

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

Re: 2630316 2630316/woodside ridge 40/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: I44967110 thru I44967197

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

Missouri COA: Engineering 001193



February 25,2021

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 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.





2	-11-12 5-8-0	9-5-15	13-2-1	17-0-0	19-	-8-4 22	-8-0
2	-11-12 2-8-4	3-9-15	3-8-3	3-9-15	2-8	8-4 ' 2-1	1-12
Plate Offsets (X,Y)	[2:0-0-0,0-2-12], [9:0-0-0,0-2-12]						
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.90 BC 1.00 WB 0.31 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl 0.20 13-14 >999 0.45 13-14 >608 0.10 9 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 89 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI WEDGE Left: 2x4 SPF No.2 , R	PF No.2 PF 1650F 1.5E PF No.2 ight: 2x4 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling di	d sheathing directs (2-2-8 max.): 4 rectly applied or	- ctly applied or 2-6-0 -7. 8-2-0 oc bracing.	oc purlins, except
REACTIONS. (siz Max H Max U Max C	e) 2=0-4-0, 9=0-4-0 Horz 2=37(LC 29) Iplift 2=-357(LC 4), 9=-357(LC 5) Grav 2=1904(LC 1), 9=1904(LC 1)						
FORCES. (lb) - Max TOP CHORD 2-3= 7-8= 7-8= BOT CHORD 2-17 11-7 11-7 WEBS 3-16	Comp./Max. Ten All forces 250 (lb) o -3526/651, 3-4=-3571/671, 4-5=-4391/8 -3572/671, 8-9=-3526/652 =-584/3214, 16-17=-584/3214, 14-16=-5 /2=-556/3214, 9-11=-556/3214 =-36/277, 4-14=-252/1271, 5-14=-557/1 =-37/279	r less except when shown 41, 5-6=-4383/838, 6-7=-4 91/3352, 13-14=-783/438 84, 6-13=-529/177, 7-13=-	1387/839, 7, 12-13=-564/3353 -250/1266,	,			
NOTES- 1) Unbalanced roof liv 2) Wind: ASCE 7-16; ' MWFRS (envelope) grip DOL=1.60 3) Provide adequate d 4) All plates are MT20 5) This truss has been 6) Provide mechanical joint 9. 7) This truss is design referenced standard 8) Graphical purlin rep 9) "NAILED" indicates 10) In the LOAD CASI LOAD CASE(S) Star	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91n gable end zone; cantilever left and righ rainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord lin connection (by others) of truss to bearin ed in accordance with the 2018 Internati d ANSI/TPI 1. resentation does not depict the size or t 3-10d (0.148"x3") or 3-12d (0.148"x3.25 E(S) section, loads applied to the face of dard	esign. hph; TCDL=6.0psf; BCDL= t exposed ; end vertical lef re load nonconcurrent with ng plate capable of withsta onal Residential Code sec ne orientation of the purlin i") toe-nails per NDS guidi the truss are noted as fro	=4.2psf; h=15ft; Cat. it and right exposed; in any other live loads anding 357 lb uplift a ctions R502.11.1 and along the top and/o ines. nt (F) or back (B).	II; Exp C; Enclosed; ; Lumber DOL=1.60 p s. It joint 2 and 357 lb u d R802.10.2 and or bottom chord.	olate plift at	FE NU PE-20	DREW OMAS NEGN MBER 17018993
1) Dead + Roof Live (k Uniform Loads (plf) Vert: 1-4=-	palanced): Lumber Increase=1.15, Plate 90, 4-7=-90, 7-10=-90, 18-21=-20	Increase=1.15				NOISSION	AL ENGIS

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



February 25,2021

Job	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
						144967110
2630316	A01	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, F	S - 67147,	8.	430 s Feb	12 2021 MiTek Industries, Inc. Thu Feb 25 13:47:30 2021 I	Page 2
		ID:wł	H4RYhEsT	NeUP2dX	vOfi1syQY8e-Tg8yvt2eS22F179NJTRi6HjAj4prTyhpKhx8YZ	zhaQh

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 25=-60(B) 26=-60(B) 27=-60(B) 29=-60(B) 30=-60(B) 31=-60(B) 33=-177(B) 34=-144(B) 35=-27(B) 36=-27(B) 37=-27(B) 38=-27(B) 39=-27(B) 40=-27(B) 41=-144(B) 42=-177(B)







	<u>8-4-0</u> 8-4-0		14-4-0 6-0-0		2	22-8-0 8-4-0	
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.71 BC 0.72 WB 0.14 Matrix-AS	DEFL. ir Vert(LL) -0.12 Vert(CT) -0.26 Horz(CT) 0.07	n (loc) 9-11 9-11 9-11	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 82 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP WEDGE Left: 2x4 SPF No.2 , Rig	F No.2 F No.2 F No.2 ght: 2x4 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structura 2-0-0 oc Rigid cei	al wood sheathing dire purlins (2-10-15 max. ling directly applied.	ectly applied, except): 4-5.	
REACTIONS. (size Max He Max U Max G	e) 2=0-4-0, 7=0-4-0 prz 2=-54(LC 13) plift 2=-180(LC 8), 7=-180(LC 9) rav 2=1325(LC 1), 7=1325(LC 1)						
FORCES. (lb) - Max.	Comp./Max. Ten All forces 250 (lb) or	less except when shown.					

TOP CHORD 2-3=-2463/325, 3-4=-2184/280, 4-5=-2014/287, 5-6=-2183/280, 6-7=-2463/325

BOT CHORD 2-11=-280/2228. 9-11=-173/2014. 7-9=-244/2228

WEBS 4-11=0/310, 5-9=0/310

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 2-1-8, Interior(1) 2-1-8 to 8-4-0, Exterior(2R) 8-4-0 to 12-6-15, Interior(1) 12-6-15 to 14-4-0, Exterior(2R) 14-4-0 to 18-6-9, Interior(1) 18-6-9 to 23-6-8 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

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 180 lb uplift at joint 2 and 180 lb uplift at joint 7.

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

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.



16023 Swingley Ridge Rd Chesterfield, MO 63017



 	5-7-12 5-7-12	<u>11-0-0</u> 5-4-4	11-8-0 0-8-0	17-0-4 5-4-4		22-8-0 5-7-12	
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.47 BC 0.72 WB 0.39 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl -0.10 9-10 >999 -0.23 9-10 >999 0.07 7 n/a	L/d 240 180 n/a	PLATES G MT20 11 MT20HS 14 Weight: 84 lb	RIP 97/144 48/108 FT = 20%
LUMBER-			BRACING				

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 2=0-4-0, 7=0-4-0 Max Horz 2=-69(LC 17) Max Uplift 2=-163(LC 8), 7=-163(LC 9) Max Grav 2=1325(LC 1), 7=1325(LC 1)

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

- 2-3=-2453/264, 3-4=-1858/231, 4-5=-1660/234, 5-6=-1858/231, 6-7=-2453/264 TOP CHORD
- BOT CHORD 2-13=-250/2216, 11-13=-250/2216, 10-11=-104/1660, 9-10=-190/2216, 7-9=-190/2216
- WEBS 3-11=-679/167, 4-11=-23/333, 5-10=-23/333, 6-10=-679/167

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 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2E) 11-0-0 to 11-8-0, Exterior(2R) 11-8-0 to 15-10-15, Interior(1) 15-10-15 to 23-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Provide adequate drainage to prevent water ponding.

4) All plates are MT20 plates unless otherwise indicated.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2 and 163 lb uplift at joint 7.

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

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

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



Structural wood sheathing directly applied, except

2-0-0 oc purlins (4-2-4 max.): 4-5.

Rigid ceiling directly applied.





-	lob	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
2	2630316	A04	ROOF SPECIAL GIRDER	1	2		144967113
					_	Job Reference (optional)	
-	Builders FirstSource (Valley)	Center) Valley Center K	S - 67147	8	430 s Eeb	12 2021 MiTek Industries Inc. Thu Feb 25 13:47:35 2021	Page 2

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-qdxrza6nGagY8u1L611tpKR625X4825YUyevDmzhaQc

NOTES-

- 7) Bearing at joint(s) 24, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 801 lb uplift at joint 24 and 827 lb uplift at joint 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.
- 10) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-7-4 from the left end to 16-7-4 to connect truss(es) to back face of bottom chord.

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

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1155 lb down and 115 lb up at 0-7-4, 1128 lb down and 138 lb up at 2-10-7, and 1113 lb down and 155 lb up at 18-7-4, and 1782 lb down and 266 lb up at 20-7-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 3-23=-90, 3-7=-90, 23-25=-160, 6-7=-160, 22-24=-160, 9-22=-20, 9-33=-110, 8-33=-160 Concentrated Loads (lb)
 - Vert: 11=-1095(B) 20=-1095(B) 5=-1063(B) 17=-1095(B) 7=-1778(B) 23=-2265(B) 21=-1095(B) 26=-1095(B) 27=-1095(B) 28=-1095(B)





- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 251 lb uplift at joint 9 and 267 lb uplift at joint 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 16-0-0 oc max. starting at
- 2-8-0 from the left end to 18-8-0 to connect truss(es) to back face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Continued on page 2





Job	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
					14-	4967114
2630316	B01	HIP GIRDER	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	430 s Feb	12 2021 MiTek Industries, Inc. Thu Feb 25 13:47:36 2021 Pa	age 2

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:47:36 2021 Page 2 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-IpVDAw6P1uoOl2cXfkY6LYzEJVt6taxhjcOSICzhaQb

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-90, 4-8=-90, 8-9=-90, 16-20=-20

Concentrated Loads (lb)

Vert: 15=-292(B) 13=-41(B) 5=-57(B) 12=-41(B) 6=-57(B) 7=-57(B) 11=-41(B) 10=-292(B) 24=-57(B) 25=-57(B) 26=-57(B) 27=-57(B) 28=-41(B) 30=-41(B) 31=-41(B) 3





