



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

Re: 2839636 SUMMIT/WOODSIDE RIDGE #26/MO

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

Pages or sheets covered by this seal: I46904242 thru I46904303

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

Missouri COA: Engineering 001193



Johnson, Andrew

July 8,2021

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



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 system. See MSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Mitek° 16023 Swingley Ridge Rd Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
2830636	۸3	Hin	1	1		146904244
2039030	70	i ib	1	1	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:05 2021	Page 2
		ID:c	low4Ylgf7	iox0?ly?5E	BCcz33zm-f_qnZUG1ieVUgzqsONW2Mweclljw8fOOAu0xp	5z_PdC

NOTES-

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





	3-3-8 6-7-8 9-8-1210-1-1	2 13-8-0 16-0-0	24-0-0	30-4-4	36-8-8	40-0-0	
Plate Offsets (X V)	<u>3-3-8 3-4-0 3-1-4 0-5-0</u> [2:0-1-0 0-3-0] [5:0-4-0 Edge] [8:0-4-0	<u>3-6-4</u> 2-4-0 Edge] [11:0-2-0 Edge] [1	8-0-0 11-0-3-8 0-2-81 [23-0-3-8	6-4-4	6-4-4	3-3-8	
	[2:0-1-0,0-3-0]; [3:0-4-0,Euge]; [8:0-4-0		 	,0-2-0]			
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 0.86 BC 0.99 WB 0.51 Matrix-AS	DEFL. ir Vert(LL) -0.36 Vert(CT) -0.88 Horz(CT) 0.52	i (loc) l/defl 16-17 >999 16-17 >546 11 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS MT18HS Weight: 209 lb	GRIP 197/144 148/108 197/144 FT = 20%
LUMBER- TOP CHORD 2x6 SPF No.2 *Except* 1-5,8-12: 2x4 SPF 1650F 1.5E BOT CHORD 2x4 SPF No.2 *Except* 2-26,11-13: 2x6 SPF 2100F 1.8E, 19-26,13-15: 2x4 SP 2400F 2.0E WEBS 2x4 SPF No.2 *Except* 3-26: 2x6 SPF No.2 OTHERS 2x4 SPF No.2 WEDGE Left: 2x4 SP No.3 , Right: 2x4 SP No.3							
REACTIONS. (size Max H Max U Max G	e) 2=0-3-8, 11=0-3-8 orz 2=146(LC 12) plift 2=-319(LC 12), 11=-319(LC 13) rav 2=2279(LC 1), 11=2279(LC 1)						
FORCES. (ib) - Max. TOP CHORD 2-3=- 9-10= BOT CHORD 2-26= 18-22 13-14 WEBS 3-26= 9-14= 3-23=	Comp./Max. Ten All forces 250 (lb) or 7167/1067, 3-4=-4501/616, 4-6=-3474/ =-4555/582, 10-11=-7499/969 =-1060/6439, 25-26=-1038/6311, 23-25= 2=-523/3835, 17-18=-537/3961, 16-17=- 4=-790/6392, 11-13=-824/6753 =-166/1347, 6-17=-107/795, 6-16=-249/ =-30/590, 10-14=-2413/433, 10-13=-121 =-2384/508	less except when shown. 506, 6-7=-3011/498, 7-9=- 1024/6185, 22-23=-523/ 284/3008, 14-16=-392/40 254, 7-16=-73/790, 9-16=- /1494, 4-17=-1131/303, 4	-3478/506, /3835, 111, -1180/291, -23=-45/557,			-5555	and the
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 20-2-15 to end vertical left and DOL=1.60 3) Provide adequate dr 4) All plates are MT20 5) This truss has been 6) Bearing at joint(s) 2, capacity of bearing s 7) Provide mechanical 2=319, 11=319. 8) This truss is designe Comference opstage dard	e loads have been considered for this de fult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) -(o 24-0-0, Exterior(2R) 24-0-0 to 28-2-15 right exposed;C-C for members and for rainage to prevent water ponding, plates unless otherwise indicated. designed for a 10.0 psf bottom chord liv 11 considers parallel to grain value usi surface. connection (by others) of truss to bearir ed in accordance with the 2018 Internati ANSI/TPI 1.	sign. ph; TCDL=6.0psf; BCDL= 0-10-8 to 2-1-8, Interior(1) Interior(1) 28-2-15 to 40- ces & MWFRS for reaction e load nonconcurrent with ng ANSI/TPI 1 angle to gra- ng plate capable of withsta onal Residential Code sec	=4.2psf; h=25ft; Cat. II; E 2-1-8 to 16-0-0, Exterior 10-8 zone; cantilever lef ns shown; Lumber DOL= n any other live loads. ain formula. Building de anding 100 lb uplift at joir ctions R502.11.1 and R8	(2R) 16-0-0 to 20- t and right expose 1.60 plate grip signer should veri nt(s) except (jt=lb) 02.10.2 and	2-15, d ; fy	* JOH NUM PE-201	MISSOL MAS SON BER 7018993 AL ENGL Uly 8,2021
WARNING - Verify of Design valid for use of a truss system. Before	design parameters and READ NOTES ON THIS AN nly with MITek® connectors. This design is based s use, the building designer must verify the applica	D INCLUDED MITEK REFERENC only upon parameters shown, an pility of design parameters and p	E PAGE MII-7473 rev. 5/19/202 d is for an individual building co roperly incorporate this design	0 BEFORE USE. omponent, not into the overall		MI	

a doss system: Jorden des, inder versione des, inder versione des la dostante des 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



Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
						146904245
2839636	A4	Hip	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	in 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:07 2021	Page 2
		ID:clo	w4Ylqf7io	x0?ly?5BC	Ccz33zm-bMyYzAIHEGIBvH FVoZWRLjxH5Mucc6hdCV2u	ızz PdA

NOTES-

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

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

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





TOP CHORD

BOT CHORD

Structural wood sheathing directly applied, except

2-0-0 oc purlins (3-6-13 max.): 5-7.

Rigid ceiling directly applied.

I UMBER

LOWIDER	
TOP CHORD	2x6 SPF No.2 *Except*
	7-9: 2x4 SPF No.2, 9-12: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except*
	2-19,13-16: 2x4 SP 2400F 2.0E, 11-13: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2 *Except*
	10-13: 2x6 SPF No.2
WEDCE	

Left: 2x4 SP No.3

REA

CTIONS.	(size)	2=0-3-8, 11=0-3-8
	Max Horz	2=131(LC 12)
	Max Uplift	2=-265(LC 12), 11=-268(LC 13)
	Max Grav	2=2279(LC 1), 11=2279(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-4051/510, 3-5=-3836/526, 5-6=-3667/548, 6-7=-3673/551, 7-8=-3737/526, 8-10=-4760/603, 10-11=-7089/830 BOT CHORD 2-20=-412/3494, 5-18=-85/709, 17-18=-273/3306, 15-17=-259/3238, 14-15=-424/4216,

13-14=-687/6228, 11-13=-702/6356 WEBS 3-20=-406/120, 18-20=-400/3287, 3-18=-257/204, 7-15=-98/758, 8-15=-1170/260, 8-14=-31/615, 10-14=-2054/321, 10-13=-98/1293, 6-17=-650/207, 7-17=-173/782, 5-17=-154/689

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 13-8-0, Exterior(2R) 13-8-0 to 17-10-15, Interior(1) 17-10-15 to 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=265, 11=268.

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

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

ᄊ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORF USE WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-74/3 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITER® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must 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





Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
000000	15	18-				146904246
2839636	A5	нр	1	1	lab Deference (optional)	
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:08 2021	Page 2
		ID:clo	w4Ylgf7io>	0?ly?5BC	cz33zm-3ZWwBWJv?Zt2XQYR3V4IzYG5TVk2LyYrssEbC	Qz_Pd9

NOTES-

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
						146904247
2839636	A6	Hip	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:09 2021	Page 2
		ID:cl	ow4Ylgf7i	x0?ly?5B	Ccz33zm-Yl3lOrKYmt?v9a7ddDb WmoJOv314SZ 4W 9y	/sz Pd8

NOTES-

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.

