

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

Re: 2630107 Summit/41 Woodside Ridge/MO

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 02/17/2021

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: I44670969 thru I44671034

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

Missouri COA: Engineering 001193



February 4,2021

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

,Engineer

Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MC)
2630107	A1	Roof Special	1	1		144670969
Builders FirstSource (Valley	(Center) Valley Center, K	S - 67147		3 240 s Ma	Job Reference (optional)	Thu Feb. 4 08:55:35 2021 Page 1
		12.8.0 14.6.1 20.0.0	ID:clow4Ylgt	7iox0?ly?	5BCcz33zm-rfJl3tfqziBQQE87nK	RpRRrx90uRB_My7M2k?dzoZgM
0-10	-8 3-3-8 3-4-0 2-4-11	4-7-13 0-10-1 5-5-15	6-7-14		6-7-14 6-8-3	0-10-8
			5x8 =			Scale = 1:86.1
	3x4	6.00 12 4x4 = 37 6	7 38 28	3x4 = 8	S 3x8 ≈	
10-7-4	3x8 = 5 4x8 = 4	16-3-0			9 2x4 1/ 10	39
* 1 ²			17			
	27 25	24 18 22 ²⁰ 21	16 ¹⁵		14	
	8x12 = 10x20 MT20HS = 4.00 12 3x4 2x4 4:00 4:00 3x4 3x4	5x8 = 2x4 2x4 2x4 3x4 x8 = 4x4 = 4x4 = 2x4 3x4 2x4 3x4 3x4	6x6 3x8 = 7x8 =		4x12 =	6x8 =
	3-3-8 6-7-8 9-0-3	10-1-12 13-8-0 14-6-1 20-1-10	30-0-10	0	40-0-0	
Plate Offsets (X,Y) [2:	<u>3-3-8</u> <u>3-4-0</u> <u>2-4-11</u> 0-2-0,Edge], [12:Edge,0-2-4],	<u>1-1-9 3-6-4 0-10-1 5-7-9</u> [14:0-5-7,0-1-8], [17:0-2-4,0-5-4],	9-11-0 , [24:0-3-8,0-2-0], [27:0-7) '-12,0-0-2	<u> </u>	
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 0.85 WB 0.93 Matrix-AS	DEFL.inVert(LL)-0.31Vert(CT)-0.73Horz(CT)0.36	(loc) 17-18 14-16 12	l/defi L/d PL >999 240 MT >660 180 MT n/a n/a We	ATES GRIP '20 197/144 '20HS 148/108 eight: 215 lb FT = 20%
LUMBER-			BRACING-			
TOP CHORD 2x4 SPF 7-9: 2x4 S 2x4 SPF 1 BOT CHORD 2x4 SPF 1 2-27,20-2 12-15: 2x WEBS 2x4 SPF 1	1650F 1.5E *Except* SPF No.2 No.2 *Except* 7: 2x6 SPF 2100F 1.8E, 17-20 4 SP 2400F 2.0E No.2 *Except*): 2x6 SPF No.2	TOP CHORD BOT CHORD WEBS JOINTS	Structura Rigid ce 1 Row a 1 Brace	al wood sheathing directly appli iling directly applied. t midpt 8-17, 6-17, at Jt(s): 23	ied. 3-24
3-27: 2x6 WEDGE Left: 2x4 SP No.3 SLIDER Right 2x4	SPF No.2 SPF No.2 2-0-0					
REACTIONS. (size) Max Horz Max Uplif Max Grav	2=0-3-8, 12=0-3-8 : 2=186(LC 12) t 2=-317(LC 12), 12=-317(LC v 2=2270(LC 1), 12=2284(LC	13) 1)				
FORCES. (lb) - Max. Co TOP CHORD 2-3=-72 8-10=-3 BOT CHORD 2-27=-1	mp./Max. Ten All forces 250 59/1125, 3-5=-4737/665, 5-6= 519/503, 10-12=-3827/526 152/6510, 26-27=-1125/6388) (lb) or less except when shown. -3646/514, 6-7=-2727/460, 7-8=- 24-26=-1114/6283, 23-24=-619/4	2815/463, 4081			
WEBS 3-27=-1 6-17=-1	619/4081, 18-19=-630/4187, 1 365/3313 92/1319, 14-17=-262/2658, 8- 212/312, 6-18=-118/849, 5-18	7-18=-376/3153, 7-17=-259/1876 17=-859/312, 8-14=-54/340, 10-1 =-1249/307, 5-24=-68/627, 3-24=	6, 14-16=0/317, 14=-428/218, =-2236/504			
 NOTES- 1) Unbalanced roof live lo 2) Wind: ASCE 7-16; Vult MWFRS (envelope) ga Interior(1) 23-1-9 to 40- & MWFRS for reactions 3) All plates are MT20 pla 4) The Fabrication Tolerai 5) This truss has been de 6) Bearing at joint(s) 2 con capacity of bearing sur 7) Provide mechanical con 2=317, 12=317. 8) This truss is designed i referenced standard At Continued on page 2 	ads have been considered for =115mph (3-second gust) Vas ble end zone and C-C Exterio 10-8 zone; cantilever left and s shown; Lumber DOL=1.60 p tes unless otherwise indicated nce at joint 27 = 8% signed for a 10.0 psf bottom c nsiders parallel to grain value face. nnection (by others) of truss to n accordance with the 2018 Ir NSI/TPI 1.	this design. ad=91mph; TCDL=6.0psf; BCDL= r(2E) -0-10-8 to 2-1-8, Interior(1) ; right exposed ; end vertical left at late grip DOL=1.60 i. hord live load nonconcurrent with using ANSI/TPI 1 angle to grain for b bearing plate capable of withstan iternational Residential Code sec	4.2psf; h=25ft; Cat. II; E; 2-1-8 to 20-1-9, Exterior(nd right exposed;C-C for any other live loads. formula. Building designe anding 100 lb uplift at join ations R502.11.1 and R8(kp C; Enc (2R) 20-1 member er should t(s) excep 02.10.2 au	losed; -9 to 23-1-9, s and forces verify bt (jt=lb) nd	PE-2001018807 February 4,2021
WARNING - Verify desi Design valid for use only a truss system. Before us building design. Bracing is always required for the	gn parameters and READ NOTES ON with MiTek® connectors. This design i e, the building designer must verify the ndicated is to prevent buckling of indi- litut and to prevent outlease with second	THIS AND INCLUDED MITEK REFERENCE s based only upon parameters shown, and e applicability of design parameters and pri ridual truss web and/or chord members on hile personal injury and present desease.	E PAGE MII-7473 rev. 5/19/2020 d is for an individual building cor roperly incorporate this design in ly. Additional temporary and pu- For general duidance reacting	BEFORE U mponent, no nto the over ermanent br	ISE. of all acing	

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

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Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO		
					14	14670969	
2630107	A1	Roof Special	1	1			
					Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		S - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:55:35 2021 Page 2				
ID:clow4Ylqf7iox0?ly?5BCcz33zm-ffJl3tfqziBQQE87nKRpRRrx90uRB_My7M2k?dzoZqM						zoZqM	

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.





