

# Chemonite®

ACZA Pressure-Treated Wood

*Protecting wood — including  
Douglas fir, hardwoods &  
other hard-to-treat species —  
from its natural enemies*



**CHEMONITE® ACZA**  
PRESSURE-TREATED WOOD

# STRONG HISTORY PROMISING FUTURE

Chemonite® is the registered trade name for ACZA and its predecessor, ACA, which have been used for treatment since 1935. Most commercial treatments are of other difficult-to-treat species for a wide variety of above ground, ground contact, fresh water and salt water applications.

Introduced in 1985, ACZA represented an improvement to the earlier formulation with respect to efficacy, leaching and appearance. Thirty years of commercial production, long term field tests and laboratory fungal and termite tests have demonstrated the efficacy and performance of ACZA treated wood.

Recent approval by AWWA for use in railroad crossties has resulted in considerable new testing and initiation of new field studies to monitor long term performance of Chemonite® treated wood. Solution corrosion, wood corrosion, conductivity, spike holding and strength properties are shown to be comparable with wood treated with other preservatives. Fire retardant properties are improved by use of ACZA.

A life cycle assessment (LCA) confirmed that ACZA-treated wood uses less energy and resources, has a lower environmental impact, decreases greenhouse gas levels, and offsets fossil fuel use, when compared to concrete, steel and fiber-reinforced composites. For more information see the reports at [www.Chemonite.com](http://www.Chemonite.com).

The performance of ACZA treated wood can be enhanced by the addition of borates to provide protection beyond the depth of the ACZA penetration. Secondary treatments such as ET® Brown can be used to improve the surface properties and climbability of ACZA utility poles.

# Applications

Chemonite® wood is especially appropriate for industrial, utility, marine, agricultural and heavy construction applications, where coastal Douglas fir or difficult-to-treat refractory species are used, or where longevity is a concern.

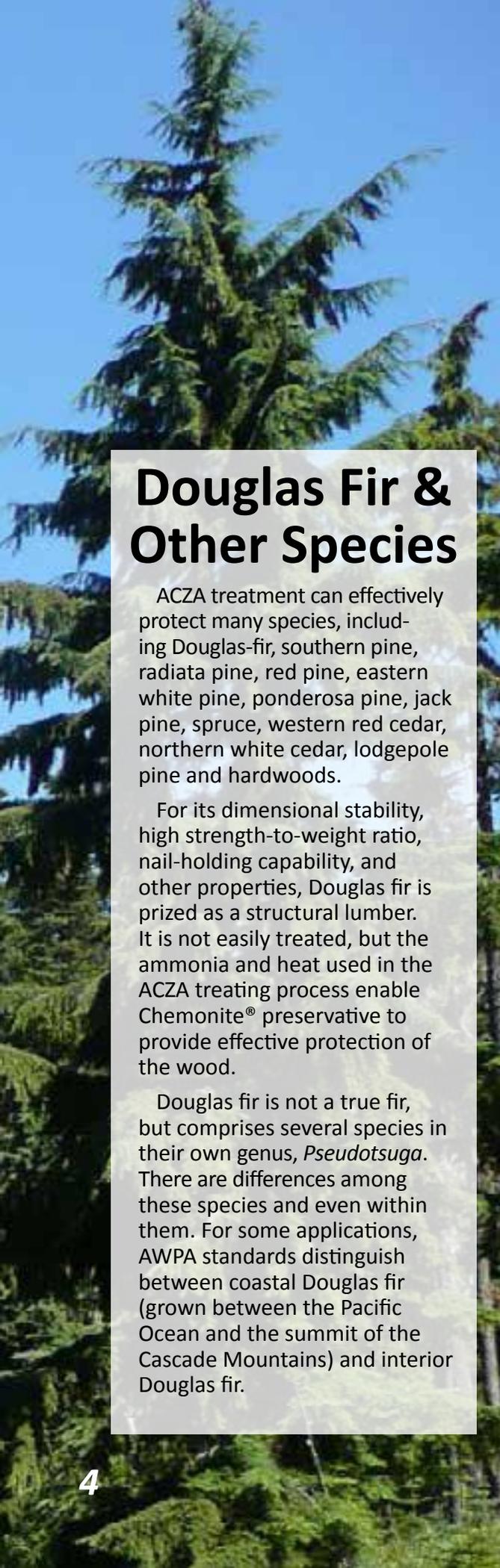
Typical applications include:

