

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

Re: 201470 Solaia

> RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/14/2020

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Heartland Truss, Inc..

Pages or sheets covered by this seal: I42650594 thru I42650688

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

Missouri COA: Engineering 001193



September 2,2020

Sevier, Scott

,Engineer

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.



- BOT CHORD B-J=-196/1570, H-J=-44/985, F-H=-170/1570
- WEBS D-H=-95/648, E-H=-487/201, D-J=-95/648, C-J=-487/200

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-1-4, Interior(1) 2-1-4 to 8-4-0, Exterior(2R) 8-4-0 to 14-4-0, Interior(1) 14-4-0 to 20-6-12, Exterior(2E) 20-6-12 to 23-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 Unbalanced snow loads have been considered for this design.

a) This trues has been desired for prostor of min particular distances

4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint B and 128 lb uplift at joint F.

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.



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





Annovember State and State

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Solaia	
						142650595
201470	A1A	Roof Special Girder	1	2	Joh Deference (antional)	
					Job Reference (optional)	
Heartland Truss, Inc,	Plattsburg, MO - 64477,			8.330 s Ju	22 2020 MiTek Industries, Inc. Tue Sep 1 08:18:37 2020	Page 2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-4PLgk_5FLmpJf9I?PZTBIP9v8qFuU2TxG6jDRayi31G

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: A-D=-70, D-G=-70, N-Q=-20 Concentrated Loads (Ib)

Vert: K=-977(F) H=-977(F) P=-980(F) V=-977(F) W=-977(F) X=-977(F) Y=-977(F) Z=-977(F) AA=-977(F) AB=-977(F) AC=-977(F)

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1	4-3-1 8-0-1	14-7	-15	18-4-15	22-8-0		
1	4-3-1 3-9-0	6-7	15	3-9-0	4-3-1		
Plate Offsets (X,Y) [B:	<u>0-0-0,0-0-4], [H:0-0-0,0-0-4], [K:0-5-0,0</u>)-4-8], [M:0-5-0,0-4-8]					
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.72 BC 0.88 WB 0.58 Matrix-MS	DEFL. in Vert(LL) -0.22 Vert(CT) -0.33 Horz(CT) 0.07	(loc) l/defl L/d K-M >999 240 K-M >836 180 H n/a n/a	PLATES GRIP MT20 244/190 Weight: 136 lb FT = 20%		
LUMBER- TOP CHORD 2x4 SP No BOT CHORD 2x6 SP No WEBS 2x4 SP No REACTIONS. (size) Max Horz Max Uplif Max Grav	0.2 0.1 0.3 B=0-3-8, H=0-3-8 B=72(LC 50) t B=-459(LC 10), H=-459(LC 11) B=2565(LC 31), H=2565(LC 31)	E	RACING- OP CHORD S 2 OT CHORD R	Structural wood sheathing 2-0-0 oc purlins (3-0-2 max Rigid ceiling directly applie	directly applied or 2-4-4 oc purlins, except ‹.): D-F. d or 9-0-6 oc bracing.		
FORCES. (lb) - Max. Co TOP CHORD B-C=-44 G-H=-44 G-H=-44 BOT CHORD B-N=-75 WEBS C-M=-58 G-K=-58	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD B-C=-4451/838, C-D=-3859/787, D-E=-3340/724, E-F=-3340/724, F-G=-3859/787, G-H=-4451/839 BOT CHORD B-N=-751/3888, M-N=-751/3888, K-M=-633/3478, J-K=-680/3888, H-J=-680/3888 WEBS C-M=-589/132, D-M=-288/1398, E-M=-400/111, E-K=-400/111, F-K=-288/1398, G-K=-589/133						
 NOTES- 1) Wind: ASCE 7-16; Vult: MWFRS (envelope) gal grip DOL=1.33 2) TCLL: ASCE 7-16; Pf=2 3) Uhbalanced snow loads 4) This truss has been deen non-concurrent with oth 5) Provide adequate drain 6) This truss has been deen 7) Provide mechanical cor joint H. 8) This truss is designed in referenced standard AM 9) Graphical purlin repress 10) Hanger(s) or other cor 3-4-0, 208 lb down an 93 lb up at 11-4-0, 26 17-4-0, and 285 lb down 11) In the LOAD CASE(S) LOAD CASE(S) Standard 	=115mph (3-second gust) Vasd=91mp ole end zone; cantilever left and right e 25.0 psf (Lum DOL=1.15 Plate DOL=1. s have been considered for this design signed for greater of min roof live load er live loads. age to prevent water ponding. signed for a 10.0 psf bottom chord live nection (by others) of truss to bearing n accordance with the 2018 Internation ISI/TPI 1. entation does not depict the size or the nection device(s) shall be provided su d 71 lb up at 5-4-0, 276 lb down and 7 2 lb down and 93 lb up at 13-4-0, 276 wn and 72 lb up at 19-4-0 on bottom c s. section, loads applied to the face of th d	h; TCDL=6.0psf; BCDL=6.0psf; xposed ; end vertical left and ri 15); Is=1.0; Rough Cat C; Fully of 16.0 psf or 2.00 times flat roo load nonconcurrent with any of plate capable of withstanding 4 al Residential Code sections R orientation of the purlin along t fificient to support concentrated 7 lb up at 7-4-0, 262 lb down a lb down and 77 lb up at 15-4-1 hord. The design/selection of s an truss are noted as front (F) o	h=20ft; Cat. II; Exp pht exposed; Lumber Exp.; Ce=0.9; Cs= if load of 25.0 psf or her live loads. .59 lb uplift at joint E 502.11.1 and R802 he top and/or bottor load(s) 285 lb down ind 93 lb up at 9-4-), and 208 lb down a uch connection dev r back (B).	C; Enclosed; er DOL=1.33 plate 1.00; Ct=1.10 n overhangs 3 and 459 lb uplift at .10.2 and m chord. n and 72 lb up at 0, 262 lb down and and 71 lb up at rice(s) is the	Sontember 2 2020		

Continued on page 2

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MITEK 16023 Swingley Ridge Rd Chesterfield, MO 63017

J	ob	Truss	Truss Type	Qty	Ply	Solaia	
							142650596
2	201470	A2	Hip Girder	1	1		
						Job Reference (optional)	
	Heartland Truss, Inc, P	lattsburg, MO - 64477,			8.330 s Jul	22 2020 MiTek Industries, Inc. Tue Sep 1 08:18:40 2020	Page 2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-V_1pM?78ehBuWd0a4i0uN1nOg2BXhR2Ny4yt2vyi31D

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: A-D=-70, D-F=-70, F-I=-70, O-R=-20 Concentrated Loads (lb)

Vert: W=-285(B) X=-208(B) Y=-276(B) Z=-262(B) AA=-262(B) AB=-262(B) AC=-276(B) AD=-208(B) AE=-285(B)

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6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint A and 78 lb uplift at joint G

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.



September 2,2020



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3) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

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

7) Gable requires continuous bottom chord bearing.

8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

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 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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) X, M, T, U, V, Q, P. O except (it=lb) W=164, N=158,
- 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.



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



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



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BCLL BCDL	0.0 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.61 Matrix-MS	Horz(CT) (0.07 H	n/a	n/a	Weight: 146 lb	FT =
LUMBER-				BRACING-					
TOP CHORD	2x4 SP No.2	*Except*		TOP CHORD	Structural	wood sh	neathing dire	ectly applied or 4-8-3 of	c purlins,
	E-G: 2x4 SP	1650F 1.5E			except en	d vertica	ls, and 2-0-0	0 oc purlins (6-0-0 max	.): E-G.
BOT CHORD	2x4 SP No.2	*Except*		BOT CHORD	Rigid ceili	ng direct	ly applied o	r 6-0-0 oc bracing.	
	F-J: 2x4 SP	No.3		WEBS	1 Row at	midpt	E-	·K, F-H	
WEBS	2x4 SP No.3								
SLIDER	Left 2x6 SP I	No.1 -x 2-0-0							

REACTIONS. (size) H=0-3-8, B=0-3-8 Max Horz B=306(LC 9) Max Uplift H=-170(LC 9), B=-76(LC 12) Max Grav H=1084(LC 29), B=1303(LC 30)

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

TOP CHORD B-D=-1376/128, D-E=-899/186, E-F=-666/189, G-H=-362/78

BOT CHORD B-L=-189/943, K-L=-189/943, F-I=-244/585, H-I=-183/679

D-K=-620/214, E-K=-669/252, I-K=-273/1232, E-I=-272/1201, F-H=-926/186 WEBS

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-1-4, Interior(1) 2-1-4 to 6-4-13, Exterior(2R) 6-4-13 to 15-1-12, Exterior(2E) 15-1-12 to 18-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

5) Provide adequate drainage to prevent water ponding.

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) B except (it=lb) H=170.

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

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



FT = 20%

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MiTek

Job	Truss	Truss Type	Qty	Ply	Solaia	
201470	D01	Piggyback Base	4	1		142650605
Heartland Truss, Inc,	l Plattsburg, MO - 64477,			8.330 s Ju	Job Reference (optional I 22 2020 MiTek Industri	al) ies, Inc. Tue Sep 1 08:18:52 2020 Page 1
		-0 ₁ 10-12 2-11-8 7-4-13	ID:CfAvtstDZ	80LuoKN7 13-11-0	75r4zmzQTwH-8IILt6Gg	pNiByTxunDEisZHNptKeVqw8jxsVTCyi311
		0-10-12 2-11-8 4-5-5	4-5-5	2-0-14		
			6x6	3	x4	Scale: 3/16"=1'
				E N	F	
	10- 9- 0	3x 5x6 10.00 12			4 6 6 8	
				\\		
		6x8 =		Ŧ F	¥,	
		В		H 3x	8 = 2	
	1-10-9	A $5x6 =$	3:	ĸ6 =	5-0	
	5					
		J 9.00 12				
		2x4 =	11-10-2	13-11-0) ,	
Plate Offsets (X Y) [B:)-3-8 Edge] [E·0-4-4 0-2-0]	2-11-8 [.l:0-2-4 0-1-0]	8-10-10	2-0-14		
LOADING (psf)			DEEL	in (loo)		
TCLL 25.0 (Roof Spow=25.0)	Plate Grip DOL 1	.15 TC 0.97	Vert(LL) -0.1	8 H-I	>921 240	MT20 244/190
TCDL 10.0	Lumber DOL 1 Rep Stress Incr Y	.15 BC 0.67 'ES WB 0.71	Vert(CT) -0.3 Horz(CT) 0.1	8 H-I 5 G	>434 180 n/a n/a	
BCDL 0.0 BCDL 10.0	Code IRC2018/TPI20	14 Matrix-MS				Weight: 110 lb FT = 20%
	0 * =========		BRACING-	0		
A-D: 2x4 SP No	SP 1650F 1.5E		TOP CHORD	except e	al wood sheathing dire and verticals, and 2-0-0) oc purlins (6-0-0 max.): E-F.
BOT CHORD 2x4 SP No WEBS 2x4 SP No	o.2 o.3 *Except*		BOT CHORD WEBS	Rigid ce 1 Row a	iling directly applied or t midpt F-0	7-9-15 oc bracing. G, E-G
B-J: 2x4 S	P No.2					
REACTIONS. (size) Max Horz Max Uplift Max Grav	G=Mechanical, J=0-3-8 J=380(LC 9) G=-170(LC 9), J=-40(LC 12 G=864(LC 30), J=1055(LC) 30)				
FORCES. (Ib) - Max. Con TOP CHORD B-C=-27 BOT CHORD I-J=-559, WEBS C-H=-88	mp./Max. Ten All forces 25 61/393, C-E=-555/143, B-J≕ /776, H-I=-234/907 7/316, E-H=-126/755, E-G=-	0 (lb) or less except when shown. -1376/356 947/148 B-I=-32/1601 C-I=-361/	1604			
NOTES-						
 Wind: ASCE 7-16; Vult= MWFRS (envelope) gat Exterior(2E) 11-10-2 to forces & MWFRS for re: TCLL: ASCE 7-16; Pf=2 Unbalanced snow loads This truss has been des pon-concurrent with oth 	115mph (3-second gust) Va ble end zone and C-C Exterior 13-9-4 zone; cantilever left a actions shown; Lumber DOL 5.0 psf (Lum DOL=1.15 Plat chave been considered for the signed for greater of min roof er live loads	sd=91mph; TCDL=6.0psf; BCDL= or(2E) -0-10-12 to 2-1-4, Interior(1 nd right exposed ; end vertical lef =1.33 plate grip DOL=1.33 e DOL=1.15); Is=1.0; Rough Cat his design. live load of 20.0 psf or 2.00 times	6.0psf; h=20ft; Cat. II; E) 2-1-4 to 7-7-3, Exterior t and right exposed;C-C C; Fully Exp.; Ce=0.9; C flat roof load of 25.0 ps	xp C; Enc (2R) 7-7-3 for memb s=1.00; C f on overh	closed; 3 to 11-10-2, hers and tt=1.10 hangs	A Deserved
5) Provide adequate drain	age to prevent water ponding]. bhard live load personautrent with	any other live leads			SE OF MISSO
7) Refer to girder(s) for tru	ss to truss connections.	chord live load nonconcurrent with	i any other live loads.			SCOTT M.
 Bearing at joint(s) J con capacity of bearing surf 	siders parallel to grain value ace.	using ANSI/TPI 1 angle to grain f	ormula. Building design	er should	verify	SEVIER SEVIER
 Provide mechanical cor G=170. 	nection (by others) of truss t	o bearing plate capable of withsta	nding 100 lb uplift at joir	nt(s) J exc	ept (jt=lb)	the the Soulen
10) This truss is designed referenced standard A	in accordance with the 2018 NSI/TPI 1.	International Residential Code se	ections R502.11.1 and R	802.10.2	and 🦊	NUMBER
11) Graphical purlin repres	sentation does not depict the	size or the orientation of the purli	n along the top and/or b	ottom cho	rd.	PE-2001018807 274
						Amora

September 2,2020



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- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-1-4, Interior(1) 2-1-4 to 7-7-3, Exterior(2R) 7-7-3 to 11-10-2, Exterior(2E) 11-10-2 to 13-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) M considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint P
- 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.





