

Boozer Laminated Beam Company

Glued Laminated Timber Columns with Eccentric End Loads*

Combination 50 SP (N1M14)**

Duration of Load = 1.15
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	42620	55030	67180	79170	--	--	--	--	--	4
5	40080	52670	64900	76150	--	--	--	--	--	5
6	37120	49770	60360	70420	--	--	--	--	--	6
7	33870	45740	54890	64030	--	--	--	--	--	7
8	30480	40960	49160	57350	--	--	--	--	--	8
9	27180	36320	43590	50850	--	--	--	--	--	9
10	24150	32110	38530	44950	--	--	--	--	--	10
11	21490	28420	34110	39790	--	--	--	--	--	11
12	19170	25250	30300	35350	--	--	--	--	--	12
13	17170	22530	27040	31540	--	--	--	--	--	13
14	15450	20200	24240	28280	--	--	--	--	--	14
15	13950	18190	21830	25470	--	--	--	--	--	15
16	12650	16460	19750	23040	--	--	--	--	--	16
17	11520	14950	17940	20930	--	--	--	--	--	17
18	10530	13640	16370	19100	--	--	--	--	--	18
19	9660	12490	14980	17480	--	--	--	--	--	19
20	8890	11470	13770	16060	--	--	--	--	--	20
21	8200	10570	12690	14800	--	--	--	--	--	21
22	7590	9770	11730	13680	--	--	--	--	--	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/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 Lam	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.

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