsets (X,Y)-- [2:0-3-9,0-0-1], [7:0-4-0,0-1-8], [9:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.06	10-13	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.16	10-13	>936	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 53 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 2=0-4-0
Max Horz 2=125(LC 9)
Max Uplift 6=-69(LC 9), 2=-65(LC 12)
Max Grav 6=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-692/128
BOT CHORD 2-10=-180/588, 9-10=-107/393, 7-8=-102/259, 6-7=-209/652
WEBS 4-6=-732/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 7-0-0, Exterior(2R) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 12-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 6, 2.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D05	HALF HIP	1	1	I43853176

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:40 2020 Page 1
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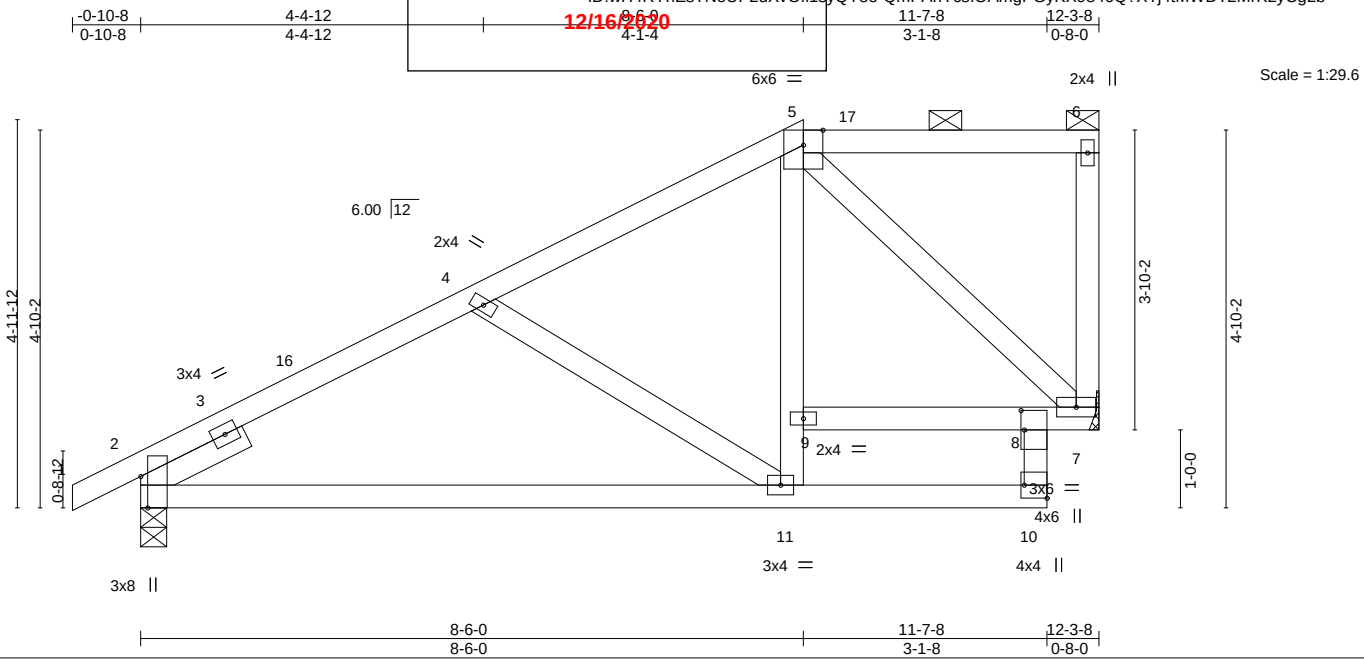

Plate Offsets (X,Y)-- [2:0-4-13,Edge], [8:0-3-0,0-0-8], [10:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.09	11-14	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.19	11-14	>781	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 56 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=153(LC 9)
Max Uplift 7=-65(LC 9), 2=-69(LC 12)
Max Grav 7=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-829/151, 4-5=-537/109
BOT CHORD 2-11=-276/736, 10-11=-103/306, 7-8=-147/423
WEBS 4-11=-389/164, 9-11=0/352, 5-9=0/325, 5-7=-586/153

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 8-6-0, Exterior(2E) 8-6-0 to 12-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 7, 2.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D06	HALF HIP	1	1	I43853177

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:40 2020 Page 1
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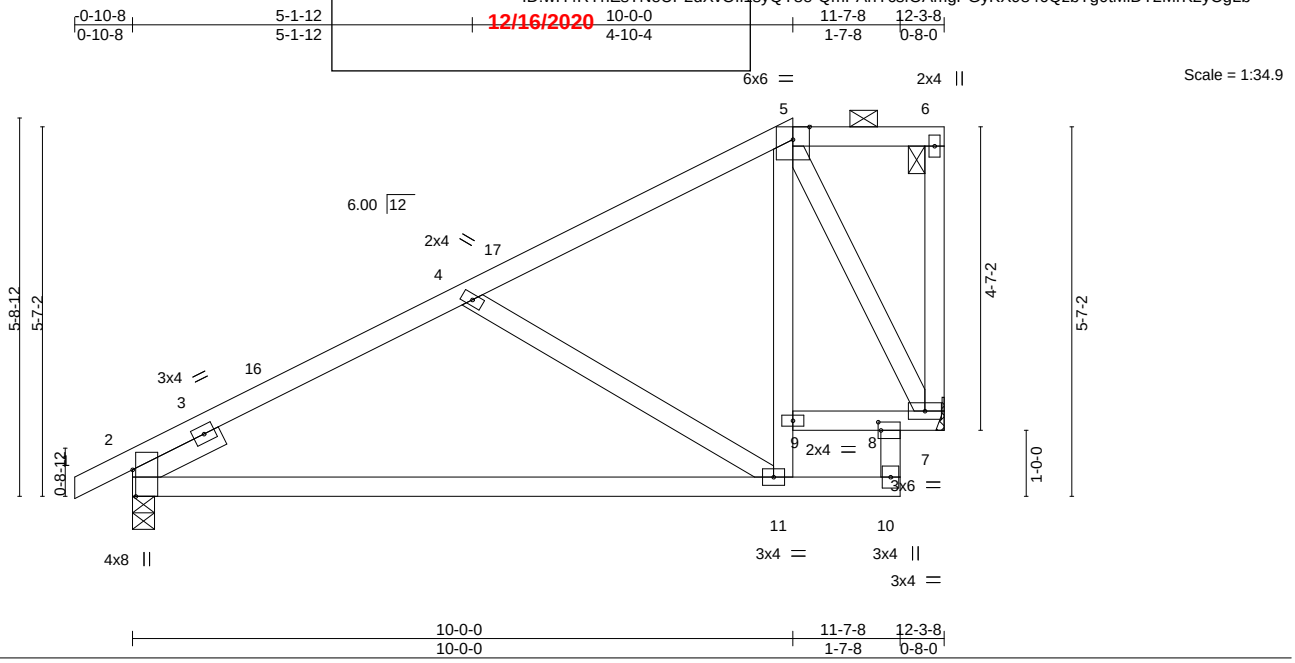

Plate Offsets (X,Y)-- [2:0-4-13,Edge], [8:0-0-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.16	11-14	>939	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.32	11-14	>456	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 57 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=181(LC 9)
Max Uplift 7=-68(LC 12), 2=-69(LC 12)
Max Grav 7=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-798/145, 4-5=-408/89
BOT CHORD 2-11=-266/705, 7-8=-106/268
WEBS 4-11=-509/192, 9-11=0/499, 5-9=-1/427, 5-7=-605/138

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=6.0psf; 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 10-0-0, Exterior(2E) 10-0-0 to 12-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 7, 2.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D07	HALF HIP	1	1	I43853178

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:41 2020 Page 1
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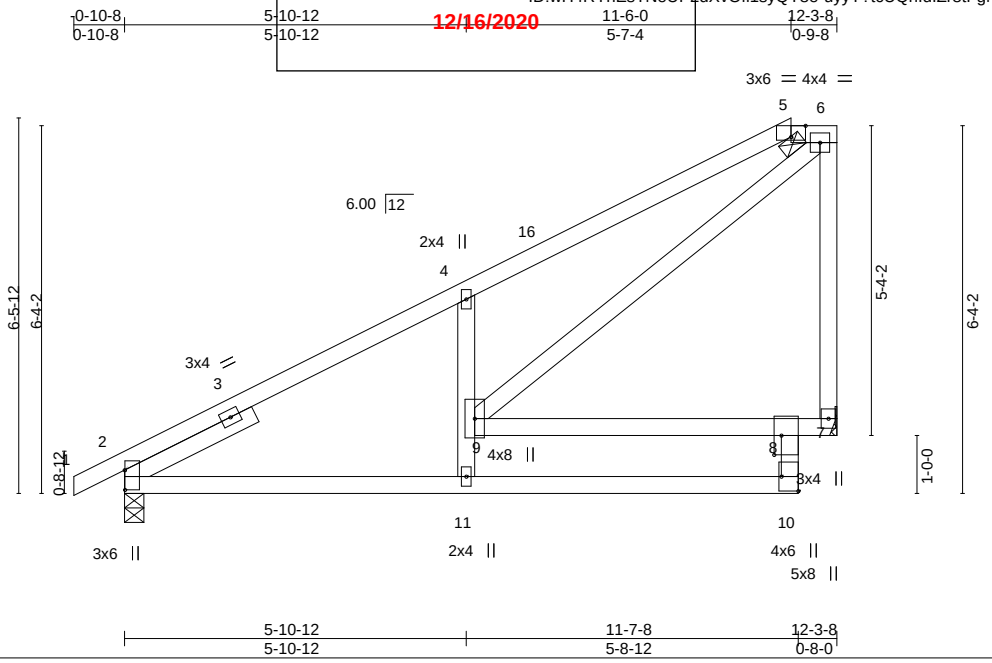

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [5:0-3-0,Edge], [8:0-4-0,0-1-8], [10:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.05	11-14	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.11	11-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 59 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=209(LC 9)
Max Uplift 7=-96(LC 12), 2=-65(LC 12)
Max Grav 7=665(LC 25), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-745/103, 4-5=-976/221, 5-6=-760/227, 6-7=-543/221
BOT CHORD 2-11=-221/666, 10-11=-94/421, 8-9=-429/122
WEBS 4-9=-573/272, 6-9=-280/999

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 11-6-0, Exterior(2E) 11-6-0 to 12-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 7, 2.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D08	JACK-CLOSED	5	1	I43853179

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:42 2020 Page 1
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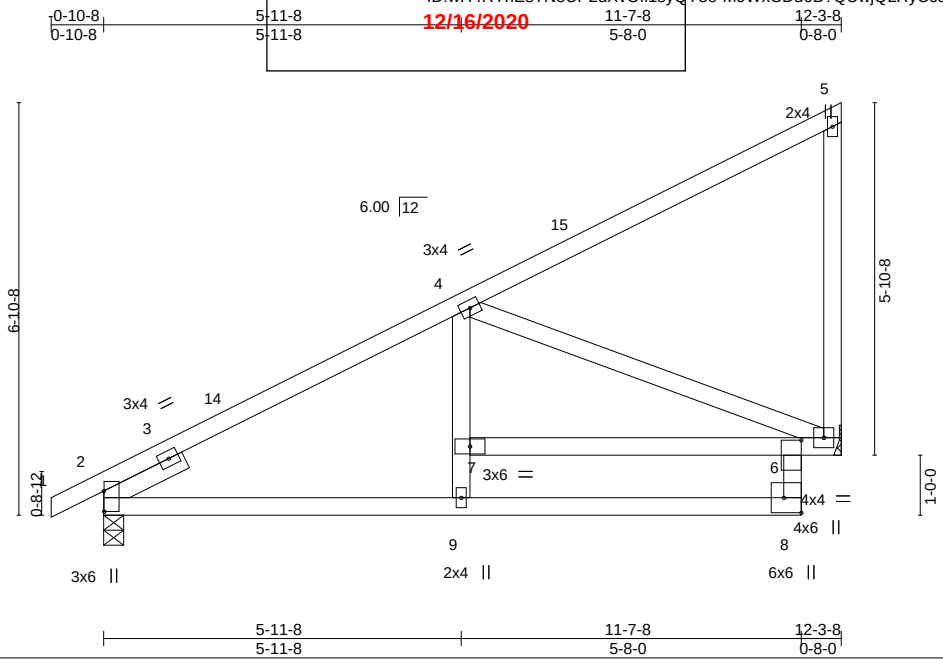

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [6:0-0-8,0-4-8], [8:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.06	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.11	9-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 57 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 6=Mechanical
Max Horz 2=202(LC 12)
Max Uplift 2=-9(LC 12), 6=-27(LC 12)
Max Grav 2=781(LC 1), 6=744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-846/0
BOT CHORD 2-9=-134/730, 8-9=-31/445, 6-8=-4/350, 6-7=-145/403
WEBS 4-7=0/289, 4-6=-910/190

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 12-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

December 4,2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D09	JACK-CLOSED	3	1	I43853180

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:43 2020 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

0-10-8 6-1-12 12-3-8
0-10-8 6-1-12 6-1-12

Scale = 1:38.3

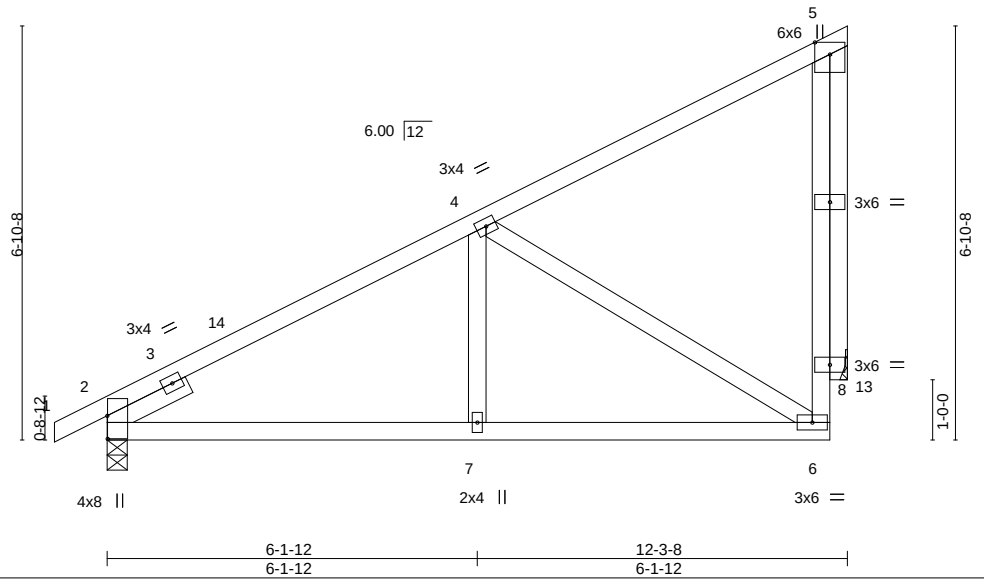

Plate Offsets (X,Y)-- [2:0-4-9,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.03	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 57 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 13=Mechanical
Max Horz 2=187(LC 12)
Max Uplift 2=-31(LC 12), 13=-72(LC 12)
Max Grav 2=754(LC 1), 13=629(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-830/107, 6-8=-45/437, 5-8=-45/437
BOT CHORD 2-7=-144/686, 6-7=-144/686
WEBS 4-7=0/252, 4-6=-732/146, 5-13=-631/115

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D10	HALF HIP	1	1	I43853181

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:44 2020 Page 1
ID:wH4RYhEsTNeUP2dXv0fi1syQY8e-JXehdvfMjcgB91ZjZNE4Fyae1468p6SoOgK3TpyCgLX

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

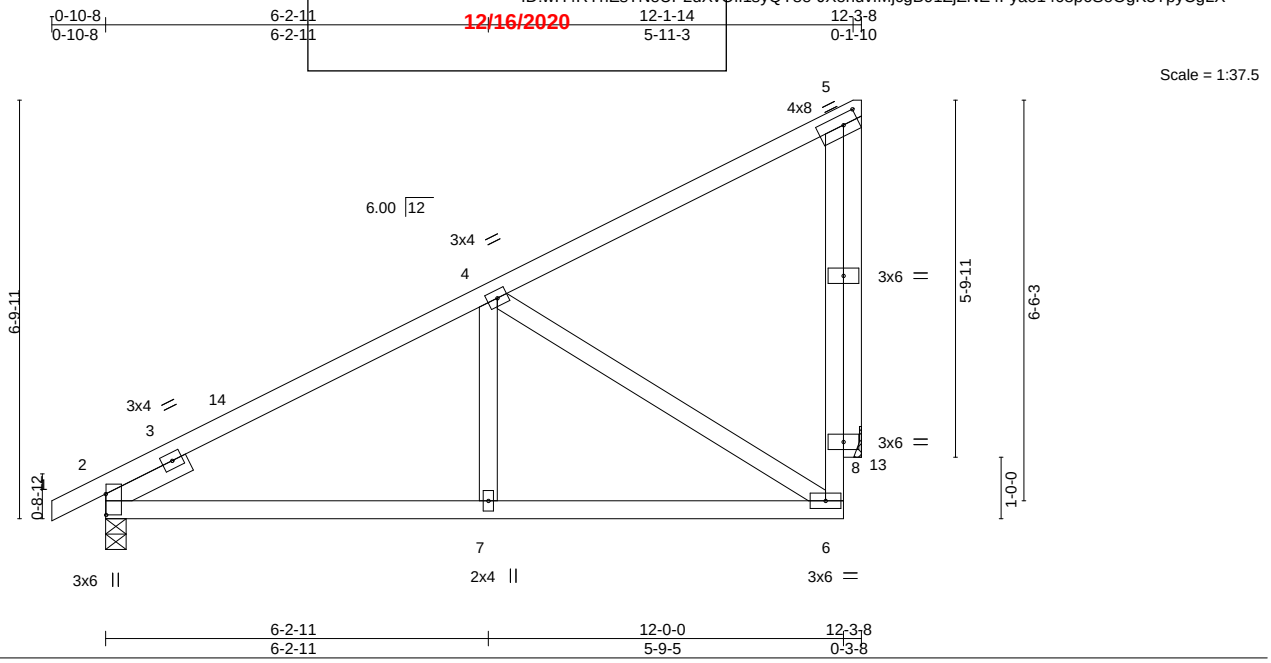

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [5:0-2-15,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	0.03	7-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.06	7-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 57 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 13=Mechanical
Max Horz 2=216(LC 12)
Max Uplift 2=-35(LC 12), 13=-132(LC 12)
Max Grav 2=754(LC 1), 13=629(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-798/8, 6-8=-59/440, 5-8=-59/440
BOT CHORD 2-7=-149/677, 6-7=-149/677
WEBS 4-7=0/254, 4-6=-728/169, 5-13=-631/132

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 13=132.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D11	HALF HIP	1	1	I43853182

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:45 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-nkC3rFf?Uwo2nA8w65lJnA7qSUSNYc0ydK3c0FyCgLW

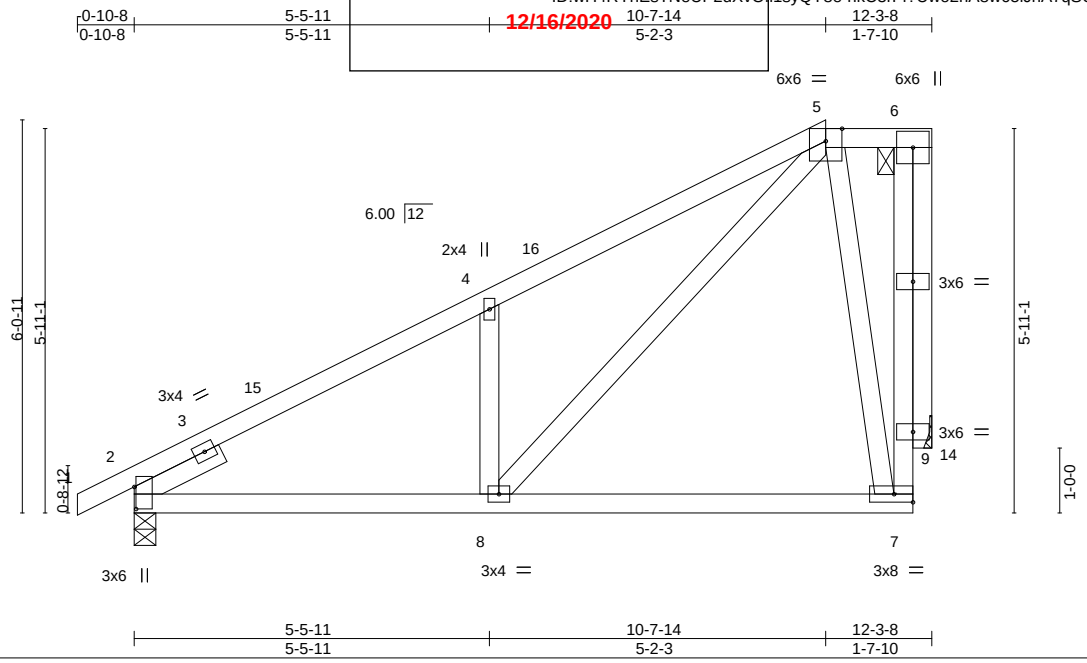

Plate Offsets (X,Y)-- [2:0-4-1,0-0-5]

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

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 14=Mechanical
Max Horz 2=190(LC 12)
Max Uplift 2=-46(LC 12), 14=-102(LC 12)
Max Grav 2=754(LC 1), 14=629(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-877/32, 4-5=-910/152, 7-9=-196/649, 6-9=-196/649
BOT CHORD 2-8=-197/719
WEBS 4-8=-472/210, 5-8=-187/804, 5-7=-599/236, 6-14=-631/155

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=6.0psf; 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 10-7-14, Exterior(2E) 10-7-14 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=102.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D12	HALF HIP	1	1	I43853183

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:46 2020 Page 1
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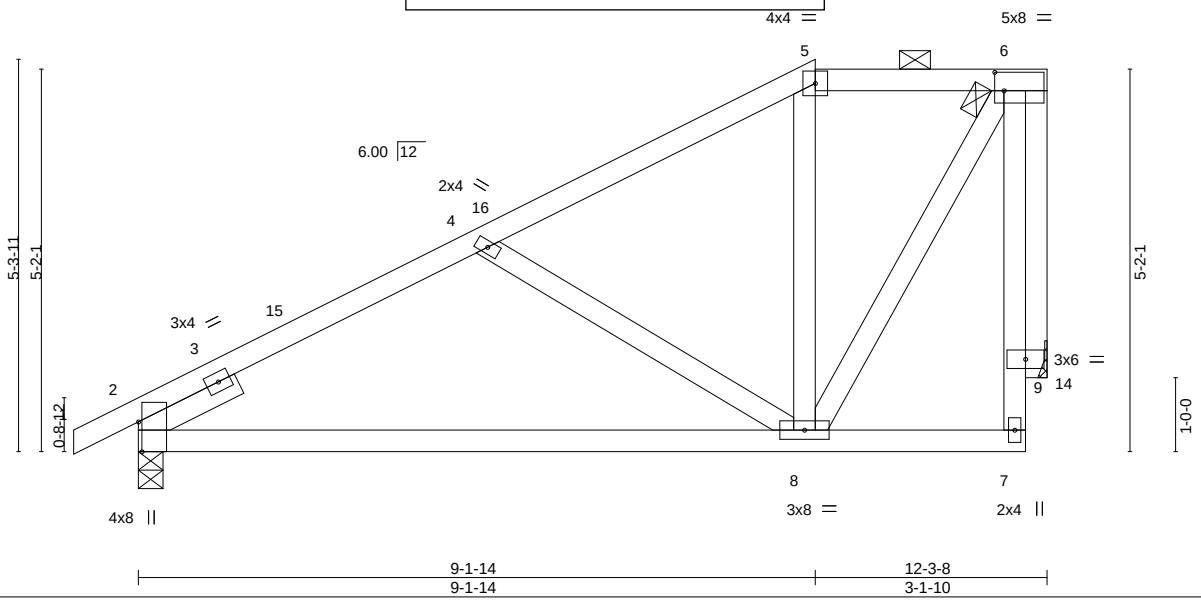

Plate Offsets (X,Y)-- [2:0-4-13,Edge], [6:0-1-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.11	8-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.22	8-12	>664	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 59 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 14=Mechanical
Max Horz 2=163(LC 12)
Max Uplift 2=-53(LC 12), 14=-71(LC 12)
Max Grav 2=754(LC 1), 14=629(LC 25)

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

TOP CHORD	2-4=-828/105, 4-5=-494/38, 5-6=-364/77
BOT CHORD	2-8=-238/732
WEBS	4-8=-440/173, 6-8=-127/611, 6-14=-632/135

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 9-1-14, Exterior(2E) 9-1-14 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D13	HALF HIP	1	1	I43853184

