

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

Re: 2423042 Summit/67 Stoney Creek

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: I42494392 thru I42494445

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

Missouri COA: Engineering 001193



Sevier, Scott

August 20,2020

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

,Engineer



16023 Swingley Ridge Rd Chesterfield, MO 63017



August 20,2020





August 20,2020





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

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- non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 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.
- 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



NITEK* 16023 Swingley Ridge Rd Chesterfield, MO 63017



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MiTek







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Design valid for use only with MTeKe connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPTI Quality Criteria**, **DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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MiTek



Job	Truss	Truss Type	Qty	Ply	Summit/67 Stoney Creek		
					14249440		
2423042	A12	ROOF SPECIAL	1	1			
					Job Reference (optional)		
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.3	240 s Mar	9 2020 MiTek Industries, Inc. Wed Aug 19 13:04:11 2020 Page 2		
		ID:70pN	ID:70pNcodsqKg2iw_8MinwnwzbO4d-JTX5keTuSx9CpX_zjyvddRF03vPQM0C				

NOTES-

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





Job	Truss	Truss Type	Qty	Ply	Summit/67 Stoney Creek	
					14	2494404
2423042	A13	ROOF SPECIAL	2	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	240 s Mar	9 2020 MiTek Industries, Inc. Wed Aug 19 13:04:14 2020 Pa	age 2
		ID:7	0pNcodsqKg2iv	v_8Minwnv	vzbO4d-j2DDMfVmksXmg_iYO4SKF4tYc6RUZK68T1mj1Aym	nH3V

NOTES-

12) 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.









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 **ANSUTPH 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

[1_			-		1			
Job	Truss		Truss Type	Q	Qtv	IPIV	Summit/67 Stonev Creek		
						,		140.40	
								142494	4406
2422042	A 1 F		Doof Coopiel Structured Coble	1		4			
2423042	CIA		Rooi Special Structural Gable	1					
							Job Reference (optional)		
Builders FirstSource (Valle	v Center)	Valley Center K	S - 67147		83	240 s Mar	9 2020 MiTek Industries Inc. W	/ed Aug 19 13:04:19 2020 Page 3	2
Buildere i listeouroe (valie	y contor),	valiey contor, re	0 01141,		0.2	_ 10 0 Miai	0 2020 1011 01 110000, 110. 1	100 / 10 10 10 10 2020 1 ugo 1	-
				ID:70pNcc	odeaka?	iw QMinw	pwzbO4d_4006DNZvZD03plb\/B	d2\/yZaTZZGiEawtd II II liNymH3C	۱
					Jusynyz			uz v y r a i r r Gilawiu 500 ji vyini 156	

NOTES-

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









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Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Stoney Creek	
					142	2494411
2423042	B3	Common Girder	1	2		
				_	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.2	240 s Mar	9 2020 MiTek Industries, Inc. Wed Aug 19 13:04:40 2020 Pag	ge 2

Builders FirstSource (Valley Center),

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 19 13:04:40 2020 Page 2 ID:70pNcodsqKg2iw_8MinwnwzbO4d-z2n2pYp4dso4o_iYwXwQJZy6hbP8fCjzS435yfymH35

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-51, 3-5=-51, 8-11=-20

Concentrated Loads (lb)

Vert: 6=-1159(B) 7=-1151(B) 16=-1151(B) 17=-1151(B) 18=-1151(B)

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 MITEK° 16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Stoney Creek	
						I42494413
2423042	C2	Common Girder	1	2		
				_	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	240 s Mar	9 2020 MiTek Industries, Inc. Wed Aug 19 13:04:	:43 2020 Page 2

ID:70pNcodsqKg2iw_8MinwnwzbO4d-NdTBSasyvnBffRQ7bgU7wBadTpSdsZUP82IIZ_ymH32

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-51, 3-5=-51, 8-11=-20

Concentrated Loads (lb)

Vert: 13=-1123(F) 16=-1301(F) 17=-1229(F) 18=-1161(F) 19=-1157(F) 20=-1249(F)

	<u>5-6-6</u> 5-6-6								
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.35 BC 0.43 WB 0.01 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.12 0.01	(loc) 6 6 2	l/defl >940 >542 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 15 lb	GRIP 197/144 FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-6-6 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-9, 5=Mechanical Max Horz 2=55(LC 30) Max Uplift 4=-22(LC 12), 2=-42(LC 8)