Scale = 1:36.1



	5-9-0		15-7-0			21-0-0	
Plate Offsets (X,Y)	[1:0-2-12,0-0-1], [7:0-6-1,0-0-5]		9-10-0			5-5-0	<u>.</u>
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.58 BC 0.83 WB 0.41 Matrix-AS	DEFL. ir Vert(LL) -0.27 Vert(CT) -0.60 Horz(CT) 0.07	n (loc) l/defl 7 8-10 >949 9 8-10 >423 7 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 77 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF SLIDER Left 2x	- PF No.2 PF No.2 PF No.2 v4 SPF No.2 -t 2-6-0, Right 2x6 SPF No.	2 -t 2-6-0	BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling di	d sheathing dire s (4-4-7 max.): rectly applied.	ectly applied, except 3-5.	
REACTIONS. (siz Max H Max L Max C	e) 1=0-4-0, 7=Mechanical lorz 1=47(LC 12) Jplift 1=-126(LC 12), 7=-124(LC 13) Grav 1=1155(LC 1), 7=1155(LC 1)						
FORCES. (lb) - Max. TOP CHORD 1-3= BOT CHORD 1-10 WEBS 3-10	Comp./Max. Ten All forces 250 (lb) or -1810/218, 3-4=-1545/224, 4-5=-1468/2 =-145/1561, 8-10=-216/1933, 7-8=-127/ =-2/462, 4-10=-561/155, 4-8=-638/160, 5	less except when shown. 16, 5-7=-1737/213 485 5-8=-2/478					
NOTES- 1) Unbalanced roof liv 2) Wind: ASCE 7-16; 1 MWFRS (envelope) Interior(1) 9-11-15 t vertical left and righ 3) Provide adequate d 4) All plates are MT20 5) This truss has been 6) Refer to girder(s) fo 7) Provide mechanical	e loads have been considered for this de Vult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) 0 o 15-7-0, Exterior(2R) 15-7-0 to 19-9-15 t exposed;C-C for members and forces a rainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord liv r truss to truss connections.	sign. ph; TCDL=6.0psf; BCDL=- -0-0 to 3-0-0, Interior(1) 3-0 Interior(1) 19-9-15 to 21-0 MWFRS for reactions sho e load nonconcurrent with g plate capable of withstar	4.2psf; h=15ft; Cat. II; E)-0 to 5-9-0, Exterior(2F)-0 zone; cantilever left own; Lumber DOL=1.6(any other live loads. nding 126 lb uplift at joir	Exp C; Enclosed; A) 5-9-0 to 9-11-1 and right expose D plate grip DOL= ht 1 and 124 lb u	∣5, d ; end ⊧1.60 plift at	SSE OI	E MISSON

joint 7. 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

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







REACTIONS. (size) 1=0-4-0, 6=Mechanical Max Horz 1=60(LC 12) Max Uplift 1=-124(LC 12), 6=-122(LC 13) Max Grav 1=1155(LC 1), 6=1155(LC 1)

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

 TOP CHORD
 1-3=-1674/232, 3-4=-1399/247, 4-6=-1659/228

 BOT CHORD
 1-9=-142/1462, 7-9=-144/1457, 6-7=-129/1405

 WEBS
 3-9=0/288, 4-7=0/285

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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-3-0, Exterior(2R) 7-3-0 to 11-5-15, Interior(1) 11-5-15 to 14-1-0, Exterior(2R) 14-1-0 to 18-3-15, Interior(1) 18-3-15 to 21-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) 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 124 lb uplift at joint 1 and 122 lb uplift at joint 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) 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.



16023 Swingley Ridge Rd Chesterfield, MO 63017



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



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.







- 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) 0-0-0 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 21-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 1 and 115 lb uplift at joint 7.

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

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.







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) 0-0-0 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 21-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 1 and 115 lb uplift at joint 7.

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

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.









1	4-3-0	10-8-0	I	17-1-0	21-0-0 21-ρ-7
1	4-3-0	6-5-0	I	6-5-0	3-11-0 0-0-7
Plate Offsets (X,Y)	[2:0-4-13,Edge], [8:0-6-1,0-0-5]				
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.80 BC 0.75 WB 0.32 Matrix-AS	DEFL. in Vert(LL) -0.11 Vert(CT) -0.27 Horz(CT) 0.06	i (loc) l/defl L/d 10 >999 240 9-10 >940 180 8 n/a n/a	PLATES GRIP MT20 197/144 Weight: 80 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF SLIDER Left 2x REACTIONS. (siz Max H Max U	PF No.2 PF No.2 PF No.2 4 SPF No.2 -t 2-6-0, Right 2x6 SPF No. e) 8=Mechanical, 2=0-4-0 lorz 2=49(LC 12) lolift 8=-126(LC 13) 2=-145(LC 12)	2 -t 2-6-0	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire 2-0-0 oc purlins (2-2-0 max.): 4 Rigid ceiling directly applied.	ctly applied, except -6.
Max G FORCES. (lb) - Max. TOP CHORD 2-4=- BOT CHORD 2-12: WEBS 4-10:	rav 8=1153(LC 1), 2=1235(LC 1) Comp./Max. Ten All forces 250 (lb) o 1834/221, 4-5=-2679/350, 5-6=-2679/3 =-181/1609, 10-12=-184/1607, 9-10=-15 =-195/1215, 5-10=-711/187, 6-10=-204/	less except when shown. 50, 6-8=-1739/226 7/1510, 8-9=-154/1511 1310			
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 8-5-15 to exposed;C-C for me 3) Provide adequate di 4) This truss has been 5) Refer to girder(s) for 6) Provide mechanical	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91n gable end zone and C-C Exterior(2E) - 17-1-0, Exterior(2E) 17-1-0 to 21-0-0 zo mbers and forces & MWFRS for reactio rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv r truss to truss connections. connection (by others) of truss to bearing	sign. ph; TCDL=6.0psf; BCDL=4)-10-8 to 2-1-8, Interior(1) 2 ne; cantilever left and right ns shown; Lumber DOL=1. re load nonconcurrent with a n plate capable of withstan	1.2psf; h=15ft; Cat. II; E -1-8 to 4-3-0, Exterior(2 exposed ; end vertical 60 plate grip DOL=1.60 any other live loads.	xp C; Enclosed; 2R) 4-3-0 to 8-5-15, left and right))	Jonna Marine

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 8 and 145 lb uplift at joint 2.

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.



16023 Swingley Ridge Rd Chesterfield, MO 63017



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
						144967122
2630316	C01	HIP GIRDER	1	2		
				~	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	430 s Feb	12 2021 MiTek Industries, Inc. Thu Feb 25 13:47:44 2021	Page 2

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-3M_ErfCQ9LpGjHD37Qh_gElcujkGl7ktYsKt2lzhaQT

.

NOTES-

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-90, 3-8=-90, 8-10=-90, 11-20=-20 Concentrated Loads (lb)

Vert: 18=-609(B) 17=-609(B) 21=-615(B) 22=-609(B) 23=-609(B) 24=-609(B) 25=-609(B) 26=-724(B) 27=-724(B) 28=-724(B) 29=-724(B) 30=-724(B) 31=-655(B) 32=-645(B) 33=-645(B) 33=-645(B) 34=-645(B) 34=-6







1-10-	0 11-2-11	14-2-0	18-5-5 20-8-11	24-8-11		32-0-0	
Plate Offsets (X,Y)	<u>9-4-11</u> [9:0-3-0.0-1-12], [15:0-2-8.0-3-4], [17:0-	5-8.0-3-01	4-3-3 2-3-3	4-0-0		7-3-3	
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.91 BC 0.82 WB 0.83 Matrix-AS	DEFL. in Vert(LL) -0.19 Vert(CT) -0.42 Horz(CT) 0.12	(loc) l/defl 16-17 >999 16-17 >901 10 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 169 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS REACTIONS. (size Max H Max U Max G	F No.2 F No.2 F No.2 e) 10=0-4-0, 19=0-4-0 orz 19=78(LC 9) plift 10=-219(LC 9), 19=-198(LC 8) rav 10=1744(LC 1), 19=1744(LC 1)		BRACING- TOP CHORD BOT CHORD	Structural wood s 2-0-0 oc purlins (Rigid ceiling dired	sheathing dire 3-4-14 max.) ctly applied.	ectly applied, except e : 4-6, 7-8.	end verticals, and
FORCES. (lb) - Max. TOP CHORD 1-2=- 6-7=- BOT CHORD 2-17= WEBS 4-16= 7-11=	Comp./Max. Ten All forces 250 (lb) or 1367/217, 2-3=-1526/262, 3-4=-2523/36 2255/348, 7-8=-1723/276, 8-9=-1946/26 -347/116, 16-17=-372/2313, 15-16=-31 13/311, 4-15=-112/511, 12-15=-288/19 -816/119, 9-11=-212/1779, 1-17=-219/2	less except when shown. 14, 4-5=-2487/397, 5-6=-2 16, 1-19=-1719/235, 9-10= 0/2295, 5-15=-419/106, 1 183, 6-15=-103/723, 7-12= 747, 3-17=-1224/190	484/398, 1672/243 1-12=-305/2202 365/122,				
 NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) 14-3-12, Interior(1) 17-11-1t & MWFRS for reacti 3) Provide adequate dr 4) All plates are MT200 5) This truss has been 6) Provide mechanical at joint 19. 7) This truss is designer referenced standard 8) This truss design reacher to be applied 9) Graphical purlin reprint 	e loads have been considered for this de ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) 0 4-3-12 to 18-5-5, Exterior(2E) 18-5-5 to 31-10-4 zone; cantilever left and right i ons shown; Lumber DOL=1.60 plate grij ainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord liv connection (by others) of truss to bearir and in accordance with the 2018 Internation ANSI/TPI 1. quires that a minimum of 7/16" structura d directly to the bottom chord. resentation does not depict the size or the second structure of the size or the size of th	sign. ph; TCDL=6.0psf; BCDL= 1-12 to 3-4-2, Interior(1) ; 20-8-11, Interior(1) 20-8- xposed ; end vertical left b DOL=1.60 e load nonconcurrent with g plate capable of withsta onal Residential Code sec wood sheathing be applie te orientation of the purlin	e4.2psf; h=15ft; Cat. II; E 3-4-2 to 11-2-11, Exterior 11 to 24-8-11, Exterior(2 and right exposed;C-C f any other live loads. Inding 219 lb uplift at joir stions R502.11.1 and R8 ed directly to the top cho along the top and/or bot	xp C; Enclosed; (2R) 11-2-11 to R) 24-8-11 to 27-1 or members and fo at 10 and 198 lb up 02.10.2 and rd and 1/2" gypsur tom chord.	1-1, irces lift	STATE OF AND JOHN PE-201	MISSOLP REW MAS NOT BER 7018993