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:47 2020 Page 1
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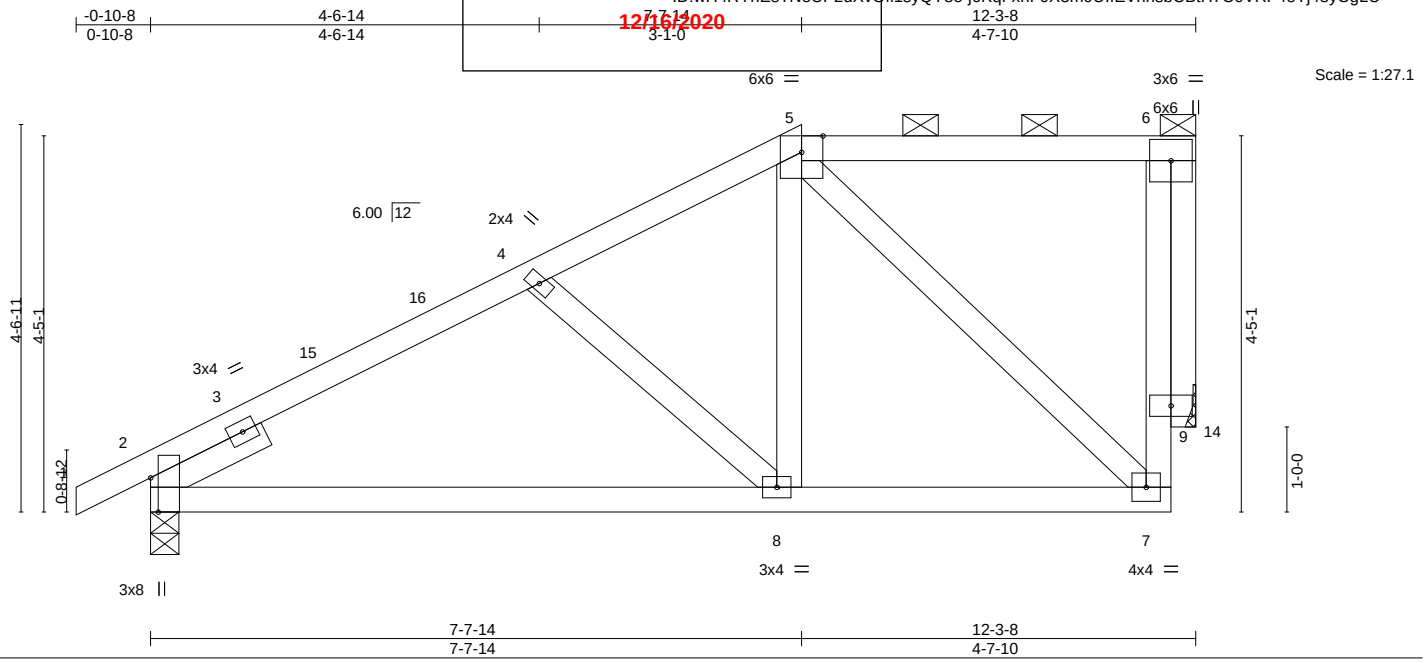

Plate Offsets (X,Y)-- [2:0-4-13,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.05	8-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.11	8-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 55 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 14=Mechanical
Max Horz 2=135(LC 12)
Max Uplift 2=-56(LC 12), 14=-54(LC 9)
Max Grav 2=754(LC 1), 14=629(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-825/123, 4-5=-617/85, 7-9=-73/441, 6-9=-73/441
BOT CHORD 2-8=-228/721, 7-8=-119/489
WEBS 5-8=-14/357, 5-7=-570/123, 4-8=-292/144, 6-14=-635/131

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=6.0psf; 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 7-7-14, Exterior(2E) 7-7-14 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D14	HALF HIP	1	1	I43853185

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:48 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-BJuCTHitnrBdeetVoDI0PoII1hRBlwvOJIIGcayCgLT

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

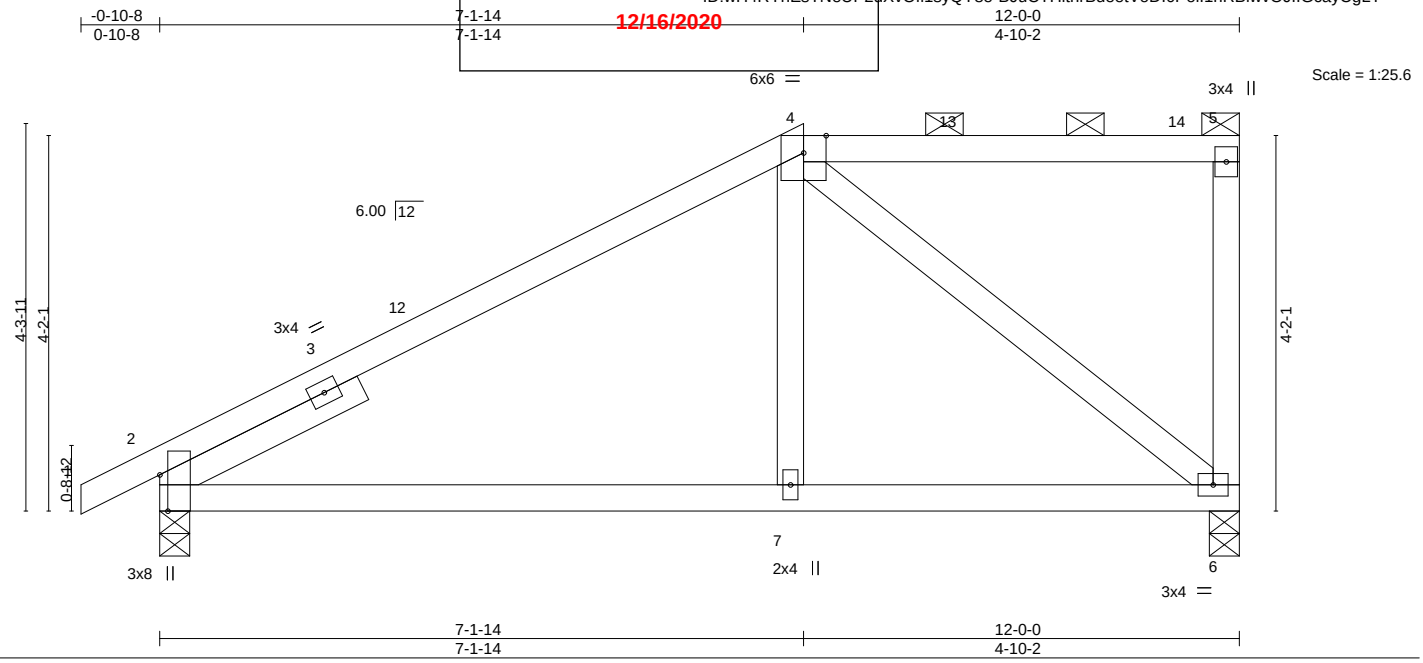

Plate Offsets (X,Y)-- [2:0-4-13,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	0.06	7-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13	7-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 47 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 6=0-4-0
Max Horz 2=147(LC 11)
Max Uplift 2=-66(LC 12), 6=-68(LC 9)
Max Grav 2=734(LC 1), 6=649(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-661/128
BOT CHORD 2-7=-200/563, 6-7=-202/556
WEBS 4-7=0/279, 4-6=-702/211

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=6.0psf; 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 7-1-14, Exterior(2R) 7-1-14 to 11-4-13, Interior(1) 11-4-13 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D15	Roof Special Girder	1	1	I43853186

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:51 2020 Page 1
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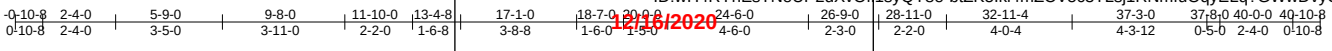

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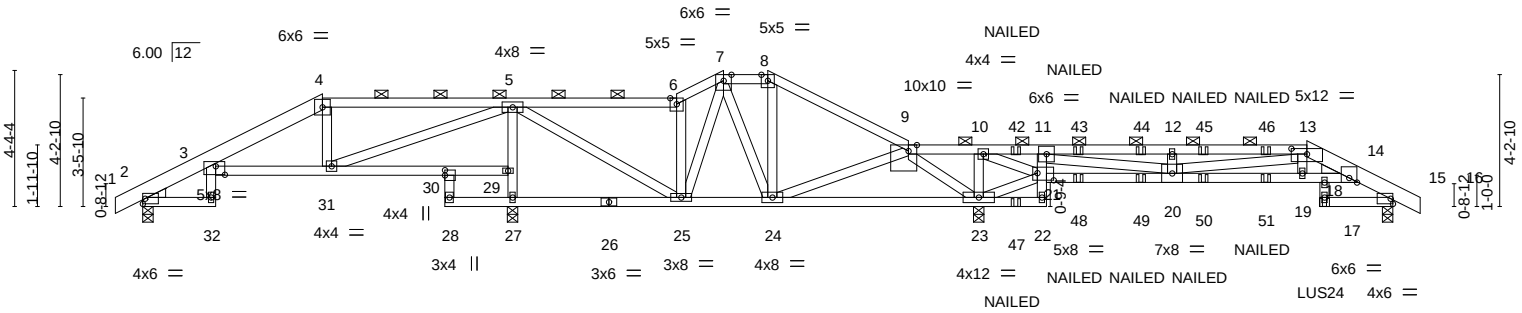


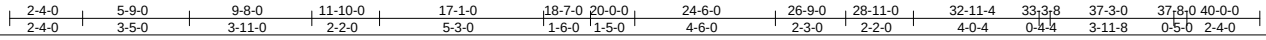


Plate Offsets (X,Y)-- [3:0-3-8,0-3-4], [9:0-3-3,Edge], [13:0-6-0,0-2-2], [21:0-6-4,0-2-12], [30:0-2-0,0-0-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	0.11	19-20	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.21	19-20	>741	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.13	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 176 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x6 SPF No.2, 13-16: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (3-4-0 max.): 4-6, 7-8, 9-13.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 6-0-0 oc bracing: 18-19

REACTIONS. All bearings 0-4-0.
(lb) - Max Horz 2=65(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2 except 15=-442(LC 9), 23=-387(LC 9), 27=-246(LC 29)
Max Grav All reactions 250 lb or less at joint(s) except 2=589(LC 21), 15=973(LC 37), 23=2202(LC 1), 27=1527(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-606/91, 4-5=-536/113, 5-6=-324/235, 6-7=-376/269, 7-8=-329/259, 8-9=-441/256, 9-10=-384/1749, 10-11=-157/714, 11-12=-2202/620, 12-13=-2202/620, 13-14=-2207/928, 14-15=-407/227
BOT CHORD 3-31=-68/561, 30-31=-490/80, 27-28=-271/25, 25-27=-421/63, 24-25=-127/291, 23-24=-747/317, 11-21=-995/274, 20-21=-501/176, 19-20=-926/2247, 18-19=-901/2186, 14-18=-901/2186
WEBS 4-31=-343/110, 5-25=-202/780, 6-25=-383/173, 8-24=-264/86, 9-24=-198/950, 10-23=-583/154, 21-23=-1744/460, 10-21=-259/1134, 12-20=-422/116, 11-20=-751/2742, 27-29=-1360/307, 5-29=-1345/312, 9-23=-1287/252, 13-19=-154/385, 13-20=-482/377, 5-31=-131/1087

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=6.0psf; 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) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 15=442, 23=387, 27=246.
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.

Continued on page 2

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

10) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent at 37-9-12 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-90, 3-4=-90, 4-6=-90, 6-7=-90, 7-8=-90, 8-9=-90, 9-13=-90, 13-16=-90, 32-33=-20, 3-30=-20, 22-28=-20, 18-21=-20, 17-39=-20
   Concentrated Loads (lb)
   Vert: 18=-197(B) 42=-57(B) 43=-38(B) 44=-38(B) 45=-38(B) 46=-38(B) 47=-41(B) 48=-61(B) 49=-61(B) 50=-61(B) 51=-61(B)

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D16	Roof Special	1	1	I43853187

Job Reference (optional)

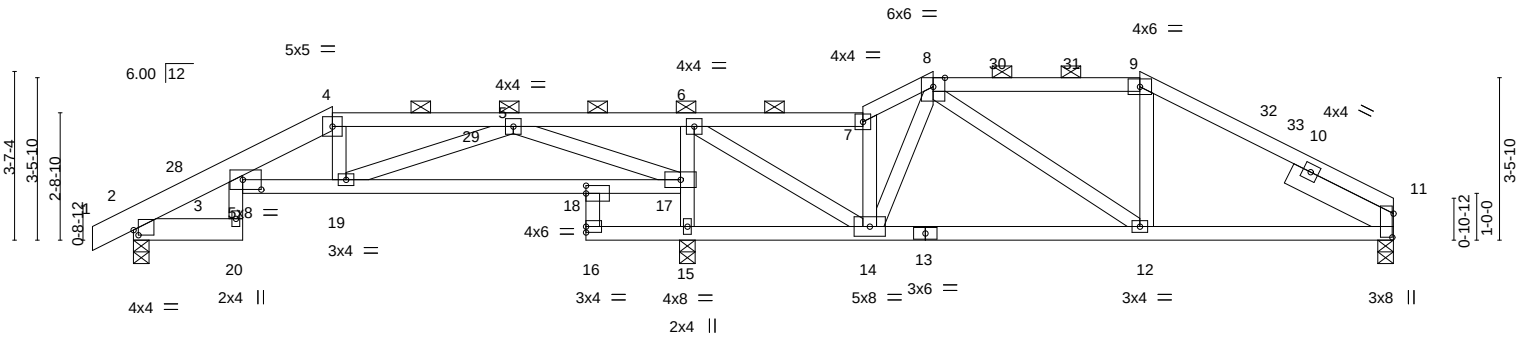
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:52 2020 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-447jJelOq4h37FBG13NyZewyEInjhlZ_EwGUlLyCgLP

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

-0-10-8	2-4-0	4-3-0	7-1-4	8-1-6	9-8-0	11-10-0	15-7-0	17-1-0	21-6-0	26-11-0
0-10-8	2-4-0	1-11-0	2-10-4	1-0-2	1-6-10	2-2-0	3-9-0	1-6-0	4-5-0	5-5-0

Scale = 1:49.2



2-4-0	4-3-0	9-8-0	11-10-0	15-7-0	17-1-0	21-6-0	26-11-0
2-4-0	1-11-0	5-5-0	2-2-0	3-9-0	1-6-0	4-5-0	5-5-0

Plate Offsets (X,Y)-- [2:0-1-4,0-1-5], [3:0-4-12,0-2-8], [11:0-6-1,0-0-5], [18:0-0-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.07	3-19	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.14	3-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 112 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 2-20: 2x6 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Right 2x6 SPF No.2 2-6-0

BRACING-

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

REACTIONS. (size) 11=0-4-0, 2=0-4-0, 15=0-4-0
Max Horz 2=65(LC 12)
Max Uplift 11=-62(LC 13), 2=-86(LC 12), 15=-122(LC 12)
Max Grav 11=739(LC 1), 2=619(LC 1), 15=1685(LC 1)

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

TOP CHORD	3-26=-305/60, 3-4=-958/142, 4-5=-944/163, 5-6=-5/606, 6-7=-585/157, 7-8=-630/180, 8-9=-792/173, 9-11=-918/152
BOT CHORD	3-19=-150/964, 18-19=-166/572, 17-18=-130/849, 15-16=-327/0, 14-15=-473/3, 12-14=-79/624, 11-12=-75/792
WEBS	7-14=-409/108, 15-17=-1536/182, 6-17=-1069/132, 6-14=-93/1230, 5-19=0/450, 5-17=-1250/211

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-7, Interior(1) 2-0-7 to 4-3-0, Exterior(2R) 4-3-0 to 7-3-0, Interior(1) 7-3-0 to 17-1-0, Exterior(2R) 17-1-0 to 20-1-0, Interior(1) 20-1-0 to 21-6-0, Exterior(2R) 21-6-0 to 24-6-0, Interior(1) 24-6-0 to 26-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2 except (jt=lb) 15=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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

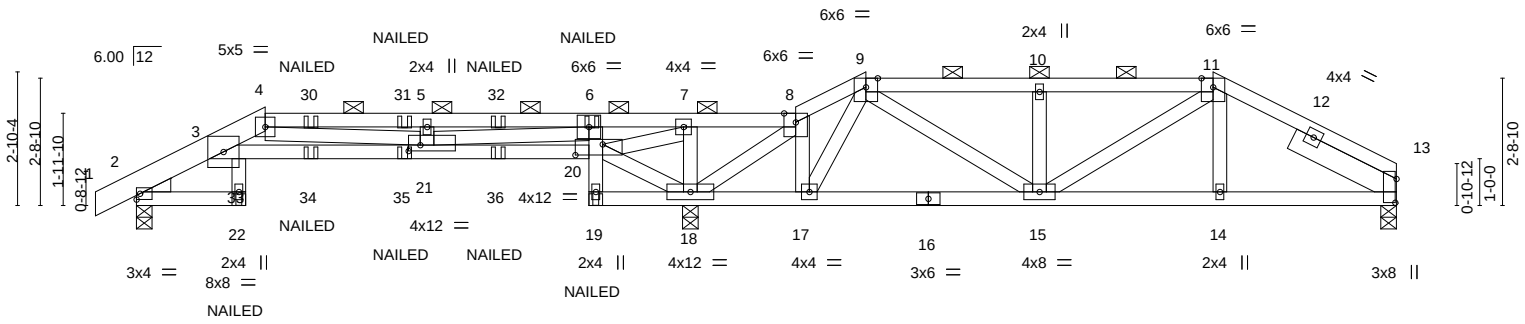
Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	D17	Roof Special Girder	1	1	I43853188

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:55 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-UfprxgnG7?3e_jvriBxfBHYTmWlou2wQwuU8MgyCgLM

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

Scale = 1:49.2



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

Plate Offsets (X,Y)-- [13:0-6-1,0-0-5], [20:0-7-0,0-2-12], [21:0-3-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.12	3-21	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.26	3-21	>539	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.14	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-22,3-20: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x6 SPF No.2 2-6-0

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

REACTIONS. (size) 13=0-4-0, 2=0-4-0, 18=0-4-0
Max Horz 2=53(LC 8)
Max Uplift 13=-98(LC 30), 2=-125(LC 8), 18=-232(LC 4)
Max Grav 13=625(LC 22), 2=802(LC 21), 18=2232(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-28=-274/60, 3-4=-2431/450, 4-5=-1741/322, 5-6=-1741/322, 6-7=-155/1283, 7-8=-252/1866, 8-9=-289/706, 9-10=-808/304, 10-11=-808/304, 11-13=-769/179
BOT CHORD 3-22=-51/298, 3-21=-484/2660, 20-21=-1061/126, 6-20=-931/188, 17-18=-687/246, 15-17=-347/355, 14-15=-127/659, 13-14=-124/662
WEBS 8-17=-89/1037, 9-17=-1107/162, 9-15=-89/857, 10-15=-406/116, 7-18=-350/77, 8-18=-1524/100, 5-21=-326/96, 6-21=-445/2848, 18-20=-1915/272, 7-20=-103/616, 4-21=-930/175

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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 2=125, 18=232.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

December 4,2020

LOAD CASE(S) Standard

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=-90, 3-4=-90, 4-8=-90, 8-9=-90, 9-11=-90, 11-13=-90, 22-27=-20, 3-20=-20, 19-23=-20
   Concentrated Loads (lb)
   Vert: 22=-210(B) 6=-57(B) 20=-41(B) 30=-36(B) 31=-36(B) 32=-36(B) 34=-62(B) 35=-62(B) 36=-62(B)

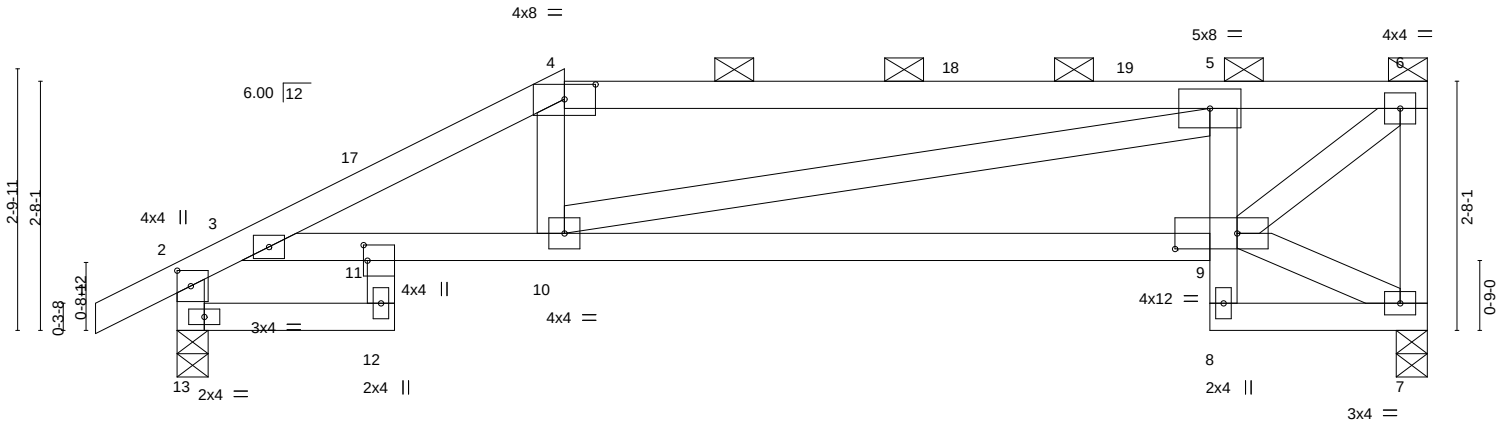
Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E02	HALF HIP	1	1	I43853189

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:56 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-yrMD80ouuIBVbtU1GuSukU4bdv8Wdb?Z9YEhv6yCgLL

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

Scale = 1:24.7



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

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

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

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

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

REACTIONS. (size) 7=0-4-0, 13=0-4-0
Max Horz 13=96(LC 11)
Max Uplift 7=-82(LC 9), 13=-49(LC 12)
Max Grav 7=718(LC 1), 13=817(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-529/83, 3-4=-1505/215, 4-5=-1345/234, 5-6=-834/128, 6-7=-663/112, 2-13=-808/180
BOT CHORD 3-11=-146/1122, 10-11=-276/1355, 9-10=-181/1040, 5-9=-611/180
WEBS 4-10=0/267, 5-10=-102/310, 6-9=-171/1067

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 4-1-14, Exterior(2R) 4-1-14 to 8-4-13, Interior(1) 8-4-13 to 13-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 13.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E03	HALF HIP	1	1	I43853190

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:57 2020 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Q1wcMMpWfcJLD03Dpcz7GidrvJScM05jOCzFRZyCgLK

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

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

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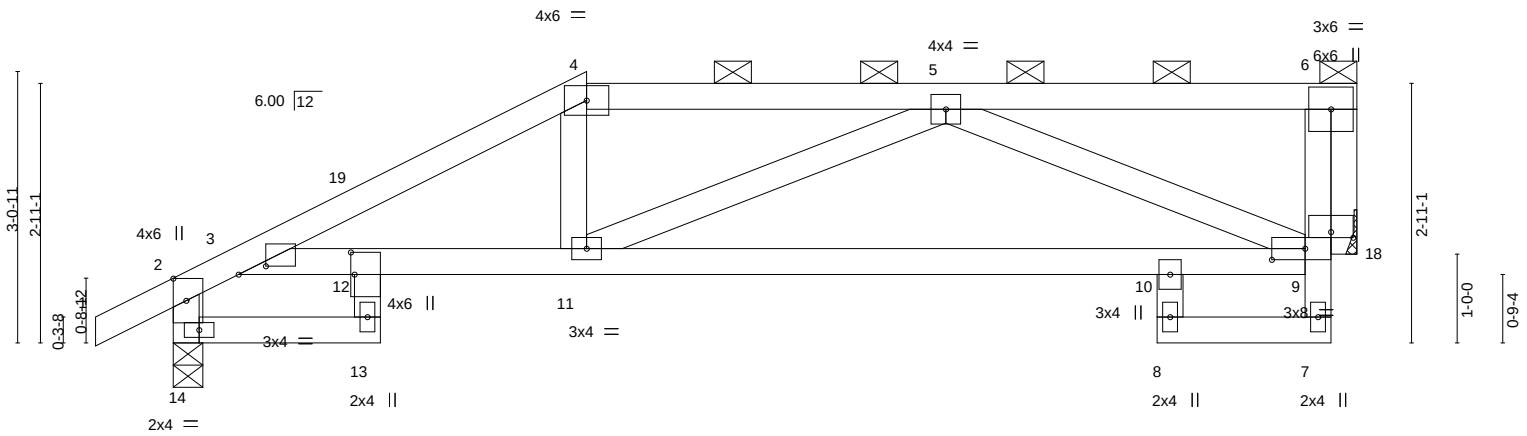


2-4-0	4-7-14	11-1-0	13-4-0
2-4-0	2-3-14	6-5-2	2-3-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.08	10-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.17	10-11	>929	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 53 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 14=0-4-0, 18=Mechanical
Max Horz 14=78(LC 9)
Max Uplift 14=-50(LC 12), 18=-73(LC 9)
Max Grav 14=817(LC 1), 18=678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-574/71, 3-4=-1381/180, 4-5=-1201/202, 5-6=-254/0, 6-9=-54/495, 2-14=-802/176
BOT CHORD 13-14=-131/286, 3-12=-86/930, 11-12=-215/1216, 10-11=-206/1183, 9-10=-144/1206
WEBS 4-11=0/296, 5-9=-1038/273, 6-18=-697/95

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=6.0psf; 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 4-7-14, Exterior(2R) 4-7-14 to 8-8-7, Interior(1) 8-8-7 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 18.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E04	HALF HIP	1	1	I43853191

Job Reference (optional)

