



Painting Plywood Products

How are Plywood Products Made?

Plywood products are made of thin layers of wood which are glued together into sheet or siding. Pine and cedar are probably the most common woods used. Common plywood is usually sanded smooth. T-1-11 siding is rough or textured with open grooves cut down the length of the panel. Other types of plywood products include: MDO (medium density overlay) and HDO (high density overlays) plywood overlays, and brushed and abraded plywood. Plywood overlays (MDO and HDO) are made by bonding a resin impregnated paper to the plywood surface which improves resistance to checking and splitting. HDO plywood has a higher resin content than MDO plywood. Brushed and abraded plywoods are made by mechanically brushing or abrading the face of the plywood to remove most of the soft grain, leaving an accentuated wood grain texture.

What Special Problems Are Associated With These Products?

Common plywood and T-1-11 siding are much less dimensionally stable than solid wood siding. This is primarily due to the manner in which the layers of wood are cut from solid wood logs and made into flat sheets. These products are prone to swell, crack and split due to moisture ingress and temperature change. Special consideration must be given to finishes.

Plywood overlays (MDO and HDO) are more dimensionally stable than common plywood. The surface is also more tightly sealed by the paper overlay preventing penetration of some stains. With brushed or abraded plywood the remaining hard grain is further hardened by the brushing or abrading process which may adversely affect adhesion of paints and solid color stains.

What is the Best Paint System Recommendation for Plywood Products?

The best paint system for common plywood, T-1-11 siding and MDO and HDO plywood overlays is to prime with a liberal coat of **6001 Hydrosealer Primer Sealer**, followed by two coats of a 100% acrylic latex exterior finish such as **FORTIS® 450 or 350 Exterior Flat, Satin and Semi-Gloss Finishes**. Application with a brush is preferred to work the primer into the substrate, although application by roller or airless spray is also acceptable. This system provides the best balance of penetration, flexibility, vapor permeability and film thickness needed to minimize checking and cracking. Prime all cut ends and edges and caulk all joints to minimize moisture ingress.

Note: *HDO plywood requires scuff sanding prior to painting. Paint systems are not generally recommended on brushed or abraded plywood.*

What is the Best Stain Recommended for Plywood Products?

On common plywood, T-1-11 siding and brushed or abraded plywood the best recommendation is **Flood® CWF® Clear Wood Finish**. This will provide maximum penetration and protection against moisture and ultraviolet light damage and a more natural appearance. Apply one full penetrating coat to all accessible surfaces including grooves, cracks, cut ends, etc. Use a natural bristle brush, medium length nap roller or low pressure spray. Use **CWF-UV® Clear Wood Finish** to protect the siding, allowing it to weather to a silvery or honey color. Use **CWF-UV Cedar, Redwood, or Honey Gold** to maintain the original wood color. If a stained appearance in a wider range of colors is desired, use **Flood TWF® Semi-Transparent Stain**.

Note: When a solid color stain is desired on plywood or T-1-11 siding, apply two preferably three liberal coats of a solid color latex stain such as Flood SWF Solid Color Stain. Solid color oil-based or alkyd stains are not recommended on common plywood, T-1-11 siding or brushed or abraded plywood. Natural wood finishes and stains are not recommended on plywood overlays (MDO and HDO).