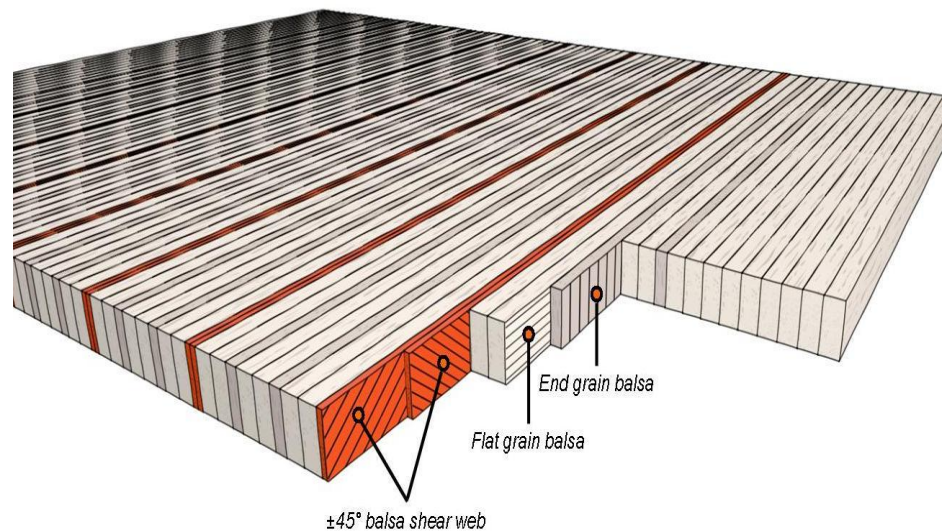


## bCores<sup>®</sup> QX



### Mechanical properties on the core width

Density*	210 kg/m <sup>3</sup>
Compression modulus z	1400 MPa
Compression strength z	5 MPa
Shear modulus xz	300 MPa
Shear strength xz	3.8 MPa
Flexural modulus x	2200 MPa

x direction is length direction parallel to ribs  
 y direction is width direction  
 z direction is out of plane direction

\* All these values are average values for the complete core. As the high-density balsa is mainly on the sides, it is mostly removed in the center of the board when the sidecut is machined. Thus the actual density of the core in final shape will be in the range between **200-205 kg/m<sup>3</sup>**.

### Product description

bCores<sup>®</sup> QX is a structural core suitable for composite applications. The core is made of balsa plywood orientated in 4 different directions (quadri-axial), which significantly improves mechanical properties, especially shear properties in length direction. The balsa plywood ensures an exceptionally high compression strength and stiffness with good bending properties of the core. The patented bCores<sup>®</sup> QX construction delivers constant quality and density.

### Processing guidelines

- The QX core can be used in any classical manufacturing method (contact molding (hand/spray), vacuum infusion, resin infusion / injection (VARTM / RTM), adhesive bonding, Pre-preg processing, compression molding (GMT, SMC)).
- Compatible with most standard resins.
- Processing temperatures up to 150°C and manufacturing pressure up to 15 bars can be used.
- Please consider our process guidelines.

### Dimensions

Standard widths: 450 mm  
 Thickness: 2-1220 mm  
 Maximum length: 3070 mm  
 Standard length: 1530 mm

### Core construction

Number of ± 45° shear web: 7  
 Wood types: BANOVA<sup>®</sup> balsa. FSC certified.

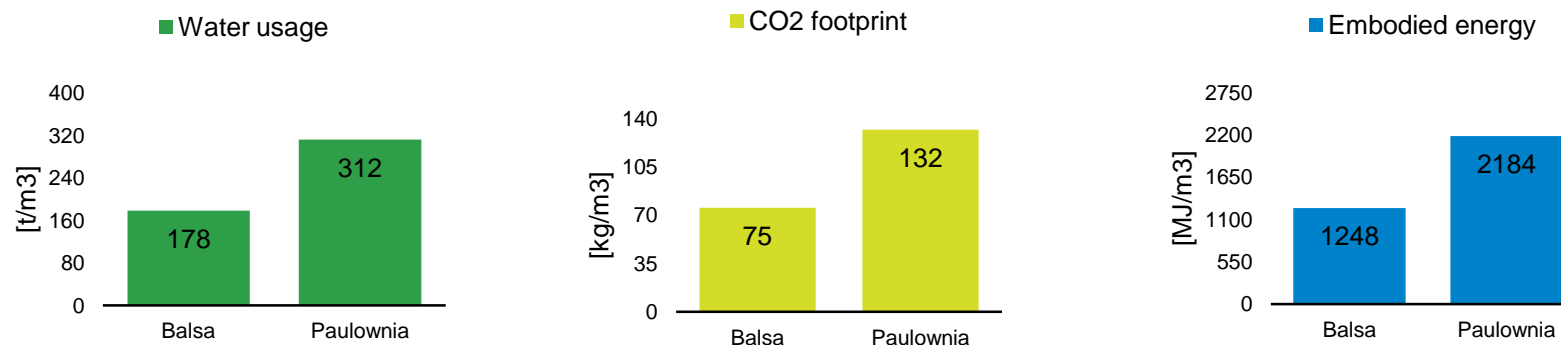


## Ecological aspects

Balsa wood is among the fastest growing tree in the world

They are FSC-certified, compliant with FSC criteria, which include e.g. taking care of indigenous peoples' rights, maintain biodiversity, resources and landscapes.

Regarding water usage, CO<sub>2</sub> footprint and embodied energy, balsa has an overall environmental impact about 40% lower than paulownia wood.



For further details please contact us: t +41 (0)26 558 84 02 | email: [contact@bcomp.ch](mailto:contact@bcomp.ch)