Boise Cascade		Quadru	ple 1-3/4"	x 11-7/8	B" VERSA	-LAM	2.0 :	3100 S	6P		P	ASSED
				BM7-4 (Roof Beam	ı)						
BC CALC® Member Build 7082	Report			Dry 1 spa	an No cant.					July	/ 10, 201	9 07:28:30
Job name:	Ellington				File name							
Address:					Descriptio							
City, State, Zip:					Specifier:							
	LAMCO				Designer		-0					
Code reports:	ESR-1040				Company	<u>. Dr</u>	.9					
				4	0							
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	+ + +	+ + +	+ + +			+ + +	· •	+ +	+ +	+ +	+ +	+ +
+ + + +	* * *	+ + +	+ + +	+ + -		+ + +	<u> </u>	* *	+ +	+ +	+ +	+ +
×												
B1				1	13-07-08							B2
				orizontal Pr	oduct Length	= 13-07-0	8					
Reaction Summa Bearing	ary (Dow _{Live}	/n / Uplift	Dead		Snow	v	Vind			f Live		
B1, 3-1/2"			5474 / 0							0/0		
B2, 3-1/2"			5474 / 0						531	0/0		
Load Summary							Live	Dead	Snow	Wind	Roof Live	Tributary
Tag Description		Load Type			End	Loc.	100%	90%	115%	160%	125%	
0 Self-Weight		Unf. Lin. (,	00-00-00		Тор		24			70.4	00-00-00
1 A02 Trusses		Unf. Lin. (,	00-00-00		Тор		734			734	n\a
2 J02 Trusses		Unf. Lin. (lb/ft) L	00-00-00	0 13-07-08	Тор		46			46	n\a
Controls Summa	a ry Valu	ue	% Allow	vable	Duration	Case	Loca	tion				
Pos. Moment		305 ft-lbs	64.5 %		125%	4	06-0	9-12				
End Shear	875	6 lbs	44.4 %		125%	4	01-0	3-06				
Total Load Deflection	L/28	88 (0.548")	62.4 %		n∖a	4	06-0	9-12				
Live Load Deflection	L/58	86 (0.27")	41.0 %		n∖a	5	06-0	9-12				
Max Defl.	0.54	48"	54.8 %		n∖a	4	06-0	9-12				
Span / Depth	13.3	3										
Bearing Support	ts Dim. (L	xW)	Value	% Allow Support	% Allow Member	Materia	al					
B1 Wall/Plate	3-1/2" >		10785 lbs	n\a	58.7 %	Unspe						
B2 Wall/Plate	3-1/2" >		10785 lbs	n\a	58.7 %	Unspe						
Cautions												
For roof members wit	h slope (1/	4)/12 or less	s final design	must ensur	e that pondir	instabi	litv will r	ot				
occur.	I (T.	5		1	5	5					
For roof members wit load.	h slope (1/	2)/12 or less	s final design	must accou	unt for Rain-o	n-Snow s	surcharg	le				
Notes												
Design meets Code r	ninimum (L	/180) Total	load deflectio	n criteria.								
Design meets Code r	,	,										
Design meets arbitrar	,			n criteria.								
Calculations assume	member is	stully braced	1.									

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

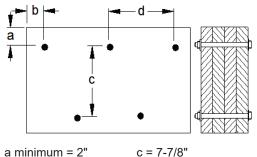
Beams 7 inches wide will be assumed to be either top-loaded only, or equally loaded from each side. Bolts are assumed to be Grade A307 or Grade 2 or higher.

Member has no side loads.

		BM7-4 (Roof Beam)	
BC CALC® Membe	er Report	Dry 1 span No cant.	July 10, 2019 07:28:30
Build 7082			
Job name:	Ellington	File name:	
Address:		Description:	
City, State, Zip:		Specifier:	
Builder:	LAMCO	Designer:	
Code reports:	ESR-1040	Company: BFS	

Quadruple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

Connection Diagram: Full Length of Member



b minimum = 2-1/2" d = 24"

Boise Cascade

Beams 7 inches wide will be assumed to be either top-loaded only, or equally loaded from each side. Bolts are assumed to be Grade A307 or Grade 2 or higher. Member has no side loads.

Connectors are: 1/2 in. Staggered Through Bolt

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.

PASSED

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