

# *Wood Treated Right*



*Build a dependable fence with a dependable product!*

## **Committed to Quality**

Wolmanized® wood is poles, piles, timbers, posts, or plywood that is pressure treated with CCA preservative to provide structural protection from termites and fungal decay. For 75 years, CCA treated wood has been specified in a wide variety of applications.

Keystone Fence Supplies is committed to producing quality treated products that meet AWPA standards. A strict quality control program and on site lab ensure correct chemical penetration and retention. Available support from Arch Wood Protection guarantees accuracy.

CCA treated wood products, when used as directed, offers decades of service, is safe to handle, safe to work with, safe for animals, and safe for the environment.

# Forest to Fence Line

Keystone Fence Supplies controls the entire manufacturing process of their agricultural fence posts. This allows them to provide a top of the line product.

The process starts by selecting southern yellow pine trees in the forest. Keystone Fence Supplies then cuts the trees to length and runs them through a specialized post peeler. After being examined for quality, they are set aside to air season until dry.

The fence posts are then sent to a CCA wood preserving facility. After pressure treatment, the fence posts are ready to be installed in agricultural fencing applications.

## Post Specifications

Species: Southern Yellow Pine  
 Chemical: CCA-C  
 Retention: .40pcf ground contact  
 Treated to AWWA Standards  
 Approximate 30 year service life

## Loblolly Pine vs. Other Pine Species

Loblolly Pine is one of several pines native to the Southeastern United States. The wood industry classifies Loblolly Pine as a southern yellow pine. Loblolly Pine is the preferred choice for fence post manufacturing because it is easy to peel, easy to treat, and the strength characteristics exceed those of other popular tree species. Other species of trees also have symmetrical knots which cause the fence post to fail while driving it into the ground during installation.

Tree Species	Static Bending Modulus of Elasticity (E)	Compress. Parallel to Grain, Max Crushing Strength	Compress. Perpen. to Grain, Fiber Stress at Prop. Limit	Shear Parallel to Grain, Max Shear Strength
	<u>10<sup>6</sup> psi</u>	<u>psi</u>	<u>psi</u>	<u>psi</u>
<b>Pine, Loblolly</b>	<b><u>1.79</u></b>	<b><u>7,130</u></b>	<b><u>790</u></b>	<b><u>1,390</u></b>
<b>Pine, Lodgepole</b>	<b><u>1.34</u></b>	<b><u>5,370</u></b>	<b><u>610</u></b>	<b><u>880</u></b>
<b>Pine, Ponderosa</b>	<b><u>1.29</u></b>	<b><u>5,320</u></b>	<b><u>580</u></b>	<b><u>1,130</u></b>
<b>Pine, Red</b>	<b><u>1.63</u></b>	<b><u>6,070</u></b>	<b><u>600</u></b>	<b><u>1,210</u></b>

Source: U.S. Forest Products Laboratory

## What is CCA and How Does It Work?

### Chemical Composition of CCA-C

All Wolmanized® Heavy Duty™ wood is treated with CCA-Type C, which is composed of the following:

Hexavalent Chromium (CrO <sub>3</sub> )	47.5%
Copper (CuO)	18.5%
Arsenic (As <sub>2</sub> O <sub>5</sub> )	34.0%

The chemical used to preserve Wolmanized® pressure treated wood is a mixture of copper oxides, chromium, and arsenic, and is known as CCA. The preservative has been formulated to render wood useless as a food substance for termites and fungi while keeping the wood attractive, clean, odorless, non-staining, and safe to handle when used as directed.

Unlike commercially produced trivalent arsenic, the arsenic in Wolman® CCA is in the form of inorganic pentavalent arsenate, a naturally occurring trace element. In the treatment process, the pentavalent arsenate becomes fixed, or chemically bound, in the wood cells as highly leach-resistant insoluble precipitates.