

MiTek, Inc. RE: P230912 - Juneau Townhomes - Osage 16023 Swingley Ridge Rd. Site Information: Chesterfield, MO 63017 Project Customer: Clover & Hive Project Name: Juneau - Farmhouse 314.434.1200 Lot/Block: 47 Subdivision: Osage Model: Address: 3721/3723/3725/3727 SW Clayton PI City: Lees Summit State: MO General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions): Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6 Wind Code: ASCE 7-16 [IV/indRSpeced: 115 mph Design Method: MWFRS (Envelope) ASCE 7-16 [Low Rise] Roof Load: 45.0 psf Floor Load: N/A psf Mean Roof Height (feet): 25 Exposure Category: C No. Seal# Truss Name Date No. Seal# Truss Name Date 100000 30/23 1234567891 30/2

$\begin{array}{c}1\\2\\3\\4\\5\\6\\7\\8\\9\\1\\1\\1\\2\\1\\2\\2\\2\\2\\2\\2\\2\\2\\2\\2\\2\\2\\2\\2$	I62280222 A2 I62280223 A3 I62280224 A4 I62280225 A5 I62280226 A6 I62280227 A7 I62280228 A8 I62280229 A9 I62280229 A9 I62280230 A10 I62280231 A11 I62280232 A12 I62280233 A13 I62280234 A14 I62280235 A15 I62280236 A16 I62280237 A17 I62280238 A18 I62280239 A19 I62280241 A21 I62280242 A22 I62280243 A23 I62280244 A24 I62280245 A25 I62280244 A24 I62280247 B1 I62280248 B2 I62280249 B3 I62280240 B5 I62280250 B4 I62280251 B5 I62280252 C1 I62280253	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	I62280256 CJA3 I62280257 D1 I62280258 D2 I62280259 D3 I62280260 D4 I62280261 D5 I62280262 D6 I62280263 D7 I62280264 D8 I62280265 HG1 I62280266 HG2 I62280266 HG3 I62280267 HG3 I62280268 HG4 I62280270 JA2 I62280271 JA3 I62280272 JA4 I62280275 JA7 I62280276 V1 I62280277 V2 I62280276 V1 I62280277 V2 I62280278 V3 I62280279 VB1 I62280280 VB2 I62280281 VB3 I62280282 VB4 I62280284 VB6 I62280285 VB7 I62280286 VC1 I62280287 VC2 I62280288 VC3 I62280284 </th <th>11/2 11/2 11/2 11/2 11/2 11/2 11/2 11/2</th>	11/2 11/2 11/2 11/2 11/2 11/2 11/2 11/2
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The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Truss Design Engineer's Name: Nathan Fox

My license renewal date for the state of Missouri is December 31, 2024.

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.



1 of 2

Nathan Fox

11/30

November 30,2023



RE: P230912 - Juneau Townhomes - Osage

MiTek, Inc. 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200

 No.
 Seal#
 Truss Name
 Date

 69
 I62280290
 VC5
 11/30/23



a truss system. Before use, the building designer must verify the applicability of design parameters and property 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, rerection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)



RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMUT PP MUS SIGH, R. 6), 1<u>2/21</u>/2023 2:59:54

	Truss Type	Qty	Ply	Juneau Townhomes - Osage	
					162280222
	Roof Special Girder	2	2		
			~	Job Reference (optional)	
Spring Hills, KS - 66083,		8.6	30 s Aug 3	0 2023 MiTek Industries, Inc. Wed Nov 29 16:40:49 2023	Page 2
ID:DUjzAB0GCWoOJpyMsoTzILz3uah-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4					

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

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

12) 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 9-6-0 from the left end to 25-6-0 to

connect truss(es) to front face of bottom chord. 13) Fill all nail holes where hanger is in contact with lumber.

14) "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.

S

15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 270 lb down and 401 lb up at 9-6-0, 270 lb down and 401 lb up at 11-6-0, 270 lb down and 401 lb up at 13-6-0, 270 lb down and 401 lb up at 15-6-0, 270 lb down and 401 lb up at 19-6-0, 270 lb down and 401 lb up at 21-6-0, and 270 Ib down and 401 lb up at 23-6-0, and 270 lb down and 401 lb up at 25-6-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert 1-4=-70 4-8=-70 8-11=-70 2-10=-20

Concentrated Loads (lb)

Vert: 19=-91(F) 16=-577(F) 13=-91(F) 24=-65(F) 25=-46(F) 27=-78(F) 28=77(F) 29=77(F) 30=77(F) 31=77(F) 32=77(F) 33=77(F) 34=77(F) 35=77(F) 35=77(F) 36=-78(F) 36=-78(F 38=-46(F) 39=-65(F) 40=-84(F) 41=-104(F) 42=-156(F) 43=-577(F) 44=-577(F) 45=-577(F) 46=-577(F) 47=-577(F) 48=-577(F) 49=-577(F) 50=-577(F) 51=-156(F) 52=-104(F) 53=-84(F)

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not beigh valid for use only with with with sets outputs into design is based only door parameters shown, and is for an individual dualing component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)





13

3x8 =

14

3x4 =

15

3x4 =

12

11 3x4 = 3x4 =



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.

5-11-2

5-9-6

9-9-C

5x5 =

3x8 ||

16

1.5x4 ||



3x4 🛸

3x4 🔍

5x5 ||

<u>-8-</u>

8

10

1.5x4 ||

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 	<u>6-0-4</u>	13-5-8 7-5-4	<u>21-6-8</u> 8-1-0	28-11-13	<u>34-8-8</u> 5-8-12
Plate Offsets (X,Y)	[2:0-2-8,Edge], [2:0-0-0,0-1-12],		8-1-0	C-C-7	5-8-12
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 NC Code IRC2018/TPI2014	CSI. TC 0.94 BC 0.99 WB 0.87 Matrix-SH	Vert(LL) -0.35	(loc) l/defl L/d 13-14 >999 240 13-14 >712 180 10 n/a n/a	PLATES GRIP MT20 197/144 Weight: 172 lb FT = 20%
BOT CHORD 2x4 SF 12-15: WEBS 2x4 SF WEDGE Left: 2x4 SP No.2	4 SP No.2, 7-10: 2x4 SP 2400F	.0E	BRACING- TOP CHORD BOT CHORD	Sheathed, except 2-0-0 oc purlins (3-11-6 ma Rigid ceiling directly applie	
Max H Max U	e) 10=Mechanical, 2=0-3-8 orz 2=125(LC 12) plift 10=-141(LC 9), 2=-166(LC 8 rav 10=1623(LC 2), 2=1686(LC				
TOP CHORD 2-3=- 8-10= BOT CHORD 2-16= WEBS 3-16=	Comp./Max. Ten All forces 25(2982/268, 3-5=-2328/191, 5-6=- 2891/253 287/2578, 14-16=-287/2578, 13 =0/275, 3-14=-667/246, 5-14=0/6 558/223	980/217, 6-7=-1976/215, 7-8= .14=-57/2055, 11-13=-147/246	-2310/185, 68, 10-11=-147/2468		
 2) Wind: ASCE 7-16; V Enclosed; MWFRS 1 DOL=1.60 plate grip 3) Provide adequate dr 4) This truss has been 5) * This truss has been 6) Refer to girder(s) for 7) Provide mechanical 10=141, 2=166. 8) This truss is designer referenced standard 	rainage to prevent water ponding designed for a 10.0 psf bottom c n designed for a live load of 20.0 ottom chord and any other memi truss to truss connections. connection (by others) of truss to ed in accordance with the 2018 Ir	d=91mph; TCDL=6.0psf; BCDl ever left and right exposed ; er ord live load nonconcurrent wi sf on the bottom chord in all a ers, with BCDL = 10.0psf. bearing plate capable of withs ernational Residential Code so	nd vertical left and right exp ith any other live loads. reas where a rectangle 3-6 tanding 100 lb uplift at joir ections R502.11.1 and R8	bosed; Lumber 6-0 tall by 2-0-0 wide nt(s) except (jt=lb) 02.10.2 and	STATE OF MISSOL NATHANIEL FOX PE-2022042259



