

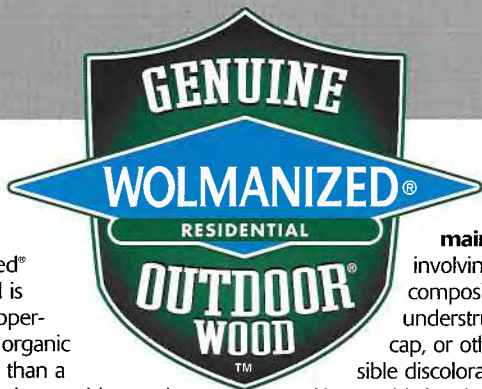
A reliable choice in pressure-treated wood.



Product Guide



WOOD TREATED RIGHT™



A recent addition to the family of Wolmanized® wood products, Wolmanized® Residential Outdoor® wood is treated with a patented copper-based preservative and an organic fungicide. Proven for more than a decade and across four continents, this wood is ideal for decks, playsets, retaining walls, fences, picnic tables, planter boxes, walkways, sill plate and structural members. An exception is saltwater applications, where use of this wood is not presently recommended.

Copper is the active ingredient, protecting against termites and most fungal decay. Protection against copper-tolerant fungi is provided by an organic azole which has also been used as a fungicide for fruits, peanuts, and other crops.

The formulation renders wood useless as a food source for termites and fungi while keeping the wood attractive, clean, and odorless.

As with CCA, the copper azole preservative is pushed into the wood under pressure.

It bonds with the wood and is leach resistant. However, some chemical may migrate from preserved wood into surrounding soil over time and may also be dislodged from the wood surface upon contact with skin.

The preservative in this wood is not a restricted use pesticide and does not meet EPA's definition of hazardous waste. As a result, fewer environmental restrictions apply to handling the wood.

Water repellency: A compatible water repellent additive is available to provide built-in moisture protection. Factory-applied water repellent helps reduce checking, warping, and splintering.

Warranty: Wolmanized® lumber is backed by a lifetime limited warranty in qualifying residential and agricultural applications. Warranted material is monitored by a third party inspection agency accredited by ALSC.

Used and recommended by Dean Johnson, host of the popular TV series, *Hometime*.



Construction & maintenance: For projects involving cedar, redwood, or composites used over Wolmanized® understructure, use flashing, joist cap, or other barrier to prevent possible discoloration from the preservative.

Also, avoid situations where rainwater may run from treated wood onto another material, as staining may occur.

Many light-colored latex paints can be used successfully, following brush-application of an oil-based primer. Primer should not be applied by sprayer, nor should coatings be used if their manufacturer advises against an oil-based primer. Always follow the manufacturer's directions and take special care in sealing end grain, holes, and other penetrations with the primer.

When dry on its surface, Wolmanized® wood can be stained like ordinary wood, and, once dry internally, can be painted. For thorough internal drying, purchase material that has been re-dried after treatment or, after the project has been completed, allow several months of good drying weather prior to painting.

For protection against moisture damage, regular application of a topical water repellent is recommended. Periodic cleaning can revive the color of preserved lumber.

Recommended hardware: Hot-dipped galvanized fasteners (meeting ASTM A 153) and connectors (ASTM A 653 Class G185 sheet), or better, are recommended for protection against the effects of moisture often present where treated wood is used. For Permanent Wood Foundations, use 304 or 316 stainless steel. *Aluminum should not be used in direct contact with this wood.*

Indoors, while galvanized fasteners are preferable, the use of non-galvanized nails of sizes and types approved by the Model Code is acceptable when attaching joists, studs, or other framing to Wolmanized® sill plate, provided the wood will remain dry in service, protected from weather and

water. Under similar conditions, the use of standard galvanized strapping or mild steel anchor bolts 1/2" diameter and larger is also acceptable for fastening Wolmanized® wood to foundations.

Handling precautions: At the present time, there are no EPA-approved precautions similar to the Consumer Safety Information Sheet for CCA. We recommend following the same guidelines as for CCA, which are essentially the same guidelines that should be followed for handling untreated wood. For example: wear a dust mask to control inhalation of sawdust; do not use treated wood under circumstances where the preservative may become a component of food or animal feed (note: in raised bed gardens this may be accomplished by placing an impervious liner such as heavy polyethylene between the treated wood and the soil); wear gloves when working with wood; wear goggles to protect eyes from flying particles; and wash after working with wood and before eating, drinking, toileting, or using tobacco products. For other precautions, see the website.

Disposal: Wolmanized® wood waste, such as scraps, broken boards, and sawdust, can be disposed of with ordinary trash collection. Neither the wood nor the preservative residues are considered hazardous wastes by EPA. If a particular landfill has restrictions against CCA-treated wood, it may accept Wolmanized® Outdoor® wood. Treated sawdust and shavings are not recommended for composting, mulching, or animal bedding, and the wood should not be burned except in approved commercial incinerators.