February 25,2021





			15-9-5						
L 1-1	10-0 7-10-5	13-10-11	14-2-0	19-2-13		23-4-11	1 27-4-1	11 32-0-0	
' 1-1	10-0 ¹ 6-0-5 ¹	6-0-5	0-3-5 1-7-5	3-5-7		4-1-14	4-0-0) 4-7-5	
Plate Offsets (X,Y)	[16:0-5-8,0-3-0], [17:0-3-0,0-0-0], [2	0:0-5-12,0-3-12]							
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.51		DEFL. Vert(LL)	in -0.13	(loc) 10-11 >	l/defl L/d >999 240	PLATES MT20	GRIP 197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.65		Vert(CT)	-0.30	10-11 >	>999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.47		Horz(CT)	0.13	10	n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		(0.)				Weight: 176 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF REACTIONS. (siz Max H Max U Max G	PF No.2 PF No.2 PF No.2 e) 10=0-4-0, 22=0-4-0 lorz 22=69(LC 9) Jplift 10=-203(LC 9), 22=-180(LC 8) Grav 10=1744(LC 1), 22=1744(LC 1)			BRACING- TOP CHOR BOT CHOR WEBS	D D	Structura 2-0-0 oc p Rigid ceil 1 Row at	I wood sheathing c purlins (3-8-0 max. ing directly applied midpt	tirectly applied, except 6): 4-5, 7-8. I. 8-10	end verticals, and
FORCES. (lb) - Max. TOP CHORD 1-2=- 6-7=-	Comp./Max. Ten All forces 250 (I -1444/238, 2-3=-2666/341, 3-4=-233 -2332/322, 7-8=-2301/296, 1-22=-16	o) or less except when sł 8/344, 4-5=-2093/351, 5 88/242	nown. -6=-2276/3	352,					
BOT CHORD 2-20: 14-1	=-1110/205, 19-20=-305/1470, 18-1 5=-35/272, 12-14=-38/293, 11-12=-)=-334/2409, 17-18=-255 294/2329, 10-11=-213/14	5/2078, 16- 426	17=-220/180)4,				
WEBS 2-19 8-10 12-10	=-117/992, 5-16=-103/570, 7-11=-92 =-1986/278, 4-18=-39/394, 3-18=-46 6=-239/1909	7/160, 8-11=-120/1382, 8/146, 7-12=-374/75, 6-	1-20=-238/ 12=-258/57	/1790, 7,					
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) 15-9-5. Exterior(2R)	e loads have been considered for th /ult=115mph (3-second gust) Vasd= gable end zone and C-C Exterior(2 15-9-5 to 19-2-13. Interior(1) 19-2-	s design. 91mph; TCDL=6.0psf; B E) 0-1-12 to 3-4-2, Interio 3 to 27-4-11. Exterior(2F	CDL=4.2ps or(1) 3-4-2 R) 27-4-11	sf; h=15ft; Ca to 13-10-11, to 30-7-1. In	at. II; E: Exterio terior(1	xp C; Enclo or(2E) 13-1	osed; 10-11 to 5 31-10-4		

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

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 203 lb uplift at joint 10 and 180 lb uplift at joint 22.
- 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.











	7-11-8	18-4-0		28-4-0	
	7-11-8	10-4-8		10-0-0	
Plate Offsets (X,Y)	[1:0-3-0,0-1-12], [5:0-6-0,0-1-15], [11:E	dge,0-3-8]			
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.89 BC 0.90 WB 0.51	DEFL. in Vert(LL) -0.24 Vert(CT) -0.54 Horz(CT) 0.06	n (loc) l/defl L/d 4 8-10 >999 240 4 8-10 >625 180 6 7 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			Weight: 140 lb FT = 20%
LUMBER-	PE No 2		BRACING-	Structural wood sheathing dir	ectly applied except and verticals and

LUWBER-		BRACING-					
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 (6-0-0 max.): 5-6.				
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.				
		WEBS	1 Row at midpt 3-10				
REACTIONS.	(size) 7=0-4-0 12=0-4-0						

Max Horz 12=-127(LC 10) Max Uplift 7=-180(LC 13), 12=-155(LC 8) Max Grav 7=1542(LC 1), 12=1542(LC 1)

- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 1-2=-1559/233, 2-3=-1493/292, 3-4=-2249/358, 4-5=-2228/247, 1-12=-1478/191

BOT CHORD

- 2-10=-589/200, 8-10=-150/1299, 7-8=-220/1514 3-10=-117/291, 3-8=-207/1071, 4-8=-711/240, 5-8=-10/500, 5-7=-2024/307, WFBS
 - 1-10=-150/1451

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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0 , Interior(1) 14-2-0 to 28-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 7 and 155 lb uplift at joint 12.

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.



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



		7-1	1-8			8-10-0	1			1.	1-6-8	I.	
Plate Offsets (X,	,Y)	[1:0-3-0,0-1-12]	[8:Edge	,0-1-12], [12:I	Edge,0-3-8]								
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0		SPACINO Plate Gri Lumber I Rep Stre Code IR	5- DOL OL is Incr 2018/TI	2-0-0 1.15 1.15 YES PI2014	CSI. TC BC WB Matri	0.88 0.79 0.48 x-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.33 -0.69 0.07	(loc) 8-9 8-9 8	l/defl >999 >487 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 142 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 *Except* 8-10: 2x4 SPF 1650F 1.5E WEBS 2x4 SPF No.2						BRACING- TOP CHOF BOT CHOF WEBS		Structu Rigid c 1 Row	ral wood eiling dire at midpt	sheathing dia ctly applied. 3	rectly applied, except e 3-11, 5-8	and verticals.	
REACTIONS.	(size) Max H Max U Max G	 in 13=0-4-0, 8 in 13=-133(LC) plift 13=-156(LC) rav 13=1542(LC) 	=0-4-0 10) 8), 8=-1 - 1), 8=1	75(LC 13) 542(LC 1)									

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-1553/236, 2-3=-1494/297, 3-4=-2077/329, 4-5=-2067/258, 5-7=-308/51, TOP CHORD 1-13=-1472/194, 7-8=-323/69 BOT CHORD 2-11=-599/203, 9-11=-102/1294, 8-9=-229/1895

4-9=-542/178, 3-9=-188/1004, 3-11=-123/272, 5-8=-2019/274, 1-11=-154/1446 WEBS

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0 Interior(1) 14-2-0 to 28-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces

& MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) 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 156 lb uplift at joint 13 and 175 lb uplift at joint 8.

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.







1	7-11-8	13-4-11	20-8-9	1	28-4-0	1			
	7-11-8	5-5-3	7-3-15		7-7-7	1			
Plate Offsets (X,Y)	[1:0-3-0,0-1-12], [13:Edge,0-3-8]								
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.85 BC 0.52 WB 0.45 Matrix-AS	DEFL. ir Vert(LL) -0.11 Vert(CT) -0.22 Horz(CT) 0.05	i (loc) l/defl 13-14 >999 13-14 >999 13-14 >999 8 n/a	L/d PLATES 240 MT20 180 n/a Weight: 150	GRIP 197/144 Ib FT = 20%			
LUMBER- TOP CHORD BOT CHORD2x4 SPF No.2BRACING- TOP CHORDStructural wood sheathing directly applied, except end 2-0-0 oc purlins (4-5-0 max.): 3-4.WEBS2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2BOT CHORDStructural wood sheathing directly applied, except end 2-0-0 oc purlins (4-5-0 max.): 3-4.REACTIONS.(size) 14=0-4-0, 8=0-4-0 Max Horz 14=-141(LC 10) Max Uplift 14=-176(LC 8), 8=-180(LC 9) Max Grav 14=1538(LC 1), 8=1538(LC 1)BOT CHORD									
FORCES. (lb) - Max TOP CHORD 1-2 1-1. 1-1. BOT CHORD 2-1. WEBS 3-11 1-1. 1-1.	 Comp./Max. Ten All forces 250 (lb) o -1543/241, 2-3=-1488/293, 3-4=-1548/2 4=-1460/197, 7-8=-1460/208 2=-618/230, 10-12=-118/1312, 9-10=-126 0=-107/533, 4-10=-313/147, 4-9=-190/67 2=-157/1441 	r less except when shown. 75, 4-5=-2263/382, 5-7=-2 //1553 7, 5-9=-698/237, 7-9=-188	270/282, /1844,						
1) Unbalanced roof li 2) Wind: ASCE 7-16;	ve loads have been considered for this du Vult=115mph (3-second gust) Vasd=91n	esign. nph; TCDL=6.0psf; BCDL=	-4.2psf; h=15ft; Cat. II; E	xp 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 8-11-5, Exterior(2E) 8-11-5 to 13-4-11, Exterior(2R) 13-4-11 to 17-7-9, Interior(1) 17-7-9 to 28-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 14 and 180 lb uplift at joint 8.

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.