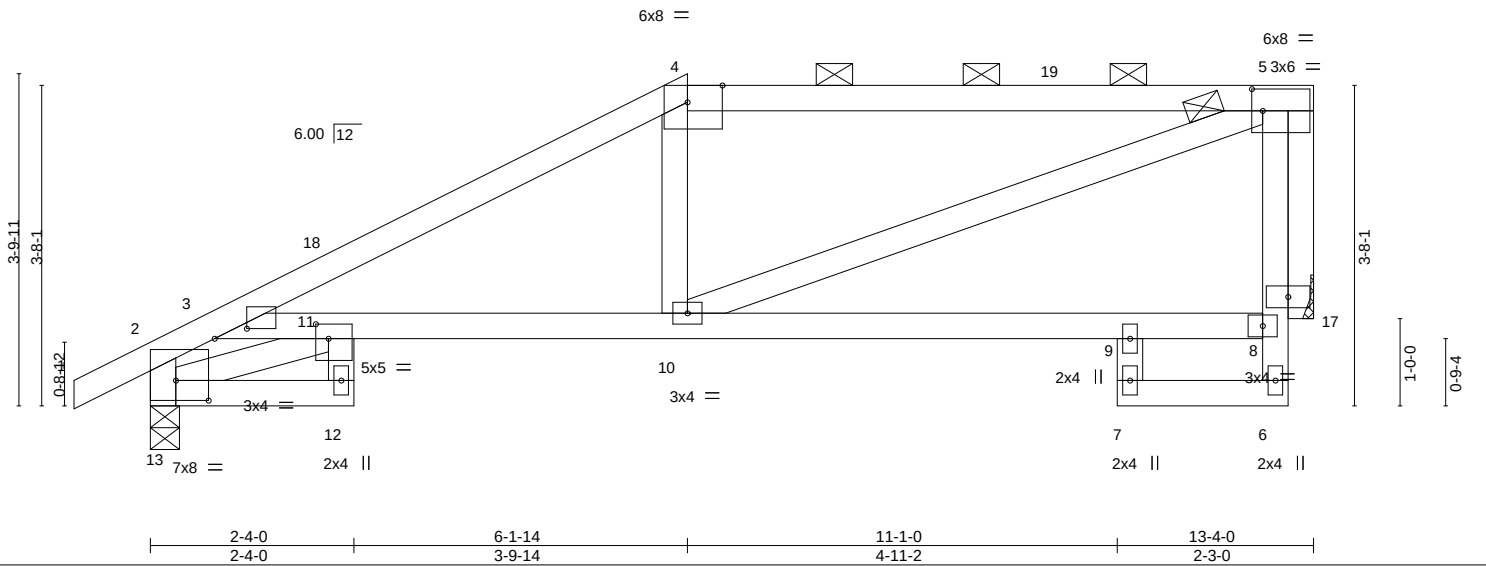
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:58 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-uEU_Zhq8QwRCrAeQNJUMpvAyljmd5VNscsjoz?yCgLJ

-0-10-8	2-4-0	6-1-14	11-1-0	13-4-0
0-10-8	2-4-0	3-9-14	4-11-2	2-3-0

Scale = 1:26.4



2-4-0	6-1-14	11-1-0	13-4-0
2-4-0	3-9-14	4-11-2	2-3-0

Plate Offsets (X,Y)-- [2:0-1-12,0-0-14], [3:0-4-7,0-1-6], [4:0-4-13,Edge], [5:0-1-8,0-3-0], [11:0-1-12,0-2-0], [13:0-4-8,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.08	10-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.17	10-11	>915	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.06	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 56 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	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.): 4-5.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 13=0-4-0, 17=Mechanical
Max Horz 13=101(LC 12)
Max Uplift 13=-57(LC 12), 17=-69(LC 9)
Max Grav 13=817(LC 1), 17=678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-636/118, 3-4=-1185/166, 4-5=-1032/204, 2-13=-813/177
BOT CHORD 12-13=-118/286, 3-11=-36/674, 10-11=-214/1025, 8-9=-18/270
WEBS 5-10=-204/861, 5-17=-692/108

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=6.0psf; 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 6-1-14, Exterior(2R) 6-1-14 to 10-4-13, Interior(1) 10-4-13 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 17.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

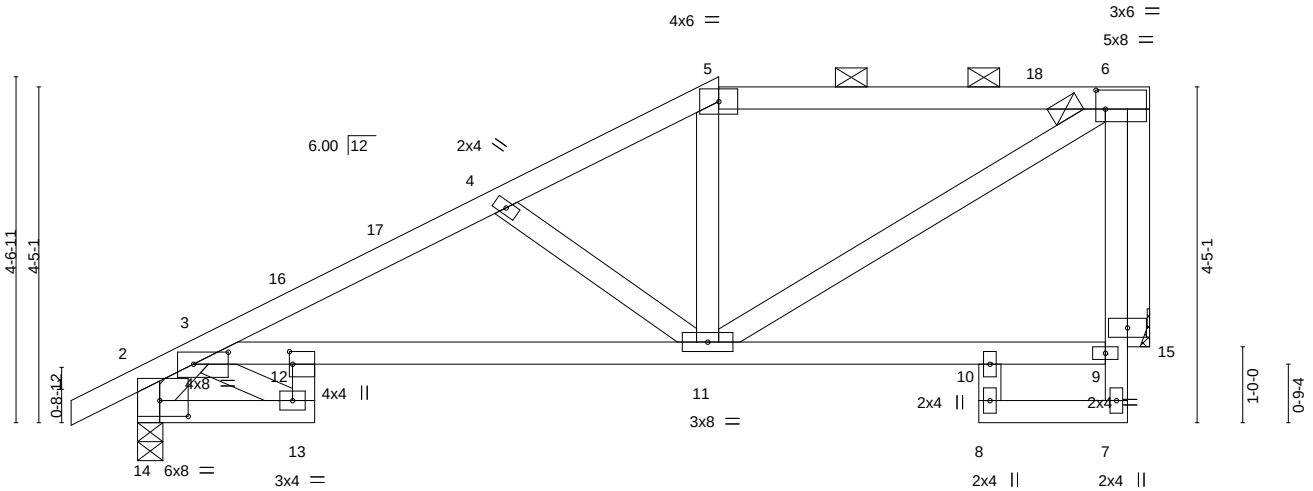
Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E05	HALF HIP	1	1	I43853192

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:44:59 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-MQ2Mn1qnBDZ3SKDcx1?bM7iC878wq_z0rVSMVRyCgLI

-0-10-8	2-4-0	4-10-4	7-7-14	11-1-0	13-4-0
0-10-8	2-4-0	2-6-4	2-9-10	3-5-2	2-3-0

Scale = 1:30.4



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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.08	11-12	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.21	11-12	>767	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.07	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 62 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except* 5-6: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 14=0-4-0, 15=Mechanical
Max Horz 14=129(LC 12)
Max Uplift 14=-61(LC 12), 15=-62(LC 9)
Max Grav 14=817(LC 1), 15=678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1215/203, 4-5=-900/141, 5-6=-759/152, 2-14=-395/89
BOT CHORD 13-14=-201/432, 3-12=-234/891, 11-12=-299/1066
WEBS 6-11=-157/739, 4-11=-380/164, 3-14=-558/82, 3-13=-300/163, 6-15=-685/120

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=6.0psf; 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 7-7-14, Exterior(2R) 7-7-14 to 11-10-13, Interior(1) 11-10-13 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 15.
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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E06	HALF HIP	1	1	I43853193

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:01 2020 Page 1
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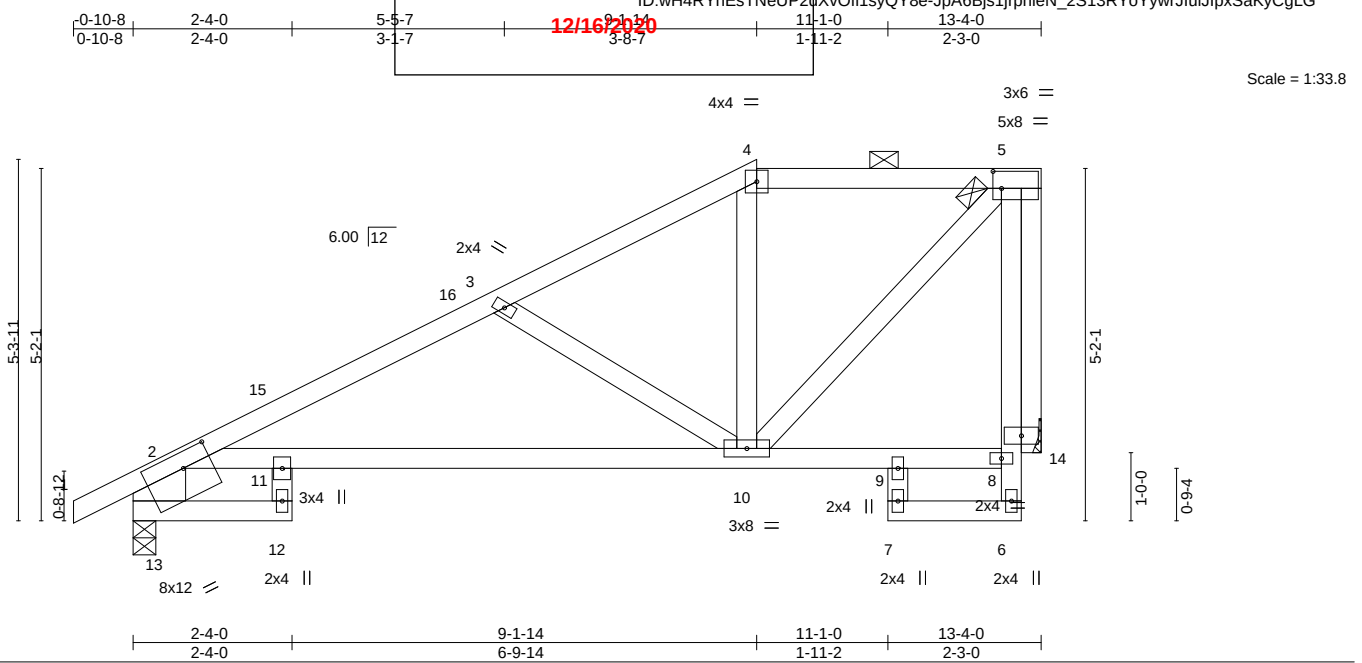

Plate Offsets (X,Y)-- [5:0-1-8,0-3-0], [13:0-4-2,0-2-1], [13:0-5-0,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.12	10-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.29	10-11	>530	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.08	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 64 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 13=0-4-0, 14=Mechanical
Max Horz 13=151(LC 12)
Max Uplift 13=-58(LC 12), 14=-60(LC 12)
Max Grav 13=827(LC 1), 14=662(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1106/174, 3-4=-682/91, 4-5=-538/114, 2-13=-807/135
BOT CHORD 2-11=-151/818, 10-11=-292/946
WEBS 5-10=-143/669, 3-10=-486/193, 5-14=-666/125

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=6.0psf; 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 9-1-14, Exterior(2E) 9-1-14 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 13, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E07	HALF HIP	1	1	I43853194

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:02 2020 Page 1
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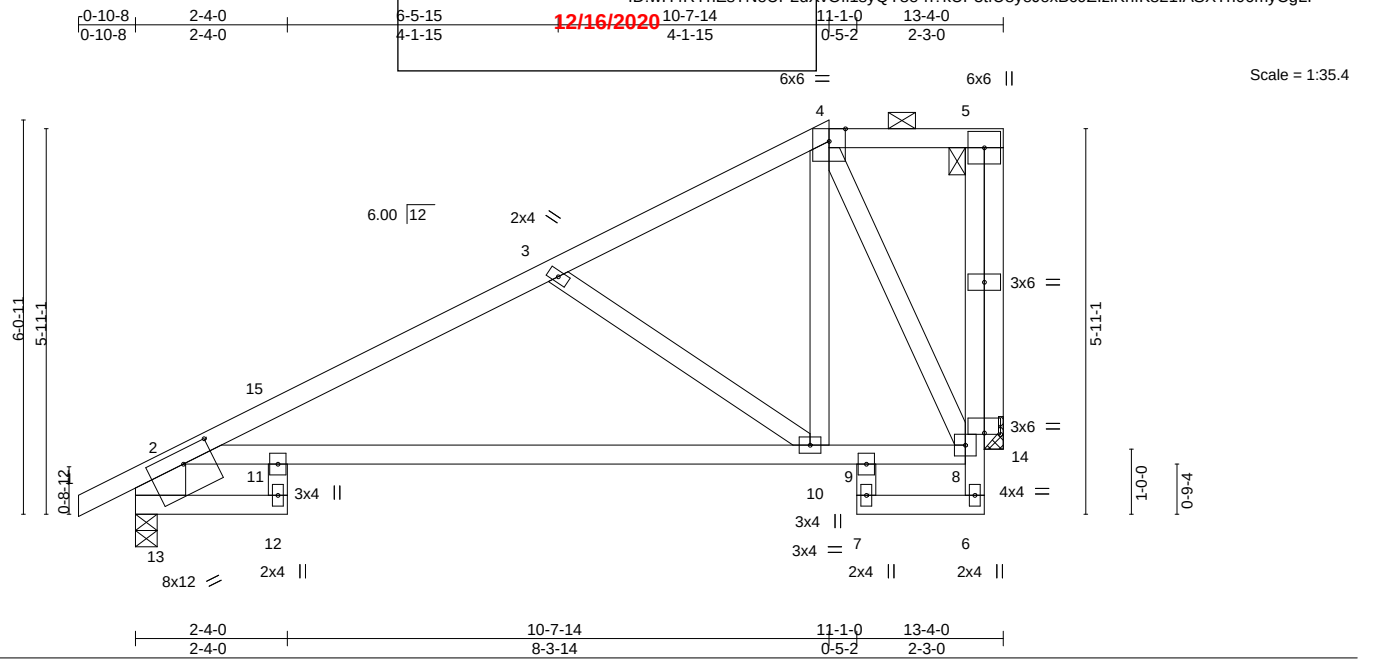

Plate Offsets (X,Y)-- [8:0-3-0,0-0-4], [13:0-5-8,0-2-8], [13:0-4-2,0-2-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.21	10-11	>749	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.49	10-11	>314	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.11	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 67 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 13=0-4-0, 14=Mechanical
Max Horz 13=179(LC 12)
Max Uplift 13=-52(LC 12), 14=-89(LC 12)
Max Grav 13=823(LC 1), 14=667(LC 1)

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

TOP CHORD	2-3=-992/125, 3-4=-501/43, 5-8=-132/571, 2-13=-804/131
BOT CHORD	2-11=-87/699, 10-11=-261/833, 9-10=-86/336, 8-9=-76/389
WEBS	4-8=-689/138, 4-10=-41/584, 3-10=-581/211, 5-14=-668/142

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=6.0psf; 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 10-7-14, Exterior(2E) 10-7-14 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 13, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E08	HALF HIP	1	1	I43853195

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:03 2020 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

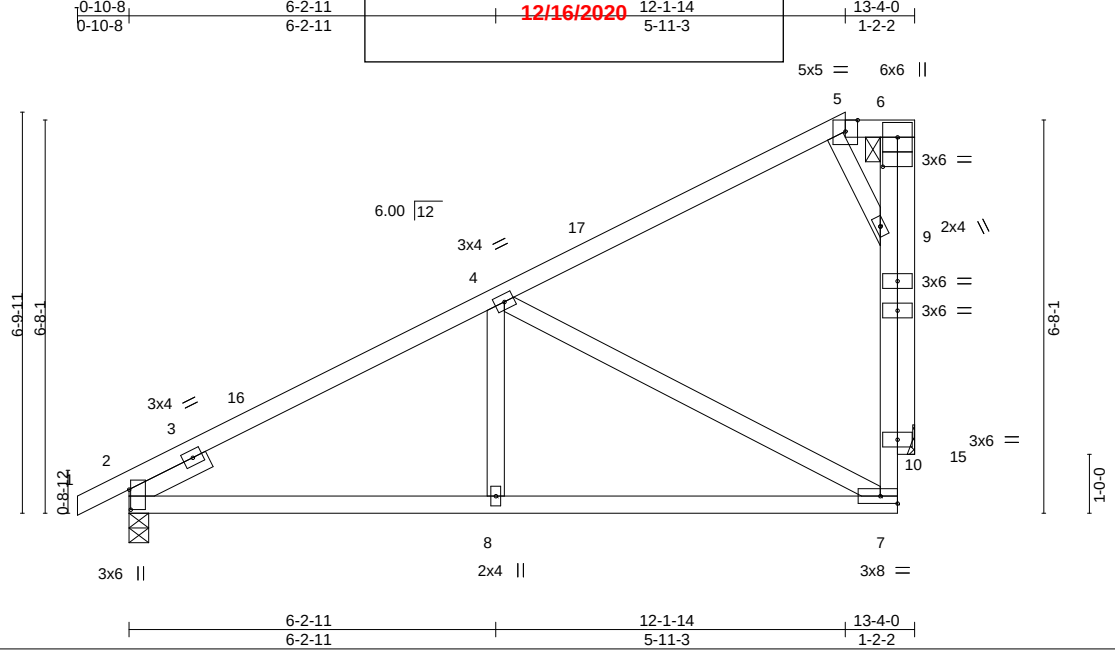

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Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [9:0-0-8,1-0-3]

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	0.44	Vert(LL)	-0.05	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.10	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 62 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=233(LC 12)
Max Uplift 2=-44(LC 12), 15=-124(LC 12)
Max Grav 2=811(LC 1), 15=687(LC 1)

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

TOP CHORD	2-4=-914/24, 7-10=-43/427, 9-10=-44/429, 6-9=-261/873
BOT CHORD	2-8=-175/780, 7-8=-175/780
WEBS	4-8=0/273, 4-7=-772/173, 5-9=-489/240, 6-15=-688/161

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=6.0psf; 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 12-1-14, Exterior(2E) 12-1-14 to 12-10-12 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 15=124.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E09	JACK-CLOSED	3	1	I43853196

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:04 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-jOrFqluv0mCMZ55Zkabm2AQ0T8szVByI?nA6BfyCgLD

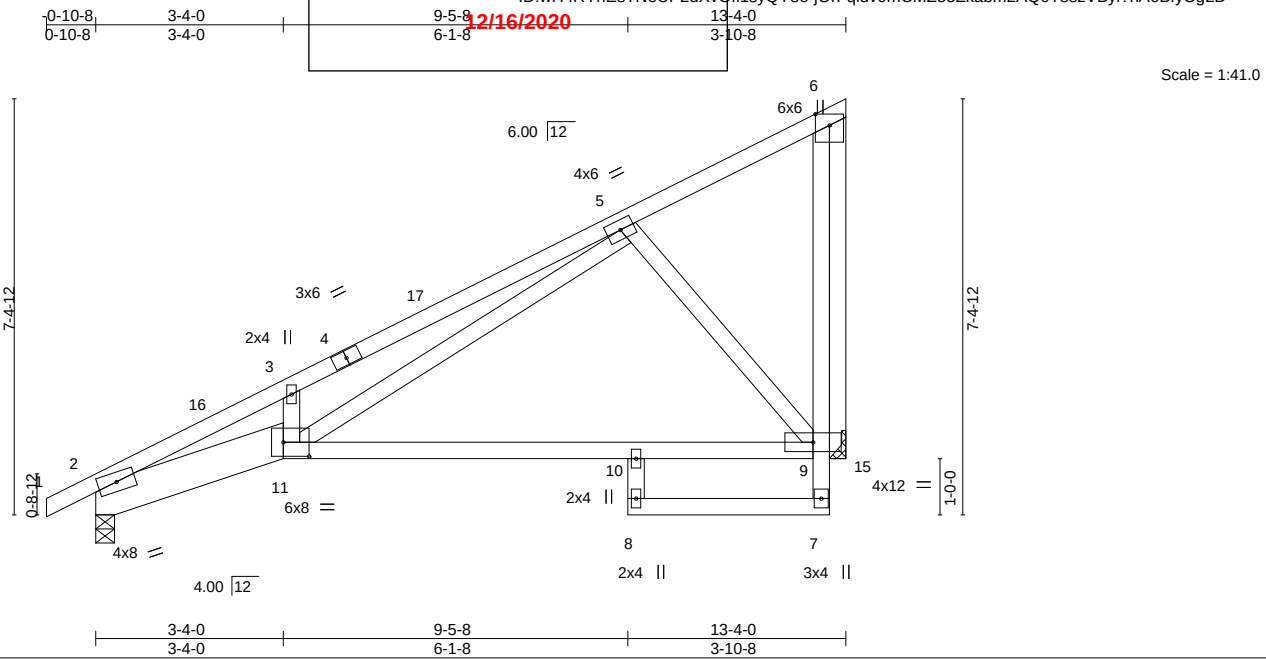

Plate Offsets (X,Y)-- [11:0-5-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.22	10-11	>720	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.51	10-11	>313	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.07	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 74 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=200(LC 12)
Max Uplift 2=-30(LC 12), 15=-73(LC 12)
Max Grav 2=806(LC 1), 15=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2039/112, 3-5=-2146/229, 6-9=-84/625
BOT CHORD 2-11=-302/1821, 10-11=-131/506, 9-10=-136/487
WEBS 3-11=-393/162, 5-9=-693/180, 5-11=-223/1596, 6-15=-692/114

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E10	JACK-CLOSED	1	1	I43853197

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:05 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-BaPd15vXn3KDAFgmHH6?bOyDjXBMEXruDRvgj5yCgLC

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

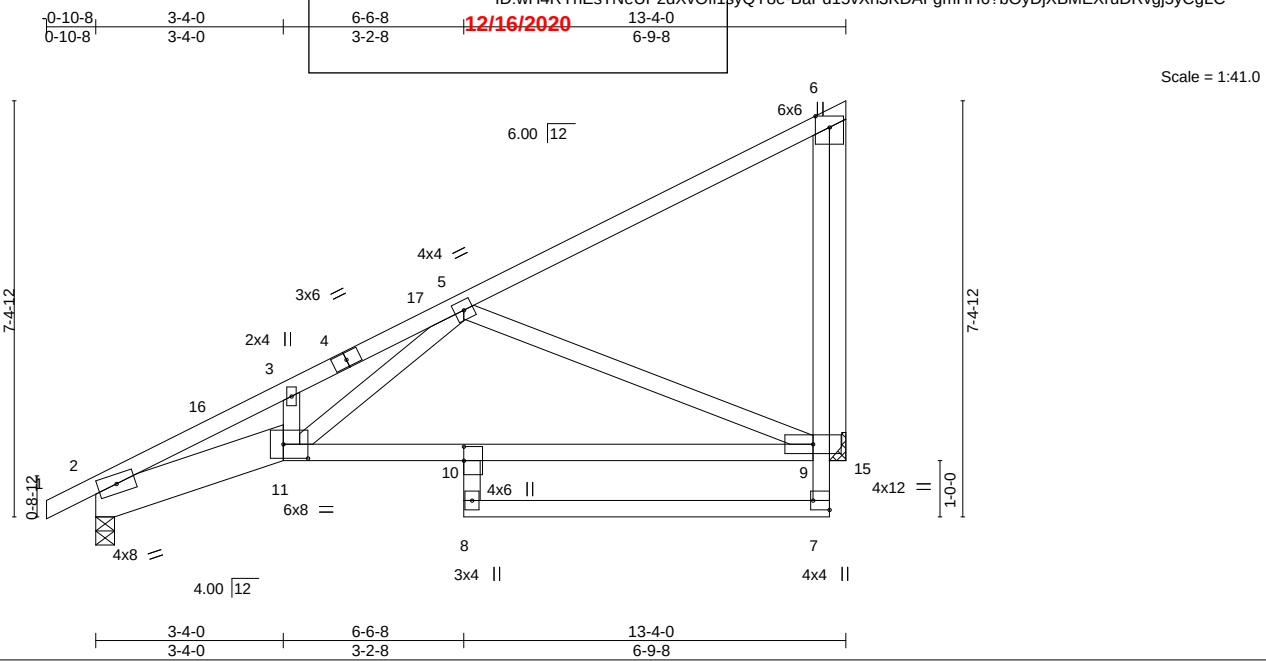

Plate Offsets (X,Y)-- [7:Edge,0-3-8], [10:0-3-0,0-0-0], [11:0-5-4,0-3-0]

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

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

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=200(LC 12)
Max Uplift 2=-30(LC 12), 15=-73(LC 12)
Max Grav 2=806(LC 1), 15=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1924/84, 3-5=-1842/134, 6-9=-34/459
BOT CHORD 2-11=-272/1693, 10-11=-226/922, 9-10=-283/791
WEBS 5-11=-76/968, 5-9=-938/212, 6-15=-692/114

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E11	JACK-CLOSED	1	1	I43853198

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:05 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-BaPd15vXn3KDAFgmHH6?bOyC8XG6EX?uDRvgj5yCgLC

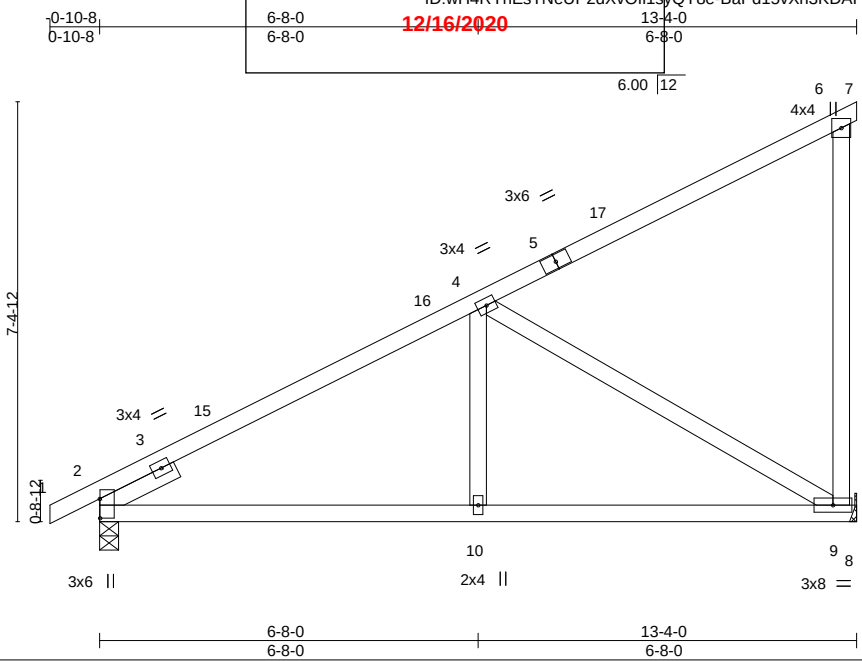

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.04	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.08	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 55 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 1-6-0

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

REACTIONS. (size) 2=0-4-0, 9=Mechanical
Max Horz 2=265(LC 11)
Max Uplift 2=-51(LC 12), 9=-58(LC 9)
Max Grav 2=800(LC 1), 9=732(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-872/114
BOT CHORD 2-10=-234/739, 9-10=-234/739
WEBS 4-10=0/283, 4-9=-828/184

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 13-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E12	HALF HIP	1	1	I43853199

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:06 2020 Page 1
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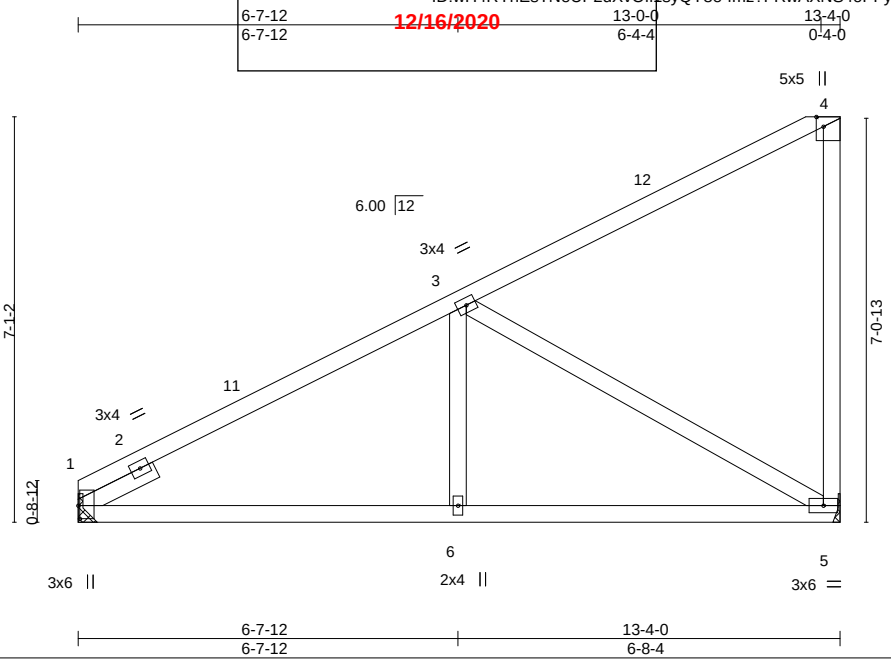

Plate Offsets (X,Y)-- [1:0-2-12,0-0-5], [4:0-2-1,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.05	5-6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.09	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 54 lb	FT = 20%

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

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

REACTIONS. (size) 1=Mechanical, 5=Mechanical
Max Horz 1=257(LC 11)
Max Uplift 1=-49(LC 12), 5=-118(LC 12)
Max Grav 1=725(LC 1), 5=725(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-862/124
BOT CHORD 1-6=-228/764, 5-6=-228/764
WEBS 3-6=0/289, 3-5=-855/189

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 5=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.

