



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

## Re: 3211086 SUMMIT/STONEY CREEK #118/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: I52607297 thru I52607350

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

Missouri COA: Engineering 001193



June 17,2022

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

,Engineer



1	7-1-11	15-5-12	15 <sub>1</sub> 7-8 18-0-5	25-9-11	28-6-0	1
Г	7-1-11	8-4-1	0-1-12 2-4-13	7-9-6	2-8-5	
Plate Offsets (X,Y)	[2:0-3-5,Edge], [2:0-0-0,0-1-11], [7:0-	·3-0,Edge], [9:0-4-1,0-1-2], [1	1:0-5-8,0-3-0], [12:0-5-12,0-2-8]			
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	<b>CSI.</b> TC 0.63 BC 0.49 WB 0.94 Matrix-AS	DEFL.         in         (loc)         I           Vert(LL)         -0.11         12-13         >           Vert(CT)         -0.24         10-11         >           Horz(CT)         0.04         9         9	/defl L/d •999 240 •642 180 n/a n/a	PLATES MT20 Weight: 116 lb	<b>GRIP</b> 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 9-10 WEBS 2x4	SPF No.2 SPF No.2 *Except* : 2x6 SPF No.2 SPF No.2		BRACING- TOP CHORD Structural BOT CHORD Rigid ceili WEBS 1 Row at	l wood sheathing dire ing directly applied. midpt 3-	ectly applied. 12, 8-11	

WEDGE

Left: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 9=0-3-8 Max Horz 2=127(LC 16) Max Uplift 2=-112(LC 12), 12=-218(LC 13), 9=-40(LC 13) Max Grav 2=602(LC 25), 12=1967(LC 1), 9=228(LC 26)

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

- TOP CHORD 2-3=-672/204, 3-5=-22/690, 5-6=-15/829, 6-8=-93/717, 8-9=-816/128
- BOT CHORD 2-13=-154/527, 12-13=-154/527, 11-12=-585/206, 10-11=-126/705, 9-10=-99/787
- WEBS 3-13=0/353, 3-12=-876/238, 5-12=-941/100, 6-12=-457/122, 8-11=-1181/313,
- 8-10=0/404

#### 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 14-3-0, Exterior(2R) 14-3-0 to 17-3-0, Interior(1) 17-3-0 to 28-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Bearing at joint(s) 9 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) 9 except (jt=lb) 2=112, 12=218.

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.







		2-10-0	12-	10-0		15-5-12	2	21-10-8		1	25-7-0	28-4-8	1
		2-10-0	10	-0-0		2-7-12	(	6-4-12		1	3-8-8	2-9-8	-
Plate Off	sets (X,Y)	[2:0-3-0,0-1-3], [3:0-4-12	,0-3-6], [11:0-2	2-1,0-0-1], [18	8:0-4-12,0-2-	12]							
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.32	3-18	>574	240		MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.63	3-18	>290	180		M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.11	16	n/a	n/a			
BCDI	10.0	Code IRC2018/T	PI2014	Matri	x-AS							Weight <sup>,</sup> 144 lb	FT = 20%

BRACING-TOP CHORD

Structural wood sheathing directly applied.

7-16

Rigid ceiling directly applied.

1 Row at midpt

LOWIDER		
TOP CHORD	2x4 SPF No.2	
BOT CHORD	2x4 SPF No.2	
WEBS	2x4 SPF No.2	
SLIDER	Left 2x4 SPF No 2 2-9-11	Right 2x4 SPF

BOT CHORD WEBS SPF No.2 2-9-11, Right 2x4 SPF No.2 2-6-0

REACTIONS. (size) 11=Mechanical, 2=0-3-8, 16=0-3-8 Max Horz 2=-161(LC 13) Max Uplift 11=-218(LC 13), 2=-112(LC 13), 16=-23(LC 12) Max Grav 11=279(LC 26), 2=158(LC 25), 16=1974(LC 1)

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

   TOP CHORD
   4-6=0/862, 6-7=0/869, 7-8=-215/790, 8-9=-79/804, 9-11=-288/402

   BOT CHORD
   3-18=-698/0, 6-18=-311/144, 16-17=-286/0, 8-14=-495/238, 13-14=-663/573,
   11-12=-289/257
- WEBS 16-18=-593/87, 7-18=-108/286, 7-16=-1465/41, 9-14=-530/250, 3-4=0/781, 14-16=-932/2, 7-14=-397/916

#### 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 14-3-0, Exterior(2R) 14-3-0 to 17-3-0, Interior(1) 17-3-0 to 28-4-8 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) 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) 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) 16 except (jt=lb) 11=218, 2=112.
- 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.