 	<u>6-1-5</u> 6-1-5	7-11-8	<u>12-1-1</u> 4-1-9	16-2-11 4-1-9		22-1-9 5-10-15		<u>28-4-0</u> 6-2-7	
Plate Offsets (X,Y)) [7:0-3-0,0-1-12], [9:0-3-8,0-4-0], [11:0-3-0,0-4-8], [13:0-6-8,0-3-8]								
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	2-0-0 1.15 1.15 NO PI2014	CSI. TC 0.65 BC 0.54 WB 0.97 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.15 -0.32 0.09	(loc) l/defl 9-11 >999 9-11 >999 8 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 338 lb	GRIP 197/144 148/108 FT = 20%
LUMBER- TOP CHORD 2x4 SF 5-7: 2x BOT CHORD 2x6 SF 14-16: WEBS 2x4 SF REACTIONS (siz Max H Max L Max C	PF No.2 *Except* 44 SPF 1650F 1.5E PF 2100F 1.8E *Except* 2x6 SPF No.2, 3-14: 2x4 PF No.2 e) 8=0-4-0, 16=0-6-0 forz 16=-148(LC 6) Jplift 8=-982(LC 5), 16=-9 Grav 8=6399(LC 1), 16=6	SPF No.2 52(LC 4) 147(LC 1)		BRACING- TOP CHOR BOT CHOR	D S e D F	Structural wood except end verti Rigid ceiling dire	sheathing direc cals, and 2-0-0 cctly applied or	ctly applied or 4-7-8 c oc purlins (4-2-10 m 10-0-0 oc bracing.	oc purlins, ax.): 2-5.
FORCES. (lb) - Max. TOP CHORD 1-2= 6-7= BOT CHORD 14-11 8-9= WEBS 1-15 6-11. 3-12	Comp./Max. Ten All foi -4814/800, 2-3=-5968/100 -8766/1377, 1-16=-5463/8 5=-52/326, 3-13=-2364/40 -85/446 =-877/5654, 2-15=-3731/8 =-850/184, 6-9=-328/376, =-418/2466	rces 250 (lb) or l 122, 3-4=-7446/1: 372, 7-8=-5241/4 08, 12-13=-881/4 562, 13-15=-680 7-9=-1215/7914	less except when show 241, 4-5=-7449/1243, 5 837 6014, 11-12=-1125/736 9/4767, 2-13=-810/5290 4, 4-12=-522/130, 5-12	n. 5-6=-7997/1321, 58, 9-11=-1264/812), 5-11=-389/2275, =-24/303,	,				
NOTES- 1) 2-ply truss to be cor Top chords connect Bottom chords connect Webs connected as 2) All loads are consid ply connections hav 3) Uhbalanced roof live 4) Wind: ASCE 7-16; \ MWFRS (envelope) grip DOL=1.60 5) Provide adequate d 6) All plates are MT20 7) This truss has been 8) Bearing at joint(s) 8 capacity of bearing 9) Provide mechanical joint 16. 10) This truss is desig referenced standa CdohtGrashinghagdig ref	nnected together with 10d ed as follows: 2x4 - 1 row lected as follows: 2x6 - 2 follows: 2x4 - 1 row at 0- ered equally applied to all e been provided to distrib e loads have been consid /ult=115mph (3-second g gable end zone; cantilew rainage to prevent water p plates unless otherwise i designed for a 10.0 psf b , 16 considers parallel to g surface. connection (by others) of ned in accordance with th rd ANSI/TPI 1. presentation does not dep	I (0.120"x3") nail v at 0-4-0 oc. rows staggered 9-0 oc. I plies, except if bute only loads n ered for this des ust) Vasd=91mp er left and right of ponding. ndicated. wottom chord live grain value using f truss to bearing e 2018 Internati pict the size or th	Is as follows: at 0-5-0 oc, 2x4 - 1 rov noted as front (F) or ba loted as (F) or (B), unle sign. bh; TCDL=6.0psf; BCDI exposed ; end vertical I e load nonconcurrent wi g ANSI/TPI 1 angle to g g plate capable of withs onal Residential Code he orientation of the pu	v at 0-9-0 oc. lock (B) face in the Lu ss otherwise indica L=4.2psf; h=15ft; Ca eft and right expose ith any other live loa grain formula. Build tanding 982 lb uplift sections R502.11.1 rlin along the top ar	DAD CA: ed. it. II; Exp d; Lumb ds. ing desig at joint { and R80 d/or bott	SE(S) section. F o C; Enclosed; er DOL=1.60 pl gner should veri 8 and 952 lb up 02.10.2 and tom chord.	Ply to ate fy ift at	STATE OF STATE OF AND THO JOH PE-201 Februar	MISSOLA REW MAS VOIN BER 7018993 AL ENGINA AL ENGINA Y 25,2021
WARNING - Verify Design valid for use o a truss system. Befor building design. Brac is always required for fabrication, storage, o Safety Information	design parameters and READ NO nly with MiTek® connectors. Thi e use, the building designer mus ing indicated is to prevent buckli stability and to prevent collapse ellivery, erection and bracing of f available from Truss Plate Institu	DTES ON THIS AND is design is based or it verify the applicabi ing of individual truss with possible persoo trusses and truss sys te, 2670 Crain High	INCLUDED MITEK REFEREN Ily upon parameters shown, a lity of design parameters and s web and/or chord members nal injury and property damag stems, see ANSI/TF way, Suite 203 Waldorf, MD 2	ICE PAGE MII-7473 rev. (and is for an individual bu properly incorporate this only. Additional tempora ge. For general guidance 11 Quality Criteria, DSB 20601	ilding comp design into ry and perr regarding -89 and B0	BEFORE USE. ponent, not o the overall manent bracing the CSI Building Comp	onent	16023 Swingley Chesterfield, M	/ Ridge Rd 0 63017

Job	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
2620246	C09		4	_		144967129
2030310	000		1	2	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	430 s Feb	12 2021 MiTek Industries, Inc. Thu Feb 25 13:47:52 2021	Page 2

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:47:52 2021 Page 2 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-quTGXOJSGpp7gWrcb5qs?ve_6xRCdkq2O6GIKHzhaQL

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 703 lb down and 113 lb up at 1-8-12, 703 lb down and 128 lb up at 3-8-12, 703 lb down and 128 lb up at 3-8-12, 703 lb down and 128 lb up at 3-8-12, 703 lb down and 128 lb up at 3-8-12, 703 lb down and 128 lb up at 12-8-12, 671 lb down and 116 lb up at 15-8-12, 671 lb down and 116 lb up at 13-8-12, 671 lb down and 116 lb up at 13-8-12, 671 lb down and 116 lb up at 13-8-12, 671 lb down and 116 lb up at 13-8-12, 671 lb down and 116 lb up at 13-8-12, 671 lb down and 128 lb up at 13-8-12, 652 lb down and 103 lb up at 21-8-12, 652 lb down and 103 lb up at 23-8-12, and 652 lb down and 101 lb up at 25-8-12, and 658 lb down and 110 lb up at 27-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-90, 2-5=-90, 5-7=-90, 14-16=-20, 8-13=-20

Concentrated Loads (lb)

Vert: 14=-712(B) 15=-703(B) 18=-703(B) 19=-703(B) 20=-671(B) 21=-671(B) 22=-671(B) 23=-671(B) 24=-671(B) 25=-671(B) 26=-652(B) 27=-652(B) 28=-652(B) 29=-658(B) 29=-658(B) 20=-658(B) 20=-6





- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-90, 4-6=-90, 7-10=-20

Concentrated Loads (lb)

Vert: 14=-63(B) 15=-57(B) 16=-57(B) 17=-57(B) 18=-57(B) 19=-254(B) 20=-41(B) 21=-41(B) 22=-41(B) 23=-41(B) 23=-41(B)

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



February 25,2021

E

16023 Swingley Ridge Rd Chesterfield, MO 63017



F	4-0-0		12-0-0								
Plate Offsets (X,Y)	[2:0-4-1,0-0-5]		6-0-0								
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.29 BC 0.46 WB 0.31 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) -0.10 7-8 >999 240 Vert(CT) -0.22 7-8 >651 180 Horz(CT) 0.01 7 n/a n/a	PLATES GRIP MT20 197/144 Weight: 46 lb FT = 20%							
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2	SPF No.2 SPF No.2 SPF No.2 2x4 SPF No.2 -t 1-6-0		BRACING- TOP CHORD Structural wood sheathing di 2-0-0 oc purlins (6-0-0 max.) BOT CHORD Rigid ceiling directly applied.	rectly applied, except end verticals, and : 4-6.							

REACTIONS. (size) 2=0-4-0, 7=0-4-0 Max Horz 2=88(LC 11) Max Uplift 2=-68(LC 12), 7=-95(LC 9) Max Grav 2=734(LC 1), 7=649(LC 1)

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

TOP CHORD 2-4=-922/181, 4-5=-769/188

BOT CHORD 2-8=-205/774, 7-8=-212/766

WEBS 5-7=-810/221

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2R) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 68 lb uplift at joint 2 and 95 lb uplift at joint 7.

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

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.







	L	5-6-0			12-0-0								
		5-6-0			1								
Plate Offsets (X,Y)													
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code, IBC2018/TE	2-0-0 1.15 1.15 YES 212014	CSI. TC BC WB Matrix	0.65 0.33 0.60	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.09 0.01	(loc) 6-7 6-7 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 45 lb	GRIP 197/144 FT = 20%		
DODE 10.0		12011	Mathy							Wolght. To ib	11 - 2070		
LUMBER- TOP CHORD 2x4 SPF No.2					BRACING- TOP CHOF	RD	Structu	ral wood	sheathing dir	ectly applied, except	end verticals, and		

 BOT CHORD
 2x4 SPF No.2
 2-0-0 oc purlins (6-0-0 max.): 4-5.

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

 SLIDER
 Left 2x4 SPF No.2 -t 1-6-0
 ENT CHORD
 Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 6=0-4-0 Max Horz 2=116(LC 11) Max Uplift 2=-79(LC 12), 6=-92(LC 9) Max Grav 2=734(LC 1), 6=649(LC 1)

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

TOP CHORD 2-4=-851/177, 5-6=-292/97

BOT CHORD 2-7=-232/701, 6-7=-234/695

WEBS 4-6=-680/210

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 2-1-8, Interior(1) 2-1-8 to 5-6-0, Exterior(2R) 5-6-0 to 9-8-15, Interior(1) 9-8-15 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 79 lb uplift at joint 2 and 92 lb uplift at joint 6.

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

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

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







Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.06

6

n/a

n/a

2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied.

	(11.)	• • •	-		050 (11)		
FORCES.	(ID) - IV	ax. Comp./Ma	ax. I en /	All forces	250 (ID) O	or less except	t when shown.

TOP CHORD 2-4=-692/150

0.0

10.0

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

Left 2x4 SPF No.2 -t 2-6-0

Max Horz 2=125(LC 9)

(size) 6=Mechanical, 2=0-4-0

Max Uplift 6=-91(LC 9), 2=-87(LC 12) Max Grav 6=665(LC 1), 2=750(LC 1)

BOT CHORD 2-10=-200/588, 9-10=-122/393, 7-8=-108/259, 6-7=-230/652

Rep Stress Incr

Code IRC2018/TPI2014

WEBS 4-6=-732/232

NOTES-

BCLL

BCDL

WEBS

SLIDER

LUMBER-

BOT CHORD

REACTIONS.

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 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 12-1-12 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

WB

Matrix-AS

0.46

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.

YES

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 6 and 87 lb uplift at joint 2.

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.



FT = 20%

Weight: 53 lb

Structural wood sheathing directly applied, except end verticals, and





Max Grav 7=665(LC 1), 2=750(LC 1)

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

TOP CHORD 2-4=-829/171, 4-5=-537/127

BOT CHORD 2-11=-296/736, 10-11=-115/306, 7-8=-163/423

WEBS 4-11=-389/170, 9-11=-15/352, 5-9=-15/325, 5-7=-586/175

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 2-1-8, Interior(1) 2-1-8 to 8-6-0, Exterior(2E) 8-6-0 to 12-1-12 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) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 7 and 91 lb uplift at joint 2.

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.

ANDREW THOMAS JOHNSON NOTMBER PE-2017018993 February 25,2021

Mitek° 16023 Swingley Ridge Rd Chesterfield, MO 63017



REACTIONS. (size) 7=Mechanical, 2=0-4-0 Max Horz 2=181(LC 9) Max Uplift 7=-90(LC 12), 2=-90(LC 12) Max Grav 7=665(LC 1), 2=750(LC 1)

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

TOP CHORD 2-4=-798/163, 4-5=-408/103

BOT CHORD 2-11=-285/705, 7-8=-118/268

WEBS 4-11=-509/199, 9-11=-12/499, 5-9=-34/427, 5-7=-605/165

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 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 12-1-12 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) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 7 and 90 lb uplift at joint 2.

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

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

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







LUMBER- BRACING- TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, exception 2-0-0 oc purlins (6-0-0 max.): 5-7. WEBS 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied. SLIDER Left 2x4 SPF No.2 -t 2-6-0 BOT CHORD Rigid ceiling directly applied.	BCDL	0.0 10.0	Rep Cod	le IRC2018/TF	912014	Mati	0.51 rix-AS	Horz(CT)	0.07	9	n/a	n/a	Weight: 58 lb
	LUMBER TOP CHO BOT CHO WEBS SLIDER	R- ORD 2: ORD 2: 2: Lu	 <4 SPF No.2 <4 SPF No.2 <4 SPF No.2 <4 SPF No.2 eft 2x4 SPF No.2 	2 -t 2-6-0				BRACING- TOP CHOR BOT CHOR	D D	Structur 2-0-0 oc Rigid ce	al wood purlins iling dire	sheathing di (6-0-0 max.) ectly applied.	rectly applied, except : 5-7.

