

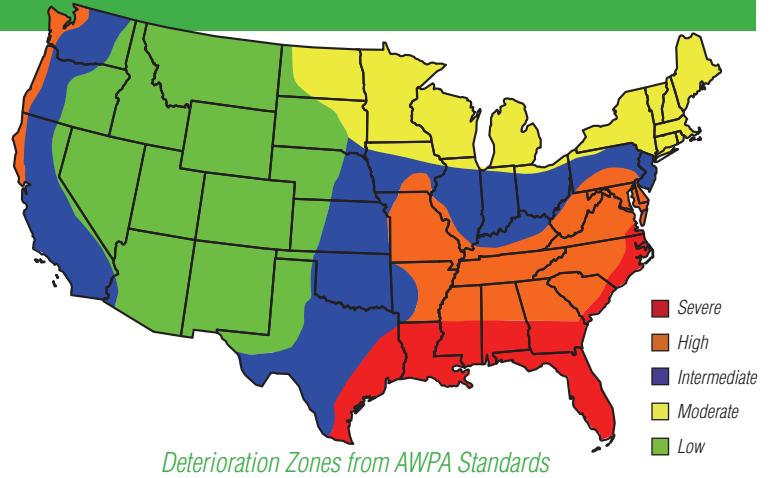
POWER PRESERVED COLUMN™

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Anthony Forest Products is now offering our popular Power Column® as a Power Preserved Column™ for ground contact using Hoover Cop-Guard. These columns are treated to the high retention level of 0.13 PCF, meeting AWPA use category 4A, 4B, and 4C (should not be used in direct contact with water).

Suggested Uses: (Exterior Only)

- Deck Support Columns
- Residential and Commercial exposed structural columns
- Raised Coastal Construction supports replacing piling
- Industrial and Farming applications
- Pedestrian bridges and park shelters



Power Preserved Column™ Design Values¹

Combination #50	F _b x-x axis	F _b y-y axis		MOE	Compression Parallel to Grain F _c =	
		<4 1/8" depth	≥4 1/8" depth		<4 1/8" depth	≥4 1/8" depth
#1 Dense SYP	2100 psi	2,100	2,300	1.9 x 10 ⁶	1700	2300
Wet-Use Factor	0.8	0.8	0.8	0.833	0.53	0.73

¹ The tabulated values are for moisture content of less than 16%. For wet-use the design values shall be multiplied by the wet-use factor.

POWER PRESERVED COLUMN™ SIZES

WIDTH	THICKNESS
3 1/2"	3 1/2", 5 1/2"
5 1/4"	5 1/2", 6 7/8"
6 3/4"	6 7/8"
8 3/4"	8 1/4"

DESIGN, INSTALLATION & CONNECTION NOTES:

- Allowable axial loading for all Power Preserved Column™ sizes can be found on our website.
- Anthony recommends all columns to be placed on column base/blocks and/or embedded in concrete.
- Should not be used in direct contact with water.
- Installation and connection details can be found at www.anthonyforest.com and recommended connections must be analyzed by an engineer and meet all local code requirements.
- Standard non-corrosion resistant fasteners can be used unless connections are made to other water borne copper treated wood or in the severe deterioration zones (local building codes supersede).
- All Anthony column tables are for preliminary design use only. Final design should include a complete engineering analysis, including bearing capacity of the foundation supporting the column.



Commercial construction

Power Preserved Column™

Allowable Axial Loads (Pounds) for Combination No. 50 Glulam Columns

Effective Column Length (ft)	Lamination Net Width = 3-1/2 in.					
	Net Depth = 3-1/2 in. (3 lams)			Net Depth = 5-1/2 in. (4 lams)		
	Load Duration Factor			Load Duration Factor		
	1.00	1.15	1.25	1.00	1.15	1.25
4	11,710	13,070	13,920	22,620	24,960	26,380
6	9,050	9,710	10,090	16,080	17,010	17,550
8	6,510	6,820	6,990	11,060	11,500	11,750
10	4,760	4,920	5,020	7,920	8,160	8,300
12	3,590	3,700	3,750	5,920	6,060	6,150
14	2,800	2,870	2,900	4,580	4,670	4,720

Effective Column Length (ft)	Lamination Net Width = 5-1/4 in.					
	Net Depth = 5-1/2 in. (4 lams)			Net Depth = 6-7/8 in. (5 lams)		
	Load Duration Factor			Load Duration Factor		
	1.00	1.15	1.25	1.00	1.15	1.25
6	31,220	34,620	36,710	41,620	46,070	48,750
8	25,780	27,780	28,960	33,820	36,260	37,680
10	20,480	21,650	22,320	26,420	27,790	28,570
12	16,280	17,010	17,430	20,740	21,580	22,070
14	13,120	13,620	13,900	16,570	17,130	17,450
16	10,760	11,100	11,280	13,490	13,880	14,100
18	8,940	9,160	9,290	11,170	11,450	11,620
20	7,510	7,680	7,780	9,390	9,600	9,720

Effective Column Length (ft)	Lamination Net Width = 6-3/4 in.		
	Net Depth = 6-7/8 in. (5 lams)		
	Load Duration Factor		
	1.00	1.15	1.25
8	48,470	53,460	56,510
10	41,450	44,710	46,620
12	34,580	36,680	37,900
14	28,750	30,170	31,000
16	24,070	25,080	25,670
18	20,360	21,100	21,530
20	17,400	17,960	18,290
22	15,010	15,450	15,700
24	13,070	13,420	13,620

Effective Column Length (ft)	Lamination Net Width = 8-3/4 in.		
	Net Depth = 8-1/4 in. (6 lams)		
	Load Duration Factor		
	1.00	1.15	1.25
8	83,960	94,950	100,730
10	76,510	85,580	89,580
12	68,180	75,210	77,610
14	59,620	64,910	66,240
16	51,680	55,720	56,440
18	44,790	47,970	48,330
20	38,930	41,490	41,640
22	34,060	36,150	36,180
24	29,980	31,730	31,680

Notes:

- The tabulated allowable loads apply only to one-piece glulam members made with all N1D14 laminations (Combination 50) without special tension laminations.
- Applicable service conditions = dry
- 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 worse. For side loads, other eccentric end loads, or other combined axial and flexural loads, see 2005 NDS
- The 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:
 Compression parallel to grain (F_c) = 2,300 psi for 4 or more lams, or 1,700 psi for 2 or 3 lams.
 Modulus of elasticity (E) = 1.9×10^6 psi
 Flexural stress when loaded parallel to wide faces of lamination (F_{by}) = 2,300 psi for 4 or more lams, or 2,100 psi for 3 lams.
 Flexural stress when loaded perpendicular to wide faces of lamination (F_{bx}) = 2,100 psi for 2 lams to 15 in. deep without special tension laminations.
 Volume factor for F_{bx} is in accordance with 2005 NDS. Size factor for F_{by} is $(12/d)^{1/9}$, where d is equal to the lamination width in inches.



(800)221-2326
 Fax (870)862-6502
 info@anthonyforest.com
 www.anthonyforest.com