

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

Re: 2546929 Summit/13 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: I43821870 thru I43821931

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

Missouri COA: Engineering 001193



December 2,2020

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 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.



Scale = 1:91.9



LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI. TC 0.91 BC 0.96 WB 0.85 Matrix-MS	DEFL. in Vert(LL) -0.45 Vert(CT) -1.00 Horz(CT) 0.08	(loc) l/defl L 17-19 >794 24 17-19 >358 18 14 n/a n	./d 40 80 n/a	PLATES GRIP MT20 197/14 MT20HS 148/10 MT18HS 244/19 Weight: 270 lb FT =	4 8 0 20%				
LUMBER- TOP CHORD 2x6 SP 3-5,11- BOT CHORD 2x6 SP 14-18,1 WEBS 2x4 SP 7-23: 2 OTHERS 2x8 SP	F No.2 *Except* 13,5-7: 2x6 SPF 2100F 1.8E F No.2 *Except* 8-22: 2x6 SP 2400F 2.0E F No.2 *Except* x4 SPF 1650F 1.5E No.2		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood she 2-0-0 oc purlins (2-9 Rigid ceiling directly 6-0-0 oc bracing: 25 3-0-8 oc bracing: 23 1 Row at midpt	athing direct -12 max.): 3 applied or 1 -26,21-23 -25. 7-23	tly applied or 2-6-9 oc purlins -7, 8-10, 11-13. 0-0-0 oc bracing, Except: 3, 12-16, 6-23	s, except				
REACTIONS. All be (lb) - Max H Max U Max G	EACTIONS. All bearings 0-3-8 except (jt=length) 23=0-8-12 (input: 0-3-8). (lb) - Max Horz 2=-26(LC 30) Max Uplift All uplift 100 lb or less at joint(s) 26 except 23=-584(LC 4), 14=-211(LC 9) Max Grav All reactions 250 lb or less at joint(s) except 2=674(LC 1), 26=817(LC 21), 23=5592(LC 1), 14=2333(LC 1)										
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-847/26, 4-6=-313/2212, 6-7=-815/7519, 7-8=-1607/239, 8-9=-4336/564, 9-10=-4336/564, 10-11=-6677/762, 11-12=-8924/897, 12-13=-4493/449, 13-14=-5030/481 BOT CHORD 2-27=-12/763, 26-27=-14/735, 25-26=-604/33, 23-25=-4045/429, 21-23=-783/75, 20-21=-179/1507, 19-20=-640/5985, 17-19=-1055/9849, 16-17=-860/8922, 14-16=-413/4624 WEBS 3-27=0/354, 3-26=-1075/91, 7-23=-7466/878, 7-21=-309/2995, 8-21=-1579/199, 8-20=-395/3394, 9-20=-627/134, 10-20=-1979/173, 10-19=-287/3176, 11-19=-4430/479, 11-17=-972/213, 12-17=0/687, 12-16=-4622/475, 13-16=-73/1429, 4-26=-195/689, 4-25=-1854/363, 6-25=-86/2084, 6-23=-4061/530											
 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) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) 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) 23 greater than input bearing size. 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26 except (jt=lb) 23=584, 14=211. Continued on page 2 											
WARNING - Verify o	design parameters and READ NOTES ON THIS AND	INCLUDED MITEK REFERENC	E PAGE MII-7473 rev. 5/19/202) BEFORE USE.							
Design valid for use or	nly with MiTek® connectors. This design is based of	only upon parameters shown, an	d is for an individual building co	mponent, not							

16023 Swingley Ridge Rd Chesterfield, MO 63017

Ì	Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
							l43821870
	2546929	A1	Roof Special Girder	1	1		
						Job Reference (optional)	
ĺ	Builders FirstSource (Valley)	Center) Valley Center K	S - 67147	۶	3 240 s Ma	r 9 2020 MiTek Industries Inc. Tue Dec 1 17:29:43 2020	Page 2

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-gD4HPKMbXU?M273EvuMdHmQKw2PBILS_?A8Y8_yDGMM

NOTES-

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 16-0-0 oc max. starting at 6-0-12 from the left end to 37-11-4 to connect truss(es) to back face of bottom chord.

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

13) "NAILED" indicates 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).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-90, 3-7=-90, 7-8=-90, 8-10=-90, 10-11=-90, 11-13=-90, 13-15=-90, 28-31=-20

Concentrated Loads (lb)

Vert: 5=-60(B) 8=-90(B) 10=-90(B) 13=-0(B) 24=-27(B) 27=-207(B) 21=-111(B) 9=-90(B) 20=-111(B) 19=-111(B) 16=-126(B) 18=-214(B) 22=-259(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-60(B) 38=-60(B) 39=-107(B) 41=-90(B) 42=-90(B) 44=-45(B) 45=-57(B) 46=-57(B) 47=-57(B) 48=-135(B) 49=-215(B) 50=-27(B) 51=-27(B) 52=-27(B) 53=-27(B) 53=-27(B) 55=-214(B) 56=-111(B) 57=-111(B) 58=-266(B) 59=-61(B) 60=-41(B) 61=-41(B) 62=-41(B) 62=-41(B)



Job		Truss		Truss Type			Qty	Ply	Sum	mit/13 Woodsid	de		
													I43821871
2546929		A2		Roof Special			1		1				
									Job R	eference (option	onal)		
Builders FirstSou	rce (Valley	Center),	Valley Center	r, KS - 67147,				8.240 s	Mar 9 20	20 MiTek Indu	stries, Inc. Tue D	ec 1 17:30:01	2020 Page 1
						ID:ggMH	uYjvKTSN	SqRK_pq	Y ByzXhju	I-9hA5AUauH0	GoDuSiyggr0ZAF	RhJbJWVMd8z	VVnxyDGM4
-0-	10 ₁ 8	6-0-0	10-4-5	16-9-7	20-1-12	26-0-0	28-0-0	32-0-0	34-8-6	39-8-6	44-8-6	50-0-0	50 ₁ 10 ₁ 8
0-	10-8	5-0-0	4-4-5	6-5-2	3-4-5	5-10-4	2-0-0	4-0-0	2-8-6	5-0-0	5-0-0	5-3-10	0-10-8
													Scale = 1:91.8



