American Institute of Timber Construction

Glued Laminated Timber Columns with Eccentric End Loads*

N1D14 Outer, N2D12 Core**

Duration of Load = 1.00
Dry Conditions of Use

Width (in)	3 1/2	3 1/2	3 1/2	3 1/2	5 1/2	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	5 1/2	6 7/8	8 1/4	9 5/8	11	Depth (in)
Length (ft)	Column Capacity (lb)									Length (ft)
4	21090	26360	31630	36910	36850	46740	56080	65430	74780	4
5	18300	22880	27460	32030	35010	44290	53150	62010	70860	5
6	15440	19310	23170	27030	32820	41410	49690	57970	66250	6
7	12910	16130	19360	22590	30360	38170	45810	53440	61080	7
8	10830	13540	16250	18960	27700	34720	41660	48610	55550	8
9	9170	11470	13760	16050	24980	31230	37480	43720	49970	9
10	7850	9810	11770	13730	22340	27930	33510	39100	44690	10
11	6780	8470	10160	11860	19960	24950	29930	34920	39910	11
12	5900	7380	8850	10330	17860	22320	26790	31250	35720	12
13	5180	6480	7780	9070	16030	20040	24050	28050	32060	13
14	4590	5730	6880	8020	14440	18050	21670	25280	28890	14
15	--	--	--	--	13060	16330	19600	22860	26130	15
16	--	--	--	--	11860	14830	17790	20760	23730	16
17	--	--	--	--	10810	13510	16220	18920	21620	17
18	--	--	--	--	9890	12360	14840	17310	19780	18
19	--	--	--	--	9080	11350	13620	15890	18150	19
20	--	--	--	--	8360	10450	12530	14620	16710	20
21	--	--	--	--	7720	9650	11580	13500	15430	21
22	--	--	--	--	7150	8930	10720	12510	14290	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
1,800,000	2200	0	2000	0	0	2100	0

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.