

■ WPC FURNITURE WITH LOW FLAMMABILITY

Wood is a popular material in interior design, but its water absorbency limits its use in bathrooms, where natural wood easily becomes discolored or moldy. Fraunhofer scientists and partners have developed a wood-polymer composite material for furniture that is resistant to humidity and has low flammability.

Resource-saving wood-polymer composites (WPCs) are the latest trend in materials for garden furniture and other outdoor applications, especially for terrace decking and also for weatherboarding and fencing panels. As part of the EU-sponsored LIMOWOOD project, researchers at the Fraunhofer Institute for Wood Research, Wilhelm-Klauditz-Institut WKI in Braunschweig are now collaborating with industrial partners in Belgium, Spain, France and Germany on the development of materials suitable for pressing into moisture-resistant WPC boards for indoor furniture manufacturing.



These boards are composed of around 60 percent wood particles and 40 percent thermoplastic material, generally polypropylene or polyethylene. Both wood and plastic components can be sourced from recycling streams. The wood component in WPC boards can be replaced by other lignocellulose products derived from the fibrous part of plants such as hemp or cotton, or the husks of rice grains and sunflower seeds. All of these materials are 100-percent recyclable.

Moreover, the pressed WPC boards produced by the WKI researchers are formaldehyde-free.

Source: <http://www.fraunhofer.de/en/press/research-news/2015/may/WPC-furniture-with-low-flammability.html>

■ MODULAR FURNITURE PIECES PRESENT INFINITE DESIGN POSSIBILITIES

Modular furniture is one tool at a designer's disposal for keeping common spaces in office, hospitality, and even residential interiors fresh. Functional and versatile, these clever seating, surface, and storage systems can be arranged in multiple configurations to achieve a quick space change while maintaining the application's original function and aesthetic. These products take versatility to the next level with designs that can be readily configured.



Mexico City-based studio Hierva crafted this occasional table system from solid wood, with plywood used for the curved surrounds. With its quarter-, half-, three-quarter, and full-circle modules, Pie Chart can be assembled and re-assembled at whim and is available for use as tables and storage. Stain options include shades of blue, green, grey, and yellow.



New York studio Dune designed Meta to double as a bench and a table. The geometric units can be joined to snake through a space.



This CNC-milled wood furniture set combines traditional and modern forms with a geometric twist, evidenced by its name and planar composition. Euclid comprises a minimalist chair and attached occasional tables whose hexagonal, triangular, and rhombus shapes are easy to spot.



Much like the game Tetris, this lightweight modular bookshelf gets its shape from maple plywood storage units stacked like blocks or mounted to the wall. From Brooklyn, N.Y.-based studio Brave Space Design, Tetrad Flatis available with blue, brown, green, white, and yellow backs.

Source: http://www.architectmagazine.com/technology/products/five-modular-furniture-pieces-present-infinite-design-possibilities_o

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