

POWER PRESERVED GLULAM[®] BEAMS AND COLUMNS



**BUILD LONG LASTING
STRUCTURES WITH POWER
PRESERVED GLULAM[®]**

STRONG, DURABLE, SUSTAINABLE



Anthony Forest Products is part of the Canfor Group of Companies

POWER PRESERVED GLULAM® BEAMS AND COLUMNS CREATE STRONGER, LONGER LASTING STRUCTURES



Surfside Beach Community Center

POWER PRESERVED GLULAM® (PPG)

As North America's largest producer of Southern Yellow Pine glue-laminated beams (glulam), Anthony Forest Products Company, LLC (a Canfor Corporation company) engineered wood products operations offer a wide variety of glulam for industrial, commercial, and residential applications.

With two Glulam Manufacturing Operations in the U.S. South (El Dorado, Arkansas and Washington, Georgia).

Our glulam operations are 100% vertically integrated for supply of raw materials with all fiber sourced internally from Canfor's sawmills located throughout the Southeast United States. This provides our glulam operations with a consistent supply of high-grade, low moisture content material allowing us to produce quality products in

an efficient, cost-effective manner.

We market our glulam under the Power Products® brand.

The Power Preserved Glulam®, our treated glulam offering, is a durable, long-term solution for most exterior non-marine use structural applications. Power Preserved Glulam® offers fast, easy, one-piece installation that's more efficient than bolting or nailing multi-ply dimension or structural composite lumber members together.

Power Preserved Glulam® is offered with two preservative treatments options:

- Permethrin / IPBC is a colorless, solvent-based (low odor mineral spirits) preservative system containing Permethrin (insecticide) and IPBC (fungicide) which are active

components in EPA-registered pesticides. Permethrin / IPBC treated wood is effective against mildew, mold, decay organisms and various termites, including the Formosan Termite in above ground (UC3) applications.

- Copper Naphthenate preservative has a green color. Copper Naphthenate treated wood products are available in a range of retentions for above ground use (UC3), ground contact (UC4) and severe exposure (UC4). It is effective against mildew, mold, decay organisms and various termites, including the Formosan Termite.

Both preservatives are applied to Power Preserved Glulam® through vacuum pressure impregnation per American Wood Protection Associations (AWPA) Standards.

With a 25-year warranty from the treater, high strength-to-weight ratio, and long span capabilities, Power Preserved Glulam® is an excellent choice for decks, boardwalks, pergolas, covered porches and demanding environments such as bridges, highway sound barriers, railroad cross ties, and floating docks.

FASTENERS

Fasteners, including nuts and washers, in contact with Copper Naphthenate and Permethrin / IPBC preservative-treated wood must be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper.

Corrosion resistant fasteners are required with Copper Naphthenate and Permethrin / IPBC treated wood if a connection is made to water borne copper treated wood or if members are in severe deterioration zones.

Stainless Steel fasteners may be required under wet conditions. Local building codes will always supersede the above restrictions.

QUALITY ASSURANCE AND CODE COMPLIANCE

Canfor’s glulam operations are certified by APA – The Engineered Wood Association for use in building construction. Products bearing the APA trademark stamp signify conformance with ANSI A190.1, American National Standard for Structural Glued Laminated Timber, and have undergone rigorous quality control testing to ensure code compliance.

Power Preserved Glulam® products are manufactured in accordance with ANSI A190.1, which is the code recognized standard for glued laminated timber and is accepted nationwide under the ICC-ESR 1940 and APA Product Report L282. The adhesive used in our glulam conforms to wet-use complying with ASTM D2559.

CONDITIONS OF USE (DRY OR WET)

Power Preserved Glulam® products are recommended for above ground use where the equilibrium moisture content (EMC) of the laminated beam will not exceed 16% thus allowing dry use design values (over 16% considered wet use). The definitions of dry and wet service vary from the many publications available on the subject. The USDA Forest Products Lab “Wood Handbook” shows how the equilibrium moisture will change with relative humidity and temperature. Although there will be intermittent wetting of the exposed beams, drying normally occurs, and therefore, the beam



Outdoor Sports Arena

does not reach a “wet use” condition.

