

#WeKnowWood

Thermal insulation materials made from beech-wood fibers

With support from



by decision of the
German Bundestag

In a current research project, researchers at the Fraunhofer WKI are determining how beech wood, which will be available in increasing quantities in the future, can be used as wood-fiber insulation material in insulation mats and as wood foam.

Industrial partners will test the insulating materials developed at the Fraunhofer WKI for the filling of thermal insulation bricks in a pilot plant to determine their suitability for practical use.

For the construction industry, the researchers are working on an economically attractive solution for the production of wood-fiber insulation materials from beech wood.

Flexible wood-fiber mats are ideal for the thermal insulation of buildings - for example, as between-rafter insulation or as a filler for thermal insulation bricks. Wood-fiber insulation materials have so far been produced mainly

from coniferous wood. Due to climate change, this will be available in significantly smaller quantities in the future.

In order to ensure a reliable raw-material base for wood-fiber insulation materials for the construction industry, the researchers are currently developing insulation mats and novel wood-foam granules made from beech-wood fibers in collaboration with industrial partners.

The project aim is to set up a pilot plant for material production. This will create a sustainable perspective for the construction industry as well as a high-quality utilization option for beech wood.

Contact

Dr. Nina Ritter
Department HNT
Phone +49 531 2155-353
nina.ritter@
wki.fraunhofer.de

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