Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A01	Half Hip Girder	1	2	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 $ID: QxryfQzv1Sq31iELQ4m4yZzXW0x-yXxf?kRqt96lnl_tm4n0EniWBFSQ_dH4BsBmqAzXMUK$





Scale = 1:72.8

Plate	Offsets (X,	Y): [4:0-2-12,0-1-4], [23:0-5-0,0-4-12]										
Load TCLL Snow TCDI BCLL BCDI	ing . (roof) / (Pf) - -	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.79 0.91 0.73	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.40 -0.63 0.12	(loc) 19-20 19-20 14	l/defl >999 >744 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 532 lb	GRIP 244/190 FT = 20%
LUM TOP BOT WEB OTH	BER CHORD CHORD S ERS	2x4 SP No.2 2x6 SP 2400F 2.0 2x4 SP No.3 *Exc 2x4 SP No.3		BRACINGTOP CHORDStructural wood sheathing directly applied or 4-2-11 except end verticals, and 2-0-0 oc purlins (3-1-15 mBOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.						I-2-11 oc purlins, -15 max.): 4-13. ing.			
REA	CTIONS (II M M M	o/size) 2=4096/0 lax Horiz 2=156 (L lax Uplift 2=-635 (L lax Grav 2=4166 (0-5-8, (min. 0-2-7), 14 C 11) ∟C 9), 14=-722 (LC 9) LC 19), 14=4245 (LC	=4103/0-5-8, (min. 0-1) 33)	-12)								
FOR TOP	CES CHORD	(lb) - Max. Con 2-3=-6548/108 29-30=-10048/ 7-34=-9654/16 10-37=-9654/11	np./Max. Ten All for 9, 3-4=-6583/1120, 4 1727, 30-31=-10048/ 50, 8-34=-9654/165 650, 10-38=-4617/80 650, 40-4617/806	ces 250 (lb) or less ex -27=-5456/950, 27-28= 1727, 6-31=-10048/172 , 8-35=-9654/1650, 9-3 6, 38-39=-4617/806, 32	cept when show 5458/950, 5-24 27, 6-32=-1004 5=-9654/1650, 9-40=-4617/806	/n. 8=-5462/95 8/1727, 32- 9-36=-9654 6, 11-40=-46	51, 5-29=-10 33=-10048/1 4/1650, 36-3 617/806, 11-	048/1723 1727, 7-3 97=-9654 •12=-461	7, 33=-100 /1650, 7/806,	48/1727			
BOT	CHORD	12-41=-461//8 2-23=-1000/53 20-45=-1541/8 18-48=-1869/1 51-52=-1382/7 3-23=-123/362 7-19=0/407, 7- 13-15=-1010/5	06, 41-42=-4617/806 24, 23-43=-1541/857 572, 20-46=-1869/10 0516, 17-18=-1869/1 777, 15-52=-1382/77 , 4-23=-391/2965, 5-2 17=-1137/209, 9-17= 931	, 13-42=-461//806, 13- 2, 43-44=-1541/8572, 1 516, 46-47=-1869/105 0516, 17-49=-1382/77 77 23=-4046/725, 5-22=0/ -708/283, 10-17=-433/	-14=-4099//44 22-44=-1541/85 16, 19-47=-1869 77, 49-50=-1382 417, 5-20=-355 2477, 10-16=0/3	572, 21-22= 9/10516, 19 2/7777, 16- /1969, 6-20 389, 10-15=	-1541/8572,)-48=-1869/1 50=-1382/77)=-710/278, 7 =-4158/737,	21-45=- 10516, 777, 16-5 7-20=-64 12-15=-6	1541/85 51=-138 9/141, 881/320	,72, 2/7777, ,			
NOT 1)	E S 2-plv truss	to be connected to	aether with 10d (0.13	1"x3") nails as follows:									
	Top chords Bottom cho Web conne	connected as follo ords connected as f ected as follows: 2x	ollows: 2x4 - 1 row at 0-9 ollows: 2x6 - 2 rows s 4 - 1 row at 0-9-0 oc.	9-0 oc. staggered at 0-9-0 oc.									
2)	All loads ar distribute o	e considered equal nly loads noted as	lly applied to all plies, (F) or (B), unless othe	except if noted as from erwise indicated.	it (F) or back (B) face in the	e LOAD CAS	SE(S) se	ction. Pl	y to ply o	conneo	ctions have been	provided to
3) 4)	Unbalance Wind: ASC	d roof live loads ha E 7-16; Vult=130m	ve been considered for ph (3-second gust) Va	or this design. asd=103mph; TCDL=6	.0psf; BCDL=6.	0psf; h=25i	ft; Cat. II; Ex	p B; Enc	losed; N	1WFRS	(envel	ope) exterior zon	e; cantilever left
5)	and right ex TCLL: ASC Ct=1.10	exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 CE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00;											

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

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 7)

8)

Provide adequate drainage to prevent water ponding.

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A01	Half Hip Girder	1	2	Job Reference (optional)

 Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08
 Page: 2

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- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 2. This connection is for uplift only and does not consider lateral forces.
- 13) 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.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent at 6-0-6 from the left end to connect truss(es) EJ01 (1 ply 2x4 SP), HJ01 (1 ply 2x4 SP) to front face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.
- 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 209 lb down and 93 lb up at 6-0-0, 229 lb down and 93 lb up at 7-5-12, 229 lb down and 93 lb up at 7-5-12, 229 lb down and 93 lb up at 13-5-12, 229 lb down and 93 lb up at 13-5-12, 229 lb down and 93 lb up at 13-5-12, 229 lb down and 93 lb up at 15-5-12, 229 lb down and 93 lb up at 17-5-12, 229 lb down and 93 lb up at 19-5-12, 229 lb down and 93 lb up at 21-5-12, 229 lb down and 93 lb up at 23-5-12, 229 lb down and 93 lb up at 25-5-12, 229 lb down and 93 lb up at 23-5-12, 229 lb down and 93 lb up at 25-5-12, 229 lb down and 93 lb up at 23-5-12, 229 lb down and 93 lb up at 23-5-12, 229 lb down and 93 lb up at 23-5-12, 229 lb down and 93 lb up at 23-5-12, 229 lb down and 93 lb up at 33-5-12, and 229 lb down and 93 lb up at 33-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 229 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 lb down and 93 lb up at 35-5-12, and 250 l

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (lb/ft)
 - Vert: 1-4=-60, 4-13=-60, 14-24=-20

Concentrated Loads (lb)

Vert: 4=-190, 21=-74, 23=-560, 20=-74, 6=-190, 16=-74, 10=-190, 18=-74, 27=-190, 28=-190, 29=-190, 31=-190, 32=-190, 33=-190, 34=-190, 35=-190, 36=-190, 37=-190, 38=-190, 40=-190, 41=-190, 42=-190, 43=-74, 44=-74, 45=-74, 46=-74, 47=-74, 48=-74, 49=-74, 50=-74, 51=-74, 52=-74, 53=-74, 54=-74

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A010	Piggyback Base	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:y3qyGQpltKm_enjyQ4SWyuzXVMX-TLNHnOQC6r_uAbPhCMFnia9Lws6VF7pxyCRDlkzXMUL



Scale = 1:68.2

Fiale		, 1). [1.0-1-3,0-2-0],	[0.0-3-12,0-2-0], [0.0	-3-12,0-2-0], [13.0-3-0	,0-2-0], [13.0-3-	0,0- 3- 0], [2	1.0-4-0,Luge	-1					
Load TCLL Snow TCDL BCLL BCDL	ing (roof) (Pf)	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.82 0.95 0.94	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.22 -0.40 0.26	(loc) 17-19 17-19 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 257 lb	GRIP 244/190 FT = 20%
LUMI TOP BOT WEB WED SLIDI	LUMBER TOP CHORD 2x4 SP No.1 *Except* T3:2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP 2400F 2.0E, B2:2x4 SP No.1, B4:2x4 SP No.3 WEBS 2x4 SP No.3 *Except* W6:2x4 SP No.2 WEDGE Right: 2x4 SP No.3 SLIDER Left 2x4 SP No.3 2-0-0							RACING DP CHORD Structural wood sheathing directly applied or 2-1-0 oc pur except 2-0-0 oc purlins (3-3-3 max.): 6-8. OT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Excep 9-0-13 oc bracing: 20-21 2-2-0 oc bracing: 12-13.					
REACTIONS (Ib/size) 1=1577/0-5-8, (min. 0-1-8), 12=1577/ Mechanical, (min. 0-1-8) Max Horiz 1=-220 (LC 12) Max Uplift 1=-153 (LC 14), 12=-153 (LC 15) Max Grav 1=1791 (LC 47), 12=1791 (LC 47)					iin. 0-1-8)	WEBS		1 Row MiTek installe Installa	at midpt recomm ed during ation gui	iends th g truss e de.	at Stal rectior	7-17, 10-16 bilizers and requin, in accordance	red cross bracing be with Stabilizer
FOR TOP BOT	Max Grav 1=1791 (LC 47), 12=1791 (LC 47) Installation guide. FORCES (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. 1-2=-2359/252, 2-3=-4399/489, 3-29=-3032/272, 29-30=-3027/286, 30-31=-2965/304, 4-31=-2867/306, 4-5=-2406/299, 5-6=-2286/316, 6-32=-2081/327, 7-32=-2081/327, 7-33=-2081/327, 8-33=-2081/327, 8-9=-2277/308, 9-34=-2404/289, 10-34=-2429/267, 10-35=-3140/288, 11-35=-3139/279, 11-12=-2723/242 BOT CHORD 1-21=-518/3844, 20-21=-484/3592, 19-20=-244/2536, 18-19=-88/1878, 18-36=-88/1878, 17-36=-88/1878, 18-												
WEB	S	3-21=-97/1141 8-17=-166/447	, 3-20=-1110/252, 4-2 , 8-16=-53/843, 10-16	20=-15/558, 4-19=-959 5=-1003/217, 11-13=-5	/218, 6-19=-87/ 39/74, 11-15=-3	896, 6-17=- 0/461, 13-7	·162/455, 7- 15=-116/214	17=-609/ 8	168,				
NOTE 1) 2) 3) 4)	ES Unbalance Wind: ASC Exterior(2f right expos TCLL: ASC Ct=1.10 Unbalance	ed roof live loads ha CE 7-16; Vult=130m E) 0-0-0 to 3-11-5, li sed ; end vertical lef CE 7-16; Pr=20.0 ps ed snow loads have	ve been considered fo ph (3-second gust) V: terior (1) 3-11-5 to 8 t and right exposed;C ff (roof LL: Lum DOL= been considered for f	or this design. asd=103mph; TCDL=6 -5-2, Exterior(2R) 8-5-2 -C for members and fo :1.15 Plate DOL=1.15) his design.	.0psf; BCDL=6. 2 to 30-11-14, Ir orces & MWFRS ; Pf=20.0 psf (Li	0psf; h=25f iterior (1) 3 6 for reactio um DOL=1.	t; Cat. II; Ex 0-11-14 to 3 ns shown; L 15 Plate DC	p B; Encl 5-4-10, E umber D DL=1.15);	losed; M Exterior(2 OL=1.60 ; Is=1.0;	IWFRS 2E) 35-4 0 plate g Rough	(envelo 10 to grip DC Cat B;	ope) exterior zon 39-5-0 zone; ca DL=1.60 Fully Exp.; Ce=(e and C-C ntilever left and).9; Cs=1.00;

5) Provide adequate drainage to prevent water ponding.

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

Plate Officete (X, X): [1:0,1,2,0,2,6] [6:0,2,12,0,2,0] [0:0,2,12,0,2,0] [12:0,2,8,0,2,0] [15:0,5,8,0,2,0] [21:0,4,0,Edgal

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

9) 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.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 12.

11) One RT7A USP 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.

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

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	A010	Piggyback Base	1	1	Job Reference (optional)	
Carter Components, Sanford, NC, user Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08					Page: 2	

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A011	Hip	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:H7APCdfYJdR0e?NV5QMr51zXXG6-TLNHnOQC6r uAbPhCMFnia9Kvs94F9YxvCRDIkzXMUL



- 1) This truss is designed in accordance with the 2018 International Residential Code sections R502 11 1 and R802 10 2 and referenced standard ANS/JZPI 1
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A012	Hip	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:sYUHapcq1i3RnYfxQlp8TPzXXG9-TLNHnOQC6r uAbPhCMFnia9M0sBOFAQxvCRDlkzXMUL

installed during truss erection, in accordance with Stabilizer

Installation guide.



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Scale = 1:68.6
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Plate Offsets (X, Y): [3:0-3-0,0-2-3], [7:0-3-0,0-2-3], [14:0-5-8,0-4-0], [17:0-5-8,0-2-8] Loading (psf) Spacing 2-0-0 CSI DEFL (loc) l/defl L/d PLATES GRIP in Plate Grip DOL 244/190 TCLL (roof) 20.0 1.15 TC 0.75 Vert(LL) -0.08 15-16 >999 240 MT20 20.0 Lumber DOL 1.15 BC 0.58 15-16 180 Snow (Pf) Vert(CT) -0.13 >999 TCDL 10.0 Rep Stress Incr YES W/B 0.71 Horz(CT) 0.05 10 n/a n/a BCLL IRC2018/TPI2014 Matrix-MSH 0.0 Code BCDL 10.0 Weight: 289 lb FT = 20% BRACING LUMBER TOP CHORD TOP CHORD 2x4 SP No.2 Structural wood sheathing directly applied or 5-3-12 oc purlins, BOT CHORD 2x4 SP No.2 *Except* B2,B4:2x4 SP No.3 except 2x4 SP No.3 2-0-0 oc purlins (5-8-12 max.): 3-7. WEBS WEDGE Left: 2x4 SP No.3 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: Right: 2x4 SP No.3 1 Row at midpt 5-17 WEBS 1 Row at midpt 3-20, 6-15, 4-19 REACTIONS All bearings 0-1-8. except 19=0-3-8, 12=0-3-8 MiTek recommends that Stabilizers and required cross bracing be

(lb) - Max Horiz 1=-186 (LC 12)

. ,	Max Uplift	All uplift 100 (lb) or less at joint(s) 1, 12 except 10=-139 (LC
		15), 19=-140 (LC 14)
	Max Grav	All reactions 250 (lb) or less at joint(s) except 1=507 (LC 43)
		$10=869 (I \oplus 51) (12=352 (I \oplus 39) (19=2024 (I \oplus 46))$

12=352 (LC 39), 19=2024 (LC 46)

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

TOP CHORD 1-28=-612/88, 28-29=-499/96, 2-29=-417/110, 3-30=-56/357, 3-4=0/261, 5-31=-729/209, 31-32=-729/209,

32-33=-729/209, 33-34=-729/209, 34-35=-729/209, 35-36=-729/209, 6-36=-729/209, 6-37=-748/242, 7-37=-747/243,

7-8=-886/271, 8-38=-988/246, 9-38=-1095/217, 9-39=-1040/223, 39-40=-1041/220, 10-40=-1164/206

BOT CHORD 1-21=-134/489, 20-21=-128/489, 19-20=-338/165, 5-17=-1151/198, 16-42=-81/729, 15-42=-81/729, 14-15=-4/817, 10-11=-109/925

WEBS 2-21=0/274, 2-20=-722/188, 3-20=-421/70, 5-16=-132/1070, 6-16=-621/180, 6-15=-49/332, 7-15=-54/347, 8-15=-466/156,

11-14=-129/1005, 9-11=-291/88, 4-19=-1594/81, 4-20=-95/788, 4-17=-95/1073, 17-19=-326/198

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-11-5, Interior (1) 3-11-5 to 6-5-2, Exterior(2R) 6-5-2 to 17-6-14, Interior (1) 17-6-14 to 21-10-2, Exterior(2R) 21-10-2 to 32-11-14, Interior (1) 32-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1 10

Unbalanced snow loads have been considered for this design. 4)

5) Provide adequate drainage to prevent water ponding.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

8) 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) 1 except (jt=lb) 10=139. 9)

One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 19. This connection is for uplift only and does not consider lateral forces. 10)

One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces. 11)

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 12)

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A012	Hip	1	1	Job Reference (optional)

 Run: 8.42 S
 Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08
 Page: 2

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A013	Hip	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:WbhOX5YXC9Q8hnmzdIDzmLzXXGE-TLNHnOQC6r_uAbPhCMFnia9J?s6QFBQxyCRDIkzXMUL



Scale = 1:68.3

Plate Offsets (X	, Y): [3:0-4-0,0-1-9],	[9:0-6-0,0-0-12], [13:	0-2-12,0-2-12], [15:0-2	2-8,0-2-12], [16:6	Edge,0-3-8]						
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.95 0.96 0.64	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.21 -0.43 0.12	(loc) 18-24 18-24 9	l/defl >750 >369 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 245 lb	GRIP 244/190 187/143 • FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE REACTIONS A (Ib) - N N	2x4 SP No.2 *Exc 2x4 SP No.2 *Exc 2x4 SP No.3 Left: 2x4 SP No.3 All bearings 0-1-8. ex Max Horiz 1=-157 (L Max Uplift All uplift 1 Max Grav All reaction 0=-1060 (U	7 (LC 37),	BRACIN TOP CH BOT CH WEBS	I G ORD ORD	Structural wood sheathing directly applied or 4-2-1 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 3-7. Rigid ceiling directly applied or 2-2-0 oc bracing. 1 Row at midpt 5-15, 5-13 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.							
FORCES TOP CHORD BOT CHORD WEBS	Wax Grav An reactions 250 (b) of less at joint(s) except 1=1227 (LC 37), 9=1069 (LC 39), 11=661 (LC 46), 17=646 (LC 46) ORCES (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. OP CHORD 1-25=-1688/162, 25-26=-1653/166, 26-27=-1627/182, 27-28=-1551/185, 2-28=-1550/188, 2-3=-1456/172, 3-4=-1805/195, 4-29=-1811/192, 29-30=-1811/192, 30-31=-1811/192, 31-32=-1811/192, 5-32=-1811/192, 5-33=-1344/213, 6-33=-1344/213, 6-7=-1344/213, 7-8=-1631/207, 8-34=-1328/170, 34-35=-1335/166, 35-36=-1413/154, 36-37=-1431/152, 9-37=-1477/147 IOT CHORD 1-18=-168/1376, 17-18=-337/16, 16-17=-337/16, 15-16=-385/58, 4-15=-550/165, 15-38=-172/2099, 14-38=-172/2099, 14-39=-172/2099, 13-39=-172/2099, 12-13=-319/37, 7-13=0/568, 11-12=-257/0, 9-10=-82/1191 VEBS 2-18=-460/184, 15-18=-125/1552, 3-15=-169/930, 5-15=-419/103, 5-14=0/414, 5-13=-974/168, 10-13=-81/1445,											
NOTES 1) Unbalance 2) Wind: ASC Exterior(2E 35-5-11, E Lumber DC 3) TCLL: ASC Ct=1.10 4) Unbalance 5) Provide ac 6) All plates a 7) This trans-	ed roof live loads hav CE 7-16; Vult=130m E) 0-0-0 to 3-11-5, Ir :xterior(2E) 35-5-11 OL=1.60 plate grip E CE 7-16; Pr=20.0 ps ed snow loads have dequate drainage to are MT20 plates unli- bac haon decisred	ve been considered fr ph (3-second gust) Va nterior (1) 3-11-5 to 4- to 39-5-0 zone; cantil OOL=1.60 f (roof LL: Lum DOL= been considered for to prevent water pondin ess otherwise indicat	or this design. asd=103mph; TCDL=6 -5-2, Exterior(2R) 4-5-2 ever left and right expo -1.15 Plate DOL=1.15) his design. g. ed.	.0psf; BCDL=6.0 2 to 15-6-14, Inte ssed ; end vertic ; Pf=20.0 psf (Lu	Opsf; h=25i erior (1) 15 al left and um DOL=1	it; Cat. II; Ex -6-14 to 23-1 right expose .15 Plate DC	p B; Encl 10-2, Exte d;C-C for DL=1.15);	osed; M erior(2R r membe Is=1.0;	WFRS () 23-10- ers and Rough	(envelo 2 to 34 forces Cat B;	ope) exterior zo 4-11-14, Interior & MWFRS for r Fully Exp.; Ce=	ne and C-C (1) 34-11-14 to reactions shown; e0.9; Cs=1.00;

signe

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 8) any other members, with BCDL = 10.0psf.

