This MANU-SPEC® utilizes the Construction Specifications Institute (CSI) Manual of Practice, including MasterFormat™, SectionFormat™ and PageFormat™. A MANU-SPEC is a manufacturer-specific proprietary product specification using the proprietary method of specifying applicable to project specifications and master guide specifications. 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 MANU-SPEC specifies alkaline copper quaternary (ACQ) based preservative treatment for wood components used to protect from insects and decay, marketed under the Preserve® trade name and ACQ preservative with a water repellency additive marketed under the Preserve Plus® name. These products are manufactured by Chemical Specialties, Inc. Recommended applications include: (above ground) decking, fence boards, handrails; (ground contact fresh water) fence posts, landscaping, piers, docks; (permanent wood foundations) permanent wood foundations, crawl spaces; (poles) building, transmission and distribution poles; and (Preserve Plus only) decking use only, 5/4 inch (32 mm) decking.

Revise MANU-SPEC section number and title below to suit project requirements, specification practices and section content. Refer to CSI MasterFormat for other section numbers and titles, including 06100 Rough Carpentry, 06200 Finish Carpentry and 06400 Architectural Woodwork.

SECTION 06076
PRESERVATIVE TREATMENT
(PRESERVATIVE-TREATED WOOD)

PART 1 GENERAL
Specifier Note: Preserve and Preserve Plus alkaline copper quaternary preservatives are used to pressure treat a wide variety of treatable timber species, including Douglas fir. Minimum preservative retention levels for various applications are provided in manufacturer’s literature. Preserved wood products are designed for long-term performance in outdoor applications and, therefore, require high quality corrosion resistant nails, screws and other fasteners. For best results, stainless steel, hot-dipped galvanized steel or other proprietary fasteners approved by the manufacturer are recommended. Direct contact of ACQ preserved wood with aluminum or mild steel is not recommended.

1.01 SUMMARY
A. Section Includes: Alkaline copper quaternary (ACQ) 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. Above Ground: Decking, fence boards, handrails.
2. Ground Contact Fresh Water: Fence posts, landscaping, piers, docks.
4. Poles: Building, transmission and distribution poles.
5. Decking Use Only: 5/4 inch (32 mm) decking.

Specifier Note: Revise paragraph below to suit project requirements. Add section numbers and titles per CSI MasterFormat and 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 Standard U1:
         a. Category UC1.
         b. Category UC2.
         c. Category UC3A.
         d. Category UC3B.
         e. Category UC4A.
         f. Category UC4B.
      2. AWPA Standard T1.
   C. International Conference of Building Officials (ICBO) Evaluation Services:
      1. ICBO ES ER-4981.
   D. National Evaluation Service, Inc. (NES):

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 ACQ wood preservative treatment which 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 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. NER-643.
   b. ICBO ES ER-4981.

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

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

   1. 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 alkaline copper quaternary 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. NES Report No. NER-643.
   2. ICBO ES ER-4981.
   3. [Insert name of applicable code.], requirements for insect- and decay-preservative-treated wood.

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

D. Quality Mark: All copper quaternary 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 for alkaline copper quaternary (ACQ).
   4. Preservative retention level.
   5. Approved use.

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 Requirement Section.

B. Comply with manufacturer’s ordering instructions and lead time requirements to avoid construction delays.

C. Delivery: Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact.

D. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
   1. Prevent exposure to precipitation during shipping, storage or installation.
   2. Store material off ground and under cover.
3. Allow materials exposed to incidental moisture to dry thoroughly prior to covering with vapor- or moisture-retarding finish 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. Chemical Specialties, Inc., offers a limited lifetime warranty against damage caused by fungal decay or termite infestations under their “Lifetime Limited Warranty For Certain Residential and Agricultural Uses.” 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.


PART 2 PRODUCTS
2.01 ALKALINE COPPER QUATERNARY (ACQ) 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: Chemical Specialties, Inc.

1. Contact: 200 East Woodlawn Road, Suite 350, Charlotte, NC 28217; Telephone: (800) 421-8661, (704) 522-0825; Fax: (704) 527-8232; E-mail: acqinfo@chemspec.com; website: www.treatedwood.com.

Specifier Note: The Preserve product is an arsenic- and chromium-free ACQ wood preservative. Preserve Plus is an ACQ preservative combined with a water repellent component. Retain one or both products to suit project requirements and specifier practice.

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

1. [Preserve] [And] [Preserve Plus] Preservative-Treated Wood Products:
   a. Preservative Treatment: Waterborne, alkaline copper quaternary (ACQ) preservative system [And water repellency component], containing no arsenic and no chromium.
   b. Material Standards: Comply with the following standards: AWPA Standard U1 (Category UC1, UC2, UC3A, UC3B, UC4A, UC4B), T1.
   c. Applications and Location: [Specify project applications and location.].
   d. Retention Rate for Various Applications: [Above ground (decking, fence boards, handrails): 0.25 - 0.40 pcf (4.0 - 6.4 kg/m³)]. [Ground contact, fresh water (fence posts, landscaping, piers, docks): 0.40 pcf (6.4 kg/m³)]. [Permanent wood foundations (permanent wood foundations, crawl spaces): 0.60 pcf (9.6 kg/m³)]. [Poles (building, transmission and distribution poles): 0.60 pcf (9.6 kg/m³)]. [Decking use only (5/4 inch (32 mm) decking): 0.15 pcf (2.4 kg/m³) plus water repellent].

Specifier Note: Edit Paragraph below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

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 ACQ preservative].
   b. Manufacturer: [Acceptable to manufacturer of ACQ preservative].
2. Adhesive:
   a. Material Type and Name: [Acceptable to manufacturer of ACQ preservative].
   b. Manufacturer: [Acceptable to manufacturer of ACQ preservative].
3. Fasteners:
   a. Type: [Specify type.].
   b. Size: [Specify size.].
   c. Material: [Stainless steel] [Hot-dipped galvanized steel] [Acceptable to ACQ preservative manufacturer].

Specifier Note: Direct contact of ACQ preserved wood with aluminum or mild steel is not recommended.

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: Article below is an addition to the CSI Section Format and a supplement to MANU-SPEC. 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. Select alkaline copper quaternary (ACQ) preservative-treated wood members in accordance with appropriate untreated lumber and plywood span tables. Provide ventilation of building cavities as required by code.
   B. Install ACQ 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 quaternary preservative-treated wood.
   C. End Cut Treatment: Treat end cuts of ACQ preservative-treated wood members with field-applied end coat prior to installation.

Specifier Note: Verify requirements of local building code and edit paragraph below as required.

D. Sill Plate: Where applicable, provide sill plate of ACQ preservative-treated wood.

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

E. Install using stainless steel, hot-dipped galvanized or other approved fasteners required by applicable code for use with treated lumber and plywood.

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 ACQ preservative-treated wood for application of finishes in accordance with manufacturer’s recommendations.
   1. Allow time for drying. Clean and check for moisture prior to finishing.
   B. Apply paint or stain in accordance with Division 9 Section: Painting.
3.04 PROTECTION

A. Protection:

1. Protect ACQ preservative-treated wood from damage due to subsequent construction activity.
2. Protect ACQ preservative-treated wood from moisture prior to application of finishes.

END OF SECTION