- Utility poles — distribution & transmission
- Railroad crossties
- Building poles
- Foundation piling
- Land and freshwater piling
- Structural timbers or supporting columns used for bridges, barns, homes, or other uses.
- Agricultural and fence posts
- Post frame construction
- Highway construction
- Permanent Wood foundations
- Laminated structures

## Benefits of Using ACZA Preservative

- Protects against fungal decay and insect attack, even Formosan termite.
- Effectively penetrates most species of wood.
- Long history of successful use.
- Studies indicate resistance to carpenter ants, woodpecker damage, and fire.
- Provides protection at all levels of exposure — above ground, ground contact, freshwater and saltwater.
- May be stored, handled, and worked like untreated wood.
- Recognized by model building codes.
- Leach-resistant.
- Can be painted or stained.
- Borates can be included into the treating solution increasing the protection of wood products.
- ET® Brown post treatment can be used to improve surface characteristics such as climbability.
- Life Cycle Assessments (LCA) confirm environmental attributes.
- Backed by limited warranties for utility poles, railroad crossties and SYP timbers.





## Douglas Fir & Other Species

ACZA treatment can effectively protect many species, including Douglas-fir, southern pine, radiata pine, red pine, eastern white pine, ponderosa pine, jack pine, spruce, western red cedar, northern white cedar, lodgepole pine and hardwoods.

For its dimensional stability, high strength-to-weight ratio, nail-holding capability, and other properties, Douglas fir is prized as a structural lumber. It is not easily treated, but the ammonia and heat used in the ACZA treating process enable Chemonite® preservative to provide effective protection of the wood.

Douglas fir is not a true fir, but comprises several species in their own genus, *Pseudotsuga*. There are differences among these species and even within them. For some applications, AWP standards distinguish between coastal Douglas fir (grown between the Pacific Ocean and the summit of the Cascade Mountains) and interior Douglas fir.

## Use & Handling

**Construction:** Bracing with round timber piles rather than sawn timbers is recommended for marine construction below high tide. All untreated wood exposed by cutting or drilling should be adequately field-treated. Avoid removing the outer shell of wood where treatment is heaviest and decay-resistance greatest. It is recommended that all structures be prefabricated before treatment; minimize problems by specifying framing, dapping and drilling before treatment whenever possible.

**Worker Safety:** Chemonite® wood can be stored, handled and worked like untreated wood. As with any wood, wear gloves to avoid splinters, wear eye protection and a dust mask when sawing, drilling and sanding. Wash hands after handling and before eating or smoking. Dispose of cut ends in a proper landfill. Treated wood should not be burned in open fires or in stoves, fireplaces or residential boilers. Treated wood may be burned only in commercial or industrial incinerators or boilers in accordance with state and federal regulations.

## Best Management Practices (BMPs)

The Western Wood Preservers Institute (WWPI), in conjunction with industry representatives, users, and scientists, developed BMPs to help reduce leaching of preservative chemicals in treated wood prior to shipment. In the fixation process of ACZA, some preservative components bond to the wood while others form insoluble precipitates. Specification of BMPs results in wood with a very low percentage of leached preservative, and may also reduce shipping weight.

BMPs have been established for Chemonite® treated wood. Details are available on the WWPI website ([www.wwpinstitute.org](http://www.wwpinstitute.org)) or by contacting a producer.

## Standards & Codes

ACZA is listed in the American Wood Protection Association (AWPA) Standard P22 (formerly P5) for Waterborne Preservatives. Wood treated with this preservative is accepted in AWP Standard U1 for applications in Use Categories 1 through 5, that is, from interior applications to salt water immersion. Within the requirements of the standards, ACZA can be used to treat numerous species of wood; however, its ability to penetrate makes it particularly useful in the treatment of hardwoods and coastal Douglas fir, for which it is most commonly used.

