



PRESERVE TECH

Guidance for properly specifying and using preserved wood products

Converting to AWPAs Use Categories from Commodity Standards

Specifications for preserved wood products have evolved over the past two decades to keep pace with the dynamic changes in the wood preserving and construction industries. The change to specifications defined under the American Wood Protection Association (AWPA) Use Categories has been fully in place for many years. Still, there are some specifications that still reference the previous AWPAs Commodity or C Standards instead of the applicable Use Categories now in effect.

C Standards were the chief specifications used for preserved wood for many decades. These standards defined the retention, or amount of preservative, and penetration required for specific products. In all, there were 36 C Standards for commodity wood products. The individual C Standards ranged from broad product groups, such as C1 covering all timber products, to those for specific uses, for example, C14 for wood used in highway construction.

Adoption of Use Categories

In 1999, AWPAs released the Use Category System in Standard U1, which shifted the specifications to reflect the service conditions where the products would be used. Standard U1 defines five main Use Categories (UC), with subcategories in three of the five categories. The higher the Use Category number, the more demanding the service condition.

Also within Standard U1, there are 10 Commodity Specifications (A through J) that define the major product categories and list the applicable preservatives, species, required retentions and any special requirements for preservative treating to the selected Use Category.

The Use Category System became the primary specification in 2004 and AWPAs discontinued publishing the C Standards in 2005. The current AWPAs Book of Standards lists only the Use Categories and Commodity Specifications. While the C Standards ended years ago, specifications and regulatory documents may still reflect the older references.

Updating Specs

Changing a specification from a C Standard to a current Use Category is simple, provided you know the environmental conditions where the preserved wood product will be used.

Using the table on the right, find the C Standard shown in the first column. Because some commodity definitions covered a wide range of products, the C Standard may appear in multiple places in the column. (See page 2 for descriptions of each C Standard.)

Next, select the environmental conditions where the wood will be used. Descriptions of the conditions, as defined in the AWPAs standards, are shown.

The appropriate Use Category is shown in the third column.

Commodity or C Standard	Use Environment	Use Category
C1 C2 C15 C28 C31	Interior, dry Continuously protected from weather or other sources of moisture	U1, UC1
C1 C2 C9 C15 C28 C31	Interior, damp Protected from weather, but may be subject to sources of moisture	U1, UC2
C1 C2 C15 C34	Above ground, protected Exposed to all weather cycles, including intermittent wetting	U1, UC3A
C1 C2 C9 C15 C25 C28 C33 C34	Above ground, exposed Exposed to all weather cycles, including intermittent wetting but with sufficient air circulation so wood can readily dry	U1, UC3B
C1 C2 C4 C5 C6 C9 C15 C17 C28 C33	Ground contact or fresh water, general use Exposed to all weather cycles, including continuous or prolonged wetting (includes above ground applications with ground contact type hazards or that are critical or hard to replace)	U1, UC4A
C1 C2 C3 C4 C5 C6 C14 C15 C16 C22 C23 C24 C28 C33	Ground contact or fresh water, heavy duty Exposed to all weather cycles, including continuous or prolonged wetting, high decay potential, salt water splash	U1, UC4B
C1 C2 C4 C6 C24 C28 C33	Ground contact or fresh water, extreme duty Exposed to all weather cycles, including continuous or prolonged wetting, severe environments, extreme decay potential	U1, UC4C
C1 C2 C3 C9 C14 C18	Marine use Continuous marine exposure (salt water)	U1, UC5A U1, UC5B U1, UC5C
C20 C27	Fire retardant treated by pressure process Interior or exterior uses for fire protection as required by codes	U1, UCFA U1, UCFB

(cont. on page 2)



Commodity Standards

The Commodity Standards used for decades in the wood preserving industry were based on specific solid sawn and round wood product commodities that receive preservative treatment by pressure process. The following are titles of each C Standard, as listed in the AWPA Book of Standards prior to 2005:

- C1 All Timber Products
- C2 Lumber, Timber, Bridge Ties and Mine Ties
- C3 Piles
- C4 Poles
- C5 Fence Posts (round, half-round or quarter-round, shorter than 16 ft.)
- C6 Crossties and Switch Ties
- C9 Plywood
- C14 Wood for Highway Construction
- C15 Wood for Commercial-Residential Construction
- C16 Wood Used on Farms
- C17 Playground Equipment Treated with Inorganic Preservatives
- C18 Material in Marine Construction
- C20 Structural Lumber - Fire Retardant Treatment
- C22 Lumber and Plywood for Permanent Wood Foundations
- C23 Round Poles and Posts Used in Building Construction
- C24 Sawn Timber Used to Support Residential and Commercial Structures
- C25 Sawn Crossarms
- C27 Plywood - Fire Retardant Treatment
- C28 Structural Glued Laminated Members and Laminations Before Gluing
- C31 Lumber Used Out of Contact with the Ground and Continuously Protected from Liquid Water
- C33 Structural Composite Lumber
- C34 Shakes and Shingles

Additional Resources

For more information on Use Categories, including the required retentions for the waterborne and oil-type preservatives in use today, consult the online Technical Library at www.PreservedWood.org in the Specifying Preserved Wood section.

Specific information on the Use Categories is available online in the AWPA website at www.AWPA.com. The full AWPA Book of Standards, listing all required preservative retentions, can be purchased on the AWPA website.