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



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	2-3-0 3-0-0		11-10-6		13-11-0	
I	2-3-8 1-1-13		8-5-3		2-0-8	
Plate Offsets (X,Y) [B:	0-2-8,0-1-12], [D:0-3-0,0-2-1]					
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 0.0 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 0.85 BC 0.98 WB 0.48 Matrix-MS	DEFL. Vert(LL) -0.1 Vert(CT) -0.2 Horz(CT) 0.1	in (loc) I/defl L/d 13 J-K >999 240 28 J-K >586 180 0 H n/a n/a	PLATES GRIP MT20 244/190 Weight: 83 lb FT = 20%	
LUMBER- BRACING- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* F-I: 2x4 SP No.3 TOP CHORD WEBS 2x4 SP No.3 REACTIONS. (size) Max Horz N=139(LC 9) Max Horz N=139(LC 9)						
FORCES. (lb) - Max. Co TOP CHORD B-C=85 B-N=-76 BOT CHORD M-N=-13 WEBS C-K=0/3	H=1004(LC 29), N=504(LC 30) mp./Max. Ten All forces 250 (lb) or le 6/126, C-D=-1224/120, D-E=-1011/122 31/155 14/519, C-L=-299/0, K-L=-209/820, J-K 25, D-K=0/378, E-K=-517/182, E-J=-80	ess except when shown. 2, E-F=-753/84, F-G=-697/ =-250/1466, F-J=-453/100 08/160, G-J=-137/1150	/86, G-H=-977/113,)			
NOTES- 1) Wind: ASCE 7-16; Vult- MWFRS (envelope) gat 10-9-4, Exterior(2E) 10- and forces & MWFRS fc 2) TCLL: ASCE 7-16; Pf=2 3) Unbalanced snow loads 4) This truss has been des non-concurrent with oth 5) Provide adequate drain 6) This truss has been des 7) Refer to girder(s) for tru 8) Provide mechanical cor H=110.	=115mph (3-second gust) Vasd=91mpl ole end zone and C-C Exterior(2E) -0-1 9-4 to 13-9-4 zone; cantilever left and or reactions shown; Lumber DOL=1.33 25.0 psf (Lum DOL=1.15 Plate DOL=1. 5 have been considered for this design. signed for greater of min roof live load of er live loads. age to prevent water ponding. signed for a 10.0 psf bottom chord live ss to truss connections. Innection (by others) of truss to bearing	n; TCDL=6.0psf; BCDL=6. 0-12 to 2-1-12, Exterior(2 right exposed ; end vertica plate grip DOL=1.33 15); Is=1.0; Rough Cat C; of 20.0 psf or 2.00 times fl load nonconcurrent with a plate capable of withstance	Opsf; h=20ft; Cat. II; E R) 2-1-12 to 7-7-15, Ir al left and right expose Fully Exp.; Ce=0.9; C at roof load of 25.0 psi ny other live loads. ding 100 lb uplift at joir	Exp C; Enclosed; hterior(1) 7-7-15 to bd;C-C for members is=1.00; Ct=1.10 f on overhangs ht(s) N except (jt=lb)	STATE OF MISSOL SCOTT M. SEVIER	

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

10) 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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	142650615
Half Hip 1	
Job Ref	Reference (optional)
MO - 64477, 8.330 s Jul 22 2020	020 MiTek Industries, Inc. Tue Sep 1 08:19:05 2020 Page 1
ID:CfAvtstDZ80LuoKN75r4zmzQ	zQTwH-Go2FcYQqIMLL0TRO2SzluJJdQ6ku2it2iTVhPyyi30q
7-0-12 11-10-8	-8 13-11-0
4-9-12 4-9-12	2 2-0-8
MO - 64477, MO - 64477, 7-0-12 	Reference (optional) D20 MiTek Industries, Inc. Tue Sep 1 08:19:05 2020 Page zQTwH-Go2FcYQqIMLL0TRO2SzluJJdQ6ku2it2iTVhPyyi30 -8 -13-11-0 2

Scale = 1:25.4



 	2-3-8	7-0-12 4-9-4		<u> </u>	<u> </u>	
Plate Offsets (X,Y) [B:	0-2-8,0-1-12], [C:0-7-0,0-2-0]					
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.85 BC 0.78 WB 0.73 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) I/defl L/d ·0.16 J >999 240 ·0.22 J-K >740 180 0.12 G n/a n/a	PLATES GRIP MT20 244/190 MT18HS 244/190 Weight: 77 lb FT = 20%	
LUMBER- TOP CHORD BRACING- 2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* C-M: 2x6 SP No.1, E-H: 2x4 SP No.3 WEBS 2x4 SP No.3						
REACTIONS. (size) Max Horz Max Uplift Max Grav	REACTIONS. (size) G=Mechanical, N=0-3-8 Max Horz N=103(LC 9) Max Uplift G=-107(LC 9), N=-66(LC 9) Max Grav G=1032(LC 29), N=916(LC 29)					
FORCES. (lb) - Max. Control TOP CHORD B-C=-93. B-N=-77 BOT CHORD MORES M-N=-11 WEBS C-J=-175	np./Max. Ten All forces 250 (lb) or le 2/114, C-D=-2801/297, D-E=-1404/148 1/141 8/601, J-K=-229/1412, I-J=-335/2794, 3/1423, D-J=-259/113, D-I=-1439/156,	ss except when shown. , E-F=-1228/128, F-G=-9 E-I=-513/106 F-I=-184/1530	73/117,			
 NOTES- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-0-3, Exterior(2R) 2-0-3 to 6-3-2, Interior(1) 6-3-2 to 10-9-4, Exterior(2E) 10-9-4 to 13-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33 TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads. Provide adequate drainage to prevent water ponding. All plates are MT20 plates unless otherwise indicated. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Refer to girder(s) for truss to truss connections. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) G=107. 						

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.



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Job	Truss	Truss Type	Qty	Ply	Solaia		
						142	2650616
201470	D11	Half Hip	1	1			
					Job Reference (optional)		
Heartland Truss, Inc, P	lattsburg, MO - 64477,			3.330 s Jul	22 2020 MiTek Industries, Inc. T	ue Sep 1 08:19:06 2020 Pa	ge 1
		ID:Cf/	AvtstDZ80Luok	N75r4zmz	QTwH-k_bequRSWgTCec0ac9U	_RWspVW3dn8yCx7FFyOyi	30p
-0-10-12	2-1-0	6-11-12		1	1-10-8	13-11-0	
0-10-12	2-1-0	4-10-12		4	-10-12	2-0-8	

Scale = 1:25.4

7x10 MT18HS =



L	2-3-8	6-11-12		11-10-8	13-11-0
	2-3-8	4-8-4		4-10-12	2-0-8
Plate Olisets (X, Y) [B:t	J-2-8,0-1-12], [C:0-7-0,0-2-0]				
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.82 BC 0.88 WB 0.81 Matrix-MS	DEFL. Vert(LL) -0.1 Vert(CT) -0.2 Horz(CT) 0.1	n (loc) l/defl L/d 9 J >864 240 6 J >631 180 4 G n/a n/a	PLATES GRIP MT20 244/190 MT18HS 244/190 Weight: 76 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No C-F: 2x4 SP No BOT CHORD 2x4 SP No C-M: 2x6 S 2x4 SP No WEBS 2x4 SP No	0.2 *Except* IP 1650F 1.5E 0.2 *Except* SP No.1, E-H: 2x4 SP No.3 .3 C=Machanical N=0.2 8		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire- except end verticals, and 2-0-0 Rigid ceiling directly applied or 6-0-0 oc bracing: K-M	ctly applied or 5-1-5 oc purlins,) oc purlins (3-2-4 max.): C-F. 9-8-12 oc bracing. Except:
Max Horz Max Uplift Max Grav	G=MeCrainical, N=0-3-8 N=98(LC 9) G=-106(LC 9), N=-68(LC 9) G=1034(LC 29), N=933(LC 29)				
FORCES. (lb) - Max. Cor TOP CHORD B-C=-920 B-N=-770	mp./Max. Ten All forces 250 (lb) or le 6/109, C-D=-3108/327, D-E=-1589/168 6/138	ss except when shown. 9, E-F=-1366/143, F-G=-971	1/115,		
BOT CHORD M-N=-11 WEBS C-J=-193	4/589, J-K=-237/1519, I-J=-363/3102, 3/1618, D-J=-267/114, D-I=-1554/164,	E-I=-525/107 F-I=-194/1640			
 NOTES- 1) Wind: ASCE 7-16; Vult= MWFRS (envelope) gat Exterior(2E) 10-9-4 to 1. & MWFRS for reactions 2) TCLL: ASCE 7-16; Pf=2 3) Unbalanced snow loads 4) This truss has been des non-concurrent with oth 5) Provide adequate draina 6) All plates are MT20 plat 7) This truss has been des 8) Refer to girder(s) for tru 9) Provide mechanical con G=106. 10) This truss is designed referenced standard A 11) Graphical purlin represent 	e115mph (3-second gust) Vasd=91mph ole end zone and C-C Exterior(2E) -0-1 3-9-4 zone; cantilever left and right exp shown; Lumber DOL=1.33 plate grip [5:0 psf (Lum DOL=1.15 Plate DOL=1. have been considered for this design. igned for greater of min roof live load of er live loads. age to prevent water ponding. es unless otherwise indicated. igned for a 10.0 psf bottom chord live is sto truss connections. unection (by others) of truss to bearing in accordance with the 2018 Internatio NSI/TPI 1. sentation does not depict the size or the	n; TCDL=6.0psf; BCDL=6.0 0-12 to 1-10-4, Exterior(2R oosed ; end vertical left and DOL=1.33 15); Is=1.0; Rough Cat C; F of 20.0 psf or 2.00 times flat coad nonconcurrent with any plate capable of withstandir nal Residential Code sectio e orientation of the purlin al	psf; h=20ft; Cat. II; E) 1-10-4 to 6-1-2, Intr right exposed;C-C fo fully Exp.; Ce=0.9; C roof load of 25.0 psi y other live loads. ng 100 lb uplift at joir ns R502.11.1 and R ong the top and/or b	xp C; Enclosed; erior(1) 6-1-2 to 10-9-4, or members and forces s=1.00; Ct=1.10 f on overhangs ht(s) N except (jt=lb) 802.10.2 and ottom chord.	Strift OF MISSOC SCOTT M. SEVIER NUMBER PE-2001018807

September 2,2020



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J

4x8 = ν

υ

4x10 =

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-6 max.): C-G.

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

х

w

н

2x4 ||

1	4-0-13	7-3-1	10-5-4	13-11-0	
Γ	4-0-13	3-2-4	3-2-4	3-5-12	7
Plate Offsets (X,Y)	[C:0-8-0,Edge], [I:0-3-8,0-2-0], [K:0-3-8,0-2	2-0]			
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep. Stress Incr NO	CSI. TC 0.53 BC 0.77 WB 0.96	DEFL. in (loc) l/defl L/d Vert(LL) -0.17 J >979 240 Vert(CT) -0.22 J >730 180 Horz(CT) 0.03 H n/a n/a	PLATES GRIP MT20 244/190	
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 70 lb FT = 20)%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

BCDL

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3

REACTIONS. (size) H=Mechanical, L=0-3-8 Max Horz L=58(LC 7) Max Uplift H=-114(LC 7), L=-118(LC 7)

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Т

Max Grav H=1056(LC 27), L=1000(LC 27)

- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- C-D=-2513/279, D-E=-3045/332, E-F=-3045/332, F-G=-2285/253, G-H=-996/128 TOP CHORD
- BOT CHORD K-L=-115/616, J-K=-297/2511, I-J=-261/2285
- WFBS C-K=-205/2027, D-K=-659/122, D-J=-66/582, E-J=-411/87, F-J=-96/811, F-I=-725/132, G-I=-254/2308, C-L=-993/155

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate arip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

K

4x8 =

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=114, L=118,
- 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 119 lb up at 0-10-10, 50 lb down and 36 lb up at 2-1-4, 50 lb down and 36 lb up at 4-1-4, 50 lb down and 36 lb up at 6-1-4, 50 lb down and 36 Ib up at 8-1-4, and 50 lb down and 36 lb up at 10-1-4, and 50 lb down and 36 lb up at 12-1-4 on top chord, and 13 lb down and 29 Ib up at 0-10-10, 10 lb down and 10 lb up at 2-1-4, 10 lb down and 10 lb up at 4-1-4, 10 lb down and 10 lb up at 6-1-4, 10 lb down and 10 lb up at 8-1-4, and 10 lb down and 10 lb up at 10-1-4, and 10 lb down and 10 lb up at 12-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2

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 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Job	Truss	Truss Type	Qty	Ply	Solaia	
						l42650617
201470	D12	Half Hip Girder	1	1		
					Job Reference (optional)	
Heartland Truss, Inc,	Plattsburg, MO - 64477,			8.330 s Jul	22 2020 MiTek Industries, Inc. Tue Sep 1 08:19:08 2020	Page 2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-gNjOEaTi2Hjwtw9zjaWSWxxDeKImF06VOQkM0Hyi30n

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: A-B=-70, B-C=-70, C-G=-70, H-L=-20 Concentrated Loads (lb)

Vert: C=25(B) K=-5(B) D=-15(B) M=-15(B) O=-15(B) P=-15(B) Q=-15(B) R=-15(B) S=4(B) T=-5(B) U=-5(B) V=-5(B) W=-5(B) X=-5(B) X=-