Max Grav 4=151(LC 17), 2=346(LC 2), 5=100(LC 17)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-4=-51, 5-7=-20

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Concentrated Loads (lb)
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Vert: 6=-8(F=-4, B=-4)
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		3-2-2 3-2-2				5- 2-	6-6 4-4		
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 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 0.65 BC 0.24 WB 0.03 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.16 0.07	(loc) 8 8 7	l/defl >672 >385 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 16 lb	GRIP 197/144 FT = 20%
LUMBER-		BRA	ACING-						

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2 REACTIONS. 2=0-4-9, 7=Mechanical (size)

Max Horz 2=44(LC 8) Max Uplift 2=-43(LC 8), 7=-18(LC 12)

Max Grav 2=338(LC 17), 7=257(LC 17)

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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-3=-51, 3-5=-51, 8-9=-20, 3-6=-20

Concentrated Loads (lb) Vert: 8=-6(F=-3, B=-3)

Structural wood sheathing directly applied or 5-6-6 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 3-7.

- Max Grav All reactions 250 lb or less at joint(s) 13, 2, 18, 19, 20, 21, 22, 17, 16,
 - 15, 14

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
- Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14.
- 12) 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.

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

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek

Job	Truss	Truss Type	Qty	Ply	Summit/67 Stoney Creek	
						I42494418
2423042	D3	Roof Special Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valle	y Center), Valley Center, ł	(S - 67147,		8.240 s Mar	9 2020 MiTek Industries, Inc.	Wed Aug 19 13:04:52 2020 Page 2
			ID:GMzSUCNiTGzd	/OMdJZqDv	voymI8U-cMVbKfzboYJNEqcr	d38Eo5S0hRPvTW0kCxzkMzymH2v

NOTES-

- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 216 lb down and 85 lb up at 35-4-0 on top chord, and 104 lb down at 35-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-51, 4-5=-51, 5-10=-61, 10-12=-51, 18-24=-20, 17-27=-20

Concentrated Loads (lb)

Vert: 15=-33(F) 7=-69(F) 16=-33(F) 10=-146(F) 13=-104(F) 32=-69(F) 33=-69(F) 35=-69(F) 37=-69(F) 38=-69(F) 39=-69(F) 40=-33(F) 41=-33(F) 42=-33(F) 43=-33(F) 44=-33(F) 44=-33(F)

