



Stock Glulam Specification

Scope

This stock glulam specification is intended to provide design values and product attributes for X-Beam Glulam that is inventoried in standard sizes and specifications by a nationwide network of lumber dealers that provide next day delivery. The standard specifications for these inventoried or “stock” glulam products are included in this specification.

Lumber dealers can also supply Custom glulam in many appearances, species, section sizes and lengths as well as curves and special camber. Delivery time for custom glulam typically ranges from 3 to 5 weeks from time of order or approved shop drawing. This specification is not intended to address the numerous options that can be provided by custom glulam manufacturers. See www.rosboro.com or www.westernstructures.com for more information on custom products.

Glulam Beam Design Values

Glulam shall be Douglas Fir combination symbol 24F-V4.

Rosboro X-Beam: Design Values

Product	Layup Combination	Flexural Stress F_b (psi) ²		Compression Perpendicular to Grain F_c (psi)	Shear F_v (psi) ³	MOE (10 ⁶ psi)	
		Tension Zone	Compression Zone			Apparent	True
X-Beam	24F-V4	2400	1850	650	265	1.8	1.9

Lumber Species: Glulam members shall be manufactured from Douglas Fir laminating lumber.

Appearance Classification

Members shall be Architectural Appearance

- Voids larger than 3/4" are filled
- Low laminations are repaired
- All exposed faces are sanded
- Corners of the wide faces exposed to view are eased

Protection: Beams to be individually wrapped

Stock Glulam Sizes: Full width glulam as manufactured by Rosboro

Beam Widths: 3 1/2" • 5-1/2" • 6-3/4" • 8-3/4"

Beam Depths

- Conventional depths 6" to 24" in 1 1/2" increments
- I-Joist compatible depths 9 1/2" • 11 7/8" • 14" • 16" • 18"

Camber: Shall be 5000 foot radius

Length	12'	14'	16'	18'	20'	22'	24'	26'
5000' R	0	0	0	0	1/8"	1/8"	1/8"	1/4"

Rosboro X-Beam Columns

Comb.	Comp. Perp. to Grain $F_{c\perp}$	Tension Parallel (2 or more Lams) F_t	Comp. Parallel (2 or 3 Lams) F_c	Comp. Parallel (4 or more Lams) F_c	MOE 10^6 psi
EWS3	650 psi	1450 psi	1850 psi	2300 psi	1.8 Apparent 1.9 True

Appearance: Architectural Appearance, surfaced 4 sides and 4 edges to be eased

Protection: Columns to be individually wrapped

Columns Sizes: 3½" x 6" • 5½" x 5½" • 5½" x 6"

Hardware

Any timber hanger that publishes a DF connection value is approved for use with X-Beam.

Adhesives

Face and end joint bonding adhesives will comply with ASTM-D2559 for exterior or wet use

Protection During Transit and Storage

Members will be individually wrapped. Protective cover shall remain on the members as long as practical to provide protection from weather, sunlight, soiling and damage from other trades. Slit the underside of wrappings to prevent the accumulation of moisture inside the wrapping. Store glulam material on a flat surface at least 6" above the ground. Place supports close enough together to prevent noticeable deflections.

Field Cutting, Notching and Drilling

Field notching of glulam members is not allowed without approval from the engineer of record. Holes not shown on the structural drawings or approved shop drawings shall not be drilled without approval from the engineer of record unless they meet the parameters detailed in the APA/EWS Tech Note EWS S560H.

Acceptable Manufacturers/ Suppliers

Shall be licensed by APA-EWS or AITC.

Manufacturing Standard

All glulam materials shall conform to the requirements of ANSI A190.1 and ICC-ESR-1940. Members shall be stamped with an APA-EWS or AITC quality trademark.

More Information:

APA-EWS • Web: www.apawood.org

Rosboro • Email: info@rosboro.com • **Web:** www.rosboro.com