June 17,2022





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

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	7-1-11	15-5-12	15 <sub>1</sub> 7-817-6-8	22-9-12	28-4-8	
	7-1-11	8-4-1	0-1-121-11-0	5-3-4	5-6-12	1
Plate Offsets (X,Y)	[2:0-3-5,Edge], [2:0-0-0,0-1-11], [10:0-2	-1,0-0-5], [15:Edge,0-1-8]				
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.49 BC 0.48 WB 0.46 Matrix-AS	DEFL.         in           Vert(LL)         -0.10           Vert(CT)         -0.19           Horz(CT)         0.01	(loc) l/defl L/d 15-16 >999 240 15-16 >961 180 2 n/a n/a	PLATES MT20 Weight: 137 lb	<b>GRIP</b> 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4 WEDGE Left: 2x4 SPF No.2 SLIDER Righ REACTIONS. (s Max Max	SPF No.2 SPF No.2 SPF No.2 t 2x4 SPF No.2 2-6-0 tize) 10=0-2-0, 2=0-3-8, 15=0-3-8 Horz 2=128(LC 12) Uplift 10=-113(LC 13), 2=-130(LC 12), 15	=-102(LC 12)	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing Rigid ceiling directly applied 1 Row at midpt	directly applied. d. 14-16	
Max FORCES. (lb) - Ma TOP CHORD 2-3 BOT CHORD 2-3 WEBS 3- 5-7 NOTES- 1) Upbalanced roof	Grav 10=518(LC 26), 2=730(LC 25), 15= x. Comp./Max. Ten All forces 250 (lb) oi =-922/173, 3-5=-919/308, 5-6=0/288, 7-8 6=-189/747, 14-15=-1323/166, 7-13=-26/ 6=-522/252, 7-14=-577/145, 11-13=-114/ 6=-255/952	1395(LC 1) less except when shown. 268/115, 8-10=-613/181 371, 10-11=-97/548 302, 8-13=-392/158, 5-14=-8	877/164,			

Interior(1) 17-3-0 to 28-4-8 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 at joint(s) 10.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=113, 2=130, 15=102.

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

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



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1	7-1-11	15-5-12	1		21-2-	0	1	28-4-8	1
1	7-1-11	8-4-1			5-8-4	ł		7-2-8	1
Plate Offsets (X,Y)	[1:0-3-5,Edge], [1:0-0-0,0-1-7], [7:0	-4-1,Edge]							
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.52 BC 0.48 WB 0.59 Matrix-AS	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.19 0.02	(loc) 9-11 9-11 9	l/defl >999 >990 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 107 lb	<b>GRIP</b> 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 S	PF No.2	· · ·	BRACIN TOP CHO	<b>3-</b> DRD	Structu	Iral wood	sheathing di	rectly applied.	

BOT CHORD

WEBS

Rigid ceiling directly applied.

2-9

1 Row at midpt

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 WEDGE
 Left: 2x4 SPF No.2

 SLIDER
 Right 2x4 SPF No.2 2-6-0

REACTIONS. (size) 7=0-2-0, 1=0-3-8, 9=0-3-8 Max Horz 1=114(LC 12) Max Uplift 7=-119(LC 13), 1=-107(LC 12), 9=-116(LC 12) Max Grav 7=549(LC 26), 1=644(LC 1), 9=1395(LC 1)

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

TOP CHORD 1-2=-886/165, 5-7=-592/191

- BOT CHORD 1-11=-179/716, 9-11=-179/716, 8-9=-89/521, 7-8=-89/521
- WEBS 2-11=0/331, 2-9=-834/238, 4-9=-526/51, 5-9=-707/226

#### 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 14-3-0, Exterior(2R) 14-3-0 to 17-3-0, Interior(1) 17-3-0 to 28-4-8 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 at joint(s) 7.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=119, 1=107, 9=116.

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.







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

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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.



