

BC CALC[®]

Analysis for Engineered Wood Products

Start using BC CALC[®] today,
no download required
<http://www.bccalc.com>

BC CALC[®] Sizing Software is simple to use, yet robust enough to analyze most joist, beam, column, stud and tall wall applications. Once an analysis is run, the user may print an easy-to-read design report that displays the span and load information with the analysis results.

BC CALC[®] is now a web-based application available for free at www.bccalc.com and can be used on Windows or Apple operating systems via Internet Explorer, Edge, Chrome or Safari browsers. Additionally, iOS and Android tablets are now supported.

In addition to BCI[®] & AJS[®] Joists, BOISE GLULAM[®] and VERSA-LAM[®] LVL, BC CALC[®] also offers the analysis of solid sawn lumber and timber members. Thus, BC CALC[®] is the only program needed to analyze structural wood members.

For questions regarding BC CALC[®], call 1-800-405-5969 or email EWPSupport@BC.com.

The image displays three overlapping screenshots of the BC CALC software interface. The top-left screenshot shows the 'Products' tab with a list of joist series including BCI® 5000-1.7 DF, BCI® 6000-1.8 DF, BCI® 6500-1.8 DF, BCI® 600-2.0 DF, BCI® 4500s-1.8 DF, BCI® 5000s-1.8 DF, BCI® 6000s-1.8 DF, BCI® 6500s-1.8 DF, BCI® 600s-2.0 DF, and BCI® 900s-2.0 DF. The top-right screenshot shows a structural diagram of a joist system with dimensions and labels for spans B1, B2, and B3. The bottom-right screenshot is a detailed design report for a 'Single 11-7/8" BCI® 5000-1.7 DF' joist. The report includes project information, a reaction summary, a load summary, a controls summary, and a hole summary.

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-3/8"	333 / 31	70 / 0			
B2, 3-1/2"	844 / 0	211 / 0			
B3, 2"	288 / 52	59 / 0			

Load Summary

Tag	Description	Load Type	Ref	Start	End	100%	90%	115%	160%	125%	OC5
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	25-10-14	40	10				16

Controls Summary

Pos. Moment	Value	% Allowable	Duration	Case	Location
Pos. Moment	1132 ft-lbs	35.9 %	100%	2	06-01-07
Neg. Moment	-1302 ft-lbs	41.3 %	100%	1	13-10-14
Int. Reaction	347 lbs	32.4 %	100%	3	25-10-14
Int. Reaction	1055 lbs	49.9 %	100%	1	13-10-14
End Shear	384 lbs	23.6 %	100%	2	00-04-06
Cont. Shear	539 lbs	33.2 %	100%	1	13-09-02
Hole #1 Shear	125 lbs	23.4 %	100%	4	07-00-00
Hole #2 Shear	300 lbs	27.7 %	100%	1	17-05-00
Total Load Deflection	L/999 (0.123")	n/a	n/a	2	06-05-13
Live Load Deflection	L/999 (0.104")	n/a	n/a	9	06-05-13
Total Neg. Defl.	L/999 (0.0217")	n/a	n/a	2	15-01-01
Max Defl.	0.123"	n/a	n/a	2	06-05-13
Span / Depth	13.7				
Hole Location	Valid				

Hole Summary

Hole	Center	Elevation	Ref	Height	Width	Shape	Orientation
H01	07-00-00	5.938"	L	6"	6"	Rectangular	Horizontal
H02	17-00-00	5.938"	L	3"		Circular	Horizontal

Bearing Supports

Support	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-3/8" x 2"	409 lbs	n/a	28.7 %	Unspecified
B2	Beam 3-1/2" x 2"	1055 lbs	n/a	46.9 %	Unspecified

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