

# POWER PRESERVED GLULAM® BEAMS AND COLUMNS



Tomorrow's Engineered Wood - Today

**Certified Building Products** 



# POWER PRESERVED GLULA CREATE STRONGER, LONG



Surfside Beach Community Center

#### **POWER PRESERVED GLULAM® (PPG)**

Anthony Forest Products has been a name to trust in the glued laminated timber business for over 45 years. Anthony stock  $2400F_b-1.8E-300F_v$  SYP glulam has been our mainstay in business along with the high strength Power Beam®  $3000F_b-2.1E-300\ F_v$  IJC beam.

With the shortage of high quality, high strength, solid southern pine treated timber, Anthony offers Power Preserved Glulam® Beams, which have been pressure treated with Hoover Cop-Guard® or Cop-8® at .04 pounds per cubic foot (PCF) or .02 pounds per cubic foot retention levels suitable for

above ground uses respectively. Power Preserved Glulam® products will resist fungal decay and wood-destroying insect attacks and are covered by a 25 year warranty by Hoover.

#### **FACT SHEET**

- 2400F<sub>b</sub> 1.8E 300F<sub>v</sub> SYP glulam industrial grade
- High strength allows for reduction in size of columns or number of pilings and piers.
- Two separate warranties for your protection
- Balanced lay-up and zero camber
- No top or bottom
- As environmentally safe as untreated wood

- Above ground use for beams (AWPA use categories UC3B) and ground contact for the columns (AWPA use categories UC4A, UC4B and UC4C)
- For PPG Beams sizes not listed, please call Anthony Forest

#### **FASTENERS**

- Non-Corrosive fasteners may be used with PPG in protected areas.
- Corrosion resistant fasteners are required if a connection is made to other water borne copper treated wood.
- Local building code requirements will always supersede above restrictions.

# M® BEAMS AND COLUMNS ER LASTING STRUCTURES

#### **SUGGESTED USES (EXTERIOR ONLY)**

- Decks, patios, trellises, pergolas and covered park shelters
- · Raised Floor Construction
- Spans longer distances requiring fewer columns for less obstructed views, turning outdoor space under your deck into an outdoor living area
- Coastal construction boardwalk and pier/beam foundation
- Light commercial and bridge construction



Copper Naphthenate (CuN) has been used as a wood preservative for over 100 years. Cop-Guard® and Copper 8 quinolinolate Cop-8® are both dissolved in low odor mineral spirits as a carrier and are an ideal fungicide and insecticide for the long term preservation of wood products in above ground uses. PPG and columns have a green coloration when treated with Cop-Guard® and have no real color change when treated with Cop-8® as shown in the picture. Cop-8® is the only wood preservative approved by the FDA (Food & Drug Administration) for contact with food goods in transportation. Both preservatives are low in toxicity, environmentally safe, clean, and noncorrosive to fasteners. For more information on Cop-Guard® and Cop-8®, please see the MSDS sheets and Consumer Information Sheets (CIS) on our website www.anthonyforest.com.

#### Power Preserved Glulam® Beams and Columns Advantages Over Waterborne Preservative Treated Wood

- No swelling or shrinkage of the beam
- Less checking, cupping, or twisting of beam



CCC Bridge Davy Crockett National Forest in Lufkin, Texas

- Three times as strong as #2 PT SYP 4x12 (2400F<sub>b</sub> vs 750 PSI)
- No strength reductions required after treatment
- · Automatic substitute for treated SCL
- Stainable and Paintable (See restrictions.)
- · Not considered hazardous material

## 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 does not reach a "wet-use" condition.

#### **CODE APPROVALS**

Power Preserved Glulam® is 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. The APA-EWS is our third party inspection agency.

