

Boise Cascade	Doub	le 1-3/4" x	(9-1/4" V	ERSA-L	AM® 2	.0 310	0 SP			P	ASSED
	2nd	Floor\Drop	oed Beams	s\BM1-2(i1	338) (Fl	oor Be	am)				
BC CALC® Member F			Dry 1 spar	•	,		,	No	ovember	25, 201	9 17:03:32
Build 7295	•		J	1						-, -	
Job name:	NHZ014			File name	e:						
Address:				Descriptio	on: 2nd	d Floor\[Dropped	d Beams [\]	BM1-2(i1338)	
City, State, Zip:				Specifier:						,	
•	A&G			Designer:							
	ESR-1040			Company							
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2											
<i>к</i> В1			11-	-03-00							
			orizontal Pro	duct Length	= 11-03-00)					DL
	ary (Down / Uplift		0		14	live el		Dee	6 1 1 1 1 1		
Bearing B1, 2-5/16"	Live	Dead 614 / 0		now 61 / 0		lind		ROO	f Live		
B2, 2-11/16"		617 / 0		54/0							
52, 2 11,10		01170		5170							
Load Summary						Live	Dead	Snow	Wind	Roof	Tributary
Tag Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Live 125%	
0 Self-Weight	Unf. Lin. (00-00-00	11-03-00	Тор	10070	9	11070		0/0	00-00-00
1 User Load	Unf. Lin. (00-00-00	11-03-00	Тор		100	100			n\a
2 User Load_Unb_		,	00-00-00	11-03-00	Тор			100			n\a
3 User Load Unb	- ,	,	00-00-00	11-03-00	Тор			100			n\a
4 User Load Unb	- ,	,	00-00-00	11-03-00	Тор			100			n∖a
5 User Load_Unb_	- ,	,	00-00-00	11-03-00	Тор			100			n∖a
				11 00 00	100			100			ma
Controls Summa		% Allow		Juration	Case	Locat					
Pos. Moment	3143 ft-lbs	36.5%		15%	1	05-07					
End Shear	973 lbs	13.8%		15%	1	00-11					
Total Load Deflection	L/894 (0.147")	26.9%		la	1	05-07					
Live Load Deflection	L/999 (0.07")	n\a		la	6	05-07					
Max Defl.	0.147"	9.8%	n	la	1	05-07	7-05				
Span / Depth	14.2										
			% Allow	% Allow					osure		
Bearing Support	S Dim. (LxW)	Value	Support	Member	Materia	I					Software is End User
B1 Column	2-5/16" x 3-1/2"	1174 lbs	20.0%	19.3%	Unspe	cified				ent (EULA	
B2 Column	2-11/16" x 3-1/2"	1181 lbs	17.3%	16.7%	Unspe	cified		Comple	teness ar	nd accura	cy of input
										d and veri	fied by a appropriate
Notes											acy, prior to
-	ninimum (L/240) Total									n such ou bility for a	tput as a particular
-	ninimum (L/360) Live lo										re is based on
-	y (1.5") Maximum Tota							building	code-acc	cepted de	sign
	unbraced length of To	p: 11-03-00, E	Bottom: 11-0	3-00.						nalysis me ise Casca	
-	s based on IBC 2015.					_					ade 5 must be in
Unpalanced snow loa	ds determined from bu	anding geome	try were use	a in selecte	a product'	S		-		current In	

Unbalanced snow loads determined from building geometry were used in selected product's verification.

Design based on Dry Service Condition.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Guide and applicable building codes. To

obtain Installation Guide or ask questions, please call (800)232-0788 before installation.



