

**FB01 (Floor Beam)**

BC CALC® Member Report

Dry | 1 span | No cant.

December 6, 2019 11:03:10

Build 7295

Job name: EVANS

File name: P19-12002

Address:

Description: BEAM FB01 GARAGE DOOR

City, State, Zip:

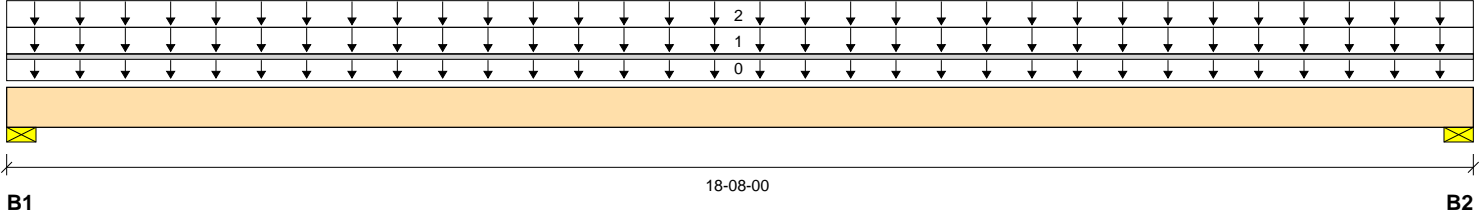
Specifier:

Builder: JE WOMBLE AND SON

Designer: Mark Lovelace

Code reports: ESR-1040

Company: LongLeaf



Total Horizontal Product Length = 18-08-00

**Reaction Summary (Down / Uplift) (lbs)**

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	2240 / 0	3437 / 0	2427 / 0		
B2, 3-1/2"	2240 / 0	3437 / 0	2427 / 0		

**Load Summary**

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	18-08-00	Top		18				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	18-08-00	Top	40	15				06-00-00
2		Unf. Area (lb/ft²)	L	00-00-00	18-08-00	Top		20	20			13-00-00

**Controls Summary**

	Value	% Allowable	Duration	Case	Location
Pos. Moment	30802 ft-lbs	57.4%	115%	3	09-04-00
End Shear	5605 lbs	40.7%	115%	3	01-09-08
Total Load Deflection	L/404 (0.54")	89.0%	n/a	3	09-04-00
Live Load Deflection	L/801 (0.273")	59.9%	n/a	6	09-04-00
Max Defl.	0.54"	54.0%	n/a	3	09-04-00
Span / Depth	12.1				

**Bearing Supports**

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	6937 lbs	n/a	75.5%	Unspecified
B2	Wall/Plate 3-1/2" x 3-1/2"	6937 lbs	n/a	75.5%	Unspecified

**Notes**

Design meets User specified (L/360) 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 2018.  
 Design based on Dry Service Condition.

**User Notes**

This design is provided as a courtesy to the builder and does NOT guarantee a complete structural review of this project. Neither lateral nor seismic analysis has been considered. All bearing conditions, connections, spans, o.c. spacing, loading and product usages shall be verified by the builder and engineer of record. This design shall be reviewed, verified and approved by the builder, project engineer and local building department prior to ordering materials.

**FB01 (Floor Beam)**

Dry | 1 span | No cant.

December 6, 2019 11:03:10

BC CALC® Member Report

Build 7295

Job name: EVANS

File name: P19-12002

Address:

Description: BEAM FB01 GARAGE DOOR

City, State, Zip:

Specifier:

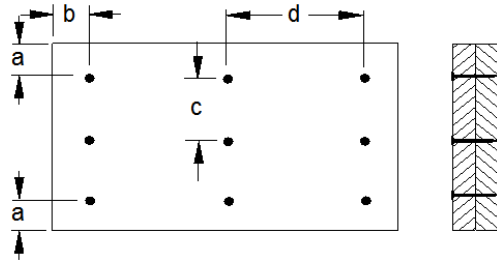
Builder: JE WOMBLE AND SON

Designer: Mark Lovelace

Code reports: ESR-1040

Company: LongLeaf

**Connection Diagram: Full Length of Member**



a minimum = 2"      c = 7"  
 b minimum = 3"      d = 24"

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®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,