

Bubble-Free Polyurethane Application Technique

Rules, Tips and Paraphernalia

WHAT YOU SHOULD HAVE ON HAND TO GET STARTED:

Sand Paper

For a new wood project - *120 grit, 180 grit and 220 grit papers*

For a re-finishing project - *For high spots, old paint or gouges I would add an 80 grit to the above three*

An GOOD to EXCELLENT quality finish brush

A natural bristle brush for oil-based polyurethane, or a synthetic bristle brush for water-based polyurethane

A thinning agent - *Mineral Spirits for oil-based polys, or water (I prefer distilled) for water-based polys*

Tack Cloth – *available at hardware stores, home centers, or online*

Polyurethane - *available in three sheens Satin, Semi-Gloss, Gloss*

A suitable storage container - *something with an air tight lid so you can save unused poly to next application*

A cleaning container for cleaning your brush after use

Patience and determination to get the job done right

RULES:

RULE #1 –Paint brushes are not finishing brushes

RULE #2 - NATURAL bristle brushes FOR OIL and SYNTHETIC bristles FOR WATER

RULE #3 – Thin 3 parts poly to 1 part thinner. Thin with MINERAL SPIRITS for OIL BASED POLY and WATER for WATER BASED POLY

RULE #4 - Never shake the can, dab the brush or use back and forth brush strokes

RULE #5 - Brushing technique - LAY IT DOWN THIN

RULE #6 - Feather once and LEAVE IT ALONE. Don't overwork or over analyze

RULE #7 – Use multiple thin coats to achieve desired surface protection. The THINNER the coat the better

RULE #8 - Let DRY OVERNIGHT

RULE #9 - Sand LIGHTLY with FINE (220 Grit) SANDPAPER

TIPS:

Air causes bubbles. Air is introduced through the application technique or the applicator tool (Brush, Foam Brush, Sponge, Lambs Wool, Cheese Cloth, etc.). Bad finishes come from bad procedures.

If you are using a water-based finishes you would thin with water not mineral spirits. I recommend distilled water for those of you on a well or with softened water or other highly treated water systems.

Forget cheapo FOAM BRUSHES, DISPOSABLE BRUSHES, CHEESE CLOTH, LAMBS WOOL, ETC.

An above average finish brush will run \$20-30 and will produce a finish you can be proud of. If properly cared for these brushes will last years and can be used again and again.

Purdy makes a good Natural Bristle Brush for oil based finishes and a Synthetic Brush for water borne finishes. High quality finish brushes feel like fine fur and will run \$50-60 but will produce a finish that becomes a show piece.

With proper care quality brushes will last a lifetime.

There is an indoor and outdoor urethane. Outdoor has UV protectors in it and its resins expand and contract which allow for temperature fluctuations.

The Great Debate: Oil-based polyurethane vs Water-based polyurethane. Both are suspension materials that evaporate and leave the coating resins. Both apply the same but require different brushes to apply.

Sand before applying your first coat of polyurethane. Sanding is done in steps and most finishers do the final sanding at 180 to 220 GRIT.

220 grit sand paper is recommended for light sanding in between coats.

Sand paper is measured in grits.

40-80 grit is COARSE (only used to level an uneven surface or remove old finishes)

120-180 grit is MEDIUM (start here with new wood)

220-300 grit is FINE (I typically finish my sanding with a 220 grit)

Above #00 grit is EXTRA FINE (High grits like these are used for polishing)

It's important to remove sanding dust and other particles or they become a part of the surface once your poly is applied.

Every coat is the same procedure.

After your first coat of poly you can use a cloth dampened in water if your urethane is water-based. Do not apply water to raw wood. Here's where I get that spot.

Tack cloth is an inexpensive dust remover that can be purchased at any home center, paint store or hardware store. It is just a piece of cheese cloth with a slightly sticky additive to pick up sanding dust and particles.

If you will be staining your wood project be sure to check out my YouTube video

THE PERFECT STAIN APPLICATION TECHNIQUE.

Finishing takes time and patience but it's what people notice. The truth is if they don't notice the finish you've scored. A nice finishing job enhances the natural beauty of the surface below without drawing attention to itself.

Please come back to my YouTube Channel and let me know how your project turned out! Oh, and while you're there subscribe as my plan is to release a series of posts and videos on all aspects of finishing and refinishing over the winter. You'll be notified as they are released.

This timetable applies to my latest polyurethane video “The Ultimate Guide to Polyurethane Varnishing”
Once the YouTube Video is open you can scroll to the time in (parentheses) to see the respective topic.

PART 1/DAY ONE - SURFACE PREP (2:52)

- Preparing and Repairing Surfaces
- Initial Sanding
- Types Urethane
- Approximate Video Length - 4 Minutes

PART 2/DAY ONE - THINNING URETHANE (6:18)

- Proper Mixing Procedures
- Proper Mixing Ratios
- Proper Thinning Agents
- Application Tools
- Approximate Video Length - 6 Minutes

PART 3/DAY ONE - FIRST COAT (12:42)

- How to Properly Apply Varnish
- Where to Start
- Filling Your Brush
- Proper Brushing Technique
- Approximate Video Length -15 Minutes

PART 4/DAY TWO - SANDING BETWEEN COATS (27:13)

- Visual/Tactile Surface Inspection
- Proper Sandpaper Grits
- Dust Removal Wipe Down
- Approximate Video Length - 5 Minutes

PART 5/DAY TWO - SECOND COAT (32:17)

- Approximate Video Length - 6 Minutes

PART 6/DAY THREE - ONE MORE COAT – HUNG DOORS/DRIP MARKS (39:55)

- Varnishing Hung Doors
- How To Remove Drip Marks
- Approximate Video Length - 2 Minutes

HAPPY WOODWORKING

best . . . paul