

2021



AWPA Book of Standards



AMERICAN WOOD PROTECTION ASSOCIATION

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Cover Photo: Preservative treated wood utility poles are a reliable and effective part of our electric and telecommunications infrastructure. This pole line runs alongside the Ellicott Highway (Colorado Route 94) east of Colorado Springs with a view of Pike's Peak in the background at an elevation of 14,115 feet (4,302 meters) above sea level. **Photo credit:** Randy Gross of Poles, Inc.

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Recently Withdrawn AWWA Standards

- A1-15: Standard Methods for Analysis of Creosote and Oil-Type Preservatives
- A2-15: Standard Methods for Analysis of Waterborne Preservatives and Fire Retardant Formulations
- A3-15: Standard Methods for Determining Penetration of Preservatives and Fire Retardants
- A5-15: Standard Methods for Analysis of Oil-Borne Preservatives
- A32-10: Standard Method for Measuring Losses of Inorganic Preservatives from Treated Wood
- A38-04: Standard Method for Determination of PXTS in Treated Wood by HPLC with UV Detection
- A39-05: Standard Method for Determination of PXTS in Wood Treatment Solutions by HPLC with UV Detection
- A44-08: Standard Method for Determination of Cyproconazole in Solventborne Wood Treating Solutions by HPLC
- A45-08: Standard Method for Determination of Cyproconazole in Wood Extracts by HPLC
- A56-11: Standard Method for the Determination of the Specific Gravity of Distillation Fractions and Residue
- A84-12: Standard Method for Determination of Copper in Copper Naphthenate Solution or in Wood Treated with Copper Naphthenate
- A89-12: Standard Method for Colorimetric Analysis of Copper in Copper Naphthenate Treated Wood or Copper Naphthenate Solutions
- E6-05: Standard Method for Determining the Equilibrium Moisture Content of Treated Wood
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- P4-11: Standard for Petroleum Oil for Blending with Creosote
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- P18-14: Nonpressure Preservatives
- P19-04: Standard for Oligomeric Alkylphenol Polysulfide (PXTS) Preservative
- P21-11: Standard for Acid Copper Chromate (ACC)
- P30-08: Standard for Copper bis(dimethyldithiocarbamate) (CDDC)
- P43-08: Standard for Chlorpyrifos (CPF)
- P44-08: Standard for Permethrin (PER)
- P46-08: Standard for Cyproconazole (CPZ)
- P54-09: Standard for Alkaline Copper DCOI (ACD)

Notes:

AWPA "C Standards" (e.g., C1, C2, C9, etc.) were last updated during the Fall 2002 Standardization Cycle and final editions were printed in the 2003 and 2004 AWWA Books of Standards. All specifications for treated wood products from the C Standards are now found in the AWWA Use Category System Standards U1 and T1. If you are a specifier, you may simply change all of your C Standard references to AWWA Standard U1. If you are a manufacturer of treated wood products, you will need to refer to Standard T1 for the treating requirements to enable you to determine conformance to Standard U1. If references to the C Standards are still needed, individual standards may be purchased online at www.awpa.com or by contacting AWWA to purchase older editions of the Book of Standards.

AWPA "F Standards" (e.g., F1, F2, etc.) were withdrawn as AWWA Standards during the Fall 2008 Standardization Cycle and are now printed as "Factors" tables in the back of the AWWA Book of Standards.

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INTRODUCTION TO THE 2021 AWPA BOOK OF STANDARDS (INFORMATIVE)

About AWPA

The American Wood Protection Association is an international, non-profit, technical society founded in 1904 to provide a common forum for the exchange of technical information between industry, research and users of treated wood.

AWPA is the principal Standards-writing body for methods, preservatives, and other technologies which protect wood and wood-based products. Individuals with various areas of interest including consumers, end-users, government, academia, specifiers and producers meet on a regular basis to develop and maintain these Standards for preservatives and other protectants, treatments, testing methods, quality control and inspection procedures for treated wood products. AWPA relies on the expertise of and information voluntarily developed by technically qualified members.

AWPA Standards help enhance product quality and build the confidence of product end-users. These standards are recognized and used by most, if not all, specifiers of treated wood including electrical utility, marine, road and building construction, as well as by local, state and federal governments through the use of the major model building codes.

AWPA believes that an open, consensus process is necessary to ensure development of technically competent, credible standards. Membership in the Association is open to all interested individuals. The Standards development meetings are open to all persons whether they are members of the Association or not.



ANSI Accreditation

AWPA is an ANSI Accredited Standards Developer. This means that the procedures which govern our Standards development process (the Technical Committee Regulations) have been reviewed by the American National Standards Institute (ANSI) and are found to be in conformance with the ANSI Essential Requirements. This contains the elements of due process, consensus, public review, consideration of viewpoints, incorporation of proposed changes into a Standard, and a right to appeal by any participant. ANSI Accreditation does not imply that all AWPA documents are American National Standards, nor does it mean that ANSI writes or reviews the technical content of any AWPA Standards. Accreditation by ANSI demonstrates that AWPA's standards development process is open, consensus-based, and affords

each participant with due process. For more information on ANSI or its Accreditation of Standards Developing Organizations, please visit www.ansi.org

Technical Committee Regulations

The AWPA Technical Committee Regulations, found in this *Book of Standards*, detail the operating procedures for the committees involved in standards development.

Guidance Documents

AWPA Guidance Documents contain specific guidelines for evaluating and/or standardizing new wood preservatives, fire retardants, millwork preservatives and preservative finishes. These guidelines have been developed and are used by the technical committees for the sole purpose of assisting individuals and organizations in proposing new or revised Standards to AWPA's Technical Committees for an impartial evaluation of new products brought to the Association.

Purpose of AWPA Standards

This *Book of Standards* is intended for use by the wood preserving industry as well as for guidance of the purchaser in specifying and obtaining adequately treated wood products. Generally, all wood products may be subjected to wood destroying organisms such as decay fungi, insects and marine borers in service. The purpose of these Standards is to ensure that wood products are treated with suitable preservatives and/or other protectants for reasons of safety, service and savings resulting from unnecessary and expensive replacements.

Organization and Use of AWPA Standards

In the *AWPA Book of Standards*, the different types of Standards are presented in a logical order. First, the Use Category System Standards are shown, followed by Preservative Standards. Next, Analytical, Miscellaneous, and Evaluation methods are presented. The letters "AWPA", the designation of its standards (e.g. U1, P25), Use Categories (e.g. UC3B, UC4A), and other AWPA nomenclature are trademarks of the American Wood Protection Association. When referring to or marking products using an AWPA Standard or associated nomenclature, that product must meet all applicable requirements of that Standard. Although these trademarks are owned by AWPA, a royalty-free license is granted to use them if, and only if, the product fully meets or exceeds the requirements of the applicable AWPA Standard.

Use Category System Standards (U1 and T1): The Use Category System Standards are the culmination of many years' efforts to simplify the specification of treated wood products. Under the previously used Commodity Standards (C Standards) the user would specify a different Standard for each type of product. With 36 different C Standards, there was a significant degree of error in product specifications. The Use