

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

Re: 3350377 Summit/2029 Meadows

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: I55348919 thru I55348955

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193



Johnson, Andrew

November 18,2022

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





1	7-3-10 14-3-	12 19-4-8	24-5-4	28-3-8 I	34-0-4	40-0-8	1
	7-3-10 7-0-	2 5-0-12	5-0-12	3-10-4	5-8-12	6-0-4	1
Plate Offsets (X,Y)	[1:Edge,0-1-12], [4:0-3-8,0-2-4], [6:	0-6-0,0-2-8], [10:Edge,0-1-12],	[11:Edge,0-1-8], [12:0-	3-8,0-1-8], [13:0-2	2-4,0-2-12]		
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 0.54 BC 0.52 WB 0.52 Matrix-AS	DEFL.irVert(LL)-0.11Vert(CT)-0.21Horz(CT)0.08	n (loc) l/defl 12-13 >999 12-13 >999 3 11 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 235 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	PF No.2 PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling dire 1 Row at midpt	sheathing direc (4-3-0 max.): 4 ectly applied. E 7-1	ttly applied, except o -6. xcept: 3	end verticals, and

WEBS

1 Row at midpt

REACTIONS. (size) 20=Mechanical, 11=0-3-8 Max Horz 20=-196(LC 10) Max Uplift 20=-224(LC 12), 11=-231(LC 13) Max Grav 20=1789(LC 1), 11=1789(LC 1)

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

 TOP CHORD
 1-3=-1822/276, 3-4=-1866/346, 4-5=-1690/359, 5-6=-1690/359, 6-7=-2209/432, 7-8=-2258/355, 8-10=-2231/299, 1-20=-1719/250, 10-11=-1729/251

 BOT CHORD
 17-19=-207/1541, 16-17=-142/1556, 15-16=-136/1605, 7-13=-326/159, 12-13=-227/1920

 WEBS
 3-19=-583/149, 4-16=-117/472, 5-16=-389/142, 6-16=-109/369, 6-15=-307/69,

- 13-15=-121/1587, 6-13=-213/858, 8-12=-455/118, 1-19=-183/1651, 10-12=-202/1913
- 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1.12 to 4-1-13, Interior(1) 4-1-13 to 14-3-12, Exterior(2R) 14-3-12 to 19-11-11, Interior(1) 19-11-11 to 24-5-4, Exterior(2R) 24-5-4 to 30-1-3, Interior(1) 30-1-3 to 39-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) 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) 20=224, 11=231.

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.



3-17, 4-17, 5-16, 6-15





 	7-5-6	7-1-14	19-8-0	24-8-12		32-0-0	<u>32-p-8</u>	38-8-1		45-4-0	
Plate Offsets (X,Y)	[1:0-3-0,0-1-8], [4:0-5-8,0-2	2-4], [6:0-4-0,0-1-15], [14:0-4-4,0-2-8]	5-0-12		1-5-4	0-0-0	0-1-5		0-7-13	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI2	2-0-0 C: 1.15 TC 1.15 BC YES W 2014 M	SI. C 0.54 C 0.67 B 0.98 atrix-AS	DEFI Vert(Vert(Horz	ii LL) -0.19 CT) -0.40 CT) 0.09	n (loc) 9 15-17 9 15-17 9 15-17 5 14	l/defl >999 2 >951 ∽ n/a	L/d 240 180 n/a	PLATE MT20 Weight	: 216 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Right: 2x4 SPF No.2	PF No.2 PF No.2 PF No.2 PF No.2	i		BRAG TOP BOT WEB	CING- CHORD CHORD	Structura 2-0-0 oc Rigid ce 1 Row a	al wood sh purlins (5- iling directl t midpt	eathing dire 2-5 max.): y applied. 3-	ectly applied, 4-6. 17, 6-14, 5-17	except er 7, 5-15	nd verticals, and
REACTIONS. (size Max H Max U Max G	e) 20=0-3-8, 10=0-3-8, 12 lorz 20=-199(LC 13) lplift 20=-210(LC 12), 10=-1 irav 20=1420(LC 1), 10=60	I=0-3-8 54(LC 13), 14=-208(L 9(LC 26), 14=2107(L0	.C 13) C 1)								
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 1-3=-1663/273, 3-4=-1450/312, 4-5=-1187/319, 5-6=-844/284, 6-7=-137/319, 9-10=-691/221, 1-20=-1346/236 BOT CHORD 17-19=-204/1396, 15-17=-74/1102, 14-15=-15/834, 13-14=-60/377, 7-14=-525/251, 12-13=-107/544, 10-12=-107/544 WEBS 3-19=-284/112, 3-17=-289/161, 4-17=-40/285, 6-15=-48/746, 6-14=-1440/59.											
9-13: NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 21-0-3 to end vertical left and DOL=1.60 3) Provide adequate di 4) All plates are 3x6 M 5) This truss has been 6) Provide mechanical 20=210, 10=154, 14 7) This truss is design referenced standard 8) This truss design re- sheetrock be applied 9) Graphical purlin repr	=-667/185, 9-12=0/288, 1-1 a loads have been considern /ult=115mph (3-second gus gable end zone and C-C E 24-8-12, Exterior(2R) 24-8- right exposed;C-C for mem rainage to prevent water po T20 unless otherwise indica designed for a 10.0 psf bot connection (by others) of tr i=208. d in accordance with the 20 I ANSI/TPI 1. quires that a minimum of 7/ d directly to the bottom chor resentation does not depict	9=-159/1359, 5-15=-6 ed for this design. t) Vasd=91mph; TCD xterior(2E) 0-1-12 to 4 12 to 31-1-11, Interior bers and forces & MV nding. ated. tom chord live load no uss to bearing plate c D18 International Resi 16" structural wood sh d. the size or the orienta	32/146 L=6.0psf; BCDI -8-2, Interior(1) (1) 31-1-11 to 4 /FRS for reaction proconcurrent with apable of withs dential Code set reathing be appendition of the purl	L=4.2psf; h=1) 4-8-2 to 14-7 46-2-8 zone; c ons shown; L th any other I tanding 100 II ections R502. blied directly to in along the to	5ft; Cat. II; F '-4, Exterior antilever le umber DOL ve loads. o uplift at joi 11.1 and R o the top cho p and/or bo	Exp C; Enc (2R) 14-7- ft and right =1.60 plate nt(s) excep 302.10.2 ar ord and 1/2 ttom chore	closed; 4 to 21-0-3 e exposed ; e grip ot (jt=lb) nd 2" gypsum d.	а, ()	THE PROFILES	OF M ANDRI THOM JOHNS NUME E-20170	ER 18993