AWPA standards are referenced in government specifications and model building codes for treated wood products.

Chemonite® wood is also listed in standards of the Canadian Standards Association (CSA O80).

# Incising

In difficult-to-treat woods such as hardwoods and western species, penetration improvement methods are employed to improve the depth and uniformity of preservative penetration into wood. Most commonly this is seen as a pattern of slits (“incisions”) on the surface of the wood. Full-length incising and deep incising are typically used for poles and piling. Radial drilling and through boring are additional methods used for poles.

Although these methods can improve protection, they can result in a strength reduction for the wood, depending on the pattern, size, and number of incisions. When treated sawn wood products have been incised, the reference design values must be multiplied by the incising factor,  $C_i$ , in accordance with section 4.3.8 of the National Design Specification for Wood Construction. A review of penetration improvement methods is recommended before insertion into a specification.

## Recommended Hardware

Hot-dipped galvanized fasteners and connectors are recommended for use with Chemonite® ACZA-treated wood.

- Some hardware manufacturers recommend only stainless steel connectors. We recommend no less than post Hot-Dipped Galvanized, HDG, fasteners (meeting ASTM A 153) and connectors (ASTM A 653 Class G185 sheet), where there is contact with ACZA-treated wood. In all cases, be sure to observe building code requirements.
- In highly corrosive environments — such as exposure to salt air, industrial fumes, fertilizer storage, high humidity, and constant wetting — appropriate stainless steel should be used. For below-grade Permanent Wood Foundations, building codes generally require stainless steel.
- Always use fasteners and connectors made of the same type of material; dissimilar metals can accelerate corrosion. Aluminum or electroplated galvanized metals should never be used. These metals are not accepted by the building codes for use in exterior applications.

**LCA** Life cycle assessments confirm that ACZA treated wood uses less energy and resources, has a lower environmental impact, decreases greenhouse gas levels, and offsets fossil fuel use, when compared to concrete, steel and fiber-reinforced composite.

For more information see the report at [www.Chemonite.com](http://www.Chemonite.com).



# The Chemonite® Pole

Chemonite® poles provide reliable transmission and distribution of electric energy, with practical benefits and less environmental impact than alternatives such as concrete and steel. The ACZA treatment consistently meets recognized standards of penetration and retention in difficult-to-treat species such as Douglas fir. Poles ranging from 25' to 135' are readily available.

The USDA Forest Products Laboratory states that the expected life of Chemonite® poles is 50 years. Poles have been known to provide uninterrupted service for more than 40 years.

**Corrosion.** No Chemonite® poles are known to have been removed from service due to failure from corrosion. In fact, bolts removed from utility poles after 40 years of service have exhibited accepted strength properties.

**Fire.** Tests indicate that Chemonite® wood provides fire retardant properties. These tests confirm utility field crew reports that Chemonite® wood resists grass and brush fires.

**Woodpeckers.** For years, utility crews have also reported that poles treated with ACZA preservative show little or no damage from woodpeckers. A formal study showed 71% less damage from woodpeckers than poles treated with other preservatives.

**Electronic Conductivity.** Conductivity is related to moisture content, not treatment method. Chemonite® poles have no higher conductivity factor than other treated or untreated poles.



**Climbability.** Research has indicated that the force required to penetrate Chemonite® poles by a line worker's gaff is comparable to that of untreated Douglas fir.

