Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHE	ASTERN	
2100198-2100198A	A	Common	10	1	lob Reference (optional)		
84 Components, Dunn, NC 2833	34				B.400	) s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:32 2021 Page 1	
	H	6-8-6 <u>13-3-3</u> <u>19-10-0</u> 6-8-6 <u>6-12</u> <u>6-6-12</u>	26-4-13	32-11-10		J3ZNW ?Z-WKCSX ?57 gQ5C2ZC5 VIYWZGOBQPt05k TityJt6nZhu Yn	
		000 0010 0010	0.0.10	0010	000	$S_{colo} = 1.09.2$	
			6x6 =			State = 1.96.2	
	I	7.00 12	5				
		3x4	12	3x4 ≪ 6			
		3x6 =			4x4 ≫		
	7-1-2	4x4 = 3			3x6 <> 7		
		2 W2	W1 W2	N 20	8		
		W5 W3		W3	XV5.		
	0 1	WA WA		XV4	9	0	
		M B1 W		B1			
	<b>C</b> - 1	16 15 23 14 24	13 12 25	26 11	10	5	
	6x6 =	3x4 — 3x0 —	$4x8 \equiv 5x0 =$	3x4 —	0X0 —		
	<u>1-49</u>   4-  -1-12  0-1-12	10-7-14         19-10-0           9-2-2         9-2-2	<u>29-0-2</u> 9-2-2		38-2-4 9-2-2 1-4-0		
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (le	oc) l/defl	L/d	PLATES GRIP	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.56	Vert(LL) -0.25 13-	15 >999 2	240	MT20 197/144	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.09	10 n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS				Weight: 236 lb FT = 20%	
LUMBER-			BRACING-	ructural wood o	shoothing directly applie	d or 2.10.0 oo purling	
BOT CHORD 2x4 SP No.2	2 or 2x4 SPF No.2 *Except*		BOT CHORD Ri	Structural wood sneatning directly applied or 3-10-9 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.			
B2: 2x4 SP WFBS 2x4 SP No.3	No.1 3		WEBS 1	Row at midpt	6-13, 4-13, 2-1	6, 8-10	
WEDGE			Ē	erection, in acc	ordance with Stabilizer I	installation guide.	
Left: 2x4 SP No.3, Right: A	2x4 SP NO.3						
REACTIONS. (lb/size) 1 Max Horz 1	6=1587/0-3-8 (min. 0-2-8), 10=1587/0-3-8 (	(min. 0-2-8)					
Max Uplift1	6=-182(LC 12), 10=-182(LC 13)						
Max Grav 1	6=1594(LC 19), 10=1594(LC 20)						
FORCES. (Ib) - Max. Com	np./Max. Ten All forces 250 (lb) or less exc	ept when shown.	-2027/358 8-0348/1	1			
BOT CHORD 1-16=0/26	i9, 15-16=-330/1911, 15-23=-183/1726, 14-2	3=-183/1726, 14-24=-183/1726, 13-24=-183	3/1726, 13-25=-114/15	4 80,			
12-25=-11 WEBS 5-13=-241	4/1580, 12-26=-114/1580, 11-26=-114/1580  /1125, 6-13=-638/265, 6-11=-24/355, 4-13=-	, 10-11=-229/1697, 9-10=0/269 -638/265, 4-15=-24/355, 2-16=-1961/413, 8-	10=-1961/413				
NOTES							
1) Unbalanced roof live loa	ads have been considered for this design.						

