

09/2005

## Design Green: Use Salvaged, Recycled, and Ag-waste Materials

*"Together we can make a difference," writes Sarah Susanka, FAIA, in her foreword to Green Building Products, "and this book points the way." In an excerpt from the introduction to this residential green-product specification guide, editors Alex Wilson and Mark Piepkorn explain the difference among salvaged, post-consumer-recycled, post-industrial-recycled, and agricultural-waste materials.*



The materials used to produce a building product, and where those materials come from, are important green criteria and probably the best known. When many people think of green building products, they think of products made from recycled materials.

### Salvaged products

Whenever we can *reuse* a product instead of producing a new one from raw materials—even if those raw materials are from recycled sources—we save resources and energy. Many salvaged materials used in buildings (including bricks, millwork, framing lumber, plumbing fixtures, and period hardware) are mostly sold on a local or regional basis by salvage yards; some are marketed nationally. Certain salvaged products are not recommended, including toilets, faucets, and windows—because the water- and energy-savings of today's high-performance products offer far greater benefit than any there might be in using the old ones. With salvaged wood products, be aware that lead paint may be present. Test painted wood for lead paint (easy-to-use test kits are available) and, if found, avoid the product or have the wood stripped and sealed.

### Products with post-consumer recycled content

Recycled content is an important feature of many green products. From an environmental standpoint, *post-consumer* is preferable



The product selection editors' introduction

*Building Products:*

*Guide to Residential*

*Materials* also explains

that:

- Conserve natural resources
- Reduce environmental impact during construction, renovation
- Save energy or water
- Contribute to a safe environment.

The next 300 pages

specification guide :

residential products

with brief descriptive

products, contact the

manufacturer of each

white illustrations of

Navigation is made

ample cross-referen

For more information

the guide, visit the /

to post-industrial recycled content because post-consumer recycled materials are more likely to be diverted from landfills. For most product categories, there is currently no set standard for the percentage of recycled content required to qualify for inclusion in *GreenSpec*; such standards will increasingly be developed in the future as more products begin using higher percentages of recycled materials.

In some cases, products with recycled content are included with caveats regarding where they should be used. Rubber flooring made from recycled automobile tires is a good example—the caveat is that these products should not be used in most fully enclosed indoor spaces due to potential off-gassing of harmful chemicals.



#### **Products with post-industrial recycled content**

Post-industrial recycling refers to the use of industrial byproducts—as distinguished from material that has been in consumer use. Examples of post-industrial recycled materials used in building products include iron-ore slag from blast furnace metal refining used in making mineral wool insulation; fly ash from the smoke stacks of coal-burning power plants

used in making concrete; and PVC scrap from pipe manufacturing used in making roofing shingles. Usually excluded from this category is the use of scrap within the manufacturing plant where it was generated—material that would typically have gone back into the manufacturing process anyway. While post-consumer recycled content is a lot better than post-industrial recycled content, the latter can still qualify a product for inclusion in *GreenSpec* in many product categories—especially those where there are no products available with post-consumer recycled content.

#### **Products made from agricultural waste material**

A number of products are included in *GreenSpec* because they are derived from agricultural waste products. Most of these are made from straw—the stems left after harvesting cereal grains—though other materials such as rice hulls and sunflower seed hulls are also used in some building products.

Excerpted from *Green Building Products*, copyright 2005 BuildingGreen Inc. Reprinted with permission.

Copyright 2005 The American Institute of Architects. All rights reserved. Home Page 



Tell a Friend

Tell the Editor

AI