

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)	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	13300	16370	25490	31860	38230	--	--	--	--	4
5	11780	14620	21610	27010	32410	--	--	--	--	5
6	10120	12520	17840	22290	26750	--	--	--	--	6
7	8550	10520	14680	18350	22020	--	--	--	--	7
8	7210	8830	12190	15240	18290	--	--	--	--	8
9	6120	7470	10240	12800	15370	--	--	--	--	9
10	5240	6370	8710	10880	13060	--	--	--	--	10
11	4530	5490	7480	9350	11220	--	--	--	--	11
12	3950	4780	6490	8110	9740	--	--	--	--	12
13	3470	4190	5680	7100	8520	--	--	--	--	13
14	3070	3700	5010	6260	7520	--	--	--	--	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 _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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