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

November 18,2022





TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	0 0 0 0	Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	1.15 1.15 YES PI2014	TC BC WB Matrix	0.53 0.46 0.67 (-AS	Vert(LL) Vert(CT) Horz(CT)	-0.11 -0.22 0.04	8-9 8-9 8-9 8	>999 >999 n/a	240 180 n/a	Weight: 172 lb	197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS	2x4 SPF 2x4 SPF 2x4 SPF	No.2 No.2 No.2				BRACING- TOP CHOP BOT CHOP	RD RD	Structu 2-0-0 o Rigid c	ral wood c purlins eiling dire	sheathing dir (6-0-0 max.):	ectly applied, except e 4-6. Except:	and verticals, and
						WEBS		1 Row 1 Row	at midpt at midpt	5. 3.	-10 -11, 4-10, 7-8, 6-8	

REACTIONS. (size) 14=0-3-8, 8=0-3-8 Max Horz 14=333(LC 11) Max Uplift 14=-182(LC 12), 8=-148(LC 13)

Max Grav 14=1260(LC 1), 8=1260(LC 1)

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

- TOP CHORD 1-3=-1448/228, 3-4=-1184/249, 4-5=-751/231, 5-6=-745/231, 1-14=-1188/208
- BOT CHORD 13-14=-356/346, 11-13=-375/1204, 10-11=-275/941, 5-10=-399/149
- WEBS 3-11=-343/166, 4-11=-53/410, 4-10=-377/119, 8-10=-193/278, 6-10=-156/955, 1-13=-123/1161, 6-8=-1164/293

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 14-7-4, Exterior(2R) 14-7-4 to 18-10-3, Interior(1) 18-10-3 to 24-8-12, Exterior(2E) 24-8-12 to 28-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=182, 8=148.

- 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.







Diata Officiata (V. W)			0100	00	12	0012	0012	
Plate Offsets (X,Y)	[2:0-3-8,Eage], [6:0-3-8,0-2-4], [9:Edge,	0-1-12], [10:Edge,0-1-8]						
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 0.76 WB 0.68 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.21 11-13 -0.45 11-13 0.09 10	l/defl L/d >999 240 >901 180 n/a n/a		PLATES MT20 Weight: 185 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI WEDGE Left: 2x4 SPF No.2 REACTIONS. (siz Max H Max L Max C	PF No.2 PF No.2 PF No.2 PF No.2 te) 2=0-3-8, 10=0-5-8 forz 2=356(LC 11) Jplift 2=-248(LC 12), 10=-189(LC 12) Grav 2=1599(LC 1), 10=1536(LC 1)		BRACING- TOP CHOR BOT CHOR WEBS	2D Structu 2-0-0 o 2D Rigid c 1 Row	ural wood sheath oc purlins (5-1-15 eiling directly ap at midpt	ing directly 6 max.): 6-8 plied. 5-13, 8	applied, except e 8-11, 9-10, 7-11	end verticals, and
FORCES. (lb) - Max. TOP CHORD 2-3= 8-9= 8-9= BOT CHORD 2-16 WEBS 3-15 7-11 7-11	Comp./Max. Ten All forces 250 (lb) or -2689/412, 3-5=-2125/367, 5-6=-1461/30 -583/229, 9-10=-1533/228 =-507/2308, 15-16=-507/2308, 13-15=-4 =-565/185, 5-15=-35/444, 5-13=-879/267 =-1078/235, 7-13=-142/663	less except when shown.)7, 6-7=-1202/316, 7-8=-44 09/1813, 11-13=-238/927 7, 6-13=-12/296, 9-11=-21-	80/212, 4/1284,					
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91m	sign. ph; TCDL=6.0psf; BCDL=	4.2psf; h=15ft; Ca	at. II; Exp C; Er	nclosed;			

MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-6-10, Interior(1) 2-6-10 to 20-7-4, Exterior(2R) 20-7-4 to 25-8-0, Interior(1) 25-8-0 to 30-8-12, Exterior(2E) 30-8-12 to 34-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=248, 10=189.

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.



