



## The Process of Pressure Treating ES+Wood™

Pressure treatment of ES+Wood™ is a two-step process. The bundles of lumber are placed on tramcars and rolled into a large cylinder. The cylinder door is then closed and locked.

### **Disodium Octaborate Tetrahydrate (DOT Borates)**

The first step of the two-step process involves filling the cylinder with a solution that is a mixture of 10% Disodium Octaborate Tetrahydrate (DOT Borates) and 90% water. DOT Borates are a natural preservative that are effective against Subterranean Termites, Dampwood Termites, Drywood Termites, Powder Post Beetles, Carpenter Ants, other Wood-Destroying Insects and Decay Fungi.

When the cylinder containing the untreated lumber is completely filled with the DOT Borate Solution, up to 150 psi pressure is applied, which forces the DOT Borate Solution into the lumber.

The goal is to reach the retention required by the relevant code requirements. In general, increasing both the pressure and the time of the treatment will increase the retention levels. Other factors include the species of the wood, whether it is incised or not, and how long it takes the wood to dry. When we have reached the desired amount of retention the remaining DOT Borate Solution is pumped out of the cylinder and a vacuum is pulled to remove the excess DOT Borate Solution.

### **EnviroSafe Plus®**

The second step of the process involves re-filling the cylinder with a proprietary solution (EnviroSafe Plus®) that contains an ambient cure polymer and stabilizers that penetrates into the wood. EnviroSafe Plus® is a Colorless Water-Repellant Polymer System that limits the amount of leaching of DOT Borates from the lumber.

The same pressure process is applied to the lumber using the EnviroSafe Plus® Solution.

### **The Final Steps**

Upon completion of the two-step process, a final vacuum can be pulled to remove excess solution before the lumber is removed from the cylinder.

The entire pressure treating process takes approximately one hour depending upon the species of the wood and the necessary retentions required.

The lumber is then stickered with the required end tags, allowed to drain and dry for 24 hours and then is ready for shipment.