

Important Application Information

- **Fasteners**- NatureWood products are designed for long term performance in outdoor applications and, therefore, require high quality corrosion-resistant nails, screws, and other fasteners and hardware.

Fasteners (and other metal products) for use with NatureWood preserved wood products include:

- *Hot-Dip Galvanized***

Fastener and hardware manufacturers have suggested the minimum Hot-Dip Galvanized requirements for use with treated wood should conform to the following ASTM Standards: ASTM-A153 (for Hot-Dip fastener products) and ASTM- A 653 (Coating Designation G-185 for Hot-Dip connector and sheet products).

- *Stainless Steel*

Stainless steel fasteners and connectors are required for Permanent Wood Foundations below grade and are recommended for use with treated wood in other severe exterior applications such as swimming pools, salt water exposure, etc. Type 304 and 316 are the recommended grades to use.

- *Other fasteners and hardware as recommended by the manufacturer*

There may be additional products (other than stainless steel or hot-dip galvanized) which are suitable for use with NatureWood treated wood. Please consult with the individual fastener or hardware manufacturer for recommendations for use of their products with NatureWood treated wood.

- *Aluminum should not be used in direct contact with NatureWood treated wood*

Spacer materials or other physical barriers are recommended to prevent direct contact of NatureWood treated wood and aluminum products.

When using NatureWood preserved wood in close proximity to aluminum products, such as aluminum siding, flashing, furniture and door and window frames, a 1/4” minimum space must be allowed for between the NatureWood and the aluminum products. Polyethylene or nylon spacers can be used to maintain the 1/4” spacing. Another option is to

use a polyethylene barrier, with a minimum thickness of 10 mils, between the NatureWood preserved wood and the aluminum product to prevent direct contact of the wood and the aluminum.

- **When appearance permits, attach boards bark side up** - As a general rule, attach boards bark side up (annual rings arc upward) to reduce cupping; however, the best face should be placed up when a defect of the wood is apparent. Fasten thin boards to thicker boards to maintain structural integrity.
- **Drill pilot holes** - Drill pilot holes especially when nailing or screwing near the edge or end of a board. Pilot holes will help minimize splitting.
- **Deck board spacing** - Should the wood become wet during construction, butt deck boards together. As drying occurs, some shrinkage can be expected. If the wood is dry, allowing for shrinkage is not necessary.
- **Use an endcoat preservative** - Brush-on endcoat wood preservative is recommended on all saw cuts and into drill holes during construction of wood projects. Also apply on areas where moisture can collect. Follow manufacturer’s recommendations.
- **Apply a weather-resistant finish** - Any exposed wood, pressure treated or not, should be protected from the weather. Application of a quality clear water repellent or semi-transparent stain, which contains water repellent, will help minimize the cycles of moisture take-up and loss the wood goes through outdoors. First, determine if your NatureWood product has been pressure treated with a factory applied water repellent by looking at the end tag. If not factory water repellent treated, thoroughly clean your project with a deck cleaning product. Clear water repellent can be immediately applied to your deck or other project. If you choose to use a semi-transparent stain which contains a water repellent, you need to first check that your project is surface dry. Either wait until the surface is dry or immediately apply clear water repellent and wait approximately 8 weeks and then apply your chosen color of semi-transparent stain.

If the NatureWood products contain a factory water repellent, an oil based stain can be applied in 30 - 60 days and water based stains can be applied after 6 months. Check that the wood is surface dry before applying stain. In all instances follow the manufacturer’s directions when applying water repellents or semi-transparent stains which may contain water repellent.

The preservatives in NatureWood products are frequently used in products that are common in our every day lives. Copper, a naturally occurring mineral, is an effective and widely used fungicide and quaternary compounds are commonly used in household disinfectants and cleaners. NatureWood preservatives penetrate deeply into and will remain in the wood for a long period of time. Some preservative may migrate into soil/water or dislodge from the wood. Incidental contact with skin during construction or use may occur.