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

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

11) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17 and 11. This connection is for uplift only and does not consider lateral forces.

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A013	Hip	1	1	Job Reference (optional)

 Run: 8.42 S
 Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08
 Page: 2

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A014	Hip	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:Gse_e0RuKOIQ50aEbMZsvSzXXGN-TLNHnOQC6r_uAbPhCMFnia9K6s5HF7xxyCRDlkzXMUL



Scale = 1:70.8

Plate Offsets (X, Y): [2:0-	4-0,0-1-9],	[7:0-8-12,0-2-0], [11:0	0-6-0,0-4-0], [13:0-6-0	,0-4-0], [14:Edg	e,0-1-8]							
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.88 0.97 0.93	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.21 -0.34 0.08	(loc) 16-19 16-19 9	l/defl >752 >458 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 217 II	GRIP 244/190 244/190 b FT = 20%
LUMBER BRACING TOP CHORD 2x4 SP 2400F 2.0E *Except* T2:2x4 SP No.1, T3:2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 4-2-6 oc purling except BOT CHORD 2x4 SP No.2 *Except* B2:2x4 SP No.3 TOP CHORD Structural wood sheathing directly applied or 4-2-6 oc purling except WEBS 2x4 SP No.3 BOT CHORD Structural wood sheathing directly applied or 4-2-6 oc purling except WEDGE Left: 2x4 SP No.3 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Right: 2x4 SP No.3 WEBS 1 Row at midpt 3-12										r 4-2-6 oc purlins, sing.		
(Ib) - Max Horiz Max Uplift	REACTIONS All bearings 0-3-8. except 1= Mechanical, 8= Mechanical (lb) - Max Horiz 1=-123 (LC 10) Max Uplift All uplift 100 (lb) or less at joint(s) 15 except 1=-175 (LC 14), 8=-269 (LC 54), 9=-288 (LC 11)									e with Stabilizer		
FORCES (lb) TOP CHORD 1-23 4-5= BOT CHORD BOT CHORD 1-30 8-31 WEBS 13-1 7-9=	8=507 (LC 51), 9=2210 (LC 46), 15=418 (LC 46) FORCES (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. IOP CHORD 1-23=-1461/245, 2-23=-1337/272, 2-24=-1759/379, 24-25=-1761/378, 3-25=-1761/378, 3-26=-1374/291, 4-26=-1374/291, 4-26=-1374/291, 4-5=-1374/291, 5-27=-1374/291, 27-28=-1374/291, 6-28=-1374/291, 6-7=-397/264, 7-29=-300/823, 8-29=-322/744 BOT CHORD 1-30=-184/1121, 16-30=-184/1121, 3-13=-338/200, 12-13=-270/1756, 11-12=-119/370, 6-11=-1354/339, 9-31=-622/243, 8-31=-622/243 WEBS 13-16=-179/1333, 2-13=-207/791, 3-12=-505/202, 4-12=-493/179, 6-12=-318/1677, 9-11=-654/306, 7-11=-184/1087, 7-0											
 NUTES Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-11-5, Exterior(2R) 3-11-5 to 13-6-14, Interior (1) 13-6-14 to 25-10-2, Exterior(2R) 25-10-2 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; c-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design. Provide adequate drainage to prevent water ponding. All plates are MT20 plates unless otherwise indicated. The Fabrication Tolerance at joint 7 = 12% 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 10.0 psf. 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) 1=175, 8=269. One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at j(s) 9. This connection is for uplift only and does not consider lateral forces. 												

14) 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A014	Hip	1	1	Job Reference (optional)

 Run: 8.42 S
 Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08
 Page: 2

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A015	Half Hip Girder	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:wur5bJOIVsf8?diHpozhCOzXXGS-iovF6fKB_0_1CNo8kh6vNuqzEdUxNVOI7yVo0CzXMUT



Special Special Special Special Special Special Special NAILED NAILED NAILED NAILED NAILED NAILED NAILED Special Speci



Scale = 1:70.1

Plate Offsets (X	, Y): [2:0-3-0,0-2-3],	[11:0-3-12,0-3-0], [16	6:0-3-8,0-3-12], [18:0-5	5-8,0-2-8], [21:0-	-2-12,0-3-1	2], [23:0-3-8	,0-4-0]						
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.87 0.49 0.90	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.11 0.03	(loc) 19-20 19-20 16	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 295 II	GRIP 244/190 b FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS REACTIONS / (lb) - N	2x4 SP No.2 *Exc 2x6 SP 2400F 2.0 2x4 SP No.3 *Exc All bearings 0-1-8. ex Max Horiz 27=140 (I Max Uplift All uplift 1 23=-798	ept* T4:2x4 SP No.1 IE *Except* B2:2x4 SI ept* W1:2x4 SP No.2 xcept 16=0-3-8, 23=0 LC 9) 100 (Ib) or less at join (LC 9), 27=-125 (LC 1	C 9),	BRACIN TOP CH BOT CH WEBS	I G ORD ORD	Structu except Rigid c 1 Row MiTek installe Installe	ral wood end ver eiling dii at midpt recomm ed during ation gui	d sheath ticals, ar rectly ap mends th g truss e de.	ing dir nd 2-0- plied c at Stal erectior	tirectly applied or 6-0-0 oc purlins, 0-0 oc purlins (4-7-10 max.): 2-13. 1 or 6-0-0 oc bracing. 8-21 abilizers and required cross bracing be on, in accordance with Stabilizer			
FORCES TOP CHORD	Max Grav All reactions 250 (lb) or less at joint(s) 14 except 16=3321 (LC 32), 23=3826 (LC 32), 27=952 (LC 32) Image: Rest of the state in the sta												
BOT CHORD	10-1199/365, 11-41=-127/310, 41-42=-127/310, 12-42=-127/310, 12-43=-127/310, 13-44=-127/310, 13-44=-127/310, 1-27=-923/96 1T CHORD 26-45=-148/657, 45-46=-148/657, 25-46=-148/657, 25-47=-414/169, 47-48=-414/169, 24-48=-414/169, 24-49=-1198/304, 23-49=-1198/304, 21-22=-252/74, 6-21=-527/200, 21-51=-344/1173, 51-52=-344/1173, 52-53=-344/1173, 20-53=-344/1173, 20-54=-344/1173, 54-55=-344/1173, 19-55=-344/1173, 19-56=-339/118, 56-57=-339/118, 18-57=-339/118, 10-18=-1531/455, 16-58=-1043/278 EBS 2-26=-337/180, 8-21=-1968/453, 8-20=0/361, 9-19=-664/247, 10-19=-432/1793, 1-26=-123/825, 11-16=-2388/541, 11-15=-256/1366, 11-18=-316/1277, 16-18=-1091/300, 12-15=-833/303, 13-15=-441/139, 3-25=-599/302, 3-26=-408/69, 4-25=-290/1377, 4-24=-1486/416, 5-24=-306/1628, 5-23=-2624/616, 5-21=-318/1192, 21-23=-1225/326												
NOTES 1) Unbalance 2) Wind: ASC and right e 3) TCLL: ASC Ct=1.10 4) Unbalance	ed roof live loads hav CE 7-16; Vult=130m exposed ; end vertica CE 7-16; Pr=20.0 ps ed snow loads have	ve been considered fo ph (3-second gust) Va al left and right expos if (roof LL: Lum DOL= been considered for t	or this design. asd=103mph; TCDL=6 ed; Lumber DOL=1.60 1.15 Plate DOL=1.15) his design.	i.0psf; BCDL=6. plate grip DOL= ; Pf=20.0 psf (Li	0psf; h=25i =1.60 um DOL=1	it; Cat. II; Ex .15 Plate DC	p B; Enc DL=1.15)	losed; N ; Is=1.0;	IWFRS Rough	(envelo Cat B;	ope) exterior zo Fully Exp.; Ce	one; cantilever left =0.9; Cs=1.00;	

5) Provide adequate drainage to prevent water ponding.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 27.

10) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.

11) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 23. This connection is for uplift only and does not consider lateral forces.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A015	Half Hip Girder	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 2

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- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 209 lb down and 93 lb up at 6-0-0, 229 lb down and 93 lb up at 7-9-12, 229 lb down and 93 lb up at 13-9-12, 229 lb down and 93 lb up at 13-9-12, 229 lb down and 93 lb up at 13-9-12, 229 lb down and 93 lb up at 13-9-12, 229 lb down and 93 lb up at 17-9-12, 229 lb down and 93 lb up at 17-9-12, 229 lb down and 93 lb up at 33-9-12, 229 lb down and 93 lb up at 37-9-12, and 229 lb down and 93 lb up at 39-9-12, and 228 lb down and 94 lb up at 41-9-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

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

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (lb/ft) Vert: 1-2=-60, 2-13=-60, 22-27=-20, 18-21=-20, 14-17=-20

Concentrated Loads (lb)

Vert: 2=-190 (B), 7=-160 (B), 10=-190 (B), 26=-74 (B), 11=-190 (B), 18=-74 (B), 28=-190 (B), 29=-190 (B), 30=-190 (B), 32=-190 (B), 33=-190 (B), 34=-190 (B), 35=-160 (B), 36=-160 (B), 46=-74 (B), 47=-74 (B), 48=-74 (B), 49=-74 (B), 50=-74 (B), 51=-105 (B), 52=-105 (B), 53=-105 (B), 55=-105 (B), 56=-105 (B), 57=-105 (B), 58=-74 (B), 59=-74 (B), 60=-77 (B), 50=-74 (B), 50=-74 (B), 52=-105 (B), 53=-105 (B), 55=-105 (B), 55=-105 (B), 56=-105 (B), 57=-105 (B), 58=-74 (B), 59=-74 (B), 60=-77 (B), 50=-74 (B), 50=-74

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A02	Нір	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:48FT9DZ4BiKTFqlWb5comBzXW u-yXxf?kRqt96Inl tm4n0EniW1FTX dR4BsBmqAzXMUK



Scale = 1:70.6

Plate Offsets (X, Y): [3:0-3-0,0-2-3], [7:0-3-0,0-2-3]

											-	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.28	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.48	11-12	>985	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.17	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		I						
BCDL	10.0										Weight: 200 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE	2x4 SP 2400F 2.0 2x4 SP No.1 2x4 SP No.3 2x4 SP No.3 Left: 2x4 SP No.3		BRACIN TOP CH BOT CH WEBS	I G ORD ORD	Structu except 2-0-0 c Rigid c 1 Row	ral wood c purlins eiling dii at midpt	d sheath s (3-8-6 rectly ap	ning dir max.): oplied c	rectly applied or 3 3-7. or 10-0-0 oc brac 4-14, 4-11, 6-5	I-3-3 oc purlins, ing. 9		
REACTIONS (I N N N			MiTek installe Install	recomm ed during ation gui	nends th g truss e de.	at Stal	bilizers and requi n, in accordance	red cross bracing be with Stabilizer				
FORCES (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-22=-2765/216, 3-22=-22658/251, 3-23=-2227/278, 23-24=-2228/278, 24-25=-2229/277, 4-25=-2229/277, 4-26=-3442/327, 5-6=-3442/327, 5-6=-3442/327, 6-27=-2226/281, 27-28=-2226/281, 28-29=-2225/282, 7-29=-2224/282,												

7-30=-2653/255, 8-30=-2760/228 BOT CHORD 2-31=-226/2257, 14-31=-226/2257

CHORD 2-31=-226/2257, 14-31=-226/2257, 13-14=-342/3456, 13-32=-342/3456, 12-32=-342/3456, 12-33=-342/3456, 11-33=-342/3456, 10-11=-308/3442, 10-34=-308/3442, 9-34=-308/3442, 9-35=-104/2254, 8-35=-104/2254

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Exterior(2R) 2-7-5 to 13-6-14, Interior (1) 13-6-14 to 25-10-2, Exterior(2R) 25-10-2 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

 One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.

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.

WEBS 3-14=-34/1134, 4-14=-1493/269, 4-12=0/399, 6-11=0/386, 6-9=-1480/269, 7-9=-34/1131

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A03	Нір	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:Cjf59vXt6bX THS5rcZnYGzXVzd-yXxf?kRqt96inI tm4n0EniVFFTM hV4BsBmqAzXMUK

5-0-10 10-0-0 16-5-11 22-11-5 29-5-0 34-4-6 39-5-0 4-11-6 5-0-10 4-11-6 6-5-11 6-5-11 6-5-11 5-0-10 3x6= 5x6= 3x5= 3x5= 5x6= 1-13 _28_6 26 25 5 8 4 27 0-1-13 8¹² 2x4 2x4 💋 , 9₂₉₃₀ 24³ 7-10-14 7-1-1 32 10 61 нwи 0-6-14 B1 ø 12 15 14 33 34 13 35 11 5x6 WB = 3x8= 4x6= 3x5= 3x8= 5x6= 5x6= 9-10-4 19-8-8 29-6-12 39-5-0 9-10-4 9-10-4 9-10-4 9-10-4

Scale = 1:70.7

Plate Offsets (X, Y): [4:0-3-0,0-2-3], [8:0-3-0,0-2-3]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.30	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.50	13-15	>938	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.11	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 214 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2 *Except* T2,T3:2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 2-10-0 oc purlins,
BOT CHORD	2x4 SP 2400F 2.0E *Except* B1:2x4 SP No.1		except
WEBS	2x4 SP No.3		2-0-0 oc purlins (2-8-10 max.): 4-8.
OTHERS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	Left: 2x4 SP No.3	WEBS	<u>1 Row at midpt 5-15, 6-11</u>
	Right: 2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be
REACTIONS	(lb/size) 2=1658/0-5-8, (min. 0-2-2), 10=1575/0-5-8, (min. 0-1-8) Max Horiz 2=169 (LC 13)		installed during truss erection, in accordance with Stabilizer Installation guide.
I	Max Uplift 2=-189 (LC 14), 10=-162 (LC 15)		
I	Max Grav 2=1824 (LC 5), 10=1755 (LC 6)		
FORCES TOP CHORD	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sh 2-22=-2631/260, 22-23=-2601/264, 23-24=-2559/283, 3-24=-2538/286, 5-26=-2828/243, 26-27=-2828/243, 27-28=-2828/243, 6-28=-2828/243, 9-29=-2543/291, 29-30=-2551/288, 30-31=-2572/277, 31-32=-2616/276	own. 3-4=-2505/259, 4-25=- 6-7=-2061/262, 7-8=-2 5, 10-32=-2639/265	2059/261, 5-25=-2061/261, 061/263, 8-9=-2508/262,
BOT CHORD	2-15=-261/2129, 14-15=-237/2722, 14-33=-237/2722, 33-34=-237/2722 12-35=-196/2724, 11-12=-196/2724, 10-11=-163/2140	2, 13-34=-237/2722, 13-	35=-196/2724,
WEBS	3-15=-399/169, 4-15=-8/1055, 5-15=-950/221, 5-13=-27/313, 6-13=-26/	311, 6-11=-950/221, 8-	11=-8/1059, 9-11=-416/174
NOTES			
1) Unbalanc	ed roof live loads have been considered for this design.		
2) Wind: AS	CE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=	=6.0psf; h=25ft; Cat. II;	Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C

Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 4-5-2, Exterior(2R) 4-5-2 to 15-6-14, Interior (1) 15-6-14 to 23-10-2, Exterior(2R) 23-10-2 to 34-11-14, Interior (1) 34-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

 One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.