REACTIONS. (size) 2=0-4-0, 9=Mechanical Max Horz 2=221(LC 12) Max Uplift 2=-59(LC 12), 9=-144(LC 12) Max Grav 2=741(LC 1), 9=675(LC 1)

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

- TOP CHORD 2-4=-642/64, 4-5=-1003/208
- BOT CHORD 2-13=-189/667, 12-13=-113/443, 10-11=-443/113
- WEBS 4-11=-675/284, 5-11=-299/1030, 6-9=-527/192

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 2-1-8, Interior(1) 2-1-8 to 11-6-0, Exterior(2E) 11-6-0 to 12-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 2 and 144 lb uplift at joint 9.
- 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.



FT = 20%





- BOT CHORD 2-9=-166/730, 8-9=-59/445, 6-8=-27/350, 6-7=-151/403
- WEBS 4-7=0/289, 4-6=-910/225

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 12-1-12 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

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 36 lb uplift at joint 2 and 63 lb uplift at joint 6.
- 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.







 Wind: ASCE /-16; Vult=115mph (3-second gust) Vasd=91mph; ICDL=6.0pst; BCDL=4.2pst; 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 11-10-4 zone; cantilever left and righ 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 53 lb uplift at joint 2 and 93 lb uplift at joint 13.

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



Max Grav 2=754(LC 1), 13=629(LC 1)

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

TOP CHORD 2-4=-798/33, 6-8=-80/440, 5-8=-80/440

BOT CHORD 2-7=-171/677. 6-7=-171/677

WEBS 4-7=0/254, 4-6=-728/193, 5-13=-631/153

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-10-4 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 57 lb uplift at joint 2 and 153 lb uplift at joint 13.

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.






sheetrock be applied directly to the bottom chord.





NUMBER PE-2017018993

E





MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017









LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.56	DEFL. in Vert(LL) 0.06	(loc) l/defl L/d 7-10 >999 240	PLATES GRIP MT20 197/144
TCDL 20.0 BCLL 0.0 BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.43 WB 0.46 Matrix-AS	Vert(CT) -0.13 Horz(CT) 0.03	7-10 >999 180 2 n/a n/a	Weight: 47 lb FT = 20%
LUMBER- TOP CHORD 2x	SPF No.2		BRACING- TOP CHORD	Structural wood sheathing di	rectly applied, except end verticals, and

 BOT CHORD
 2x4 SPF No.2
 Substantial wood sheadaining directly applied, except end venticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.

 WEBS
 2x4 SPF No.2
 BOT CHORD
 BOT CHORD

 SLIDER
 Left 2x4 SPF No.2 -t 2-6-0
 BOT CHORD
 Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 6=0-4-0 Max Horz 2=147(LC 11) Max Uplift 2=-87(LC 12), 6=-89(LC 9) Max Grav 2=734(LC 1), 6=649(LC 1)

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

TOP CHORD 2-4=-661/149

BOT CHORD 2-7=-220/563, 6-7=-221/556

WEBS 4-7=0/279, 4-6=-702/234

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 2-1-8, Interior(1) 2-1-8 to 7-1-14, Exterior(2R) 7-1-14 to 11-4-13, Interior(1) 11-4-13 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 87 lb uplift at joint 2 and 89 lb uplift at joint 6.

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

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

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







WEBS 6-30=-92/505, 6-29=-841/193, 7-29=-831/246, 7-27=-192/637, 8-27=-378/132, 10-26=-275/85, 11-26=-190/1083, 14-23=-3113/625, 14-22=-90/480, 15-21=-126/638, 16-19=-807/177, 15-22=-47/257, 12-25=-718/177, 11-25=-1360/238, 23-25=-1859/404, 12-23=-286/1385

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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 17=251, 29=328, 25=396.

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

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 254 lb down and 71 lb up at Confine 420 and 42





Job	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
						I44967144
2630316	D15	Roof Special Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	430 s Feb	12 2021 MiTek Industries, Inc. Thu Feb 25 13:48:06 2021	Page 2

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-QbJZTBUEz6a8MfvIQ148ZsDObbAzuB56cHf2pTzhaQ7

NOTES-

10) 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: 1-5=-90, 5-8=-90, 8-9=-90, 9-10=-90, 10-11=-90, 11-15=-90, 15-18=-90, 24-32=-20, 20-23=-20, 19-36=-20

Concentrated Loads (lb)

Vert: 20=-254(F) 40=-57(F) 41=41(F) 42=41(F) 43=41(F) 44=41(F) 45=-63(F) 46=-41(F) 47=-195(F) 48=-195(F) 49=-195(F) 50=-195(F)





L	4-3-0 11	-10-0	15-7-0	17-1-0	21-6-0	26-11-0	
	4-3-0 7	-7-0	3-9-0	' 1-6-0 '	4-5-0	5-5-0	
Plate Offsets (X,Y)	[2:0-4-1,0-0-5], [7:0-2-4,0-3-4], [10:0-6-	1,0-0-5]				1	
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.70 BC 0.35 WB 0.47 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.06 15-16 -0.13 15-16 0.02 10	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 106 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI SLIDER Left 2	PF No.2 PF No.2 PF No.2 PF No.2 r4 SPF No.2 -t 2-6-0, Right 2x6 SPF No.	2 -t 2-6-0	BRACING- TOP CHORE BOT CHORE	9 Structur 2-0-0 o 9 Rigid ce	ral wood sheathing dii c purlins (6-0-0 max.): eiling directly applied.	rectly applied, except 4-6, 7-8.	
REACTIONS. (siz Max H Max U Max C	e) 10=0-4-0, 2=0-4-0, 15=0-4-0 Horz 2=62(LC 12) Jplift 10=-81(LC 13), 2=-102(LC 12), 15= Grav 10=724(LC 1), 2=598(LC 1), 15=17	183(LC 12) 18(LC 1)					
FORCES. (lb) - Max TOP CHORD 2-4= BOT CHORD 2-16 WEBS 5-16	. Comp./Max. Ten All forces 250 (lb) o -548/120, 4-5=-538/129, 5-6=-55/682, 6 =-106/542, 13-15=-90/496, 12-13=-90/4 =-35/604, 5-15=-1047/216, 6-15=-1364/	e less except when shown. 7=-704/168, 7-8=-758/183 96, 11-12=-72/591, 10-11= 193	3, 8-10=-879/170 :-91/760				
 NOTES- 1) Unbalanced roof liv 2) Wind: ASCE 7-16; MWFRS (envelope Interior(1) 7-3-0 to 7 to 26-11-0 zone; ca reactions shown; Lu 3) Provide adequate of 4) This truss has beer 5) Provide mechanica 2=102, 15=183. 6) This truss is design referenced standard 7) This truss design referencek papping 	e loads have been considered for this de Vult=115mph (3-second gust) Vasd=91n 9 gable end zone and C-C Exterior(2E) -(17-1-0, Exterior(2R) 17-1-0 to 20-1-0, Int ntilever left and right exposed ; end verti umber DOL=1.60 plate grip DOL=1.60 rainage to prevent water ponding. I designed for a 10.0 psf bottom chord liv I connection (by others) of truss to bearin ed in accordance with the 2018 Internati d ANSI/TPI 1. requires that a minimum of 7/16" structura d directly to the bottom chord.	sign. ph; TCDL=6.0psf; BCDL= -10-8 to 2-1-8, Interior(1) ; erior(1) 20-1-0 to 21-6-0, E cal left and right exposed;(e load nonconcurrent with ng plate capable of withstar onal Residential Code sec I wood sheathing be applie	4.2psf; h=15ft; Cat 2-1-8 to 4-3-0, Exte Exterior(2R) 21-6-0 C-C for members a any other live load nding 100 lb uplift a tions R502.11.1 an ed directly to the top	II; Exp C; En rrior(2R) 4-3-0 to 24-6-0, Inte nd forces & M s. at joint(s) 10 e d R802.10.2 a o chord and 1/	closed; to 7-3-0, prior(1) 24-6-0 WFRS for xcept (jt=lb) and /2" gypsum	STATE OF ANI THO	MISSOLA DREW MAS

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







Continued on page 2



Job	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
						I44967146
2630316	D17	Roof Special Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	430 s Feb	12 2021 MiTek Industries, Inc. Thu Feb 25 13:48:09 2021	Page 2

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-qA?h5CW6G1yjD7et5AerBVruOoFK5a5YIFtiQozhaQ4

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-90, 4-7=-90, 7-8=-90, 8-10=-90, 10-12=-90, 21-25=-20

Concentrated Loads (lb)

Vert: 6=-57(F) 17=-45(F) 3=-63(F) 29=-57(F) 30=-57(F) 31=-57(F) 32=-61(F) 33=-254(F) 34=-41(F) 35=-41(F) 36=-41(F) 37=-41(F) 37=-41(F) 36=-41(F) 37=-41(F) 36=-41(F) 37=-41(F) 36=-41(F) 37=-41(F) 36=-41(F) 37=-41(F) 3





L	2-4-0	4-1-14		11-1-0				13-5-0	
l	2-4-0	1-9-14	1	6-11-2				2-4-0	
Plate Offsets (X,Y)	[2:0-2-0,0-1-12], [3:0-3	-7,0-1-2], [6:Edge	<u>e,0-1-8], [9:0-4-8,0-2-0], [1</u>	12:0-3-0,0-0-8]					
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/	2-0-0 1.15 1.15 YES /TPI2014	CSI. TC 0.63 BC 0.58 WB 0.56 Matrix-AS	DEFL. i Vert(LL) -0.1: Vert(CT) -0.2 Horz(CT) 0.0	n (loc) 2 10-11 3 10-11 7 7	l/defl >999 >597 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 53 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF REACTIONS. (siz Max H Max U Max C	PF No.2 PF No.2 PF No.2 e) 7=0-4-0, 14=0-4-0 lorz 14=96(LC 11) lplift 7=-106(LC 9), 14= irav 7=718(LC 1), 14=8	-73(LC 12) 317(LC 25)		BRACING- TOP CHORD BOT CHORD	Structura 2-0-0 oc Rigid ce	al wood c purlins eiling dire	sheathing dire (4-10-12 max. ctly applied.	ectly applied, except .): 4-6.	end verticals, and
FORCES.(lb) - Max.TOP CHORD2-3=BOT CHORD13-14WEBS4-115	Comp./Max. Ten All -550/108, 3-4=-1477/23 4=-144/259, 3-12=-147/ =0/350, 5-9=-1264/338	forces 250 (lb) or 4, 4-5=-1288/245 /1051, 11-12=-29	less except when shown 5, 7-9=-676/127, 2-14=-80 1/1310, 10-11=-289/1362	55/201 , 9-10=-238/1428					
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 8-7-11 to MWFRS for reaction 3) Provide adaption	e loads have been cons /ult=115mph (3-second gable end zone and C- 13-3-4 zone; cantilever is shown; Lumber DOL	sidered for this de gust) Vasd=91m -C Exterior(2E) -C left and right exp =1.60 plate grip I r popding	sign. ph; TCDL=6.0psf; BCDL= -10-8 to 2-1-8, Interior(1) vosed ; end vertical left an VOL=1.60	=4.2psf; h=15ft; Cat. II; 2-1-8 to 4-1-14, Exteric d right exposed;C-C for	Exp C; End r(2R) 4-1- members	closed; 14 to 8-7 and force	7-11, ces &		

3) Provide adequate drainage to prevent water ponding.