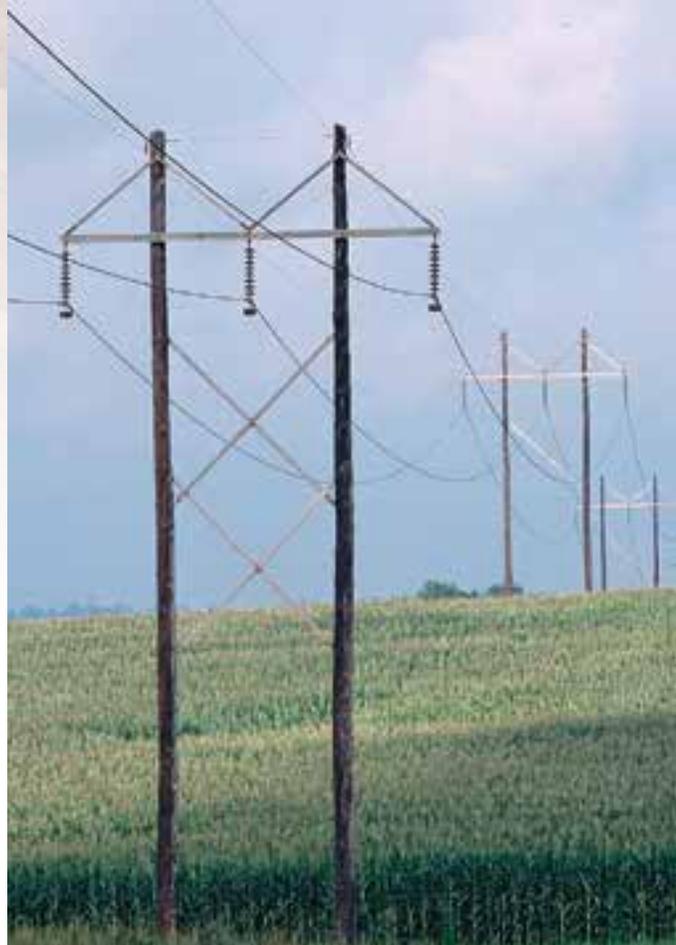
**Steam Sterilization.** The treatment system allows for the use of steam sterilization during the treatment process to kill existing fungal infection in the heartwood.

**Reuse and Disposal.** Many utilities reinstall poles removed from service at other locations. It is also very common for poles to be reused for other purposes. Disposal requirements are typically the same as for other large construction products; check with local landfills for details.

**Protection.** Poles treated with ACZA preservative fall under EPA's minimum protective precautions. There should be no special concerns when handling or climbing Chemonite® poles. Gloves should be worn. No special clothing is required. As with other types of treated and untreated wood, dust masks and goggles should be worn when sawing or machining wood.

## Borate Additive Benefits

Poles treated with a mixture of ACZA and borates, are an option. Borates enhance the protection offered by ACZA alone, through borate movement into the heartwood of even difficult to treat pole species.



## ET® Treatment

To enhance climbability of these poles, they may be ordered with ET® oil-emulsion treatment. The process conditions the outer shell of the pole, allowing for deeper gaff penetration by climbing linemen. Trials of poles after 9, 14, 20, 23, and 25 years' exposure have shown the lasting effectiveness of ET® conditioning.

# The Chemonite® Tie

Ammoniacal Copper Zinc Arsenate (ACZA) is made for heavy duty applications. The long-term protection of ACZA preservative yields a construction material that has been providing reliable service for decades – in utility poles, building poles, foundation piling, bridge girders, guardrail posts, roller coasters, marine piling, glue laminated members, cooling tower stock, and other demanding applications.