December 4,2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E13	HALF HIP	1	1	I43853200

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:07 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-7yXNSmwoIhaxQZq8Pi8Tgp1a_LvziWVBhlOnn_yCgLA

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

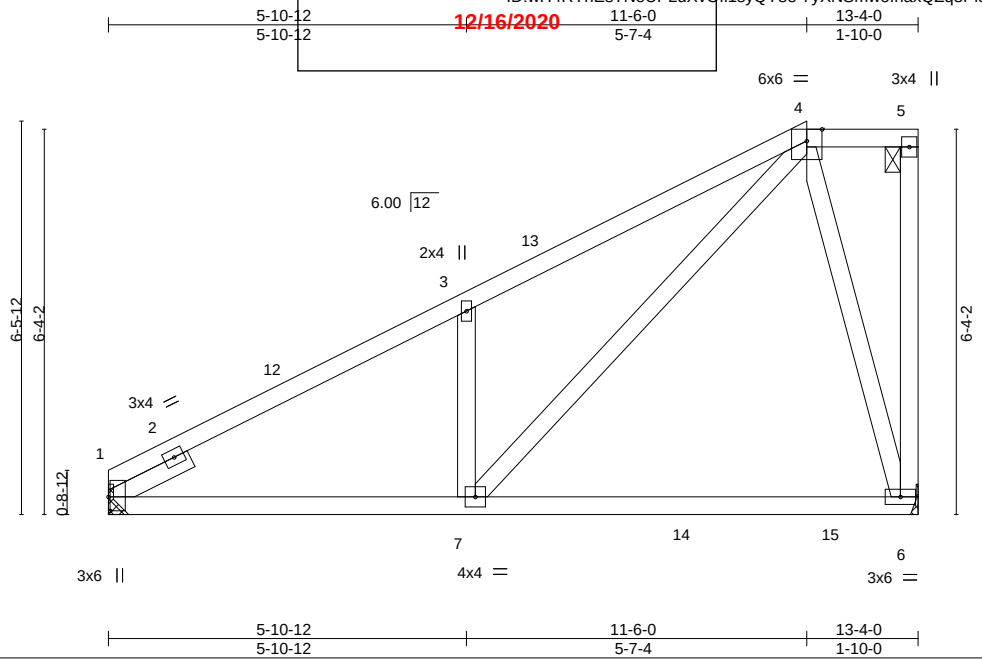

Plate Offsets (X,Y)-- [1:0-2-12,0-0-5]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.12	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.20	6-7	>779	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 60 lb	FT = 20%

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

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

REACTIONS. (size) 1=Mechanical, 6=Mechanical
Max Horz 1=221(LC 11)
Max Uplift 1=-55(LC 12), 6=-85(LC 12)
Max Grav 1=749(LC 2), 6=772(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1013/125, 3-4=-1036/238
BOT CHORD 1-7=-252/858
WEBS 3-7=-517/216, 4-7=-187/961, 4-6=-678/297

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=6.0psf; 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 11-6-0, Exterior(2E) 11-6-0 to 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 1, 6.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	E14	HALF HIP	1	1	I43853201

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:08 2020 Page 1
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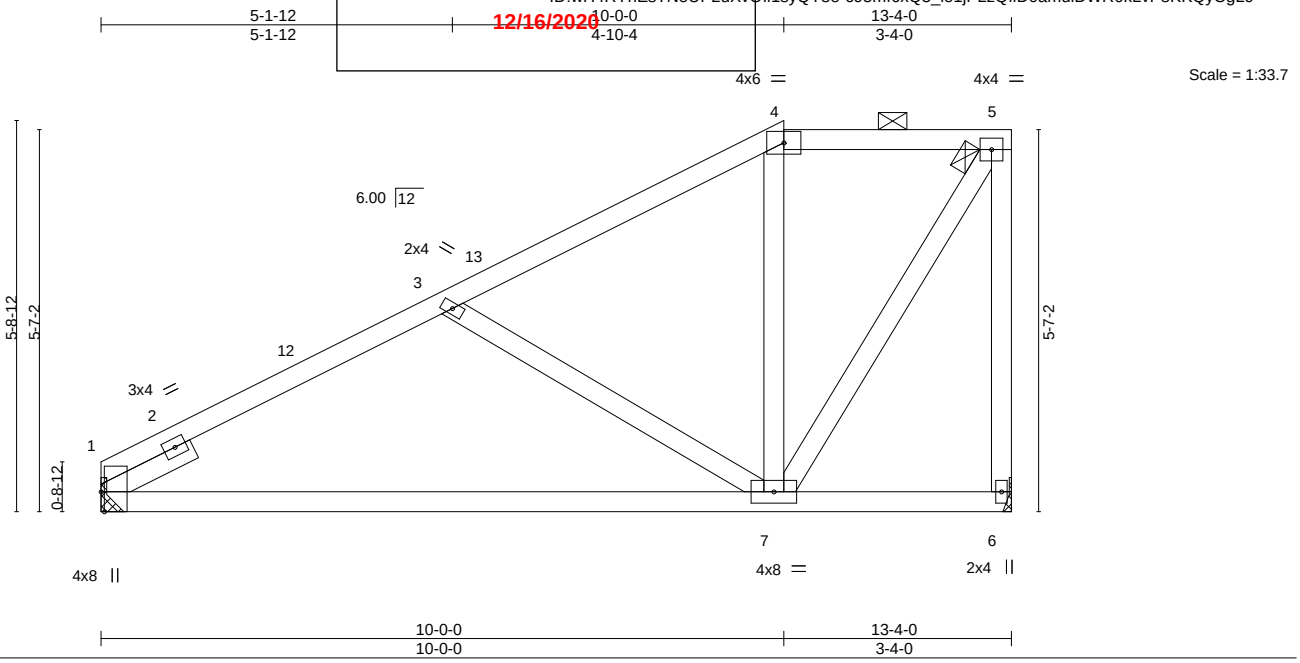

Plate Offsets (X,Y)-- [1:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.16	7-10	>998	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.32	7-10	>487	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	1	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 58 lb	FT = 20%

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

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

REACTIONS. (size) 1=Mechanical, 6=Mechanical
Max Horz 1=193(LC 11)
Max Uplift 1=-57(LC 12), 6=-69(LC 9)
Max Grav 1=725(LC 1), 6=725(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-903/166, 3-4=-529/109, 4-5=-386/124, 5-6=-727/181
BOT CHORD 1-7=-299/808
WEBS 3-7=-501/178, 5-7=-179/714

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=6.0psf; 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 10-0-0, Exterior(2E) 10-0-0 to 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 1, 6.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Summit/19 Woodside
2552987	G01	Hip Girder		1	1	I43853202

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:10 2020 Page 1
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0-10-8	2-9-0	5-2-8	5-2-8	2-5-0

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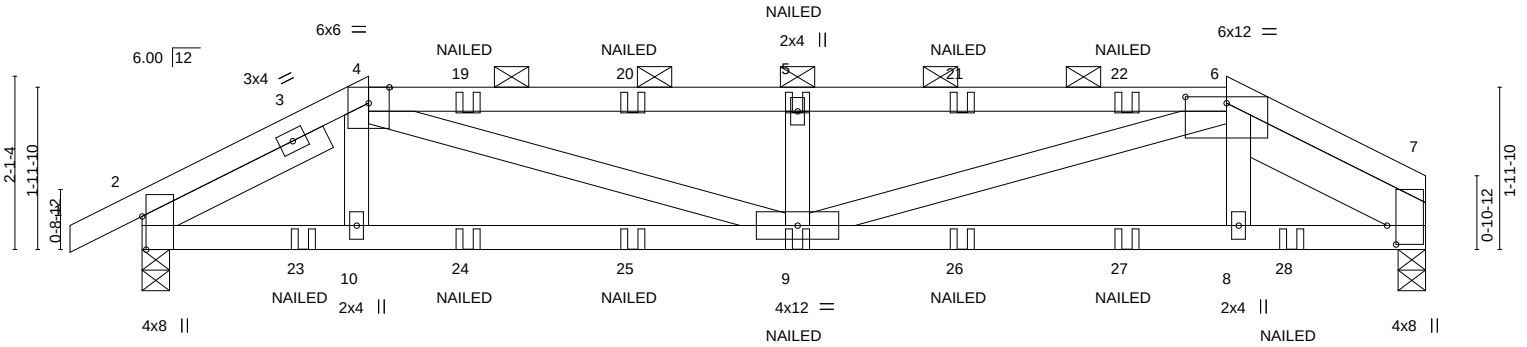

2-9-0	7-11-8	13-2-0	15-7-0
2-9-0	5-2-8	5-2-8	2-5-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.10	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.23	9-10	>815	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 62 lb	FT = 20%

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

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

REACTIONS. (size) 7=0-4-0, 2=0-4-0
Max Horz 2=37(LC 8)
Max Uplift 7=-140(LC 9), 2=-156(LC 8)
Max Grav 7=1299(LC 1), 2=1364(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1996/209, 4-5=-3171/336, 5-6=-3171/337, 6-7=-253/81
BOT CHORD 2-10=-179/1767, 9-10=-183/1751, 8-9=-149/1628, 7-8=-144/1647
WEBS 4-10=0/255, 4-9=-181/1530, 5-9=-769/214, 6-9=-192/1654, 6-8=0/285

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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=140, 2=156.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-6=-90, 6-7=-90, 11-15=-20

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

December 4,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	G01	Hip Girder	1	1	I43853202

Job Reference (optional)

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-41(F) 5=-57(F) 19=-57(F) 20=-57(F) 21=-57(F) 22=-57(F) 23=-191(F) 24=-41(F) 25=-41(F) 26=-41(F) 27=-41(F) 28=-191(F)

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	H01	HIP GIRDER	1	1	I43853203

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:11 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-0kmuI8_IMv4MuA8veYDPrfCJ1yIzeQjncNM_wlyCgL6

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

-0-10-8 / 0-10-8 | 2-9-0 / 2-9-0 | 4-7-0 / 1-10-0 | 7-4-0 / 2-9-0 | 8-2-8 / 0-10-8

Scale = 1:17.4

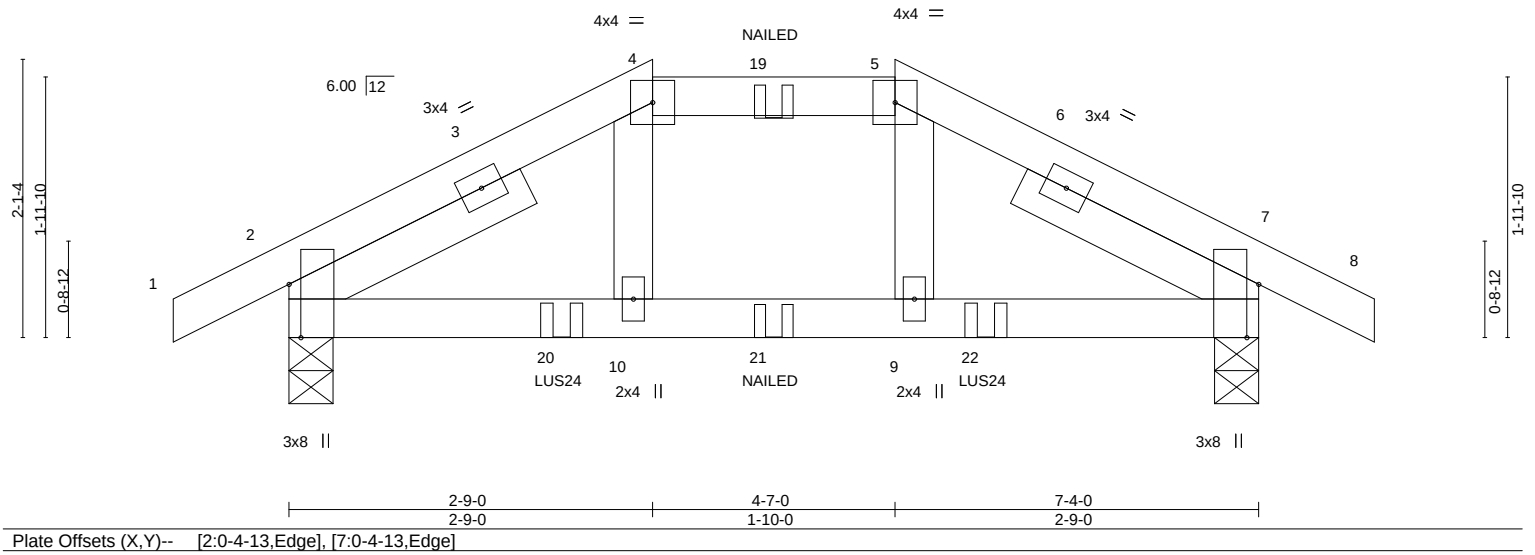

Plate Offsets (X,Y)-- [2:0-4-13,Edge], [7:0-4-13,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.02	10-13	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.03	10-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 28 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-6 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 7-6-8 oc bracing.

REACTIONS. (size) 2=0-4-0, 7=0-4-0
Max Horz 2=28(LC 33)
Max Uplift 2=-468(LC 8), 7=-468(LC 9)
Max Grav 2=884(LC 35), 7=884(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1068/647, 4-5=-907/559, 5-7=-1068/647
BOT CHORD 2-10=-544/953, 9-10=-525/925, 7-9=-547/955
WEBS 4-10=-264/395, 5-9=-264/395

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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=468, 7=468.
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) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 3-2-8 oc max. starting at 2-0-12 from the left end to 5-3-4 to connect truss(es) to front face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-5=-90, 5-8=-90, 11-15=-20

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

December 4,2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	H01	HIP GIRDER	1	1	I43853203

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 19=-57(F) 20=-197(F) 21=-41(F) 22=-197(F)

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	H02	COMMON	4	1	I43853204

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:12 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-UwKGVU_x7DCDWKi6CGkeNslTAMi6Nudwq16YTByCgL5

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

Scale = 1:19.5

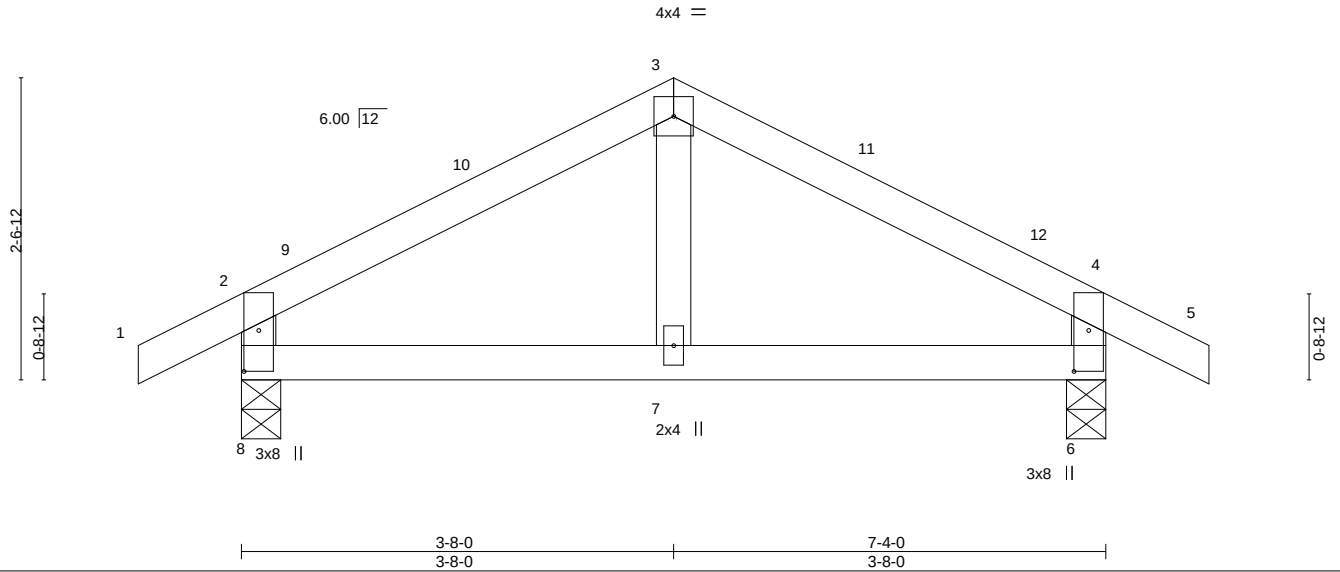

Plate Offsets (X,Y)-- [6:0-4-3,0-1-8], [8:0-4-3,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 23 lb	FT = 20%

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

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

REACTIONS. (size) 8=0-4-0, 6=0-4-0
Max Horz 8=-43(LC 10)
Max Uplift 8=-46(LC 12), 6=-46(LC 13)
Max Grav 8=479(LC 1), 6=479(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-414/158, 3-4=-414/158, 2-8=-426/208, 4-6=-426/207
BOT CHORD 7-8=-57/295, 6-7=-57/295

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 8-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J01	JACK-OPEN	5	1	I43853205

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:13 2020 Page 1
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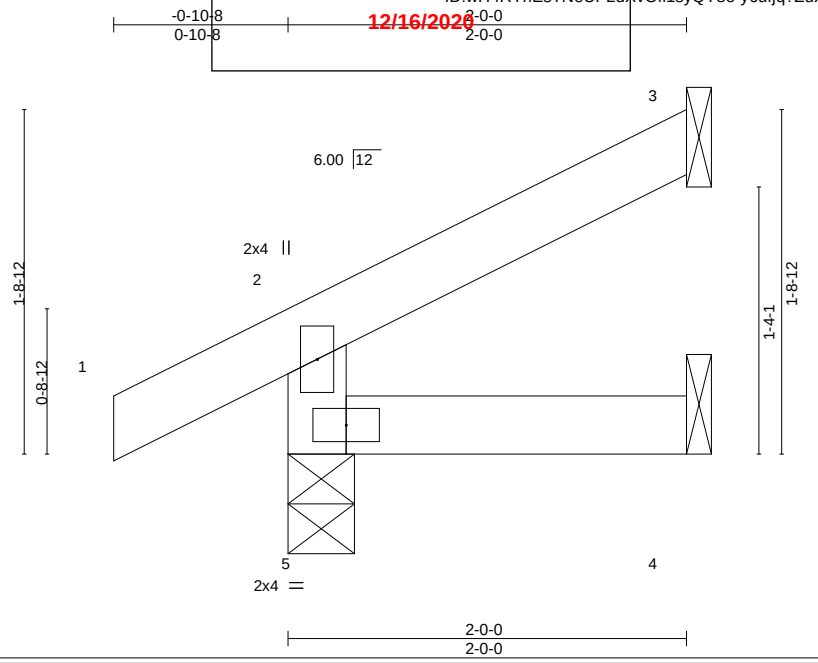

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=44(LC 12)
Max Uplift 5=-18(LC 12), 3=-28(LC 12)
Max Grav 5=219(LC 1), 3=61(LC 1), 4=33(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J01A	Jack-Open	1	1	I43853206

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:14 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-QJS1wA0BfqSxmesUJgm6SHqrpAPUroXDILbeX4yCgL3

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
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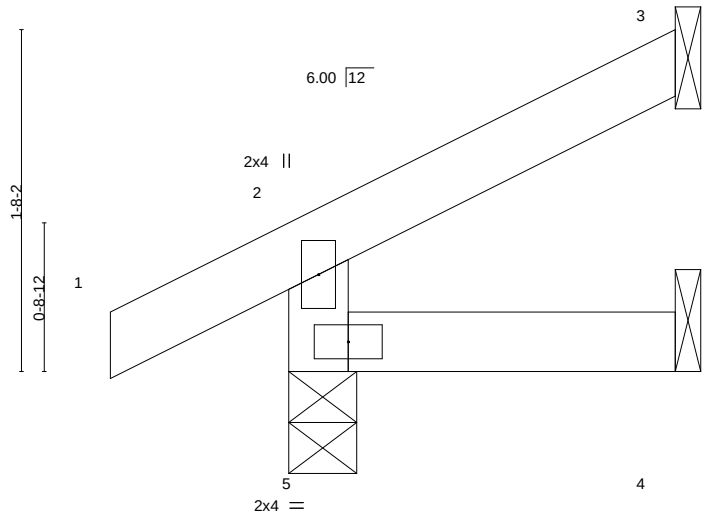
LEE'S SUMMIT, MISSOURI
12/16/2020

-0-10-8 1-10-12
0-10-8 1-10-12

Scale = 1:11.3



1-10-12
1-10-12

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

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

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=42(LC 12)
Max Uplift 5=-18(LC 12), 3=-27(LC 12)
Max Grav 5=214(LC 1), 3=56(LC 1), 4=31(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J02	Jack-Open	6	1	I43853207

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:15 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-uV0P8V1pQ8aoNoRhtOHL?VN_ZZk7aEGMW?KC4WyCgL2

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

-1-5-8
1-5-8
3-2-0
3-2-0

Scale = 1:11.2

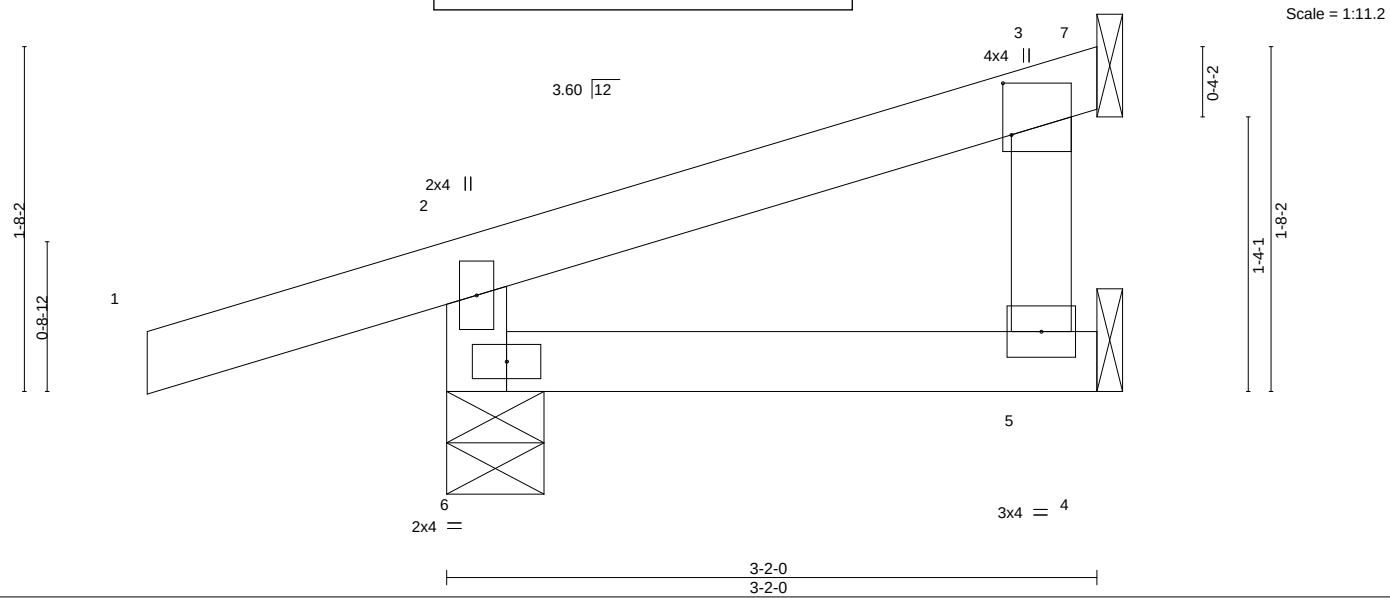


Plate Offsets (X,Y)-- [3:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-5-11, 5=Mechanical, 3=Mechanical
Max Horz 6=49(LC 8)
Max Uplift 6=-107(LC 8), 3=-498(LC 8)
Max Grav 6=342(LC 1), 5=508(LC 8), 3=90(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-315/238
WEBS 3-5=-1030/382

