

INSTEAD OF STYROFOAM, FUNGUS AND RICE HULLS

 PROPERTY & CONSTRUCTION

Polystyrene products have been used for years as home insulation and Styrofoam packaging, but the petroleum-based materials are infamous for the toll they take on the environment. **Ecovative**, a Troy, N.Y., start-up, aims to replace such products with an organic alternative derived from fungus and agricultural waste. Rather than being manufactured from preexisting ingredients—a process that inevitably takes considerable energy—Ecovative's Greensulate is actually grown afresh. A mixture including water, recycled paper and rice hulls (a form of agricultural waste) is injected with living mushroom cells inside a mold and then placed in a dark environment. There the cells begin to grow and sprout thousands of cellular strands. In one to two weeks, the result is ready to be dried into a panel of insulation that can be used to keep a house warm in winter and cool in summer, or to protect a package during shipment. Greensulate is fire retardant, and it's also unlikely to trigger mold and fungus allergies, by virtue of the drying process. And while its polystyrene counterparts take up landfill space indefinitely, Greensulate is highly compostable, enriching the soil surrounding it and even aiding the breakdown of other nearby waste. Current cost projections suggest Greensulate will retail at costs competitive with traditional foams, the company says. Ecovative is still working on R&D and compliance with American Society for Testing and Materials (ASTM) International standards and International Building Code. It will focus on material optimization and compliance testing throughout 2008, it says, with a commercially available insulation product targeted for mid-2009. The company is actively seeking strategic partners to aid in Greensulate's commercialization. One to get in on early? Spotted by: Michael Martin

21st July 2008

Email: info@ecovatedesign.com

Website: www.ecovatedesign.com