

## environment •

# New bamboo company in Springfield

Bamboo being used as a structural building material

Luke Schuette had a notion as an undergraduate architecture student at Southern Illinois University that may turn into a lifelong career. The notion was using bamboo as a structural material similar to the way steel and lumber are used. The potential lifelong career has been given the name Lamboo. After encouragement from one of Schuette's SIU professors and a few years to let the notion grow into a business, Lamboo opened its headquarters at 510 East Adams Street in downtown Springfield.

Lamboo is focused on the research and development of structural engineered bamboo in three product categories: structural, windows and doors,

and panels and veneer. These are not consumer goods. Rather, Lamboo strives to create a sustainable material that will eventually compete and perhaps replace the current standard materials. For example, the structural division of Lamboo aims to create beams of bamboo that are stronger and lighter than the I-beams of steel with which we are all familiar. The windows and doors division is working to make bamboo a preferred material over the vinyl currently used in replacement windows.

Cole Bradley, Lamboo's director of marketing, put it this way: "Our business is Lamboo, their business is their business"—"them" meaning windows and doors manufacturers or companies who manufacture construction beams.

When Schuette proposed structural bamboo as a building material for a senior architecture project at SIU, his instructor said "but that doesn't exist." But other instructors had their ears open. Professor John Dobbins, who now serves on the Lamboo board of directors, encouraged Schuette to pursue his idea of developing engineered bamboo. The University of Illinois caught on to Schuette's idea quickly as well, securing laboratory space for Schuette to use in developing the bamboo material.

Schuette said that the turning point for Lamboo was an April 2008 presentation he gave to the American Society for Testing and Materials ("ASTM") in California. The response to Schuette's ideas led to more presentations and attention from manufacturers and architects that many structural materials companies would hope to get only from intense marketing and outreach.

Using bamboo in construction probably doesn't sound radical. It didn't to me when I first spoke with Schuette and Bradley at their work space on Adams Street. However, Lamboo is something much more than bamboo flooring as an alternative to hardwood. Schuette explained that, "Lamboo is set apart from other structural material manufacturers, because we are the first to innovate bamboo in its engineered form for structural applications and the necessary certifications are being completed" to make Lamboo a standard material for architects and contractors.

Lamboo has a head start on those certifications too, because one of them is from the ASTM—the organization that Schuette made his turning point presentation to in 2008. According to



## Going Green

Chad Kruse

“Using bamboo in construction probably doesn't sound radical. It didn't to me when I first spoke with Schuette and Bradley at their work space on Adams Street. However, Lamboo is something much more than bamboo flooring as an alternative to hardwood.”

the ASTM website, the organization's goal is "to be recognized globally as the premier developer and provider of voluntary consensus standards, related technical information, and services." Both Schuette and Bradley made it clear that a certification from the ASTM means the chance at success with architects and engineers worldwide.

Lamboo's vision is not limited to the United States. Lamboo already has an International Environmental Advisor in Mr. Peter Illig of Divonne-les-Bains, France. Lamboo expects a report from the International Code Council ("ICC") within the year. The ICC is "a membership association dedicated to building safety and fire prevention" that "develops the codes used to construct residential and commercial buildings, including homes and schools."

With the ICC report, Lamboo can become the structural material of choice for commercial buildings or schools around the globe. In fact, Schuette mentioned the use of Lamboo in transportable, prefabricated structures commissioned by the United Nations for relief efforts in response to natural disasters such as hurricane Katrina in New Orleans. Such structures would be used in place of the mobile homes used in Katrina's wake—which received criticism for their lack of structural integrity.

Sustainability is the heart of Lamboo. The ASTM has sustainability closely linked with its mission statement on its webpage and the use of Lamboo will help builders achieve a certification of their own—LEED (Leadership in Energy and Environmental Design) certification. Lamboo's Web site states that all

Lamboo products "contribute to LEED certification" under the categories of "rapidly renewable materials" and "low-emitting materials."

Schuette's two-year link to the University of Illinois has resulted in another opportunity to further Lamboo's sustainable vision. The University of Illinois has been selected to participate in the U.S. Department of Energy's Solar Decathlon on the National Mall this October. The Decathlon "joins 20 college and university teams in a competition to design, build, and operate the most attractive and energy-efficient solar-powered house." The University of Illinois team chose Lamboo as a primary partner.

Schuette and Bradley made it clear that "Lamboo is vested in making central Illinois its home . . . giving back to the rich culture of Springfield." While Lamboo currently has fewer than 10 employees, the Adams Street location contains room for Lamboo to expand its headquarters. Lamboo's nearby Alton warehouse and manufacturing location provide easy access to the Midwest U.S. and beyond. Keep your eyes open for Lamboo projects popping up right in your backyard in the near future.

Chad Kruse is a freelance writer from Springfield.