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=107, 3=498.
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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Summit/19 Woodside
2552987	J02A	Jack-Open		2	1	I43853208
						Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:15 2020 Page 1
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-1-5-8 / 1-5-8 | 2-11-15 / 2-11-15

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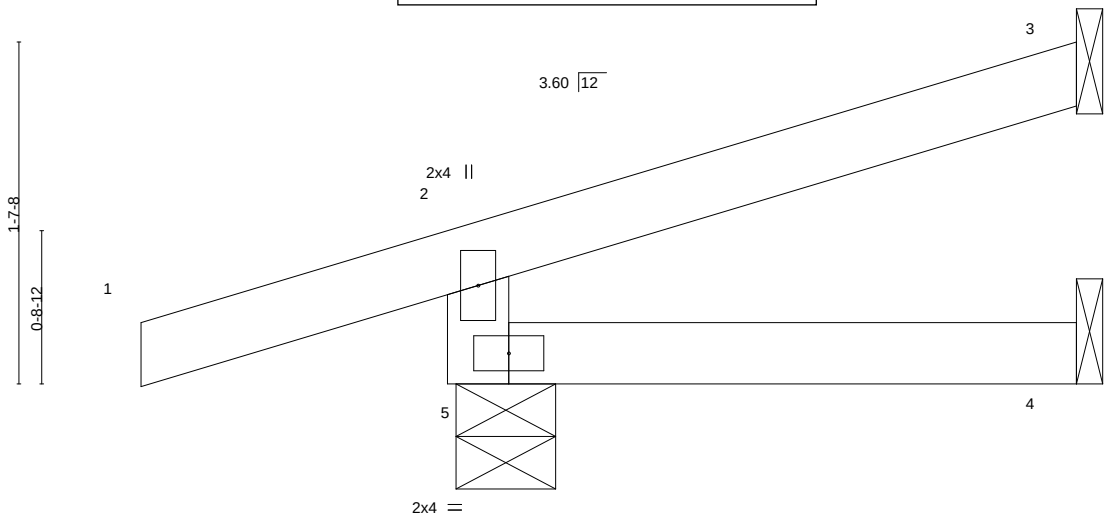

2-11-15 / 2-11-7

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

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

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

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical
Max Horz 5=47(LC 8)
Max Uplift 5=-82(LC 8), 3=-31(LC 12)
Max Grav 5=339(LC 1), 3=91(LC 1), 4=48(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-304/198

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J02B	Jack-Open Girder	1	1	I43853209

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:16 2020 Page 1
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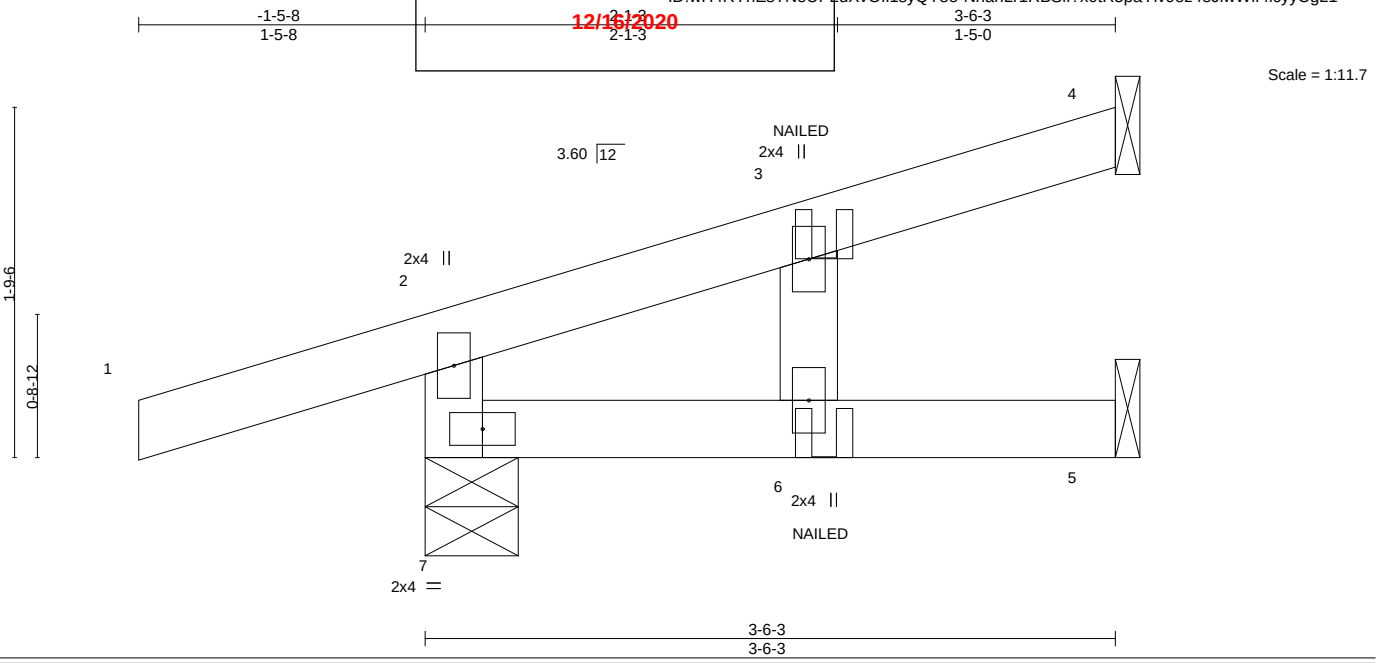

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.01	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 11 lb	FT = 20%

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

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

REACTIONS. (size) 7=0-5-11, 4=Mechanical, 5=Mechanical
Max Horz 7=53(LC 4)
Max Uplift 7=-83(LC 4), 4=-24(LC 8), 5=-1(LC 8)
Max Grav 7=361(LC 1), 4=95(LC 1), 5=58(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-294/88

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 7, 4, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J03	Half Hip Girder	6	1	I43853210

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:17 2020 Page 1
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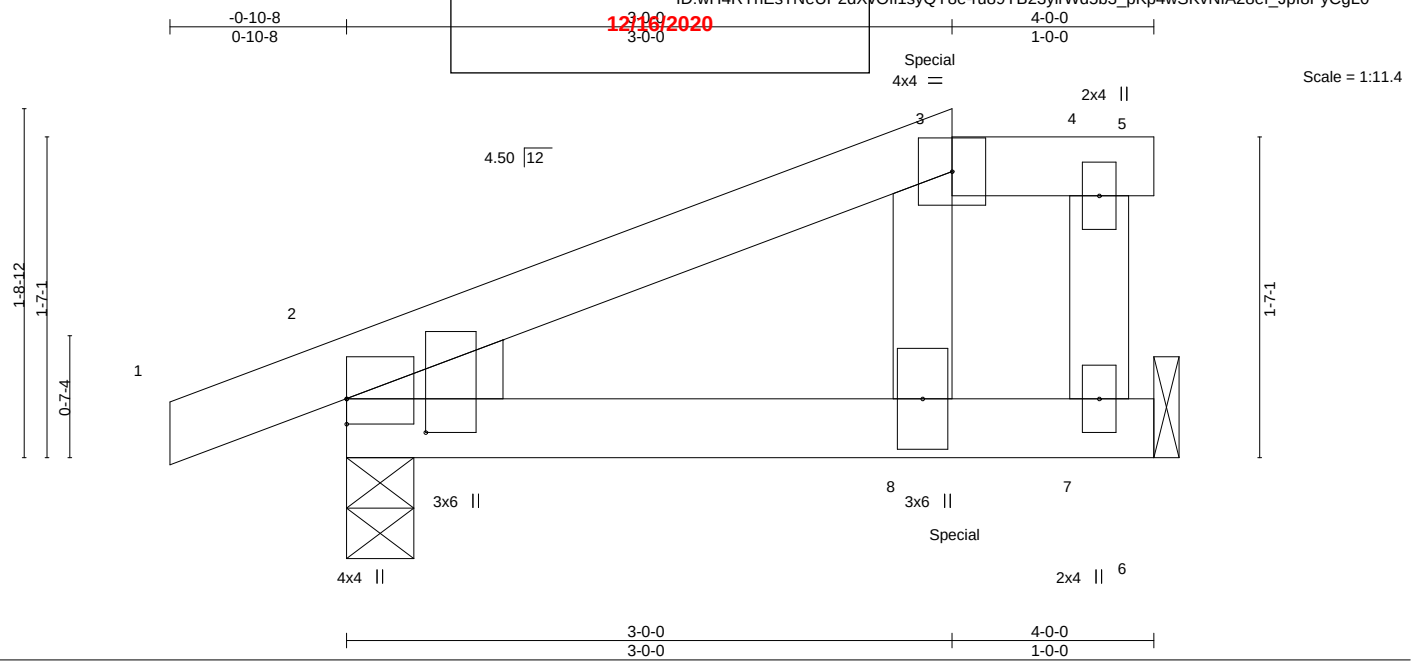

Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.08	8-11	>551	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.08	8-11	>545	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 7=Mechanical
Max Horz 2=49(LC 4)
Max Uplift 2=-137(LC 4), 7=-401(LC 8)
Max Grav 2=321(LC 38), 7=478(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-8=-169/599

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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 2=137, 7=401.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 51 lb down and 519 lb up at 3-0-0 on top chord, and 512 lb down at 3-0-0 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: 1-3=-90, 3-4=-90, 4-5=-40, 6-9=-20

December 4,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J03	Half Hip Girder	6	1	I43853210

Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 8=-6(B)

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J03A	Half Hip Girder	2	1	I43853211

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:18 2020 Page 1
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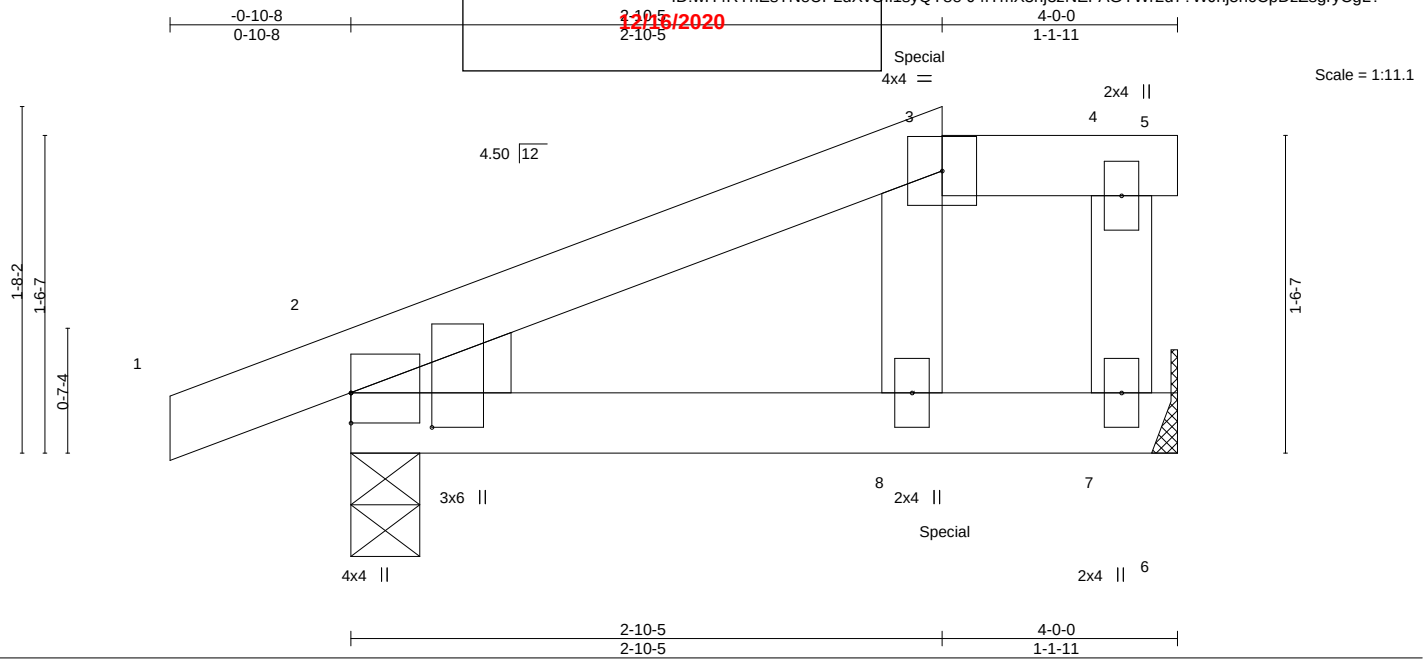

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Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.02	8-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.04	8-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=51(LC 7)
Max Uplift 7=-26(LC 5), 2=-51(LC 4)
Max Grav 7=211(LC 1), 2=292(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 7, 2.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 69 lb up at 2-10-5 on top chord, and 14 lb down and 3 lb up at 2-10-5 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: 1-3=-90, 3-4=-90, 4-5=-40, 6-9=-20
Concentrated Loads (lb)
Vert: 8=3(B)

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J03B	Half Hip Girder	1	1	I43853212

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:19 2020 Page 1
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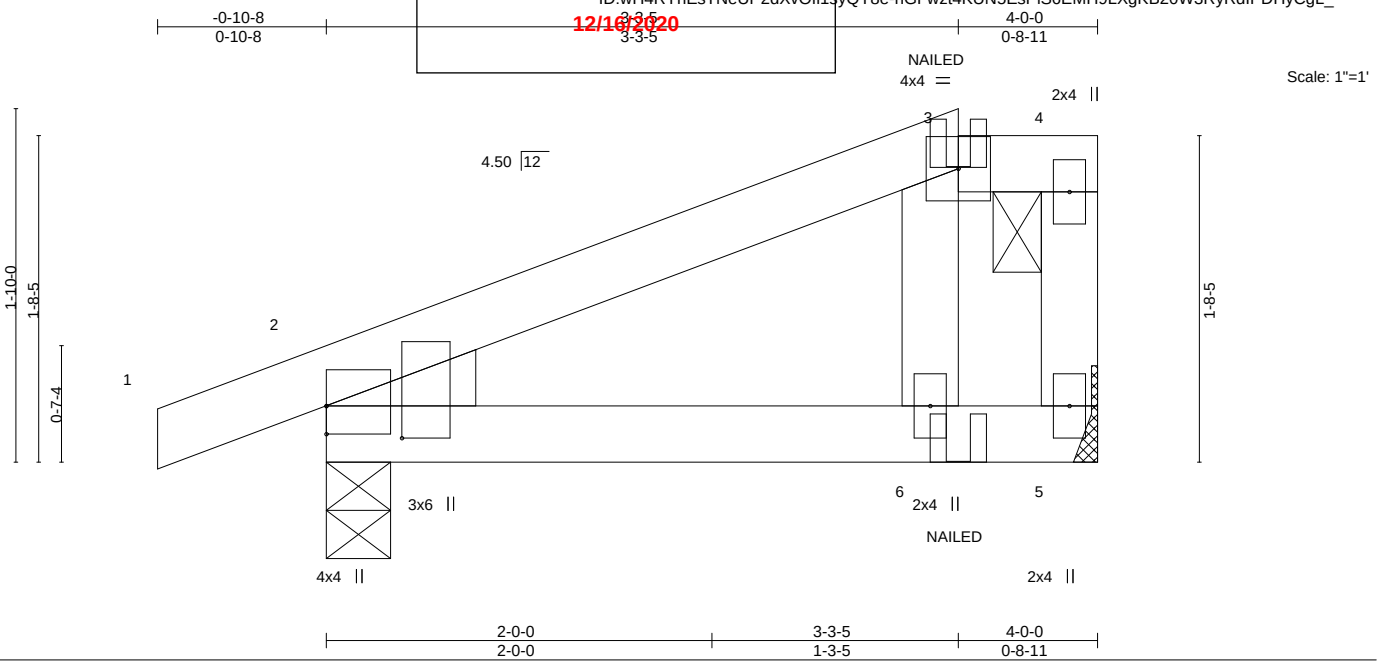

Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

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

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

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

REACTIONS. (size) 5=Mechanical, 2=0-4-0
Max Horz 2=58(LC 7)
Max Uplift 5=-35(LC 5), 2=-53(LC 4)
Max Grav 5=230(LC 1), 2=306(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 5, 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-4=-90, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-3(F) 6=-29(F)

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J04	JACK-OPEN	15	1	I43853213

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:20 2020 Page 1
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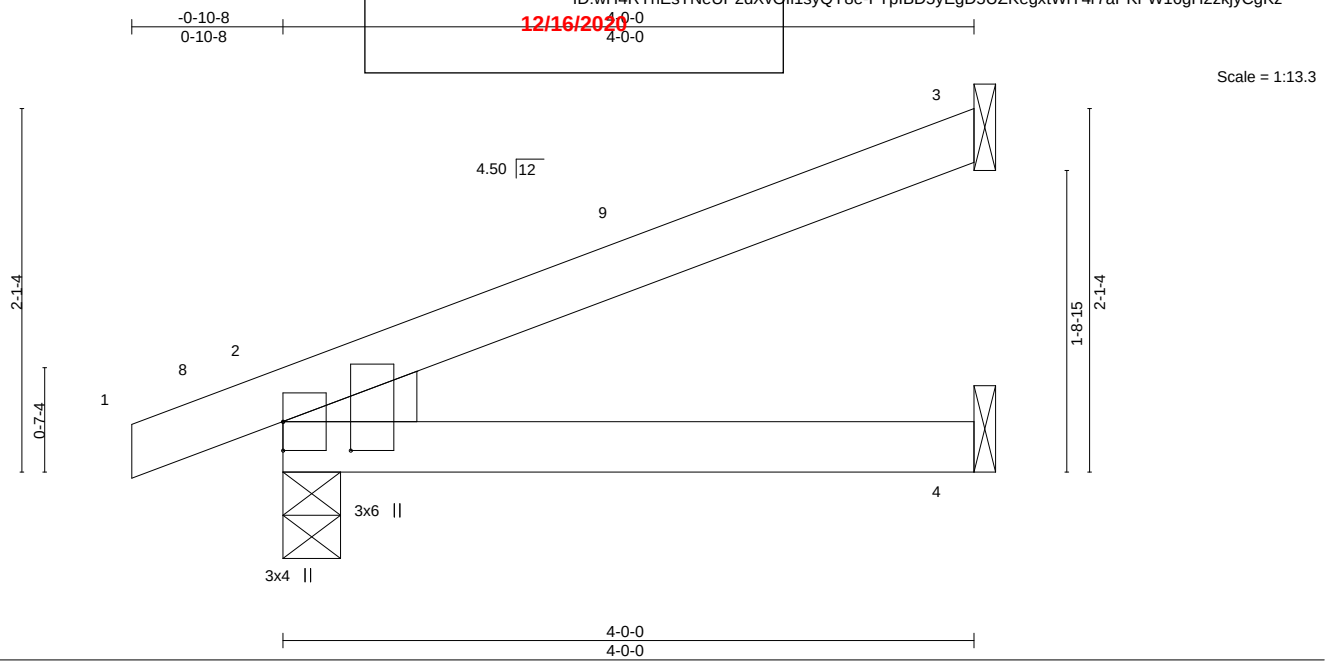

Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

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

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 3=-44(LC 12), 2=-40(LC 8)
Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J04A	Jack-Open	3	1	I43853214

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:21 2020 Page 1
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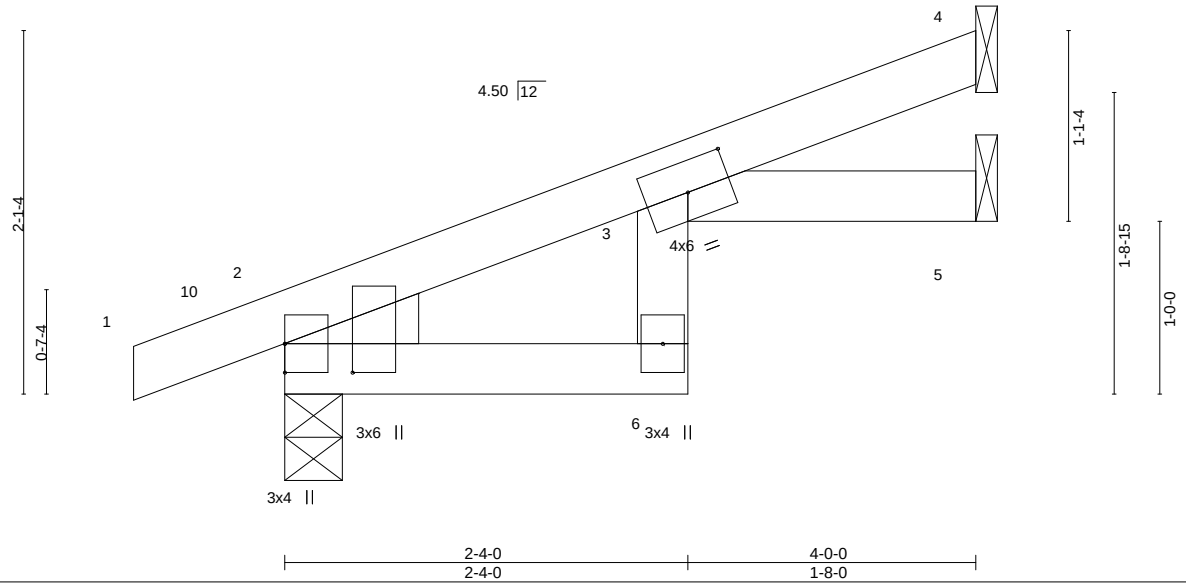

2-4-0 / 2-4-0 | 4-0-0 / 1-8-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-0, 5=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 4=-32(LC 12), 2=-40(LC 8), 5=-5(LC 12)
Max Grav 4=126(LC 1), 2=304(LC 1), 5=82(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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-2-4, Interior(1) 2-2-4 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J05	Jack-Open	1	1	I43853215

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:22 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Brx2cv6CmITojsT1nMw_nz9DAO83jQWO7bX3ocyCgKx

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0-10-8 2-3-4

Scale = 1:10.1

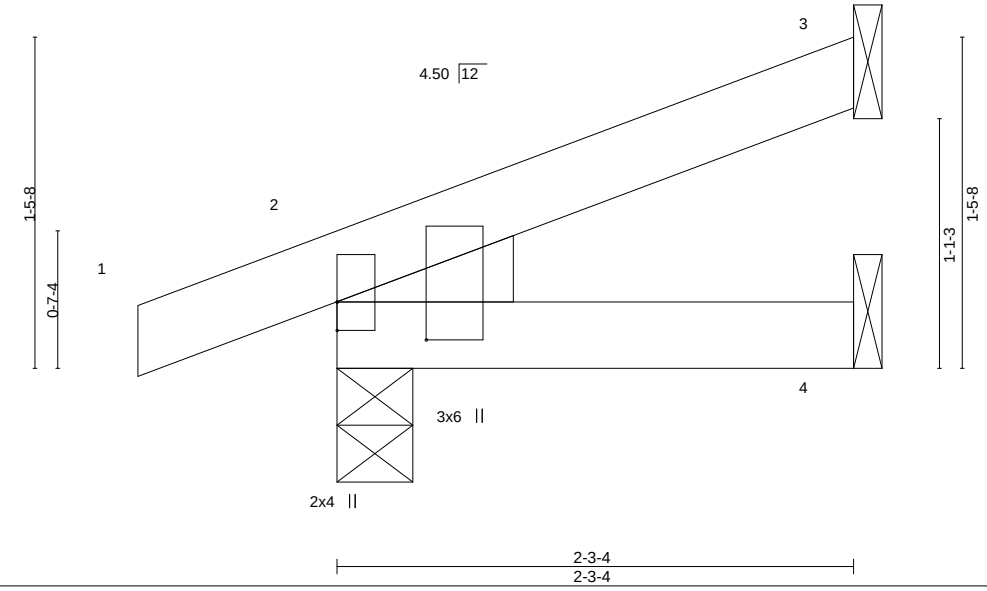

Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 7 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
Max Horz 2=44(LC 8)
Max Uplift 3=-22(LC 12), 2=-38(LC 8)
Max Grav 3=72(LC 1), 2=216(LC 1), 4=41(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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J05A	Monopitch	1	1	I43853216

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:22 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Brx2cv6CmITojsT1nMw_nz9DqO8TjQWO7bX3ocyCgKx

-0-10-8 2-3-4
0-10-8 2-3-4

Scale = 1:10.1

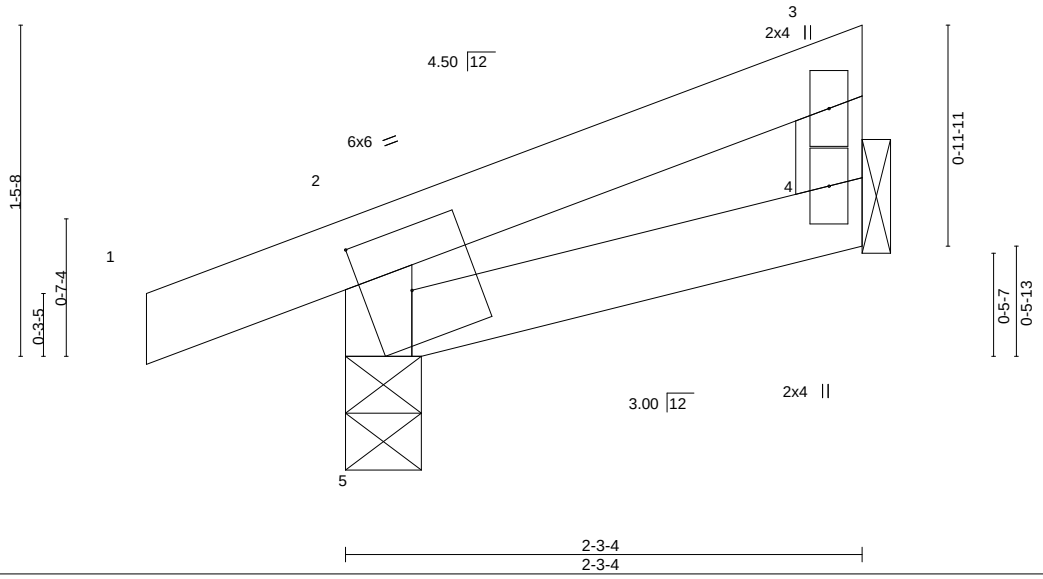

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-8,0-3-4], [5:0-0-10,0-1-10]

