

Copper Azole Technical Bulletin

Copper Azole Description

Copper azole (CA) is a copper-based wood preservative that has been used to pressure treat wood products worldwide since 1992. CA was first introduced in the United States in 2001.

CA contains active ingredients, copper and azoles. The copper is 100% recycled and soluble, penetrating deeper in the wood cells. The copper is very effective in preventing damage from insects and fungi. The organic triazole co-biocides; tebuconazole and propiconazole, which help control damage from copper tolerant fungi.

The Viance brand name for Copper Azole is "[Preserve® CA](#)."

Safety, People and the Environment

Both CA and ACQ have been used effectively around the world for over 25 years. CA was initially introduced in 1992 and ACQ in 1987 and their introduction to the United States was 2001 and 1992, respectively.

Preserve CA treated wood meets the stringent industry standards of the American Wood Protection Association (AWPA), the leading authority on wood preservation science. Preserve CA is approved for a wide variety of residential, commercial and agricultural construction projects including above ground exposed use (UC3B), ground contact general use (UC4A), freshwater immersion (UC4B), and salt-water splash applications (UC4B). CA is not recommended for saltwater immersion applications.

Preserve CA is an NAHB Home Innovation Research Labs [Green Certified Product](#) for Resource Efficiency and is eligible to contribute points toward a building's certification under the National Green Building Standard™ (NGBS).

CA and ACQ Treated Wood

Similarities

The main difference between the two types of treated wood is the co-biocides that are used to combat copper tolerant fungi. ACQ uses a quaternary compound (Quat) as a co-biocide and Copper Azole uses a blend of azoles as a co-biocide.

Because the appearance and performance of CA and ACQ treated wood are very similar, they have been used interchangeably in many instances. It is rare for the average consumer to notice any significant difference in appearance between CA and ACQ treated wood.

Differences

The differences are few and any differences typically only affect the producers. When properly produced, the differences in the treated wood is insignificant to the point where the retailer and consumer will not notice.

Choosing CA Treated Wood Over ACQ Treated Wood

The performance differences between CA treated wood and ACQ treated wood are basically indiscernible when properly treated and used in the correct application. When choosing between purchasing CA treated wood and ACQ treated wood the purchaser should consider the following:

- Performance history of the treating company
- Quality of the substrate treated and results of treatment
- Support available

Fasteners and Connectors

CA, like ACQ, is in the “excellent range” as defined in the *Corrosion Engineering Handbook*. Viance provides the following guidelines regarding fasteners used with CA and ACQ treated wood:

- Use building-code approved, corrosion-resistant fasteners and connectors suitable for use in pressure-treated wood.
- For fasteners, use of hot-dipped galvanized (meeting ASTM A 153) or stainless steel fasteners.
- For connectors, use G185 hot-dipped galvanized connectors for exterior applications.
- For Permanent Wood Foundations and corrosive environments, such as Coastal areas with saltwater spray, use code approved stainless steel fasteners and connectors.
- CA and ACQ are not suitable for direct contact with uncoated steel or aluminum building products.

Building Code Compliance

CA is:

- Field-tested, proven-to-last, and accepted as an industry standard
- Building code compliant (IRC and IBC)
- An American Wood Protection Association (AWPA) standardized wood preservative

Warranty

Preserve CA treated wood is covered by a Lifetime Limited Warranty against damage from fungal decay and termite attack when installed in accordance with applicable building codes. [See Preserve CA Lifetime Limited Warranty](#) for terms and conditions.

More Information

<https://treatedwood.com/products/preserve>