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 	8-4-13 8-4-13	<u>16-1-8</u> 7-8-11	18-10-8	24-2-5 25-6-8 26 5-3-13 1-4-3 1	6-7-12 28-1-0 <u>31-5-2</u> I-1-4 1-5-4 3-4-2	<u>34-8-8</u> 3-3-6	
Plate Offsets (X,Y)	[2:Edge,0-3-2], [7:0-4-6,Edge], [8:0-1-1					3-3-0	
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 NO Code IRC2018/TPI2014	CSI. TC 0.88 BC 0.84 WB 1.00 Matrix-SH	Vert(LL) -0.50) 13-14 >834 24 4 13-14 >491 18		GRIP 185/144 197/144 Ib FT = 20%	
BOT CHORD 2x4 SP 10-12: 14-16,8 WEBS 2x4 SP	6 SP 2400F 2.0E, 8-10: 2x10 HF No.2		BRACING- TOP CHORD BOT CHORD WEBS JOINTS	Sheathed, except 2-0-0 oc purlins (3-4 Rigid ceiling directly 8-11-2 oc bracing: 1 1 Row at midpt 2 Rows at 1/3 pts 1 Brace at Jt(s): 15	applied or 10-0-0 oc bracing	j, Except:	
Max H Max U	e) 2=0-3-8, 10=Mechanical orz 2=148(LC 8) plift 2=-187(LC 8), 10=-162(LC 9) rav 2=1713(LC 2), 10=1664(LC 2)						
TOP CHORD 2-3=- 8-9=- 2-20= 14-15 BOT CHORD 2-20= 14-15 WEBS 3-20= 7-15=	Comp./Max. Ten All forces 250 (lb) o 2943/327, 3-5=-2747/298, 5-6=-2061/2 7171/505, 9-10=-3020/282 =-358/2542, 18-20=-209/2198, 17-18=-3 5=-333/6810, 13-14=-313/7023, 8-13=-4 =-293/186, 5-20=-39/503, 5-18=-623/22 =-1/770, 8-15=-4675/407, 9-11=-1391/1 =-143/3832	33, 6-7=-2345/239, 7-8=-2 5/304, 11-12=-38/440, 10 5/2364 4, 6-18=-413/0, 15-18=-25	2763/201,)-11=-204/2579, 5/1860,				
 9-13=-143/3832 NOTES- 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=6.0psf; h=25ft; Ke=0.96; 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. All plates are MT20 plates unless otherwise indicated. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 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) 2=187, 10=162. This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1. Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 							
Design valid for use or a truss system. Before	design parameters and READ NOTES ON THIS A hly with MITek® connectors. This design is based use, the building designer must verify the applica ng indicated is to prevent buckling of individual tru	only upon parameters shown, an bility of design parameters and p	d is for an individual building o properly incorporate this design	omponent, not into the overall	N	/iiTe k°	

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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, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)





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	6-0-5 11-6-3 6-0-5 5-5-14	<u>11-10-0 17-6-0</u> 0-3-13 5-8-0	<u>21-5-8</u> 3-11-8	23-7-8 25-6-0	34-8- 9-2-		
Plate Offsets (X,Y)	[2:0-2-8,Edge], [2:0-0-0,0-1-4], [12:0-4-0),0-1-8], [14:Edge,0-3-8]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.67 BC 0.95 WB 0.69 Matrix-SH	Vert(CT)	in (loc) l/defl -0.39 11-12 >341 -0.64 11-12 >207 0.07 11 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 199 lb	GRIP 197/144 197/144 FT = 20%
		5E	BRACING- TOP CHORE BOT CHORE WEBS	purlins (6-0-0 n	nax.): 7-10. rectly applied o g: 8-15	, except end verticals r 6-0-0 oc bracing. Ex 16, 7-15, 9-15, 5-16	,
Max H Max U Max G FORCES. (lb) - Max. TOP CHORD 2-3=- BOT CHORD 2-19: 11-12 WEBS 5-18:	e) 11=Mechanical, 15=0-3-8, 2=0-3-8 lorz 2=288(LC 5) plift 11=-194(LC 23), 15=-140(LC 9), 2= comp./Max. Ten All forces 250 (lb) or -1369/270, 3-5=-835/258, 5-6=-265/216, -349/1112, 18-19=-349/1112, 16-18=-2 2=-373/0, 8-15=-281/117 =-4/479, 6-16=-267/32, 7-15=-1233/119,	924(LC 21) less except when shown 7-8=-8/914, 8-9=-10/902 33/678, 15-16=-565/0, 14 13-15=-893/89, 9-13=-91	-15=-432/0,				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V Enclosed; MWFRS DOL=1.60 plate grip 3) Provide adequate di 4) All plates are MT20 5) This truss has been (a) All fit between the b (b) Refer to girder(s) for 8) Provide mechanical 11=194, 15=140, 2=	rainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord liv n designed for a live load of 20.0psf on t bottom chord and any other members, wi t russ to truss connections. connection (by others) of truss to bearin	sign. ph; TCDL=6.0psf; BCDL= ft and right exposed ; end e load nonconcurrent with he bottom chord in all are ith BCDL = 10.0psf. g plate capable of withsta	n any other live load any other live load as where a rectang anding 100 lb uplift a	ht exposed; Lumber ls. le 3-6-0 tall by 2-0-0 at joint(s) except (jt=lb			MISSOLUTEL

ith the 2018 International Residential Code sections R502.11.1 and R802.10.2 and 9) sıgr referenced standard ANSI/TPI 1.

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



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0000 10					
LUMBER-			BRACING-		
TOP CHORD	2x4 SP	No.2	TOP CHORD	Sheathed or 3-8-8 oc purlins	, except end verticals, and 2-0-0 oc
BOT CHORD	2x4 SP	No.2 *Except*		purlins (6-0-0 max.): 9-11.	
	13-15:	2x4 SPF No.3	BOT CHORD	Rigid ceiling directly applied	or 6-0-0 oc bracing. Except:
WEBS	2x4 SP	F No.3		4-5-0 oc bracing: 7-9	
WEDGE				4-8-0 oc bracing: 9-16	
Left: 2x4 SP N	lo.2		WEBS	1 Row at midpt	6-17, 10-16, 5-17

REACTIONS. (size) 12=Mechanical, 16=0-3-8, 2=0-3-8 Max Horz 2=253(LC 5) Max Uplift 12=-109(LC 9), 16=-124(LC 9), 2=-180(LC 8) Max Grav 12=235(LC 22), 16=2236(LC 2), 2=976(LC 1)

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) 12=109, 16=124, 2=180.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

 TOP CHORD
 2-3=-1476/259, 3-5=-943/246, 5-6=-376/204, 6-7=-374/228, 7-8=-163/821, 8-10=-31/691

 BOT CHORD
 2-20=-335/1243, 19-20=-335/1243, 17-19=-219/789, 16-17=-673/0, 15-16=-337/0, 12-13=-271/0, 9-16=-1360/179, 7-9=-1638/270

 WEBS
 5-19=-4/477, 14-16=-634/115, 10-14=-682/130, 10-12=0/391, 3-19=-527/135, 3-20=0/262, 5-17=-791/227, 7-17=-22/1249



		,0 = 0], [10:0 = 0,0 = 0]				
LOADING (psf)	SPACING- 2-0-0	CSI.		n (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL) -0.32	2 12-13 >417 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.64	4 12-13 >207 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.76	Horz(CT) 0.0	7 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH			Weight: 189 lb	FT = 20%
LUMBER-			BRACING-			
TOP CHORD 2x4	SP No.2		TOP CHORD	Sheathed or 3-7-0 oc purlin	s, except end verticals,	and 2-0-0 oc
BOT CHORD 2x4	SP No.2 *Except*			purlins (6-0-0 max.): 9-11.	•	
13-1	4: 2x4 SPF No.3		BOT CHORD	Rigid ceiling directly applied	d or 3-9-12 oc bracing.	Except:
WEBS 2x4	SPF No.3			4-9-0 oc bracing: 7-15	Ŭ	
WEDGE			WEBS	1 Row at midpt	6-16, 5-16	
Loft: 2v4 SP No 2				•		

Left: 2x4 SP No.2

- REACTIONS. (size) 12=Mechanical, 15=0-3-8, 2=0-3-8 Max Horz 2=216(LC 5) Max Uplift 12=-75(LC 5), 15=-160(LC 9), 2=-165(LC 8) Max Grav 12=291(LC 22), 15=2048(LC 2), 2=1034(LC 23)
- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-3=-1598/229, 3-5=-1051/216, 5-6=-466/173, 6-7=-460/196, 7-8=-54/572,

	8-10=-38/441
BOT CHORD	2-19=-305/1363, 18-19=-305/1363, 16-18=-188/915, 15-16=-434/15, 9-15=-1417/188,
	7-9=-1460/187
WEBS	5-18=-6/471, 13-15=-536/36, 10-13=-483/144, 10-12=-1/265, 3-18=-521/136,
	3-19=0/262, 5-16=-786/229, 7-16=-58/1076

