



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

Re: 2964577 SUMMIT/WOODSIDE RIDGE #124/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: I48383636 thru I48383691

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

Missouri COA: Engineering 001193



October 18,2021

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.



Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #124/MO	
						148383636
2964577	A1	Piggyback Base Supported Gable	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Au	ug 16 2021 MiTek Industries, Inc. Fri Oct 15 14:24:29 2021	Page 2
		ID:pEl2	2tSnelCAF	SbWVqXH	HdMIzCDRM-LJjLuivt9?BGreXR4qYY7EY EMGq5?fLSfjs	qyT8SG

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

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 64, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 47, 46, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 32.
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.









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 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

October 18,2021



1	7-2-0 7-3 ₁ 12 15-2-8	1 21-2-0	27-1-8	34-0-0	41-2-0
	7-2-0 0-1 ^{!!} 12 7-10-12	5-11-8	5-11-8	6-10-8	7-2-0
Plate Offsets (X Y)	[2:0-3-0 0-1-8] [5:0-4-0 0-1-15] [7:0-4-	0 0-1-15] [9:0-3-0 0-1-8] [10)·Edge ()-1-8]		
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.59	DEFL. in (lo Vert(LL) -0.08 16-	oc) l/defl L/d -17 >999 240	PLATES GRIP MT20 197/144
TCDI 10.0	Lumber DOL 1 15	BC 0.64	Vert(CT) -0.18.16-	17 >999 180	
BCU 0.0	Rep Stress Incr VES	W/B 0.36	Horz(CT) 0.04	10 n/a n/a	
BODI 10.0		Matrix AC	11012(01) 0.04	10 11/a 11/a	
BCDL 10.0	Code IRC2018/1912014	Matrix-AS			weight: 215 lb $FI = 20\%$
LUMBER- TOP CHORD 2x4 SF 5-7: 2x BOT CHORD 2x4 SF WEBS 2x4 SF	PF No.2 *Except* 6 SPF No.2 PF No.2 PF No.2		BRACING- TOP CHORD Str 2-0 BOT CHORD Rig WEBS 1 F	ructural wood sheathing dir D-0 oc purlins (6-0-0 max.): gid ceiling directly applied. Row at midpt 5-	ectly applied, except end verticals, and 5-7. •16, 6-14, 7-14, 8-13
REACTIONS. (siz Max H Max U Max G	e) 19=0-3-8, 10=0-5-8, 17=0-3-8 orz 19=197(LC 11) plift 19=-66(LC 12), 10=-279(LC 13), 1 rav 19=398(LC 25), 10=1494(LC 1), 17	7=-361(LC 12) ?=1951(LC 1)			
FORCES. (lb) - Max. TOP CHORD 4-5=- 2-19:	Comp./Max. Ten All forces 250 (lb) o .1191/314, 5-6=-1316/380, 6-7=-1316/3 330/209, 9-10=-1424/303	r less except when shown. 80, 7-8=-1599/379, 8-9=-174	18/341,		
BOT CHORD 17-1	3=-1876/391 4-18=-1768/394 14-16=-	24/954 13-14=-152/1321 1	1-13=-256/1475		
WEBS 4-16: 8-11:	=-134/1218, 5-16=-545/139, 5-14=-165/ =-327/137, 9-11=-223/1455	749, 6-14=-473/200, 7-13=-5	;3/338,		
NOTES					
NOTES-					
 Unbalanced roof live 	e loads have been considered for this de	esign.			
 Wind: ASCE 7-16; \ 	/ult=115mph (3-second gust) Vasd=91n	nph; TCDL=6.0psf; BCDL=4.	2psf; h=25ft; Cat. II; Exp C	C; Enclosed;	
MWFRS (envelope)	gable end zone and C-C Exterior(2E) -	1-10-8 to 2-2-14, Interior(1) 2	2-2-14 to 15-2-8, Exterior(2	2R) 15-2-8 to	
21-2-0. Interior(1) 2	I-2-0 to 27-1-8. Exterior(2R) 27-1-8 to 3	2-11-6. Interior(1) 32-11-6 to	41-0-4 zone: cantilever le	eft and right	
exposed · end vertic	al left and right exposed C-C for memb	ers and forces & MWFRS for	reactions shown. Lumber	DOI = 1.60 plate	
arip DOI = 1.60				Bel neo plate	
2) Drovido odogusta d	colorade to provent water pending				James
4) This trues has here	anage to prevent water ponding.	in load was an automatively as	nu othor live loodo		OF MISCON
4) This truss has been	designed for a 10.0 pst bottom chord liv	ve load nonconcurrent with a	ny other live loads.		A TE SON
Bearing at joint(s) 1	considers parallel to grain value using	ANSI/TPL1 angle to grain fo	ormula. Building designer	should verify	BAN YO.W.
capacity of bearing	surface.				SCOTT M. VEN
Provide mechanical	connection (by others) of truss to bearing	ng plate capable of withstand	ling 100 lb uplift at joint(s)	19 except (jt=lb)	H SEVIED VY
10=279, 17=361.	· · ·				A / SEVIER / N
7) This truss is designed	ed in accordance with the 2018 Internati	onal Residential Code section	ons R502.11.1 and R802 1	0.2 and	
referenced standard					10
9) This trues design re-	nuiros that a minimum of 7/16" atructure	wood shoothing he applied	directly to the top chard of	and 1/2" avecum	PARATZ ZAMONT
sheetrock be applied	directly to the bottom chord.	a wood sneathing be applied	unectly to the top chord a	inu i/z gypsum	PE-2001018807