<u>AWPA</u>	SYP Preservative Retention Comparison Table (po									
Use Categories		Preservative Type								
<b>Above Ground</b>	ACQ	ACD	Cop8®	Cop- Guard®	MCQ	MCA	Penta			
UC3B (Exterior)	0.25	0.17	0.02	0.04	0.15	0.07	0.30			
<b>Ground Contact</b>										
UC4A	0.40	0.28	N/A	0.075	0.34	0.07	0.60			
UC4B	0.60	0.28	N/A	0.075	0.60	0.16	0.60			
UC4C	0.60	0.28	N/A	0.075	0.60	0.24	0.60			

#### **RESTRICTIVE USES**

Power Preserved Glulam® treated with Cop-Guard® at .04 PCF and Cop-8® at .02 PCF retention (UC3B) are for above ground use only. Power Preserved Glulam® products shall not be used in any applications in direct contact with bituminous materials such as deck protective wrap, asphalt/tar/felt paper, ground, water, or marine applications.

After thorough drying and stain blocking primer has been applied, PPG Beams are stainable and paintable (Columns are not).



Pergola



Raised Floor Construction



Raised Beach Home

Table 2: Power Preserved Glulam® Design Value Comparison (PSI)									
Product	F <sub>b</sub> (Flexural Stress)	MOE (Modulus of Elasticity)	<b>F</b> <sub>v</sub> (Horizontal Shear)	<b>F</b> <sub>c⊥</sub> (Compression Perpendicular to Grain)					
Power Preserved Glulam <sup>©1</sup>	2400	1.8x10 <sup>6</sup>	300	740					
Treated SCL <sup>2</sup>	2117	1.7x10 <sup>6</sup>	241	533					
#2 Treated SYP 4x12³	750	1.4x10 <sup>6</sup>	170	379					

<sup>&</sup>quot;Dry-Use" means the treated beam does not exceed 16% maximum moisture content.

<sup>&</sup>lt;sup>3</sup>SYP 4x12 is treated with water borne preservatives for wet-use. No wet-use reduction applied.

Table 3: Anthony Glulam Beam Design Comparisons								
Product	Layup	Modulus of	Flexural Str	ess F <sub>b</sub> (psi) <sup>2</sup>	Choor	Compression Perpendicular		
	Combinaton	Elasticity E (10 <sup>6</sup> psi)	Tension Zone	Compression Zone	Shear F <sub>v</sub> (psi) <sup>3</sup>	to Grain F <sub>c⊥</sub> (psi)		
Power Beam®	30F-E2	2.1	3,000	3,000	300	805		
24F Stock Glulam	24F-V4	1.7	2,400	1,850	170-210	740		
Power Preserved Glulam	24F-V5M1	1.8	2,400	2,400	300	740		
Wet-Use Factor <sup>1</sup>		0.833	0.8	0.8	0.875	0.53		

<sup>&</sup>lt;sup>1</sup>The tabulated values are for moisture content of less than 16%. For wet-use, the design values must be multiplied by the wet-use factor.  $^2F_b$  shall be adjusted by the volume effect factor using the following formula:  $C_v = (5.125/b)^{1/20} \times (12/d)^{1/20} \times (21/L)^{1/20} \le 1.0$  Where: b = beam width (in.), d = beam depth (in.), L = beam length (ft.)

<sup>&</sup>lt;sup>3</sup>For non-prismatic members, notched members, members subject to impact or cyclic loading, or shear design of bending members at connections (NDS-2012, 3.4.3.3), the design shear (F<sub>i</sub>) shall be multiplied by a factor of 0.72.

Table 4: Power	Preserve	ed Glulam®	Sizes an	d Design Pro	perties 1,2
EWS 24F-V5M1/SP	Drv-Use	F.=2.400 psi	F =300psi	E=1.8 x 10 <sup>6</sup> psi	$F_{o.} = 740 \text{ psi}$

LW3 241-V31011/31 DIY-036 $\Gamma_0$ =2,400 psi $\Gamma_V$ =300psi L=1.0 X 10 psi $\Gamma_{0,1}$ =740 psi							
			Moment of	Maximum Resisti	ve Moment (ftlbf)	Maximum Resi	istive Shear (lbf)
Width (in.)	Depth (in.)	Weight (lbf/ft.)1	Inertia (in⁴)	100%	115%	100%	115%
	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
2 7/16" <sup>3</sup>	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
	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
5 1/4"	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

<sup>&</sup>lt;sup>1</sup>Beam weight is assumed to be 48 pcf.

