

HOW TO SPECIFY TREATED WOOD PRODUCTS

First, if your specifications for treated wood read something like “0.25 PT wood”, it’s probably time to update your specifications. There are many types of treated wood available in the marketplace, but some of them may be low-cost alternatives which have not been standardized by the American Wood Protection Association (AWPA), whose experts in wood protection review product performance data in an ANSI-accredited, consensus-based standards development process. This is why it is important to specify AWPA Standards.

Next, if your specifications call out AWPA’s “C” Standards, please be aware that these standards are outdated. These Commodity Standards were finalized during the Fall 2002 standardization cycle and were last printed in the 2004 AWPA Book of Standards. All 36 of the AWPA C Standards were combined by our technical committees into the AWPA Use Category System, consisting of two standards, U1 and T1. U1 contains the User Specifications for treated wood, and is the proper replacement for all of the C Standards. Standard T1 is the “treatment” standard which manufacturers must comply with in order to meet Standard U1. Therefore, as a specifier, you would simply replace any of the references to the C standards, for example, Standard C2, with a reference to Standard U1.

To dig a bit deeper into Standard U1, you would first determine the Use Category for a particular application. A complete description of the use categories is found in Section 2 of Standard U1. Section 2, as well as other excerpts from Standard U1 can be downloaded free of charge from the AWPA website at this URL: www.awpa.com/standards/ucs.asp. Each type of application will have a particular Use Category. For example, sill plates will be a Use Category 2 (UC2), which is an interior-damp application. A residential deck would carry an exterior-exposed Use Category 3B, whereas a ground contact structural post supporting a building would be either a UC4B or UC4C application. Examples of different types of applications and their use categories are found in section 3 of Standard U1.

Sections 4 and 5 contain listed species and preservatives, which can be useful if you are considering the use of a specific species or need to know the basis or carrier type for a particular preservative. Section 6 lists all species/preservative combinations for each use category in a section for each type of commodity. For example, Commodity Specification A lists the requirements for sawn products, such as lumber and timbers. Commodity Specification F lists the requirements for composites, such as glulam and plywood. Within each Commodity Specification within Section 6 of Standard U1, you will find a table of retentions (amount of preservative per cubic foot or cubic meter) for each species/preservative combination. Any location in the table where a retention is not listed means that the particular species/preservative combination has not been submitted for review by a proponent, or that it has been proven ineffective.

With the foregoing in mind, you can develop reliable specifications for treated wood products. The specifications can be very simple or complex, depending on your needs. Here are some sample specifications which may aid you in specifying treated wood. The samples are for sill plates, but you can substitute the name of the product and any preservative, commodity specification, Use Category, or preservative as needed:

1. Sill plates shall be treated in accordance with AWPA Standard U1 to the requirements of Use Category 2 (UC2).

The above specification allows maximum flexibility with respect to the choice of materials used. Not only does it permit the use of any listed species and preservative combination for solid sawn lumber, but would also allow for substitution with any type of composite product.

2. Sill plates shall be treated with waterborne preservatives in accordance with AWPA Standard U1 to the requirements of Use Category 2 (UC2).

The above specification is similar to the first one, but narrows the choices of preservative to those using water to carry the preservative into the wood. This is especially useful for buildings where VOCs are a concern.

3. Sill plates shall be treated with waterborne preservatives in accordance with AWPAs Standard U1, Commodity Specification A, to the requirements of Use Category 2 (UC2).

The above specification further limits the materials to the use of solid sawn lumber and water-based preservative systems, but still allows all listed species to be used for the application.

4. Sill plates shall be southern pine lumber, treated with waterborne preservatives in accordance with AWPAs Standard U1, Commodity Specification A, to the requirements of Use Category 2 (UC2).

The above specification is similar to the previous one, but names the southern pine species group in the event the designer/specifier has a particular species that he or she wishes to use.

5. Sill plates shall be southern pine lumber, treated with inorganic boron (SBX) in accordance with AWPAs Standard U1, Commodity Specification A, to the requirements of Use Category 2 (UC2).

Finally, the above specification is very specific in nature. It lists the species, a specific preservative system, and the proper use category. This is one of the most detailed specifications that can be written.

Note that it is not absolutely necessary to specify the retention, as the retention values can vary between species and preservatives. However, if you have chosen a specific species/preservative/Use Category combination, it can be helpful to know the retention for verification of conformance on the jobsite. In addition, the specifier is free to make exceptions to the AWPAs Standards, as long as they do not reduce the reliability of the product. Adding more stringent requirements is the prerogative of the designer, but you should be aware that availability of products may become a concern if additional requirements are too far from ordinary.

AWPA provides assistance in using its standards. For further assistance in developing your specifications, please contact us for technical support. Our contact information is found on our website.

For more information, please visit our website: www.awpa.com

WHY SPECIFY AWPAs

Founded in 1904, the American Wood Protection Association (AWPA) is the only ANSI-accredited developer of standards for treated wood products. Our committees consist of the world's foremost experts in the field of wood protection who determine wood protection system efficacy in an open, unbiased forum. Engineers, architects, wood scientists, chemists, mycologists, and other persons from the forest products and wood protection industries all participate in our standards development process to make AWPAs Standards the most reliable wood protection standards in the world today.

AWPA Standards are the only Standards listed directly in the major model building codes where treated wood is required, so any product meeting AWPAs Standards is code approved. AWPAs open, consensus-based process provides the most rigorous evaluation of wood preservative performance data by a body of experts on the subject. AWPAs does not charge any mandatory fees for reviewing or listing preservatives or treated wood products in its Standards, but is supported financially through the sale of its Standards, individual membership dues, organizational sponsorships, and meeting registration fees. AWPAs has no financial interest in any product or process listed in our Standards.

Membership in AWPAs is open to all persons with an interest in wood protection and standards development. Participation in the standardization process by any qualified individual is strongly encouraged, as it leads to improved standards through broad-based participation. This benefits all of society, as the standards become more reliable for use by consumers, end-users, specifiers, and manufacturers alike.