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		7-10-1	8-8-3	15-4-4	17-4-0 20-7	-4 26-	4-0 26-4-	4 30-8-12	34-3-8	
		7-10-1	0-10-2	6-8-1	1-11-12 3-3-	4 5-8	-12 0-0-4	4-4-8	3-6-12	
Plate Offs	sets (X,Y)	[2:0-3-8,Edge], [6:0-3-8,0)-2-4], [8:0-3-0),0-2-0], [12:0-5-8,0	-2-8], [14:0-5-8,0-3-4], [15:Edge,0-3-8]				
	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	_/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.55	Vert(Ll	.) -0.14 13-14	>999 2	40	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.70	Vert(C	Г) -0.29 15-16	>999 1	80		
BCLL	0.0	Rep Stress Incr	YES	WB 0.84	Horz(C	T) 0.10 10	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-AS					Weight: 200 lb	FT = 20%
BCDL	10.0		912014	Matrix-A5					weight: 200 lb	
JMBER	-				BRACI	NG-				

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except end verticals, and BOT CHORD 2x4 SPF No 2 2-0-0 oc purlins (4-7-10 max.): 6-8. 2x4 SPF No 2 BOT CHORD WFBS Rigid ceiling directly applied. Except: WEDGE 1 Row at midpt 7-12 Left: 2x4 SPF No.2 WEBS 1 Row at midpt 9-10, 8-10, 5-13

REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=356(LC 11) Max Uplift 2=-247(LC 12), 10=-187(LC 12) Max Grav 2=1599(LC 1), 10=1536(LC 1)

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

- TOP CHORD 2-3=-2662/406, 3-5=-2251/396, 5-6=-1565/332, 6-7=-1319/329, 7-8=-964/255
- BOT CHORD 2-16=-499/2277, 5-14=-76/571, 13-14=-439/1911, 12-13=-245/971, 7-12=-985/235
- WEBS 10-12=-198/359, 8-12=-202/1268, 8-10=-1465/329, 6-13=-23/339, 7-13=-172/685,
 - 5-13=-953/273, 14-16=-492/2126, 3-14=-404/162

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-6-10, Interior(1) 2-6-10 to 20-7-4, Exterior(2R) 20-7-4 to 25-5-7, Interior(1) 25-5-7 to 30-8-12, Exterior(2E) 30-8-12 to 34-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=247, 10=187.

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.







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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-6-10, Exterior(2N) 2-6-10 to 20-7-4, Corner(3R) 20-7-4 to 24-4-0, Exterior(2N) 24-4-0 to 30-8-12, Corner(3E) 30-8-12 to 34-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are 1.5x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 1-4-0 oc.
- 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) 31, 2, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33 except (jt=lb) 56=101, 32=158.
- 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.



November 18,2022







TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No 2 OTHERS

Left 2x4 SPF No.2 2-0-0, Right 2x4 SPF No.2 2-0-0 SI IDER

REACTIONS. All bearings 21-4-0.

(lb) -Max Horz 2=-158(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 28, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20 Max Grav All reactions 250 lb or less at joint(s) 2, 26, 27, 28, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18

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

NOTES-

 Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 10-8-0, Corner(3R) 10-8-0 to 13-8-0, Exterior(2N) 13-8-0 to 22-2-8 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 1.5x4 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, 27, 28, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 18.
- 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.

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



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.



NiTek* 16023 Swingley Ridge Rd Chesterfield, MO 63017



	7-2-8		<u>14-1-8</u> 6-11-0	21-4	4-0 -8
Plate Offsets (X,Y)	[1:0-3-4,0-0-6], [7:0-3-15,0-0-6]	-			
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.26	DEFL. in (I Vert(LL) -0.05 8	oc) I/defl L/d -10 >999 240	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.40 WB 0.12	Vert(CT) -0.11 8 Horz(CT) 0.03	-10 >999 180 7 n/a n/a	
3CDL 10.0	Code IRC2018/1PI2014	Matrix-AS			Weight: 82 lb $FI = 20\%$
LUMBER-	SPE No 2		BRACING- TOP CHORD St	ructural wood sheathing dire	ctly applied

BOT CHORD

Rigid ceiling directly applied.

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

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

 REACTIONS.
 (size)
 1=0-3-8, 7=0-3-8

Max Horz 1=-146(LC 8) Max Uplift 1=-115(LC 12), 7=-115(LC 13) Max Grav 1=960(LC 1), 7=960(LC 1)

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

TOP CHORD 1-3=-1248/182, 3-4=-1247/224, 4-5=-1247/224, 5-7=-1248/182

BOT CHORD 1-10=-184/1131, 8-10=-46/788, 7-8=-95/1131

WEBS 4-8=-121/479, 5-8=-319/180, 4-10=-121/479, 3-10=-319/180

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0 to 3-0-0, Interior(1) 3-0-0 to 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 21-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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, 7=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.



