Boise Cascade

Single 14" AJS® 25

BC CALC® Design Report

Dry | 1 span | No cantilevers | 0/12 slope
16 OCS | Repetitive | Glued & nailed construction

May 7

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 05/17/18

Build 6536

Job Name:	Reynolds Project	File Name:	Reynolds Project
Address:	32 Mass Ave	Description:	Second Floor Joist
City, State, Zip:	Portland, ME	Specifier:	
Customer:	Eldredge Lumber	Designer:	
Code reports:	ESR-1144	Company:	
		Misc:	

Total of Horizontal Design Spans = 24-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B0	640 / 0	160 / 0			
B1	640 / 0	160 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	Standard Load	Unf. Area (lb/ft^2)	L	00-00-00	24-00-00	40	10				16

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	4,800 ft-lbs	57.3%	100%	1	12-00-00
End Reaction	800 lbs	80.3%	100%	1	00-00-00
End Shear	795 lbs	44.4%	100%	1	00-00-14
Total Load Defl.	L/483 (0.596")	49.7%	n/a	1	12-00-00
Live Load Defl.	L/604 (0.477")	79.5%	n/a	2	12-00-00
Max Defl.	0.596"	n/a	n/a	1	12-00-00
Span / Depth	20.6	n/a	n/a	0	00-00-00

Notes

Entered/Displayed Horizontal Span Length(s) = Clear Span + 1/2 min. end bearing + 1/2 intermediate bearing
Design meets Code minimum (L/240) Total load deflection criteria.
Design meets User specified (L/480) Live load deflection criteria.
Minimum bearing length for B0 is 1-1/2".
Minimum bearing length for B1 is 1-1/2".
Calculations assume member is fully braced.
BC CALC® analysis is based on IBC 2009.
Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
Design based on Dry Service Condition.

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 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.

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