



Sustainable Flooring Options

BY DENNIS ALLEN

What properties, besides cost, warrant consideration when considering flooring choices? Health issues such as toxicity or the avoidance of bacteria, dust and allergens need foremost attention.

Health concerns should disqualify carpeting. Although there are eco-friendly choices for carpeting, such as wool, sisal, P.E.T. Berber (made from recycled plastic bottles) and carpet tiles, none of these avoid the inherent problem with all carpeting: the trapping of dirt, mites, pesticides, and chemicals tracked in from outside. The AIA (American Institute of Architects) did a study some years ago, weighing newly installed carpeting that was steam cleaned weekly over its 10-year life and weighing it again when pulled up. Despite the rigorous cleaning schedule, it weighed three times its original weight. No cleaning method can completely remove the dirt and bacteria that get ground into carpeting.

If we rule out carpeting, what are other good choices? Wood flooring is one. Durability, recycled, reclaimed or renewable material, and transportation distance are key criteria for environmentally friendly flooring. Taking these measures into account, wood flooring rates

high. Solid wood flooring is not usually considered sustainable due to deforestation concerns, but if the wood comes from forests that are responsibly and sustainably managed and that carry the FSC (Forest Stewardship Council) certification guarantee, such worry is negated.

Reclaimed wood milled into flooring or, even better, reclaimed wood flooring is another way to get attractive flooring without logging existing forests. Then there is pre-finished, engineered wood flooring (FSC certified). Engineered wood is more stable than sawn boards, uses less wood per square foot, and avoids off-gassing when toxic-free adhesives are used.

Although frequently considered along with wood flooring, bamboo is actually a rapidly growing grass and thus supremely renewable. Make certain the bamboo is mature, four- to six-year growth, because flooring made from two- to three-year-old bamboo is soft and scuffable. A variation, strand-woven bamboo, has more of a wood-grain look, is stable and extremely hard — twice as hard as oak. The only drawback to bamboo is that most of it comes from China, requiring transportation halfway around the world.

Concrete isn't usually thought of as sustainable or as flooring. When made with a high-percentage fly-ash mix, concrete becomes considerably greener. Fly-ash is a waste product from coal power plants that can be substituted for cement and greatly reduces its greenhouse gas emissions. Concrete slabs can be turned into beautiful, eco-friendly flooring through selection of score pattern, use of organic dyes, and careful polishing — often being made to look like stone, tile, or old leather. As finish flooring, it saves the expense and material needed to install another finish floor over it. Concrete flooring contributes to high-quality indoor air.

Other sustainable flooring choices include naturally cushioned, anti-microbial, sound- and thermal-insulating cork (bark from cork oak trees); linoleum made from linseed oil, cork dust, tree resins, and limestone; and glass tiles made from recycled glass bottles.

Flooring can be beautiful, easy on the environment, and promoting of good health. And there's a wide variety of choices.

Dennis Allen is the founder of Allen Construction. www.buildallen.com