

#WeKnowWood

Glued laminated timber made from robinia for more climate protection in the construction industry

Buildings, bridges, and towers made from wood bind CO₂ from the atmosphere and therefore contribute towards climate protection. As a classic supplier of construction timber, spruce is finding increasingly poor growing conditions in Europe due to climate change. In addition, spruce wood has limited durability. Researchers at the Fraunhofer WKI are developing a sustainable and economical solution: a glue laminated timber made from robinia.

The deciduous species robinia copes better with the changed climate conditions than spruce and grows almost twice as fast.

Robinia wood has a higher density than oak and is the only European wood species categorized in durability class 1-2 (in accordance with DIN EN 350-2). It can be used outdoors as well as in damp rooms without chemical or structural wood preservation.

Robinia could thus not only replace spruce and reduce the use of biocides the use of tropical wood as well as finite resources such as steel and concrete could also be reduced by construction products made from robinia.

In collaboration with project partners, the researchers want to make the wood raw material robinia, with its outstanding natural properties, usable for the construction sector.

Funding:

SPRIN-D

 **Fraunhofer**
ZUKUNFTSSTIFTUNG

Contact

Dr. Dirk Berthold
Department HNT
Phone +49 531 2155-452
dirk.berthold@
wki.fraunhofer.de

Fraunhofer WKI
Bienroder Weg 54 E
38108 Braunschweig
Germany
www.wki.fraunhofer.de

© Fraunhofer WKI
05/2023

WKI is a registered mark of the
Fraunhofer-Gesellschaft.