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3x6 || 2x4 ||

	<u>1-0-3</u> 1-0-3	4-5-4	<u>10-9-3</u> 6-3-15					
Plate Offsets (X,Y) [A:0	0-2-0,0-0-2], [B:0-3-0,0-4-15], [D:0-6-0	,0-2-3]	0010					
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.96 BC 0.80 WB 0.61 Matrix-MS	DEFL. Vert(LL) -0.1 Vert(CT) -0.2 Horz(CT) 0.1	in (loc) 5 F-G 24 F-G 10 F	l/defl >861 >529 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 64 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP No C-D: 2x4 S BOT CHORD 2x4 SP No WEBS 2x4 SP No SLIDER Left 2x4 SF REACTIONS. (size) May Horz	.1 *Except* P No.2, D-E: 2x4 SP 1650F 1.5E .2 .3 P No.3 -x 0-11-15 A=Mechanical, F=Mechanical A=28(I C 9)		BRACING- TOP CHORD BOT CHORD WEBS	Structura except e Rigid cei 1 Row at	al wood s nd vertica ling direc t midpt	heathing dire als, and 2-0- ttly applied o D [.]	ectly applied or 2-2-0 0 oc purlins (3-5-10 m r 8-11-2 oc bracing. -F	oc purlins, nax.): C-D.
FORCES. (lb) - Max. Cor TOP CHORD B-J=-601 BOT CHORD B-G=-424 WEBS C-G=-720	A=34(LC 12), F=-126(LC 12) A=60(LC 32), F=733(LC 32) np./Max. Ten All forces 250 (lb) or ld /134, B-C=-1236/237, C-D=-2186/324 4/1369, F-G=-337/2239 977, D-G=-284/113, D-F=-2215/436	ess except when shown. , D-E=-351/223, E-F=-37	8/112					
NOTES- 1) Wind: ASCE 7-16; Vult= MWFRS (envelope) gab cantilever left and right of Lumber DOL=1.33 plate 2) TCLL: ASCE 7-16; Pf=2 3) Unbalanced snow loads 4) Provide adequate draine 5) This truss has been des 6) Refer to girder(s) for trust	115mph (3-second gust) Vasd=91mp le end zone and C-C Exterior(2E) 0-0 exposed ; end vertical left and right ex grip DOL=1.33 5.0 psf (Lum DOL=1.15 Plate DOL=1. have been considered for this design age to prevent water ponding. igned for a 10.0 psf bottom chord live ss to truss connections.	h; TCDL=6.0psf; BCDL=6 -0 to 4-5-4, Interior(1) 4-5- bosed;C-C for members a 15); Is=1.0; Rough Cat C; load nonconcurrent with a	.0psf; h=20ft; Cat. II; E -4 to 7-7-7, Exterior(2E and forces & MWFRS f ; Fully Exp.; Ce=0.9; C any other live loads.	Exp C; Encl 2) 7-7-7 to or reaction 2:s=1.00; Ct	losed; 10-7-7 zi is shown t=1.10	one; ;	STE OF	MISSO

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A except (jt=lb) F=126.

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

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



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



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September 2,2020



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September 2,2020


Job	Truss	Truss Type	Qty	Ply	Solaia	142650626
201470	F1	Scissor	3	1	Job Reference (optiona	Δ
Heartland Truss, Inc, P	lattsburg, MO - 64477,			8.330 s Ju	1 22 2020 MiTek Industrie	es, Inc. Tue Sep 1 08:19:24 2020 Page 1
		-0 ₁ 10-12 3-1-12 6-0- 0-10-12 3-1-12 2-10-	ID:CfAvtstDZ8 0 10-11-14 4 4-11-14	0LuoKN75i <u>1</u> 2-0- 1-0-2	r4zmzQTwH-CShRb2fkF <u>q</u> 2	ICkfoOO2fxpD9JcrjnFk?Eer4wcCaMyi30X
				6x6 🥢 6x6	ý 5 =	Scale = 1:62.4
	T			E F	-	
					T É	
			М			
		10.00 12 _{2x4}	↓ L	/ 3x	6 11	
			D // //			
	-0-8	146 //		м	φ	
			H	A	6-7	
		4x5 1/	7x10		4-3-6	
	Ţ	9.00	12			
		J		(3xf	BY SCISSOR TYPE	E TRUSSES, CAREFUL CONSIDERATION
		3x6 🥢			CONSIDERATION THIS TRUSS COM	OF THESE ITEMS IS NOT PART OF IPONENT DESIGN AND IS NOT THE
		3-1-12 6-0-	0 <u>12-0-0</u> 4 6-0-0		H RESPONSIBILITY	OF THE TRUSS ENGINEER. REGISTERED SIONAL TO ADDRESS THIS ISSUE.
Plate Offsets (X,Y) [G:0	-4-10,0-1-0], [H:0-4-6,0-3-8]], [J:0-4-10,0-1-0]				
LOADING (psf)	SPACING- 2-	0-0 CSI .	DEFL.	in (loc)	l/defl L/d	PLATES GRIP
(Roof Snow=25.0)	Plate Grip DOL 1 Lumber DOL 1	.15 IC 0.97 .15 BC 0.70	Vert(LL) 0.4 Vert(CT) -0.7	15 Н 74 Н	>314 240 >189 180	MT20 244/190
BCLL 0.0	Rep Stress Incr Y Code IRC2018/TPI20	YES WB 0.98 14 Matrix-MS	Horz(CT) 1.	12 G	n/a n/a	Weight: 87 lb FT = 20%
BCDL 10.0			BRACING-			
TOP CHORD 2x4 SP No.	2		TOP CHORD	Structura	al wood sheathing dired	ctly applied, except end verticals.
WEBS 2x4 SP No.	2 3 *Except*		WEBS	Rigid cei 1 Row a	t midpt F-C	6-0-0 oc bracing. G
F-H: 2x4 S	P 1650F 1.5E, F-G: 2x4 SP I	No.2				
REACTIONS. (size)	J=0-3-8, G=0-3-8					
Max Horz Max Uplift	J=-31(LC 12), G=-152(LC 12)	2)				
wax Grav	J=608(LC 19), G=569(LC 22	2)				
FORCES. (lb) - Max. Con TOP CHORD B-C=-185	np./Max. Ten All forces 250 6/408, C-D=-1428/339, D-E	0 (lb) or less except when shown. =-1301/385, E-F=-908/303, F-G=-4	90/179,			
B-J=-655 BOT CHORD I-J=-452/3	/196 364 H-I=-755/1847					
WEBS C-H=-453	8/307, H-K=-572/1458, F-K=-	-458/1070, B-I=-309/1443, E-K=-18	7/640			
NOTES-						
 Wind: ASCE 7-16; Vult= MWFRS (envelope) gab 	115mph (3-second gust) Vas le end zone and C-C Exterio	sd=91mph; TCDL=6.0psf; BCDL=6 or(2E) -0-10-12 to 2-1-4, Interior(1) :	.0psf; h=20ft; Cat. II; E 2-1-4 to 7-11-14, Exte	Exp C; Enc rior(2R) 7-	losed; 11-14 to	
10-11-14, Exterior(2E) 1 members and forces & N	0-11-14 to 11-10-4 zone; cai /WFRS for reactions shown:	ntilever left and right exposed ; end : Lumber DOL=1.33 plate grip DOL	vertical left and right	exposed;C	-C for	
2) TCLL: ASCE 7-16; Pf=2	5.0 psf (Lum DOL=1.15 Plate	e DOL=1.15); Is=1.0; Rough Cat C	Fully Exp.; Ce=0.9; C	Cs=1.00; C	t=1.10	
4) This truss has been desi	gned for greater of min roof	live load of 16.0 psf or 2.00 times f	at roof load of 25.0 ps	f on overh	angs	Samo
non-concurrent with othe 5) This truss has been desi	er live loads. gned for a 10.0 psf bottom c	chord live load nonconcurrent with a	any other live loads.			SE OF MISS
 Bearing at joint(s) J, G c capacity of bearing surface 	onsiders parallel to grain val ice.	lue using ANSI/TPI 1 angle to grain	formula. Building des	signer shou	uld verify	SCOTT M
7) Provide mechanical con	nection (by others) of truss to	o bearing plate capable of withstan	ding 100 lb uplift at joi	nt(s) J exc	ept (jt=lb)	SEVIER SEVIER

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



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 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) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

6) Gable studs spaced at 2-0-0 oc.

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

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

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 218 lb uplift at joint G.

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.







2-10-9	<u>5-7-7</u> 2-8-13	<u>8-4-4</u> 2-8-13	2-8-13	<u>13-9-15</u> 2-8-13	<u> </u>			
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.16 BC 0.49 WB 0.70 Matrix-MS	DEFL. in (loc) Vert(LL) -0.04 L Vert(CT) -0.07 L Horz(CT) 0.01 I	l/defi L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 244/190 Weight: 257 lb FT = 20%			
LUMBER- TOP CHORD 2x6 SP No BOT CHORD 2x6 SP No WEBS 2x4 SP No	.1 .1 .3		BRACING- TOP CHORD 2-0-0 oc BOT CHORD Rigid ce	: purlins (6-0-0 max.): A- iling directly applied or 1	H, except end verticals. 0-0-0 oc bracing.			
REACTIONS. (size) Max Horz Max Uplift Max Grav	P=Mechanical, I=Mechanical P=93(LC 7) P=-280(LC 6), I=-396(LC 7) P=1806(LC 1), I=2187(LC 1)							
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. FOP CHORD A-P=-1748/286, A-B=-1701/280, B-C=-2834/463, C-D=-3394/575, D-E=-3394/575, E-G=-3449/622, G-H=-2268/424, H-I=-2209/416 BOT CHORD M-O=-320/1701, L-M=-503/2834, K-L=-646/3449, J-K=-433/2268 WEBS A-O=-362/2276, B-O=-1522/290, B-M=-270/1546, C-M=-996/214, C-L=-172/765, D-L=-350/89, G-K=-290/1612, G-J=-1254/272, H-J=-556/3052								
 NOTES- 1) 2-ply truss to be connect Top chords connected a Bottom chords connected a Bottom chords connected Webs connected as foll 2) All loads are considered ply connections have be 3) Wind: ASCE 7-16; Vult= MWFRS (envelope) gab grip DOL=1.33 4) TCLL: ASCE 7-16; Pf=2 5) Unbalanced snow loads 6) Provide adequate draina 7) This truss has been des 8) Refer to girder(s) for trus 9) Provide mechanical com P=280, I=396. 10) This truss is designed referenced standard A 11) Graphical purlin repres 12) Hanger(s) or other con 1-4-8, 249 lb down and chord, and 249 lb down on bottom chord. The 	ted together with 10d (0.131"x3") nails is follows: 2x4 - 1 row at 0-9-0 oc, 2x6 ed as follows: 2x6 - 2 rows staggered a ows: 2x4 - 1 row at 0-9-0 oc. I equally applied to all plies, except if n een provided to distribute only loads no e115mph (3-second gust) Vasd=91mpf ble end zone; cantilever left and right e: (5.0 psf (Lum DOL=1.15 Plate DOL=1. have been considered for this design. age to prevent water ponding. igned for a 10.0 psf bottom chord live I ss to truss connections. nection (by others) of truss to bearing in accordance with the 2018 Internatio NSI/TPI 1. sentation does not depict the size or the inection device(s) shall be provided su d 40 lb up at 3-4-8, and 249 lb down ai n and 65 lb up at 9-4-8, and 249 lb down ai	as follows: - 2 rows staggered at 0-9- t 0-6-0 oc. oted as front (F) or back (ted as (F) or (B), unless o a; TCDL=6.0psf; BCDL=6. (sposed ; end vertical left a 15); Is=1.0; Rough Cat C; oad nonconcurrent with a plate capable of withstance nal Residential Code sect e orientation of the purlin a fificient to support concent and 40 lb up at 5-4-8, and wn and 65 lb up at 11-4-8 avice(s) is the responsibili	-0 oc. B) face in the LOAD CASE(S) s therwise indicated. Opsf; h=20ft; Cat. II; Exp C; End ind right exposed; Lumber DOL Fully Exp.; Ce=0.9; Cs=1.00; C ny other live loads. ting 100 lb uplift at joint(s) exceptions rated load(s) 249 lb down and 4 249 lb down and 40 lb up at 7- 8, and 1221 lb down and 241 lb ty of others.	ection. Ply to closed; =1.33 plate :t=1.10 pt (jt=lb) and ird. 40 lb up at 4-8 on top up at 12-8-8	September 2,2020			
WARNING - Verify desig	In parameters and READ NOTES ON THIS AND IN		PAGE MII-7473 rev. 5/19/2020 BEFORE I	ISE				

Design valid for use only with MiTek® connectors. This design is based only upon parameters and properly incorporate this design into the overall 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 dmage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss system, 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	Solaia	
					14:	2650628
201470	FLAT1	Roof Special Girder	1	2		
					Job Reference (optional)	
Heartland Truss, Inc, P	lattsburg, MO - 64477,			8.330 s Ju	22 2020 MiTek Industries, Inc. Tue Sep 1 08:19:30 2020 Pa	age 2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-1c2is5kVt2UoWJrB0CwdPas3rBLPP1ckSs3Wo?yi30R

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: A-H=-70, I-P=-20 Concentrated Loads (lb)

Vert: C=-199 K=-249 Q=-199 R=-199 S=-199 T=-249 U=-1221(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	Solaia	
						142650629
201470	FLAT2	Roof Special Girder	1	2	lah Deferance (antional)	
					Job Reference (optional)	
Heartland Truss, Inc, P	lattsburg, MO - 64477,			8.330 s Jul	22 2020 MiTek Industries, Inc. Tue Sep 1 08:19:31 2020	Page 2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-Voc43RI7eLcf8SQOZvRsxnOC2bn88amthVo4KSyi30Q

LOAD CASE(S) Standard Uniform Loads (plf) Vert: A-C=-70, D-F=-20 Concentrated Loads (lb) Vert: C=-980 G=-945 H=-945





NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-1-4, Interior(1) 2-1-4 to 2-6-12, Exterior(2R) 2-6-12 to 7-8-12, Exterior(2E) 7-8-12 to 10-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) G, E.

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







5) Provide adequate drainage to prevent water ponding.

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) I, F.

