

## HOOVER TREATED WOOD PRODUCTS, INC.

# *TECHNICAL NOTE*

FOR ADDITIONAL INFORMATION: 1-800-TEC-WOOD (832-9663)

## GUIDELINES FOR FINISHING *EXTERIOR FIRE-X*<sup>®</sup> FIRE RETARDANT TREATED WOOD

*EXTERIOR FIRE-X*<sup>®</sup> treated wood can be finished with good results. Precautions and procedures for finishing *EXTERIOR FIRE-X*<sup>®</sup> are similar to those for untreated wood. As with untreated wood, finish performance is highly dependent on moisture content, species, surface preparation, application method, and finishing system.

**MOISTURE CONTENT:** Moisture content at time of painting or staining is the most important factor in determining performance, whether treated or untreated. Unfortunately, post-installation drying and moisture content stabilization is often overlooked in the rush to complete a construction project. If moisture content is too high, finishing results will be poor.

*EXTERIOR FIRE-X*<sup>®</sup> treated wood should not be painted or stained immediately after installation. Finishing should be done after a period of dry, sunny weather when wood moisture content is uniformly low. Even though *EXTERIOR FIRE-X*<sup>®</sup> is always kiln dried after treatment (KDAT) additional drying time is necessary after installation because of possible re-wetting on the job or moisture gain due to high humidity.

Furthermore, even freshly KDAT wood will not have uniformly low enough moisture content for painting or staining, and shop application of paint or stain to freshly un-bundled wood is not recommended.

**PAINT OR STAIN?** According to the U.S. Forest Products Laboratory (FPL), wood shrinkage and swelling due to fluctuating moisture content constantly stresses a paint film and will cause cracking and peeling. Consequently, for exterior wood, penetrating stains are likely to perform better because they don't crack or peel.

FPL studies show that all-acrylic latex solid-color stains are generally superior to oil-based solid-color stains on exterior wood when two coats are applied. Stain-blocking primers are recommended. Brush application is more effective than spray or roller application. Primer and finish coat should be from the same manufacturer. If cracks and checks develop later, apply a clear water-repellent preservative.

If paint is used, FPL testing shows that two coats of all-acrylic topcoat paint applied over a stain-blocking acrylic latex primer lasts longer than other paint systems for exterior wood. Oil-based paint films usually provide the best moisture shield, but they tend to become brittle and are more likely to crack and peel. FPL recommends use of a *paintable water-repellent preservative* as the first coat. Any surface that cannot be reached after installation should be painted or given a protective water-repellent preservative coating before installation.

**CONTACT SURFACES:** Where wood surfaces will be in contact and trap moisture these surfaces should receive a coating of preservative such as copper naphthenate, which is sold under brand names including Green End-Coat, Co-Nap, and Coppa. It should be applied before assembly to the wood-to-wood surfaces of laminated beams or joists, beam-to-post attachments, top edges of joists, and other contact surfaces that trap moisture.

**EXPOSED SURFACES:** Exposed surfaces should receive a water-repellent preservative coating. Water repellent preservatives are recommended for all exterior wood because they reduce moisture absorption, shrinkage and cracking, plus they help prevent mold and mildew. Be sure to use paintable water repellent that also has a *preservative* ingredient. Exposed (non-contact) surfaces of **EXTERIOR FIRE-X®** joists, framing and decking should be coated on all sides with a paintable water-repellent preservative before or during installation. Water repellent preservative coatings should be re-applied regularly because they are not permanent.

**SURFACE PREPARATION:** Surface preparation is very important for painting or staining. In addition to being thoroughly dry, the surface must be free of dirt, surface deposits, pitch, dust, mildew and other contaminants. Sanding, scraping, brushing or wiping may be necessary to clean the surface. Avoid washing because it re-wets the wood.

**TESTING OF FINISHES:** Due to the infinite variety of weather conditions, building exposures, storage conditions, finishing systems and construction techniques, Hoover Treated Wood Products Inc. cannot make more detailed recommendations for finishing systems to use on **EXTERIOR FIRE-X®** treated wood and accepts no liability with regards to the finishing of its products. **IT IS THE USER'S RESPONSIBILITY TO TEST THE DESIRED FINISHING SYSTEM ON SAMPLE MATERIAL AND EXPOSE TO ACTUAL USE CONDITIONS TO DETERMINE IF THE DESIRED EFFECT CAN BE OBTAINED.**