5x5 🗢

5.00 12

Scale = 1:72.5

5-3-4	<u> </u>	20-3-8	26-9-12	33-4-0		39-4-0			
Plate Offsets (X,Y) [2:0-0-0,0)-1-0], [4:0-2-11,0-2-8], [5:0-3-14,Edge]	0110	004	004		000			
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 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 0.68 BC 0.65 WB 0.90 Matrix-AS	DEFL. Vert(LL) -0 Vert(CT) -0 Horz(CT) 0	in (loc) l/defl .21 16-17 >999 .43 16-17 >562 .03 16 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 148 lb	GRIP 197/144 FT = 20%		
LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2 WEDGE Left: 2x4 SP No.3		BF TC BC	RACING- IP CHORD Strue 2-0-0 DT CHORD Rigid	ctural wood sheathin 0 oc purlins (3-7-2 m d ceiling directly appl	g directly applied ax.): 5-9. ied.	d, except			
REACTIONS. (size) 2=0- Max Horz 2=68 Max Uplift 2=-2 Max Grav 2=91	3-8, 10=0-3-8, 16=0-3-8 (LC 12) 9(LC 12), 10=-52(LC 13), 16=-76(LC 13) 5(LC 2), 10=876(LC 58), 16=1877(LC 2))							
ORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. OP CHORD 2-3=-1394/49, 3-4=-950/41, 4-5=-913/49, 6-7=-1463/102, 7-9=-1463/102, 9-10=-1533/96 SOT CHORD 2-19=-58/1174, 17-19=-58/1174, 16-17=0/784, 15-16=-1281/94, 6-15=-1203/119, 13-15=-278/53, 12-13=-39/1347, 10-12=-37/1355 WEBS 3-17=-500/90, 4-17=0/439, 6-13=-93/1835, 7-13=-601/95, 9-12=0/252, 5-16=-1181/40									
 NOTES- 1) Unbalanced roof live loads ha 2) Wind: ASCE 7-16; Vult=115m MWFRS (envelope); cantileve 3) TCLL: ASCE 7-16; Pr=25.0 p DOL=1.15); Is=1.0; Rough Ca surcharge applied to all expose 4) Unbalanced snow loads have 5) This truss has been designed non-concurrent with other live 6) Provide adequate drainage to 7) This truss has been designed 8) Provide mechanical connection 9) This truss is designed in accor referenced standard ANSI/TF 10) This truss design requires the sheetrock be applied tirectly 11) Graphical purlin representat 	Ive been considered for this design. Iph (3-second gust) Vasd=91mph; TCDL Ir left and right exposed ; end vertical left sf (roof LL: Lum DOL=1.15 Plate DOL=1 at C; Partially Exp.; Ce=1.0; Cs=1.00; Ct- sed surfaces with slopes less than 0.500, been considered for this design. for greater of min roof live load of 12.0 p loads. prevent water ponding. for a 10.0 psf bottom chord live load noi on (by others) of truss to bearing plate ca ridance with the 2018 International Resic 'I 1. at a minimum of 7/16" structural wood si y to the bottom chord. ion does not depict the size or the orient.	=6.0psf; BCDL=4.2psf; h t and right exposed; Lum .15); Pg=20.0 psf; Pf=20 =1.10, Lu=50-0-0; Min. fla /12 in accordance with IE osf or 1.00 times flat roof nconcurrent with any othe apable of withstanding 10 dential Code sections R50 heathing be applied direct ation of the purlin along t	1=15ft; Cat. II; Exp C; ber DOL=1.60 plate g .4 psf (Lum DOL=1.1) at roof snow load gov 3C 1608.3.4. load of 15.4 psf on ov er live loads. 0 lb uplift at joint(s) 2 02.11.1 and R802.10. stly to the top chord at he top and/or bottom	Enclosed; grip DOL=1.60 5 Plate erns. Rain verhangs , 10, 16. .2 and nd 1/2" gypsum chord.	The second second	SCOTT M. SEVIER PE-200101880 SSIONAL EN August 20,2			