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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017



- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 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) I, F.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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16023 Swingley Ridge Rd Chesterfield, MO 63017



	2-2-15 2-2-15			8-10-9 6-7-10					<u>11-1-8</u> 2-2-15	
Plate Offsets (X,Y) [E	3:0-1-7,0-1-12], [C:0-3-0,0-	2-1], [E:0-3-0,0-2-1],	[F:0-1-7,0-1-12], [H:	0-0-0,0-1-12], [K:0-0-0,0	0-1-12]				
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) 10.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES Pl2014	CSI. TC 0.67 BC 0.48 WB 0.19 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.14 0.01	(loc) I-J I-J H	l/defl >999 >951 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 58 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP N	No.2			BRACING- TOP CHORI	D S	tructura	al wood s	heathing o	directly applied or 5-10-1	0 oc purlins,

BOT CHORD

TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD

REACTIONS. (size) K=0-3-8, H=0-3-8 Max Horz K=-88(LC 10) Max Uplift K=-78(LC 12), H=-78(LC 13) Max Grav K=661(LC 32), H=661(LC 32)

2x4 SP No.3

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

TOP CHORD B-C=-734/116, C-D=-490/114, D-E=-490/114, E-F=-734/116, B-K=-603/151, F-H=-603/151

BOT CHORD J-K=-51/507, I-J=-111/904, H-I=-14/507

WFBS C-J=0/304, D-J=-500/126, D-I=-500/126, E-I=0/304

NOTES-

WEBS

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-2-15, Exterior(2R) 2-2-15 to 8-10-9, Exterior(2E) 8-10-9 to 12-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 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) K, H.

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

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



except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-E.

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





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



September 2,2020

Job	Truss	Truss Type	Qty	Ply	Solaia	
					142650	3634
201470	G5	Hip Girder	1	1		
					Job Reference (optional)	
Heartland Truss, Inc, P	lattsburg, MO - 64477,			3.330 s Jul	22 2020 MiTek Industries, Inc. Tue Sep 1 08:19:41 2020 Page 2	2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-CjDsAssPHQtEL?BJ90cCLupwid5mU1BL_3Dbhtyi30G

LOAD CASE(S) Standard

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

Vert: A-B=-70, B-C=-70, C-F=-70, F-G=-70, G-H=-70, I-L=-20 Concentrated Loads (lb)

Vert: M=-29(F) N=-29(F) P=-29(F) R=-29(F) S=-29(F) T=3(F) U=-10(F) V=-10(F) W=-10(F) X=-10(F) Y=-10(F) Z=3(F)





LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins,
BOT CHORD	2x6 SP No.1		except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-I.
WEBS	2x4 SP No.3 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	D-R,E-O,H-O,I-K: 2x4 SP No.2		6-0-0 oc bracing: R-U.
		WEBS	1 Row at midpt I-J
		JOINTS	1 Brace at Jt(s): I, AF, AB, AA, W, V, T, N, M, P, Q, S

REACTIONS. (size) J=0-3-8, AH=0-3-8, U=0-3-8 Max Horz AH=263(LC 9) Max Uplift J=-763(LC 7), AH=-47(LC 10), U=-1199(LC 7)

Max Grav J=4262(LC 26), AH=2592(LC 27), U=8560(LC 26)

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

- TOP CHORD A-B=-1347/38, B-C=-1058/58, C-D=-170/982, D-E=-1522/306, E-G=-2892/540, G-H=-2894/541, H-I=-2631/523, I-J=-4086/728, AH-AJ=-1757/13, AJ-AK=-1689/32, A-AK=-1562/39
- BOT CHORD
 AC-AH=-219/287, X-AC=-168/1251, U-X=-106/765, R-U=-899/239, O-R=-367/1580, K-O=-524/2632

 WEBS
 AC-AE=-263/41, B-AB=-906/134, AB-AD=-881/124, X-AD=-868/103, X-Z=-119/1578, Z-AA=-99/1613, C-AA=-52/1625, C-W=-2944/321, W-Y=-3069/331, U-Y=-3130/315,
 - U-V=-4449/725, D-V=-4265/761, D-T=-754/4397, R-T=-758/4305, R-S=-2451/394,
 - E-S=-2516/459, E-Q=-409/2406, O-Q=-407/2221, O-P=-401/134, G-P=-555/128,
 - N-O=-104/358, H-N=-71/470, K-M=-1039/190, H-M=-991/204, I-K=-823/4647, A-AG=0/1377, AG-AI=-19/1466, AC-AI=-35/1358

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-6-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
- Webs connected as follows: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 4) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Bearing at joint(s) U considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Confirmedeometadolate or equivalent at bearing(s) U to support reaction shown.





Job	Truss	Truss Type	Qty	Ply	Solaia	
						I42650635
201470	GIRDER1	Half Hip Girder	1	2	Job Reference (optional)	
Heartland Truss Inc P	attsburg MO - 64477			8 330 s Jul	22 2020 MiTek Industries Inc. Tue Sep 1 08:19:49 2020) Page 2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-zFiurbzQOtt6IDordhl4ga8CjsIFMd2XqJ90zPyi308

NOTES-

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) AH except (jt=lb) J=763, U=1199.
- 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- (13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 589 lb down and 97 lb up at 4-6-0, and 614 lb down and 126 lb up at 6-6-0, and 687 lb down and 135 lb up at 8-6-0 on top chord, and 584 lb down and 50 lb up at 0-6-0, 709 lb down and 47 lb up at 2-6-0, 795 lb down and 79 lb up at 7-8-1, 737 lb down and 143 lb up at 10-6-6, 483 lb down and 135 lb up at 12-6-0, 483 lb down and 135 lb up at 12-6-0, 483 lb down and 135 lb up at 12-6-0, 483 lb down and 135 lb up at 12-6-0, 483 lb down and 135 lb up at 18-6-0, 483 lb down and 135 lb up at 12-6-0, 483 lb down and 135 lb up at 22-5-1, 1786 lb down and 300 lb up at 24-5-12, 483 lb down and 135 lb up at 24-6-0, and 483 lb down and 135 lb up at 22-6-0, and 483 lb down and 135 lb up at 28-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: A-C=-70, C-I=-70, J-AH=-20, Y-Z=-20, AD-AE=-20, AI-AJ=-20, S-AK=-20, M-BH=-20, BH-BI=-20, S-BI=-20 Concentrated Loads (lb)
 - Vert: X=-795(F) R=-483(B) L=-483(B) AL=-539(B) AM=-564(B) AN=-663(B) AP=-584(B) AQ=-709(B) AR=-737(B) AS=-483(B) AT=-483(B) AU=-483(B) AV=-483(B) AV=-483(B) AV=-2268(F=-1786, B=-483) AX=-483(B) AY=-483(B) AV=-483(B) AV=-



Job	Truss	Truss Type	Qty	Ply	Solaia		
201470	GIRDER2	Piggyback Base Girder	1	2		142650636	
Heartland Truss Inc.	Platteburg MO - 64477				Job Reference (optiona	I)	
Fleathand Truss, Inc,	Flattsburg, MO - 04477,		ID:CfAvtstDZ80LuoKI	N75r4zmz(QTwH-9Ns29M5JoGGY	7w8ymVSfdv56KHZRRWu8MWK6rGyi3?z	
	0 ₁ 11-3 3-9-2 7-2 0-11-3 2-9-15 3-3	2-12 10-8-6 14-2-0 5-10 3-5-10 3-5-10	4-3-3	21-9-14 3-4-11	25-2-9 28-1	0-12 3-3	
						0	
			5x6 =	:	3x6 = 5x6 =	2x4 Scale = 1:70.1	
т			IJ	Ø	K L AS		
		6.00 12 6x8	2x4				
		F		\			
		5x6 📁	FR `	//			
		3x8 = G					
q	3x6	AM					
10-9	3x6 📁	E					
	$10x16 = D^{AL}$			//			
	A B			L'	\mathbb{H}		
			X S				
	5×8 _{AE}		BF BG W 340	AV	R AW AX Q AZA	^Y ве ^{βA}	
I				10x ⁻	12 = 10x12 =	$8 \times 10 = 1$	
	AI AH AG AF 5x6	= AC AS Z AT	VBD ^{BE} U				
	8x18 MT18HS = 3x4 =	8x10 = 4x6 = 5x6	= 3x4 8x10 = 3x4 =) =			
	8x10 =	8	sx10				
	0-11-3 3-9-2 7-3	2-12 10-8-6 14-2-0	18-0-0 18-3-12	21-9-14	25-2-9 28-7	-12 28-10-12	
Ploto Offecto (X X) [A:	0-11-3 2-9-15 3-	5-10 3-5-10 3-5-10	3-10-0 0-3-12	3-6-2	3-4-11 3-5		
LOADING (pcf)	0-9-12,0-3-12], [J.0-3-0,0-2-0	<u>j, [Q.0-3-0,0-5-0], [K.0-3-0,0-5-0], [</u>	5.0-2-4,0-2-12J, [AC.0-	3-0,0-4-0	, [AF.0-3-6,0-4-0], [AI.0	<u></u>	
TCLL 25.0	SPACING- 2- Plate Grip DOI 1	0-0 CSI.	DEFL.	in (loc)	I/defl L/d	PLATES GRIP	
(Roof Snow=25.0)	Lumber DOL 1	.15 BC 0.55	Vert(CT) -0.1	1 R-S	>999 180	MT18HS 244/190	
BCLL 0.0	Rep Stress Incr	NO WB 0.96	Horz(CT) 0.0	3 P	n/a n/a	Weight: 677 lb ET - 20%	
BCDL 10.0							
LUMBER- TOP CHORD 2x4 SP No	0.2 *Except*		BRACING- TOP CHORD	Structura	al wood sheathing dire	ctly applied or 5-6-4 oc purlins.	
A-B: 2x6 S	SP No.1			except e	end verticals, and 2-0-0	oc purlins (6-0-0 max.): J-N, A-B.	
O-S: 2x6 SP No	SP 2400F 2.0E		WEBS	1 Row a	t midpt M-	10-0-0 oc bracing. P, L-P	
WEBS 2x4 SP No	0.3 *Except*		JOINTS	1 Brace	at Jt(s): M, A, AD, AB,	Y, AA, X	
WI-F. 2X0	5F NU. I, G-2, H-V. 284 5F NU).2					
REACTIONS. (size)	P=0-3-8, AI=0-3-8, V=0-3-8						
Max Uplif	t P=-1098(LC 7), AI=-492(LC	10), V=-1569(LC 10)					
Max Grav	P=6574(LC 30), AI=5436(L0	C 31), V=11449(LC 31)					
FORCES. (lb) - Max. Co	mp./Max. Ten All forces 25	0 (lb) or less except when shown.					
TOP CHORD B-C=-48 H-I=-152	67/375, C-D=-3850/319, D-F 28/332, I-J=-1572/342, J-K=-2	=-2583/206, F-G=-645/82, G-H=-22 2395/448. K-L=-1854/364. M-P=-10	21/1455, 11/280.				
A-AI=-44	486/388, A-B=-2593/212						
BOT CHORD AH-AI=- R-S=-38	370/213, AF-AH=-501/2309, 0/1432, Q-R=-473/2395, P-C	AC-AF=-530/4404, Z-AC=-348/296 =-374/1854, C-AG=-979/81, AE-AC	8, V-Z=-128/1010, G=-938/77,				
AD-AE=	-789/84, AB-AD=-744/80, Y-A	A=-515/76, AA-AB=-592/82	,				
WEBS S-U=-81 AC-AE=	/422, I-S=-479/111, AF-AG=- -1853/249, AC-AD=-342/291	281/952, D-AG=-227/704, D-AE=-1), F-AD=-279/2753, F-AB=-2870/35	1580/219, 59, Z-AB=-3201/364,				
Z-AA=-4	77/3989, G-AA=-406/3621, G	-Y=-3626/477, V-Y=-4437/553, V-	X=-5214/712,				
K-R=-27	1/1104, K-Q=-1442/285, L-Q	=-606/4067, L-P=-4825/766, B-AF=	=-164/2430,			ALERA	
J-S=-170	62/212, B-AH=-2655/217, A-A	AH=-387/4514				OF MISS	
NOTES-						ALE SOLV	
 2-ply truss to be connected and the connected and the	cted together with 10d (0.131 as follows: 2x4 - 1 row at 0-9	"x3") nails as follows: .0 oc. 2x6 - 2 rows staggered at 0-9	-0 oc			SCOTT M.	
Bottom chords connect	i op chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc. SEVIER SEVIER SEVIER						
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.							
ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.							
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed : end vertical left and right exposed: Lumber DOL=1.33 plate							
grip DOL=1.35 plate end zone, candideven en and night exposed, end ventical en and night exposed, cumber DOL=1.55 plate							
4) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 5) Unbalanced snow loads have been considered for this design.							
6) Provide adequate drainage to prevent water ponding.							
Continiserusa page gen des	7) All plates are MT20 plates unless otherwise indicated. September 2,2020						
WARNING - Verify desi	on parameters and READ NOTES ON		PAGE MII-7473 rev. 5/19/202	BEFORE	JSE.		
Design valid for use only v a truss system. Before use	with MiTek® connectors. This design	is based only upon parameters shown, and i	s for an individual building co	mponent, no	ot all		
building design. Bracing i is always required for state	ndicated is to prevent buckling of indi ility and to prevent collapse with pos	vidual truss web and/or chord members only sible personal injury and property damage	 Additional temporary and p or general guidance regarding 	ermanent br	racing	MiTek	
fabrication, storage, delive Safety Information avail	ery, erection and bracing of trusses an able from Truss Plate Institute, 2670	nd truss systems, see ANSI/TPI1 Q Crain Highway, Suite 203 Waldorf, MD 2060	uality Criteria, DSB-89 and	BCSI Build	ing Component	16023 Swingley Ridge Rd Chesterfield, MO 63017	
1							

Job	Truss	Truss Type	Qty	Ply	Solaia	
						142650636
201470	GIRDER2	Piggyback Base Girder	1	2		
				_	Job Reference (optional)	
Heartland Truss. Inc. P	lattsburg, MO - 64477.			8.330 s Ju	22 2020 MiTek Industries, Inc. Tue Sep 1 08:20:00 2020	Page 2