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=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) 12 except (jt=lb) 15=160, 2=165.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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				-
LUMBER-		BRACING-		
TOP CHORD	2x4 SP No.2	TOP CHORD	Sheathed or 3-6-10 oc purli	ns, except end verticals, and 2-0-0 oc
BOT CHORD	2x4 SP No.2 *Except*		purlins (6-0-0 max.): 8-11.	
	9-14: 2x4 SPF No.3	BOT CHORD	Rigid ceiling directly applied	or 6-0-0 oc bracing.
WEBS	2x4 SPF No.3	WEBS	1 Row at midpt	6-16, 5-16
WEDGE		JOINTS	1 Brace at Jt(s): 8, 11	

Left: 2x4 SP No.2

REACTIONS. (size) 12=Mechanical, 2=0-3-8, 15=0-3-8 Max Horz 2=189(LC 8) Max Uplift 12=-64(LC 9), 2=-162(LC 8), 15=-166(LC 9) Max Grav 12=329(LC 22), 2=1055(LC 2), 15=1961(LC 2)

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

- TOP CHORD 2-3=-1642/223, 3-5=-1095/209, 5-6=-497/165, 6-7=-501/189, 7-10=-27/475
- BOT CHORD 2-19=-295/1403, 16-19=-295/1403, 16-18=-178/957, 15-16=-341/34, 14-15=-286/21, 12-13=-155/286, 8-15=-1594/196, 7-8=-1472/187
- WEBS 5-18=-7/468, 10-13=-483/226, 3-18=-518/136, 3-19=0/262, 5-16=-785/230, 7-16=-58/1015

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=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 12, 162 lb uplift at joint 2 and 166 lb uplift at joint 15.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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



November 30,2023

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L			34-8-8					
I			34-8-8					I
Plate Offsets (X,Y) [2	2:0-0-0,0-1-0], [2:0-2-8,Edge]							
OADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
CLL 25.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL) -0.		n/r	120	MT20	197/144
CDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) -0.		n/r	90		
CLL 0.0 *	Rep Stress Incr NO	WB 0.20	Horz(CT) 0.0	01 23	n/a	n/a		
CDL 10.0	Code IRC2018/TPI2014	Matrix-SH					Weight: 200 lb	FT = 20%
UMBER-			BRACING-					
OP CHORD 2x4 SP	No.2		TOP CHORD	Sheath	ed or 6-0	-0 oc purlins,	except end verticals.	
OT CHORD 2x4 SP	No.2		BOT CHORD	Rigid c	eiling dire	ctly applied of	or 10-0-0 oc bracing.	
VEBS 2x4 SPF	- No.3		WEBS	•	at midpt		2-33	

WEBS 2x4 SPF No.3 OTHERS 2x4 SPF No.3 WEDGE

Left: 2x4 SP No.2

REACTIONS. All bearings 34-8-8.

Max Horz 2=162(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 23, 2, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25 except 24=-108(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 23, 2, 33, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24

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=6.0psf; h=25ft; Ke=0.96; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
- will fit between the bottom chord and any other members. 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 2, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25 except (jt=lb) 24=108.
- 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.





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			35-0-0	
			35-0-0	1
Plate Offsets (X,Y)	[2:0-0-0,0-1-0], [2:0-2-8,Edge], [22:0-0-0	0,0-1-0], [22:0-2-8,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 0.09 BC 0.04 WB 0.20 Matrix-SH	Vert(LL) -0.00 1 n/r 120 MT20 1 Vert(CT) -0.00 1 n/r 90 Horz(CT) 0.01 22 n/a n/a	FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF WEDGE			BRACING-TOP CHORDSheathed or 6-0-0 oc purlins.BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.WEBS1 Row at midpt12-32	

25 0 0

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

REACTIONS. All bearings 35-0-0.

(lb) - Max Horz 2=160(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 28, 27, 26, 25, 24, 23

Max Grav All reactions 250 lb or less at joint(s) 2, 32, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 28, 27, 26, 25, 24, 23, 22

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 28, 27, 26, 25, 24, 23.
- 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.



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3x4 = 4x8 = 3x4 =

3x4 =

1.5x4 ||

3x8 ||

REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=157(LC 12) Max Uplift 2=-196(LC 8), 10=-196(LC 9)

3x8 ||

wax Upim 2=-196(LC 8), 10=-196(LC 9) Max Grav 2=1699(LC 2), 10=1699(LC 2)

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

 TOP CHORD
 2-3=-2995/311, 3-5=-2484/286, 5-6=-1896/262, 6-7=-1896/262, 7-9=-2484/286, 9-10=-2995/312

 BOT CHORD
 2-18=-347/2565, 17-18=-347/2565, 15-17=-211/2159, 13-15=-73/2159, 12-13=-191/2565, 10-12=-191/2565

 WEBS
 7-15=-777/230, 7-13=-12/466, 6-15=-114/1317, 9-13=-485/159, 5-15=-777/230, 5-17=-12/466, 3-17=-485/158

1.5x4 ||

3x4 =

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=6.0psf; h=25ft; Ke=0.96; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=196, 10=196.

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



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REL EASE FOR CONSTRUCTION	Truss Type	Qty	Ply	Juneau Townhomes - Osage	
AS NOTED ON PLANS REVIEW				162280235	
DEVELOPMENT SERVICES	Roof Special Girder	2	1		
				Job Reference (optional)	
LEE'S SUMMUT PM SSAGHIRKS),	Spring Hills, KS - 66083, 8.630 s Aug 30 2023 MiTek Industries, Inc. Wed Nov 29 16:40:30 2023 Page 2				
12/21/2023 2:59:54	ID:DUjzAB0GCWoOJpyMsoTzILz3uah-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f				

LOAD CASE(S) Standard

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

Vert: 1-6=-70, 6-8=-70, 8-9=-70, 9-10=-70, 10-11=-70, 2-12=-20 Concentrated Loads (b)

Vert: 13=3(F)

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WEBS 7-19=-2906/436, 19-21=-50/459, 6-19=-104/1636, 5-21=-767/227, 7-16=-591/223, 14-16=0/1115, 8-16=-44/1810, 5-22=-13/459, 3-22=-478/159, 9-16=0/2339, 14-17=-1207/0, 18-21=-82/1763, 13-16=-91/3034, 9-13=-1907/154, 10-13=-183/2015

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=6.0psf; h=25ft; Ke=0.96; 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

12=227, 2=201. 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.

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

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building designe. 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/TPH1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org)
and BCSI Building Component Safety Information
available from the Structural Building Component Association (www.sbcscomponents.com)







WEDGE

Left: 2x4 SP No.2

- REACTIONS. (size) 2=0-3-8, 14=0-3-8, 11=Mechanical Max Horz 2=165(LC 8) Max Uplift 2=-135(LC 8), 14=-198(LC 9), 11=-78(LC 9) Max Grav 2=978(LC 2), 14=2267(LC 2), 11=466(LC 22)
- FORCES.
 (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.

 TOP CHORD
 2-3=-1505/185, 3-5=-952/156, 5-6=-343/129, 6-7=-315/131, 7-8=-27/648, 8-9=-148/311, 9-10=-498/100, 10-11=-445/88

 BOT CHORD
 2-19=-245/1306, 18-19=-245/1306, 16-18=-103/835, 14-16=-393/129, 13-14=-260/140, 12-13=-81/433

 WERD
 5.0
 0.01/202, 5.49, 15/104, 7.44, 405/1404, 0.44, 000/157, 0.10, 11/202
- WEBS 5-16=-804/233, 5-18=-15/494, 7-14=-1254/194, 8-14=-926/157, 8-13=-11/380, 9-13=-527/154, 10-12=-78/464, 3-18=-547/165, 7-16=-115/1057

