

#WeKnowWood

# Sustainable laminated-material bridge

This laminated-material bridge is a free-form pedestrian bridge made from hardwood veneers – produced in a vacuum-infusion process – which represents a sustainable and durable alternative to concrete bridge construction.

## Project aim

The aim of this project is to produce hybrid materials from a combination of freshly peeled, moist – and therefore still flexible – hardwood veneers in combination with fibers (glass, carbon, natural and, in particular, basalt) in a special vacuum-drying and infusion process for the manufacture of self-supporting 3D free-form surfaces.

## Area of application

The area of application for the new materials includes lightweight wooden-bridge construction. There, the materials can be used as a

statically integrative component of the primary structure, or as secondary components for covering layers and overlays or curtaining shells.

## Possibilities

The laminated-material bridge demonstrates possibilities for introducing renewable raw materials – such as balsa wood, hardwood or natural fibers – into future-oriented and durable applications. The utilization of renewable raw materials leaves behind a significantly smaller carbon footprint than that of concrete bridges.

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