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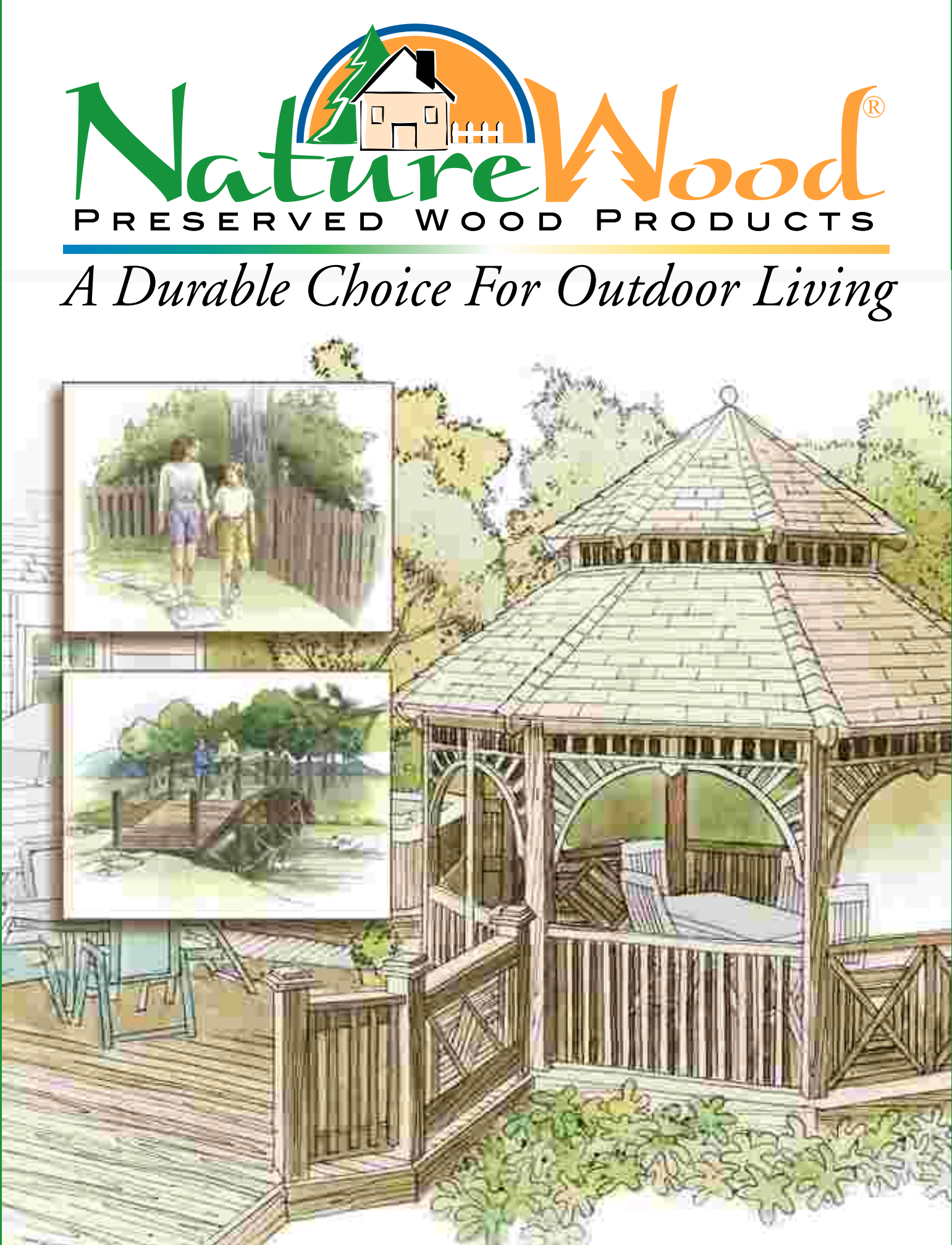
- Do not burn preserved wood.
- Wear a dust mask and goggles when cutting or sanding wood.
- Wear gloves when working with wood.
- Some preservative may migrate from the treated wood into soil/water or may dislodge from the treated wood surface upon contact with skin. Wash exposed skin areas thoroughly.
- All sawdust and construction debris should be cleaned up and disposed of after construction.
- Wash work clothes separately from other household clothing before reuse.
- Preserved wood should not be used where it may come into direct or indirect contact with drinking water, except for uses involving incidental contact such as fresh water docks and bridges.
- Do not use preserved wood under circumstances where the preservative may become a component of food, animal feed, or beehives.
- Do not use preserved wood as mulch.
- Only preserved wood that is visibly clean and free of surface residue should be used.
- If the wood is to be used in an interior application and becomes wet during construction, it should be allowed to dry before being covered or enclosed.
- Disposal Recommendations - Preserved wood may be disposed of in landfills or burned in commercial or industrial incinerators or boilers in accordance with federal, state, and local regulations.
- If you desire to apply a paint, stain, clear water repellent, or other finish to your preservative treated wood, we recommend following the manufacturer’s instructions and label of the finishing product. Before you start, we recommend you apply the finishing product to a small exposed test area before completing the entire project to insure it provides the intended result before proceeding.
- Projects should be designed and installed in accordance with federal, state, and local building codes and ordinances governing construction in your area and in accordance with the National Design Specifications (NDS) and the Wood Handbook.
- Mold growth can and does occur on the surface of many products, including untreated and treated wood, during prolonged surface exposure to excessive moisture conditions. To remove mold from the treated wood surface, wood should be allowed to dry. Typically, mild soap and water can be used to remove remaining surface mold. For more information visit www.epa.gov.

