



# How Selecting Materials Impacts Our Lives

There are many factors to consider when choosing a building or design material. Some impact the environment more, while others are a cost consideration. Be knowledgeable when making a selection. Compare factors in a product's life cycle with those of North American hardwoods.

What to Consider for Material Selection	How North American Hardwoods Compare
Is the material natural or man-made?	North American hardwoods are an all-natural material.
Is it a healthy material?	With hardwood floors, there is no place to harbor pollen or animal dander, or for mold to grow.
Does it require a lot of processing?	Cutting and drying of lumber is all that is required.
How much of the material is utilized?	Virtually every part of a log is used as lumber or by-products, including bark, sawdust, and scrap.
How does importing products impact the environment?	Regionally sourced North American hardwoods don't incur burning fossil fuels to transport them across the ocean.
Why is it important to consider a material's origin?	Some foreign countries have no governing agencies to assure quality standards or environmentally safe manufacturing practices. In the U.S., quality standards and safe manufacturing practices are regulated by U.S. agencies and associations.
Are harmful chemicals needed for manufacturing and on-going maintenance?	With the proper finish, hardwood products require minimal maintenance, like dusting or occasional buffing.
What maintenance and repair costs are associated with the material?	Minimal maintenance is required. Typical repair is refinishing.
What is the useful life of the material? How does it compare with other materials?	A solid hardwood floor can last up to 125 years or longer with several refinishings. Museum quality furniture can last centuries.
Can the material be recycled or repurposed?	Hardwood products can be repurposed or used as a combustible fuel.
What happens to the material after its useful life?	If in a landfill, hardwoods naturally decay and return to nature, unlike many synthetics and plastics which will remain almost indefinitely.



*North American forests offer the world's widest selection of sustainable hardwoods that are naturally carbon-neutral and store carbon throughout the lifetime of not only the trees, but the products made from them. Available in a variety of distinct grain patterns, colors, and tones, architects are pairing the aesthetic qualities of hardwoods with their acoustic properties to offer dazzling performances.*

*Carlos Ferrater, one of Spain's most famous architects, used North American hard maple for the city of Castellón's Auditorium and Conference Hall, in the Valencia region of Spain. The hard maple links all internal areas as it is used in the Foyer, the Chamber Music Hall, the Multi-Purpose Hall, and the Symphonic Hall (pictured). The walls are surfaced with decorative maple veneer, while maple plywood is used for the ceiling panels.*

*Photos courtesy the American Hardwood Export Council*

## **What is a Carbon Footprint?**

A carbon footprint is the measurement of greenhouse gases produced from day-to-day living through burning fossil fuels for electricity, heating, transportation and product manufacturing. Measured in tons of carbon dioxide, it is a current concern for many environmentalists who believe greenhouse gases are a contributing source to global warming.

Hardwoods play an important role in reducing America's overall carbon footprint.

- When a young forest is growing, it produces one ton of oxygen and absorbs 1.4 tons of carbon dioxide for every ton of wood.
- Trees actually sequester carbon into the wood, meaning it will not be released into the atmosphere.
- Carbon emissions associated with manufacturing wood products are less than the carbon stored within the wood during its growth cycle.

The  
**Hardwood**  
Council