	<u>6-0-0</u> 7 <u>1-12</u> 13-6-14	20-1-12	26-0-0 28-0-0	32-0-0	34-8-6	44-8-6	50-0-0			
Plate Offsets (X V)	6-0-0 1-1-12 6-5-2	6-6-14 [doe] [0:0-5-0 0-3-8] [16	<u>5-10-4 2-0-0</u>	4-0-0	2-8-6	10-0-0	5-3-10			
	[2:0-3-7,0-2-0], [4:0-4-2,Euge], [7:0-3-0,E	ugej, [9.0-5-0,0-5-6], [10	<u>J.0-0-0,0-1-15j</u>							
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.82 BC 0.77 WB 0.82 Matrix-AS	DEFL. Vert(LL) -0 Vert(CT) -0 Horz(CT) 0	in (loc)).29 18-20).74 18-20).07 16	l/defl L/d >999 240 >487 180 n/a n/a	PLATES MT20 MT20HS Weight: 218 lb	GRIP 197/144 148/108 FT = 20%			
LUMBER- TOP CHORD 2x6 SP 1-4,14- BOT CHORD 2x4 SP 22-24: WEBS 2x4 SP SLIDER Left 2x REACTIONS. All be (lb) - Max H	 'F No.2 *Except* .17: 2x4 SPF No.2 'F 1650F 1.5E *Except* 2x4 SPF No.2 'F No.2 4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2 sarings 0-3-8 except (jt=length) 23=0-5-5 lorz = 2=33(LC 12) loit = .01 upit 100 lb or loce of icipt(c) 2 	-6-0 (input: 0-3-8).	BRACING- TOP CHORD BOT CHORD WEBS	Structur 2-0-0 oc Rigid ce 1 Row a	ral wood sheathing c purlins (3-9-4 max eiling directly applied at midpt	directly applied, except): 4-9, 10-11, 12-14. d. 9-23				
Max Uplift All uplift 100 lb or less at joint(s) 2, 16 except 26=-140(LC 26) Max Grav All reactions 250 lb or less at joint(s) except 2=586(LC 1), 26=474(LC 25), 16=1425(LC 1), 23=3394(LC 1)										
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-519/132, 4-5=-321/128, 5-6=-19/874, 6-8=-190/3152, 8-9=-189/3153, 9-10=-944/139, 10-11=-844/142, 11-12=-3437/294, 12-13=-3251/261, 13-14=-2251/198, 144.16 -2629/4197										
BOT CHORD 2-27= 20-21 WEBS 4-26= 12-20 5-25=	14-16=-2528/187 BOT CHORD 2-27=-66/475, 26-27=-66/468, 25-26=-164/286, 23-25=-1733/135, 21-23=-18/337, 20-21=-101/1840, 18-20=-259/3408, 16-18=-112/2283 WEBS 4-26=-437/58, 9-23=-3712/319, 9-21=-11/1157, 11-21=-1330/104, 11-20=-118/2236, 12-20=-1555/175, 13-18=-1281/168, 14-18=0/679, 8-23=-54/549, 5-25=-1059/166, 6-25=-44/1250, 6-23=-1896/174									
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 9-0-0 to 2 to 44-8-6, Exterior(2 right exposed;C-C fc 3) Provide adequate dr 4) All plates are MT200 5) This truss has been will fit between the b 7) WARNING: Require 8) Provide mechanical (jt=lb) 26=140. 9) This truss is designe referenced standard Continued on page 2	I loads have been considered for this des 'ult=115mph (3-second gust) Vasd=91mp interior zone and C-C Exterior(2E) -0-10 8-0-0, Exterior(2R) 28-0-0 to 31-0-0, Inte R) 44-8-6 to 47-8-6, Interior(1) 47-8-6 to or members and forces & MWFRS for rea 'ainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on the ottom chord and any other members. d bearing size at joint(s) 23 greater than connection (by others) of truss to bearing ed in accordance with the 2018 Internatio I ANSI/TPI 1.	ign. bh; TCDL=6.0psf; BCDL= 8 to 2-1-8, Interior(1) 2-7 rior(1) 31-0-0 to 32-0-0, It 50-10-8 zone; cantilever totions shown; Lumber D e load nonconcurrent with the bottom chord in all are input bearing size. g plate capable of withstan nal Residential Code sec	=6.0psf; h=15ft; Cat. I 1-8 to 6-0-0, Exterior(Exterior(2E) 32-0-0 to left and right expose- iOL=1.60 plate grip D n any other live loads as where a rectangle anding 100 lb uplift at ctions R502.11.1 and	II; Exp C; End (2R) 6-0-0 to > 34-8-6, Inte d; end vertic IOL=1.60 joint(s) 2, 16 I R802.10.2 a	closed; 9-0-0, prior(1) 34-8-6 cal left and / 2-0-0 wide & except and	State of Sta	MISSOLUTI MISSOLUTI WIER MBER 01018807			
WARNING - Verify of Design valid for use on a truss system. Before building design. Braci is always required for fabrication, storage, di Safety Information	design parameters and READ NOTES ON THIS AND nly with MiTek® connectors. This design is based or 9 use, the building designer must verify the applicabing indicated is to prevent buckling of individual trus: stability and to prevent collapse with possible perso elivery, erection and bracing of trusses and truss sy available from Truss Plate Institute, 2670 Crain High	INCLUDED MITEK REFERENC hly upon parameters shown, an tilly of design parameters and p s web and/or chord members or nal injury and property damage stems, see ANSI/TPI1 way, Suite 203 Waldorf, MD 20	E PAGE MII-7473 rev. 5/19 d is for an individual buildir roperty incorporate this des nly. Additional temporary a . For general guidance reç I Quality Criteria, DSB-89 9601	V2020 BEFORE I ng component, n sign into the over and permanent b garding the and BCSI Build	USE. tot prall pracing ding Component	Mitek 16023 Swingle Chesterfield, f	ey Ridge Rd MO 63017			

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside			
					143821871			
2546929	A2	Roof Special	1	1				
					Job Reference (optional)			
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:30:02 2020 Page 2			
		ID:ggMHu	ID:ggMHuYjvKTSNSqRK_pqYByzXhju-dtkTOqaW2JOfq10uWNB4ZmibRjxYFybnNdE2JNyDGM3					

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.





Scale = 1:90.2



	7-1-12 8 ₁ 0-0 14-0-14	20-1-12	28-0-0	32-10-13	42-10-13	3 50-0	0-0			
	<u>7-1-12 0-10-4 6-0-14</u>	6-0-14	7-10-4	4-10-13	<u> </u>	′ 7-1	-3			
Plate Offsets (X,Y)	[2:0-3-15,Edge], [4:1-5-12,0-2-0], [5:0-3-	8,0-2-0], [6:0-3-0,Edge],	[8:0-3-0,Edge], [14:0	<u>)-0-0,0-2-3], [1</u>	9:0-5-12,0-1-12]					
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.94 BC 0.96 WB 0.80 Matrix-AS	DEFL. Vert(LL) - Vert(CT) - Horz(CT)	in (loc) 0.30 16-18 0.71 16-18 0.06 14	l/defl L/d >999 240 >503 180 n/a n/a	PLATES MT20 MT18HS Weight: 204 lb	GRIP 197/144 197/144 FT = 20%			
LUMBER- TOP CHORD 2x6 SP 1-4,12- BOT CHORD 2x4 SP WEBS 2x4 SP SLIDER Left 2x4	DMBER- OP CHORD 2x6 SPF No.2 *Except* 1-4,12-15: 2x4 SPF No.2, 4-6,6-8: 2x4 SPF 1650F 1.5E TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 4-8, 10-12. 3OT CHORD 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied. VEBS 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0 WEBS 1 Row at midpt 5-21									
REACTIONS. All bearings 0-3-8 except (jt=length) 21=0-5-4 (input: 0-3-8). (lb) - Max Horz 2=-42(LC 13) Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 24 Max Grav All reactions 250 lb or less at joint(s) except 2=753(LC 25), 21=3359(LC 1), 14=1462(LC 1), 24=253(LC 25)										
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-720/221, 4-5=-192/473, 5-7=-73/2114, 7-8=-1173/143, 8-9=-1289/175, 9-10=-2614/237, 10-11=-2428/199, 11-12=-2238/205, 12-14=-2448/188 BOT CHORD 2-24=-133/667, 23-24=-129/677, 21-23=-472/189, 19-21=-1430/113, 18-19=-23/1301, 16-18=-177/2800, 14-16=-97/2255 WEBS 5-23=0/552, 5-21=-2258/210, 7-21=-2157/214, 7-19=-166/2936, 8-19=-874/152, 9-19=-579/0, 9-18=-126/2011, 10-18=-1317/162, 11-18=-510/98, 11-16=-664/100, 12-16=0/552, 4-24=-41/261, 4-23=-905/149										
 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) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 30-0-0, Exterior(2E) 30-0-0 to 32-10-13, Interior(1) 32-10-13 to 42-10-13, Exterior(2R) 42-10-13 to 45-10-13, Interior(1) 45-10-13 to 50-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) All plates are MT20 plates unless otherwise indicated. 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6) * 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) 21 greater than input bearing size. 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 24. 9) This truss is design equires 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) 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. 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 										
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.										





ARXING - Verify design parameters and READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MIL-74/3 feV. 5/19/2020 BEFORE USE. Design valid for use only with MITER® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





6-1	1-12 12-0-0	20-1-12	28-0-0 32-	5-14	42-5-14	50-0-	0			
6-1	1-12 5-10-4	8-1-12	7-10-4 4-	5-14	10-0-0	7-6-2				
Plate Offsets (X,Y)	[2:0-3-15,Edge], [5:0-4-2,Edge], [6:0-3-8	,0-2-0], [8:0-2-12,0-3-0], [[12:0-3-15,Edge], [18:0	-3-8,0-2-0]						
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 *	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES	CSI. TC 0.86 BC 0.89 WB 0.88	DEFL. Vert(LL) -0.2 Vert(CT) -0.6 Horz(CT) 0.0	n (loc) l/defl 8 14-16 >999 5 14-16 >554 5 12 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS				Weight: 218 lb	FT = 20%			
LUMBER- TOP CHORD 2x6 SP 1-5,10- BOT CHORD 2x4 SP WEBS 2x4 SP SLIDER Left 2x	2F No.2 *Except* 13: 2x4 SPF No.2 2F No.2 2F No.2 4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2	2-6-0	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood 2-0-0 oc purlins Rigid ceiling dire 2 Rows at 1/3 pt	sheathing direct (5-0-3 max.): 5- cetly applied. s 7-18	tly applied, except 7, 8-10. 3				
REACTIONS. (size Max H Max U Max G	EACTIONS. (size) 2=0-3-8, 18=0-3-8 (req. 0-5-11), 12=0-3-8 SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR Max Horz 2=50(LC 12) OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT Max Uplift 2=-33(LC 12), 12=-33(LC 13) WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) Max Grav 2=829(LC 25), 18=3618(LC 1), 12=1389(LC 26) OR THE BUILDING DESIGNER.									
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-968/107, 4-5=-386/405, 5-6=-283/325, 6-7=0/1874, 7-8=-604/154, 8-9=-1869/212, 9-10=-2061/218, 10-12=-2238/193 BOT CHORD 2-22=-88/969, 21-22=-88/969, 18-21=-1872/155, 17-18=0/463, 16-17=-102/1888, 14-16=-166/2374, 12-14=-106/2071										
WEBS 4-21=		1, 6-18=-1936/220, 7-18=	=-2708/173,							
 The design of the design of the design of the design. Wind: ASCE 7-16; Vull=115mpt (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Wind: ASCE 7-16; Vull=115mpt (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; WWFRS (envelope) interior zone and C-C Exterior(ZE) -0-0.6 to tab. 2-1-8. Interior(1) 2-1-8 to 12-0-0. Exterior(2R) 12-0-0 to 15-0-0. Interior(1) 15-0-0 to 28-0-0. Exterior(ZE) -0-0.0 plate grip DOL=1.60 Provide adequate drainage to prevent water ponding. All plates are 3x6 MT20 unless otherwise indicated. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. This truss has been designed for a 10.0 psf bottom chord hord 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. WARNING: Required bearing size at joint(s) 18 greater than input bearing size. Provide mechanical connection (by others) of trus to bearing plate capable of withstanding 100 lb upift at joint(s) 2, 12. This truss designe quires 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. Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 										
WARNING - Verify	design parameters and READ NOTES ON THIS AND	INCLUDED MITEK REFERENC	E PAGE MII-7473 rev. 5/19/20	20 BEFORE USE.						

