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## Finishing Guidelines

A basic good finish for any wood surface can be described as:

1. A Base Coat or coats.
2. Build Coats.
3. Top Coat.

These 3 basic finish steps apply to all finishes from the most basic wax or oil finish to high-tec coatings and even painting the exterior of a house or a room wall. The Base sealer or primer coat, provides the foundation of the finish. The Build coats provide the structure or framework of the finish itself, much as the framing of a house. The Top coat gives the finish its final character and look whether it be high gloss or the subtle richness of a matte sheen.

### THE IMPORTANCE of the FIRST COAT!

Unlike metal or plastic surfaces, wood presents a substrate that varies in density, porosity, and stability. It should go without saying that almost no coating or finish can overcome a poorly prepared surface. Prepare the surface of the substrate in character with the desired finish result. If an extra smooth surface is specified, then sanding, grain filling, and defect filling of some sort is indicated. The best finish cannot overcome an ill prepared surface. The first coat on new wood seals and evens out differences in porosity and density. On softer woods and on face grain this sealer coat may require 2 applications to provide an even base for the build coats. If an area shows little or no sealer build by comparison to the surrounding surface the build coats then have to make up for the lack of a proper sealer or primer foundation.

### The NECESSITY of the BUILD COATS

The build or body coats are the part of a finish that provide moisture resistance, durability and longevity to the coating. Depth in clear or translucent finishes and richness of coloured coatings depend on these build coats. For clear coatings, where the structure, grain and tone of the wood are visible, use only gloss for build coats. Gloss body or build coats maintain clarity and eliminate the foggy, dull or milky look associated when semi-gloss or altered sheens are used to build the body of a finish.

In solid opaque lacquers or painted finishes the gloss product has all the best in hardness and durability characteristics including resistance to dents and impressions. (Obtain the look or sheen desired with your top coat -- see the Top Coat below.)

With moisture proof or moisture resistant coatings the hardness or density and porosity of the wood substrate will dictate the required number of build coats. The best moisture proof coating cannot do its job if the coating thickness does not provide for wear and a non permeable membrane. When moisture resistance is important, always give at least one more coat than just looks good or provides an even build. The one extra gloss build coat added to a finish consisting of one sealer, one build, & one topcoat will more than double resistance to moisture.

## **THE LOOK of the FINAL or TOP COAT**

This is the look and result that most envision when a finishing job is started. Many finishers, in a rush to this end, omit the necessary foundation work that will provide the lasting look and result in durable performance. This top coat gives the desired esthetic sheen, but the total look and character of the finish comes from the work put into the Base & Build coats.

If a matte, semi-gloss, or satin sheen is desired apply only as a last top coat. Finishes built with adjusted sheen materials lack durability and clarity. Uneven sheens and a foggy look of the final cured coat are common and symptomatic in lacquer finishes built up with a flatted or less than gloss sheen. (Interior wall paint finishes would be an exception to this dictum.)

Careful preparation prior to this last "LOOK coat" by sanding with fine paper, careful removal of dust from the surface, and sanitation in the work area pay off in a lot of saved labor.

If the last coat is to be rubbed to high gloss allow plenty of drying and curing time (depending on coating type and humidity - temperature conditions) prior to any polishing or rubbing operations.. Polishing or rubbing materials depend on the hardness of the cured coating to produce an even and predictable result.

Note: many finishes take much longer after "dry enough to handle" to reach the final complete cure required to polish a finish to a high gloss. Lacquer will reach final hardness and cure in 21 days under good conditions. Traditional gloss oil based enamels should cure 30 days if a rubbed higher gloss finish is desired.

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