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Scale = 1:72.4

F	5-3-4	10-4-8	12-7-9	20-3-8	25-9-12	31-4	-0	39	9-4-0	
	5-3-4	5-1-4	2-3-1	7-7-15	5-6-4	5-6-	4		3-0-0	
Plate Offsets (X	(,Y) [2:0-0-0,0·	1-0], [4:0-2-11,0-2-8]	, [5:0-6-0,0-2-0], [9:0-4-2,Edge], [10:0-0	-0,0-0-5]					
LOADING (psf TCLL (roof) Snow (Pf/Pg) 2 TCDL BCLL BCDL) 25.0 20.4/20.0 10.0 0.0 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018	2-0-0 1.15 1.15 YES /TPI2014	CSI. TC 0.88 BC 0.66 WB 0.42 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.21 16-17 -0.43 16-17 0.03 16	l/defl >999 >564 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 152 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS WEDGE Left: 2x4 SP No	2x4 SPF No.2 2x4 SPF No.2 2x4 SPF No.2 0.3				BRACING- TOP CHORD BOT CHORD WEBS	Structural wood 2-0-0 oc purlins Rigid ceiling dir 1 Row at midpt	l sheathing ((5-7-3 max ectly applied	directly applie): 5-9. d. 5-16	ed, except	
REACTIONS.	(size) 2=0-3 Max Horz 2=68(Max Uplift 2=-28 Max Grav 2=914	-8, 10=0-3-8, 16=0-3- LC 12) (LC 12), 10=-52(LC 1 -(LC 2), 10=875(LC 5	8 3), 16=-77(LC 13) 8), 16=1881(LC 2)						
FORCES. (Ib) TOP CHORD BOT CHORD WEBS) - Max. Comp./Ma 2-3=-1393/47, 3 2-19=-57/1174, 12-14=-19/1161 3-17=-501/91, 4 5-16=-1144/24	x. Ten All forces 25 -4=-942/39, 4-5=-902 17-19=-57/1174, 16- , 10-12=-17/1169 -17=-14/530, 6-14=-6	i0 (Ib) or less exce 2/49, 6-8=-866/83, 17=0/838, 15-16= 32/1254, 8-14=-47	ept when shown. 8-9=-868/84, 9-10=- 1316/109, 6-15=-124 0/73, 9-14=-443/30, 9	1360/92 48/130, 9-12=0/296,					
NOTES- 1) Unbalanced 2) Wind: ASCE MWFRS (em 3) TCLL: ASCE DOL=1.15); 1 surcharge ap 4) Unbalanced 5) This truss ha non-concurrer 6) Provide adec 7) This truss ha 8) Provide adec 9) This truss is referenced s; 10) This truss of sheetrock h	roof live loads hav 7-16; Vult=115mp velope); cantilever 7-16; Pr=25.0 ps Is=1.0; Rough Cat oplied to all expose snow loads have I as been designed to as been designed to hanical connection designed in accor tandard ANSI/TPI design requires that e applied directly	re been considered for oh (3-second gust) Va left and right expose (roof LL: Lum DOL= C; Partially Exp.; Ce ad surfaces with slope been considered for th for greater of min roof loads. prevent water pondin- ror a 10.0 psf bottom h (by others) of truss i dance with the 2018 I 1. tt a minimum of 7/16" to the bottom chord	or this design. asd=91mph; TCDL d ; end vertical lef 1.15 Plate DOL=1 =1.0; Cs=1.00; Ct so less than 0.500 his design. live load of 12.0 p g. chord live load noi to bearing plate ca nternational Resid structural wood s	=6.0psf; BCDL=4.2p; t and right exposed; L .15); Pg=20.0 psf; Pf =1.10, Lu=50-0-0; Mii /12 in accordance wit osf or 1.00 times flat r nconcurrent with any upable of withstanding tential Code sections heathing be applied c	sf; h=15ft; Cat. II; E: umber DOL=1.60 p =20.4 psf (Lum DOL h. flat roof snow load h IBC 1608.3.4. oof load of 15.4 psf other live loads. g 100 lb uplift at join R502.11.1 and R80 lirectly to the top ch	xp C; Enclosed; late grip DOL=1 =1.15 Plate d governs. Rain on overhangs t(s) 2, 10, 16. 12.10.2 and prd and 1/2" gyp	.60 sum	ALC BRO	ATE OF MISS SCOTT M. SEVIER NUMBER PE-200101880	evret