Mitek* 16023 Swingley Ridge Rd Chesterfield, MO 63017



Scale = 1:90.3



	L	7-1-12	14-0-0	20-1-12	26-0-0		34-3-7		44-3-	7 5	0-0-0
	1	7-1-12	6-10-4	6-1-12	5-10-4	1	8-3-7	1	10-0-	·0 ¹ 5	i-8-9
Plate Offsets (X	<,Y)	[2:0-3-7,0-2-0], [5:0-3	3-0,Edge], [14:0-3-1	5,Edge], [18:0-3-0,0)-1-12]						
LOADING (psf TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	f) C C C * C	SPACING- Plate Grip DC Lumber DOL Rep Stress In Code IRC201	2-0-0 L 1.15 1.15 cr YES 8/TPI2014	CSI. TC 0.70 BC 0.83 WB 0.86 Matrix-AS		DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.32 16-17 -0.70 16-17 0.03 2	l/defl >999 >508 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 229 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS SLIDER REACTIONS.	UMBER- OP CHORD 2x6 SPF No.2 *Except* 12-15,1-5: 2x4 SPF No.2 BRACING- TOP CHORD TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-13 max.): 6-8, 10-12. IOT CHORD 2x4 SPF No.2 *Except* 2-21,14-17: 2x4 SPF 1650F 1.5E BOT CHORD Rigid ceiling directly applied. WEBS 1 Row at midpt 4-22, 7-20 VEBS 2x4 SPF No.2 Left 2x4 SPF No.2 - 6-0, Right 2x4 SPF No.2 2-6-0 WEBS 1 Row at midpt 4-22, 7-20 VERS Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0 SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) Max Horz 2=-57(LC 13) Max Grav 2=788(LC 25), 20=3953(LC 2), 14=1311(LC 28) SUPPLEMENTARY BEARING DLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.										
Max Grav 2=788(LC 25), 20=3953(LC 2), 14=1311(LC 28) ARC THE NEUTONOBER TO THE INCOMMENTATION. FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. OR THE BUILDING DESIGNER. TOP CHORD 2-4=-879/378, 4-6=-25/977, 6-7=0/853, 7-8=0/427, 8-9=0/514, 9-10=-2353/240, 10-11=-2263/205, 11-12=-2041/189, 12-14=-2291/171 BOT CHORD 2-23=-286/811, 22-23=-286/811, 20-22=-2147/173, 18-20=-2147/173, 17-18=-32/632, 16-17=-203/2701, 14-16=-98/2067 WEBS 4-23=0/307, 4-22=-1107/107, 6-22=-776/111, 7-22=-112/2042, 7-20=-3689/290, 7-18=-134/2452, 8-18=-525/69, 9-18=-1429/157, 9-17=-111/2318, 10-17=-1244/160, 11-17=-547/109, 11-16=-798/129, 12-16=0/609											
 NOTES- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 21-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 26-0-0. Exterior(2R) 20-0 to 29-0-0, Interior(1) 20-0 to 44-3-7, Exterior(2R) 44-3-7 to 47-3-7, Interior(1) 47-3-7, to 50-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 5) * 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) WARNING: Required bearing size at joint(s) 20 greater than input bearing size. 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14. 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) 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. 											
	G - Verify	design parameters and RE/	AD NOTES ON THIS AND	INCLUDED MITEK REFE	RENCE PAG	E MII-7473 rev. 5	5/19/2020 BEFORE	USE.			





⊢ <u>2</u>	2-9-8 5-3-0 10-7-8 16-0-0 20-1-12 24-0-0 2-9-8 2-5-8 5-4-8 5-4-8 4-1-12 3-10-4	<u>30-0-8</u> <u>36-1-1</u> 6-0-8 <u>6-0-8</u>	38-6-3 41-1-1 43-7-15 46-1-1 50-0-0 2-5-2 2-6-14 2-6-14 2-5-2 3-10-15								
Plate Offsets (X,Y)	[3:0-0-4,0-2-4], [4:0-2-8,0-5-4], [6:0-3-0,Edge], [8:0-4-0,0-4-4], [9:0-10	-12,0-3-12], [11:0-5-0,0-3-4], [24:0-3-	3,Edge], [31:0-2-12,0-2-12], [32:0-0-0,0-1-12]								
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 CSI. Plate Grip DOL 1.15 TC 0.81 Lumber DOL 1.15 BC 0.75 Rep Stress Incr NO WB 0.95 Code IRC2018/TPI2014 Matrix-MS	DEFL. in (loc) I/defl Vert(LL) -0.33 21-22 >999 Vert(CT) -0.59 21-22 >605 Horz(CT) -0.15 27 n/a	L/d PLATES GRIP 240 MT20 197/144 180 MT20HS 148/108 n/a Weight: 263 lb FT = 20%								
LUMBER- TOP CHORD 2x6 SF 8-9: 2x 1-6: 2x BOT CHORD 2x4 SF 16-23: WEBS 2x4 SF WEDGE Right: 2x4 SP No.3 SLIDER Left 2x	BRACING- TOP CHORD 2x6 SPF No.2 *Except* 8-9: 2x6 SPF 2100F 1.8E, 15-17: 2x4 SPF No.2 1-6: 2x4 SPF 1650F 1.5E BOT CHORD 2x4 SPF No.2 *Except* 16-23: 2x6 SPF 2100F 1.8E, 23-26: 2x4 SPF 1650F 1.5E BOT CHORD 16-23: 2x6 SPF 2100F 1.8E, 23-26: 2x4 SPF 1650F 1.5E BOT CHORD 16-23: 2x6 SPF 2100F 1.8E, 23-26: 2x4 SPF 1650F 1.5E WEBS 2x4 SPF No.2 WEBS 2x4 SPF No.2 WEBS 16-23: 2x6 SPF 2100F 1.8E, 23-26: 2x4 SPF 1650F 1.5E WEBS 16-23: 2x6 SPF No.2 WEBS 2x4 SPF No.2 WEBS 16-23: 2x6 SPF No.2 WEBS 1700 CHORD 180 w at midpt 8-27, 9-27, 10-25, 11-24 WEBS 190 CHORD 190 CHORD <t< td=""></t<>										
REACTIONS. (size) 2=0-3-8, 27=0-3-8 (req. 0-8-3), 16=0-3-8 Max Horz 2=-64(LC 30) Max Uplift 2=-492(LC 22), 27=-73(LC 5), 16=-186(LC 9) Max Grav 2=263(LC 18), 27=5206(LC 1), 16=1811(LC 22)											
FORCES. (lb) - Max. TOP CHORD 2-3= 8-9= 13-1. BOT CHORD 2-33 28-2 21-2 16-1	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-145/410, 3-4=-654/2822, 4-5=-393/2495, 5-7=-336/2326, 7-8=-104/2680, 8-9=-62/3823, 9-10=-78/2506, 10-11=-109/1009, 11-12=-3408/429, 12-13=-5376/681, 13-14=-5376/681, 14-15=-2978/365, 15-16=-3366/391 BOT CHORD 2-33=-949/293, 32-33=-951/329, 4-32=-528/248, 31-32=-2939/758, 5-31=-396/73, 28-29=-1864/266, 27-28=-2423/241, 25-27=-2261/165, 24-25=-875/134, 22-24=-388/3486, 21-22=-595/4955, 20-21=-595/4955, 19-20=-527/4685, 18-19=-527/4685,										
WEBS 4-31 8-28 10-2 3-33 14-2		/62, /192, =-2253/570, =-274/59,	STATE OF MISSOL								
 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) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) 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 bee will fit between the b 7) WARNING: Require 	en designed for a live load of 20.0psf on the bottom chord in all areas w bottom chord and any other members. ad bearing size at joint(s) 27 greater than input bearing size.	where a rectangle 3-6-0 tall by 2-0-0 w	ide December 2,2020								
Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing WIEW Termination of the state of the prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing WIEW Termination of the state of the prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing											

building design. Bracing indicated is to prevent buckling of individual russ web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
						43821876
2546929	A7	ROOF SPECIAL	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,				3.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:30:11 2020 F	Page 2

