

Varnish application using a roller

Varnishing wood

Whenever water or any stain or finish that contains water comes into contact with wood, it causes the wood fibres to swell, which is called "grain raising" or "raised grain." After the water has dried the wood feels rough to the touch, and thinly applied finishes also feel rough.

Raised grain occurs no matter how fine you sand the wood before wetting it. Because you can't prevent raised grain if you use a water-based product, you need to deal with it so the final finish comes out smooth. Dampening the surface with a mist of water or a damp cloth, allowing it to dry and re-sanding will generally overcome this.

Once sanded smooth, the grain won't raise again nearly as much as it did with the first wetting.

When applying water-based varnish with a roller, it is important to prep the surface first. Make sure that the surface to be covered is clean and free of dirt, dust or anything that might prevent the varnish from bonding to the surface.

You can do this by removing any dirt or debris with a brush or vacuum. Then lightly sand the surface with fine-grit sandpaper to create a smooth finish.

After that, wipe the surface down with a damp cloth to remove the dust particles. Once the surface is clean, you can begin to apply the water-based varnish

Always test on surfaces before application to ensure compatibility.





Walls and floors

If using a roller, you need to use an extension pole to reach across the floor and higher wall areas and a roller tray to hold the varnish

Start in a corner, approximately 3-4 feet away, and then quickly and evenly roll out the varnish using criss-cross strokes.

Move in one direction across the surface, turning the roller at the end of each stroke for a consistent finish. If your strokes become uneven, use a brush or foam brush to enhance and even out the surface. Do not apply pressure to the roller, this will cause uneven film and maybe produce bubbles in the varnish.

Repeat this process until you have covered the entire surface.

Allow the varnish to dry for 2-4 hours before adding a second coat. Make sure to go back with a damp cloth to remove any dust or debris from the surface before the next coat. After the second coat is dry, you have successfully applied water-based varnish to your surface with a roller. Ideal application temperature 15-20**C**.

Water based varnishes dry very fast as the temperature rises and you can lose your wet edge, (if the varnish edge dries during application, you will produce overlap marks).

When applying the varnish, start with a light coat and let it dry completely before applying another. Most water-based varnishes need to cure for 24 hours before light use, acrylics 5-7 days before hard use, and heavy duty varnish just 16 hours.

Don't over-apply the varnish, as it can run or leave streaks. Once you're finished, you may need to lightly sand the surface with a fine-grit sandpaper.

Afterward, you can buff the surface to achieve a smooth, even finish.

When rolling varnish, be sure to use slow, steady strokes and a good technique to ensure a uniform finish.

Whether brushing or rolling, the goal should be the same: evenly spread and evenly consolidate the varnish for a consistent finish. Experiment and find what works best for each specific project.

Make sure that the roller is specifically for use with water-based products. It is important to avoid using a high-pile roller, as it can leave excess material on the surface and can cause air bubbles.

For a smooth finish with even coverage, use overlapping roller strokes and use a brush to manoeuvre around corners and details.

After the varnish is applied, it should be left to cure.

The Best Rollers for Water-Based Varnish

Water-based varnish is a popular choice for finishing wood surfaces and protecting other surfaces because it is durable, easy to apply, and dries quickly. However, choosing the right roller is crucial for getting a smooth, even finish.

Use a Short Pile Gloss Roller for water-based varnish or 6-8mm (1.4 inch) nap (gloss) covers.

by Peter Wells, Polyvine Technical Director.