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=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) 11 except (jt=lb) 2=135, 14=198.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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	0-0-3 11-0-3	19-0-7	23-3-12 23-0		37-0-0	
1	6-0-5 5-5-14	8-0-5	3-11-5 2-0-	4 6-5-11	5-8-13	I
Plate Offsets (X,Y)	[2:0-3-8,Edge], [8:0-8-6,Edge], [16:)-2-0,0-0-8]				
LOADING (psf) FCLL 25.0 FCDL 10.0 SCLL 0.0 * SCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.89 BC 0.65 WB 0.54 Matrix-SH	DEFL. in (loc Vert(LL) -0.07 21-2 Vert(CT) -0.14 21-2 Horz(CT) 0.03 1	3 >999 240 3 >999 180	MT20	GRIP 197/144 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 S 30T CHORD 2x4 S WEBS 2x4 S WEDGE Left: 2x4 SP No.2	P No.2 P No.2 PF No.3 2x4 SP No.2 2-10-11		2-0- BOT CHORD Rigi	athed or 4-2-11 oc purlins 0 oc purlins (10-0-0 max.) d ceiling directly applied o bw at midpt 5-	, except : 7-8.	
Max H Max I Max C FORCES. (Ib) - Max	ze) 2=0-3-8, 19=0-3-8, 12=Mechar Horz 2=190(LC 8) Jplift 2=-179(LC 8), 19=-84(LC 9), 1: Grav 2=1007(LC 2), 19=2218(LC 2), . Comp./Max. Ten All forces 250 (I 1570/274, 3-5=-1021/246, 5-6=-42	2=-147(LC 9) 12=457(LC 22) b) or less except when shown.				
9-11 BOT CHORD 2-23 15-1 WEBS 5-20	=-607/256 =-347/1346, 21-23=-347/1346, 20-2 6=-162/472, 14-15=-162/472, 11-14)=-814/225, 5-21=-7/506, 7-19=-1180 '=-775/207, 9-15=0/260, 3-21=-540/	1=-208/881, 18-19=-304/0, 16 122/420, 11-12=-463/150 /135, 17-19=-884/170, 8-17=-	-17=-157/674,			
 Wind: ASCE 7-16; Enclosed; MWFRS DOL=1.60 plate gri Provide adequate c All plates are MT20 This truss has beer 	re loads have been considered for th Vult=115mph (3-second gust) Vasd= (envelope) gable end zone; cantilev p DOL=1.60 Irainage to prevent water ponding.) plates unless otherwise indicated. In designed for a 10.0 psf bottom cho	91mph; TCDL=6.0psf; BCDL= er left and right exposed ; end d live load nonconcurrent with	vertical left and right exposed	l; Lumber	STATE OF D	MISSOLUTION

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 2=179, 12=147.

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.



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F	<u>6-0-5</u> <u>11-6-3</u> 6-0-5 <u>5-5-14</u>	<u>18-1-9</u> 6-7-6	23-5-12		8 <u>1-11-11</u> 6-5-11	37-8-8		
Plate Offsets (X,Y)	[2:0-3-8,Edge]	0-7-0	5-4-3	2-0-4	0-0-11	5-6-13		
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 0.82 BC 0.68 WB 0.90 Matrix-SH	Vert(LL) -0.08	n (loc) l/defl 8 21-22 >999 5 21-22 >999 8 13 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 208 lb	GRIP 197/144 FT = 20%	
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Left: 2x4 SP No.2 SLIDER Right 2	° No.2		BRACING- TOP CHORD BOT CHORD WEBS	Sheathed or 3- 2-0-0 oc purlins Rigid ceiling dir 1 Row at midpt	(6-0-0 max.): ectly applied o			
REACTIONS. (size) 2=0-3-8, 20=0-3-8, 13=Mechanical Max Horz 2=194(LC 8) Max Uplift 2=-182(LC 8), 20=-60(LC 8), 13=-133(LC 9) Max Grav 2=1014(LC 21), 20=2315(LC 2), 13=389(LC 22)								
TOP CHORD 2-3=-	Comp./Max. Ten All forces 250 (lb) o 1570/274, 3-5=-1044/250, 5-6=-421/20 2=-430/198							
	=-348/1301, 22-24=-348/1301, 21-22=-2 3=-362/119	18/861, 20-21=-272/97, 1	5-16=-100/290,					
WEBS 6-21=	=-252/40, 5-21=-846/230, 5-22=0/509, 7)=-635/222, 8-18=-628/238, 3-22=-522/	,	71/95,					
 2) Wind: ASCE 7-16; V Enclosed; MWFRS (DOL=1.60 plate grip 3) Provide adequate dr 4) This truss has been 5) * This truss has been 6) Refer to girder(s) for 7) Provide mechanical 2=182, 13=133. 8) This truss is designer referenced standard 	rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv n designed for a live load of 20.0psf on pottom chord and any other members, w r truss to truss connections. connection (by others) of truss to bearing ed in accordance with the 2018 Internation	nph; TCDL=6.0psf; BCDL= ft and right exposed ; end re load nonconcurrent with the bottom chord in all are ith BCDL = 10.0psf. ng plate capable of withsta onal Residential Code sec	vertical left and right ex a any other live loads. as where a rectangle 3 anding 100 lb uplift at joi stions R502.11.1 and R8	rposed; Lumber -6-0 tall by 2-0-0 v int(s) 20 except (jt: 802.10.2 and		Ha theme	MISSOLANIEL DX HBER 2042259	

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BOT CHORD

WEBS

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

1 Row at midpt

6-21, 5-21, 7-20

 TOP CHORD
 2x4 SP No.2 *Except*

 4-6: 2x4 SP 1650F 1.5E

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

 WEDGE
 2x4 SP No.3

Left: 2x4 SP No.2

SLIDER Right 2x4 SP No.2 2-10-11

REACTIONS. (size) 2=0-3-8, 20=0-3-8, 13=Mechanical Max Horz 2=211(LC 8) Max Uplift 2=-183(LC 8), 20=-88(LC 8), 13=-131(LC 9) Max Grav 2=1005(LC 21), 20=2285(LC 2), 13=394(LC 22)

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

- TOP CHORD
 2-3=-1540/269, 3-5=-1028/263, 5-6=-251/213, 7-8=0/650, 8-9=-398/287, 9-12=-450/200

 BOT CHORD
 2-24=-359/1267, 23-24=-359/1267, 21-23=-253/862, 20-21=-513/74, 15-16=-102/311, 12-15=-56/253, 12-13=-373/121

 WEBS
 6-21=-392/0, 5-21=-990/288, 5-23=0/513, 7-21=-60/1306, 7-20=-1664/104,
- 18-20=-613/177, 8-18=-560/197, 9-16=-291/151, 3-23=-497/122, 3-24=0/256, 8-16=-90/628

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=6.0psf; h=25ft; Ke=0.96; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) 20 except (jt=lb) 2=183, 13=131.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Plate Offsets (X,Y)	[2:0-3-8,Edge], [30:0-2-8,0-3-0], [37:0-2	2-8,0-3-0]	37-8-8 37-8-8				
LOADING (psf) TCLL 25.0 TCDL 10.0 SCLL 0.0 * SCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.09 BC 0.06 WB 0.15 Matrix-SH	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) 0.0	0 1	n/r 12 n/r 9	90 i/a	S GRIP 197/144 : 235 lb FT = 20%
LUMBER- FOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP	No.2		BRACING- TOP CHORD BOT CHORD WEBS	Rigid c		c purlins, except end v applied or 10-0-0 oc br 13-33, 12-34, 1	

2x4 SPF No.3 WEBS OTHERS 2x4 SPF No.3 WEDGE

Left: 2x4 SP No.2

- REACTIONS. All bearings 37-8-8. Max Horz 2=186(LC 8) (lb) -
 - Max Uplift All uplift 100 lb or less at joint(s) 34, 35, 36, 37, 38, 39, 40, 41, 42, 32, 31, 30, 29, 28, 27, 26, 2 except 25=-102(LC 9)
 - Max Grav All reactions 250 lb or less at joint(s) 24, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 32, 31, 30, 29, 28, 27, 26, 25, 2

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

TOP CHORD 10-11=-67/274, 11-12=-56/300, 12-13=-49/319, 13-14=-48/311, 14-15=-44/273

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=6.0psf; h=25ft; Ke=0.96; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 34, 35, 36, 37, 38, 39, 40, 41, 42, 32, 31, 30, 29, 28, 27, 26, 2 except (jt=lb) 25=102.
- 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.



