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Your Home / Green

Don't get bamboozled

Buyer beware: What you need to know about bamboo before you choose it for floors, furniture, or anything else.

Bamboo is often hailed as an eco-friendly substitute for wood. Used in consumer goods from cutting boards to skateboards, it is especially popular in home design as flooring, furniture, and cabinetry.

The bamboo plant, which is a grass, not a tree, can mature enough in five or six years to be used as a building material. It is a rapidly renewable resource that its proponents say could spare the world's dwindling forests. Many species grow without irrigation, pesticides, or fertilizers, according to horticulturalist Susanne Lucas, CEO of the World Bamboo Organization, a trade group. Lucas grows more than 60 types of bamboo in her Plymouth yard.

Manufacturers freely market bamboo products as eco-friendly, and dozens of different labels and certifications attest to the items' supposed greenness. But practices such as overharvesting, treatment with non-green chemicals, and shipping across the globe can undercut the raw material's environmental virtues. "There's so much out there that's

been 'greenwashed,' ” says Lucas, it's difficult for consumers to know if they're buying a product that's truly low-impact, especially, it seems, with bamboo.

“Bamboo has become emblematic,” says Annie Cardinaux of the nonprofit Nexus Green Building Resource Center in Boston, and it's challenging to figure out which of the many seals of approval represents valid testing done by independent third parties. “There is no comprehensive certification, so it's up to individuals to navigate,” says Cardinaux, resource coordinator for Nexus. Although her organization doesn't endorse any standards, Cardinaux does say that the increasingly visible Forest Stewardship Council (FSC) mark -- FSC has certifiers around the world accrediting forestry practices as sustainable -- and the so-called California 01350 standards on building materials “have a lot to offer” to consumers.

Last year, when Lucas needed new kitchen cabinets, she looked for FSC certification and picked a line of architectural plywood called Plyboo, made by San Francisco-based Smith & Fong. (The company was the first non-wood manufacturer recognized by the FSC.) Dan Smith of Smith & Fong says of cultivation practices: “When harvesting bamboo, it is very important not to clear-cut.” In any bamboo grove, neighboring stems are of different ages, he explains. “Underground roots shuttle nutrients from older stems to new sprouts. If a grove is clear-cut, this shuttling system is broken and can prevent the bamboo from ever growing back.”

California 01350 standards come into play in the processing of bamboo. Unlike solid wood from trees, which can simply be cut to size, hollow bamboo stems are sliced into thin strips that are glued together to create planks. The glues can contain high amounts of toxic gases such as formaldehyde. Lucas says that some companies that make more affordable bamboo flooring cut corners at a cost to the environment and workers -- and possibly the buyer, who eventually will breathe in the gases. Finishes, too, can contain toxic chemicals, and the California standards address those as well.

With bamboo now very popular in furniture making, thoughtful design can contribute to eco-friendliness. Robert O'Neal, a retired professor from the Rhode Island School of Design, taught students to design bamboo furniture without creating planks, but instead by bending and nailing or gluing together bamboo poles with no other processing. The

simplicity of the system, O'Neal says, makes this one of the greenest ways to use bamboo. And irregularities in the stems and variations in color add to the beauty of the furniture.

Then there's shipping. The Home Depot has its own certification system, called Eco Options, but none of the company's 28 bamboo flooring products gets the nod. "Bamboo is a fast-growing plant," says Ron Jarvis, vice president of environmental innovation at Home Depot, "but I'm not convinced that, when the entire life cycle is considered, shipping bamboo from China has less impact on the environment than using hardwoods grown here."

But it depends on who you ask. The long trip isn't necessarily an environmental minus, says Ann Knight, vice president of Teragren, a bamboo flooring company based near Seattle. In fact, her company's China-made product was chosen for an EPA office that recently opened in Denver because the total environmental impact of harvesting and shipping the bamboo flooring from China, according to its calculations, was lower than that of cutting and transporting US-grown wood flooring, Knight says.

Bamboo fan Lucas says it's worth mucking through the research -- and not for environmental reasons alone. "Bamboo products hold up very well," she says, "if you find the right ones."

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