

NatureWood®
Construction Product Specification Guide



PRESERVATIVE TREATMENT

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This Specification Guide utilizes the Construction Specifications Institute (CSI) *Manual of Practice*. Optional text is indicated by brackets []; delete optional text in final copy of specification.

Specifier Notes typically precede specification text; delete notes in final copy of specification. Trade/brand names with appropriate symbols typically are used in Specifier Notes; symbols are not used in specification text. Metric conversion, where used, is soft metric conversion.

This Specification Guide specifies copper azole based preservative treatment for wood components used to protect from insects and decay and marketed under the NatureWood® trademark or other brand names.

Recommended applications include: above ground decking, rails, spindles, trim and fascia, framing, flooring, sill plates, trellises, gazebos, fencing; ground contact deck support posts and fence posts; and critical structural members, including permanent wood foundations and building poles. Typical uses may include structural lumber, sill plates, outdoor furniture, patios, decks, garden edging, landscaping structures and fresh water boat docks.

PRESERVATIVE TREATMENT (PRESERVATIVE-TREATED WOOD)

PART 1 GENERAL

Specifier Note: NatureWood® copper azole preservatives are used to pressure treat the following materials: Dimensional lumber and timbers of the following sapwood species: Southern Pine, Ponderosa Pine, Red Pine, Radiata Pine and Caribbean Pine.

Dimensional lumber and timbers of the following heartwood species: Douglas Fir, Western Hemlock, Hem-Fir, Lodgepole Pine, Jack Pine and Redwood. Maximum nominal size of 5/4 inches x 6 inches in all listed species for decking use only. Southern Pine and Douglas Fir plywood. Round and Sawn posts and building poles of Southern Pine, Ponderosa Pine, Red Pine, Douglas-Fir, Hem-Fir and Western Hemlock. Minimum preservative retention levels are provided in ESR-1980. NatureWood® preserved wood products are designed for long-term

performance in outdoor applications and, therefore, require high quality corrosion resistant nails, screws and other fasteners. Use hot dip galvanized, stainless steel or other fasteners and hardware as recommended by the hardware manufacturer. Direct contact of NatureWood® preserved wood with aluminum is not recommended and should be avoided. When using NatureWood® preserved wood in close proximity to aluminum products such as aluminum siding, flashing and door and window frames, a 1/4 inch (25.4 mm) minimum space must be allowed for between the NatureWood® treated wood products and the aluminum products. Polyethylene or nylon spacers can be used to maintain the 1/4 inch (6.4 mm) spacing. Another option is to use a polyethylene barrier, with a minimum 10 mil (0.25 mm) thickness, between the NatureWood® preserved wood and the aluminum product to prevent direct contact of the wood and the aluminum. NatureWood® products are not currently approved for saltwater immersion applications.

1.01 SUMMARY

A. Section Includes: Insect and decay protection treatment for wood products specified in other Division 6 sections, including:

Specifier Note: Edit subparagraphs below to suit project requirements and specifier practice.

1. Aboveground: Decking, rails, spindles, trim and fascia, framing, flooring, sill plates, trellises, gazebos, fencing.
2. Ground Contact: Deck support posts, fence posts.
3. Critical Structural: Permanent wood foundations, building poles.

Specifier Note: Revise paragraph below to suit project requirements. Add section numbers and titles per CSI Specifier's practice.

B. Related Sections: Section(s) related to this section include:

1. Division 6 Section: Rough Carpentry.
2. Division 6 Section: Finish Carpentry.
3. Division 6 Section: Engineered Structural Wood Products.
4. Division 6 Section: Manufactured Wood Trusses.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation.

Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section.

1.02 REFERENCES

A. General: Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards

listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein, are referred to by issuing authority abbreviation and standard designation.

B. American Wood-Preservers' Association (AWPA) Standards:

1. AWPA Analytical Standards A2-98, A3-00, A9-00, A-16-93, A17-97, A18-99.

Specifier Note: AWPA Standard C4-99.

2. AWPA Commodity Standards C1-00, C2-00, [C4-99,] C5-00, C9-00, C15-00, C17-00, C22-00.

3. AWPA Preservative Standard P5-01.

C. ICC-ES Evaluation Report:

1. ESR-1980.

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional, not dimensional, tolerances of a complete system. Limit descriptions to composite and operational properties to extent necessary to link multiple components of a system together and to interface with other systems.

1.03 SYSTEM DESCRIPTION

A. Performance Requirements: Provide copper azole wood preservative treatment that will [Insert performance criteria.]

[Perform in accordance with manufacturer's stated performance criteria without defects, damage or failure.].

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction.

Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.

1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit product data, including manufacturer's product sheet, for specified products.

C. Quality Assurance Submittals: Submit the following:

1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.

2. Evaluation Report:

a. ESR-1980.

b. [Specify model code evaluation report submittal to suit project requirements.].

3. Certificates: Certification from treating plant certifying wood treatment applied complies with the criteria and physical requirements for copper azole preservative-treated wood products as specified herein.

4. Closeout Submittals: Submit the following: [Insert requirements.].

5. Warranty: Warranty documents specified herein.

Specifier Note: Article below should include prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate below article with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

A. Source Quality: Obtain copper azole preservative-treated wood products from a single approved source.

B. Wood Treatment Plant Qualifications: Wood treatment plant experienced in performing work of this section which has specialized in the treatment of wood similar to that required for this project, licensed by the manufacturer.