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.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A04	Нір	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:JRQ8r6C3x5Cca31f9vP9QmzXVn8-vXxf?kRat96Inl tm4n0EniZrFYI aF4BsBmaAzXMUK



Scale = 1:70.6

Plate Offsets (X, Y): [5:0-3-0,0-2-3], [7:0-3-0,0-2-3]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.17	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.35	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.11	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 231 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 4-8-11 oc purlins,
BOT CHORD	2x4 SP 2400F 2.0E		except
WEBS	2x4 SP No.3 *Except* W4:2x4 SP No.2		2-0-0 oc purlins (5-1-3 max.): 5-7.
OTHERS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	Left: 2x4 SP No.3	WEBS	1 Row at midpt 6-15, 6-11
	Right: 2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be
REACTIONS	(lb/size) 2=1758/0-5-8, (min. 0-1-9), 9=1675/0-5-8, (min. 0-1-9)		installed during truss erection, in accordance with Stabilizer
	Max Horiz 2=200 (LC 13)		Installation guide.
	Max Uplift 2=-85 (LC 14), 9=-58 (LC 15)		
	Max Grav 2=1924 (LC 48), 9=1855 (LC 48)		

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

TOP CHORD 2-23=-2822/65, 23-24=-2736/67, 24-25=-2726/74, 3-25=-2699/88, 3-26=-2504/48, 4-26=-2500/62, 4-5=-2425/86, 5-27=-2053/123, 27-28=-2054/123, 28-29=-2055/123, 6-29=-2055/123, 6-30=-2057/124, 30-31=-2057/124, 31-32=-2057/124, 7-32=-2055/125, 7-33=-2505/90, 8-33=-2514/51, 8-34=-2688/94, 34-35=-2740/80, 9-35=-2834/73 BOT CHORD 2-16=-109/2276, 15-16=-109/2276, 15-36=0/2641, 14-36=0/2641, 14-37=0/2641, 13-37=0/2641, 13-38=0/2641, 13-38=0/2641, 14-36=0/2641, 14-37=0/2641, 13-37=0/2641, 13-38=0/26641, 13-38=0/26641, 13-38=0/26641, 13-38=0/26660, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800, 13-2800,

12-38=0/2641, 12-39=0/2641, 11-39=0/2641, 10-11=0/2291, 9-10=0/2291

WEBS 3-15=-533/191, 5-15=0/1018, 6-15=-847/65, 6-13=0/621, 6-11=-843/64, 7-11=0/1023, 8-11=-549/196

NOTES

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 6-5-2, Exterior(2R) 6-5-2 to 17-6-14, Interior (1) 17-6-14 to 21-10-2, Exterior(2R) 21-10-2 to 32-11-14, Interior (1) 32-11-14 to 35-5-11, Exterior(2E) 35-5-11 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 5)

6) 200.0lb AC unit load placed on the bottom chord, 19-8-8 from left end, supported at two points, 5-0-0 apart.

Provide adequate drainage to prevent water ponding. 7)

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

- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces

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)

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	A04	Hip	1	1	Job Reference (optional)	
Carter Components, Sanford, N	C, user	Run: 8.42 S Dec	: 30 2020 Pri	int: 8.420 S I	Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08	Page: 2

LOAD CASE(S) Standard

ID:JRQ8r6C3x5Ccq31f9vP9QmzXVn8-yXxf?kRqt96Inl_tm4n0EniZrFYI_gF4BsBmqAzXMUK

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A05	Нір	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:Z14nhAa3QUgHivtjj8uwCMzXV62-yXxf?kRqt96Inl_tm4n0EniX7FXG_cW4BsBmqAzXMUK

5-0-10 9-10-4 14-0-0 19-8-8 25-5-0 28-11-4 34-0-10 39-5-0 4-9-10 4-1-12 3-6-4 5-1-6 5-4-6 5-0-10 5-8-8 5-8-8 5x6= 3x8= 5x6= 0-1-13 0-1**=13** 31 7 32 8 3x6💊 4x5≉ 4x5。 3x6 🖋 9 10 5 8¹² 33 1 3x5💊 3x8 🖌 10-6-14 30 ³⁴35 9-9-1 9-9-1 11 3 Ŕ); 36 29 Wh 1 B4 ₩10 12 15 14 1-0-0 19 18 37 17 38 16 0-6-14 ∐HW1 HWA R 221 4x8= 2x4 II 3x8= 22 5x10= 13 4x5= 2x4 II 2x4 II 3x6= 5x6= 3x8 II 4x5∎ 6x8= One RT7A 14-10-8 5-0-10 10-0-0 13-10-4 19-8-8 25-6-12 28-9-8 34-0-10 39-5-0 5-0-10 4-11-6 3-10-4 4-10-0 5-10-4 3-2-12 5-3-2 5-4-6

Scale = 1:71

Plate Offse	ts (X, Y): [2:0-3-8,Edge]], [6:0-3-0,0-2-3], [8:0-3	3-0,0-2-3], [15:0-5-8,0-	4-0]								
Loading TCLL (roof Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.73 0.60 0.78	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.16 0.05	(loc) 16-17 16-17 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 278 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHO BOT CHO WEBS WEDGE	RD 2x4 SP No.2 RD 2x4 SP No.2 *Ex 2x4 SP No.3 Left: 2x4 SP No.3 Right: 2x4 SP No.4	cept* B2,B5:2x4 SP N 3 5.3	0.3		BRACIN TOP CH BOT CH	G ORD ORD	Structur except 2-0-0 oc Rigid ce 6-0-0 oc 5-20	al wood c purlins eiling dir c bracin	l sheath : (5-0-6 ectly ap g: 2-22,;	ing dir max.): plied c 21-22,	ectly applied or 6-8. or 10-0-0 oc brac 19-20.	1-1-5 oc purlins, ing, Except:
REACTIONS (lb/size) 2=295/0-3-8, (min. 0-1-8), 12=0/0-5-8, (min. 0-1-8), 20=1817/0-5-8, (min. 0-2-7) Max Horiz 2=231 (LC 13) Max Uplift 2=-44 (LC 14), 12=-154 (LC 15), 20=-182 (LC 14) Max Grav 2=360 (LC 44), 12=1286 (LC 52), 20=2090 (LC 48) 2=2090 (LC 48)					WEBS	1 Row at midpt 6-19, 7-19 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.						
FORCES TOP CHO BOT CHO WEBS	(lb) - Max. Co RD 3-30=-43/372, 8-32=-1096/2(11-35=-1776/2) RD 5-20=-1733/11 15-16=-34/14(3-20=-411/152 13-15=-136/1-4	mp./Max. Ten All for 4-30=-27/440, 4-5=-1 63, 8-9=-1368/282, 9- 239, 11-36=-1753/248 75, 19-20=-388/161, 1 02, 9-15=-46/579, 12- 3, 5-19=-19/1271, 7-19 440	ces 250 (lb) or less exi 5/538, 5-6=-518/185, 6 10=-1621/270, 10-33=- 12-36=-1873/231 8-19=-44/1016, 18-37= 13=-126/1502 ==-1067/116, 7-17=0/3	cept when show 6-31=-409/187, ⁻ 1664/256, 33-34 44/1016, 17-33 47, 7-16=-68/42	n. 7-31=-411// 4=-1682/25 7=-44/1016 2, 8-16=-46	187, 7-32=-1 4, 34-35=-17 9, 17-38=-44/ 6/529, 9-16=	1098/263 734/241, /1016, 16 :-819/184	-38=-44 ,	/1016,			
NOTES1)Unba2)WindExterright3)TCLLCt=1(true)4)Unba	lanced roof live loads ha ASCE 7-16; Vult=130n ior(2E) -1-4-0 to 2-7-5, I exposed ; end vertical le : ASCE 7-16; Pr=20.0 p 10 lanced snow loads have	ave been considered fr nph (3-second gust) V/ nterior (1) 2-7-5 to 8-5 fft and right exposed;C sf (roof LL: Lum DOL= e been considered for f	or this design. asd=103mph; TCDL=6 -2, Exterior(2R) 8-5-2 t -C for members and fo :1.15 Plate DOL=1.15) his design.	.0psf; BCDL=6. to 30-11-14, Inte prces & MWFRS ; Pf=20.0 psf (Li	Opsf; h=25f rior (1) 30- for reactio um DOL=1.	it; Cat. II; Ex 11-14 to 35- ns shown; L 15 Plate DC	p B; Encl 5-11, Ext umber D DL=1.15);	osed; M erior(2E OL=1.6 Is=1.0;	WFRS 5) 35-5- 0 plate g Rough	(envelo 11 to 3 grip DC Cat B;	ope) exterior zor 9-5-0 zone; can DL=1.60 Fully Exp.; Ce=	ie and C-C ilever left and 0.9; Cs=1.00;
5) This	russ has been designed	l for greater of min roo	f live load of 12.0 psf o	or 1.00 times flat	roof load c	of 20.0 psf or	n overhar	ngs non	-concuri	rent wit	th other live loac	S.

6) Provide adequate drainage to prevent water ponding.

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

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.

10) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.

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

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	A05	Hip	1	1	Job Reference (optional)	
Carter Components, Sanford, N	C, user	Run: 8.42 S Dec	: 30 2020 Pri	int: 8.420 S I	Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08	Page: 2

LOAD CASE(S) Standard

 $ID:Z14nhAa3QUgHivtjj8uwCMzXV62-yXxf?kRqt96lnl_tm4n0EniX7FXG_cW4BsBmqAzXMUK$

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A06	Piggyback Base	3	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:IwUG1Xzd10VKrBRam0w6hvzXV2z-yXxf?kRqt96Inl_tm4n0EniX7FWj_c14BsBmqAzXMUK



Scale = 1:69.9

Plate Offsets (X,	Y): [2:0-3-8,Edge],	[6:0-3-12,0-2-0], [8:0	-3-12,0-2-0], [15:0-5-8	,0-4-0]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.73 0.70 0.81	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.22 -0.45 0.06	(loc) 21-24 21-24 12	l/defl >540 >264 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 274	GRIP 244/190 b FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE	2x4 SP No.2 2x4 SP No.2 *Exc 2x4 SP No.3 *Exc Left: 2x4 SP No.3 Right: 2x4 SP No.	ept* B2,B5:2x4 SP No ept* W5:2x4 SP No.2 3	o.3		BRACIN TOP CH BOT CH	G ORD ORD	Structu except 2-0-0 o Rigid ce 6-0-0 o	ral wood c purlins eiling dir c bracin	d sheath s (4-10-1 rectly ap g: 2-21,	ing dir I4 max plied c 19-20.	ectly applied o): 6-8. or 10-0-0 oc bra	r 3-11-14 oc purlins, acing, Except:
REACTIONS (I M M M	b/size) 2=370/0- 20=1717/ lax Horiz 2=234 (L lax Uplift 2=-6 (LC lax Grav 2=451 (L	3-8, (min. 0-1-8), 12= /0-5-8, (min. 0-2-4) C 11) 15), 12=-142 (LC 15) C 38), 12=1324 (LC 5	1146/0-5-8, (min. 0-1-{ , 20=-219 (LC 14) 2), 20=1933 (LC 48)	9),	1 Row at WEBS	: midpt	5-20 1 Row a MiTek installe Installa	at midpt recomm ed during ation gui	nends th g truss e de.	at Stal rection	6-19, 7-19 bilizers and rec n, in accordanc	uired cross bracing be with Stabilizer
FORCES TOP CHORD BOT CHORD WEBS	Max Grav 2=451 (LC 38), 12=1324 (LC 52), 20=1933 (LC 48) FORCES (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-28=-323/44, 4-5=-81/338, 5-6=-660/148, 6-30=-522/156, 7-30=-522/156, 7-31=-1148/246, 8-31=-1148/246, 8-9=-1451/262, 9-10=-1704/246, 10-32=-1747/322, 32-33=-1765/230, 33-34=-1816/217, 11-34=-1859/215, 11-35=-1820/229, 12-35=-1940/211 BOT CHORD 2-21=-124/294, 20-21=-35/270, 5-20=-1548/227, 18-19=-21/1089, 18-36=-21/1089, 17-36=-21/1089, 17-37=-21/1089, 16-37=-21/1089, 15-16=-15/1471, 9-15=-44/587, 12-13=-110/1557 WEBS 3-20=-367/171, 5-19=-53/1125, 7-19=-1008/128, 7-17=0/347, 7-16=-84/386, 8-16=-37/588, 9-16=-851/189,											
NOTES 1) Unbalance 2) Wind: ASC Exterior(2E right expos 3) TCLL: ASC Ct=1.10 4) Unbalance 5) This truss I 6) Provide ad 7) This truss I	d roof live loads hav E 7-16; Vult=130m) -1-4-0 to 2-7-5, In ed ; end vertical lef E 7-16; Pr=20.0 ps d snow loads have has been designed equate drainage to has been designed	ve been considered for ph (3-second gust) Va terior (1) 2-7-5 to 8-5- t and right exposed;C if (roof LL: Lum DOL= been considered for t for greater of min roo prevent water pondin for a 10.0 psf bottom	or this design. Isd=103mph; TCDL=6 2, Exterior(2R) 8-5-2 t -C for members and fo 1.15 Plate DOL=1.15) his design. I live load of 12.0 psf o g. chord live load noncor	.0psf; BCDL=6. to 30-11-14, Inte prces & MWFRS ; Pf=20.0 psf (Lu pr 1.00 times flat	Dpsf; h=25f rior (1) 30- for reactio um DOL=1. roof load c	t; Cat. II; Ex 11-14 to 35- ns shown; L 15 Plate DC of 20.0 psf or loads.	p B; Encl 5-11, Ex umber D DL=1.15); n overhai	losed; N terior(2E)OL=1.6 ; Is=1.0; ngs non	IWFRS E) 35-5- 0 plate g Rough -concurr	(envelo 11 to 3 grip DC Cat B; rent wi	ope) exterior z 9-5-0 zone; ca DL=1.60 Fully Exp.; Ce th other live loa	one and C-C ntilever left and =0.9; Cs=1.00; ads.

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

 One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.

10) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.

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

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	A06	Piggyback Base	3	1	Job Reference (optional)	
Carter Components, Sanford, No	C, user	Run: 8.42 S Dec	: 30 2020 Pri	nt: 8.420 S I	Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08	Page: 2

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A07	Piggyback Base	5	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:qYV9Xda?GNoErtFBhWprjSzXV2B-TLNHnOQC6r_uAbPhCMFnia9MNsAUF9oxyCRDIkzXMUL



Scale = 1:71.7

Fiale Olisels	(X, Y): [2:0-3-8,Edge],	, [6:0-3-12,0-2-0], [8:0	-3-12,0-2-0], [10:0-5-6	,0-4-0]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.73 0.70 0.81	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.22 -0.45 0.06	(loc) 22-25 22-25 12	l/defl >540 >264 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 276 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORI BOT CHORI WEBS WEDGE	D 2x4 SP No.2 D 2x4 SP No.2 *Exc 2x4 SP No.3 *Exc Left: 2x4 SP No.3 Right: 2x4 SP No.3	ept* B2,B5:2x4 SP N ept* W5:2x4 SP No.2 3	o.3		BRACIN TOP CH BOT CH	G ORD ORD	Structur except 2-0-0 oc Rigid ce 6-0-0 oc	ral wood c purlins eiling dii c bracin	d sheath s (4-10-1 rectly ap g: 2-22,3	ing dir 4 max plied c 20-21.	ectly applied or 3 (.): 6-8. or 10-0-0 oc brac	3-11-12 oc purlins, ing, Except:
REACTION	S (Ib/size) 2=368/0- 21=1718 Max Horiz 2=241 (L Max Uplift 2=-20 (LC Max Grav 2=451 (L	3-8, (min. 0-1-8), 12= /0-5-8, (min. 0-2-4) C 13) C 14), 12=-172 (LC 15 C 38), 12=1401 (LC 5	1227/0-5-8, (min. 0-1- ⁻ i), 21=-212 (LC 14) 2), 21=1926 (LC 48)	10),	1 Row at WEBS	: midpt	5-21 1 Row a MiTek installe Installa	at midpt recomm d during ition gui	nends th g truss e de.	at Stal rectior	6-20, 7-20 bilizers and requ n, in accordance	ired cross bracing be with Stabilizer
FORCES TOP CHORI BOT CHORI	Max Grav 2=451 (LC 38), 12=1401 (LC 52), 21=1926 (LC 48) FORCES (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-29=-323/62, 4-5=-76/336, 5-6=-659/156, 6-32=-521/163, 7-32=-521/163, 7-33=-1144/246, 8-33=-1144/246, 8-33=-1144/246, 8-9=-1447/263, 9-10=-1738/244, 10-34=-1759/227, 34-35=-1809/215, 11-35=-1852/213, 11-36=-1815/228, 12-36=-1927/210 BOT CHORD 2-22=-120/295, 21-22=-33/271, 5-21=-1544/209, 19-20=-14/1088, 19-37=-14/1088, 18-37=-14/1088, 18-38=-14/1088, 18-3											
WEBS	14-16=-91/147	9	1008/123, 7-18-0/3	47, 7-1779/30	4, 0-17 30	5/500, 9-17-	040/104	•,				
NOTES 1) Unbala 2) Wind: A Exterio right ex 3) TCLL: A Ct=1.10 4) Unbala 5) This tru	nced roof live loads ha ASCE 7-16; Vult=130m r(2E) -1-4-0 to 2-7-5, Ir posed ; end vertical lef ASCE 7-16; Pr=20.0 ps) nced snow loads have iss has been designed	ve been considered for ph (3-second gust) Va terior (1) 2-7-5 to 8-5- it and right exposed;C sf (roof LL: Lum DOL= been considered for t for greater of min roo	or this design. Isd=103mph; TCDL=6 2, Exterior(2R) 8-5-2 t -C for members and fo 1.15 Plate DOL=1.15) his design. f live load of 12.0 psf o	.0psf; BCDL=6. o 30-11-14, Inte orces & MWFRS ; Pf=20.0 psf (L r 1.00 times flat	0psf; h=25f erior (1) 30- 5 for reactio um DOL=1. c roof load c	t; Cat. II; Ex 11-14 to 36- ns shown; L 15 Plate DC f 20.0 psf or	p B; Encl 9-11, Ext umber D DL=1.15); n overhar	osed; M terior(2E OL=1.6 Is=1.0; ngs non	IWFRS E) 36-9-′ 0 plate g Rough -concurr	(envelo 11 to 4 grip DC Cat B; rent wi	ope) exterior zon 0-9-0 zone; cant DL=1.60 Fully Exp.; Ce=(th other live load	ne and C-C tilever left and 0.9; Cs=1.00; Is.

