

White Oak as a species

White oak, (*Quercus alba*), is a long-lived hardwood native to eastern and central North America. White oak is fairly tolerant of a variety of habitats, and may be found on ridges, in valleys, and in between, in dry and moist habitats, and in moderately acid and alkaline soils. It has moderately high shrinkage values when milled, resulting in mediocre dimensional stability in flatsawn boards making it an ideal candidate for round timber applications. It is valued for its density, strength, resiliency and relatively low chance of splintering if broken by impact, relative to the substantially cheaper red oak. White oak has tyloses that give the wood a closed cellular structure, making it water- and rot-resistant. Its rot resistance and durability have made it a tree historically utilized for boat building and barrels.

White Oak and WholeTrees®

WholeTrees uses white oak in both structural and decorative applications for many reasons, including:

- Superior rot-resistance, especially valuable in outdoor applications
- Aesthetic sculptural qualities
- Notable strength of branches
- Accessibility in the company's home state of Wisconsin

WholeTrees has been using white oak for over 20 years and typically applies the same standard treatment methods to it as those for other species. This includes hand-peeling the outer bark, kiln-drying the wood to eliminate pests and reduce checking, and applying a diluted borate treatment to protect against fungus and mold. Once all members are pre-fabricated for their intended use, they are sanded and finished. WholeTrees has experience with all of the finishes listed below. Please contact WholeTrees for more information and help in selecting.



- **No finish:** the wood will grey over time and is naturally extremely rot and disease resistant
- **Heritage** (WholeTrees' standard finish for all species): tung and linseed oil-based, penetrating, added UV & mildew protection, easy re-application
- **Hempshield Log Home:** hemp oil-based, penetrating, added UV and mildew protection, fungicide, and algacide, easy re-application
- **Rymar Premium:** natural & synthetic oil-based, penetrating & surface level (may chip away), added UV resistance, requires light sanding to re-apply