16023 Swingley Ridge Rd Chesterfield, MO 63017



Scale = 1:46.4



	8-0-0	11-10-4	18-10-8			26-10-8			
	8-0-0	3-10-4	7-0-4			8-0-0	1		
Plate Offsets (X,Y)	[2:0-4-10,Edge]								
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 0.63 BC 0.51 WB 0.32 Matrix-AS	DEFL. in Vert(LL) -0.10 Vert(CT) -0.20 Horz(CT) 0.03	(loc) 9-12 9-12 1	l/defl L/d >999 240 >700 180 n/a n/a	PLATES MT20 Weight: 93 lb	GRIP 197/144 FT = 20%		
BODE HOLS HOLS HOLS HOLS HOLS HOLS HOLS HOLS HOLS									
FORCES. (lb) - Max. TOP CHORD 1-2= BOT CHORD 1-9= WEBS 2-9=	. Comp./Max. Ten All forces 250 (lb) or -783/208, 2-3=-274/195, 3-4=-840/260, 4 -154/606, 7-9=-154/600, 6-7=-107/505, 4 0/261, 2-7=-537/90, 3-7=-733/174, 3-6=-	: less except when shown. 4-5=-1042/232 5-6=-114/836 52/490							
 NOTES- Unbalanced roof liv Wind: ASCE 7-16; ' MWFRS (envelope) Interior(1) 12-2-15 t end vertical left and DOL=1.60 Provide adequate d This truss has been Provide mechanica 7=129, 1=136, 5=15 This truss is design referenced standard This truss design ref 	e loads have been considered for this de Vult=115mph (3-second gust) Vasd=91m) gable end zone and C-C Exterior(2E) 0 to 18-10-8, Exterior(2R) 18-10-8 to 23-1- 1 right exposed;C-C for members and for trainage to prevent water ponding. designed for a 10.0 psf bottom chord liv connection (by others) of truss to bearin 50. ed in accordance with the 2018 Internation d ANSI/TPI 1. squires that a minimum of 7/16" structura	sign. ph; TCDL=6.0psf; BCDL= -0-0 to 3-0-0, Interior(1) 3- 7, Interior(1) 23-1-7 to 26- ces & MWFRS for reaction e load nonconcurrent with g plate capable of withsta onal Residential Code sec I wood sheathing be appli	=4.2psf; h=15ft; Cat. II; E -0-0 to 8-0-0, Exterior(2R 10-8 zone; cantilever left ns shown; Lumber DOL= n any other live loads. anding 100 lb uplift at join ctions R502.11.1 and R8(ed directly to the top cho	xp C; Encl) 8-0-0 to and right 1.60 plate t(s) except 02.10.2 an rd and 1/2	osed; 12-2-15, exposed ; grip t (jt=lb) d " gypsum	STATE OF AND	MISSOLA REW MAS		

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.







Scale = 1:46.3



⊢		6-0-0	1	1-10-4		20-10)-8			26-10-8	
	- (V V) [6-0-0	0 1 151 [2:0 4 ([5:0.2.5 Edgo]	9-0-	4			6-0-0	
	<u>s (^, i) [</u>	1.0-3-3,Eugej, [1.0-0-0,	0-1-15], [2.0-4-0	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	[5.0-5-5,Euge]						
LOADING (p TCLL 2 TCDL 1 BCLL BCDI 1	psf) 25.0 10.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code JBC2018/T	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.79 BC 0.48 WB 0.62 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.14 -0.29 0.02	(loc) 6-7 6-7 5	l/defl >999 >618 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 92 lb	GRIP 197/144 FT = 20%
	10.0		112014	Matrix //O						Weight. 52 lb	11 = 2070
LUMBER- TOP CHORE BOT CHORE WEBS WEDGE Left: 2x4 SPF	LUMBER- BRACING- TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except BOT CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except WEBS 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied. WEDGE Left: 2x4 SPF No.2, Right: 2x4 SPF No.2, Right: REACTIONS. (size) 7=0-3-8, 1=0-3-8, 5=0-3-8										
REACTIONS	REACTIONS. (size) 7=0-3-8, 1=0-3-8, 5=0-3-8 Max Horz 1=46(LC 12) Max Uplift 7=-194(LC 9), 1=-101(LC 12), 5=-123(LC 13) Max Grav 7=1330(LC 1), 1=466(LC 1), 5=623(LC 1)										
FORCES. (TOP CHORE BOT CHORE WEBS	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-569/157, 2-3=-42/268, 3-4=-758/214, 4-5=-915/190 BOT CHORD 1-9=-118/448, 7-9=-119/442, 5-6=-103/753 WEBS 2-7=-757/150, 3-7=-930/247, 3-6=-74/630										
NOTES- 1) Unbalance 2) Wind: ASG MWFRS (Interior(1)) end vertic: DOL=1.6C 3) Provide ar 4) This truss 5) Provide m	ed roof live CE 7-16; VL (envelope) () 10-2-15 to cal left and ri dequate dra s has been c rechanical c	loads have been consid ult=115mph (3-second g gable end zone and C-C 20-10-8, Exterior(2R) 2 ight exposed;C-C for me ainage to prevent water designed for a 10.0 psf to connection (by others) o	lered for this de just) Vasd=91m Exterior(2E) 0 0-10-8 to 25-1- embers and for ponding. pottom chord liv f truss to bearin	sign. ph; TCDL=6.0psf; BCDL= 0-0 to 3-0-0, Interior(1) 3 7, Interior(1) 25-1-7 to 26- ces & MWFRS for reaction e load nonconcurrent with g plate capable of withsta	=4.2psf; h=15ft; Ca -0-0 to 6-0-0, Exte 10-8 zone; cantile ns shown; Lumber n any other live loa anding 100 lb uplifi	at. II; E: rior(2R ver left DOL= ads. t at join	xp C; Er) 6-0-0 t and rigl 1.60 pla t(s) exce	nclosed; to 10-2-1 ht expose te grip ept (jt=lb)	5, ed ;	STE OF	MISSOL
 7=194, 1= 6) This truss referenced 7) This truss sheetrock 	=101, 5=123 is designed d standard d design req be applied	3. d in accordance with the ANSI/TPI 1. uires that a minimum of directly to the bottom cl	2018 Internatio 7/16" structura nord.	onal Residential Code sec I wood sheathing be appli	ctions R502.11.1 a ied directly to the t	ind R8(op cho	02.10.2 and 1	and /2" gypsi	um 🖌	AND THO THO JOINT	MAS

