

Taming Wild Veneers for Use in Marquetry

By Dave Fifield



Generally, for use in marquetry, you don't need to flatten whole big sheets (like the really wavy one shown above!). You only need relatively small pieces, up to about 12" x 6" maximum. This makes the process a whole lot faster and easier. Large pieces of wild veneer require large presses and lots of care when handling.

There are two ways to tame a wild veneer and flatten it ready for use in a marquetry picture: the FAST method (which has a couple of drawbacks) and the SLOW method. Which method you use will depend on mainly on your patience and/or work deadline! In wood terms, for both methods, what you are trying to achieve is to reshape and realign the lignin (cells) in the wood so that they all line up flat.

Fast Method

For the fast taming method, you will need an electric clothes iron and two pieces of melamine covered particle board. Place the veneer you need to flatten on one piece of the melamine board and, with the iron set on high (it needs to be over about 180°C, 350°F in order to get the lignin to temporarily plasticize), press the wild veneer flat while immediately covering it with the other piece of melamine board. Keep it pressed flat for a minute or two to let the lignin solidify again, then take a look at it. You may need to turn it over and press it with the iron/melamine board from the other side to get it nice and flat. This will get the piece of wild veneer flat enough to cut out the shape/s you need for your picture, but it's likely that the piece will curl up again in fairly short order! This usually isn't too much of a problem though, as the piece will again be flattened (and become a perfect fit) when you glue the finished picture to its substrate.

Slow Method

Better results are obtained using the slow method. For the slow method, you will need some form of liquid to make the veneer supple so that it bends and doesn't just split along the grain. You could just use water for this, but it's not the ideal solution. Much better is a mixture of water and glycerin, or water, glycerin and ordinary wood glue. The water enters the wood cells and makes them plastic. Some water is retained in the cells by the glycerin after the drying process. Adding glue helps a) by sealing the wood surface, trapping

some of the glycerin and water in the wood, and b) by stiffening the structure of the veneer to prevent it from curling up again later. The water also thins the glue substantially, so that it becomes liquid enough to enter the wood pores easily.

Some people make all kinds of weird concoctions involving fabric softener, hide glue, alcohol etc. (perhaps to make a name for themselves?) but in my experience these all have serious drawbacks. Why bother when a simple formula is quite adequate?

My favorite formula is 3 parts water, 1 part Titebond III wood glue, and 1 part glycerin, in a small spray-top bottle. I have heard of other people using 3 parts water, 2 parts glue, and 1 part glycerin, and some people add 1 part alcohol to the mix too. Experiment and see - too much glue though, and the veneer will stick to the paper towels used in the drying process. Glycerin is available from your local supermarket or drugstore or from most woodworking and craft stores. My mix has the added advantage that the glue helps seal the pores of the wood, which for marquetry is a plus (but not for furniture use where you will probably want to stain the finish).

There are several very good ready-mixed products on the market, such as Super-Soft Veneer Softener from JoeWoodworker.com. There are no ingredients lists on any of these products. They generally appear to be various mixes of water, glycerin and alcohol.

For the slow method, you will need a pair (or more, if you want to flatten a whole stack of veneer at once) of similar sized good quality $\frac{3}{4}$ " plywood platens and a roll of ordinary white kitchen paper towels or similar. Begin by spraying both sides of the piece of veneer to be tamed with the softener solution of your choice. The veneer will bend and curl all over the place, but don't worry! Let it air dry for a minute or two so that the surface doesn't appear to be shiny-wet anymore, then place the veneer between two sheets of kitchen paper towel and then between the two plywood platens. Then clamp them platens together as hard as you can.

Leave the veneer clamped like this for 20 minutes, then remove the clamps and replace the paper towels with new dry pieces, then clamp the stack back together (tightly!) again. After about 10 minutes, replace the paper towels again, then leave the stack clamped together (tightly, of course!) until you need to use the veneer. If you need to use the veneer right away, clamp it for at least one hour to let the glue in the softener mix dry.

The veneer will be dead flat and easily stay flat long enough for you to cut out your picture and glue it up, I guarantee it. Good luck taming your wildest veneers!