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section.

General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided. Edit paragraph below to suit project requirements.

C. Regulatory Requirements: Provide preservative treatment that complies with the following regulatory requirements:

1. [Insert name of applicable code.], requirements for insect and decay preservative-treated wood.

Specifier Note: Retain quality mark requirement below for all copper azole preservative-treated wood product applications.

D. Quality Mark: All copper azole preservative-treated wood members shall bear an end tag or permanent ink stamp indicating the following:

1. Name of wood treating company.
2. Treatment plant city and state.
3. Symbol "CA" (copper azole).
4. Preservative retention level.
5. Approved use.
6. ESR number.

Specifier Note: Article below should include special and unique requirements. Coordinate article below with Division 1 Product Requirements Section.

1.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirements Sections.

B. Exposure: Allow materials exposed to incidental moisture to dry thoroughly prior to covering with vapor - or moisture retarding finishing materials.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section.

1.07 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty

provisions.

Specifier Note: Coordinate paragraph below with manufacturer's warranty requirements. Koppers Inc., offers a limited lifetime warranty against structural failure caused by fungal decay or termites under "The NatureWood® Lifetime Residential & Agricultural Limited Warranty." Consult manufacturer for complete details.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents.

Specifier Note: Coordinate paragraph below with manufacturer's warranty requirements.

1. Warranty Period: Limited lifetime warranty.

PART 2 PRODUCTS

Specify appropriate product(s) below.

2.01 COPPER AZOLE PRESERVATIVE-TREATED WOOD PRODUCTS

Specifier Note: Retain first 3 paragraphs below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

A. Manufacturer: Koppers Inc. – Koppers Performance Chemicals.

1. Contact: PO Drawer O, 1016 Everee Inn Road, Griffin, GA 30224-0249;

Telephone: (800) 241-0240, (770) 233-4200;

Fax: (770) 229-5225; E-mail: treatedwood@koppers; Web site:

www.kopperspc.com.

B. Proprietary Product(s)/System(s):

1. NatureWood® Treated Wood Products:

a. Preservative Treatment: Waterborne, copper azole preservative system meeting the following standards:

1) AWWA Analytical Standards A2-98, A3-00, A9-00, A-16-93, A17-97, A18-99.

Specifier Note: AWWA Standard C4-99.

2) AWWA Commodity Standards C1-00, C2-00, [C4-99,] C5-00, C9-00, C15-00, C17-00, C22-00.

3) AWWA Preservative Standard P5-01.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

2.03 RELATED MATERIALS

A. Provide the following related materials:

1. End Cut Preservative:

- a. Material Type and Name: [Acceptable to manufacturer of copper azole preservative].
- b. Manufacturer: [Acceptable to manufacturer of copper azole preservative].
- 2. Adhesive:
 - a. Material Type and Name: [Acceptable to manufacturer of copper azole preservative].
 - b. Manufacturer: [Acceptable to manufacturer of copper azole preservative].

2.04 SOURCE QUALITY

Specifier Note: Coordinate paragraph below with Division 1 Quality Control Section.

- A. Tests, Inspections: [Specify tests, inspections and other source quality requirements.].

PART 3 EXECUTION

Specifier Note: Revise article below to suit project requirements and Specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.02 INSTALLATION

A. General:

- 1. Select copper azole preservative-treated wood members in accordance with appropriate untreated lumber and plywood span tables.
- 2. Provide ventilation of building cavities as required by code.

Specifier Note: Retain, edit or delete paragraph below to suit project requirements and specifier practice.

B. Prevent direct contact between treated wood and aluminum using an appropriate method as follows:

- 1. Maintain minimum 1/4 inch (6.4 mm) space between treated wood and aluminum building components using polyethylene or nylon spacers.
- 2. Maintain separation using minimum 10 mil (0.25 mm) thick polyethylene film between treated wood and aluminum.

C. Install copper azole preservative-treated wood in accordance with requirements of applicable codes and related Division 6 sections. Avoid milling operations that could adversely affect preservative characteristics of copper azole preservative-treated wood.

D. End Cut Treatment: Treat end cuts of copper azole preservative-treated wood members with field-applied end coat prior to installation.

Specifier Note: Verify requirements of building code authority having jurisdiction and edit paragraph below as required.

E. Sill Plate: Where applicable, provide sill plate of [Copper azole preservative-treated wood] [Specify sill plate material.].

Specifier Note: Verify fastener requirements of building code authority having jurisdiction and edit paragraph below as required.

F. Install treated wood using hot dipped galvanized steel, stainless steel or other fasteners and hardware as recommended by the hardware manufacturer and in compliance with code authority having jurisdiction.

3.03 FINISHING

Specifier Note: Complete application recommendations are available from the manufacturer. Avoid frequent or prolonged inhalation of sawdust from treated wood. When sawing and machining treated wood, wear a dust mask. When power sawing or machining, wear goggles to protect eyes from flying particles. Surfaces must be clean and dry before application.

A. Prepare copper azole preservative-treated wood for application of finishes in accordance with manufacturer's recommendations. Sand surfaces lightly, clean and verify proper moisture content prior to finishing.

B. Apply paint or stain in accordance with Division 9 Section "Painting."

3.04 PROTECTION

A. Protection:

1. Protect copper azole preservative-treated wood from damage due to subsequent construction activity.
2. Protect from moisture prior to installation of finishes.

END OF SECTION