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Triple 2 x 12 SP #2



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$ \begin{array}{c} & \downarrow & \downarrow & 5 \\ & \downarrow & \downarrow & 4 \\ & \downarrow & 4 \\ & \downarrow & 4 \\ & \downarrow & 2 \\ & \downarrow & 1 \\ & \downarrow & 2 \\ & \downarrow & 1 \\ & \downarrow & 2 \\ & \downarrow & 1 \\ & \downarrow & 2 \\ & \downarrow & 1 \\ & \downarrow & 2 \\ & 12-00-\\ & 200-00 \\ \hline & 12-00-\\ \hline & $	File name Descriptio Specifier: Designer: Company C	ELOC. Top Top Top Top Top	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ 00 Wind Live	Dead 90%	d Beams	\BM3-3(i1599)	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ B2 Tributary 00-00-00 n\a
$ \begin{array}{c} & \downarrow & \downarrow & 5 \\ \hline & \downarrow & \downarrow & 4 \\ \hline & \downarrow & \downarrow & 3 \\ \hline & \downarrow & \downarrow & 1 \\ \hline & \downarrow & \downarrow & 1 \\ \hline & \downarrow & \downarrow & 0 \\ \hline & 12-00- \\ \hline zontal Produ \\ \hline & 12-00- \\ \hline$	Descriptic Specifier: Designer: Company	ELOC. Top Top Top Top Top	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ 00 Wind Live	Dead 90%	• • • • • • • • • • • • • • • • • • •	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	+ + + + + + + + + + + + + + +	Tributary 00-00-00 n\a
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	Designer: Company	= 12-00 -	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
$ \begin{array}{c} $	Company	r: ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
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		<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
↓ 3 ↓ 2 ↓ 1 ↓ 0 12-00- zontal Produ 1428 1212 Start 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1		<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
		<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
t t 1 t t 1		<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
12-00- zontal Produ 1428 1212 Start 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	ct Length w 3 / 0 2 / 0 End 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00	<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
zontal Produ <u>Snov</u> 1428 1212 <u>Start</u> 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	ct Length w 3 / 0 2 / 0 End 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00	<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
zontal Produ <u>Snov</u> 1428 1212 <u>Start</u> 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	ct Length w 3 / 0 2 / 0 End 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00	<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
zontal Produ <u>Snov</u> 1428 1212 <u>Start</u> 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	ct Length w 3 / 0 2 / 0 End 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00	<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
<u>Start</u> 1428 1212 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	<i>w</i> 3 / 0 2 / 0 <i>End</i> 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00	<u>Loc.</u> Тор Тор Тор Тор	Wind Live	90% 12	Snow 115% 220 220	Wind	Live	Tributary 00-00-00 n\a
1428 1212 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	3 / 0 2 / 0 End 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00	<u>Loc.</u> Тор Тор Тор Тор	Live	90% 12	Snow 115% 220 220	Wind	Live	00-00-00 n\a
1428 1212 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	3 / 0 2 / 0 End 12-00-00 12-00-00 12-00-00 12-00-00 12-00-00	<u>Loc.</u> Тор Тор Тор Тор	Live	90% 12	Snow 115% 220 220	Wind	Live	00-00-00 n\a
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00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	2-00-00 2-00-00 2-00-00 2-00-00 2-00-00	Тор Тор Тор Тор		90% 12	115% 220 220		Live	00-00-00 n\a
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00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	2-00-00 2-00-00 2-00-00 2-00-00 2-00-00	Тор Тор Тор Тор	100%	12	220 220	160%		n\a
00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1 00-00-00 1	2-00-00 2-00-00 2-00-00 2-00-00	Тор Тор Тор			220			n\a
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00-00-00 1		Ton			220			n∖a
		Тор			220			n\a
	2-00-00	Тор			220			n\a
le Dur	ation	Case	e Loca	tion				
115	5%	1	06-0	5-14				
115	5%	1	03-0	3-10				
n∖a		1	06-0	5-14				
n∖a		6						
n∖a		1	06-0	5-14				
115	5%							
Allow %	6 Allow							
6% 5	.9%	Unsp	ecified					
	n\a n\a 115 115 Allow % upport <u>M</u> 2% 4	n\a n\a 115% 115% Allow % Allow upport <u>Member</u> 2% 4.1%	n\a 6 n\a 1 115% 115% Allow % Allow upport Member Mater 2% 4.1% Unsp	n\a 6 06-0 n\a 1 06-0 115% 115% Allow % Allow upport Member Material 2% 4.1% Unspecified	n\a 6 06-05-14 n\a 1 06-05-14 115% 115% Allow % Allow upport Member Material 2% 4.1% Unspecified	n\a 6 06-05-14 n\a 1 06-05-14 115% 115% Allow % Allow upport Member Material 2% 4.1% Unspecified	n\a 6 06-05-14 n\a 1 06-05-14 115% 115% Allow % Allow upport Member Material 2% 4.1% Unspecified	n\a 6 06-05-14 n\a 1 06-05-14 115% 115% Allow % Allow upport Member Member Material 2% 4.1%



BC CALC® Member Report

Triple 2 x 12 SP #2



2nd Floor\Dropped Beams\BM3-3(i1599) (Floor Beam) Dry | 1 span | No cant.

