

What is Southern Yellow Pine Lumber?

Southern Yellow Pine grows across the Southern United States, from East Texas to Virginia. It is a rare county that does not contain one of the four main species: shortleaf, longleaf, loblolly or slash. Lumber made from Southern Yellow Pine include all four species and is graded in accordance with the grading rules of the SPIB (Southern Pine Inspection Bureau).

Southern Yellow Pine is used for many applications due to the desirable inherent characteristics:

HIGH STRENGTH - Design values assigned for Southern Yellow Pine are among the highest for all softwoods.

SEASONING – Grade marked Southern Yellow Pine dimension lumber (2" and less in thickness) must be dried to a maximum moisture content of 19%.

NAIL HOLDING - The ability of Southern Yellow Pine to hold fasteners is among the highest of the softwoods.

DURABILITY - Southern Yellow Pine is highly resistant to wear; therefore, it is suitable for flooring, decks, patios, marinas, boardwalks and other high-traffic applications.

TREATABILITY - Southern Yellow Pine is also one of the easiest softwoods to pressure-treat with preservatives. As a result, treated Southern Yellow Pine is one of the largest segments of the Pine market.

QUALITY - Southern Yellow Pine lumber is produced to the highest standards, as contained in the SPIB grading rules.

Dimensional Stability

Proper seasoning and storage helps provide optimal dimensional stability of lumber in service. Wood is composed of a series of organic cells that contain water and act similar to a sponge. As water is removed from the wood fiber, it shrinks; conversely, if submerged in water, it swells. The greatest shrinking and swelling occurs tangential to the growth rings, while half as much occurs radially to the growth rings, and very small amounts occur longitudinally.

What is Pressure Treated Lumber?

When most wood is exposed to the elements, excessive moisture, or contact with the ground, it will decay. Certain conditions are required for decay and insect attack to occur: moisture, a favorable temperature, oxygen, and a source of food (wood fiber). If any of these conditions is removed, infestation and decay will not occur.

Southern Yellow Pine is the most treatable of all softwood species. Its unique cellular structure permits deep, uniform penetration of preservatives rendering the wood useless as a food source for fungi, termites and micro-organisms. Some 85% of all pressure-treated wood is Southern Yellow Pine.

In addition, the use of treated Southern Yellow Pine products poses no measurable risk to humans, animals, plant or marine life.

Follow these simple tips when using pressure-treated Southern Yellow Pine:

- Wear eye protection and a dust mask when sawing or machining treated wood.
- Avoid prolonged inhalation of sawdust from untreated or treated wood.
- When the work is completed, wash areas of skin contact thoroughly before eating or drinking.
- Clothing that accumulates sawdust should be laundered separately from other household clothing and before reuse.
- Dispose of treated wood in compliance with local ordinances. Do not burn treated wood.

Marine Environments are toughest on treated Southern Yellow Pine

Wood is one of the most economical and versatile construction materials used in the marine environment, and pressure-treated Southern Yellow Pine continues to be preferred for use in a long list of marine applications. Marine designers, contractors and engineers favor treated wood because it is readily available, easily repairable, and extremely durable. To assure long-lasting service in demanding marine environments, pressure treatment with preservatives is the most effective method of protecting wood.

For most marine construction, waterborne preservatives are preferred. These treatments are clean, colorless and odorless. Leading waterborne preservatives approved for outdoor applications in the market today include Alkaline Copper Quaternary (ACQ), Copper Azole (CA) and Chromated Copper Arsenate (CCA).

Recent labeling changes mandated by the Environmental Protection Agency have removed **CCA** as a preservative for lumber products intended for general consumer use. **ACQ** and **CA** are replacing CCA in the outdoor consumer market. Sold under a variety of trade names, ACQ and CA contain no arsenic and provide the same resistance to decay and termite attack.

CCA Treatment Still EPA Approved for Saltwater Use C18

While ACQ and CA are effective for ground contact and freshwater applications, CCA still has an important role to play in marine environments where wood is either immersed in saltwater (including brackish) or exposed to saltwater splash. The EPA continues to approve the use of CCA for marine construction, as specified in the American Wood Preserver's Association Use Category Standard UC5 and Commodity Standard C18.

Marine specifiers will continue to select CCA-treated structural components exposed to saltwater, such as round piles, sawn timbers and heavy dimension lumber used for cross bracing. With the introduction of "environmentally friendly" **ACQ** and **CA** into the market, there are now alternatives to CCA for decking, railing and other components.