RESTRICTIVE USES

Power Preserved Glulam® Beams and Columns should not be used in interior applications.

Power Preserved Glulam® Beams and Columns shall not be used in any applications in direct contact with bituminous materials such as deck protective wrap, asphalt, tar or felt paper. Power Preserved Glulam® Beams and Columns shall not be used in any application where it will be submerged in water or in marine applications.

Freshly treated Power Preserved Glulam® (treated with Copper Naphthenate) will exhibit a bright green to olive color and have an oily odor. The color is from copper naphthenate, and the odor is from both preservative and carrier solvent. Under certain conditions Copper Naphthenate treated wood may exude surface deposits which will be green in color. This exudation is more likely to happen when higher retention, freshly

treated material is placed in bright, hot sunlight and in a vertical position, as in a column. Some exudates may appear on the surface or collect at the base of the column or pool on the surface of the supporting structure. This will cease after the beam or column has dried. Exudate may be removed from the wood surface by wiping the affected area with a heavy cotton cloth saturated with mineral spirits. Stained surfaces may be cleaned by using a biodegradable cleaning solvent such as Dawn Power Dissolver, with water and either a pressure washer or stiff scrub brush. This will in no way affect the preservative properties or efficacy of the preservative treated wood and does not negate the warranty.

Sawn ends, field trimming, and fabrications holes and or notching should be resealed with a 25% Copper Naphthenate solution or other commonly used wood preservative available at local home centers under various trade names.

After treatment and prior to installation or use, store treated material in well-

TABLE 1: SYP PRESERVATIVE RETENTION COMPARISON TABLE (PCF)

AWPA Use Categories		PRESERVATIVE					
		ACQ	ACD	IPBC/PER	CuNAP	MCQ	MCA
ABOVE GROUND	UC3B	0.25	0.17	0.055	0.04	0.15	0.07
GROUND CONTACT	UC4A	0.40	0.28	N/A	0.075	0.34	0.07
	UC4B	0.60	0.28	N/A	0.075	0.60	0.16
	UC4C	0.60	0.28	N/A	0.075	0.60	0.24

RESTRICTIVE USES (CONTINUED)

ventilated area or “open air” environment and stack so air circulates around each piece until dry and odor free. Do not allow vapors to collect in closed spaces (especially working or living areas) during the drying process. Avoid open flames and do not smoke around treated wood during the drying process. Avoid exposure to vapors from freshly treated wood.

For additional restrictions and preservative information, please refer to the Consumer Information Sheets and Safety Data Sheets on our website anthonyforest.com.

FINISHING

Copper Naphthenate above ground treated wood product may be finished or stained after thorough air drying has occurred. A stain blocking primer is required for all applications. Ground contact retention is not recommended for painting, staining or finishing.

Permethrin / IPBC treated wood may be painted, stained or sealed after air drying has evaporated the solvent. Blistering, peeling or solvent bleeding may occur if not adequately dry. It is the user’s responsibility to test the desired finishing system on sample material and exposure to actual use conditions to determine if the desired effect can be obtained. With exposure to the elements, unprotected treated wood will turn to a natural gray color.

STORAGE AND HANDLING

Prior to installation, Power Preserved Glulam® should be protected from direct exposure to weather conditions (i.e., sun, rain, snow) by storing undercover, in elevated

racks, or by leaving the paper wrap intact on the unit until installation. Store on stickers or in racks away from direct contact with the ground and in orderly stacks at heights that can be handled safely. Use care in moving and storing with forklifts to prevent damage. To minimize checking, maintain size tolerances, and appearance, keep Power Preserved Glulam® covered with paper wrap and seal ends after trimming or cutting. Sawn ends, field trimming, and fabrications holes and or notching should be resealed with a 25% Copper Naphthenate solution. Do not install or repair damaged products.

