

# Conservation, Matting, and Framing 2-Dimensional Artwork

## Why do we mat and frame artwork on paper?

A mat accomplishes several tasks, such as conservation, by keeping the ink, pencil (graphite), charcoal, or chalk away from the frame's glass or Plexiglas (which would eventually cause a transfer of the image to the glass,) a mat acts a visual "rest" between the frame and the image (so the viewer will have a "clean visual palette" when viewing the image,) and a mat allows one to display a work on paper that is not framed as well as allowing viewers to touch the artwork without damaging the paper.

According to Museum Archivists and Curators anything done to a work on paper must be reversible. Adhesives used must be "neutral pH," which means they are free of acids that will discolor the paper, and water-based so they can be removed. Any tapes that are used must be archival and are known as "gummed" paper or linen tape, do not use masking tape or any tape that has a wet, sticky, adhesive. Wet (active) adhesives will dry out over time and will lose their adhesion. Spray glues, or any solvent-based glue, is to be avoided due to "out gassing" of the solvent leading to eventual damage to the paper (support.) Any spray fixatives used will have to be allowed time to cure before framing but may be matted at any time.

For framing, artwork must not touch the glazing material (glass, sheet acrylic, or Plexiglas.) A mat, if the edges of the work can be covered, or spacers in the frame (called "fillets"), if the edges of the work must show, will keep the support from touching the glazing material.

Framing seals the paper from harmful air pollution, allows one to hang the artwork on a wall, and protects the matted work from damage in handling. Mats and frames, in my opinion, should be "neutral," and should not compete with the artwork for attention. In this instance "neutral" means white, off-white, light tan, cream, light gray, or black and your choice of which "color" mat to use would be dictated by the drawing, the color and type of frame, and your personal choice. I won't grade down for using some color mat (some color other than the ones I have listed) but I will grade down if your choice of mat makes the art look unprofessional and/or garish. Some students believe that they can make their artwork look better by using a "loud" mat. It is my belief that the artwork should be able to "stand on its own" and, other than the reasons I stated above, your artwork should not need a "fancy" mat. Museums, Galleries, and Art collectors world wide generally agree with me about matting artwork. There is only one way I would even think about matting that is considered "fancy." Cutting multiple mats of the same color, with each window slightly larger than the last, to "stair step" the multiple mat giving the artwork a more intimate setting. But that is just my own feeling on the matter. You may, when you leave this class, decide to mat your work, or the work of others if you get a job in a frame shop, in any manner you choose. For now, though, I suggest you follow my lead.

One last point: Tradition dictates we bevel the window of a mat but a bevel is not absolutely necessary and, if you do not have or have access to, a mat cutter that will automatically bevel the cut, a bevel will not look very good if cut freehand (without years of practice.) A straight cut, on the other hand, will look just fine and is perfectly acceptable.

For complete matting instructions see the handout page "**Matting 2D Artwork.**"

## Framing 2-dimensional artwork: Tips, Hints, and Tricks

Plexiglas or clear Acrylic sheet, rather than glass, is your best bet for framing 2-dimensional artwork (prints, drawings, or watercolors) for several reasons. It is lighter in weight, it is easier to cut to size and it won't shatter (even if it can break) when dropped onto a hard surface. It will cost a bit more than glass, but the additional cost is worth it if it protects the artwork. Cleaning Plexiglas is a bit different than cleaning glass, and it can scratch much easier than glass, but it is neither expensive nor is it difficult to clean Plexiglas. Use a cleaner that does not contain ammonia and some soft paper towels or cotton cloth, and follow up with some crumpled newspaper to do a final polish (I use a mixture of alcohol and distilled water as a cleaner.) Glass OR Plexiglas cut for a frame should be 1/8 inch smaller than the frame opening to allow for expansion and to keep from cracking the frame at the corners.

Artwork on paper that is not matted can still be framed, but one will have to use a "shadowbox" frame and the paper will have to be "floated" on the backer board. I use foam board (AKA Fomecore) as a backer board and I like to float my unmated work on a small piece of foam board along the top of the artwork. I attach this piece of foam board (no larger than 1/4 inch by the width of the paper minus 1 inch) to the backer board with Elmer's Glue-All, and I attach the artwork to the foam board strip with one tiny dot of neutral pH glue in each of the two top corners. The space between the Plexiglas and the backer board is twice the thickness of the strip of foam board I use to mount the art to the backer, allowing enough clearance that the art won't touch the Plexiglas.

Screw eyes (or "D" rings, saw-toothed bars, etc.) used to attach wire for hanging framed artwork should be installed between 2/3 to 3/4 up from the bottom of the frame, this allows the hanger and wire to remain hidden behind the artwork on the wall. Both picture wire and screw eyes come in different gauges and your choice of gauge will depend on the size and weight of the framed piece. When in doubt choose a heavier gauge than you think you might need, better safe than sorry. Picture wire can come untwisted, dropping the piece off the wall, so it is a good idea to wrap the wire twice around the screw eye and, once it is twisted around itself several times, twist the wire back on itself several times toward the direction of the screw eye (I also add a bit of masking tape to the twist to keep it from marring the wall.)

