



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

Re: 2811731 Roeser/1484 WV

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

Pages or sheets covered by this seal: I46995269 thru I46995380

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

Missouri COA: Engineering 001193



July 15,2021

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



Scale = 1:55.2



	2-7-4	6-1-5	7-11-4	9-9-3	13-3-4	17-1-4	21-4-12	25-8-4	28-4-12	31-2-12	1
	2-7-4	3-6-1	1-9-15	1-9-15	3-6-1	3-10-0	4-3-8	4-3-8	2-8-8	2-10-0	1
Plate Offset	ts (X,Y)	[2:0-3-8,0-2-8],	[3:0-3-8,0-2-0]	, [5:0-4-0,	Edge], [8:0-3-0,Ed	ge], [10:0-6-0,0-3-0]	[11:0-8-15,0-3-13], [1	1:0-4-1,0-2-0], [16:0	0-8-8,Edge], [19:0)-10-12,Edge],	
		[21:0-3-8,0-2-8]	, [22:0-1-9,0-1-	0], [23:0-	8-8,0-0-0]						
											-

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.89 BC 0.86 WB 1.00 Matrix-MS	DEFL. in Vert(LL) -0.92 Vert(CT) -1.63 Horz(CT) 0.58	(loc) l/defl 19 >407 19 >229 12 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 309 lb	GRIP 197/144 148/108 FT = 20%					
LUMBER- TOP CHORD 2x4 SP 10-12: BOT CHORD 2x4 SP 19-22: 11-16: WEBS 2x4 SP 16-19:	PF 1650F 1.5E *Except* 2x8 SP 2400F 2.0E, 5-8: 2x4 SP 2400F PF No.2 *Except* 2x6 SPF 2100F 1.8E, 6-18,7-17: 2x4 SF 2x4 SP 2400F 2.0E, 12-13: 2x6 SPF No PF No.2 *Except* 2x4 SPF 1650F 1.5E	2.0E PF 1650F 1.5E 0.2	BRACING- TOP CHORD BOT CHORD	Structural wood s except end vertic Rigid ceiling dire 6-0-0 oc bracing:	sheathing directly als, and 2-0-0 oc ctly applied or 10 18-19,12-13.	applied or 6-0-0 o purlins (2-7-13 ma -0-0 oc bracing, E	ις purlins, ax.): 1-10. Ξxcept:					
REACTIONS. (size Max H Max U Max G	e) 12=0-3-8, 23=Mechanical orz 23=-100(LC 6) plift 12=-584(LC 9), 23=-719(LC 4) rav 12=2524(LC 1), 23=3044(LC 1)											
FORCES. (lb) - Max. TOP CHORD 1-23= 6-7=- 11-12	Comp./Max. Ten All forces 250 (lb) or 2877/688, 1-2=-5380/1288, 2-3=-1142 16888/4164, 7-9=-13040/3235, 9-10=-1 2=-1129/290	less except when shown 3/2801, 3-4=-15154/3712 1152/2780, 10-11=-7925/	2, 4-6=-15154/3712, /1967,									
BOT CHORD 21-22 7-16= 11-13 WEBS 9-16= 7-19	11-12=-1129/290 3OT CHORD 21-22=-1295/5647, 20-21=-2738/11423, 19-20=-4216/17387, 6-19=-147/572, 7-16=-1877/517, 15-16=-2717/11152, 14-15=-1899/7848, 11-14=-1901/7851, 11-13=-124/583 VEBS 9-16=-486/2014, 9-15=-1127/335, 10-15=-877/3540, 16-18=-156/637, 16-19=-3001/12285, 7-19=-990/4116, 6-20=-2357/645, 2-21=-1543/6158, 3-21=-1509/396, 3-20=-971/3938,											
1-22= NOTES- 1) 2-ply truss to be con Top chords connect Bottom chords conn Webs connected as 2) All loads are conside ply connections hav 3) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 4) Provide adequate dr 5) All plates are MT20 6) This truss has been 7) Refer to girder(s) for 8) Provide mechanical Continte@Moi@and(s)	=-1404/5950, 2-22=-2353/618 Inected together with 10d (0.131"x3") na ed as follows: 2x4 - 1 row at 0-4-0 oc, 2y ected as follows: 2x4 - 1 row at 0-9-0 oc follows: 2x4 - 1 row at 0-9-0 oc. ered equally applied to all plies, except it e been provided to distribute only loads /ult=115mph (3-second gust) Vasd=91m gable end zone; cantilever left and right rainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord liv truss to truss connections. connection (by others) of truss to bearing	ils as follows: k8 - 2 rows staggered at 0 ; 2x6 - 2 rows staggered ; f noted as front (F) or bac noted as (F) or (B), unles; uph; TCDL=6.0psf; BCDL= exposed ; end vertical lef re load nonconcurrent with ag plate capable of withsta	0-9-0 oc. at 0-9-0 oc. s otherwise indicated. =4.2psf; h=15ft; Cat. II; E ft and right exposed; Lun h any other live loads. anding 100 lb uplift at join	ASE(S) section. P xp C; Enclosed; tber DOL=1.60 pla t(s) except (jt=lb)	lly to ate	STATE OF SEV SEV PE-200 Ju	MISSOLUTI MISSOLUTI MIR Sector 1018807					
WARNING - Verify Design valid for use or a truss system. Before building design. Braci is always required for fabrication, storage, d Safety Information a	design parameters and READ NOTES ON THIS AND nly with MITek® connectors. This design is based or use, the building designer must verify the applicat ing indicated is to prevent buckling of individual trus stability and to prevent collapse with possible perse elivery, erection and bracing of trusses and truss s available from Truss Plate Institute, 2670 Crain Hig	D INCLUDED MITEK REFERENC only upon parameters shown, an oility of design parameters and p ss web and/or chord members or onal injury and property damage ystems, see ANS/ITPI hway. Suite 203 Waldorf. MD 20	E PAGE MII-7473 rev. 5/19/2020 d is for an individual building co roperly incorporate this design i nly. Additional temporary and p . For general guidance regardin Guality Criteria, DSB-89 and 601	BEFORE USE. mponent, not nto the overall ermanent bracing ig the BCSI Building Compo	onent	MiTek* 16023 Swingley Chesterfield, M	y Ridge Rd O 63017					

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

	Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
	0011701	A.1		4	_		146995269
	2011/31	AT		1	2	Job Reference (optional)	
Ì	Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 08:58:33 2021	Page 2

ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-GFW?nW0WrBhtuo2SK7sBs0VAOoJUFsEjPFbBHayyC1q

NOTES-

- 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) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 3-7-8 from the left end to 11-7-8 to connect truss(es) to front face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 243 lb down and 78 lb up at 1-7-8, and 228 lb down and 85 lb up at
- 13-5-0, and 336 lb down and 151 lb up at 25-7-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-10=-70, 10-11=-70, 11-12=-70, 23-24=-20, 19-22=-20, 17-18=-20, 11-16=-20, 13-25=-20, 22-23=-20 Concentrated Loads (lb)
 - Vert: 10=-68(F) 8=-68(F) 9=-68(F) 15=-55(F) 14=-336(F) 19=-228(F) 20=-247(F) 29=-88(F) 30=-68(F) 31=-68(F) 32=-243(F) 33=-254(F) 34=-243(F) 35=-243(F) 36=-238(F) 37=-35(F) 38=-55(F) 39=-55(F) 40=-55(F)

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 sand truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601







2-7-4	6-9-6	13-	3-4	1	17-1-4	18-5-1	2	23-	-8-4		28-4-12	3	1-2-12	1
2-7-4	4-2-2	6-5	-14	' 3	3-10-0	1-4-8	1	5-2	2-8	1	4-8-8		2-10-0	I
Plate Offsets (X,Y)-	 [1:Edge,0-1-12], [6:0-5 	5-4,0-3-0], [7:0-3-1	2,0-4-0], [11	:0-3-12,0-3-4	4], [14:0-	4-8,0-3-4]	, [15:0-	3-0,0-2-	8]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018	2-0-0 1.15 1.15 YES VTPI2014	CSI. TC BC WB Matrix	0.65 0.96 0.88 <-AS	D V V H	EFL. ert(LL) ert(CT) orz(CT)	in -0.50 -0.91 0.38	(loc) 14 14-15 8	l/defl >740 >410 n/a	L/d 240 180 n/a	PLA MT2 Wei	ATES 20 ight: 145 lb	GRIP 197/144 FT = :	4 20%
LUMBER- TOP CHORD 2x4 68 BOT CHORD 2x4 7-1 WEBS 2x4 11- WEDGE Right: 2x4 SPF No. REACTIONS. (Ma Ma Ma	SPF 1650F 1.5E *Except 2x8 SP 2400F 2.0E SPF No.2 *Except* I: 2x4 SPF 1650F 1.5E SPF No.2 *Except* I4: 2x4 SPF 1650F 1.5E 2 size) 19=Mechanical, 8 x Horz 19=-132(LC 10) x Uplift 19=-248(LC 8), 8= x Grav 19=1400(LC 1), 8:	* =Mechanical =-208(LC 13) =1411(LC 1)			B Ti	RACING- DP CHOR DT CHOR	D	Structu 2-0-0 o Rigid co	ral wood c purlins eiling dire	sheathing dii (2-5-12 max. cctly applied.	l rectly applie .): 1-6.	ed, except	end vertic	als, and
FORCES. (lb) - M TOP CHORD 11 5- BOT CHORD 14 WEBS 1- 5- NOTES- 1) Wind: ASCE 7-11 MWFRS (envelo Interior(1) 28-4-5 & MWERS for re	Max Grav 19=1400(LC 1), 8=1411(LC 1) FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 17-19=-1361/250, 1-17=-1315/261, 1-2=-3559/616, 2-3=-5071/867, 3-5=-4934/840, 5-6=-4463/765, 6-7=-3571/545, 7-8=-487/99 BOT CHORD 14-15=-532/3559, 3-14=-323/114, 5-11=-687/186, 10-11=-453/3403, 7-10=-456/3391 WEBS 1-15=-607/3573, 2-15=-973/266, 2-14=-326/1588, 6-10=0/297, 11-14=-631/4247, 5-14=-104/611, 6-11=-242/1129 NOTES- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-4, Interior(1) 3-3-4 to 23-8-4, Exterior(2R) 23-8-4 to 28-4-5, Interior(1) 28-4-5 to 31-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces													
 Provide adequat This truss has be Refer to girder(s) Provide mechani 19=248, 8=208. This truss is designed at the second stand This truss designed at the second stand This truss designed at the second stand Graphical purlies 	a drainage to prevent wate en designed for a 10.0 ps for truss to truss connect cal connection (by others) gned in accordance with t ard ANSI/TPI 1. requires that a minimum lied directly to the bottom epresentation does not de	of truss to bearing of truss to bearin he 2018 Internation of 7/16" structural chord. epict the size or th	e load nonco g plate capa onal Residen wood sheat e orientatior	oncurrent with ble of withsta tial Code sea hing be appli n of the purlin	h any oth anding 1 ctions R ied direc a along th	ner live loa 20 lb uplift 502.11.1 a tly to the to ne top and	ds. at join nd R80 op choi /or bott	t(s) exce 02.10.2 a rd and 1/ tom chor	ept (jt=lb) and /2" gypsu rd.	m	to the second	PE-200 PE-200	TT M. VIER VIER)101880 AL ET	CIP AND

July 15,2021



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2-7-	-4 5-3-4 13- -4 2-8-0 8-	3-4	3-10-0	21-8-4 4-7-0		<u>28-4-12</u>	31-2-12					
Plate Offsets (X,Y)	[1:0-3-0,0-1-12], [2:0-4-2,Edge], [7:0-3-	12,0-4-0], [12:0-7-8,0-3-0]	, [15:0-5-0,0-3-0],	16:0-3-8,0-2-0]		2.100					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.67 BC 0.98 WB 0.79 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.33 11-26 -0.64 11-26 0.29 8	l/defl L/d >999 240 >584 180 n/a n/a	PLATES MT20 Weight: 155	GRIP 197/144 Ib FT = 20%					
LUMBER- TOP CHORD 2x4 SF 2-4: 2x BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Right: 2x4 SF No.2	PF No.2 *Except* 4 SP 2400F 2.0E, 6-8: 2x8 SP 2400F 2 PF No.2 PF No.2	0E	BRACING- TOP CHOR BOT CHOR	D Structu 2-0-0 o D Rigid ca	ral wood sheathir c purlins (2-11-13 eiling directly app	ng directly applied, exce 3 max.): 2-6. lied.	ot end verticals, and					
REACTIONS. (size Max H Max U Max G	e) 20=Mechanical, 8=Mechanical orz 20=-82(LC 10) plift 20=-189(LC 8), 8=-158(LC 9) rav 20=1400(LC 1), 8=1411(LC 1)											
FORCES. (lb) - Max. TOP CHORD 1-2=- 7-8=- BOT CHORD 15-16 WEBS 1-16- 5-15=-	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. FOP CHORD 1-2=-2290/321, 2-3=-3734/608, 3-5=-3634/587, 5-6=-2935/440, 6-7=-3118/438, 7-8=-487/81, 18-20=-1369/184, 1-18=-1352/184 3OT CHORD 15-16=-214/2079, 3-15=-518/177, 11-12=-430/3320, 7-11=-333/2915 WEBS 1-16=-255/1913, 2-15=-305/1840, 5-11=-637/124, 6-11=-24/515, 12-15=-385/3214, 5-15=-75/486											
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 9-8-4 to 2 vertical left and right 3) Provide adequate di 4) This truss has been 5) Refer to girder(s) for 6) Provide mechanical 20=189, 8=158. 7) This truss is designer referenced standard 8) This truss design referenced standard	e loads have been considered for this de fult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) 0 1-8-4, Exterior(2R) 21-8-4 to 26-1-4, Int exposed;C-C for members and forces a rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv truss to truss connections. connection (by others) of truss to bearin ed in accordance with the 2018 Internati ANSI/TPI 1. quires that a minimum of 7/16" structura d directly to the bottom chord.	sign. ph; TCDL=6.0psf; BCDL= 1-12 to 3-3-4, Interior(1) 3 prior(1) 26-1-4 to 31-2-12 WWFRS for reactions shall be load nonconcurrent with rig plate capable of withstance ponal Residential Code second I wood sheathing be appli	=4.2psf; h=15ft; Ca 3-3-4 to 5-3-4, Exte zone; cantilever le nown; Lumber DOL n any other live loa anding 100 lb uplift ctions R502.11.1 at ed directly to the to	t. II; Exp C; En erior(2R) 5-3-4 ft and right exp =1.60 plate gri ds. at joint(s) exce nd R802.10.2 a op chord and 1,	closed; to 9-8-4, oosed ; end ip DOL=1.60 ept (jt=lb) and /2" gypsum	STATE O STATE O STATE O SO	F MISSOUR COTT M. SEVIER					

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



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

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Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
2811731	Δ4		1			146995272
2011101	7.4			2	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 08:58:44 2021	Page 2

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 14 08:58:44 2021 Page 2 ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-SMg94H9QFZ4JiUOZUxZmoKS1pD16KtMLxSmH9SyyC1f

NOTES-

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

- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 31=271, 12=571.
 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) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss, Single Ply Girder) or equivalent at 31-3-8 from the left end to connect truss(es) to front face of bottom chord skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 294 lb down and 88 lb up at 33-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-3=-70, 3-6=-70, 6-8=-70, 8-10=-70, 10-13=-70, 29-31=-20, 28-29=-20, 24-26=-20, 21-22=-20, 17-20=-20, 16-32=-20, 16-17=-20

Concentrated Loads (lb) Vert: 10=-88(F) 15=-294(F) 35=-1618(F)