Milek

16023 Swingley Ridge Rd Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONEY CREEK #118/MO	
						152607305
3211086	AG1	GABLE	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	.530 s Dec	6 2021 MiTek Industries, Inc. Thu Jun 16 16:00:44 2022	Page 2
		ID:mDd9	/cyFdydMl	JJW7?YBu	Jg7z82D4-mppsQzydezhkMV4AzjBGrgmu2H9KYxfqQou7k	KEz5fa1

#### NOTES-

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





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		2-8-5	1			10-5-11				1	13-2-0	I.	
		2-8-5	1			7-9-6				I	2-8-5		
Plate Off	sets (X,Y)	[2:0-4-1,0-1-2], [6:0-4-1,0	-1-2], [8:0-5-8	3,0-2-8], [9:0-5-8	8,0-2-8]								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC C	).34	Vert(LL)	-0.15	8-9	>999	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC C	).50	Vert(CT)	-0.35	8-9	>451	180			
BCLL	0.0	Rep Stress Incr	YES	WB 0	).31	Horz(CT)	0.12	6	n/a	n/a			

BRACING-TOP CHORD

BOT CHORD

LUMBER-

BCDL

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x6 SPF No.2 *Except*
	8-9: 2x4 SPF No.2
WEBS	2x4 SPE No 2

10.0

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=59(LC 12) Max Uplift 2=-90(LC 12), 6=-90(LC 13) Max Grav 2=654(LC 1), 6=654(LC 1)

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

Code IRC2018/TPI2014

TOP CHORD 2-3=-2104/473, 3-4=-2041/573, 4-5=-2041/572, 5-6=-2104/472

BOT CHORD 2-9=-376/1915, 8-9=-118/752, 6-8=-375/1915

WEBS 4-8=-325/1272, 4-9=-326/1272

#### 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 6-7-0, Exterior(2R) 6-7-0 to 9-7-0, Interior(1) 9-7-0 to 14-0-8 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

Matrix-AS

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

4) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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



Weight: 50 lb

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

FT = 20%

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MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



	0-Q <u>-1</u>	3-1-6		5-6-6		
	0-0-1	3-1-5	1	2-5-0	1	
Plate Offsets (X,Y)	[2:0-0-0,0-0-13], [3:0-4-0,Edge]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.87 BC 0.53 WB 0.00	<b>DEFL.</b> in Vert(LL) -0.09 Vert(CT) -0.14 Horz(CT) 0.05	(loc) I/defl L/d 8 >700 240 8 >443 180 7 n/a n/a	PLATES G MT20 1	<b>;RIP</b> 97/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR			Weight: 15 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI	PF No.2 PF No.2		BRACING- TOP CHORD	Structural wood sheathing dire	ectly applied or 5-6-6 oc	purlins,

cept end ve BOT CHORD

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

REACTIONS. (size) 7=Mechanical, 2=0-4-9

2x4 SPF No.2

Max Horz 2=48(LC 4) Max Uplift 7=-83(LC 8), 2=-116(LC 4)

Max Grav 7=287(LC 1), 2=372(LC 1)

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

TOP CHORD 3-4=-270/76 BOT CHORD 3-7=-77/265

NOTES-

WEBS

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

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

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2 = 116.

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

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

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

#### LOAD CASE(S) Standard

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

Vert: 1-3=-70, 3-4=-70, 4-5=-20, 8-9=-20, 3-6=-20 Concentrated Loads (lb)

Vert: 8=-88(F=-44, B=-44)



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



1	7-9-4	<sub>1</sub> 8-11	-12 <sub>1</sub>	15-6-4		1		24-6-0		1
I	7-9-4	1-2	-8	6-6-8		1		8-11-12		
Plate Offsets (X,Y)	[5:0-0-0,0-0-0]									
LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 <b>C</b> 1.15 Tr 1.15 B	<b>SI.</b> C 0.44 C 0.50	DEFL. Vert(LL) Vert(CT)	in -0.12 -0.25	(loc) 8-16 8-16	l/defl >920 >435	L/d 240 180	PLATES MT20	<b>GRIP</b> 197/144
BCDL 10.0	Code IRC2018/TPI2	2014 M	atrix-AS	11012(C1)	0.02	0	n/a	n/a	Weight: 88 lb	FT = 20%
LUMBER-	SPE No 2	I	I	BRACING-	D	Structu	ral wood s	heathing directly	applied	

BOT CHORD

Rigid ceiling directly applied.

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

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8, 6=0-5-8 Max Horz 2=104(LC 12) Max Uplift 2=-105(LC 12), 8=-134(LC 12), 6=-78(LC 13) Max Grav 2=767(LC 1), 8=1083(LC 1), 6=512(LC 26)

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

TOP CHORD 2-3=-1002/158, 3-4=-720/151, 4-5=-266/80, 5-6=-472/90

BOT CHORD 2-10=-152/835, 8-10=0/315, 6-8=0/385

WEBS 3-10=-442/202, 4-10=-102/537, 4-8=-648/157, 5-8=-463/204

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 12-3-0, Exterior(2R) 12-3-0 to 15-3-0, Interior(1) 15-3-0 to 25-4-8 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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=105, 8=134.

