BUILD EFFICIENTLY WITH 24F GLULAM

STRONG
SUSTAINABLE
EFFICIENT

24F GLULAM

24F GLULAM FEATURES

- Manufactured with superior strength southern yellow pine lumber
- Strong, low-carbon alternative to concrete and steel
- Sustainable Forestry Initiative (SFI®) Certified
- Available in a range of appearance classifications including Architectural for exposed applications
- Complement to Mass Timber wood framing systems
- Excellent Fire Resistance
- Fast, easy one-piece installation

ANTHONY®
ANTHONY FOREST PRODUCTS CO.

CANFOR

Anthony Forest Products is part of the Canfor Group of Companies

24F-V5 M1 (BALANCED) AND 24F-V3 (UNBALANCED) DESIGN VALUES

Flexural Stress F_b 2400 psi	Modulus of Elasticity E 1,800,000 psi	Horizontal Shear F_V 300 psi	Compression Prep F_{cerp} 740 psi

24F-V5 M1 AND 24F-V3 PROPERTIES AND ALLOWABLE CAPACITIES

	Depth	8-1/4"	9-5/8"	11	12-3/8"	13-3/4"	15-1/8"	16-1/2"	17-7/8"	19-1/4"	20-5/8"	22"	23-3/8"	24-3/4"	26-1/8"	27-1/2"	28-7/8"
3-1/8"	Weight [lbs./ft.]	6.8	7.9	9.1	10.2	11.3	12.5	13.6	14.7								
	C_{db} Factor (L=21')	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
	Moment of Inertia I [in⁴]	146	232	347	494	677	901	1170	1487								
	Moment Capacity M [ft-lbs]	7090	9650	12604	15952	19694	23830	28359	33283								
	Shear Capacity [Lbs]	5156	6016	6875	7734	8594	9453	10313	11172								
5-1/8"	Weight [lbs./ft.]	-	13.0	14.9	16.7	18.6	20.5	22.3	24.2	26	27.9	29.8	31.6	33.5			
	C_{db} Factor (L=21')	-	1.00	1.00	0.998	0.993	0.988	0.984	0.980	0.977	0.973	0.970	0.967	0.964			
	Moment of Inertia I [in⁴]	-	381	568	809	1110	1478	1919	2439	3047	3747	4548	5455	6475			
	Moment Capacity M [ft-lbs]	-	15826	20671	26109	32072	38612	45765	53492	61848	70709	80203	90261	100879			
	Shear Capacity [Lbs]	-	9866	11275	12684	14094	15503	16913	18322	19731	21141	22550	23959	25369			
6-3/4"	Weight [lbs./ft.]	-	-	19.6	22.0	24.5	26.9	29.4	31.8	34.3	36.7	39.2	41.6	44.1	46.5	49.0	51.4
	C_{db} Factor (L=21')	-	-	0.990	0.984	0.980	0.975	0.971	0.967	0.963	0.960	0.957	0.954	0.951	0.949	0.946	0.944
	Moment of Inertia I [in⁴]	-	-	749	1066	1462	1946	2527	3213	4012	4935	5990	7184	8528	10030	11698	13542
	Moment Capacity M [ft-lbs]	-	-	26953	33905	41688	50185	59480	69519	80291	91884	104217	117283	131073	145734	160968	177092
	Shear Capacity [Lbs]	-	-	14850	16706	18563	20419	22275	24131	25988	27844	29700	31556	33413	35269	37125	38981

Balanced and Unbalanced Lay-ups

The strongest laminations in glulams are placed in the zones where tension and compression stresses are highest under in-service loading conditions.

Balanced lay-up beams (24F-V5M1) are symmetric in their lay-up and have the same grade lumber on both the top and bottom of the member. Balanced lay-up members have the same strength characteristics regardless of which face lamination is on top. Balanced beams are designed for use in cantilevered, continuous span applications, and are also suitable for simple span applications.

Unbalanced lay-up beams (24F-V3) have an asymmetrical lay-up, meaning that different grades of lumber are used in the top and bottom of the member. The word "Top" is stamped on the compression face of unbalanced beams, and the beam must be installed with the compression face upward. Unbalanced beams are designed primarily for use in simple span applications.

Camber

Camber is an initial curvature built into a fabricated member which is opposite to the calculated deflection which will occur under gravity loads. The use of camber in glulam beams also gives the designer the ability to account for the possible adverse effects of long-term deflection. Canfor's 24F-V3, Non-Balanced lay-up has a standard camber of 2000' radius.

Architectural Appearance Classification

The appearance of choice in applications where members are exposed to view because they have a smooth, attractive finish.

Power Sizer® Software

2400Fb glulam is available in iStruct® branded Power Sizer® software suite. To download the latest version of iStruct®, go to our website https://www.anthonyforest.com/sizing-software.shtml and download a copy at no charge.

Notes:
- Flexural stress F_b, shall be modified by Volume Factor, C_v, as outlined in ICC ESR-1940, APA Product Report-L263 and APA-EWS Y117 where :
$$C_v = [(5.125/b)^{.05} \times (12/d)^{.05} \times (21/L)^{.05}] \le 1.0$$
$$C_v = [C_{db} \times (21/L)^{.05}] \le 1.0$$
- Width and depth portions of Volume Factor, C_v, are incorporated into tabulated C_{db} Volume Factor.
- Tabulated Moment capacities based on width and depth portions of Volume Factor

Note: Allowable design properties and load capacities are based on a load duration of 100 percent and dry use conditions.