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16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						146995273
2811731	A5	Roof Special	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 08:58:46 2021	Page 2
		ID:TDamR1	NvM3FVK	AsrLwFUZ	vyOBKQ-OlovVzAgnAK1yoYxbMbEulXNt1k_okeeOmFNE	KyyC1d

NOTES-

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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Scale = 1:71.8



 	8-0-4	<u>10-10-12</u> <u>16-4-4</u> 2-10-8 5-5-8	<u>16-4-5 21-8</u> 0-0-1 5-3-	15	29-2-4 7-6-0		38-8-12 9-6-8						
Plate Offsets (X,Y)	[4:0-4-2,Edge], [5:0-9-8,0-	-2-12], [6:0-6-4,0-2-0], [7:0	-7-4,0-1-12], [14:0	-5-0,0-3-0], [16:0-	6-12,Edge], [18:0	-7-12,0-2-12], [1	19:Edge,0-3-8]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI	2-0-0 CSI. 1.15 TC 1.15 BC YES WB 12014 Matri	0.90 0.84 0.87 x-AS	DEFL. Vert(LL) -0.3 Vert(CT) -0.6 Horz(CT) 0.3	in (loc) l/defl 5 16 >999 4 14-15 >722 30 10 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 188 lb	GRIP 197/144 148/108 FT = 20%					
LUMBER- TOP CHORD 2x4 S 6-7: 2 BOT CHORD 2x4 S 10-13 WEBS 2x4 S 14-16 SLIDER Right	UMBER- OP CHORD 6-7: 2x4 SP 2400F 2.0E BRACING- TOP CHORD 6-7: 2x4 SP 2400F 2.0E TOP CHORD 2-0 oc purlins (2-11-4 max.): 4-5, 6-7. OT CHORD 10-13: 2x4 SPF 1650F 1.5E BOT CHORD 10-13: 2x4 SPF 1650F 1.5E BOT CHORD 10-13: 2x4 SPF 1650F 1.5E BOT CHORD 10-13: 2x4 SPF 1650F 1.5E WEBS 1 Row at midpt 2-20 /EBS 2x4 SPF No.2 *Except* 14-16: 2x4 SPF 1650F 1.5E WEBS 1 Row at midpt 2-20 LIDER Right 2x4 SPF No.2 2-6-0 WEBS 1 Row at midpt 2-20 EACTIONS (size) 10=0-3-8, 20=Mechanical Max Horz 20=-126(LC 17) Max Uplift 10=-289(LC 13), 20=-158(LC 9) S S S S												
REACTIONS. (si Max Max Max	ze) 10=0-3-8, 20=Mechar Horz 20=-126(LC 17) Uplift 10=-289(LC 13), 20=- Grav 10=1871(LC 1), 20=1	nical •158(LC 9) 733(LC 1)											
FORCES. (ib) - Max TOP CHORD 2-3a 7-8a 7-8a BOT CHORD 17-' WEBS 5-10 7-12 18-2a	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-3365/498, 3-4=-3151/494, 4-5=-2876/477, 5-6=-4028/596, 6-7=-3823/592, 7-8=-3160/466, 8-10=-3210/498 BOT CHORD 17-18=-296/3071, 16-17=-333/3498, 12-14=-318/2910, 10-12=-376/2864 WEBS 5-16=-197/1703, 14-16=-482/4129, 6-16=-347/223, 6-14=-1875/303, 7-14=-158/1062, 7-12=0/278, 4-17=-73/841, 3-17=-301/128, 5-17=-942/195, 2-20=-2818/410, 18-20=-232/2003, 2-18=-90/1114												
18-20=-232/2003, 2-18=-90/114 NOTES- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2R) 16-0-12, Lot 4-0-2, Interior(1) 4-0-2 to 10-10-12, Exterior(2R) 10-10-12 to 14-9-4, Interior(1) 14-9-4 to 16-0-12, Exterior(2R) 16-0-12 to 19-11-4, Interior(1) 19-11-4 to 29-2-4, Exterior(2R) 29-2-4 to 33-0-12, Interior(1) 33-0-12 to 40-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces 8 MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) All plates are MT20 plates unless otherwise indicated. 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6) Refer to girder(s) for truss to truss connections. 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10-2289, 20=158. 8) This truss designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1. 9) This truss design requires that a minimum of 7/16° structural wood sheathing be applied directly to the top chord and 1/2° gypsum sheetrock be applied directly to the bottom chord. 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.													

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Scale = 1:71.6



L	4-1-1	14	8-0-4	12-10-12	16-4-4	19-8-4		27-2-4		32-9-12	38-8-12		
I	4-1-1	14	3-10-6	4-10-8	3-5-8	3-4-0	1	7-6-0		5-7-8	5-11-0		
Plate Offsets (X,	,Y) [4	1:0-4-2,Edge	<u>ə], [5:0-4-0</u>),0-2-0], [8:0-6-4	<u>,0-2-0], [9:0-8-2,Edg</u>	e], [12:0-4	-11,0-0-2], [1	7:0-5-0,0-3-0],	[19:0-5-0	,0-3-0], [21:0-	-5-8,0-3-0]		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0		SPAC Plate (Lumbe Rep S Code	ING- Grip DOL er DOL tress Incr IRC2018/	2-0-0 1.15 1.15 YES TPI2014	CSI. TC 0.98 BC 0.92 WB 0.93 Matrix-AS		DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.34 19 -0.61 19-20 0.28 12	l/defl >999 >755 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS MT18HS Weight: 200 lb	GRIP 197/144 148/108 197/144 FT = 20%	
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2 SLIDER F	2x4 SPF 8-9: 2x4 2x4 SPF 12-16: 2x 2x4 SPF Right 2x6	No.2 *Exce SP 2400F 2 No.2 *Exce x4 SPF 165 No.2 6 SPF No.2	>pt* 2.0E ≥pt* ©F 1.5E 2-6-0				BRACING- TOP CHOP BOT CHOP WEBS	RD Struct 2-0-0 RD Rigid 1 Rov	tural wood oc purlins ceiling dir v at midpt	sheathing dii (2-7-0 max.): ectly applied. 8	rectly applied, except 4-5, 8-9. 8-17	end verticals, and	
REACTIONS.	(size) Max Hor Max Upli Max Gra	24=Mech rz 24=-131(lift 24=-196(av 24=1733	nanical, 12 (LC 17) (LC 12), 12 3(LC 1), 12	2=0-5-8 2=-292(LC 13) =1871(LC 1)									
FORCES. (lb) TOP CHORD	ORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. OP CHORD 1-2=-1783/279, 2-3=-3355/476, 3-4=-3235/494, 4-5=-3858/557, 5-6=-4156/625, 6-7=-3771/577, 7-8=-3922/569, 8-9=-3253/516, 9-10=-3022/461, 10-12=-3242/486, 1-24=-1685/254 POCT CHORD 20-276/0006, 10, 20-260/2004, 15, 17-270/2759, 14, 15-257/2008												
BOT CHORD	20-21≕ 12-14≕	-272/3046, -357/2908	19-20=-26	60/3204, 15-17≕	279/2758, 14-15=-3	57/2908,							
WEBS	WEBS 2-23=-1659/227, 21-23=-192/1766, 2-21=-146/1635, 4-20=-171/1110, 5-20=-1846/313, 17-19=-387/3792, 8-19=-25/365, 8-17=-2195/306, 9-17=-95/606, 9-15=0/350, 1-23=-239/1787, 6-19=-264/1636, 6-20=-218/1337												
 NOTES- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vull=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-1-14, Interior(1) 4-1-14 to 8-10-12, Exterior(2E) 8-10-12 to 15-5-12, Exterior(2E) 15-5-12 to 19-4-4, Interior(1) 19-4-4 to 27-2-4, Exterior(2R) 27-2-4 to 31-0-12, Interior(1) 12-10-12 to 15-5-12, Exterior(2E) 15-5-12 to 19-4-4, Interior(1) 19-4-4 to 27-2-4, Exterior(2R) 27-2-4 to 31-0-12, Interior(1) 12-10-12 to 40-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) All plates are MT20 plates unless otherwise indicated. 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6) Refer to grider(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) 24-196, 12-292. 8) This truss is design requires that a minimum of 7/16° structural wood sheathing be applied directly to the top chord and 1/2° gypsum sheetrock be applied directly to the bottom chord. 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 													
	- Verify des	sion parameter	s and READ I	NOTES ON THIS AN	D INCLUDED MITEK REFE	RENCE PAG	GE MII-7473 rev.	5/19/2020 BEFOR	E USE.				

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SE. t all ng Component 16023 Swingley Ridge Rd Chesterfield, MO 63017

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	5-10-8	11-3-8	18-9-8		23-9-12	29-1-8	
1	5-10-8	5-5-0	7-6-0		5-0-4	5-3-12	
Plate Offsets (X,Y)	[1:Edge,0-0-8], [4:0-4-2,Edge], [7:0-4	-11,0-0-2]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.73 BC 0.82 WB 0.37 Matrix-AS	DEFL. ir Vert(LL) -0.12 Vert(CT) -0.26 Horz(CT) 0.11	1 (loc) // ? 9-10 > } 10-12 > 7	/defl L/d 999 240 999 180 n/a n/a	PLATES MT20 Weight: 134 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF 3-4: 2x BOT CHORD 2x4 SF WEBS 2x4 SF OTHERS 2x4 SF SLIDER Right 2 REACTIONS. (sizt Max H Max U Max G	PF No.2 *Except* 4 SPF 1650F 1.5E PF No.2 PF No.2 PF No.2 PF No.2 2x6 SPF No.2 2-6-0 e) 7=0-5-8, 20=0-3-4 lorz 20=-167(LC 13) lplift 7=-261(LC 13), 20=-155(LC 13) yaray 7=1440(LC 1), 20=1273(LC 1)		BRACING- TOP CHORD BOT CHORD WEBS	Structural 2-0-0 oc p Rigid ceili 1 Row at i	wood sheathing dire ourlins (3-5-15 max.): ng directly applied. midpt 3-	ectly applied, except e 3-4. 13	nd verticals, and
FORCES. (lb) - Max. TOP CHORD 1-2=- BOT CHORD 12-13 WEBS 2-13	Comp./Max. Ten All forces 250 (lb) -1002/257, 2-3=-1035/243, 3-4=-1961 3=-215/1958, 10-12=-221/1902, 9-10= -107/416, 3-13=-1428/308, 4-10=0/3	or less except when showr /393, 4-5=-2092/400, 5-7=- ·-299/2062, 7-9=-299/2062 39, 1-13=-95/1021, 1-20=-1	n. 2306/417 1294/175				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 8-10-8 to vertical left and right 3) Provide adequate dr 4) This truss has been 5) Bearing at joint(s) 20 canacity of bearing s	e loads have been considered for this /ult=115mph (3-second gust) Vasd=9 gable end zone and C-C Exterior(2E 18-9-8, Exterior(2R) 18-9-8 to 21-9-8, t exposed;C-C for members and force rainage to prevent water ponding. designed for a 10.0 psf bottom chord 0 considers parallel to grain value usi surface	design. Imph; TCDL=6.0psf; BCDL 0-5-4 to 3-5-4, Interior(1) 3 Interior(1) 21-9-8 to 31-0-0 s & MWFRS for reactions s live load nonconcurrent wit ng ANSI/TPI 1 angle to grain	=4.2psf; h=15ft; Cat. II; E 3-5-4 to 5-10-8, Exterior(2) zone; cantilever left and shown; Lumber DOL=1.60 th any other live loads. n formula. Building desig	Exp C; Enclo 2R) 5-10-8 to 1 right expos 0 plate grip 1 gner should	osed; o 8-10-8, ied ; end DOL=1.60 verify	TE OF	MISSOL

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=261, 20=155.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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





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



July 15,2021

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

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	7-9-8	15-3-8 7-6-0			22-9-8	3		29-1-8				
Plate Offsets (X,Y)	[5:0-4-2,Edge], [7:0-4-7,0-0-6]	100			100			040				
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.78 BC 0.84 WB 0.68 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.23 -0.47 0.10	(loc) 9-11 9-11 7	l/defl >999 >743 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 132 lb	GRIP 197/144 FT = 20%			
LUMBER- TOP CHORD 2x4 SF 4-5: 2x BOT CHORD 2x4 SF WEBS 2x4 SF OTHERS 2x4 SF SLIDER Right 2	PF No.2 *Except* 4 SP 2400F 2.0E PF No.2 PF No.2 PF No.2 PF No.2 Ex6 SPF No.2 2-6-0		BRACING- TOP CHORE BOT CHORE WEBS))	Structur 2-0-0 or Rigid ce 1 Row a	ral wood sh c purlins (3 eiling direct at midpt	eathing dire 1-13 max.): y applied. 2-	ectly applied, except e : 4-5. 13	and verticals, and			
REACTIONS. (siz Max H Max U Max G	e) 7=0-5-8, 19=0-3-4 lorz 19=-167(LC 13) plift 7=-261(LC 13), 19=-155(LC 13) rav 7=1440(LC 1), 19=1273(LC 1)											
FORCES. (lb) - Max. TOP CHORD 2-3=- 1-14:	ORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. OP CHORD 2-3=-1341/304, 3-4=-3472/653, 4-5=-3210/571, 5-7=-2389/422, 13-14=-59/1051, 1-14=-59/1051 3OT CHORD 12-13=-15/870, 11-12=-182/1732, 9-11=-302/2148, 7-9=-299/2152 VEBS 2-12=-210/1186, 3-12=-1140/296, 3-11=-374/2076, 4-11=-1798/405, 5-11=-162/1142, 2-13=-1232/118, 1-19=-1295/169											
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 8-10-8 to vertical left and right 3) Provide adequate di 4) This truss has been 5) Bearing at joint(s) 19; capacity of bearing at capacity of bearing at 7=261, 19=155. 7) This truss is design re- referenced standardc 8) This truss design re- sheetrock be applier 9) Graphical purlin rep	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) 0 22-9-8, Exterior(2R) 22-9-8 to 25-9-8, Ir exposed;C-C for members and forces & rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv 9 considers parallel to grain value using surface. connection (by others) of truss to bearin ed in accordance with the 2018 Internation I ANSI/TPI 1. quires that a minimum of 7/16" structura d directly to the bottom chord. resentation does not depict the size or th	sign. ph; TCDL=6.0psf; BCDL= 5-4 to 3-5-4, Interior(1) 3- terior(1) 25-9-8 to 31-0-0 & MWFRS for reactions sh e load nonconcurrent with ANSI/TPI 1 angle to grain g plate capable of withsta onal Residential Code sec wood sheathing be appli ae orientation of the purlin	e4.2psf; h=15ft; Cat 5-4 to 5-10-8, Exter zone; cantilever left nown; Lumber DOL- n any other live load formula. Building of anding 100 lb uplift a stions R502.11.1 an ed directly to the top along the top and/of	. II; Ex rior(2F t and r =1.60 ls. design at joint ad R80 p chor p chor	p C; En) 5-10-{ ight exp plate gri ner shou (s) exce (2.10.2 a d and 1/ om chor	closed; 3 to 8-10-8, iosed ; end ip DOL=1.6 ld verify ept (jt=lb) and /2" gypsum rd.	0	STATE OF SCO SE NUN PE-200	MISSOLA TT M. VIER MBER 1018807			

July 15,2021



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BOT CHORD

WEBS

Rigid ceiling directly applied or 8-3-2 oc bracing.