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

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



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	I.	7-9-4		8-11-12		15-6-4		1			24-6-0	1
	ſ	7-9-4		1-2-8		6-6-8		1		8	3-11-12	
Plate Offs	ets (X,Y)	[5:0-0-0,0-0-0]										
LOADING	i (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.11	8-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.24	8-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	-AS						Weight: 88 lb	FT = 20%
						DRACING						

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

#### LUMBER-

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

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

#### REACTIONS. (size) 2=0-3-8, 6=0-5-8 Max Horz 2=104(LC 12) Max Uplift 2=-154(LC 12), 6=-154(LC 13) Max Grav 2=1164(LC 1), 6=1164(LC 1)

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

- TOP CHORD 2-3=-1811/300, 3-4=-1540/295, 4-5=-1540/295, 5-6=-1810/300
- BOT CHORD 2-10=-239/1546, 8-10=-64/1070, 6-8=-189/1545
- WEBS 3-10=-414/197, 4-10=-97/511, 4-8=-98/511, 5-8=-414/197

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 12-3-0, Exterior(2R) 12-3-0 to 15-3-0, Interior(1) 15-3-0 to 25-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=154, 6=154.
- 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.







3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) All plates are 1.5x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

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

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 29, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20.

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







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 4-4-0, Exterior(2R) 4-4-0 to 7-4-0, Interior(1) 7-4-0 to 9-6-8 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
- 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.



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- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 13, 12.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONEY CREEK #118/MO
					152607315
3211086	G1	GABLE	1	1	
					Job Reference (optional)
Builders First Source, Valley Cen	ter, KS 67147				8.530 s Dec 17 2021 MiTek Industries, Inc. Fri Jun 17 09:25:27 2022 Page 2
		ID:mDd9y	cyFdydML	JJW7?YBu	g7z82D4tB7FOfJkJ0bUlq47AQHkFPx9Be?nSuDMXaXuXz5QGc

#### NOTES-

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1257 lb down and 179 lb up at 2-3-4, 529 lb down and 139 lb up at 4-3-4, 529 lb down and 139 lb up at 6-3-4, 529 lb down and 139 lb up at 8-3-4, 529 lb down and 139 lb up at 10-3-4, and 259 lb down and 259 lb up at 22-3-4, and 259 lb

down and 259 lb up at 24-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. 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: 1-3=-70, 3-5=-70, 31-34=-20

Concentrated Loads (lb)

Vert: 14=-529(B) 37=-1257(B) 38=-529(B) 39=-529(B) 40=-529(B) 41=-259(B) 42=-259(B)





SLIDER Left 2x4 SPF No.2 1-7-8, Right 2x4 SPF No.2 1-7-8

REACTIONS. All bearings 11-8-0.

(lb) - Max Horz 2=-105(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 19, 20, 16, 15, 14 Max Grav All reactions 250 lb or less at joint(s) 2, 12, 17, 18, 19, 20, 16, 15, 14

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 Corner(3E) -0-10-8 to 1-10-0, Exterior(2N) 1-10-0 to 5-10-0, Corner(3R) 5-10-0 to 8-10-0, Exterior(2N) 8-10-0 to 12-6-8 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

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) All plates are 1.5x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

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

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 19, 20, 16, 15, 14.

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







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 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

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- 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 5-8-0, Exterior(2R) 5-8-0 to 8-8-0, Interior(1) 8-8-0 to 12-2-8 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.







REACTIONS. All bearings 11-4-0.

Max Horz 2=102(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 19, 20, 16, 15, 14

Max Grav All reactions 250 lb or less at joint(s) 2, 12, 17, 18, 19, 20, 16, 15, 14

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 Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-8-0, Corner(3R) 5-8-0 to 8-8-0, Exterior(2N) 8-8-0 to 12-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) All plates are 1.5x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

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

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 19, 20, 16, 15.14.