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



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



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	1	7-2-0	7-3 ₁ 12	15-2-8		. 2	23-3-12	27-1	-8	:	34-0-0	41-2-0	I
		7-2-0	0-1-12	7-10-12		I	8-1-4	3-9-	12 '		6-10-8	7-2-0	
Plate Offsets	(X,Y)	[2:0-3-0,0-1-8],	[5:0-4-4,0-	2-0], [7:0-4-0,0)-1-15], [9:E	dge,0-1-12]	, [14:Edge,0-3-8]						
LOADING (pr TCLL 25 TCDL 10 BCLL 0 BCDL 10	sf) 5.0).0).0	SPACIN Plate Gri Lumber Rep Stre	IG- ip DOL DOL ess Incr 2C2018/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC BC WB Matri	0.57 0.83 0.43 x-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.30 -0.63 0.03	(loc) 11-13 11-13 10	l/defl >999 >640 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 222 lb	GRIP 197/144
BOBE 10			02010/11	2011	maan	~ / 10						Wolght. 222 lb	11 - 2070
LUMBER- TOP CHORD BOT CHORD WEBS REACTIONS.	2x4 SF 5-7: 2x 2x4 SF 2x4 SF . (siz Max H Max U Max C	PF No.2 *Except 66 SPF No.2 PF No.2 PF No.2 e) 19=0-3-8, 1 forz 19=197(LC Jplift 19=-91(LC Grav 19=423(LC	17=0-3-8, 1 2 11) 8), 17=-36 2 25), 17=1:	0=0-5-8 1(LC 12), 10=- 900(LC 1), 10=	287(LC 13) 1503(LC 1)	BRACING- TOP CHOF BOT CHOF WEBS	RD RD	Structu 2-0-0 o Rigid c 1 Row 1 Row	ral wood c purlins eiling dire at midpt at midpt	sheathing dir (5-6-13 max. ectly applied. 6 5	rectly applied, except e): 5-7. Except: -13 -15	end verticals, and
FORCES. (I TOP CHORD BOT CHORD WEBS	b) - Max. 4-5= 2-19 17-1 5-15 7-13	Comp./Max. Te -1109/334, 5-6= =-354/246, 9-10 8=-1832/388, 4- =-671/163, 8-11 =-100/390, 13-1	en All forc -1391/403, =-1447/306 18=-1735/3 =-536/302, 5=-81/907,	ces 250 (lb) or 6-7=-1395/40 390, 6-13=-513 9-11=-218/14 5-13=-166/82	ess except D, 7-8=-179 //216, 11-13 //0, 4-15=-1 3	when shown 99/517, 8-9=- 3=-161/1312 21/1145, 7-1	n. 1783/346, 11=-178/348,						
NOTES- 1) Unbalance: 2) Wind: ASC MWFRS (e 21-0-6, Inte exposed; e grip DOL=1 3) Provide ad 4) This truss b	d roof live E 7-16; \ envelope) erior(1) 2 end vertio 1.60 lequate d	e loads have be /ult=115mph (3- gable end zone 1-0-6 to 27-1-8, cal left and right rainage to preve designed for a	en conside second gu and C-C E Exterior(2F exposed;C ent water po	red for this des st) Vasd=91mp Exterior(2E) -1- R) 27-1-8 to 32 -C for member onding.	ign. h; TCDL=6 10-8 to 2-2 -11-6, Inter s and force	6.0psf; BCDL -14, Interior(ior(1) 32-11- es & MWFRS	_=4.2psf; h=25ft; Ca (1) 2-2-14 to 15-2-8 6 to 41-0-4 zone; c 5 for reactions show	at. II; Ex , Exterio antileve vn; Lum ads	p C; En or(2R) 1 r left an ber DO	iclosed; 5-2-8 to id right L=1.60 pl	late	S-E OF	MISS

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 17=361, 10=287.
- 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.