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-scmtHvh9x4WNPQCdYmsBQga8QL12s_m5RXw16MyDGLw

NOTES-

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27 except (jt=lb) 2=492, 16=186.
- 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.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 40-0-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg. to the left, sloping 0.0 deg. down.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 209 lb down and 121 lb up at 46-1-1 on top chord, and 187 lb down and 29 lb up at 45-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) 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: 1-8=-90, 8-9=-90, 9-11=-90, 11-15=-90, 15-17=-90, 33-34=-20, 31-32=-20, 30-38=-20

Concentrated Loads (lb)

Vert: 15=-91(F) 18=-187(F) 19=-48(F) 14=-76(F) 41=-76(F) 42=-655(F) 43=-48(F)





	19-10-4											
2-9-1	-8	5-3-0	7-1-10	8-6-2	11-7-8	1	18-0-0	19-8-8	22-0-0	30-10-4	40-0-0	
2-9-1	-8	2-5-8	1-10-10	1-4-8	3-1-6	1	6-4-8	1-8-8	2-1-12	8-10-4	9-1-12	
0-1-12												
Plate Offsets (X X)												

Plate Offsets (X, Y)	[2:0-3-15,Edge], [8:0-7-12,0-2-0], [14:0-	3-15,Edgej, [22:0-2-0,0-2-8]							
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.87 BC 0.71 WB 0.62 Matrix-S	DEFL. Vert(LL) - Vert(CT) - Horz(CT)	in -0.26 -0.49 0.19	(loc) 28 28 19	l/defl >930 >483 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 191 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 SP 1-6: 2x BOT CHORD 2x4 SP WEBS 2x4 SP SLIDER Left 2x	F No.2 *Except* 4 SPF 1650F 1.5E F No.2 F No.2 4 SPF No.2 2-6-0, Right 2x4 SPF No.2 3	3-3-7	BRACING- TOP CHORE BOT CHORE WEBS JOINTS) S 2) F 1 1	Structur 2-0-0 or Rigid ce 1 Row a 1 Brace	ral wood c purlins eiling dire at midpt e at Jt(s):	sheathing dire (10-0-0 max.) ectly applied o 19 23	ectly applied or 2-2-0 o : 8-9. r 4-0-15 oc bracing. 9-22, 10-17, 9-19, 8-19	ic purlins, except
REACTIONS. (size) 2=0-3-8, 19=0-3-8 (req. 0-6-3), 14=Mechanical Max Horz 2=124(LC 12) SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR Max Uplift 2=-28(LC 13), 19=-330(LC 12), 14=-159(LC 13) OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT Max Grav 2=433(LC 27), 19=3960(LC 2), 14=652(LC 26) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER)RAGE, OR RED SUPPORT ETC.) IURER	
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. OR THE BUILDING DESIGNER. FOP CHORD 5-7=-164/995, 7-8=-68/1019, 8-9=-196/2102, 9-10=-226/1764, 10-12=-469/939, 12-14=-901/713 GOT CHORD 17-19=-1593/334, 15-17=-1065/308, 14-15=-590/743 WEBS 20-22=0/264, 7-22=-505/179, 19-22=-1715/277, 9-17=-80/908, 10-17=-1090/204, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-602/177, 8-22=-183/1284, 5-22=-972/170, 5-24=0/275, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851, 12-15=-500/140, 10-15=-3/851,									
NOTES- I) 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 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 40-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * 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.

- 8) WARNING: Required bearing size at joint(s) 19 greater than input bearing size.
- 9) Refer to girder(s) for truss to truss connections.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 19=330, 14=159.

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.







🔺 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to be only with with ever connectors. This besign is based only upon parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 MiTek

December 2,2020



a truss system and to use the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPI1 Quality Criteria**, **DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <u>ANS/TPH1</u> Quality Criteria, DSB-89 and BCSI Building Component
 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
						143821881
2546929	A12	Hip	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:29:48 2020	Page 2
		ID:ggMH	luYjvKTSN	ISqRK_pq	YByzXhju-1BtAS2QkL0de9uyChRxo_p7DA38IzcAj9SrJpB	yDGMH

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





⊢	-3-8 10-1-12	<u>16-0-0</u> <u>21-7-8</u>	24-0-0	30-0-8	35-8-8 40-0-0	
Plate Offsets (X,Y)	[2:0-0-13,0-1-4], [6:0-4-2,Edge], [8:1-4-	0,0-1-4], [12:0-0-13,0-1-4], [14:	0-8-0,Edge], [16:Ed	ge,0-1-8], [19:0-5-4,0-4-	12], [22:0-3-8,0-2-0]	
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.87 BC 0.84 WB 0.77 Matrix-AS	DEFL. in Vert(LL) -0.45 Vert(CT) -1.00 Horz(CT) 0.47	(loc) l/defl L/d 19-20 >999 240 19-20 >482 180 12 n/a n/a	PLATES GRIP MT20 197/144 MT20HS 148/108 MT18HS 197/144 Weight: 216 lb FT = 20%	
LUMBER- TOP CHORD 2x4 3 6-8: BOT CHORD 2x4 3 2-23, 19-2 WEBS 2x4 3 3-23,	SPF 1650F 1.5E *Except* 2x4 SPF No.2 SPF No.2 *Except* 12-14: 2x8 SP 2400F 2.0E, 21-23,14-15: : 2x6 SPF No.2 SPF No.2 *Except* 11-14: 2x6 SPF No.2	2x6 SPF 2100F 1.8E	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheath 2-0-0 oc purlins (2-1-8 r Rigid ceiling directly ap 1 Row at midpt	ing directly applied, except nax.): 6-8. plied. 3-22, 5-20, 8-17, 11-15	
REACTIONS. (s Max Max Max	REACTIONS. (size) 2=0-3-8, 12=0-3-8 Max Horz 2=-110(LC 17) Max Uplift 2=-184(LC 12), 12=-180(LC 13) Max Grav 2=2279(LC 1), 12=2279(LC 1)					
FORCES. (lb) - Ma TOP CHORD 2-3 8-9 3-2 BOT CHORD 2-2 WEBS 3-2 6-1 8-1	 Comp./Max. Ten All forces 250 (lb) o -7899/638, 3-5=-5354/402, 5-6=-4055/3 -5258/458, 9-11=-5317/361, 11-12=-793 3=-650/7311, 22-23=-629/6995, 20-22=-3 71=-1/314, 9-15=-520/191, 14-15=-424/7 3=-45/1142, 3-22=-2146/285, 5-22=-1/71. 9=-117/421, 17-19=-55/3157, 8-19=-127/ 5=-258/2401, 11-15=-2193/226, 11-14=-42 	less except when shown. 04, 6-7=-3772/319, 7-8=-3741/ 5/525 49/4891, 19-20=-160/3638, 7- 012, 12-14=-432/7345 2, 5-20=-1443/221, 6-20=-39/8 1893, 8-17=-1815/108, 15-17= /1206	315, 19=-487/119, 80, -85/2803,			
NOTES- 1) Unbalanced roof Ii 2) Wind: ASCE 7-16; MWFRS (envelop Interior(1) 20-2-15 end vertical left an DOL=1.60 3) Provide adequate 4) All plates are MT2 5) This truss has bee 6) * This truss has bee 6) * This truss has bee 7) Bearing at joint(s) capacity of bearing 8) Provide mechanic 2=184, 12=180. 9) This truss is desig referenced standa Continued on page 2	ve loads have been considered for this de Vult=115mph (3-second gust) Vasd=91n e) gable end zone and C-C Exterior(2E) -4 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15 d right exposed;C-C for members and for drainage to prevent water ponding. 0 plates unless otherwise indicated. n designed for a 10.0 psf bottom chord lin en designed for a live load of 20.0psf on bottom chord and any other members. 2, 12 considers parallel to grain value usi g surface. al connection (by others) of truss to bearin hed in accordance with the 2018 Internation rd ANSI/TPI 1.	asign. hph; TCDL=6.0psf; BCDL=6.0p 0-10-8 to 2-1-8, Interior(1) 2-1-4 Interior(1) 28-2-15 to 40-10-8 ces & MWFRS for reactions sh re load nonconcurrent with any the bottom chord in all areas w ng ANSI/TPI 1 angle to grain for ng plate capable of withstandin onal Residential Code sections	esf; h=15ft; Cat. II; E: 8 to 16-0-0, Exterior zone; cantilever left iown; Lumber DOL= other live loads. here a rectangle 3-6 ormula. Building des g 100 lb uplift at join 6 R502.11.1 and R80	xp C; Enclosed; (2R) 16-0-0 to 20-2-15, and right exposed ; 1.60 plate grip 6-0 tall by 2-0-0 wide signer should verify t(s) except (jt=lb) 02.10.2 and	NUMBER PE-2001018807 December 2,2020	
WARNING - Veri	y design parameters and READ NOTES ON THIS AN	D INCLUDED MITEK REFERENCE PAG	GE MII-7473 rev. 5/19/2020) BEFORE USE.		