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



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<u>6-11-7</u> 6-11-7		+	13-10-9 6-11-2				+ <u>20-10-0</u> 6-11-7			
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2 Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI20	2-0-0 <b>CSI.</b> 1.15 TC 1.15 BC YES WB 014 Matrix	0.27 0.43 0.12 <-AS	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.15 0.04	(loc) 8-10 8-10 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 76 lb	<b>GRIP</b> 197/144 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 WEBS 2x4 SPF No.2 WEDGE

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=89(LC 16) Max Uplift 2=-134(LC 12), 6=-134(LC 13) Max Grav 2=999(LC 1), 6=999(LC 1)

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

2-3=-1521/285, 3-4=-1349/300, 4-5=-1349/300, 5-6=-1521/285 TOP CHORD

BOT CHORD 2-10=-195/1294. 8-10=-63/895. 6-8=-183/1294

WEBS 4-8=-97/477, 5-8=-323/163, 4-10=-97/477, 3-10=-323/163

#### 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 10-5-0, Exterior(2R) 10-5-0 to 13-5-0, Interior(1) 13-5-0 to 21-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=134, 6=134.

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

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



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- Provide mechanical connection (by or 30, 31, 23, 22, 21, 20, 19, 18, 16.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=42(LC 12)

Max Uplift 3=-24(LC 12), 2=-27(LC 8) Max Grav 3=55(LC 1), 2=164(LC 1), 4=35(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) 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.



Structural wood sheathing directly applied or 2-0-0 oc purlins.

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





BRACING-

TOP CHORD

BOT CHORD

n/a

n/a

2-0-0 oc purlins: 3-4.

Rigid ceiling directly applied.

BCDL

WEBS

LUMBER-

BOT CHORD

REACTIONS.

10.0

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

Max Horz 2=89(LC 11)

Max Grav 5=242(LC 1), 2=313(LC 1) FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

Code IRC2018/TPI2014

#### NOTES-

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

(size) 5=Mechanical, 2=0-3-8

Max Uplift 5=-44(LC 12), 2=-54(LC 12)

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 5-0-0, Exterior(2E) 5-0-0 to 5-5-12 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

Matrix-AS

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.

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: 19 lb

Structural wood sheathing directly applied, except end verticals, and





				5-7-8
LOADING TCLL	(psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.41	DEFL.         in         (loc)         I/defl         L/d         PLATES         GRIP           Vert(LL)         -0.04         4-7         >999         240         MT20         197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.28	Vert(CT) -0.09 4-7 >741 180
BCLL BCDL	0.0 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-AS	Horz(CT) 0.01 2 n/a n/a Weight: 17 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

```
LUMBER-
```

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

2x4 SPF No.2

REACTIONS. 4=Mechanical, 2=0-3-8 (size) Max Horz 2=102(LC 11) Max Uplift 4=-54(LC 12), 2=-52(LC 12) Max Grav 4=242(LC 1), 2=313(LC 1)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

Rigid ceiling directly applied.

1

n/a

Weight: 16 lb

Structural wood sheathing directly applied, except end verticals.

FT = 20%

#### NOTES-

BCLL

BCDL

WEBS

LUMBER-

TOP CHORD

BOT CHORD

REACTIONS.

0.0

10.0

2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

(size)

Max Horz 1=95(LC 11)

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 5-5-12 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

Matrix-AS

- 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.

YES

Code IRC2018/TPI2014

1=0-3-8, 3=Mechanical

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

Max Uplift 1=-34(LC 12), 3=-55(LC 12) Max Grav 1=247(LC 1), 3=247(LC 1)

- 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, 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) 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.



June 17,2022







LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI. TC 0.14 BC 0.05 WB 0.00 Matrix-MP	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.00         8         >999         240           Vert(CT)         -0.00         8         >999         180           Horz(CT)         0.00         2         n/a         n/a	PLATES         GRIP           MT20         197/144           Weight: 12 lb         FT = 20%

#### LUMBER-

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2SLIDERLeft 2x4 SPF No.2 2-6-0

Plate Offsets (X,Y)-- [2:0-2-12,0-2-6]

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-11-11 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=56(LC 4) Max Uplift 4=-30(LC 8), 2=-77(LC 4), 5=-2(LC 8)

Max Grav 4=79(LC 1), 2=249(LC 1), 5=43(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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate
- grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-4=-70, 5-6=-20 Concentrated Loads (lb)
- Vert: 10=-1(F)







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

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

Max Horz 2=47(LC 8)

Max Uplift 3=-19(LC 12), 2=-77(LC 8) Max Grav 3=47(LC 1), 2=223(LC 1), 4=40(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) 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.



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



TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-2-9 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.



LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-5-0 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=39(LC 12) Max Uplift 3=-15(LC 12), 2=-23(LC 12), 4=-1(LC 12) Max Grav 3=30(LC 1), 2=144(LC 1), 4=26(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) 3, 2, 4. 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-0-0 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=50(LC 12) Max Uplift 3=-23(LC 12), 2=-24(LC 12), 4=-2(LC 12) Max Grav 3=48(LC 1), 2=164(LC 1), 4=40(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) 3, 2, 4. 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







BCLL 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 2 n/a n/a	LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           DODL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.09 BC 0.07 WB 0.00	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.00         4-7         >999         240           Vert(CT)         -0.01         4-7         >999         180           Horz(CT)         0.00         2         n/a         n/a	PLATES         GRIP           MT20         197/144
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BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

EBS 2x4 SPF No.2

REACTIONS. (size) 4=Mechanical, 2=0-3-8 Max Horz 2=47(LC 11) Max Uplift 4=-24(LC 12), 2=-57(LC 8)

Max Grav 4=117(LC 1), 2=197(LC 0)

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 2-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) 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.



Structural wood sheathing directly applied or 2-11-8 oc purlins,

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

except end verticals.





				1-10-13	
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 0.13	Vert(LL) -0.00 7 >999 240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.01 4-7 >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/TPI2014	Matrix-MP		Weight: 6 lb FT = 20%

LUMBER-

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

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

Max Horz 2=35(LC 8) Max Uplift 2=-47(LC 8), 4=-19(LC 9) Max Grav 2=161(LC 1), 4=72(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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4. 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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# 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.



	<b> </b>	2-3-8		4-0-0	
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in	(loc) l/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.26	Vert(LL) -0.02	8 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.03	8 >999 180	)
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01	7 n/a n/a	a la
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR			Weight: 12 lb FT = 20%
LUMBER-			BRACING-		

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2

REACTIONS. 7=Mechanical, 2=0-3-8 (size) Max Horz 2=49(LC 9) Max Uplift 7=-38(LC 12), 2=-60(LC 8) Max Grav 7=172(LC 1), 2=236(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 4-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.





			1-5-7					
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.01 BC 0.02 WB 0.00 Matrix-MP	<b>DEFL.</b> Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) 0.0	n (loc) ) 7 ) 7 0 7 0 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 4 lb	<b>GRIP</b> 197/144 FT = 20%

LUMBER-

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

BRACING-TOP CHORD

Structural wood sheathing directly applied or 1-5-8 oc purlins, except end verticals.

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

REACTIONS. 2=0-3-8, 4=Mechanical (size) Max Horz 2=29(LC 11) Max Uplift 2=-16(LC 12), 4=-13(LC 12) Max Grav 2=89(LC 1), 4=55(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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

# OF MISS 0 SCOTT M. SEVIER NUMBER NOTESSIONAL PE-2001018807 E June 17,2022













			5-9-0		16-1-8	7-11-0	
			5-9-0		0-4-8	1-9-8	
LOADING	G (psf)	SPACING- 2-0-	CSI.	DEFL. in (	(loc) l/defl L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	TC 0.32	Vert(LL) -0.02 8	3-11 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	BC 0.21	Vert(CT) -0.04 8	3-11 >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/TPI2014	Matrix-AS			Weight: 23 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, except end verticals. Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=96(LC 9) Max Uplift 2=-66(LC 8), 6=-94(LC 12) Max Grav 2=311(LC 1), 6=450(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. BOT CHORD 3-7=-302/289

#### 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 7-9-4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
   4) 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) 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.







Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.01

2

n/a

Rigid ceiling directly applied.

n/a

Weight: 24 lb

Structural wood sheathing directly applied, except end verticals.

FT = 20%

FORCES.	lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.
TOP CHORE	2-3=-301/131, 3-5=-346/251

Rep Stress Incr

(size) 2=0-3-8, 9=Mechanical

Max Uplift 2=-91(LC 8), 9=-63(LC 12) Max Grav 2=412(LC 1), 9=318(LC 1)

Code IRC2018/TPI2014

#### NOTES-

BCLL

BCDL

WEBS

OTHERS

LUMBER-

BOT CHORD

REACTIONS.