SCOTT M. SEVIER NUMBER WORTSSIONAL PE-2001018807 E October 18,2021





ROFT PE-2001018807 SSIONAL F October 18,2021

> MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-11-0, Exterior(2R) 11-11-0 to 14-11-0, Interior(1) 14-11-0 to 25-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=288, 6=183.

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.

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







REACTIONS.

Max Horz 14=-435(LC 10) Max Uplift 14=-294(LC 8), 7=-271(LC 13) Max Grav 14=1431(LC 1), 7=1494(LC 1)

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

TOP CHORD 2-3=-1040/328, 3-4=-1276/328, 4-6=-1932/365, 6-7=-2479/433

BOT CHORD 13-14=-25/691, 12-13=-25/691, 10-12=-107/1642, 9-10=-286/2124, 7-9=-286/2124

2-14=-1383/314, 2-12=-224/720, 4-12=-865/309, 4-10=-48/461, 6-10=-549/221 WEBS

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-2, Interior(1) 3-4-2 to 11-11-0, Exterior(2R) 11-11-0 to 15-1-6 , Interior(1) 15-1-6 to 32-10-0 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) Provide adequate drainage to prevent water ponding.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=294, 7=271.

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.

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







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 10-13=-1393/203, 1-10=-1393/201, 1-2=-787/200, 2-3=-787/200, 2-3=-787/200, 3-4=-1040/444, 4-5=-1850/356, 5-7=-2285/433, 7-8=-2505/453

 BOT CHORD
 17-18=-325/423, 15-16=-263/353, 14-15=-251/432, 13-14=0/1130, 4-13=-325/187, 8-10=-318/2158

 WEBS
 10-13=-162/1862, 5-13=-469/236, 7-10=-270/180, 2-14=-480/213, 1-14=-240/1448, 3-13=-324/1135, 3-14=-650/249

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) 0-1-12 to 3-4-2, Interior(1) 3-4-2 to 11-11-0, Exterior(2R) 11-11-0 to 15-1-6, Interior(1) 15-1-6 to 32-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces
 MWERD (second second secon

& MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=294, 8=271.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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



16023 Swingley Ridge Rd Chesterfield, MO 63017



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TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. All bearings 20-4-0.

Max Horz 2=-97(LC 17) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 30, 31, 23, 22, 21, 20, 19, 18, 16 All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 30, 31, 23, 22, 21, 20, 19, 18, 16 Max Grav

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 Corner(3E) -0-10-8 to 2-2-0, Exterior(2N) 2-2-0 to 10-2-0, Corner(3R) 10-2-0 to 13-2-0, Exterior(2N) 13-2-0 to 21-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 30, 31, 23, 22, 21, 20, 19, 18, 16.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

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





	6-9-7 6-9-7	13-6-9 6-9-2			20-4-0 6-9-7	<u> </u>
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI.DEFL.TC0.26BC0.41Vert(LL)WB0.11Horz(C)Matrix-AS	in (loc) -0.07 8-10) -0.14 8-10) 0.03 6	I/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 74 lb	GRIP 197/144 FT = 20%
LUMBER-	· · ·	BRACIN	G-			

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=-97(LC 13) Max Uplift 2=-170(LC 12), 6=-170(LC 13) Max Grav 2=976(LC 1), 6=976(LC 1)

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

2-3=-1480/352, 3-4=-1313/364, 4-5=-1313/364, 5-6=-1480/352 TOP CHORD

BOT CHORD 2-10=-243/1258. 8-10=-94/873. 6-8=-237/1258

WEBS 4-8=-118/463, 5-8=-314/183, 4-10=-118/463, 3-10=-314/182

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 10-2-0, Exterior(2R) 10-2-0 to 13-2-0, Interior(1) 13-2-0 to 21-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=170, 6=170.

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



Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #124/MO	
	-					148383652
2964577	B3	Monopitch Girder	1	2		
				-	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Au	ig 16 2021 MiTek Industries, Inc. Fri Oct 15 14:24:51 2021	Page 2

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 15 14:24:51 2021 ID:pEI2tSnelCAFSbWVgXHdMIzCDRM-iY2fWDAgzmy8U1DgNSxi0tSba6lQ_snuPt?tdYyT8Rw

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-5=-70, 6-23=-20

Concentrated Loads (lb)

Vert: 7=-869(F) 26=-867(F) 27=-867(F) 28=-869(F) 29=-869(F) 30=-869(F) 31=-869(F) 32=-869(F) 33=-869(F)





- 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 Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 27, 28, 29, 30, 32, 25, 24, 23, 22, 21, 18 except (jt=lb) 33=118, 20=106.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







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 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-10-8 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 100 lb uplift at joint(s) except (jt=lb) 2=158, 8=158.