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 **ANS/ITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





2-3-8	5-10-5	10-0-0	13-8-10	19-3-12	21-1-12	28-4-0	30-0-0	40-0-0	
Plate Offsets (X,Y)	[4:0-4-12,0-3-0], [9):0-4-0,0-1-15], [11:0-3-8,Edge], [15:0-2-12,Ed	ge]	1-2-4	1-0-0	10-0-0	
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip I Lumber DO Rep Stress Code IRC2	2-0-0 DOL 1.15 IL 1.15 Incr YES 2018/TPI2014	C: Tri Bi W M	SI. C 0.82 C 0.58 B 0.89 atrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.25 3-19 -0.60 3-19 0.22 17	l/defl L/d >654 240 >275 180 n/a n/a	PLATES MT20 Weight: 162 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF 1-4: 2x BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Right: 2x4 SFF No.2	PF No.2 *Except* 6 SPF No.2, 4-7: 2 PF No.2 PF No.2	x4 SPF 1650F 1	I.5E		BRACING TOP CHOI BOT CHOI	RD Struct 2-0-0 RD Rigid	tural wood sheathing d oc purlins (6-0-0 max. ceiling directly applied	irectly applied, except): 4-9.	
REACTIONS. All be (lb) - Max H Max U Max G	earings 0-3-8 excep lorz 2=97(LC 12) Jplift All uplift 100 9), 15=-208(LC Grav All reactions 11=590(LC 26	ot (jt=length) 16= lb or less at join C 8) 250 lb or less at δ), 16=3002(LC 2	=14-3-0, 15=14 t(s) 2 except 1 : joint(s) 17 exc 25), 15=675(L0	3-0. 1=-123(LC 13), cept 2=584(LC 2 C 26)	16=-416(LC 25),				
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 3-22=-268/122, 3-4=-155/298, 5-6=-437/2495, 6-8=-50/381, 8-9=-48/399, 10-11=-570/171 BOT CHORD 17-19=-1412/389, 16-17=-1412/389, 15-16=-1511/392, 8-15=-407/140, 13-14=-258/0, 11-13=-74/476 WEBS 4-19=-775/212, 5-19=-304/1661, 5-16=-1833/333, 6-16=-1704/280, 6-15=-268/1426, 13-15=-9/345, 9-15=-829/193, 9-13=-107/499, 10-13=-578/209									
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; M MWFRS (envelope) 14-2-15, Interior(1) - exposed ; end vertic grip DOL=1.60 3) Provide adequate di 4) This truss has been 5) Provide mechanical 11=123, 16=416, 15 6) This truss is designered referenced standard 7) This truss design re- sheetrock be applier 8) Graphical purlin rep	e loads have been of /ult=115mph (3-sec gable end zone an 14-2-15 to 30-0-0, f cal left and right exp rainage to prevent designed for a 10.1 connection (by oth 5=208. ed in accordance w d ANSI/TPI 1. quires that a minim d directly to the bot resentation does no	considered for th cond gust) Vasd id C-C Exterior(2 Exterior(2R) 30-1 cossed;C-C for m water ponding. 0 psf bottom cho- ters) of truss to the with the 2018 Inter- tim of 7/16" stru- tom chord. ot depict the size	nis design. =91mph; TCD 2E) -0-10-8 to 0-0 to 34-2-15 embers and fo ord live load no bearing plate c ernational Resi ctural wood sh e or the orienta	==6.0psf; BCDL 2-1-12, Interior(' Interior(1) 34-2 rces & MWFRS nconcurrent witi apable of withsta dential Code se- eathing be appl tion of the purlir	=4.2psf; h=25ft; C 1) 2-1-12 to 10-0-(-15 to 40-10-8 zor for reactions show h any other live lo anding 100 lb upli ctions R502.11.1 ied directly to the h along the top an	at. II; Exp C; E), Exterior(2R) he; cantilever le wn; Lumber DC ads. t at joint(s) 2 e and R802.10.2 top chord and d/or bottom cho	Enclosed; 10-0-0 to eft and right DL=1.60 plate except (jt=lb) 2 and 1/2" gypsum ord.	SIMTE OF SIMTE OF ANIL THO JOIN PE-201	MISSOL REW MAS NOI ABER 7018993
WARNING - Verify Design valid for use o	design parameters and R only with MiTek® connec	READ NOTES ON TH	IIS AND INCLUDE	O MITEK REFERENC	CE PAGE MII-7473 rev. nd is for an individual b	5/19/2020 BEFOR uilding component	E 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





4x6 = 2x4			2x4 ^{3x4} =		4x12 =	15 3x6 =	3x4 =	2x4		4x6 =	
2-3-8	8-0-0	11-8-8	13-10-4	21-0-0		28-1-12	1 32-0-0	1	40-0-0		
2-3-8	5-8-8	3-8-8	2-1-12	7-1-12	1	7-1-12	3-10-4	1	8-0-0	1	

16

15

₿ 14

13

Plate Offsets (X,Y)	[8:0-3-0,Edge], [19:0-2-8,0-2-0]						
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 0.86 BC 0.37 WB 0.58 Matrix-AS	DEFL. in Vert(LL) -0.09 Vert(CT) -0.20 Horz(CT) 0.09	(loc) l/defl 3-20 >999 3-20 >834 17 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 175 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x6 SPF No.2 *Except* 4-8,8-10: 2x4 SPF No.2 BRACING- TOP CHORD BOT CHORD 2x4 SPF No.2 *Except* 15-18: 2x4 SP 2400F 2.0E DOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-10. WEBS 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied.							
REACTIONS. All bearings 0-3-8. (lb) - Max Horz 2=78(LC 12) Max Uplift All uplift 100 lb or less at joint(s) 2 except 17=-436(LC 12), 14=-253(LC 8), 11=-150(LC 13) Max Grav All reactions 250 lb or less at joint(s) except 2=390(LC 1), 17=2352(LC 1), 14=1306(LC 26), 11=645(LC 26)							
FORCES. (lb) - Max. TOP CHORD 3-4=- BOT CHORD 3-20: 11-13 11-13 WEBS 4-19: 9-16: 9-16:	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-105/427, 4-5=-236/1265, 5-6=-242/1287, 9-10=-15/269, 10-11=-453/145 BOT CHORD 3-20=-252/141, 19-20=-254/138, 16-17=-1407/343, 14-16=-269/80, 13-14=-13/302, 11-13=-12/307 WEBS 4-19=-1309/282, 17-19=-1517/387, 6-17=-1503/306, 6-16=-222/1505, 7-16=-682/218, 9-16=-197/397, 9-14=-696/265, 10-14=-726/95, 10-13=0/251						
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 13-10-4 to end vertical left and DOL=1.60 3) Provide adequate di 4) This truss has been 5) Provide mechanical 17=436, 14=253, 11 6) This truss is designer referenced standard 7) This truss design re- sheetrock be applier	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) -(o 32-0-0, Exterior(2R) 32-0-0 to 37-7-14 right exposed;C-C for members and for rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv connection (by others) of truss to bearir =150. ed in accordance with the 2018 Internati I ANSI/TPI 1. quires that a minimum of 7/16" structura d directly to the bottom chord.	esign. hph; TCDL=6.0psf; BCDL -10-8 to 3-1-8, Interior(1) , Interior(1) 37-7-14 to 40 ces & MWFRS for reaction re load nonconcurrent with hg plate capable of withstance onal Residential Code se I wood sheathing be appl	=4.2psf; h=25ft; Cat. II; E 3-1-8 to 8-0-0, Exterior(2 -10-8 zone; cantilever left ns shown; Lumber DOL= h any other live loads. anding 100 lb uplift at joir ctions R502.11.1 and R8 ied directly to the top cho	xp C; Enclosed 2R) 8-0-0 to 13- t and right expo 1.60 plate grip nt(s) 2 except (jt 02.10.2 and ord and 1/2" gyp	; 10-4, sed ; =lb) sum	STATE OF STATE OF ANI THU JOH	MISSOUP DREW DMAS NSON HEER

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

19

18

₿ 17

5x8 =

20

2x4 ||

88

21



11

R

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





16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
						I46904250
2839636	A9	Hip Girder	1	2	Ich Deference (entional)	
				_	JOD Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	in 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:14 2021	Page 2

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:14 2021 Page 2 ID:clow4YIgf7iox0?Iy?5BCcz33zm-ujtBRZNgaPeCFM0bPmB9DpV9WwrllpAjEohwe3z_Pd3

NOTES-

10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 8-0-12 from the left end to 31-11-4 to connect truss(es) to front face of bottom chord.

