

Techniques for Stretching Watercolor Paper

Stretching watercolor paper means thoroughly soaking it with water until the paper expands, forming ripples as it does so. In its fully expanded state, the ripples and bubbles can be smoothed away by lifting up the corners of the paper toward the center and placing them back down again. It can be taped or stapled down so that it dries in this “stretched” or expanded condition. We do this so that when it is painted on, the paper will stay flat and no longer buckle or expand. This is especially important for veil painting, a process that involves building up many washes of color.

Techniques

There are several techniques for stretching watercolor paper. The one described here involves taping it on a wood board. Artist Leszek Forczek taught me this technique, and it consistently works better than anything else I’ve tried! It is also possible to use wooden stretcher bars, the way one would for canvas, by folding the edges of the expanded wet paper onto the bars and stapling them in place. The paper dries like a drum and can be painted on like canvas. It’s also possible to use thick foam core board (~1/2” thick), sometimes called Gatorboard, instead of a wood board, and either tape or staple the paper in place. These last two versions are quite light to handle. Masonite can also be used, but it’s a lot heavier. Don’t use slick white boards for veil painting, since the tape comes off too easily. They are good for wet-on-wet techniques when the paper is not taped down.

Materials and Step-by-step Directions

For veil painting, use a good quality 100% rag (cotton), acid-free, watercolor paper such as Arches, Saunders Waterford, or Winsor Newton. We usually use 140 lb. (300gm/m²) weight paper, rough or cold press surface, but 90 lb. paper, which is thinner, could also be used. If one is willing to pay the price, 300 lb. paper is so thick you can skip the stretching process altogether! A full sheet is ~22”x30.” If you use a half sheet, cut down the longer dimension proportionately, especially if you’re working vertically. (If you want to maintain at least the impression of the deckle edge of the watercolor paper, you can cut it using the back side of a sharp knife along a straight-edge, pushing through the paper onto a soft surface, like a rug.)

1. Obtain a painting board that is at least a couple inches wider and longer than the paper you plan to use. Alternatively, cut your paper to create this margin, which is necessary to give the tape enough surface to stick to. Birch or mahogany plywood 1/4” thick works well. (Note: It is often necessary to buy a full 4’ x 8’ sheet of plywood, which can be cut into 6 boards ~24” x 32.”) Although not essential, you can maximize the life of your board by lightly sanding it and applying a coat of dilute acrylic matte varnish (~1:4 acrylic to water). One coat is enough to give the board some water repellency but not make it so slick your tape won’t stick. Both sides of the board are generally usable.
2. Determine the front side of your paper by holding it up to the light, so you can see the watermark—the side that’s readable is considered the *front* side. Often, either side can be used, but if in doubt, use the front side. Measure in about 5/8 – 3/4” from the edge of your paper along each side and mark with a pencil at two places. For a smaller paper, a 1/2” margin will suffice.
3. Soak the paper thoroughly with water. You could do this in a tub or large sink, but it’s generally easier to wet it while it’s on your painting board, using a soft sponge or brush to spread the water liberally and gently, first over the *back* surface of the paper (the side without the pencil marks on it). Allow the water to soak in briefly before picking the paper up by its edges and turning it over to the *front* side. Now thoroughly wet this side, checking that the *entire* surface is shiny with water when you look at it from an angle. Be gentle; don’t scrub the paper. Allow the water to soak in for a couple minutes; it will continue stretching during the subsequent steps. It is not necessary to wait for the paper to stretch to its absolute maximum before going on with the process, since the paper will never be this wet again during painting. Stretching a paper to its max can result in warped painting boards—100% rag (cotton) paper is very strong!

4. As the paper soaks, it stretches. You will start to see bubbles or surface buckling in the paper as it expands. Gently pick up one corner of the paper at a time and lift it toward the center; then roll it back down into place. If there are still bubbles under the paper, lift that section again and either rewet the board or the paper on the underside where the bubble occurred; then roll the paper back down. When the paper lays flat with no major undulations, it has expanded enough and is ready to be taped down. Minor bubbles are no problem. Drain any excess water off by tilting the board with one corner down over your water container.
5. Begin by blotting the *edges* of your paper about 1" in on all sides with a towel or clean rag. When you look at your paper from the side, you'll be able to see that the edges are now dryer, because they'll look duller than the rest of the paper. Sometimes this is enough to *be sure the paper is drier than the tape*, but you can also use a hair dryer to dry the edges until they just start to come up from the board. Keep the dryer moving along the edges so they dry evenly. Be sure to blow away from the center and toward the edges, so the rest of the paper doesn't start to dry unevenly.
6. Now you're ready to adhere the tape. Use gummed paper tape 1 ½ - 2" wide that must be wetted to stick. Art stores generally carry this tape often referred to as watercolor tape. Don't use reinforced packing tape. Tear your tape to the desired lengths ahead of time. Allowing a little extra tape to fold over the ends of the board can anchor it even more securely. Soak a sponge in a bowl of water. Take one length of tape and turn it over so the shiny gummed side is facing up. Laying it on the table, *gently* place the wet sponge at the near end of the tape and squeeze slightly, so a bead of water is always visible as you pull the tape through under the sponge. Do this fairly quickly and without much pressure so the glue is not dissolved and wiped off in the process. By keeping the bead of water, you'll be sure the tape is wet enough. Pick up the tape, allowing excess water to fall off of it, and place it overlapping the appropriate edge of your paper (~5/8 - 3/4"), using the pencil marks to align it, taping the paper to the board. Work quickly; it's harder once the tape edges start to curl. Press the tape from the center out toward the ends, using a towel or rag to blot the excess water. Avoid rubbing the edges once the tape is adhered; press gently instead. Check the edges over the next couple minutes, pressing them back down again if necessary or adding a bit of water with a brush under the tape if it wasn't wet enough. Continue with the same process for taping the other edges, working your way around the board. *The whole idea is that the tape should be wetter than the paper it is adhering to, but the paper has to be wet in order to be stretched; therefore, we only dry the edges to assure good adhesion. And, of course, the tape shouldn't be so wet that the adhesive washes off.* This step may take a little practice.
7. Lay your board *flat* to dry. It may take several hours. Remember, water flows with gravity. If the board is at an angle, the upper part of the paper will dry before the lower part, creating uneven tension on the tape and uneven contraction of your paper. To assure even drying and stretching, let it dry flat. Your paper will probably never be this wet again, but the tape will hold it in its "stretched" state, allowing you to paint washes without the paper buckling. If, after all this, you find a section of tape that is not quite adhered to the paper, though it should be adhered to the board, it may not have been wet enough to begin with. You could take a spray bottle of water or a small wet paintbrush to apply a little water under that section of tape. Immediately press it down with a rag, and then allow to dry. If for some reason the tape is not good or the adhesive has been washed off of it, all is not lost. The paper could always be re-stretched with better tape. Tear off as much of the old tape as possible, rewet the paper, especially the edges, and remove the old tape as the adhesive dissolves. Then start the whole process again with better tape.
8. After your paper is totally dry, as a final assurance, it is a good idea to put masking tape, blue tape or artist's tape (1/2 - 1" wide) along the edges of the paper tape, overlapping about 1/8" onto the watercolor paper. This will help keep the paper tape from coming up along the edges after repeated washes. Enjoy painting on a well-stretched paper!