Artwork on paper should be removed from a frame, should be re-matted, and should be re-framed every 10 to 20 years. This is about the length of time a good frame job can be expected to protect the paper, even if a dust cover is glued to the back of a frame. Of course hardly anyone follows this "rule," but you might take this rule into account when having your work framed (ask yourself if you want to spend that much money every 10 to 20 years...that is why I do my own mats and frames!)

# Matting 2D Artwork

## Calculating Dimensions for Matting

Assumptions:

1. You intend to frame the work (eventually.)
2. You want the outside dimensions to be whole numbers, rather than fractional numbers, so you won't need a custom frame.
3. You intend to "mat over" the paper your work is on rather than "floating" the work in a shadow box frame.
4. You have a sharp utility and/or X-Acto knife, some gummed tape, a piece of matboard (archival 4-ply), and a piece of mountboard (archival foam board).

**Step 1:** Measure the width of your work (the image area, or the papers' width.) Subtract  $\frac{1}{2}$ " from this number ( $\frac{1}{4}$ " from each side of the image that will be covered by the mat.)

Write this number on a sheet of paper.

**Step 2:** Decide what nominal<sup>1</sup> mat size you want and multiply that number by "2." Write it down.

**Step 3:** Add the numbers you have written down (you will, at this point, probably NOT have a whole number. If you do have a whole number, skip to Step 4.) If you have a fractional number (such as  $16\frac{3}{4}$ ") round up, or down, to a whole number. Take what you added or subtracted (from rounding up or down) and divide that number by 2 (this sum is to be added to the "nominal" size of each mat side.)

**Step 4:** Repeat steps 1 through 3 for the height of the mat/image. If needed, always add any excess to the bottom of the mat. See Step 5 (on the right) for an example of how this is done.

## Matting example

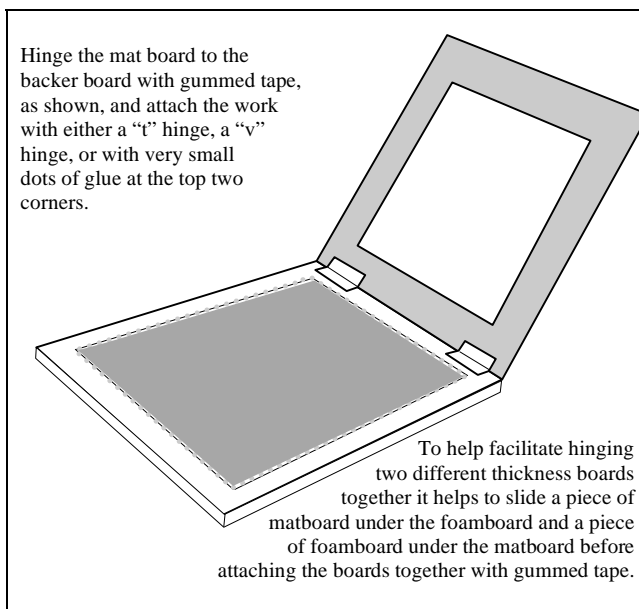


**Step 1:** this image is, for example only,  $8\frac{1}{4}$ " (h) x  $5$ " (w)

**Step 2:** A nominal mat size of  $2$ " has been chosen.  $2$  times  $2$ " equals  $4$ ".

**Step 3:** Width of image that will show through the mat window is  $4\frac{1}{2}$ ", width of the mat (times 2) is  $4$ ". Total, for the width, is  $8\frac{1}{2}$ " (not a whole number!) Round up  $\frac{1}{2}$ " and add that to  $8\frac{1}{2}$ " leaving you with  $9$ ". The total mat size now is  $4\frac{1}{2}$ " (each side is  $2\frac{1}{4}$ " actual) and must be taken into account for **Step 4**.

**Step 4:** Height of the image is, after subtracting  $\frac{1}{2}$ " for overlap, is  $7\frac{3}{4}$ ", and the mat size total is  $4\frac{1}{2}$ " (so far.) Total, for the height, is  $12\frac{1}{4}$ " (ouch! NOT a whole number!) Okay, it appears we have another fraction and we don't want to pay some frame maker an arm and leg just to custom make a frame, so we merely add  $\frac{3}{4}$ " to the bottom of the mat and it now totals  $13$ " (a whole number!) This means, after we cut our mat and backer and mount the work in the hinged mat, we can now look for a frame that is  $13$ " (h) x  $9$ " (w).



<sup>1</sup> **Nominal:** An approximate, rather than an actual, number that is more or less than the actual final number.