November 25, 2019 17:03:32

Build 7295	·		
Job name:	NHZ014	File name:	
Address:		Description:	2nd Floor\Dropped Beams\BM3-3(i1599)
City, State, Zip:		Specifier:	
Builder:	A&G	Designer:	
Code reports:	SPIB	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

BC CALC® analysis is based on IBC 2015.

Unbalanced snow loads determined from building geometry were used in selected product's verification.

Design based on Dry Service Condition.

The analysis of solid sawn wood members is in accordance with the NDS and is limited to the output shown above. All other support and design for these products, including but not limited to notching, connections, installation, and engineer/architect certification is the responsibility of the project's design professional of record.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



Triple 2 x 12 SP #1



2nd Floor\Dropped Beams\DB3-3(i1578) (Floor Beam)

BC CALC® Mem	ber Report	Dry 1 span No cant.			, ,						Ν	love	mbe	r 25,	201	9 17	2:03:32					
Build 7295 Job name: Address:	NHZ014					File name: Description: 2nd F		Floor	\Drc	oppe	ed B	eam	s\DE	33-3((i157	8)						
City, State, Zip:								Specifi														
Builder:	A&G							Design														
Code reports:	SPIB						(Compa	ny:													
$ \begin{array}{c} 23 \\ 24 \\ 20 \\ 19 \\ 19 \\ 10 \\ 12 \\ 10 \\ 10 \\ 10 \\ 9 \\ 10 \\ 9 \\ 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 2 \\ 4 \\ 4 \\ 3 \\ 2 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4$								€A 53 54 53 53 53 53 54 53 53 53 54 53 53 53 53 53 54 53 54 52 <td></td>														
^и В1							11-11-	00														B2
21			ſ	Fotal H	lorizo	ontal	Produ	ct Leng	th = 1 ⁻	1-11	-00											DŁ

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live	
B1, 24-3/4"	196 / 0	3079 / 0	2516 / 0	369 / 2201	2366 / 1	
B2, 19-1/4"	181 / 0	2656 / 0	2045 / 0	300 / 1714	1970 / 0	

Loa	ad Summary						Live	Dead	Snow	Wind	Roof Live	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	125%	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	11-11-00	Тор		12				00-00-00
1	Rim1(i1580)	Unf. Lin. (lb/ft)	L	00-00-00	11-11-00	Тор	32	101				n\a
2	Rim1(i1580)	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор		488	488		488	n\a
3	Rim1(i1580)_Unb_N	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор			550			n\a
4	Rim1(i1580)_Unb_S	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор			326			n\a
5	Rim1(i1580)_Unb_E	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор			560			n\a
6	Rim1(i1580)_Unb_W	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор			560			n∖a
7	Rim1(i1580)_N_EX+	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор				4		n\a
8	Rim1(i1580)_S_EX+	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор				15		n\a
9	Rim1(i1580)_N_INT-	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор				83		n∖a
10	Rim1(i1580)_S_INT-	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор				83		n\a
11	Rim1(i1580)_E_INT-	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор				83		n∖a
12	Rim1(i1580)_W_INT-	Unf. Lin. (lb/ft)	L	00-00-00	01-01-04	Тор				83		n∖a
13	Rim1(i1580)	Conc. Pt. (lbs)	L	00-05-04	00-05-04	Тор					-1	n\a
14	Rim1(i1580)_N_EX-	Conc. Pt. (lbs)	L	00-05-04	00-05-04	Тор				-288		n∖a
15	Rim1(i1580)_S_EX-	Conc. Pt. (lbs)	L	00-05-04	00-05-04	Тор				-243		n∖a
16	Rim1(i1580)_E_EX+	Conc. Pt. (lbs)	L	00-05-04	00-05-04	Тор				-564		n\a
17	Rim1(i1580)_E_EX-	Conc. Pt. (lbs)	L	00-05-04	00-05-04	Тор				-564		n∖a