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



November 18,202

NITEK 16023 Swingley Ridge Rd Chesterfield, MO 63017



Scale = 1:47.2



<u>⊢ 4</u>	-0-0 7-11-2	3-11-2	17-4-6 5-6-2		22-10-8	26-	-10-8			
Plate Offsets (X,Y)	[1:0-3-5,Edge], [1:0-0-0,0-1-11], [2:0-4-0	0,0-1-15], [7:0-4-0,0-1-15]	<u> </u>		<u> </u>		-0-0			
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI. TC 0.56 BC 0.62 WB 0.53 Matrix-MS	DEFL. in Vert(LL) -0.07 Vert(CT) -0.15 Horz(CT) 0.01	(loc) 9-10 9-10 8	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 97 lb	GRIP 197/144 FT = 20%			
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP WEDGE Left: 2x4 SPF No.2 , Ri	F No.2 F No.2 F No.2 ght: 2x4 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structu 2-0-0 c Rigid c	ural wood sheathing dir oc purlins (4-9-10 max.) eiling directly applied c	ectly applied or 4-9-7): 2-7. or 6-0-0 oc bracing.	⁷ oc purlins, except			
REACTIONS. (size Max H Max U Max G	a) 11=0-3-8, 1=0-3-8, 8=0-3-8 brz 1=-30(LC 30) plift 11=-581(LC 5), 1=-145(LC 8), 8=-2 rav 11=2148(LC 1), 1=567(LC 1), 8=81	13(LC 9) 9(LC 1)								
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-860/251, 2-3=-350/147, 3-4=-348/146, 4-6=-1116/351, 6-7=-1118/352, 7-8=-1379/386 BOT CHORD 1-14=-206/724, 13-14=-204/709, 11-13=-894/268, 10-11=-894/268, 9-10=-297/1172, 8-9=-298/1188 WEBS 2-14=-24/266, 2-13=-418/116, 3-13=-365/156, 4-13=-389/1412, 4-11=-1946/593, 4-10=-584/2155, 6-10=-570/241, 7-9=-11/294										
 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 11=581, 1=145, 8=2 6) This truss is designe referenced standard 7) Graphical purlin repr 8) "NAILED" indicates 3 9) Hanger(s) or other c 4-0-0, and 111 lb do up at 22-9-12 on bo 10) In the LOAD CASE 	loads have been considered for this de ult=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 13. d in accordance with the 2018 Internation ANSI/TPI 1. esentation 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 wn and 109 lb up at 22-10-8 on top cho thom chord. The design/selection of suc (S) section, loads applied to the face of	esign. hph; TCDL=6.0psf; BCDL= exposed ; end vertical le e load nonconcurrent with ng plate capable of withsta onal Residential Code sec ne orientation of the purlin ") toe-nails per NDS guid ufficient to support concer ord, and 143 lb down and ch connection device(s) is the truss are noted as fro	=4.2psf; h=15ft; Cat. II; E ft and right exposed; Lun h any other live loads. anding 100 lb uplift at joir ctions R502.11.1 and R8 h along the top and/or bot lines. ntrated load(s) 111 lb dov 73 lb up at 4-0-0, and 14 the responsibility of othe ont (F) or back (B).	xp C; Er nber DO nt(s) exce 02.10.2 : tom cho wn and 1 43 lb dow ers.	nclosed; L=1.60 plate ept (jt=lb) and ord. 109 lb up at wn and 73 lb	ANI SANTE OF ANI THO NUM PE-201 PE-201	MISSOLUTION MAS MAS MBER 7018993			
LOAD CASE(S) Stand	dard					ALC N	AL			

November 18,2022



Job	Truss	Truss Type	Qty	Ply	Summit/2029 Meadows	
					15534	48934
3350377	C3	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	530 s Aug	11 2022 MiTek Industries, Inc. Thu Nov 17 16:34:22 2022 Page	e 2

ID:3bdcgReV7IPqhseTN6p0GyyrBnO-6CFbPa2zUpkfUqzwl0sCdE_ivs6ziC1lbv?mB5yIDaF

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-7=-70, 7-8=-70, 15-18=-20

Concentrated Loads (lb)

Vert: 2=-53(B) 14=-143(B) 6=-47(B) 10=-34(B) 7=-53(B) 9=-143(B) 21=-47(B) 22=-47(B) 23=-47(B) 24=-47(B) 25=-47(B) 26=-47(B) 27=-47(B) 28=-47(B) 29=-34(B) 30=-34(B) 31=-34(B) 32=-34(B) 32





	5-6-6											
	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	0.18	Vert(LL)	-0.03	6	>999	240	MT20	197/144
CDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.05	6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	912014	Matri	x-MP						Weight: 19 lb	FT = 20%

LUMBER-

TOP CHORD2x4 SPF No.2BOT CHORD2x6 SPF No.2WEBS2x4 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.

REACTIONS. (size) 4=Mechanical, 2=0-4-9, 5=Mechanical

Max Horz 2=92(LC 4)

Max Uplift 4=-41(LC 8), 2=-90(LC 4), 5=-27(LC 8)

Max Grav 4=104(LC 1), 2=348(LC 1), 5=138(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) 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.
- 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: 1-4=-70, 5-7=-20
- Concentrated Loads (lb)
 - Vert: 6=-12(F=-6, B=-6)