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

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F	<u>3-3-8 6-7-8 10-1-12 10-8r4 13</u> 3-3-8 3-4-0 3-6-4 0-6-8 2-1	-8-0 14-3 ₇ 4 18-0-0 22-0- 1-12 0-7-4 3-8-12 4-0-(0 29-4-4	36-8-8	40-0-0			
Plate Offsets (X,Y)	[2:0-2-0,Edge], [4:0-4-0,Edge], [9:0-4-0	Edge], [11:0-2-0,Edge], [14:0	-3-8,0-2-0], [25:0-2-0),0-0-0], [26:0-7-12,0-0-2]				
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 0.79 BC 0.93 WB 0.67 Matrix-AS	DEFL. in Vert(LL) -0.36 Vert(CT) -0.79 Horz(CT) 0.50	(loc) l/defl L/d 17 >999 240 13-14 >609 180 11 n/a n/a	PLATES GRIP MT20 197/144 MT20HS 148/108 MT18HS 197/144 Weight: 213 lb FT = 20%			
LUMBER- TOP CHORD 2x4 SF 6-7: 2x BOT CHORD 2x6 SF 24-25, WEBS 2x4 SF 3-26,10 WEDGE Left: 2x4 SP No.3	PF 1650F 1.5E *Except* 4 SPF No.2 PF 2100F 1.8E *Except* 20-24,18-20: 2x4 SPF No.2, 16-19: 2x6 PF No.2 *Except* 0-13: 2x6 SPF No.2	SPF No.2	BRACING- TOP CHORD BOT CHORD WEBS JOINTS	Structural wood sheathing di 2-0-0 oc purlins (3-3-4 max.) Rigid ceiling directly applied. 1 Row at midpt 1 Brace at Jt(s): 22	irectly applied, except : 6-7. 3-22, 6-15, 8-15, 10-14, 5-17			
REACTIONS. (size) 2=0-3-8, 11=0-3-8 Max Horz 2=165(LC 12) Max Uplift 2=-321(LC 12), 11=-321(LC 13) Max Grav 2=2279(LC 1), 11=2279(LC 1)								
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-7344/1131, 3-5=-4449/613, 5-6=-3185/487, 6-7=-2693/479, 7-8=-3183/485, 8-10=-4503/577, 10-11=-7544/978 BOT CHORD 2-26=-1140/6597, 25-26=-1117/6479, 23-25=-1092/6337, 22-23=-1092/6337, 18-22=-519/3763, 17-18=-544/3907, 15-17=-235/2694, 14-15=-379/3957, 13-14=-793/6332, 11-13=-830/6787 WEBS 3-26=-177/1354, 3-22=-2597/579, 6-17=-148/875, 6-15=-251/245, 7-15=-121/863, 8-15=-1475/351, 8-14=-18/678, 10-14=-2397/450, 10-13=-105/1431, 5-17=-1419/364.								
 b) the finites is the finites is the finite construction for the 200 Horr, of the finites of the finit								
WARNING - Verify Design valid for use o a truss system. Befor building design. Brac is always required for fabrication, storage, d Safety Information	design parameters and READ NOTES ON THIS ANI nly with MITek® connectors. This design is based e use, the building designer must verify the applicat- ing indicated is to prevent buckling of individual tru- stability and to prevent collapse with possible pers lelivery, rection and bracing of trusses and truss s available from Truss Plate Institute, 2670 Crain Hig	D INCLUDED MITEK REFERENCE P/ only upon parameters shown, and is oility of design parameters and prope ss web and/or chord members only. onal injury and property damage. Fo yetems, see ANS/TPI1 Qu hway, Suite 203 Waldorf, MD 20601	GE MII-7473 rev. 5/19/202 or an individual building oc y incorporate this design Additional temporary and p general guidance regardi ality Criteria, DSB-89 and	0 BEFORE USE. mponent, not into the overall permanent bracing ng the BCSI Building Component	16023 Swingley Ridge Rd Chesterfield, MO 63017			

Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO		
						144670971	
2630107	A3	Hip	1	1			
					Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		S - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:55:38 2021 Page 2				
		ID:clow4Ylgf7iox0?ly?5BCcz33zm-FE?uiuhjGdZ?HhtiTS_W33TTgDuxOPGOpKHPcyzoZg					

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.





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Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO	
						144670972
2630107	A4	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. Thu Feb 4 08:55:40 2021	Page 2
ID:clow4Ylqf7iox0?ly?5BCcz33zm-Bd7e6ajzoFpjW?05at0_8UZqw1bvsMKhHemVhrzoZq/						hrzoZgH

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.





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

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Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO	
						144670973
2630107	A5	Hip	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		S - 67147,		3.240 s Ma	ar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:55:42 2021	Page 2
		ID	clow4Ylg	f7iox0?ly?	5BCcz33zm-80EOXGIDKs3RmJATiI3SDve6ugHfKA3 kyF	cljzoZqF

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 WITHS KRETERENCE PAGE MIL-74/3 fev. or 19/2/2/2 DEFORE 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 **ANS/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO		
						144670974	
2630107	A6	Hip	1	1			
					Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		S - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:55:44 2021 Page 2				
ID:clow4YIgf7iox0?Iy?5BCcz33zm-4OM9yymUsTJ9?cKspj5wJKjU3ezPo7oGCFkjqczo					czoZgD		

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.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED WITHS KRETERENCE PAGE MIL-74/3 fev. or 19/2/2/2 DEFORE 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 **ANS/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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16

4x12 =

15

3x6 =

13

2x4 ||

3x8 ||

3x4 =

2x4 ||

18

2x4 || ^{3x8} =

21

 $4x6 = \begin{array}{c} 2x4 \hspace{.1in} || \\$

220	0.0.0 11.0.0	12 10 4 21 0 0	28.4.42	32.0.0	40.0.0			
2-3-8	5-8-8 3-8-8	2-1-12 7-1-12	7-1-12	3-10-4	8-0-0			
Plate Offsets (X,Y)	[10:1-6-4,0-2-0], [11:0-0-3,0-5-0], [11	:0-0-1,0-0-3], [11:0-3-8,Edge]	, [17:0-3-8,0-1-8], [19:0-2-8,0-2-0	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 0.86 BC 0.62 WB 0.58 Matrix-AS	DEFL. in (loc) Vert(LL) -0.10 13-27 Vert(CT) -0.25 13-27 Horz(CT) 0.10 17	l/defl L/d >999 240 >580 180 n/a n/a	PLATES GRIP MT20 197/144 MT18HS 197/144 Weight: 170 lb FT = 20%			
LUMBER- TOP CHORD 2x4 SF 1-4: 2x BOT CHORD 2x4 SF 15-18: WEBS 2x4 SF WEDGE Right: 2x4 SPF No.2	PF No.2 *Except* 66 SPF No.2 PF No.2 *Except* 2x4 SP 2400F 2.0E PF No.2		BRACING- TOP CHORD Structur 2-0-0 oc BOT CHORD Rigid ce WEBS 1 Row a	ral wood sheathing di c purlins (6-0-0 max.) eiling directly applied. at midpt §	rectly applied, except : 4-10. 9-16			
REACTIONS. All bearings 0-3-8. (lb) - Max Horz 2=80(LC 12) Max Uplift All uplift 100 lb or less at joint(s) 2 except 17=-328(LC 9), 14=-230(LC 8), 11=-180(LC 13) Max Grav All reactions 250 lb or less at joint(s) except 2=393(LC 1), 17=2432(LC 1), 14=1122(LC 26), 11=747(LC 26)								
FORCES. (lb) - Max. TOP CHORD 3-4=: 10-1 BOT CHORD 16-1 WEBS 4-19: 9-14:	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-125/422, 4-5=-221/1258, 5-6=-220/1280, 6-7=-319/238, 7-9=-319/238, 10-11=-732/227 BOT CHORD 16-17=-1401/306, 13-14=-85/524, 11-13=-84/531 WEBS 4-19=-1307/238, 17-19=-1511/340, 6-17=-1588/285, 6-16=-233/1672, 7-16=-686/219, 9-14=-592/251, 10-14=-640/72, 10-13=0/280							
 NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; MWFRS (envelope) Interior(1) 13-10-4 tu end vertical left and DOL=1.60 3) Provide adequate di 4) All plates are MT20 5) This truss has been 6) Provide mechanical 17=328, 14=230, 11 7) This truss is designer referenced standard 8) This truss design re sheetrock be applied 9) Graphical purlin rep 	e loads have been considered for this /ult=115mph (3-second gust) Vasd=9 gable end zone and C-C Exterior(2E o 32-0-0, Exterior(2R) 32-0-0 to 37-7- right exposed;C-C for members and i rainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord connection (by others) of truss to bea =180. ed in accordance with the 2018 Intern d ANSI/TPI 1. quires that a minimum of 7/16" structu d directly to the bottom chord. resentation does not depict the size o	design. 1mph; TCDL=6.0psf; BCDL=/ -0-10-8 to 3-1-8, Interior(1) 3 14, Interior(1) 37-7-14 to 40-1 orces & MWFRS for reaction: live load nonconcurrent with ring plate capable of withstar ational Residential Code sect ral wood sheathing be applie r the orientation of the purlin a	4.2psf; h=25ft; Cat. II; Exp C; End 3-1-8 to 8-0-0, Exterior(2R) 8-0-0 0-8 zone; cantilever left and right s shown; Lumber DOL=1.60 plate any other live loads. nding 100 lb uplift at joint(s) 2 exc ions R502.11.1 and R802.10.2 a d directly to the top chord and 1/2 along the top and/or bottom chord	closed; to 13-10-4, t exposed ; e grip cept (jt=lb) nd 2" gypsum d.	SCOTT M. SEVIER NUMBER PE-2001018807 February 4,2021			







Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO		
						144670977	
2630107	A9	Hip Girder	1	1			
					Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		S - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:55:49 2021 Page 2				
ID:clow4Ylqf7iox0?Iv?5BCcz33zm-RMA2?fqcq0xR6OCpcGh57OQICfk5TJK0LXRUVpzoZq8						zoZq8	

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 816 lb down and 301 lb up at 6-0-0, and 306 lb down and 102 lb up at 11-10-4, and 800 lb down and 284 lb up at 33-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

Uniform Loads (plf)

Vert: 1-3=-90, 3-4=-90, 4-13=-90, 13-16=-90, 29-30=-20, 3-26=-20, 25-33=-20

Concentrated Loads (lb)

Vert: 26=-306(F) 21=-306(F) 28=-816(F) 24=-306(F) 20=-306(F) 18=-800(F) 36=-307(F) 37=-307(F) 38=-306(F) 39=-306(F) 40=-306(F) 41=-306(F) 42=-306(F) 42=-306(F) 40=-306(F) 40=-3 43=-306(F) 44=-306(F)





February 4,2021





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.











4	-8-15 9-5-8	16-0-0	20-3-8	20-4-0 24-0-0	31-8-8	39-8-8	39-8-14	
4	-8-15 4-8-9	6-6-8	4-3-8	0-0-8 3-8-0	7-8-8	8-0-0	0-0-6	
Plate Offsets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0]	, [2:0-3-8,Edge], [12:0-5-1,Edg	e]					
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0 Plate Grip DOL 1 Lumber DOL 1 Rep Stress Incr Y Code IRC2018/TPI201	0-0 CSI. 15 TC 0.75 15 BC 0.51 ES WB 0.40 4 Matrix-AS		DEFL. in Vert(LL) -0.06 Vert(CT) -0.16 Horz(CT) 0.04	(loc) I/defl L/d 13-27 >999 240 13-27 >999 180 17 n/a n/a	PLATES MT20 Weight: 189 lb	GRIP 197/144 FT = 20%	
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF 17-19: WEBS 2x4 SF WEDGE Left: 2x4 SPF No.2 SLIDER Right 2	JMBER- DP CHORD 2x4 SPF No.2 Except* TOP CHORD 2x4 SPF No.2 *Except* TOP CHORD Structural wood sheathing directly applied, except 17-19: 2x4 SP 2400F 2.0E BOT CHORD Rigid ceiling directly applied. Except: 18S 2x4 SPF No.2 1 Row at midpt 7-17 'EDGE WEBS 1 Row at midpt 5-18, 6-17, 8-15, 10-15 ff: 2x4 SPF No.2 EIGH 2x4 SPF No.2 2-0-0 Structural wood sheathing directly applied.							
EACTIONS. (size) 2=0-3-8, 17=0-3-8, 12=Mechanical Max Horz 2=158(LC 12) Max Uplift 2=-209(LC 12), 17=-233(LC 12), 12=-235(LC 13) Max Grav 2=1103(LC 25), 17=2411(LC 1), 12=978(LC 26)								
FORCES. (lb) - Max. TOP CHORD 2-3=- 8-10: 8-10: BOT CHORD 2-21: 15-10 15-10 WEBS 19-2: 10-13 10-13	*ORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. FOP CHORD 2-3=-1627/313, 3-5=-1479/349, 5-6=-542/231, 6-7=-9/367, 7-8=-269/319, 8-10=-464/298, 10-12=-1282/386 3OT CHORD 2-21=-359/1372, 5-19=-50/472, 18-19=-319/1297, 17-18=-48/346, 7-17=-1356/203, 15-16=-273/67, 13-15=-246/1113, 12-13=-246/1113 WEBS 19-21=-327/1299, 5-18=-1095/315, 6-18=-100/659, 6-17=-1166/214, 8-15=-394/49, 10-15=-996/284, 10-13=0/328, 7-15=-149/1142							
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; M MWFRS (envelope) Interior(1) 20-5-12 tr vertical left and right 3) Provide adequate di 4) This truss has been 5) Refer to girder(s) for 6) Provide mechanical joint 17 and 235 lb d 7) This truss is designer referenced standard 8) This truss design references	e loads have been considered /ult=115mph (3-second gust) \ gable end zone and C-C Exte o 24-0-0, Exterior(2R) 24-0-0 t t exposed;C-C for members ar rainage to prevent water pondi designed for a 10.0 psf botton r truss to truss connections. connection (by others) of truss uplift at joint 12. ed in accordance with the 2018 I ANSI/TPI 1. quires that a minimum of 7/16"	for this design. /asd=91mph; TCDL=6.0psf; BC rior(2E) -0-10-8 to 2-1-8, Interio > 28-2-15, Interior(1) 28-2-15 to id forces & MWFRS for reaction ng. n chord live load nonconcurrent s to bearing plate capable of wi B International Residential Code structural wood sheathing be a	CDL=4.2 or (1) 2-1 o 39-8-8 ns shown t with any thstandin e section applied c	psf; h=25ft; Cat. II; E -8 to 16-0-0, Exterior zone; cantilever left a n; Lumber DOL=1.60 y other live loads. ng 209 lb uplift at join is R502.11.1 and R80 lirectly to the top cho	xp C; Enclosed; (2R) 16-0-0 to 20-5-12, and right exposed ; end plate grip DOL=1.60 at 2, 233 lb uplift at 02.10.2 and rd and 1/2" gypsum	SCO SE E E E E E E E E E E E E E E E E E E	MISSOLUT MISSOLUT VIER MBER 1018807	

sheetrock be applied directly to the bottom chord.