Triple 2 x 12 SP #1



2nd Floor\Dropped Beams\DB3-3(i1578) (Floor Beam)

November 25 2019 17:03:32

BC CALC® Memb	er Report	Dry 1 span No cant.	November 25, 2019 17:03:3
Build 7295			
Job name:	NHZ014	File name:	
Address:		Description:	2nd Floor\Dropped Beams\DB3-3(i1578)
City, State, Zip:		Specifier:	
Builder:	A&G	Designer:	
Code reports:	SPIB	Company:	

Live Dead Snow Wind Roof Tributary Load Summary Live Tag Description 100% 90% 115% 160% Ref. 125% Load Type Start End Loc 18 Rim1(i1580) W EX+ 00-05-04 -394 Conc. Pt. (lbs) L 00-05-04 Тор n∖a -393 19 Rim1(i1580)_W_EX-Conc. Pt. (lbs) L 00-05-04 00-05-04 Top n∖a 20 00-05-04 -110 Rim1(i1580) N INT+ Conc. Pt. (lbs) L 00-05-04 Top n\a Rim1(i1580) S INT+ Conc. Pt. (lbs) 00-05-04 00-05-04 -110 21 L Top n\a 22 Rim1(i1580)_E_INT+ Conc. Pt. (lbs) L 00-05-04 00-05-04 Top -110 n\a Conc. Pt. (lbs) 23 Rim1(i1580) W INT+ L 00-05-04 00-05-04 Top -110 n\a 407 24 Rim1(i1580) Trapezoidal (lb/ft) L 01-05-04 Тор 392 392 n∖a 11-05-04 379 381 392 25 Rim1(i1580)_Unb_N Trapezoidal (lb/ft) L 01-05-04 400 Top n\a 11-05-04 375 Trapezoidal (lb/ft) L 26 Rim1(i1580) Unb S 01-05-04 Top 229 n∖a 11-05-04 217 Rim1(i1580) Unb E Trapezoidal (lb/ft) L 27 01-05-04 Top 407 n\a 11-05-04 381 28 Rim1(i1580)_Unb_W Trapezoidal (lb/ft) L 01-05-04 Top 407 n\a 11-05-04 381 29 Rim1(i1580) N EX+ Unf. Lin. (lb/ft) 01-05-04 11-05-04 3 L Top n\a 30 11 Rim1(i1580)_S_EX+ Trapezoidal (lb/ft) L 01-05-04 Top n∖a 11-05-04 10 Trapezoidal (lb/ft) L 01-05-04 60 31 Rim1(i1580)_N_INT-Тор n\a 11-05-04 56 32 Rim1(i1580)_S_INT-Trapezoidal (lb/ft) L 01-05-04 Top 60 n\a 11-05-04 56 Rim1(i1580)_E_INT-Trapezoidal (lb/ft) L 33 01-05-04 Top 60 n\a 11-05-04 56 Rim1(i1580)_W_INT-Trapezoidal (lb/ft) L 60 34 01-05-04 Top n\a 11-05-04 56 Rim1(i1580) N EX-Conc. Pt. (lbs) 02-05-04 02-05-04 -346 35 L Top n\a Conc. Pt. (lbs) -293 36 Rim1(i1580)_S_EX-L 02-05-04 02-05-04 Top n\a 37 Rim1(i1580) E EX+ Conc. Pt. (lbs) L 02-05-04 02-05-04 Top -660 n\a 38 Conc. Pt. (lbs) L 02-05-04 -692 Rim1(i1580)_E_EX-02-05-04 Top n\a 39 Rim1(i1580) W EX+ Conc. Pt. (lbs) L 02-05-04 02-05-04 Top -425 n\a 40 Rim1(i1580) W EX-Conc. Pt. (lbs) L 02-05-04 02-05-04 -457 Top n\a 41 Rim1(i1580)_N_INT+ Conc. Pt. (lbs) L 02-05-04 02-05-04 Top -118 n\a 42 Rim1(i1580)_S_INT+ Conc. Pt. (lbs) L 02-05-04 02-05-04 Top -118 n\a 43 Rim1(i1580) E INT+ Conc. Pt. (lbs) L 02-05-04 02-05-04 Top -118 n\a 44 Rim1(i1580)_W_INT+ Conc. Pt. (lbs) L 02-05-04 02-05-04 Top -118 n\a -330 45 Rim1(i1580)_N_EX-Conc. Pt. (lbs) L 04-05-04 04-05-04 Top n∖a Rim1(i1580) S EX-Conc. Pt. (lbs) 04-05-04 04-05-04 -279 46 L Top n∖a 47 Rim1(i1580)_E_EX+ Conc. Pt. (lbs) L 04-05-04 04-05-04 Top -647 n\a 48 Rim1(i1580) E EX-Conc. Pt. (lbs) L 04-05-04 04-05-04 -670 Top n\a Rim1(i1580)_W_EX+ 49 Conc. Pt. (lbs) L 04-05-04 04-05-04 Тор -417 n∖a 50 Rim1(i1580) W EX-Conc. Pt. (lbs) L 04-05-04 04-05-04 Top -440 n\a 51 Rim1(i1580)_N_INT+ Conc. Pt. (lbs) L 04-05-04 04-05-04 Top -116 n\a 52 Rim1(i1580)_S_INT+ Conc. Pt. (lbs) L 04-05-04 04-05-04 Top -116 n\a 53 Rim1(i1580) E INT+ Conc. Pt. (lbs) L 04-05-04 04-05-04 Top -116 n\a Rim1(i1580)_W_INT+ 54 04-05-04 Conc. Pt. (lbs) L 04-05-04 Top -116 n\a 55 Rim1(i1580) N EX-Conc. Pt. (lbs) L 06-05-04 06-05-04 Top -330 n\a 56 Rim1(i1580) S EX-Conc. Pt. (lbs) L 06-05-04 06-05-04 Top -279 n\a



