



# MISSION BLUE DESIGN

## Designing With Green Furnishings

### Certified sustainable wood

Whether a piece of furniture is made from wood, cloth, metal, or plastic, there are earth-friendly options. When cave people realized that boulders weren't the most comfortable things to sit on, wood was almost certainly where they looked, so let's start there. The world needs more trees, not less, so practices that lead to deforestation aren't any good. Not only do trees absorb carbon dioxide and produce oxygen, they keep the surface of the planet cool, they hold soil together so it can stay rich, and they provide the habitat that animals, insects, birds, and other plants call home, not to mention they support many people's livelihood. Simply put, don't mess with the trees. There are sustainable ways to harvest wood, however. Wood from sustainably harvested forests, sustainably harvested tree farms, and reclaimed wood are the main sources. Forest Stewardship Council (FSC) and its largest forest certifier, the Rainforest Alliance, is the most widely used standard for sustainable forestry.

### Furniture made with reclaimed materials

If wood is taken care of, and sometimes even if it isn't, it can last a really, really long time. So shouldn't we be able to make good use of all the wood that's already out there? A lot of designers think so and are doing just that. Reclaimed wood usually comes from old furniture, houses, or other built things that are ready for some friendly reincarnation, from flawed wood, or from scraps from a factory that makes other stuff. Some reclaimed wood even comes from logs that sunk to the bottom of rivers as they were being floated downstream to the sawmill, or from the bottom of man-made reservoirs (check out the Sawfish). Either way, furniture made from reclaimed wood is a great example of resource efficiency, but usually comes in shorter supply. The Rainforest Alliance has a Rediscovered Wood Certification label to look for.

### Bamboo

You've probably heard by this point that bamboo isn't a tree at all, but a grass. Bamboo represents a family of grasses that range in size from tiny to huge, and in color from lime green to maroon stripes. It is incredibly fast-growing and versatile and has become the unofficial poster material of environmental designers and builders. Bamboo can be flattened into flooring, molded into furniture, pressed into veneers, sliced up to make window blinds, or hey, you can just build your whole house out of it. Using bamboo in buildings earns architects and builders LEED points. Most bamboo comes from China and is grown with few or no pesticides. Because it is so fast growing, it is much easier to maintain healthy bamboo forests. This also means it uses a lot of water, however, and harvesting too fast can deplete soil fertility. Some growers do use pesticides and

other chemical inputs, however, so keep that in mind. But for the most part, bamboo is one of the greenest materials around.

#### Recycled/recyclable metal and plastic

Since both metal and plastic are recyclable, at least in theory, these can be considered eco-friendly materials for furniture. More and more furniture is being made from recycled plastics and metals as well, like the recycled aluminum Icon Chair. Recycled materials require less processing and fewer resources, and help support the market for recycled materials. Technologies are always improving, meaning that recycled plastics and metals are always going up in quality. It's not all about materials, though, so here are some basic guiding principles to keep in mind when looking for furniture.

#### Recyclable and disassemblable

Good eco-friendly furniture should lend itself to easy repair, disassembly, and recycling. Products certified by MBDC's C2C (Cradle 2 Cradle) product regimen are a perfect example, like certified office chairs from Herman Miller and Steelcase. These products can be easily taken apart, sorted into their constituent parts, and recycled at the end of their useful lives. When buying furniture, stay away from "monstrous hybrids", pieces that are an inseparable amalgam of materials. If they can't be taken apart it's probably a sign that they can't be repaired very well either.

#### Look for furniture that's durable and fixable

One of the most important but often overlooked aspects of green products (and this definitely goes for furniture) is durability. If something is tough and/or can be readily repaired, this lessens the chance that it'll end up in the landfill, and could easily save you money in the long run, even if it's initially more expensive. Even recyclable materials if they break (and can't be fixed) require energy and other resources to reprocess and then replace. Durable goods that will last a long time can be passed on from person to person. Even if your style changes and that kitchen table isn't your thing anymore, a good strong table will almost always be appealing to someone else, while a broken (and unfixable) one probably won't. When it's time to part with your possessions, think of Craigslist, Freecycle, or eBay, and find it a new home.

#### Low-toxicity furniture

When you buy a piece of furniture, bring it home, and set it down in a room, it doesn't just sit there. No matter what it's made out of, chances are, it's offgassing (or releasing substances into the air). Almost everything offgasses, which isn't necessarily bad, but synthetic materials or those treated with synthetic substances can offgas chemicals which are toxic. Volatile organic compounds, or VOCs, are the most common family of chemicals that are offgassed and have been linked to birth defects, endocrine disruption, and cancer. Flame retardants and formaldehyde are common VOCs offgassed by furniture. Especially if your home or office is well-insulated (which it should be for energy purposes) toxins can't get out easily. In fact, studies have shown that air quality inside your house

(or car) is often worse than outside. Everyone should be conscious of the kinds of chemicals they bring home, but especially if you have kids, pets, or other family members who are low to the ground and prone to licking things. There are some good ways to help maintain good indoor air quality when it comes to furniture choices.

Greenguard is a certification which ensures furniture is low toxicity. Herman Miller, Haworth, Knoll, and Izzydesign all offer Greenguard certified furniture options. Also, look for furniture that is untreated or treated with natural substances, like natural wood finishes, or naturally tanned leather. Organic cotton is also less likely to be treated with toxic stuff. Another great way to dodge toxic chemicals is to buy furniture that is vintage or second-hand and has already done most of its offgassing (just make sure it doesn't carry anything worse, like lead paint). You can tell intuitively that new things offgas more actively-just think of that new car smell.

#### Buy vintage

With all the slick, mod, "eco" brands jumping into the market it can be hard to keep in mind that pre-owned goods can be the most green purchase of all. Vintage and second-hand furniture requires no additional resources to manufacture, is often locally sourced (cutting down on transportation), is preoffgassed and eases the load on the landfill. Quality vintage furniture can also have excellent resale value (sometimes selling for the same price it was bought) which certainly can't be said for most new furniture, green or otherwise.

#### Buy local

Just like the food on the dinner plate, we might be amazed how many miles the constituent parts of a piece of furniture might have had to travel in order to reach us. If possible, source furniture close to home. This will support the local economy, small craftspeople, and decrease the environmental cost of shipping (not to mention the other kind of cost).

#### What to do with it when you're over it

We can't promise we're going to like something forever or that our furnishing needs won't change. When it's time to bid a chair, table, bed, or dresser farewell, make sure it goes to a good home. Sell it on Craigslist, eBay, or the local paper, give it away via Freecycle, or include it in your next yard sale. Putting it safely on the curb with a "free" sign on it can also do the trick. If you are the crafty type, lots of furniture can be repurposed into new functions or just freshened up with new paint or finish. No sturdy artifact should have to live out eternity in the landfill. If it's your mission to get deeper into the green furniture space, put on your designer's smock and start tinkering. Think about refurbishing old furniture or entirely repurposing other objects, like this bathtub turned arm chair. In this design, a clever individual specced out a top-notch chair from heavy-duty fabric covered cardboard tubes, aluminum rings, and wood. Heavy-duty cardboard can be fashioned to interlock in creative ways. If you've got fertile ground and some time to spare you can even grow your own furniture to suit. The Spanish group Drap-Art has a reuse festival that is ripe with ideas.