Codes and standards: This wood meets requirements of model building codes for many applications, and code evaluation reports have been issued. See NES National Evaluation Report No. 669 for allowable values and/or conditions of use. Such reports are subject to re-examination, revisions, and possible closing of file. The preservative treatment is listed in the standards of the American Wood-Preservers' Association for above-ground and ground contact applications (Use Categories UC1, UC2, UC3A, UC3B, UC4A, UC4B, and UC4C). Internationally, it is approved by government and trade agencies throughout Europe and in Australia, New Zealand, and Japan.



Model Specification for Wolmanized® Outdoor® Wood

The following paragraphs are for insertion into a section of generic specifications or generic/proprietary specifications covering rough carpentry to include preservative treated wood. *Notes shown in italics should not be included in the final specification.*

1.01: REFERENCES

A. American Wood-Preservers' Association (AWPA):

1. Standard C1, All Timber Products - Preservative Treatment by Pressure Process.
2. Standard C2, Lumber, Timbers, Bridge Ties and Mine Ties.
3. Standard C9, Plywood.
4. Standard P5, Waterborne Preservatives.
5. Standard E13, Standard Method of Testing to Determine Water Repellents in Pressure Treated Lumber.
6. Standard M4, Care of Preservative-Treated Wood Products.
7. Standard U1, Use Category System.

B. National Institute of Standards and Technology (NIST):

1. PS 1, U.S. Product Standard for Construction and Industrial Plywood.
2. PS 20, American Softwood Lumber Standard.

1.02: QUALITY ASSURANCE

A. Qualifications:

1. Treatment Facility: Provide treated materials that have been produced under a quality assurance program conducted by an ALSC-recognized agency.

1.03: DELIVERY, STORAGE AND HANDLING

If drying after treatment is selected in part 2, retain the two paragraphs below.

A. Packing and Shipping:

1. Provide waterproof covers for preservative treated wood during shipment.

B. Storage and Protection:

1. Store preservative treated wood off the ground and protected from the weather.

Part 2: PRODUCTS

2.01: MANUFACTURERS

A. Preservative: Wolman® E copper azole; Arch Treatment Technologies, Inc.

Retain below if water repellent is required.

B. Water Repellent: Wolman® WE water repellent; Arch Treatment Technologies, Inc.

2.02: MATERIALS

Lumber for preservative treatment must conform to the following specifications. Select grade and species below. Other species are acceptable for some applications, contact Arch or review code evaluation reports for more information. Not all species are readily available in all areas of the country.

A. Lumber: In accordance with NIST PS 20 and as follows:

1. Grade: No. 1
1. Grade: No. 2
1. Grade: No. 1 Dense.
1. Grade: No. 2 Dense.
1. Grade: Select Structural.
1. Grade: Standard.
1. Grade: Premium.
2. Species: Southern pine.
2. Species: Red pine.
2. Species: Ponderosa pine.
2. Species: Hem-fir.
2. Species: Douglas fir.
2. Species: Western hemlock.
2. Species: Eastern white pine.
2. Species: Caribbean pine.
2. Species: Radiata pine.
3. Surfacing: S4S.
3. Surfacing: S1S2E.
3. Surfacing: Rough.

Plywood for preservative treatment must conform to the following specifications. Select panel grade, exposure durability, species group, and structural rating from below.

B. Plywood: In accordance with NIST PS 1 and as follows:

1. Panel Grade: A-C.
1. Panel Grade: B-C.
1. Panel Grade: C-C.
1. Panel Grade: C-D.
2. Exposure Durability: Exterior.
2. Exposure Durability: Exposure 1.
3. Southern pine face veneers, Group 1 or 2 no hardwood core veneers
3. Douglas fir face veneers, Group 1 or 2 no hardwood core veneers
4. APA Structural Rating: Structural I.
4. APA Structural Rating: Structural II.

C. Preservative: Copper azole in accordance with AWPA Standard P5.

2.03: PRESERVATIVE TREATMENT

Select required end uses below.

A. Pressure Treatment: In accordance with the requirements of AWPA Standard C1 and in accordance with the following standards for indicated end uses:

1. Lumber: C2.
2. Plywood: C9.

Select required applications below.

B. Preservative Retention: In accordance with the specified standard, determined in the specified zone, for the following applications:

1. Above Ground.
2. Ground or Fresh Water Contact.
3. Structural Posts and Poles (Sawn or Round).

C. Moisture Content: Drying after treatment is not required.

Select above or below.

C. Moisture Content: Dry after treatment as follows:

1. Lumber: 19%, maximum.
2. Plywood: 18%, maximum.

Retain below if water repellent is required.