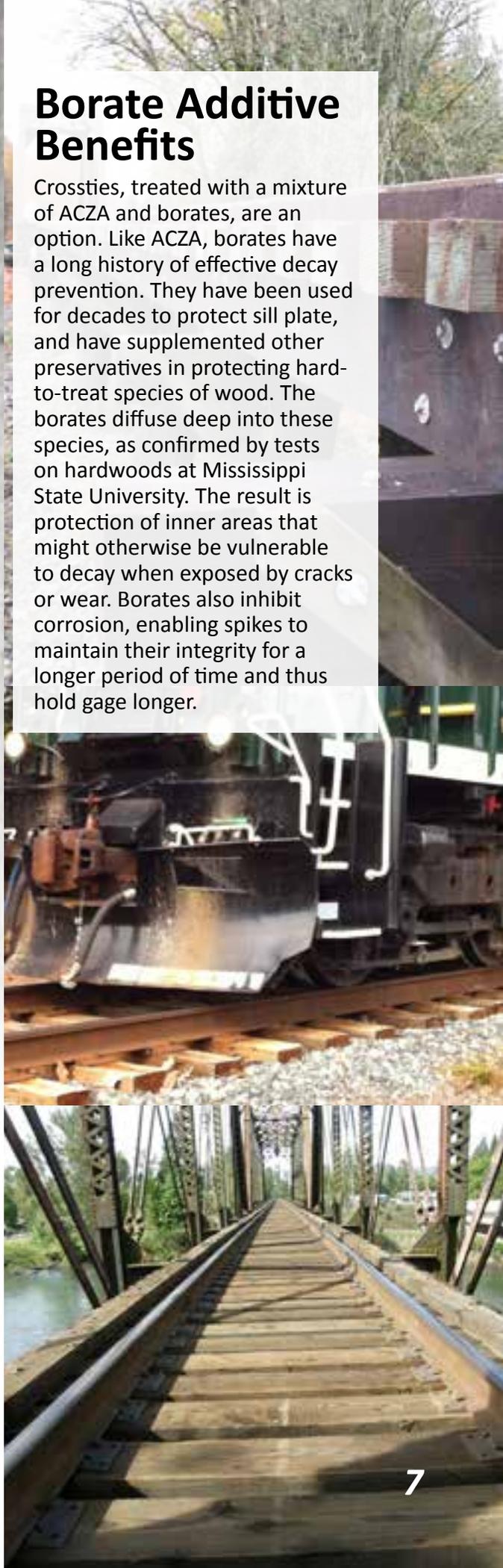
Long-term protection, plus advantageous economical and handling features make ACZA-treated crossties an exceptional choice for railroads.

Chemonite® ACZA-treated crossties have the characteristics of all Chemonite® ACZA-treated wood and more.

- It is resistant to termites and fungal decay.
- Tie strength is not perceptibly affected by treatment.
- In all testing to date, ACZA treatments have shown no more metal corrosion than from untreated wood. In typical rail tie installations the use of special hardware is not required. However, the end use including the design, exposure conditions, etc., should be evaluated to determine if hot dipped galvanized or stainless steel hardware should be recommended.
- ACZA crossties have excellent spike-holding characteristics.
- Tests have indicated that the metallic oxides in ACZA are no more conductive than untreated wood. Regardless of the test method used, a bigger factor than wood species or preservative is moisture, which affects all types of treated wood crossties.
- Both Doug fir and hardwood varieties of Chemonite® ACZA + Boron-treated crossties are backed by limited warranties. See [www.Chemonite.com](http://www.Chemonite.com) for specifics.
- Crossties can be coated with silicone sealer (AntiBlu® H<sub>2</sub>O Water Block) or treated with clear or brown ET® oil emulsion.

## Borate Additive Benefits

Crossties, treated with a mixture of ACZA and borates, are an option. Like ACZA, borates have a long history of effective decay prevention. They have been used for decades to protect sill plate, and have supplemented other preservatives in protecting hard-to-treat species of wood. The borates diffuse deep into these species, as confirmed by tests on hardwoods at Mississippi State University. The result is protection of inner areas that might otherwise be vulnerable to decay when exposed by cracks or wear. Borates also inhibit corrosion, enabling spikes to maintain their integrity for a longer period of time and thus hold gage longer.