Job	Truss	Truss Type	Qty	Ply	Summit/2029 Meadov	vs
3350377	G2	Half Hip Girder	1	2		155348936
Builders FirstSource (Va	alley Center), Valley Center,	KS - 67147,	8.	530 s Aug	Job Reference (option 11 2022 MiTek Industri	al) es, Inc. Thu Nov 17 16:34:25 2022 Page 1
		3-4-5 6-8-4	D:3bdcgReV7IPql 1	nseTN6p0 0-0-4	GyyrBnO-Wnwj1b4smk6	6ELIiVR8QvEscFA4C0vXwkHtDQoQyIDaC
		3-4-5 3-4-0	3	-4-0	1-11-12	
					5x6 =	x4 Scale = 1:34.4
	Т				4 5	
					A ME	Ð Í
		6.00 12 42	x6 📁 🦯	//		
			3			
			FR.			
	-7-6	4x5 🖈				E .
	2 2	2		\backslash		ů.
				$\backslash /$		
				\geq		
	1			`		}
	\boxtimes	13 9 14 15	8 16	26	7	
	4x8 =	4x12 12>	<14 = 1100 26	²⁰ 12	2x14 = 5x6 =	-
		3.4.5 6.9.4	20	2.0.4	12.0.0	
Plata Offacta (X X)		3-4-5 3-4-0 [4:0 2 4 0 1 4] [7:0 2 8 0 6 0] [9:0 2 8 0	3	-4-0	1-11-12	1
	[1.0-0-0,0-0-1], [3.0-1-8,0-1-8],	[4.0-2-4,0-1-4], [7.0-3-8,0-6-0], [6.0-3-8,0-	·o-0j			
LOADING (psf) TCLL 25.0	Plate Grip DOL 1.1	0 CSI. E 5 TC 0.37 V	DEFL. in /ert(LL) -0.07	(loc) 8-9	l/defl L/d >999 240	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0	Lumber DOL 1.1 Rep Stress Incr N	5 BC 0.34 V O WB 0.65 H	/ert(CT) -0.12 lorz(CT) 0.02	8-9 6	>999 180 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	- (-)	-		Weight: 164 lb FT = 20%
LUMBER-		B	RACING-	0		
BOT CHORD 2x4 SP	2400F 2.0E	I	OP CHORD	except	end verticals, and 2-0-	o oc purlins (6-0-0 max.): 4-5.
WEBS 2x4 SP	PF No.2	В	OT CHORD	Rigid ce	eiling directly applied o	r 10-0-0 oc bracing.
REACTIONS. (size	e) 1=0-3-8, 6=0-3-8 orz 1=185(LC 28)					
Max U Max C	plift 1=-644(LC 8), 6=-680(LC 8	3)				
Max G	rav 1=4883(LC 1), 6=5028(LC	1)				
FORCES. (lb) - Max. TOP CHORD 1-2=-	Comp./Max. Ten All forces 2: 8116/1073, 2-3=-5623/758, 3-4	50 (lb) or less except when shown. =-2075/308				
BOT CHORD 1-9=- WEBS 2-9=-	1006/7209, 8-9=-1006/7209, 7- 262/2176, 2-8=-2512/383, 3-8=	8=-684/5004, 6-7=-258/1671 -621/4837_3-7=-4715/689_4-7=-726/5278	8			
4-6=-	4845/670	021/4007, 0 7 = 47 10/000, 4 7 = 720/0210	σ,			
NOTES-						
 2-ply truss to be con Top chords connected 	nected together with 10d (0.13 ed as follows: 2x4 - 1 row at 0-7	l"x3") nails as follows: '-0 oc.				
Bottom chords conn Webs connected as	ected as follows: 2x8 - 2 rows s	taggered at 0-5-0 oc.				
2) All loads are consider	ered equally applied to all plies,	except if noted as front (F) or back (B) fac	ce in the LOAD C	ASE(S)	section. Ply to	
3) Unbalanced roof live	e loads have been considered fo	or this design.	vise indicated.			
4) Wind: ASCE 7-16; V MWFRS (envelope)	ult=115mph (3-second gust) Va gable end zone; cantilever left	asd=91mph; TCDL=6.0psf; BCDL=4.2psf; and right exposed ; end vertical left and rig	h=15ft; Cat. II; E ght exposed; Lun	xp C; En nber DOL	closed; _=1.60 plate	OF MISS
grip DOL=1.60 5) Provide adequate dr	ainage to prevent water pondin	a.				Extre SOLV
6) This truss has been	designed for a 10.0 psf bottom	chord live load nonconcurrent with any oth	her live loads.	(a) avaa	net (it. Ib.)	ANDREW THOMAS
1=644, 6=680.	connection (by others) or truss					
 8) This truss is designed referenced standard 	ANSI/TPI 1.	International Residential Code sections R	502.11.1 and R8	02.10.2 a	and	Munistry -
 Graphical purlin repr Use Simpson Stror 	esentation does not depict the ng-Tie HUS26 (14-10d Girder, 6	size or the orientation of the purlin along the -10d Truss) or equivalent spaced at 2-0-0	he top and/or bot oc max, starting	tom chor at 2-0-12	d. 2 from the left	PE-2017018993
end to 10-0-12 to c	onnect truss(es) to front face of	bottom chord.				ATTEL STA
						NONAL EN
LOAD CASE(S) Stand	dard					November 18 2022
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

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek[®]

Job	Truss	Truss Type	Qty	Ply	Summit/2029 Meadows	
	_					155348936
3350377	G2	Half Hip Girder	1	2		
				_	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	530 s Aug	11 2022 MiTek Industries, Inc. Thu Nov 17 16:34:26 2022	Page 2

ID:3bdcgReV7IPqhseTN6p0GyyrBnO-?zU6Fx5UX1F5zSHh_rx8n48QwUYFezAuWWzzLsyIDaB

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-70, 4-5=-70, 6-10=-20

Concentrated Loads (lb)

Vert: 7=-1769(F) 13=-1769(F) 14=-1769(F) 15=-1769(F) 16=-1769(F)





						4-0-0						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	k-AS						Weight: 12 lb	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=86(LC 12) Max Uplift 3=-54(LC 12), 2=-27(LC 12)

Max Grav 3=117(LC 1), 2=245(LC 1), 4=71(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- grip DOL=1.60 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) 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.
- 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.