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.

10) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21. This connection is for uplift only and does not consider lateral forces.

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

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	A07	Piggyback Base	5	1	Job Reference (optional)	
Carter Components, Sanford, No	C, user	Run: 8.42 S Dec	30 2020 Pri	int: 8.420 S [Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Pa	age: 2

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A08	Piggyback Base	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:7RUf7e3jczzQFAu3bd2St5zXV1Y-TLNHnOQC6r_uAbPhCMFnia9Jys5xF7wxyCRDIkzXMUL



Scale = 1:74.5

Plate Offsets (X, Y):	[2:0-1-2,0-2-11	1], [7:0-3-12,0-2-0], [9:	0-3-12,0-2-0], [15:0-3-	8,0-2-8], [17:0-5	-8,0-3-8], [23:0-4-0,Edg	gej					
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.95 0.99 0.93	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.22 -0.40 0.26	(loc) 19-21 19-21 13	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 262 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 *Except* T1:2x4 SP No.1 BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP 2400F 2.0E, B2:2x4 SP No.1, B4:2x4 SP No.3 WEBS 2x4 SP No.3 *Except* W6:2x4 SP No.2 WEDGE Right: 2x4 SP No.3 SLIDER Left 2x4 SP No.3 - 2-0-0 REACTIONS (lb/size) 2=1657/0-5-8, (min. 0-1-8), 13=1657/0-5-8, (min. 0-2-3) Max Horiz 2=-241 (LC 12) Max Uplift 2=-179 (LC 14), 13=-179 (LC 15) Max Grav 2=1851 (LC 48) 13=1851 (LC 48)					BRACIN TOP CH BOT CH WEBS	G ORD ORD	Structu 2-0-0 o Rigid c 9-4-14 2-2-0 o 1 Row MiTek installe Installa	ral wood c purling eiling dii oc bracin c bracin at midpl recomn ed during ation gui	d sheath s (3-2-15 rectly ap ng: 22-2 g: 13-15 nends th g truss e de.	ing dir 5 max. plied c 3 5. at Stal rection	ectly applied, ex): 7-9. or 10-0-0 oc brac <u>8-19, 11-18</u> bilizers and requi n, in accordance	cept ing, Except: red cross bracing be with Stabilizer
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanced rc 2) Wind: ASCE 7	Grav 2=1851 ((lb) - Max. Cor 2-3=-2301/223 5-6=-2394/267 10-37=-2392/2 13-40=-2692/2 2-23=-480/380 18-42=0/1875, 4-23=-84/1124 9-19=-167/449 of live loads ha -16; Vult=130m	LC 48), 13=1851 (LC np./Max. Ten All for , 3-31=-4351/449, 4-3 (6-7=-2269/299, 7-35 (65, 11-37=-2417/250) (21) 8, 22-23=-450/3561, 1 17-18=-82/2618, 11- 1, 4-22=-1082/236, 5-2 0, 9-18=-50/836, 11-18 (ve been considered for ph (3-second gust) Va	48) 2es 250 (lb) or less exi 11=-4298/464, 4-32=-3 i=-2078/313, 8-35=-20 11-38=-3018/268, 38- 21-22=-225/2531, 20-2 17=0/557, 13-15=-99/2 12=-10/550, 5-21=-950, i=-992/212, 12-15=-53 or this design. asd=103mph; TCDL=6	cept when show 004/279, 32-33 78/313, 8-36=-2 39=-3051/260, 11=-74/1867, 20 1163 /215, 7-21=-85// 8/67, 12-17=-27	n. =-2949/281 :078/313, 9 12-39=-31 -41=-74/18 890, 7-19=- /471, 15-1 0psf; h=25f	, 33-34=-28 -36=-2078/3 13/245, 12-4 67, 19-41=- ⁻ -162/456, 8- 7=-78/2118 t; Cat. II; Ex	69/297, 5 313, 9-10 0=-2605 74/1867, 19=-612/ p B; Enc	5-34=-28 =-2278/ /232, 19-42= /169, losed; N	947/299, 291, 0/1875, 1WFRS	(envel	ope) exterior zon	e and C-C

Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 36-9-11, Exterior(2E) 36-9-11 to 40-9-0 zone; cantilever left an 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.

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

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	A08	Piggyback Base	1	1	Job Reference (optional)	
Carter Components, Sanford, NC, user Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Th				Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08	Page: 2	

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	A09	Piggyback Base	4	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:J8zW2TWKhgn?4fwOXs0klczXX4f-TLNHnOQC6r uAbPhCMFnia9Kms6aF7txvCRDIkzXMUL



Scale = 1:72.5

Plate Offsets (7	ς, Υ): [2:0-1-2,0-2-11], [7:0-3-12,0-2-0], [9	1:0-3-12,0-2-0], [14:0-3-	8,0-2-8], [16:0-8	5-8,0-3-8], [22:0-4-0,E0	gej					
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.83 0.95 0.93	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.22 -0.40 0.26	(loc) 18-20 18-20 13	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 260 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.1 *Except* T2,T3:2x4 SP No.2 BOT CHORD 2x4 SP No.2 *Except* B1:2x4 SP 2400F 2.0E, B2:2x4 SP No.1, B4:2x4 SP No.3						BRACING TOP CHORD Structural wood sheathing directly applied or 2-0-11 oc pur except 2-0-0 oc purlins (3-2-12 max.): 7-9.						2-0-11 oc purlins,
WEBS WEDGE SLIDER	SP No.3 SS 2x4 SP No.3 *Except* W6:2x4 SP No.2 DGE Right: 2x4 SP No.3 DER Left 2x4 SP No.3 2-0-0				BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except 9-2-3 oc bracing: 21-22 2-2-0 oc bracing: 13-14.							ing, Except:
REACTIONS	(lb/size) 2=1658/0)-5-8. (min. 0-1-8). 13	3=1575/0-5-8. (min. 0-2	-2)	WEBS <u>1 Row at midpt</u> 8-18, 11-17							
	Max Horiz 2=234 (L Max Uplift 2=-179 (L Max Grav 2=1858 (MiTek installe Installe	recomn ed during ation gui	nends th g truss e ide.	at Sta erection	bilizers and requi n, in accordance	ired cross bracing be with Stabilizer			
FORCES TOP CHORD	(lb) - Max. Con 2-3=-2308/230 6-7=-2275/309 11-35=-2423/2 2-22=-504/380	np./Max. Ten All for , 3-30=-4362/461, 4- , 7-33=-2080/322, 8- 63, 11-36=-3030/284 6, 21-22=-473/3559	rces 250 (lb) or less exi 30=-4310/476, 4-31=-3 33=-2080/322, 8-34=-2 I, 36-37=-3064/276, 12: 20-21=-242/2527, 19-5	cept when show 017/283, 31-32 080/322, 9-34= -37=-3125/272, 20=-86/1872, 19	/n. =-2955/301 -2080/322, 12-13=-27)-38=-86/18	, 5-32=-285 9-10=-2270 11/241 172 18-38=-	7/303, 5- /304, 10- 86/1872	6=-2400 35=-239	0/277, 98/285,			

WEBS

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-0 to 2-7-5, Interior (1) 2-7-5 to 8-5-2, Exterior(2R) 8-5-2 to 30-11-14, Interior (1) 30-11-14 to 35-4-10, Exterior(2E) 35-4-10 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

4-22=-91/1123, 4-21=-1084/242, 5-21=-12/550, 5-20=-955/217, 7-20=-87/893, 7-18=-162/456, 8-18=-611/168,

9-18=-166/447, 9-17=-53/839, 11-17=-997/217, 12-14=-535/74, 12-16=-30/460, 14-16=-116/2139

10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.

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

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

18-39=-33/1880, 17-39=-33/1880, 16-17=-141/2626, 11-16=-3/569, 13-14=-136/2183

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	A09	Piggyback Base	4	1	Job Reference (optional)	
Carter Components, Sanford, NC, user Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08				Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08	Page: 2	

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12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 15, 23, 24, 25, 26, 27, 20, 19, 18, 17, and 16. This connection is for uplif only and does not consider lateral forces.

13) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 411 lb uplift at joint 7.
- 11) One RT7A USP 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.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

¹³⁾ Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 7-6-4 from the left end to 15-6-4 to connect truss(es) A010 (1 ply 2x4 SP), A011 (1 ply 2x4 SP), A012 (1 ply 2x4 SP), A013 (1 ply 2x4 SP), A014 (1 ply 2x4 SP) to back face of bottom chord.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	B04	Common Girder	1	2	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 2

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

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft) Vert: 1-4=-60, 4-7=-60, 12-15=-20

Concentrated Loads (lb)

Vert: 10=-821 (B), 8=-182 (B), 20=-1647 (B), 21=-865 (B), 22=-1001 (B), 23=-441 (B)

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	B05	Hip Girder	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:6gM k7wtJbRUIP3k4X79yHzXVNh-EcLtvJJZE4sAbDDyBzbgqgHpGD59e36cuJmEUIzXMUU



10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.

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

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

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230	
21030029-A	B05	Hip Girder	1	1	Job Reference (optional)	
Carter Components, Sanford, NC, user Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08				Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08	Page: 2	

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14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 218 lb down and 93 lb up at 6-0-0, 229 lb down and 93 lb up at 8-0-12, 229 lb down and 93 lb up at 10-0-12, 229 lb down and 90 lb up at 11-9-8, 229 lb down and 93 lb up at 13-6-4, and 229 lb down and 93 lb up at 15-6-4, and 218 lb down and 93 lb up at 13-6-4, and 229 lb down and 93 lb up at 15-6-4, and 218 lb down and 93 lb up at 17-7-0 on top chord, and 560 lb down and 88 lb up at 6-0-0, and 560 lb down and 88 lb up at 17-6-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-7=-60, 7-10=-60, 18-21=-20

Concentrated Loads (lb)

Vert: 4=-190, 7=-190, 14=-74, 16=-560, 5=-190, 15=-74, 13=-74, 6=-190, 12=-560, 25=-190, 27=-190, 29=-190, 31=-74, 32=-74

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	B06	Hip	1	1	Job Reference (optional)

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Scale = 1:48.6

Plate Offsets (X, Y): [2:0-3-8,Edge], [3:0-5-5,Edge], [4:0-3-0,0-2-3], [5:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.17	7-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.25	7-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 111 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 5-3-8 oc purlins,
BOT CHORD	2x4 SP No.2		except
WEBS	2x4 SP No.3		2-0-0 oc purlins (5-7-14 max.): 3-4.
WEDGE	Left: 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	Right: 2x4 SP No.3	WEBS	1 Row at midpt 3-7
REACTIONS (lb/size) 2=1023/0-3-8, (min. 0-1-8), 5=1023/0-5-8, (min. 0-1-8) Max Horiz 2=-144 (LC 12) Max Uplift 2=-119 (LC 14), 5=-119 (LC 15)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
Ν	Max Grav 2=1232 (LC 45), 5=1223 (LC 45)		
FORCES	(lb) - Max Comp (Max Ten - All forces 250 (lb) or less excent when show	ND	

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

TOP CHORD 2-16=-1513/117, 16-17=-1408/133, 3-17=-1399/161, 3-18=-1149/194, 18-19=-1149/194, 19-20=-1149/194,

4-20=-1149/194, 4-21=-1384/161, 21-22=-1392/133, 5-22=-1498/117

BOT CHORD 2-23=-88/1169, 9-23=-50/1169, 9-24=-52/1160, 8-24=-52/1160, 7-8=-52/1160, 7-25=0/1157, 5-25=0/1157 WEBS 3-9=0/406, 4-7=0/394

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 3-9-1, Exterior(2R) 3-9-1 to 19-9-15, Interior (1) 19-9-15 to 21-11-0, Exterior(2E) 21-11-0 to 24-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

 One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.

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.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	B07	Hip	1	1	Job Reference (optional)

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9-10-4	, 13-8-12	23-7-0	
9-10-4	3-10-8	9-10-4	

.

Scale = 1:44.8

Plate Offsets (X, Y): [1:0-3-8,Edge], [3:0-4-0,0-1-9], [4:0-4-0,0-1-9], [6:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.19	7-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.38	7-15	>751	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 126 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-5-3 oc purlins,
BOT CHORD	2x4 SP No.2		except
WEBS	2x4 SP No.3		2-0-0 oc purlins (5-9-15 max.): 3-4.
WEDGE	Left: 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	Right: 2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be
REACTIONS ((lb/size) 1=943/0-5-8. (min. 0-1-8). 6=943/0-5-8. (min. 0-1-8)		installed during truss erection, in accordance with Stabilizer
Ň	Max Horiz 1=-155 (LC 10)		Installation guide.
N	Max Uplift 1=-87 (LC 14), 6=-87 (LC 15)		
M	Max Grav 1=1135 (LC 38), 6=1135 (LC 38)		
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sho	wn.	

TOP CHORD 1-16=-1643/148, 16-17=-1574/161, 17-18=-1554/164, 2-18=-1478/174, 2-19=-1306/137, 19-20=-1199/147,

3-20=-1164/166, 3-21=-967/181, 4-21=-967/181, 4-22=-1163/167, 22-23=-1198/147, 5-23=-1306/137, 5-24=-1478/174,

BOT CHORD 1-9=-166/1313, 8-9=0/966, 7-8=0/966, 6-7=-79/1313

2-9=-417/179, 3-9=-19/368, 4-7=-30/373, 5-7=-418/179 WEBS

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-9-1, Exterior(2R) 5-9-1 to 17-9-15, Interior (1) 17-9-15 to 20-7-0, Exterior(2E) 20-7-0 to 23-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

Provide adequate drainage to prevent water ponding. 5)

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 6. This connection is for uplift only and does not consider lateral forces.

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)

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

^{24-25=-1554/164, 25-26=-1573/161, 6-26=-1643/148}


¹⁴⁾ Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-6-0 from the left end to 19-6-0 to connect truss(es) B02 (1 ply 2x4 SP), B03 (1 ply 2x4 SP) to back face of bottom chord.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	B08	Hip Girder	1	3	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 2 ID:ycupP3Edtn29j?JUPD3UK3zXVM?-EcLtvJJZE4sAbDDyBzbgqgHqCD4Re13cuJmEUIzXMUU

 15) Fill all nail holes where hanger is in contact with lumber.
 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 8768 lb down and 1151 lb up at 21-4-8 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-4=-60, 4-6=-60, 12-15=-20

Concentrated Loads (lb)

Vert: 11=-953, 14=-953, 24=-953, 25=-1208, 26=-1208, 27=-1208, 28=-1208, 29=-1208, 30=-1208, 31=-1208, 32=-8727



ndard

Job		Truss		Truss Type			Qty	Ply	1	65 Beechl	eaf-Roo	f-BB-2	230	
21030029-A		C02		Common			3	1	Jo	ob Referei	nce (opti	ional)		
Carter Components,	Sanford, NC	, user		-		Run: 8.42 S	Dec 30 20	20 Print: 8.42 qs8um??aaki	20 S Dec if11WbB	30 2020 M C2kXEzXV	iTek Indu 90-EcLtv.	stries, Ir JJZE4s/	nc. Thu Mar 25 15:5 AbDDyBzbaaaHsXr	50:08 Page: 1 D7seDUcuJmEUIzXMUU
		- -	1-4-0 1-4-0	5-2-8 5-2-8		<u>10-3-12</u> 5-1-4			<u>15-</u> 5-1	5-0 -4			<u>20-7-8</u> 5-2-8	21-11-8
9-1-4-6	D-6- <u>14</u>	1	2 HW1 3x8 II One RT7A	6-10-15	812 2x4 w 17 3	18 10 3x5=	21	4x5 II 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	9 3x5=	19 8 3x5=	2x4 20 11 4	2	<u>H</u> B2 0-7-8	6 ₩1 3x8॥ One RT7A
Scale = 1:44.6	Y)· [2·0-3-8	Edgel	6:0-3-8 Edgel	6-10-15			6	-9-10				6-	·10-15	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	((psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	IRC2018/7	2-0-0 1.15 1.15 YES PI2014	CSI TC BC WB Matrix-MSH	0.61 0.54 0.24	DEFL Vert(LL) Vert(CT) Horz(CT)	ii -0.1 -0.1 0.0	n (loc) 0 8-10 6 8-10 3 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 108 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE	2x4 SP No 2x4 SP No 2x4 SP No Left: 2x4 S	.2 .2 .3 P No.3					BRACIN TOP CH BOT CH	G ORD ORD	Struc Rigid MiTe insta	tural wood ceiling dii ek recomm alled during	d sheath rectly ap nends th g truss e	ing dir plied o at Stat rectior	ectly applied or 4 o <u>r 10-0-0 oc braci</u> pilizers and requi n. in accordance	-4-9 oc purlins. ing. red cross bracing be with Stabilizer
REACTIONS (Ib., Ma Ma Ma TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanced 2) Wind: ASCE Exterior(2E) right expose 3) TCLL: ASCE Ct=1.10 4) Unbalanced 5) This truss ha 6) This truss ha 7) * This truss ha	rxignt: 2x4 /size) 2= ax Horiz 2= ax Uplift 2= ax Grav 2= (lb) - Ma 2-3=-12 5-6=-12 2-10=-1 4-8=-10 I roof live lo 5-7-16; Vult: -1-4-0 to 1 ed; end ver 5-7-16; Pr= snow load: as been de: has been de: has been de:	57 No.3 905/0-3 182 (LC 97 (LC -1011 (L ax. Comp 88/128, 13/1106 3/586, 5 ads have =130mp -8-0, Int tical left 20.0 psf s have b signed for signed for esigned for	-8, (min. 0-1-8), C 12) 14), 6=-97 (LC - C 28), 6=1011 (I o./Max. Ten Al 3-17=-1200/150 , 10-21=0/729, 9 -8=-351/189, 4-1 e been considered h (3-second gus erior (1) 1-8-0 to and right expose (roof LL: Lum D been considered or greater of min or a 10.0 psf bott for a live load of	6=905/0-3-8, (mir 15) 17 25) forces 250 (lb) o 17-18=-1112/16 -21=0/729, 8-9=0 0=-103/584, 3-10 ed for this design. c) Vasd=103mph; 7-3-12, Exterior(2 ed;C-C for member DL=1.15 Plate DC for this design. roof live load of 1 om chord live load 20.0psf on the bo	r less exc 1, 4-18=- /729, 6-8 =-351/18 TCDL=6 IR) 7-3-1 ors and fc DL=1.15) 2.0 psf o d noncor ottom cho	cept when shown 1085/181, 4-19=- i=-11/1028 ig 0psf; BCDL=6.0 2 to 13-3-12, Inte prces & MWFRS 1 ; Pf=20.0 psf (Lur r 1.00 times flat r iccurrent with any ord in all areas wh	1086/181 psf; h=25f rior (1) 13 for reactio n DOL=1. oof load c other live here a rec	, 19-20=-11 t; Cat. II; Ex -3-12 to 18 ns shown; I 15 Plate D0 f 20.0 psf o loads. tangle 3-06	(Insta 113/161 -11-8, I Lumber OL=1.1 on overf	, 5-20=-12 nclosed; № Exterior(21 · DOL=1.6 5); Is=1.0; hangs non by 2-00-0	de. 201/150, 201/150, 18-11 0 plate g Rough -concurr 0 wide v	(envelo -8 to 2 grip DC Cat B; rent wil rent will fit b	ope) exterior zon 1-11-8 zone; car DL=1.60 Fully Exp.; Ce=0 th other live load: etween the botto	e and C-C ttilever left and 0.9; Cs=1.00; s. m chord and
 8) One RT7A L forces. 9) This truss is 	JSP connect	ctors rec	commended to co	onnect truss to be 018 International F	aring wal Residenti	lls due to UPLIFT al Code sections	⁻ at jt(s) 2 R502.11.	and 6. This 1 and R802	conne 2.10.2 a	ction is for and referer	uplift or	nly and	does not consid ANSI/TPI 1.	er lateral

