

Case Study:

High-Performance Sustainable Snowboard



Background

Based in Newfoundland, Canada, Magine Snowboards specialise in handcrafted snowboards. They are passionate about designing, developing and delivering lasting, quality snowboards.

Snowboards are built using a sandwich construction, often using wood, glass fibre and various core materials. Magine wanted to develop a more sustainable snowboard for its environmentally conscious community, without sacrificing the quality or ride characteristics.

Magine worked in partnership with the Composites Innovation Center (CIC) in Winnipeg, Canada, the Natural Sciences and Engineering Research Council of Canada (NSERC), and the University of Winnipeg (UoW) to develop a sustainable bio-fibre composite snowboard. Magine were introduced to Composites Evolution as experts in sustainable materials.

Production

Composites Evolution worked closely with Magine, offering technical support - advising and assisting its team in choosing the best Biotex Flax fabric for the application. Magine selected Biotex Flax for its superior properties, excellent damping and its highly sustainable offering.

Magine were pleased to see that the Biotex Flax snowboard performed well above the required standard. Magine also found that by using a clear polymer film top sheet over the Biotex Flax fabric they were able to keep the natural look of the flax fibre weave, therefore making the snowboard's aesthetic properties reflect the sustainable nature of Biotex Flax.

Material Selection

The snowboard was built using a wood laminate core sandwiched between two layers of Biotex Flax 2x2 Twill 400gsm with a polymer film surface. The materials were bonded together using an eco-epoxy resin system.

Why Biotex Flax?

Composites Evolution's materials allowed Magine to create a bio-fibre composite snowboard, improving its flex and ride response. a balance of aesthetics and performance.

MAGINE
SNOWBOARDS / HANDCRAFTED IN CANADA 