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

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



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- BOT CHORD 2-9=-207/890, 8-9=-105/851
- WEBS 4-9=-323/210, 5-9=-88/526, 6-9=-290/202

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 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=135, 2=157.
- 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.







- BOT CHORD 1-8=-209/896, 7-8=-105/853
- WEBS 3-8=-328/211, 4-8=-88/527, 5-8=-290/202

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 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=136, 7=135.
- 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.



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LOADING TCLL TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 10.0	SPACING-2-Plate Grip DOL1Lumber DOL1Rep Stress IncrCode IRC2018/TPI20	-0-0 1.15 1.15 NO 014	CSI. TC BC WB Matrix	0.67 0.18 0.00 c-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.10 -0.16 0.05	(loc) 8 8 6	l/defl >622 >386 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	GRIP 197/144 FT = 20%	
LUMBER-						BRACING-	_	_					

 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 or 5-6-6 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-8.

REACTIONS. (size) 2=0-4-9, 6=Mechanical, 4=Mechanical Max Horz 2=99(LC 4) Max Uplift 2=-106(LC 4), 4=-90(LC 8) Max Grav 2=338(LC 1), 6=58(LC 3), 4=209(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) 4 except (jt=lb)

2=106.

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

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

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

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-70, 8-9=-20, 5-7=-20

Concentrated Loads (lb)

Vert: 8=-12(F=-6, B=-6)







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 7-9-8, Exterior(2R) 7-9-8 to 10-9-8, Interior(1) 10-9-8 to 15-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=115, 5=115.

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

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



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Flate Olisets (A, I)	[2.0-0-4,0-1-0], [2.0-2-0,0-1-0], [3.0-3-4,	,0-2-0], [5.0-2-0,0-1-0], [5.	.0-0-4;0-1-8
LOADING (psf) TCLL 25.0 TCDL 10.0 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 0.97 BC 0.91 WB 0.04 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) -0.20 2-9 >935 240 MT20 197/144 Vert(CT) -0.37 2-9 >510 180 MT20 197/144 Horz(CT) 0.34 6 n/a n/a Weight: 58 lb FT = 20%
LUMBER- TOP CHORD 2x6 S 3-4; 2	SPF No.2 *Except*		BRACING- TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-0-4 max.): 3-4.

 2x6 SPF No.2 *Except*
 TOP CHORD
 Structural wood sheathing directly applied, excep

 3-4: 2x4 SPF No.2
 2-0-0 oc purlins (5-0-4 max.): 3-4.

 2x4 SPF No.2
 BOT CHORD
 Rigid ceiling directly applied.

 2x4 SPF No.2
 PN oc.2
 No.2

REACTIONS. (size) 1=0-3-8, 6=0-3-8 Max Horz 1=52(LC 12) Max Uplift 1=-117(LC 12), 6=-117(LC 13) Max Grav 1=705(LC 1), 6=705(LC 1)

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

TOP CHORD 2-12=-374/126, 2-3=-1365/370, 3-4=-1282/390, 4-5=-1366/366, 5-6=-374/121

BOT CHORD 2-9=-275/1275, 8-9=-274/1282, 5-8=-264/1276

NOTES-

BOT CHORD

WEBS

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 5-11-8, Exterior(2E) 5-11-8 to 9-7-8, Exterior(2R) 9-7-8 to 13-7-7, Interior(1) 13-7-7 to 15-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C- C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) The Fabrication Tolerance at joint 2 = 4%, joint 5 = 4%, joint 2 = 0%, joint 5 = 0%

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=117, 6=117.