TECHNICAL SUPPORT

Our Power Preserved Glulam® Beams and Columns are available in iStruct® branded Power Sizer® software suite. To download the latest version of iStruct®, go to our website and download a copy at no charge. <https://www.anthonyforest.com/sizing-software.shtml>

Technical questions regarding our Power Preserved Glulam® can be answered with a call to 800-221-BEAM.

TABLE 2: PPG BEAMS VS 2X12'S LOAD TABLE COMPARISON

Product	Column Spacing 10' or 12' (LDF=1.00)	Span	Total Load PLF
2 7/16" x 11 1/4" Power Preserved Glulam®		10	822
3 pcs. 2x12 #2 SYP .25 MCQ		10	524
2 7/16" x 11 1/4" Power Preserved Glulam®		12	554
4 pcs. 2x12 #2 SYP .25 MCQ		12	483

TABLE 3: POWER PRESERVED GLULAM® DESIGN VALUE COMPARISON (PSI)

Product	F _b (Flexural Stress)	MOE (Modulus of Elasticity)	F _v (Horizontal Shear)	F _{c,⊥} (Compression Perpendicular to Grain)
Power Preserved Glulam® ¹	2400	1.8 x 10 ⁶	300	740
Treated SCL ²	2117	1.7 x 10 ⁶	241	533
#2 Treated SYP 4x12 ³	750	1.3 x 10 ⁶	170	379
Wet-Use Factor ⁴	0.8	0.833	0.875	0.53

¹“Dry-Use” means the treated beam does not exceed 16% maximum moisture content.
²SCL or structural composite lumber is treated with water borne preservatives for service level 1 or dry-use. For service level 2 or wet-use, additional reductions are required.
³SYP 4x12 is treated with water borne preservatives for wet-use. No wet-use reduction applied.
⁴The tabulated values are for moisture content of less than 16%. For wet-use, the design values must be multiplied by the wet-use factor.

TABLE 4: POWER PRESERVED GLULAM® SIZES AND DESIGN PROPERTIES ^{1,2}
 EWS 24F-V5M1/SP • Dry-Use • F_b=2,400 psi • F_v=300psi • E=1.8 x 10⁶ psi • F_c =740 psi

Width (in.)	Depth (in.)	Weight (lbs/ft.) ¹	Moment of Inertia (in ⁴)	Maximum Resistive Moment (ft.-lbf)		Maximum Resistive Shear (lbf)	
				100%	115%	100%	115%
2 7/16" ³	9 1/4	10.8	227	9,804	11,275	6,359	7,313
	9 1/2	11.1	246	10,341	11,892	6,531	7,511
	11 1/4	13.1	408	14,502	16,677	7,734	8,895
	11 7/8	13.9	480	16,158	18,582	8,164	9,389
3 1/2"	14	16.3	786	22,458	25,827	9,625	11,069
	16	18.7	1173	29,333	33,733	11,000	12,650
	18	21.0	1671	37,125	42,694	12,375	14,231
5 1/4"	9 1/4	16.2	346	14,973	17,219	9,713	11,169
	9 1/2	16.6	375	15,794	18,163	9,975	11,471
	11 1/4	19.7	623	22,148	25,471	11,813	13,584
	11 7/8	20.8	733	24,678	28,379	12,469	14,339
	14	24.5	1201	34,300	39,445	14,700	16,905
	16	28.0	1792	44,800	51,520	16,800	19,320
	18	31.5	2552	56,700	65,205	18,900	21,735

¹Beam weight is assumed to be 48 pcf.
²Maximum resistive moment shall be adjusted by the volume factor based in NDS-2012, or see footnote #2 from Table 3.
³2 7/16" widths only available in 9 1/4", 11 1/4" and 14" depths. To determine 2 7/16" design properties, multiply .464 times the 5 1/4" weight, moment of inertia, moment and shear. See Anthony Forest website at www.anthonyforest.com to download complete 2 7/16" design properties table and load tables.