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	0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 7 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=0-4-0
Max Horz 5=44(LC 9)
Max Uplift 4=-14(LC 12), 5=-49(LC 8)
Max Grav 4=85(LC 1), 5=224(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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J06	Jack-Open	1	1	I43853217

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:23 2020 Page 1
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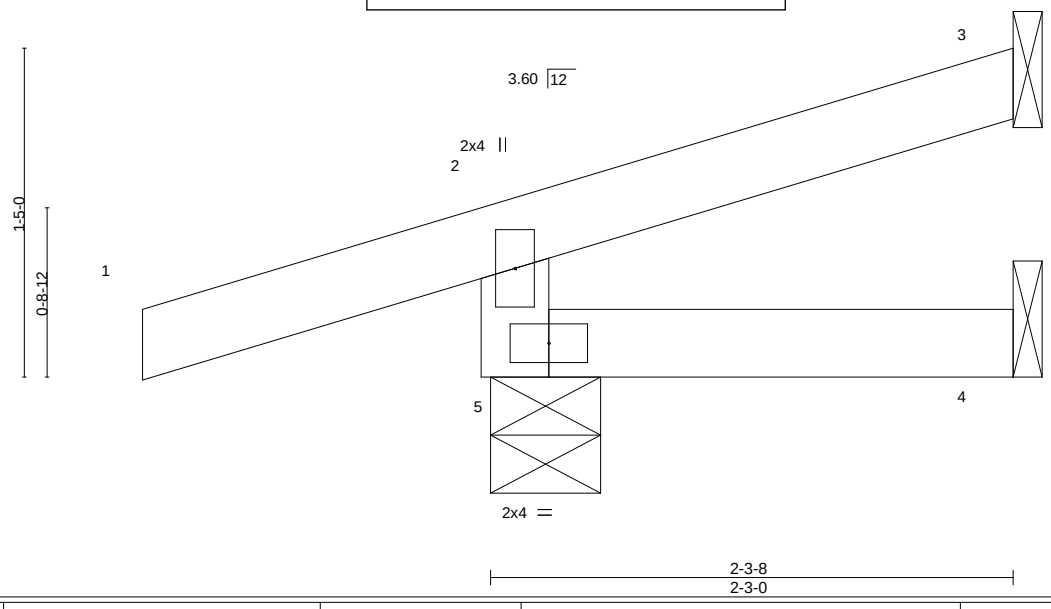
Scale = 1:9.9



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	0.22	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 7 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical
Max Horz 5=39(LC 8)
Max Uplift 5=-84(LC 8), 3=-21(LC 12)
Max Grav 5=315(LC 1), 3=52(LC 1), 4=32(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-279/189

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J06A	Jack-Open	1	1	I43853218

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:24 2020 Page 1
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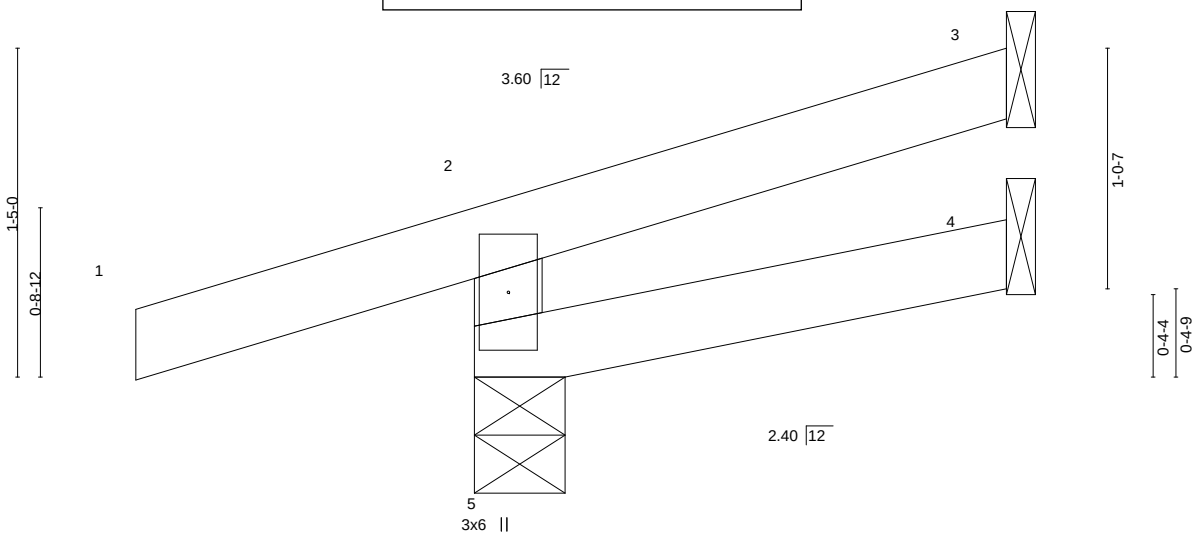
-1-5-8 1-5-8 2-3-8 2-3-8

Scale = 1:9.9



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	0.22	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	20.0	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 2-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-4-11, 3=Mechanical, 4=Mechanical
Max Horz 5=39(LC 8)
Max Uplift 5=-84(LC 8), 3=-21(LC 12)
Max Grav 5=315(LC 1), 3=52(LC 1), 4=33(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-280/188

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J07	Half Hip Girder	1	1	I43853219

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:25 2020 Page 1
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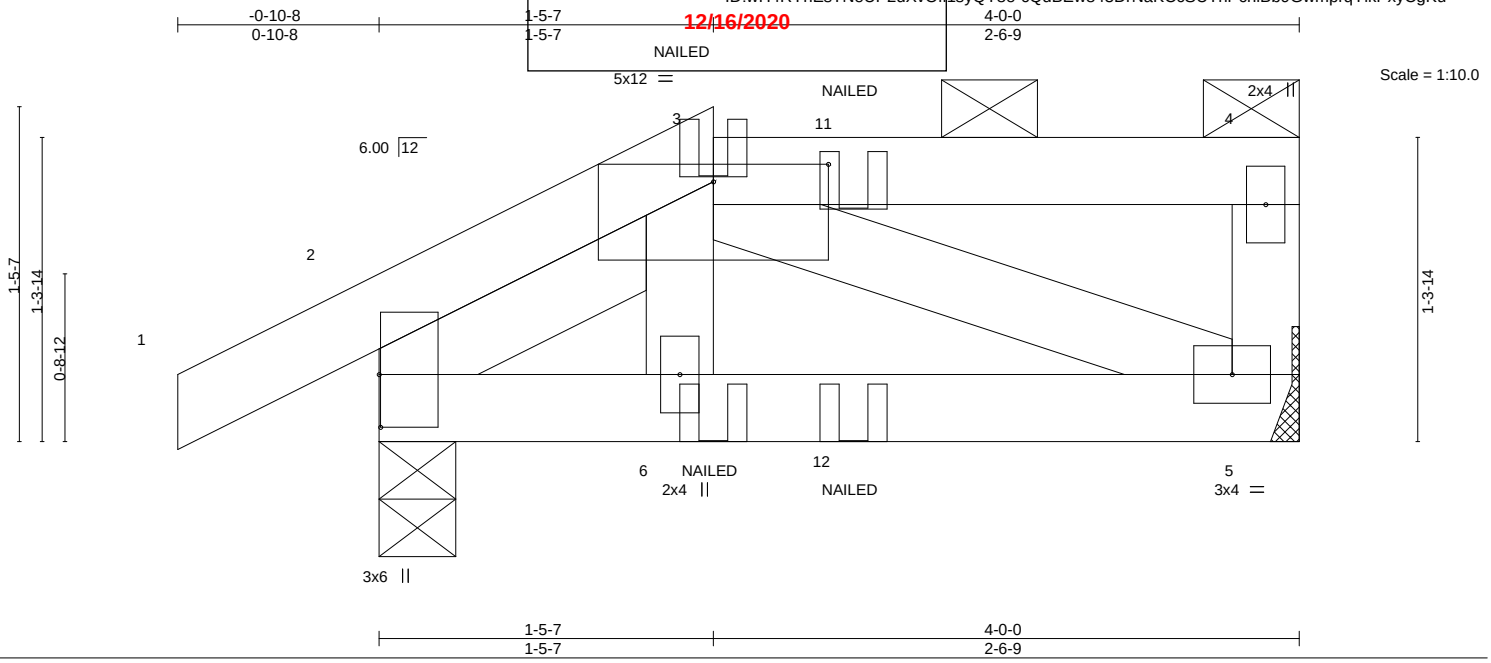

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Plate Offsets (X,Y)-- [2:0-2-12,0-0-1], [3:0-6-0,0-0-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 17 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 1-4-3

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

REACTIONS. (size) 2=0-4-0, 5=Mechanical
Max Horz 2=40(LC 7)
Max Uplift 2=-33(LC 8), 5=-25(LC 5)
Max Grav 2=303(LC 1), 5=209(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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-4=-90, 5-7=-20
Concentrated Loads (lb)
Vert: 6=5(B) 12=-14(B)

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J07A	Half Hip Girder	1	1	I43853220

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:26 2020 Page 1
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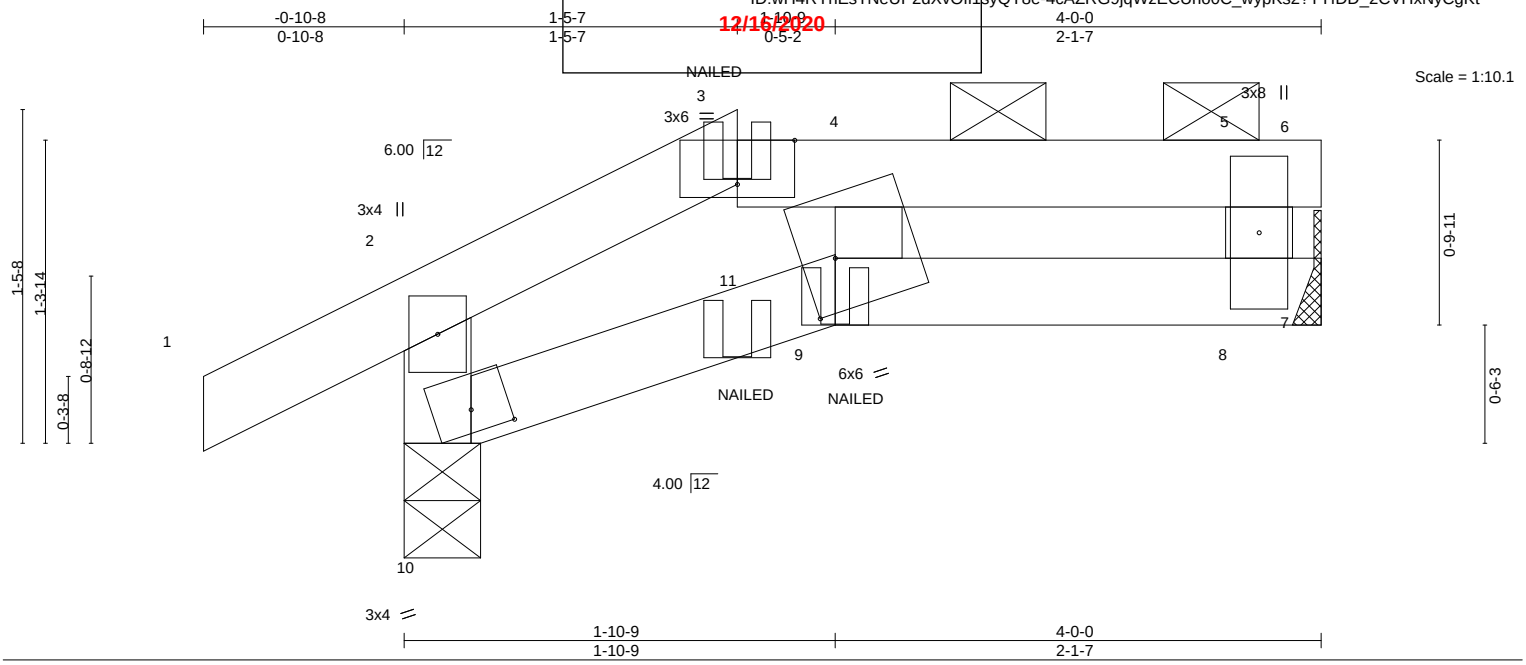

Plate Offsets (X,Y)-- [3:0-3-0,Edge], [4:0-1-11,0-0-9], [9:0-1-12,0-2-12], [10:0-2-0,0-1-3]

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	0.20	Vert(LL)	-0.01	9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	8	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
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 8=Mechanical, 10=0-4-0
Max Horz 10=38(LC 5)
Max Uplift 8=-39(LC 5), 10=-44(LC 8)
Max Grav 8=231(LC 1), 10=332(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-265/50, 2-10=-323/58

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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-90, 2-3=-90, 3-5=-90, 5-6=-40, 9-10=-20, 7-9=-20
Concentrated Loads (lb)
Vert: 9=-65(F) 11=5(F)

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J08	Half Hip	1	1	I43853221

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:27 2020 Page 1
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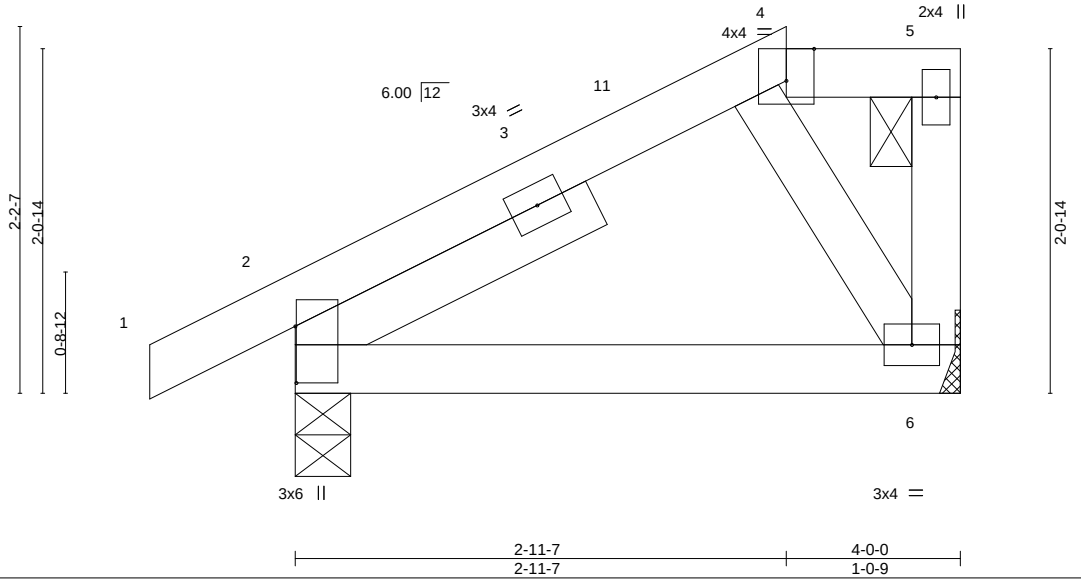

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [4:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	6-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 17 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 2-0-0

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

REACTIONS. (size) 2=0-4-0, 6=Mechanical
Max Horz 2=68(LC 11)
Max Uplift 2=-34(LC 12), 6=-23(LC 9)
Max Grav 2=300(LC 1), 6=203(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=6.0psf; 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 2-11-7, Exterior(2E) 2-11-7 to 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J08A	Half Hip	1	1	I43853222

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:28 2020 Page 1
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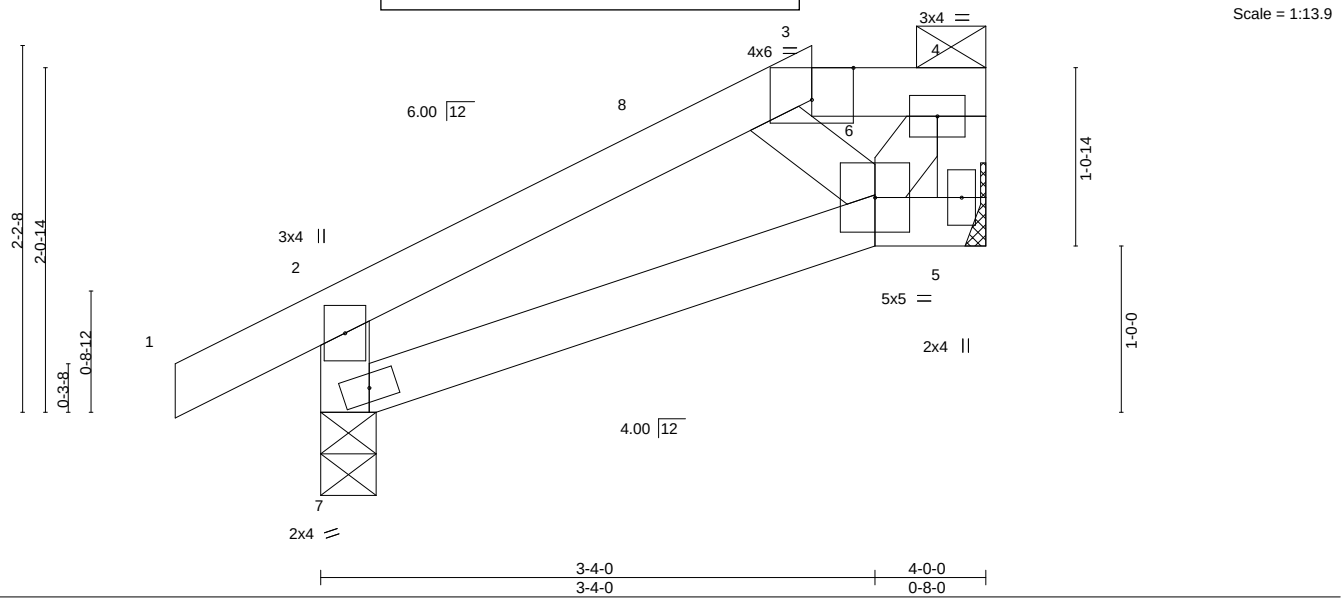

Plate Offsets (X,Y)-- [3:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 7=0-4-0
Max Horz 7=59(LC 9)
Max Uplift 5=-23(LC 9), 7=-33(LC 12)
Max Grav 5=191(LC 1), 7=308(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-311/166

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=6.0psf; 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 2-11-7, Exterior(2E) 2-11-7 to 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J09	Jack-Open	8	1	I43853223

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:28 2020 Page 1
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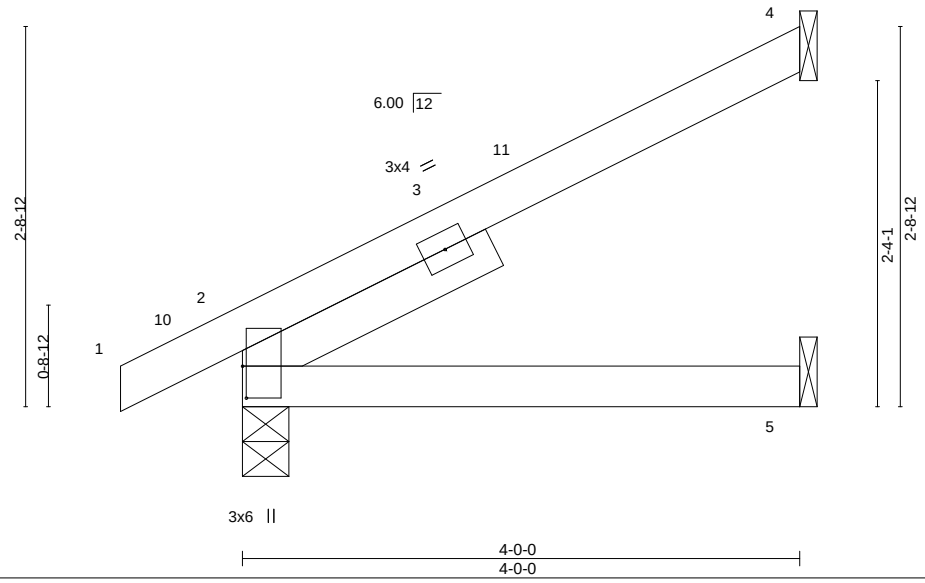

Plate Offsets (X,Y)-- [2:0-2-12,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.02	5-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	5-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-0, 5=Mechanical
Max Horz 2=86(LC 12)
Max Uplift 4=-55(LC 12), 2=-17(LC 12)
Max Grav 4=150(LC 1), 2=304(LC 1), 5=76(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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J09A	Jack-Open	1	1	I43853224

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:29 2020 Page 1
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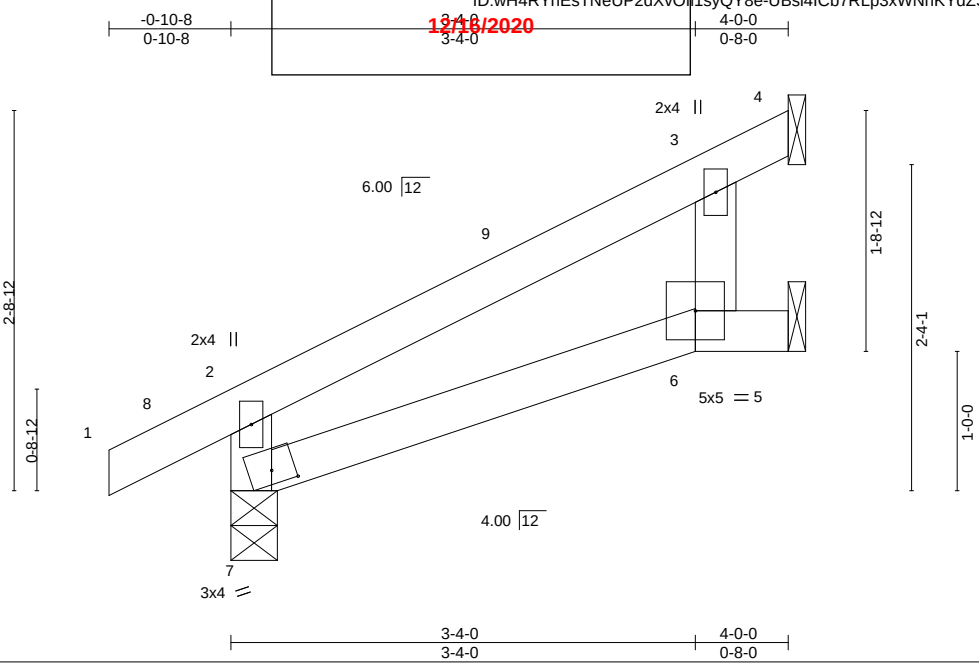

Plate Offsets (X,Y)-- [7:0-2-0,0-1-3]

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)	0.02	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03	6-7	>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-MP							Weight: 13 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 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-4-0, 4=Mechanical, 5=Mechanical
Max Horz 7=79(LC 12)
Max Uplift 7=-18(LC 12), 4=-16(LC 12), 5=-34(LC 12)
Max Grav 7=313(LC 1), 4=105(LC 3), 5=95(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-269/122

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 7, 4, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J10	JACK-OPEN	4	1	I43853225

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:30 2020 Page 1
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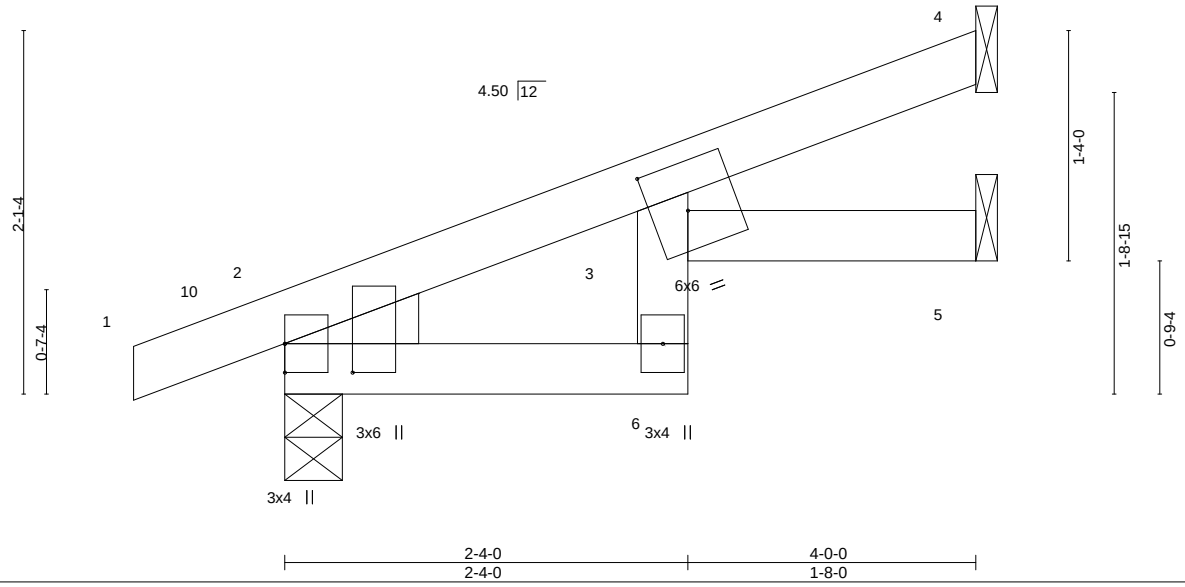

2-4-0 / 2-4-0 | 4-0-0 / 1-8-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.05	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-0, 5=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 4=-33(LC 12), 2=-40(LC 8), 5=-4(LC 12)
Max Grav 4=128(LC 1), 2=305(LC 1), 5=81(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-1, Interior(1) 2-1-1 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J11	Jack-Open	5	1	I43853226

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:31 2020 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

