

BC CALC® Design Report



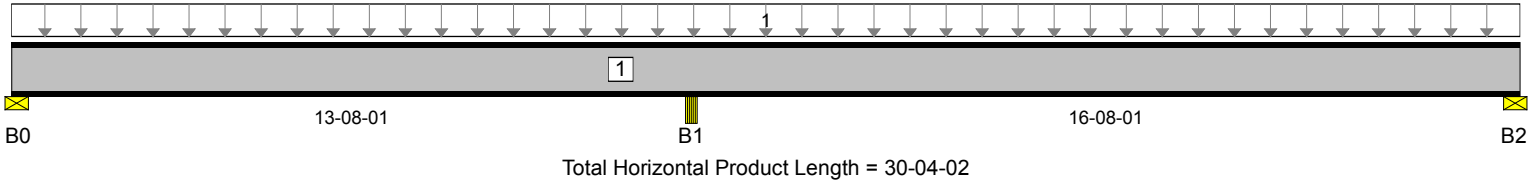
Dry | 2 spans | No cantilevers | 0/12 slope
16 OCS | Non-Repetitive | Glued & nailed construction

June 7, 2018 14:39:54

Build 6684
Job Name:
Address:
City, State, Zip: ,
Customer:
Code reports: ESR-1336

File Name: BC CALC Project
Description: Designs\J01
Specifier:
Designer:
Company:
Misc:

6842 Galpin



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B0, 2-1/2"	329 / 71	65 / 0			
B1, 3-1/2"	1,002 / 0	250 / 0			
B2, 2-1/2"	390 / 32	90 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	160%	125%	OCS
1	Standard Load	Unf. Area (lb/ft^2)	L	00-00-00	30-04-02	40	10				16

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1,657 ft-lbs	52.6%	100%	3	23-01-03
Neg. Moment	-1,864 ft-lbs	59.2%	100%	1	13-08-01
End Reaction	480 lbs	40.4%	100%	3	30-04-02
Int. Reaction	1,252 lbs	55.7%	100%	1	13-08-01
End Shear	466 lbs	28.7%	100%	3	30-01-10
Cont. Shear	654 lbs	40.2%	100%	1	13-09-13
Hole #1 Shear	511 lbs	87.8%	100%	1	12-06-01
Total Load Defl.	L/793 (0.25")	30.3%	n/a	3	22-05-02
Live Load Defl.	L/949 (0.209")	50.6%	n/a	8	22-05-02
Total Neg. Defl.	L/999 (-0.048")	n/a	n/a	3	08-07-08
Max Defl.	0.25"	25%	n/a	3	22-05-02
Vibration	16' 3-7/8"	87.7%	n/a		00-00-00
Span / Depth	16.7	n/a	n/a	0	00-00-00
Hole Location	Valid				

Web of joist cut out beginning 14" from bearing. 6"w x 5"h hole. No damage to flanges. 1542 plan.

Hole Summary

	Center	Elevation	Ref.	Width	Height	Shape	Orientation
H01	12-03-01	5.938"	L	6"	5"	Rect.	Horizontal

Bearing Supports

B0	Wall/Plate	2-1/2" x 2"	394 lbs	n/a	33.2%	Unspecified
B1	Beam			13.9%	55.7%	Versa-Lam 1.7
B2	Wall/Plate			n/a	40.4%	Unspecified

Vibration Summary

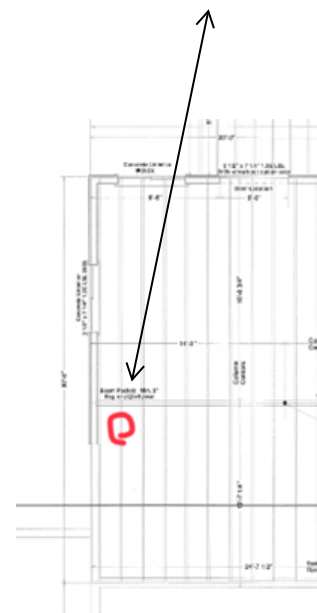
Subfloor: 23/32" OSB, Glue Nail, P.E. S.E. LEED AP
Strapping: None
Gypsum Ceiling: None
Bracing: None

Notes



No Fix Required. See Attached analysis.

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Single 11-7/8" BCI® 5000-1.7 DF

Joist\J01

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Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) 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.

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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