Boozer Laminated Beam Company

Glued Laminated Timber Columns with Eccentric End Loads*

Combination 50 SP (N1M14)**

Duration of Load = 1.00
Dry Conditions of Use

Width (in)	5 1/2	5 1/2	5 1/2	5 1/2	--	--	--	--	--	Width (in)
Depth (in)	5 1/2	6 7/8	8 1/4	9 5/8	--	--	--	--	--	Depth (in)
Length (ft)	Column Capacity (lb)									Length (ft)
4	37590	48330	58870	69290	--	--	--	--	--	4
5	35640	46550	57170	67610	--	--	--	--	--	5
6	33360	44360	54290	63330	--	--	--	--	--	6
7	30820	41690	50020	58360	--	--	--	--	--	7
8	28100	37870	45440	53020	--	--	--	--	--	8
9	25360	34000	40800	47610	--	--	--	--	--	9
10	22750	30350	36420	42480	--	--	--	--	--	10
11	20380	27050	32460	37870	--	--	--	--	--	11
12	18280	24160	28990	33820	--	--	--	--	--	12
13	16450	21650	25970	30300	--	--	--	--	--	13
14	14850	19470	23370	27260	--	--	--	--	--	14
15	13450	17590	21100	24620	--	--	--	--	--	15
16	12230	15950	19140	22330	--	--	--	--	--	16
17	11160	14520	17430	20330	--	--	--	--	--	17
18	10220	13270	15920	18580	--	--	--	--	--	18
19	9390	12170	14600	17030	--	--	--	--	--	19
20	8650	11190	13430	15670	--	--	--	--	--	20
21	8000	10330	12390	14460	--	--	--	--	--	21
22	7410	9560	11470	13390	--	--	--	--	--	22
23	--	--	--	--	--	--	--	--	--	23
24	--	--	--	--	--	--	--	--	--	24
25	--	--	--	--	--	--	--	--	--	25
26	--	--	--	--	--	--	--	--	--	26
27	--	--	--	--	--	--	--	--	--	27
28	--	--	--	--	--	--	--	--	--	28
29	--	--	--	--	--	--	--	--	--	29
30	--	--	--	--	--	--	--	--	--	30

Table Specifications: The tabulated capacities are for glued laminated timber columns of constant cross section under dry conditions of use.

Capacities have been rounded to nearest 10 lb.

Columns are limited to a maximum effective length/least dimension (l_e/d) of 50.

End Conditions: Capacities are based on column ends being supported to prevent translation.

The effective buckling length factor used is K_e = 1.00.

*** Eccentricity:** End loads are limited to a maximum eccentricity of 1/6 of either cross sectional dimension.

**** Design Properties:**

E (psi)	F_c (psi)		F_{by} (psi)			F_{bx} (psi)	
	4 or More Lams	2 or 3 Lams	4 or More Lams	3 Lams	2 Lams	2 Lams to 15 Inches Deep without 302 Tension	4 or More Lams with 302 Tension Lam
1,900,000	2300	1700	2300	2100	1750	2100	2400

302 tension laminations are not required to develop the capacities shown in this table.

While these capacity tables have been prepared in accordance with recognized engineering principles and are based on the most accurate and reliable technical data available, these tables should not be used or relied upon for any general or specific application without competent professional examination and verification of their accuracy, suitability, and applicability by a licensed design professional.