

Double 2 x 12 SP #2

PASSED

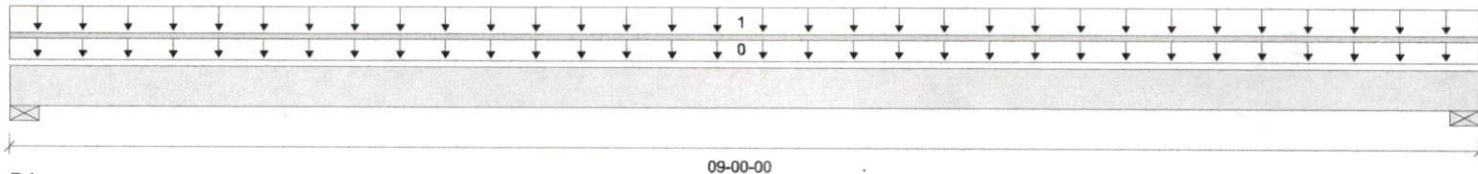
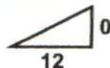
RB01 (Roof Beam)

Dry | 1 span | No cant.

January 16, 2019 09:02:03

BC CALC® Member Report
 Build 6782
 Job name:
 Address:
 City, State, Zip:
 Builder:
 Code reports: SPIB

File name:
 Description:
 Specifier:
 Designer: Rodney Evans
 Company: 84 Lumber



Total Horizontal Product Length = 09-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"		710 / 0	900 / 0		
B2, 3-1/2"		710 / 0	900 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-00-00	Top		8				00-00-00
1	Standard Load	Unf. Area (lb/ft ²)	L	00-00-00	09-00-00	Top		15	20			10-00-00

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	3263 ft-lbs	71.7%	115%	4	04-06-00
End Shear	1170 lbs	25.8%	115%	4	01-02-12
Total Load Deflection	L/999 (0.086")	n/a	n/a	4	04-06-00
Live Load Deflection	L/999 (0.048")	n/a	n/a	5	04-06-00
Max Defl.	0.086"	n/a	n/a	4	04-06-00
Span / Depth	9.1				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3"	1610 lbs	n/a	27.1%	Unspecified
B2	Wall/Plate 3-1/2" x 3"	1610 lbs	n/a	27.1%	Unspecified

Cautions

For roof members with slope (1/4)/12 or less final design must ensure that ponding instability will not occur.
 For roof members with slope (1/2)/12 or less final design must account for Rain-on-Snow surcharge load.

Notes

Design meets Code minimum (L/180) Total load deflection criteria.
 Design meets Code minimum (L/240) Live load deflection criteria.
 Design meets arbitrary (1") Maximum Total load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2009.
 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®,