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The old bamboo...

...is new in home decor again, and why not? It's versatile, plentiful and tough. But buyer, beware: Quality-wise, it's a jungle out there.

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What with chopsticks, Chinese dumpling steamers, kebab skewers, pseudo-Polynesian bars and fishing poles, bamboo is nothing new. But now it's being used in elegant flooring, furniture and kitchen cabinets, and for decorative and practical items for the home. Styles range from cleanlined modern to traditional or casual-fun.

Why all the fuss and fanfare? Bamboo is just grass. Some 1,000 kinds exist throughout the world, from dwarf species 12 inches tall to those reaching more than 100 feet. It thrives everywhere from jungles to high mountainsides. Some kinds grow four feet or more a day, an exciting prospect for those who like watching the grass grow.

The type grown as timber reaches mature, harvestable heights of up to 60 feet in five to six years, depending on how it will be used. Root systems continually send up new shoots, so replanting is never needed. It's a great plant for reducing soil erosion, and even more efficient than trees in sopping up carbon dioxide. In addition, fertilizers and pesticides are rarely used on bamboo.



Photo courtesy of Teragren This bamboo flooring provides contrast in a Bainbridge Island, Wash., home.

In China, which produces most of the products we see in the United States, bamboo plantations aren't replacing natural forests - only other plantations because bamboo is more profitable than



Photo courtesy of Teragren A plantation in China grows the moso bamboo, a type ideal for lumber.

what was grown before. And don't worry: Bamboo grown as timber is not among the kinds pandas dine on.

These factors make bamboo among the crème de la crème of renewable resources.

But even if you're not inclined toward greenness, here's another factor that makes

bamboo an excellent alternative to hardwoods: It's harder. Flexible and lightweight as it seems, bamboo is significantly stronger than red oak or maple and has about the same strength-to-weight ratio as steel in tension, experts say.



Photo courtesy of Teragren Stair treads coordinate with the flooring, both made from vertical grain lumber in a natural bamboo color.

Flooring is its most common use in the United States. Thanks to bamboo's growing popularity, a host of new companies are stampeding into the market. In 1997, only eight companies were supplying North American flooring demands, according to BuildingGreen, an independent publishing company providing information to professionals and policymakers in the building industry on environmental performance. In 2005, an estimated 200 companies imported around 4.2 million square feet of flooring into the United States alone.

In Arkansas, it's available through home improvement centers, flooring distributors and retail flooring dealers. The number of Web sites offering bamboo products is growing like, well, bamboo.

But all bamboo is not alike, flooring in particular. No official grading system exists, and some importers or trading houses buy products based on price alone, paying scant attention to quality controls. Such outfits may not monitor harmful chemicals used in adhesives, or whether the bamboo is harvested so early that it's still soft. Other

problems also can occur based upon sloppy manufacturing processes, such as moisture problems if the lumber isn't kiln-dried properly.

If the flooring looks gray or dull, it's likely that the wrong species was used or it was harvested too soon, says David M. Knight, president of Teragren, a Bainbridge, Wash.-based manufacturer of flooring, panels and veneer.

Before shopping for flooring or other bamboo items, here are background information and some considerations:

The most widely cultivated bamboo species in China is known by its Japanese name, moso. Only a handful of species makes good lumber, and this is the most popular. It should be at least 5 or 6 years old when harvested because that's when it reaches peak hardness. If cut too soon, the fibers will be much softer, more like pine.

Bamboo poles are split lengthwise, shaped, kiln-dried, selected for color, laminated together using a hot press and glues, then milled into tongue-and-groove strips or planks. A third process mixes strands or shreds of bamboo with an adhesive, after which extreme pressure is applied to the mass. The resulting planks are even harder than regular bamboo flooring, excellent for commercial and high-traffic uses.

Bamboo flooring can be solid or engineered. Solid doesn't mean solid planks of bamboo, but strips made up of distinct layers. Engineered flooring is made of a bamboo top layer glued to one of a number of materials.

The surface bamboo will be oriented horizontally or vertically. The horizontal grain (or flat grain) has the most traditional look that features bamboo's nodes, or "knuckles." The vertical grain has the bamboo strips lined up on edge, reducing the knuckle look.

