

Using the New Pressure Treated Lumber

In January of 2004, the EPA banned the use of Chromated Copper arsenate (CCA) as a preservative in residential use pressure treated lumber. Instead, two types of waterborne compounds are now used; alkaline copper quat (CBA-A) and copper azole (CA-B). If at this point you think you are reading a foreign language, hang in there and keep reading.

The companies producing these new preservatives proclaim them to be just as effective as CCA at preventing rot if used properly, and are much safer for human and animal contact. The brand names these are sold under include: Preserve, NatureWood, and Natural Select.

Basically, the arsenic in the old products has been replaced by a much higher copper content in the new products (between 18%-96% higher). One beautiful result of this is higher prices associated with it due to the higher copper content. Cost varies, however, due to the fact that manufacturers attempt to keep prices lower by varying the amount of copper in they use in the boards.

Boards are treated according to their "end use". In other words, a 5/4 deck board will have less copper content than 2X lumber used for above ground. The highest level of preservative is in 4X and 6X ground contact lumber. The use and rating of the lumber should be on a tag on the end of each board.

Besides increasing the cost, adding copper to the boards also makes them much more corrosive. According to the American Wood Preservers Association, the increased copper content makes them 5 times more corrosive to common steel. This occurs because of the galvanic reaction between two dissimilar metals (copper in the wood reacting with galvanized fasteners). Because of this, fasteners and flashings need to be stainless steel or copper whenever possible. At the very least, they should be a high grade galvanized product. The grade is determined by the thickness of the galvanized coatings on each fastener.

Regular hot-dipped fasteners are labeled G-60 and G-90. Engineers recommend going to the heavier G-185, which is the highest grade of galvanized fastener. One definite no-no is using aluminum flashings with these boards. Aluminum in the presence of copper is highly corrosive. For more information on fastener recommendations, go to www.osmose.com.