300	Truss		Truss Type		Qty	Ply	165 Beec	nleaf-Root	f-BB-22	230	
21030029-A	C03		Common		1	1	Job Reference (optional)				
Carter Components, S	anford, NC, user			Run: 8.42 S Dec 30 2020 Print: 8.			3.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1				
		1 1			12.WOON		0,0000000002		1	0003020gqg110142	
		1-4-0	<u> </u>	<u>, 10-3-12</u> 5-1-4	,	,	<u>15-5-0</u> 5-1-4	,	r	<u>20-7-8</u> 5-2-8	
									1		I
					4	x5 II					
	-				4	l A					
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			8 T	17	_		18				
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Q			3	16 T1	wz	wz		12 19	5		
-1-6			F	5 //	/	```		\nearrow	I-	<.	
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	0-6-14	Z IHW1								B2	HW1
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		378		3x5=			3x5= 3>	:5=			3×8
		One RT7A									One RT7A
		ļ	6-10-15	l	13-	8-9	l			20-7-8	ļ
Scale = 1:44.6		1	6-10-15	1	6-9	-10	1			6-10-15	1
Plate Offsets (X, Y)	: [2:0-3-8,Edge]	, [6:0-3-8,Edge]		.							
Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.62 Ve	FL t(LL)	in (loc -0.10 7-9	/defl >999	L/d 240	PLATES MT20	GRIP 244/190
- ()					0.56 Ve	t(CT)	-0.15 7-9	>999	180		
Snow (Pf)	20.0	Lumber DOL Bon Strong Inor	1.15	BC			0.02	n/o	n/a		
Snow (Pf) TCDL BCLL	20.0 10.0 0.0*	Rep Stress Incr Code	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH	0.24 Ho	rz(CŤ)	0.03 6	i n/a	n/a		
Snow (Pf) TCDL BCLL BCDL	20.0 10.0 0.0* 10.0	Lumber DOL Rep Stress Incr Code	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH	0.24 Ho	rz(CŤ)	0.03 6	i n/a	n/a	Weight: 106 lb	FT = 20%
Snow (Pf) TCDL BCLL BCDL	20.0 10.0 0.0* 10.0	Lumber DOL Rep Stress Incr Code	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH	ACING	rz(CŤ)	0.03 6	6 n/a	n/a	Weight: 106 lb	FT = 20%
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.2	Rep Stress Incr Code	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH BR TO BO	ACING P CHORD T CHORD	rz(CT)	0.03 6 Structural wo Rigid ceiling o	5 n/a od sheath <u>lirectly ap</u>	n/a ing dire	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci	FT = 20% 4-9 oc purlins. ng.
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEBS 2 WEDGE L	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3	Lumber DOL Rep Stress Incr Code	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH BR TO BO	ACING P CHORD		0.03 6 Structural wo Rigid ceiling o MiTek recom	od sheath <u>lirectly ap</u> mends thang	n/a ing dire plied or at Stab	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi in accordance	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEBS 2 WEDGE L R FACTIONS (h/r	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 itight: 2x4 SP No.3	Lumber DOL Rep Stress Incr Code	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH BR TO BO	ACING P CHORD T CHORD	rz(CŤ)	0.03 6 Structural wo Rigid ceiling of MiTek recom installed duri Installation g	od sheath <u>lirectly ap</u> mends th ng truss e uide.	n/a ing dire plied or at Stab	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi , in accordance	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDS 2 WEDGE L REACTIONS (lb/s Max	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 kight: 2x4 SP No.3 kight: 2x4 SP No.3 kight: 2x4 SP No.3 kight: 2x4 SP No.3	Lumber DOL Rep Stress Incr Code 3 3-8, (min. 0-1-8), 6=0 C 13)	1.15 YES IRC2018/TPI2014 0/0-3-8, (min. 0-1-8)	BC WB Matrix-MSH BR TO BO	ACING P CHORD	rz(CŤ)	0.03 6 Structural wo Rigid ceiling d MiTek recom Installed duri Installation g	od sheath <u>tirectly ap</u> mends th ng truss e uide.	n/a ing dire <u>plied or</u> at Stab rection	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi , in accordance	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL TOP CHORD 2 BOT CHORD 2 WEBS 2 WEDGE L REACTIONS (Ib/s Max Max	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2=070 (Li Uplift: 2=-97 (Li Grav 2=1012 (Lumber DOL Rep Stress Incr Code 3.3 3-8, (min. 0-1-8), 6=0 C 13) C 14), 6=-70 (LC 15) LC 24), 6=934 (LC 2	1.15 YES IRC2018/TPI2014 D/0-3-8, (min. 0-1-8) 5)	BC WB Matrix-MSH BR TO BO	ACING P CHORE		0.03 6 Structural wo Rigid ceiling o MiTek recorr installed duri Installation g	i n/a od sheath <u>lirectly ap</u> mends th ng truss e uide.	n/a ing dire <u>plied or</u> at Stab rection,	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi , in accordance	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDS 2 WEDGE L REACTIONS (Ib/s Max Max Max FORCES	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 ight: 2x4 SP No.3 ight: 2x4 SP No.3 ight: 2x4 SP No.3 ight: 2x4 SP No.2 x4 SP No.3 itight: 2x4 SP	Lumber DOL Rep Stress Incr Code 3.3 3-8, (min. 0-1-8), 6=0 C 13) C 14), 6=-70 (LC 15) LC 24), 6=934 (LC 2 np./Max. Ten All fo	1.15 YES IRC2018/TPI2014 D/0-3-8, (min. 0-1-8) 5) 5) 5) 517-1114/164 4-17=	BC WB Matrix-MSH TO BO	ACING P CHORE T CHORE	2(CŤ)	0.03 6 Structural wo Rigid ceiling d MiTek recom Installed duri Installation g	in/a in n/a irrectly ap mends th ng truss e uide.	n/a ing dire <u>plied or</u> at Stab rection	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi , in accordance	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDS 2 WEDGE L WEDGE L REACTIONS (Ib/s Max Max FORCES TOP CHORD	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2=075 (Li Grav 2=1012 ((lb) - Max. Cor 2-3=-1290/130 5-6=-1298/136	Lumber DOL Rep Stress Incr Code 3-3 3-8, (min. 0-1-8), 6= (C 13) C 14), 6=-70 (LC 15) (LC 24), 6=934 (LC 2 np./Max. Ten All fo (), 3-16=-1202/153, 16	1.15 YES IRC2018/TPI2014 0/0-3-8, (min. 0-1-8) 5) 5) rces 250 (lb) or less ex 5-17=-1114/164, 4-17=-	BC WB Matrix-MSH BR TO BO Cept when shown. -1087/184, 4-18=-109	ACING P CHORE T CHORE	19=-1124	0.03 6 Structural wo Rigid ceiling o MiTek recorr installed duri Installation g	i n/a od sheath <u>tirectly ap</u> mends th ng truss e uide. 1211/159,	n/a ing dire <u>plied or</u> at Stab erection	Weight: 106 lb ectly applied or 4 <u>r 10-0-0 oc braci</u> ilizers and requi , in accordance	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL TOP CHORD 2 BOT CHORD 2 WEDGE L WEDGE L REACTIONS (Ib/s Max Max FORCES TOP CHORD BOT CHORD WEBS	20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 kight: 2x4 SP No.3 kight: 2x4 SP No.3 kight: 2x4 SP No.3 kight: 2x4 SP No.3 comparison of the second seco	Lumber DOL Rep Stress Incr Code 3-3 3-8, (min. 0-1-8), 6=4 C 13) C 14), 6=-70 (LC 15) LC 24), 6=934 (LC 2 np./Max. Ten All fo , 3-16=-1202/153, 16 5-7=-358/192, 4-9=-	1.15 YES IRC2018/TPI2014 0/0-3-8, (min. 0-1-8) 5) 5) 5-17=-1114/164, 4-17= -2/721, 7-8=-2/721, 6-7 102/583, 3-9=-352/189	BC WB Matrix-MSH TO BO Very when shown. -1087/184, 4-18=-109 7=-50/1038	ACING P CHORE T CHORE	rz(CŤ)	0.03 6 Structural wo Rigid ceiling d MiTek recom Installed duri Installation g	i n/a bd sheath <u>directly ap</u> mends th ng truss e uide. 1211/159,	n/a ing dire plied or at Stab rection,	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi , in accordance	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDS 2 WEDGE L REACTIONS (Ib/s Max Max Max FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Lubalanced f	20.0 10.0 0.0* 10.0 10.0 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2=175 (L Carav 2=1012 ((lb) - Max. Cor 2-3=-1290/130 5-6=-1298/136 2-9=-128/1098 4-7=-108/598, pool live loads ba	Lumber DOL Rep Stress Incr Code 3	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH TO BO solution BO solution BO solution BO solution BO solution BO solution BO solution BO solution BO solution S	ACING P CHORE T CHORE	19=-1124	0.03 6 Structural wo Rigid ceiling o MiTek recorr installed duri Installation g	i n/a od sheath <u>lirectly ap</u> mends th, ng truss e uide.	n/a ing dire plied or at Stab	Weight: 106 lb	FT = 20% 4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDGE L WEDGE L REACTIONS (Ib/s Max Max FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanced r 2) Wind: ASCE Extraint/2E	20.0 10.0 0.0* 10.0 10.0 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 ight: 2x4 SP No.3	Lumber DOL Rep Stress Incr Code 3-3 3-8, (min. 0-1-8), 6=0 C 13) C 14), 6=-70 (LC 15) LC 24), 6=934 (LC 2 np./Max. Ten All fo , 3-16=-1202/153, 16 5-7=-358/192, 4-9=- ve been considered ph (3-second gust) V	1.15 YES IRC2018/TPI2014 0/0-3-8, (min. 0-1-8) 5) rces 250 (lb) or less ex 3-17=-1114/164, 4-17= -2/721, 7-8=-2/721, 6-7 102/583, 3-9=-352/189 for this design. 'asd=103mph; TCDL=f 212 Extrore/CP.7 2	BC WB Matrix-MSH TO BO cept when shown. -1087/184, 4-18=-109 7=-50/1038	ACING P CHORE T CHORE 6/190, 18-	t. II; Exp	0.03 6 Structural wo Rigid ceiling d MiTek recom Installed duri Installation g /170, 5-19=- B; Enclosed;	i n/a bd sheath <u>directly ap</u> mends th. ng truss e uide. 1211/159, MWFRS (n/a ing dire plied or at Stab rection,	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi , in accordance	FT = 20% -4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDS 2 WEDGE L REACTIONS (Ib/s Max Max Max FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanced r 2) Wind: ASCE Exterior(2E) - right exposed	20.0 10.0 0.0* 10.0 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2=175 (L Carav 2=1012 ((lb) - Max. Cor 2-3=-1290/130 5-6=-1298/136 2-9=-128/1098 4-7=-108/598, oof live loads ha 7-16; Vult=130m 1-4-0 to 1-8-0, Ir ; end vertical left	Lumber DOL Rep Stress Incr Code 3	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH BR TO BO BO 7=-50/1038 5.0psf; BCDL=6.0psf; 12 to 13-3-12, Interior orces & MWFRS for re	ACING P CHORE T CHORE 6/190, 18- 6/190, 18- 13-3-1 actions sl	t. II; Exp 2 to 17-7- nown; Lui	0.03 6 Structural wo Rigid ceiling of MiTek recom- installed duri Installation g /170, 5-19=- B; Enclosed; 8, Exterior(2 nber DOL=1	b n/a bd sheath directly ap mends th, ng truss e uide. 1211/159, MWFRS (E) 17-7-8 60 plate g	n/a ing dire plied or at Stab erection, erection, frip DO	Weight: 106 lb ectly applied or 4 <u>r 10-0-0 oc braci</u> ilizers and requi ilizers and requi in accordance	FT = 20% -4-9 oc purlins. ng. red cross bracing be with Stabilizer
Snow (Pf) TCDL BCLL BCDL TOP CHORD 2 BOT CHORD 2 WEDGE L WEDGE L REACTIONS (Ib/s Max Max FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanced r 2) Wind: ASCE Exterior(2E) - right exposed 3) TCLL: ASCE Ct=1.10	20.0 10.0 0.0* 10.0	Lumber DOL Rep Stress Incr Code 3 3-8, (min. 0-1-8), 6=0 C 13) C 14), 6=-70 (LC 15) LC 24), 6=934 (LC 2 np./Max. Ten All fo , 3-16=-1202/153, 16 5, 9-20=-2/721, 8-20= 5-7=-358/192, 4-9=- ve been considered ph (3-second gust) V terior (1) 1-8-0 to 7- ft and right exposed; sf (roof LL: Lum DOL	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH BR TO BO Cept when shown. -1087/184, 4-18=-109 7=-50/1038 5.0psf; BCDL=6.0psf; 12 to 13-3-12, Interior orces & MWFRS for re ;; Pf=20.0 psf (Lum Do	ACING P CHORE T CHORE 6/190, 18- 6/190, 18- 101 13-3-1 sactions si DL=1.15 F	t. II; Exp 2 to II; Exp 2 to I7-7- nown; Lur Pate DOL	0.03 6 Structural wo Rigid ceiling d MiTek recom installed duri Installation g /170, 5-19=- B; Enclosed; 8, Exterior(2 nber DOL=1 =1.15); Is=1.	in n/a bd sheath <u>lirectly ap</u> mends th ng truss e uide. 1211/159, MWFRS (E) 17-7-8 60 plate <u>c</u> 0; Rough (n/a ing dire plied or at Stab rection, (envelo to 20-7 grip DO Cat B; f	Weight: 106 lb ectly applied or 4 r 10-0-0 oc braci ilizers and requi , in accordance pe) exterior zon -8 zone; cantilev L=1.60 Fully Exp.; Ce=0	FT = 20% -4-9 oc purlins. ng. red cross bracing be with Stabilizer e and C-C /er left and 0.9; Cs=1.00;
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDS 2 WEDGE L REACTIONS (Ib/s Max Max FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanced r 2) Wind: ASCE Exterior(2E)- right exposed 3) TCLL: ASCE Ct=1.10 4) Unbalanced s 5) This truss has	20.0 10.0 0.0* 10.0 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 eft: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2x4 SP No.3 itight: 2=107 (I) - Max. Cor 2-3=-1290/130 5-6=-1298/136 2-9=-128/1098 4-7=-108/598, oof live loads have itight: and vertical left 7-16; Pr=20.0 ps snow loads have s been designed	Lumber DOL Rep Stress Incr Code 3	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH TO BO BO solution Solution BC BO BO BO BO BO BO BO BO BO BO BO BO BO	ACING P CHORD T CHORD 6/190, 18- 6/190, 18- 10- 10- 10- 10- 10- 10- 10- 10- 10- 10	t. II; Exp 2 to 17-7- hown; Lui late DOL 0 psf on 0	0.03 6 Structural wo Rigid ceiling of MiTek recom Installed duri Installation g /170, 5-19=- B; Enclosed; 8, Exterior(2 nber DOL=1 =1.15); Is=1. overhangs no	i n/a od sheath <u>lirectly ap</u> mends th ng truss e uide. 1211/159, MWFRS (E) 17-7-8 60 plate <u>c</u>); Rough i n-concurr	n/a ing dire plied or at Stab rection, (envelo to 20-7. grip DO Cat B; I rent with	Weight: 106 lb ectly applied or 4 <u>r 10-0-0 oc braci</u> ilizers and requi , in accordance pe) exterior zon -8 zone; cantilev L=1.60 Fully Exp.; Ce=0 h other live load:	FT = 20% -4-9 oc purlins. ng. red cross bracing be with Stabilizer e and C-C ver left and 0.9; Cs=1.00; s.
Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD 2 BOT CHORD 2 WEDGE L WEDGE L WEDGE E REACTIONS (Ib/s Max Max FORCES TOP CHORD WEBS NOTES 1) Unbalanced r 2) Wind: ASCE Exterior(2E) - right exposed 3) TCLL: ASCE Ct=1.10 4) Unbalanced s 5) This truss has 6) This truss has 7) * This truss has 7) * This truss has	20.0 10.0 0.0* 10.0	Lumber DOL Rep Stress Incr Code 3. 3-8, (min. 0-1-8), 6=0 C 13) C 14), 6=-70 (LC 15) LC 24), 6=934 (LC 2 mp./Max. Ten All fo J, 3-16=-1202/153, 16 5. 5-7=-358/192, 4-9=- ve been considered ph (3-second gust) Viterior (1) 1-8-0 to 7- ft and right exposed; sf (roof LL: Lum DOL been considered for for greater of min roo for a 10.0 psf bottom	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH BR TO BO SOPST, BCDL=6.0psf; 12 to 13-3-12, Interior orces & MWFRS for ro corces & MWFRS for ro press (Lum Do cor 1.00 times flat roof 1 or 1.00 times flat roof 1 ord in all areas where	ACING P CHORE T CHORE 5/190, 18- 6/190, 18- 6/190, 18- 10- 10- 10- 10- 10- 10- 10- 10- 10- 10	t. II; Exp 19=-1124 t. II; Exp 2 to 17-7- nown; Lui late DOL 0 psf on o s. le 3-06-00	0.03 6 Structural woo Rigid ceiling of MiTek recom- installed duri Installation g /170, 5-19=- B; Enclosed; 8, Exterior(2 nber DOL=1 =1.15); Is=1. overhangs no 0 tall by 2-00.	in-concurr 00 wide wide	n/a ing dire plied or at Stab rection, (envelo to 20-7 grip DO Cat B; f rent with vill fit be	Weight: 106 lb ectly applied or 4 r <u>10-0-0 oc braci</u> ilizers and requi , in accordance pe) exterior zon -8 zone; cantilev L=1.60 Fully Exp.; Ce=C h other live loads	FT = 20% -4-9 oc purlins. ng. red cross bracing be with Stabilizer e and C-C /er left and 0.9; Cs=1.00; s. m chord and
Snow (Pf) TCDL BCLL BCDL TOP CHORD 2 BOT CHORD 2 WEDS 2 WEDGE L REACTIONS (Ib/s Max Max FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalanced r 2) Wind: ASCE Exterior(2E) - right exposed 3) TCLL: ASCE Ct=1.10 4) Unbalanced s 5) This truss has 6) This truss has 7) * This truss has 6) This truss has 7) * This truss has 8) One RTZ4 !!	20.0 10.0 0.0* 10.0	Lumber DOL Rep Stress Incr Code 3	1.15 YES IRC2018/TPI2014	BC WB Matrix-MSH TO BO BO Sopsf; BCDL=6.0psf; 12 to 13-3-12, Interior orces & MWFRS for rd ; Pf=20.0 psf (Lum Di protection of Lum Di protection of the set of the se	ACING P CHORD T CHORD T CHORD 6/190, 18- bactions si DL=1.15 F oad of 20. r live load a rectang	t. II; Exp 19=-1124 t. II; Exp 2 to 17-7- hown; Lui late DOL 0 psf on o s. le 3-06-00 6 This co	0.03 6 Structural woo Rigid ceiling of MiTek recom Installed duri Installation g /170, 5-19=- B; Enclosed; 8, Exterior(2 nber DOL=1 =1.15); Is=1. overhangs no 0 tall by 2-00- innection is f	in n/a in n/a irectly ap mends th ng truss e uide. 1211/159, 1211/159, MWFRS (=) 17-7-8 60 plate (2); Rough (n-concurr 00 wide w	n/a ing dire plied or at Stab rection, (envelo to 20-7. grip DO Cat B; I rent with vill fit be	Weight: 106 lb ectly applied or 4 <u>r 10-0-0 oc braci</u> ilizers and requi , in accordance pe) exterior zon -8 zone; cantiley L=1.60 Fully Exp.; Ce=0 h other live loads etween the botto	FT = 20% -4-9 oc purlins. ng. red cross bracing be with Stabilizer e and C-C ver left and 0.9; Cs=1.00; s. m chord and er lateral