6-13

1 Row at midpt

6-8: 2x4 SPF 1650F 1.5E BOT CHORD 2x4 SPF No.2 *Except* 9-14: 2x6 SPF 2100F 1.8E WEBS 2x4 SPF No.2 OTHERS 2x4 SPF No.2 WEDGE Right: 2x4 SPF No.2

REACTIONS. (size) 9=

(size) 9=0-5-8, 22=0-3-4
 Max Horz 22=-167(LC 9)
 Max Uplift 9=-455(LC 9), 22=-210(LC 9)
 Max Grav 9=2220(LC 1), 22=1507(LC 1)

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

TOP CHORD 1-2=-797/238, 2-3=-828/250, 3-4=-2182/510, 4-5=-2181/446, 5-6=-3614/692,

6-7=-6037/1188, 7-8=-6037/1188, 8-9=-4031/826

BOT CHORD 15-16=-37/1042, 13-15=-511/3286, 12-13=-1110/6086, 11-12=-694/3679, 9-11=-692/3677 WEBS 3-16=-865/147, 3-15=-409/1932, 4-15=-273/123, 5-15=-1877/406, 5-13=-289/1643, 6-13=-3202/684, 7-12=-452/148, 8-12=-467/2704, 1-16=-122/1295, 6-12=-551/437, 1-22=-1525/213

NOTES-

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

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=455, 22=210.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss, Single Ply Girder) or equivalent at 21-8-4 from the left end to connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

Continued on page 2

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E.							
L	Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
L			,,				140005000
L							140995260
L	2811731	A12	Roof Special Girder	1	1		
L	2011101	7112		•	•		
L						Job Reference (optional)	
	Builders FirstSource (Valley	Center) Valley Center K	S - 67147	8	430 s.lur	2 2021 MiTek Industries Inc. Wed Jul 14 08:58:37 2021	Page 2
	Danacio i notocaroc (vancy		0 01141,				i ugo z
			ID:TDamR	1NvM3FV	KAsrl wFU	IZvvOBKQ-90IVcu31vPCINQMDZzx70sfrwPfiBh5.IKsZPQI	vvC1m

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 177 lb down and 68 lb up at 24-8-12 on bottom chord. The

design/selection of such connection device(s) is the responsibility of others.

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

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-3=-70, 3-6=-70, 6-8=-70, 8-10=-70, 17-19=-20

Concentrated Loads (lb)

Vert: 8=-44(B) 11=-177(B) 23=-44(B) 24=-732(B) 25=-17(B)

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

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



July 15,2021

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WEBS

1 Row at midpt

7-11, 3-11

 WEBS
 2x4 SPF No.2

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

REACTIONS. (size) 1=0-3-8, 9=0-3-8 Max Horz 1=104(LC 12) Max Uplift 1=-181(LC 12), 9=-181(LC 13) Max Grav 1=1417(LC 1), 9=1417(LC 1)

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

TOP CHORD 1-3=-2584/332, 3-5=-1891/295, 5-7=-1891/295, 7-9=-2584/333

BOT CHORD 1-12=-332/2313, 11-12=-332/2313, 10-11=-229/2313, 9-10=-229/2313

WEBS 5-11=-56/828, 7-11=-806/242, 7-10=0/283, 3-11=-806/241, 3-12=0/283

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-13, Interior(1) 3-1-13 to 15-9-0, Exterior(2R) 15-9-0 to 18-10-13, Interior(1) 18-10-13 to 31-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=181, 9=181.

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

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



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L	7-3-12	14-4-0	17-2-0	18-2-0		27-2-8	3	J 31-6-0	
1	7-3-12	7-0-4	2-10-0	1-0-0		9-0-8		4-3-8	
Plate Offsets (X,Y)	[6:0-4-2,Edge], [9:0-4-0,Edge], [12:0-0-	6,0-4-6], [15:0-2-8,Edge]							
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
ICLL 25.0	Plate Grip DOL 1.15	IC 0.91	Vert(LI	_) -0.48	14-15	>780	240	M120	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.94	Vert(C	T) -1.11	14-15	>340	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.64	Horz(C	T) 0.24	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						Weight: 139 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SF 7-9,9-1 BOT CHORD 2x4 SF 14-15: WEBS 2x4 SF SLIDER Left 2x	PF No.2 *Except* 3: 2x4 SPF 1650F 1.5E PF No.2 *Except* 2x4 SPF 1650F 1.5E, 12-14: 2x4 SP 24 PF No.2 4 SPF No.2 2-6-0, Right 2x4 SPF No.2	100F 2.0E 2-6-0	BRACI TOP C BOT C	NG- HORD HORD	Structur 2-0-0 oo Rigid ce	ral wood : c purlins (eiling dire	sheathing dire 3-9-3 max.): (ctly applied.	ectly applied, except 6-7.	
REACTIONS. (siz Max H Max U Max G	e) 2=0-3-8, 12=0-3-8 lorz 2=-106(LC 13) lplift 2=-218(LC 12), 12=-217(LC 13) irav 2=1555(LC 1), 12=1557(LC 1)								
FORCES. (lb) - Max. TOP CHORD 2-4=- 10-12 10-12 BOT CHORD 2-203 WEBS 4-203 10-12 10-14	Comp./Max. Ten All forces 250 (lb) o 2571/324, 4-6=-2022/286, 6-7=-2065/3 2=-4379/456 =-307/2301, 18-20=-307/2301, 14-15=-2 =0/250, 4-18=-622/198, 7-15=-74/661, 8 4=0/309, 15-18=-136/1836, 6-15=-79/62	less except when shown. 11, 7-8=-2358/314, 8-10=- 260/2834, 12-14=-349/397 -15=-869/233, 8-14=-130/ 5	4243/501, 5 (1299,						
NOTES									
 Unbalanced roof live Wind: ASCE 7-16; MWFRS (envelope) Exterior(2R) 17-2-0 exposed;C-C for me Provide adequate di This truss has been Bearing at joint(s) 12 capacity of bearing si Provide mechanical 2=218, 12=217. This truss is designer referenced standard This truss design referenced standard 	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91n gable end zone and C-C Exterior(2E) - to 21-7-7, Interior(1) 21-7-7 to 33-4-8 zc imbers and forces & MWFRS for reaction rainage to prevent water ponding. designed for a 10.0 psf bottom chord ling 2 considers parallel to grain value using surface. connection (by others) of truss to bearing ed in accordance with the 2018 Internation I ANSI/TPI 1. quires that a minimum of 7/16" structure	esign. hph; TCDL=6.0psf; BCDL= 1-10-8 to 1-3-5, Interior(1) one; cantilever left and righ ns shown; Lumber DOL=1 re load nonconcurrent with ANSI/TPI 1 angle to grain ng plate capable of withsta onal Residential Code second I wood sheathing be applied	e4.2psf; h=15i 1-3-5 to 14-4 tt exposed ; e 1.60 plate grip a any other liv formula. Bui unding 100 lb ctions R502.1 ed directly to	it; Cat. II; E: -0, Exterior(nd vertical I DOL=1.60 e loads. Iding design uplift at join 1.1 and R80 the top cho	kp C; En (2E) 14-4 eft and r ner shou t(s) exce 02.10.2 a rd and 1/	closed; I-O to 17- ight Id verify pt (jt=lb) Ind '2" gypsu	2-0, n	STATE OF SCOT SEV DE COT NON PE-200	MISSOLIP TT M. TER

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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L	6-3-12 12-	4-0	18-2-0	27-2-8	31-6-0			
I	6-3-12 6-0	-4	5-10-0	9-0-8	4-3-8			
Plate Offsets (X,Y)	[5:0-4-2,Edge], [7:0-4-2,Edge], [11:0-0-0	6,0-4-6]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.85 BC 0.94 WB 0.51 Matrix-AS	DEFL. Vert(LL) -(Vert(CT) -(Horz(CT) (in (loc) I/defl L/d).34 13-14 >999 240).78 13-14 >487 180).23 11 n/a n/a	PLATES GRIP MT20 197/144 Weight: 141 lb FT = 20%			
LUMBER- TOP CHORD 2x4 SF 5-7: 2x BOT CHORD 2x4 SF 13-14: WEBS 2x4 SF SLIDER Left 2x	PF 1650F 1.5E *Except* 4 SPF No.2 PF No.2 *Except* 2x4 SPF 1650F 1.5E, 11-13: 2x4 SP 24 PF No.2 4 SPF No.2 2-6-0, Right 2x4 SPF No.2 :	00F 2.0E 2-6-0	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir 2-0-0 oc purlins (3-4-1 max.): Rigid ceiling directly applied.	rectly applied, except 5-7.			
REACTIONS. (size Max H Max U Max G	e) 2=0-3-8, 11=0-3-8 lorz 2=92(LC 16) plift 2=-223(LC 12), 11=-223(LC 13) rav 2=1549(LC 1), 11=1549(LC 1)							
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-2557/338, 4-5=-2193/312, 5-6=-2462/354, 6-7=-2484/349, 7-8=-2480/330, 8-9=-4154/522, 9-11=-4288/484 BOT CHORD 2-18=-313/2289, 16-18=-313/2289, 6-14=-449/130, 13-14=-292/2961, 11-13=-376/3890 WEBS 4-16=-404/153, 14-16=-155/1977, 5-14=-106/728, 7-14=-109/963, 8-14=-822/209, 8-13=-127/1081, 9-13=0/301								
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 16-9-7 to vertical left and right 3) Provide adequate dr 4) This truss has been 5) Bearing at joint(s) 1° capacity of bearing s	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) - 19-2-0, Exterior(2R) 19-2-0 to 23-7-7, In exposed;C-C for members and forces & rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv 1 considers parallel to grain value using surface.	sign. ph; TCDL=6.0psf; BCDL -10-8 to 1-3-5, Interior(1) terior(1) 23-7-7 to 33-4-8 & MWFRS for reactions s e load nonconcurrent with ANSI/TPI 1 angle to grain	=4.2psf; h=15ft; Cat.) 1-3-5 to 12-4-0, Exte 3 zone; cantilever left hown; Lumber DOL= h any other live loads n formula. Building d	II; Exp C; Enclosed; rrior(2R) 12-4-0 to 16-9-7, and right exposed ; end 1.60 plate grip DOL=1.60 esigner should verify	SCOTT M.			

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
 2=223, 11=223.

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

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

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



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	5-9-12 11-4-0	13-6-8 14-0-0	18-2-0 21	2-0	27-2-8	31-6-0	
Plate Offsets (X,Y)	[1:0-2-8,0-0-4], [5:0-3-0,Edge], [11:0-4-	14,Edge]	4-2-0 3-	5-0	0-0-0	4-3-0	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.42 BC 0.64 WB 0.69 Matrix-AS	DEFL. Vert(LL) -0.0 Vert(CT) -0.1 Horz(CT) 0.0	in (loc) l/defl 9 13-14 >999 8 13-14 >999 5 11 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 137 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP SLIDER Left 2x REACTIONS. (size Max H	F No.2 F No.2 F No.2 4 SPF No.2 2-6-0, Right 2x4 SPF No.2 : e) 1=0-3-8, 11=0-3-8, 17=0-3-8 orz 1=-98(LC 13)	2-6-0	BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling dir	d sheathing direc ; (6-0-0 max.): 4 ectly applied.	ctly applied, except -5, 6-8.	
FORCES. (lb) - Max. TOP CHORD 1-3=- 8-9=- BOT CHORD 1-20 WEBS 3-18= 9-14=	 Juit 1 = 90(LC 12), 11=-159(LC 13), 17= rav 1=483(LC 25), 11=722(LC 26), 17= Comp./Max. Ten All forces 250 (lb) or 586/180, 3-4=-9/494, 4-5=0/432, 5-6=0/ 482/149, 9-11=-1439/303 -156/541, 18-20=-156/541, 17-18=-836 -693/172, 4-18=-458/78, 6-17=-1028/15 -887/222, 9-13=0/370, 6-18=-110/972 	193(LC 13) 1919(LC 1) less except when shown. 405, 6-7=0/807, 7-8=-385 /175, 13-14=-207/1247, 1 50, 7-17=-1055/171, 7-14=	/169, 1-13=-212/1318 90/707,				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) Interior(1) 14-0-0 to vertical left and right 3) Provide adequate dr 4) This truss has been 5) Bearing at joint(s) 17 capacity of bearing s 6) Provide mechanical 11=159, 17=193. 7) This truss id esigner referenced standard 8) This truss design ref	e loads have been considered for this de ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) 0- 21-2-0, Exterior(2R) 21-2-0 to 24-3-13, I exposed;C-C for members and forces & ainage to prevent water ponding. designed for a 10.0 psf bottom chord liv i considers parallel to grain value using surface. connection (by others) of truss to bearin d in accordance with the 2018 Internation ANSI/TPI 1. quires that a minimum of 7/16" structura	sign. ph; TCDL=6.0psf; BCDL= 0-0 to 3-1-13, Interior(1) 3 nterior(1) 24-3-13 to 33-4- k MWFRS for reactions sh e load nonconcurrent with ANSI/TPI 1 angle to grain g plate capable of withsta onal Residential Code sec I wood sheathing be applie	4.2psf; h=15ft; Cat. II; 3-1-13 to 11-4-0, Exter 8 zone; cantilever left lown; Lumber DOL=1. any other live loads. formula. Building des nding 100 lb uplift at jo tions R502.11.1 and R ed directly to the top cl	Exp C; Enclosed; or(2E) 11-4-0 to 1/ and right exposed 30 plate grip DOL= igner should verify int(s) 1 except (jt= 802.10.2 and nord and 1/2" gyps	4-0-0, ; end 11.60 Ib) um	STATE OF SEV	MISSOUR T.M. TER

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



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LOADING (psf TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	F) D D D D	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC 0.4 BC 0.8 WB 0.3 Matrix-AS	45 38 32 33	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.19 0.10	(loc) 10-11 10-11 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 84 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS SLIDER	2x4 SPI 2x4 SPI 2x4 SPI Right 2x	F No.2 F No.2 F No.2 K4 SPF No.2 2-6-0				BRACING- TOP CHOR BOT CHOR	RD RD	Structu 2-0-0 o Rigid ce	ral wood c purlins eiling dire	sheathing dir (5-7-6 max.): ectly applied.	ectly applied, except 1-2, 3-5.	end verticals, and

REACTIONS. (size) 14=0-3-8, 8=0-3-8 Max Horz 14=-173(LC 10) Max Uplift 14=-132(LC 13), 8=-173(LC 13) Max Grav 14=795(LC 1), 8=940(LC 1)

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

TOP CHORD 3-4=-944/218, 4-5=-986/225, 5-6=-1420/278, 6-8=-2115/343

BOT CHORD 4-12=-319/130, 11-12=-108/1286, 10-11=-225/1830, 8-10=-235/1921

- WEBS 12-14=0/406, 3-12=-140/818, 5-12=-345/138, 5-11=-13/350, 6-11=-559/159,
- 6-10=-16/415, 3-14=-889/170

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-5-8, Interior(1) 2-5-8 to 9-7-8, Exterior(2R) 9-7-8 to 12-7-8, Interior(1) 12-7-8 to 19-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.

