■ MYCO BOARD

MycoBoard™ products are a biofabricated, certified sustainable, form of engineered wood. They are grown using mycelium – "nature's glue" – which is formaldehyde-free, safe, and healthy and produces panels that are strong, machinable and fire-resistant. This makes MycoBoard™ panels an ideal solution for the home, office, or school.

Our Green Island facilities and team are producing custom molded MycoBoard shapes as well as 3x6' panels on our own presses.

We have multiple presses designed to accept molded tooling for the production of chair backs, custom architectural elements, and complex geometries. Pressing the material right to its final form removes the need for milling or routing, reducing waste and energy. In addition to our own 3x6' press, Ecovative has partnered with multiple North American mills to produce industry standard 4x8' and 5x10' panels in greater volumes. These panels are available in limited release and can be purchased through our sales team.

MycoBoard is powered by our mResin™ technology and is directly compatible with existing presses. Loose particles, from hemp to conventional wood fibers, are then combined with our proprietary mycelium strains. The growth of the mycelium converts some of the particles into a natural and safe biological glue. Compatible with existing mill technology, mResin™ adheres the particles together under the same temperatures and pressures of existing equipment.

Installing our bio-resin system can be a valuble upgrade to existing particle board plants, completely eliminating any harmful emissions, both during application and during end use, while maintaining compatability with both continious and multi-open discontinious lines. Further more, unlike conventional chemical resin systems, mResin™ adhesive is grown on site, reducing transport costs.

Our mResin™ adhesive system is currently being piloted in multiple mills in North America. MycoBoard has a pleasing all-natural surface finish which can be coated using conventional finishing systems or laminated.

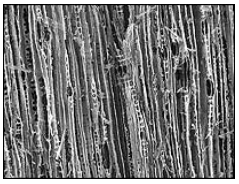
Sourse: ***http://www.ecovativedesign.com/myco-board***

■ PETRIFIED WOOD CREATED IN THE LAB

A team of US scientists claims to have created petrified wood in just a few days, mimicking a natural process that normally takes millions of years. Researchers from Pacific Northwest National Laboratory turned wood into mineral by soaking poplar and pine in a solution and then cooking them.

The process could provide new ways of filtering pollutants, soaking up contaminants and separating chemicals. Details of the research appear in the journal Advanced Materials. Petrified forests can form when trees are buried without oxygen, leaching out their woody compounds and sponging up the soil's minerals over millions of years.

To mimic this process in the lab, the team led by Yongsoon Shin bought pine and poplar boards. A 1cm cube cut from these boards is placed in acid for two days, before being soaked in a silica solution for two more. Next, the cube is air-dried, placed in a furnace filled with argon gas which is gradually raised to 1,400^{0}C and left to cook for two hours. Finally, the cube is left to cool in argon to room temperature.



Sourse: ***http://news.bbc.co.uk/2/hi/science/nature/4206387.stm***

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