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

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 816 lb down and 282 lb up at 6-0-0, and 306 lb down and 102 lb up at 11-10-4, and 800 lb down and 281 lb up at 33-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-90, 3-4=-90, 4-11=-90, 11-14=-90, 26-27=-20, 24-30=-20, 22-33=-20 Concentrated Loads (lb)

Vert: 24=-306(F) 18=-306(F) 25=-816(F) 16=-800(F) 21=-306(F) 17=-306(F) 19=-306(F) 20=-306(F) 36=-307(F) 37=-307(F) 38=-306(F) 39=-306(F) 40=-306(F) 41=-306(F) 42=-306(F) 42=-3

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-LUMBER-TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied. 2x4 SPF No.2 *Except* BOT CHORD BOT CHORD Rigid ceiling directly applied. 2-19,12-15: 2x4 SP 2400F 2.0E WEBS 1 Row at midpt 5-17, 7-17 WEBS 2x4 SPF No.2

WEDGE

Left: 2x6 SPF No.2

- Right 2x4 SPF No.2 2-6-0 SLIDER
- REACTIONS. (size) 2=0-3-8, 12=0-3-8 Max Horz 2=-184(LC 17) Max Uplift 2=-316(LC 12), 12=-318(LC 13) Max Grav 2=2270(LC 1), 12=2284(LC 1)

FORCES. (lb) -	Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3908/522, 3-5=-3782/530, 5-6=-2808/474, 6-7=-2796/472, 7-8=-4166/603,
	8-10=-4195/549, 10-12=-3785/515
BOT CHORD	2-20=-546/3379, 19-20=-26/282, 5-18=-86/651, 17-18=-419/3285, 16-17=-274/3206,
	8-16=-367/130, 12-14=-372/3297
WEBS	3-20=-425/134, 18-20=-526/3132, 5-17=-1227/345, 6-17=-239/1826, 7-17=-1138/323,
	7-16=-185/1096 14-16=-338/3167 10-16=-24/412 10-14=-617/118

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 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 316 lb uplift at joint 2 and 318 lb uplift at joint 12.

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.



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

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



⊢	6-10-3	13-8-0	20-3-8	20-4-0	29-10-8		39-8-8		
Plate Offsets (X Y)	[12:0-5-1 Edge] [16:0	6-9-13 1-2-12 0-3-4] [17·0	-5-12 0-2-8]	0-0-8	9-0-0		9-10-0		
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Inc Code IRC2018	2-0-0 - 1.15 1.15 r YES 3/TPI2014	CSI. TC 0.64 BC 0.71 WB 0.65 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl -0.15 13-15 >999 -0.29 13-15 >791 0.03 16 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 186 lb	GRIP 197/144 FT = 20%	
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP 16-17:: WEBS 2x4 SP WEDGE Left: 2x4 SPF No.2 SLIDER Right 2	LUMBER- IOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied. 30T CHORD 2x4 SPF No.2 *Except* 16-17: 2x4 SP 2400F 2.0E TOP CHORD Rigid ceiling directly applied. Except: 1 Row at midpt 7-16 WEBS 2x4 SPF No.2 WEBS 1 Row at midpt 5-16, 13-16, 8-16 WEDGE Left: 2x4 SPF No.2 Right 2x4 SPF No.2 2-0-0 Stude at midpt 5-16, 13-16, 8-16								
REACTIONS. (size) 2=0-3-8, 16=0-3-8, 12=Mechanical Max Horz 2=195(LC 12) Max Uplift 2=-168(LC 12), 16=-304(LC 12), 12=-147(LC 13) Max Grav 2=1051(LC 25), 16=2649(LC 1), 12=854(LC 26)									
FORCES. (lb) - Max. TOP CHORD 2-3=- 10-12 BOT CHORD 2-19=	Comp./Max. Ten All 1453/222, 3-5=-761/1 2=-1063/229 292/1196, 5-17=-62/	l forces 250 (lb) or 57, 5-6=0/614, 6-7 570, 16-17=-99/57	less except when shown. '=0/657, 7-8=0/651, 8-10= '6, 16-20=-1044/132, 7-20	789/208,)=-462/105,					
12-13 WEBS 17-19 8-13=	8=-122/942 9=-278/1125, 3-17=-71 110/677, 10-13=-552	16/211, 5-16=-116 2/232, 6-20=-668/1	1/323, 13-16=-19/256, 8-1 16	6=-973/317,					
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 23-0-0 to 3 MWFRS for reaction 3) This truss has been 4) Refer to girder(s) for 5) Provide mechanical joint 16 and 147 lb u	loads have been con ult=115mph (3-secon- gable end zone and C 39-8-8 zone; cantileve s shown; Lumber DOI designed for a 10.0 p truss to truss connec connection (by others plift at joint 12.	sidered for this dea d gust) Vasd=91m C-C Exterior(2E) -0 r left and right exp L=1.60 plate grip E sf bottom chord live tions.) of truss to bearin	sign. ph; TCDL=6.0psf; BCDL= -10-8 to 2-1-8, Interior(1) losed ; end vertical left and DCL=1.60 e load nonconcurrent with g plate capable of withsta	4.2psf; h=25ft; Ca 2-1-8 to 20-0-0, E d right exposed;C any other live loa nding 168 lb uplift	at. II; Exp C; Enclosed; xterior(2R) 20-0-0 to 2 -C for members and fo ds. at joint 2, 304 lb uplift	3-0-0, prces & at	STATE OF AND THO JOIN	MISSOUP REW MAS	

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

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



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

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



4-	-6-15 4-6-9	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)	[6:0-4-0,0-1-15], [8:0-4-0,0-1-15], [12:0-	4-1,0-0-1], [17:0-6-0,0-3-0]			
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 0.76 BC 0.75 WB 0.60 Matrix-AS	DEFL. in Vert(LL) -0.26 Vert(CT) -0.53 Horz(CT) 0.03	(loc) I/defl L/d 17-18 >946 240 17-18 >465 180 17 n/a n/a	PLATES GRIP MT20 197/144 MT20HS 148/108 Weight: 184 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF 17-18: 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 2-0-0 oc purlins (10-0-0 m Rigid ceiling directly applie 1 Row at midpt	l directly applied, except ax.): 6-8. ∋d. 6-17, 10-15, 8-16
REACTIONS. (siz Max H Max L Max C	e) 2=0-3-8, 17=0-3-8, 12=Mechanical lorz 2=158(LC 12) Jplift 2=-224(LC 12), 17=-203(LC 12), 12 Grav 2=1063(LC 25), 17=2495(LC 1), 12	=-251(LC 13) =935(LC 26)			
FORCES. (lb) - Max. TOP CHORD 2-3= 10-1: 10-1: BOT CHORD 2-20: 12-1: WEBS 18-2 8-16:	Comp./Max. Ten All forces 250 (lb) or -1550/341, 3-5=-1386/374, 5-6=-1490/5 2=-1196/418 =-383/1304, 5-18=-566/238, 16-17=-107 3=-274/1037 0=-304/1302, 6-17=-1150/242, 8-15=-95 =-1197/133, 6-18=-352/1434	less except when shown. 9, 6-7=0/466, 7-8=0/463, 8- (1093, 7-17=-344/126, 13-15 (657, 10-15=-1002/280, 10-1	10=-373/332, 5=-274/1037, 3=0/334,		
NOTES- 1) Unbalanced roof liv. 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 20-5-12 t 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 17 and 251 lb u 8) This truss is design referenced standard 9) This truss design referenced standard 9) This truss design referenced standard 9) Graphical purlin ref	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) -0 o 24-0-0, Exterior(2R) 24-0-0 to 28-215, t exposed;C-C for members and forces & rainage to prevent water ponding, plates unless otherwise indicated. designed for a 10.0 psf bottom chord liv r truss to truss connections. connection (by others) of truss to bearir uplift at joint 12. ed in accordance with the 2018 Internatio d ANS/TPI 1. quires that a minimum of 7/16" structura d directly to the bottom chord. presentation does not depict the size or	sign. ph; TCDL=6.0psf; BCDL=4.2 -10-8 to 2-1-8, Interior(1) 2-1 Interior(1) 28-2-15 to 39-8-8 MWFRS for reactions show e load nonconcurrent with ar g plate capable of withstand onal Residential Code section wood sheathing be applied the orientation of the purlin a	2psf; h=25ft; Cat. II; E I-8 to 16-0-0, Exterior 2 zone; cantilever left : 2 n; Lumber DOL=1.60 ny other live loads. ing 224 lb uplift at joir ns R502.11.1 and R8 directly to the top cho long the top and/or b	xp C; Enclosed; (2R) 16-0-0 to 20-5-12, and right exposed ; end 0 plate grip DOL=1.60 ht 2, 203 lb uplift at 02.10.2 and ord and 1/2" gypsum bottom chord.	ANDREW THOMAS JOHNSON NUMBER PE-2017018993