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L	6-0-5	11-6-3	20-1-12	23-5-12		31-5-8	31-11 ₀ 11	37-8-8	
	6-0-5 ¹	5-5-14	8-7-9	3-4-0	2-0-4	5-11-8	0-6-3	5-8-13	
Plate Offsets (X,Y)	[2:0-3-8,Edge], [12:0-4-3,E	Edgej							
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 NO 12014	CSI. TC 0.78 BC 0.80 WB 0.81 Matrix-SH		in (loc) -0.19 18-19 -0.35 18-19 0.05 12	>999 2 >804 1	L/d 240 80 n/a	PLATES MT20 Weight: 206 lb	GRIP 197/144 FT = 20%
4-6: 2: BOT CHORD 2x4 SI 14-16: WEBS 2x4 SI WEDGE Left: 2x4 SP No.2 SLIDER Right :	P No.2 *Except* x4 SP 1650F 1.5E P No.2 *Except* : 2x4 SPF No.3 PF No.3 2x4 SP No.2 3-1-13 2x4 SP No.2 3-1-13 2e) 2=0-3-8, 12=Mechani			BRACING- TOP CHORI BOT CHORI WEBS	D Rigid c	eed or 3-8-2 o eiling directly at midpt	y applied or 6	-0-0 oc bracing. ;, 5-18, 7-17	
Max L Max C FORCES. (lb) - Max TOP CHORD 2-3= 10-1 BOT CHORD 2-21 WEBS 6-18	Horz 2=204(LC 8) Jplift 2=-185(LC 8), 12=-13 Grav 2=1006(LC 21), 12=4 . Comp./Max. Ten All ford 1534/279, 3-5=-1039/260, 2=-485/217 =-360/1259, 19-21=-360/12 =-389/0, 5-18=-1008/279, 1 =0/532, 7-18=-59/1296, 10	09(LC 22), 17≕ ces 250 (lb) or lo , 5-6=-252/221, 259, 18-19=-24 7-17=-1660/105	2285(LC 2) ess except when shown. 7-8=0/653, 8-10=-429/3 4/871, 17-18=-508/77, 12 5, 15-17=-608/178, 8-15=	08, 2-13=-106/334 557/194,					
 Wind: ASCE 7-16; Enclosed; MWFRS DOL=1.60 plate gri 3) This truss has beer 4) * This truss has beer will fit between the 5) Refer to girder(s) fc 6) Provide mechanica 2=185, 12=138. 	designed for a 10.0 psf bo en designed for a live load of bottom chord and any other or truss to truss connections I connection (by others) of f ed in accordance with the 2	est) Vasd=91mp e; cantilever left of 20.0psf on th r members, with s. truss to bearing	h; TCDL=6.0psf; BCDL= and right exposed ; end load nonconcurrent with e bottom chord in all are n BCDL = 10.0psf. plate capable of withsta	vertical left and rig any other live load as where a rectang nding 100 lb uplift	ht exposed; L ds. gle 3-6-0 tall b at joint(s) 17 e	umber y 2-0-0 wide except (jt=lb)	7	A Anna OFESSION	MBER 22042259

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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbsccomponents.com)



13-6-4 13-6-4

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	тс	0.07	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	13	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-SH						Weight: 80 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins.

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

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SPF No.3

SLIDER Left 2x4 SP No.2 1-6-15, Right 2x4 SP No.2 1-6-14

REACTIONS.

All bearings 13-6-4. Max Horz 2=129(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14 Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.

Gable studs spaced at 1-4-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14.
- 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.



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RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE:S.SUMMST.MISSOURE. 12/21/2023 2:59:55



Plate Offsets (X,Y)	[2:0-3-13,0-0-9], [11:Edge,0-1-8]	6-9-2 6-9-2		3-6-4 -9-2			
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 0.76 BC 0.45 WB 0.54 Matrix-SH	DEFL. ir Vert(LL) 0.06 Vert(CT) -0.10 Horz(CT) 0.01	52-12>99902-12>999	L/d 240 180 n/a	PLATES MT20 Weight: 97 lb	GRIP 197/144 FT = 20%
UMBER- OP CHORD 2x4 SP OT CHORD 2x4 SP VEBS 2x4 SP OTHERS 2x4 SP	P No.2 PF No.3		BRACING- TOP CHORD BOT CHORD WEBS JOINTS		rectly applied o	except end verticals or 10-0-0 oc bracing. 0-11	

REACTIONS. (size) 11=0-3-8, 2=0-3-8 Max Horz 2=361(LC 5) Max Uplift 11=-167(LC 8), 2=-58(LC 8)

Left 2x4 SP No.2 4-0-2

Max Uplift 11=-167(LC 8), 2=-58(LC 8) Max Grav 11=645(LC 15), 2=668(LC 1)

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

 TOP CHORD
 2-4=-696/39, 11-13=-560/210

 BOT CHORD
 2-12=-130/537, 11-12=-130/537

 WEBS
 4-12=0/283, 4-17=-591/236, 16-17=-587/224, 15-16=-622/247, 14-15=-625/255, 13-14=-657/249

NOTES-

SLIDER

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) 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) Gable studs spaced at 1-4-0 oc.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 11=167.

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





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		2-2-0 7-6-1	11-6-0	13-6-4			
Plate Offsets (X,Y)	[1:0-5-8,Edge], [2:0-4-0,0-2-12], [9:0-	<u>2-2-0</u> <u>5-4-1</u> 4-8,0-3-8], [10:0-3-8,0-4-4]	3-11-15	2-0-4			
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 0.30 BC 0.94 WB 0.58 Matrix-SH	Vert(LL) -0.1	n (loc) l/defl l 10-11 >999 3 10-11 >900 2 7 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 220 lb	GRIP 118/123 FT = 20%
2-12: 1 WEBS 2x4 SP	No.2 F No.2 *Except* 1/2" x 5 1/2" 2.0E Microllam® LVL F No.3 *Except* 6 SPF No.2		BRACING- TOP CHORD BOT CHORD WEBS		ctly applied or 10	cept end verticals.)-0-0 oc bracing,	
Max He Max U	e) 7=0-3-8, 1=0-3-8 orz 1=352(LC 22) plift 7=-631(LC 8), 1=-460(LC 8) rav 7=2822(LC 1), 1=2011(LC 1)						
TOP CHORD 1-2=- BOT CHORD 1-12= 7-8=- WEBS 2-10= NOTES- 1) 2-ply truss to be con Top chords connecte Bottom chords connecte	Comp./Max. Ten All forces 250 (lb) 2942/704, 2-4=-2382/586, 4-5=-815/ 658/2095, 11-12=-123/541, 2-11=-2 121/490 3436/1225, 4-10=-564/1820, 4-9=-1 nected together with 10d (0.120"x3") ed as follows: 2x4 - 1 row at 0-9-0 oc ected as follows: 2x6 - 2 rows stagge follows: 2x4 - 1 row at 0-9-0 oc.	195, 5-6=-574/189, 6-7=-24 04/853, 10-11=-1736/5308, 870/677, 7-9=-593/246, 6-9 nails as follows: 2x6 - 2 rows staggered at (30/549 , 9-10=-582/1891, 9=-598/2628				2200
 ply connections have Wind: ASCE 7-16; V Enclosed; MWFRS (DOL=1.60 plate grip This truss has been * This truss has been will fit between the bio Provide mechanical 7=631, 1=460. This truss is designe referenced standard Use Simpson Strong 	designed for a 10.0 psf bottom chorc n designed for a live load of 20.0psf of ottom chord and any other members connection (by others) of truss to be id in accordance with the 2018 Intern	ds noted as (F) or (B), unless 1mph; TCDL=6.0psf; BCDL left and right exposed; end live load nonconcurrent with in the bottom chord in all an arring plate capable of withst ational Residential Code se ss, Single Ply Girder) or eq	ss otherwise indicated. =6.0psf; h=25ft; Ke=0.96 d vertical left and right ex h any other live loads. eas where a rectangle 3 anding 100 lb uplift at joi ctions R502.11.1 and R	5; Cat. II; Exp C; ;posed; Lumber -6-0 tall by 2-0-0 wi nt(s) except (jt=lb) 302.10.2 and	de 7	attam	MISSOLATION
10) Hanger(s) or other	ere hanger is in contact with lumber. connection device(s) shall be provide chord. The design/selection of such			down and 187 lb u	o at	Novemb	per 30,2023
WARNING - Verify Design valid for use or a truss system. Before building design. Braci is always required for s fabrication, storage, de	design parameters and READ NOTES ON TH hly with MiTek® connectors. This design is bas use, the building designer must verify the app ng indicated is to prevent buckling of individual stability and to prevent collapse with possible p elivery, erection and bracing of trusses and trus omponent Safety Information available from	S AND INCLUDED MITEK REFERE ad only upon parameters shown, an icability of design parameters and truss web and/or chord members or ersonal injury and property damage s systems, see ANS/TPTI Quality	ENCE PAGE MII-7473 rev. 1/2/2 nd is for an individual building or properly incorporate this design only. Additional temporary and a. For general guidance regain or general guidance regain y Criteria, and DSB-22 availat	omponent, not into the overall permanent bracing ing the le from Truss Plate Insti	tute (www.tpinst.org)	Ches	Swingley Ridge Rd. terfield, MO 63017 1200 / MiTek-US.com