TREATED GLULAM ALLOWABLE FLOOR LOADS (PLF)

EWS 24F-V5M1/SP • Dry-Use • $F_b=2,400$ psi • $F_v=300$ psi • $E=1.8 \times 10^6$ psi • $F_c = 740$ psi • (LDF=1.00)

Width (in)	Depth (in)	Load Condition	Span (feet)										
			6	8	10	12	14	16	18	20	22	24	26
2 7/16" <i>(See Note 1)</i>	9 1/4	Total Load	2052	1226	756	437	275	185	130	94	71	55	43
		Live Load	---	1181	605	350	220	148	104	76	57	44	34
		Min. End/Int.Bearing (in.)	2.4/6.0	1.9/4.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	9 1/2	Total Load	2108	1293	827	474	298	200	140	102	77	59	47
		Live Load	---	1279	655	379	239	160	112	82	62	47	37
		Min. End/Int.Bearing (in.)	2.5/6.3	2.0/5.0	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 1/4	Total Load	2749	1813	1160	787	495	332	233	170	128	98	77
		Live Load	---	---	1088	629	396	266	186	136	102	79	62
		Min. End/Int.Bearing (in.)	3.2/8.0	2.9/7.3	2.3/5.8	1.9/4.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 7/8	Total Load	2901	1918	1293	898	583	390	274	200	150	116	91
		Live Load	---	---	1279	740	466	312	219	160	120	93	73
		Min. End/Int.Bearing (in.)	3.4/8.5	3.0/7.5	2.5/6.3	2.1/5.3	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
3 1/2"	14	Total Load	3743	2401	1782	1248	917	702	449	328	246	190	149
		Live Load	---	---	1784	1213	764	512	359	262	197	152	119
		Min. End/Int.Bearing (in.)	4.4/11.0	3.8/9.5	3.5/8.8	2.9/7.3	2.5/6.3	2.2/5.5	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
16	Total Load	4719	2926	2101	1615	1182	901	671	489	367	283	223	
	Live Load	---	---	---	---	1140	764	537	391	294	226	178	
	Min. End/Int.Bearing (in.)	5.6/14.0	4.6/11.5	4.1/10.3	3.8/9.5	3.3/8.3	2.8/7.0	2.4/6.0	1.9/4.8	1.6/4.0	1.5/3.8	1.5/3.8	
18	Total Load	5917	3522	2485	2046	1499	1143	899	725	523	403	317	
	Live Load	---	---	---	---	---	1088	764	557	418	322	253	
	Min. End/Int.Bearing (in.)	7.0/17.5	5.5/13.8	4.9/2.3	4.8/12.0	4.1/10.3	3.6/9.0	3.2/8.0	2.8/7.0	2.3/5.8	1.9/4.8	1.6/4.0	
5 1/4"	9 1/4	Total Load	3114	1861	1154	664	419	280	197	144	108	83	66
		Live Load	---	1803	923	534	337	225	158	115	87	67	53
		Min. End/Int.Bearing (in.)	2.4/6.0	1.9/4.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	9 1/2	Total Load	3199	1948	1264	719	453	303	214	156	117	90	71
		Live Load	---	---	1000	579	365	244	172	125	94	72	57
		Min. End/Int.Bearing (in.)	2.5/6.3	2.0/5.0	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 1/4	Total Load	4172	2752	1772	1195	753	504	354	260	195	150	118
		Live Load	---	---	1661	961	605	406	285	208	156	120	95
		Min. End/Int.Bearing (in.)	3.2/8.0	2.9/7.3	2.3/5.8	1.9/4.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 7/8	Total Load	4403	2910	1944	1344	885	593	419	305	229	177	139
		Live Load	---	---	---	1131	712	477	335	244	183	141	111
		Min. End/Int.Bearing (in.)	3.4/8.5	3.0/7.5	2.5/6.3	2.1/5.3	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	14	Total Load	5679	3644	2707	1874	1371	1044	682	497	373	289	228
		Live Load	---	---	---	1853	1167	782	549	400	301	232	182
		Min. End/Int.Bearing (in.)	4.4/11.0	3.8/9.5	3.5/8.8	2.9/7.3	2.5/6.3	2.2/5.5	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	16	Total Load	7161	4440	3188	2451	1794	1400	1018	742	558	460	340
		Live Load	---	---	---	---	1741	1167	819	597	449	346	272
		Min. End/Int.Bearing (in.)	5.6/14.0	4.6/11.5	4.1/10.3	3.8/9.5	3.3/8.3	2.8/7.0	2.4/6.0	1.9/4.8	1.6/4.0	1.5/3.8	1.5/3.8
	18	Total Load	8979	5343	3770	3106	2274	1734	1365	1128	794	615	484
		Live Load	---	---	---	---	---	1661	1167	851	639	492	387
		Min. End/Int.Bearing (in.)	7.0/17.5	5.5/13.8	4.9/12.3	4.8/12.0	4.1/10.3	3.6/9.0	3.2/8.0	2.9/7.3	2.3/5.8	1.9/4.8	1.6/4.0