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

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



July 8,2021



4	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
Plate Offsets (X Y)	<u>5-12 4-5-7</u> [6:0-4-0 0-1-15] [8:0-4-0 0	5-0-14 -1-15] [11:0-4-1:0-0	0-3-8 11 [16:0-6-0 Edge]	0-0-8	5-8-0		6-8-8	7-0-0	0-0-4
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI:	2-0-0 1.15 1.15 YES 2014	CSI. TC 0.70 3C 0.78 WB 0.83 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT	in -0.31 -0.62) 0.03	(loc) 16-17 16-17 16	l/defl L/d >800 240 >395 180 n/a n/a	PLATES MT20 MT20HS Weight: 177 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 Sf BOT CHORD 2x4 Sf 16-17: 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			BRACIN TOP CHO BOT CHO WEBS	G- ORD ORD	Structu 2-0-0 o Rigid co 1 Row a	ral wood sheathing c c purlins (10-0-0 ma: eiling directly applied at midpt	directly applied, except x.): 6-8. l. 6-16, 8-15	
REACTIONS. (siz Max H Max L Max C	e) 11=Mechanical, 2=0-3 Horz 2=140(LC 12) Jplift 11=-235(LC 13), 2=-22 Grav 11=940(LC 26), 2=108	3-8, 16=0-3-8 26(LC 12), 16=-209(I 31(LC 25), 16=2460(_C 12) _C 1)						
FORCES. (lb) - Max. TOP CHORD 2-3= 9-11 BOT CHORD 2-19 13-1 WEBS 3-19 8-13	Comp./Max. Ten All forca -1595/348, 3-5=-1516/386, =-1252/391 =-375/1349, 5-17=-435/183 5=-58/388, 12-13=-261/109 =-274/112, 17-19=-301/138 =-71/573, 9-13=-819/235, 9	es 250 (lb) or less ex 5-6=-1559/491, 6-7= 8, 16-17=-153/524, 1 8, 11-12=-261/1098 14, 6-17=-265/1222, (-12=0/273	cept when shown. 0/413, 7-8=0/415, 8 5-16=-77/931, 7-16= 5-16=-1187/234, 8-1	3-9=-589/323, =-598/199, 15=-1128/128,					
NOTES- 1) Unbalanced roof liv. 2) Wind: ASCE 7-16; \ MWFRS (envelope) Interior(1) 18-2-15 t 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 209 lb up 8) This truss is design referenced standard 9) This truss design re sheetrock be applie 10) Graphical purlin re	e loads have been consider Vult=115mph (3-second gus) gable end zone and C-C E o 26-0-0, Exterior(2R) 26-0- t exposed;C-C for members rainage to prevent water po plates unless otherwise ind designed for a 10.0 psf bot r truss to truss connections. I connection (by others) of tr olift at joint 16. ed in accordance with the 2 d ANSI/TPI 1. equires that a minimum of 7/ d directly to the bottom choil opersentation does not depice	red for this design. st) Vasd=91mph; TCI :xterior(2E) -0-10-8 tr -0 to 30-2-15, Interior s and forces & MWFi onding. dicated. ttom chord live load r russ to bearing plate 018 International Re /16" structural wood s rd. ct the size or the orie	DL=6.0psf; BCDL=4 2-1-8, Interior(1) 2 (1) 30-2-15 to 39-8 RS for reactions sho nonconcurrent with a capable of withstan sidential Code secti sheathing be applied ntation of the purlin	1.2psf; h=25ft; -1-8 to 14-0-0 -8 zone; cantil own; Lumber E any other live ding 235 lb up ons R502.11. d directly to th along the top	Cat. II; E , Exterior ever left a DOL=1.60 loads. lift at join 1 and R80 e top cho and/or bo	xp C; En (2R) 14-(and right plate gri tt 11, 226 02.10.2 a rd and 1, ottom cho	closed; 0-0 to 18-2-15, exposed ; end ip DOL=1.60 6 lb uplift at and /2" gypsum ord.	THE OF STATE OF ANI THO JOH NUM PE-201	MISSOLA MAS TOOLA TOOLA MAS TOOLA MAS TOOLA TOOLA MAS TOOLA TOOLA TOOLA TOOL

Mitek* 16023 Swingley Ridge Rd Chesterfield, MO 63017

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



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
	3-0-0 5-0-10	8-3-8	0-0-8	7-8-0	1	5-8-8	6-0-0	0-0-1
Plate Offsets (X,Y)	[5:0-4-0,0-1-15], [8:0-4-0,0-3-3], [10:6	dge,0-0-15], [17:0-5-8,0-2-	8]					
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.87 BC 0.68 WB 0.92 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.09 12-14 -0.20 12-14 0.04 15	l/defl L/a >999 240 >999 180 n/a n/a	H PLAT	ES GF 19 ht: 183 lb F	RIP 7/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF 8-10: 2 BOT CHORD 2x4 SF 15-17: WEBS 2x4 SF WEDGE Left: 2x4 SPF No.2 , R	PF No.2 *Except* 2x6 SPF No.2 2 F No.2 *Except* 2x4 SP 2400F 2.0E PF No.2 ight: 2x4 SPF No.2		BRACING- TOP CHORI BOT CHORI WEBS	D Structo 2-0-0 D Rigid o 1 Row	ural wood shea oc purlins (5-11 ceiling directly a r at midpt	hing directly applied -7 max.): 5-8. pplied. 8-14	, except	
REACTIONS. (siz Max H Max U Max G	e) 2=0-3-8, 15=0-3-8, 10=Mechanic forz 2=121(LC 12) Jplift 2=-185(LC 12), 15=-269(LC 9), 1 Grav 2=1109(LC 25), 15=2399(LC 1),	al 0=-190(LC 13) 10=964(LC 26)						
FORCES. (lb) - Max. TOP CHORD 2-3=: 8-9=: 8-9=: BOT CHORD 2-19: 7-15: 7-15:	Comp./Max. Ten All forces 250 (lb) -1636/267, 3-4=-1912/356, 4-5=-1110 -864/249, 9-10=-1443/313 =-289/1385, 4-17=-70/435, 16-17=-33 =-604/191, 12-14=-30/670, 11-12=-20	or less except when shown 227, 5-6=-903/236, 6-7=0/3 1/1734, 15-16=-59/439, 14- 5/1198, 10-11=-205/1198	363, 7-8=0/326, 15=-42/812,					
WEBS 4-16: 3-19:	=-942/278, 6-16=-93/729, 6-15=-1162 =-470/127, 17-19=-278/1335, 3-17=-2	(166, 8-12=-50/521, 9-12=-6 5/327, 8-14=-1179/118	507/210,					
 NOTES- Unbalanced roof live Wind: ASCE 7-16; \ MWFRS (envelope) Interior(1) 16-2-0 to vertical left and right Provide adequate d This truss has been Refer to girder(s) fo Provide mechanical joint 15 and 190 b u This truss is designer referenced standard This truss design re sheetrock be applied 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) 28-0-0, Exterior(2R) 28-0-0 to 32-2-1 t exposed;C-C for members and force rainage to prevent water ponding. designed for a 10.0 psf bottom chord r truss to truss connections. connection (by others) of truss to bea uplift at joint 10. 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. Imph; TCDL=6.0psf; BCDL: -0-10-8 to 2-1-8, Interior(1) 5, Interior(1) 32-2-15 to 39-8 s & MWFRS for reactions si live load nonconcurrent with ring plate capable of withsta ational Residential Code ser ral wood sheathing be appl the orientation of the purlin	=4.2psf; h=25ft; Cat 2-1-8 to 12-0-0, Ex 8-8 zone; cantilever hown; Lumber DOL h any other live load anding 185 lb uplift ctions R502.11.1 ar ied directly to the to h along the top and/	. II; Exp C; E terior(2R) 12 left and right =1.60 plate g ls. at joint 2, 269 id R802.10.2 p chord and for pr bottom cho	nclosed; -0-0 to 16-2-0, exposed ; end rip DOL=1.60) Ib uplift at and 1/2" gypsum ord.	A TRACTA	LE OF M. ANDRE THOMA JOHNOC NUMBE PE-201701	IS SOLUE

