



A New Generation of Pressure Treated Wood

Every year, in the US, 40 million lbs. of arsenic is used in pressure treated lumber for decks, foundations, and playground equipment. However, that will change as of Jan. 1, 2004. The Environmental Protection Agency (EPA) is banning chromated copper arsenate (CCA) from residential use. CCA will still be available for permanent wood foundations and other industrial/agricultural work. A new generation of preservative treatments will take the place of CCA, but they have certain drawbacks, of which one should be aware, in order to use them properly.

Alkaline copper quat (ACQ types A & B) and copper azole (CBA-A & CA-B) are two low toxicity treatments that will largely replace CCA in the residential market. These waterborne preservatives contain a much higher concentration of copper than does CCA and will have a higher cost as a result. You can expect to pay an additional 15-35% for the new products when compared to CCA. In order to mitigate the impact of this price on the consumer, treatment companies are offering lower levels of treatment (retention levels) than were offered before.

Four different grades; Decking, Above Ground Use, Ground Contact, PWF (Permanent Wood Foundation), with retention levels from 0.1-3.1 lbs. per cu. ft. will correspond with residential building usage and offer the appropriate level of protection for each application. The American Wood Preservers Association (AWPA) sets the standards for retention levels, the building codes approve these standards, and a third party inspector verifies compliance by preservative treatment companies. A tag attached to each piece of pressure treated lumber will clearly list the end use application grade. The consumer may use a higher retention level grade in a lower application, but use of a lower retention level grade in a higher application is not advisable, and could lead to premature failure.

A higher concentration of copper in the treatment makes the new preservatives more corrosive to other metals. Beware of potential galvanic reactions between dissimilar metals that will accelerate corrosion of lightly galvanized metal components. Aluminum flashings and fasteners will corrode quickly; use copper flashings and stainless steel joist hangers and fasteners to ensure lifetime performance.

The EPA states that existing CCA treated structures and play sets are fine. If you are uneasy about leaching chromium and arsenic and the safety of your CCA deck or swing set, treatment with an oil based penetrating stain every couple of years will help to minimize the problem.

R. Scott Devers is President of On The Level, Professional Home Inspections of Bakerton. He will answer questions on this or other related topics via email at levelinspections@juno.com