ID:CfAvtstDZ80LuoKN75r4zmzQTwH-9Ns29M5JoGGY7w8ymVSfdv56KHZRRWu8MWK6rGyi3?z

NOTES-

- 9) Bearing at joint(s) V considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) P=1098, Al=492, V=1569.
- 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 806 lb down and 78 lb up at 3-11-4, and 825 lb down and 240 lb up at 28-7-0 on top chord, and 1045 lb down and 125 lb up at 0-1-12, 1014 lb down and 126 lb up at 2-2-12, 1012 lb down and 127 lb up at 2-6-0, 984 lb down and 130 lb up at 4-6-0, 950 lb down and 135 lb up at 6-6-0, 906 lb down and 141 lb up at 8-6-0, 852 lb down and 148 lb up at 10-8-6, 787 lb down and 156 lb up at 12-6-0, 718 lb down and 163 lb up at 14-6-0, 755 lb down and 197 lb up at 16-6-0, 795 lb down and 79 lb up at 18-0-0, 844 lb down and 185 lb up at 18-3-12, 795 lb down and 79 lb up at 19-11-4, 844 lb down and 190 lb up at 20-6-0, 795 lb down and 79 lb up at 21-11-4, 844 lb down and 190 lb up at 22-6-0, 795 lb down and 79 lb up at 23-11-4, and 844 lb down and 190 lb up at 22-6-0, 795 lb down and 79 lb up at 25-11-4, and 844 lb down and 190 lb up at 22-6-0, 795 lb down and 79 lb up at 25-11-4, and 844 lb down and 190 lb up at 27-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: B-J=-70, J-M=-70, M-N=-70, T-AI=-20, O-S=-20, W-Y=-20, C-AA=-20, A-B=-70, Y-AA=-20 Concentrated Loads (lb)
 - Vert: M=-800(F) AI=-1045(F) S=-795(B) D=-756(B) Z=-852(F) R=-795(B) AP=-2026(F) AQ=-984(F) AR=-950(F) AS=-906(F) AT=-787(F) AU=-844(F) AV=-795(B) AW=-844(F) AX=-844(F) AX=-795(B) AZ=-844(F) AS=-795(B) BB=-844(F) BC=-796(B) BD=-718(F) BE=-755(F)



Job	Truss	Truss Type	Qty	Ply	Solaia	
201470	H1	JACK-CLOSED	9	1		142650637
Heartland Truss, Inc, F	lattsburg, MO - 64477,			8.330 s Ju	Job Reference (option I 22 2020 MiTek Industri	al) ries, Inc. Tue Sep 1 08:20:01 2020 Page 1
		-0-10-12 3-11-4	ID:CfAvtstDZ80	LuoKN75r -8	4zmzQTwH-dZQQMi6y	zZOPk3j9KCzu96eDZhvkAACIaA3fNiyi3?y
		0-10-12 3-11-4	3-11	-4	—	
				3x4		Scale = 1:43.4
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		G				
		3x4				
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		A 10-0			1	
					<u>A</u>	
		F 3x4		3x6	E =	
			7-10-8 7-10-8			
LOADING (psf)	SPACING- 2-	D-0 CSI.	DEFL.	in (loc)	l/defl L/d	PLATES GRIP
(Roof Snow=25.0)	Plate Grip DOL 1	15 TC 0.76	Vert(LL) -0.1 Vert(CT) -0.2	3 E-F	>717 240 >367 180	MT20 244/190
TCDL 10.0 BCLL 0.0	Rep Stress Incr Y	ES WB 0.19	Horz(CT) 0.0	0 E	n/a n/a	Woight 47 lb ET - 200/
BCDL 10.0						Weight. 47 ID FT = 20%
TOP CHORD 2x4 SP No	0.2		BRACING- TOP CHORD	Structura	al wood sheathing dire	ectly applied or 6-0-0 oc purlins,
BOT CHORD 2x4 SP No WEBS 2x4 SP No	o.2 o.3		BOT CHORD	except e Rigid ce	end verticals. iling directly applied o	r 10-0-0 oc bracing.
REACTIONS. (size)	F=0-3-8 F=Mechanical					-
Max Horz	F=279(LC 9)					
Max Opint Max Grav	F=489(LC 19), E=503(LC 19)	3)				
FORCES. (Ib) - Max. Cor	mp./Max. Ten All forces 250) (Ib) or less except when shown.				
TOP CHORD B-F=-405	5/149, B-C=-415/78					
WEBS C-E=-32	7/247					
NOTES-						
 Wind: ASCE 7-16; Vult= MWFRS (envelope) gab 	115mph (3-second gust) Vas ble end zone and C-C Exterio	d=91mph; TCDL=6.0psf; BCDL=6 r(2E) -0-10-12 to 2-1-4. Interior(1) 2	.0psf; h=20ft; Cat. II; E 2-1-4 to 3-5-13. Exterio	xp C; Enc pr(2R) 3-5	closed; -13 to 7-8-12	
zone; cantilever left and	right exposed ; end vertical I	eft and right exposed;C-C for mem	bers and forces & MW	FRS for re	eactions	
2) TCLL: ASCE 7-16; Pf=2	5.0 psf (Lum DOL=1.15 Plate	DOL=1.15); Is=1.0; Rough Cat C;	Fully Exp.; Ce=0.9; C	s=1.00; C	t=1.10	
4) This truss has been des	s have been considered for the	is design. live load of 16.0 psf or 2.00 times fl	at roof load of 25.0 ps	f on overh	angs	
non-concurrent with oth 5) This truss has been des	er live loads. signed for a 10.0 psf bottom c	hord live load nonconcurrent with a	nv other live loads.			
 6) Refer to girder(s) for true 7) Provide mechanical con 	ss to truss connections.	boaring plate capable of withstan	ling 100 lb unlift at joir	t(c) E ovo	vont (it_lb)	Sumo
E=115.						SE OF MISSO
8) This truss is designed in referenced standard AN	accordance with the 2018 Ir	iternational Residential Code section	ons R502.11.1 and R8	02.10.2 ai	nd	SCOTT M R
						SEVIER
					•	A COUL SEMMENT
						PE-2001018807
						Ser ENGLE
						WAL E
						September 2 2020

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Solaia	
201470	H1A	Roof Special Supported Gable	1	1		142650638
Heartland Truss, Inc,	Plattsburg, MO - 64477,			8.330 s Ju	Job Reference (optional) 22 2020 MiTek Industries	s, Inc. Tue Sep 1 08:20:02 2020 Page 1
		ID:C	CfAvtstDZ80Luc	oKN75r4zr	nzQTwH-5m_pa27aKtWG	MDILuwU7iKBMp5FqvcKRpqpDv9yi3?x
		7-10-	-8 -8			
				04		Scale - 1:43.4
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		3x4		3x6	=	
		7-10-	-8			
		7-10-	-8			
LOADING (psf)	SPACING- 2	0-0 CSI DE	FI	in (loc)	l/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL	.15 TC 0.86 Ve	rt(LL) -0.1	3 D-E	>697 240	MT20 244/190
TCDL 10.0	Lumber DOL 1	.15 BC 0.55 Ve	ert(CT) -0.2	5 D-E	>358 180	
BCLL 0.0	Code IRC2018/TPI20	14 Matrix-MS	0.0	0 0	n/a n/a	Weight: 46 lb FT = 20%
BCDL 10.0						
LUMBER- TOP CHORD 2x4 SP N	n 2	BRA TOP	CHORD	Structura	al wood sheathing direct	ly applied or 6-0-0 oc purlins
BOT CHORD 2x4 SP N	0.2		onone	except e	nd verticals.	
WEBS 2x4 SP N	0.3	BOT	CHORD	Rigid cei	iling directly applied or 1	0-0-0 oc bracing.
REACTIONS. (size)	E=0-3-8, D=0-3-8					
Max Horz	z E=264(LC 9)					
Max Upli Max Gray	t D=-119(LC 12) / E=411(LC 18) D=508(LC 1	8)				
Wax Old	(20.10), D=000(20.1	<i>.</i> ,				
FORCES. (lb) - Max. Co	mp./Max. Ten All forces 25	0 (lb) or less except when shown.				
BOT CHORD D-E=-13	38/272					
WEBS B-D=-33	39/353					
NOTES-						
1) Wind: ASCE 7-16; Vult	=115mph (3-second gust) Va	sd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=2	20ft; Cat. II; E	xp C; Enc	losed;	

- MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 4-8-12, Corner(3E) 4-8-12 to 7-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) D=119.

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.







	[0.0 0 0,0 1 12]			
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 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 0.94 BC 0.15 WB 0.09 Matrix MS	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 E-F >999 240 Vert(CT) -0.02 E-F >999 180 Horz(CT) -0.00 E n/a n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2018/1PI2014	Matrix-MS		weight: 37 ib FT = 20%
LUMBER- TOP CHORD 2x6 SP	No.1		BRACING- TOP CHORD Structural wood sheathing dire	ctly applied or 4-3-3 oc purlins,

BOT CHORD

except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing.

TOP CHORD2x6 SP No.1BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (size) F=0-10-7, E=Mechanical

Max Horz F=150(LC 7) Max Uplift F=-140(LC 6), E=-124(LC 16)

Max Grav F=741(LC 17), E=110(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD B-F=-705/167

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate
- grip DOL=1.33 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) except (jt=lb) F=140, E=124.
- 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.







BOT CHORD

except end verticals

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

I OP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (size) E=0-5-9, C=Mechanical, D=Mechanical Max Horz E=61(LC 10) Max Uplift E=-56(LC 6), C=-34(LC 10), D=-5(LC 16) Max Grav E=434(LC 17), C=80(LC 17), D=44(LC 5)

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

TOP CHORD B-E=-392/75

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) E, C, D.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 11 lb down and 21 lb up at 0-7-15 on top chord, and 4 lb down and 1 lb up at 0-7-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: A-B=-70, B-C=-70, D-E=-20 Concentrated Loads (lb)