<sup>&</sup>lt;sup>2</sup>SCL 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.

<sup>&</sup>lt;sup>2</sup>Maximum resistive moment shall be adjusted by the volume factor based in NDS-2012, or see footnote #2 from Table 3.

<sup>&</sup>lt;sup>3</sup>2 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.

## **Treated Glulam Allowable Floor Loads (plf)**

EWS 24F-V5M1/SP • Dry-Use • F<sub>b</sub>=2,400 psi • F<sub>v</sub>=300 psi • E=1.8 x 10<sup>6</sup> psi • F<sub>c1</sub> =740 psi • (LDF=1.00)

			Span (feet)										
Width (in)	Depth (in)	Load Condition	6	8	10	12	14	16	18	20	22	24	26
	9 1/4	Total Load Live Load Min. End/Int.Bearing (in.)	2052  2.4/6.0	1226 1181 1.9/4.8	756 605 1.5/3.8	437 350 1.5/3.8	275 220 1.5/3.8	185 148 1.5/3.8	130 104 1.5/3.8	94 76 1.5/3.8	71 57 1.5/3.8	55 44 1.5/3.8	43 34 1.5/3.8
	9 1/2	Total Load Live Load Min. End/Int.Bearing (in.)	2108  2.5/6.3	1293 1279 2.0/5.0	827 655 1.6/4.0	474 379 1.5/3.8	298 239 1.5/3.8	200 160 1.5/3.8	140 112 1.5/3.8	102 82 1.5/3.8	77 62 1.5/3.8	59 47 1.5/3.8	47 37 1.5/3.8
<b>2 7/16"</b> (See Note 1)	11 1/4	Total Load Live Load Min. End/Int.Bearing (in.)	2749  3.2/8.0	1813  2.9/7.3	1160 1088 2.3/5.8	787 629 1.9/4.8	495 396 1.5/3.8	332 266 1.5/3.8	233 186 1.5/3.8	170 136 1.5/3.8	128 102 1.5/3.8	98 79 1.5/3.8	77 62 1.5/3.8
	11 7/8	Total Load Live Load Min. End/Int.Bearing (in.)	2901  3.4/8.5	1918  3.0/7.5	1293 1279 2.5/6.3	898 740 2.1/5.3	583 466 1.6/4.0	390 312 1.5/3.8	274 219 1.5/3.8	200 160 1.5/3.8	150 120 1.5/3.8	116 93 1.5/3.8	91 73 1.5/3.8
3 1/2"	14	Total Load Live Load Min. End/Int.Bearing (in.)	3743  4.4/11.0	2401  3.8/9.5	1782 1784 3.5/8.8	1248 1213 2.9/7.3	917 764 2.5/6.3	702 512 2.2/5.5	449 359 1.6/4.0	328 262 1.5/3.8	246 197 1.5/3.8	190 152 1.5/3.8	149 119 1.5/3.8
	16	Total Load Live Load Min. End/Int.Bearing (in.)	4719  5.6/14.0	2926  4.6/11.5	2101  4.1/10.3	1615  3.8/9.5	1182 1140 3.3/8.3	901 764 2.8/7.0	671 537 2.4/6.0	489 391 1.9/4.8	367 294 1.6/4.0	283 226 1.5/3.8	223 178 1.5/3.8
	18	Total Load Live Load Min. End/Int.Bearing (in.)	5917  7.0/17.5	3522  5.5/13.8	2485  4.9/2.3	2046  4.8/12.0	1499  4.1/10.3	1143 1088 3.6/9.0	899 764 3.2/8.0	725 557 2.8/7.0	523 418 2.3/5.8	403 322 1.9/4.8	317 253 1.6/4.0