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

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

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



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Scale = 1:26.9



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

LOADING (psf) TCLL 25.0 TCDL 10.0 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 0.92 BC 0.81 WB 0.17 Matrix-MS	DEFL. in Vert(LL) -0.24 Vert(CT) -0.44 Horz(CT) 0.34	(loc) l/defl L/d 10 >771 240 10 >423 180 7 n/a n/a	PLATES GRIP MT20 197/144 Weight: 63 lb FT = 20%	
LUMBER- TOP CHORD 2x6 SP 3-5: 2x BOT CHORD 2x4 SP 2-12,6- WEBS 2x4 SP	F 2100F 1.8E *Except* 4 SPF No.2 'F No.2 *Except* 8: 2x6 SPF No.2, 2-6: 2x4 SP 2400F 2. 'F No.2	DE	BRACING- TOP CHORD BOT CHORD	Structural wood sheathi 2-0-0 oc purlins (2-9-2 n Rigid ceiling directly app	ng directly applied or 4-4-5 oc purlins, except nax.): 3-5. vlied or 8-8-2 oc bracing.	_
REACTIONS. (size Max H Max U Max G	e) 1=0-3-8, 7=0-3-8 orz 1=-35(LC 9) plift 1=-295(LC 8), 7=-295(LC 9) rav 1=1018(LC 1), 7=1018(LC 1)					
FORCES. (lb) - Max. TOP CHORD 2-14=	Comp./Max. Ten All forces 250 (lb) or 561/192, 2-3=-2980/918, 3-4=-3528/10	less except when shown)89, 4-5=-3528/1089, 5-6	=-2980/892,			
BOT CHORD 2-11= WEBS 3-10=	877/2909, 10-11=-878/2903, 9-10=-84 232/702, 4-10=-305/144, 5-10=-230/70	6/2903, 6-9=-845/2909)2				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 3) Provide adequate dr 4) This truss has been 5) Provide mechanical 1=295, 7=295. 6) This truss is designer referenced standard 7) Graphical purlin repr 8) "NAILED" indicates 9) Hanger(s) or other of 3-11-8, and 200 lb d at 11-6-12 on botton 10) In the LOAD CASE	e loads have been considered for this de fult=115mph (3-second gust) Vasd=91m gable end zone; cantilever left and right ainage to prevent water ponding. designed for a 10.0 psf bottom chord liv connection (by others) of truss to bearin an accordance with the 2018 Internation ANSI/TPI 1. resentation does not depict the size or th 3-10d (0.148"x3") or 3-12d (0.148"x3.25 onnection device(s) shall be provided so own and 157 lb up at 11-7-8 on top cho m chord. The design/selection of such of (S) section, loads applied to the face of	sign. ph; TCDL=6.0psf; BCDL= exposed ; end vertical le e load nonconcurrent with g plate capable of withsta onal Residential Code sec ne orientation of the purlin ") toe-nails per NDS guid ufficient to support concer rd, and 51 lb down and 3 connection device(s) is the the truss are noted as from	=4.2psf; h=25ft; Cat. II; E ft and right exposed; Lun n any other live loads. anding 100 lb uplift at join ctions R502.11.1 and R80 n along the top and/or bot lines. ntrated load(s) 200 lb dov 4 lb up at 3-11-8, and 51 e responsibility of others. ont (F) or back (B).	xp C; Enclosed; hber DOL=1.60 plate t(s) except (jt=lb) D2.10.2 and tom chord. <i>v</i> n and 157 lb up at lb down and 34 lb up	STATE OF MISSOUR SCOTT M. SEVIER NUMSEE PE-2001018807	
LOAD CASE(S) Stand 1) Dead + Roof Live (b Uniform Loads (plf)	dard alanced): Lumber Increase=1.15, Plate	Increase=1.15			WASSIONAL ENGINE	

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 12-13=-20, 2-6=-20, 8-16=-20

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



October 18,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #124/MO	
0004577	Da					148383660
2964577	03	Hip Girder	1	1	Job Reference (ontional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Au	g 16 2021 MiTek Industries, Inc. Fri Oct 15 14:25:01 2021	Page 2

ID:pEl2tSnelCAFSbWVgXHdMlzCDRM-PTfRcelydrDjgZ_byY72Q_sHw861KZsMiQQPzzyT8Rm

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 3=-141(F) 5=-141(F) 11=-51(F) 10=-51(F) 4=-31(F) 9=-51(F) 19=-31(F) 20=-31(F) 21=-51(F) 22=-51(F)





- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







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

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

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 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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #124/MO	
						148383663
2964577	E3	Flat Girder	1	2		
				-	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Au	ug 16 2021 MiTek Industries, Inc. Fri Oct 15 14:25:05 2021	Page 2

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 15 14:25:05 2021 Page 2 ID:pEI2tSnelCAFSbWVgXHdMIzCDRM-HFuyS0LSg3j99AHMBOB_aq1?wlbYGDMyd2Od6lyT8Ri

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-70, 5-8=-20 Concentrated Loads (lb) Vert: 9=-1762(F) 10=-1762(F) 11=-1762(F) 12=-1762(F) 13=-1762(F) 14=-1762(F)





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

BOT CHORD

Structural wood sheathing directly applied or 4-0-0 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=96(LC 12) Max Uplift 4=-47(LC 12), 2=-38(LC 12), 5=-15(LC 12)

Max Grav 4=101(LC 1), 2=246(LC 1), 5=71(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 3-11-4 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) 4, 2, 5.

