



BC CALC® Member Report
Build 7883

RB02 (Roof Beam)
Dry | 1 span | No cant.

December 3, 2020 10:18:39

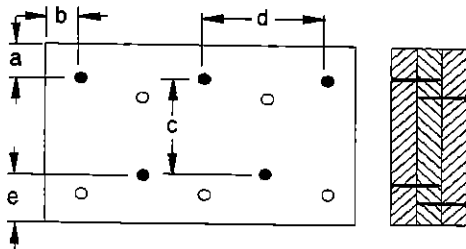
Job name: Sheila
Address:
City, State, Zip:
Customer:
Code reports: ESR-1040

File name: Matt Gowens
Description:
Specifier:
Designer: Jason Chunn
Company: ELP

Notch/Bevel Cut Details

Location	Type	Dimensions	Design Depth
01-03-12	Bevel - Top	Heel Depth: 4", Bevel Slope: 6/12	5-3/4"

Connection Diagram: Full Length of Member



a minimum = 2" c = 7-7/8"
b minimum = 3" d = 12"
e minimum = 3"

Calculated Side Load = 0.0 lb/ft
Nailing applies to both sides of the member
Connectors are: 3-1/4 in. Pneumatic Gun Nails

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®,



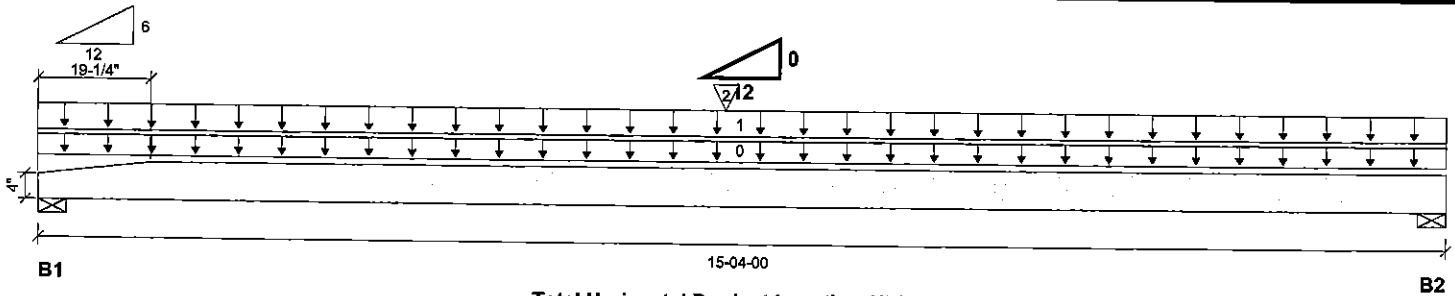
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Total Horizontal Product Length = 15-04-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"		1483 / 0			1344 / 0
B2, 3-1/2"		1454 / 0			1316 / 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	15-04-00	Top		18				00-00-00
1		Unf. Area (lb/ft²)	L	00-00-00	15-04-00	Top		20			20	04-06-00
2		Conc. Pt. (lbs)	L	07-06-00	07-06-00	Top		1280			1280	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	14991 ft-lbs	37.6%	125%	4	07-06-00
End Shear	2769 lbs	38.6%	125%	4	00-03-08
Total Load Deflection	L/489 (0.365")	36.8%	n/a	4	07-06-00
Live Load Deflection	L/1016 (0.176")	23.6%	n/a	5	07-06-00
Max Defl.	0.365"	36.5%	n/a	4	07-06-00
Span / Depth	15.0				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 5-1/4"	2827 lbs	n/a	20.5%	Unspecified
B2	Wall/Plate 3-1/2" x 5-1/4"	2770 lbs	n/a	20.1%	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.

BC CALC® analysis is based on IBC 2012.

Design based on Dry Service Condition.

Calculations assume member is fully braced.