



GDH (Floor Beam)

Dry | 2 spans | No cant.

February 9, 2022 07:02:06

BC CALC® Member Report

Build 8104

Job name:

File name:

Address:

Description:

City, State, Zip:

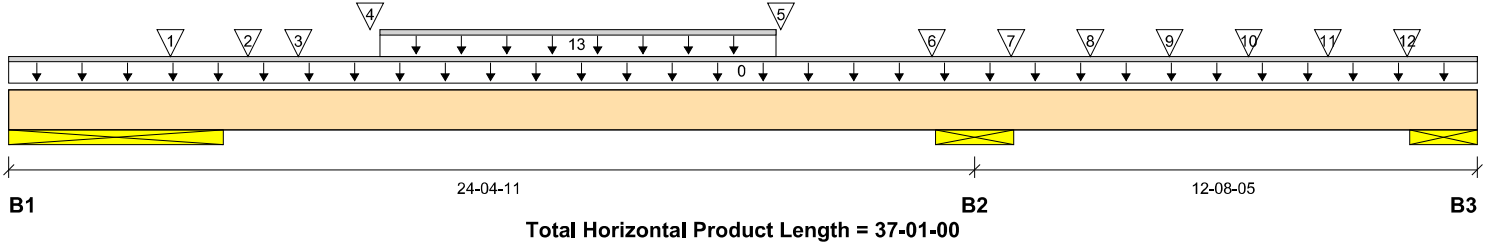
Specifier:

Customer:

Designer: Rodney Evans

Code reports: ESR-1040

Company: 84 Lumber



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 65"	6285 / 86	7394 / 0			967 / 0
B2, 23-5/8"	9262 / 0	11232 / 0			1783 / 0
B3, 20-1/2"	2461 / 872	1727 / 0			0 / 350

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	37-01-00	Top		24				00-00-00
1	DG2	Conc. Pt. (lbs)	L	04-01-00	04-01-00	Top	1061	1061				n/a
2	D	Conc. Pt. (lbs)	L	06-00-08	06-00-08	Top	890	890				n/a
3	D	Conc. Pt. (lbs)	L	07-03-12	07-03-12	Top	890	890				n/a
4	DG1	Conc. Pt. (lbs)	L	09-01-08	09-01-08	Top	3989	3989				n/a
5	DG1	Conc. Pt. (lbs)	L	19-06-00	19-06-00	Top	3989	3989				n/a
6	D	Conc. Pt. (lbs)	L	23-03-12	23-03-12	Top	890	890				n/a
7	D	Conc. Pt. (lbs)	L	25-03-12	25-03-12	Top	890	890				n/a
8	D	Conc. Pt. (lbs)	L	27-03-12	27-03-12	Top	890	890				n/a
9	D	Conc. Pt. (lbs)	L	29-03-12	29-03-12	Top	890	890				n/a
10	D	Conc. Pt. (lbs)	L	31-03-12	31-03-12	Top	890	890				n/a
11	D	Conc. Pt. (lbs)	L	33-03-12	33-03-12	Top	890	890				n/a
12	D	Conc. Pt. (lbs)	L	35-03-12	35-03-12	Top	890	890				n/a
13	E	Unf. Lin. (lb/ft)	L	09-04-08	19-04-08	Top		240			240	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	29475 ft-lbs	52.6%	100%	2	09-01-08
Neg. Moment	-31956 ft-lbs	57.0%	100%	1	23-04-14
End Shear	7831 lbs	49.1%	100%	2	06-09-00
Cont. Shear	11192 lbs	70.1%	100%	1	22-00-14
Total Load Deflection	L/481 (0.475")	49.9%	n/a	6	13-07-02
Live Load Deflection	L/1082 (0.211")	33.3%	n/a	13	13-09-00
Total Neg. Defl.	L/999 (-0.061")	n/a	n/a	6	27-06-12
Max Defl.	0.475"	47.5%	n/a	6	13-07-02
Span / Depth	14.3				
Conc. Load (B1)	2123 lbs	15.4%	100%		
Conc. Load (B2)	1780 lbs	12.9%	100%		

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 65" x 5-1/4"	13678 lbs	n/a	5.3%	Unspecified
B2	Wall/Plate 23-5/8" x 5-1/4"	20213 lbs	n/a	21.7%	Unspecified
B3	Wall/Plate 20-1/2" x 5-1/4"	4389 lbs	n/a	5.4%	Unspecified



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Notes

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

Design meets Code minimum (L/360) Live load deflection criteria.

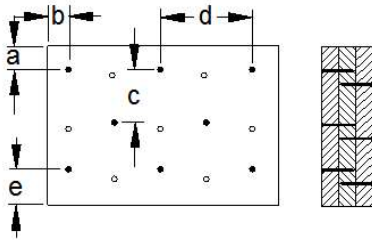
Design meets arbitrary (1") Maximum Total load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

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.

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