July 8,2021

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





3-3-	8 10-0-0	5-2-0 20-3-8	20-4-0 25-3-12		30-0-0	39-8-8	<u>39-8</u> -10		
Plate Offsets (X,Y)	[2:0-2-15,0-2-0], [4:0-4-10,Edge], [9:0-4	-0,0-1-15], [12:0-5-1,Edge],	[16:0-6-0,0-2-12]		4-0-4	3-0-0	0-0-2		
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 0.95 WB 0.36 Matrix-AS	DEFL. ir Vert(LL) -0.19 Vert(CT) -0.40 Horz(CT) 0.12	n (loc) 16-18 13-15 2 16	l/defl L/d >999 240 >572 180 n/a n/a	PLATES MT20 MT20HS Weight: 162 lb	GRIP 197/144 148/108 FT = 20%		
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S 2-19: WEBS 2x4 S SLIDER Right	PF No.2 PF No.2 *Except* 2x6 SPF No.2, 16-17: 2x4 SP 2400F 2.0 PF No.2 2x4 SPF No.2 2-0-0	E	BRACING- TOP CHORD BOT CHORD WEBS	Structu 2-0-0 c Rigid c 1 Row	ural wood sheathing oc purlins (5-0-3 ma ceiling directly applic at midpt	directly applied, except x.): 4-9. ed. 3-18, 8-15, 5-16			
REACTIONS. (siz Max H Max U Max 0	te) 12=Mechanical, 2=0-3-8, 16=0-3-8 Horz 2=105(LC 12) Jplift 12=-205(LC 13), 2=-209(LC 12), 11 Grav 12=960(LC 26), 2=1099(LC 25), 16	5=-320(LC 9) =2418(LC 1)							
FORCES. (Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-3292/719, 3-4=-1456/295, 4-5=-1199/315, 5-6=-9/456, 6-8=0/399, 8-9=-862/299, 9-10=-1050/293, 10-12=-1396/360									
BOT CHORD 2-19 13-1	=-712/2967, 18-19=-678/2794, 16-18=- 5=-91/475, 12-13=-252/1197	48/693, 15-16=-117/938, 6-	16=-484/147,						
WEBS 3-19 5-18	=-116/709, 3-18=-1616/480, 10-13=-400 =-71/657, 5-16=-1431/317	/173, 8-13=-28/603, 8-15=-1	1174/212,						
 NOTES- Unbalanced roof liv Wind: ASCE 7-16; MWFRS (envelope Interior(1) 14-2-15 1 vertical left and righ Provide adequate of All plates are MT20 This truss has beer Refer to girder(s) for Bearing at joint(s) 2 capacity of bearing Provide mechanica joint 2 and 320 lb u This truss is design referenced standarr This truss design sheetrock be appl Graphical purlin referenced 	e loads have been considered for this de Vult=115mph (3-second gust) Vasd=91n) gable end zone and C-C Exterior(2E) - o 30-0, Exterior(2R) 30-0-0 to 34-2-15 it exposed;C-C for members and forces rainage to prevent water ponding. plates unless otherwise indicated. or designed for a 10.0 psf bottom chord live r truss to truss connections. considers parallel to grain value using / surface. I connection (by others) of truss to bearin plift at joint 16. ed in accordance with the 2018 Internati d ANSI/TPI 1. requires that a minimum of 7/16" structu ied directly to the bottom chord. ppresentation does not depict the size or	asign. ph; TCDL=6.0psf; BCDL=4)-10-8 to 2-1-8, Interior(1) 2- Interior(1) 34-2-15 to 39-8- & MWFRS for reactions sho re load nonconcurrent with a INSI/TPI 1 angle to grain for ng plate capable of withstand onal Residential Code section al wood sheathing be applied the orientation of the purlin	2psf; h=25ft; Cat. II; E 1-8 to 10-0-0, Exterior 8 zone; cantilever left wn; Lumber DOL=1.6(ny other live loads. mula. Building desigr ding 205 lb uplift at join ons R502.11.1 and R8 ed directly to the top ch along the top and/or b	Exp C; Er r(2R) 10- and righ) plate gi her shoul ht 12, 20 02.10.2 hord and ottom ch	nclosed; -0-0 to 14-2-15, t exposed ; end rip DOL=1.60 Id verify 9 lb uplift at and 1/2" gypsum nord.	× JOH NUT PE-201 NUT PE-201	MISSOL DREW MAS MEER 7018993		

July 8,2021

16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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 TCLL TCDL BCLL BCDL	(psf) 25.0 20.0 0.0 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES Pl2014	CSI. TC 0.50 BC 0.41 WB 0.85 Matrix-AS	DEFL.irVert(LL)-0.05Vert(CT)-0.11Horz(CT)0.04	n (loc) I/defl L/d 11-12 >999 240 11-12 >999 180 9 n/a n/a	PLATES MT20 Weight: 87 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHOF BOT CHOF	RD 2x4 SI RD 2x4 SI 2-12: 2	PF No.2 PF No.2 *Except* 2x6 SPF No.2			BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir 2-0-0 oc purlins (10-0-0 max. Rigid ceiling directly applied.	ectly applied, except): 4-5.	end verticals, and
WEBS	2x4 S	PF No.2						

REACTIONS. All bearings 6-11-14 except (jt=length) 2=0-3-8. (lb) - Max Horz 2=179(LC 9)

Max Horz 2=179(LC 9) Max Uplift All uplift 100 lb or less at joint(s) 7, 2 except 8=-199(LC 25), 9=-319(LC 12) Max Grav All reactions 250 lb or less at joint(s) 7, 8 except 2=664(LC 1), 9=1598(LC 1)

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

TOP CHORD 2-3=-1583/348, 3-4=-557/119, 4-5=-205/601, 5-6=-197/728

- BOT CHORD 2-12=-521/1407, 11-12=-488/1307, 9-11=-161/416
- WEBS 3-12=-97/383, 3-11=-899/334, 4-11=-37/360, 4-9=-1171/344, 6-9=-909/273, 6-8=-98/308

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 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 19-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 7, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2 except (jt=lb) 8=199, 9=319.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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





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



Plate Offsets (X,Y) [2:0-3-7	3-3-8	2-8-8	3-8-8	3-3-8	
Plate Offsets (X,Y) [2:0-3-7	7 0-2-01 [4.0-4-0 0-1-15] [7.0				
	7,0-2-0], [4.0-4-0,0-1-10], [7.0	-0-8,0-1-8], [8:0-5-4,0-2-4], [9:0-	3-8,0-4-8], [10:0-10-0,Edge]		
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNO	CSI. TC 0.66 BC 0.54 WB 0.61	DEFL. in (loc) l/defl L// Vert(LL) -0.09 9-10 >999 244 Vert(CT) -0.19 9-10 >792 18 Horz(CT) 0.13 7 n/a n/a	d PLATES GRIP 00 MT20 197/144 00 MT20HS 148/108 a	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-4-14 oc purlins,
BOT CHORD	2x6 SPF 2100F 1.8E *Except*		except end verticals, and 2-0-0 oc purlins (3-10-4 max.): 4-6.
	7-8: 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 7=0-3-8, 2=0-3-8 Max Horz 2=137(LC 7) Max Uplift 7=-489(LC 5), 2=-323(LC 8) Max Grav 7=1789(LC 1), 2=1449(LC 1)

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

- TOP CHORD 2-3=-4357/1033, 3-4=-3322/844, 4-5=-2097/559, 5-6=-2071/549, 6-7=-1539/431
- BOT CHORD 2-10=-1029/3892, 9-10=-978/3698, 8-9=-804/2889
- WEBS 3-10=-159/694, 4-8=-920/258, 5-8=-362/119, 6-8=-689/2476, 4-9=-419/1590, 3-9=-756/221

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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) Bearing at joint(s) 7, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=489, 2=323.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 8-0-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 827 lb down and 281 lb up at 6-0-0, and 306 lb down and 119 lb up at 9-8-8, and 307 lb down and 118 lb up at 12-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2

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





Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
						I46904259
2839636	B9	Half Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:27 2021	Page 2

ID:clow4Ylgf7iox0?ly?5BCcz33zm-0D96A?YqWPHMJLV5g_wCFZYPL9IYldZeDJL6apz_Pcs

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, 10-11=-20, 8-10=-20, 7-8=-20 Concentrated Loads (lb)

Vert: 8=-306(B) 9=-827(B) 14=-306(B) 15=-307(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 **ANS/ITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
0000000						I46904260
2839636	01	ROOF SPECIAL GIRDER	1	2	lob Reference (ontional)	
Builders FirstSource (Valley	Center), Valley Center, K	.S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:29 2021	Page 2
		ID	clow4Ylg	7iox0?ly?	5BCcz33zm-ybHsbhZ420X4YffToPygK dk5zzmmVVwhdg[Dfiz Pcq

NOTES-

- 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 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-0-12 from the left end to 18-0-12 to connect truss(es) to front face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down at 0-0-12, and 1568 lb down and 403 lb up at 2-0-7, and 854 lb down and 147 lb up at 20-0-12 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, 4-10=-90, 24-26=-160, 9-10=-160, 25-32=-160, 22-32=-110, 8-22=-20, 7-8=-160
 - Concentrated Loads (lb)
 - Vert: 19=-1024(F) 14=-880(F) 24=-1623(F) 23=-1001(F) 10=-854(F) 27=-1024(F) 28=-900(F) 29=-904(F) 30=-875(F) 31=-903(F)

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





Plate Offsets (X,Y)	[5:0-6-0,0-0-15]					
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 0.32 BC 0.58 WB 0.13 Matrix-AS	DEFL. ir Vert(LL) -0.08 Vert(CT) -0.18 Horz(CT) 0.05	n (loc) l/defl L/d 9-17 >999 240 9-17 >999 180 7 n/a n/a	PLATES MT20 Weight: 80 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF	PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir 2-0-0 oc purlins (4-11-8 max.) Rigid ceiling directly applied.	ectly applied, except): 4-5.	