NITEK* 16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
					14382	21882
2546929	A13	Hip	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:29:50 2020 Page	; 2
		ID:ggMHu	YjvKTSNS	qRK_pqYl	ByzXhju-zZ?xtkR_tdtMOB6aps_G3EDXltqnRWL0cmKQu4yDGM	١F

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.





4-3	-8 14-0-0	20-6-8	26-1-0	27-1-0	32-10-4	40-0-0	
Plate Offsets (X,Y)	-o	3-8,Edge], [19:0-4-8,0-3-12],	[23:0-8-0,Edge]	1-0-0	0-9-4	7-1-12	
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.86 BC 0.88 WB 0.96 Matrix-AS	DEFL. in Vert(LL) -0.36 Vert(CT) -0.83 Horz(CT) 0.36	(loc) l/defl 20 >999 21-23 >580 13 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 199 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 SP 4-6: 2x4 BOT CHORD 2x6 SP 13-18: 2 WEBS 2x4 SP SLIDER Right 2	F 1650F 1.5E *Except* 5 SPF No.2, 8-10: 2x4 SPF No.2, 1-4: 2x F 2100F 1.8E *Except* 2x4 SPF 1650F 1.5E F No.2 x4 SPF No.2 2-6-0	x6 SPF 2100F 1.8E	BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling dir	l sheathing dir (2-4-15 max.) ectly applied.	ectly applied, except): 6-8.	
KEACTIONS. (size) 2=0-3-8, 13=(0-3-8 + bearing block) (req. 0-3-10) Max Horz 2=99(LC 12) Max Uplift 2=-125(LC 12), 13=-121(LC 13) Max Grav 2=2285(LC 1), 13=2292(LC 1)							
FORCES. (lb) - Max. TOP CHORD 2-3=-1 8-9=- 8-9=- BOT CHORD 2-23= WEBS 3-23= 7-20= 8-19=	Comp./Max. Ten All forces 250 (lb) or 8252/384, 3-5=-7953/448, 5-6=-4596/29 4529/334, 9-11=-4648/298, 11-13=-4368 -389/7603, 21-23=-249/5272, 20-21=-1- 0/427, 5-23=-191/2464, 5-21=-1297/238 -635/167, 16-19=-172/3894, 11-19=-6/4 -113/949	less except when shown. 7, 6-7=-4497/335, 7-8=-4500 5/257 49/4135, 19-20=-135/4021, 1 9, 6-21=-23/957, 6-20=-71/67 73, 11-16=-646/110, 8-20=-7	D/336, 3-16=-168/3936 70, 75/822,				
 NOTES- 1) 2x4 SPF 1650F 1.5E Total fasteners. Bear 2) Unbalanced roof live 3) Wind: ASCE 7-16; W MWFRS (envelope) Interior(1) 18-2-15 to end vertical left and in DOL=1.60 4) Provide adequate dr: 5) All plates are MT20 p 6) This truss has been will fit between the b 8) Bearing at joint(s) 2 discription capacity of bearing s 9) Provide mechanical 2=125, 13=121. 10) This truss is design referenced standard 	bearing block 12" long at jt. 13 attacher ing is assumed to be SPF 1650F 1.5E. loads have been considered for this de ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) -0 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, right exposed;C-C for members and forc ainage to prevent water ponding. blates unless otherwise indicated. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on ti ottom chord and any other members. considers parallel to grain value using A urface. connection (by others) of truss to bearin ed in accordance with the 2018 Internat d ANSI/TPI 1.	d to front face with 2 rows of sign. ph; TCDL=6.0psf; BCDL=6.0 -10-8 to 2-1-8, Interior(1) 2-1 Interior(1) 30-2-15 to 40-10- es & MWFRS for reactions s e load nonconcurrent with an he bottom chord in all areas s NSI/TPI 1 angle to grain form g plate capable of withstandi ional Residential Code sectio	10d (0.131"x3") nails psf; h=15ft; Cat. II; E; -8 to 14-0-0, Exterior(8 zone; cantilever left shown; Lumber DOL= ny other live loads. where a rectangle 3-6 nula. Building designe ng 100 lb uplift at join ons R502.11.1 and R8	spaced 3" o.c. 8 xp C; Enclosed; 2R) 14-0-0 to 18 and right exposed 1.60 plate grip -0 tall by 2-0-0 w er should verify t(s) except (jt=lb 302.10.2 and	3-2-15, ed ; vide	STATE OF SSTATE OF SEV OF PE-200 Decem	MISSOLUTI MISSOLUTI MISSOLUTI MIRE MISSOLUTI M

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
					4	43821883
2546929	A14	Hip	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:29:51 2020 P	Page 2
		ID:ggMHuY	jvKTSNSc	RK_pqYB	yzXhju-RmZJ43Scex?D0LhnNZVVcSlibHAIAxm9rQ4zQWyD	GME

11) 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.

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





 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
						143821884
2546929	A15	HIP	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	6	.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:29:52 2020	Page 2
		ID:ggMH	luYjvKTSN	SqRK_pq	YByzXhju-vy7hIPTEPF74eVGzwH0k9flurhVNvPAI44pWyyyl	DGMD

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) 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.

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





4-	$\frac{3-8}{3-8}$ 10-0-0 14- 3-8 5-8-8 4-	-10-4 18-0-8 1 10-4 3-2-4 1	<u>19-10-4</u> 1-9-12 5-0-0	<u>26-1-0 28-10-8</u> 1-2-12 2-9-8	<u>30-0-0 33-7-4</u> 1-1-8 3-7-4	37-2-8	2-9-8
Plate Offsets (X,Y)	[2:0-7-11,0-2-0], [5:0-6-0,0-1-5], [10:0-5-	4,Edge], [11:0-10-6,Edge	e], [11:0-2-4,0-1-10], [12:0)-2-14,0-0-0], [25	5:0-8-8,Edge]		
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.84 BC 0.86 WB 0.42 Matrix-AS	DEFL. in Vert(LL) -0.60 Vert(CT) -1.32 Horz(CT) 0.55	(loc) l/defl 21 >801 21 >364 12 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 239 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 Sf 10-12: BOT CHORD 2x4 Sf 2-25: 2 12-13: WEBS 2x4 Sf 3-25: 2 OTHERS 2x8 Sf LBR SCAB 10-12	² F 1650F 1.5E *Except* 2x8 SP 2400F 2.0E ² F No.2 *Except* 2x8 SP 2400F 2.0E, 22-25,11-16,16-22: 2 2x6 SPF No.2 ² F No.2 *Except* 2x6 SPF No.2 ² 2400F 2.0E 2x8 SP 2400F 2.0E one side	2x6 SPF 2100F 1.8E	BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling dir	I sheathing direct (2-2-0 max.): 5-1 ectly applied.	ly applied, except I0.	
REACTIONS. (siz Max H Max U Max C	Reactions. (size) 2=0-3-8, 12=0-3-8 Max Horz 2=75(LC 16) Max Uplift 2=-171(LC 8), 12=-147(LC 9) Max Grav 2=2278(LC 1), 12=2198(LC 1)						
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-7684/534, 3-4=-7563/572, 4-5=-5460/469, 5-6=-6228/593, 6-7=-6665/633, 7-9=-6665/633, 9-10=-6255/595, 10-11=-5478/456, 11-12=-1095/98 3OT CHORD 2-25=-465/7086, 24-25=-399/5658, 23-24=-344/4997, 21-23=-489/6226, 20-21=-486/6255, 19-20=-345/5165, 15-19=-347/5134, 14-15=-345/5165, 11-14=-349/5153, 11-13=-29/556 WEBS 5-24=-23/875, 10-14=0/354, 7-21=-443/120, 6-21=-61/635, 6-23=-885/169, 5-23=-188/1613, 9-21=-53/594, 9-20=-777/157, 10-20=-179/1454, 4-24=-800/135, 4-25=-135/1694							
 NOTES- 1) Attached 11-1-0 scab 10 to 12, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-3 from end at joint 10, nail 2 row(s) at 4" o.c. for 2-0-0; starting at 6-6-11 from end at joint 10, nail 2 row(s) at 2" o.c. for 4-3-0. 2) Unbalanced roof live loads have been considered for this design. 3) 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(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 30-0-0, Exterior(2R) 30-0-0 to 34-2-15, Interior(1) 34-2-15 to 39-11-12 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 4) Provide adequate drainage to prevent water ponding. 5) All plates are MT20 plates unless otherwise indicated. 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 7) * 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) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. Continued on page 2 							
WARNING - Verify Design valid for use of a truss system. Befor building design. Brac is always required for fabrication, storage, of Safety Information	design parameters and READ NOTES ON THIS AND nly with MITek® connectors. This design is based o e use, the building designer must verify the applicab sing indicated is to prevent buckling of individual trus stability and to prevent collapse with possible perso belivery, erection and bracing of trusses and truss sy available from Truss Plate Institute, 2670 Crain Hid	INCLUDED MITEK REFERENC nly upon parameters shown, and ility of design parameters and p s web and/or chord members or nal injury and property damage. stems, see <u>ANSUPT</u> way, Suite 203 Waldorf, MD 20	CE PAGE MII-7473 rev. 5/19/2020 di si for an individual building cor roperly incorporate this design in ny. Additional temporary and pe . For general guidance regardin I Quality Criteria, DSB-89 and I 6001	BEFORE USE. nponent, not to the overall ermanent bracing g the BCSI Building Com	ponent	16023 Swingley Chesterfield, M	/ Ridge Rd D 63017

fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component** Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside
25 40000					143821885
2546929	A16	Нір	1	1	
					Job Reference (optional)
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		3.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:29:54 2020 Page 2
		ID:ggMHu	YjvKTSNS	qRK_pqYI	ByzXhju-sLFRi5UVxsNotpPL2i2CE4NDDUCPNQybXNId1ryDGMB

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=171, 12=147.
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) 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. 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





TOP CHORD 2-34=8331/686, 3-34=-8272/689, 3-4=-6429/587, 4-35=-8353/844, 5-35=-8355/843, 5-6=-9200/931, 6-7=-9200/931, 7-8=-9200/931, 8-36=-8479/860, 9-36=-8479/860, 9-32=-6315/593, 10-32=-6382/581, 10-37=-7118/624, 37-38=-7143/616, 11-38=-7159/615, 11-33=-1275/122, 12-33=-1280/103 2-25=-606/7752, 24-25=-57777303, 23-24=-484/5943, 22-23=-484/5943, 21-22=-763/8353.

- 20-21=-773/8479, 19-20=-494/6120, 16-19=-484/5828, 15-16=-484/5828, 14-15=-494/6120, 11-14=-558/6990, 17-18=-9/292, 11-13=-45/701 WEBS 3-25=-75/1375, 3-24=-1375/148, 4-24=0/812, 4-22=-311/2719, 5-22=-965/199,
- 5-21=-105/1012, 6-21=-494/130, 9-14=0/540, 8-20=-871/186, 8-21=-85/881, 9-20=-308/2635, 10-14=-971/108

NOTES-

1) Attached 8-11-0 scab 9 to 12, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-3 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 2-1-12 from end at joint 9, nail 2 row(s) at 2" o.c. for 6-6-0.

- 2) Unbalanced roof live loads have been considered for this design.
- 3) 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 2-4-13, Interior(1) 2-4-13 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 32-0-0, Exterior(2R) 32-0-0 to 36-2-15, Interior(1) 36-2-15 to 39-11-12 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
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * 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.

 Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside
					143821886
2546929	A17	Hip	1	1	
					Job Reference (optional)
Builders First Source, Valley Center	er, KS 67147				8.240 s Apr 4 2020 MiTek Industries, Inc. Wed Dec 2 08:47:52 2020 Page 2
		ID:ggMHuY	jvKTSNSq	RK_pqYB	/zXhju-oYnKCHsS?UBWu2Z4i7aCOAYeemFXFP8biRH7ARyD2vb

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2 and 169 lb uplift at joint 12.
- 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) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
2546929	Δ18		1	_	I	43821887
2040020	Alo			2	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:30:00 2020 F	Page 2

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-gUcjz8ZGWi8xbktVOy9cTLdErvEMn3iUvJIxFVyDGM5

- 9) * 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.
- 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.
 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=375, 22=984.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 473 lb down and 105 lb up at 6-0-0, 116 lb down and 45 lb up at 6-0-12, 116 lb down and 45 lb up at 8-0-12, 116 lb down and 45 lb up at 10-0-12, 116 lb down and 45 lb up at 12-0-12, 116 lb down and 45 lb up at 14-0-12, 116 lb down and 45 lb up at 16-0-12, 116 lb down and 45 lb up at 18-0-12, 116 lb down and 45 lb up at 20-0-0, 116 lb down and 45 lb up at 21-11-4, 116 lb down and 45 lb up at 23-11-4, and 116 lb down and 45 lb up at 26-2-12, and 611 lb down and 155 lb up at 33-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

Uniform Loads (plf)

- Vert: 1-4=-90, 4-11=-90, 11-12=-90, 12-15=-90, 28-29=-20, 21-28=-20, 19-22=-20, 12-18=-20, 16-32=-20 Concentrated Loads (lb)
 - Vert: 4=-84(F) 8=-84(F) 26=-116 9=-84(F) 21=-116 27=-589(F=-473) 24=-116 6=-84(F) 11=-116(F) 17=-611(F) 10=-116(F) 36=-84(F) 37=-84(F) 38=-84(F) 3 39=-84(F) 40=-84(F) 41=-84(F) 42=-84(F) 43=-90(F) 44=-116(F) 45=-116 46=-116 47=-116 48=-116 49=-116 50=-116 51=-116 52=-111(F) 54=-85(F) 55=-85(F)





H	<u>6-0-0</u> 6-0-0			<u>12-0-0</u> 6-0-0	
Plate Offsets (X,Y)	[2:0-1-12,0-0-4], [6:0-2-3,0-0-4]				
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.38 BC 0.36 WB 0.06 Matrix-AS	DEFL. in Vert(LL) -0.04 Vert(CT) -0.07 Horz(CT) 0.02	(loc) l/defl L/d 8-15 >999 240 8-15 >999 180 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 40 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF	PF No.2		BRACING- TOP CHORD	Structural wood sheathing dir	ectly applied.

TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=45(LC 12) Max Uplift 2=-64(LC 12), 6=-64(LC 13)

Max Grav 2=739(LC 1), 6=739(LC 1)

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

Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

TOP CHORD 2-4=-863/228, 4-6=-863/228

2x4 SPF No.2

2x4 SPF No.2

BOT CHORD 2-8=-112/786, 6-8=-112/786 4-8=0/257

WEBS

BOT CHORD

WEBS

SLIDER

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 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * 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) 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.



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



REACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=-31(LC 9) Max Uplift 2=-159(LC 8), 7=-159(LC 9) Max Grav 2=1131(LC 1), 7=1131(LC 1)

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

TOP CHORD 2-4=-1842/278, 4-5=-1743/248, 5-7=-1842/278

BOT CHORD 2-11=-233/1682, 10-11=-233/1663, 9-10=-208/1663, 7-9=-207/1682

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=159, 7=159.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 290 lb down and 66 lb up at 4-0-0, and 290 lb down and 66 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-90, 4-5=-90, 5-8=-90, 12-16=-20

Concentrated Loads (lb)

Vert: 4=-60(F) 5=-60(F) 11=-290(F) 9=-290(F) 10=-27(F) 20=-60(F)

OF MISS TE SCOTT M. SEVIER NUMBER NOR PL STONAL PE-2001018807 E

December 2,2020





				2-8-7
	(psf) 25.0	SPACING- 2-0-0 Plate Grip DOI 1 15	CSI. TC 0.13	DEFL. in (loc) I/defl L/d PLATES GRIP
TCDL	20.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 7 >999 180
BCDL	0.0 × 10.0	Code IRC2018/TPI2014	Matrix-MP	Horz(C1) 0.00 3 n/a n/a Weight: 10 lb FT = 20%

LUMBER-

TOP CHORD2x4 SPF No.2BOT CHORD2x6 SPF No.2

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical

Max Horz 2=46(LC 8)

Max Uplift 3=-25(LC 12), 2=-65(LC 8)

Max Grav 3=83(LC 1), 2=283(LC 1), 4=54(LC 3)

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

NOTES-

 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

exposed; C-C for memoers and forces & MVVFRS for reactions snown; Lumber DOL=1.60 plate grip DOL=1.0
 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-8-7 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.