					<u>1-10-</u> 1-10-	15 15			4		
LOADIN TCLL	G (psf) 25.0	SPACING- 2-0 Plate Grip DOL 1.	-0 CSI. 15 TC	0.05	DEFL. Vert(LL)	in -0.00	(loc) 7	l/defl >999	L/d 240	PLATES MT20	GRIP 197/144
TCDL BCLL	10.0 0.0	Lumber DOL 1. Rep Stress Incr YE	15 BC IS WB	0.03 0.00	Vert(CT) Horz(CT)	-0.00 0.00	7 3	>999 n/a	180 n/a		
BCDL	10.0	Code IRC2018/TPI201	4 Matri	x-MP						Weight: 7 lb	FT = 20%

LUMBER-

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

Left: 2x4 SPF No.2

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

Max Horz 2=49(LC 12)

Max Uplift 3=-23(LC 12), 2=-22(LC 12), 4=-3(LC 12)

Max Grav 3=48(LC 1), 2=161(LC 1), 4=32(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) 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.







4x5 =

Scale: 3/16"=1'



18-7-12

			10-7-12					
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	CSI. TC 0.12 BC 0.06 WB 0.19 Matrix S	DEFL. ii Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.0	ו (loc) ג - ג - ג - ג 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/1P12014	Matrix-5					weight: 100 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI	PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structu Rigid ce	ral wood sł eiling direct	neathing dire	ectly applied or 6-0-0	oc purlins.

OTHERS 2x4 SPF No.2

WEBS

1 Row at midpt 5-13

REACTIONS. All bearings 18-7-12.

Max Horz 1=-244(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-128(LC 12), 16=-104(LC 12), 17=-190(LC 12), 12=-126(LC 13), 11=-105(LC 13), 10=-190(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 16, 12, 11 except 17=312(LC 19), 10=311(LC 20)

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

, c

TOP CHORD 1-2=-307/209, 8-9=-273/190

NOTES-

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-14, Interior(1) 3-3-14 to 9-3-14, Exterior(2R) 9-3-14 to 12-3-14, Interior(1) 12-3-14 to 18-3-13 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 1.5x4 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=128, 16=104, 17=190, 12=126, 11=105, 10=190.

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.





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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior(1) 3-4-3 to 5-0-12, Exterior(2R) 5-0-12 to 8-0-12, Interior(1) 8-0-12 to 9-9-5 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 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, 7, 6, 2, 10, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.







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) 6, 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.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.







Max Grav All reactions 250 lb or less at joint(s) 7, 10 except 8=386(LC 1), 9=361(LC 1), 10=332(LC 1)

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

TOP CHORD 1-2=-386/220, 2-4=-311/191

WEBS 5-8=-301/184, 4-9=-281/154, 2-10=-256/143

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 15-1-1 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, 10 except (jt=lb) 8=109, 9=102.

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 a - n/a a - n/a b 5 n/a	L/d 999 999 n/a	PLATES GRIP MT20 197/144 Weight: 44 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	PF No.2	I	BRACING- TOP CHORD	Structural wood	sheathing dir	ectly 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 oc bracing.

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

REACTIONS. All bearings 12-10-5.

(lb) - Max Horz 1=227(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-104(LC 12), 7=-119(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=368(LC 1), 7=420(LC 1)

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

TOP CHORD 1-2=-323/195

WEBS 3-6=-290/188, 2-7=-317/193

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 12-9-1 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=104, 7=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.



 020 BEFORE USE.

 component, not

 gn into the overall

 d permanent bracing

 rding the

 nd BCSI Building Component

 16023 Swingley Ridge Rd

 Chesterfield, MO 63017





TOP CHORD 1-2=-251/174

WEBS 2-5=-428/253

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 10-5-1 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) 1, 4 except (jt=lb) 5=126.

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 0.04 Matrix-P	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	n (loc) l/defl L/d a - n/a 999 a - n/a 999) 4 n/a n/a	PLATES MT20 Weight: 25 lb	GRIP 197/144 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 dire except end verticals. Rigid ceiling directly applied or	ectly applied or 6-0-0 o r 10-0-0 oc bracing.	c purlins,
REACTIONS. (si Max	ze) 1=8-2-5, 4=8-2-5, 5=8-2-5 Horz 1=140(LC 9)					

Max Grav 1=122(LC 20), 4=133(LC 1), 5=420(LC 1) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

Max Uplift 4=-25(LC 9), 5=-107(LC 12)

WEBS

NOTES 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 8-1-1 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.

2-5=-326/239

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=107.

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 TCLL 2 TCDL 6 BCLL BCDL 6	(psf) 25.0 10.0 0.0 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES VI2014	CSI. TC BC WB Matrix	0.51 0.28 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: 16 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHOR BOT CHOR WEBS	D 2x4 SP D 2x4 SP 2x4 SP	2F No.2 2F No.2 2F No.2				BRACING- TOP CHOR BOT CHOR	D	Structur except (Rigid ce	al wood end verti eiling dire	sheathing dir cals. ectly applied c	ectly applied or 5-10- or 10-0-0 oc bracing.	13 oc purlins,

REACTIONS. (size) 1=5-10-5, 3=5-10-5

Max Horz 1=96(LC 11) Max Uplift 1=-30(LC 12), 3=-54(LC 12)

Max Grav 1=231(LC 1), 3=231(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=15ft; 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 5-9-1 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- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	2-0-0 1.15 1.15 YES Pl2014	CSI. TC C BC C WB C Matrix-F	0.33 0.18 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: 13 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 22 BOT CHORD 22 WEBS 25	4 SPF No.2 4 SPF No.2 4 SPF No.2				BRACING- TOP CHOR BOT CHOR	D	Structur except Rigid ce	ral wood end vertio eiling dire	sheathing dir cals. ctly applied c	ectly applied or 4-11- or 10-0-0 oc bracing.	12 oc purlins,