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

5) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 7=106.

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.







· · · ·	2-4-0 2-3-14	I	6-5-2			2-3-0	
Plate Offsets (X,Y)	[3:0-3-15,0-1-6], [9:0-4-8,0-1-8], [9:0-2-0	0,0-0-12], [12:0-3-0,0-0-8]					
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.49 BC 0.61 WB 0.39 Matrix-AS	DEFL. ir Vert(LL) -0.08 Vert(CT) -0.17 Horz(CT) 0.05	(loc) l/defl 10-11 >999 10-11 >923 18 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 54 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF 2:14: 2 OTHERS 2x4 SF	PF No.2 PF No.2 PF No.2 *Except* 2x6 SPF No.2 PF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling dir	I sheathing dir (5-2-15 max.) ectly applied.	rectly applied, except): 4-6.	end verticals, and
REACTIONS. (siz Max H Max L Max C	te) 14=0-4-0, 18=Mechanical Horz 14=79(LC 9) Jplift 14=-74(LC 12), 18=-95(LC 9) Grav 14=820(LC 1), 18=672(LC 25)						
FORCES. (lb) - Max. TOP CHORD 2-3= BOT CHORD 3-12 WEBS 4-11	Comp./Max. Ten All forces 250 (lb) or -540/84, 3-4=-1352/226, 4-5=-1172/241, =-126/939, 11-12=-256/1187, 10-11=-23 =0/290, 5-9=-1023/285, 6-18=-691/116	less except when shown 5-6=-254/0, 6-9=-74/490 5/1170, 9-10=-186/1196	, 2-14=-812/199				
NOTES- 1) Unbalanced roof liv. 2) Wind: ASCE 7-16; \ MWFRS (envelope) Interior(1) 8-8-7 to 1 & MWFRS for react 3) Provide adequate d 4) This truss has been 5) Refer to girder(s) fo 6) Bearing at joint(s) 1 capacity of bearing 7) Provide mechanical 8) This truss is design re sheetrock be applie 10) Graphical purlin re	e loads have been considered for this de Vult=115mph (3-second gust) Vasd=91m) gable end zone and C-C Exterior(2E) -(12-10-12 zone; cantilever left and right er ions shown; Lumber DOL=1.60 plate grij rainage to prevent water ponding. I designed for a 10.0 psf bottom chord liv r truss to truss connections. 4 considers parallel to grain value using surface. I connection (by others) of truss to bearin ed in accordance with the 2018 Internation d ANSI/TPI 1. equires that a minimum of 7/16" structura d directly to the bottom chord. presentation does not depict the size or	sign. ph; TCDL=6.0psf; BCDL: -10-8 to 2-1-8, Interior(1) sposed ; end vertical left a b DOL=1.60 e load nonconcurrent with ANSI/TPI 1 angle to grain g plate capable of withsta onal Residential Code sec I wood sheathing be appl the orientation of the purl	=4.2psf; h=15ft; Cat. II; E 2-1-8 to 4-7-14, Exterio and right exposed;C-C fo n any other live loads. n formula. Building desig anding 100 lb uplift at joi ctions R502.11.1 and R8 ied directly to the top cho in along the top and/or b	Exp C; Enclosed; r(2R) 4-7-14 to 8- r members and for gner should verify nt(s) 14, 18. 02.10.2 and ord and 1/2" gyps ottom chord.	8-7, brces	STATE OF STATE OF AN TH JOF NU PE-20	MISSOUT DREW MAS MONAS MONAS MONAS MONAS MONAS MONAS MONAS MONAS



MiTek

16023 Swingley Ridge Rd Chesterfield, MO 63017



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

NITEK 16023 Swingley Ridge Rd Chesterfield, MO 63017



February 25,2021







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

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



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



) 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.







- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15.
 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.







Max Uplift 2=-74(LC 12), 9=-83(LC 9) Max Grav 2=800(LC 1), 9=732(LC 1)

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

TOP CHORD 2-4=-872/141

BOT CHORD 2-10=-258/739, 9-10=-258/739

WEBS 4-10=0/283, 4-9=-828/211

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 13-4-0 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

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

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.

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







 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 SLIDER
 Left 2x4 SPF No.2 + 1-6-0

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 2=0-4-0, 6=Mechanical Max Horz 2=265(LC 11) Max Uplift 2=-90(LC 12), 6=-142(LC 12) Max Grav 2=807(LC 1), 6=723(LC 1)

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

TOP CHORD 2-4=-891/143

BOT CHORD 2-7=-252/757, 6-7=-252/757

WEBS 4-7=0/287, 4-6=-847/215

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 13-2-4 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.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 6=142.

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.



NiTek° 16023 Swingley Ridge Rd Chesterfield, MO 63017



BCDL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	BRACING-	Weight: 61 lb FT = 20%
LOADING (psf) TCLL 25.0 TCDL 20.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15	CSI. TC 0.38 BC 0.39	DEFL. in (loc) l/defl L/d Vert(LL) -0.08 7-8 >999 240 Vert(CT) -0.16 7-8 >972 180	PLATES GRIP MT20 197/144

 DOP CHORD
 2x4 SPF No.2
 TOP CHORD
 Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

 WEBS
 2x4 SPF No.2
 BOT CHORD
 Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

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

 SLIDER
 Left 2x4 SPF No.2 - t 1-6-0
 BOT CHORD
 Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 7=Mechanical Max Horz 2=228(LC 11) Max Uplift 2=-97(LC 12), 7=-108(LC 12) Max Grav 2=807(LC 1), 7=723(LC 1)

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

TOP CHORD 2-4=-967/145, 4-5=-1001/254

BOT CHORD 2-8=-279/792

WEBS 4-8=-512/215, 5-8=-219/892, 5-7=-676/308

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 11-6-0, Exterior(2E) 11-6-0 to 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) 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) 2 except (jt=lb) 7=108.
- 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.







TCLL TCDL BCLL BCDL	25.0 20.0 0.0 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	TC 0.32 BC 0.58 WB 0.27 Matrix-AS	Vert(LL) -0.16 Vert(CT) -0.32 Horz(CT) 0.02	8-11 8-11 2	>999 >491 n/a	240 180 n/a	MT20 Weight: 59 lb	197/144 FT = 20%	
LUMBER-				BRACING-	-					
TOP CHOP	RD 2x4 SP	PF No.2		TOP CHORD	Structu	iral wood	sheathing dir	rectly applied, except	end verticals, and	
BOT CHOP	RD 2x4 SP	PF No.2			2-0-0 c	oc purlins	(6-0-0 max.):	: 5-6.		
WEBS	2x4 SP	PF No.2		BOT CHORD	Rigid c	eiling dire	ectly applied.			
SLIDER	Left 2x	4 SPF No.2 -t 1-6-0								
REACTION	NS. (size	e) 7=Mechanical, 2=0-4-0								
	Max H	orz 2=200(LC 11)								
	MaxII	$nlift 7 = -03(1 \cap 0) 2 = -08(1 \cap 12)$								

Max Uplift 7=-93(LC 9), 2=-98(LC 12) Max Grav 7=723(LC 1), 2=807(LC 1)

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

- TOP CHORD 2-4=-908/176, 4-5=-526/122, 5-6=-384/137, 6-7=-723/206
- BOT CHORD 2-8=-319/799
- WEBS 4-8=-493/184, 6-8=-207/711

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 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) 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) 7, 2.
- 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.







Scale = 1:27.9



	2-9-0		7-11-8	1		13-2-0		1	5-7-0	
I	2-9-0		5-2-8			5-2-8		2	-5-0	
Plate Offsets (X,Y)	[2:0-4-13,Edge], [4:0-3-	3,Edge], [6:0-3-3,E	Edge], [8:0-6-1,0-0-5]							_
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/7	2-0-0 1.15 1.15 NO TPI2014	CSI. TC 0.69 BC 0.72 WB 0.79 Matrix-MS	DEFL. Vert(LL) - Vert(CT) - Horz(CT)	in (loc) -0.10 10 -0.23 10-11 0.05 8	l/defl >999 >823 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 61 lb	GRIP 197/144 FT = 20%	_
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2	SPF No.2 SPF 1650F 1.5E SPF No.2 2x4 SPF No.2 -t 2-6-0, Rig	9ht 2x6 SPF No.2 -	t 2-6-0	BRACING- TOP CHORD BOT CHORD) Structur except 2-0-0 oc Rigid ce	al wood s purlins (eiling dire	sheathing dire 3-3-10 max.): ctly applied of	ectly applied or 3-3-1 : 4-6. r 9-8-14 oc bracing.	1 oc purlins,	_

REACTIONS. (size) 8=0-4-0, 2=0-4-0 Max Horz 2=37(LC 8) Max Uplift 8=-257(LC 9), 2=-268(LC 8) Max Grav 8=1429(LC 1), 2=1487(LC 1)

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

TOP CHORD 2-4=-2213/401, 4-5=-2009/371, 5-6=-1852/338, 6-8=-2040/355

BOT CHORD 2-11=-348/1946, 10-11=-546/3351, 9-10=-546/3351, 8-9=-302/1785

WEBS 4-11=-52/719, 5-11=-1440/221, 5-10=0/307, 5-9=-1602/252, 6-9=-61/768

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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=257, 2=268.
- 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.
- 8) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 11-1-8 oc max. starting at 2-4-12 from the left end to 13-6-4 to connect truss(es) to back face of bottom chord.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-4=-90, 4-6=-90, 6-8=-90, 12-16=-20

Continued on page 2





Job	Truss	Truss Type	Qty	Ply	2630316/woodside ridge 40/mo	
						144967160
2630316	G01	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	430 s Feb	12 2021 MiTek Industries, Inc. Thu Feb 25 13:48:24 2021	Page 2
		ID:wH4	IRYhEsTN	eUP2dXv0	Ofi1syQY8e-u2PMFLhWkerbWQHITpPNIfzSKrJq6Fcll40?R0	QzhaPr

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 10=-41(B) 5=-57(B) 7=-63(B) 20=-63(B) 21=-57(B) 22=-57(B) 23=-57(B) 24=-57(B) 25=-254(B) 26=-41(B) 27=-41(B) 28=-41(B) 29=-41(B) 30=-254(B) 20=-254(B) 20=-25(B) 20=-25(B) 20=-25(B) 20=-25(B)





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss 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 NITEK° 16023 Swingley Ridge Rd Chesterfield, MO 63017



MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, interior(1) 2-1-8 to 3-8-0, Exterior(2R) 3-8-0 to 6-10-14, Interior(1) 6-10-14 to 8-2-8 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) 2, 6.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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







	[0:0 = .=,0 = 0]			
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.09	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 5 >999 240	PLATES GRIP MT20 197/144
BCLL 0.0	Rep Stress Incr YES	BC 0.03 WB 0.02	Vert(CT) -0.00 4-5 >999 180 Horz(CT) -0.00 3 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	BRACING.	Weight: 8 lb F I = 20%

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

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

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

Max Horz 5=44(LC 12) Max Uplift 5=-22(LC 12), 3=-23(LC 12), 4=-5(LC 12)

Max Grav 5=219(LC 1), 3=57(LC 1), 4=37(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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) 5, 3, 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.







LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.09	DEFL. in l/defl L/d PLATES GRIP Vert(LL) 0.00 5 >999 240 MT20 197/144	
TCDL 20.0 BCLL 0.0 BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.02 WB 0.00 Matrix-MR	Vert(CT) 0.00 5 >999 180 Horz(CT) -0.00 3 n/a n/a Weight: 4 lb FT = 20%	

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

BOT CHORD

Structural wood sheathing directly applied or 1-2-1 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical Max Horz 5=30(LC 9) Max Uplift 5=-22(LC 12), 3=-13(LC 12), 4=-2(LC 1) Max Grav 5=194(LC 1), 3=12(LC 19), 4=14(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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1.







			0-4-7	1			3-9-11				I I	
Plate Offse	ets (X,Y)	[2:0-1-12,0-1-15]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	5-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	5-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	912014	Matrix	(-AS						Weight: 14 lb	FT = 20%

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 SLIDER
 Left 2x4 SPF No.2 -t 2-6-0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-6-11, 5=Mechanical

Max Horz 2=60(LC 8) Max Uplift 4=-42(LC 12), 2=-71(LC 8)

Max Grav 4=136(LC 1), 2=360(LC 1), 5=66(LC 3)

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

NOTES-

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

MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-1 to 3-2-14, Exterior(2R) 3-2-14 to 4-1-6 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 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.







				1			4-2-1					
				ſ			4-1-1	0			1	
Plate Offse	ts (X,Y)	[2:0-2-0,0-0-7]										
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	0.25	Vert(LL)	-0.01	5-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03	5-8	>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/TF	PI2014	Matrix	k-AS						Weight: 14 lb	FT = 20%

Pl

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 -t 2-6-0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-5-11, 5=Mechanical

Max Horz 2=67(LC 8) Max Uplift 4=-46(LC 12), 2=-84(LC 8)

Max Grav 4=152(LC 1), 2=381(LC 1), 5=72(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope) gable end zone and C-C Corner(3) -1-5-8 to 2-9-7, Exterior(2R) 2-9-7 to 4-1-5 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 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.







- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 220 lb down and 152 lb up at 3-5-5 on top chord, and 46 lb down at 3-5-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-90, 3-4=-90, 5-7=-20 Concentrated Loads (lb) Vert: 6=-30(F) 10=-220(F) 11=-4(F)







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

BRACING-TOP CHORD BOT CHORD

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

(size) 4=Mechanical, 2=0-4-0

REACTIONS.

Max Horz 2=72(LC 11) Max Uplift 4=-53(LC 12), 2=-55(LC 8) Max Grav 4=312(LC 1), 2=300(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-4 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) 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) "NAILED" indicates 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf) Vert: 1-3=-90. 4-5=-20 Concentrated Loads (lb)
 - Vert: 3=-75(F) 4=-33(F)







			4-0-0	
Plate Offsets (X,Y	[2:0-2-0,0-4-11]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) 0.02 4-7 >999 240 MT20 197/144	
TCDL 20.0	Lumber DOL 1.15	BC 0.20	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/TPI2014	Matrix-AS	Weight: 12 lb FT = 20%	
			RDACING-	

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=0-4-0, 4=Mechanical Max Horz 2=66(LC 8)

Max Horz 2=66(LC 8)Max Uplift 3=-46(LC 12), 2=-47(LC 8) Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-

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







LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.07 BC 0.05 WB 0.00 Matrix-MP	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 7 >999 240 Vert(CT) -0.00 7 >999 180 Horz(CT) 0.00 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 7 lb FT = 20%
			BRACING	

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

Structural wood sheathing directly applied or 2-3-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 2=44(LC 8) Max Uplift 3=-23(LC 12), 2=-42(LC 8), 4=-2(LC 12) Max Grav 3=72(LC 1), 2=216(LC 1), 4=41(LC 3)

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

NOTES-

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







				2-3-0
LOADIN TCLL TCDL BCU	G (psf) 25.0 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Ippr YES	CSI. TC 0.22 BC 0.05 WB 0.00	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) 0.00 5 >999 240 MT20 197/144 Vert(CT) -0.00 4-5 >999 180 Horz 197/144
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	Weight: 7 lb FT = 20%

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

BOT CHORD

Structural wood sheathing directly applied or 2-3-8 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical Max Horz 5=39(LC 8) Max Uplift 5=-88(LC 8), 3=-21(LC 12) Max Grav 5=315(LC 1), 3=52(LC 1), 4=32(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-279/188

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

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

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

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







BOT CHORD

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

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

REACTIONS. 5=Mechanical, 7=0-4-0 (size) Max Horz 7=45(LC 7)

Max Uplift 5=-37(LC 5), 7=-48(LC 8) Max Grav 5=197(LC 1), 7=312(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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate
- grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1. 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf) Vert: 1-2=-90, 2-3=-90, 3-4=-90, 5-7=-20 Concentrated Loads (lb)
 - Vert: 6=5(F) 9=-14(F)






LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.18 BC 0.35 WB 0.03 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) 0.03 7-10 >999 240 Vert(CT) -0.05 7-10 >994 180 Horz(CT) 0.04 5 n/a n/a	PLATES GRIP MT20 197/144 Weight: 15 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	PF No.2		BRACING- TOP CHORD Structural wood sheathing dire	ectly applied, except

BOT CHORD

2-0-0 oc purlins: 4-5.

Rigid ceiling directly applied.

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

WEBS 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 -t 2-6-0 REACTIONS. (size) 5=Mechanical,

 (size) 5=Mechanical, 2=0-4-0, 6=Mechanical Max Horz 2=64(LC 12) Max Uplift 5=-12(LC 8), 2=-34(LC 12), 6=-27(LC 12) Max Grav 5=44(LC 1), 2=304(LC 1), 6=164(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-299/173

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-7, Exterior(2E) 2-11-7 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
- 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) 5, 2, 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) 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.





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



	(psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc)	l/defl L/d	PLATES GRIP	
TCDL	25.0 20.0	Lumber DOL 1.15	BC 0.13	Vert(LL) -0.02	4-5 2 4-5	>999 240 >999 180	M120 197/144	
BCLL BCDL	0.0 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-AS	Horz(CT) 0.0	3	n/a n/a	Weight: 11 lb FT = 20%	

LUMBER-

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

2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. 5=0-4-0, 3=Mechanical, 4=Mechanical (size) Max Horz 5=79(LC 12) Max Uplift 5=-26(LC 12), 3=-59(LC 12) Max Grav 5=313(LC 1), 3=150(LC 1), 4=74(LC 3)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-284/140

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) -0-10-8 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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify

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

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

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







BRACING-

TOP CHORD

BOT CHORD

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

(size) 5=Mechanical, 2=0-4-0, 6=Mechanical

Max Uplift 5=-7(LC 1), 2=-47(LC 8), 6=-51(LC 12) Max Grav 5=7(LC 12), 2=305(LC 1), 6=215(LC 1)

Code IRC2018/TPI2014

NOTES-

BCDL

WEBS

WEDGE Left: 2x4 SPF No.2 REACTIONS.

LUMBER-

BOT CHORD

10.0

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

Max Horz 2=66(LC 8)

 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 2-1-1, Interior(1) 2-1-1 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-AS

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 5, 2, 6.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



FT = 20%

Weight: 13 lb

Structural wood sheathing directly applied.

Rigid ceiling directly applied.





					4-0-0					•	
Plate Offsets (X,Y)	[2:0-2-0,0-4-11]										
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.23 0.20 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.01	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TF	PI2014	Matri	x-AS						Weight: 12 lb	FT = 20%
LUMBER-					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=0-4-0, 4=Mechanical

Max Horz 2=66(LC 8) Max Uplift 3=-46(LC 12), 2=-47(LC 8) Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-

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







LUMBER-	
---------	--

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

10.0

BRACING-TOP CHORD

BOT CHORD

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

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

Max Horz 4=33(LC 9) Max Uplift 2=-63(LC 12), 3=-1(LC 12)

Max Grav 4=101(LC 1), 2=173(LC 1), 3=37(LC 3)

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

NOTES-

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

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.

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: 1-2=-90, 3-4=-20 Concentrated Loads (lb)

Vert: 2=-96(F)







Fiale OI		[1.0-2-0,0-4-11]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15	5 TC 0.24	Vert(LL) 0.02 3-6 >999 240 MT20 197/144	
TCDL	20.0	Lumber DOL 1.15	5 BC 0.23	Vert(CT) -0.03 3-6 >999 180	
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 1 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Weight: 10 lb FT = 20	.0%
LUMBE	R-			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) 1=0-4-0, 2=Mechanical, 3=Mechanical Max Horz 1=54(LC 12)

Max Uplift 1=-18(LC 12), 2=-46(LC 12) Max Grav 1=217(LC 1), 2=151(LC 1), 3=79(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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









Plate Offs	sets (X,Y)	[2:0-2-8,0-0-1]										
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix	k-MP						Weight: 10 lb	FT = 20%
		1				1						

LUMBER-

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 SLIDER
 Left 2x4 SPF No.2 -t 2-6-0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-4-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 2=56(LC 12) Max Uplift 2=-27(LC 33), 3=-81(LC 12)

Max Grav 2=189(LC 1), 5=33(LC 3), 3=223(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) 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.
- 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=-90, 5-6=-20
- Concentrated Loads (lb) Vert: 4=-95(B)
 - ven: 4=-95







			1				4-2-1						
			1				4-1-10				I		
Plate Offse	ets (X,Y)	[2:0-2-0,0-0-7]											
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	0.25	Vert(LL)	-0.01	5-8	>999	240	MT20	197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03	5-8	>999	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a			

LUMBER-

BCDL

Pla

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 -t 2-6-0

10.0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

Weight: 14 lb

FT = 20%

REACTIONS. (size) 4=Mechanical, 2=0-5-11, 5=Mechanical

Max Horz 2=67(LC 8) Max Uplift 4=-46(LC 12), 2=-84(LC 8)

Max Grav 4=152(LC 1), 2=381(LC 1), 5=72(LC 3)

Code IRC2018/TPI2014

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 Corner(3) -1-5-8 to 2-9-7, Exterior(2R) 2-9-7 to 4-1-5 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

Matrix-AS

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 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.