	9 1/4	Total Load Live Load Min. End/Int.Bearing (in.)	3114  2.4/6.0	1861 1803 1.9/4.8	1154 923 1.5/3.8	664 534 1.5/3.8	419 337 1.5/3.8	280 225 1.5/3.8	197 158 1.5/3.8	144 115 1.5/3.8	108 87 1.5/3.8	83 67 1.5/3.8	66 53 1.5/3.8
	9 1/2	Total Load Live Load Min. End/Int.Bearing (in.)	3199  2.5/6.3	1948  2.0/5.0	1264 1000 1.6/4.0	719 579 1.5/3.8	453 365 1.5/3.8	303 244 1.5/3.8	214 172 1.5/3.8	156 125 1.5/3.8	117 94 1.5/3.8	90 72 1.5/3.8	71 57 1.5/3.8
	11 1/4	Total Load Live Load Min. End/Int.Bearing (in.)	4172  3.2/8.0	2752  2.9/7.3	1772 1661 2.3/5.8	1195 961 1.9/4.8	753 605 1.5/3.8	504 406 1.5/3.8	354 285 1.5/3.8	260 208 1.5/3.8	195 156 1.5/3.8	150 120 1.5/3.8	118 95 1.5/3.8
5 1/4"	11 7/8	Total Load Live Load Min. End/Int.Bearing (in.)	4403  3.4/8.5	2910  3.0/7.5	1944  2.5/6.3	1344 1131 2.1/5.3	885 712 1.6/4.0	593 477 1.5/3.8	419 335 1.5/3.8	305 244 1.5/3.8	229 183 1.5/3.8	177 141 1.5/3.8	139 111 1.5/3.8
	14	Total Load Live Load Min. End/Int.Bearing (in.)	5679  4.4/11.0	3644  3.8/9.5	2707  3.5/8.8	1874 1853 2.9/7.3	1371 1167 2.5/6.3	1044 782 2.2/5.5	682 549 1.6/4.0	497 400 1.5/3.8	373 301 1.5/3.8	289 232 1.5/3.8	228 182 1.5/3.8
	16	Total Load Live Load Min. End/Int.Bearing (in.)	7161  5.6/14.0	4440  4.6/11.5	3188  4.1/10.3	2451  3.8/9.5	1794 1741 3.3/8.3	1400 1167 2.8/7.0	1018 819 2.4/6.0	742 597 1.9/4.8	558 449 1.6/4.0	460 346 1.5/3.8	340 272 1.5/3.8
	18	Total Load Live Load Min. End/Int.Bearing (in.)	8979  7.0/17.5	5343  5.5/13.8	3770  4.912.3	3106  4.8/12.0	2274  4.1/10.3	1734 1661 3.6/9.0	1365 1167 3.2/8.0	1128 851 2.9/7.3	794 639 2.3/5.8	615 492 1.9/4.8	484 387 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.
- 5. 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.
- 7. For deflection limits of L/240 and L/480, multiply the live load figures by 1.5 and 0.75 respectively.
- 8. The beam is assumed to be loaded on the top edge and with full lateral support at bearing points.
- 9. Selected beam must satisfy both live and total load.
- 10. Where no live load shows, live load is the same as total load
- 11. Call Anthony Forest for sizes not listed.