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Vert: G=1(F)
```







			1-10-1	
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.57 BC 0.17 WB 0.00 Matrix-MR	DEFL. in (loc) I/defl L Vert(LL) 0.00 D-E >999 24 Vert(CT) 0.00 D-E >999 18 Horz(CT) -0.01 C n/a n	/d PLATES GRIP 40 MT20 244/190 30 /a Weight: 9 lb FT = 20%
LUMBER-			BRACING-	

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

2x4 SP No.3

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-10-11 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. C=Mechanical, D=Mechanical, E=0-5-9 (size) Max Horz E=48(LC 7) Max Uplift C=-65(LC 16), D=-24(LC 16), E=-65(LC 6) Max Grav C=13(LC 17), D=27(LC 5), E=403(LC 17)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD B-E=-358/75

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) C, D, E.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 16 lb up at 0-5-12 on top chord, and 5 lb down and 8 lb up at 0-5-12 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: A-B=-70, B-C=-70, D-E=-20

Concentrated Loads (lb) Vert: G=1(B)







			1-6-5	
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI. TC 0.57 BC 0.16 WB 0.00 Matrix-MR	DEFL. in (loc) l/defl L/d Vert(LL) 0.00 D-E >999 240 Vert(CT) 0.00 D-E >999 180 Horz(CT) -0.01 C n/a n/a	

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD

Structural wood sheathing directly applied or 1-6-15 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

- REACTIONS. (size) C=Mechanical, D=Mechanical, E=0-5-9 Max Horz E=45(LC 7) Max Uplift C=-90(LC 16), D=-33(LC 16), E=-71(LC 6) Max Grav C=19(LC 34), D=20(LC 5), E=406(LC 16)
- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown. TOP CHORD B-E=-354/78

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) C, D, E.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 16 lb up at 0-5-12 on top chord, and 5 lb down and 8 lb up at 0-5-12 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

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: A-B=-70, B-C=-70, D-E=-20
 - Concentrated Loads (lb) Vert: G=1(B)







					1-3-1				
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI. TC 0.57 BC 0.15 WB 0.00 Matrix-MR	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 -0.01	(loc) E D-E C	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 8 lb	GRIP 244/190 FT = 20%

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD

Structural wood sheathing directly applied or 1-3-11 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) C=Mechanical, D=Mechanical, E=0-5-9 Max Horz E=42(LC 7) Max Uplift C=-121(LC 16), D=-42(LC 16), E=-79(LC 6) Max Grav C=30(LC 34), D=14(LC 5), E=435(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD B-E=-371/83

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D, E except (jt=lb) C=121.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 54 lb down and 15 lb up at 0-5-12 on top chord, and 5 lb down and 8 lb up at 0-5-12 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: A-B=-70, B-C=-70, D-E=-20 Concentrated Loads (lb)

Vert: G=1(F)







			5-1-0 5-1-0				
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0- Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr YE Code IRC2018/TPI2014	0 CSI. 5 TC 0.50 5 BC 0.20 S WB 0.00 Matrix-MR	DEFL. in Vert(LL) -0.02 Vert(CT) -0.04 Horz(CT) -0.00	(loc) l/defl D-E >999 D-E >999 D n/a	L/d 240 180 n/a	PLATES MT20 Weight: 24 lb	GRIP 244/190 FT = 20%
LUMBER-			BRACING-				

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD 2x4 SP No.3 WEBS

REACTIONS. D=Mechanical, E=0-6-0 (size) Max Horz E=141(LC 9)

Max Uplift D=-47(LC 12), E=-67(LC 12) Max Grav D=281(LC 19), E=524(LC 19)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD B-E=-487/271

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) D, E.
- 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 5-1-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.





TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.54 BC 0.17 WB 0.00 Matrix-MR	DEFL. in (loc) Vert(LL) 0.00 D-E Vert(CT) 0.00 D-E Horz(CT) -0.01 C	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 244/190 Weight: 10 lb FT = 20%
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TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) E=0-6-0, C=Mechanical, D=Mechanical Max Horz E=58(LC 12) Max Uplift E=-52(LC 12), C=-68(LC 18), D=-23(LC 18) Max Grav E=432(LC 19), C=14(LC 19), D=28(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD B-E=-384/202

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-9-12 to 1-2-4, Interior(1) 1-2-4 to 1-11-7 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) E, C, D.

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.







TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) C=Mechanical, B=0-3-8, D=Mechanical

Max Horz B=76(LC 12) Max Uplift C=-47(LC 12), B=-26(LC 12)

Max Grav C=140(LC 19), B=308(LC 19), D=58(LC 5)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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 www.enveloped.com/decompositions/actives/beautilever.pdf
- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) C, B.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.







BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2

REACTIONS. (size) C=Mechanical, B=0-3-8, D=Mechanical Max Horz B=38(LC 12) Max Uplift C=-16(LC 12), B=-25(LC 12), D=-8(LC 18)

Max Grav C=34(LC 19), B=189(LC 19), D=19(LC 5)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) C, B, D.
- 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 1-2-9 oc purlins.

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





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

Structural wood sheathing directly applied or 2-5-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) C=Mechanical, B=0-3-8, D=Mechanical Max Horz B=61(LC 12) Max Uplift C=-35(LC 12), B=-25(LC 12)

Max Grav C=99(LC 19), B=256(LC 19), D=43(LC 5)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 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) C, B.
- 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.







TODL	10.0	
BCLL	0.0	Rep Siless inci i fea
DOLL	0.0	Code IRC2018/TPI2014
BCDL	10.0	

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

BRACING-TOP CHORD BOT CHORD

Horz(CT)

0.00

С

n/a

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

Weight: 9 lb

n/a

REACTIONS. C=Mechanical, B=0-3-8, D=Mechanical (size) Max Horz B=56(LC 12) Max Uplift C=-31(LC 12), B=-24(LC 12) Max Grav C=84(LC 19), B=239(LC 19), D=38(LC 5)

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=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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.

YES

WB

Matrix-MP

0.00

- 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) C, B.
- 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.



FT = 20%





3x6 ||

Plate Offsets (X,Y) [B:0-0	0-0,0-0-8], [B:0-1-0,0-5-3]						
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) 10.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.11 BC 0.04 WB 0.00 Matrix-P	DEFL. ir Vert(LL) 0.00 Vert(CT) 0.00 Horz(CT) 0.00	n (loc)) A) A) D	l/defl L/d n/r 120 n/r 90 n/a n/a	PLATES MT20 Weight: 11 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2	2		BRACING- TOP CHORD	Structura except e	al wood sheathing dire	ectly applied or 2-2-0	oc purlins,

WEBS 2x4 SP No.3 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) D=2-2-0, B=2-2-0

Max Horz B=53(LC 9) Max Uplift D=-18(LC 12), B=-31(LC 12) Max Grav D=102(LC 19), B=234(LC 19)

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=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs
- non-concurrent with other live loads. 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 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) D, B.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) B.

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.









Plate Offsets (X,Y) [B:	0-0-0,0-0-4]				
LOADING (psf) TCLL 25.0 (Roof Snow=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 0.11 BC 0.04 WB 0.00 Matrix-MP	DEFL. in (loc Vert(LL) 0.00 C Vert(CT) 0.00 C Horz(CT) -0.00 C	:) I/defl L/d G >999 240 G >999 180 C n/a n/a	PLATES GRIP MT20 244/190 Weight: 5 lb FT = 20%
LUMBER-	1		BRACING-		

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

REACTIONS. C=Mechanical, B=0-3-8, D=Mechanical (size) Max Horz B=35(LC 12) Max Uplift C=-13(LC 12), B=-26(LC 12), D=-13(LC 18) Max Grav C=25(LC 19), B=183(LC 19), D=16(LC 5)

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=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) C, B, D.
- 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 1-0-11 oc purlins.

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





LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 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 0.80 BC 0.26 WB 0.00 Matrix-MR	DEFL. Vert(LL) C Vert(CT) C Horz(CT) -C	in (loc)).00 E).00 E).02 C	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 9 lb	GRIP 244/190 FT = 20%
	10.2		BRACING-	Structu	alwood	boothing dire	actly applied or 0.11	15 oc purling

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 0-11-15 oc	ourlins,
BOT CHORD 2x4 SP No.2 except end verticals.	
WEBS2x4 SP No.3BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.	

REACTIONS. (size) E=0-6-0, C=Mechanical, D=Mechanical Max Horz E=72(LC 9) Max Uplift E=-16(LC 12), C=-217(LC 18), D=-43(LC 9)

Max Grav E=527(LC 18), C=12(LC 8), D=37(LC 10)

TOP CHORD B-E=-469/287

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) E, D except (jt=lb) C=217.
- 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.





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



Max Horz E=168(LC 9) Max Uplift E=-16(LC 12), D=-73(LC 9) Max Grav E=397(LC 19), D=282(LC 19)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD B-E=-375/158

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) E, D.
- 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.







FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD B-F=-448/161

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-1-4, Exterior(2R) 2-1-4 to 3-11-6, Exterior(2E) 3-11-6 to 4-2-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

5) Provide adequate drainage to prevent water ponding.

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

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

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

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.

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







BOT CHORD

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (size) F=0-3-8, E=Mechanical

Max Horz F=117(LC 9) Max Uplift F=-34(LC 12), E=-51(LC 9)

Max Grav F=444(LC 30), E=228(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD B-F=-400/165

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-12 to 2-1-4, Exterior(2R) 2-1-4 to 2-8-15, Exterior(2E) 2-8-15 to 4-2-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

5) Provide adequate drainage to prevent water ponding.

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

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

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

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.

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



except end verticals, and 2-0-0 oc purlins: C-D.

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

16023 Swingley Ridge Rd Chesterfield, MO 63017



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (size) E=Mechanical, I

(size) E=Mechanical, F=0-3-8 Max Horz F=79(LC 7) Max Uplift E=-52(LC 7), F=-53(LC 10)

Max Grav E=305(LC 27), F=437(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD B-F=-284/94

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate orip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

5) Provide adequate drainage to prevent water ponding.

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

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

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

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.

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

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down and 39 lb up at 1-6-9, and 102 lb down and 54 lb up at 2-5-6 on top chord, and 12 lb down and 2 lb up at 1-6-9, and 25 lb down at 2-5-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