Disposal Recommendations

NatureWood products which are no longer usable such as cutoffs, broken boards, sawdust or treated wood material taken out of service are not considered hazardous and may be disposed of in landfills or burned in commercial or industrial incinerators or boilers in accordance with state and federal regulations.

* Electroplated galvanized fastener and metal products are typically not accepted by the building codes for use in exterior applications, regardless of the type of wood used.

For more information visit www.osmosewood.com



Product Introduction

NatureWood® preserved wood is offered as an alternative to traditional CCA pressure treated wood. NatureWood preserved wood products provide retailers, treaters, consumers, builders and architects an option in their selection of pressure treated wood products.

The preservative technology in NatureWood products has been commercially used since 1991 throughout Europe, Asia, and the United States. For many backyard and commercial projects such as decks, fences and landscaping, NatureWood products are an ideal alternative to traditional pressure treated wood. Here's why:

- NatureWood products are durable and designed for outdoor construction
- The most effective and widely used alternative to traditional pressure treated wood
- Lifetime Residential and Agricultural Limited Warranty against structural damage caused by decay and termites. See warranty for specific provisions
- Ideal for structural lumber, sill plates, outdoor furniture, playground products, patios, decks, garden edging, and landscaping structures
- Building code compliant
- Copper-based preservative with a co-biocide
- Offers consumers a choice in pressure treated wood products
- The preservatives in NatureWood products meet AWWPA standards

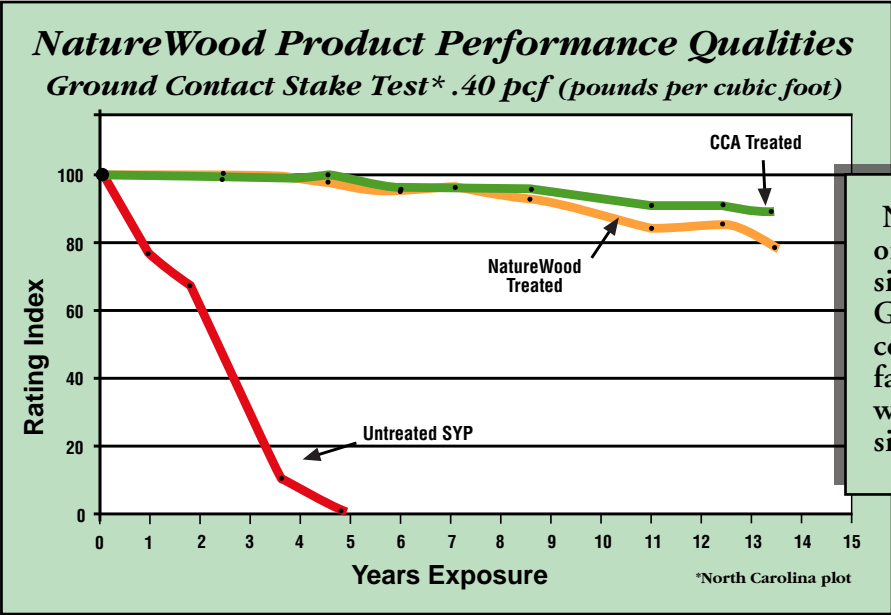
Characteristics of the NatureWood Preservative