# Treated Glulam Allowable Roof Snow Loads (plf)

EWS 24F-V5M1/SP • Dry-Use • F<sub>b</sub>=2,400 psi • F<sub>v</sub>=300 psi • E=1.8 x 10<sup>6</sup> psi • F<sub>c1</sub> =740 psi • (LDF=1.15)

			Span (					Span (feet)						
Width (in)	Depth (in)	<b>Load Condition</b>	6	8	10	12	14	16	18	20	22	24	26	
	9 1/4	Total Load	2364	1400	892	574	357	236	163	124	85	63	47	
		Live Load Min. End/Int.Bearing (in.)	2.8/7.0	2.2/5.5	1.8/4.5	525 1.5/3.8	330 1.5/3.8	221 1.5/3.8	155 1.5/3.8	113 1.5/3.8	1.5/3.8	1.5/3.8	1.5/3.8	
	9 1/2	Total Load Live Load Min. End/Int.Bearing (in.)	2428  2.9/7.3	1478  2.3/5.8	943  1.9/4.8	622 569 1.5/3.8	388 358 1.5/3.8	256 240 1.5/3.8	178 168 1.5/3.8	127 123 1.5/3.8	92  1.5/3.8	69  1.5/3.8	52  1.5/3.8	
<b>2 7/16"</b> (See Note 1)	11 1/4	Total Load Live Load Min. End/Int.Bearing (in.)	3165  3.7/9.3	2076  3.3/8.3	1324  2.6/6.5	916  2.2/5.5	651 595 1.8/4.5	432 398 1.5/3.8	300 280 1.5/3.8	216 204 1.5/3.8	159 153 1.5/3.8	121 118 1.5/3.8	91  1.5/3.8	
3 1/2"	11 7/8	Total Load Live Load Min. End/Int.Bearing (in.)	3340  3.9/9.8	2313  3.6/9.0	1476  2.9/7.3	1021  2.4/6.0	747 699 2.1/5.3	509 468 1.6/4.0	354 329 1.5/3.8	255 240 1.5/3.8	189 180 1.5/3.8	151 139 1.5/3.8	110 109 2.0/5.0	
3 1/2	14	Total Load Live Load Min. End/Int.Bearing (in.)	4309  5.1/12.8	2769  4.4/11.0	2054  4.0/10.0	1422  3.4/8.5	1041  2.9/7.3	794 768 2.5/6.3	586 539 2.1/5.3	424 393 1.7/7.3	315 295 1.5/3.8	239 227 1.5/3.8	194 179 1.5/3.8	
	16	Total Load Live Load Min. End/Int.Bearing (in.)	5432  6.4/16.0	3372  5.3/13.3	2425  4.8/12.0	1860  4.4/11.0	1362  3.7/9.3	1039  3.3/8.3	818 805 2.9/7.3	637 587 2.5/6.3	474 441 2.1/5.3	362 340 1.7/7.3	281 267 1.5/3.8	
	18	Total Load Live Load Min. End/Int.Bearing (in.)	6810  8.0/20.0	4057  6.4/16.0	2866  5.6/14.0	2356  5.6/14.0	1726  4.71/1.8	1317  4.1/10.3	1037  3.7/9.3	837 835 3.3/8.3	689 628 3.0/7.5	520 483 2.5/6.3	405 380 2.1/5.3	
	9 1/4	Total Load Live Load Min. End/Int.Bearing (in.)	3587  2.8	2125  2.2	1355  1.8/4.5	871 802 1.5/3.8	543 505 1.5/3.8	359 338 1.5/3.8	247 237 1.5/3.8	177 173 1.5/3.8	130  1.5/3.8	96  1.5/3.8	73  1.5/3.8	
	9 1/2	Total Load Live Load Min. End/Int.Bearing (in.)	3684  2.9/7.3	2243  2.3/5.8	1430  1.9/4.8	989 868 1.5/3.8	604 547 1.5/3.8	405 366 1.5/3.8	270 257 1.5/3.8	193 188 1.5/3.8	142 141 1.5/3.8	106  1.5/3.8	80  1.5/3.8	
	11 1/4	Total Load Live Load Min. End/Int.Bearing (in.)	4803  3.79.3	3166  3.3/8.3	2026  2.6/6.5	1407  2.2/5.5	1003 908 1.8/4.5	676 608 1.5/3.8	475 427 1.5/3.8	346 311 1.5/3.8	260 234 1.5/3.8	200 180 1.5/3.8	158 142 1.5/3.8	
5 1/4"	11 7/8	Total Load Live Load Min. End/Int.Bearing (in.)	5069  3.9/9.8	3509  3.6/9.0	2239  2.9/7.3	1549  2.4/6.0	1134 1068 2.1/5.3	758 715 1.6/4.0	532 502 1.5/3.8	391 366 1.5/3.8	275  1.5/3.8	226 212 1.5/3.8	178 167 1.5/5.0	
	14	Total Load Live Load Min. End/Int.Bearing (in.)	6539  5.1/12.8	4201  4.4/11.0	3116  4.0/10.0	2158  3.4/8.5	1580  2.9/7.3	1205 1172 2.5/6.3	910 823 2.1/5.3	663 600 1.7/7.3	501 451 1.4/3.5	386 347 1.5/3.8	304 273 1.5/3.8	
	16	Total Load Live Load Min. End/Int.Bearing (in.)	8241  6.4/16.0	5115  5.3/13.3	3680  4.8/12.0	2821  4.4/11.0	2067  3.7/9.3	1577  3.3/8.3	1241 1229 2.9/7.3	989 896 2.6/	744 673 2.1/5.3	576 519 1.8/4.5	453 408 1.5/3.8	
	18	Total Load Live Load Min. End/Int.Bearing (in.)	10331  8.0/20.0	6155  6.4/16.0	4350  5.6/14.0	3575  5.6/14.0	2619  4.71/1.8	1999  4.1/10.3	1574  3.7/9.3	1270  3.3/8.3	1044 958 3.0/7.5	816 738 2.5/6.3	645 581 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.
- 2. 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.
- 4. 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.
- 5. 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.
- 7. 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.
- 8. The beam is assumed to be loaded on the top edge and with full lateral support at bearing points.
- 9. Selected beam must satisfy both live and total load.
- 10. Where no live load shows, live load is the same as total load.
- 11. Call Anthony Forest for sizes not listed