RE AS	FOR (D ON	CONST PLANS	REVIEV	N V
			MCES	
	SUMM		SQURE),	
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	Truss Type	Qty	Ply	Juneau Townhomes - Osage		
					162280249	
	Monopitch Girder	1	2			
			-	Job Reference (optional)		
Spring Hills, KS - 66083,		8.6	30 s Aug 3	0 2023 MiTek Industries, Inc. Wed Nov 29 16:41:14 2023	Page 2	
	ID:DUjzAB0GCWoOJpyMsoTzILz3uah-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f					

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-6=-70, 1-12=-20, 9-11=-20, 7-8=-20

Concentrated Loads (lb)

Vert: 10=-389(F) 9=-1606(F) 13=-446(F) 14=-439(F) 15=-382(F) 16=-389(F)

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15

14 13 3x4 ||

16



TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3
SLIDER	Left 2x4 SP No.2 1-8-4

TOP CHORD BOT CHORD WEBS

Sheathed or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 12-13, 11-14

REACTIONS. All bearings 13-6-4. (lb) -

Max Horz 2=361(LC 5) Max Uplift All uplift 100 lb or less at joint(s) 13, 2, 14, 15, 16, 17, 18, 19, 20, 21, 22 Max Grav All reactions 250 lb or less at joint(s) 13, 2, 14, 15, 16, 17, 18, 19, 20, 21, 22

5x8 💋

3x6 ||

22 21 20

19 18 17

0-8-8

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

TOP CHORD 2-3=-347/216, 3-4=-316/204, 4-5=-270/171

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 7) will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 2, 14, 15, 16, 17, 18, 19, 20, 21, 22.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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Plate Offsets (X Y)-- [1:0-5-8 Edge] [7:0-2-12 0-4-4]



4x6 =

LUS24 LUS24 LUS24 4-6-1 13-6-4 8-9-9 4-6-1 4-3-9 4-8-11

3x4 ||

Plate Offsets (X,Y)	[1:0-5-8,Edge], [7:0-2-12,0-4-4]						
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 0.40 BC 0.98 WB 0.58 Matrix-SH	Vert(CT) -0.	in (loc) l/defl .05 6-7 >999 .09 6-7 >999 .01 6 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 167 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x6 SP WEBS 2x4 SP WEDGE Left: 2x4 SP No.2			BRACING- TOP CHORD BOT CHORD WEBS		rectly applied or	except end verticals. 10-0-0 oc bracing.	
Max H Max U	e) 6=0-3-8, 1=0-3-8 orz 1=354(LC 5) plift 6=-613(LC 8), 1=-450(LC 8) irav 6=2770(LC 1), 1=2028(LC 1)						
TOP CHORD 1-2=- BOT CHORD 1-8=-	Comp./Max. Ten All forces 250 (lb) o 2566/603, 2-4=-1632/364 599/1994, 7-8=-599/1994, 6-7=-366/12 277/880, 2-7=-885/375, 4-7=-565/2237	93	ι.				
Top chords connected Bottom chords connected Bottom chords connected as 2) All loads are conside ply connections have 3) Wind: ASCE 7-16; V Enclosed; MWFRS (DOL=1.60 plate grip 4) This truss has been will fit between the b 6) Provide mechanical 6=613, 1=450. 7) This truss is designe referenced standard 8) Use Simpson Strong 3-6-12 from the left 6 10) Use Simpson Strong connect truss(es) to 11) Fill all nail holes wh	designed for a 10.0 psf bottom chord lin n designed for a live load of 20.0psf on oottom chord and any other members. connection (by others) of truss to beari ad in accordance with the 2018 Internat ANSI/TPI 1. g-Tie LUS26 (4-10d Girder, 3-10d Truss	d at 0-4-0 oc. if noted as front (F) or bac noted as (F) or (B), unles nph; TCDL=6.0psf; BCDL ft and right exposed ; end ve load nonconcurrent wit the bottom chord in all ar- ng plate capable of withst ional Residential Code se s, Single Ply Girder) or eq c, Single Ply Girder) or eq ck face of bottom chord.	ss otherwise indicated. =6.0psf; h=25ft; Ke=0. d vertical left and right h any other live loads. eas where a rectangle anding 100 lb uplift at ctions R502.11.1 and uivalent at 1-6-12 from uivalent spaced at 2-0-	96; Cat. II; Exp C; exposed; Lumber 3-6-0 tall by 2-0-0 joint(s) except (jt=lt R802.10.2 and the left end to con -0 oc max. starting	wide) nect at	TO PE-202	MISSOLUTE ANIEL OX 2042259 AL ENGINE er 30,2023
Continued on page 2 LOAD CASE(S) Stand	dard						
WARNING - Verify Design valid for use or a truss system. Before	design parameters and READ NOTES ON THIS J nly with MiTek® connectors. This design is based a use, the building designer must verify the applicating indicated is to prevent buckling of individual tru	only upon parameters shown, an bility of design parameters and p	nd is for an individual building properly incorporate this des	g component, not ign into the overall		M	iTek °

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**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)



RELEASE FOR CONSTRUCTION	Truss Type
AS NOTED ON PLANS REVIEW	
DEVELOPMENT SERVICES	Monopitch Girder
LEE'S SUMMIST PM S S GHI, RS),	Spring Hills, KS - 66083,
12/21/2023 2:59:55	ID:DUj

	Quy	,	ounour rommonios osugo	162280251
	1	2		
			Job Reference (optional)	
8.630 s Aug 30 2023 MiTek Industries, Inc. Wed Nov 29 16:41:17 2023 Page 2				
ID:DUjzAE	30GCWoC	OJpyMsoT	zILz3uah-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7、	J4zJC?f

Juneau Townhomes - Osage

Qty

Ply

LOAD CASE(S) Standard

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

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

Concentrated Loads (lb)

Vert: 9=-446(B) 10=-437(B) 11=-369(B) 12=-374(B) 13=-374(B) 14=-1606(B)

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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponent.com)

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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

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N				
IN	Truss Type	Qty	Ply	Juneau Townhomes - Osage
V				162280254
	ROOF SPECIAL GIRDER	2	2	
			2	Job Reference (optional)
	Spring Hills, KS - 66083,	8.6	30 s Aug 3	0 2023 MiTek Industries, Inc. Wed Nov 29 16:41:22 2023 Page 2
	ID:DUjz	AB0GCWo	JpyMsoT	zlLz3uah-RfC?PsB70Hg3NSgPgnL8w3ulTXbGKWrCDoi7J4zJC?f

11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 11-11-8 from the left end to connect truss(es) to back face of bottom chord.

12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 13-11-8 from the left end to connect truss(es) to back face of bottom

chord. 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 15-11-8 from the left end to 17-11-8 to connect truss(es) to back face of bottom chord.

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

15) "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 1-14=-20, 2-11=-20, 7-9=-20

Concentrated Loads (lb)

Vert: 14=-320(B) 15=-80(B) 16=-309(B) 17=-271(B) 18=-215(B) 19=-399(B) 20=-1531(B) 23=-1534(B) 24=-1534(B)





3x4 =

BRACING-

TOP CHORD

BOT CHORD

1-2-13

Sheathed or 1-2-13 oc purlins.

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

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	0.22	Vert(LL)	-0.00	2	>999	240	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	2	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 1	10.0	Code IRC2018/T	PI2014	Matri	k-P						Weight: 7 lb	FT = 20%

LUMBER-

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

REACTIONS. (size) 3=Mechanical, 2=0-4-13, 4=Mechanical

Max Horz 2=42(LC 8)

Max Uplift 3=-32(LC 1), 2=-83(LC 4)

Max Grav 3=15(LC 4), 2=236(LC 1), 4=24(LC 3)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 3, 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.





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				2-10-5						
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP					
TCLL	25.0	Plate Grip DOL 1.15	TC 0.26	Vert(LL) -0.00 4-5 >999 240	MT20 197/144					
TCDL	10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) -0.00 4-5 >999 180						
BCLL	0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.02 3 n/a n/a						
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 13 lb FT = 20%					

```
LUMBER-
```

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

BRACING-TOP CHORD BOT CHORD

Sheathed or 2-10-11 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-13, 3=Mechanical, 4=Mechanical Max Horz 5=73(LC 5) Max Uplift 5=-51(LC 4), 3=-46(LC 8), 4=-2(LC 5) Max Grav 5=274(LC 1), 3=63(LC 1), 4=49(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 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.