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

5) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=132, 8=173.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

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





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	3-5-8	4-5-84 ₁ 7 ₁ 8	11-7-8			13-8-	0	1	7-11-8	
	3-5-8	<u>1-0-0 0-2-0</u>	7-0-0			2-0-8	3 '		4-3-8	
Plate Offsets (X,Y)	[2:0-3-0,0-0-12], [8	3:0-4-8,Edge], [12:0-2	-8,0-3-8]							
LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- Plate Grip I Lumber DO	2-0-0 DOL 1.15 L 1.15	CSI. TC 0.39 BC 0.82	DEFL. Vert(LL) Vert(CT)	in -0.10 -0.22	(loc) 10-11 11-12	l/defl >999 >963	L/d 240 180	PLATES MT20	GRIP 197/144
BCLL0.0BCDL10.0	Rep Stress Code IRC2	Incr YES 018/TPI2014	WB 0.33 Matrix-AS	Horz(CT)	0.11	8	n/a	n/a	Weight: 80 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF SLIDER Right 2	PF No.2 PF No.2 PF No.2 2x4 SPF No.2 2-6-0)		BRACING- TOP CHORI BOT CHORI	כ כ	Structur 2-0-0 or Rigid ce	ral wood c purlins eiling dire	sheathing dire (4-6-0 max.): ctly applied.	ectly applied, except 1-2, 3-5.	end verticals, and
REACTIONS. (siz Max H Max L Max C	Reactions. (size) 15=0-3-8, 8=0-3-8 Max Horz 15=-141(LC 10) Max Uplift 15=-125(LC 9), 8=-172(LC 13) Max Grav 15=795(LC 26), 8=940(LC 26)									
FORCES. (lb) - Max. TOP CHORD 13-1 6-8= BOT CHORD 12-1 WEBS 5-11	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 13:15=-753/186, 2-3=-1431/282, 3-4=-1319/254, 4-5=-1644/317, 5-6=-1766/325, 6-8=-2057/360 BOT CHORD 12:13=-67/896, 11:12=-251/1769, 10:11=-246/1785, 8-10=-261/1863 WEBS 5-11=-28/356, 6-10=-46/317, 2-13=-1088/209, 3:12=-641/140, 2-12=-165/1093,									
 4-12 NOTES- 1) Unbalanced roof liv. 2) Wind: ASCE 7-16; \ MWFRS (envelope) Interior(1) 4-5-8 to 1 vertical left and righ 3) Provide adequate d 4) This truss has been 5) Bearing at joint(s) 8 capacity of bearing capacity of bearing capacity of bearing capacity of bearing 	e loads have been of /ult=115mph (3-sec) gable end zone ar 11-7-8, Exterior(2R) t exposed;C-C for r rainage to prevent t designed for a 10.1 considers parallel t surface.	considered for this de cond gust) Vasd=91m id C-C Exterior(2E) 0 11-7-8 to 14-7-8, Intr nembers and forces & water ponding. 0 psf bottom chord liv to grain value using A	sign. ph; TCDL=6.0psf; BCDL= 1-12 to 3-1-12, Interior(1) erior(1) 14-7-8 to 19-10-0 MWFRS for reactions sl e load nonconcurrent with NSI/TPI 1 angle to grain	=4.2psf; h=15ft; Cat) 3-1-12 to 3-5-8, E: zone; cantilever lef hown; Lumber DOL h any other live load formula. Building d	t. II; Exp xterior(; t and ri =1.60 p ds. lesigner	p C; En 2E) 3-5- ght exp blate gri r should	closed; -8 to 4-5- osed ; er p DOL=1 d verify	8, Id .60	ANTE OF	MISSOL

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=125, 8=172.
 3) This trues is designed in accordance with the 2018 International Residential Code sections RE02 11.1 and R202 10.2 and
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





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L	5-5-8 6-	5-8 10-0-8	1:	3-7-8		17-11-8	_
I	5-5-8 1-	0-0 3-7-0	3	-7-0		4-4-0	1
Plate Offsets (X,Y)	[2:0-4-2,Edge], [3:0-4-0,0-2-2], [5:0-4-0,	0-2-2]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.72 BC 0.86 WB 0.45 Matrix-MS	DEFL. ir Vert(LL) -0.13 Vert(CT) -0.23 Horz(CT) 0.07	i (loc) l/defl 10-11 >999 10-11 >923 7 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 74 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP 7-12: 2 WEBS 2x4 SP SLIDER Right 2	F No.2 F No.2 *Except* x4 SPF 1650F 1.5E F No.2 x4 SPF No.2 2-6-0		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood except end vert Rigid ceiling dir 1 Row at midpt	l sheathing dire icals, and 2-0-(ectly applied or 2-	ectly applied or 2-11- 0 oc purlins (3-0-0 ma r 8-11-11 oc bracing. 13	10 oc purlins, ax.): 1-2, 3-5.
REACTIONS. (size Max H Max U Max G	e) 13=0-3-8, 7=0-3-8 orz 13=-108(LC 6) plift 13=-305(LC 5), 7=-318(LC 9) rav 13=1377(LC 1), 7=1406(LC 1)						
FORCES. (lb) - Max. TOP CHORD 1-13= BOT CHORD 11-13 WEBS 2-13= 2-11=	Comp./Max. Ten All forces 250 (lb) or 271/111, 2-3=-2820/624, 3-4=-2728/60 3=-421/2127, 10-11=-625/2983, 9-10=-4 2276/518, 3-11=-1006/223, 4-11=-297 333/1703	less except when shown)7, 4-5=-2986/706, 5-7=-2 04/1999, 7-9=-402/2006 /129, 4-10=-277/93, 5-10:	2226/518 =-284/1154,				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 3) Provide adequate dr 4) This truss has been 5) Provide mechanical 13=305, 7=318. 6) This truss is designer referenced standard 7) Graphical purlin repr 8) "NAILED" indicates is 9) Hanger(s) or other co 13-6-12 on bottom co 10) In the LOAD CASE LOAD CASE(S) Stand 1) Dead + Roof Live (b Uniform Loads (plf) Vert: 1-2=-7	e loads have been considered for this de fult=115mph (3-second gust) Vasd=91m gable end zone; cantilever left and right ainage to prevent water ponding. designed for a 10.0 psf bottom chord liv connection (by others) of truss to bearin ad in accordance with the 2018 Internation ANSI/TPI 1. resentation does not depict the size or th 3-10d (0.148"x3") or 3-12d (0.148"x3.25 onnection device(s) shall be provided su hord. The design/selection of such conn is(S) section, loads applied to the face of dard alanced): Lumber Increase=1.15, Plate 70, 2-3=-70, 3-5=-70, 5-8=-70, 13-14=-20	isign. iph; TCDL=6.0psf; BCDL= exposed ; end vertical lef e load nonconcurrent with g plate capable of withsta onal Residential Code sec the orientation of the purlin ") toe-nails per NDS guidi ufficient to support concer nection device(s) is the re the truss are noted as fro Increase=1.15	=4.2psf; h=15ft; Cat. II; E ft and right exposed; Lur n any other live loads. anding 100 lb uplift at joir ctions R502.11.1 and R8 along the top and/or boi ines. ntrated load(s) 177 lb dov sponsibility of others. int (F) or back (B).	xp C; Enclosed; nber DOL=1.60 p nt(s) except (jt=lb 02.10.2 and ttom chord. wn and 68 lb up a	late) It	STATE OF STATE OF SCORE	MISSOLUTI MISSOLUTI VIER DI018807
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Continued on page 2

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NiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

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LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 5=-44(B) 9=-177(B) 18=-80(B) 19=-80(B) 20=-44(B) 21=-32(B) 22=-32(B) 23=-179(B) 24=-190(B) 25=-173(B) 26=-17(B)

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16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
2811731	C1	ROOF SPECIAL GIRDER	1	2		146995289
				_	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		3.430 s Jur	n 2 2021 MiTek Industries, Inc. Wed Jul 14 08:59:05 2021	Page 2

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NOTES-

- 11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 3-5-4 from the left end to connect truss(es) to front face of bottom chord. 12) Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 19-6-0 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the right,
- sloping 0.0 deg. down.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-10-12 from the left end to 5-10-12 to connect truss(es) to back face of bottom chord.
- 14) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 7-9-14 from the left end to connect truss(es) to back face of bottom chord.
- 15) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 9-10-12 from the left end to 11-10-12 to connect truss(es) to back face of bottom chord.
- 16) Use Simpson Strong-Tie HHUS26-2 (14-SD10212 Girder, 6-SD10212 Truss) or equivalent at 13-9-14 from the left end to connect truss(es) to back face of bottom chord.
- 17) Fill all nail holes where hanger is in contact with lumber.
- 18) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-70, 3-4=-70, 4-5=-70, 5-7=-70, 7-8=-70, 8-10=-70, 18-19=-20

Concentrated Loads (lb)

Vert: 8=43(F) 17=-1713(B) 21=89(F) 23=-1713(B) 24=-356(F) 25=-1713(B) 26=-2079(B) 27=-1380(B) 28=-1380(B) 29=-2926(B)

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L	5-4-0	1	10-8-0		16-0-0				
I	5-4-0		5-4-0		1		5-4-0	1	
Plate Offsets (X,Y)-	[1:0-2-8,0-0-4], [3:0-4-2,Edge]								
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.44 BC 0.40 WB 0.09 Matrix-AS	DEFL. in Vert(LL) -0.05 Vert(CT) -0.10 Horz(CT) 0.03	(loc) 7-8 7-8 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 55 lb	GRIP 197/144 FT = 20%	
LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 BRACING- TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-0-10 max.): 3-4. WEBS 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0 REACTIONS. (size) 1=Mechanical, 6=0-3-8 Max Horz 1=34(LC 12) Max Uplift 1=-95(LC 12), 6=-95(LC 13) Max Grav 1=720(LC 1), 6=-720(LC 1)									
FORCES. (Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except when shown. FOP CHORD 1-3=-1149/263, 3-4=-1028/276, 4-6=-1149/262 BOT CHORD 1-8=-193/1034, 7-8=-195/1028, 6-7=-186/1034									
NOTES- 1) Unbalanced roof 2) Wind: ASCE 7-1 MWFRS (envelo	live loads have been considered for thi 5; Vult=115mph (3-second gust) Vasd= se) gable end zone and C-C Exterior(21	. design. 1mph; TCDL=6.0psf; BCDL=4.2) 0-0-0 to 3-0-0, Interior(1) 3-0-0	2psf; h=15ft; Cat. II; E: 0 to 5-4-0, Exterior(2R	xp C; En) 5-4-0 t	nclosed; o 9-6-15,				

Interior(1) 9-6-15 to 10-8-0, Exterior(2R) 10-8-0 to 14-10-15, Interior(1) 14-10-15 to 16-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6.

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

referenced standard ANSI/TPI 1.

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

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



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	<u> </u>	3-5-12	6-8-0		9-8-0		12-8-0		16-0-0	
Plate Of	fsets (X,Y)	[1:0-3-8,Edge], [6:0-4	<u>3-2-4</u> -0,0-2-2], [8:0-5-3,I	Edge]	3-0-0		3-0-0		3-4-0	
LOADIN TCLL TCDL BCLL BCDL	G (psf) 25.0 10.0 0.0 10.0	SPACING- Plate Grip DOI Lumber DOL Rep Stress Inc Code IRC2018	2-0-0 L 1.15 1.15 sr NO 8/TPI2014	CSI. TC 0.39 BC 0.74 WB 0.34 Matrix-MS	DEF Vert(Vert(Horz	ir LL) -0.09 CT) -0.15 (CT) 0.04	n (loc) / 0.10-11 > 5.10-11 > 4. 8	/defl L/d •999 240 •999 180 n/a n/a	PLATES MT20 Weight: 64 lb	GRIP 197/144 FT = 20%
LUMBEI TOP CH BOT CH WEBS SLIDER	R- ORD 2x4 SP ORD 2x4 SP 2x4 SP Left 2x	PF No.2 PF No.2 PF No.2 4 SPF No.2 2-0-0, Rig	ght 2x4 SPF No.2 2	2-6-0	BRA TOP BOT	CING- CHORD CHORD	Structural 2-0-0 oc p Rigid ceili	wood sheathing d purlins (3-7-10 max ing directly applied	irectly applied or 4-0-1 (.): 4-6. or 9-3-11 oc bracing.	oc purlins, except
REACTI	ONS. (size Max H Max U Max G	e) 1=0-3-8, 8=0-3-8 orz 1=-57(LC 9) plift 1=-114(LC 8), 8= rav 1=841(LC 1), 8=	238(LC 9) 1112(LC 1)							
FORCES TOP CH BOT CH WEBS	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. FOP CHORD 1-3=-1368/217, 3-4=-2124/396, 4-5=-2006/361, 5-6=-2327/479, 6-8=-1601/349 BOT CHORD 1-13=-143/1213, 12-13=-145/1208, 11-12=-406/2324, 10-11=-255/1434, 8-10=-254/1440 WEBS 3-12=-279/1392, 4-12=-969/205, 5-12=-429/146, 6-11=-186/1034									
NOTES- 1) Unbal 2) Wind: MWFI grip D 3) Provid 4) This t 5) Provid 1=114 6) This t refere 7) Graph 8) Use S truss(9) Fill all 10) "NAI 11) Han 12-7 12) In th	lanced roof live ASCE 7-16; V RS (envelope) IOL=1.60 de adequate dr russ has been de mechanical 4, 8=238. russ is designe nical purlin rep Simpson Strong es) to front fac nail holes whe LED" indicates ger(s) or other '-4 on bottom c e LOAD CASE	e loads have been cor (ult=115mph (3-secon gable end zone; cant rainage to prevent wat designed for a 10.0 p connection (by others ed in accordance with ANSI/TPI 1. resentation does not co p-Tie LUS24 (4-10d G e of bottom chord. ere hanger is in contad s 3-10d (0.148"x3") or connection device(s) shord. The design/sel (S) section, loads app	nsidered for this dea id gust) Vasd=91m ilever left and right ter ponding. sf bottom chord live s) of truss to bearing the 2018 Internation depict the size or th irder, 2-10d Truss, ct with lumber. 3-12d (0.148"x3.2! shall be provided s ection of such conr plied to the face of	sign. ph; TCDL=6.0psf; BCl exposed ; end vertica e load nonconcurrent i g plate capable of with onal Residential Code ie orientation of the pu Single Ply Girder) or 5") toe-nails per NDS sufficient to support co nection device(s) is the the truss are noted as	DL=4.2psf; h=1 I left and right of with any other hstanding 100 I sections R502 urlin along the t equivalent at 1 guidlines. ncentrated loa e responsibility front (F) or ba	5ft; Cat. II; E exposed; Lur ive loads. o uplift at join 11.1 and R8 op and/or bo 0-0-12 from t d(s) 98 lb do of others. ck (B).	Exp C; Enclo nber DOL=1 nt(s) except 02.10.2 and ttom chord. the left end t wn and 45 ll	bsed; 1.60 plate (jt=lb) d to connect b up at	STATE OF STATE OF SCO SE SCO SE NUT	MISSOLP TT M. VIER MBER 01018807
LOAD C 1) Dead Unifor	ASE(S) Stand + Roof Live (b rm Loads (plf)	dard alanced): Lumber Inc	rease=1.15, Plate I	ncrease=1.15					ESSION	AL ENGL

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-9=-70, 14-18=-20

Continued on page 2

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July 15,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						I46995291
2811731	C3	Roof Special Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 08:59:08 2021	Page 2

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LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 6=-4(F) 10=-69(F) 22=-4(F) 23=-302(F) 24=-2(F)

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NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 10-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

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

referenced standard ANSI/TPI 1.

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

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- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 140 lb down and 82 lb up at 3-10-0, and 140 lb down and 82 lb up at 6-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-70, 4-5=-70, 5-8=-70, 11-15=-20 Concentrated Loads (lb)

Vert: 5=-24(F) 10=-140(F) 9=-140(F) 4=-24(F)





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Plate Offsets (X,Y)	[2:0-4-10,0-0-1]				
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.57 BC 0.32 WB 0.03 Matrix-MP	DEFL. ir Vert(LL) -0.00 Vert(CT) -0.01 Horz(CT) 0.00	(loc) l/defl L/d 9 >999 240 8-9 >999 180 8 n/a n/a	PLATES GRIP MT20 197/144 Weight: 28 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SE	2F No.2 2F No.2 2F No.2 2F No.2		BRACING- TOP CHORD	Structural wood sheath except end verticals.	ning directly applied or 6-0-0 oc purlins,

WEBS2x4 SPF No.2SLIDERLeft 2x6 SPF No.2 2-6-0REACTIONS.(size)2=0-7-6, 8=Mechanical

Max Horz 2=94(LC 7) Max Uplift 2=-168(LC 4), 8=-40(LC 8) Max Grav 2=503(LC 1), 8=188(LC 1)

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

NOTES-

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

MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=168.