	1	2-6-5		l
LOADING (psf) SPACING- 2-0 TCLL 25.0 Plate Grip DOL 1. TCDL 20.0 Lumber DOL 1. BCLL 0.0 * Rep Stress Incr Y RCD 10.0 Code_ RC2018/TPI201	0 CSI. 5 TC 0.13 5 BC 0.03 S WB 0.00 4 Matrix-MP	DEFL. in (loc) Vert(LL) -0.00 7 Vert(CT) -0.00 7 Horz(CT) 0.00 3	l/defi L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 197/144 Weight: 9 lb ET = 20%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x4 SPF No.2BOT CHORD2x6 SPF No.2

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical

Max Horz 2=44(LC 8)

Max Uplift 3=-23(LC 12), 2=-65(LC 8) Max Grav 3=76(LC 1), 2=275(LC 1), 4=50(LC 3)

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

NOTES-

 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) 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.



Structural wood sheathing directly applied or 2-6-5 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing





TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. 2=0-4-9, 4=Mechanical (size)

Max Horz 2=43(LC 4) Max Uplift 2=-61(LC 21), 4=-37(LC 5) Max Grav 2=283(LC 1), 4=150(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
- Vert: 1-3=-90, 4-5=-20
- Concentrated Loads (lb) Vert: 4=-25(B)



Structural wood sheathing directly applied or 2-8-7 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing





		2-8-12 2-8-12				5-1-4 2-4-9		
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.16 BC 0.29 WB 0.02 Matrix-MP	DEFL. in Vert(LL) -0.02 Vert(CT) -0.04 Horz(CT) 0.01	(loc) 6 6 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 18 lb	GRIP 197/144 FT = 20%
LUMBER-		11	BRACING-					

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2

REACTIONS. 4=Mechanical, 2=0-4-6, 5=Mechanical (size) Max Horz 2=69(LC 21) Max Uplift 4=-30(LC 8), 2=-76(LC 4), 5=-9(LC 8) Max Grav 4=115(LC 1), 2=416(LC 1), 5=153(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; 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) 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) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf) Vert: 1-4=-90, 5-7=-20 Concentrated Loads (Ib) Vert: 6=-12(F=-9, B=-2)



Structural wood sheathing directly applied or 5-1-4 oc purlins.

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

December 2,2020





				5-8-11
	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.03 6 >999 240 MT20 197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.06 6 >999 180
BCLL	0.0 *	Rep Stress Incr NO	WB 0.03	Horz(CT) 0.01 4 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP	Weight: 19 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2

REACTIONS. (size) 4=Mechanical, 2=0-4-6, 5=Mechanical Max Horz 2=76(LC 21) Max Uplift 4=-36(LC 8), 2=-78(LC 4), 5=-8(LC 8) Max Grav 4=136(LC 1), 2=447(LC 1), 5=166(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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; 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) 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-4=-90, 5-7=-20 Concentrated Loads (Ib) Vert: 6=-9(F=1, B=-9)



Structural wood sheathing directly applied or 5-8-11 oc purlins.

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




6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15. Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-90, 3-5=-90, 5-6=-40, 9-10=-20, 3-7=-20 Concentrated Loads (lb) Vert: 15=2(F=1, B=1) 16=-147(F=-74, B=-74)

OFFESSIONAL PE-2001018807 E December 2,2020

SCOTT M.

SEVIER

NUMBER



🔺 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid to use only design parameters and READ NOTES ON THIS AND INCLUDED WITH REPORT PAGE MIT 475 164 (2010) and 164 (20
 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



AWARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MIT-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITER® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verity the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designe. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

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

REACTIONS. 3=Mechanical, 2=0-3-8, 4=Mechanical (size)

Max Horz 2=42(LC 12)

Max Uplift 3=-22(LC 12), 2=-23(LC 8) Max Grav 3=63(LC 1), 2=205(LC 1), 4=42(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.



Structural wood sheathing directly applied or 2-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



LUMBER-



Design valid for use only with MITeKe connectors. This design is based only upper parameters show, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters show, and is for an individual building component, not building design. Bracing indicated is to prevent buckling of individual truss we band/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent uclasses with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway. Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside	
						43821899
2546929	J2	Half Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	3.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:30:41 2020 I	Page 2

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 17:30:41 2020 Page 2 ID:ggMHuYjvKTSNSqRK_pqYByzXhju-_NaDaA3zsII701VOI3ODe?qM8RPeulFWLBBcAcyDGLS

LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 1-3=-90, 3-4=-90, 5-7=-20 Concentrated Loads (lb) Vert: 6=-18(F) 11=-9(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



December 2,2020



Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITTPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MITEK[®] 16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside
					143821901
2546929	J4	Roof Special Girder	1	1	
					Job Reference (optional)
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	6	8.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:31:30 2020 Page 2

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-2p2kswfjKMTAOZlogsmi7KMpUB7DtxEkcJYiOHyDGKh

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 7=-25(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria**, **DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





1 1 1 1 1 1 1	DED
	3EK-

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

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

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical Max Horz 1=28(LC 12) Max Uplift 1=-2(LC 12), 2=-21(LC 12), 3=-1(LC 12) Max Grav 1=102(LC 1), 2=62(LC 1), 3=45(LC 3)

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

NOTES-

 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) 1, 2, 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Plate Offs	ets (X,Y)	[2:0-1-12,0-0-12], [2:0-2-	12,0-1-8], [5:0	-0-0,0-1-12]							1	
	(psf)	SPACING-	2-0-0	CSI.	0.24	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCDL	20.0	Lumber DOL	1.15	BC	0.24 0.13	Vert(CT)	-0.01	4-5 4-5	>999	240 180	MIT20	197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TF	YES PI2014	WB Matri	0.00 x-AS	Horz(CT)	0.01	3	n/a	n/a	Weight: 11 lb	FT = 20%

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8

Max Horz 5=66(LC 12) Max Uplift 3=-52(LC 12), 5=-28(LC 12)

Max Grav 3=150(LC 1), 4=73(LC 3), 5=313(LC 1)

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

TOP CHORD 2-5=-284/150

NOTES-

- 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) 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) 3, 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) 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





			3-10-8		1		
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.21 BC 0.11 WB 0.00 Matrix-R	DEFL. in Vert(LL) -0.01 Vert(CT) -0.01 Horz(CT) 0.00	(loc) l/defl 3-4 >999 3-4 >999 3 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 12 lb	GRIP 197/144 FT = 20%
LUMBER-			BRACING-				

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. 4=0-2-0, 3=Mechanical (size) Max Horz 4=74(LC 9) Max Uplift 4=-14(LC 12), 3=-31(LC 12)

Max Grav 4=197(LC 1), 3=197(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 Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 3-8-12 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

4) Gable studs spaced at 1-4-0 oc.

- 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.
- Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 3.
- 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.



Structural wood sheathing directly applied or 3-10-8 oc purlins,

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

except end verticals.

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek

Job	Truss	Truss Type	Qty	Ply	Summit/13 Woodside
					143821905
2546929	J8	Roof Special Girder	1	1	
					Job Reference (optional)
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	8.240 s Ma	r 9 2020 MiTek Industries, Inc. Tue Dec 1 17:31:38 2020 Page 2

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-pLXmXflkRpU1LoML8XwaS0hARPsilYCvSZU7gpyDGKZ

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 8=-131(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria**, **DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





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

TOP CHORD BOT CHORD

Structural wood sheathing directly applied, except 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=69(LC 12) Max Uplift 4=-24(LC 8), 2=-40(LC 12), 5=-12(LC 12) Max Grav 4=87(LC 1), 2=411(LC 1), 5=234(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 4-0-0, Exterior(2E) 4-0-0 to 5-11-4 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

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) 4, 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) 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.



🗼 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





		F			6-0-0						
LOADING TCLL	(psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC	0.44	DEFL. Vert(LL)	in 0.09	(loc) 6-7	l/defl >790	L/d 240	PLATES MT20	GRIP 197/144
BCLL BCDL	20.0 0.0 * 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	BC (BC (WB (Matrix-)	0.52 0.02 AS	Vert(CT) Horz(CT)	-0.17 0.04	6-7 4	>402 n/a	180 n/a	Weight: 18 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2

REACTIONS. 4=Mechanical, 5=Mechanical, 7=0-3-8 (size) Max Horz 7=97(LC 12) Max Uplift 4=-45(LC 12), 5=-15(LC 12), 7=-33(LC 12) Max Grav 4=180(LC 1), 5=131(LC 1), 7=419(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-7=-319/131

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 5-11-4 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) 4, 5, 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.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



December 2,2020



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **SAUSTPIT Quality Criteria**, DSB-89 and BCSI Building Component **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



REACTIONS. 1=0-3-8, 2=Mechanical, 3=Mechanical (size)

Max Horz 1=27(LC 33)

Max Uplift 2=-20(LC 33), 3=-1(LC 12) Max Grav 1=266(LC 1), 2=58(LC 1), 3=43(LC 3)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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.

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, 3.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 169 lb down and 47 lb up at 0-0-0 on top 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, 3-4=-20

- Concentrated Loads (lb) Vert: 1=-169



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





BRACING-TOP CHORD

BOT CHORD

NOTES-

BCDL

LUMBER-

BOT CHORD

REACTIONS.