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 10. This connection is for uplift only and does not consider lateral forces.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUT	THEASTERN	
2100198-2100198A	A1	ROOF TRUSS	2	1	1		
84 Components, Dunn, NC 283	34				Job Reference (option 8	al) .400 s Apr  7 2020 MiTek	Industries, Inc. Wed Feb 24 15:53:34 2021 Page 1
		6-8-6 13-3-3 17	-10-0 19-10-021-10-0 26-4-13	ID:N 32-11-10	NMPehaEQ4zz9fQFsfDC 38-4-0	1J3zhw?Z-S6KCMg7	NB1LKIHMUdj?_3hTRadZlZgryCGo_BgzhuYl
		6-8-6 6-6-13 4-	6-13 2-0-0 2-0-0 4-6-13	6-6-13	5-4-6		
			3x6 =				Scale = 1:103.5
		7.00 12	3x4 ≈ 6 3x4 ≈				
	12:4:7	2x4    4 T2 4x8 = 3 2 4x8 = 3 2 4x8 = 3 2 4x8 = 3 2 4x8 = 3 2 4x8 = 3 2 2 4x8 = 3 2 2 2 3x6 = 100 19 19 10	5 W1 7 W1 2 W2 W2 817 25 1615	2x4 // 12 8 W4 W4 14 <sup>26</sup>	$4x8 \approx$ $3x6 \approx$ 9 10 $3x4 \parallel$ 11 4x 11	1-3-15 0-10-12	
		21 20 19 10 $3x6 - 4x8$	017 20 1010 0 - 4y6    4y6    4y8		13 12	-	
		6x6 = 2x4	4x6    4x6    4x6		2x4    3x6 =		
		5x4 1/2					
		1-4-0 6-8-6 14-10-0 1-4-0 5-4-6 8-1-10	24-10-0	<u>32-11-10</u> 8-1-10	<u>38-4-0</u> 5-4-6		
Plate Offsets (X,Y) [2:0	-3-4,0-1-8], [6:0-3-0,Edge], [10:0-3-0,0- 	1-8]					
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.90 BC 0.87 WB 0.56 Matrix-MS	DEFL. in Vert(LL) -0.33 Vert(CT) -0.48 Horz(CT) 0.08	(loc) l/defl  8-20 >999  8-20 >916  12 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 268 lb	<b>GRIP</b> 197/144 FT = 20%
						5	
TOP CHORD 2x4 SP No. BOT CHORD 2x4 SP No. B3: 2x8 SP	2 or 2x4 SPF No.2 2 or 2x4 SPF No.2 *Except* No.2		TOP CHORD BOT CHORD WEBS	JNG-         CHORD       Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.         CHORD       Rigid ceiling directly applied or 10-0-0 oc bracing.         S       1 Row at midpt       2-18, 10-15, 10-12, 2-21			
WEBS 2x4 SP No.	3			MiTek recomn	mends that Stabilizers	and required cross I	pracing be installed during truss
Left: 2x4 SP No.3				erection, in ac	cordance with Stabiliz	er Installation guide	<u>.</u>
REACTIONS. (Ib/size) 1 Max Horz 2 Max Uplift1	12=1475/0-3-8 (min. 0-2-5), 21=1580/0 21=304(LC 11) 12=-162(LC 13), 21=-182(LC 12)	3-8 (min. 0-2-8)					
FORCES.         (lb)         - Max. Cor           TOP CHORD         2-3=-1833           BOT CHORD         20-21=-30           15-16=-60           WEBS         2-20=0/21           2-21=-200	np./Max. Ten All forces 250 (lb) or les 2/344, 3-4=-1744/380, 4-5=-1790/471, 7 22/1893, 19-20=-302/1893, 18-19=-302 7/1360, 14-15=-239/1656, 13-14=-239/ 75, 2-18=-285/162, 4-18=-411/263, 5-18 26/286, 5-7=-1238/405	s except when shown. -8=-1780/471, 8-9=-1736/379, 9-10=-1823 1893, 17-18=-67/1360, 17-25=-67/1360, 2 656, 12-13=-239/1656 =-210/820, 7-15=-206/798, 8-15=-412/266	3/344 25-26=-67/1360, 16-26=-67 6, 10-13=0/285, 10-12=-196	/1360, 32/257,			
NOTES- 1) Unbalanced roof live loc 2) Wind: ASCE 7-10: Vult	ads have been considered for this desig	n. h: TCDI =6 0nsf: BCDI =6 0nsf: h=30ft: Ca	at II: Exp B: Enclosed: MW	(FRS (envelope)	) cable end zone and (	C-C Exterior(2) zone	s.

Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 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 will fit between the bottom chord and any other members, with POPL = 4.0 psf.

with BCDL = 10.0psf.

