Bcomp® | bCores™ 200

Product Data Sheet

Mechanical Properties

Density plank	machined [1] [kg/m³]	235	200
Compression strength [MPa]	3.4
Compression strength laminated [2] [MPa]	5
Shear modulus [MPa]	520
Shear strength [MPa]	4.4
Modulus of elsaticity [MPa]	2200

Dimensions

Standard widths [mm]	M: 121 mm L: 143 mm
Thickness [mm]	From 3 mm to 850 mm

Mechanical properties determined with bCore+™ L
(1) Density of machined ski core
(2) Compressive strength of sandwich

Core Construction

Balsa wood	165 kg/m³	at +/- 45°
Hard wood edges	300 kg/m³	at 0°

Product Highlights

• Patent pending technology. Designed in Switzerland.
• Shear stiffness comparable to hardwoods with tree times higher density
• Engineered Balsa sandwich core with outstanding performance to weight ratio.
• Our Balsa wood is responsibly sourced from FSC-certified plantations that care for indigenous people's right and maintain biodiversity, resources and landscapes.

Processing Guidelines

Machining parameters

When adjusting the machining parameters, the goal is to minimize the cutting forces that act on the core. High cutting speeds and low feed rates can help to significantly improve the machining quality. Profiling in one pass at a lower feed rate yields better results than a rough- and a finishing-cut at a high feed rate. A tool with a large diameter also helps to improve the cutting quality. If possible, climb milling should be preferred over conventional milling.
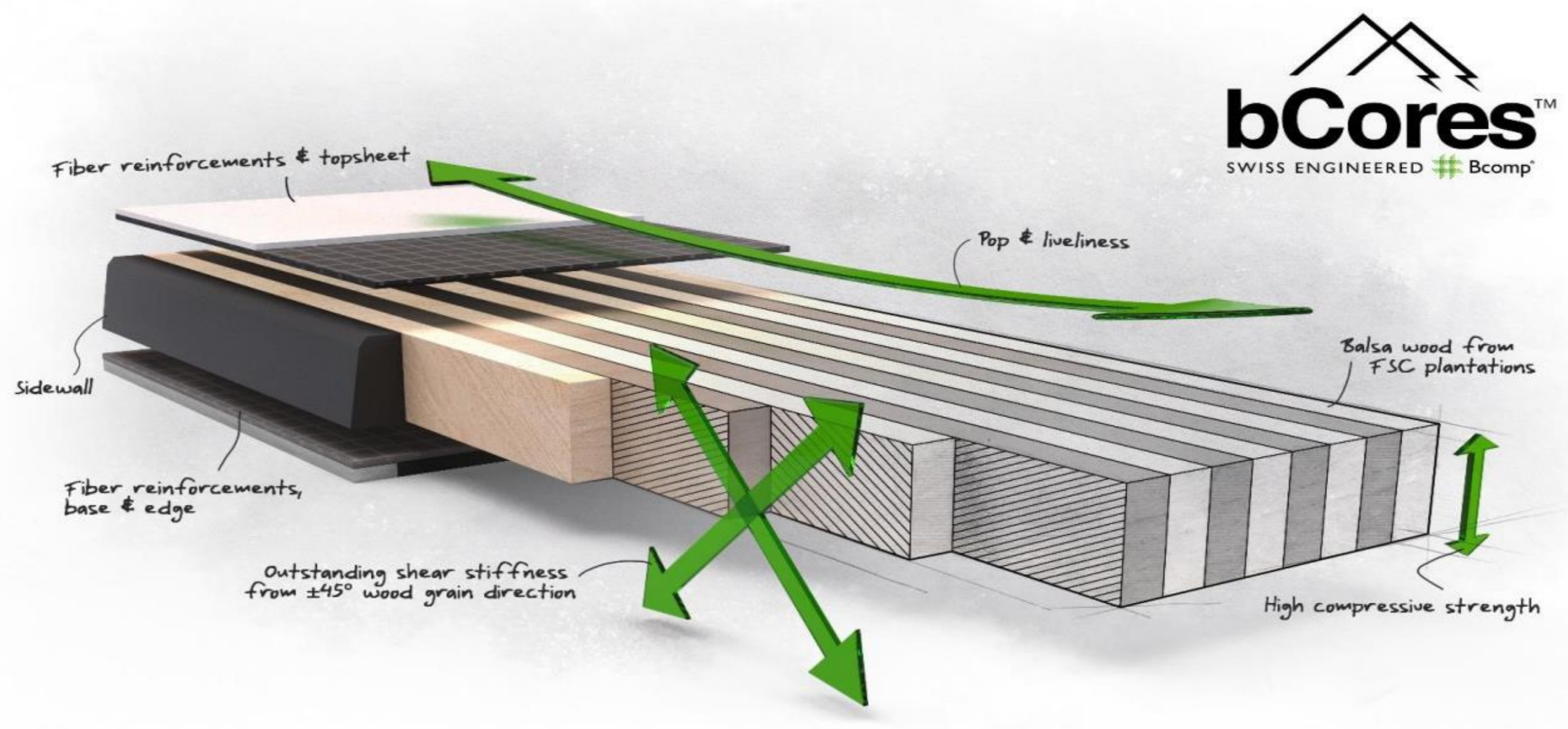
Binding renforcement

Due to the light weight of bCores™, it is very important to have a tough reinforcement material under the binding that screw retention meets standard values. The following binding reinforcements are recommended: A 3mm thick layer of plywood (e.g. Birch or cotton/phenolic resin).. An additional titanal layer of around 0.8mm in the binding area can also be used.

Calculate the righ core thickness

bCores™ have a lower flexural stiffness than classical wood cores. Therefore, bCores™ need to be slightly thicker in order to reach the same flexural stiffness as with a standard wood core. The thickness increase is not linear, Bcomp can calculate it for you.

Pressing bCores™ & resin control

To minimize weight, the amount of resin used to glue the face sheets has to be controlled. Typically, 100-150 g/m² of resin for core-to-skin bonding is enough.