

## PRESERVATIVE EVALUATION METHODS

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### Introduction

The American Wood Protection Association (AWPA) publishes Guidance Documents (GDA) that indicate the types and methods of efficacy testing that are mandatory for a proponent to bring a potential formulation system forward for acceptance into the AWPA Book of Standards. This presentation focused on the methods necessary for acceptance in AWPA User Categories UC3 (above ground) and UC4 (ground contact).

### Methods

Testing procedures will focus on the following data collecting methods:

- 1) Preservative Efficacy
- 2) Field Efficacy
- 3) Preservative Depletion
- 4) Field Depletion
- 5) Physical Properties

The following Table lists the AWPA procedure, approximate time of tests and Use Category requirements.

<b>AWPA Procedure</b>	<b>Approximate time of tests</b>	<b>UC required</b>
<i>E10 "Standard Method of Testing Wood Preservatives by Laboratory Soil-block Cultures"</i>	8 to 12 weeks	UC3 and UC4
<i>E23 "Accelerated Method of Evaluating Wood Preservatives in Soil Contact"</i>	3 months	UC4
<i>E1 "Standard Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites"</i>	4 weeks	UC3 and UC4
<i>E7 "Standard Method of Evaluating Wood Preservative by Field Tests with Stakes"</i>	5 to 8 years	UC4
<i>E16 "Standard Field Test for Evaluation of Wood"</i>	3 to 5 years	UC3

<i>Preservatives to be used Out of Ground Contact: Horizontal Lap Joint Method”</i>		
<i>E18 “Standard Field Test for Evaluation of Wood Preservatives to be used Above Ground; Ground Proximity Test”</i>	3 to 5 years	UC3
<i>E21 “Standard Test Method for the Evaluation of Preservative Treatments for Lumber and Timbers Against Subterranean Termites in Above Ground , Protected Applications”</i>	2 years	UC3 and UC4
<i>E11 “Standard Method of Determining the Leachability of Wood Preservatives”</i>	2 weeks	UC3 and UC4
<i>E12 “Standard Method of Determining Corrosion of Metal in Contact with Treated Wood”</i>	366 hours	UC3 and UC4
<i>ASTM D5664 “Standard Test Method for Evaluating the Effects of Fire-Retardant Treatments and Elevated Temperatures on Strength Properties – Static Bending”</i>		UC3 and UC4
<i>ASTM D3201 “Standard Test Method for Hygroscopic Properties of Fire-Retardant Wood and Wood Base Products”</i>		UC3 and UC4

### **Conclusion**

The data generated from the approve testing is vital to the package presented to AWWA for approval. Each procedure is generally performed by certified third party laboratories that have the experience necessary to submit qualified reports.

### **Literature**

1. AWWA. 2015. Book of Standards, American Wood Protection Association