11) 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

16023 Swingley Ridge Rd Chesterfield, MO 63017

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

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek

Scale = 1:23.1

⊢	4-0-0	8-0-0	9-8-8	12-0-0
Plate Offsets (X,Y) [2:0-7-7	0-0-13], [2:0-3-4,0-3-4], [2:0-3-6,0-3-6], [3:0-0-8,Edge], [7:0-0-8,Edge], [8:0-7-7,0-(D-13], [13:0-1-15,0-0-10]	2-0-0
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. DEFL. TC 0.68 Vert(LL) BC 0.84 Vert(CT) WB 0.12 Horz(CT) Matrix-MS Horz(CT) Horz(CT)	in (loc) l/defl L/d -0.21 11-12 >690 240 -0.37 11-12 >385 180 0.20 8 n/a n/a	PLATES GRIP MT20 197/144 Weight: 50 lb FT = 20%
LUMBER- TOP CHORD 2x6 SP 2400F : 4-6: 2x4 SPF No.2 * 3-7: 2x4 SPF No.2 * WEBS 2x4 SPF No.2 REACTIONS. (size) 2=0 Max Horz 2=- Max Uplift 2=- Max Grav 2=9	2.0E *Except* o.2 Except* 350F 1.5E -3-8, 8=0-3-8 I5(LC 55) 14(LC 8), 8=-94(LC 9) 76(LC 35), 8=976(LC 35)	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly 2-0-0 oc purlins (2-9-6 max.): 4-6. Rigid ceiling directly applied or 10	/ applied or 5-0-6 oc purlins, except
FORCES. (lb) - Max. Comp.// TOP CHORD 3-4=-3685/31 BOT CHORD 3-12=-289/36 WEBS 4-12=-35/509	1ax. Ten All forces 250 (lb) or less exc 7, 4-5=-3737/323, 5-6=-3737/310, 6-7=-3 44, 11-12=-321/3883, 7-11=-272/3644 , 6-11=-35/509	apt when shown. 3685/304		
 NOTES- 1) Unbalanced roof live loads h 2) Wind: ASCE 7-16; Vult=115r MWFRS (envelope); cantilev 3) TCLL: ASCE 7-16; Pr=25.0 f DOL=1.15); Is=1.0; Rough C surfaces with slopes less that 4) Unbalanced snow loads have 5) This truss has been designe 8) Provide adequate drainage t 7) This truss has been designe 8) Provide adequate drainage t 7) This truss is designed in acc referenced standard ANSI/T1 10) Graphical purlin representa 11) "NAILED" indicates 3-10d (12) Hanger(s) or other connect 4-0-0, and 281 lb down and responsibility of others. 13) In the LOAD CASE(S) sect 	ave been considered for this design. nph (3-second gust) Vasd=91mph; TCDI er left and right exposed ; end vertical lei isf (roof LL: Lum DOL=1.15 Plate DOL=1 at C; Partially Exp.; Ce=1.0; CS=1.00; CI n 0.500/12 in accordance with IBC 1608 a been considered for this design. 1 for greater of min roof live load of 12.0 a loads. b prevent water ponding. d for a 10.0 psf bottom chord live load nc on (by others) of truss to bearing plate c ordance with the 2018 International Resi 1 1. tion does not depict the size or the orient 0.148"x3") or 3-12d (0.148"x3.25") toe-ni ion device(s) shall be provided sufficient 1 65 lb up at 7-11-4 on bottom chord. Th tion, loads applied to the face of the truss	.=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Ex ft and right exposed; Lumber DOL=1.60 p I.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL =1.10, Lu=50-0-0 Rain surcharge applied .3.4. psf or 1.00 times flat roof load of 15.4 psf inconcurrent with any other live loads. apable of withstanding 100 lb uplift at joint dential Code sections R502.11.1 and R80 tation of the purlin along the top and/or bo ails per NDS guidlines. to support concentrated load(s) 281 lb doi te design/selection of such connection dev are noted as front (F) or back (B).	ep C; Enclosed; late grip DOL=1.60 .=1.15 Plate d to all exposed on overhangs (s) 2, 8. 2.10.2 and ttom chord. wn and 65 lb up at <i>vice</i> (s) is the	STATE OF MISSOL SCOTT M. SEVIER PE-2001018807 PE-2001018807

LOAD CASE(S) Standard

Continued on page 2

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

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

August 20,2020

Job	Truss	Truss Type	Qty	Ply	Summit/67 Stoney Creek	
					14249	94426
2423042	E1	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.2	240 s Mar	9 2020 MiTek Industries, Inc. Wed Aug 19 13:05:03 2020 Page	2

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 19 13:05:03 2020 Page 2 ID:70pNcodsqKg2iw_8MinwnwzbO4d-oTgleQ5VCwip3WyzmtrpkPPyvsAkYh9Lk98pFqymH2k

LOAD CASE(S) Standard

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

Vert: 1-4=-51, 4-6=-61, 6-9=-51, 13-16=-20, 19-22=-20, 10-25=-20 Concentrated Loads (lb)

Vert: 4=-50(B) 6=-50(B) 12=-281(B) 11=-281(B) 5=-45(B) 28=-52(B)

