Spruce Pine Glulam - CSA

Made to the highest specifications and standards in a regularly inspected environment focused on quality. Western Archrib's glulam products are second to none. From straight glulam beams to complex curved shapes Western Archrib glulam is the ideal product.

Manufacturing Standards

Our production facilities are certified by the APA – Engineered Wood Systems to produce glulam in accordance with:

CSA – 0122 Canadian Standards Association

As part of our commitment to the environment we offer Chain-of-Custody Certification on products manufactured with FSC® Certified Wood.

FSC® – STD-40-004 Companies supplying and manufacturing FSC® Certified Products

Manufacturing Locations

Edmonton, Alberta, Canada
Boissevain, Manitoba, Canada

Specifications

Standard Sizes:

- Width – 80mm, 130mm, 175mm, 215mm, 265mm, 315mm, 365mm, 400mm, 440mm, 490mm, 540mm, 590mm, and 640mm
- Depth – Increments of 38 mm
- Length – available in lengths up to 46m
- Custom sizes are available upon request

Stress Grades:

- CSA – Spruce Pine: 20f-EX, 20f-E, 12c-E, 14t-E

Profiles/Shapes:

- Beams
- Columns
- Curves
- Arches
- Pitch Tapered Beam
- Round/Elliptical Columns
- Multi Radii Curves
- Tudor Arches
- Shaped profiles
- Bridges
- Long Span Beams/Curves

Appearance Classifications – CSA 0122

- *Industrial (Planed) – sides of member are surfaced true to specified dimensions. Occasional planing misses may occur, filling or patching is not required.*
- *Commercial – sides of member are surfaced true to specified dimensions, free form squeezed-out adhesive, and sanded smooth. Planing misses along laminations are patched. Defects over 19mm in diameter are patched or filled.*
- *Quality - sides of member are surfaced true to specified dimensions, free form squeezed-out adhesive, and sanded smooth. Planing misses along laminations are patched. All defects are patched or filled.*

Adhesive/Service Grade

- Our adhesives are in accordance with CSA 0112.9 and meet the qualification requirements of CSA 0177 for Exterior Grade glulam.

Design Values:

- See below table for beam and column design values

Specified Strengths and Modulus of Elasticity (MPa) - CSA Spruce Pine:

		20f-E	**20f-EX**	**12c-E**
Bending Moment (pos.)	fb	25.6	25.6	9.8
Bending Moment (neg.)	fb	19.2	25.6	9.8
Longitudinal Shear	fv	1.75	1.75	1.75
Compression parallel	fc	25.2*	25.2*	25.2
Compression parallel combined with bending	fcb	25.2*	25.2	25.2
Compression Perpendicular				
-compression face bearing	fcb	5.8	5.8	5.8
-tension face bearing	fcb	5.8	5.8	5.8
Tension net section	ftn	17*	17	17
Tension gross section	ftg	12.7*	12.7	12.7
Tension perpendicular to grain	ftp	0.51	0.51	0.51
Modulus of elasticity	E	10300	10300	9700

* The use of this stress grade for this primary application is not recommended

Notes:

(1) Designers are advised to check the availability of grades before specifying.

(2) Tabulated values are based on the following standard conditions:

(a) dry service conditions; and

(b) standard term duration of load.

The information presented in the above table has been taken from the CSA 086-17 Engineering Design in Wood guide. See guide for specific notes and further information.