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







LUMBER-

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=54(LC 12) Max Uplift 3=-26(LC 12), 2=-30(LC 12), 4=-3(LC 12) Max Grav 3=45(LC 1), 2=161(LC 1), 4=38(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.
- 2) Poter to girder(c) for truce to truce connections

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.







LUMBER-

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. All bearings 7-4-9.

(lb) - Max Horz 1=-101(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-154(LC 12), 6=-154(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-8-4, Exterior(2R) 3-8-4 to 6-8-4, Interior(1) 6-8-4 to 7-0-10 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=154. 6=154.

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.









October 18,2021













MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 1-2=-459/276, 2-4=-333/210, 4-5=-256/190
- WEBS 5-8=-313/207, 2-11=-394/217

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 18-0-15 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 8=137, 9=101, 11=179.
- 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.







REACTIONS. All bearings 15-6-11.

(lb) - Max Horz 1=308(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7 except 8=-132(LC 12), 9=-122(LC 12), 10=-119(LC 12) Max Grav All reactions 250 lb or less at joint(s) 7, 1 except 8=387(LC 1), 9=357(LC 1), 10=348(LC 1)

- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 1-2=-432/246, 2-4=-344/211, 4-5=-251/176
- WEBS 5-8=-301/209, 4-9=-279/174, 2-10=-266/167

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 3-6-11, Interior(1) 3-6-11 to 15-4-15 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) 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) 7 except (jt=lb) 8=132, 9=122, 10=119.
- 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) TCLL 25.0 TCDL 10.0 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 0.23 BC 0.12 WB 0.09 Matrix-S	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	n (loc) l/defl L/d n n/a 999 n n/a 999 5 n/a n/a	PLATES GRIP MT20 197/144 Weight: 44 lb FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S OTHERS 2x4 S	PF No.2 PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing din except end verticals. Rigid ceiling directly applied o	rectly applied or 6-0-0 oc purlins, or 10-0-0 oc bracing.

REACTIONS. All bearings 12-10-11.

(lb) - Max Horz 1=252(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-125(LC 12), 7=-143(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=368(LC 1), 7=419(LC 1)

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

TOP CHORD 1-2=-359/215

WEBS 3-6=-290/215, 2-7=-317/221

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 12-8-15 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) 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) 5 except (jt=lb) 6=125, 7=143.

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.







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LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.33 BC 0.18 WB 0.06 Matrix-S	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	loc) l/defl L/ - n/a 999 - n/a 999 4 n/a n/a	d PLATES GRIP 9 MT20 197/144 9 a Weight: 32 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF OTHERS 2x4 SF	PF No.2 PF No.2 PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood shea except end verticals. Rigid ceiling directly a	thing directly applied or 6-0-0 oc purlins, applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=10-2-11, 4=10-2-11, 5=10-2-11 Max Horz 1=197(LC 11)

Max Uplift 4=-38(LC 9), 5=-145(LC 12)

Max Grav 1=178(LC 1), 4=152(LC 1), 5=521(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-280/182

TOP CHORD WEBS 2-5=-396/280

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 10-0-15 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) 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) 4 except (jt=lb) 5 = 145
- 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) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	f) 0 0 0 0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC BC WB Matrix	0.21 0.10 0.05 c-P	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	2x4 SPF 2x4 SPF	No.2 No.2				BRACING- TOP CHOF	RD	Structu	ral wood	sheathing di	rectly applied or 6-0-0	oc purlins,

BOT CHORD

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

2x4 SPF No.2 WEBS OTHERS 2x4 SPF No.2

REACTIONS. (size) 1=7-6-11, 4=7-6-11, 5=7-6-11

Max Horz 1=141(LC 9) Max Uplift 4=-24(LC 9), 5=-125(LC 12)

Max Grav 1=142(LC 1), 4=80(LC 1), 5=389(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-5=-302/267WEBS

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-4-15 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) 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) 4 except (jt=lb) 5 = 125

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-		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		except end verticals.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
OTHERS	2x4 SPF No.2		6-0-0 oc bracing: 11-12.
		WEBS	1 Row at midpt 7-8

REACTIONS. All bearings 15-1-12. (lb) - Max Horz 12=375(LC 9)

Max Uplif All uplif 100 lb or less at joint(s) 12, 8 except 9=-132(LC 12), 10=-124(LC 12), 11=-192(LC 12) Max Grav All reactions 250 lb or less at joint(s) 8 except 12=349(LC 20), 9=386(LC 1), 10=364(LC 1),

11=290(LC 1)

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

TOP CHORD 2-12=-325/89, 2-3=-447/261, 3-5=-363/231, 5-6=-269/196

BOT CHORD 11-12=-536/346

WEBS 6-9=-300/220, 5-10=-285/186, 2-11=-254/476

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) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 15-0-0 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) 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) 12, 8 except (jt=lb) 9=132, 10=124, 11=192.