12) 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: A-B=-70, B-C=-70, C-D=-70, E-F=-20 Concentrated Loads (lb)

Vert: C=-5(F) G=-70(F) H=2(F) I=-25(F)



Structural wood sheathing directly applied or 4-4-10 oc purlins,

except end verticals, and 2-0-0 oc purlins: C-D.

Rigid ceiling directly applied or 6-0-0 oc bracing




			1-11-13	
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 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 0.26 BC 0.13 WB 0.00 Matrix-MR	DEFL. in (loc) I/defl L/d Vert(LL) 0.00 D-E >999 240 Vert(CT) -0.00 D-E >999 180 Horz(CT) -0.00 C n/a n/a	PLATES GRIP MT20 244/190 Weight: 10 lb FT = 20%
			DD 4 OINO	

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-11-13 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) E=0-3-8, C=Mechanical, D=Mechanical Max Horz E=79(LC 12) Max Uplift C=-50(LC 12), D=-6(LC 12) Max Grav E=266(LC 19), C=72(LC 19), D=33(LC 5)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) C, D.
- 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

Plate Offsets (X,Y) [C	:0-3-0,0-0-4]								
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 0.0 BCLL 0.0 BCDL 10.0	SPACING- 2-1 Plate Grip DOL 1 Lumber DOL 1 Rep Stress Incr 1 Code IRC2018/TPI201	0-0 CSI. .15 TC .15 BC NO WB 14 Matrix	0.20 V 0.04 V 0.00 H -MR	EFL. in ert(LL) 0.00 ert(CT) -0.00 orz(CT) -0.00	(loc) F F E	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 10 lb	GRIP 244/190 FT = 20%
LUMBER-			BR	ACING-					

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (size) E=Mechanical, F=0-3-8

Max Horz F=59(LC 7) Max Uplift E=-52(LC 50), F=-49(LC 10)

Max Grav E=98(LC 27), F=258(LC 28)

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=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs
- non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E, F.
- 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 62 lb down and 153 lb up at 0-8-15 on top chord, and 15 lb down and 34 lb up at 0-8-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) 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: A-B=-70, B-C=-70, C-D=-70, E-F=-20 Concentrated Loads (lb)





Structural wood sheathing directly applied or 1-11-13 oc purlins,

except end verticals, and 2-0-0 oc purlins: C-D.

Rigid ceiling directly applied or 6-0-0 oc bracing.

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 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





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201470				Piy 1	Solala	14265066
Heartland Truss Inc.	Plattsburg MO - 64477		1	8 330 e lu	Job Reference (option	al) rios, Inc., Tuo Sep. 1.08:20:10.2020, Page 1
Heartianu Truss, inc,	Fiansburg, WO - O44TT,	4.0.3	ID:CfAvtstDZ8	0LuoKN75	r4zmzQTwH-51WE8sK	EK5fruq5cN_I6uvORzyA_OI4xjzQc0gyi3?g
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			9-2-14			
Plate Offsets (X Y)	[D:0-1-15 Edge]		9-2-14		1	
LOADING (psf)	SPACING-	2-0-0 CSI	DEEL	in (loc)	l/defl l/d	PLATES GRIP
TCLL 25.0 (Roof Snow=25.0)	Plate Grip DOL	1.15 TC 0.19	Vert(LL) n	/a -	n/a 999	MT20 244/190
TCDL 10.0 BCLL 0.0	Rep Stress Incr	YES WB 0.23	Horz(CT) 0.0	7a - 00 H	n/a 999 n/a n/a	
BCDL 10.0	Code IRC2018/1PI2	014 Matrix-S				Weight: 82 lb F1 = 20%
TOP CHORD 2x4	SP No.2		BRACING- TOP CHORD	Structura	al wood sheathing dire	ectly applied or 6-0-0 oc purlins,
BOT CHORD 2x4 WEBS 2x4	SP No.2 SP No.3		BOT CHORD	except e Rigid ce	end verticals, and 2-0-0 iling directly applied o	0 oc purlins (6-0-0 max.): D-G. r 10-0-0 oc bracing.
OTHERS 2x4	SP No.3		WEBS	1 Row a	t midpt G	-H, F-I, E-J
REACTIONS. AI (lb) - Max	l bearings 9-2-14. x Horz A=334(LC 12)					
Ma	k Uplift All uplift 100 lb or less at L=-256(LC 12)	joint(s) H, I except A=-272(LC 10), J	J=-130(LC 12), K=-310	(LC 12),		
Ma	Grav All reactions 250 lb or les	s at joint(s) H except A=585(LC 12)	, I=399(LC 28), J=290(LC 28), K=	=435(LC	
FORCES (lb) - M	av Comp /Max Ten - All forces 2	50 (lb) or less excent when shown				
TOP CHORD A-	B=-753/594, B-C=-473/377	05/284 P L = 224/206				
NOTES	I=-336/143, E-J=-230/239, C-R=-3	95/564, D-L=-524/500				
1) Wind: ASCE 7-16	; Vult=115mph (3-second gust) V	asd=91mph; TCDL=6.0psf; BCDL=6	6.0psf; h=20ft; Cat. II; E	xp C; End	losed;	
MWFRS (envelop members and for	ces & MWFRS for reactions show	er(3) zone; cantilever left and right e n; Lumber DOL=1.33 plate grip DOL	xposed ; end vertical le _=1.33	ett expose	d;C-C for	
 2) TCLL: ASCE 7-10 3) Unbalanced snow 	6; Pf=25.0 psf (Lum DOL=1.15 Pla v loads have been considered for t	ite DOL=1.15); ls=1.0; Rough Cat C his design.	; Fully Exp.; Ce=0.9; C	s=1.00; C	t=1.10	
 4) Provide adequate 5) Gable requires compared 	e drainage to prevent water pondir ontinuous bottom chord bearing.	ıg.				ALLER
6) This truss has be7) Provide mechanic	en designed for a 10.0 psf bottom cal connection (by others) of truss	chord live load nonconcurrent with a to bearing plate capable of withstan	any other live loads. Iding 100 lb uplift at joir	nt(s) H, I e	xcept (jt=lb)	F OF MISS
A=272, J=130, K 8) This truss is designed	=310, L=256. aned in accordance with the 2018	International Residential Code secti	ons R502.11.1 and R8	02.10.2 ar	nd	SCOTT M
referenced stand	ard ANSI/TPI 1.	size or the orientation of the purlin a	along the top and/or bo	ttom chore	4	SEVIER SEVIER
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September 2,2020

Job	Truss	Truss Type	Otv	Plv	Solaia	
201470	LAY1B	GABLE	1	, 1		142650661
Heartland Truss, Inc, F	Plattsburg, MO - 64477,			.330 s Ju	Job Reference (optional 22 2020 MiTek Industrie) es, Inc. Tue Sep 1 08:20:20 2020 Page 1
	, , ,		ID:CfAvtstDZ80Lu 4-5-4	oKN75r4z	zmzQTwH-ZD4cMCLs5P	niW_goxipLR7wahLW27mx5ydA9Y6yi3?f
			4-5-4			
			С			Scale = 1:44.8
		22.36 12 2x4	2x4 			
		2x4 //	E D	п		
		ł	2x4 2x4	П		
LOADING (psf)	SPACING- 2-)-0 CSI	DEEL		l/defl l/d	PLATES GRIP
TCLL 25.0 (Roof Snow=25.0)	Plate Grip DOL 1	15 TC 0.26	Vert(LL) n/a	a -	n/a 999 n/a 999	MT20 244/190
TCDL 10.0 BCLL 0.0	Rep Stress Incr Y Code IRC2018/TPI201	ES WB 0.19 4 Matrix-P	Horz(CT) 0.00)	n/a n/a	Weight: 37 lb FT = 20%
LUMBER-			BRACING-			
TOP CHORD2x4 SP NoBOT CHORD2x4 SP NoWEBS2x4 SP NoOTHERS2x4 SP No	.2 .2 .3 .3		TOP CHORD BOT CHORD	Structura except e Rigid cei	al wood sheathing direc nd verticals. lling directly applied or	tty applied or 4-5-4 oc purlins, 10-0-0 oc bracing.
REACTIONS. (size) Max Horz Max Uplift Max Grav	A=4-5-4, D=4-5-4, E=4-5-4 A=294(LC 12) A=-157(LC 10), D=-100(LC A=416(LC 12), D=113(LC 12)	12), E=-377(LC 12) 8), E=366(LC 18)				
FORCES.(lb) - Max. CorTOP CHORDA-B=-623WEBSB-E=-464	np./Max. Ten All forces 25(3/483 4/523) (Ib) or less except when shown.				
 NOTES- 1) Wind: ASCE 7-16; Vult= MWFRS (envelope) gab members and forces & I 2) TCLL: ASCE 7-16; Pf=2 3) Unbalanced snow loads 4) Gable requires continuo 5) This truss has been des 6) Provide mechanical con A=157, E=377. 7) This truss is designed in referenced standard AN 	115mph (3-second gust) Vas le end zone and C-C Corner WWFRS for reactions shown; 5.0 psf (Lum DOL=1.15 Plate have been considered for th us bottom chord bearing. igned for a 10.0 psf bottom c nection (by others) of truss to a accordance with the 2018 Ir SI/TPI 1.	d=91mph; TCDL=6.0psf; BCDL=6. (3) zone; cantilever left and right ex- Lumber DOL=1.33 plate grip DOL= 5 DOL=1.15); Is=1.0; Rough Cat C; s design. nord live load nonconcurrent with a bearing plate capable of withstand ternational Residential Code section	Opsf; h=20ft; Cat. II; Exposed ; end vertical lef =1.33 Fully Exp.; Ce=0.9; Cs iny other live loads. ding 100 lb uplift at joint ons R502.11.1 and R80	cp C; Enc t exposed =1.00; C c(s) D exc 2.10.2 ar	losed; t;C-C for t=1.10 wept (jt=lb) nd	SCOTT M. SEVIER NUMBER PE-2001018807 PE-2001018807

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September 2,2020





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Job	Truss	Truss Type	Qtv	Plv	Solaia]
201470	LAY3	GABLE	2	, 1		142650663
Heartland Truss, Inc, F	Plattsburg, MO - 64477,			.330 s Ju	Job Reference (optional I 22 2020 MiTek Industr	al) ies, Inc. Tue Sep 1 08:20:21 2020 Page 1
		L	ID:CfAvtstDZ8 2-9-11	LuoKN7	5r4zmzQTwH-1Pe_ZYL	VsjvZ88F?VPKazKTjllsVsDuEBHvj4Yyi3?e
			2-9-11			
		22.36 12	C 2x4			
		2x4 // 2x4 	2x4			
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 10.0 BCLL 0.0	SPACING- 2- Plate Grip DOL 1 Lumber DOL 1 Rep Stress Incr Y Code IPC2018/TDI20	0-0 CSI. 15 TC 0.43 15 BC 0.03 ES WB 0.14	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	n (loc) a - a -) D	l/defl L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 244/190
BCDL 10.0 LUMBER- TOP CHORD 2x4 SP No BOT CHORD 2x4 SP No WEBS 2x4 SP No OTHERS 2x4 SP No	.2 .2 .3 .3		BRACING- TOP CHORD BOT CHORD	Structura except e Rigid ce	al wood sheathing dire and verticals. iling directly applied or	rctly applied or 2-9-11 oc purlins, 10-0-0 oc bracing.
REACTIONS. (size) Max Horz Max Uplift Max Grav	A=2-9-11, D=2-9-11, E=2-9- A=168(LC 9) A=-234(LC 10), D=-121(LC A=286(LC 12), D=136(LC 2)	11 9), E=-287(LC 12) 1), E=275(LC 21)				
FORCES. (lb) - Max. Cor TOP CHORD A-B=-326 WEBS B-E=-353	np./Max. Ten All forces 25(5/261 3/398) (Ib) or less except when shown.				
NOTES- 1) Wind: ASCE 7-16; Vult= MWFRS (envelope) gab exposed;C-C for member 2) TCLL: ASCE 7-16; Pf=2 3) Unbalanced snow loads 4) Gable requires continued 5) This truss has been dess 6) Provide mechanical con- joint D and 287 lb uplift 7) This truss is designed in	115mph (3-second gust) Vas ble end zone and C-C Corner ers and forces & MWFRS for 5.0 psf (Lum DOL=1.15 Plate have been considered for th us bottom chord bearing. igned for a 10.0 psf bottom c nection (by others) of truss to at joint E. accordance with the 2018 Ir	d=91mph; TCDL=6.0psf; BCDL=6.0p (3) zone; cantilever left and right expore reactions shown; Lumber DOL=1.33 2 DOL=1.15); Is=1.0; Rough Cat C; F is design. hord live load nonconcurrent with any 2 bearing plate capable of withstandir ternational Residential Code section	osf; h=20ft; Cat. II; Ex osed ; end vertical lef plate grip DOL=1.33 ully Exp.; Ce=0.9; Cs v other live loads. ng 234 lb uplift at joint s R502.11.1 and R80	cp C; End t and righ =1.00; C ∴ A, 121 II 2.10.2 at	closed; ht :t=1.10 b uplift at nd	Samo
reterenced standard AN	SV/IPI1.				Å	SCOTT M. SEVIER NUMBER PE-2001018807
						September 2,2020

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BRACING-

TOP CHORD

BOT CHORD

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

LUMBER-

WEBS

OTHERS

TOP CHORD

BOT CHORD

REACTIONS.

(lb) -

NOTES-1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-1 to 3-5-1, Exterior(2R) 3-5-1 to 4-5-11, Exterior(2E) 4-5-11 to 6-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

Max Grav All reactions 250 lb or less at joint(s) A, E, F except G=281(LC 18)

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

4) Gable requires continuous bottom chord bearing.

2x4 SP No.2

2x4 SP No.2

2x4 SP No.3

2x4 SP No.3

All bearings 6-4-0.

Max Horz A=103(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) A, E, F, G

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) A, E, F, G.

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.



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

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

except end verticals.

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Job	Truss	Truss Type	C	ty P	Ply	Solaia		
201470	N44	Digguback Base	1		4			142650666
201470		Piggyback base	4		1	Job Reference (optional)	
Heartland Truss, Inc,	Plattsburg, MO - 64477,	0-0 <u>1</u> 1 0-0 ⁻¹ 1	ID:CfAv 2 3-1-10 6-3-4 2 3-0-14 3-1-10	8.3 tstDZ80Lu ⊣	330 s Ju uoKN75r	22 2020 MiTek Industrie 4zmzQTwH-S_J7BZON	s, Inc. Tue Sep 1 08 9el8?czaAYuHbz5lpzi	3:20:24 2020 Page 1 mR3bZgtF8Nhtyi3?b
		2x4 A 06:01	3x4 = 2	x4 II C				Scale = 1:62.2
LOADING (psf) TCLL 25.0 (Dect 25.0)	SPACING- Plate Grip DOL	2-0-0 CSI. 1.15 TC 0	$4 = 3;$ $\frac{3 \cdot 1 \cdot 10}{3 \cdot 1 \cdot 10} + \frac{6 \cdot 3 \cdot 4}{3 \cdot 1 \cdot 10}$ $DEFL.$ $0.18 + Vert(LL)$	→ 4 = 	(loc) D-E	l/defi L/d >936 240	PLATES MT20	GRIP 244/190
(Root Snow=25.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	Lumber DOL Rep Stress Incr Code IRC2018/T	1.15 BC 0 YES WB 0 Pl2014 Matrix-N	0.46 Vert(CT) 0.08 Horz(CT) MP	-0.15 -0.00	D-E D	>468 180 n/a n/a	Weight: 80 lb	FT = 20%

TOP CHORD

BOT CHORD

WEBS

2-0-0 oc purlins: A-C, except end verticals.

1 Row at midpt

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

C-D, B-E, B-D, A-E

