17 SECOND FLOOR BEAM-Floor Beam

4 Seasons Engineering Inc.
Project: 3317 GREEN MOUNTAIN ROAD
Job: LINCOLN LOGS
Client: LINCOLN LOGS

11:12:58 03/08/07
Designed by: Donna Petersen P.E.
Checked by:_____

Input Data

Check of 1.75x11.875x2 NORDIC LAM 20F-1.6E -User LVL ✔

Left Cantilever: None	Main Span: 8'	
	Main Span: 7'	Right Cantilever: None
Check for repetitive use? Yes	Tributary Width: 6'6"	Slope: 0
Dead Load: 17 psf	Live Load: 40 psf	Snow Load: 0
Allow. LL Deflection: L/360	Allow. TL Deflection: L/240 (3 in Maximum)	DOL: 1.000
E_b: 1600000 psi	F_v: 250 psi	F_b: 2000 psi

Design Checks

	Reaction lb	Bending - X psi	Shear psi	LL Defl. in	TL Defl. in
Max. Value	3485.84	-385.097	52.525	-0.0209	-0.0271
Allowable	3521.21	1944.94	250	0.2667	0.4
% of Allow.	99 ✔	20 ✔	21 ✔	7 ✔	6 ✔
Location	8'	8'	7'1/8"	3'8-9/32"	3'8-9/32"

Reactions and Bearing

Support Location ft	Min. Bearing in	Reaction lb
0'	1.5	1244.92
8'	2.236	3485.84
15'	1.5	1078.11

Self-weight of member is not included.

Member has an actual/allowable ratio in span 1 of 21 ✔%.
Design is governed by shear fv/Fv.
Governing load combination is Dead+Floor Live w/Pattern Loads.
Maximum hanger forces: 1244.92 lb (Left) and 1078.11 lb (Right).

Program Version 8.2 - 12/17/2004