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

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

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-70, 5-6=-20, 7-10=-20 Concentrated Loads (lb) Vert: 9=22(F=11, B=11)



July 15,2021



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grip DOL=1.60

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

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=152.

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

- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-5=-70, 5-6=-20, 7-10=-20 Concentrated Loads (lb)







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			<u>3-11-5</u> 3-11-5					7-8-9 3-9-3		—
Plate Offsets (X,Y)	[2:0-4-10,0-0-5]									
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2 Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI20	-0-0 1.15 1.15 NO 014	CSI. TC 0.57 BC 0.36 WB 0.08 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.10 0.04	(loc) 11 11 9	l/defl >999 >904 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 29 lb	GRIP 197/144 FT = 20%

LUMBER- TOP CHORD	2x4 SPF No.2	BRACING- TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins,			
WEBS SLIDER	2x4 SPF No.2 2x4 SPF No.2 Left 2x4 SPF No.2 2-0-0	BOT CHORD	except end verticals. Rigid ceiling directly applied of 6-0-0 oc bracing: 10-11.	or 10-0-0 oc bracing,	Except:	

REACTIONS. (size) 9=Mechanical, 2=0-4-9 Max Horz 2=94(LC 5) Max Uplift 9=-95(LC 8), 2=-167(LC 4) Max Grav 9=309(LC 1), 2=510(LC 1)

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

 TOP CHORD
 2-4=-256/364, 4-5=-449/138

 BOT CHORD
 9-10=-150/467

 WEBS
 5-9=-535/189

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=167.

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

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

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-6=-70, 6-7=-20, 11-12=-20, 8-10=-20

Concentrated Loads (lb) Vert: 16=73(F=36, B=36) 19=-25(F=-13, B=-13)





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1-1-6	1
1-1-6	

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.43	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 8 lb	FT = 20%

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

Plate Offsets (X Y)-- [2:0-2-3 0-0-0]

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-1-6 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-4-9 Max Horz 5=45(LC 8) Max Uplift 3=-49(LC 1), 4=-252(LC 1), 5=-256(LC 8)

Max Grav 3=24(LC 8), 4=117(LC 8), 5=616(LC 1)

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

NOTES-

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

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

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 4=252, 5=256.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







1-3-8	
1_2_9	

Plate Offs	sets (X,Y)	[2:0-2-3,0-0-0]										
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matrix	k-MP						Weight: 8 lb	FT = 20%

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-3-8 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-4-9 Max Horz 5=46(LC 8) Max Uplift 3=-35(LC 1), 4=-203(LC 1), 5=-232(LC 8)

Max Grav 3=18(LC 8), 4=97(LC 8), 5=569(LC 1)

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

NOTES-

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

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

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 4=203, 5=232.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







4-7-1
4-7-1

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.67 BC 0.32 WB 0.00 Matrix-MP	DEFL. in (loc) l/defl L/d Vert(LL) 0.04 7-10 >999 240 MT20 197/144 Vert(CT) 0.05 7-10 >999 180 MT20 197/144 Horz(CT) -0.02 2 n/a n/a Weight: 18 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	PF No.2		BRACING- TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins,

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

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

 TOP CHORD
 Structural wood sheathing directly applied or 4-7except end verticals.

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

REACTIONS. (size) 7=Mechanical, 2=0-4-9 Max Horz 2=78(LC 7) Max Uplift 7=-31(LC 21), 2=-151(LC 4)

Plate Offsets (X,Y)-- [2:0-4-6,0-0-5]

Max Grav 7=109(LC 37), 2=354(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-309/615

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=151.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

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

Vert: 12=86(F=43, B=43) 13=59(F=29, B=29)



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Plate Offsets ((X,Y)	[2:0-4-10,0-0-5]									1	
LOADING (p:	osf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25	5.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	0.04	7-10	>999	240	MT20	197/144
TCDL 10	0.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.04	7-10	>999	180		
BCLL 0	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL 10	0.0	Code IRC2018/TF	912014	Matri	k-MP						Weight: 20 lb	FT = 20%

 TOP CHORD
 2x4 SPF No.2
 TOP CHORD
 Structural wood sheathing directly applied or 5-3-9 oc purlins, except end verticals.

 BOT CHORD
 2x4 SPF No.2
 BOT CHORD
 Structural wood sheathing directly applied or 10-0 oc bracing.

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

 SLIDER
 Left 2x4 SPF No.2 2-6-0
 BOT CHORD
 Rigid ceiling directly applied or 10-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-4-9 Max Horz 2=86(LC 7) Max Uplift 7=-53(LC 8), 2=-172(LC 4)

Max Grav 7=159(LC 1), 2=432(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-282/308

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=172.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

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

Vert: 12=58(F=29, B=29)



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					3-2-2				2-4-4		
Plate Offsets (X,Y)	[2:0-4-6,0-0-5], [4:0-0-0,0	-0-0]			022				- · ·		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code JBC2018/TE	2-0-0 1.15 1.15 NO 212014	CSI. TC BC WB Matrix	0.57 0.24 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.02 0.01	(loc) 9 9 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 21 lb	GRIP 197/144
LUMBER-		12011	Matrix		BRACING					Wolght. 21 lb	11-20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-6-6 oc purlins,
BOT CHORD	2x4 SPF No.2		except end verticals.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
SLIDER	Left 2x4 SPF No.2 2-6-0		6-0-0 oc bracing: 9-10.

REACTIONS. (size) 8=Mechanical, 2=0-4-9 Max Horz 2=78(LC 24) Max Uplift 8=-40(LC 8), 2=-154(LC 4) Max Grav 8=201(LC 1), 2=469(LC 1)

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

NOTES-

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

MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=154.

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

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

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-70, 5-6=-20, 10-11=-20, 7-9=-20



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				2-10-3	
	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL	25.0 10.0	Lumber DOL 1.15	BC 0.39	Vert(LL) -0.02 4-5 >999 240 MT20 197/144 Vert(CT) 0.02 4-5 >999 180	4
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.02 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP	Weight: 12 lb FT =	= 20%

```
LUMBER-
```

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

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

2-10-3

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-4-9 Max Horz 5=63(LC 8) Max Uplift 3=-28(LC 12), 4=-52(LC 1), 5=-165(LC 8) Max Grav 3=49(LC 1), 4=41(LC 8), 5=470(LC 1)

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

NOTES-

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

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

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=165.

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



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			100
		I	4-3-3
Plate Offsets (X,Y)	[2:0-3-15,0-0-4], [2:0-1-8,1-6-5]		
OADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) 0.02 7 >999 240 MT20 197/144
CDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01 7 >999 180
CLL 0.0	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.00 2 n/a n/a
CDL 10.0	Code IRC2018/TPI2014	Matrix-MP	Weight: 18 lb FT = 20%
IIMBER-			BRACING-
			TOP CHORD Structurel wood abacthing directly applied or 4.2.2 on purling
			TOP CHORD Structural wood shearing directly applied of 4-5-5 oc punits,
UTCHORD 2X4 SI	PF NO.2		except end verticals.

BOT CHORD

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

IOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2WEDGELeft: 2x4 SPF No.2

REACTIONS. (size) 6=Mechanical, 2=0-4-9

Max Horz 2=72(LC 7) Max Uplift 6=-30(LC 8), 2=-125(LC 4)

Max Grav 6=125(LC 1), 2=464(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=125.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf) Vert: 1-3=-70, 3-4=-20, 5-7=-20

Concentrated Loads (lb) Vert: 13=-3(F=-1, B=-1)



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Plate Offsets (X,Y)	[2:0-3-15,0-0-12], [2:0-1-8,1-6-5]			
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.17 BC 0.17 WB 0.00 Matrix-MP	DEFL. in (loc) I/defl L/d Vert(LL) -0.01 5 >999 240 Vert(CT) -0.02 5 >999 180 Horz(CT) -0.00 3 n/a n/a Weight: 9 lb FT = 20%	
LUMBER-		11	BRACING-	_

TOP CHORD

BOT CHORD

LUMBER-

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

Left: 2x4 SPF No.2

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 2=0-4-9 Max Horz 2=48(LC 8) Max Uplift 3=-51(LC 1), 4=-74(LC 1), 2=-197(LC 8) Max Grav 3=24(LC 8), 4=33(LC 8), 2=468(LC 1)

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

NOTES-

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

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

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=197.

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



Structural wood sheathing directly applied or 1-5-4 oc purlins.

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





TOP CHORD

BOT CHORD

Max Grav	10=434(LC	1),	2=632(LC	1)

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

TOP CHORD 4-14=-333/52, 4-6=-856/196

2x4 SPF No.2 *Except*

2x4 SPF No.2

2x4 SPF No.2

1-5: 2x4 SP 2400F 2.0E

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

Max Horz 2=101(LC 5)

(size) 10=Mechanical, 2=0-4-9

Max Uplift 10=-105(LC 8), 2=-184(LC 4)

BOT CHORD 4-11=-213/830, 10-11=-213/835

WEBS 6-10=-899/244

NOTES-

TOP CHORD

BOT CHORD

REACTIONS.

WEBS

SLIDER

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

MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=105, 2=184.

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

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

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-70, 4-7=-70, 7-8=-20, 12-13=-20, 4-9=-20

Concentrated Loads (Ib) Vert: 18=18(F=-9, B=-9) 20=-57(F=-29, B=-29) CALL OF MISSOL

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

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=174.

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

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

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

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-5=-70, 5-6=-20, 7-10=-20

Concentrated Loads (lb) Vert: 15=-4(F=-2, B=-2) 17=-6(F=-3, B=-3)







		3-1-1	6-2-3	
		3-1-1	3-1-1	
(X,Y)	[2:0-4-6,0-0-1]			

LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.57 BC 0.19	DEFL. in (loc) l/defl L Vert(LL) -0.00 7 >999 24 Vert(CT) -0.01 6-7 >999 18	/d PLATES GRIP 40 MT20 197/144 30
BCLL 0.0 BCDL 10.0	Rep Stress Incr NO Code IRC2018/TPI2014	WB 0.05 Matrix-MP	Horz(CT) -0.00 2 n/a n	/a Weight: 27 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF	PF No.2 PF No.2		BRACING- TOP CHORD Structural wood sheat except end verticals.	athing directly applied or 6-0-0 oc purlins,

WEBS 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 2-6-0 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-4-9, 6=Mechanical Max Horz 2=96(LC 7)

Max Uplift 2=-161(LC 4), 6=-45(LC 8) Max Grav 2=490(LC 1), 6=220(LC 1)

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

NOTES-

Plate Offsets

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=161.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-5=-70, 6-8=-20 Concentrated Loads (lb)
 - Vert: 13=19(F=10, B=10)



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		1	3-1-7	6-2-1	4	1
		I	3-1-7	3-1-	7	1
Plate Offsets (X,Y)	[2:0-4-6,0-0-1]					

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.57 BC 0.18 WB 0.04 Matrix-MP	DEFL. ir Vert(LL) -0.00 Vert(CT) -0.01 Horz(CT) -0.00	n (loc) I/defl L/d 9 >999 240 8-9 >999 180 9 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 27 lb FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4	SPF No.2 SPF No.2 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals. Rigid ceiling directly applied o	rectly applied or 6-0-0 oc purlins, or 10-0-0 oc bracing.

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

REACTIONS. (size) 2=0-4-9, 8=Mechanical Max Horz 2=97(LC 7)

Max Uplift 2=-160(LC 4), 8=-48(LC 8) Max Grav 2=487(LC 1), 8=227(LC 1)

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

NOTES-

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- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=160.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-70, 5-6=-20, 7-10=-20 Concentrated Loads (lb)

Vert: 15=19(F=10, B=10)



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4-9-14	
4-9-14	

Plate Offsets (X,	() [2	2:0-4-10,0-0-1]										
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0		SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 NO Pl2014	CSI. TC BC WB Matrix	0.57 0.22 0.00 MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.04 0.04 -0.01	(loc) 7-10 7-10 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2	x4 SPF	- No.2				BRACING- TOP CHOR	D	Structu	ral wood	sheathing di	rectly applied or 4-9-1	4 oc purlins,

 LUMBER BRACING

 TOP CHORD
 2x4 SPF No.2
 TOP CHORD
 TOP CHORD
 Structural wood sheathing directly applied or 4-9-14 oc purlins, except end verticals.

 BOT CHORD
 2x4 SPF No.2
 BOT CHORD
 Structural wood sheathing directly applied or 10-0-0 oc bracing.

 SLIDER
 Left 2x4 SPF No.2 2-6-0
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-14 Max Horz 2=81(LC 7) Max Uplift 7=-24(LC 5), 2=-145(LC 4) Max Grav 7=141(LC 37), 2=405(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-311/410

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

H

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=145.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

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





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Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						I46995310
2811731	D1	ROOF SPECIAL GIRDER	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 08:59:27 2021	Page 2

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LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-70, 4-5=-70, 5-6=-70, 6-7=-70, 7-9=-70, 16-17=-20, 12-15=-20, 10-11=-20 Concentrated Loads (lb)

Vert: 16=-280(F) 12=-183(F) 23=-193(F) 24=-193(F)





	3-3-8 3-3-8	5-1-4 1-9-12	8-10-8 3-9-4	11-2-0 2-3-8
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. DEFL. TC 0.23 Vert(LL) BC 0.44 Vert(CT) WB 0.16 Horz(CT) Matrix-AS Horz(CT)	in (loc) I/defl L/d -0.03 12-13 >999 240 -0.07 11-12 >999 180 0.05 8 n/a n/a	PLATES GRIP MT20 197/144 Weight: 49 lb FT = 20%
LUMBER-		BRACING	-	

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	4-14: 2x6 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 2-0-0

REACTIONS. (size) 8=0-3-8, 2=0-3-8 Max Horz 2=104(LC 11) Max Uplift 8=-84(LC 9), 2=-102(LC 8)

Max Grav 8=485(LC 1), 2=638(LC 1)

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

- 2-4=-606/155, 4-5=-1006/274, 5-6=-912/270, 8-10=-455/128 TOP CHORD
- BOT CHORD 2-14=-243/541, 12-13=-546/1264, 11-12=-256/730, 10-11=-247/734
- WEBS 4-12=-360/239, 6-10=-731/249

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-1-4, Exterior(2R) 5-1-4 to 9-4-3, Interior(1) 9-4-3 to 11-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=102.

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

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

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



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 5-7.

Rigid ceiling directly applied.







WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 July 15,2021





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

E

July 15,2021





LOADING ((psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.05	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.01	6	n/a	n/a		
BCDL 1	10.0	Code IRC2018/TF	912014	Matri	x-AS						Weight: 47 lb	FT = 20%

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=206(LC 11) Max Uplift 2=-108(LC 12), 6=-108(LC 12) Max Grav 2=638(LC 1), 6=485(LC 1)

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

 TOP CHORD
 2-4=-540/154

 BOT CHORD
 2-7=-278/547, 6-7=-278/547

WEBS 4-6=-590/246

NOTES-

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

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

- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=108, 6=108.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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



BRACING-TOP CHORD BOT CHORD

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



					2100		0 10 0	·		000		
				ſ	2-10-0	1	1-0-0	1		2-8-8		
Plate Offset	ts (X,Y)	[4:0-3-14,Edge]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.01	9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	k-AS						Weight: 27 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 8=Mechanical, 10=0-3-8

Max Horz 10=119(LC 9) Max Uplift 8=-58(LC 12), 10=-84(LC 12)

Max Grav 8=263(LC 1), 10=440(LC 1)

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

TOP CHORD 2-3=-260/45, 2-10=-379/225

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 2-10-0, Exterior(2E) 2-10-0 to 3-10-0, Interior(1) 3-10-0 to 6-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

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

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

5) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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

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

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

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



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied.