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



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



4-5	5-12 8-11-2	14-0-0 20-3-8	20-4-0 26-0-0	32-8-8	39-8-8 39-8-12				
	5-12 4-5-7	5-0-14 6-3-8	0-0-8 5-8-0	6-8-8	7-0-0 0-0-4				
	[2.0-3-6,Euge], [2.0-0-3,0-5-0],	[2.0-0-1,0-0-3], [11.0-3-1,Edge], [[10.0-3-4,0-3-0]						
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0- Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr YE Code IRC2018/TPI2014	0 CSI. 5 TC 0.68 5 BC 0.46 5 WB 0.83 Matrix-AS	DEFL. in Vert(LL) -0.05 Vert(CT) -0.11 Horz(CT) 0.04	(loc) I/defi L/d 17-18 >999 240 17-18 >999 180 16 n/a n/a	PLATES GRIP MT20 197/144 Weight: 182 lb FT = 20%				
LUMBER- TOP CHORD 2x4 Sf BOT CHORD 2x4 Sf 16-18: WEBS 2x4 Sf WEDGE Left: 2x4 SPF No.2 SLIDER Right 2	PF No.2 PF No.2 *Except* . 2x4 SP 2400F 2.0E PF No.2 2x4 SPF No.2 2-0-0		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing di 2-0-0 oc purlins (6-0-0 max.) Rigid ceiling directly applied. 1 Row at midpt 7 1 Row at midpt 6	rectly applied, except : 6-8. Except: /-16 }-16				
REACTIONS. (size) 11=Mechanical, 2=0-3-8, 16=0-3-8 Max Horz 2=140(LC 12) Max Uplift 11=-223(LC 13), 2=-215(LC 12), 16=-233(LC 12) Max Grav 11=975(LC 26), 2=1114(LC 25), 16=2392(LC 1)									
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1658/327, 3-5=-1581/374, 5-6=-819/258, 6-7=-7/326, 7-8=-472/313, 8-9=-661/298, 9-11=-1319/368 BOT CHORD 2-20=-356/1404, 5-18=-64/433, 17-18=-321/1363, 16-17=-110/630, 7-16=-1440/243, 12-13=-241/1157, 11-12=-241/1157 WEBS 3-20=-273/121, 18-20=-342/1326, 5-17=-888/258, 6-17=-91/632, 6-16=-1203/214, 7-13=-143/1084, 8-13=-289/50, 9-13=-813/238, 9-12=0/268 NOTES- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 26-0-0, Exterior(2E) -0-10-8 to 30-2-15 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60									
 Provide adequate d This truss has been Refer to girder(s) fo Provide mechanical joint 2 and 233 lb ur This truss is designine referenced standard This truss design resheetrock be applie Graphical purlin rep 	Irainage to prevent water pondim, a designed for a 10.0 psf bottom or truss to truss connections. I connection (by others) of truss i plift at joint 16. ed in accordance with the 2018 I d ANSI/TPI 1. equires that a minimum of 7/16" s ad directly to the bottom chord. presentation does not depict the s	g. chord live load nonconcurrent wit to bearing plate capable of withst nternational Residential Code se structural wood sheathing be app size or the orientation of the purli	th any other live loads. tanding 223 lb uplift at joir ections R502.11.1 and R8 lied directly to the top cho n along the top and/or bo	nt 11, 215 lb uplift at 02.10.2 and ord and 1/2" gypsum tom chord.	SCOTT M. SEVIER NUMBER PE-2001018807				

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3-11-6	6-11-6	12-0-0	20-3-8	20-4-0	28-0-0			33-8-8	39-8-8	<u>39-</u> 8-9
3-11-6	3-0-0	5-0-10	8-3-8	0-0-8	7-8-0			5-8-8	6-0-0	0-0-1
Plate Offsets (X,Y)	[2:0-3-8,Edge], [2:0-0	<u>0-3,0-5-0], [2:0-0-1,0</u>	0-0-3], [8:1-6-4,0-2-0],	[11:0-5-1,Edge], [16	:0-3-0,0-	-3-4], [20:	:0-3-8,0-1	1-8]		
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DO Lumber DOL Rep Stress Ind Code IRC201	2-0-0 L 1.15 1.15 cr YES 8/TPI2014	CSI. TC 0.92 BC 0.70 WB 0.93 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.20 0.04	(loc) 13-15 : 13-15 : 16	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 177 lb	GRIP 197/144 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI 16-18: WEBS 2x4 SI WEDGE Left: 2x4 SPF No.2 SLIDER Right 2	UMBER- OP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 5-8. 16-18: 2x4 SP 2400F 2.0E BOT CHORD Rigid ceiling directly applied. VEDS 2x4 SPF No.2 WEBS 1 Row at midpt eft: 2x4 SPF No.2 Eft 2x4 SPF No.2 2-0-0 BOT CHORD Rigid ceiling directly applied. VEDSE Eft 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied.									
REACTIONS. (size) 11=Mechanical, 2=0-3-8, 16=0-3-8 Max Horz 2=122(LC 12) Max Uplift 11=-208(LC 13), 2=-214(LC 12), 16=-271(LC 9) Max Grav 11=960(LC 26), 2=1106(LC 25), 16=2407(LC 1)										
FORCES. (lb) - Max TOP CHORD 2-3= 8-9= 8-9= BOT CHORD 2-20 7-16 4-17 3-20 3-20	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1629/321, 3-4=-1902/437, 4-5=-1100/281, 5-6=-895/289, 6-7=0/359, 7-8=0/328, 8-9=-843/290, 9-11=-1318/343 BOT CHORD 2-20=-337/1379, 4-18=-78/434, 17-18=-404/1724, 16-17=-95/427, 15-16=-70/812, 7-16=-618/198, 13-15=-66/650, 12-13=-228/1164, 11-12=-228/1164 WEBS 4-17=-94/734, 6-16=-1164/250, 8-13=-41/520, 9-13=-596/189, 3-20=-468/148, 18-20=-326/1329, 3-18=-53/233, 8-15=-1172/161									
NOTES- 1) Unbalanced roof liv 2) Wind: ASCE 7-16; ' MWFRS (envelope) Interior(1) 16-2-0 to vertical left and righ 3) Provide adequate d 4) All plates are MT20 5) This truss has been 6) Refer to girder(s) fo 7) Provide mechanical joint 2 and 271 lb u 8) This truss is design re eferenced standarr 9) This truss design re sheetrock be applie 10) Graphical purlin re	e loads have been cor Vult=115mph (3-secor) gable end zone and (28-0-0, Exterior(2R) 2 t exposed;C-C for me rainage to prevent wa plates unless otherwi designed for a 10.0 p r truss to truss connect connection (by others olift at joint 16. ed in accordance with d ANSI/TPI 1. equires that a minimum d directly to the bottor presentation does not	nsidered for this den nd gust) Vasd=91m C-C Exterior(2E) -0 28-0-0 to 32-2-15, I mbers and forces & iter ponding. ise indicated. isf bottom chord live ctions. s) of truss to bearin the 2018 Internation n of 7/16" structural m chord.	sign. ph; TCDL=6.0psf; BCD -10-8 to 2-1-8, Interior(nterior(1) 32-2-15 to 39 & MWFRS for reactions e load nonconcurrent w g plate capable of with onal Residential Code s wood sheathing be ap the orientation of the pu	DL=4.2psf; h=25ft; C 1) 2-1-8 to 12-0-0, I 0-8-8 zone; cantileve shown; Lumber DC vith any other live lo standing 208 lb upli sections R502.11.1 plied directly to the urlin along the top a	at. II; Ex Exterior(2 er left and DL=1.60 p ads. it at joint and R802 top chord nd/or bot	p C; Encl 2R) 12-0- d right ex plate grip 11, 214 I 2.10.2 an d and 1/2 ttom chor	losed; 0 to 16-2 posed ; e DOL=1. b uplift a id " gypsun rd.	2-0, end 60 t	STATE OF SCO SE SCO SE PE-200 PE-200	MISSOLUTI MISSOLUTI VIER

