Boise Cascade

Single 5-1/4" x 7-1/4" VERSA-LAM® 2.0 3100 SP

Floor Be

Dry | 1 span | No cantilevers | 0/12 slope

Friday, Decer

BC CALC® Design Report

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 01/05/15

Build 3272
Job Name:
Address:
City, State, Zip: ,
Customer:
Code reports: ESR-1040

File Name: BC CALC Project
Description: Designs\FB01
Specifier:
Designer:
Company:
Misc:

Total Horizontal Product Length = 10-05-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B0, 3-1/2"	2,500 / 0	1,073 / 0			
B1, 3-1/2"	2,500 / 0	1,073 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	Trib.
1	Standard Load	Unf. Area (lb/ft^2)	L	00-00-00	10-05-00	40	10				12-00-00
2		Unf. Lin. (lb/ft)	L	00-00-00	10-05-00	0	75				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	8,504 ft-lbs	67.7%	100%	1	05-02-08
End Shear	2,958 lbs	40.9%	100%	1	00-10-12
Total Load Defl.	L/262 (0.455")	91.4%	n/a	1	05-02-08
Live Load Defl.	L/375 (0.319")	96%	n/a	2	05-02-08
Max Defl.	0.455"	45.5%	n/a	1	05-02-08
Span / Depth	16.5	n/a	n/a	0	00-00-00

Bearing Supports

		Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0	Post	3-1/2" x 3-1/2"	3,573 lbs	n/a	38.9%	Unspecified
B1	Post	3-1/2" x 3-1/2"	3,573 lbs	n/a	38.9%	Unspecified

Cautions

Member is not fully supported at post B0. A connector is required at this bearing.
Member is not fully supported at post B1. A connector is required at this bearing.

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") Maximum total load deflection criteria.
Calculations assume Member is Fully Braced.
Design based on Dry Service Condition.
Deflections less than 1/8" were ignored in the results.

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of BOISE 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.\n\nBC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, SIMPLE FRAMING SYSTEM® , VERSA-LAM®, VERSA-RIM PLUS® , VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.