5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 21. This connection is for uplift only and does not consider lateral forces.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

Job	Truss	Truss Type	Qty	Pl	y	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	A2	ROOF TRUSS	4		1	In Reference (ontional)
84 Components, Dunn, NC 283	34					B400 S Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:36 2021 Page 1
		6-8-6 13-3-3 6-8-6 6-6-13	<u>17-10-0</u> <u>19-10-021-10-0</u> <u>26-4-13</u> <u>4-6-13</u> <u>2-0-0</u> <u>2-0-0</u> <u>4-6-13</u>		32-11-10 6-6-13	
			3x6 =			Scale = 1:103.5
		7 00 12	3x4 ≈ 6 3x4 ≫			
	Ţ		5 7			
		2x4 \		2x4 /	11	
		4 3x6 //		12 8		4x8 ≈
	-1-7	4x8 1/2				3x6 ≈
	5	2 3	W2 W2	₩з	- AR	10
		W6 W4		// v	N4	3x4    11
					~	
				5 14 <sup>26</sup>	B	
		21 20 3x6 =	= 4x8 = 4x6    4x6    4x6	3 =		13 12 2v4 II 3v6 -
		3x4 1/2	4x6    4x6    4x6	3x6 =		
		<u>1-4-0 6-8-6 14-10-0</u>	24-10-0	32-1	11-10	
Plate Offsets (X,Y) [2:0	-3-4,0-1-8], [6:0-3-0,Edge], [10:0-3-0	)-1-8]	10-0-0	0-	1-10	0-4-0
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in	(loc)	l/defl	L/d PLATES GRIP
TCLL 20.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.90 BC 0.87	Vert(LL) -0.33 Vert(CT) -0.48	18-20 : 18-20 :	>999 2 >916 1	240 MT20 197/144 180 I
BCLL 0.0 *	Rep Stress Incr YES	WB 0.56 Matrix-MS	Horz(CT) 0.08	12	n/a	n/a
	Code 11(C2013/1112014	Matrix-MO				
TOP CHORD 2x4 SP No.	2 or 2x4 SPF No.2		BRACING- TOP CHORD	Structur	ral wood s	sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No. B3: 2x8 SP	2 or 2x4 SPF No.2 *Except*		BOT CHORD WEBS	Rigid ce	eiling direo at midot	ctly applied or 10-0-0 oc bracing. 2-18 10-15 10-12 2-21
WEBS 2x4 SP No.	3			MiTek	recomme	ends that Stabilizers and required cross bracing be installed during truss
Left: 2x4 SP No.3				erectio	on, in acco	ordance with Stabilizer Installation guide.
REACTIONS. (lb/size) 1	2=1475/Mechanical. 21=1580/0-3-8	(min. 0-2-8)				
Max Horz 2 Max Holift1	21=304(LC 11)	()				
	12="102(LO 10), 21="102(LO 12)					
TOP CHORD 2-3=-1832	np./Max. Ten All forces 250 (lb) of 1 2/344, 3-4=-1744/380, 4-5=-1790/471	ess except when shown. 7-8=-1780/471, 8-9=-1736/379, 9-10=	-1823/344			
BOT CHORD 20-21=-30 15-16=-67	02/1893, 19-20=-302/1893, 18-19=-3 7/1360, 14-15=-239/1656, 13-14=-23	2/1893, 17-18=-67/1360, 17-25=-67/13 /1656, 12-13=-239/1656	360, 25-26=-67/1360, 16-26=-6	7/1360,		
WEBS 2-20=0/27	75, 2-18=-285/162, 4-18=-411/263, 5-	18=-210/820, 7-15=-206/798, 8-15=-41	12/266, 10-13=0/285, 10-12=-19	962/257,		
2-21200	J0/200, J-7 1230/403					
1) Unbalanced roof live loa	ads have been considered for this de	ign.				
<ol> <li>Wind: ASCE 7-10; Vult- cantilever left and right</li> </ol>	=130mph (3-second gust) Vasd=103 exposed : end vertical left and right e	nph; TCDL=6.0psf; BCDL=6.0psf; h=30 (posed:C-C for members and forces &	Oft; Cat. II; Exp B; Enclosed; MV MWFRS for reactions shown: I	VFRS (er _umber D	nvelope) g OCL=1.60	gable end zone and C-C Exterior(2) zone; ) plate grip DOL=1.60
3) This truss has been des	signed for a 10.0 psf bottom chord liv	load nonconcurrent with any other live	e loads.	will fit has	twoon the	
with BCDL = 10.0psf.	esigned for a live load of 20.0psf off t	e bollom chord in all areas where a re-	ciangle 3-6-0 tall by 2-0-0 wide	will fit be	etween the	e bollom chord and any other members,
<ul><li>5) Refer to girder(s) for tru</li><li>6) Provide mechanical cor</li></ul>	iss to truss connections. nnection (by others) of truss to bearin	plate capable of withstanding 162 lb u	uplift at joint 12.			
7) One H2.5A Simpson St	rong-Tie connectors recommended to	connect truss to bearing walls due to	UPLIFT at jt(s) 21. This connect	tion is for	r uplift only	ly and does not consider lateral forces.
9) ATTIC SPACE SHOWN	N IS DESIGNED AS UNINHABITABL					

