

Applying Water-Based Interior Finish

In the past, obtaining a furniture quality finish required compressors, spray guns, and untold hours waiting for solvent-based finishes to cure. Today, with water-based stains and polyurethane, anyone can achieve a beautiful finish in a very short time, using only paintbrushes and rags. Lowe's is happy to provide this information as a [service](#) to you.



Tools	Materials
<ul style="list-style-type: none">• Rubber gloves• Protective eyewear• Tack cloth• Clean, soft cloths/rags• Synthetic bristled brush	<ul style="list-style-type: none">• Sandpaper• Fine synthetic steel wool• Water-based sanding sealer• Water-based wood stain• Water-based polyurethane• Paste wax or furniture polish



SAFETY NOTE:

- Always apply finishing materials in a well-ventilated area.
- Wear eye protection and rubber gloves to prevent exposure to finishing materials.
- Read and follow the manufacturer's instructions and cautions.



Prepare the Surface

Finishing highlights the beauty of wood, but the process also magnifies imperfections. Sand the wood smooth and repair all defects before finishing.

- 1.

- To produce smooth surfaces, always sand with the grain of the wood. The material should go through at least three sandings with successively finer grit sandpaper. Start with 80 grit, move to 150 grit and finish with 220 grit. Use a tack cloth to remove dust between sandings.
- Raise the grain in the wood by rubbing it lightly with a damp cloth. Allow the wood to dry, and sand the raised grain smooth with 400 or higher grit sandpaper. Use a tack cloth to remove any sanding dust.
- Use a quality sanding sealer to counter the effects of large pores and wavy grain patterns. Wood is a natural material with pores and grain patterns that accept stains at different rates. Even in the same board, shifts in grain patterns can cause blotching. Blotching occurs when larger pores or wavy grain patterns absorb too much stain and appear much darker than the surrounding material. Apply a light coat of sanding sealer with a rag or soft bristled brush. Allow the sealer to dry according to the manufacturer's instructions. Rub the wood with synthetic steel wool to smooth the surface. Apply another light coat of sanding sealer, and allow it to dry.
- Inspect the material for small nicks or imperfections. Rub out any rough spots with synthetic steel wool. Wipe the material with a clean tack cloth to remove any dust.



Orbital sander



Good idea: Never use steel wool in conjunction with water-based finishes. Slivers left behind may react with the finish materials and leave rust stains.

Apply Stain

Stain shades [vary in appearance](#) on different wood species. Always test stain on wood of the same species as the material with which you are working. When possible, test in the same type of light prevalent where the stained material will be displayed. Colors appear to change when they are exposed to different light sources, based on the spectral colors that make up the light. Yellow is the dominant color in incandescent light (regular light bulbs), and blue-green is dominant in fluorescent light (common in most shops).

- Stir the stain according to the manufacturer's instructions. To maintain an even color, stir the stain periodically during application. When finishing large pieces that require more than a single can of stain, mix all the stain together in one container before applying. Mixing the stain in the beginning helps to ensure even color distribution.
- Apply the stain with a clean, soft cloth or a soft synthetic bristled brush. Wipe or brush the stain in the same direction as the wood grain.
- Allow the stain to penetrate the wood for five to ten minutes. Wipe the excess stain off with a clean, soft cloth. Allow the stain to dry completely. If a darker color is desired, apply a second coat.
- After the final coat of stain has dried, rub the material vigorously with a clean, soft cloth. Rubbing helps compress any grain that may have raised during staining and smoothes the surface for the topcoat.



Stain vs. natural



Good idea: For the best possible finish, always use quality brushes.

Apply Topcoat

Once you achieve the desired effect with the stain, protect it from scratches and moisture damage with a topcoat of clear, water-based polyurethane.

1. Stir the polyurethane according to the manufacturer's instructions. Never shake water-base polyurethane.
2. Apply a thin coat with a synthetic bristled brush.
3. Allow the polyurethane to dry according to the manufacturer's instructions.
4. Apply a second light coat and allow it to dry.
5. Sand the topcoat lightly with 400 or higher grit sandpaper or synthetic steel wool. Remove any sanding dust with a tack cloth.
6. Brush on another light coat of polyurethane and allow it to dry.
7. Apply a fourth light coat and allow it to dry.
8. Polish the surface with paste wax or furniture polish.



The finished product