(lb) -

Max Horz 1=-100(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 9, 10 except 8=-107(LC 13), 11=-106(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9, 10 except 8=272(LC 20), 11=272(LC 19)

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) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 5-5-14, Exterior(2R) 5-5-14 to 8-6-0, Interior(1) 8-6-0 to 10-6-14 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Gable requires continuous bottom chord bearing.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 10 except (it=lb) 8=107. 11=106.

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.





Job	Truss	Truss Type	Qty	Ply	2630316/woodside r	dge 40/mo
2630316	LG03	GABLE	1	1		144967183
					Job Reference (optio	nal)
Builders FirstSource (Va	lley Center), Valley Cent	er, KS - 6/14/,	ID:3seZTqShN q	3.430 s ⊦e vhelqPBp	b 12 2021 MiTek Indust z4myNXMX-ri2YEqwRF	ries, Inc. Thu Feb 25 13:48:43 2021 Page 1 TEuILEP5JFqZqFq_VzC3_xY7X6VcqzhaPY
		1-2	-7 3-2-7 5-2-7 7-2-7 8-8	-15	, ,	
		1-2	-7 2-0-0 2-0-0 2-0-0 1-	0		
		т		6		Scale = 1:69.4
		1255-1	7.09 12 4 12 3 2 2 4	× ×		
		4x4	11 10 9 8 //	7		
		<u>1-2</u> 1-2	<u>-7 3-2-7 5-2-7 7-2-7 8-8</u> -7 2-0-0 2-0-0 1-1	-15 6-8		
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	-0-0 CSI. 1.15 TC 0.15 1.15 BC 0.02 YES WB 0.24	DEFL. i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	n (loc) a - a - 0	l/defl L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2	014 Matrix-P				Weight: 65 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	F No.2 F No.2 F No.2		BRACING- TOP CHORD BOT CHORD WEBS	Structu except Rigid c 1 Row	aral wood sheathing di end verticals. eeiling directly applied at midpt 6	rectly applied or 6-0-0 oc purlins, or 10-0-0 oc bracing. i-7, 5-8
REACTIONS. All be (lb) - Max Hi Max U Max G	arings 8-8-15. orz 1=434(LC 12) plift All uplift 100 lb or less 9=-185(LC 12), 8=-165(rav All reactions 250 lb or	at joint(s) 7 except 1=-248(LC LC 12) ess at joint(s) 7, 11, 8 except	10), 11=-153(LC 12), 10=-188 1=601(LC 12), 10=274(LC 19)	6(LC 12), , 9=273(L	.C 19)	
FORCES. (lb) - Max. TOP CHORD 1-2=- WEBS 3-10=	Comp./Max. Ten All force: 782/679, 2-3=-614/553, 3-4: -283/236, 4-9=-283/202, 5-8	s 250 (lb) or less except when 409/386 3=-253/181	shown.			
NOTES- 1) Wind: ASCE 7-16; V MWFRS (envelope) exposed ; end vertic: DOL=1.60 2) All blates are 2x4 M	ult=115mph (3-second gust gable end zone and C-C Cc al left exposed;C-C for mem r20 unless otherwise indicat	Vasd=91mph; TCDL=6.0psf; rner(3) 0-3-6 to 4-6-4, Exterior bers and forces & MWFRS for ed.	BCDL=4.2psf; h=15ft; Cat. II; (2R) 4-6-4 to 8-7-3 zone; cant reactions shown; Lumber DO	Exp C; Er ilever left L=1.60 pl	nclosed; and right ate grip	

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) 7 except (jt=lb) 1=248, 11=153, 10=185, 9=185, 8=165.

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.







REACTIONS. All bearings 12-6-6.

(lb) - Max Horz 1=-115(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 12, 11, 10 except 9=-116(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 8, 13, 12, 11, 10 except 9=300(LC 20)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 6-3-3, Exterior(2R) 6-3-3 to 9-3-3, Interior(1) 9-3-3 to 12-1-9 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Gable requires continuous bottom chord bearing.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 12, 11, 10 except (jt=lb) 9=116.

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.







BRACING-

TOP CHORD

BOT CHORD

LU	JM	B	E	R-
----	----	---	---	----

BCDL

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

10.0

REACTIONS. All bearings 9-8-12.

(lb) - Max Horz 1=-88(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 10, 9 except 8=-104(LC 13)

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

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

Code IRC2018/TPI2014

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) 0-4-13 to 3-5-4, Interior(1) 3-5-4 to 4-10-8, Exterior(2R) 4-10-8 to 7-10-8, Interior(1) 7-10-8 to 9-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

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

4) Gable requires continuous bottom chord bearing.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 10, 9 except (jt=lb) 8=104.

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.



FT = 20%

Weight: 33 lb

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

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





LOADING (ps TCLL 25. TCDL 20. BCLL 0. BCDL 10.	sf) .0 .0 .0 .0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES 212014	CSI. TC BC WB Matrix-	0.16 0.03 0.23 S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 68 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD	2x4 SPI	F No.2				BRACING- TOP CHOR	D	Structur	al wood	sheathing dir	ectly applied or 6-0-0	oc purlins,
BOT CHORD WEBS	2x4 SPI 2x4 SPI	F No.2 F No.2				BOT CHOR	D	except e Rigid ce	end vertie eiling dire	cals.	or 10-0-0 oc bracing.	•
OTHERS	2x4 SP	F No.2				WEBS		1 Řow a	at midpt	6	-7, 5-8	

REACTIONS. All bearings 9-3-3.

Max Horz 1=451(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-257(LC 10), 8=-182(LC 12), 9=-182(LC 12), 10=-186(LC 12), 11=-155(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 7, 11 except 1=621(LC 12), 8=279(LC 19), 9=265(LC 19), 10=275(LC 19)

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

TOP CHORD 1-2=-809/705, 2-3=-647/585, 3-4=-435/418, 4-5=-258/260

WEBS 5-8=-287/201, 4-9=-273/197, 3-10=-284/234

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 Corner(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 9-1-7 zone; cantilever left and right exposed ; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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) 7 except (jt=lb) 1=257, 8=182, 9=182, 10=186, 11=155.

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.











LOADING TCLL TCDL BCU	G (psf) 25.0 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Ben Stress Incr. YES	CSI. TC 0.17 BC 0.08 WB 0.09	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo n/a n/a 0.00	oc) l/defl - n/a - n/a 4 n/a	L/d 999 999 p/a	PLATES GRIP MT20 197/144
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	1012(01)	0.00	- 11/a	174	Weight: 18 lb FT = 20%

LUMBER-

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

Structural wood sheathing directly applied or 3-3-5 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-3-5, 4=3-3-5 Max Horz 1=144(LC 9) Max Uplift 1=-35(LC 8), 4=-102(LC 9) Max Grav 1=205(LC 20), 4=209(LC 19)

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

TOP CHORD 2-3=-279/260, 3-4=-264/278

WEBS 2-4=-411/340

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(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 35 lb uplift at joint 1 and 102 lb uplift at joint 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.











E

February 25,2021



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

REACTIONS. 1=10-1-9, 3=10-1-9, 4=10-1-9 (size) Max Horz 1=26(LC 12) Max Uplift 1=-33(LC 12), 3=-38(LC 13), 4=-37(LC 8)

Max Grav 1=211(LC 25), 3=211(LC 26), 4=531(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. 2-4=-394/171 WEBS

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) 0-10-1 to 3-10-1, Interior(1) 3-10-1 to 5-1-7, Exterior(2R) 5-1-7 to 8-1-7, Interior(1) 8-1-7 to 9-4-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

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

referenced standard ANSI/TPI 1.





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



2x4 📁

2x4 🗢

			4-10-4				<u>4-101</u> 14 0-0-11
Plate Offsets (X,Y)	[2:0-2-0,Edge]		+ 10 +				0011
LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.05 BC 0.12 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: 9 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP	2F No.2 2F No.2		BRACING- TOP CHORD BOT CHORD	Structur Rigid ce	ral wood eiling dire	sheathing di	rectly applied or 4-10-14 oc purlins. or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-9-9, 3=4-9-9 Max Horz 1=10(LC 12) Max Uplift 1=-19(LC 12), 3=-19(LC 13)

Max Grav 1=178(LC 1), 3=178(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.







LOADING (psf) TCLL 25.0 TCDL 20.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.17 BC 0.07 WB 0.00 Matrix-P	DEFL. Vert(LL) n Vert(CT) n Horz(CT) 0.0	in (loc) /a - /a - 00 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES GRIP MT20 197/144 Weight: 9 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	BRACING- TOP CHORD	Struct	ural wood	sheathing d	irectly applied or 3-8-11 oc purlins.		

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

BOT CHORD

iy app except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 3=3-8-0, 2=3-8-0 (size) Max Horz 3=-42(LC 8) Max Uplift 3=-26(LC 13), 2=-19(LC 13)

Max Grav 3=151(LC 1), 2=151(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=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) 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) 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.

OF MISSO ATE ANDREW THOMAS JOHNSON NUMBER PE-2017018993 C HESSIONAL E February 25,2021





	[
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.28	DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999	PLATES GRIP MT20 197/144
ICDL 20.0 BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.05 Matrix-P	Horz(CT) $0.00 - 1/a - 999$ Horz(CT) $0.00 - 3 n/a n/a$	Weight: 16 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	SPF No.2		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 10-0-0 oc bracing.

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

REACTIONS. (size) 5=6-4-11, 3=6-4-11, 4=6-4-11 Max Horz 5=-82(LC 8) Max Uplift 5=-30(LC 13), 3=-78(LC 1), 4=-96(LC 13) Max Core 5 = 422(LC 13), 2-28(LC 13), 4-490(LC 13)

Max Grav 5=183(LC 1), 3=38(LC 13), 4=489(LC 1)

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) 0-1-12 to 4-3-8, Interior(1) 4-3-8 to 5-6-10 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

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, 3, 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.





FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-4=-400/244



a) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 ib upint at joint(s) 5, 3, 4.
 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.







1) 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 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.







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

referenced standard ANSI/TPI 1.







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

3) 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) 6, 4.

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