**ACZA Treated Wood Specification Guide  
for Commercial, Industrial, and Aquatic Use**

	AWPA U1 Standard			Canada CSA O80		
	Use Category Designation	Commodity Specification	Preservative Retention (Lbs. per cu. ft.)	Use Category Designation	Kg/m <sup>3</sup>	
<b>AGRICULTURE, FARM</b>	<b>STRUCTURAL MEMBERS</b>					
	Round posts (<16')	4B	B	0.60	4.2	9.6
	Round poles	4B	D	0.60 <sup>1</sup>	4.2	9.6
	Sawn poles and posts	4B	A	0.60	4.2	8.0
	<b>POSTS, FENCE (&lt;16')</b>					
	Round, half & quarter round	4A	B	0.40	4.1	6.4
Sawn four sides	4A	A	0.40	4.1	6.4	
<b>CROSSTIES</b>	Listed pines, Doug fir, hardwoods	4A	C	0.40	4.1, 4.2	NA
<b>BUILDING CONSTRUCTION, MARINE AND FRESH WATER</b>	<b>LUMBER &amp; TIMBERS</b>					
	Floor plate	2	A	0.25	3.2	4.0
	Ground contact and fresh water use	4A	A	0.40	4.1	6.4
	Sawn timbers supporting resdtl & coml structures	4B, 4C	A (4.8)	0.80	4.2	8.0
	Salt water splash	4B, 4C	A	0.60	4.1	6.4
	Subject to tides, waves or in salt water — severe <sup>2</sup>	5B, 5C	G	2.50	NA	NA
	Subject to tides, waves or in salt water — northern <sup>3</sup>	5A	G	1.90	5A	30.0
	<b>PERMANENT WOOD FOUNDATION</b>					
	Lumber & plywood (KDAT required)	4B	A (4.2)	0.60	4.2	8.0
	<b>PLYWOOD</b>					
	Sub-floor, damp above ground	2	F	0.25	2	4.0
	Exterior, above ground	3B	F	0.25	3.2	4.0
	Ground contact and fresh water use	4A	F	0.40	4.1	6.4
	Salt water splash	4B	F	0.60	4.1	6.4
	Subject to tides, waves or in salt water	5B	G	2.50	5A	30.0
	<b>PILING</b>					
	Round piling, marine – severe exposure <sup>2</sup>	5B, 5C	G	2.50	NA	NA
	Round piling, marine – northern waters <sup>3</sup>	5A	G	1.50	5A	30.0
	Round piling – land & fresh water (Douglas fir)	4C	E	1.00	4.2	12.0
	<b>Poles, Building</b>					
	Round – structural	4B	B (4.4.1)	0.60	4.2	9.6
	Sawn – structural	4B	A	0.60	4.2	8.0
	<b>GLUE-LAMINATED MEMBERS, DOUGLAS FIR (TREATED AFTER GLUING)</b>					
	Above ground – interior/exterior	1, 2, 3B	F	0.30	1, 2, 3.2	NA
Ground contact & fresh water use	4A, 4B, 4C	F	0.60	4.1, 4.2	NA	
<b>POLES, UTILITY</b>		4A, 4B, 4C	D	0.60 <sup>1</sup>	4.1, 4.2	9.6
<b>HIGHWAY MATERIAL</b>	<b>Lumber &amp; Timbers</b>					
	Lumber and timbers for bridges, structural members, decking, cribbing, & culverts	4C	A (4.3.1)	0.60	4.2	8.0
	<b>STRUCTURAL POSTS &amp; TIMBERS</b>					
	Round, half round, quarter round <sup>5</sup>	4B	B	0.50	4.2	9.6
	Sawn	4C	A	0.60	4.2	8.0
	<b>POSTS, GUARDRAIL</b>					
Round	4B	B	0.50	4.2	9.6	
Sawn	4B	A	0.60	4.2	8.0	

<sup>1</sup>An Inner Zone requirement (0.30 pcf) exists for Douglas fir.

<sup>2</sup>In 5B and 5C applications where *Sphaeroma tererans*, *Limnoria tripunctata*, and *Toredo or pholads* are present, dual treatment is recommended: for solid sawn wood — 1.50 pcf ACZA followed by 20 pcf creosote, and for round piling — 1.00 pcf ACZA followed by 20 pcf creosote.

<sup>3</sup>Northern waters defined as Long Island (NY) and northward on the East Coast and north of San Francisco on the West Coast.

<sup>5</sup>Doug fir and other western species not recommended for half-round and quarter-round posts.

NA = Not in Standard. Cannot use.

For sensitive environments, specify material treated in compliance with Best Management Practices.

This table is meant as a guide. See the most recent AWPA standard for details prior to specification.

# Model Specification for ACZA-Treated 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.

## PART 1 GENERAL

### 1.01 REFERENCES

A. American Wood Protection Association (AWPA) Book of Standards:

1. Standard U1, Use Category System: User Specification for Treated Wood.
2. Standard P5, Waterborne Preservatives.
3. Standard M4, Care of Preservative-Treated Wood Products.