	2-3-	3 6-0-0 3 3-8-8	3	<u>9-8-8</u> 3-8-8			12-0-0 2-3-8	
Plate Offsets ()	X,Y) [2:0-8-7,0	-1-1], [2:0-0-0,0-1-5], [3:0-4-0,0-1-0], [5	:0-4-0,0-1-4], [5:0-2-6,0-3	-5], [6:0-8-7,0-1-1]				
LOADING (pst TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	f) 25.0 15.4/20.0 10.0 0.0 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.70 BC 0.65 WB 0.05 Matrix-AS	DEFL. in Vert(LL) -0.12 Vert(CT) -0.23 Horz(CT) 0.13	(loc) l/d 8 >9 8 >6 6 r	defl L/d 999 240 531 180 n/a n/a	PLATES MT20 Weight: 43 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS	2x6 SPF No.2 2x4 SPF No.2 2x4 SPF No.2		BR TO BC	RACING- PP CHORD Structur: DT CHORD Rigid ce	al wood shea iling directly	ething directly ap applied.	oplied.	
REACTIONS.	(size) 2=0-3 Max Horz 2=21 Max Uplift 2=-40 Max Grav 2=60	3-8, 6=0-3-8 (LC 12))(LC 8), 6=-40(LC 9) 8(LC 2), 6=608(LC 2)						
FORCES. (Ib TOP CHORD BOT CHORD) - Max. Comp./M 3-4=-1391/27, 3-9=0/1355, 5-	ax. Ten All forces 250 (lb) or less exc 4-5=-1391/32 9=0/1355	ept when shown.					
NOTES- 1) Unbalanced 2) Wind: ASCE MWFRS (en 3) TCLL: ASCE DOI =1 15):	roof live loads ha 7-16; Vult=115m welope); cantileve 7-16; Pr=25.0 ps Is=1 0: Rough Ca	ve been considered for this design. ph (3-second gust) Vasd=91mph; TCD r left and right exposed ; end vertical le sf (roof LL: Lum DOL=1.15 Plate DOL= t C: Partially Exp : Ce=1 0: Cs=1 00: C	L=6.0psf; BCDL=4.2psf; h ft and right exposed; Lum 1.15); Pg=20.0 psf; Pf=15 t=1 10	=15ft; Cat. II; Exp C; Enc ber DOL=1.60 plate grip .4 psf (Lum DOL=1.15 Pl	:losed; DOL=1.60 ate			

4) Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.

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

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

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.

			4-0-0	
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.21 BC 0.15 WB 0.00 Matrix-AS	DEFL. in (loc) I/defl L Vert(LL) -0.01 4-7 >999 2- Vert(CT) -0.03 4-7 >999 1- Horz(CT) 0.00 2 n/a r	/d PLATES GRIP 40 MT20 197/144 80 /a Weight: 11 lb FT = 20%

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

Structural wood sheathing directly applied. Rigid ceiling directly applied.

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

Max Horz 2=49(LC 12) Max Uplift 3=-28(LC 12), 2=-8(LC 12)

Max Grav 3=130(LC 17), 2=265(LC 17), 4=71(LC 7)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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) 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 (ps	sf)	SPACING	200	C 91		DEEL	in	(loc)	l/dofl	L/d		CRIP
TCLL (roof)	25.0	Blote Crip DOI	2-0-0		0.05	Vort/LL	0.00	(100)	1/UEII	240	MT20	107/144
Snow (Pf/Pa)	15.4/20.0	Plate Grip DOL	1.15		0.05	Ven(LL	-0.00	<u>′</u>	>999	240	IVI 1 20	197/144
TCDI	10.0	Lumber DOL	1.15	BC	0.02	Vert(CI) -0.00	7	>999	180		
BCU	0.0	Rep Stress Incr	YES	WB	0.00	Horz(C) 0.00	2	n/a	n/a		
DOLL	0.0	Code IRC2018/TF	912014	Matri	x-MP						Weight: 6 lb	FT = 20%
BCDL	10.0											

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

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

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

Max Horz 2=28(LC 12) Max Uplift 3=-12(LC 12), 2=-15(LC 8)

Max Grav 3=50(LC 17), 2=162(LC 17), 4=33(LC 7)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 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. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=34(LC 12) Max Uplift 3=-16(LC 12), 2=-5(LC 12)

Max Grav 3=57(LC 12), 2=5(LC 12)Max Grav 3=57(LC 17), 2=170(LC 17), 4=35(LC 7)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 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.

			2-0-5	
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 PCL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.10 BC 0.04 WB 0.00	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.00 4-7 >999 240 MT20 197/144 Vert(CT) -0.00 4-7 >999 180 MT20 197/144 Horz(CT) 0.00 2 n/a n/a 100 100	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	Weight: 8 lb FT = 20	ጋ%

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

Structural wood sheathing directly applied or 2-6-5 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical

Max Horz 2=39(LC 8)

Max Uplift 3=-16(LC 12), 2=-40(LC 8) Max Grav 3=67(LC 17), 2=224(LC 17), 4=43(LC 7)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

Structural wood sheathing directly applied or 2-8-7 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical

Max Horz 2=40(LC 8)

Max Uplift 3=-17(LC 12), 2=-40(LC 8) Max Grav 3=74(LC 17), 2=232(LC 17), 4=46(LC 7)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LUMBER-

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

Structural wood sheathing directly applied or 4-0-0 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=44(LC 8) Max Uplift 4=-16(LC 12), 2=-28(LC 8)

Max Grav 4=106(LC 17), 2=257(LC 17), 5=72(LC 17)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

TOP CHORD BOT CHORD

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

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

Max Horz 2=27(LC 8) Max Uplift 3=-12(LC 12), 2=-28(LC 8)

Max Grav 3=51(LC 2), 2=161(LC 2), 4=33(LC 7)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.