- 2 7/16" Load Tables widths only available in 9 1/4", 11 1/4" and 14" depths. To determine 2 7/16" load capacity, multiply .464 times the 5 1/4" loads. The bearing stays the same. See Anthony Forest website at www.anthonyforest.com to download complete 2 7/16" load tables.
- Values shown are the maximum uniform loads (beam weight included) in pounds per lineal foot (PLF) that can be applied to the beam.
- These tables are for preliminary design when considering load and other conditions. The final design should include complete design analysis.
- Bearing lengths shown in third row of each cell are for maximum PLF loads for the two end bearings and for middle or intermediate bearings when beam is continuous. A shorter bearing may be used if proper analysis is done.
- Live load is based on the deflection criterion of L/360 and includes the beam weight (48 pcf).
- Total load is based on the deflection criterion of L/240 and includes creep deflection with a LL/DL ratio of 4 or higher.
- For deflection limits of L/240 and L/480, multiply the live load figures by 1.5 and 0.75 respectively.
- The beam is assumed to be loaded on the top edge and with full lateral support at bearing points.
- Selected beam must satisfy both live and total load.
- Where no live load shows, live load is the same as total load.

TREATED GLULAM ALLOWABLE ROOF SNOW LOADS (PLF)

EWS 24F-V5M1/SP • Dry-Use • $F_b=2,400$ psi • $F_v=300$ psi • $E=1.8 \times 10^6$ psi • $F_c = 740$ psi • (LDF=1.15)