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	A2	ROOF TRUSS	4	1	Job Reference (optional)
84 Components, Dunn, NC 28334	•				8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:37 2021 Page 2

8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:37 2021 Page 2 ID:NMPehaEQ4zz9fQFsfDQ1J3zhw?Z-sh0L\_j9FUykv9k43IsYhgK5ypqaSm1aOuE1en?zhuYi

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	AE	Common Supported Gable	2	1	Job Reference (optional)
84 Components, Dunn, NC 28334				ID:NMP	8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:39 2021 Page 1 ehaEQ4zz9fQFsfDQ1J3zhw?Z-p485POAW0a_dO2ERQHa9mIBUzeQ?E0ihMYWIstzhuYg



	F		<u>38-4-0</u> 38-4-0	<u> </u>	
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.16 BC 0.22 WB 0.20 Matrix-S	DEFL. in (loc) l/defl Vert(LL) n/a - n/a Vert(CT) n/a - n/a Horz(CT) 0.01 24 n/a	L/d <b>PLATES</b> 999 MT20 999 n/a Weight: 300 lb	<b>GRIP</b> 197/144 FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 OTHERS 2x4 SP No.3 WEDGE Left: 2x4 SP No.3 , Right: 2x4 SP No.3

## BRACING-TOP CHORD BOT CHORD

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

#### WEBS 1 F

1 Row at midpt 12-33, 11-34, 10-35, 9-36, 13-32, 14-31, 15-30

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Scale = 1:103.5

### **REACTIONS.** All bearings 37-0-0.

(lb) - Max Horz 42=-292(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 34, 35, 36, 37, 38, 39, 40, 32, 31, 30, 29, 28, 27, 26 except 41=-183(LC 12), 42=-154(LC 8), 25=-166(LC 13), 24=-120(LC 9) Max Grav All reactions 250 lb or less at joint(s) 34, 35, 36, 37, 38, 39, 40, 32, 31, 30, 29, 28, 27, 26, 25 except 33=308(LC

13), 41=264(LC 10), 42=319(LC 20), 24=293(LC 19)

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

TOP CHORD 8-9=-174/264, 9-10=-214/293, 10-11=-257/325, 11-12=-292/363, 12-13=-292/363, 13-14=-257/322, 14-15=-214/274

WEBS 12-33=-292/173

### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 2x4 MT20 unless otherwise indicated.

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

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

7) \* 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.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 34, 35, 36, 37, 38, 39, 40, 41, 42, 32, 31, 30, 29, 28, 27, 26, 25, and 24. This connection is for uplift only and does not consider lateral forces.