Triple 2 x 12 SP #1



Tributary

2nd Floor\Dropped Beams\DB3-3(i1578) (Floor Beam)

November 25, 2019 17:03:32

Roof

BC CALC® Memb	er Report	Dry 1 span No cant.	November 25, 2019 17:03:3
Build 7295			
Job name:	NHZ014	File name:	
Address:		Description:	2nd Floor\Dropped Beams\DB3-3(i1578)
City, State, Zip:		Specifier:	
Builder:	A&G	Designer:	
Code reports:	SPIB	Company:	

Live

Dead

Snow Wind

Load Summary

	la caminary										Live	-
Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	125%	
57	Rim1(i1580)_E_EX+	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-647		n\a
58	Rim1(i1580)_E_EX-	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-670		n\a
59	Rim1(i1580)_W_EX+	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-417		n\a
60	Rim1(i1580)_W_EX-	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-440		n\a
61	Rim1(i1580)_N_INT+	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-116		n\a
62	Rim1(i1580)_S_INT+	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-116		n\a
63	Rim1(i1580)_E_INT+	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-116		n\a
64	Rim1(i1580)_W_INT+	Conc. Pt. (lbs)	L	06-05-04	06-05-04	Тор				-116		n\a
65	Rim1(i1580)_N_EX-	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-330		n∖a
66	Rim1(i1580)_S_EX-	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-279		n∖a
67	Rim1(i1580)_E_EX+	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-647		n\a
68	Rim1(i1580)_E_EX-	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-670		n∖a
69	Rim1(i1580)_W_EX+	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-390		n\a
70	Rim1(i1580)_W_EX-	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-413		n∖a
71	Rim1(i1580)_N_INT+	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-116		n∖a
72	Rim1(i1580)_S_INT+	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-116		n∖a
73	Rim1(i1580)_E_INT+	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-116		n∖a
74	Rim1(i1580)_W_INT+	Conc. Pt. (lbs)	L	08-05-04	08-05-04	Тор				-116		n∖a
75	Rim1(i1580)_N_EX-	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-319		n∖a
76	Rim1(i1580)_S_EX-	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-270		n∖a
77	Rim1(i1580)_E_EX+	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-627		n∖a
78	Rim1(i1580)_E_EX-	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-649		n∖a
79	Rim1(i1580)_W_EX+	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-340		n∖a
80	Rim1(i1580)_W_EX-	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-362		n∖a
81	Rim1(i1580)_N_INT+	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-112		n∖a
82	Rim1(i1580)_S_INT+	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-112		n∖a
83	Rim1(i1580)_E_INT+	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-112		n∖a
84	Rim1(i1580)_W_INT+	Conc. Pt. (lbs)	L	10-05-04	10-05-04	Тор				-112		n∖a

