DSC TECHNICAL BULLETIN 04-06

Subject: Use of Metal Connectors and Fasteners in Pressure Treated Lumber

Discussion:

Chromated Copper Arsenate (CCA) has been the most widely used preservative treatment for lumber for a number of years. As of January 2004, the Environmental Protection Agency does not allow residential use of CCA treated wood. The treated wood industry has responded to this and transitioned to other types of treatments, some of which are more corrosive to metal connectors and fasteners than CCA.

The Simpson Strong-tie Company, Inc. undertook a testing program to determine the corrosive effects of pressure treated lumber on the products they manufacture. The results are summarized in Simpson Technical Bulletin T-PTWOOD04 which is available at www.strongtie.com.

The results show that ACQ-D, copper azole (CA-B) and sodium borate with NaSiO₂ treated woods are twice as corrosive as CCA treated lumber. ACZA treated lumber was found to be more than three times as corrosive as CCA treated lumber.

Recommendation:

Do not use G60 galvanized coatings for metal connectors and fasteners with pressure treated lumber.

Consult with the connector and fastener manufacturer to determine which coating or material type is required for a particular type of treated wood and installation.