- Max Uplift All uplift 100 lb or less at joint(s) 1, 21, 14, 15, 16, 17, 18, 19, 22, 23, 24, 26, 27 except 25=-106(LC 11)
- Max Grav All reactions 250 lb or less at joint(s) 1, 21, 14, 25, 15, 16, 17, 18, 19, 22, 23, 24, 26, 27

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate

- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Provide adequate drainage to prevent water ponding. 5) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 21, 14, 15, 16, 17, 18, 19, 22, 23, 24, 26, 27 except (jt=lb) 25=106.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 26, 27.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

Plate Offsets (X,Y)-- [2:0-0-0.0-1-0], [2:0-1-0.0-5-3]

	10], [2.010,000]							
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.09 BC 0.04 WB 0.03 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loo -0.00 0.00 -0.00	c) l/defl 1 n/r 1 n/r 6 n/a	L/d 120 120 n/a	PLATES MT20 Weight: 22 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2		BR TO	ACING- P CHORD	Structural wo	od sheathir erticals.	ng directly ap	plied or 5-4-0 oc purlir	۱S,

 BOT CHORD
 2x4 SPF No.2
 except end verticals.

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

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

 WEDGE
 Except end verticals.
 Except end verticals.

Left: 2x4 SPF No.2

REACTIONS. All bearings 5-4-0.

- (lb) Max Horz 2=86(LC 9)
 - Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8 Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=251(LC 17)

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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
- Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 8.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 11) 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.

					5-4-0						
Plate Offsets (X,Y) [2:0-0-0,0	-0-12]									
LOADING (ps TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	f) 25.0 15.4/20.0 10.0 0.0 10.0	SPACING-2-Plate Grip DOL1Lumber DOL1Rep Stress IncrYCode IRC2018/TPI20	-0-0 CSI. 1.15 TC 1.15 BC YES WB 114 Matrix-	0.42 0.27 0.00 -AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.08 0.01	(loc) 4-7 4-7 2	l/defl >999 >791 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 17 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD	2x4 SPF No.2			!	BRACING- TOP CHORD S	tructura	l wood	sheathing	directly ap	plied, except end verti	cals.

BOT CHORD

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

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

Max Horz 2=87(LC 11) Max Uplift 4=-21(LC 12), 2=-12(LC 12) Max Grav 4=254(LC 17), 2=300(LC 2)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

3) Unbalanced snow loads have been considered for this design.

- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. 4=Mechanical, 2=0-3-8 (size) Max Horz 2=58(LC 11) Max Uplift 4=-13(LC 12), 2=-10(LC 12) Max Grav 4=145(LC 17), 2=231(LC 17)

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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.

Structural wood sheathing directly applied or 3-4-0 oc purlins,

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

except end verticals.

- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 48 lb up at 2-0-0 on top chord, and 26 lb down and 8 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-3=-51, 3-4=-61, 5-7=-20

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Summit/67 Stoney Creek	
						42494439
2423042	M4	Half Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.	240 s Mar	9 2020 MiTek Industries, Inc. Wed Aug 19 13:05:13 2020 F	Page 2

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 19 13:05:13 2020 Page 2 ID:70pNcodsqKg2iw_8MinwnwzbO4d-VPHXkqDnr?zPF2juLz098WqpGuhQuEEp2iZLcFymH2a

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 3=-4(B) 4=-23(B) 5=-10(B) 6=-6(B)

Matrix-AS

BRACING-

TOP CHORD

BOT CHORD

BCLL	

LUMBER-

BCDL

TOP CHORD 2x4 SPF No.2 BOT CHORD

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

0.0

10.0

REACTIONS. (size) 4=Mechanical, 2=0-3-8 Max Horz 2=72(LC 11) Max Uplift 4=-17(LC 12), 2=-11(LC 12) Max Grav 4=203(LC 17), 2=272(LC 17)

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

Code IRC2018/TPI2014

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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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) 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.