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.







- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 1-2=-430/245, 2-4=-344/211, 4-5=-251/175
- WEBS 5-8=-301/210, 4-9=-280/176, 2-10=-261/164

- 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 3-4-11, Interior(1) 3-4-11 to 15-2-15 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 8=131, 9=122, 10=116.
- 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 (ps TCLL 25 TCDL 10 BCLL 0 BCDL 10	sf) 5.0 0.0 0.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES Pl2014	CSI. TC BC WB Matrix	0.22 0.11 0.09 (-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 43 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS OTHERS	2x4 SPI 2x4 SPI 2x4 SPI 2x4 SPI	F No.2 F No.2 F No.2 F No.2				BRACING- TOP CHOR BOT CHOR	D D	Structur except Rigid ce	ral wood end verti eiling dire	sheathing di cals. ectly applied o	rectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins,

REACTIONS. All bearings 12-8-11.

(lb) - Max Horz 1=249(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-126(LC 12), 7=-139(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=372(LC 1), 7=408(LC 1)

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

TOP CHORD 1-2=-356/213

WEBS 3-6=-292/218, 2-7=-309/217

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 12-6-15 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) 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) 5 except (jt=lb) 6=126, 7=139.

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) TCLL 25.0 TCDL 10.0 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 0.17 WB 0.06 Matrix-S	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 31 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI	PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structu except Rigid c	ral wood end verti eiling dire	sheathing dir cals.	rectly applied or 6-0-0	oc purlins,

WEBS 2x4 SPF No.2 OTHERS 2x4 SPF No.2

REACTIONS. (size) 1=10-0-11, 4=10-0-11, 5=10-0-11 Max Horz 1=193(LC 9)

Max Uplift 4=-38(LC 9), 5=-144(LC 12)

Max Grav 1=175(LC 1), 4=149(LC 1), 5=511(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-277/179 TOP CHORD

WEBS 2-5=-389/277

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-10-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) 4 except (jt=lb) 5 = 144

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-5=-289/259

Max Grav 1=111(LC 20), 4=117(LC 1), 5=372(LC 1)

Code IRC2018/TPI2014

(size) 1=7-4-11, 4=7-4-11, 5=7-4-11

Max Uplift 4=-28(LC 9), 5=-122(LC 12)

NOTES-

BCDL

WEBS

OTHERS

LUMBER-

TOP CHORD

BOT CHORD

REACTIONS.

10.0

2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

Max Horz 1=138(LC 9)

 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 3-10-2, Interior(1) 3-10-2 to 7-2-15 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

Matrix-P

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=122.

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.



Weight: 22 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

FT = 20%





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

TOP CHORD 1-2=-419/218, 2-3=-323/174, 3-4=-291/170

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 Corner(3E) 0-7-7 to 3-4-15, Exterior(2N) 3-4-15 to 11-3-3 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 10, 11, 12, 13, 14, 15.

7) Non Standard bearing condition. Review required.

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



16023 Swingley Ridge Rd Chesterfield, MO 63017









LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.55 BC 0.30 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144 Weight: 17 lb FT = 20%
LUMBER.				

TOP CHORD

BOT CHORD

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

WEBS 2x4 SPF No.2

REACTIONS. (size) 1=6-0-15, 3=6-0-15 Max Horz 1=111(LC 9)

Max Uplift 1=-40(LC 12), 3=-68(LC 12) Max Grav 1=239(LC 1), 3=239(LC 1)

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

NOTES-

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

2) Gable requires continuous bottom chord bearing.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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 6-0-0 oc purlins,

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

except end verticals.





1

LOADING (psf) TCLL 25.0 TCDL 10.0 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 0.12 BC 0.07 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144 Weight: 9 lb FT = 20%
I IIMBER-			BRACING-	

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. 1=3-4-15, 3=3-4-15 (size) Max Horz 1=55(LC 9) Max Uplift 1=-20(LC 12), 3=-34(LC 12)

Max Grav 1=119(LC 1), 3=119(LC 1)

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

NOTES-

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

2) Gable requires continuous bottom chord bearing.

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

OF MISS SCOTT M. SEVIER NUMBER PE-2001018807 0 SSIONAL October 18,2021

Structural wood sheathing directly applied or 3-4-15 oc purlins,

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

except end verticals.