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LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING-5-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNO	CSI. TC 0.39 BC 0.09 WB 0.12	DEFL. in Vert(LL) -0.00 Vert(CT) 0.00 Horz(CT) -0.00	(loc) l/ 1 1 6	defl L/d n/r 120 n/r 80 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		0	ina ina	Weight: 26 lb FT = 20%

TOP CHORD	ZX4 SP r
BOT CHORD	2x6 SPF

TOP CHORE -0-0 oc purlins, except end vertical No.2 (Switched from sheeted: Spacing > 2-8-0). WEBS 2x4 SPF No.3 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. OTHERS 2x4 SPF No.3

REACTIONS. All bearings 5-11-8.

Max Horz 2=231(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 2=-126(LC 4), 8=-157(LC 8) Max Grav All reactions 250 lb or less at joint(s) 6, 7 except 2=491(LC 1), 8=716(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-8=-543/261

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) 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) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=lb) 2=126, 8=157.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







					0-11-0					1	
	l l l l l l l l l l l l l l l l l l l				5-11-8					1	
Plate Offsets (X,Y) [4:	:Edge,0-2-0]										
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	тс	0.80	Vert(LL)	-0.02	2-4	>999	240	MT20	197/144
CDL 10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	2-4	>999	180		
SCLL 0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TP	12014	Matrix	-P						Weight: 23 lb	FT = 20%
			1		1						
LUMBER-					BRACING-						

E 4 4 0

TOP CHORD

BOT CHORD

Sheathed or 5-11-8 oc purlins, except end verticals.

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

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SPF No.2 WEBS 2x4 SPF No.3

REACTIONS. (size) 2=0-3-8, 4=0-1-0 Max Horz 2=92(LC 5)

Max Uplift 2=-84(LC 4), 4=-49(LC 8) Max Grav 2=336(LC 1), 4=248(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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BRACING-

BOT CHORD

LUM	BE	R-

BCDL

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

10.0

VEBS2x4 SF N0.22x4 SPF No.3

REACTIONS. (size) 2=0-3-8, 4=0-1-0 Max Horz 2=80(LC 5) Max Uplift 2=-77(LC 4), 4=-40(LC 8) Max Grav 2=293(LC 1), 4=202(LC 1)

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

Code IRC2018/TPI2014

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Matrix-P

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



Weight: 18 lb

Sheathed or 4-11-8 oc purlins, except end verticals.

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

FT = 20%

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November 30,2023





		<u>3-7-8</u> 3-7-8	<u>4-11-8</u> 1-4-0	I
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	BC 0.06 Vert(CT)	in (loc) l/defl L/d -0.00 2-6 >999 240 -0.01 2-6 >999 180 -0.00 5 n/a n/a	PLATES GRIP MT20 197/144 Weight: 21 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 4-11-8 oc purlins, except end verticals.

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

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 *Except* BOT CHORD 2-6: 2x6 SPF No.2 WEBS 2x4 SPF No.3

REACTIONS. All bearings 4-8-0. (lb) -

Max Horz 2=70(LC 5) Max Uplift All uplift 100 lb or less at joint(s) 5, 2, 6

Max Grav All reactions 250 lb or less at joint(s) 5, 5, 2 except 6=274(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) 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) Gable studs spaced at 1-4-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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November 30,2023



NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2 except (jt=lb) 6=241.

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











OADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.12	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.05	Horz(CT) -0.01 10 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH		Weight: 94 lb FT = 20%

TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD OTHERS 2x4 SPF No.3 TOP CHORD BOT CHORD

Sheathed 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 17-4-15.

Max Horz 1=478(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 17, 12, 13, 14, 15 except 10=-168(LC 8), 16=-116(LC 8), 18=-116(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 10, 17, 11, 12, 13, 14, 15, 16, 18 except 1=295(LC 8)

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

TOP CHORD 1-2=-469/202, 2-4=-363/162, 4-5=-265/125

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=6.0psf; h=25ft; Ke=0.96; 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) All plates are 1.5x4 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 6) will fit between the bottom chord and any other members.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 17, 12, 13, 14, 15 except (jt=lb) 10=168, 16=116, 18=116.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 11, 12, 13, 14, 15, 16.
- 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.









		0-0-4 7-1-7 0-0-4 7-1-3	9-4					
_OADING (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) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.12	Horz(CT) -0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH	. ,				Weight: 56 lb	FT = 20%

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

6-0-0 oc bracing: 7-8.

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

LUMBER-

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

REACTIONS. All bearings 9-4-5.

(lb) -Max Horz 1=275(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 9, 12, 11 except 1=-109(LC 6), 7=-139(LC 7), 10=-101(LC 8), 8=-132(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9, 12, 11, 10, 8

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

TOP CHORD

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

1-2=-330/193, 2-3=-259/170

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 12, 11 except (it=lb) 1=109, 7=139, 10=101, 8=132.
- 6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 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.



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	<u>2-4-14</u> 2-4-14		13-11-13 11-6-15					
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 0.06 BC 0.04 WB 0.14 Matrix-SH	Vert(CT)	in (loc) n/a - n/a - .00 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 87 lb	GRIP 197/144 FT = 20%

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2OTHERS2x4 SPF No.3

BRACING-TOP CHORD BOT CHORD WEBS

2-0-0 oc purlins (10-0-0 max.): 1-8. Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt 2-15, 3-13

REACTIONS. All bearings 13-11-13.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 15, 13, 12, 11, 10, 9 Max Grav All reactions 250 lb or less at joint(s) 1, 8, 16, 14, 15, 13, 12, 11, 10, 9

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) All plates are 1.5x4 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 15, 13, 12, 11, 10, 9.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 13, 12, 11, 10, 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.

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







NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Bearing at joint(s) 1 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) 4 except (jt=lb) 1=122, 6=218, 5=172.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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1-5-4

Sheathed or 1-5-4 oc purlins.

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

		1-5-4							1			
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	0.08	Vert(LL)	-0.00	2	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	2	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix	(-P						Weight: 7 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=44(LC 8)

Max Uplift 3=-21(LC 8), 2=-29(LC 8)

Max Grav 3=26(LC 1), 2=151(LC 1), 4=28(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 3, 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.



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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 0.46 BC 0.42 WB 0.02 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) -0.05 2-7 >999 240 Vert(CT) -0.10 2-7 >673 180 Horz(CT) 0.02 5 n/a n/a	PLATES GRIP MT20 197/144 Weight: 24 lb FT = 20%
	No.2 *Except* SP No.2		BRACING- TOP CHORD Sheathed or 5-8-6 oc purlins, 2-0-0 oc purlins: 3-5.	except

BOT CHORD

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

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

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical

Max Horz 2=44(LC 8) Max Uplift 5=-24(LC 5), 2=-27(LC 5), 6=-17(LC 5) Max Grav 5=135(LC 22), 2=302(LC 1), 6=104(LC 22)

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=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 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) 5, 2, 6.

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

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

- 10) "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") toe-nails per NDS guidelines.
- 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, 3-5=-70, 2-6=-20 Concentrated Loads (lb) Vert: 3=30(B)



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			2-3-13			1-8-9				1-8-0	
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	тс	0.27	Vert(LL)	-0.09	5-6	>736	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.18	5-6	>367	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.14	4	n/a	n/a		
BCDL 10.0	Code IRC2018/T	PI2014	Matri	x-P						Weight: 23 lt	FT = 20%

TOP CHORD 2x6 SPF No.2 *Except* 3-4: 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SPF No.3

TOP CHORD BOT CHORD

Sheathed or 5-8-6 oc purlins, except 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=83(LC 8) Max Uplift 4=-45(LC 4), 2=-39(LC 8)

Max Grav 4=116(LC 1), 2=329(LC 1), 5=129(LC 3)

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

NOTES-

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

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

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

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





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



		<u>3-9-13</u> 3-9-13			5-8-6 1-10-9			
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 0.11	Vert(LL) -0.08	2-6	>822	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.17	2-6	>396	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.05	Horz(CT) 0.11	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	. ,				Weight: 25 lb	FT = 20%

TOP CHORD 2x6 SPF No.2 *Except*

 3-4: 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SPF No.3

BRACING-TOP CHORD BOT CHORD

Sheathed or 5-8-6 oc purlins, except 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=122(LC 8) Max Uplift 4=-25(LC 4), 2=-34(LC 8), 5=-33(LC 8) Max Grav 4=64(LC 1), 2=329(LC 1), 5=176(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

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

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







OADING	i (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	тс	0.41	Vert(LL)	-0.01	2-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matrix	k-R						Weight: 27 lb	FT = 20%

5-8-6

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2	TOP CHORD	Sheathed or 5-8-6 oc purlins, except end verticals, and 2-0-0
BOT CHORD	2x4 SP No.2		purlins: 3-4.
WEBS	2x4 SPF No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=149(LC 7) Max Uplift 2=-42(LC 8), 5=-95(LC 5)

Max Grav 4=179(LC 3), 2=329(LC 1), 5=125(LC 15)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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3x4 ||

Sheathed or 5-8-6 oc purlins.