9) Non Standard bearing condition. Review required.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	AE	Common Supported Gable	2	1	Job Reference (optional)
84 Components, Dunn, NC 28334					8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:39 2021 Page 2

8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:39 2021 Page 2 ID:NMPehaEQ4zz9fQFsfDQ1J3zhw?Z-p485POAW0a\_dO2ERQHa9mlBUzeQ?E0ihMYWlstzhuYg

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	BE	Common Supported Gable	1	1	Job Reference (optional)
84 Components, Dunn, NC 28334	·		10-0-0	ID:NM	8.400 s Apr. 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:41 2021 Page 1 PehaEQ4zz9fQFsfDQ1J3zhw?Z-ISFsq4CmYBELdMOqXhddrAGq4R8MiyY_ps?sxmzhuYe



Scale = 1:50.5



			10-0-0 10-0-0	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code JRC2015/JTPI2014	CSI. TC 0.18 BC 0.10 WB 0.12 Matrix-R	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.01         9         n/r         120           Vert(CT)         -0.01         9         n/r         90           Horz(CT)         -0.00         10         n/a         n/a	PLATES         GRIP           MT20         197/144           Weight: 68 lb         ET = 20%

#### LUMBER-

 TOP CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 BOT CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 WEBS
 2x4 SP No.3

 OTHERS
 2x4 SP No.3

BRACING-TOP CHORD

TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.BOT CHORDRigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 10-0-0.

(lb) - Max Horz 16=-183(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 14, 12 except 16=-171(LC 8), 10=-159(LC 9), 15=-153(LC 9), 11=-145(LC 8) Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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 2x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* 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.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 10, 14, 15, 12, and 11. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

	-		-	-	
Job	Truss	Truss Type	Qtv	Ply	120 BEECHLEAF - SOUTHEASTERN
			,		
2100198-2100198A	BGR	Common Girder	1	ົ່	
				<b></b>	Job Reference (optional)
84 Components Dunn NC 28334					8 400 s Apr. 7 2020 MiTek Industries Inc. Wed Feb 24 15:53:44 2021 Page 1
04 Componenta, Dunin, NO 20004					
				ID:NM	PenaEQ4zz9fQFsfDQ1J3zhw?2-91x_S5Eer6cvUp7PCqAKTouDAf41v9rQVqDvvX5zhuYb



4x4 ||

Scale = 1:53.5



<u>5-0-0</u><u>10-0-0</u> 5-0-0<u>5-0-0</u>

# \*\*\* Design Problems \*\*\* REVIEW REQUIRED

#### Plate Offsets (X,Y)-- [4:Edge,0-3-8], [5:0-4-0,0-4-12]

LOADING (psf)	sf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	P	PLATES	GRIP
TCLL 20.0	.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	-0.03	4-5	>999	240	N N	/T20	197/144
TCDL 10.0	.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.07	4-5	>999	180			
BCLL 0.0	.0 *	Rep Stress Incr	NO	WB 0.66	Horz(CT)	0.00	4	n/a	n/a			
BCDL 10.0	.0	Code IRC2015/TP	2014	Matrix-MS						V 1	Veight: 136 lb	FT = 20%

#### LUMBER-

 TOP CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 BOT CHORD
 2x6 SP DSS

 WEBS
 2x4 SP No.3

#### BRACING-

TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=3260/0-3-8 (min. 0-2-9), 4=3336/0-3-8 (min. 0-2-10) Max Horz 6=-149(LC 8) Max Uplift6=-374(LC 13), 4=-383(LC 12)

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

TOP CHORD 1-2=-2786/388, 2-3=-2787/388, 1-6=-2373/343, 3-4=-2370/343

BOT CHORD 6-7=-182/365, 7-8=-182/365, 5-8=-182/365, 5-9=-89/299, 9-10=-89/299, 4-10=-89/299

WEBS 2-5=-336/3180, 1-5=-239/1852, 3-5=-239/1841

#### NOTES-

 2-ply truss to be connected together with 10d (0.120"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	BGR	Common Girder	1	2	Job Reference (optional)
84 Components, Dunn, NC 28334	•				8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:44 2021 Page 2

8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:44 2021 Page 2 ID:NMPehaEQ4zz9fQFsfDQ1J3zhw?Z-91x\_S5Eer6cvUp7PCqAKTouDAf41v9rQVqDWX5zhuYb