```
LUMBER-
```

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

2x4 SP No.3 REACTIONS. (size) D=0-3-0, E=0-3-8

Max Uplift D=-45(LC 8), E=-45(LC 8) Max Grav D=269(LC 1), E=269(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=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D, E.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job	Truss	Truss Type	Qty	Ply	Solaia	
201470	M2	Roof Special	1	1		142650667
Heartland Truss Inc	Plattsburg MO - 64477			8 330 e lu	Job Reference (optional) as Inc. Tue Sep. 1.08:20:25.2020. Page 1
Fieditianu Truss, inc,	Flattsburg, 190 - 04477,	3-1-10 3-1-10	ID:CfAvtstDZ80Lu 6-3-4 3-1-10	oKN75r4z	mzQTwH-wBtVPvO?wxC	?dIYmkFPW8AeTZM6fo2wq6vtwDJyi3?a
		2x4 A	3x4 = 2x4			Scale = 1:59.4
		E	D			
		3x4 =	3x4 =			
			6-3-4 6-3-4			
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL	SPACING- 2 Plate Grip DOL Lumber DOL Ren Stress Incr	-0-0 CSI. 1.15 TC 0.18 1.15 BC 0.46 VES WB 0.08	DEFL. Vert(LL) -0.0 Vert(CT) -0.1 Horz(CT) -0.0	in (loc) 8 D-E 5 D-E	l/defl L/d >936 240 >468 180	PLATES GRIP MT20 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI20	14 Matrix-MP	1012(01) -0.0	0 0	11/a 11/a	Weight: 77 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.2 No.2 No.3		BRACING- TOP CHORD BOT CHORD WEBS	2-0-0 oc Rigid ce 1 Row a	purlins: A-C, except e iling directly applied or t midpt A-E	nd verticals. 10-0-0 oc bracing. 5, C-D, B-E, B-D
REACTIONS. (size Max Up Max Gr) E=0-3-8, D=0-3-0)lift E=-45(LC 8), D=-45(LC 8) av E=269(LC 1), D=269(LC 1)					
FORCES. (Ib) - Max. (Comp./Max. Ten All forces 2	60 (lb) or less except when shown.				
NOTES- 1) Wind: ASCE 7-16; Vi MWFRS (envelope) MWFRS for reactions 2) TCLL: ASCE 7-16; P	ult=115mph (3-second gust) Va gable end zone and C-C Corne s shown; Lumber DOL=1.33 pl f=25.0 psf (Lum DOL=1.15 Pla	isd=91mph; TCDL=6.0psf; BCDL=6 r(3) zone; cantilever left and right ex te grip DOL=1.33 te DOL=1.15); ls=1.0; Rough Cat C;	.0psf; h=20ft; Cat. II; E kposed ;C-C for memb ; Fully Exp.; Ce=0.9; C	xp C; End ers and fo s=1.00; C	closed; orces & :t=1.10	

3) Provide adequate drainage to prevent water ponding.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E, D.
 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job	Truss	Truss Type		Qty	Ply	Solaia	142650668
201470	M3	Roof Special		1	1	Job Reference (optiona	n
Heartland Truss, Inc,	Plattsburg, MO - 64477,		3-1-10 3-1-10	ID:CfAvtstDZ80Lu 6-3-4 3-1-10	3.330 s Ju oKN75r4z	I 22 2020 MiTek Industrie mzQTwH-wBtVPvO?wx0	y ss, Inc. Tue Sep 1 08:20:25 2020 Page 1 Q?dIYmkFPW8AeTZM6fo36q6vtwDJyi3?a
		8-7-0	2x4 33 A B B B B B C C C C C C C C C C C C C C C	$\begin{array}{c} x_4 = & 2x_4 \\ x_3 & \square & C \\ \hline & & & \\ \hline \\ \hline$	II		Scale = 1:49.9
			6-:	3-4 3-4			
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 0.0 BCDL 10.0	SPACING- 2 Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI20	2-0-0 1.15 1.15 YES 014	CSI. TC 0.18 BC 0.46 WB 0.06 Matrix-MP	DEFL. i Vert(LL) -0.03 Vert(CT) -0.13 Horz(CT) -0.00	n (loc) 8 D-E 5 D-E 0 D	l/defl L/d >936 240 >468 180 n/a n/a	PLATES GRIP MT20 244/190 Weight: 68 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.2 No.2 No.3			BRACING- TOP CHORD BOT CHORD WEBS	2-0-0 oc Rigid ce 1 Row a	purlins: A-C, except e iling directly applied or t midpt A-E	nd verticals. 10-0-0 oc bracing. E, C-D, B-E, B-D
REACTIONS. (size) Max Up Max Gr) E=0-3-8, D=0-3-0 lift E=-45(LC 8), D=-45(LC 8) av E=269(LC 1), D=269(LC 1)					
FORCES. (Ib) - Max. C	Comp./Max. Ten All forces 2	50 (lb) or less exc	cept when shown.				
NOTES- 1) Wind: ASCE 7-16; Vu MWFRS (envelope) of MWFRS for reactions 2) TCLL: ASCE 7-16; Pl 3) Provide adequate dra	ult=115mph (3-second gust) V jable end zone and C-C Corne s shown; Lumber DOL=1.33 pl f=25.0 psf (Lum DOL=1.15 Pla inage to prevent water pondir	asd=91mph; TCD er(3) zone; cantile ate grip DOL=1.3 tte DOL=1.15); Is ig.	uL=6.0psf; BCDL=6.0p ver left and right expo 3 =1.0; Rough Cat C; F	osf; h=20ft; Cat. II; E; osed ;C-C for membe ully Exp.; Ce=0.9; Cs	xp C; Enc ers and fo s=1.00; C	losed; rces & t=1.10	

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



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- MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

Provide adequate drainage to prevent water ponding.

- 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) H, I, K except (jt=lb) J=120, M=149.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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



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- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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) F, G, H except (it=lb) |=137.
- 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.



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- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) E, F except (jt=lb) G=160.
- 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.



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REACTIONS. All bearings 22-5-5.

(lb) - Max Horz A=150(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) H, M, K, J, I except N=-122(LC 12)

Max Grav All reactions 250 lb or less at joint(s) A, H except M=362(LC 29), N=655(LC 29), K=583(LC 28), J=567(LC 28), I=472(LC 28)

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

WEBS C-M=-287/94, B-N=-556/168, D-K=-503/115, E-J=-484/110, F-I=-404/97

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-7 to 3-7-7, Interior(1) 3-7-7 to 4-3-4, Exterior(2R) 4-3-4 to 12-9-1, Interior(1) 12-9-1 to 19-3-9, Exterior(2E) 19-3-9 to 22-3-9 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

4) Provide adequate drainage to prevent water ponding.

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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, M, K, J, I except (jt=lb) N=122.

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

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



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 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





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- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-7 to 3-7-7, Exterior(2R) 3-7-7 to 4-6-10, Exterior(2E) 4-6-10 to 7-6-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions
- shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) A, C, D.
- 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.



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LOADING (psf) SPACING TCLL 25.0 Plate Grip (Roof Snow=25.0) Lumber Di TCDL 10.0 Rep Stress BCLL 0.0 Code IRC	2-0-0 OOL 1.15 L 1.15 Incr YES 018/TPI2014	CSI. TC 0.97 BC 0.33 WB 0.00 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - C	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 21 lb	GRIP 244/190 FT = 20%	
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BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3

REACTIONS. (size) A=5-10-12, C=5-10-12 Max Horz A=102(LC 9) Max Uplift A=-26(LC 12), C=-51(LC 12) Max Grav A=336(LC 18), C=336(LC 18)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD B-C=-284/156

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

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) A, C.

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.



Structural wood sheathing directly applied, except end verticals.

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

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			-5-9					
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL TCDL 0.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.18 BC 0.05 WB 0.05 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) 0.00 A 0.00 A 0.00 I	l/defl n/r n/r n/a	L/d 120 90 n/a	PLATES MT20 Weight: 69 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3			BRACING- TOP CHORE BOT CHORE	D Structur except o D Rigid ce	al wood s end vertica eiling direc	heathing direc als, and 2-0-0 tly applied or 6	tly applied or 6-0-0 o oc purlins (6-0-0 ma 6-0-0 oc bracing.	oc purlins, x.): C-E.
REACTIONS. All bearings 9 (lb) - Max Horz B=5 Max Uplift All Max Grav All FORCES. (lb) - Max Comp //	-2-8. 7(LC 11) uplift 100 lb or less at joint(s) B, F, reactions 250 lb or less at joint(s) l //ax Ten - All forces 250 (lb) or les	H, G B, F except H=337(LC 29 Is except when shown	9), G=562(LC 29)					
 WEBS C-H=-268/149 NOTES- 1) 2-ply truss to be connected as foll Bottom chords connected as foll Bottom chords connected as 2) All loads are considered equa ply connections have been pi 3) Wind: ASCE 7-16; Vult=115n MWFRS (envelope) gable en zone; cantilever left and right shown; Lumber DOL=1.33 pi 4) TCLL: ASCE 7-16; Pf=25.0 pi 5) Unbalanced snow loads have 6) This truss has been designed non-concurrent with other live 7) Provide adequate drainage to 40) Bable requires continuous be 9) This truss has been designed 10) Provide mechanical connect 11) This truss is designed in act referenced standard ANSI/7 12) See Standard Industry Pigg designer. 13) Graphical purlin representat 	a), D-G=-485/157 ogether with 10d (0.131"x3") nails a lows: 2x4 - 1 row at 0-9-0 oc. follows: 2x4 - 1 row at 0-9-0 oc. ally applied to all plies, except if no rovided to distribute only loads not mph (3-second gust) Vasd=91mph; ad zone and C-C Exterior(2E) 0-3-1 t exposed; end vertical left and rigitate grip DOL=1.31 set (Lum DOL=1.15 Plate DOL=1.1) e been considered for this design. d for greater of min roof live load of e loads. o prevent water ponding. ottom chord bearing. d for a 10.0 psf bottom chord live lo for (by others) of truss to bearing cordance with the 2018 Internation TPI 1. yyback Truss Connection Detail for	as follows: ted as front (F) or back (ed as (F) or (B), unless or TCDL=6.0psf; BCDL=6. 5 to 3-5-7, Exterior(2R) : tt exposed;C-C for memil 5); Is=1.0; Rough Cat C; 20.0 psf or 2.00 times fl bad nonconcurrent with a plate capable of withstar al Residential Code sect Connection to base trus orientation of the purlin a	B) face in the LO therwise indicate 0psf; h=20ft; Cat 3-5-7 to 7-8-6, Int bers and forces 8 Fully Exp.; Ce=C at roof load of 25 ny other live load ding 100 lb uplift ions R502.11.1 a s as applicable, c along the top and	AD CASE(S) s .d. .II; Exp C; End terior(1) 7-8-6 MWFRS for r 0.9; Cs=1.00; C .0 psf on overf ls. at joint(s) B, F ind R802.10.2 or consult qualit /or bottom cho	ection. Pl closed; to 10-3-13 eactions X=1.10 hangs F, H, G. and fied buildi ord.	y to s	STATE OF SCALE SCA	MISSOLA TT M. VIER MBER JOINS807

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JOD			Qty	PIY .	Solala		142650683
2014/0	23	KOOT Special	1	1	Job Reference (optional)	
Heartland Truss, Inc,	Plattsburg, MO - 64477,		ID:CfAvtstDZ80	8.330 s Ju)LuoKN75	l 22 2020 MiTek Industrie r4zmzQTwH3HAY1aP	es, Inc. Tue Sep 1 08 0YJsw3Ce6vA1ELltH	3:20:40 2020 Page 1 IPI_pry1Yl0DFyyi3?L
H			<u>6-5-6</u> 6-5-6				ł
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I 40.00	5x6 1/2	\sim]			2x4	p
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			******			××××××××	G 4
	F					E	
			6-5-6 6-5-6				1
Plate Offsets (X,Y) [B:	<u>0-2-9,0-0-0], [C:0-0-8,0-2-10],</u>	[C:0-0-15,0-1-2], [F:0-1-6,0-1-2]					
LOADING (psf) TCLL 25.0	SPACING- 2-0	-0 <b>CSI.</b>	DEFL. i	n (loc)	l/defl L/d	PLATES	GRIP
(Roof Snow=25.0) TCDL 10.0	Lumber DOL 1.	15 BC 0.22	Vert(CT) -0.0	0 A	n/r 90	WI120	244/190
BCLL 0.0	Rep Stress Incr Y Code IRC2018/TPI201	ES WB 0.06 4 Matrix-P	Horz(CT) -0.0	0 G	n/a n/a	Weight: 19 lb	FT = 20%
LUMBER-			BRACING-				
TOP CHORD 2x4 SP N	0.2 *Except* SP 1650F 1 5F		TOP CHORD	Structura	al wood sheathing direc	tly applied or 6-0-0	oc purlins, ax ): C-D
BOT CHORD 2x4 SP N	0.2		BOT CHORD	Rigid ce	iling directly applied or	10-0-0 oc bracing.	
WEBS 2X4 SP N	0.3						
REACTIONS. (size) Max Horz	G=5-6-3, B=5-6-3, E=5-6-3, B=28(LC 11)	F=5-6-3					
Max Uplif Max Gray	t B=-111(LC 5), E=-46(LC 8) B=66(LC 30), E=379(LC 29)	. F=417(LC 29)					
TOP CHORD D-E=-34	0/122	(ib) of less except when shown.					
WEBS C-F=-28	5/113						
NOTES- 1) Wind: ASCE 7-16: Vult	=115mph (3-second gust) Vas	d=91mph: TCDI =6 0psf: BCDI =6 0	)nsf: h=20ft: Cat_II: F	xn C: Enc	losed.		
MWFRS (envelope) ga	ble end zone and C-C Exterior	(2E) 0-2-12 to 1-2-7, Exterior(2R) 1	-2-7 to 5-5-5, Interior(	1) 5-5-5 t	o 6-3-10		
shown; Lumber DOL=1	.33 plate grip DOL=1.33	en and right exposed,C-C for memor	ers and forces & MW		eactions		
<ol> <li>2) TCLL: ASCE 7-16; Pf=</li> <li>3) Unbalanced snow load</li> </ol>	25.0 psf (Lum DOL=1.15 Plate s have been considered for thi	: DOL=1.15); ls=1.0; Rough Cat C; F s design.	Fully Exp.; Ce=0.9; C	s=1.00; C	t=1.10		
<ol> <li>This truss has been de non-concurrent with oth</li> </ol>	signed for greater of min roof I	ive load of 20.0 psf or 2.00 times fla	t roof load of 25.0 psf	on overh	angs		
5) Provide adequate drain	age to prevent water ponding						alle
<ul><li>6) Gable requires continue</li><li>7) This truss has been de</li></ul>	ous bottom chord bearing. signed for a 10.0 psf bottom cl	nord live load nonconcurrent with an	y other live loads.			SE OF	MISS
<ol> <li>Provide mechanical con B=111.</li> </ol>	nnection (by others) of truss to	bearing plate capable of withstandi	ing 100 lb uplift at join	t(s) E exc	cept (jt=lb)	BAT on	A ST M TTU
9) This truss is designed i	n accordance with the 2018 In	ternational Residential Code sectior	ns R502.11.1 and R80	)2.10.2 ar	nd	A SE	VIER Y
10) See Standard Industr	y Piggyback Truss Connection	Detail for Connection to base truss	as applicable, or con	sult qualif	ied building	Black	· South
designer. 11) Graphical purlin repre	sentation does not depict the	size or the orientation of the purlin a	long the top and/or bo	ottom cho	rd. 🥪	NUI	MBER A
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			5-2-8						
OADING         (psf)           CLL         25.0           Roof Snow=25.0)         CDL           CDL         10.0           CLL         0.0           CDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.20 BC 0.07 WB 0.07 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.00 0.00	(loc) A A G	l/defl n/r n/r n/a	L/d 120 90 n/a	PLATES MT20 Weight: 23 lb	<b>GRIP</b> 244/190 FT = 20%
UMBER-	0.2		BRACING- TOP CHORE	o s	tructura	al wood s	heathing dire	ectly applied or 6-0-0	oc purlins,

BOT CHORD 2x4 SP No.2 2x4 SP No.3 WEBS OTHERS 2x4 SP No.3 BOT CHORD

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

REACTIONS. (size) G=4-11-7, B=4-11-7, E=4-11-7, F=4-11-7 Max Horz B=115(LC 11) Max Uplift B=-2(LC 8), E=-18(LC 12), F=-78(LC 12)

Max Grav B=170(LC 19), E=157(LC 19), F=410(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. C-F=-345/180 WEBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-1-4, Interior(1) 3-1-4 to 6-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 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) B, E, F. 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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		0						
Plate Offsets (X,Y) [D:0	-3-0,0-1-3]							
LOADING (psf) TCLL 25.0 (Roof Snow=25.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.20 BC 0.07 WB 0.07 Matrix-P	DEFL. Vert(LL) 0.0 Vert(CT) 0.0 Horz(CT) 0.0	n (loc) 0 A 0 A 0 G	l/defl n/r n/r n/a	L/d 120 90 n/a	PLATES MT20 Weight: 23 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.: BOT CHORD 2x4 SP No.	2		BRACING- TOP CHORD	Structur	al wood s	heathing dire	ectly applied or 6-0-0	oc purlins,

BOT CHORD

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

WEBS 2x4 SP No.2 OTHERS 2x4 SP No.3

REACTIONS. (size) G=4-11-7, B=4-11-7, E=4-11-7, F=4-11-7 Max Horz B=115(LC 11) Max Uplift B=-2(LC 8), E=-18(LC 12), F=-78(LC 12) Max Grav B=170(LC 19), E=157(LC 19), F=410(LC 19)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS C-F=-345/188

### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-1-4, Interior(1) 3-1-4 to 6-0-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 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) B, E, F.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





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		0-2-8							1			
	1				6	2-8						
Plate Offsets (X,Y)	[C:0-3-	-0,Edge], [D:Edge,0-1-	8]									
LOADING         (psf)           TCLL         25.0           (Roof Snow=25.0)         TCDL           TCDL         10.0           BCLL         0.0           BCDL         10.0		SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI	2-0-0 1.15 1.15 YES 2014	<b>CSI.</b> TC BC WB Matrix-	0.67 0.26 0.00 R	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.01 0.00	(loc) A A E	l/defl n/r n/r n/a	L/d 120 90 n/a	PLATES MT20 Weight: 18 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4	SP No.2 SP No.2 SP No.3					BRACING- TOP CHORD BOT CHORD	S e R	tructura xcept er	l wood s nd vertica ing direc	heathing dire als, and 2-0-0 tly applied or	ctly applied or 6-0-0 ) oc purlins (6-0-0 ma 10-0-0 oc bracing.	oc purlins, ıx.): C-D.

## REACTIONS. (size) F=4-11-7, B=4-11-7, E=4-11-7 Max Horz B=41(LC 11) Max Uplift B=-32(LC 12), E=-35(LC 9)

Max Grav B=340(LC 30), E=330(LC 29)

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

TOP CHORD B-C=-414/167, C-D=-366/157, D-E=-261/129

BOT CHORD B-E=-113/361

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 2-7-14, Exterior(2R) 2-7-14 to 6-10-13 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) 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) B, E.
  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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

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		1	1-1-10	0-3	3-9 '				
LOADING         (psf)           TCLL         25.0           (Roof Snow=25.0)         TCDL           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.04 BC 0.04 WB 0.00 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (1 0.00 0.00 0.00	(loc) B B E	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 8 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-			BRACING-						

TOP CHORD

BOT CHORD

# LUMBER-

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

2x4 SP No.3

REACTIONS. B=0-3-8, E=0-3-8 (size) Max Horz B=55(LC 11) Max Uplift B=-5(LC 12), E=-23(LC 12) Max Grav B=108(LC 19), E=89(LC 19)

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=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 16.0 psf or 2.00 times flat roof load of 25.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, E.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Structural wood sheathing directly applied or 2-0-14 oc purlins,

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

except end verticals.

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Plate Offsets (X,Y) [C:	0-3-0,0-2-1]							
LOADING         (psf)           TCLL         25.0           (Roof Snow=25.0)         TCDL           TCDL         0.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.03 BC 0.04 WB 0.00 Matrix-R	DEFL.         in           Vert(LL)         0.00           Vert(CT)         0.00           Horz(CT)         -0.00	(loc) B B F	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 6 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER-			BRACING-					

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (size) B=0-3-8, F=0-3-8

Max Horz B=28(LC 11) Max Uplift B=-16(LC 12), F=-18(LC 9) Max Grav B=134(LC 30), F=109(LC 29)

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=6.0psf; h=20ft; 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=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 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) B, F.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 2-0-14 oc purlins,

except end verticals, and 2-0-0 oc purlins: C-D, E-G.

Rigid ceiling directly applied or 6-0-0 oc bracing.

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