-0-10-8
0-10-8
4-0-0
4-0-0

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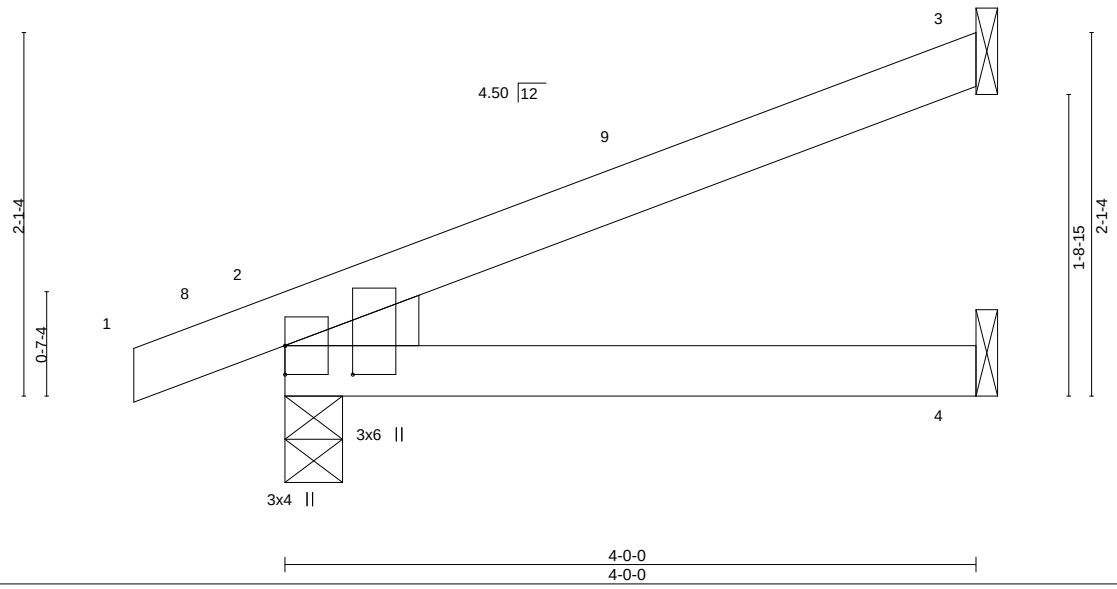

4-0-0
4-0-0

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

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

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 3=-44(LC 12), 2=-40(LC 8)
Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J12	Jack-Open	1	1	I43853227

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:31 2020 Page 1
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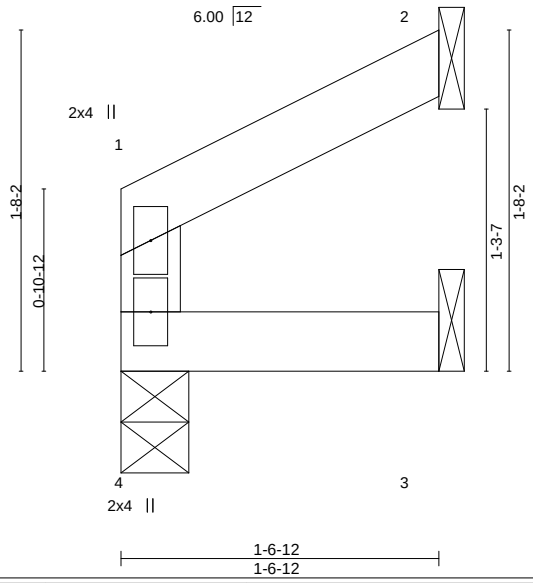
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

1-6-12
1-6-12

Scale = 1:11.3



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	0.04	Vert(LL)	-0.00	4	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 4 lb	FT = 20%

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

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

REACTIONS. (size) 4=0-4-0, 2=Mechanical, 3=Mechanical
Max Horz 4=29(LC 9)
Max Uplift 2=-26(LC 12)
Max Grav 4=77(LC 1), 2=59(LC 1), 3=28(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	J13	Jack-Open	1	1	I43853228

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:32 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-vmYqiJETQMjOwPEyMS5KB4awGQZs3x?tR8yb91yCgKn

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0-10-8 1-2-1

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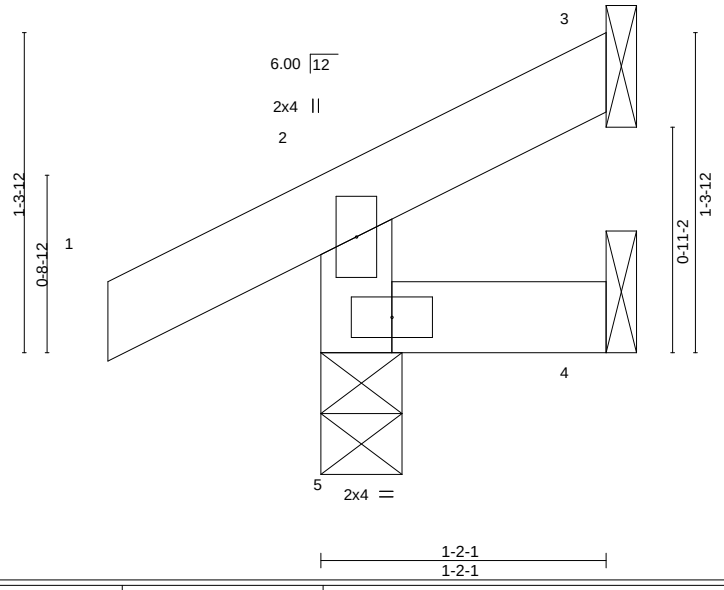

1-2-1
1-2-1

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 4 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=30(LC 9)
Max Uplift 5=-20(LC 12), 3=-13(LC 12), 4=-2(LC 1)
Max Grav 5=194(LC 1), 3=12(LC 19), 4=14(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG01	GABLE	1	1	I43853229

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:34 2020 Page 1
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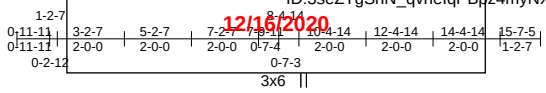

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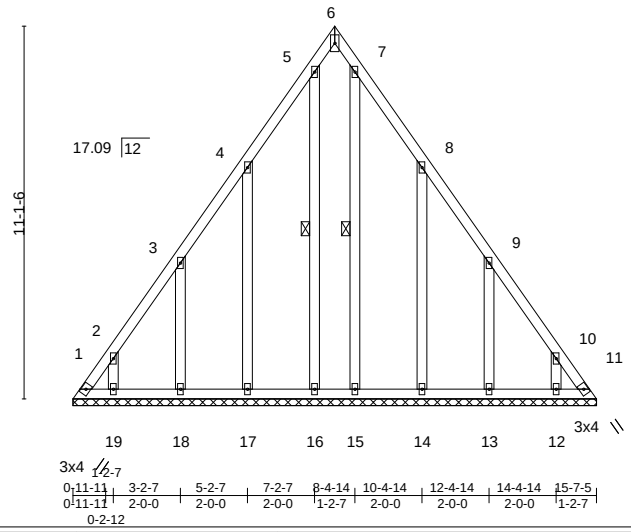


LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 97 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-16, 7-15

REACTIONS. All bearings 15-7-5.
(lb) - Max Horz 1=-277(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 16, 15 except 1=-215(LC 10), 11=-187(LC 11), 19=-148(LC 12), 18=-175(LC 12), 17=-195(LC 12), 12=-148(LC 13), 13=-175(LC 13), 14=-197(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 19, 16, 12, 15 except 1=423(LC 12), 11=406(LC 13), 18=272(LC 19), 17=280(LC 19), 13=272(LC 20), 14=282(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-517/387, 2-3=-375/275, 9-10=-354/275, 10-11=-497/387
BOT CHORD 1-19=-218/296, 18-19=-218/296, 17-18=-218/296, 16-17=-218/296, 15-16=-218/296, 14-15=-218/296, 13-14=-218/296, 12-13=-218/296, 11-12=-218/296
WEBS 3-18=-264/200, 4-17=-286/219, 9-13=-264/200, 8-14=-286/221

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-2-7, Interior(1) 3-2-7 to 7-9-11, Exterior(2R) 7-9-11 to 10-9-11, Interior(1) 10-9-11 to 15-3-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 15 except (jt=lb) 1=215, 11=187, 19=148, 18=175, 17=195, 12=148, 13=175, 14=197.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Summit/19 Woodside
2552987	LG03	GABLE		1	1	I43853230

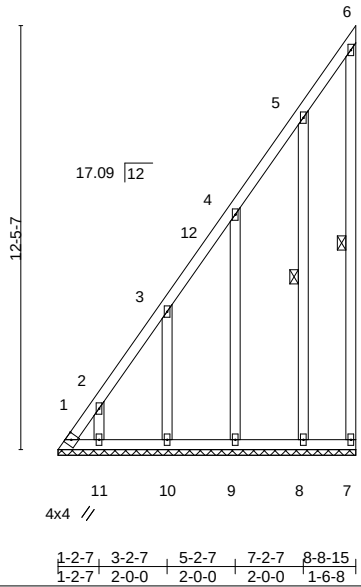
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:34 2020 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-r9fb7?Fkx__59iOKUt7oGVfFoEEJXop9uSRiDwyCgKl

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

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

Scale = 1:67.7



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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 65 lb	FT = 20%

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

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

REACTIONS. All bearings 8-8-15.
(lb) - Max Horz 1=434(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-248(LC 10), 11=-147(LC 12), 10=-178(LC 12), 9=-178(LC 12), 8=-158(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7, 11, 8 except 1=602(LC 12), 10=274(LC 19), 9=273(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-782/679, 2-3=-614/553, 3-4=-409/386
WEBS 3-10=-283/236, 4-9=-283/202, 5-8=-253/181

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 8-7-3 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=248, 11=147, 10=178, 9=178, 8=158.
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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG04	GABLE	1	1	I43853231

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:35 2020 Page 1
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6-3-3 6-3-3 | 12-6-6 6-3-3

3x6 =

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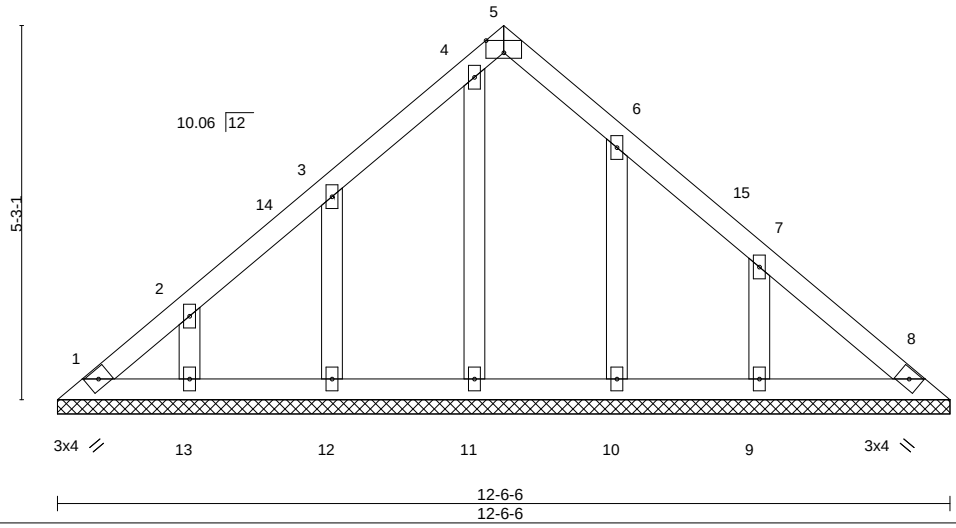

Plate Offsets (X,Y)-- [5:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 47 lb	FT = 20%

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

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

REACTIONS. All bearings 12-6-6.
(lb) - Max Horz 1=-115(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 12, 10 except 9=-101(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 13, 12, 11, 10 except 9=285(LC 20)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 6-3-3, Exterior(2R) 6-3-3 to 9-3-3, Interior(1) 9-3-3 to 12-1-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 12, 10 except (jt=lb) 9=101.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG05	GABLE	1	1	I43853232

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:36 2020 Page 1
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5-2-8 10-5-1
5-2-8 5-2-9

Scale = 1:26.0

3x6 =

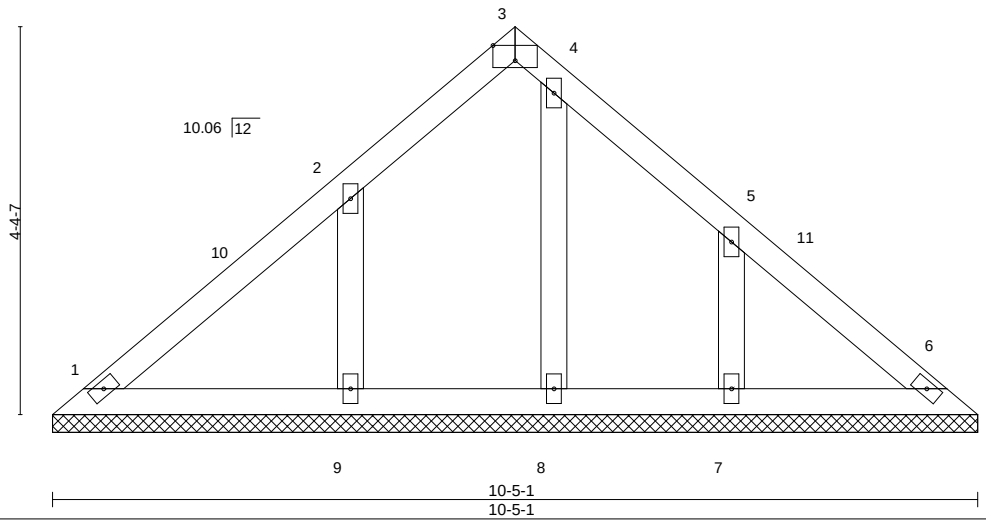

Plate Offsets (X,Y)-- [3:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 35 lb	FT = 20%

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

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

REACTIONS. All bearings 10-5-1.
(lb) - Max Horz 1=-95(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 7=-110(LC 13), 9=-112(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 8 except 7=302(LC 20), 9=358(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-282/181

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-4, Interior(1) 3-4-4 to 5-2-8, Exterior(2R) 5-2-8 to 8-2-8, Interior(1) 8-2-8 to 10-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 7 and 112 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG06	GABLE	1	1	I43853233

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:37 2020 Page 1
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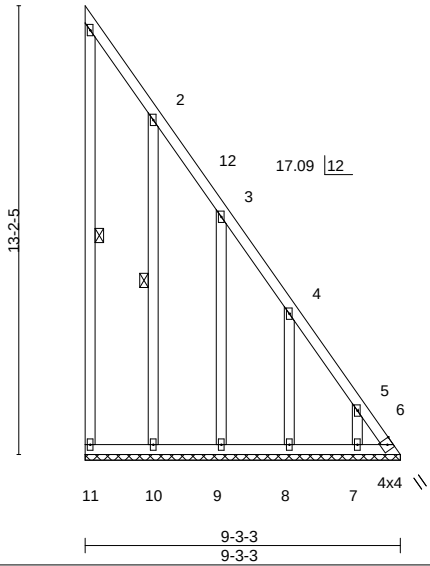
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

9-3-3
9-3-3
1

Scale = 1:67.7



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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	6	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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-3-15 oc bracing.
WEBS 1 Row at midpt 1-11, 2-10

REACTIONS. All bearings 9-3-3.
(lb) - Max Horz 11=-412(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 11 except 6=-259(LC 11), 10=-110(LC 13), 9=-161(LC 13), 8=-181(LC 13), 7=-148(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 11, 7 except 6=565(LC 13), 10=279(LC 20), 9=265(LC 20), 8=275(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-258/260, 3-4=-431/418, 4-5=-610/584, 5-6=-745/705
BOT CHORD 10-11=-405/442, 9-10=-405/442, 8-9=-405/442, 7-8=-405/442, 6-7=-405/442
WEBS 2-10=-287/197, 3-9=-273/187, 4-8=-284/207

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 8-11-13 zone; cantilever left and right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 6=259, 10=110, 9=161, 8=181, 7=148.
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.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG07	GABLE	1	1	I43853234

Job Reference (optional)

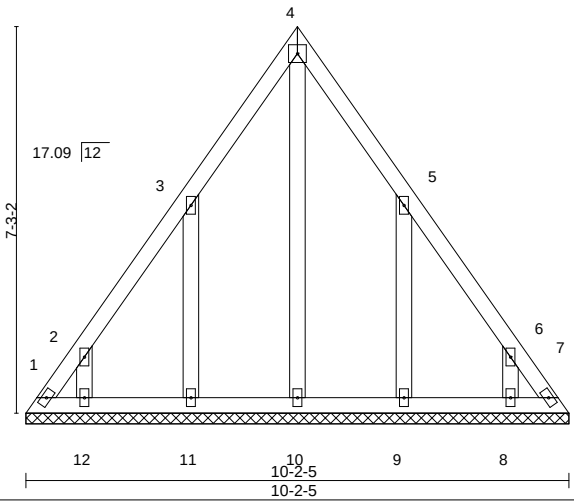
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:38 2020 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-jwv6yNIE?CUXeKi6jjCkRLqy_rc7Te_lp4PwNhyCgKh

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

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

Scale = 1:43.3

4x4 =



LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 49 lb	FT = 20%

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

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

REACTIONS. All bearings 10-2-5.
(lb) - Max Horz 1=177(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-123(LC 10), 7=-102(LC 11), 11=-188(LC 12), 12=-144(LC 12), 9=-187(LC 13), 8=-145(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 12, 8 except 11=291(LC 19), 9=290(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-289/203, 6-7=-273/203
WEBS 3-11=-289/213, 5-9=-289/212

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-1-3, Interior(1) 3-1-3 to 5-1-3, Exterior(2R) 5-1-3 to 8-1-3, Interior(1) 8-1-3 to 9-10-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 1, 102 lb uplift at joint 7, 188 lb uplift at joint 11, 144 lb uplift at joint 12, 187 lb uplift at joint 9 and 145 lb uplift at joint 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG08	Lay-In Gable	1	1	I43853235

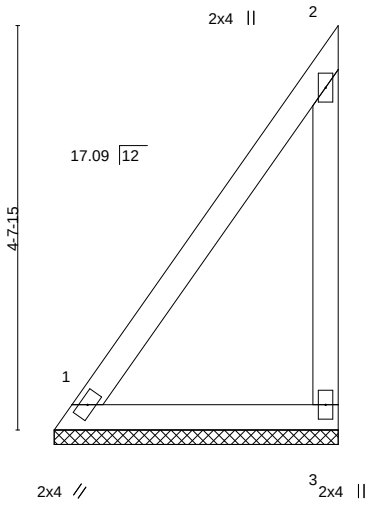
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:39 2020 Page 1
ID:3seZTgShN_qvheIqPBpz4myNXMX-B6TUAjJsmWcOFUHIHQjzzZM4oFweC6kv2k8Tv7yCgKg

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

3-3-5
3-3-5

Scale = 1:26.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 1=3-3-5, 3=3-3-5
Max Horz 1=144(LC 11)
Max Uplift 1=-30(LC 8), 3=-97(LC 9)
Max Grav 1=205(LC 20), 3=209(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-228/254, 2-3=-284/214

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1 and 97 lb uplift at joint 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG09	GABLE	1	1	I43853236

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:40 2020 Page 1
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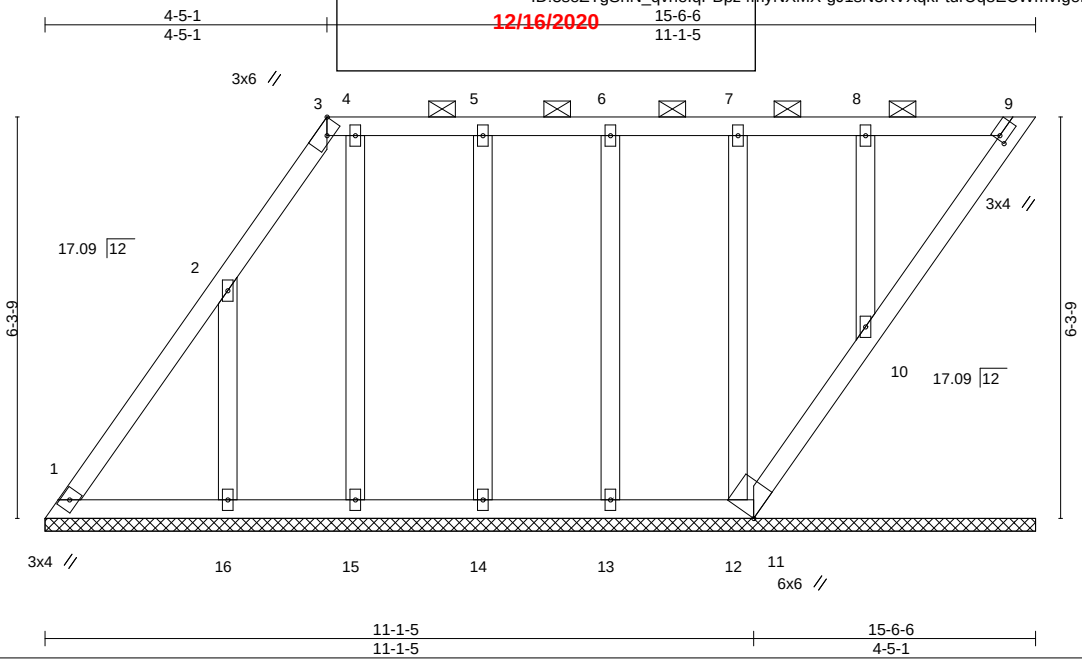

Plate Offsets (X,Y)-- [3:0-2-14,Edge], [9:0-0-12,0-1-8], [11:0-1-7,0-1-0], [12:0-1-0,0-1-7]

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

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

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

REACTIONS. All bearings 15-6-6.
(lb) - Max Horz 1=220(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 9, 11, 15, 14, 13, 12, 10 except 16=-232(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 11, 15, 14, 13, 12 except 16=360(LC 19), 10=283(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-16=-331/248

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-3-6, Interior(1) 3-3-6 to 4-5-1, Exterior(2R) 4-5-1 to 7-5-1, Interior(1) 7-5-1 to 15-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 11, 15, 14, 13, 12, 10 except (jt=lb) 16=232.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	LG10	GABLE	1	1	I43853237

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:41 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-8VaEbOL7I7s6VnQgOrlR2_SSL2dpg_FBV2daz0yCgKe

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

8-5-14 16-11-11
8-5-14 8-5-14

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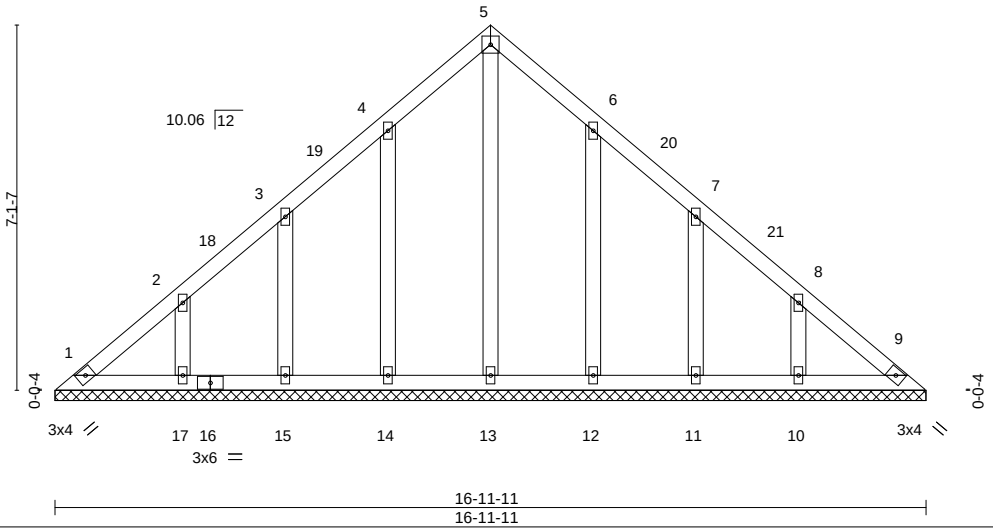

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 73 lb	FT = 20%

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

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

REACTIONS. All bearings 16-11-11.
(lb) - Max Horz 1=-159(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 14, 15, 17, 12, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 12, 11 except 17=267(LC 19), 10=266(LC 20)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 8-5-14, Exterior(2R) 8-5-14 to 11-5-14, Interior(1) 11-5-14 to 16-6-14 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 14, 15, 17, 12, 11, 10.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V1	Valley	1	1	I43853238

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:48 2020 Page 1
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8-4-11 16-9-6
8-4-11 8-4-11

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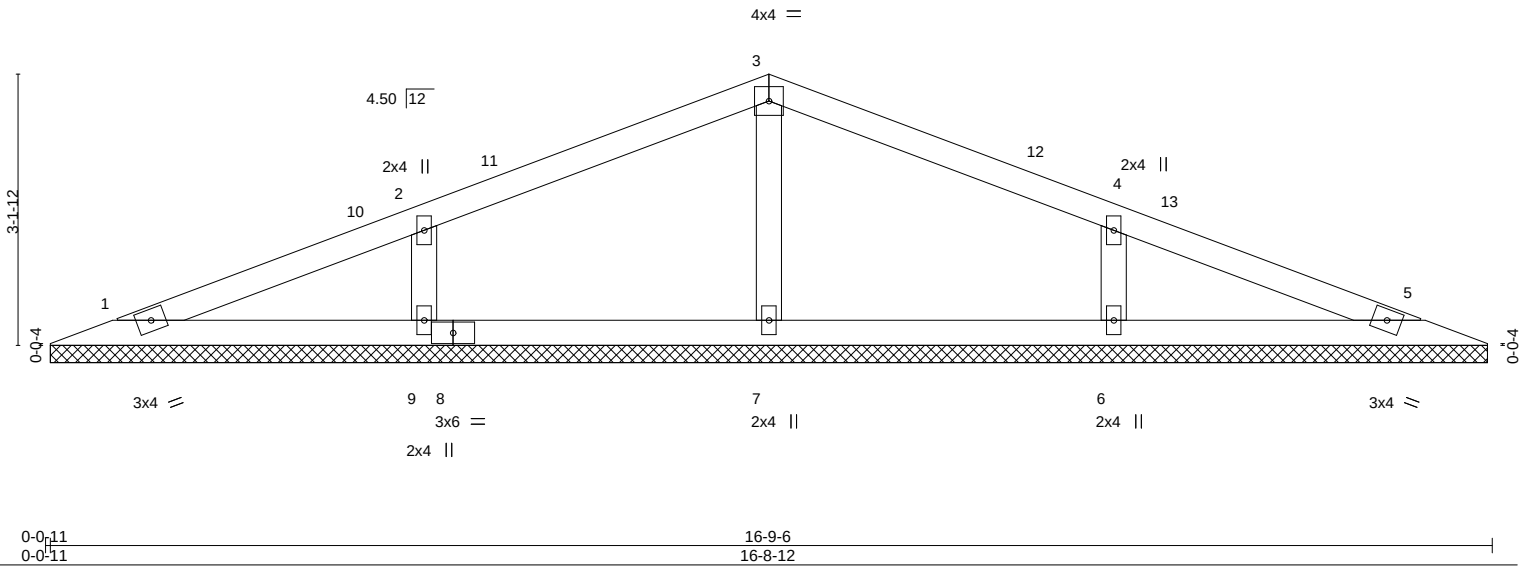