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



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3	-3-8 10-0-0	15-2-0 20-3-	-8 20-4-0 25-3-12	30-0-0	39-8-8	39-8-10		
	-3-8 6-8-8	5-2-0 5-1-	8 0-0-8 4-11-12	4-8-4	9-8-8	0-0-2		
Plate Offsets (X,Y) [2:0-3-3,0-2-0], [12:0-5-1,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 0.73 BC 0.85 WB 0.50 Matrix-AS	DEFL. in Vert(LL) -0.14 Vert(CT) -0.32 Horz(CT) 0.12	(loc) I/defl L/d 13-24 >999 240 20-21 >759 180 17 n/a n/a	PLATES MT20 Weight: 172 lb	GRIP 197/144 FT = 20%		
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 2-2 WEBS 2x4 SLIDER Rig	SPF No.2 SPF No.2 *Except* 1: 2x6 SPF No.2, 17-19: 2x4 SP 2400 SPF No.2 ht 2x4 SPF No.2 2-0-0	- 2.0E	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheath 2-0-0 oc purlins (6-0-0 i Rigid ceiling directly ap 1 Row at midpt	ing directly applied, except max.): 4-9. plied. 3-20, 5-17			
REACTIONS. (size) 12=Mechanical, 2=0-3-8, 17=0-3-8 Max Horz 2=105(LC 12) Max Uplift 12=-201(LC 13), 2=-203(LC 12), 17=-328(LC 9) Max Grav 12=949(LC 26), 2=1085(LC 25), 17=2450(LC 1)								
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-3250/681, 3-4=-1420/292, 4-5=-662/212, 5-6=-14/535, 6-8=-478/266, 8-9=-826/297, 9-10=-1011/290, 10-12=-1313/356 BOT CHORD 2-21=-676/2930, 20-21=-648/2757, 18-20=-199/1150, 17-18=-101/659, 6-17=-1421/256, 15-16=-480/107, 13-15=-73/478, 12-13=-247/1175 WEBS 3-21=-94/709, 3-20=-1612/453, 4-20=-31/465, 4-18=-648/127, 5-18=-21/459, 5-17=-1482/276, 6-15=-198/1282, 8-15=-816/172, 8-13=-52/547, 10-13=-419/170								
 5-17=-1482/276, 6-15=-198/1282, 8-15=-816/172, 8-13=-52/547, 10-13=-419/170 NOTES- Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Refer to girder(s) for truss to truss connections. 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 201 lb uplift at joint 12, 203 lb uplift at joint 2 and 328 lb uplift at joint 17. This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 								

9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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

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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 sand 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

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ACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=137(LC 28) Max Uplift 2=-290(LC 8), 7=-323(LC 5) Max Grav 2=1313(LC 1), 7=1363(LC 1)

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

- TOP CHORD 2-3=-3910/925, 3-4=-2865/700, 4-5=-1779/447, 5-6=-1727/428, 6-7=-1305/349
- BOT CHORD 2-10=-896/3493, 9-10=-845/3299, 8-9=-680/2510
- WEBS 3-10=-159/697, 3-9=-769/226, 4-9=-237/1078, 4-8=-856/239, 5-8=-707/252, 6-8=-549/2076

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearing at joint(s) 2, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
- capacity of bearing surface.
 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=290, 7=323.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 "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) 228 lb down and 135 lb up at 6-0-0, and 204 lb down and 135 lb up at 8-0-0, and 202 lb down and 136 lb up at 10-0-0 on top chord, and 527 lb down and 162 lb up at 6-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO	
						I44670986
2630107	B9	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. Thu Feb 4 08:56:02 2021	Page 2

Builders FirstSource (Valley Center),

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:56:02 2021 Page 2 ID:clow4Ylgf7iox0?ly?5BCcz33zm-YsSyk6_mc?ab9NiJtVQ817Tcpu4g0JgwL35gRZzoZfx

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-90, 4-6=-90, 10-11=-20, 8-10=-20, 7-8=-20

Concentrated Loads (lb) Vert: 4=-204(B) 8=-9 9=-527(B) 14=-204(B) 15=-202(B) 16=-6(B) 17=-30





Job	Truss	Truss Type	Qtv	Plv	Summit/41 Woodside Ridge/MO	
			,		g	144670987
2630107	C1	ROOF SPECIAL GIRDER	1	_		
2000101				2	Job Reference (optional)	
Builders FirstSource (Valley	Center). Vallev Center, K	S - 67147.		8.240 s Ma	r 9 2020 MiTek Industries, Inc. Thu Feb 4 08:56:05 2021	Page 2

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NOTES-

- 8) Bearing at joint(s) 25, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 25=1193, 9=1319.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Use Simpson Strong-Tie HUS26 (14-16d Girder, 6-16d Truss) or equivalent at 4-0-12 from the left end to connect truss(es) to front face of bottom chord.
- 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-0-12 from the left end to 20-0-12 to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down at 0-0-12, and 825 lb down and 158 lb up at 22-0-12 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: 3-24=-90, 3-4=-90, 4-8=-90, 24-26=-160, 7-8=-160, 25-33=-160, 22-33=-110, 10-22=-20, 10-39=-110, 9-39=-160 Concentrated Loads (lb)
 - Vert: 17=-1024(F) 13=-915(F) 24=-80(F) 8=-825(F) 23=-2243(F) 27=-1024(F) 28=-1024(F) 29=-889(F) 30=-900(F) 31=-918(F) 32=-862(F)





L	8-4-12	1	14-4-12		22-9-8
I	8-4-12		6-0-0		8-4-12
Plate Offsets (X,Y)	[2:0-3-8,Edge], [2:0-0-3,0-5-0], [2:0-0-1,	0-0-3], [4:0-4-0,0-1-15], [7	:0-0-3,0-0-1], [7:0-5-0,0-0)-3]	
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 0.66 BC 0.62 WB 0.14 Matrix-AS	DEFL. in Vert(LL) -0.08 Vert(CT) -0.17 Horz(CT) 0.06	(loc) l/defl L/d 9-11 >999 240 9-17 >999 180 7 n/a n/a	PLATES GRIP MT20 197/144 Weight: 86 lb FT = 20%
LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2 WEDGE 2x4 SPF No.2			BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dii 2-0-0 oc purlins (3-6-3 max.) Rigid ceiling directly applied.	rectly applied, except 4-5.

Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=-80(LC 13)

Max Floiz 2=-00(LC 13) Max Uplift 2=-195(LC 12), 7=-195(LC 13) Max Grav 2=1332(LC 1), 7=1332(LC 1)

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

- TOP CHORD 2-3=-2084/338, 3-4=-1799/298, 4-5=-1549/304, 5-6=-1799/298, 6-7=-2084/338
- BOT CHORD 2-11=-286/1781, 9-11=-144/1549, 7-9=-239/1781
- WEBS 3-11=-269/145, 4-11=-8/337, 5-9=-11/337, 6-9=-269/145

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-4-12, Exterior(2R) 8-4-12 to 12-7-11, Interior(1) 12-7-11 to 14-4-12, Exterior(2R) 14-4-12 to 18-8-14, Interior(1) 18-8-14 to 23-8-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=195, 7=195.

- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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







- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-3=-5217/1246, 3-4=-5693/1409, 4-5=-6206/1503, 5-6=-6206/1503, 6-7=-5693/1409, 7-8=-5217/1247 BOT CHORD 2-15=-1112/4589, 14-15=-1112/4589, 12-14=-1200/5046, 11-12=-1147/5046,
- WEBS
 3-15=-627/183, 3-14=-291/734, 4-14=-362/1353, 4-12=-378/1475, 5-12=-619/192, 6-12=-378/1475, 6-11=-362/1353, 7-11=-292/734, 7-10=-627/182

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=715, 8=715.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 9) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 7-4-12 from the left end to 15-4-12 to connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 890 lb down and 307 lb up at 6-4-12, and 890 lb down and 307 lb up at 16-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

dantinuter රාර්ත්රිය් Section, loads applied to the face of the truss are noted as front (F) or back (B).





Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO	
						144670989
2630107	C3	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	8.240 s Ma	ar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:56:08 2021	Page 2

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:56:08 2021 Page 2 ID:clow4YIgf7iox0?ly?5BCcz33zm-N0pE?93XCrLItl9TDmXYHOjYwJE4Q2Toj_Y_fDzoZfr

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-90, 4-6=-90, 6-9=-90, 16-19=-20

Concentrated Loads (lb)

Vert: 14=-890(B) 12=-328(B) 11=-890(B) 22=-328(B) 23=-328(B) 24=-328(B) 25=-328(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 **MSI/TPI1 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







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 **MSI/TPI1 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



February 4,2021




				0-4-3			4-9-10					
Plate Offse	ets (X,Y)	[2:0-3-14,0-5-0]									1.	
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.04	6-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.06	6-11	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-MP						Weight: 17 lb	FT = 20%
LUMBER-	RD 2x4 S	PF No.2		·		BRACING- TOP CHOR	D	Structu	ural wood	sheathing di	rectly applied or 5-1-1	3 oc purlins,

BOT CHORD

except end verticals.

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

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

REACTIONS. (size) 6=Mechanical, 2=0-2-13

Max Horz 2=98(LC 7) Max Uplift 6=-83(LC 8), 2=-140(LC 4) Max Grav 6=267(LC 1), 2=455(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2 = 140
- 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, 3-4=-40, 5-7=-20 Concentrated Loads (lb)

Vert: 12=-57(F=-29, B=-29)







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 **MSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



E

February 4,2021



February 4,2021





16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/41 Woodside Ridge/MO	
						144670998
2630107	D3	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.240 s Ma	ar 9 2020 MiTek Industries, Inc. Thu Feb 4 08:56:17 2021	Page 2

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LOAD CASE(S) Standard

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

Vert: 1-3=-90, 3-5=-90, 5-7=-90, 14-17=-20

Concentrated Loads (lb)

Vert: 11=-766(B) 10=-306(B) 9=-766(B) 20=-306(B) 21=-306(B)







MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-8, Exterior(2R) 3-9-8 to 6-11-11, Interior(1) 6-11-11 to 8-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

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

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



16023 Swingley Ridge Rd Chesterfield, MO 63017



LUMBER-

BCDL

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 WEDGE
 Left: 2x4 SPF No.2

10.0

BRACING-TOP CHORD BOT CHORD

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

Weight: 20 lb

REACTIONS. (size) 6=Mechanical, 2=0-3-8

Max Horz 2=139(LC 11) Max Uplift 6=-82(LC 12), 2=-59(LC 12) Max Grav 6=326(LC 1), 2=399(LC 1)

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

Code IRC2018/TPI2014

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0 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

Matrix-AS

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

3) Refer to girder(s) for truss to truss connections.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.

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

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



FT = 20%





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 0.80 BC 0.30 WB 0.04 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) 0.17 8 >399 240 Vert(CT) -0.29 8 >236 180 Horz(CT) 0.20 7 n/a n/a	PLATES GRIP MT20 197/144 Weight: 20 lb FT = 20%
LUMBER-		1	BRACING-	

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 7=Mechanical

Max Horz 2=137(LC 12) Max Uplift 2=-41(LC 12), 7=-99(LC 12) Max Grav 2=400(LC 1), 7=327(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WFBS 4-7=-284/223

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 6-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) Refer to girder(s) for truss to truss connections.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.

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

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







Plate Offs	sets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0)-5-0], [2:0-3-8	3,Edge], [3:0-4	1-4,0-2-0]							
LOADING TCLL TCDL	G (psf) 25.0 20.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.34 0.22	DEFL. Vert(LL) Vert(CT)	in 0.03 -0.05	(loc) 6 6	l/defl >999 >999	L/d 240 180	PLATES MT20	GRIP 197/144
BCLL BCDL	0.0 10.0	Rep Stress Incr Code IRC2018/T	YES PI2014	WB Matrix	0.00 «-MR	Horz(CT)	0.04	5	n/a	n/a	Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=94(LC 12)

Max Thir2 2=34(LC 12) Max Uplift 4=-46(LC 12), 2=-35(LC 12), 5=-16(LC 12) Max Grav 4=123(LC 1), 2=301(LC 1), 5=81(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 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) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Plate Offs	ets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0)-5-0], [2:0-3-8	3,Edge]								
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	тс	0.23	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	K-MP						Weight: 11 lb	FT = 20%
BCDL	10.0	Code IRC2018/T	PI2014	Matrix	K-MP						Weight: 11 lb	FT = 209

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

Structural wood sheathing directly applied or 3-10-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

LOIL ZATOI I NO.2

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

Max Horz 2=94(LC 12) Max Uplift 3=-60(LC 12), 2=-36(LC 12), 4=-3(LC 12) Max Grav 3=143(LC 1), 2=299(LC 1), 4=76(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



20 BEFORE USE. omponent, not into the overall permanent bracing ing the d BCSI Building Component 16023 Swingley Ridge Rd Chesterfield, MO 63017



3x8 II

CSI.

тс

BC

WB

Matrix-MP

0.07

0.03

0.00

11	IM	IRI	EE	2

TCLL

TCDL

BCLL

BCDL

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

25.0

20.0

0.0

10.0

Left: 2x4 SPF No.2

Plate Offsets (X,Y)--

LOADING (psf)

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 2=54(LC 12) Max Uplift 3=-27(LC 12), 2=-28(LC 12), 4=-4(LC 12) Max Grav 3=60(LC 1), 2=201(LC 1), 4=35(LC 3)

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

[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]

2-0-0

1.15

1.15

YES

NOTES-

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



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



BRACING-TOP CHORD BOT CHORD

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

1-10-15 1-10-15

(loc)

7

7

3

in

-0.00

-0.00

0.00

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

PLATES

Weight: 7 lb

MT20

GRIP

197/144

FT = 20%

4

l/defl

>999

>999

n/a

L/d

240

180

n/a



						2-3	-11					
Plate Off	fsets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0)-5-0], [2:0-3-8	3,Edge]								
LOADIN TCLL TCDL	G (psf) 25.0 20.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.07 0.05	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	0.0 10.0	Rep Stress Incr Code IRC2018/T	YES PI2014	WB Matri	0.00 x-MP	Horz(CT)	0.00	3	n/a	n/a	Weight: 8 lb	FT = 20%
	-											

3x8 ||

LUMBER-

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

2-3-11

Structural wood sheathing directly applied or 2-3-11 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

4

REACTIONS. (size) 3=

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=61(LC 12) Max Uplift 3=-33(LC 12), 2=-29(LC 12), 4=-4(LC 12) Max Grav 3=75(LC 1), 2=218(LC 1), 4=42(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.