## **POWER PRESERVED COLUMN®**

#### **POWER PRESERVED COLUMN®**

Anthony Forest Products offers 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 0.075 PCF, meeting AWPA use categories 4A, 4B, and 4C (should not be used in direct contact with water).

#### 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



Margaritaville in Destin, Florida

Power Preserved Column® Design Values <sup>1</sup>								
Combination #50	F <sub>b</sub> x-x axis	F <sub>b</sub> y-y	axis		Compro Parallel to			
#1 Dense SYP	F <sub>b</sub>	3 laminations	4 or more laminations	MOE	3 laminations	4 or more laminations		
Design Value	2,100 psi	2,100	2,300	1.9 x 10 <sup>6</sup>	1,700	2,300		
Wet-Use Factor	0.8	0.8	0.8	0.833	0.53	0.73		

<sup>&</sup>lt;sup>1</sup> The tabulated values are for moisture content of less than 16%. Apply wet-use adjustment factors for columns in direct contact with the ground. Use of column bases or standoff may allow for dry-use.

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"						
10 3/4"	10 3/4"						



Mason Pergola. Power Preserved Glulam® Beams and Columns

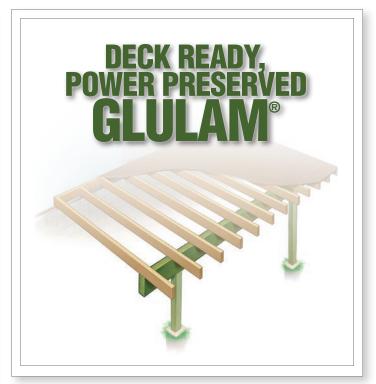
#### **DESIGN, INSTALLATION AND CONNECTION NOTES:**

#### BEAMS AND COLUMNS

- Allowable axial loading for all Power Preserved Column<sup>®</sup> 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, staining, painting and connection details can be found at www.anthonyforest.com. Recommended connections must 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.
- Power Preserved Glulam® Beams and Columns shall not come in direct contact with bituminous materials such as deck protective wrap, asphalt or tar/felt paper.
- For 2 ply connection details for 2 7/16" and 3 1/2" PPG beams go to www.anthonyforest.com .



Power Preserved Glulam® solar panel array



Call Anthony Forest for Deck Guide

#### **SOFTWARE AND TECHNICAL SUPPORT**

Power Preserved Glulam® Beams and Columns can be sized for loading and spans using our free Power Sizer® software downloadable from our website or from the load tables on pages 5 and 6. For sizes not shown in this brochure, use our Power Sizer® software or 24F glulam brochure. For Power Preserved Column® sizing, please use our column flyer

or axial load tables, or go to our website for sizing software download.

#### **SERVICE**

If you need technical assistance, a skilled member of the Anthony EWP Team can be reached at 800.221.2326, 870-862-3414 or at info@anthonyforest.com.



Austin, Texas Deck



Power Beam® ▲ Power Column® ▲ SYP Lumber ▲ Power Joist® ▲ PRG®







DISTRIBUTED BY:



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