

Tips For Coating Wood

Wood is an incredibly versatile building material that is commonly used in residential and commercial construction. In addition to being a versatile building material, wood is a unique substrate when it comes to coating options as opaque (paint and solid color stains), stains (semi-transparent and translucent), and clear finishes can all be used.

When specifying wood coatings for exterior applications, it is important to understand the exposure environment. If the wood substrate is not suitably protected, exposure to moisture and ultra violet rays can cause significant structural damage.



Pictured: Water damage on unprotected wood.

The list below provides a set of advantages and disadvantages for each coating type for exterior applications.

Opaque Finishes (Paint and Solid Color Stains)

Opaque finishes form a protective film on top of the wood substrate and typically offer

the best form of protection against exposure to the elements and UV rays. Despite the increased protection from using opaque finishes, they completely mask the grain of the wood. This can be undesirable from an aesthetic perspective, especially where high-quality, exotic woods are used.

When using opaque finishes, it is recommended to use either an [oil/alkyd wood primer](#), or a [specially formulated waterborne primer](#) to seal the wood and to reduce stain bleeding from showing through the topcoat. Generally, oil/alkyd primers are able to penetrate deeper into than their waterborne alternatives (and therefore seal the substrate better), however these waterborne primers dry faster, show better resistance to blistering in exterior applications and are more environmentally friendly.

Stains (Semi-transparent and Translucent)

Stain products impart color into the wood either by dyeing the wood grain, or by depositing pigment near or on the surface of the wood to provide some protection from UV light and the elements.

Stains are a good compromise when trying to balance performance and aesthetics. From an aesthetic perspective, most of the wood grain is visible and the natural color of the wood is only slightly augmented by the coating. Although these coatings do provide some protection from the elements, the duty cycle of stains will generally not be as long as an opaque finish.

Clear Finishes

Clear finishes provide very little protection from UV rays or moisture but allows the natural grain and color of wood to show through. Aesthetically, clear finishes are highly desirable where premium woods are used. Despite the strong aesthetic appeal of using clear finishes in exterior applications, these coatings typically require maintenance between every 6 and 12 months in order to ensure adequate protection from the elements.



Products tested by MPI are listed in the MPI Approved Products List (APL) under the relevant standard #. Look out for the MPI Approved Product Label on paint cans! [CLICK HERE](#) for more information.