2.04: WATER REPELLENT TREATMENT

A. Factory water repellent applied with preservative treatment

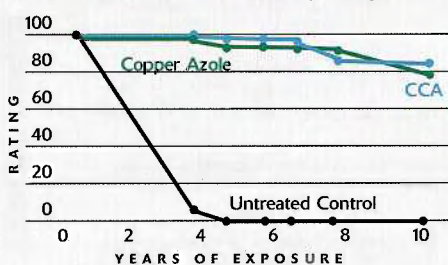
2.05: SOURCE QUALITY CONTROL

A. Inspection:

1. Untreated Material:
 - a. Lumber: Provide lumber that has been inspected and graded by an ALSC recognized grading agency.
 - b. Plywood: Provide plywood that has been inspected and graded before treatment by a code-recognized inspection and testing agency.
2. Treated Material: Provide treated material that bears the Wolmanized® trademark and the quality mark of an ALSC-recognized agency which maintains supervision, testing, and inspection of the quality of the product. Quality marks shall be affixed to each piece and include the following:
 - a. Identification of the inspection agency.
 - b. Identification of the standard to which the material was treated.
 - c. Identification of the treating facility.
 - d. Identification of the preservative and retention.
 - e. Identification of the end use for which the product is suitable.

Decay and Termite Resistance

Stake Test Performance - Conley, Georgia



Wolmanized® Outdoor® wood is available in the following species

- Southern Pine
 - Red Pine
 - Douglas Fir^{1,2}
 - Eastern White Pine
 - Radiata Pine
 - Ponderosa Pine
 - Hem-Fir¹
 - Western Hemlock¹
 - Caribbean Pine
- With incising 'Ammonia formulation*

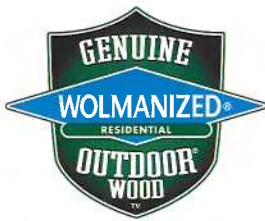
Part 3: EXECUTION

3.01: INSTALLATION

Below is not generally required for pine species less than 6 inches thick. No other special installation specifications are required for preservative treated wood.

A. Surface Treatment of Field Cuts: Treat field cuts on members that provide structural support to a permanent structure in accordance with AWPA Standard M4.

The information presented here is believed to be accurate at time of publication. Check website and most recent AWPA standards for latest information. Wolmanized and Outdoor are registered trademarks of Arch Wood Protection, Inc.



Specification Guide for Treated Wood End Uses

Wood Treated Right™

		AWPA Standards		Preservative Retention (Lbs. per cubic foot)		
		U1	C	CA-B	CBA-A	CCA
		UCS	Commodity			
AGRICULTURE, FARM USE	Round poles and posts as structural members	4B	C4, C5, C16	.31	.61	.60
	Sawn poles and posts as structural members	4B	C2, C16	.31	.61	.60
	Posts, Fence					
	Round, half & quarter round	4A	C5, C16	.21	.41	.40
	Sawn four sides	4A	C2, C16	.21	.41	.40*
	Lumber, in soil contact	4A	C2, C16	.21	.41	.40*
	Lumber, not in soil contact	3B	C2, C16	.10	.20	.25*
	Plywood, in soil contact	4A	C9, C16	.21	.41	.40
	Plywood, not in soil contact	3B	C9, C16	.10	.20	.25
	Grape stakes, sawn	4A	C2, C16	.21	.41	.40*
BUILDING CONSTRUCTION MATERIAL	Floor plate	2	C2, C15, C31	.10	.20	.25*
	Flooring, residential					
	Damp environment	2	C2, C31	.10	.20	.25*
	Dry environment	1	C2, C31	.10	.20	.25*
	Framing, interior	1, 2	C2, C15, C31	.10	.20	.25*
	Lumber					
	Interior, above ground	1, 2	C2, C15, C31	.10	.20	.25*
	Exterior, above ground	3B	C2, C15	.10	.20	.25*
	Ground contact and fresh water use	4A	C2	.21	.41	.40*
	Permanent Wood Foundation					
	Lumber & Plywood	4B	C22	.31	.61	.60
	Plywood					
	Sub-floor, damp above ground	2	C9, C15, C31	.10	.20	.25
	Exterior, above ground	3B	C9, C15	.10	.20	.25
	Ground contact and fresh water use	4A	C9	.21	.41	.40
	Poles, building					
	Round	4B	C4, C23	.31	.61	.60
Sawn	4B	C2, C15, C24	.31	.61	.60	
DECKS	Above ground: Decking, joists, rails, steps	3B	C2, C15	.10	.20	.25*
	Sapwood species: Decking, specialties		NER-669	.08	.16	-
	Ground contact: Posts	4A	C2, C15	.21	.41	.40*
FENCES	Pickets, slats, trim	3A, 3B	C2, C15	.10	.20	.25*
	Posts, sawn	4A	C2, C15	.21	.41	.40*
HIGHWAY MATERIAL	Lumber and timbers for bridges, structural members, decking, cribbing, & culverts	4B	C2, C14	.31	.61	.60
	Structural lumber and timbers:					
	Posts: Round, half-round, quarter round	4A	C5, C14	.21	.41	.40
	Posts: Sawn	4A	C2, C14	.21	.41	.40
	Handrails and guardrails	3B	C2, C14	.10	.20	.25
	Posts, guardrail					
	Round	4A	C5, C14	.25	.51	.50
	Sawn	4A	C2, C14	.25	.51	.50

* Not appropriate for CCA-treated wood produced after December 30, 2003.

www.wolmanizedwood.com 1-866-789-4567

Arch Treatment Technologies, Inc.
1955 Lake Park Drive, Suite 250
Smyrna, GA 30080