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.

C. Western Wood Preservers Institute

1. Best Management Practices for the Use of Treated Wood in Aquatic Environments.

### 1.02 QUALITY ASSURANCE

#### A. Qualifications:

1. Treatment Facility: Provide treated materials that have been produced under the appropriate ASTM or ANSI standard or an ALSC recognized quality assurance program.

### 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: Chemonite® ACZA (Ammoniacal Copper Zinc Arsenate); Arch Wood Protection, Inc.

### 2.02 MATERIALS

*Lumber for preservative treatment must conform to the following specifications. Select grade and species below. Other grades and species may be acceptable, contact Arch to verify.*

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

1. Grade:
2. Species:
3. Surfacing:
4. Moisture Content: 19%, maximum.

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

A. 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. Species Group: 1.
3. Species Group: 2.
4. APA Structural Rating: Structural I.
4. APA Structural Rating: Structural II.

B. Preservative: ACZA in accordance with AWPA P5.

### 2.03 PRESERVATIVE TREATMENT

A. Pressure Treatment: In accordance with the requirements of AWPA Standard U1 and in accordance with the following Commodity Specification:

1. A: Sawn Products.

2. B: Posts.
3. D: Poles.
3. E: Round Timber Piling.
4. F: Wood Composites (including Plywood).
5. G: Marine (Salt Water) Applications.
- B. Preservative Retention: In accordance with AWPA Standard U1 and appropriate Commodity Specification for the following use category:
  1. UC2 Interior construction, Above Ground, damp.
  2. UC3A Exterior construction, Above Ground, coated & rapid water run-off.
  3. UC3B Exterior construction, Above Ground, uncoated or poor water run-off.
  4. UC4A Ground Contact or Fresh Water, non-critical components.
  5. UC4B Ground Contact or Fresh Water, critical components or difficult replacement.
  6. UC4C Ground Contact or Fresh Water, critical structural components.
  7. UC5A Salt or brackish water and adjacent mud zone, northern waters.
  8. UC5B Salt or brackish water and adjacent mud zone, NJ to GA, south of San Francisco.
  9. UC5C Salt or brackish water and adjacent mud zone, south of GA, Gulf Coast, Hawaii, and Puerto Rico.
- 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.
3. Plywood: 15%, maximum (for Permanent Wood Foundation).

*Retain below if fixed preservative is required for aquatic environments.*

D. Pressure Treatment of Materials for Aquatic Environments: In accordance with the Best Management Practices published by the Western Wood Preservers Institute.

### 2.05 SOURCE QUALITY CONTROL

A. Inspection:

1. Untreated Material:

- a. Lumber: Provide lumber that has been inspected before treatment 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.
- c. Poles: Provide poles that have been inspected before treatment in accordance with ANSI standards.
- d. Piling: Provide piling that has been inspected and graded before treatment in accordance with ASTM standards.
- e. Ties: Provide ties that have been inspected and graded in accordance with user approved specification.

2. Treated Material

- a. Lumber: Provide treated material that bears the mark of an ALSC-recognized agency which maintains supervision, testing, and inspection of the quality of the product.
- b. Plywood: Provide treated material that bears the mark of an ALSC-recognized agency which maintains supervision, testing, and inspection of the quality of the product.
- c. Poles: Provide treated materials that bears the quality mark of and approved auditing program or independent inspection agency approved by the user.
- d. Piling: Provide treated material that bears the quality mark of an inspection agency approved by the user.
- e. Ties: Provide treated material that bears the user approved quality mark of acceptance.

## PART 3 EXECUTION

### 3.01 INSTALLATION

*Below is not generally required for sapwood species such as southern pine less than 5 inches thick in the eastern and central U.S. 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.

# FAQs

## Frequently Asked Questions

### 1. What is Chemonite® wood?

Chemonite® is the registered trade name for wood protected by ACZA (ammoniacal copper zinc arsenate), a waterborne wood preservative. Pressure treating wood with ACZA protects it against marine borers, insect attack, and decay. First developed at the University of California in the 1920s, the preservative was commercially developed for the treatment of coastal Douglas fir and other hard-to-treat species in the 1940s by J.H. Baxter, a California wood preserving company.