Flooring colors (as well as the colors of other bamboo items) are usually a light blond or a darker tone referred to as "caramelized" or "carbonized," achieved by heat-treating the bamboo, which caramelizes the sugar in its fiber. Several companies also offer stained flooring.

You may want to choose a brand of flooring that also offers such coordinating products as moldings, stair parts, vents, panels and veneers.

Some manufacturers use adhesives and glues free of urea formaldehyde. Even if the adhesives do contain it, the products may emit less formaldehyde than do those made of wood. That's because very little formaldehyde occurs naturally in bamboo compared with hardwood. Check for flooring that meets Europe's E1 standard limiting formaldehyde concentrations to 0.1 parts per million. Still, with poorly made flooring, toxicity can vary widely, so check.

Before buying, look at the floor's construction and quality of its finishing. There should be no gaps or fillers between layers or pieces as you look at the end of the board. The finish should be completely smooth. See how two boards fit together. And the board should be no less than fiveeighths thick (less than that and the floor can't be refinished as many times). Teragren recently bought U.S. patents for strand bamboo and hopes to enforce a consistent quality in imports of this type.

Prefinished flooring usually has coats of aluminum oxide finish topped by scratch-resistant polyurethane. Compare the number and type of coatings. Some companies recommend sealing bamboo flooring in kitchens, even if it's prefinished, to prevent damage from spills that might not get mopped up promptly.

Read installation instructions carefully to see whether and in what circumstances flooring needs to be glued or nailed or can be put in as a floating floor. If need be, see if it can go in over concrete or radiant heating.

Bamboo flooring is priced up to \$6.99 or more per square foot. If you find flooring at a significantly lower price, say around \$1.99 or so, beware of quality problems.

Just like hardwood floors, bamboo ones need maintenance. They'll need sweeping regularly. You'll need to put felt pads or area rugs under the legs of furniture. A foyer might need an entry rug or a tile or stone surface to prevent tracking in dirt, sand or bits of gravel. Follow instructions.

Bamboo can be used in hundreds of other ways in modern homes. Here're a sampling and where to find more information:

Veneers and panels: Bamboo veneers and panels can be used in cabinetry, furniture construction, interior paneling (even ceilings), countertops and any other way hardwoods have been used indoors. Although it cuts and sands very nicely, a bamboo panel is much stiffer and stronger than normal plywood. It can be used for countertops, shelving, cabinetry, desks, cutting boards and more.

Furniture is made for every room in the house and outdoors, from astronomically priced one-of-a-kind pieces through inexpensive items, and in classical designs through shaggy-roofed Tiki bars. Find inspiration at www.berkeleymills.com, www.vivavi.com, www.trocadero.com/enlighten and www.bravespacedesign.com.

Rugs: They're made for use indoors, outdoors or both. Find them everywhere from big-box stores to upscale boutique-style spots. Some look like bamboo, others come in primary colors or with patterns. You'll see them with and without backing and edge trim.

Fabrics: Bedding, towels, lampshades and clothing are using fabrics made from bamboo. Find sheets and towels at such chains as Target, Bed, Bath & Beyond or Linens 'N Things, where you can compare softness and density. For lampshades, check Daisy LaPoma Design at www.lightshades.com, www.balistuff.com, www.ecodesignz.com (also has furniture and accessories), or compare at www.nextag.com. For clothing, see www.shirtsofbamboo.com (also towels) and www.ecodesignz.com.

Kitchen implements, household decor: The list of items already nears endless, but is growing. Find chopping boards, trays, plates, bowls, implements, chopping-block and serving carts, cheese boards, canisters, mirror and picture frames, lighting, drapery rods, door knobs, office chair mats. Keep eyes open when you're shopping or browse www.trubamboo.com, or www.totallybamboo.com.

Window treatments may be even more prevalent than rugs or kitchen items. Look anywhere that blinds are sold.

Almost bamboo: Dog toys by Bodhi, faucets by Moen and flatware by Ralph Lauren Home are among products that carry out the bamboo look. View www.bodhitoy.com, www.rlhome.com, www.showhouse.com, www.polo.com, www.showhouse.com, moen.com.
