

Float Mounting a Watercolor

By Greg Fremstad

Floating a watercolor over a decorative backing without mats creates a wonderful presentation that is becoming very popular. The easiest method for floating is to hinge art to a pedestal of foamboard or matboard that is about 1" smaller all around than the watercolor itself. This will then be attached to the front of a decorative backing about 2" to 3" larger than the watercolor all around. The example here uses white linen matboard as a decorative backing with 1/2" wide white Frame-Space spacers and a maple stem moulding. The pedestal of foamboard raises the watercolor off the backing, creating a shadow that accentuates the deckled edge and shows off the beauty of the watercolor. No mats are required in this striking presentation.

Hinging Using Pedestals

1. Lay the watercolor face down on a clean surface and center the piece of foamboard or matboard on the back of the watercolor. The pedestal should be about 1" smaller all around than the watercolor so that it doesn't show.
2. Mark the back of the watercolor with light pencil lines or bits of masking tape at the edges of the foamboard where the hinges will be.
3. Remove the foamboard and paste the hinges just underneath the marks. Make sure there is 1/4" space between the mark on the watercolor and where the hinge is pasted.
4. After the hinges have dried for about 15 to 20 minutes, place the foamboard back down on the watercolor and lay heavy books or other weights on it so it won't move.
5. Now fold the hinges back over the foamboard. Put one T hinge across the top center pendant hinge close to the edge of the foamboard. Put all the rest of the T's at the tips of the pendant hinges. Pull the top hinges snug before T-ing and make sure all of the safety hinges are T'd with a little slack to prevent buckling.



Float mounting a watercolor creates a dramatic effect that makes the thin sheet of art appear to be hanging in space.

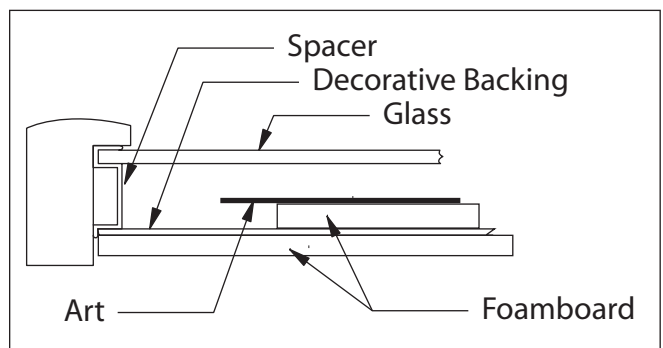


Figure 1: The basic structure of the float mounting elements.

6. After the hinges have dried, bond the foamboard to the center of the decorative backing with several 1" diameter dollops of a flexible adhesive, such as the acrylic used for bonding paneling. Years from now, these spots of adhesive can be reversed by "sawing" with a piece of picture wire between the decorative backing and the foamboard. The T hinges can be slit on either side of the pendant hinges. Everything here is reversible.

S or Slit Hinges

Another method of floating watercolors uses S hinges, sometimes called slit hinges. This is done by cutting slits through the decorative backing and running long hinges through them. The hinges as noted above. This method holds the watercolor flush with the decorative backing, but any buckling of the watercolor will be more apparent than with the pedestal float.

Assembly

With either floating method, the next step is assembly. If you're using FrameSpace, put it all around the glass. Put the first length of FrameSpace on the glass, leaving about $\frac{3}{16}$ " space from the corners. Cut the other end flush with the edge of the glass with an anvil pruner garden shears or razor knife. Put the next piece on in a butt-joint fashion, cut flush with the edge of the glass, and so on all around the glass. Stack this on top of the art and backing. Check for dust and critters before completion.

When all is clean, place the empty frame down over the art-glass-backing package. Check again for dust, turn the frame over, and put the fitting or glaziers points in. Leave these points slightly loose to allow for the free expansion and contraction of the decorative backing. If it is too tight, the backing will buckle with changes in humidity.