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	CJ01	Jack-Open	6	1	Job Reference (optional)

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Scale = 1:25.8

Plate Offsets (X, Y): [2:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03	4-7	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 16 lb	FT = 20%	

LUMBER

REACTIONS	(lb/size)	2=248/0-5-
WEDGE	Left: 2x	4 SP No.3
BOT CHORD	2x4 SP	No.2
TOP CHORD	2x4 SP	No.2

 REACTIONS
 (Ib/size)
 2=248/0-5-8, (min. 0-1-8), 3=94/ Mechanical, (min. 0-1-8), 4=46/ Mechanical, (min. 0-1-8)

 Max Horiz
 2=122 (LC 14)
 Max Uplift
 2=-19 (LC 14), 3=-61 (LC 14)

 Max Grav
 2=361 (LC 21), 3=156 (LC 21), 4=70 (LC 7)
 100 (LC 7)

BRACING TOP CHORD BOT CHORD

HORD Struc

3-10-15

Structural wood sheathing directly applied or 3-10-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

FORCES

 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

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

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 3.

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

9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	CJ02	Jack-Open	10	1	Job Reference (optional)

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Scale = 1:23.6

Plate Offsets (X, Y): [2:Edge,0-2-7]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.00	4-7	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-7	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 10 lb	FT = 20%	

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEDGE	Left: 2x4 SP No.3

2=184/0-5-8, (min. 0-1-8), 3=35/ Mechanical, (min. 0-1-8), **REACTIONS** (lb/size) 4=13/ Mechanical, (min. 0-1-8) Max Horiz 2=74 (LC 14) Max Uplift 2=-28 (LC 14), 3=-25 (LC 14) Max Grav 2=275 (LC 21), 3=52 (LC 21), 4=30 (LC 7)

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

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 4)

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 6) any other members.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 3.

One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces. 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.

LOAD CASE(S) Standard

BRACING
TOP CHORD

BOT CHORD

1-10-15

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

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

Job	Tr	russ	Truss Type		Qty	Ply	165 Beechlea	af-Roof-BB-2	230			
21030029-A	D	01	Hip Girder		1	2	Job Reference	ce (optional)				
Carter Components	s, Sanford, NC, u	ser		Run: 8.42 S Dec	Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Pa							
					ID.:	and machines	R/UNHKGRNFIZ/	AAG2-MPNVN2	IXTIIIKJZ3emuG4	RITIIIqsavibSitonxJ2XMOv		
		ļ_	4-1-0	7-7-8		11-	2-0	15-	3-0	16-7-0		
			4-1-0	3-6-8		3-0	5-8	4-	1-0	1-4-0		
								D				
			NA					0				
				INAILE		NAILED	NAILED					
			<u>1</u> 2 ⁶	x8=	2x4	4 u	6x8	3=				
<u> </u>	- ⁸	1-13	0-1=13 2	14 15	Ŕ	16 1 1 0		4				
	ĊŶ.	6										
	5 5		T1 W	1 W2	W3		W2 W1		3			
	ч + +											
4		0-6-14				BII		1	\rightarrow	5		
) 20 21	22 8	23 24	25 7		Ŕ	6		
		42	x8= 3>	(8 11	6x8	8=	3х	8 II	4x8			
			TUDOC	TUDOC	TUDOG	TUD		<u>_</u>				
			THD26		THD26			6				
	HJC26 NAILED NAILED NAILED											
	3-11-4 7-7-8 11-3-12 15-3-0											
Scale = 1:39.1	<u> </u>		3-11-4	3-8-4	01 10 0 4	3-	8-4	3-	11-4			
	, Y): [1:0-8-0,0-	-1-12], [2:0-3-4,0-1-12], [4	:0-3-4,0-1-12], [5:0-8-0,0-1	1-12], [7:0-6-0,0-1-	-8], [8:0-4	-0,0-4-4], [9	:0-6-0,0-1-8]					
Loading TCLL (roof)	(ps 20	sf) Spacing 0.0 Plate Grip DOL	2-0-0 C 1.15 T	SI C	0.35 Ve	E FL ert(LL) -	in (loc) 0.06 8-9	l/defl L/d >999 240	PLATES MT20	GRIP 244/190		
Snow (Pf)	20 10	0.0 Lumber DOL	1.15 B	C /B	0.22 Ve	ert(CT) -	0.10 8-9	>999 180				
BCLL	0	0.0* Code	IRC2018/TPI2014	latrix-MSH	0.00 110	512(01)	0.02 0	11/4 11/4	Mainht 015			
BCDL	10	5.0		-					vveight: 215	ID FT = 20%		
LUMBER	2x6 SP 2400	IF 2 0F *Excent* T2:2x4 S	P No 2	BR TO		n s	tructural wood	sheathing di	ectly applied o	r 6-0-0 oc purlins		
BOT CHORD	2x8 SP 2400	F 2.0E	1 110.2			e) 2.	cept	(4-9-14 max)· 2_4			
REACTIONS (I	b/size) 1=38	816/0-5-8, (min. 0-1-10), 5	5=2956/0-5-8, (min. 0-1-8)	BO	T CHORI	D R	igid ceiling dire	ectly applied of	or 10-0-0 oc bra	acing.		
N	/lax Horiz 1=-7 /lax Uplift 1=-5	77 (LC 8) 541 (LC 12), 5=-453 (LC 1	3)									
N	Aax Grav 1=38	887 (LC 37), 5=3081 (LC	37) 	4								
TOP CHORD	(Ib) - Max. 1-2=-6089	. Comp./Max. Ten All fol 9/856, 2-14=-6066/888, 14	rces 250 (lb) or less excep -15=-6066/888, 3-15=-606	6/888, 3-16=-606	6/888, 16	6-17=-6066/	888, 4-17=-606	6/888,				
BOT CHORD	4-5=-5109 1-18=-689	9/756 9/5055, 18-19=-689/5055,	9-19=-689/5055, 9-20=-67	78/4944, 20-21=-6	78/4944,	21-22=-678	/4944,					
WEBS	8-22=-678 2-9=-211/2	3/4944, 8-23=-564/4178, 2 2145, 2-8=-262/1447, 3-8	23-24=-564/4178, 24-25=-{ =-462/170, 4-8=-350/2412	564/4178, 7-25=-5 , 4-7=-89/944	64/4178,	5-7=-567/4	228					
NOTES	ITES											
Top chords	s connected as	s follows: 2x6 - 2 rows stag	ggered at 0-9-0 oc, 2x4 - 1	row at 0-9-0 oc.								
Bottom cho Web conne	ords connected ected as follow	d as follows: 2x8 - 2 rows /s: 2x4 - 1 row at 0-9-0 oc.	staggered at 0-9-0 oc.									
 All loads an distribute of 	re considered e only loads note	equally applied to all plies d as (F) or (B), unless oth	, except if noted as front (F erwise indicated.	⁻) or back (B) face	in the LC	DAD CASE(S) section. Ply	to ply conne	ctions have be	en provided to		
 Unbalance Wind: ASC 	ed roof live load CE 7-16: Vult=1	ds have been considered f I30mph (3-second aust) V	or this design. asd=103mph: TCDL=6.0p	sf: BCDL=6.0psf:	h=25ft: C	at. II: Exp B	: Enclosed: MV	VFRS (envel	ope) exterior z	one: cantilever left		
and right e	xposed ; end v CE 7-16 [.] Pr=20	vertical left and right expos	sed; Lumber DOL=1.60 pla =1.15 Plate DOI =1 15): Pl	ate grip DOL=1.60	OL=1 15	Plate DOI =	1.15): Is=1 0 [.] F	Rough Cat B		=0.9: Cs=1 00		
Ct=1.10		have been considered for	this design	20.0 por (2411 B	02 1.10		1.10), 10 1.0, 1	tough out b	r uny Exp., oo	, 0.0, 00 1.00,		
7) This truss I	has been desig	gned for greater of min roo	of live load of 12.0 psf or 1	.00 times flat roof	load of 20	0.0 psf on o	/erhangs non-o	concurrent w	th other live loa	ads.		
o) Provide ad9) This truss I	iequate drainaç has been desiç	ge to prevent water pondir gned for a 10.0 psf bottom	ng. I chord live load nonconcu	rrent with any othe	er live load	ds.						
10) * This truss any other r	s has been des members.	signed for a live load of 20	.0psf on the bottom chord	in all areas where	a rectan	gle 3-06-00	tall by 2-00-00	wide will fit t	between the bo	ttom chord and		
11) One RT7A forces.	USP connecto	ors recommended to conn	ect truss to bearing walls o	due to UPLIFT at j	t(s) 1 and	5. This cor	nection is for ι	plift only and	does not cons	sider lateral		
12) This truss i	is designed in a	accordance with the 2018	International Residential (Code sections R50)2.11.1 ar	nd R802.10	2 and referend	ed standard	ANSI/TPI 1.			

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-2-4 from the left end to 9-2-4 to connect truss(es) A011 (1 ply 2x4 SP), A012 (1 ply 2x4 SP), A013 (1 ply 2x4 SP), A014 (1 ply 2x4 SP), A015 (1 ply 2x6 SP) to front face of bottom chord.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	D01	Hip Girder	1	2	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 2

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- 15) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 7-0-4 oc max. starting at 4-1-6 from the left end to 11-1-10 to connect truss(es) EJ04 (1 ply 2x4 SP), HJ02 (1 ply 2x4 SP), HJ02 (1 ply 2x4 SP), HJ02 (1 ply 2x4 SP), to back face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.
- 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft) Vert: 1-2=-60, 2-4=-60, 4-6=-60, 1-5=-20

Concentrated Loads (lb)

Vert: 9=-310 (B), 2=-105 (B), 4=-105 (B), 7=-310 (B), 15=-105 (B), 16=-105 (B), 17=-105 (B), 18=-545 (F), 19=-487 (F), 20=-1132 (F), 21=-43 (B), 22=-1102 (F), 23=-43 (B), 24=-932 (F), 25=-43 (B)

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230		
21030029-A	E01	Common Supported Gable 1		1	Job Reference (optional)		
Carter Components, Sanford, No	C, user	Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08					

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:eCwtKcSbQv2176ax2FkADlzXVA5-mPnVhzIxTmkJz3emdG4RITlozqvSvpBSff0hxJzXMUV



8-10-0



Scale = 1:27.5

Plate Offsets (X, Y): [2:Edge,0-2-7], [6:Edge,0-2-7]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 45 lb	FT = 20%	

LUMBER

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 OTHERS
 2x4 SP No.3

 WEDGE
 Left: 2x4 SP No.3

 Right: 2x4 SP No.3

REACTIONS All bearings 8-10-0.

(lb) - Max Horiz 2=-87 (LC 12), 11=-87 (LC 12)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 8, 10, 11, 15

Max Grav All reactions 250 (lb) or less at joint(s) 2, 6, 9, 11, 15 except

8=284 (LC 22), 10=284 (LC 21)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-4-0 to 1-8-0, Corner(3R) 1-8-0 to 7-2-0, Corner(3E) 7-2-0 to 10-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.

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

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	E02	Common	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 ID:aJ51eNaVaHRTvov2B3Rm93zXV9w-mPnVhzIxTmkJz3emdG4RITIIOaavvotSff0hxJzXMUV







Scale = 1:30.8

Plate Offsets (X, Y): [2:0-3-8,Edge], [4:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.02	6-9	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.03	6-9	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	2	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 40 lb	FT = 20%	

4-5-0

4-5-0

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.3
	Right: 2x4 SP No.3

Carter Components, Sanford, NC, user

REACTIONS (lb/size) 2=433/0-3-8, (min. 0-1-8), 4=433/0-3-8, (min. 0-1-8) Max Horiz 2=90 (LC 13) Max Uplift 2=-57 (LC 14), 4=-57 (LC 15) Max Grav 2=541 (LC 21), 4=541 (LC 22) FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-450/101, 3-4=-450/101

BOT CHORD 2-6=-19/273, 4-6=0/273

NOTES

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior(2E) -1-4-0 to 1-8-0, Exterior(2R) 1-8-0 to 7-2-0, Exterior(2E) 7-2-0 to 10-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 5)

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

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 7) any other members.

One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral 8) forces

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)

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

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

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

One RT7A

8-10-0

4-5-0

Page: 1

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	EJ01	Jack-Open	35	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:Cijuw43psZGzGU75jd LcizXXGt-mPnVhzIxTmkJz3emdG4RITidBqmfvpzSff0hxJzXMUV



4x5 =

Scale = 1:30

Plate Offsets (X, Y): [2:Edge,0-2-7]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.10	4-7	>691	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.18	4-7	>404	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 23 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP	' No.2
BOT CHORD	2x4 SP	' No.2
WEDGE	Left: 2x	4 SP No.3
DEACTIONS	(lb/oizo)	2-226/0 5

 REACTIONS
 (lb/size)
 2=326/0-5-8, (min. 0-1-8), 3=152/ Mechanical, (min. 0-1-8), 4=76/ Mechanical, (min. 0-1-8)

 Max Horiz
 2=173 (LC 14)

 Max Uplift
 2=-13 (LC 14), 3=-97 (LC 14)

 Max Grav
 2=400 (LC 21), 3=250 (LC 21), 4=110 (LC 7)
 BRACING TOP CHORD BOT CHORD

6-0-0

ORD Structu

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

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

FORCES

 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

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

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 3.

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

9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	EJ02	Jack-Open	7	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:SRIIp9ASkKOhrsKpl0eSTbzXXGk-mPnVhzIxTmkJz3emdG4RITIhraiDvpzSff0hxJzXMUV

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

installed during truss erection, in accordance with Stabilizer

MiTek recommends that Stabilizers and required cross bracing be

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

Installation guide.