July 15,2021





BOT CHORD 4-11=-249/376, 10-11=-247/365

WEBS 5-10=-458/301

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 4-10-0, Exterior(2E) 4-10-0 to 5-10-0, Interior(1) 5-10-0 to 6-6-8 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

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

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

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

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

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

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







					2-10-0				6-6-8			
				1	2-10-0				3-8-8		1	
Plate Offs	sets (X,Y)	[3:0-5-4,0-2-2]										
	C (nof)	SPACING	200	001		DEEL	in	(loc)	l/dofl	L /d		CRIP
LUADING	s (psi)	SFACING-	2-0-0	031.		DEFL.		(100)	i/deli	L/u	FLATES	GRIF
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.12	3	>615	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.18	3-7	>399	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.13	7	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-AS						Weight: 21 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 7=Mechanical, 9=0-3-8

Max Horz 9=116(LC 12) Max Uplift 7=-72(LC 12), 9=-67(LC 12)

Max Grav 7=263(LC 1), 9=439(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-9=-428/215

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 6-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

4) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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

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

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



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





REACTIONS. (size) 7=Mechanical, 11=0-3-8

Max Horz 11=101(LC 12) Max Uplift 7=-57(LC 12), 11=-75(LC 12)

Max Grav 7=267(LC 1), 11=449(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-11=-441/226

WEBS 5-8=-251/144

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 4-10-8, Exterior(2E) 4-10-8 to 5-10-8, Interior(1) 5-10-8 to 6-6-8 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

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

6) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 11.

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

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

sheetrock be applied directly to the bottom chord.

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



July 15,202

16023 Swingley Ridge Rd Chesterfield, MO 63017



	I	2-10-0	l.	1-0-8		2-8-0	1	
Plate Offsets (X,Y) [5:0-3-8,0-2-12]								
LOADING (psf) SPACING TCLL 25.0 Plate Grip TCDL 10.0 Lumber D BCLL 0.0 Rep Stres RCDL 10.0 Code IPG	- 2-0-0 DOL 1.15 OL 1.15 s Incr YES	CSI. TC 0.58 BC 0.55 WB 0.06 Matrix 45	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo 0.12 4 -0.17 4 0.10	oc) l/defl 1-8 >651 1-8 >441 8 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 REACTIONS. (size) 8=Mechanical, 10=0-3-8

Max Horz 10=99(LC 9) Max Uplift 8=-57(LC 12), 10=-83(LC 12)

Max Grav 8=258(LC 1), 10=446(LC 1)

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

TOP CHORD 2-3=-255/109, 2-10=-389/234

WEBS 3-9=-303/343

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 2-10-8, Exterior(2E) 2-10-8 to 3-10-8, Interior(1) 3-10-8 to 6-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

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

- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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



Structural wood sheathing directly applied, except end verticals, and

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

Rigid ceiling directly applied.





WEBS 3-7=-55/400, 4-6=-398/114

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate arip DOL=1.60

Provide adequate drainage to prevent water ponding.

3) 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=137.

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

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

8) Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 0-10-8 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.

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

- 10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-3=-70, 3-4=-70, 4-5=-70, 6-8=-20 Concentrated Loads (lb)

Vert: 3=48(F) 12=106(F)

OF MISS TE 0 SCOTT M. SEVIER SOFFESSIONAL PE-2001018807 E

July 15,2021





			<u></u>	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.35 BC 0.25 WB 0.00 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) -0.04 4-5 >999 240 Vert(CT) -0.08 4-5 >847 180 Horz(CT) 0.02 3 n/a n/a Weight: 16 lb FT = 20%	

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

2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. 3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=101(LC 12) Max Uplift 3=-71(LC 12), 5=-65(LC 12) Max Grav 3=158(LC 1), 4=97(LC 3), 5=408(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-357/229

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) Refer to girder(s) for truss to truss connections. 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify

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

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

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



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		<u>2-10-0</u> 2-10-0	<u></u>						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.27 BC 0.27 WB 0.00 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.05 -0.07 0.03	(loc) 6 5-6 5	l/defl >999 >922 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 17 lb	GRIP 197/144 FT = 20%

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

BRACING-TOP CHORD BOT CHORD

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

- REACTIONS. (size) 4=Mechanical, 5=Mechanical, 8=0-3-8 Max Horz 8=101(LC 12) Max Uplift 4=-53(LC 12), 5=-8(LC 12), 8=-65(LC 12) Max Grav 4=138(LC 1), 5=86(LC 3), 8=408(LC 1)
- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown. TOP CHORD 2-8=-366/205

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







				2-10-0	0-7-7	—		
	(psf) 25.0	SPACING- 2-0-0 Plate Grip DOI 1 15	CSI. TC 0.26	DEFL. in	(loc) l/defl	L/d 240	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) -0.00	7-8 >999	180		
BCLL BCDL	0.0 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-MR	Horz(CT) -0.00	4 n/a	n/a	Weight: 12 lb	FT = 20%

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

BRACING-TOP CHORD

Structural wood sheathing directly applied or 3-5-7 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 4=Mechanical, 5=Mechanical, 8=0-3-8 (size) Max Horz 8=70(LC 12) Max Uplift 4=-17(LC 12), 5=-16(LC 12), 8=-67(LC 8) Max Grav 4=63(LC 1), 5=47(LC 3), 8=332(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-8=-293/201

NOTES-

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

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

- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.

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







								1-	5-7			
LOADING TCLL	(psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.28	DEFL. Vert(LL)	in 0.00	(loc) 5	l/defl >999	L/d 240	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	5	>999	180		
BCLL BCDL	0.0 10.0	Rep Stress Incr Code IRC2018/TPI	YES 2014	WB Matrix	0.00 ĸ-MR	Horz(CT)	-0.00	3	n/a	n/a	Weight: 6 lb	FT = 20%

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

BOT CHORD

1-5-7

Structural wood sheathing directly applied or 1-5-7 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=40(LC 12) Max Uplift 3=-31(LC 1), 4=-21(LC 1), 5=-90(LC 8) Max Grav 3=16(LC 8), 4=14(LC 3), 5=310(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-263/215

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 1-5-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 5.

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.







TOP CHORD 2x4 SPF No.2 2x8 SP 2400F 2.0E BOT CHORD WEBS 2x4 SPF No.2

BRACING-TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 6=Mechanical Max Horz 1=96(LC 24)

Max Uplift 1=-234(LC 8), 6=-238(LC 8)

Max Grav 1=1644(LC 1), 6=1623(LC 1)

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

TOP CHORD 1-2=-1964/268

BOT CHORD 1-7=-267/1784, 6-7=-267/1784

2-7=-202/1597, 2-6=-2061/325 WFBS

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=234 6=238

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

6) Use Simpson Strong-Tie HUS28 (22-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-7-4 from the left end to 3-7-4 to connect truss(es) to back face of bottom chord.

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

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

LOAD CASE(S) Standard

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

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





July 15,2021





							3-5	-7				
	(psf)	SPACING- Plate Grin DOI	2-0-0	CSI.	0.26	DEFL.	in -0 01	(loc) 4-5	l/defl ⊳999	L/d 240	PLATES	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	4-5	>999	180	WIT20	137/144
BCLL BCDL	0.0 10.0	Rep Stress Incr Code IRC2018/TF	YES 912014	WB Matri	0.00 k-MR	Horz(CT)	0.01	3	n/a	n/a	Weight: 11 lb	FT = 20%

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

Structural wood sheathing directly applied or 3-5-7 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=70(LC 12) Max Uplift 3=-40(LC 12), 5=-67(LC 8)

Max Grav 3=79(LC 1), 4=57(LC 3), 5=332(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-289/207

NOTES-

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

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

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

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

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

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.







(LL) -0.04 5-8 >999 24 (CT) -0.08 5-8 >637 18 (CT) 0.02 5-8 -637 18	0 MT20 197/144				
(CT) -0.08 5-8 >637 18	30				
2(CT) 0.02 T n/a n/	/a l				
	Weight: 16 lb FT = 20%				
BRACING-					
RA	RACING-				

BOT CHORD

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

WEBS 2x4 SPF No.2 WEDGE Left: 2x4 SPF No.2

REACTIONS. (size) 5=Mechanical, 1=0-5-8

Max Horz 1=78(LC 7) Max Uplift 5=-144(LC 8), 1=-89(LC 8) Max Grav 5=752(LC 1), 1=571(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 5 = 144
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 2-4-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-3=-20, 4-6=-20 Concentrated Loads (lb)





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

Rigid ceiling directly applied or 3-9-0 oc bracing.

except end verticals.

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



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

2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. 3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=83(LC 12) Max Uplift 3=-54(LC 12), 5=-64(LC 8)

Max Grav 3=114(LC 1), 4=74(LC 3), 5=362(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-317/217

NOTES-

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

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

3) Refer to girder(s) for truss to truss connections. 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify

capacity of bearing surface.

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

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

sheetrock be applied directly to the bottom chord.



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017





LOADING TCLL TCDL	(psf) 25.0 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.28 BC 0.09	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) 0.00 4-5 >999 240 MT20 197/144 Vert(CT) 0.00 4-5 >999 180 Image: Control of the state of the s	
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a	20%
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	Weight: 8 lb FT =	

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

Structural wood sheathing directly applied or 2-2-15 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

- REACTIONS. (size) 5=0-5-8, 3=Mechanical, 4=Mechanical Max Horz 5=51(LC 12) Max Uplift 5=-76(LC 8), 3=-19(LC 12), 4=-2(LC 1) Max Grav 5=303(LC 1), 3=23(LC 1), 4=31(LC 3)
- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-261/202

NOTES-

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







			5-4-0					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.31 BC 0.23 WB 0.00 Matrix-AS	DEFL. ir Vert(LL) -0.03 Vert(CT) -0.06 Horz(CT) 0.02	(loc) 4-5 4-5 3	l/defl >999 >958 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 15 lb	GRIP 197/144 FT = 20%

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=98(LC 12) Max Uplift 3=-68(LC 12), 5=-64(LC 12)

Max Grav 3=150(LC 1), 4=93(LC 3), 5=400(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-350/228

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

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

- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







						2-8-0 2-8-0			2	5-4-0 2-8-0		
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	4-5	>999	240	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.04	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 1	10.0	Code IRC2018/TF	912014	Matrix	k-AS						Weight: 18 lb	FT = 20%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 REACTIONS. (size) 4=Mechanical, 5=0-3-8 Max Horz 5=116(LC 9)

Max Horz 5=116(LC 9)Max Uplift 4=-45(LC 12), 5=-76(LC 12)

Max Grav 4=199(LC 1), 5=397(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-352/244

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify

capacity of bearing surface.

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

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

SCOTT M. SEVIER NUMBER PE-2001018807 July 15,2021

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.




REACTIONS. (size) 7=Mechanical, 2=0-3-8 Max Horz 2=95(LC 11) Max Uplift 7=-44(LC 12), 2=-77(LC 12) Max Grav 7=210(LC 1), 2=388(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-259/98

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-1-4, Exterior(2E) 3-1-4 to 4-1-4, Interior(1) 4-1-4 to 5-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







		<u> 1-1-4</u> 1-1-4	2-1-4 1-0-0			5-4-0 3-2-12		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.32 BC 0.15 WB 0.02 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo -0.01 6 -0.02 6 0.00	oc) l/defl 6-7 >999 6-7 >999 6 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 22 lb	GRIP 197/144 FT = 20%

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

BRACING-TOP CHORD

Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 8=0-3-8 Max Horz 8=99(LC 5) Max Uplift 6=-43(LC 8), 8=-99(LC 4) Max Grav 6=183(LC 1), 8=325(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-8=-268/77

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Provide adequate drainage to prevent water ponding.

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

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

5) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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

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

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 150 lb up at 1-1-4 on top chord, and 24 lb down and 97 lb up at 1-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

LOAD CASE(S) Standard

 Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20

Concentrated Loads (lb) Vert: 3=46(B) 7=41(B)







BRACING-

TOP CHORD

BOT CHORD

NOTES-

BCDL

WEBS

LUMBER-

TOP CHORD

BOT CHORD

REACTIONS.

10.0

2x4 SPF No 2

2x4 SPF No.2

2x4 SPF No.2

(size) 2=Mechanie Max Horz 4=19(LC 9)

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

Matrix-MR

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

Code IRC2018/TPI2014

Max Uplift 2=-16(LC 12), 3=-1(LC 9) Max Grav 2=31(LC 1), 3=18(LC 3), 4=43(LC 1) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2=Mechanical, 3=Mechanical, 4=0-3-8

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

- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Weight: 3 lb

Structural wood sheathing directly applied or 1-1-4 oc purlins,

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

except end verticals.

FT = 20%



Job Truss Truss Type Oty Ply Rosser/1484 WV Med99335 2811731 E21 Jack-Open 2 1 Job Reference (optional) Job Reference (optional) Job Reference (optional) Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID/TDamR1M/MSPVKAR-UZ-3021 MTek Industries, Inc. Wed Jul 14 06:59:46 2021 Page 1 ID/TDamR1M/MSPVKAR-UZ-3020 MTek Industries, Inc. Wed Jul 14 06:59:46 2021 Page 1 10:70:00:01 10:70:00:01 10:70:00:01 10:70:00:01 Scale = 18.7 10:70:00:01 2 1 10:70:00:01 Scale = 18.7 10:70:00:01:01 2 1 10:70:00:00:00:00:00:00:00:00:00:00:00:00							
2811731 E21 Jack-Open 2 1 Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8430 S Jun 2 2021 MTek Industries, Inc. Wed Jul 14 08:59:46 2021 Page 1 10-75 10-3 10-3 10-3 5:00 [72] 2 1 Job Reference (optional) Scale = 18.7 5:00 [72] 2 1 5:00 [72] 3 Scale = 18.7 5:00 [72] 2 1 5:00 [72]	Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
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1000 Lumber DOL 1.15 BC 0.01 Vert(C1) -0.00 4 >999 180	TOLL 25.0	Plate Grip DOL 1.		Vert(LL) -(.00 4	>999 240	MIZU 197/144
$P(1)$ n_0 Dop Stroce loor VES $N/P (n_0)$ $Portz(C1) (n_0) 2 n_0 n_0$		Lumber DOL 1." Rop Stross Incr. VE			.00 4	>999 180	

JMBER	-
	JMBER

BCDL

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

10.0

BRACING-TOP CHORD BOT CHORD

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

Weight: 3 lb

FT = 20%

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 4=0-3-8 Max Horz 4=18(LC 9) Max Uplift 2=-15(LC 12), 3=-1(LC 9)

Max Grav 2=29(LC 1), 3=17(LC 3), 4=39(LC 1)

Code IRC2018/TPI2014

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

NOTES-

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

Matrix-MR

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

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

- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







	LOADING (psf) TCLL 25.0 TCDL 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 0.05 BC 0.04 WB 0.00 Matrix-MR	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 4 >999 240 Vert(CT) -0.00 3-4 >999 180 Horz(CT) -0.00 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 5 lb FT = 20%
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TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 2-1-4 oc purlins, except end verticals.

