CBMI Enters License Agreement for Corn-Based Structural Composite Technology

Posted in | Business | Composites | Sustainable Technologies

Corn Board Manufacturing Inc. (CBMI), and the University of Illinois at Urbana-Champaign (Illinois) have entered into a license agreement under which CBMI will utilize a corn-based structural composite technology initially developed by Illinois' inventors, Dr. Nancy Sottos, Dr. Scott White and Dr. Thomas Mackin. CBMI's primary product is labeled CornBoard™.

CBMI CEO Lane Segerstron says, "We are so excited and honored to be able to bring the University of Illinois' patented technology to the marketplace and have an opportunity to make a positive impact on rural communities while doing our part to help the environment."

Lesley Millar, Director of the Illinois' Office of Technology Management, agrees: "We are pleased to be working with CBMI, a company that is dedicated to repurposing an agricultural byproduct into new and diverse products."

CornBoard™ is a version of wood composite board that uses corn husks and stalks (commonly referred to as corn stover) remaining in the field after corn is harvested. The structural composite is prepared by mixing the fibrous corn component with a polymer matrix, laminating the mixture, and applying heat and pressure.

In contrast to traditional particle board, plywood, or medium-density fiberboard, CornBoard™ developed at CBMI will be repurposing an underutilized biomass material. For every acre of corn grown, (over 86 million acres are grown annually in the U.S), over 4,000 pounds of corn stover is left in the field. Appropriating this biomass material into new and innovative products is an efficient and environmentally conscious means of stewardship.

CornBoard™ is a green technology in that it traps CO2. Typically, when biomass is left to decompose in the field, the CO2 previously captured and consumed by the growing plant is released back into the atmosphere. Conversely, when the corn stover is made into CornBoard™, the CO2 is...
“trapped” in the material. Sequestering CO2 in CornBoard™ alleviates the contribution of the decomposing biomass towards an increase of CO2 in the atmosphere.

CornBoard™ also provides an alternative to wood products, thereby reducing the demand on a less renewable resource. According to CBMI, just 2 acres of leftover corn stover biomass would produce enough CornBoard™ to build a two story house supplying the roof decking, flooring, and outer wall sheathing. CBMI uses a non-toxic resin binder in CornBoard™ production. This method is a safer and more environmentally conscious choice than a traditional formaldehyde-base binder.

CBMI can produce CornBoard™ in varying densities, allowing for a variety of applications. Due to this flexibility, CornBoard™ is not limited to being a wood composite board replacement, but is also being developed into a variety of products including home and lawn furniture, kitchen cabinets, door cores, and even a full line of longboards.

CBMI is introducing the Zea Home™ Outdoor Furniture Collection, a line of outdoor furniture made from 100% CornBoard™. The first item to be released is an Adirondack chair, an easily assembled piece requiring no fasteners or adhesives.

CBMI also announces the introduction of StalkIt Longboards. These top-of-the-line performance skate boards utilize CornBoard™ for the decks and are endorsed by professional skater Christian Hosoi and professional surfers Alana Blanchard and Bobby Martinez. In addition, a portion of the profits from the signature “Fallen Soldier Longboard” will be donated to the Snowball Express charity. The Snowball Express charity provides support for the families of United States military personnel lost in the line of duty.

Carbon Dioxide Emissions
Learn how to save 30% off your energy costs from the experts!
schneider-electric.com

Source: http://cornboardmanufacturinginc.com/

Posted Oct 1, 2010

- Popular
- Latest
- Random

:: Medical Plastics Industry Set for Expansion over the Next Decade
:: Comprehensive Report on World’s Solid Oxide Fuel Cell Market
:: Green Star Products to Construct New Biodiesel Facility
:: Borouge Establishes Marketing and Sales Company in China
:: Dow Corning to Showcase Silicone Solutions for Use in Skin and Hair Care Products
:: Kaiser Aluminum to Buy Assets of Alexco
:: Uniscan Introduce New Version of Research Electrochemistry Software Package
:: New Report Reviews Market for Polymeric Foams
:: 3M Expand Manufacturing Facility for Ultra Barrier Solar Film