Creating Spacers

1. Cut four strips of matboard the width of the desired spacer. Make sure they are all exactly the same width and that the cuts are straight.
2. Bond these strips to yet another

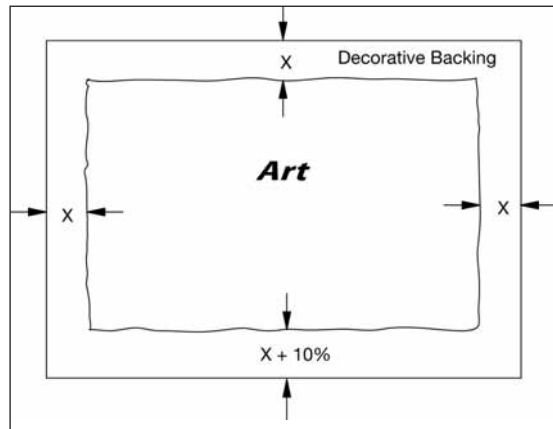


Figure 2: The overall positioning and size relationship between the art, the decorative backing, and the frame.

er strip of foamboard (or thicker mat or mounting board) with glue because double-stick tape won't last as long. This will give the glass a ledge to sit on.

3. Clean the glass, drop it into the frame rabbet, and then glue the spacer strips into the frame. Be careful not to smudge the glass as it will be very hard to clean right next to the spacer. After the glue has dried, turn the frame over and set it down onto the art/backing.

Turn the whole package over and fit loosely to allow the backing to expand and contract with changes in humidity.

Hinging

In more than 35 years in the framing business, I've found that hinging artwork into a frame is the most troublesome problem facing artists and framing professionals.

There are some important basic physical properties of hinging materials as well as proper methods that should be kept in mind. The biggest problems with hinging start with the use of pressure sensitive adhesive (PSA) tapes. You have probably seen lots of PSA tape failure, discoloration, and either a dried out or gummy residue on the art. Even tapes marketed with such words as "archival," "acid-free," "museum," "conservation," "removable," and "permanent" are not as preservation-framing friendly as hinging with wheat starch paste and Japanese papers, which is why those materials are preferred by museums and conservators. This method has been used for hundreds of years because wheat starch paste creates a very strong bond that doesn't degrade with time. It is easily reversible with a dampened Q-tip without damage

Microwave Wheat Starch Paste Recipe

Museums have secret recipes for cooking wheat starch paste that usually take 45 minutes or so over a double boiler, stirring, cooling, and straining. Here is a brilliant wheat starch paste recipe that yields two tablespoons using a microwave oven, courtesy of Kristen Anderson of Abaton, Inc. This is still a chore but takes a lot less time.

Tools

Microwave oven
4 ounce container
teaspoons
spoon for stirring

Ingredients

1 teaspoon dry wheat starch
6 teaspoons distilled or de-ionized water

1. Place 6 teaspoons of water in a 4-ounce container.
2. Slowly add 1 teaspoon of dry wheat starch, stirring until it is completely mixed.
3. Place uncovered container off center in the microwave. Cook at medium-high stirring every 10 seconds.
4. After approximately 30-35 seconds of cooking, the paste will thicken and become translucent.
5. Cover and let stand until cool.

This paste will start to grow mold within a day or two, even in a refrigerator. Some molds are green, blue, pink, orange, or clear. Do not use moldy paste for hinging.

to the art, even after decades. Hinging with wheat starch paste is very easy to do, and the results are well worth the extra effort.

Proper, strong, long lasting hinging is really easy. The hinges should be the weakest link because they should fail before the art tears. This is where hand-made Japanese papers, such as rice or mulberry, come into play. Japanese papers are available in several different thicknesses and strengths. Select the strength of paper, size of hinges, and number of hinges to correspond with the weight and size of the art. There is no special calculation for this, so try different combinations until it's right.

When hinging very light-weight Japanese-style brush paintings, for example, you'll want to use the lightest hinge paper available. With full-sheet, 400-pound watercolor paper, on the other hand, you'll want to use a much heavier hinging paper.