#### NOTES-

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 4. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1455 lb down and 182 lb up at 2-0-12, 1455 lb down and 182 lb up at 4-0-12, and 1455 lb down and 182 lb up at 6-0-12, and 1455 lb down and 182 lb up at 8-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-60, 2-3=-60, 4-6=-20

Concentrated Loads (lb)

Vert: 7=-1455(B) 8=-1455(B) 9=-1455(B) 10=-1455(B)



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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 8-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) \* 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 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) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Continued on page 2

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	M1	Half Hip	5	1	Job Reference (optional)
84 Components, Dunn, NC 28334	•	•			8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:46 2021 Page 2

8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:46 2021 Page 2 ID:NMPehaEQ4zz9fQFsfDQ1J3zhw?Z-5Q3ltnGvNjsdk7GnKFCoYDzXLSouNC\_jz8idczzhuYZ

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-60, 3-4=-110(F=-50), 5-7=-20



(lb) - Max Horz 1=79(LC 12) Max Uplift All uplift 100 lb or less at joint(s) 8, 1 Max Grav All reactions 250 lb or less at joint(s) 7, 6, 1 except 8=459(LC 1)

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

WEBS 2-8=-326/224

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 8-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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) Provide adequate drainage to prevent water ponding.

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

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

7) \* 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.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.

9) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

10) Non Standard bearing condition. Review required.

11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

Cóntinued on page 2

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	M1E	Half Hip Supported	1	1	Job Reference (optional)
84 Components, Dunn, NC 28334				ID:N	8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:53:47 2021 Page 2 MPehaEQ4zz9fQFsfDQ1J3zhw?Z-acc747HX71_ULHr_uyk14RWo9s9Z6frsBoSA8QzhuYY

84 Components, Dunn, NC 28334

#### NOTES-

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

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

Vert: 1-3=-60, 4-5=-110(F=-50), 1-6=-20



TOP CHORD 1-2=-495/215 BOT CHORD 1-4=-267/469

WEBS 2-4=-453/246

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) 4.

6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Horz 1=92(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7, 1
 Max Grav All reactions 250 lb or less at joint(s) 5, 6, 1 except 7=425(LC 1)

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

WEBS 2-7=-305/210

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 2-0-0 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5, 6, and 7. This connection is for uplift only and does not consider lateral

forces. 7) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

8) Non Standard bearing condition. Review required.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Uplift3=-27(LC 12), 1=-45(LC 8)

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

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed : end vertical left and right exposed: C-C for members and forces & MWFRS for reactions shown: Lumber DOL=1.60 plate grip DOL=1.60

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.

6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 1. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



erection, in accordance with Stabilizer Installation guide.

WEBS 2x4 SP No.3 WEDGE Left: 2x4 SP No.3

REACTIONS. (lb/size) 3=123/0-3-8 (min. 0-1-8), 1=269/0-3-8 (min. 0-1-8) Max Horz 3=50(LC 11) Max Uplift3=-27(LC 12), 1=-45(LC 8)

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

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 2-0-0 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3 and 1. This connection is for uplift only and does not consider lateral

forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN	]
2100198-2100198A	M6	Monopitch	5		1	
84 Components, Dunn, NC 2833	4	⊢ ⊢1	-5-12 <u>3-2-4</u> -5-12 1.8-8	 ID:N	Job Reference (optional) 8.400 s Apr 7 2020 Mi MPehaEQ4zz9fQFsfDQ1J3zhw?Z-h6v1pZR	Tek Industries, Inc. Wed Feb 24 15:54:00 2021 Page 1 h41dePHLT8BT46AY5W6dwfYbnBJ5M5AzhuYL
						Scale = 1:18.7
			7.00 12 2x4    2x4    2 T1 W2 B1 B1 5 2x4			
		<u>  1-</u> 1-	2x4    4-0 1 <sub>1</sub> 5- <u>12 3-2-4</u> 4-0 0 <sup>1</sup> -12 1-8-8			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.10 BC 0.09 WB 0.03 Matrix-MP	DEFL.         in         (loc           Vert(LL)         0.00         4           Vert(CT)         0.00         4           Horz(CT)         0.00         4	) l/defl 5 >999 5 >999 4 n/a	L/d <b>PLATES</b> 240 MT20 180 n/a Weight: 14 I	<b>GRIP</b> 197/144 b FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2	2 or 2x4 SPF No.2 2 or 2x4 SPF No.2		BRACING- TOP CHORD Stru BOT CHORD Riai	ctural woo d ceiling d	d sheathing directly applied or 3-2-4 oc pliectly applied or 10-0 oc bracing.	purlins, except end verticals.