0.0

10.0

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

Max Horz 9=88(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 2-1-8, Interior(1) 2-1-8 to 7-5-2 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

0.41

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

YES

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



16023 Swingley Ridge Rd Chesterfield, MO 63017



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LOADING TCLL TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES 212014	<b>CSI.</b> TC BC WB Matrix	0.17 0.10 0.06 ∢-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 0.00 0.00	(loc) 1 1 7	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 28 lb	<b>GRIP</b> 197/144 FT = 20%	
LUMBER- TOP CHOR BOT CHOR	RD 2x4 SP RD 2x4 SP	F No.2 F No.2				BRACING- TOP CHOF	D	Structu except	ral wood end verti	sheathing di cals.	rectly applied or 6-0-0	oc purlins,	

BOT CHORD

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

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 OTHERS
 2x4 SPF No.2

**REACTIONS.** All bearings 7-10-6.

(lb) - Max Horz 2=111(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9, 10

Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8 except 10=356(LC 1)

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

WEBS 3-10=-272/313

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-8-10 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

3) All plates are 1.5x4 MT20 unless otherwise indicated.

4) Gable requires continuous bottom chord bearing.

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

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 8, 9, 10.

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

referenced standard ANSI/TPI 1.







Scale = 1:23.1



VERTICAL SUPPORT OF FREE END OF CHORD IS REQUIRED.

L	2-3-8 4-0-0	8-0-0	9-8-8	12-0-0					
	2-3-8 1-8-8	4-0-0	1-8-8	2-3-8					
Plate Offsets (X,Y)	[2:0-1-9,Edge], [2:0-0-11,0-1-8], [4:0-8-	0,0-1-0], [7:0-0-11,0-1-8], [7:0-1-9,Edg	<u>e]</u>						
LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI.DEFLTC0.84Vert(IBC1.00Vert(0WB0.11Horz(1Matrix-MSVert(0	in (loc) l/defl L/d .L) -0.19 10-11 >761 240 CT) -0.33 10-11 >437 180 CT) 0.19 7 n/a n/a	PLATES         GRIP           MT20         197/144           Weight: 88 lb         FT = 20%					
LUMBER- TOP CHORD 2x4 SF 4-5: 2x BOT CHORD 2x4 SF WEDS 2x4 SF WEDGE Left: 2x4 SPF No.2 , R REACTIONS. (siz	2 2400F 2.0E *Except* 4 SPF No.2 PF No.2 PF No.2 Ight: 2x4 SPF No.2 e) 2=0-3-8, 7=0-3-8	BRAC TOP ( BOT (	:ING- :HORD Structural wood sheathing d 2-0-0 oc purlins (5-8-2 max. :HORD Rigid ceiling directly applied	lirectly applied or 6-0-0 oc purlins, except ): 4-5. I or 10-0-0 oc bracing.					
Max Horz 2=25(LC 8)         Max Uplift 2=-282(LC 4), 7=-282(LC 5)         Max Grav 2=1100(LC 1), 7=1098(LC 1)         FORCES.       (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       3-16=-284/109, 3-4=-4850/1227, 4-5=-4543/1140, 5-6=-4842/1201, 6-7=-284/104         BOT CHORD       3-11=-1167/4724, 10-11=-1126/4550, 6-10=-1119/4716         WFES       4-11=-215/4897, 5-10=-213/892									
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be corr Top chords connect Bottom chords connect Bottom chords connected as</li> <li>2) All loads are conside ply connections hav</li> <li>3) Unbalanced roof live</li> <li>4) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60</li> <li>5) Provide adequate di</li> <li>6) This truss has been 7) Provide mechanical 2=282, 7=282.</li> <li>8) This truss is designer referenced standard</li> <li>9) Graphical purlin rep 10) "NAILED" indicates</li> <li>11) Hanger(s) or other 4-0-0, and 411 lb c responsibility of other</li> </ul>	anected together with 10d (0.120"x3") na ed as follows: 2x4 - 1 row at 0-9-0 oc. lected as follows: 2x4 - 1 row at 0-7-0 or follows: 2x4 - 1 row at 0-9-0 oc. ered equally applied to all plies, except i e been provided to distribute only loads 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. designed for a 10.0 psf bottom chord lix connection (by others) of truss to bearin ed in accordance with the 2018 Internati I ANSI/TPI 1. resentation does not depict the size or t s 3-10d (0.148"x3") or 3-12d (0.148"x3.2 connection device(s) shall be provided lown and 169 lb up at 7-11-4 on bottom hers.	ils as follows: f noted as front (F) or back (B) face in noted as (F) or (B), unless otherwise i isign. ph; TCDL=6.0psf; BCDL=4.2psf; h=1{ e to ad nonconcurrent with any other lin ig plate capable of withstanding 100 lb onal Residential Code sections R502.4 the orientation of the purlin along the to 5") toe-nails per NDS guidlines. sufficient to support concentrated load chord. The design/selection of such of	the LOAD CASE(S) section. Ply to ndicated. 5ft; Cat. II; Exp C; Enclosed; xposed; Lumber DOL=1.60 plate ve loads. o uplift at joint(s) except (jt=lb) 11.1 and R802.10.2 and p and/or bottom chord. ((s) 411 lb down and 169 lb up at connection device(s) is the	SCOTT M. SEVIER PE-2001018807 June 17.2022					