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

			5-8-6		
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 0.21	Vert(LL) -0.05 2-6	>999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.09 2-6	>692 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.19	Horz(CT) -0.00 4	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P			Weight: 27 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SPF No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SPF No.3

REACTIONS. 4=Mechanical, 2=0-3-8, 6=Mechanical (size)

Max Horz 2=170(LC 8)

Max Uplift 4=-354(LC 15), 6=-355(LC 8)

Max Grav 4=242(LC 8), 2=304(LC 1), 6=633(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 3-6=-574/390

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) except (jt=lb) 4=354, 6=355.
- 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.









1-10-0

				1-10-0	
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.12	Vert(LL) -0.00 4-5 >999 240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.00 4-5 >999 180	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.01 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 9 lb FT = 20%

1-10-0

LUMBER-

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

TOP CHORD BOT CHORD

BRACING-

Sheathed or 1-10-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 5=68(LC 5) Max Uplift 3=-51(LC 8), 4=-16(LC 5) Max Grav 5=173(LC 1), 3=53(LC 15), 4=37(LC 6)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 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.







3) All plates are 1.5x4 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 16, 17, 12, 11, 10.

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



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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

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

referenced standard ANSI/TPI 1.







Ply

_OADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL)	n/a	(100)	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999	101120	13//144
BCLL 0.0 *	Rep Stress Incr NO	WB 0.12		-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH	(0.)		-			Weight: 47 lb	FT = 20%

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

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

LUMBER-

2x4 SP No.2
2x4 SP No.2
2x4 SPF No.3
2x4 SPF No.3

REACTIONS. All bearings 10-7-2.

Max Horz 1=256(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 6=-146(LC 8), 7=-111(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=513(LC 15), 7=357(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-6=-328/186

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 6=146.7=111.

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







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Sheathed or 6-0-0 oc purlins, except end verticals.

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

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 0.36	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.10	Horz(CT) -0.00 4 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH		Weight: 38 lb FT = 20%

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=9-1-2, 4=9-1-2, 5=9-1-2

Max Horz 1=218(LC 5) Max Uplift 4=-42(LC 5), 5=-173(LC 8)

Max Grav 1=218(LC 16), 4=186(LC 15), 5=585(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-5=-370/208

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5 = 173
- 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)	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) n/a - n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.07	Horz(CT) -0.00 4 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	(),	Weight: 31 lb FT = 20%

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=7-7-2, 4=7-7-2, 5=7-7-2

Max Horz 1=179(LC 5) Max Uplift 1=-11(LC 4), 4=-38(LC 5), 5=-144(LC 8)

Max Grav 1=128(LC 16), 4=152(LC 15), 5=409(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-5=-321/197

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5 = 144

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.



Sheathed or 6-0-0 oc purlins, except end verticals.

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





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Sheathed or 6-0-0 oc purlins, except end verticals.

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

OADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc) l/def	L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.26	Vert(LL) n/a	- n/a	999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) n/a	- n/a	999	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.06	Horz(CT) -0.00	4 n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P				Weight: 24 lb FT = 20%

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=6-1-2, 4=6-1-2, 5=6-1-2

Max Horz 1=141(LC 5) Max Uplift 1=-48(LC 6), 4=-33(LC 5), 5=-130(LC 8)

Max Grav 1=74(LC 5), 4=154(LC 15), 5=368(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. 2-5=-288/177 WEBS

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5 = 130

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



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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not beigh valid for use only with with with sets outputs into design is based only door parameters shown, and is for an individual dualing component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com) 16023 Swingley Ridge Rd. Chesterfield MO 63017

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RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE:S.SUMMST.MISSQUIRE) 12/21/2023 2:59:57



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	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-P						Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Sheathed or 4-7-8 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-7-2, 3=4-7-2 Max Horz 1=102(LC 5) Max Uplift 1=-9(LC 8), 3=-48(LC 8) Max Grav 1=167(LC 1), 3=180(LC 15)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 **ANSUTPIT Quality Criteria, and DSE-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com) 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MITek-US.com



LOADIN	u /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-P						Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Sheathed or 3-1-8 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-1-2, 3=3-1-2 Max Horz 1=64(LC 5) Max Uplift 1=-8(LC 8), 3=-30(LC 8) Max Grav 1=112(LC 1), 3=120(LC 15)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.









3x4 🥢

1.5x4 ||

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	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	0.02	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-P						Weight: 5 lb	FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Sheathed or 1-7-8 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=1-7-2, 3=1-7-2 Max Horz 1=25(LC 5) Max Uplift 1=-3(LC 8), 3=-12(LC 8) Max Grav 1=45(LC 1), 3=48(LC 15)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

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

-1-0

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







1.5x4 ||

Sheathed or 6-0-0 oc purlins, except end verticals.

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

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) 0.00	4 n/r	120	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) 0.00	4 n/r	80	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.07	Horz(CT) -0.00	5 n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	()			Weight: 35 lb FT = 20%

TOP CHORD

BOT CHORD

1.5x4 ||

LUMBER-

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

REACTIONS. (size) 1=8-0-7, 5=8-0-7, 6=8-0-7

Max Horz 1=222(LC 5)

Max Uplift 1=-11(LC 4), 5=-104(LC 5), 6=-138(LC 8)

Max Grav 1=156(LC 16), 5=260(LC 15), 6=405(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-6=-313/194

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 5=104. 6=138

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.







ł LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d PLATES GRIP in (loc) l/defl 25.0 Plate Grip DOL Vert(LL) 0.00 120 197/144 TCLL 1.15 TC 0.20 4 n/r MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.13 Vert(CT) 0.00 4 n/r 80 BCLL 0.0 Rep Stress Incr NO WB 0.06 Horz(CT) -0.00 5 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 28 lb FT = 20% BRACING-

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

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

LUMBER-

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

REACTIONS. (size) 1=6-6-7, 5=6-6-7, 6=6-6-7

Max Horz 1=184(LC 5) Max Uplift 1=-29(LC 6), 5=-100(LC 5), 6=-114(LC 8) Max Grav 1=93(LC 5), 5=267(LC 15), 6=340(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-6=-260/162

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 5=100. 6=114.

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	TC	0.41	Vert(LL)	-0.00	3	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	0.01	3	n/r	80		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-P						Weight: 21 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 5-0-7 oc purlins, except end verticals.

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

LUMBER-

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

WEBS 2x4 SPF No.3

REACTIONS. (size) 1=5-0-7, 4=5-0-7 Max Horz 1=145(LC 5) Max Uplift 4=-111(LC 8)

Max Grav 1=182(LC 1), 4=315(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-4=-272/138

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

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.



 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SLIMMUT DISSOURS



	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	0.17	Vert(LL)	0.00	3	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	3	n/r	80		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-P						Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Sheathed or 3-6-7 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-6-7, 4=3-6-7 Max Horz 1=107(LC 5) Max Uplift 4=-99(LC 8) Max Grav 1=109(LC 16), 4=246(LC 15)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.







3x4 🥢

1.5x4 ||

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 0.17	Vert(LL)	0.00	3	n/r	120	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT)	-0.00	2	n/r	80	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 9 lb FT = 20%

BRACING-TOP CHORD

BOT CHORD

Sheathed or 2-0-7 oc purlins, except end verticals.

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

LUMBER-

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

2x4 SPF No.3

REACTIONS. (size) 1=2-0-7, 4=2-0-7 Max Horz 1=68(LC 5) Max Uplift 1=-10(LC 4), 4=-91(LC 8) Max Grav 1=61(LC 5), 4=205(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; 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) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.







General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- ω Never exceed the design loading shown and never stack materials on inadequately braced trusses.

TOP CHORD

- 4 Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- ςī Cut members to bear tightly against each other
- <u>о</u> Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 7 Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- œ Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- <u>ب</u> Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- . Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.