Controls Summary	Value	% Allowable	Duration	Case	Location
Pos. Moment	7832 ft-lbs	86.1%	115%	6	06-02-04
End Shear	3601 lbs	53.0%	115%	6	03-00-00
Total Load Deflection	L/999 (0.116")	n\a	n∖a	6	06-02-04
Live Load Deflection	L/999 (0.051")	n\a	n∖a	309	06-02-04
Max Defl.	0.116"	n∖a	n∖a	6	06-02-04
Span / Depth	8.9				
Dist. Load (B1)	1148.74 lb/ft	3.3%	115%		
Dist. Load (B2)	865.43 lb/ft	2.5%	115%		

Bearing	g Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate	24-3/4" x 4-1/2"	5595 lbs	6.9%	8.9%	Unspecified
B2	Wall/Plate	19-1/4" x 4-1/2"	4701 lbs	12.8%	9.6%	Unspecified



BC CALC® Member Report

Triple 2 x 12 SP #1



2nd Floor\Dropped Beams\DB3-3(i1578) (Floor Beam) Dry | 1 span | No cant.

November 25, 2019 17:03:32

Build 7295	•	 •	
Job name:	NHZ014	File name:	
Address:		Description:	2nd Floor\Dropped Beams\DB3-3(i1578)
City, State, Zip:		Specifier:	
Builder:	A&G	Designer:	
Code reports:	SPIB	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2015.

Unbalanced snow loads determined from building geometry were used in selected product's verification.

Wind loads determined from building geometry were used in selected product's verification. Design based on Dry Service Condition.

The analysis of solid sawn wood members is in accordance with the NDS and is limited to the output shown above. All other support and design for these products, including but not limited to notching, connections, installation, and engineer/architect certification is the responsibility of the project's design professional of record.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

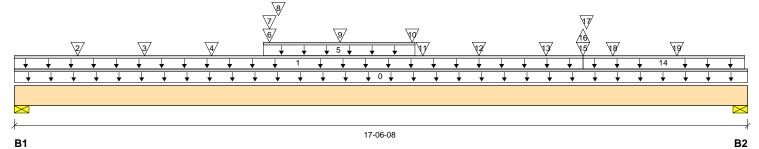
BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



Triple 1-3/4" x 14" VERSA-LAM® 2.0 3100 SP



BC CALC® Member Report		d Floor\Floor Beams\FB1-3(i1556) (Dry 1 span No cant.	November 25, 2019 17:03:32
Build 7295			
Job name:	NHZ014	File name:	
Address:		Description:	2nd Floor\Floor Beams\FB1-3(i1556)
City, State, Zip:		Specifier:	
Builder:	A&G	Designer:	
Code reports:	ESR-1040	Company:	



Total Horizontal Product Length = 17-06-08

Reaction Summary (Down / Uplift) (lbs) Bearing Live Dead Snow Wind **Roof Live** B1, 4-1/2" 2800 / 61 1706 / 0 B2, 5-1/2" 3146 / 230 2205 / 0