The NatureWood wood preservative is a waterborne, alkaline copper quaternary preservative system developed to provide long-term protection of wood exposed in exterior applications. The NatureWood system is based on the well-established effectiveness of copper combined with an organic quaternary compound and is applied to wood by pressure treatment. Copper and quaternary compounds are effective fungicides and termiticides. Together they provide protection from a broad spectrum of fungi and termites. Quaternary compounds are commonly used as swimming pool additives, disinfectants and sanitizers and have antibacterial properties. The active ingredients in NatureWood, copper oxide and quaternary compounds are dissolved in an alkaline carrier. Depending on the desired product application, wood species, and exposure hazard, the NatureWood preservative system may be formulated with a number of specialty additives such as water repellents to enhance product performance.



Characteristics of the NatureWood Preserved Wood Product

Properly treated and processed NatureWood products are similar to CCA treated wood products - both are pressure treated, long lasting, durable, clean to the touch and have no objectionable odor. More than a decade of field test performance and commercial use worldwide establishes the proven effectiveness of the NatureWood preservative technology against termites and fungal decay.



NatureWood preserved wood products offer termite and fungal decay protection similar to that of CCA treated wood. Ground contact testing of treated stakes confirm that while untreated SYP stakes fail in less than 5 years, stakes preserved with NatureWood preservatives perform similarly to CCA treated stakes.

NatureWood Weathering Information

Freshly treated NatureWood products begin with a familiar greenish color and will over time, turn to a light tan/brown color upon exposure to sunlight. As with most outdoor wood products, NatureWood products will eventually fade to gray over time.

Lifetime Residential and Agricultural Limited Warranty

A Lifetime Residential and Agricultural Limited Warranty is offered on NatureWood products for material used in residential and agricultural applications. See warranty for specific provisions. An independent third-party quality control agency is required for the use of the NatureWood trademark and NatureWood Lifetime Residential and Agricultural Limited Warranty.

Fastener Information

NatureWood preserved wood products are designed for long-term performance in outdoor applications and, therefore, require high quality, corrosion-resistant nails, screws, and hardware. Use Hot-Dip galvanized (conforming to ASTM Standards: ASTM-A153 for Hot-Dip fasteners and ASTM-A653, Coating Designation G-185 for Hot-Dip connectors and sheet products), stainless steel, or other fasteners and hardware as recommended by the hardware manufacturer. Direct contact of NatureWood preserved wood with aluminum fasteners is not recommended. *See Important Application Information on the back.*

Regulatory Requirements

The preservative technology in NatureWood products is registered by EPA as a non-restricted use pesticide and does not require Proposition 65 labeling in California. NatureWood products as described in ICC-ES Report, ESR-1980 meet all major model building code requirements.

NatureWood Treatment Specifications

Table 1. Minimum Retention Requirements for NatureWood Products by End Use

End Use	Water Repellent	Materials & Applications
Above-Ground General Use	Optional	Decks, Fencing, Trellises, Gazebos, Sill Plates, Porches, Green Houses, Framing, Flooring, Siding, Shakes, Shingles, Trim & Fascia, etc.
Ground & Fresh Water Contact	Optional	Deck Support Posts, Fence Posts, Docks, Step Stringers, Landscape Timbers, etc.
Critical Structural Members	Optional	Building Poles, Permanent Wood Foundations, Brackish and Saltwater Splash

NatureWood products are not currently approved for saltwater immersion applications.

Table 2. Species of NatureWood Materials

Materials	Sapwood Species	Heartwood Species
Dimensional Lumber & Timbers	Southern Pine Ponderosa Pine Red Pine Radiata Pine Caribbean Pine	Douglas Fir Western Hemlock Hem-Fir Jack Pine Lodgepole Pine Redwood
Plywood	Southern Pine	Douglas Fir
Round & Sawn Posts & Building Poles	Southern Pine Ponderosa Pine Red Pine	Douglas Fir Western Hemlock Hem-Fir