### 2. How is wood treated with ACZA?

First, tiny cuts called incisions are made in the wood. The wood is loaded on carts and pushed into a large steel cylinder. The cylinder is closed, vacuum is used to remove excess air and moisture from the wood cells, and warm ACZA solution is pumped in. Pressure and heat are applied to force the solution deep into the wood cells.

### 3. Will the chemicals wash out in water or in the ground?

Chemonite® wood is leach resistant. The U.S. Environmental Protection Agency (EPA) has stated that “Arsenicals in treated wood have a very low tendency to leach into the soil...”

### 4. Does ACZA treatment change the color of the wood?

Chemonite® treated wood has a dark greenish brown color from the copper compounds in the preservative. But the color is difficult to control. Sapwood will tend to be greenish brown with heartwood tending toward more brownish black. Over time, as the wood weathers, the color becomes more uniform.

### 5. Does Chemonite® wood have an odor?

Only when freshly treated. Once the ammonia evaporates, the treated wood is nearly odorless. (Avoid storing any freshly treated wood in damp, unventilated facilities.)

### 6. How do I treat “end-cuts”?

Minimize any cutting to obtain the maximum benefit of the treatment by not exposing untreated wood to decay hazards. If you do cut Chemonite treated wood, the exposed areas should be protected by applying copper naphthenate solution or other solution containing at least 1% copper — available at most home centers. Use a generous amount to completely saturate any untreated areas of your project exposed by cutting or drilling.

## **7. Does Chemonite® wood present a safety hazard?**

Wood treated with ACZA falls under the U.S. Environmental Protection Agency's (EPA) minimum protective precautions. Other than the normal safety measures suggested for handling any wood (wear gloves when handling, goggles and a dust mask when drilling or sawing), no special handling or clothing is required. See the Consumer Safety Information Sheet at [www.Chemonite.com](http://www.Chemonite.com).

## **8. Does ACZA treatment affect the strength of the wood?**

The National Design Specification allows the same strength values for treated as for untreated lumber of the same species, grade, and moisture content. However, when incised, the incising factor should be applied.

## **9. Do nails hold well in Chemonite® wood?**

Laboratory tests and field experience indicate that nails hold just as well or better in Chemonite®-treated lumber as they do in untreated lumber. For fasteners and connectors, always use hot-dipped galvanized, stainless steel or an approved equal.

## **10. Can Chemonite® wood be painted? If so, how soon after treatment?**

Yes. Simply follow the manufacturer's instructions. The wood should be clean and dried to 20% moisture content or less before paint is applied.

## **11. How long will this treated wood last?**

Thirty to fifty years or longer in many end uses when treated to AWPA standards and barring any incidental damage.

## **12. Does the treatment affect the flamespread rating of wood?**

Chemonite® wood is slightly more difficult to ignite than untreated lumber. Tests conducted at Underwriters Laboratories Inc. confirm the fire resistant qualities of Chemonite® wood:

- Douglas fir lumber treated with 0.35 pcf of ACZA had a 41.7 flame spread rating, which displays the properties of a Class B rating.
- Douglas fir lumber treated with 1.86 pcf of ACZA had a 24.8 flame spread rating, which displays the properties of a Class A rating.

## **13. Will Chemonite® wood last if it's buried in the ground?**

Yes. Wood treated to the minimum 0.40 pcf retention will withstand wood-destroying organisms in ground contact.

## **14. Is Chemonite® wood suitable for aquatic applications?**

Yes. Treatment in accordance with AWPA Standards provides a long service life. Specifying that the wood conforms with the Best Management Practices (BMPs) of the Western Wood Preservers Institute ensures that Chemonite® wood is suitable for use in aquatic environments.

## **15. Does Chemonite® wood have a warranty?**

Yes. Chemonite® utility poles and railroad crossties are backed by a limited warranty. See [www.Chemonite.com](http://www.Chemonite.com).



## Specification

A model spec appears on the website. It is in an editable format for convenient customization.

[www.Chemonite.com](http://www.Chemonite.com)

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