WEBS 2x4 SPF No.2 WEDGE

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 17)

Max Uplift 2=-178(LC 12), 7=-178(LC 13) Max Grav 2=1222(LC 1), 7=1222(LC 1)

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

TOP CHORD 2-3=-1874/336, 3-4=-1556/288, 4-5=-1319/295, 5-6=-1555/288, 6-7=-1874/336

BOT CHORD 2-11=-260/1602, 9-11=-130/1319, 7-9=-238/1602

WEBS 3-11=-328/154, 4-11=-22/310, 5-9=-25/310, 6-9=-328/154

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(2E) 8-4-12 to 12-4-12, Exterior(2R) 12-4-12 to 16-8-14, Interior(1) 16-8-14 to 21-8-0 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

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=178, 7=178

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.





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



	<u>3-2-9</u> <u>6-4-12</u> <u>3-2-9</u> <u>3-2-3</u>	10-4-12	1	4-4-12	17-6-15	20-9-	8			
Plate Offsets (X,Y)	[2:0-0-0,0-0-1], [4:0-4-0,0-1-15], [6:0	-4-0,0-1-15], [8:0-0-0,0-0-1],	[11:0-6-0,0-6-0], [13	:0-6-0,0-6-0]	020	02	<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 NO Code IRC2018/TPI2014	CSI. TC 0.73 BC 0.35 WB 0.33 Matrix-MS	DEFL. Vert(LL) - Vert(CT) - Horz(CT)	in (loc) 0.13 12 0.28 12 0.04 8	l/defl L/d >999 240 >906 180 n/a n/a	PLATES MT20 Weight: 123 lb	GRIP 197/144 FT = 20%			
LUMBER- TOP CHORD 2x4 SF 4-6: 2x BOT CHORD 2x8 SF WEBS 2x4 SF	PF No.2 *Except* 4 SPF 1650F 1.5E 2 2400F 2.0E 2F No.2		BRACING- TOP CHORD BOT CHORD	Structu 2-0-0 c Rigid c	ural wood sheathing d oc purlins (2-8-14 ma ceiling directly applied	lirectly applied or 2-1-2 x.): 4-6. I or 10-0-0 oc bracing.	oc purlins, except			
REACTIONS. (size Max H Max U Max G	e) 2=0-3-8, 8=0-3-8 lorz 2=-62(LC 34) plift 2=-653(LC 8), 8=-653(LC 9) irav 2=2768(LC 1), 8=2768(LC 1)									
FORCES. (lb) - Max. TOP CHORD 2-3=- 7-8=-	Comp./Max. Ten All forces 250 (II 4795/1151, 3-4=-5144/1280, 4-5=-5 4795/1153) or less except when showr 253/1279, 5-6=-5253/1279, 6	n. 6-7=-5144/1280,							
WEBS 3-15= 6-12=	BOT CHORD 2-15=-1030/4235, 13-15=-1030/4235, 12-13=-1080/4534, 11-12=-1018/4534, 10-11=-969/4235, 8-10=-969/4235 WEBS 3-15=-528/158, 3-13=-258/546, 4-13=-362/1351, 4-12=-263/1009, 5-12=-483/151, 6-12=-263/1009, 6-11=-362/1352, 7-11=-259/546, 7-10=-528/157									
 NOTES- Unbalanced roof live Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 Provide adequate di This truss has been Provide mechanical 2=653, 8=653. This truss is designe referenced standard Graphical purlin repi Use Simpson Strong 7-4-12 from the left of 9) Fill all nail holes whe Hanger(s) or other 6-4-12, and 890 lb responsibility of ott In the LOAD CASE(S) Standard 	a loads have been considered for thi /ult=115mph (3-second gust) Vasd= gable end zone; cantilever left and rainage to prevent water ponding. designed for a 10.0 psf bottom chor connection (by others) of truss to be ed in accordance with the 2018 Inter I ANSI/TPI 1. resentation does not depict the size g-Tie LUS24 (4-10d Girder, 2-10d Ti end to 13-4-12 to connect truss(es) are hanger is in contact with lumber. connection device(s) shall be provid down and 308 lb up at 14-4-0 on br erss. E(S) section, loads applied to the fact dard	s design. Damph; TCDL=6.0psf; BCDL ight exposed ; end vertical le d live load nonconcurrent wit aring plate capable of withst national Residential Code se or the orientation of the purlir uss, Single Ply Girder) or eq o back face of bottom chord. ed sufficient to support conc ttom chord. The design/sele e of the truss are noted as fro	=4.2psf; h=25ft; Cat. ft and right exposed h any other live load anding 100 lb uplift a ctions R502.11.1 and h along the top and/c uivalent spaced at 2- entrated load(s) 890 ection of such conner ont (F) or back (B).	II; Exp C; Ei ; Lumber DC s. it joint(s) exc d R802.10.2 or bottom chc 0-0 oc max. Ib down and ction device(nclosed; iL=1.60 plate ept (jt=lb) and ord. starting at 308 lb up at s) is the	SCINTE OF SCINTE OF AN THUS JOE NO PE-20	MISSOL DREW OMAS DSON MBER 17018993			

Continued on page 2

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

MiTek° 16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
						146904262
2839636	C3	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67		S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:32 2021	Page 2

ID:clow4YIgf7iox0?ly?5BCcz33zm-MAy?DjbzLxveP7O2TYVNycFE_A2lzy7NNb2tF1z_Pcn

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: 13=-890(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 **ANSUTPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





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





July 8,2021



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



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 system. See MSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building 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

NITEK 16023 Swingley Ridge Rd Chesterfield, MO 63017



LOADING ((psf)	SPACING- 2-0-0	CSI.	DEFL. i	າ (loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL 1.15	TC 0.42	Vert(LL) 0.04	6-11	>999	240	MT20	197/144
TCDL 2	20.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.07	′ 6-11	>862	180		
BCLL	0.0	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.0	2	n/a	n/a		
BCDL '	10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 17 lb	FT = 20%
LUMBER-				BRACING-					
TOP CHORD 2x4 SPF No.2			TOP CHORD	TOP CHORD Structural wood sheathing directly applied or 5-1-13 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

(size) 6=Mechanical, 2=0-7-0

REACTIONS.

Max Horz 2=98(LC 7) Max Uplift 6=-89(LC 8), 2=-146(LC 4) Max Grav 6=281(LC 1), 2=466(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 capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2 = 146
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-90, 3-4=-40, 5-7=-20 Concentrated Loads (lb) Vert: 12=-82(F=-41, B=-41)





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


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



July 8,2021

16023 Swingley Ridge Rd Chesterfield, MO 63017



L	8-0-0	12-0-0		19-8-8
I	8-0-0	4-0-0	1	7-8-8
Plate Offsets (X,Y)	[1:0-0-0,0-0-5], [3:0-4-0,0-1-15]			
LOADING (psf)	SPACING- 2-0-0	CSI. DEFL.	in (loc) l/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.71 Vert(LL) -(.07 8-11 >999 240	MT20 197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.51 Vert(CT) -0	.18 8-11 >999 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.13 Horz(CT) (.03 5 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 71 lb FT = 20%
LUMBER-		BRACING-		
TOP CHORD 2x4 S	SPF No.2 *Except*	TOP CHORD	Structural wood sheathing d	irectly applied, except
1-2:2	2x6 SPF No.2		2-0-0 oc purlins (4-10-3 max	.): 2-3.
BOT CHORD 2x4 S	SPF No.2	BOT CHORD	Rigid ceiling directly applied	
WEBS 2x4 S	SPF No.2		· · · · · · · · · · · · · · · · · · ·	
SLIDER Right	2x4 SPF No.2 2-0-0			
5				

REACTIONS. (size) 1=0-3-8, 5=Mechanical Max Horz 1=76(LC 12) Max Uplift 1=-132(LC 12), 5=-129(LC 13)

Max Grav 1=1084(LC 1), 5=1084(LC 1)

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

 TOP CHORD
 1-2=-1569/277, 2-3=-1271/312, 3-5=-1475/287

 BOT CHORD
 1-8=-172/1300, 6-8=-173/1296, 5-6=-167/1274

 WEBS
 3-6=-6/253

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-0-0, Exterior(2E) 8-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 19-8-8 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.