Japanese papers like to be "wet torn" to make feathered edges that increase the bond strength and help hide the edge of the hinge. This is especially important if the art is very thin or translucent. To wet-tear paper, wet a line with a small brush to soften the fibers, wait a bit, and then tear it. You can make nice long feathered edges by pulling and separating the paper across the wet line.

Types of Hinges

There are three basic hinge types: pendant, T, and V. For a heavy watercolor, a typical pendant hinge made from a light to medium-weight Japanese hinging paper would measure about 2" to 2½" long and ¾" to 1" wide with wet-torn edges all around. The grain of the

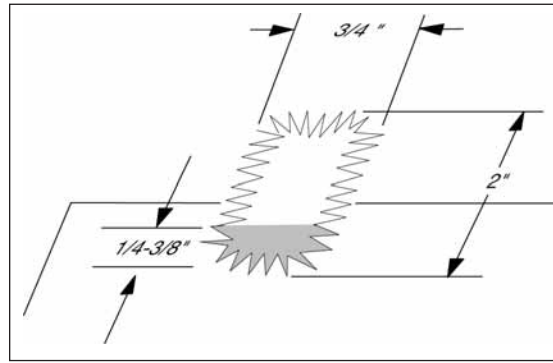


Figure 3: The dimensions of the feathered Japanese paper hinge.

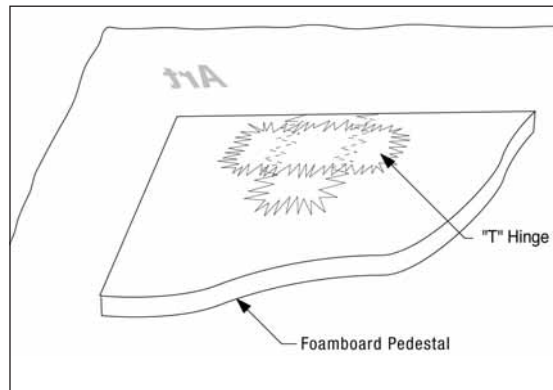


Figure 4: Positioning the T hinge on the foamboard.

paper should run horizontal for the most strength.

With a pendant hinge, the bonded engagement on the back of the watercolor is the last ¼" to ⅜" of the tip of the hinge. It is bonded about ½" in from the edge of the art and sticks out perpendicular past the edge.

This hinge is then adhered to the backing board, although some prefer to hinge to the back of the mat. If you hinge to the backing, either hinge the mat(s) and backing together (with linen hinge tape along the long edge of the mat) or otherwise attach the mat to the backing. If you decide to use double-sided PSA tape for this step, remember that it is not permanent. A couple of dabs of white glue would be better.

For adhering to either the mat or the backing I recommend

a T hinge. This is simply another strip of Japanese paper adhered across the pendant hinge to form a T. This is amply strong and facilitates easy removal of the hinge from the backing by slitting off the two legs of the T without upsetting perfectly good hinge attachment to the watercolor.

The V hinge is folded in half like a V and attached to both the art and the backing, with or without a T. These are very weak (even with the T) and should not be used.

Try this quick test to see how important hinge strength is. Stick a piece of tape on the edge of a table and pull on the end of the tape straight out from the table. This is the "shear" mode, and it is very strong. Now fold the tape back over on itself and pull towards the center of the table. This is the "peel" mode, and it is very weak. Little rings of

Linen Hinge Tape

Linen hinge tape was designed for book binding and hinging front mats to back mats. It is way too strong to be a weak link. This tape is not easily removable from paper without a tremendous amount of water and risk to the art. PSA linen hinge tape is also too strong and not easily removable. It generally requires solvents for removal. "Artists Tape" and "Framers Tape" are also not suitable for hinging important or valuable art. Paper conservators repair many ravages of these tapes.

any tape squished between the art and the backing are in the "peel" mode and will fail very easily. A pendant hinge is very strong because to overcome the bond you must "shear" the whole bond at once. A V hinge is set up in the "peel" mode and the bond is easily overcome. If you use V hinges at just the top of the art, any movement of the art, either up or down, will peel the hinges.

