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## Wood of the Month: Bamboo

By Jo-Ann Kaiser

*Editor's note: Although bamboo is not a wood species, Wood of the Month revisits this wood-like grass to keep abreast of the gains it is making in traditional wood markets.*

Ann Knight, executive vice president & Global Brand director at Bainbridge Island, WA-based Teragren Fine Bamboo Flooring, Panels & Veneer, has kept watch on the evolution of the bamboo market in the United States.

"Since opening our doors 15 years ago, we have expanded our initial bamboo flooring product lines to include bamboo solid strip strand and traditional flooring, wide plank self-locking floating floor options, flooring accessories, stair parts, furniture grade panels and veneer, and most recently, countertops," she said.

The list of applications for this "wood substitute" continues to grow, with new uses including kitchen and bath cabinetry, wall treatments, casegoods, snowboards and skateboards, bows and arrows, lighting fixtures, custom fixtures and store fixtures. Knight said the company's bamboo products have been used by the U.S. Environmental Protection Agency for its EPA Region 8 headquarters in Denver, CO, as well as Santa Clara University, which used the bamboo panels and specially developed bamboo open web joists for the 2009 Solar decathlon.

### Green and Other Issues

John McIsaac, a spokesman for San Francisco, CA-based Smith & Fong, claims his company has introduced the first bamboo flooring to carry Forest Stewardship Council (FSC) certification. "Our FSC



**Family Name:** *Phyllostachys pubesecens* and various species from *Arundinaria*, *Bambusa* and *Dendrocalamus* of the Family Gramineae

**Common Names:** Bamboo, moso bamboo (*Phyllostachys pubesecens*)

**Height/Weight:** Most industrial bamboo averages 40 feet, but plants can grow to 120 feet. Moso bamboo averages 70 feet in height. Weight is not applicable.

**Properties:** Bamboo machines easily and sands well. The end grain seals and fills easily. It can be finished.

bamboo has been on the market for about 18 months and is being used by woodworkers, modern furniture designers and interior designers,” he said. The company’s Plyboo plywood and flooring is “the first non-wood FSC-certification on the planet,” Mclsaac adds.

“Bamboo plywood makes up close to 65 percent of S&F’s sales now, and the majority of it goes into modern, design-rich commercial and residential installations. Same goes for the flooring. It’s not a traditional product (in North America), so it’s mostly used in high-end modern interiors,” said Mclsaac.

Smith & Fong contracts with and partly owns two factories in China and Taiwan. “The company also has long-standing relationships with its bamboo forestland owner/suppliers,” Mclsaac said.

“When people from IMO (independent European FSC-certifier Institut für Marktökologie) visited our bamboo resource, they saw for themselves what a working model of sustainability a bamboo forest is. Third-party validation enables architects, specifiers, fabricators and consumers to know that the products they’re using come from a source that is managed to high social and environmental standards,” he added.

Proponents of bamboo as a green product also cite the fact that bamboo can mature in 5-1/2 to 6 years. Also, the fact that the bamboo culms are cut and the remaining plant regenerates continuously makes it a renewable resource, and therefore green.

However, critics say they want proof that bamboo is not being planted and grown at the expense of other diversified species or that rainforests, for example, are being clear cut to expand bamboo growing areas. In one example, the Maple Flooring Manufacturers Assn. last year issued an article encouraging bamboo industry leaders to back up their green claims regarding resource management and manufacturing practices, including quality control and grading.

Teragren’s Knight agreed that an important issue facing the industry is that “not all bamboo products are created the same. Much of the bamboo products sold in North America are from bamboo forests in China. However, quality control standards in China are inconsistent. There is little industry oversight, and neither China nor the U.S. has created an independent grading system. Consumers should ask retailers or other suppliers if the manufacturer uses a system of quality control and grading standards,” she said.

### **Mostly Moso**

There are some 800 to 1,000 species of bamboo in the world, but the species used by Teragren, Smith & Fong and many other manufacturers of bamboo flooring and products is moso bamboo.

Moso bamboo is a monopodial bamboo native to China and Japan. This species is the major source of edible bamboo shoots and has been providing food in Asia for thousands of years. The stems have a wide range of uses, including: fencing, furniture, housing, outdoor structures, food, construction material, paper, irrigation, medicine, musical instruments, beer and diesel fuel.