, 2-5-8	, 6-0-0
2-5-8	3-6-8

BRACING

TOP CHORD

BOT CHORD

Scale = 1:31.2

Plate Offsets (X, Y): [2:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.11	5-6	>621	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.18	5-6	>402	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.07	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 25 lb	FT = 20%

LUMBER

WEDGE	Left: 2x4 SP No.3
BOT CHORD	2x4 SP No.2 *Except* B2:2x4 SP No.3
TOP CHORD	2x4 SP No.2

2=326/0-5-8, (min. 0-1-8), 4=136/ Mechanical, (min. 0-1-8), **REACTIONS** (lb/size) 5=93/ Mechanical, (min. 0-1-8) Max Horiz 2=173 (LC 14) Max Uplift 2=-13 (LC 14), 4=-79 (LC 14), 5=-9 (LC 14) Max Grav 2=400 (LC 21), 4=220 (LC 21), 5=125 (LC 21)

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

TOP CHORD

2-11=-378/23, 3-11=-310/0 BOT CHORD 2-7=-119/258

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 2) Ct=1.10

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

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 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)

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

Refer to girder(s) for truss to truss connections. 8)

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 4 and 9 lb uplift at joint 5. 9)

10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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



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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 3.

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.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	EJ04	Jack-Open	5	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:wdJa0VA4VeWYT0u0Jk9h0pzXXGi-mPnVhzlxTmkJz3emdG4RITll1as5vpzSff0hxJzXMUV

Scale = 1:26

Plate Offsets (X, Y): [2:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 17 lb	FT = 20%

LUMBER

REACTIONS	(lb/size)	2=254/0-5-8,
WEDGE	Left: 2>	4 SP No.3
BOT CHORD	2x4 SF	No.2
TOP CHORD	2x4 SF	2 No.2

(min. 0-1-8), 3=99/ Mechanical, (min. 0-1-8), 4=49/ Mechanical, (min. 0-1-8) Max Horiz 2=126 (LC 14) Max Uplift 2=-18 (LC 14), 3=-64 (LC 14) Max Grav 2=363 (LC 21), 3=165 (LC 21), 4=73 (LC 7)

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

NOTES

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 4)

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 6) any other members.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 3.

One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces. 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.

LOAD CASE(S) Standard BRACING TOP CHORD BOT CHORD

4-1-0

Structural wood sheathing directly applied or 4-1-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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	165	Beechle	eaf-Roof-	BB-2	230	
21030029-A	HJ02		Diagonal Hip Girde	r	2		1	Job I	Referen	nce (optio	nal)		
Carter Components	s, Sanford, NC, user			Run: 8.42 S)ec 30 202	20 Prir	nt: 8.420	S Dec 30	2020 Mi	Tek Indust	ries, I	nc. Thu Mar 25 15	::50:08 Page: 1
			I	I.	11	D:H7A	APCqfYJo	dR0e?NV	5QMr51z	zXXG6-mP I	nVhz	IxTmkJz3emdG4F	RITImrqttvoiSff0hxJzXMUV
			-1-10-10) 2-8-	1		5	5-7-13		-			
			1-10-10	2-8-1	1		2	2-11-2					
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		3-10				W1	W2				ć		
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Scale = 1:31 1				2-8-2	1	\uparrow	2	5-7-13 2-11-2		ł			
Plate Offecte (X	V): [2:Edgo 0 2 4]			I									
	1). [z.∟uge,0-z-4]	1										1	
Loading	(psf) 20.0	Spacing Plate Grin DOI	2-0-0 1 15	CSI TC	0.29	DEF Vert	•(III)	in 0 00	(loc) 5-6	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert	(CT)	-0.01	5-6	>999	180		
TCDL BCLL	10.0 0.0*	Rep Stress Incr Code	NO IRC2018/TPI2014	WB Matrix-MP	0.08	Horz	z(CT)	0.00	5	n/a	n/a		
BCDL	10.0	-										Weight: 32 lb	FT = 20%
						c							
TOP CHORD	2x4 SP No.2			-	OP CHC	ORD		Structura	al wood	l sheathir	ng dir	ectly applied or	5-7-13 oc purlins,
BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.3				вот сно	ORD		except e Riaid ce	end vert ilina dire	icals. ectlv app	lied o	or 10-0-0 oc bra	cina.
WEDGE	Left: 2x4 SP No.3	i -						MiTek r	ecomm	ends tha	t Sta	bilizers and req	uired cross bracing be
REACTIONS (I	b/size) 2=352/0-	7-6, (min. 0-1-8), 5=2	200/ Mechanical, (min.	0-1-8)				installeo Installat	d during	g truss er de.	ectio	n, in accordanc	e with Stabilizer
Ň	1ax Uplift 2=-65 (L0	C 12), 5=-41 (LC 12)							0				
N	1ax Grav 2=447 (L	.C 19), 5=295 (LC 19)										
TOP CHORD	2-3=-343/100	np./max. ren All lo	ices 250 (ib) of less exi	cept when shown.									
BOT CHORD	2-6=-99/277, 5 3-5=-317/58	-6=-41/277											
NOTES	00 011/00												
1) Wind: ASC	E 7-16; Vult=130m	ph (3-second gust) V	asd=103mph; TCDL=6	.0psf; BCDL=6.0ps	sf; h=25ft;	; Cat	. II; Exp	B; Enclo	osed; M	IWFRS (e	envel	ope) exterior zo	ne; cantilever left
2) TCLL: ASC	CE 7-16; Pr=20.0 ps	of (roof LL: Lum DOL	=1.15 Plate DOL=1.15)	; Pf=20.0 psf (Lum	DOL=1.1	15 Pla	ate DOL	L=1.15);	ls=1.0;	Rough C	at B;	Fully Exp.; Ce	=0.9; Cs=1.00;
Ct=1.10 3) Unbalance	d snow loads have	been considered for	this design.										
4) This truss I	has been designed	for greater of min roo	of live load of 12.0 psf o	or 1.00 times flat ro	of load of	f 20.0) psf on	overhan	gs non-	-concurre	ent wi	th other live loa	ds.
6) * This truss any other r	s has been designed members	d for a live load of 20	0.0psf on the bottom cho	ord in all areas whe	ere a rect	tangle	e 3-06-0	00 tall by	2-00-00	0 wide wi	ll fit b	between the bot	tom chord and
7) Refer to gi	rder(s) for truss to t	russ connections.				<i>.</i>							
 Provide me One RT7A 	echanical connectio	on (by others) of truss ecommended to conr	s to bearing plate capab lect truss to bearing wa	le of withstanding a lis due to UPLIFT a	11 lb uplit at jt(s) 2.	ft at j This	oint 5. connect	tion is for	r uplift c	only and o	does	not consider la	teral forces.
10) This truss i 11) "NAILED" i	is designed in acco indicates 3-10d (0.1	rdance with the 2018 48"x3") or 2-12d (0.4	International Residenti 148"x3.25") toe-nails pe	ial Code sections F r NDS guidlines.	502.11.1	1 and	R802.1	10.2 and	referen	iced stan	dard	ANSI/TPI 1.	
12) In the LOA	D CASE(S) section	, loads applied to the	e face of the truss are n	oted as front (F) or	back (B)).							
1) Dead + S	Standard now (balanced): Lu	mber Increase=1.15,	Plate Increase=1.15										
Unitorm L	.uaus (ID/IL)												

Vert: 1-4=-60, 5-7=-20 Concentrated Loads (lb) Vert: 6=1 (F=0, B=0)

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	PB01	Piggyback	2	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:fivJo1kyXBtzlihcV6atAPzXVMe-mPnVhzlxTmkJz3emdG4RITI6atNvoiSff0hxJzXMUV

2x4 II

3x5 =

9-10-12

except

Installation guide.

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

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

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

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

Scale = 1:28.7

Plate Offsets (X, Y): [4:0-2-8,Edge], [6:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 35 lb	FT = 20%

BRACING TOP CHORD

BOT CHORD

LUMBER

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

REACTIONS All bearings 9-10-12.

(lb) -	Max	Horiz	2=25	(LC 13)	13=25	(LC 13)	

- Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 10, 11, 13, 17
 - Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 10, 13, 17 except
- 11=524 (LC 38)
- FORCES (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-294/39, 3-4=-300/74, 4-5=-269/61, 5-6=-269/61, 6-7=-302/74, 7-8=-284/48
- BOT CHORD 2-12=-28/267, 11-12=-28/267, 10-11=-28/267, 8-10=-28/267
- WEBS 5-11=-419/137

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-5 to 2-0-0, Exterior(2R) 2-0-0 to 9-5-0, Exterior(2E) 9-5-0 to 11-1-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

7) Provide adequate drainage to prevent water ponding.

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

9) Gable requires continuous bottom chord bearing.

10) Gable studs spaced at 4-0-0 oc.

- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 11, and 10. This connection is for uplift only and does not consider lateral forces.
- 14) 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.
- 15) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	PB02	Piggyback	2	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:fivJo1kvXBtzlihcV6qtAPzXVMe-IDD7UdlliTcSLv3Z3ZZCIFCbVQXHAMvJR?H8PtzXMUW

9-10-12

except

Installation guide.

2-0-0 oc purlins (6-0-0 max.): 4-5.

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

installed during truss erection, in accordance with Stabilizer

MiTek recommends that Stabilizers and required cross bracing be

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

Scale = 1:26.4

Plate Offsets (X, Y): [4:0-2-8,Edge], [5:0-3-5,Edge], [6:0-2-1,0-1-0]

												-
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 39 lb	FT = 20%

BRACING TOP CHORD

BOT CHORD

LUMBER

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

REACTIONS All bearings 9-10-12.

(lb) - Max Horiz 2=57 (LC 13), 10=57 (LC 13)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 8, 9, 10, 13

Max Grav All reactions 250 (lb) or less at joint(s) 2, 6, 10, 13 except

8=309 (LC 22), 9=320 (LC 21) (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

FORCES

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-5 to 3-5-0, Exterior(2R) 3-5-0 to 8-1-11, Exterior(2E) 8-1-11 to 11-1-11 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.

8) Gable requires continuous bottom chord bearing.

9) Gable studs spaced at 4-0-0 oc.

- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 8, and 9. This connection is for uplift only and does not consider lateral forces.

13) 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.

- 14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss		Truss Type		Qty	Ply	165 B	leechle	af-Roof	-BB-2	230	
21030029-A	PB03		Piggyback		10	1	Job R	eferend	ce (optio	onal)		
Carter Components, Sa	anford, NC, user		•	Run: 8.42 S De	ec 30 2020	Print: 8.42	0 S Dec 30 2	2020 MiT	ek Indus	stries, li	nc. Thu Mar 25 15	5:50:08 P
					ID:vZF	IOQSUSPv	PRDBBpskS	1gzzXX4	4i-IDD7U	JdllilcS	SLV3Z3ZZCIFCYE	QSpAMzJR?H8PtzX
			0-8-12	5-8-2	:					10-7	<u>-8</u>	11-4-4
			0-0-12	4-11-0)					4-11	-0	0-0-12
							4x5 =					
							3					
				10			\land					
				12 8 ┌─								
					/							
				14 71	//		ST1			T1	15	
-9-11	3-8-1								~	\sim		
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		<u> </u>	2									4 5
	-1	0-4-7						BI				
ę	ò						6					
			3x5 =				2x4 I					3x5 =
			I				0 10 12					I
Scale = 1:27	-						9-10-12					
Plate Offsets (X, Y):	: [2:0-2-9,0-1-8]	, [4:0-2-9,0-1-8]										-
Loading	(psf)	Spacing	2-0-0	CSI	0.47	DEFL	in n/a	(loc)	l/defl	L/d	PLATES	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	/ert(CT)	n/a	-	n/a	999 999	IVIT 20	244/190
TCDL	10.0	Rep Stress Incr	YES	WB Motrix MSH	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL BCDL	10.0	Code	IRC2018/1PI2014	Matrix-MSH							Weight: 40 lb	FT = 20%
		4										-
LUMBER TOP CHORD 2>	x4 SP No.2			B T(DP CHO	RD	Structura	l wood	sheathi	ing dir	ectly applied or	6-0-0 oc purlins.
BOT CHORD 2>	x4 SP No.2 x4 SP No.3			B	OT CHO	RD	Rigid ceil	ing dire	ctly app	plied c	or 10-0-0 oc bra	icing.
REACTIONS All be	earings 9-10-12						installed	during	truss e	rection	n, in accordance	e with Stabilizer
(lb) - Max	Horiz 2=85 (LC	C 13), 7=85 (LC 13)	nt(s) 2 4 7 11				Installati	on guid	e.			
Max	Grav All reacti	ions 250 (lb) or less	at joint(s) except 2=348	(LC 21),								
FORCES	4=348 (L	-C 22), 6=358 (LC 22	2), 7=348 (LC 21), 11=3	48 (LC 22)								
TOP CHORD	2-14=-256/93,	4-15=-256/93		cept when shown.								
NOTES	oof live loade be	wa baan aanaidarad	for this design									
2) Wind: ASCE 7	7-16; Vult=130m	iph (3-second gust)	/asd=103mph; TCDL=6	6.0psf; BCDL=6.0psf	; h=25ft;	Cat. II; Ex	p B; Enclos	sed; MV	VFRS (envel	ope) exterior zo	one and C-C
Exterior(2E) 0- members and	-3-5 to 3-3-5, Ex forces & MWFF	xterior(2R) 3-3-5 to 8 RS for reactions show	8-1-11, Exterior(2E) 8-1- wn; Lumber DOL=1.60 p	11 to 11-1-11 zone; plate grip DOL=1.60	cantileve	r left and	right expos	ed ; en	d vertic	al left	and right expos	sed;C-C for
 Truss designed 	ed for wind load	s in the plane of the	truss only. For studs ex	posed to wind (norn	nal to the	face), se	e Standard	Industi	y Gable	e End	Details as appl	licable, or consult
4) TCLL: ASCE 7	7-16; Pr=20.0 p	sf (roof LL: Lum DOL	=1.15 Plate DOL=1.15)	; Pf=20.0 psf (Lum [OOL=1.1	5 Plate DO	DL=1.15); I	s=1.0; F	Rough (Cat B;	Fully Exp.; Ce	=0.9; Cs=1.00;
Ct=1.10 5) Unbalanced si	now loads have	been considered for	this design									
 This truss has Cohle result 	been designed	for greater of min ro	of live load of 12.0 psf of	or 1.00 times flat root	load of	20.0 psf o	n overhang	js non-o	concurr	ent wi	th other live loa	ds.
 Gable requires Gable studs s 	s continuous bo paced at 4-0-0 d	nuom chord bearing. DC.										
 This truss has * This truss has 	been designed	for a 10.0 psf bottor of for a live load of 2	n chord live load nonco 0.0psf on the bottom ch	ncurrent with any oth ord in all areas wher	er live lo e a recta	ads. nale 3-06	-00 tall by 2	2-00-00	wide w	/ill fit h	etween the bot	tom chord and
any other men	mbers.											
forces.	or connectors re	ecommended to con	nect truss to bearing wa	ins due to UPLIFT at	ji(s) 2 ar	iu 4. I NIS	connection	i is for l	ipint on	iy and	udes not cons	iuer lateral

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.
 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 1 except (jt=lb) 9=174, 7=122.

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.

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)

Job	Truss		Truss Type		Qty	Ply	16	5 Beechl	eaf-Roo	of-BB-2	2230	
21030029-A	VL03		Vallev		1	1		D -f	(
			·				Joi	Referen		lional)	TI NA 05.45	
Carter Components, S	Sanford, NC, user			Run: 8.42 S	Dec 30 20	20 Print: 8.4	20 S Dec 3	80 2020 M	I ek Indu	Istries, I	Inc. Thu Mar 25 15	:50:08 Page:
							Syer4ATCI	Ryw i UZA.	NGI-IDD	ouning	SLV3Z3ZZGIFGVL	
			1									11-6-4
				502					11	1 1		
			/	5-9-2			•		5_3	-15		
				0-0-2					0-0	10		
												0-5-3
						4:	x5 =					
						0						
						2						
						//	\swarrow					
				,	/ /	, l		/ /				
10	0			10 71		ST1		Ţ	1	11		
0-6	ů-			10					\frown			
à	с С		10									
			8 -								$\langle \rangle$	
			1					1			$ \longrightarrow $	3
	- 0	-0-4		****						~~~		
					\times		\times	\times	XXX	$\times\!\!\times$		
				~~~~~~		4	$\vee$ $\vee$ $\vee$ $\vee$		$\nabla \nabla \nabla$	~~~	~ ~ ~ ~ ~ ~ ~ ~ ~	
			3x5 🛩			2:	x4 II					3x5 💊
Scale = 1:28.5			<u></u>			11-6	6-4					ł
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.61	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL	) 0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/1PI2014	Matrix-MSH							Woight: 41 lb	ET - 20%
	10.0										Weight. 41 lb	FT = 20%
						-						
	VASP No 2					G	Struct	ural wood	t choot	aina di	rectly applied or	
BOT CHORD 2	2x4 SP No.2				BOT CH	ORD	Rigid	ceiling di	ectly ar	oplied	or 6-0-0 oc braci	ina
OTHERS 2	2x4 SP No.3				201 011	one		recomm	ends th	nat Sta	bilizers and requ	uired cross bracing b
REACTIONS AND	pearings 11-6-4						install	ed during	g truss (	erectio	n, in accordance	e with Stabilizer
(lb) - Max Horiz 1=-87 (LC 12) Installation guide.												
Ma	k Uplift All uplift	100 (lb) or less at jo	int(s) 3, 4, 9 except 1=-1	69 (LC								
	21)											
Ma	Grav All reaction	ons 250 (lb) or less	at joint(s) 1, 3, 9 except	4=1122								
	(LC 21)		0.50 (11.)									
FORCES	(lb) - Max. Con	np./Max. Ten All fo	orces 250 (lb) or less exe	cept when shown								
BOT CHORD	1-10=-187/550	, 2-10=-58/600, 2-1 3-4=-458/130	1=-58/687, 3-11=-74/532	2								
WEBS	2-4=-946/205	5-4450/150										
NOTES	2.0.200											
1) Unbalanced	roof live loads ha	ve been considered	for this design									
2) Wind: ASCE	7-16; Vult=130m	ph (3-second gust)	Vasd=103mph; TCDL=6	.0psf; BCDL=6.0	psf; h=25f	t; Cat. II; E	Exp B; End	closed; N	IWFRS	(envel	ope) exterior zo	ne and C-C
Exterior(2E)	0-0-6 to 3-0-6, Ex	terior(2R) 3-0-6 to 8	3-6-10, Exterior(2E) 8-6-	10 to 11-6-10 zon	ne; cantile	ver left an	d right exp	osed ; e	nd verti	cal left	and right expos	ed;C-C for
members and	d forces & MWFF	RS for reactions sho	wn; Lumber DOL=1.60 p	late grip DOL=1.	60				_	_		
3) TCLL: ASCE	7-16; Pr=20.0 ps	f (roof LL: Lum DOI	L=1.15 Plate DOL=1.15)	; Pf=20.0 psf (Lur	n DOL=1	.15 Plate E	OOL=1.15	); Is=1.0;	Rough	Cat B	; Fully Exp.; Ce=	=0.9; Cs=1.00;
(UT=1.10	now loads have	boon considered f-	r this docian									
+) Unbalanced	Unbalanced snow loads have been considered for this design.											