Plate Off	sets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-	3-8,Edge]	
	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 0.28	Vert(LL) 0.03 4-7 >999 240 MT20 197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.04 4-7 >999 180
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 2 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Weight: 12 lb FT = 20%
	_			

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEDGE Left: 2x4 SPF No.2 BRACING-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=102(LC 12)

Max Uplift 3=-68(LC 12), 2=-37(LC 12), 4=-2(LC 12) Max Grav 3=161(LC 1), 2=320(LC 1), 4=83(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-2-15 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







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 0.63 BC 0.46 WB 0.00 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) 0.09 6-9 >806 240 Vert(CT) -0.18 6-9 >417 180 Horz(CT) 0.03 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 21 lb FT = 20%
			PRACINC	

TOP CHORD

BOT CHORD

MBER-

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

(size) 6=Mechanical, 2=0-3-8

REACTIONS.

Max Horz 2=147(LC 11) Max Uplift 6=-87(LC 12), 2=-59(LC 12) Max Grav 6=348(LC 1), 2=421(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-6=-253/225

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-4-12 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) Refer to girder(s) for truss to truss connections.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.

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

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





Plate Offs	ets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0)-5-0], [2:0-3-8	3,Edge]								
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	тс	0.23	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	K-MP						Weight: 11 lb	FT = 20%
BCDL	10.0	Code IRC2018/T	PI2014	Matrix	K-MP						Weight: 11 lb	FT = 209

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-10-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 2=94(LC 12) Max Uplift 3=-60(LC 12), 2=-36(LC 12), 4=-3(LC 12) Max Grav 3=143(LC 1), 2=299(LC 1), 4=76(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







1-2-1

			1	1-7-7
			[1-7-7
LOADIN	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 0.04	Vert(LL) -0.00 4 >999 240 MT20 197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 4 >999 180
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 2 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	Weight: 4 lb FT = 20%
		L	L	DRADNO

LUMBER-TOP CHORD 2x4 SPF No 2

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

BRACING-TOP CHORD BOT CHORD 3

Structural wood sheathing directly applied or 1-7-7 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 4=Mechanical, 2=Mechanical, 3=Mechanical (size)

Max Horz 4=29(LC 9) Max Uplift 2=-30(LC 12), 3=-2(LC 12)

Max Grav 4=80(LC 1), 2=61(LC 1), 3=29(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right
- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) Refer to girder(s) for truss to truss connections.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.

0-0-0

3x8 || ⁴

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







	F		3-7-7					
			3-1-1					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -	-0.00 3-4	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.09	Vert(CT) -	-0.01 3-4	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -	-0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR					Weight: 9 lb	FT = 20%
		1						

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 3-7-7 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings Mechanical. (lb) -

Max Horz 4=292(LC 1), 1=-292(LC 1)

Max Uplift All uplift 100 lb or less at joint(s) 1, 2 Max Grav All reactions 250 lb or less at joint(s) 4, 1, 2, 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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-6-11 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) Refer to girder(s) for truss to truss connections.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2.

5) Non Standard bearing condition. Review required.

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

7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.







Plate Offsets (X, Y)	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8	,Edgej	
LOADING (psf)	SPACING- 2-0-0 Plate Grip DOI 1.15	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP Vert/(L) -0.00 7 >999 240 MT20 197/144
TCDL 20.0 BCLL 0.0	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.03 WB 0.00	Vert(CT) -0.00 7 >999 180 Horz(CT) 0.00 3 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	Weight: 7 lb FT = 20%

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

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

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

Max Horz 2=54(LC 12) Max Uplift 3=-27(LC 12), 2=-28(LC 12), 4=-4(LC 12) Max Grav 3=60(LC 1), 2=201(LC 1), 4=35(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.







						3-10-13						
Plate Of	sets (X,Y)	[1:0-0-1,0-0-3], [1:0-0-3,0)-5-0], [1:0-3-8	,Edge]								
LOADIN	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	0.25	Vert(LL)	0.02	3-6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03	3-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	1	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-MP						Weight: 10 lb	FT = 20%
LUMBER	२-					BRACING						

TOP CHORD

BOT CHORD

LUMBER-

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

Left: 2x4 SPF No.2 REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8 Max Horz 1=79(LC 12)

Max Uplift 2=-61(LC 12), 3=-4(LC 12), 1=-14(LC 12) Max Grav 2=147(LC 1), 3=79(LC 3), 1=212(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 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) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3, 1.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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





Plate Offsets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8	,Eagej		
OADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) 0.02 4-7 >999 240	MT20 197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.02 4-7 >999 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 2 n/a n/a	
3CDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 11 lb FT = 20%

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

Structural wood sheathing directly applied or 3-8-12 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

LOIL ZAT OF FIN

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical

Max Horz 2=90(LC 12) Max Uplift 3=-57(LC 12), 2=-35(LC 12), 4=-3(LC 12) Max Grav 3=135(LC 1), 2=290(LC 1), 4=73(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Plate Offsets (X,Y)	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8	,Edgej	
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 0.07 BC 0.03 WB 0.00 Matrix-MP	DEFL. in (loc) l/defl L/d Vert(LL) 0.00 9 >999 240 Vert(CT) -0.00 9 >999 180 Horz(CT) 0.00 2 n/a n/a Weight: 7 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	SPF No.2		BRACING- TOP CHORD Structural wood sheathing directly applied or 1-7-11 oc purlins,

BOT CHORD 2x4 SPF No.2 except end verticals. WEBS 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEDGE

Left: 2x4 SPF No.2

REACTIONS. (size) 2=0-5-8, 5=Mechanical

Max Horz 2=48(LC 11) Max Uplift 2=-33(LC 12), 5=-19(LC 12) Max Grav 2=188(LC 1), 5=57(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right

- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and









LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 25.0 TCDL 20.0 BCLL 0.0	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr. YES	TC 0.07 BC 0.04 WB 0.00	Vert(LL) -0.00 9 >999 240 Vert(CT) -0.00 9 >999 180 Hor(CT) -0.00 2 p/a p/a	MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 7 lb FT = 20%
LUMBER- TOP CHORD 2x4 SPF No.2			BRACING- TOP CHORD Structural wood sheathing	g directly applied or 1-7-11 oc purlins,

 TOP CHORD
 2x4 SPF No.2
 TOP CHORD
 Structural wood sheathing directly applied or 1-7except end verticals.

 BOT CHORD
 2x4 SPF No.2
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

 WEBS
 2x4 SPF No.2
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

Left: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 5=Mechanical

Max Horz 5=48(LC 11) Max Uplift 2=-33(LC 12), 5=-19(LC 12) Max Grav 2=188(LC 1), 5=57(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right

- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 4,2021





TOP CHORD 2-3=-370/71

WEBS 3-6=-307/470

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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) Refer to girder(s) for truss to truss connections.

- 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=116.
- 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.