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

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 4=0-3-8 Max Horz 4=29(LC 9) Max Uplift 2=-29(LC 12), 4=-2(LC 12)

Max Grav 2=62(LC 1), 3=36(LC 3), 4=85(LC 1)

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

NOTES-

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

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

- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







			4-0-0									
LOADING TCLL TCDL BCLL	i (psf) 25.0 10.0 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI TC BC WB	0.26 0.11 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.02 0.01	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES GRIP MT20 197/144		
BCDL	10.0	Code IRC2018/TPI2014	Mat	rix-MR						Weight: 12 lb FT = 20%		

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

Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=78(LC 12)

Max Uplift 3=-48(LC 12), 5=-65(LC 8)

Max Grav 3=101(LC 1), 4=68(LC 3), 5=350(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-306/213

NOTES-

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

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

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







	LOADING (psf) TCLL 25.0 TCDL 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 0.12 WB 0.00 Matrix-MR	DEFL. ii Vert(LL) 0.02 Vert(CT) -0.03 Horz(CT) 0.03	(loc) 6 6 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 14 lb	GRIP 197/144 FT = 20%
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TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8

Max Horz 7=78(LC 12) Max Uplift 4=-34(LC 12), 5=-6(LC 12), 7=-64(LC 8) Max Grav 4=84(LC 1), 5=61(LC 3), 7=351(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-7=-313/195

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=47(LC 12) Max Uplift 3=-13(LC 12), 4=-8(LC 1), 5=-80(LC 8) Max Grav 3=7(LC 22), 4=25(LC 3), 5=302(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-258/204

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 1-10-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 5.

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.







TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

2x4 SPF No.2

REACTIONS. 4=Mechanical, 5=Mechanical, 6=0-3-8 (size) Max Horz 4=51(LC 12), 6=59(LC 8) Max Uplift 5=-14(LC 1), 6=-113(LC 12) Max Grav 5=30(LC 3), 6=521(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 3-6=-405/341

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-12, Interior(1) 1-1-12 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6 = 113

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

6) Load case(s) 5 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

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

LOAD CASE(S) Standard Except:

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=61, 2-3=52, 3-4=34, 6-7=65, 5-6=-8

Horz: 1-2=-73, 2-3=-64, 3-4=-46

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=29, 2-8=34, 4-8=52, 6-7=65, 5-6=-8

Horz: 1-2=-41, 2-8=-46, 4-8=-64

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60



Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	140005040
2811731	E26	Jack-Open	1	1		146995340
					Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 14 08:59:50 2021 Page 2 ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-W3f6xryqirOydeRFLokEUFBQXqklowx36jlmUdyyC0d

LOAD CASE(S) Standard Except: Uniform Loads (plf)
Horz: 1-2=-1, 2-4=-26
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
Vert: 1-2=-41, 2-4=-46, 6-7=1, 5-6=-20 Horz: 1-2=21, 2-4=26
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Vert: 1-2=27, 2-4=14, 6-7=9, 5-6=-8 Horz: 1-2=-39, 2-4=-26
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
Vert: 1-2=7, 2-4=12, 5-7=-8
Horz: 1-z=-19, z-4=-24 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Horz: 1-2=-21, 2-4=-16
 Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
Vert: 1-2=-1, 2-4=-6, 5-7=-20
Horz: 1-2=-19, 2-4=-14 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Horz: 1-2=-31, 2-4=-37
 Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
Vert: 1-2=-1, 2-4=4, 5-7=-8
14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf) Vert: 1-2=8, 2-4=14, 5-7=-8
Horz: 1-2=-20, 2-4=-26
15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
Vert: 1-2=-1, 2-4=4, 5-7=-8
16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf) Vert: 1-2=11. 2-4=6. 5-7=-20
Horz: 1-2=-31, 2-4=-26
17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
Vert: 1-2=-9, 2-4=-14, 5-7=-20
19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf) Vert: 1-2=-42, 2-4=-46, 6-7=-7, 5-6=-20
Horz: 1-2=-16, 2-4=-12
20) Dead + 0.75 Root Live (bal.) + 0.75(0.6 MWFRS wind (Neg. Int) Right): Lumber increase=1.60, Plate increase=1.60 Uniform Loads (plf)
Vert: 1-2=-43, 2-4=-47, 5-7=-20 Horz: 1-2=-14, 2-4=-10
21) Dead + 0.75 (co fuive (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (pif) Vert: 1-2=-34, 2-4=-38, 5-7=-20
Horz: 1-2=-24, 2-4=-20
Uniform Loads (plf)
Vert: 1-2=-49, 2-4=-53, 5-7=-20 Horz: 1-2=-8 2-4=-4
23) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Vert: 1-2=4, 2-4=-28, 6-7=8, 5-6=-8
Horz: 1-2=-16, 2-4=16 24) Dead + 0.6 C-C Wind Min, Lloward: Lumber Increase - 1.60. Plate Increase - 1.60
Uniform Loads (plf)
Vert: 1-4=4, 6-7=8, 5-6=-8 Horz: 1-4=-16





			3-0-0 3-0-0					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.13 BC 0.42 WB 0.01 Matrix-MP	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) -0.0	in (loc) 1 5-6 1 5-6 0 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 14 lb	GRIP 197/144 FT = 20%

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

BRACING-TOP CHORD

Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.

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

REACTIONS. 6=0-3-8, 5=Mechanical (size) Max Horz 6=73(LC 7)

Max Uplift 6=-78(LC 8), 5=-70(LC 5)

Max Grav 6=568(LC 1), 5=376(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 6) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 1-0-12 from the left end to connect truss(es) to front face of bottom chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-3=-20, 4-6=-20 Concentrated Loads (lb)





July 15,2021





	F		3-4-0 3-4-0					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.25 BC 0.56 WB 0.00 Matrix-MR	DEFL. Vert(LL) - Vert(CT) - Horz(CT)	in (lo -0.02 5 -0.03 5 0.00	bc) l/def 5-6 >999 5-6 >999 5 n/a	l L/d 9 240 9 180 a n/a	PLATES MT20 Weight: 10 lb	GRIP 197/144 FT = 20%

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

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 3-4-0 oc purlins, except end verticals.

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

REACTIONS. (size) 5=Mechanical, 6=0-3-8 Max Horz 6=67(LC 5) Max Uplift 5=-64(LC 8), 6=-51(LC 8) Max Grav 5=322(LC 1), 6=369(LC 1)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

- 3) Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 1-4-12 from the left end to connect truss(es) to back face of bottom chord.
- 8) Fill all nail holes where hanger is in contact with lumber.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-20, 4-6=-20

Concentrated Loads (lb) Vert: 7=-418(B)



July 15,2021





			3-4-0									
	G (psf)	SPACING-	2-0-0	CSI.	0.26	DEFL.	in -0.00	(loc) 4-5	l/defl ⊳999	L/d 240	PLATES	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-5	>999	180	11120	10//111
BCLL BCDL	0.0 10.0	Rep Stress Incr Code IRC2018/TPI2	YES 2014	WB Matrix	0.00 «-MR	Horz(CT)	0.00	3	n/a	n/a	Weight: 11 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=68(LC 12)

Max Uplift 3=-38(LC 12), 5=-67(LC 8) Max Grav 3=74(LC 1), 4=54(LC 3), 5=328(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-286/206

NOTES-

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

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

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







1-2-13
in (loc) l/defl L/d PLATES GRIP
0.00 5 >999 240 MT20 197/144
0.00 5 >999 180
-0.00 3 n/a n/a
Weight: 6 lb FT = 20%
)

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

BOT CHORD

Structural wood sheathing directly applied or 1-2-15 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=37(LC 8) Max Uplift 3=-54(LC 1), 4=-29(LC 1), 5=-98(LC 8) Max Grav 3=24(LC 8), 4=14(LC 8), 5=322(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-272/225

NOTES-

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

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

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

- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 5.
- 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.







	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	тс	0.26	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	912014	Matri	x-MR						Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=75(LC 12) Max Uplift 3=-46(LC 12), 5=-65(LC 8)

Max Grav 3=94(LC 1), 4=64(LC 3), 5=344(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-301/211

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

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

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







LOADING (psf TCLL 25.0	if) .0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI. TC	0.28	DEFL. Vert(LL)	in 0.00	(loc) 4-5	l/defl >999	L/d 240	PLATES MT20	GRIP 197/144	
BCLL 0.0 BCDL 10.0	.0 .0	Rep Stress Incr Code IRC2018/TP	YES 12014	WB Matrix	0.00 k-MR	Horz(CT)	-0.00	3	n/a	n/a	Weight: 7 lb	FT = 20%	

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

Structural wood sheathing directly applied or 1-8-15 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=44(LC 12) Max Uplift 3=-9(LC 12), 4=-13(LC 1), 5=-83(LC 8) Max Grav 3=7(LC 8), 4=21(LC 3), 5=303(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-258/207

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 1-8-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 5.

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.







	2-1-4	4-7-4	5-7-4	
	2-1-4	2-6-0	1-0-0	
Plate Offsets (X,Y) [4:0-3-14,Edge]				

TOP CHORD

BOT CHORD

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.32 BC 0.15 WB 0.03 Matrix-MS	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 6-7 >999 240 Vert(CT) -0.01 6-7 >999 180 Horz(CT) 0.00 6 n/a n/a	PLATES GRIP MT20 197/144 Weight: 23 lb FT = 20%
LUMBER-		1	BRACING-	

LUMBER-

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

REACTIONS. (size) 6=Mechanical, 8=0-3-8

Max Horz 8=79(LC 5) Max Uplift 6=-45(LC 8), 8=-101(LC 4)

Max Grav 6=203(LC 1), 8=390(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-8=-332/94

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

- 3) 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.
- 5) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=101.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 33 lb down and 67 lb up at
- 2-1-4 on top chord, and 42 lb down and 80 lb up at 2-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20 Concentrated Loads (lb)





Structural wood sheathing directly applied or 5-7-4 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4.

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







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- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 4.

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

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

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







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





NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-0-0, Exterior(2E) 6-0-0 to 10-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 6) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						146995353
2811731	G5	Half Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	6	3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:09 2021	Page 2

430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:09 ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-SjJHwLBkEhnFPYOuylahIFTfCU4xIS4sUArGf0yyC0K

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 3=-14(F) 6=-20(F) 9=-203(F) 5=-57(F) 14=-14(F) 16=-14(F) 17=-30(F) 18=-30(F)





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

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MiTek

Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						l46995354
2811731	GR1	Flat Girder	1	2		
				-	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		3.430 s Jur	n 2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:11 2021	Page 2

ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-P5R2L1C?ml2zesXH4id9qgZwTIxFDIP8xUKNjvyyC0I

LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 1-3=-70, 4-6=-20 Concentrated Loads (lb)

Vert: 2=-1203 7=-870 8=-1437 11=-1203 12=-1203





Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						146995355
2811731	GR2	Half Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8	3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:12 2021	Page 2

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:12 2021 ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-tl?QYNDdXcAqG06TeQ8ONu57viBoyg?IA84xGLyyC0H

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 7=-438(B) 12=-663(B) 13=-438(B) 14=-438(B) 15=-438(B)





Special



- (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.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 11 lb down and 26 lb up at 10-0-0 on top chord, and 365 lb down and 109 lb up at 6-0-0, and 365 lb down and 109 lb up at 13-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Special

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

Vert: 1-5=-70, 5-7=-70, 7-10=-70, 17-21=-20

Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						146995356
2811731	H1	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:14 2021	Page 2

ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-pg6Az2Ft3DQYVKGsIrAsSJAX0VvSQjvbdSZ1KEyyC0F

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 5=-104(F) 7=-104(F) 14=-365(F) 12=-365(F) 25=-104(F) 26=-104(F) 27=-42(F) 28=-42(F)





LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	;)))))	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES I2014	CSI. TC C BC C WB C Matrix-A	0.86 0.64 0.07 AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.20 -0.46 0.08	(loc) 6-9 6-9 2	l/defl >526 >226 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 33 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS SLIDER	2x4 SPI 2x4 SPI 2x4 SPI Left 2x4	= No.2 = No.2 = No.2 = SPF No.2 2-0-0				BRACING- TOP CHOR BOT CHOR	D D	Structu 2-0-0 o Rigid ce	ral wood c purlins: eiling dire	sheathing dir 4-5. ctly applied.	ectly applied, except	end verticals, and

REACTIONS. (size) 6=0-3-8, 2=0-3-8 Max Horz 2=151(LC 11) Max Uplift 6=-71(LC 12), 2=-95(LC 12) Max Grav 6=375(LC 1), 2=535(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-578/70

WEBS 4-6=-260/188

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 8-0-0, Exterior(2E) 8-0-0 to 8-7-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

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

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



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	2-3-8	6-6-0		10-6-0			14-8-8		17-0-0	
B	2-3-8	4-2-8		4-0-0			4-2-8		2-3-8	
Plate Offsets (X,Y)	[2:0-0-0,0-0-1], [3:0-11-	10,Edge], [3:0-1-	4,0-0-6], [4:0-5-4,0-3-0],	[6:0-11-10,Edge],	[6:0-1-	4,0-0-6],	[7:0-0-0,0	-0-1]		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 NO PI2014	CSI. TC 0.81 BC 0.73 WB 0.18 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.20 -0.36 0.28	(loc) 6-10 6-10 7	l/defl >999 >569 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 99 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x8 SF 4-5: 2x BOT CHORD 2x4 SF 3-6: 2x WEBS 2x4 SF	2 2400F 2.0E *Except* 4 SPF No.2 2F No.2 *Except* 6 SPF 2100F 1.8E 2F No.2	I		BRACING- TOP CHOR BOT CHOR	D D	Structu except 2-0-0 o Rigid co	ral wood s c purlins (: eiling direc	heathing dir 2-5-0 max.): ttly applied c	ectly applied or 4-10-: 4-5. or 10-0-0 oc bracing.	3 oc purlins,
REACTIONS. (size Max H Max U Max G	e) 2=0-3-8, 7=0-3-8 lorz 2=56(LC 8) lplift 2=-341(LC 8), 7=-34 Grav 2=1558(LC 1), 7=15	41(LC 9) 558(LC 1)								
FORCES. (lb) - Max. TOP CHORD 3-14= BOT CHORD 3-11= WEBS 4-11=	Comp./Max. Ten All fc =-604/184, 3-4=-4039/90 =-821/3824, 10-11=-832/ =-139/742, 5-10=-142/73	orces 250 (lb) or 4, 4-5=-3848/85 3882, 6-10=-761 3	less except when shown 8, 5-6=-4004/861, 6-7=-6 I/3792	ı. 604/169						
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 3) Provide adequate di 4) This truss has been 5) Provide mechanical 2=341, 7=341. 6) This truss is designe referenced standard 7) Graphical purlin repi 8) "NAILED" indicates 9) Hanger(s) or other c 6 6 0 and 472 list do	e loads have been consid /ult=115mph (3-second g gable end zone; cantilev rainage to prevent water designed for a 10.0 psf l connection (by others) c ed in accordance with the I ANSI/TPI 1. resentation does not dep 3-10d (0.148"x3") or 3-1: connection device(s) sha	dered for this des gust) Vasd=91mj ver left and right ponding. pottom chord live f truss to bearing 2018 Internatio ict the size or th 2d (0.148"x3.25" I be provided su	sign. ph; TCDL=6.0psf; BCDL: exposed ; end vertical le e load nonconcurrent witi g plate capable of withsta nal Residential Code ser e orientation of the purlir) toe-nails per NDS guid fficient to support concer	=4.2psf; h=15ft; Ca ft and right expose h any other live loa anding 100 lb uplift ctions R502.11.1 a h along the top and lines. htrated load(s) 473 on of even concert	nt. II; E; d; Lum ds. at join nd R80 /or bott Ib dow	kp C; En liber DOL t(s) exce 02.10.2 a tom chor vn and 1	closed; .=1.60 pla ept (jt=lb) and d. 57 lb up a	te	STATE OF	MISSOUR VIT M. VIER
responsibility of othe 10) In the LOAD CASE	ers. E(S) section, loads applie	ed to the face of t	the truss are noted as fro	ont (F) or back (B).		100(3)		-	PE-20	J1018807

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 6-8=-70, 12-13=-20, 3-6=-20, 9-16=-20

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



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July 15,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						146995358
2811731	J1	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:16 2021	Page 2

ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-I3ExOkG7bqgFldQEtGCKXkGneJUeueTu5m28P6yyC0D

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 4=-103(B) 5=-103(B) 11=-473(B) 10=-473(B) 19=-103(B) 20=-68(B)





NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 8-6-0, Exterior(2R) 8-6-0 to 11-6-0, Interior(1) 11-6-0 to 18-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=135, 6=135.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







	8-6-0		17-0-0	
			8-6-0	
Plate Offsets (X,Y)	[2:0-3-8,Edge], [8:0-5-3,Edge], [10:0-4-0	0,0-3-0]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.07 10-13 >999 240 MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.14 10-13 >999 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.03 8 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Weight: 66 lb FT = 2	20%
LUMBER-			BRACING-	
TOP CHORD 2X4 SPF No.2			I OP CHORD Structural wood sheathing directly applied.	

BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-68(LC 17) Max Uplift 2=-135(LC 12), 8=-135(LC 13)

Max Grav 2=896(LC 1), 8=896(LC 1)

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

Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

TOP CHORD 2-4=-1156/287, 4-5=-951/230, 5-6=-951/230, 6-8=-1156/287

BOT CHORD 2-10=-173/1034, 8-10=-186/1034

2x4 SPF No.2

2x4 SPF No.2

WEBS 5-10=-26/407, 6-10=-273/132, 4-10=-273/131

NOTES-

BOT CHORD

WEBS

SLIDER

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 8-6-0, Exterior(2R) 8-6-0 to 11-6-0, Interior(1) 11-6-0 to 18-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=135, 8=135.

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

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



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

Max Horz 2=78(LC 12) Max Uplift 5=-30(LC 12), 2=-23(LC 8)

Max Grav 5=240(LC 1), 2=414(LC 1)

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

NOTES-

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

- MWFRS (envelope) and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-9-12 zone; cantilever left and right exposed ; end
- vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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








		<u>3-6-0</u> 3-6-0		7-6-0 4-0-0	8-11-8 1-5-8
Plate Offsets (X,Y)	[4:0-4-2,Edge]				
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.38 BC 0.29 WB 0.12 Matrix-MP	DEFL. in Vert(LL) -0.01 Vert(CT) -0.03 Horz(CT) 0.01	(loc) l/defl L/d 8-9 >999 240 8-9 >999 180 7 n/a n/a	PLATES GRIP MT20 197/144 Weight: 38 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP SLIDER Left 2x4	F No.2 F No.2 F No.2 4 SPF No.2 2-6-0		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir except end verticals, and 2-0- Rigid ceiling directly applied c	ectly applied or 6-0-0 oc purlins, 0 oc purlins (6-0-0 max.): 4-5. r 10-0-0 oc bracing.
REACTIONS. (size Max H Max U Max G	e) 2=0-3-0, 7=Mechanical orz 2=61(LC 28) plift 2=-141(LC 8), 7=-121(LC 5) rav 2=633(LC 1), 7=535(LC 1)				
FORCES. (lb) - Max. TOP CHORD 2-4=-	Comp./Max. Ten All forces 250 (lb) o 653/150, 4-5=-338/91, 5-6=-366/88, 6-7	r less except when shown. /=-553/116			

BOT CHORD 2-9=-141/588 8-9=-142/576

WEBS 4-8=-263/72, 6-8=-108/509

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=141, 7=121.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 124 lb down and 38 lb up at 3-6-0, and 124 lb down and 38 lb up at 7-5-4 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-4=-70, 4-5=-70, 5-6=-70, 7-10=-20

Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						146995362
2811731	K1	Hip Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	6	3.430 s Jur	2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:21 2021	Page 2

3.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 14 09:00:21 2021 ID:TDamR1NvM3FVKAsrLwFUZvyOBKQ-601qRSKGPMIYrOICfpoWEnzl7KJoZwcdE2lv4KyyC08

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 4=-11(F) 5=-11(F) 9=-102(F) 8=-103(F) 14=-11(F) 15=-5(F)





				3-3-8				3-5-6	5			
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matrix	x-AS						Weight: 29 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 6=0-3-8, 4=0-3-8 Max Horz 6=44(LC 9) Max Uplift 6=-38(LC 12), 4=-38(LC 13) Max Grav 6=298(LC 1), 4=-298(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-6=-272/161, 3-4=-272/161

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-5-8, Exterior(2R) 3-5-8 to 6-5-8, Interior(1) 6-5-8 to 6-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

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

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

July 15,2021



PE-2001018807



	2-3-8	6-6-0	
	2-3-8	4-2-8	
Plate Offsets (X,Y) [3:0-7-0,0-1-13]			
LOADING (psf) SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0 Plate Grip DOL 1.15	TC 0.51	Vert(LL) 0.12 3-5 >654 240	MT20 197/144
TCDL 10.0 Lumber DOL 1.15	BC 0.43	Vert(CT) -0.18 3-5 >421 180	
BCLL 0.0 Rep Stress Incr YES	WB 0.00	Horz(CT) 0.12 5 n/a n/a	
BCDL 10.0 Code IRC2018/TPI2014	Matrix-AS		Weight: 19 lb FT = 20%

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8

Max Horz 7=114(LC 12) Max Uplift 4=-64(LC 12), 5=-3(LC 12), 7=-69(LC 12)

Max Grav 4=173(LC 1), 5=107(LC 3), 7=449(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-7=-436/213

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 6-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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







LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	0.03	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.04	6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matrix	k-AS						Weight: 14 lb	FT = 20%

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8

Max Horz 7=84(LC 12) Max Uplift 4=-40(LC 12)

Max Uplift 4=-40(LC 12), 5=-6(LC 12), 7=-63(LC 8) Max Grav 4=99(LC 1), 5=68(LC 3), 7=366(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-7=-332/199

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 4-4-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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







				2 - 10
	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d PLATES GRIP Vert/(L) 0.00 4.5 >999 240 MT20 197/144
TCDI	10.0	Lumber DOL 115	BC 0.07	Ver(CE) 0.00 4-5 >999 180
BCLL	0.0	Rep Stress Incr YES	WB 0.01	Horz(CT) -0.01 3 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MS	Weight: 10 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

- WEBS 2x4 SPF No.2 REACTIONS. (size) 3=Mechanical, 5=0-3-8
 - Max Horz 5=48(LC 12) Max Uplift 3=-31(LC 25), 5=-76(LC 8)

Max Grav 3=40(LC 3), 5=303(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-267/207

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 2-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 5) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



Structural wood sheathing directly applied or 2-3-8 oc purlins,

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

except end verticals.

16023 Swingley Ridge Rd Chesterfield, MO 63017



				6-0-0	
LOADING TCLL TCDL BCLL	(psf) 25.0 10.0 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.43 BC 0.29 WB 0.00	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) 0.06 5-8 >999 240 MT20 197/144 Vert(CT) -0.11 5-8 >675 180 197/144 Horz(CT) 0.03 4 n/a n/a 1/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Weight: 19 lb FT = 20%	

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

TOP CHORD BOT CHORD

BRACING-

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. 4=Mechanical, 2=0-3-8, 5=Mechanical (size) Max Horz 2=115(LC 12) Max Uplift 4=-76(LC 12), 2=-64(LC 12) Max Grav 4=177(LC 1), 2=419(LC 1), 5=104(LC 3)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-4=-252/83

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

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

referenced standard ANSI/TPI 1.

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







LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES	CSI. TC 0.32 BC 0.06 WB 0.02	DEFL. in Vert(LL) 0.01 Vert(CT) -0.01 Horz(CT) 0.00	(loc) 1 1 7	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R					Weight: 25 lb	FT = 20%

TOP CHORD

LUMBER-

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 OTHERS
 2x4 SPF No.2

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

BOT CHORD Rigid ceiling directly applied or 6-0-0 d

REACTIONS. All bearings 6-0-0.

(lb) - Max Horz 11=127(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 11, 7, 8, 9, 10

Max Grav All reactions 250 lb or less at joint(s) 7, 8, 9, 10 except 11=308(LC 1)

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

TOP CHORD 2-11=-271/294

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-10-8 to 1-1-8, Exterior(2N) 1-1-8 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7, 8, 9, 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.









				F			3-10-	15				
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matrix	k-MR						Weight: 12 lb	FT = 20%

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

Structural wood sheathing directly applied or 3-10-15 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=77(LC 12) Max Uplift 3=-47(LC 12), 5=-65(LC 8)

Max Grav 3=97(LC 1), 4=66(LC 3), 5=347(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-303/212

NOTES-

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

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

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

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

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

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







LOADING TCLL TCDL BCLL	(psf) 25.0 10.0 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.28 BC 0.09 WB 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (0.00 0.00 -0.00	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR						Weight: 7 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=47(LC 12) Max Uplift 3=-13(LC 12), 4=-8(LC 1), 5=-80(LC 8) Max Grav 3=7(LC 22), 4=25(LC 3), 5=302(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-258/204

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 1-10-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 5.

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.





Job	Truss	Truss Type	Qty	Ply	Roeser/1484 WV	
						I46995371
2811731	L8	Monopitch Girder	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley Center), Valle	y Center, KS - 67147,		8.430 s J	un 2 2021 MiTek Industries, Inc. Wed Ju	ul 14 09:00:31 2021 Page 1
			ID:TDamR1NvM3F	FVKAsrLwFU	JZvyOBKQ-pxecYsSY2RZ72x37Fv_seu0	DWJMl5vT15XcARRlyyC0_
			2-5-8			
			2-5-8			
						Scalo - 1:11 9
				2		Scale = 1.11.0
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		3x6		2x4		
			2-5-8		———————————————————————————————————————	
Plate Offects (X V)	[1.0.2.0.0.1.1]		2-0-0			
FIALE UIISELS (A, I)	[1.0-3-0,0-1-1]					

1 1410 0110010 (7.1)			
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.08 BC 0.16 WB 0.00	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.00 6 >999 240 MT20 197/144 Vert(CT) -0.00 6 >999 180 MT20 197/144 Horz(CT) 0.00 1 n/a n/a Na Na
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	Weight: 10 lb FT = 20%
LUMBER- TOP CHORD 2>	SPF No.2		BRACING- TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins,

BOT CHORD 2x6 SPF No.2 except end verticals. WEBS 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEDGE

Left: 2x4 SPF No.2

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

Max Horz 1=47(LC 7) Max Uplift 3=-51(LC 8), 1=-67(LC 8) Max Grav 3=199(LC 1), 1=299(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.602) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 1.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 290 lb down and 89 lb up at 0-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 3-4=-20 Concentrated Loads (lb) Vert: 6=-290







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BCDL

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

10.0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-4-15 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 8 lb

FT = 20%

REACTIONS. 3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=54(LC 12) Max Uplift 3=-22(LC 12), 5=-74(LC 8)

Max Grav 3=32(LC 1), 4=35(LC 3), 5=305(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-264/202

NOTES-

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

Matrix-MR

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

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

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

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

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.







TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. 4=Mechanical, 5=0-3-8 (size) Max Horz 5=102(LC 11) Max Uplift 4=-89(LC 12), 5=-75(LC 8) Max Grav 4=370(LC 1), 5=365(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-323/233

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 4-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 4-4-4 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-2=-70, 2-3=-70, 4-5=-20

Concentrated Loads (lb) Vert: 4=-214(F)



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





			I	3-6-	-0			
	(psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc)	l/defl L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	IC 0.26	Vert(LL) -0.01	4-5	>999 240	M120	197/144
	10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.01	4-5	>999 180		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	H012(C1) 0.01	3	n/a n/a	Weight: 11 lb	FT = 20%

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

Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-0 Max Horz 5=70(LC 12) Max Uplift 3=-41(LC 12), 5=-67(LC 8)

Max Grav 3=81(LC 1), 4=58(LC 3), 5=333(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-291/208

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

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

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







				1-4-15
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) 0.00 5 >999 240 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) 0.00 5 >999 180
BCLL	0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	Weight: 6 lb FT = 20%
		1		

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

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 1-4-15 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

 Max Horz
 5=39(LC 12)

 Max Uplift
 3=-35(LC 1), 4=-23(LC 1), 5=-92(LC 8)

 Max Grav
 3=17(LC 8), 4=13(LC 3), 5=312(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-264/216

NOTES-

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

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

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

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







LOADING (psf) TCLL 25.0 TCDL 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 0.10 BC 0.03 WB 0.15 Matrix-S	DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 11 n/a n/a	PLATES GRIP MT20 197/144 Weight: 81 lb FT = 20%
			5540W0	

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.

REACTIONS. All bearings 14-8-12.

(lb) - Max Horz 1=361(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 16, 14, 13 except 11=-114(LC 11), 1=-118(LC 10), 19=-116(LC 12), 18=-119(LC 12), 17=-118(LC 12), 15=-133(LC 12), 12=-132(LC 13) Max Grav All reactions 250 lb or less at joint(s) 11, 16, 19, 18, 17, 15, 14, 13, 12 except 1=361(LC 12)

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

TOP CHORD 1-2=-505/400, 2-3=-399/311, 3-5=-280/212

NOTES-

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 11-3-6, Exterior(2E) 11-3-6 to 14-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Gable requires continuous bottom chord bearing.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 14, 13 except (jt=lb) 11=114, 1=118, 19=116, 18=119, 17=118, 15=133, 12=132.

7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 15, 14, 13, 12.

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.



July 15,2021



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



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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-9-6.

(lb) - Max Horz 1=329(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 15, 14, 13, 12, 11 except 18=-121(LC 12), 17=-116(LC 12), 16=-132(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 10, 15, 18, 17, 16, 14, 13, 12, 11 except 1=263(LC 12)

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

TOP CHORD 1-2=-374/301, 2-3=-262/207

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 8-6-11, Exterior(2R) 8-6-11 to 11-6-11, Interior(1) 11-6-11 to 15-5-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 15, 14, 13, 12, 11 except (jt=lb) 18=121, 17=116, 16=132.

8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 14, 13, 12, 11.

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.







REACTIONS. All bearings 14-6-14.

(lb) -Max Horz 1=281(LC 12)

1-2=-304/247

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 13, 12, 11, 10 except 16=-120(LC 12), 15=-124(LC 12), 14=-101(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 16, 15, 14, 12, 11, 10

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

TOP CHORD NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-4-3, Exterior(2R) 7-4-3 to 10-4-3, Interior(1) 10-4-3 to 14-2-14 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 13, 12, 11, 10 except (jt=lb) 16=120, 15=124, 14=101.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 12, 11, 10.
- 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.



July 15,2021





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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. All bearings 7-4-12.

Max Horz 1=107(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 9=-155(LC 12), 6=-125(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6 except 9=258(LC 19)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 4-6-6, Exterior(2E) 4-6-6 to 7-2-5 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 9=155, 6=125.

6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 6.

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



July 15,2021







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

TOP CHORD 4-5=-278/285, 5-6=-325/338, 6-7=-251/268, 7-8=-251/268, 8-9=-254/271,

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-2-5, Interior(1) 2-2-5 to 9-7-5, Exterior(2R) 9-7-5 to 12-7-5, Interior(1) 12-7-5 to 13-11-0, Exterior(2R) 13-11-0 to 16-11-0, Interior(1) 16-11-0 to 23-7-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.

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) 26, 19, 20, 21, 22, 25 except (jt=lb) 14=207, 23=139, 24=113, 18=113, 17=119, 16=119, 15=118.
- 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.



^{9-10=-338/354, 10-11=-258/303, 11-12=-273/288, 12-13=-303/299, 13-14=-336/322}

