

Mushroom Spores: The Newest Green Insulation Material

by Jeff McIntire-Strasburg, St. Louis, MO on 05. 7.07



Materials ranging from [hemp](#) to [recycled paper](#) to [used denim](#) are all in use as alternatives to traditional fiberglass and foam building insulation. Now Eben Bayer, who will graduate from Rensselaer Polytechnic Institute on May 19th, has added another material to the mix: mushroom spores. According to CCNews,

A dual major in mechanical engineering and product design and innovation, Bayer has developed an environmentally friendly organic insulation. The patented combination of water, flour, minerals, and mushroom spores could replace conventional foam insulations, which are expensive to produce and harmful to the environment.

"The insulation is created by pouring a mixture of insulating particles, hydrogen peroxide, starch, and water into a panel mold," Bayer says. "Mushroom cells are then injected into the mold, where they digest the starch producing a tightly meshed network of insulating particles and mycelium. The end result is an organic composite board that has a competitive R-Value – a measurement of resistance to heat flow – and can serve as a firewall."

Bayer and classmate/business partner Gavin McIntyre have plans for the process beyond insulation, too: they believe that adding reinforcing materials to the growth mixture "...could be used to create strong, sustainable "growable" homes." No need to ship materials in -- builders could grow them on site.

Once they've graduated, Bayer and McIntyre plan to launch their new company Greensulate. We're guessing that with this kind of innovative thinking, they'll do well... ::[CCNMag.com](#)

Follow [@TreeHugger](#) on Twitter & get our headlines with [@TH_rss!](#)



Furniture



Grass



Transportation



Jewelry

Foam Insulation Lakeland

Give Us a Call for Home Insulation Installation and Removal Services.

Buy UltraTouch Insulation

No itch. Less noise. In Stock! "Green" product. Call 866-768-6381

[Ads by Google](#)

Comments (1)

Maybe they can use spores from the mushrooms that have been found to use radiation like sunlight that grow in Chernobyl...

June 12, 2007 6:40 PM | [flag a problem](#)

stephanie says:

[Jump back to top](#)