10.0

TOP CHORD 2x4 SPF No.2

2x6 SPF No.2

(size)

Max Horz 1=54(LC 12)

Max Uplift 1=-12(LC 12), 2=-43(LC 12) Max Grav 1=217(LC 1), 2=135(LC 1), 3=93(LC 3) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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 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

Matrix-AS

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Code IRC2018/TPI2014

1=0-3-8, 2=Mechanical, 3=Mechanical

- 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, 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.



Weight: 12 lb

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

FT = 20%

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





		•		4-0-0					1	
Plate Offsets (X,Y)	[2:0-2-0,0-4-11]									
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 *	SPACING- 2-0- Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr YE	0 CSI. 5 TC 5 BC S WB	0.23 0.20 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.01	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix	x-AS	· · ·					Weight: 12 lb	FT = 20%
LUMBER-				BRACING-						

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

TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 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. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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.



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





LOADING TCLL TCDL	5 (psf) 25.0 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Dop Strate Lar	CSI. TC 0.07 BC 0.03	DEFL. Vert(LL) Vert(CT)	in -0.00 -0.00	(loc) 7 7	l/defl >999 >999	L/d 240 180	PLATES MT20	GRIP 197/144
BCLL BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP	Horz(CT)	0.00	3	n/a	n/a	Weight: 8 lb	FT = 20%

TOP CHORD2x4 SPF No.2BOT CHORD2x6 SPF No.2

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=43(LC 8)

Max Uplift 3=-22(LC 12), 2=-39(LC 8) Max Grav 3=67(LC 1), 2=214(LC 1), 4=48(LC 3)

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

NOTES-

 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-2-14 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.



BRACING-

TOP CHORD

BOT CHORD

	MDED	
	NBER	-

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=36(LC 12) Max Uplift 3=-17(LC 12), 2=-24(LC 8)

Max Grav 3=48(LC 1), 2=188(LC 1), 4=32(LC 3)

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

NOTES-

 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.



Structural wood sheathing directly applied or 1-7-6 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





						400						
Plate Offs	ets (X,Y)	[2:0-2-0,0-4-11]										
LOADING TCLL TCDL BCLL	(psf) 25.0 20.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.30 0.25 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.02 -0.05 0.01	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL	10.0	Code IRC2018/TF	12014	Matrix	k-AS						Weight: 13 lb	FT = 20%
LUMBER-	RD 2x4 SI	PF No.2		1		BRACING- TOP CHOF	RD.	Structu	ral wood	sheathing di	rectly applied.	

BOT CHORD

Rigid ceiling directly applied.

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=72(LC 8)

Max Uplift 3=-50(LC 12), 2=-41(LC 8) Max Grav 3=166(LC 1), 2=328(LC 1), 4=86(LC 3)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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 4-4-12 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) 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.



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITTPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

LUMBER-

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

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * 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.



Structural wood sheathing directly applied or 3-10-15 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=70(LC 12) Max Uplift 4=-25(LC 12), 2=-27(LC 12), 5=-13(LC 12) Max Grav 4=101(LC 1), 2=299(LC 1), 5=102(LC 1)



				1-10-13	
	G (psf)	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: 6 lb FT = 20%

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. 3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=35(LC 12) Max Uplift 3=-23(LC 12), 5=-28(LC 8)

Max Grav 3=57(LC 1), 4=31(LC 3), 5=215(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) 3, 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.



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE ARXING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MILER KEERENCE PAGE MIL-7475 fev. or 19/2/2/0/ DEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TCDL BCLL BCDL	20.0 0.0 * 10.0	Lumber DOL Rep Stress Incr Code IRC2018/TP	1.15 YES 12014	BC WB Matri	0.50 0.00 ix-AS	Vert(CT) Horz(CT)	-0.15 0.06	5-6 5	>474 n/a	180 n/a
LUMBER TOP CHO BOT CHO	8- ORD 2x4 SP ORD 2x4 SP	2F No.2 2F No.2		·		BRACING- TOP CHOF BOT CHOF	RD RD	Structu Rigid c	iral wood eiling dire	sheatl

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

Weight: 17 lb

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 8=0-3-8

Max Horz 8=97(LC 12) Max Uplift 4=-59(LC 12), 5=-1(LC 12), 8=-33(LC 12)

Max Grav 4=206(LC 1), 5=111(LC 3), 8=419(LC 1)

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

TOP CHORD 2-8=-397/151, 2-3=-351/50

2x4 SPF No.2

BOT CHORD 7-8=-149/253

NOTES-

WEBS

 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 5-11-4 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) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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.



FT = 20%



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria**, DSB-89 and BCSI Building Component **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.51 BC 0.44 WB 0.02 Matrix-AS	DEFL. in Vert(LL) 0.08 Vert(CT) -0.16 Horz(CT) 0.04	(loc) 6-7 6-7 4	l/defl >832 >427 n/a	L/d 240 180 n/a	PLATES C MT20 1 Weight: 17 lb	GRIP 97/144 FT = 20%
			BRACING					

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8

Max Horz 7=96(LC 12) Max Uplift 4=-35(LC 12), 5=-25(LC 12), 7=-33(LC 12)

Max Grav 4=174(LC 1), 5=136(LC 1), 7=419(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-7=-337/141

NOTES-

- 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 5-11-4 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) 4, 5, 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.



16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.24 BC 0.13 WB 0.00 Matrix-MR	DEFL. ir Vert(LL) -0.01 Vert(CT) -0.02 Horz(CT) 0.01	n (loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 11 lb	GRIP 197/144 FT = 20%
--	---	--	---	----------------------------	-------------------------------	--------------------------	---------------------------------	------------------------------------

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-10-15 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. 3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=64(LC 12) Max Uplift 3=-51(LC 12), 5=-27(LC 12)

Max Grav 3=145(LC 1), 4=72(LC 3), 5=308(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-280/148

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 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * 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) 3, 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.



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE ARXING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MILER KEERENCE PAGE MIL-7475 fev. or 19/2/2/0/ DEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





LOADING TCLL TCDL BCLL BCDI	(psf) 25.0 20.0 0.0 * 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code_IRC2018/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC BC WB Matri	0.09 0.02 0.00 x-MR	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 -0.00	(loc) 5 5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 6 lb	GRIP 197/144 FT = 20%	
DODE	10.0		12014	Wath							Weight. 0 lb	11 = 2070	

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

BOT CHORD

BRACING-

TOP CHORD

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=35(LC 12) Max Uplift 3=-24(LC 12), 5=-27(LC 8)

Max Grav 3=57(LC 1), 4=31(LC 3), 5=215(LC 1)

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

NOTES-

 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) 3, 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





	184	DE	D
LU	ואונ	DE	R -

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 2-0-5 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing

BOT CHORD

3=Mechanical, 4=Mechanical, 5=0-3-8 REACTIONS. (size) Max Horz 5=36(LC 12) Max Uplift 3=-24(LC 12), 5=-27(LC 8)

Max Grav 3=60(LC 1), 4=32(LC 3), 5=218(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) 3, 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.



🗼 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





AWARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MIT-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





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

TOP CHORD

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) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 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) All plates are 2x4 MT20 unless otherwise indicated.

1-2=-262/174

- 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 except (jt=lb) 10=112, 11=115, 12=106, 16=113, 15=114, 14=108.

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.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designe. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

¹⁾ Unbalanced roof live loads have been considered for this design.



December 2,2020



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designe. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2OTHERS2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-9. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-10-14.

(lb) - Max Horz 1=215(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 14, 13, 11, 10 except 16=-138(LC 12), 15=-104(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11 except 16=260(LC 19), 10=309(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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) 0-3-12 to 3-3-12, Interior(1) 3-3-12 to 5-1-14, Exterior(2R) 5-1-14 to 8-0-0, Interior(1) 8-0-0 to 14-7-15 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) Provide adequate drainage to prevent water ponding.

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) 1, 9, 12, 14, 13, 11, 10 except (jt=lb) 16=138, 15=104.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 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.



ent 16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITP11** Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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

TOP CHORD

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) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.

1-2=-262/174

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 except (jt=lb) 10=112, 11=115, 12=106, 16=113, 15=114, 14=108.

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.



16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designe. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601


B) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except (jt=lb) 27=122, 28=107, 17=122, 16=108.

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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designe. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSIVTPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

NITEK 16023 Swingley Ridge Rd Chesterfield, MO 63017



Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-126(LC 12), 6=-126(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 19), 6=261(LC 20)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 3-10-6, Exterior(2R) 3-10-6 to 6-10-6, Interior(1) 6-10-6 to 7-4-12 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) 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 except (jt=lb) 8=126, 6=126.

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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek@ connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



December 2,2020





🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