Load Summary						Live	Dead	Snow	Wind	Roof Live	Tributary	
Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	125%	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	17-06-08	Тор		21				00-00-00
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	13-07-04	Тор	28	7				n∖a
2	FJ-3(i1400)	Conc. Pt. (lbs)	L	01-06-03	01-06-03	Back	489	225				n\a
3	FJ-3(i1402)	Conc. Pt. (lbs)	L	03-01-06	03-01-06	Back	489	207				n\a
4	FJ-3(i1453)	Conc. Pt. (lbs)	L	04-08-10	04-08-10	Back	489	228				n∖a
5	FC2 Floor Material	Unf. Lin. (lb/ft)	L	05-11-08	09-07-00	Тор		22				n∖a
6	28(i163)	Conc. Pt. (lbs)	L	06-01-04	06-01-04	Тор		28				n\a
7	FC2 Floor Material	Conc. Pt. (lbs)	L	06-01-04	06-01-04	Тор		23				n\a
8	FJ-3(i1379)	Conc. Pt. (lbs)	L	06-03-13	06-03-13	Back	470	332				n∖a
9	FJ-3(i1439)	Conc. Pt. (lbs)	L	07-09-08	07-09-08	Back	489	207				n∖a
10	FJ-3(i1387)	Conc. Pt. (lbs)	L	09-06-03	09-06-03	Back	508	323				n∖a
11	24(i160)	Conc. Pt. (lbs)	L	09-09-04	09-09-04	Тор		64				n∖a
12	FJ-3(i1449)	Conc. Pt. (lbs)	L	11-01-06	11-01-06	Back	489	277				n∖a
13	FJ-3(i1413)	Conc. Pt. (lbs)	L	12-08-10	12-08-10	Back	489	296				n∖a
14	FC2 Floor Material	Unf. Lin. (lb/ft)	L	13-07-04	17-05-10	Тор	28	7				n\a
15	FJ-7-2(i1546)	Conc. Pt. (lbs)	L	13-07-04	13-07-04	Front	488	257				n∖a
16	FJ-7-2(i1546)	Conc. Pt. (lbs)	L	13-07-04	13-07-04	Front	-291					n∖a
17	29(i164)	Conc. Pt. (lbs)	L	13-08-04	13-08-04	Тор		32				n∖a
18	FJ-3(i1396)	Conc. Pt. (lbs)	L	14-03-13	14-03-13	Back	479	294				n\a
19	FJ-4-2(i1394)	Conc. Pt. (lbs)	L	15-10-03	15-10-03	Back	585	544				n\a

Controls Summary	Value	% Allowable	Duration	Case	Location
Pos. Moment	21265 ft-lbs	48.8%	100%	1	09-06-03
End Shear	5264 lbs	37.7%	100%	1	15-11-00
Total Load Deflection	L/446 (0.453")	53.8%	n∖a	1	08-10-07
Live Load Deflection	L/739 (0.273")	48.7%	n∖a	3	08-10-07
Max Defl.	0.453"	30.2%	n∖a	1	08-10-07
Span / Depth	14.4				

Bearing	g Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate	4-1/2" x 5-1/4"	4507 lbs	44.9%	25.4%	Unspecified
B2	Wall/Plate	5-1/2" x 5-1/4"	5352 lbs	43.6%	24.7%	Unspecified



BC CALC® Member Report

Triple 1-3/4" x 14" VERSA-LAM® 2.0 3100 SP



2nd Floor\Floor Beams\FB1-3(i1556) (Floor Beam) Dry | 1 span | No cant.

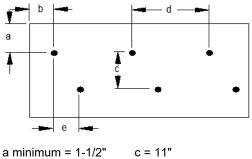
November 25, 2019 17:03:32

Build 7295	·			
Job name:	NHZ014	File name:		
Address:		Description:	2nd Floor\Floor Beams\FB1-3(i1556)	
City, State, Zip:		Specifier:		
Builder:	A&G	Designer:		
Code reports:	ESR-1040	Company:		

Notes

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria. Design meets arbitrary (1.5") Maximum Total load deflection criteria. Calculations assume member is fully braced. BC CALC® analysis is based on IBC 2015. Design based on Dry Service Condition.

Connection Diagram: Full Length of Member



b minimum = 4"

d = 12" e minimum = 1"

Calculated Side Load = 951.0 lb/ft Install screws with screw heads in the loaded ply. Connectors are: SDS $1/4 \times 4-1/2$

Disclosure

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