0-0-11 16-9-6
0-0-11 16-8-12

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	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 43 lb	FT = 20%

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

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

REACTIONS. All bearings 16-8-1.
(lb) - Max Horz 1=45(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=379(LC 1), 9=494(LC 25), 6=494(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-7=-305/66, 2-9=-402/150, 4-6=-402/150

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-1 to 3-10-1, Interior(1) 3-10-1 to 8-4-11, Exterior(2R) 8-4-11 to 11-4-11, Interior(1) 11-4-11 to 15-11-6 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 9, 6.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V2	Valley	1	1	I43853239

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:49 2020 Page 1
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5-8-11 11-5-6
5-8-11 5-8-11

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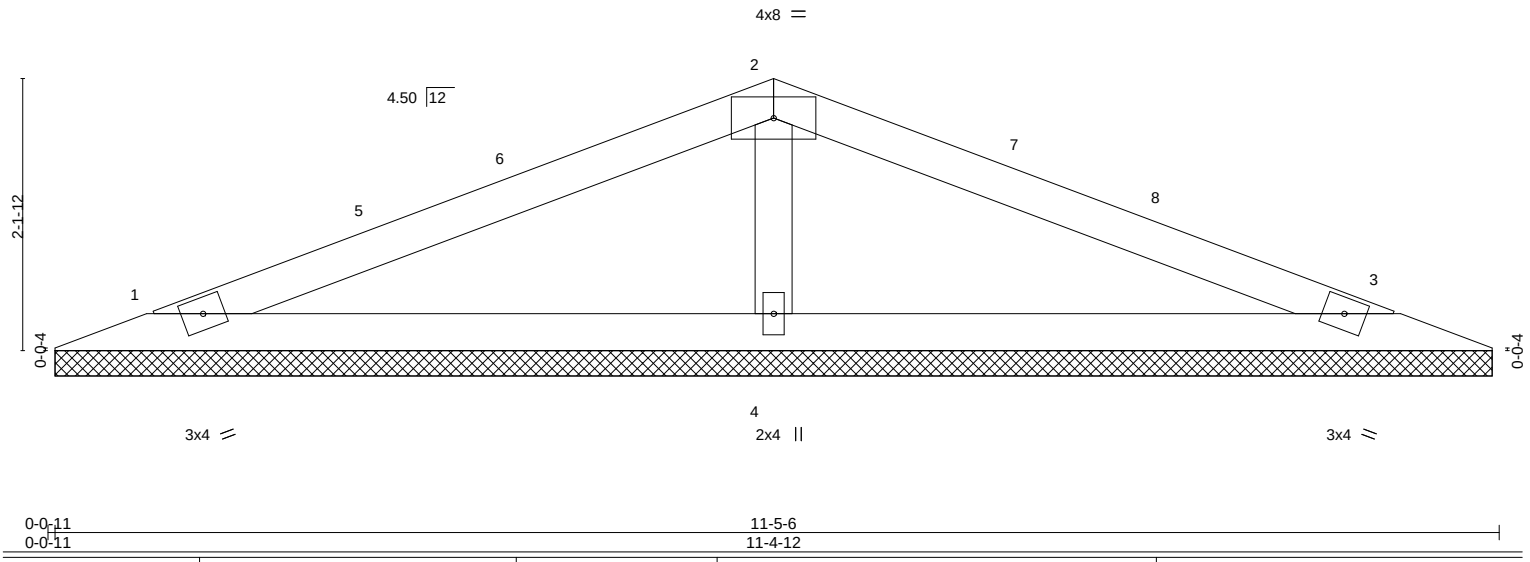


0-0-11 11-5-6
0-0-11 11-4-12

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	0.41	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.21	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: 27 lb	FT = 20%

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

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

REACTIONS. (size) 1=11-4-1, 3=11-4-1, 4=11-4-1
Max Horz 1=29(LC 16)
Max Uplift 1=-31(LC 12), 3=-36(LC 13), 4=-21(LC 8)
Max Grav 1=241(LC 25), 3=241(LC 26), 4=605(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-450/179

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-1 to 3-10-1, Interior(1) 3-10-1 to 5-8-11, Exterior(2R) 5-8-11 to 8-8-11 , Interior(1) 8-8-11 to 10-7-6 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
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.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V03	VALLEY	1	1	I43853240

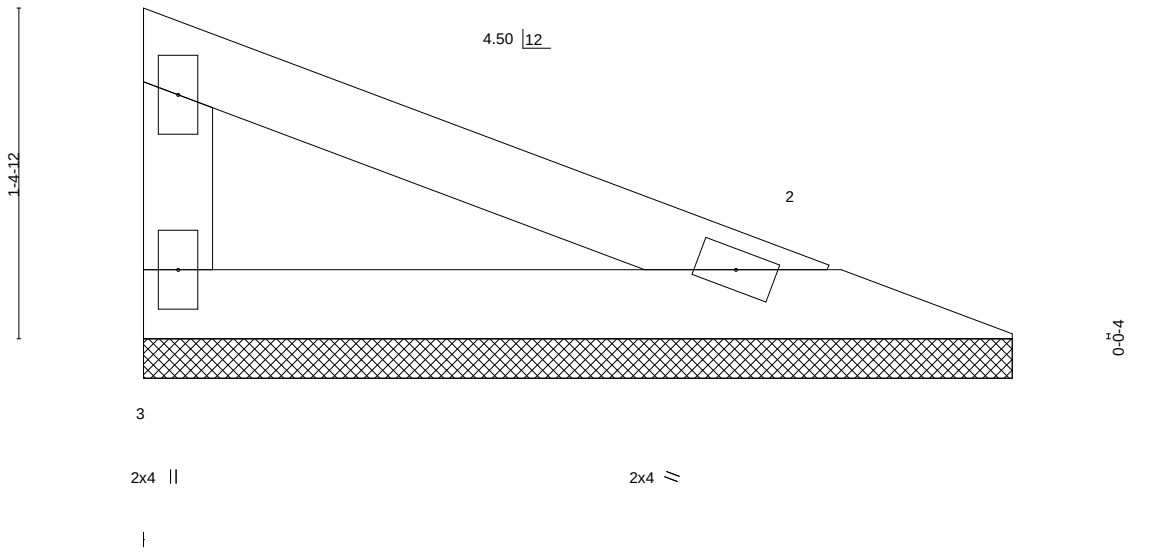
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:42 2020 Page 1
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-ch8cokMl3R_z7x?tyZGhbB_cYSyRPSTLkiN7WSyCgKd

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

3-8-11
3-8-11

Scale = 1:9.7



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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

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

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

REACTIONS. (size) 3=3-8-0, 2=3-8-0
Max Horz 3=-42(LC 8)
Max Uplift 3=-21(LC 13), 2=-14(LC 13)
Max Grav 3=151(LC 1), 2=151(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V3	Valley	1	1	I43853241

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:50 2020 Page 1
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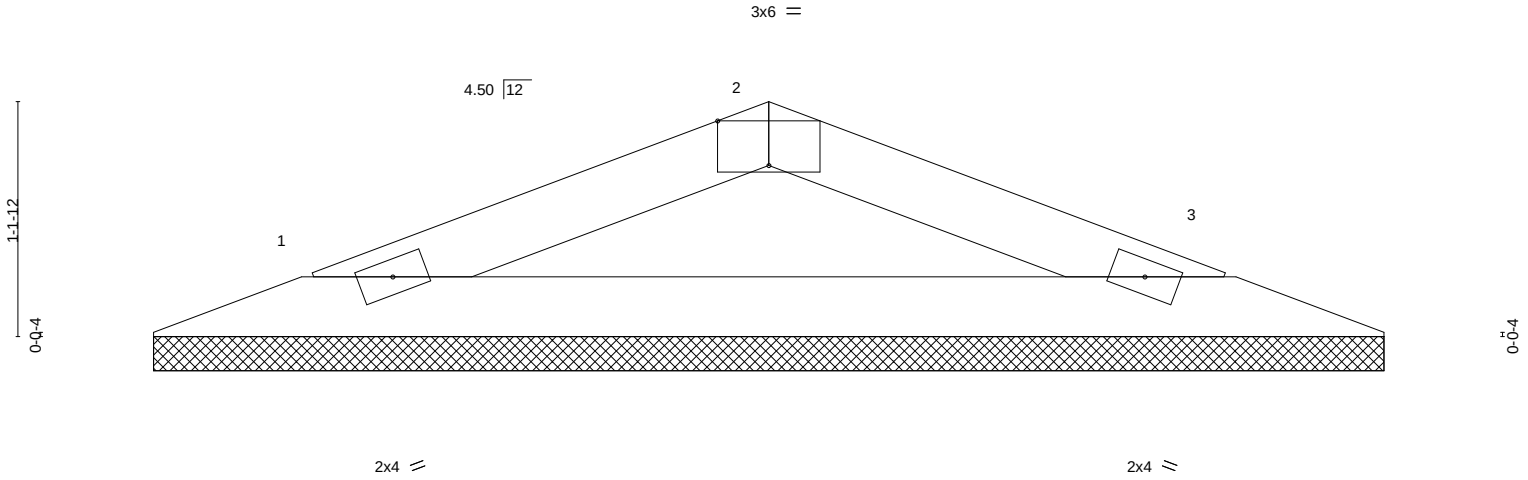
3-0-11
3-0-11

6-1-6
3-0-11

Scale = 1:11.2



0-0-11
0-0-11

6-1-6
6-0-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.23	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: 12 lb	FT = 20%

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

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

REACTIONS. (size) 1=6-0-1, 3=6-0-1
Max Horz 1=-13(LC 17)
Max Uplift 1=-18(LC 12), 3=-18(LC 13)
Max Grav 1=244(LC 1), 3=244(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-309/179, 2-3=-309/185
BOT CHORD 1-3=-143/263

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=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V04	GABLE	1	1	I43853242

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:43 2020 Page 1
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6-4-11
6-4-11

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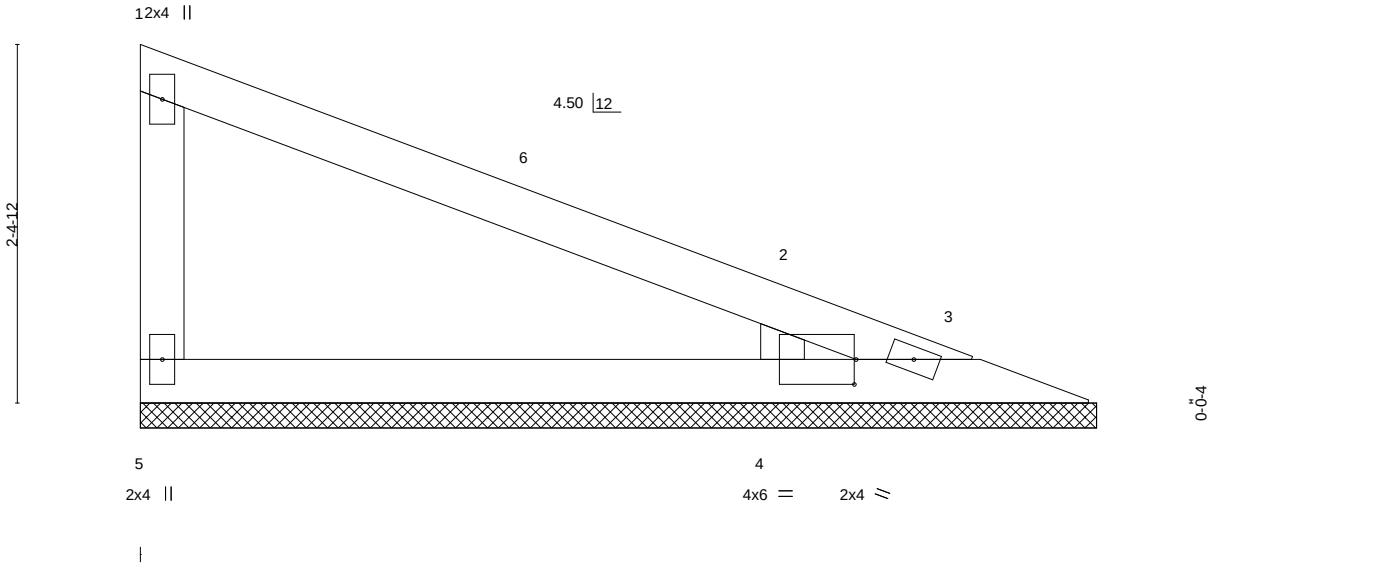

Plate Offsets (X,Y)-- [2:0-1-12,0-0-10], [4:0-0-2,0-2-0], [4:0-1-12,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=6-4-11, 3=6-4-11, 4=6-4-11
Max Horz 5=-82(LC 8)
Max Uplift 5=-24(LC 13), 3=-78(LC 1), 4=-80(LC 13)
Max Grav 5=183(LC 1), 3=36(LC 13), 4=489(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-400/244

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-3-8, Interior(1) 4-3-8 to 5-6-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V05	VALLEY	1	1	I43853243

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:44 2020 Page 1
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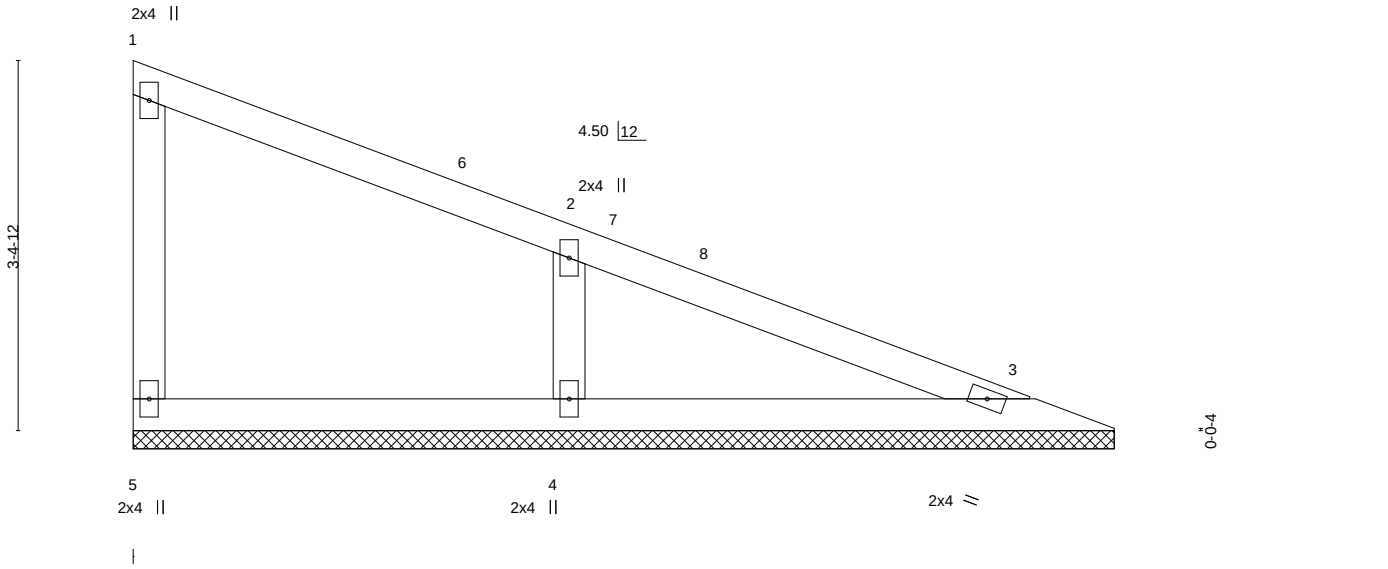

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=9-0-0, 3=9-0-0, 4=9-0-0
Max Horz 5=-122(LC 8)
Max Uplift 5=-16(LC 8), 3=-2(LC 13), 4=-75(LC 9)
Max Grav 5=161(LC 1), 3=185(LC 1), 4=542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-434/201

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 8-2-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V06	VALLEY	1	1	I43853244

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:44 2020 Page 1
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2-7-15 5-3-14
2-7-15 2-7-15

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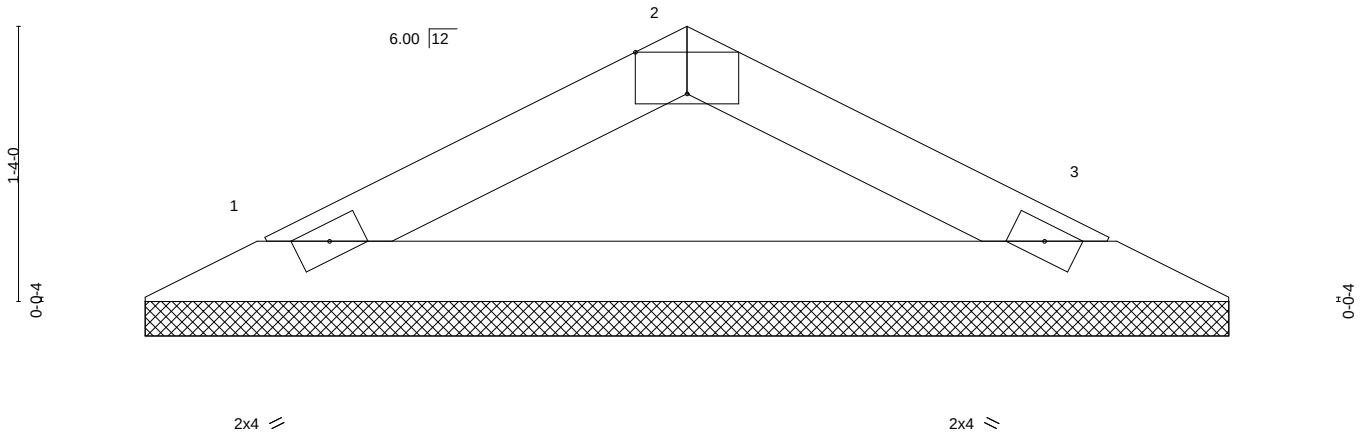

Plate Offsets (X,Y)-- [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

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

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

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

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V07	VALLEY	1	1	I43853245

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:45 2020 Page 1
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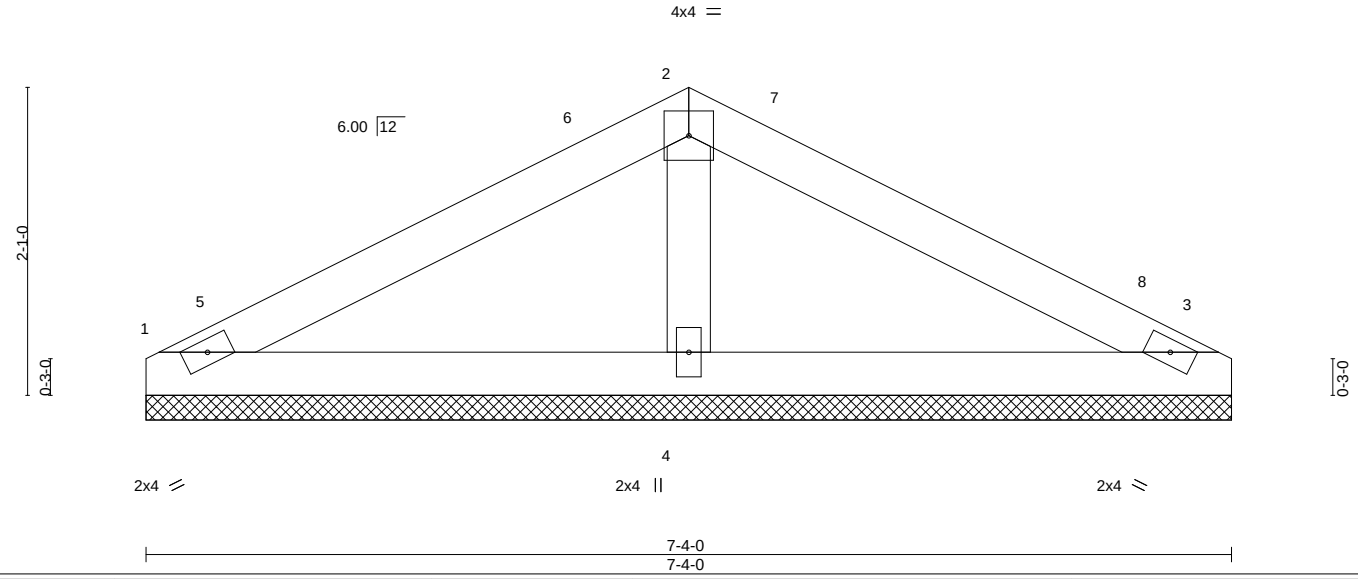
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

3-8-0
3-8-0

7-4-0
3-8-0

Scale = 1:15.6



7-4-0
7-4-0

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

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

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

REACTIONS. (size) 1=7-4-0, 3=7-4-0, 4=7-4-0
Max Horz 1=28(LC 16)
Max Uplift 1=-29(LC 12), 3=-34(LC 13)
Max Grav 1=200(LC 1), 3=200(LC 1), 4=375(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-286/145

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=6.0psf; 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 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 7-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

December 4,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/19 Woodside
2552987	V08	VALLEY	1	1	I43853246

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 12:45:46 2020 Page 1
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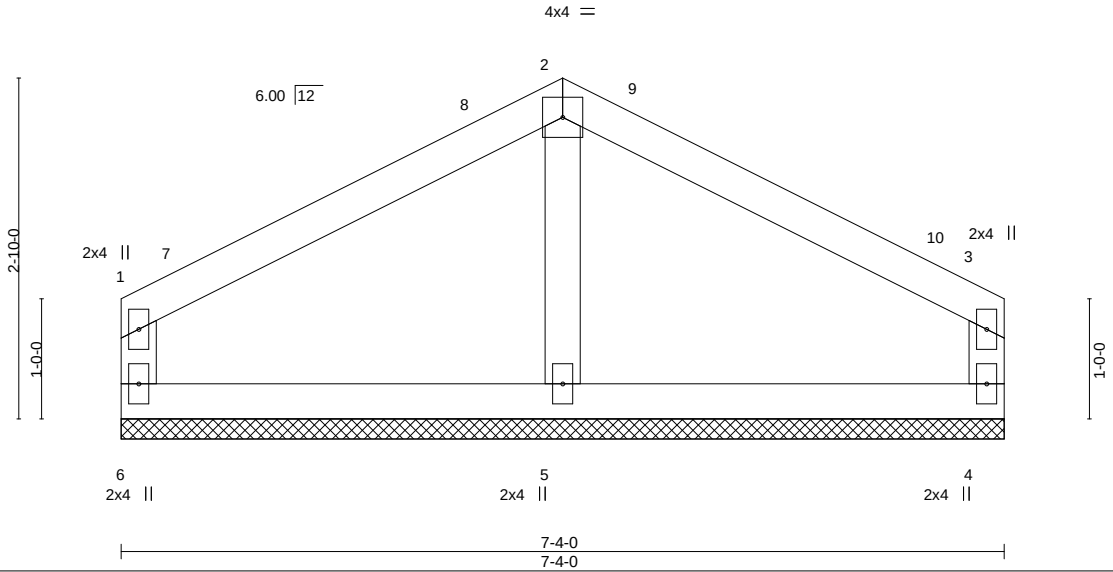
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

3-8-0
3-8-0
7-4-0
3-8-0

Scale = 1:19.1



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 6=7-4-0, 4=7-4-0, 5=7-4-0
Max Horz 6=-46(LC 8)
Max Uplift 6=-37(LC 12), 4=-37(LC 13)
Max Grav 6=224(LC 1), 4=224(LC 1), 5=327(LC 1)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 7-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
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.

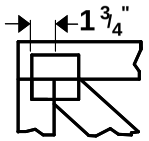
STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

December 4,2020

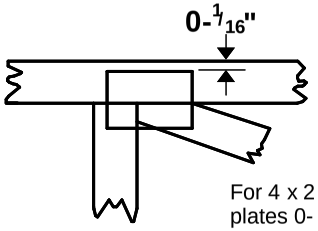
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

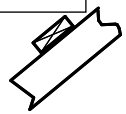
***Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 X 4

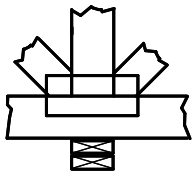
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

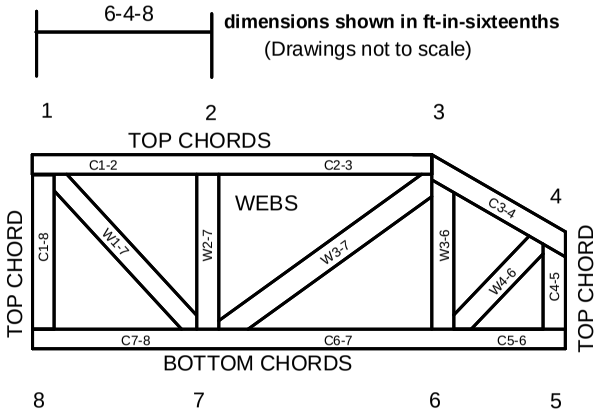


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.