

Why choose White Cedar?



THE MOST DEPENDABLE,
DURABLE AND BEAUTIFUL
WOOD FOR LOG HOMES



HEARTWOOD | MILLS

www.heartwoodmills.com
888.829.5909

Building, remodeling or
adding onto a home?

Heartwood Mills
has everything you need.

From siding and paneling to trusses and trims, Heartwood Mills is North America's premier lumber mill. Since 1947 we have provided homeowners, builders and distributors with quality milled wood products. We specialize in Northern White Cedar but also mill a full range of Pine, Spruce and Fir products. Whatever style you're building or remodeling, Heartwood Mills can supply what you need at mill direct prices. You'll also benefit from our experienced staff who can answer your questions and help you select the right wood products for your project.

Browse through this catalog or visit our web site for more information about our wide selection of milled wood products and custom milling options. Give us a call if you'd like talk about your specific project or need an estimate. Our team is always happy to help!

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Blending technology with traditional craftsmanship

Every winter, Heartwood Mills harvests Northern White Cedar from Michigan's Upper Peninsula using environmentally sensitive harvesting and removal techniques. We also harvest large virgin timbers of spruce and Pine that often grow in the same forests. Special one-of-a-kind timbers are harvested from areas partially damaged by nature.

After harvesting, Heartwood Mills kiln dries each log to perfection in order to supply our customers with nature's finest and most perfectly crafted building materials. Heartwood Mills combines handcrafting with 21st century technology, efficiently producing a range of exterior and interior wood building products.

Heartwood Mills is your building partner, reliably supplying Northern White Cedar, Pine, Spruce and Fir year-after-year.

MEMBER OF THE MICHIGAN
FOREST RESOURCE ALLIANCE



COMPARE NORTHERN WHITE CEDAR TO RED, WHITE AND SOUTHERN YELLOW PINE

Learn why White Cedar is the right choice for your next project

Decay & rot resistance

White Cedar

Blessed with natural preservatives, Cedar one of the most decay/rot resistant and insect tolerant woods available. Minimal cracking and checking. Cracks will not penetrate the heartwood.

White Pine / Red Pine / Southern Yellow Pine

Not naturally resistant to rot or insects. Kiln-drying typically used to kill existing insects in wood. Requires preservative treatments to prevent future rot and insect damage. However, these treatments lose their abilities once the logs crack.

Durability

White Cedar

According to a University of Maine study initiated to determine the natural durability of various species of commonly used woods, untreated White Cedar possesses a high natural durability, even in ground contact conditions.

White Pine / Red Pine / Southern Yellow Pine

The life expectancy of untreated wood species, (other than Cedar) commonly used in log home construction, with ground contact, range from 3-7 years.

Moisture content

White Cedar

Less moisture when green (3500 lbs. per cord) which makes it easier to reach desired moisture content levels. Cedar can be naturally air-dried to a 14-16% moisture level in a fairly short time. Air drying allows the wood to acclimate itself to the new moisture level without harming its molecular structure.

White Pine / Red Pine / Southern Yellow Pine

Pine averages 4700 lbs. per cord immediately after harvest. The natural character of the wood is to retain moisture and in turn, release it very slowly if it is "forced out" unnaturally, risking possible cell rupture.

Thermal resistance

White Cedar

The highest "R" value of any of the wood species used in log home production. A rating of 1.41 "R" / inch of thickness.

According to the ASHRAE Handbook, the "R" Factor / Thermal Mass Factor of White Cedar is 3.78. (The higher the number, the better.)

White Pine / Red Pine / Southern Yellow Pine

The "R" value of various Pine species used in log production averages 1.12 "R" / inch of thickness.

According to the ASHRAE Handbook, the "R" Factor / Thermal Mass Factor of Pine is 2.76.

Knot bleeding

Knot bleeding can occur when a knot contains an excessive amount of extractives. The extractive rich woods are primarily all Pine (especially Red Pine), Western Red Cedar and Incense Cedar.

Kiln drying wood can help reduce knot bleeding in Pine, but it won't eliminate it. Droplets of pitch will occur in Pine log siding when exposed to direct sunlight or rain. The tendency for knots to bleed will occur for many years, and have been known to discharge resin for up to 50 years.

Pine log siding will need to be sanded and re-stained to remove the discharged sap. This is an expensive procedure that will need to be performed repeatedly. The average cost to re-stain a house is \$2/sq. ft. of wall surface. The cost to strip a house it is at least \$2/sq. ft. but often more. When figuring the cost differential between White Cedar vs. Pine be sure to consider the additional maintenance Pine requires.

KILN DRYING

Obtaining equilibrium moisture content

Kiln drying has long been a controversial issue in log homes. The evidence is clear that “favored procedures are those that bring the wood to moisture content corresponding to the average atmospheric condition to which it will be exposed,” according to the USDA guidelines.

Given this acknowledged reality, why don't all producers kiln dry their logs? First, there is the very expensive investment in purchasing, building and operating a kiln. Second, there is the reality that moisture removal and the subsequent shrinkage geometry is such that it is very challenging to properly kiln dry a round log, especially if you try to do it quickly. Third, it is very costly and time consuming to dry large timbers. Finally, some wood species have such a high moisture content that it just wouldn't be economically feasible to dry them. Since sapwood has a much higher moisture content than heartwood, those species with large sapwood rings—such as Pine—are even more difficult to dry.

To mitigate these problems, many producers opt to use a wide variety of adjustable bolts, ‘settling blocks’, springs, slipjoints, and other mechanical devices to accommodate the uneven shrinking and settling that results from having a log exposed to two entirely different environments—the inside of the home and the external elements. While some are better than others, there are still problems of checking and splitting that cannot be controlled.



With the exception of kiln drying, there simply isn't an effective method to overcome moisture content. Even on the same tree, there can be a wide variance in the moisture content of the boards.

At Heartwood Mills, we use Equilibrium Moisture Content (EMC) kilns. EMC is defined as the point at which the wood is neither gaining nor losing moisture. Our kilns continually add and withdraw moisture from our lumber until it reaches the EMC point. In most of the U.S., that point will be between 6% and 11%. Technically speaking, lumber may be labeled as ‘kiln dried’ at 19%, but that is not the same as EMC. Our custom designed dehumidification kilns are more akin to those used for preparing wood for manufacturing fine furniture.

Because we maintain a large timber supply, our logs air dry first to equalize their moisture content and reduce kiln drying time. This ‘air drying’, while a good prelude to kiln drying, does not by itself achieve the USDA guidelines for wood drying in home manufacturing.



TAKE A LOOK AT OUR PRODUCTS

Our mill in Boyne Falls, MI is full of amazing Northern White Cedar and other wood products.

Visit www.heartwoodmills.com for a preview then give our milled product experts a call to talk about your specific project and the products you're interested in. More than likely, we'll have what you need or make it for you!



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info@heartwoodmills.com

04740 Skop Rd, Boyne Falls, MI 49713