Width (in)	Depth (in)	Load Condition	Span (feet)										
			6	8	10	12	14	16	18	20	22	24	26
2 7/16" <i>(See Note 1)</i>	9 1/4	Total Load	2364	1400	892	574	357	236	163	124	85	63	47
		Live Load	---	---	---	525	330	221	155	113	---	---	---
		Min. End/Int.Bearing (in.)	2.8/7.0	2.2/5.5	1.8/4.5	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	9 1/2	Total Load	2428	1478	943	622	388	256	178	127	92	69	52
		Live Load	---	---	---	569	358	240	168	123	---	---	---
		Min. End/Int.Bearing (in.)	2.9/7.3	2.3/5.8	1.9/4.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 1/4	Total Load	3165	2076	1324	916	651	432	300	216	159	121	91
		Live Load	---	---	---	---	595	398	280	204	153	118	---
		Min. End/Int.Bearing (in.)	3.7/9.3	3.3/8.3	2.6/6.5	2.2/5.5	1.8/4.5	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 7/8	Total Load	3340	2313	1476	1021	747	509	354	255	189	151	110
		Live Load	---	---	---	---	699	468	329	240	180	139	109
		Min. End/Int.Bearing (in.)	3.9/9.8	3.6/9.0	2.9/7.3	2.4/6.0	2.1/5.3	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	2.0/5.0
14	Total Load	4309	2769	2054	1422	1041	794	586	424	315	239	194	
	Live Load	---	---	---	---	---	768	539	393	295	227	179	
	Min. End/Int.Bearing (in.)	5.1/12.8	4.4/11.0	4.0/10.0	3.4/8.5	2.9/7.3	2.5/6.3	2.1/5.3	1.7/7.3	1.5/3.8	1.5/3.8	1.5/3.8	
16	Total Load	5432	3372	2425	1860	1362	1039	818	637	474	362	281	
	Live Load	---	---	---	---	---	---	805	587	441	340	267	
	Min. End/Int.Bearing (in.)	6.4/16.0	5.3/13.3	4.8/12.0	4.4/11.0	3.7/9.3	3.3/8.3	2.9/7.3	2.5/6.3	2.1/5.3	1.7/7.3	1.5/3.8	
18	Total Load	6810	4057	2866	2356	1726	1317	1037	837	689	520	405	
	Live Load	---	---	---	---	---	---	---	835	628	483	380	
	Min. End/Int.Bearing (in.)	8.0/20.0	6.4/16.0	5.6/14.0	5.6/14.0	4.7/11.8	4.1/10.3	3.7/9.3	3.3/8.3	3.0/7.5	2.5/6.3	2.1/5.3	
3 1/2"	9 1/4	Total Load	3587	2125	1355	871	543	359	247	177	130	96	73
		Live Load	---	---	---	802	505	338	237	173	---	---	---
		Min. End/Int.Bearing (in.)	2.8	2.2	1.8/4.5	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	9 1/2	Total Load	3684	2243	1430	989	604	405	270	193	142	106	80
		Live Load	---	---	---	868	547	366	257	188	141	---	---
		Min. End/Int.Bearing (in.)	2.9/7.3	2.3/5.8	1.9/4.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 1/4	Total Load	4803	3166	2026	1407	1003	676	475	346	260	200	158
		Live Load	---	---	---	---	908	608	427	311	234	180	142
		Min. End/Int.Bearing (in.)	3.7/9.3	3.3/8.3	2.6/6.5	2.2/5.5	1.8/4.5	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8
	11 7/8	Total Load	5069	3509	2239	1549	1134	758	532	391	275	226	178
		Live Load	---	---	---	---	1068	715	502	366	---	212	167
		Min. End/Int.Bearing (in.)	3.9/9.8	3.6/9.0	2.9/7.3	2.4/6.0	2.1/5.3	1.6/4.0	1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	1.5/5.0
14	Total Load	6539	4201	3116	2158	1580	1205	910	663	501	386	304	
	Live Load	---	---	---	---	---	1172	823	600	451	347	273	
	Min. End/Int.Bearing (in.)	5.1/12.8	4.4/11.0	4.0/10.0	3.4/8.5	2.9/7.3	2.5/6.3	2.1/5.3	1.7/7.3	1.4/3.5	1.5/3.8	1.5/3.8	
16	Total Load	8241	5115	3680	2821	2067	1577	1241	989	744	576	453	
	Live Load	---	---	---	---	---	---	1229	896	673	519	408	
	Min. End/Int.Bearing (in.)	6.4/16.0	5.3/13.3	4.8/12.0	4.4/11.0	3.7/9.3	3.3/8.3	2.9/7.3	2.6	2.1/5.3	1.8/4.5	1.5/3.8	
18	Total Load	10331	6155	4350	3575	2619	1999	1574	1270	1044	816	645	
	Live Load	---	---	---	---	---	---	---	---	958	738	581	
	Min. End/Int.Bearing (in.)	8.0/20.0	6.4/16.0	5.6/14.0	5.6/14.0	4.7/11.8	4.1/10.3	3.7/9.3	3.3/8.3	3.0/7.5	2.5/6.3	2.2/5.5	

