

Double 1-3/4" x 14" VERSA-LAM® 2.0 3100 SP Wall Header\16' OHD HEADER

Dry | 1 span | No cantilevers | 0/12 slope
16-00-00 OCS

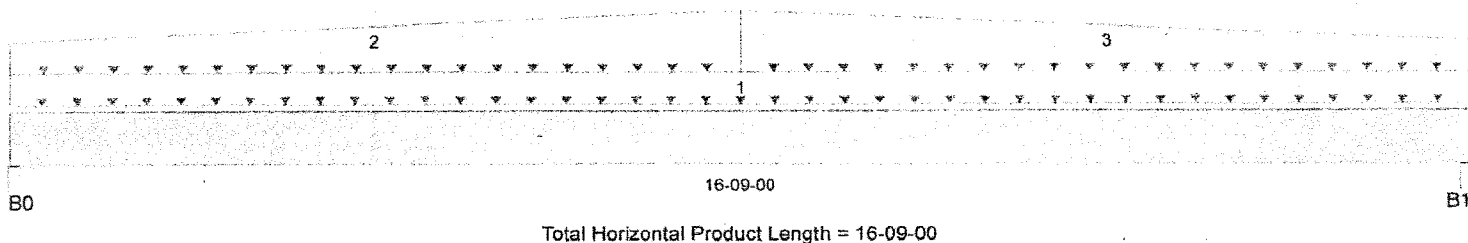
November 23, 2015 09:44:27

BC CALC® Design Report



Build 4137
Job Name: PORTLAND GARAGE
Address:
City, State, Zip: ,
Customer:
Code reports: ESR-1040

File Name: BC CALC Project
Description: Designs\16' OHD HEADER
Specifier:
Designer:
Company:
Misc:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B0, 3"	1,843 / 0	1,610 / 0	1,989 / 0		
B1, 3"	1,843 / 0	1,610 / 0	1,989 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	160%	125%	OCS
1		Unf. Area (lb/ft ²)	L	00-00-00	16-09-00	20	10				11-00-00
2		Trapezoidal (lb/ft)	L	00-00-00			38	150			n/a
					08-04-08		98	325			n/a
3		Trapezoidal (lb/ft)	R	-00-00-00			38	150			n/a
					08-04-08		98	325			n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	19,059 ft-lbs	57.1%	115%	3	08-04-08
End Shear	4,035 lbs	37.7%	115%	3	01-05-00
Total Load Defl.	L/345 (0.57")	69.6%	n/a	3	08-04-08
Live Load Defl.	L/536 (0.366")	67.1%	n/a	6	08-04-08
Max Defl.	0.57"	57%	n/a	3	08-04-08
Span / Depth	14	n/a	n/a	0	00-00-00

Bearing Supports

	Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0 Post	3" x 3-1/2"	4,483 lbs	58.9%	56.9%	Spruce Pine Fir
B1 Post	3" x 3-1/2"	4,483 lbs	58.9%	56.9%	Spruce Pine Fir

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.
 Calculations assume Member is Fully Braced.
 Design based on Dry Service Condition.
 Deflections less than 1/8" were ignored in the results.