WHOLETREES® STRUCTURES

Black Locust
DATA SHEET

Black locust

Black locust, (Robinia pseudoacacia), is a deciduous tree native to the southwestern United States that has been planted elsewhere in the US and in other countries with similar climates. It is generally considered a weed tree and even categorized as an invasive species in some areas, based on its growing habits and ability to displace natives. There are no large-scale commercial applications for black locust, but because of its superior hardness, rot resistance, and ability to regenerate quickly, it is commonly used by landowners for fence posts and firewood. Those characteristics, along with its rich yellow color and often gnarled branching, also make black locust a prized wood for flooring, decking, outdoor furniture, garden structures, and other exterior applications.

Black locust and WholeTrees®

WholeTrees uses black locust in both structural and decorative applications for many reasons, including:

- Use of an invasive species as part of its commitment to sustainability
- Superior rot resistance, especially valuable in outdoor applications
- Incredible strength properties
- Aesthetic sculptural qualities of branches
- Accessibility in the company's home state of Wisconsin
- Naturally people and animal safe when peeled.

WholeTrees has been using black locust for over 15 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 natural borate product (Tim-bor) to help control pests, 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 on black locust projects. Please see the associated pictures for examples and contact WholeTrees for more information and help in selecting.

Figure 1. Black locust with Hempshield applied, two months after initial application.

- **No finish:** the wood will grey over time and is naturally extremely rot and disease resistant
- **Heritage**: tung and linseed oil-based, penetrating, added UV & mildew protections, easy re-application (Figure 4)
- **Hempshield Log Home:** hemp oil-based; penetrating; added UV resistance, mildewcide, fungicide, and algicide; easy re-application (Figure 1)
- **Rymar Premium:** natural & synthetic oil-based, penetrating & surface level (may chip away), added UV resistance, should lightly sand to re-apply (Figure 2)
- **Robi Oil:** terpene & tung oil-based, penetrating, specially formulated for black locust, easy re-application (Figure 3)

Regardless of finish selection, WholeTrees recommends following manufacturer's instructions for maintenance. This means cleaning the structure and re-applying the finish every 1-5 years depending on site conditions.

Black Locust Appearance Over Time

Freshly peeled black locust is a fairly light 'blond' color. The wood is also known to develop black specks or streaks when in contact with moisture in the air, and sometimes develops black 'blooms' in extremely moist, shady locations. These surface-level effects do not impact the integrity of the wood, but may be considered visually unappealing. Through discussions with black locust experts, this is thought to be the result of the natural disease-resistant components of the wood (flavonoids) interacting with the finish in humid conditions. To treat, use water and a small amount of mold treatment product such as Clorox Green Works, Microban Disinfectant, or Zinsser Mold Killer along with a stiff brush or pressure washer to scrub the area. Finish can then be re-applied once the wood dries, if desired. Please contact WholeTrees for help diagnosing any concerns that you have.

Figure 2. Black locust with Rymar finish plus color tint, approximately two years after initial application.

Figure 3. Black locust tree slices with Robi Oil finish at initial application.

Figure 4. Black locust with Heritage finish, approximately one month after initial application.