

The “Green” Metal is Made to Last

Recycling aluminum, plastic and glass products has become second nature in many households today. But did you know that copper — a durable metal used in everything from cell phones and automobiles to plumbing and roofing — is far more recyclable?

With the highest recycling rate of any engineering metal, copper rarely ends up in a landfill — it’s just too valuable. Salvaged electrical wiring, plumbing tube and car radiators are the main sources for reclaimed copper, which is sold to brass mills, copper mills and refineries to be melted down and recast into new products.

Recycled copper helps conserve the earth’s resources — a primary goal of the “green” building movement. As the world’s population continues to grow, and with it the demand for natural resources, builders and consumers alike have come to realize the importance of using recycled building materials.

According to the National Association of Home Builders, which is currently developing green building guidelines for the residential construction industry, more than 13,000 eco-friendly homes were built in 2002 alone — a great improvement over the previous 11 years, when a total of only 18,887 green homes were built.

Metals such as copper are among the most resource-efficient roofing materials available today, according to the Center for Resourceful Building Technology (CRBT) located in Missoula, Montana, which praises the copper roofing shingle for its durability, low maintenance and high recycled content.

A Longer Lifecycle

Naturally corrosion-resistant, copper roofs can last 100 years or longer, with the oldest known copper roof in the USA — the historic Christ Church in Philadelphia — dating back to 1727.

For residential construction, copper roofing shingles are an easy-to-install, lighter-weight alternative to more common roofs. And, like all copper roofs, copper shingles enjoy a long lifespan, and can typically outlast asphalt shingles by many decades.

One reason for copper’s longevity is its protective patina, a film that occurs when copper is exposed to the elements. Over time, the metal’s shiny red exterior develops a blue-green (or nut brown, in arid locations) coating that protects it from deterioration. The Statue of Liberty is the best example of the patina that develops when copper is exposed to moist air.

Other practical attributes of roofs constructed with copper shingles are fire resistance and the ability to withstand difficult weather conditions like high winds and heavy snowfall. Plus, many homeowners today like the look of a copper roof, which can distinguish their home from the rest of the neighborhood.

Several manufacturers offer shingles today made largely from recycled copper, all of which are themselves 100% recyclable. For a listing, see www.crbtdb.nat.org. To learn more about the many architectural applications of copper, visit the Copper Development Association Web site at www.copper.org. Click on Applications/Architecture. **HP**