

Guidelines for Selecting Corrosion-Resistant Fasteners for Use with Preservative-Treated Wood

Based on a review of technical information posted by the major U. S. preservative manufacturers and selected fastener and connector manufacturers, the following guidelines summarize the current state-of-practice regarding the selection of metal fasteners and connectors for use with ACQ and copper azole (CA) preservative-treated wood:

AWPA Use Category and Description	Appropriate Fastener/Connector Types
UC 3A or B – Exterior Construction, Above Ground UC 4A – Ground Contact or Fresh Water, Non-critical components	<u>Fasteners</u> Hot-Dipped (HD) Galvanized per ASTM A153 or Stainless Steel (SS), Type 304 or 316 <u>Connectors</u> HD Galvanized per ASTM A653, Class G185 or Stainless steel, Type 304 or 316
UC 4B - Ground Contact or Fresh Water, Critical components or difficult to replace	Stainless steel, Type 304 or 316

Other Preservatives:

1. For CCA-treated wood, HD galvanized fasteners and connectors as specified above are recommended. CCA is less corrosive than ACQ and CA.
2. For ACZA-treated wood, SS fasteners and connectors as specified above are recommended. ACZA contains ammonia and is significantly more corrosive than ACQ and CA.
3. For other preservatives, the more stringent of the preservative manufacturer's recommendations and the fastener/connector manufacturer's recommendations should be followed.

Notes regarding NRCS-type structures:

1. Use Category UC 3A and B include railings, decking, bracing, and slats on composter bins.
2. Use Category UC 4A includes posts such as those used in composter bins.
3. Use Category UC 4B includes structural building poles and permanent wood foundations.

Prepared by: Benjamin C. Doerge, P.E., G.E.
Geotechnical Engineer
NDCSMC
Fort Worth, TX

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