LOADING (psf) TCLL 25.0 TCDL 10.0 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 0.14 BC 0.07 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a Weight: 9 lb FT = 20%
I UMBER-			BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

2x4 SPF No.2 REACTIONS.

1=3-6-15, 3=3-6-15 (size) Max Horz 1=59(LC 9) Max Uplift 1=-21(LC 12), 3=-36(LC 12) Max Grav 1=126(LC 1), 3=126(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 MISS TF. 0 SCOTT M. SEVIER PE-200101880 SIONAL October 18,2021

Structural wood sheathing directly applied or 3-6-15 oc purlins,

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

except end verticals.





LOADING (psf) TCLL 25.0 TCDL 10.0 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 0.59 BC 0.32 WB 0.00 Matrix-P	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES GRIP MT20 197/144 Weight: 17 lb FT = 20%
	1		BRACING.				•

TOP CHORD

BOT CHORD

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 WEBS

2x4 SPF No.2 REACTIONS.

1=6-2-15, 3=6-2-15 (size) Max Horz 1=114(LC 9) Max Uplift 1=-38(LC 12), 3=-73(LC 12)

Max Grav 1=246(LC 1), 3=246(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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-1-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60 2) Gable requires continuous bottom chord bearing.

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

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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 6-0-0 oc purlins,

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

except end verticals.





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) 4 except (jt=lb) 5 = 136

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) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.44 BC 0.24 WB 0.00 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144 Weight: 15 lb FT = 20%
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LUMBER-TOP CHORD

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

BOT CHORD

Structural wood sheathing directly applied or 5-6-8 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 1=5-6-0, 3=5-6-0 (size) Max Horz 1=99(LC 9) Max Uplift 1=-36(LC 12), 3=-61(LC 12)

Max Grav 1=215(LC 1), 3=215(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-4-12 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) 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.







LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.13 BC 0.07 WB 0.00 Matrix-P	DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144 Weight: 9 lb FT = 20%
LUMBER-			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=3-6-0, 3=3-6-0 (size) Max Horz 1=58(LC 11)

Max Uplift 1=-21(LC 12), 3=-36(LC 12) Max Grav 1=125(LC 1), 3=125(LC 1)

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

NOTES-

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

2) Gable requires continuous bottom chord bearing.

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

OF MISS SCOTT M. SEVIER NUMBER 6 PE-2001018807 SSIONAL October 18,2021

Structural wood sheathing directly applied or 3-6-8 oc purlins,

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

except end verticals.





LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.24 BC 0.13	DEFL. in (I Vert(LL) n/a Vert(CT) n/a	(loc) l/defl - n/a - n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	MB 0.00 Matrix-P	Horz(CT) 0.00	3 n/a	n/a	Weight: 12 lb	FT = 20%
IIMBER-			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=4-4-8, 3=4-4-8 (size) Max Horz 1=76(LC 9) Max Uplift 1=-28(LC 12), 3=-47(LC 12)

Max Grav 1=164(LC 1), 3=164(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 4-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60 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 4-5-0 oc purlins,

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

except end verticals.





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LOADING (psf) TCLL 25.0 TCDL 10.0 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 0.04 BC 0.02 WB 0.00 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT) 0	in (lo n/a n/a 0.00	oc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 6 lb	GRIP 197/144 FT = 20%	
LUMBER-			BRACING							

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=2-4-8, 3=2-4-8 Max Horz 1=34(LC 9)

Max Uplift 1=-12(LC 12), 3=-21(LC 12) Max Grav 1=74(LC 1), 3=74(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) 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.

NUMBER PE-2001018807 October 18,2021

Structural wood sheathing directly applied or 2-5-0 oc purlins,

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

except end verticals.





2x4 💋

2x4 📚

3-2-9 3<u>-3-</u>1 0-0-8 3-2-9 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-PLATES GRIP 2-0-0 CSI. DEFL in (loc) l/defl L/d 25.0 Plate Grip DOL TCLL 1.15 тс 0.03 Vert(LL) 999 MT20 197/144 n/a n/a TCDL 10.0 Lumber DOL 1.15 BC 0.04 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a Code IRC2018/TPI2014 FT = 20% BCDL 10.0 Matrix-P Weight: 6 lb BRACING-LUMBER-TOP CHORD Structural wood sheathing directly applied or 3-3-1 oc purlins.

BOT CHORD

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

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

REACTIONS. 1=3-2-1, 3=3-2-1 (size) Max Horz 1=9(LC 12) Max Uplift 1=-15(LC 12), 3=-15(LC 13) Max Grav 1=90(LC 1), 3=90(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.





