



RB01 (Roof Flush Beam)

Dry | 1 span | No cant.

October 17, 2025 09:05:36

BC CALC® Member Report

Build 9045

Job name:

File name:

C:\Users\MarkLovelace...BCCALCSPEC\IP25101839

Address:

Description:

GARAGE DOOR

City, State, Zip:

Specifier:

Customer:

Designer:

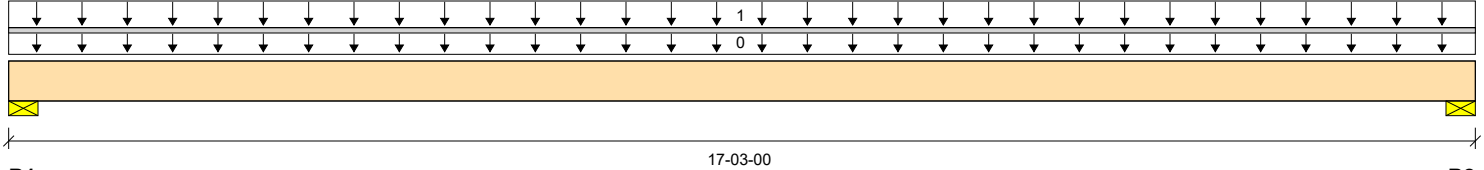
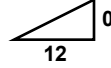
MARK LOVELACE

Code reports:

ESR-1040

Company:

LONGLEAF TRUSS CO



B1 Total Horizontal Product Length = 17'-03.00" **B2**

Reaction Summary (Unfactored Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 6"		4452 / 0	4313 / 0		
B2, 6"		4452 / 0	4313 / 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	17-03-00	Top		16				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	17-03-00	Top		20	20			25-00-00

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	34061 ft-lbs	79.3%	115%	4	08-07-08
Neg. Moment	0 ft-lbs	n/a	115%	4	16-09-12
End Shear	6902 lbs	56.4%	115%	4	01-10-00
Total Load Deflection	L/272 (0.722")	66.1%	n/a	4	08-07-08
Live Load Deflection	L/553 (0.355")	43.4%	n/a	5	08-07-08
Max Defl.	0.722"	72.2%	n/a	4	08-07-08
Span / Depth	12.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 6" x 3-1/2"	8765 lbs	98.2%	55.7%	Spruce-Pine-Fir
B2	Wall/Plate 6" x 3-1/2"	8765 lbs	98.2%	55.7%	Spruce-Pine-Fir

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.

Design based on Dry Service Condition.

BC CALC® analysis is based on IRC 2021.

Calculations assume member is fully braced.



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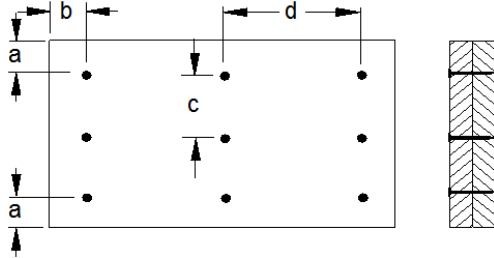
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Connection Diagram: Full Length of Member



a minimum = 2"

c = 6"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

Disclosure

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