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=132, 5=129.

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

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

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







LUMBER-			BRACING-		
TOP CHORD	2x4 SP	F No.2 *Except*	TOP CHORD	Structural wood sheathing di	rectly applied, except
	2-3: 2x	6 SPF No.2		2-0-0 oc purlins (4-5-15 max	.): 2-3.
BOT CHORD	2x4 SP	F No.2	BOT CHORD	Rigid ceiling directly applied.	
WEBS	2x4 SP	F No.2	WEBS	1 Row at midpt	2-6
WEDGE				-	
Left: 2x4 SPF	No.2				
SLIDER	Right 2	x4 SPF No.2 2-0-0			

REACTIONS. (size) 5=Mechanical, 1=0-3-8 Max Horz 1=55(LC 12) Max Uplift 5=-145(LC 13), 1=-148(LC 12) Max Grav 5=1084(LC 1), 1=1084(LC 1)

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

 TOP CHORD
 1-2=-1777/296, 2-3=-1431/300, 3-5=-1677/289

 BOT CHORD
 1-8=-204/1503, 6-8=-207/1496, 5-6=-187/1438

 WEBS
 2-8=0/294, 3-6=0/295

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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 6-0-0, Exterior(2R) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 19-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) All plates are MT20 plates unless otherwise indicated.

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

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=145, 1=148.

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

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

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







- 2-12=-17/258, 2-10=-400/1483, 3-10=-506/193, 4-9=-528/197, 5-9=-425/1607
- WEBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=377, 1=373
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 215 lb down and 93 lb up at 4-0-0, and 215 lb down and 93 lb up at 15-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Continued on page 2





Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO
					146904272
2839636	D3	Hip Girder	1	1	
					Job Reference (optional)
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:41 2021 Page 2

ID:clow4Ylgf7iox0?ly?5BCcz33zm-cv?O6oicDi1N?VanVxAUpW7k_o_La?MhRUkr4?z_Pce

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-90, 2-5=-90, 5-7=-90, 13-17=-20 Concentrated Loads (lb)

Vert: 2=-45(B) 5=-45(B) 11=-53(B) 12=-215(B) 10=-53(B) 3=-45(B) 4=-45(B) 9=-53(B) 8=-215(B) 20=-45(B) 21=-45(B) 22=-45(B) 23=-53(B) 24=-53(B) 24=-





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 July 8,2021





Max Grav 2=496(LC 1), 4=496(LC 1)

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

2-3=-484/221, 3-4=-484/221 TOP CHORD

BOT CHORD 2-6=-83/368, 4-6=-83/368

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.







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 0.54	Vert(LL) 0.07 6-9 >924 240 MT20 197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.41	Vert(CT) -0.14 6-9 >505 180
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.03 2 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Weight: 20 lb FT = 20%

REACTIONS.

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 WEDGE
 Left: 2x4 SPF No.2

Leit. 2x4 SPF No.2

(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. (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 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) 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.



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

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



Plate Offs	ets (X,Y)	[3:0-6-0,Edge]			_
	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15	IC 0.71	Vert(LL) 0.09 8 >743 240 MI20 197/144	
TCDL	20.0	Lumber DOL 1.15	BC 0.56	Vert(CI) -0.16 8 >439 180	
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.10 7 n/a n/a	
RCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Weight: 21 lb F I = 20%	_

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2 *Except*

 2-8: 2x6 SPF No.2

 WEBS
 2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 7=Mechanical, 2=0-3-8 Max Horz 2=118(LC 9)

Max Uplift 7=-82(LC 12), 2=-58(LC 12) Max Grav 7=327(LC 1), 2=401(LC 1)

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 2-0-5, 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) 7, 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.







TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 *Except* 2-6: 2x6 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 Uplift 4=-45(LC 12), 2=-37(LC 12), 5=-15(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-

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 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.

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/TPL1.

ANDREW THOMAS JOHNSON NUMBER PE-2017018993 July 8,2021





LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) 0	0.01 4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0	0.01 4-7	>999	180		
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0	0.00 3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 13 lb	FT = 20%

TOP CHORD2x4 SPF No.2BOT CHORD2x6 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=-56(LC 12), 2=-38(LC 12), 4=-5(LC 12) Max Grav 3=131(LC 1), 2=299(LC 1), 4=88(LC 3)

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

NOTES-

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







BCLL BCDL	0.0 10.0	Rep Stress Incr YE Code IRC2018/TPI201	S WB Matrix	0.02 Vent 0.00 Horz c-MP	(CT) z(CT)
					-

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

0.00

3

n/a

n/a

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

Weight: 7 lb

FT = 20%

REACTIONS. 3=Mechanical, 2=0-3-8, 4=Mechanical (size) Max Horz 2=54(LC 12) Max Uplift 3=-26(LC 12), 2=-30(LC 12), 4=-3(LC 12) Max Grav 3=58(LC 1), 2=201(LC 1), 4=40(LC 3)

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

NOTES-

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

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

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







BOT CHORD

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

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

REACTIONS. 3=Mechanical, 2=0-3-8, 4=Mechanical (size) Max Horz 2=61(LC 12) Max Uplift 3=-31(LC 12), 2=-31(LC 12), 4=-4(LC 12) Max Grav 3=71(LC 1), 2=218(LC 1), 4=49(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) 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.







			4-3-11					
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 0.28 BC 0.22 WB 0.00 Matrix-AS	DEFL. in Vert(LL) 0.03 Vert(CT) -0.04 Horz(CT) 0.01	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 12 lb	GRIP 197/144 FT = 20%

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 WEDGE

Left: 2x4 SPF No.2

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. (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 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.







				0-4-12					
			1	6-4-12					
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 0.63	Vert(LL) 0.09	6-9	>806 24	0	MT20	197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.18	6-9	>417 18	0		
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.03	2	n/a n/	a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 21 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2 WEDGE Loft: 2x4 SPE No.2

WEDGE Left: 2x4 SPF No.2 REACTIONS. (size) 6=Mecha

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

 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.



ANDREW THOMAS JOHNSON HE PE-2017018993 JULY 8,2021



BRACING-TOP CHORD

BOT CHORD

IIIMD	=D_

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

BOT CHORD 2x6 SPF No.2

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=96(LC 12) Max Uplift 3=-58(LC 12), 2=-38(LC 12), 4=-5(LC 12) Max Grav 3=135(LC 1), 2=304(LC 1), 4=90(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 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- grip DOL=1.60

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

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

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





Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #26/MO	
2839636	.110	Jack-Open	1	1		146904284
2000000	0.0				Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ju	n 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:44 2021	Page 1

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 7 15:53:44 2021 Page 1 ID:clow4Ylgf7iox0?ly?5BCcz33zm-0UhXkplVWdQxszJMA3jBR8ITk0DSnSG87SyVgKz_Pcb



Scale = 1:10.7

4x8 || ⁴

3

			1-7-7 1-7-7					
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES	CSI. TC 0.04 BC 0.03 WB 0.00	DEFL. Vert(LL) -C Vert(CT) -C Horz(CT) -C	in (loc) 0.00 4 0.00 4 0.00 2	l/defl >999 >999 >999 2 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR	BRACING-				Weight: 4 lb	FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

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

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-

- 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.
- 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.







LUMBER-

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

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical Max Horz 2=90(LC 12) Max Uplift 3=-53(LC 12), 2=-37(LC 12), 4=-5(LC 12) Max Grav 3=124(LC 1), 2=290(LC 1), 4=84(LC 3)

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

NOTES-

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







BRACING-

TOP CHORD

BOT CHORD

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

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

Max Horz 2=45(LC 12) Max Uplift 2=-28(LC 12), 4=-24(LC 9)

Max Grav 2=189(LC 1), 4=70(LC 1)

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

NOTES-

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

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

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

OF MISSOL TE ANDREW THOMAS HISON WORDESSIONAL NUMBER PE-2017018993 E July 8,2021

Structural wood sheathing directly applied or 1-7-11 oc purlins.