WEBS 2x4 SP No.3

**REACTIONS.** (lb/size) 4=6/Mechanical, 5=237/0-3-8 (min. 0-1-8) Max Horz 5=73(LC 11) Max Uplift4=-48(LC 9), 5=-18(LC 12) Max Grav 4=47(LC 10), 5=237(LC 1)

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

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) 4.

6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 5. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	M6E	Monopitch Structural Gable	2		1 lob Reference (ontional)
84 Components, Dunn, NC 2833	34	<u></u>	1-5-12 <u>3-2-4</u> 1-5-12 1-8-8	I	Job Reference (optionar) 8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:54:01 2021 Page 1 ID:NMPehaEQ4zz9fQFsfDQ1J3zhw?Z-9JTQ0vSJqKIV1Qwgiu_JfN5GFVz9O?rwPzrveczhuYK
				2	Scale = 1:18.7
		1 1 3x4 =	7.00 12 2x4 2x4    2 T1 W2 B1 5		
		<u>⊢1.</u> 1-	2x4    2x4  -4-0   3-2-4  -4-0   1-10-4		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.10 BC 0.09 WB 0.03 Matrix-MP	DEFL.         in         (I           Vert(LL)         0.00           Vert(CT)         0.00           Horz(CT)         -0.00	oc) l/defl 5 >999 4-5 >999 5 n/a	L/d <b>PLATES GRIP</b> 240 MT20 197/144 180 n/a Weight: 14 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No.: BOT CHORD 2x4 SP No.:	2 or 2x4 SPF No.2 2 or 2x4 SPF No.2		BRACING- TOP CHORD S BOT CHORD R	ructural wo	od sheathing directly applied or 3-2-4 oc purlins, except end verticals. Jirectly applied or 10-0-0 oc bracing.

2x4 SP No.3 WEBS

**REACTIONS.** (lb/size) 4=6/0-3-8 (min. 0-1-8), 5=237/0-3-8 (min. 0-1-8) Max Horz 4=73(LC 11) Max Uplift4=-48(LC 9), 5=-18(LC 12) Max Grav 4=47(LC 10), 5=237(LC 1)

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

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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 2-0-0 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 5. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.



Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 18, 19, 20, 15, 14, 13 except 21=263(LC 19), 12=263(LC 20)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Gable requires continuous bottom chord bearing.

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

6) \* 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 11, 18, 19, 20, 21, 15, 14, 13, and 12. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

WEBS 3-12=-311/237, 5-9=-311/236

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Gable requires continuous bottom chord bearing.

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

6) \* 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 7, 12, 13, 9, and 8. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

#### WEBS 2-9=-336/251, 4-6=-336/251

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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, with BCDL = 10.0psf.

6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 9, and 6. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

