

BUILD TALL WITH POWER COLUMN®

STRONG, EFFICIENT, SUSTAINABLE



POWER COLUMN® FEATURES

- Fast, easy one-piece installation
- Complement to Mass Timber wood framing systems
- Sustainable Forestry Initiative (SFI®) Certified
- Excellent fire resistance
- Manufactured with superior strength southern yellow pine MSR Lumber
- Available in range of appearance grades for structural and architectural applications
- Superior alternative for Tall Wall applications
- Load path solution for Engineered Beam and Header Products
- Framing members such as Power Beam® can easily be attached to Power Column® with simple connection detailing



Anthony Forest Products is part of the Canfor Group of Companies

POWER COLUMN®

COMBINATION #50 LAYUP

ALLOWABLE AXIAL COMPRESSIVE LOADS (POUNDS)

EFFECTIVE LENGTH	NET WIDTH = 3-1/2"											
	Net Depth = 3-1/2"			4-1/8"			5-1/2"			7"		
	Load Duration Factor			Load Duration Factor			Load Duration Factor			Load Duration Factor		
	1.00	1.15	1.25	1.00	1.15	1.25	1.00	1.15	1.25	1.00	1.15	1.25
4	11,750	13,130	13,990	14,410	16,190	17,320	22,740	25,110	26,560	29,700	32,950	34,950
6	9,130	9,810	10,200	11,330	12,150	12,610	16,260	17,220	17,770	21,900	23,300	24,110
8	6,600	6,910	7,090	8,100	8,460	8,670	11,220	11,660	11,920	15,350	16,000	16,370
10	4,830	5,000	5,090	5,880	6,070	6,190	8,040	8,290	8,430	11,090	11,450	11,650
12	3,650	3,750	3,810	4,420	4,540	4,610	6,010	6,160	6,250	8,330	8,540	8,670
14	2,840	2,910	2,950	3,430	3,510	3,550	4,650	4,750	4,800	6,460	6,600	6,680

EFFECTIVE LENGTH	NET WIDTH = 5-1/2"											
	Net Depth = 5-1/2"			7"			8-1/4"			9-5/8"		
	Load Duration Factor			Load Duration Factor			Load Duration Factor			Load Duration Factor		
	1.00	1.15	1.25	1.00	1.15	1.25	1.00	1.15	1.25	1.00	1.15	1.25
6	32,920	36,550	38,810	45,610	51,260	54,840	54,950	61,180	65,070	64,110	71,370	75,910
8	27,420	29,640	30,950	39,290	42,590	44,520	46,310	50,190	52,470	54,030	58,560	61,220
10	21,970	23,280	24,030	31,680	33,560	34,650	37,330	39,560	40,840	43,560	46,150	47,640
12	17,550	18,380	18,850	25,300	26,470	27,140	29,820	31,190	31,990	34,790	36,390	37,320
14	14,200	14,760	15,080	20,430	21,210	21,660	24,080	25,000	25,520	28,090	29,160	29,780
16	11,670	12,060	12,290	16,760	17,300	17,610	19,750	20,390	20,760	23,040	23,790	24,220
18	9,730	10,020	10,180	13,950	14,350	14,580	16,440	16,910	17,180	19,190	19,730	20,040
20	8,230	8,440	8,570	11,780	12,080	12,250	13,880	14,230	14,430	16,200	16,600	16,840
22	7,040	7,210	7,300	10,070	10,290	10,420	11,860	12,130	12,290	13,840	14,150	14,330

EFFECTIVE LENGTH	NET WIDTH = 6-3/4"									NET WIDTH = 7"		
	Net Depth = 6-7/8"			8-1/4"			9-5/8"			7"		
	Load Duration Factor			Load Duration Factor			Load Duration Factor			Load Duration Factor		
	1.00	1.15	1.25	1.00	1.15	1.25	1.00	1.15	1.25	1.00	1.15	1.25
8	48,730	53,790	56,880	63,540	70,930	75,120	74,790	82,750	87,640	53,460	59,380	63,060
10	41,790	45,120	47,080	55,390	59,940	62,600	64,620	69,930	73,040	46,900	51,070	53,550
12	34,950	37,100	38,350	46,520	49,420	51,090	54,280	57,650	59,600	40,070	42,840	44,450
14	29,100	30,560	31,410	38,750	40,690	41,810	45,210	47,470	48,770	33,840	35,730	36,830
16	24,390	25,430	26,030	32,450	33,810	34,600	37,860	39,450	40,370	28,630	29,990	30,770
18	20,640	21,410	21,850	27,430	28,430	29,010	32,000	33,170	33,840	24,400	25,400	25,980
20	17,650	18,230	18,570	23,430	24,180	24,610	27,330	28,210	28,720	20,980	21,740	22,180
22	15,240	15,690	15,950	20,200	20,790	21,120	23,570	24,250	24,640	18,190	18,780	19,120
24	13,280	13,630	13,830	17,580	18,040	18,310	20,510	21,050	21,360	15,900	16,370	16,640

EFFECTIVE LENGTH	NET WIDTH = 8-1/2"						NET WIDTH = 10-1/2"		
	Net Depth = 8-1/4"			9-5/8"			10-1/2"		
	Load Duration Factor			Load Duration Factor			Load Duration Factor		
	1.00	1.15	1.25	1.00	1.15	1.25	1.00	1.15	1.25
8	81,600	92,390	98,870	98,690	112,120	120,380	136,450	155,450	167,380
10	74,380	83,440	88,460	91,740	103,410	110,150	129,030	146,180	156,520
12	66,290	73,550	77,160	83,490	92,820	97,430	120,280	135,320	143,880
14	57,990	63,690	66,210	73,290	80,510	83,700	110,250	123,030	129,760
16	50,280	54,810	56,610	63,550	69,260	71,520	99,800	110,410	115,510
18	43,580	47,270	48,610	55,050	59,660	61,330	89,500	98,250	102,110
20	37,900	40,950	41,980	47,860	51,670	52,940	79,900	87,210	90,180
22	33,150	35,710	36,520	41,860	45,060	46,050	71,320	77,510	79,860
24	29,190	31,370	32,020	36,850	39,570	40,350	63,810	69,110	71,000

- The tabulated allowable loads apply only to **one-piece** glulam members made with all N1D14 laminations (Combination 50) without any special tension laminations.
- Dry Service conditions
- The tabulated allowable loads are based on simply axially loaded columns subjected to a maximum eccentricity of either 1/6 column width or 1/6 column depth, whichever is greater.
- Column is assumed to be unbraced, except at the column ends, and the effective column length is equal to the actual column length.
- Design properties for normal load duration and dry-use service conditions:
 Allowable Compression parallel to grain (F_c) = 2,300 psi for 4 or more laminations, or 1,700 psi for 2 or 3 laminations.
 Modulus of elasticity (E) = 1,900,000 psi.
 Flexural stress when loaded parallel to wide face of lamination F_{bx} = 2,300 psi for 4 or more lams, or 2,100 psi for 3 lams.
 Flexural stress when loaded perpendicular to wide face of lamination F_{by} = 2,100 psi.
- Bearing material supporting column must be considered to avoid crushing.



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