If you put two or more hinges on a watercolor and T them close to the edge of the watercolor, it will most likely cause buckling between the hinges with changes in humidity.

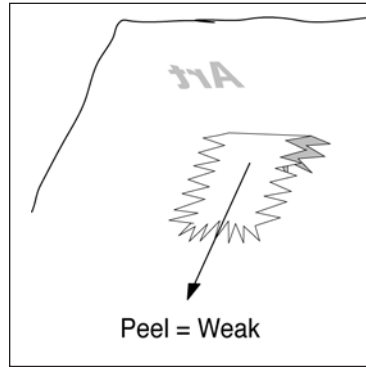
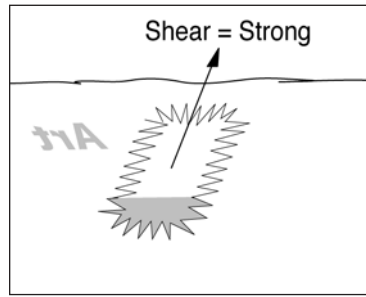
The simple answer is to T only one of the top (primary) hinges close to the edge of the watercolor and put the T's at the very tips of all the rest of the primary pendant hinges. This one close T will keep the watercolor aligned with the mat, left and right, while all the rest of the T's at the top will have gravity helping to hold the art level. These long T'd pendant hinges will swing back and forth as the watercolor expands and contracts with changes in humidity. The chances of buckling between hinges is now greatly reduced.

When you have pendant hinges (shear) just at the top of a watercolor and someone picks up the frame and turns it sideways, the weight of the watercolor will swing downward and peel the hinge that is now near the bottom. This is the cause of most hinge failures, especially during shipping.

The answer to this is what I call Safety Hinges at the bottom (and sometimes even the sides) of the watercolor. These should be T'd way out at the tips of the pendant hinges with a little slack to allow for the expansion and contraction of the watercolor with changes in humidity. When the watercolor is turned sideways or upside down, all the safety hinges at the sides and bottom go into action and keep the primary top hinges from peeling.

Starch Paste

The secret to making wheat starch paste work well without puckering watercolor paper is timing. You must learn just how long to wait from the time you



Figures 5 and 5a show the directional nature of the strength and weakness of the single feathered hinge.

apply the paste to the hinges until you apply the hinges to the art. If you apply them too soon (too wet), the art will pucker. If you wait too long, you won't get a strong bond.

Here are some tips to getting it right. Paste up six or seven trial hinges at the same time. Try to apply about the same amount of paste to the tip of each hinge. Immediately after pasting, apply the first pasted hinge to a piece of copy paper or page from a magazine. Apply the hinge gently, and blot lightly with a folded paper towel. If you blot too hard you will squish moisture out of the hinge and onto the paper, making it pucker.

Make a blotter by folding a piece of paper towel into a 2" square and put it over the hinge and weight it with a small weighted bag (filled with sand or pellets).

You'll need several weights, as each hinge must dry for about 15 to 20 minutes.

Wait two minutes and apply the next hinge, wait two minutes more and apply another hinge, and so on. Then, 20 minutes after applying the last hinge, do the pull tests.

You'll notice that the first couple of hinges were still too wet and that the paper puckered. The last couple of hinges probably got too dry and didn't stick very well if at all. So some of the middle hinges were just right. Now you know how long to wait from pasting to hinging. When you start a hinging job, set a timer because you will probably get distracted. Now try peeling the hinges that seemed strongest just to see how weak hinges are in the peel mode.

For more detailed hinging instructions, go to the FrameTek website, www.frametek.com, and navigate to "Free Info" under the pull-down menu. ■



Greg Fremstad started framing in 1970 and has developed several products for the framing industry including FrameSpace and EconoSpace art/glass separators, and RabbetSpace rabbet depth extenders. Greg is also a trustee and member of several standard setting committees of F.A.C.T.S. (Fine Art Care and Treatment Standards) www.artifacts.org. He lives in Eugene, OR, and can be reached at www.frametek.com.