

Hand Rubbing with Pumice and Rottenstone

80K04.01+

Pumice powder is an abrasive material used in the application of varnish, shellac or lacquer to produce a fine hand-rubbed finish. It is obtained by grinding volcanic ash into powders of different degrees of coarseness. Pumice powder should be sifted through cheesecloth before using to make sure particle size is uniform. Large particles or specks of dirt can cause scratching.

Pumice is used for the coarse rubbing of a hand-rubbed finish. In other words, it is the abrasive used when you are building up the body of the finish. The fine polishing, or final work on your finish, uses rottenstone as the abrasive.

Pumice is worked with a pad. Three types of pad can be used; of these you should decide through experimentation which is best for your particular purpose. Felt rubbing pads are available from 1/4" to 1" thick in various weaves. The finer the weave the smoother the finish. Burlap, folded to about 1/4" thick, will give a good cutting action. This material must be inspected for flaws or dirt that could cause scratching. Cotton or wool wadding wrapped in a soft rag is the traditional type of pad.

Coarse rubbing of the undercoats can be done with medium pumice and a medium pad. Sprinkle just enough pumice on the work to do the piece. As you rub it in, the powder will be ground smaller. So if you must add more pumice remember that it will be coarser and scratch up what you have accomplished.

Rottenstone, also known as tripoli, is a very fine powder ground from slate or limestone. It comes in only one grade. It can be worked with a pad or with the palm of your hand – usually your hand for the final finish, thus the “hand-rubbed” finish.

A lubricant must be used with pumice and rottenstone because dry powder will cake up and could cause heat or friction damage. Note that water will turn shellac white, so must be avoided in favor of oil when shellac is your finishing material.

For the best results, a minimum of three coats, and from four to six coats of finish, are needed. The pumice is used between layers of finish, and the finish must be allowed to dry thoroughly before you apply any pumice powder.

Hand Rubbing Shellac

Make a thin mix of pumice and oil to be applied with the pad, or you can soak the pad with oil and dip it into the pumice to transfer enough powder to do the piece. Through the years several kinds

of oil have been in and out of favor. Generally, any non-fatty oil (e.g., raw linseed oil or paraffin oil) or mineral oil, thinned slightly with naphtha, will serve the purpose.

With the pad, rub with the grain. Try to use the same pressure and number of strokes over the whole surface. Avoid using a circular motion as this will scratch the finish. Keep the abrasive wet, keep the pad free of build-up, and check the surface often to make sure that you do not rub through. **Do not** rub too long in one place or the finish will burn from friction or from lack of oil. Be very careful at the corners and edges as it is easier to go through at these spots. Work until a very flat and dull surface is achieved, then clean off the pumice.

Oil leaves a film that must be removed with a very soft cloth and some naphtha. Fold the cloth so that no stitches or creases are on the pad. “Crawling” of layers can result if the oil is not carefully cleaned between coats.

For the last application of pumice, using fine pumice powder with oil, rub only enough to dull and smooth the finish, then clean it. Wait 48 hours before fine rubbing with rottenstone.

Soak a pad in oil and work the rottenstone powder into the pad with your hand. Sprinkle a little oil and rottenstone on the work surface and rub with the pad in the direction of the grain. Use moderate pressure and continue the strokes from one edge to the other. Refill as necessary and check often. When the desired finish has been achieved, rub off the paste with a soft cloth, again with the grain, then wipe with your hand.

Clean the finish with a very soft cloth to which a little naphtha can be applied. Allow to dry at least 24 hours, then you can use either wax or polish to complete the work.

Hand Rubbing Varnish or Lacquer

When finishing with varnish or lacquer, there is a significant difference in that you use water as the lubricant in the coarse rubbing stage with medium pumice powder. Water cuts quickly, and care should be taken not to rub through the wood. A drop of detergent in the water will cut surface tension and allow the water to spread further over the work surface.

Sprinkle enough pumice on the work to do the piece. Add enough water to make a paste then, with the pad, rub with the grain. Take the same precautions as with oil rubbing to avoid accidents. When a flat and dull surface is reached, clean off the pumice with a sponge then use a chamois or soft dry cloth to pick up the water.

The final rubbing with pumice for varnish and lacquer uses oil as the lubricant. Rub enough to dull and smoother the finish, clean it, then wait 48 hours before fine rubbing with rottenstone.

For a high-polish hand finish on varnish or lacquer, use water as the lubricant and apply rottenstone with the palm of your hand. Clean with a soft cloth and naphtha, let dry 24 hours minimum, then apply wax or polish.

Other Surfaces

On moldings, scrollwork and carvings, pumice can be applied with a stiff, short-haired brush. Soak the brush in water or oil, press into the pumice powder, then scrub the work firmly. Refill occasionally. Clean the surface with a dry cloth then a soft brush that can be dipped in naphtha.

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