- 2 7/16" Load Tables widths only available in 9 1/4", 11 1/4" and 14" depths. To determine 2 7/16" load capacity, multiply .464 times the 5 1/4" loads. The bearing stays the same.
- Values shown are the maximum uniform loads (beam weight included) in pounds per lineal foot (PLF) that can be applied to the beam.
- These tables are for preliminary design when considering load and other conditions. The final design should include complete design analysis.
- Bearing lengths shown in third row of each cell are for maximum PLF loads for the two end bearings and for middle or intermediate bearings when beam is continuous. A shorter bearing may be used if proper analysis is done.
- Live load is based on the deflection criterion of span/240 and includes the beam weight (48 pcf)
- Total load is based on the deflection criterion of span/180 and includes creep deflection with a LL/DL ratio of 2 or higher.
- For live deflection limits of L/180 and L/360, multiply the live load values by 1.33 and 0.67 respectively. The resulting live load shall not exceed the total load shown.
- The beam is assumed to be loaded on the top edge and with full lateral support at bearing points.
- Selected beam must satisfy both live and total load.
- Where no live load shows, live load is the same as total load.

POWER PRESERVED GLULAM® COLUMN

POWER PRESERVED GLULAM® COLUMN

Power Preserved Glulam® Column is our treated glulam column offering. Power Preserved Glulam® Columns can be treated to above ground or ground contact retentions. When treated to ground contact retentions (.075 pcf), Power Preserved Glulam® Columns meet AWP use categories 4A, 4B, and 4C.

Suggested Uses: (Exterior Only)

- Deck support columns and board walks
- Residential and commercial exposed structural columns
- Raised coastal construction supports replacing piling
- Industrial and farming applications
- Pedestrian bridges and park shelters
- Pergolas

POWER PRESERVED GLULAM® COLUMN DESIGN VALUES

For Normal Duration of Load (LDF = 1.0)

Layup Combination	Species	Grade	Modulus of Elasticity		Compression Parallel to Grain		Bending X-X Axis	Bending Y-Y Axis	
					4 or More Lams	2 or 3 Lams	2 lams to 15" Depth	4 or More Lams	3 Lams
			E_{Xapp} E_{Yapp}	E_{Xtrue} or E_{Axial} E_{Ytrue}	F_{CL}	F_{CL}	F_{BXX}	F_{BYX}	F_{BYX}
Combination #50	Southern Pine	N1D14	1.9x10 ⁶ psi	2.0x10 ⁶ psi	2300 psi	1700 psi	2100 psi	2300 psi	2100 psi
Wet-Use Factor			0.833		0.73		0.8		0.8

Values Listed are for moisture content of less than 16% (Dry-Use). Apply wet-use adjustment factors for columns in direct contact with the ground. Use of column bases or standoffs may allow for dry-use. See APA Product Report PR-L282 Power Preserved Glulam Beams and Columns Table 2 for complete list of Design Values.



Power Preserved Glulam® Pier and Beam Application



Power Preserved Glulam® Beach House Application

POWER PRESERVED GLULAM® BEAMS AND COLUMNS DESIGN, INSTALLATION, AND CONNECTION NOTES

- Allowable axial loading for all Power Preserved Column® sizes can be found on our website:
<https://www.anthonyforest.com/ewp/power-column.shtml>
- Power Preserved Glulam® column load tables are for preliminary design use only. Final design should include a complete engineering analysis, including bearing capacity of the foundation supporting the column.
- Power Preserved Glulam® columns should be placed on column bases or embedded in concrete.
- Power Preserved Glulam® Beams and Columns should not be used in direct contact with water.
- Corrosion resistant connections are required and must meet all local building codes
- Power Preserved Glulam® Beams and Columns treated to ground contact retention (.075 pcf) should not be painted or stained.
- Power Preserved Glulam® Beams and Columns should not come in direct contact with bituminous materials such as deck protective wrap, asphalt or tar/felt paper.
- Two-ply connection details for 2 7/16" and 3 1/2" Power Preserved Glulam® can be found on our website:

<https://www.anthonyforest.com/ewp/glulam-tech-data.shtml>



Power Preserved Glulam® Deck Application



Power Preserved Glulam® Pergola



Power Preserved Glulam® Bridge Application



Power Preserved Glulam® Deck Application

ANTHONY FOREST PRODUCTS IS PART OF THE CANFOR GROUP OF COMPANIES



**BUILD LONG LASTING STRUCTURES WITH
POWER PRESERVED GLULAM®**

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