



Can Decks be “Green?”
By Thomas G Wells, CR, SBA

Most of us want to do the correct thing for the environment when building outdoor structures. Decks are particularly on people’s minds these days. Are decks Green? Can they be? Here are some thoughts to get you moving in the right direction.

To start off let’s define Green in the context of outdoor products: First, are the products durable? (Sustainability relates to how long products last – so they don’t have to be replaced as often.) Second, during manufacture and use, do the products have a negative effect on humans or the environment? Third, can the products be recycled into new products at the end of their service or do they necessarily end up in the landfill? Conservation of resources and environmental/human health – that’s Green in a nut shell.

The support structure of most decks is pressure treated yellow pine lumber. Unfortunately this type of lumber is the anti-Green. Even if it comes from sustainably grown forests, there are environmental impacts to logging which are hard to justify. The harsh chemicals used in the pressure treating process are polluting during the manufacture of the lumber. Once installed the chemicals leach out of the lumber, thereby contaminating the soil under the decks. The cut-offs end up in landfills. All in all, this is not a green product.

Decking and railing materials fall into three general categories: Wood, plastic or composites made of a combination of plastics and wood fibers. Wood decking and railings are used less and less frequently because of the maintenance requirements in cleaning and re-staining. These processes put excessive amounts of chemical over spray into the environments. Wood has to be replaced more often than the other types of decking. Cutting old growth forests for decks is environmentally insensitive.

Decking made of plastics or composites have some things in common. They are durable and easy to maintain. They use varying amounts of recycled and/or new plastics. These recycled components are milk jugs and laundry detergent bottles (HDPE) and plastic bags and tubing (LDPE). Purely plastic decking is typically 50 to 100% post-consumer materials. Composites are typically 0 to 100% recycled materials and must contain wood preservatives so they do not rot. One down side to composites is that they are not recyclable once they wear out, because once the plastics and wood fibers are mixed together they can not be separated. Plastic decking is fully recyclable.

From a Green point of view, plastic decking made from 100% post-consumer products is probably the best for decking and railings, with composites the next best.