REACTIONS. (size) 1=4-11-4, 3=4-11-4

Max Horz 1=79(LC 9) Max Uplift 1=-24(LC 12), 3=-44(LC 12)

Max Grav 1=189(LC 1), 3=189(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=15ft; 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 4-10-0 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) 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- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.19 BC 0.10 WB 0.04 Matrix-P	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	n (loc) l/defl L/d - n/a 999 - n/a 999 4 n/a n/a	PLATES MT20 Weight: 22 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF OTHERS 2x4 SF	PF No.2 PF No.2 PF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied c	ectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins,

REACTIONS. (size) 1=7-3-4, 4=7-3-4, 5=7-3-4 Max Horz 1=122(LC 9) Max Uplift 4=-24(LC 9), 5=-103(LC 12)

Max Grav 1=83(LC 20), 4=139(LC 1), 5=377(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-5=-293/231

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 7-2-0 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) 4 except (jt=lb) 5=103.

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.







TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=9-7-4, 4=9-7-4, 5=9-7-4 Max Horz 1=166(LC 9) Max Uplift 4=-27(LC 9), 5=-117(LC 12)

Max Grav 1=182(LC 1), 4=117(LC 1), 5=499(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-5=-377/240

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 9-6-0 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) 4 except (jt=lb) 5=117.

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





LOADING (ps TCLL 25. TCDL 10. BCLL 0.	sf) 5.0 0.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.20 0.10 0.08	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	GRIP 197/144
BCDL 10.	0.0	Code IRC2018/TP	912014	Matrix	k-S						Weight: 40 lb	FT = 20%
LUMBER- TOP CHORD	2x4 SPF	No.2				BRACING- TOP CHOF	RD.	Structu	ral wood	sheathing di	rectly applied or 6-0-0	oc purlins,
BOT CHORD	2x4 SPF	No.2						except	end verti	cals.		
WEBS	2x4 SPF	No.2				BOT CHOF	RD	Rigid ce	eiling dire	ectly applied (or 10-0-0 oc bracing.	

WEBS2x4 SPF No.2OTHERS2x4 SPF No.2

REACTIONS. All bearings 11-11-4.

(lb) - Max Horz 1=210(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=385(LC 1), 7=362(LC 1)

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

TOP CHORD 1-2=-290/186

WEBS 3-6=-302/192, 2-7=-276/153

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 11-10-0 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) 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, 6, 7.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







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 0.40 BC 0.22 WB 0.11 Matrix-S	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	n (loc) l/defl L/d - n/a 999 - n/a 999 5 n/a n/a	PLATES GRIP MT20 197/144 Weight: 49 lb FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S	PF No.2 PF No.2		BRACING- TOP CHORD	Structural wood sheathing d	irectly 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.

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

REACTIONS. All bearings 14-3-4.

(lb) - Max Horz 1=253(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-148(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=328(LC 1), 7=525(LC 1)

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

TOP CHORD 1-2=-340/211

WEBS 3-6=-262/167, 2-7=-394/222

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 14-2-0 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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=148.

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.









except end verticals.

1 Row at midpt

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

13-14

Scale = 1:46.5



16-7-12

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.34 BC 0.17 WB 0.12	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) n/a - n/a 999 MT20 197/144 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 14 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Weight: 95 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	SPF No.2		BRACING- TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD

WFBS

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

REACTIONS. All bearings 16-7-12.

(lb) - Max Horz 1=297(LC 9)

 Max Uplift
 All uplift 100 lb or less at joint(s) 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25

 Max Grav
 All reactions 250 lb or less at joint(s) 14, 1, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25

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

TOP CHORD 1-2=-496/247, 2-3=-428/214, 3-4=-403/212, 4-5=-365/199, 5-6=-331/189, 6-8=-295/178, 8-9=-260/167

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-7-7 to 3-7-7, Exterior(2N) 3-7-7 to 16-6-0 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) 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 1.5x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 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) 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25.
- 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.



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LUMBER-			BRACING-		
TOP CHORD	2x4 SPI	F No.2	TOP CHORD	Structural wood sheathing di	ectly applied or 8-8-0 oc purlins,
BOT CHORD	2x4 SPI	F No.2		except end verticals, and 2-0	-0 oc purlins (6-0-0 max.): 1-3.
WEBS	2x4 SPI	F No.2	BOT CHORD	Rigid ceiling directly applied	or 6-0-0 oc bracing.
OTHERS	2x4 SPI	F No.2			

REACTIONS. All bearings 8-7-8.

(lb) - Max Horz 7=-54(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 7, 4, 5, 6 Max Grav All reactions 250 lb or less at joint(s) 7, 4, 5 except 6=257(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-10-8, Exterior(2E) 4-10-8 to 8-0-7 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) 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) 7, 4, 5, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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







- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.

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, 4, 5, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







2x4 ⋍

2x4 📚

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

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

0-		6-5-9									
	-0-8 [2:0-3-0,Edge]				6-5-1						
	SPACING-	2-0-0	190		DEEL	in	(loc)	l/defl	l /d		CDID
CLL 25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	(100)	n/a	999	MT20	197/144
CDL 10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
3CLL 0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/T	PI2014	Matri	x-P						Weight: 14 lb	FT = 20%

TOP CHORD

BOT CHORD

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

REACTIONS. (size) 1=6-4-9, 3=6-4-9

Max Horz 1=-21(LC 17) Max Uplift 1=-29(LC 12), 3=-29(LC 13)

Max Grav 1=234(LC 1), 3=234(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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