Weight: 14 lb

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Matrix-AS

_		
	IMDED_	
- L	JIVIDER-	

BCDL

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

WEBS 2x4 SPF No.2

REACTIONS. 4=Mechanical, 2=0-3-8 (size) Max Horz 2=72(LC 11) Max Uplift 4=-17(LC 12), 2=-11(LC 12)

10.0

Max Grav 4=203(LC 17), 2=272(LC 17)

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

Code IRC2018/TPI2014

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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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) 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.

Weight: 14 lb

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

FT = 20%

Scale = 1:16.4

3x6 ||

2x4 ||

4-0-0 1-0-0

Plate Offsets (X,Y) [1:0-3-4,0)-0-3]							
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.23 BC 0.14 WB 0.00 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo -0.01 4 -0.02 4 0.01	c) l/defl -7 >999 -7 >999 1 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 15 lb	GRIP 197/144 FT = 20%
		BF	ACING-				alled avecational vert	icolo

BOT CHORD

sneatning directly applied, except end verticals Rigid ceiling directly applied.

Left 2x4 SPF No.2 2-6-0 REACTIONS. (size) 1=Mechanical, 4=Mechanical

2x4 SPF No.2

2x4 SPF No.2

Max Horz 1=65(LC 11) Max Uplift 1=-2(LC 12), 4=-18(LC 12) Max Grav 1=185(LC 16), 4=185(LC 16)

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

NOTES-

BOT CHORD

WEBS

SLIDER

- 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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) 1, 4.
- 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.

		F		<u>2-0-0</u> 2-0-0						
Plate Offsets (X,Y) [2:0-0-0,0	0-1-14], [2:0-1-11,0-4-13]									
LOADING (psf) TCLL (roof) 25.0	SPACING- 2	2-0-0 CS	SI.	DEFL.	in (le	oc) l/d	lefl	L/d	PLATES	GRIF

TCLL (roof) Snow (Pf/Pg) TCDL BCLL	25.0 15.4/20.0 10.0 0.0	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	TC 0.05 BC 0.03 WB 0.00	Vert(LL) Vert(CT) Horz(CT)	-0.00 -0.00 0.00	7 7 2	>999 >999 n/a	240 180 n/a	MT20	197/144
BCDL	10.0	Code IRC2018/1PI2014	Matrix-MP						Weight: 7 lb	FI = 20%
LUMBER-			B	RACING-						
TOP CHORD	2x4 SPF No.2		т	OP CHORD	Structural v	wood s	sheathin	g directly a	pplied or 2-0-0 oc purli	ns,
BOT CHORD	2x4 SPF No.2				except end	l vertic	als.			
WEBS	2x4 SPF No.2		B	OT CHORD	Rigid ceiling	ig dire	ctly appl	ied or 10-0-	 0 oc bracing. 	

WEDGE Left: 2x4 SPF No.2

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

Max Horz 2=34(LC 11) Max Uplift 4=-7(LC 9), 2=-18(LC 8) Max Grav 4=69(LC 17), 2=160(LC 17)

-4-5

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- 2) TOLE: ASCE 7-10; PI=25.0 psi (1001 LE: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psi; PI=15.4 psi (Lum DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

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

- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design.

5) Gable requires continuous bottom chord bearing.

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

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

2x4 💋

2x4 📚

Plate Offsets (X,Y) [2:0-3-0,E	idge]	4-0-9 4-0-9					ר <u>1-1</u> 0-0-8	8
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.03 BC 0.08 WB 0.00 Matrix-P	DEFL. Vert(LL) n Vert(CT) n Horz(CT) 0.0	in (loc) /a - /a - 00 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 8 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2		BRAC TOP (BOT (CING- CHORD Struc CHORD Rigid	tural wood ceiling dire	sheathin ectly appl	g directly app ied or 10-0-0	plied or 4-1-1 oc purli) oc bracing.	ns.

REACTIONS. (size) 1=4-0-1, 3=4-0-1 Max Horz 1=-7(LC 8) Max Uplift 1=-3(LC 12), 3=-3(LC 13) Max Grav 1=127(LC 2), 3=127(LC 2)

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

- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

5) Gable requires continuous bottom chord bearing.

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

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

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.

