

# 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)	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	--	--	--	--	Width (in)
Depth (in)	3 1/2	4 1/8	5 1/2	6 7/8	8 1/4	--	--	--	--	Depth (in)
Length (ft)	Column Capacity (lb)									Length (ft)
4	11880	14550	23010	28760	34520	--	--	--	--	4
5	10710	13310	19950	24940	29920	--	--	--	--	5
6	9390	11630	16790	20980	25180	--	--	--	--	6
7	8060	9940	13990	17480	20980	--	--	--	--	7
8	6870	8430	11700	14630	17560	--	--	--	--	8
9	5870	7180	9890	12360	14830	--	--	--	--	9
10	5050	6160	8440	10550	12660	--	--	--	--	10
11	4380	5330	7270	9090	10910	--	--	--	--	11
12	3830	4650	6330	7910	9490	--	--	--	--	12
13	3380	4090	5550	6940	8330	--	--	--	--	13
14	2990	3620	4900	6130	7360	--	--	--	--	14
15	--	--	--	--	--	--	--	--	--	15
16	--	--	--	--	--	--	--	--	--	16
17	--	--	--	--	--	--	--	--	--	17
18	--	--	--	--	--	--	--	--	--	18
19	--	--	--	--	--	--	--	--	--	19
20	--	--	--	--	--	--	--	--	--	20
21	--	--	--	--	--	--	--	--	--	21
22	--	--	--	--	--	--	--	--	--	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 <sub>c</sub> (psi)		F <sub>by</sub> (psi)			F <sub>bx</sub> (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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