#### WEBS 2-8=-285/214, 4-6=-285/214

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 8, and 6. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty		Ply	120 BEECHLEAF - S	OUTHEASTERN	
2100198-2100198A	V5	/alley	1		1			
84 Components, Dunn, NC 2833	4	-				Job Reference (op	tional) 8.400 s Apr 7 2020 MiT	ek Industries, Inc. Wed Feb 24 15:54:11 2021 Page 1
		1-8-9 5-8-9	. 9-1	8-9	ID:NN	IPehaEQ4zz9fQFsfD	Q1J3zhw?Z-tE3C7KZ	aUP04Ezhbl?9f3UVwPXLkkWpOjWGR_1zhuYA
		1-8-9 4-0-0	4-1	0-0	1	-8-9		
			4x4 =					Scale = 1:40.5
			2					
		I	, A					
		10.00 12						
			$//$    $\setminus$					
		N TI		<b>1</b> 1				
		o 2x4	ST1		> 2	×4		
		2			4			
					B	5		
						× 4		
		$\stackrel{\scriptscriptstyle 1}{\varsigma} ( \times $	********	XXXX	xxxx			
		3x4 1/2 8	7		6	3x4 ∖∖		
		2x4	2x4		2x4			
		0-0-5 1-8-9 0-0-5 1-8-4	<u>9-8-9</u> 8-0-0		11	1-5-2 -8-9		
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. ir	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL) n/a	a -	n/a	999	MT20	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 46 lt	5 FT = 20%
LUMBER-			BRACING-	<b>.</b>				
BOT CHORD 2x4 SP No.: BOT CHORD 2x4 SP No.:	3		BOT CHORD	Rigid (	ural wood ceiling dire	sheathing directly ectly applied or 10-	applied or 6-0-0 oc p 0-0 oc bracing.	urlins.
WEBS 2x4 SP No.3	3			MiTe	ek recomm	nends that Stabilize	ers and required cros	s bracing be installed during truss
01HER5 2X4 5P NO.	3			erect	tion, in ac	cordance with Stab	ilizer Installation guid	de.
REACTIONS. All bearing	JS 11-4-8.							
Max Uplift	All uplift 100 lb or less at joint(s) 1, 5 except	8=-166(LC 12), 6=-166(LC 13)						
Max Grav	All reactions 250 lb or less at joint(s) 1, 5, 7	except 8=326(LC 19), 6=326(LC 20)						
FORCES.         (lb) - Max. Com           WEBS         2-8=-280/2	np./Max. Ten All forces 250 (lb) or less exc 213, 4-6=-280/213	ept when shown.						
NOTES-								
1) Unbalanced roof live loa	ds have been considered for this design.		II. Evo B. Enclosed: M		onvolono)	apple and zone or	d C-C Extorior(2) 70	no:
cantilever left and right e	exposed ; end vertical left and right exposed	C-C for members and forces & MWFF	S for reactions shown;	Lumber	DOL=1.60	0 plate grip DOL=1	.60	iic,
<ol> <li>Gable requires continuo</li> <li>This truss has been des</li> </ol>	us bottom chord bearing. igned for a 10.0 psf bottom chord live load n	onconcurrent with any other live loads						

 6) \* This truss has been designed for a live load of 20.0ps 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, and 6. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Uplift1=-37(LC 13), 3=-47(LC 13)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty Ply	120 BEECHLEAF - SOUTHEASTERN
2100198-2100198A	V7	Valley	1 1	
84 Components, Dunn, NC 28334				Job Reference (optional) 8.400 s Apr 7 2020 MiTek Industries, Inc. Wed Feb 24 15:54:14 2021 Page 1
		2-10-1	5 5-9-14 2 10 15	//PenaEQ4zz9fQFsfDQ1J3znw?Z-HpiKiMcTnKOf5QPAz7jMg77SYIP_xuCfPUU5bMznuY7 I
		2-10-1	2-10-15	Scale - 1:23 7
			4x4 —	
				-0-4 
		2x4 1⁄2	4 2x4    2x4 ∾	
		0- <u>0-5</u> 0-0-5	5-9-14 5-9-10	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.19 BC 0.11 WB 0.02 Matrix-P	DEFL. in (loc) l/defl Vert(LL) n/a - n/a S Vert(CT) n/a - n/a S Horz(CT) 0.00 3 n/a	L/d PLATES GRIP MT20 244/190 m/a Weight: 21 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No.3		·	BRACING- TOP CHORD Structural wood s	heathing directly applied or 5-9-14 oc purlins.

BOT CHORD

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

erection, in accordance with Stabilizer Installation guide.

MiTek recommends that Stabilizers and required cross bracing be installed during truss

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

**REACTIONS.** (lb/size) 1=114/5-9-5 (min. 0-1-8), 3=114/5-9-5 (min. 0-1-8), 4=173/5-9-5 (min. 0-1-8) Max Horz 1=-52(LC 8) Max Uplift1=-24(LC 13), 3=-30(LC 13)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.