16023 Swingley Ridge Rd Chesterfield, MO 63017



		3-0-12		2-11-4			
Plate Offsets (X,Y) [2:0-2-13,0-1-	8]						
LOADING (psf) SPAC TCLL 25.0 Plate 0 TCDL 20.0 Lumbe BCLL 0.0 Rep S	NG- 2-0-0 Grip DOL 1.15 r DOL 1.15 ress Incr YES	CSI. TC 0.88 BC 0.30 WB 0.05	DEFL. Vert(LL) (Vert(CT) -(Horz(CT) (in (loc) l/defl 0.18 6 >399 0.30 6 >235 0.09 5 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0 Code	IRC2018/1PI2014	Matrix-AS				Weight: 19 lb	F1 = 20%

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2 *Except*

 2-6: 2x6 SPF No.2

 WEBS
 2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=136(LC 12) Max Uplift 4=-108(LC 12), 2=-46(LC 12) Max Grav 4=292(LC 1), 2=411(LC 1), 5=58(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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) Refer to girder(s) for truss to truss connections.

- 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=108.
- 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.







		3-3-8	2-8-8	1
Plate Offsets (X,Y)	[2:0-2-9,0-1-8]			
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 0.31 WB 0.05 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) 0.17 6 >416 240 Vert(CT) -0.29 6 >245 180 Horz(CT) 0.09 5 n/a n/a	PLATES GRIP MT20 197/144 Weight: 19 lb FT = 20%

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2 *Except*

 2-6: 2x6 SPF No.2

 WEBS
 2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=136(LC 12) Max Uplift 4=-107(LC 12), 2=-46(LC 12) Max Grav 4=294(LC 1), 2=411(LC 1), 5=53(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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) Refer to girder(s) for truss to truss connections.

- 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) 2 except (jt=lb) 4=107.
- 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.







			3-3-8		0-7-	7		
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.21	DEFL. Vert(LL)	in (loc) -0.01 6	l/defl >999	L/d 240	PLATES MT20	GRIP 197/144
ICDL 20.0 BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.02 Matrix-MP	Horz(CT)	-0.01 6-9 0.00 5	>999 n/a	n/a	Weight: 14 lb	FT = 20%
LUMBER-		I	BRACING-					

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=94(LC 12) Max Uplift 4=-65(LC 12), 2=-36(LC 12)

Max Grav 4=197(LC 1), 2=299(LC 1), 5=11(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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





Plate Offsets (X Y)-- [2:0-1-15 0-0-0] [2:0-2-7 0-3-0] [5:0-0-13 0-1-10]

LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) l/defl L/d TCLL 25.0 Plate Grip DOL 1.15 TC 0.09 Vert(LL) -0.00 5 >999 240 TCDL 20.0 Lumber DOL 1.15 BC 0.03 Vert(CT) -0.00 5 >999 180 PCIL 0.0 Des Chross lage VES WE 0.00 Uert(CT) -0.00 2 -0.7	PLATES GRIP
BCCL 0.0 Rep Sitess incl YES WB 0.00 H012(C1) -0.00 3 1/a 1/a	MT20 197/144
BOBL 10.0 Code RC2010/11/12/14 MainA-With LUMBER- BRACING- TOP CHORD 2x4 SPE No 2 TOP CHORD Structural wood sheathing dire	ctly applied or 1-10-15 oc purlins

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

BOT CHORD

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=48(LC 12) Max Uplift 3=-30(LC 12), 5=-30(LC 12)

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-

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







2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-11-4, Exterior(2R) 5-11-4 to 9-10-15, Interior(1) 9-10-15 to 21-10-10, Exterior(2R) 21-10-10 to 25-10-15, Interior(1) 25-10-15 to 27-5-15 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

3) Provide adequate drainage to prevent water ponding.

4) All plates are 2x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except (jt=lb) 27=155, 28=140, 17=155, 16=141.

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

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











SEVIER

NUMBER PE-2001018807

February 4,2021

SSIONAL

C



- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 9-10-15, Exterior(2R) 9-10-15 to 12-10-15, Interior(1) 12-10-15 to 19-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 1=131, 17=140, 18=147, 19=145, 20=144, 15=138, 14=148, 13=142, 12=142.

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.







 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=164.

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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017



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

2-8=-320/212, 4-6=-320/211

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 4-10-15, Exterior(2R) 4-10-15 to 7-10-15, Interior(1) 7-10-15 to 9-5-15 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) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=201, 6=200.

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.







FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-8=-275/178, 4-6=-275/178

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-15, Exterior(2R) 3-10-15 to 6-10-15, Interior(1) 6-10-15 to 7-5-15 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) 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.

 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=161.

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.













SINTE OF MISSOUR SCOTT M. SEVIER NUMBER PE-2001018807

February 4,2021




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 0.27 BC 0.11 WB 0.05 Matrix-P	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	(loc) l/defl L/d - n/a 999 - n/a 999 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 23 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF OTHERS 2x4 SF	PF No.2 PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied o	rectly applied or 6-0-0 oc purlins, or 10-0-0 oc bracing.
REACTIONS. (size) 1=7-9-12, 4=7-9-12, 5=7-9-12 Max Horz Max Horz 1=148(LC 9) Max Uplift 4=-31(LC 9), 5=-128(LC 12) Max Grav Max Grav 1=132(LC 20), 4=166(LC 1), 5=489(LC 1)					

WEBS 2-5=-400/265

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-10-4, Interior(1) 3-10-4 to 7-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=128.

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



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





LOADING TCLL TCDL	(psf) 25.0 20.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.64 0.27	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL BCDL	0.0 10.0	Rep Stress Incr Code IRC2018/TF	YES PI2014	WB Matri	0.00 x-P	Horz(CT)	0.00	3	n/a	n/a	Weight: 16 lb	FT = 20%

LUMBER-

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

BOT CHORD

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

REACTIONS. (size) 1=5-9-12, 3=5-9-12 Max Horz 1=106(LC 9) Max Uplift 1=-38(LC 12), 3=-65(LC 12) Max Grav 1=279(LC 1), 3=279(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-8-8 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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 preven tbuckling 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 sand 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





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 0.22 BC 0.09 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144 Weight: 10 lb FT = 20%
LUMBER-			BRACING-	

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. 1=3-9-12, 3=3-9-12 (size) Max Horz 1=64(LC 9)

Max Uplift 1=-23(LC 12), 3=-40(LC 12) Max Grav 1=169(LC 1), 3=169(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

OF MISS SCOTT M. SEVIER NUMBER PE-2001018807 0 SSIONAL F February 4,2021

Structural wood sheathing directly applied or 3-10-4 oc purlins,

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

except end verticals.

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2x4 💋

2x4 📚

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

0 ₇ 0 ₇ 8 0-0-8			4-4-1 4-3-9				
Plate Offsets (X,Y) [2:0-2-0,Edge]							
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.06 BC 0.10 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144 Weight: 9 lb FT = 20%			
LUMBER- TOP CHORD 2x4 SPF No.2			BRACING- TOP CHORD Structural wood sheathing dir	ectly applied or 4-4-1 oc purlins.			

BOT CHORD

OP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

REACTIONS. (size) 1=4-3-1, 3=4-3-1 Max Horz 1=14(LC 16) Max Uplift 1=-23(LC 12), 3=-23(LC 13) Max Grav 1=169(LC 1), 3=169(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;

- MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right
- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

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



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CTIONS. (size) 1=6-3-1, 3=6-3-1, 4=6-3-1 Max Horz 1=-22(LC 13) Max Uplift 1=-30(LC 12), 3=-34(LC 13), 4=-16(LC 12) Max Grav 1=144(LC 1), 3=144(LC 1), 4=270(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;

- MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right
- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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