5)

6)

Gable requires continuous bottom chord bearing. 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 7) any other members.

8)

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 3 except (jt=lb) 1=169. 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)

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	VL04	Valley	1	1	Job Reference (optional)

2-6-5

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15:50:08 Page: 1 ID:b513Dil93o7hX0r_dWsLFgzXVMc-IDD7UdlliTcSLv3Z3ZZCIFCcbQVfALXJR?H8PtzXMUW

![](_page_59_Figure_3.jpeg)

4x5 =

![](_page_59_Figure_4.jpeg)

![](_page_59_Figure_5.jpeg)

2x4 👟

3

Scale = 1:23.6			<u>}</u>			7	-6-4				,	ł	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 26 lb	FT = 20%	

#### LUMBER

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

REACTIONS (lb/size) 1=81/7-6-4, (min. 0-1-8), 3=53/7-6-4, (min. 0-1-8), 4=431/7-6-4, (min. 0-1-8)

Max Horiz 1=55 (LC 11)

Max Uplift 1=-6 (LC 15), 3=-30 (LC 20), 4=-64 (LC 14)

Max Grav 1=112 (LC 20), 3=144 (LC 21), 4=517 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-4=-358/130

WEBS

#### NOTES

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-1-4, Exterior(2E) 4-1-4 to 7-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 3) Ct=1.10

Unbalanced snow loads have been considered for this design. 4)

Gable requires continuous bottom chord bearing. 5)

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

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 7) any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 1, 30 lb uplift at joint 3 and 64 lb uplift at joint 4.

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

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 7-6-4 oc purlins. Rigid 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.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	VL05	Valley	1	1	Job Reference (optional)

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![](_page_60_Figure_3.jpeg)

![](_page_60_Figure_4.jpeg)

![](_page_60_Figure_5.jpeg)

![](_page_60_Figure_6.jpeg)

![](_page_60_Figure_7.jpeg)

Scale = 1:22.1

#### Plate Offsets (X, Y): [2:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

#### LUMBER

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

REACTIONS (lb/size) 1=123/3-6-4, (min. 0-1-8), 3=123/3-6-4, (min. 0-1-8)

Max Horiz 1=24 (LC 11)

Max Uplift 1=-12 (LC 14), 3=-9 (LC 15)

Max Grav 1=142 (LC 20), 3=134 (LC 21)

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

#### NOTES

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) Gable requires continuous bottom chord bearing.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 9 lb uplift at joint 3.

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.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-6-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

![](_page_61_Figure_0.jpeg)

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5, 5 lb uplift at joint 1 and 45 lb uplift at joint 6.

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

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

![](_page_62_Figure_0.jpeg)

FORCES

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-1-0, Exterior(2E) 4-1-0 to 5-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) Gable requires continuous bottom chord bearing.

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

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 4, 14 lb uplift at joint 1 and 29 lb uplift at joint 5.

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

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	VL08	Valley	1	1	Job Reference (optional)

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![](_page_63_Figure_3.jpeg)

3-6-15

![](_page_63_Figure_4.jpeg)

2x4 =

Scale = 1:20.2

#### Plate Offsets (X, Y): [2:0-2-8,Edge]

		-										
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 11 lb	FT = 20%

#### LUMBER

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

REACTIONS (lb/size) 1=143/3-6-15, (min. 0-1-8), 3=143/3-6-15, (min. 0-1-8), 4=143/3-6-15, (min. 0-1-8) Max Horiz 1=28 (LC 11)

1-4-11

Max Uplift 1=-14 (LC 14), 3=-10 (LC 15), 4=-10 (LC 15)

Max Grav 1=167 (LC 20), 3=158 (LC 21), 4=158 (LC 21)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) Gable requires continuous bottom chord bearing.

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

1-0-0

0-0-4

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 3, 14 lb uplift at joint 1 and 10 lb uplift at joint 3.

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.

LOAD CASE(S) Standard

BRACING TOP CHORD

#### TOP CHORD BOT CHORD

2x4 🖌

Structural wood sheathing directly applied or 3-7-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Job	Trus	5	Truss Type			Pl	Ply 165 Beechleaf-Roof-BB-2230										
21030029-A	VL0	9	Valley	Valley 1				Job I	Referer	nce (opti	onal)						
Carter Component	s, Sanford, NC, user			Run: 8.42 S De					rint: 8.420 S Dec 30 2020 MiTek Industries, Inc. Thu Mar 25 15								
				ID:g	ZaLWBWE	BunyvC	M1xwz3	358YzXV	V_x-IDD7	UdlliTo	SLv3Z3ZZCIFCa/	AQYyALnJR?H8PtzXMUW					
			1		1							12-4	I-2				
			4-0	-12	<i>.</i>			11-	10-15 10-3				7				
			+-0	-12				,-	10-5			0-5	-3				
				4	x5=												
	5-6-8 0-3-8	2-10-0	8 2x4 II 7 2x4 II		2 1 1 ××4 II			9 2 5 81	2x4 II 3 5T2 5 2x4 II			4 2 3x5 \$					
Scale = 1:33.8			<u>/</u>			12-4	-2						×				
<del></del>																	
Loading TCLL (roof)	(pst) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	TC	0.35	DEFL Vert(LL	)	in n/a	(loc) -	l/defl n/a	L/d 999	MT20	<b>GRIP</b> 244/190				
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL	.)	n/a	-	n/a	999						
BCLL	10.0 0.0*	Rep Stress Incr	YES IRC2018/TPI2014	WB Matrix-SH	0.12	Horiz(1	L)	0.00	4	n/a	n/a						
BCDL	10.0											Weight: 54 lb	FT = 20%				
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3 OTHERS 2x4 SP No.3 REACTIONS All bearings 12-4-2. (Ib) - Max Horiz 7=-155 (LC 10) Max Uplift All uplift 100 (Ib) or less at joint(s) 4, 7 except 5=-141 (LC 15) Max Grav All reactions 250 (Ib) or less at joint(s) 4 except 5=454 (LC 21), 6=313 (LC 21), 7=255 (LC 20)						<b>G</b> ORD ORD	S e R i i	itructura xcept e Rigid ce MiTek r nstalleo nstallat	al wood and vert iling dir ecomm d during tion gui	d sheathi ticals. rectly app nends tha g truss ei de.	ing dir <u>plied c</u> at Stal rection	rectly applied or or 10-0-0 oc bra bilizers and req n, in accordance	6-0-0 oc purlins, cing. uired cross bracing be a with Stabilizer				
FORCES WEBS	(lb) - Max. Co 3-5=-361/184	נבס בד), 7=255 (בס 20 20 pmp./Max. Ten All fo 1	orces 250 (lb) or less exe	cept when shown													
NOTES 1) Unbalance 2) Wind: ASC	ed roof live loads h CE 7-16; Vult=130	nave been considered	for this design. /asd=103mph; TCDL=6	.0psf; BCDL=6.0	psf; h=251	t; Cat. II;	Exp E	3; Enclo	osed; M	IWFRS (	envel	ope) exterior zo	ne and C-C				

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 7-0-12, Interior (1) 7-0-12 to 8-10-12, Exterior(2E) 8-10-12 to 11-10-12 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) Gable requires continuous bottom chord bearing.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide 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) 7, 4 except (jt=lb) 5=140.

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

Job		Truss		Truss Type		Qty Ply 165 Beechleaf-Roo					eaf-Ro	of-BB-2230			
21030029-/	A	VL10		Valley		1	1		.lob R	eferer	nce (or	tional)			
Carter Compone	ents, Sanford, N	C, user			Run: 8.42 S De	c 30 202	20 Print: 8.42	0 S D	)ec 30 2	020 Mi	Tek Ind	ustries,	Inc. Thu Mar 25	15:50:08	Page: 1
						ID:gZa	aLWBWBuny	vOM	1xwz35	8YzXW	/_x-IDD	7UdlliTo	SLv3Z3ZZCIFC	CaPQXmALcJR?H	8PtzXMUW
					4 0 12					9-10-15					
				1	4-0-12		,			5-10	)-3				
				I		I								0-5-3	
						4	x5 =								
					8 8 71										
	4-2-8	4-2-8	3-11-0	2x4 u 1		ST1			T2		9	2x4 <b>"</b> 3			
		-3-8		7 B1 4							4				
		U						$\bigotimes$		***		$\underbrace{\times}_{5}$		$\mathbf{X}$	
				2x4 II		2	x4 u					2x4 II	2x4	•	
Scale = 1:29.5				/			10-4	-2							
Loading TCLL (roof) Snow (Pf) TCDL		(psf) 20.0 20.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI TC BC WB	0.33 0.13 0.07	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	0	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190	
BCDL		0.0 10.0	Code	IRC2018/1PI2014					_				Weight: 42	lb FT = 20%	
LUMBER TOP CHORE BOT CHORE WEBS	) 2x4 SP N ) 2x4 SP N 2x4 SP N 2x4 SP N	5.2 5.2 5.3			BF TC BC	RACINO OP CHO	<b>3</b> DRD DRD	Str exe Ric	ructural cept er gid ceili	l wood nd vert	l sheat icals. ectly a	hing di pplied	rectly applied or 10-0-0 oc I	or 6-0-0 oc pur pracing.	lins,
OTHERS REACTIONS (lb)	2x4 SP No All bearings - Max Horiz 7	o.3 10-4-2. =-107 (L	.C 10)		(1.0.45)			Mi ins Ins	iTek re stalled stallatio	comm during on gui	iends t g truss de.	hat Sta erectio	bilizers and r n, in accorda	equired cross b nce with Stabili	racing be zer
	Max Uplift A Max Grav A	II uplift 1 II reactic =305 (I (	00 (lb) or less at joir ons 250 (lb) or less a C 21)_7=281 (LC 20	nt(s) 4, 7 except 5=-117 t joint(s) 4 except 5=39	(LC 15) 8 (LC 21),										
FORCES WEBS	(lb) - M 3-5=-34	ax. Com 45/181	np./Max. Ten All fo	rces 250 (lb) or less exc	cept when shown.										
NOTES 1) Unbalar 2) Wind: A Exterior for mem 3) TCLL: A	nced roof live lu SCE 7-16; Vul (2E) 0-1-12 to bers and force ASCE 7-16; Pr=	oads hav t=130mp 3-1-12, I es & MW =20.0 ps	ve been considered t oh (3-second gust) V Exterior(2R) 3-1-12 t /FRS for reactions st f (roof LL: Lum DOL:	or this design. asd=103mph; TCDL=6 o 6-10-12, Exterior(2E) nown; Lumber DOL=1.6 =1.15 Plate DOL=1.15)	.0psf; BCDL=6.0psf; 6-10-12 to 9-10-12 z 0 plate grip DOL=1.6 ; Pf=20.0 psf (Lum D	h=25ft zone; c 60 )OL=1.′	; Cat. II; Ex antilever le 15 Plate DC	p B; ft an DL=1	Enclos d right .15); Is	sed; M expos s=1.0;	WFRS ed ; er Rougł	i (enve nd verti n Cat B	ope) exterior cal left and rig ; Fully Exp.; 0	zone and C-C ght exposed;C-( Ce=0.9; Cs=1.0(	C 0;
Ct=1.10 4) Unbalar 5) Gable re 6) This true 7) * This tr	) nced snow load equires continu ss has been de uss has been de	ds have l lous bott esigned f	been considered for tom chord bearing. for a 10.0 psf bottom	this design. I chord live load noncor	icurrent with any othe	er live l	oads.	-00 +-	all by 2	-00-04	) wide	will fit I	netween the k	ottom chord an	nd
<ul> <li>any othe</li> <li>8) Provide</li> <li>9) This true</li> </ul>	er members. mechanical co ss is designed	onnection in accor	n (by others) of truss dance with the 2018	to bearing plate capab International Residenti	le of withstanding 10 al Code sections R5	0 lb up 02.11.1	lift at joint(s and R802	s) 7, .10.2	4 exce 2 and re	pt (jt=	lb) 5=1	16. andard	ANSI/TPI 1.	outom choru ar	iu
LOAD CASE	(S) Standa	ard													

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	VL11	Valley	1	1	Job Reference (optional)

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![](_page_66_Figure_3.jpeg)

4x5 =

![](_page_66_Figure_4.jpeg)

![](_page_66_Figure_5.jpeg)

8-6-12

3x5 🛩

Scale = 1:24.7

												1	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	9	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 30 lb	FT = 20%	

#### LUMBER

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

REACTIONS All bearings 8-6-12.

(lb) - Max Horiz 1=-63 (LC 10)

Max Uplift	All uplift 100 (lb) or less at joint(s) 3, 4, 9 except 1=-146 (LC
	21)
Max Grav	All reactions 250 (lb) or less at joint(s) 1, 3, 9 except 4=871 (LC
	21)

FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-152/498, 2-3=-89/548
BOT CHORD	1-4=-400/145, 3-4=-400/145
WEBS	2-4=-728/189
NOTES	

#### NC

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior(2E) -0-2-10 to 2-9-6, Exterior(2R) 2-9-6 to 5-4-2, Exterior(2E) 5-4-2 to 8-4-2 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

5) Gable requires continuous bottom chord bearing.

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

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 7) any other members.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 3 except (jt=lb) 1=145. 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)

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 8-4-8 oc purlins. Rigid 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.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	VL12	Valley	1	1	Job Reference (optional)

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![](_page_67_Figure_3.jpeg)

![](_page_67_Figure_4.jpeg)

![](_page_67_Figure_5.jpeg)

![](_page_67_Figure_6.jpeg)

4-6-12

0----

Scale = 1:20.4		-			1						1		
_oading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 15 lb	FT = 20%	

L	U	м	в	Е	R
_	_		_	_	

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

REACTIONS (lb/size) 1=51/4-6-12, (min. 0-1-8), 3=51/4-6-12, (min. 0-1-8),

4=264/4-6-12, (min. 0-1-8)

Max Horiz 1=-32 (LC 10)

Max Uplift 1=-5 (LC 14), 3=-11 (LC 15), 4=-22 (LC 14)

Max Grav 1=82 (LC 20), 3=82 (LC 21), 4=264 (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.

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

5) Gable requires continuous bottom chord bearing.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 11 lb uplift at joint 3 and 22 lb uplift at joint 4.

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.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 4-6-12 oc purlins. Rigid 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.

![](_page_68_Figure_0.jpeg)

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 8 except (jt=lb) 12=134, 10=134.

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.

![](_page_69_Figure_0.jpeg)

![](_page_70_Figure_0.jpeg)

- Ct=1.10
- 4) Unbalanced snow loads have been considered for this design
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide 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) 1 except (jt=lb) 8=108, 6=106.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	165 Beechleaf-Roof-BB-2230
21030029-A	VL16	Valley	1	1	Job Reference (optional)

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![](_page_71_Figure_3.jpeg)

4x5 =

2x4 I

![](_page_71_Figure_4.jpeg)

![](_page_71_Figure_5.jpeg)

Structural wood sheathing directly applied or 7-11-4 oc purlins.

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

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

Installation guide.

3x5 💊

Scale = 1:24			<u> </u>				11-4					$\neq$	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	тс	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 27 lb	FT = 20%	

BRACING TOP CHORD

BOT CHORD

LUMBER	L	υN	IB	EF	2
--------	---	----	----	----	---

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

**REACTIONS** (lb/size) 1=38/7-11-4, (min. 0-1-8), 3=38/7-11-4, (min. 0-1-8), 4=558/7-11-4, (min. 0-1-8)

4=558/7-11-4, (min Max Horiz 1=-58 (LC 12)

Max Horiz 1=-58 (LC 12)

Max Uplift 1=-24 (LC 21), 3=-24 (LC 20), 4=-63 (LC 14)

Max Grav 1=105 (LC 20), 3=105 (LC 21), 4=589 (LC 21)

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

TOP CHORD 1-2=-94/281, 2-3=-93/281

WEBS 2-4=-426/188

VVEDS

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-11-10, Exterior(2E) 4-11-10 to 7-11-10 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) Gable requires continuous bottom chord bearing.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1, 24 lb uplift at joint 3 and 63 lb uplift at joint 4.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
| Job        | Truss | Truss Type | Qty | Ply | 165 Beechleaf-Roof-BB-2230 |
|------------|-------|------------|-----|-----|----------------------------|
| 21030029-A | VL17  | Valley     | 1   | 1   | Job Reference (optional)   |

Carter Components, Sanford, NC, user

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3-11-4

2x4 💋

2x4 👟

Scale = 1:20

## Plate Offsets (X, Y): [2:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 11 lb	FT = 20%

## LUMBER

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

**REACTIONS** (lb/size) 1=157/3-11-4, (min. 0-1-8), 3=157/3-11-4, (min. 0-1-8)

Max Horiz 1=27 (LC 13)

Max Uplift 1=-14 (LC 14), 3=-14 (LC 15)

Max Grav 1=182 (LC 20), 3=182 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-263/97

## TOP CHORD

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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

5) Gable requires continuous bottom chord bearing.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8)

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 14 lb uplift at joint 3. 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.

LOAD CASE(S) Standard

BRACING TOP CHORD

## BOT CHORD

Structural wood sheathing directly applied or 3-11-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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