COMPUSASE(S)geStandard



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONEY CREEK #118/MO	
						152607340
3211086	01	HIP GIRDER	1	2		
				~	Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 16 16:01:25 2022 Page 2				

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Jun 16 16:01:25 2022 Page 2 ID:mDd9ycyFdydMUJW7?YBug7z82D4-3ioM1?SL\_Zswnoi3sqQt0Jyr\_p0ZfbssrgKoGMz5fZO

#### LOAD CASE(S) Standard

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

Vert: 1-4=-70, 4-5=-70, 5-8=-70, 12-15=-20, 18-21=-20, 9-24=-20 Concentrated Loads (lb)

Vert: 11=-411(F) 10=-411(F) 28=-152(F)





	2-3-8	1	6-0-0	9-8-8			1	12-0-0		1
	2-3-8		3-8-8	1	3-8-8		1	2-3-8		
Plate Offsets (X	X,Y) [2:0-1-8,0-0-12], [3:0-6-0,Edge], [5:0-6-0,Edge], [6:0-1-8,0-0-12]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d	Р	LATES	GRIP	
TCI 25.0	Plate Grip DOI	1 15	TC 0.91	Vert(LL)	-0.28 3-9	>514 240	M	T20	197/144	

<b></b> (po.)	200	•••			
TCLL 25.0	Plate Grip DOL 1.15	TC 0.91	Vert(LL) -0.2	3 3-9 >514 240	MT20 197/144
TCDI 10.0	Lumber DOL 115	BC 0.93	Vert(CT) -0.5	1 3-9 >283 180	
PCU 0.0	Bon Stross Incr. VES	WP 0.07			
DOLL 0.0		VVB 0.07	1012(01) 0.3	5 0 11/a 11/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			Weight: 38 lb $FT = 20\%$
LUMBER-			BRACING-		
TOP CHORD 2	x4 SP 2400F 2.0E		TOP CHORD	Structural wood sheathing	directly applied.
BOT CHORD 2	x4 SPE No 2 *Excent*		BOT CHORD	Rigid ceiling directly appli	he
			Ber offerte	rugia coming anoony appin	54.
	-5. 2X4 SFF 1050F 1.5E				
WEBS 2	X4 SPF NO.2				
REACTIONS.	(size) 2=0-3-8, 6=0-3-8				
1	Max Horz 2=-36(LC 17)				
1	Max Unlift 2111(IC8) 6111(IC9)				
	Max $C_{rov}$ 2 = 01(1 C 1) 6 = 01(1 C 1)				
I	viax Grav 2=001(LC 1), 0=001(LC 1)				
FORCES. (Ib) -	Max. Comp./Max. Ten All forces 250 (lb) of	less except when shown.			
TOP CHORD	3-12=-355/139, 3-4=-1453/456, 4-5=-1453/4	63, 5-6=-355/131			
BOT CHORD	3-10=-67/258, 3-9=-369/1390, 5-9=-369/139	), 5-8=-64/258			
WERS	4 0- 22/299	-,			
VVLDO	+-J				

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 2-1-12, Interior(1) 2-1-12 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=111, 6=111.

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

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



MiTek

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

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- 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 5-11-12, Exterior(2R) 5-11-12 to 8-11-12, Interior(1) 8-11-12 to 11-8-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=110.

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

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









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- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- WEBS 2-8=-416/232, 4-6=-425/238

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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 10-2-2, Exterior(2R) 10-2-2 to 13-2-2, Interior(1) 13-2-2 to 19-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=194, 6=201.
- 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.



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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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-8-2, Exterior(2R) 5-8-2 to 8-8-2, Interior(1) 8-8-2 to 10-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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.



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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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-5-0, Exterior(2R) 4-5-0 to 7-5-0, Interior(1) 7-5-0 to 8-4-4 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

- 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.







LUMBER-

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 1=5-9-4, 3=5-9-4, 4=5-9-4 Max Horz 1=38(LC 9) Max Uplift 1=-24(LC 12), 3=-29(LC 13), 4=-4(LC 12) Max Grav 1=119(LC 1), 3=119(LC 1), 4=201(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, 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.







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

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



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