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





WEBS 3-8=-293/448, 4-7=-273/230

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

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







BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

11	IN	IRI	FR	2
	J 14			<u>-</u>

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2 *Except*

 2-8: 2x6 SPF No.2

 WEBS
 2x4 SPF No.2

 WEBS
 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=398(LC 1), 7=326(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 4-7=-293/221

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

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







Plate Offsets (X,Y)	[2:0-0-14,0-1-10]		
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 0.78 BC 0.29 WB 0.04 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) 0.14 8 >490 240 MT20 197/144 Vert(CT) -0.24 8 >287 180 MT20 197/144 Horz(CT) 0.07 7 n/a n/a Weight: 22 lb FT = 20%
LUMBER-		I I	BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

2x4 SPF No.2 TOP CHORD BOT CHORD 2x4 SPF No.2 *Except* 2-8: 2x6 SPF No.2 WEBS 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=398(LC 1), 7=326(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 4-7=-296/220

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 6-0-0 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) 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, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







		 	3-3-8			0-7	-7		
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 0.21 BC 0.14 WB 0.02 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.01 0.00	(loc) 6 6-9 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 14 lb	GRIP 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2 *Except*

 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. (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 3-10-3 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.





		[=:= = =;= = =]										
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	0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	912014	Matrix	k-MR						Weight: 6 lb	FT = 20%
LUMBER	१-					BRACING-						
TOP CH						TOP CHOR	סא	Structu	ral wood	sheathing di	rectly applied or 1-10)-15 oc purlins

LUWBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-15 oc purlins,
BOT CHORD	2x4 SPF No.2		except end verticals.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

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

Max Horz 5=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. (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 www.endlogue.com/decompletere/second/
- 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.

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

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

- 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.







 			27-9-14 27-9-14		
Plate Offsets (X,Y)	[4:0-2-10,Edge], [12:0-2-10,Edge], [22:0-	4-0,0-3-0]			
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 0.07 BC 0.03 WB 0.14 Matrix-S	DEFL. ir Vert(LL) n/z Vert(CT) n/z Horz(CT) 0.01	(loc) l/defl L/d - n/a 999 - n/a 999 15 n/a n/a	PLATES GRIP MT20 197/144 Weight: 144 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF	PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire 2-0-0 oc purlins (6-0-0 max.): / Rigid ceiling directly applied or	ctly applied or 6-0-0 oc purlins, except 4-12. 10-0-0 oc bracing.

REACTIONS. All bearings 27-9-14.

(lb) - Max Horz 1=-170(LC 8)

 Max Uplift
 All uplift 100 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except 27=-155(LC 12), 28=-140(LC 12), 17=-155(LC 13), 16=-141(LC 13)

 Max Grav
 All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 28, 21, 20, 19, 18, 16 except

27=265(LC 19), 17=264(LC 20)

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

NOTES-

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

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.





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



LUMBER-

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

BRACING-TOP CHORD BOT CHORD WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 5-13

REACTIONS. All bearings 15-9-14.

(lb) - Max Horz 1=-229(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-145(LC 12), 15=-145(LC 12), 16=-142(LC 12), 12=-143(LC 13), 11=-146(LC 13), 10=-141(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 15, 16, 11, 10 except 14=261(LC 19), 12=259(LC 20)

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

TOP CHORD 1-2=-311/203, 8-9=-279/197

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 7-10-15, Exterior(2R) 7-10-15 to 10-10-15, Interior(1) 10-10-15 to 15-5-15 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.

4) Gable requires continuous bottom chord bearing.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=145, 15=145, 16=142, 12=143, 11=146, 10=141.

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









<u>19-9-14</u> 19-9-14

Plate Offsets (X,Y)	[6:Edge,0-1-14], [19:0-4-0,0-3-0]			
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.09 BC 0.05 WB 0.15	DEFL. in (loc) I/defl Vert(LL) n/a - n/a Vert(CT) n/a - n/a Horz(CT) 0.01 11 n/a	L/d PLATES GRIP 999 MT20 197/144 999 n/a
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 112 lb FT = 20%
LUMBER-			BRACING-	

TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing	directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applie	d or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2	WEBS	1 Row at midpt	6-16, 5-17, 7-15

REACTIONS. All bearings 19-9-14.

(lb) - Max Horz 1=-289(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-131(LC 10), 17=-140(LC 12), 18=-147(LC 12), 19=-145(LC 12), 20=-144(LC 12), 15=-138(LC 13), 14=-148(LC 13), 13=-142(LC 13), 12=-142(LC 13), 14=-148(LC 13), 13=-142(LC 13), 12=-142(LC 13), 14=-148(LC 13), 13=-142(LC 13), 16=256(LC 13), 17=259(LC 19), 18, 20, 14, 13, 12 except 1=297(LC 12), 11=262(LC 13), 16=256(LC 13), 17=259(LC 19), 19=254(LC 19), 15=257(LC 20)

TOP CHORD 1-2=-415/264, 2-3=-287/214, 10-11=-370/256

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 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.

4) Gable requires continuous bottom chord bearing.

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

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





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

BOT CHORD 1-20=-180/274, 19-20=-180/274, 18-19=-175/272, 17-18=-175/272, 16-17=-175/272, 15-16=-175/272, 13-14=-175/272, 12-13=-175/272, 11-12=-175/272



- shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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, 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.





(lb) - Max Horz 1=-108(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) except 6=-180(LC 13), 7=-182(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=320(LC 20), 7=322(LC 19)

- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- WEBS 4-6=-313/201, 2-7=-313/203

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 180 lb uplift at joint 6 and 182 lb uplift at joint 7.

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







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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. All bearings 11-9-14.

Max Horz 1=-168(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-150(LC 12), 12=-142(LC 12), 9=-149(LC 13), 8=-142(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 12, 8 except 11=262(LC 19), 9=261(LC 20)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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 5-10-15, Exterior(2R) 5-10-15 to 8-10-15, Interior(1) 8-10-15 to 11-5-15 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.

4) Gable requires continuous bottom chord bearing.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=150, 12=142, 9=149, 8=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.



















LOADING (ps TCLL 25 TCDL 20 BCLL 0 BCDL 10	sf) 5.0 9.0 9.0	SPACING- 2 Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI20	2-0-0 C 1.15 T 1.15 E YES V 014 M	CSI. TC 0.27 BC 0.11 WB 0.05 Matrix-P	5	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 23 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS OTHERS	2x4 SPF 2x4 SPF 2x4 SPF 2x4 SPF 2x4 SPF	No.2 No.2 No.2 No.2				BRACING- TOP CHOR BOT CHOR	D D	Structur except e Rigid ce	al wood end vertie eiling dire	sheathing dir cals. ctly applied c	ectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins,
REACTIONS.	(size) Max Ho Max Up Max Gra) 1=7-9-12, 4=7-9-12, 5=7 rz 1=148(LC 9) lift 4=-31(LC 9), 5=-128(LC av 1=132(LC 20), 4=166(LC	7-9-12 : 12) C 1), 5=489(LC 1)									

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-251/176

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.







LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/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 0.64 BC 0.27 WB 0.00	Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 16 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=5-9-12, 3=5-9-12 (size) 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-

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-Č 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.

- 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.



Structural wood sheathing directly applied or 5-10-4 oc purlins,

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

except end verticals.





LOADING TCLL TCDL BCLL BCDL	(psf) 25.0 20.0 0.0 10.0	SPACING- 2 Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI20	2-0-0 1.15 1.15 YES 014	CSI. TC BC WB Matrix	0.22 0.09 0.00 <-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 10 lb	GRIP 197/144 FT = 20%	
I UMBER-						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. (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) 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 MISSO ATE ANDREW THOMAS JOHNSON NUMBER to. PE-2017018993 HESSIONAL E July 8,2021

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

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

except end verticals.





2x4 💋

2x4 📚

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

Plate Offsets (X,Y)	12:0-2-0.Edge]		4-3-9 4-3-9	<u>474</u> 1 0-0-8
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.06 BC 0.10 WB 0.00	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
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 9 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP	F No 2		BRACING- TOP CHORD Structural wood sheathing dir	rectly applied or 4-4-1 oc purlins

BOT CHORD

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

REACTIONS. (size) 1=4-3-1, 3=4-3-1 Max Horz 1=-14(LC 17) 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.




