

Redwood

The Natural Choice for Green Building

Decks have always made a statement about their owners. With redwood, consumers can also make a statement about their environmental consciousness.

Redwood is a sound environmental choice – a renewable, recyclable and biodegradable resource grown and harvested in accordance with some of the highest environmental standards in the world. From conserving energy to absorbing greenhouse gases, no other building material offers the environmental advantages that come naturally with redwood.

Sustainability Guaranteed

The redwood that becomes beautiful decks, fences, gazebos and more is grown exclusively along California's central and north coast. With most old-growth redwoods preserved in public holdings, virtually all redwood decking and fence materials come from privately owned second- and third-growth forests.

A full 80 percent of California's managed redwood forests are certified as sustainable



Private redwood forestland in Northern California.

and well managed under the nation's two leading independent forest certification programs. Plus, all privately owned redwood forests are subject to California's stringent forestry regulations. State laws protect water quality, conserve wildlife habitat and ensure sustainability, meaning that California's redwood forests will stand tall for generations.

A 2003 study by the California Polytechnic State University – San Luis

Obispo compared state regulations with certification requirements and found that California's forestry requirements are almost universally as strict or stricter than independent certification program standards.

So you can be confident California grown wood comes from sustainable forests. And if it's redwood, it's California grown. ■

Redwood Forests and Greenhouse Gases

Redwoods are the fastest growing softwood tree species in North America, making managed redwood forests perhaps the most efficient scrubbers of greenhouse gases in the world.

When trees grow, they absorb the greenhouse gas carbon and release oxygen through photosynthesis. The faster the tree grows, the more carbon it removes from the atmosphere and stores in its trunk, branches and roots.

Older trees grow at a slower rate than younger trees, so they don't remove as much carbon from the air. In fact, very old trees may decay faster than they grow, so they could release more carbon than they absorb. A 300-year old redwood may hold carbon from the days of the Revolutionary War and California's gold rush, but it isn't doing much to absorb carbon today.

Managed redwood forests provide optimal growing and carbon-absorption conditions. Furthermore, by harvesting trees after their peak carbon-absorbing years, much of the carbon they removed from the atmosphere stays trapped in wood products like decks and fences. New redwoods, planted by foresters or naturally sprouted, continue the carbon-removal cycle at maximum efficiency.



Managed redwood forests remove millions of tons of carbon from the atmosphere every year.

Energy – Consider the Source

Most green building standards emphasize greenhouse gas emissions and energy consumption when evaluating building materials. The energy to grow redwood comes from the sun. The energy to extract and process plastics, concrete and other manufactured materials comes from burning fossil fuels. Burning fossil fuels spews greenhouse gases into the air and has been closely linked to global warming.

Furthermore, much of the energy used to power sawmills and produce finished redwood lumber is clean biomass energy. Bark, wood chips, scraps and sawdust from mill operations are used to generate energy on-site. Some redwood mills even generate excess electricity for California's power grid. ■



Redwood products store carbon long-term in beautiful decks, fences and other outdoor projects.

Did You Know?

Redwood forests today cover more than 1.7 million acres in California.¹ About 95 percent of the land that was redwood forest when European settlers arrived on the West Coast is still redwood forest today.² More than 350,000 acres of redwoods and 95 percent of all old-growth redwood forests have been set aside in public parks and preserves.³

When the 1906 earthquake struck, the quake or subsequent fires destroyed most of San Francisco. Since so many redwood buildings were left standing in the wake of those devastating fires, the city required that all new buildings be constructed of redwood, stone or metal. ■



Choose Redwood for Green Living

| | Redwood | Concrete, plastics & other manufactured materials |
|----------------------------------|---------|---|
| Renewable resource | Y | N |
| Reduces greenhouse gas emissions | Y | N |
| Reduces landfill impact | Y | N |
| Clean energy source | Y | N |

Sources

1. USDA Forest Service.
2. Barbour, Michael. *Coast Redwood: A Natural and Cultural History*, Cachuma Press, 2001.
3. California Department of Forestry and Fire Protection.



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