

Treated Wood Products Available in Missouri

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Builders and home craftsmen should be aware of the advantages of the many new treated wood products increasingly available to them at more reasonable costs than before. Broader use of treated wood, where appropriate, would increase the durability and quality of structures.

Preservatives for Wood

Many chemical preservatives used to treat wood are toxic to insects and rotting organisms. The most common preservative used in Missouri is an oil solution of pentachlorophenol salts. "Penta" is an excellent preservative widely used since World War II.

Since the solvent for a Penta solution is some form of light oil, it gives off an undesirable odor in confined spaces. "Penta" treated wood can be painted; however, special procedures are specified for satisfactory results. The treatment itself imparts a deep brown color to the wood which may be pleasing to the designer-builder, especially in rustic applications.

"Penta" treated lumber sold in Missouri is generally not kiln dried. The lumber usually will fall in the range of 15 to 40 per cent moisture content. If the lumber is well fastened (nailed or screwed) during fabrication, warping of the lumber should be no problem as the wood adjusts to an equilibrium state.

Even though few treaters guarantee a life expectancy for their products, wood properly treated with "penta" (in accordance with Missouri Treated Timber Products Act of 1961) should last 20 years—more likely 30 or more years—under wood decay conditions. "Penta" treated wood is safe to use in most applications. It should not be used, however, in horticultural applications where the wood is in close proximity to plants.

Another excellent wood preservative becoming ever more available is "CCA." This preservative is a water solution of chrome-copper-arsenate. It does not give off an odor and, therefore, is recommended for use in confined spaces (inside a house) as well as for exterior use. CCA treated

lumber and plywood is kiln dried and usually grade stamped. It can be painted or stained using standard procedures and materials.

Manufacturers of CCA treated wood do not guarantee a life expectancy of their products under wood decay conditions. Reports suggest a life expectancy ranging from 50 years or more. CCA is safe to use in all usual applications.

Sources

Treated products can be purchased basically from two sources. Manufacturers (treating plants) have a wholesale price schedule for quantity buyers and retailers. They also sell smaller quantities to individual buyers at retail prices.

Most of the treating plants are located in south central Missouri, bounded by Jefferson City on the north and the Arkansas state line on the south. Persons interested in locations of treating plants may obtain a partial list from their nearest University of Missouri Extension center or by writing Wood Technologist, School of Forestry, Fisheries and Wildlife, 1-31 Agriculture Building, University of Missouri, Columbia, MO 65201.

Another information source is a list published by the Missouri Department of Conservation entitled *Missouri Forest Products Industries 1975*. At this writing there are 63 licensed treating plants in the state.

The second major source of supply is lumberyards. Not all lumberyards stock treated wood, but many carry a stock or can get the material for you.

CCA treated materials have fewer outlets and, therefore, are more difficult to obtain in some areas. Retailers interested in wholesale sources of CCA treated products can obtain information by contacting the author.

Cost

It is difficult to discuss the pricing of treated wood products because of their large numbers and because of frequent price changes. A rough rule of thumb for treated

lumber would be a markup of 40 to 75 per cent above the cost of the untreated lumber. Most of the treated lumber is Number 2 common or better.

Products

Posts and Poles. Posts and poles are sold by the diameter of the small end and the length. A 4½ x 7 post is 4½ inches in diameter at the small end and 7 feet long. Posts range from 6½ feet to 14 feet long, whereas poles are 16 feet and longer. Only the large treating companies offer poles longer than 35 feet. Posts up to 8 feet are usually available in pine and oak.

Even though oak posts often cost 5 to 10 per cent less, they do not treat as well as pine posts. The heartwood of white oak is not penetrable, and, therefore, preservative does not enter this area of the post. All treatment is confined to the

sapwood, which is characteristically narrow in white oak.

Lumber. Pine and oak lumber and timbers are available in lengths from 8 feet to 16 feet in increments of 2 feet. Some sizes are occasionally available in 18 and 20 foot lengths. Some outlets offer the lumber rough sawn and/or surfaced-four-sides (S4S). Others just have one or the other. In any case, the rough lumber should be cheaper than S4S. Pine treated lumber has the same advantage over oak as mentioned under posts and poles.

Plywood. CCA treated plywood is available in 4 foot x 8 foot sheets in ½", ⅝" and ¾" thicknesses.

There are several large treating plants in Missouri treating with creosote-coal tar solutions. This preservative is used to treat railroad ties and large poles. The sale of these products is confined to power and communication utilities and railroad companies.