

MAT T I N G H A N D B O O K
f o r
A D V A N C E D P H O T O G R A P H Y

S t e v e n B e r k o w i t z

T y l e r S c h o o l o f A r t
D e p a r t m e n t o f
G r a p h i c A r t s
& D e s i g n
P h o t o
A r e a

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ALL ABOUT MATTING

MUSEUM MATTING

The purpose of matting is to protect images and to present them in a reinforcing yet neutral manner. If the mat is unconventional it runs the risk of drawing attention away from the image itself.

Remember that form supports content. These instructions will help you how to prepare mats in a traditional museum style format.

MAT BOARD PROPORTIONS

Photographic mats are most often cut to the proportions of photographic paper. The convention is to overmat to the next larger paper size. Standard overmat conventions are:

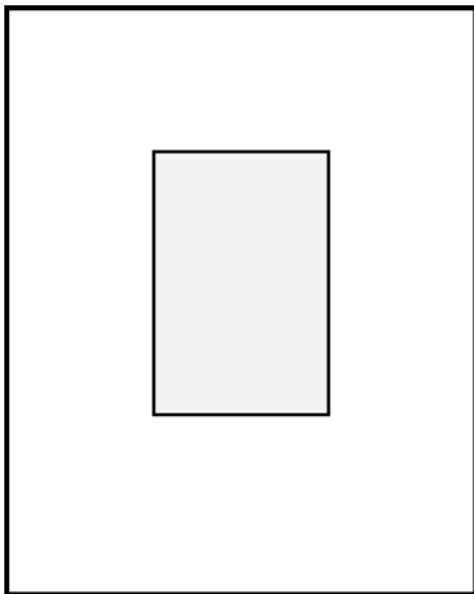
8" x 10" paper overmats onto 11" x 14" board,

11" x 14" paper overmats onto 16" x 20" board,

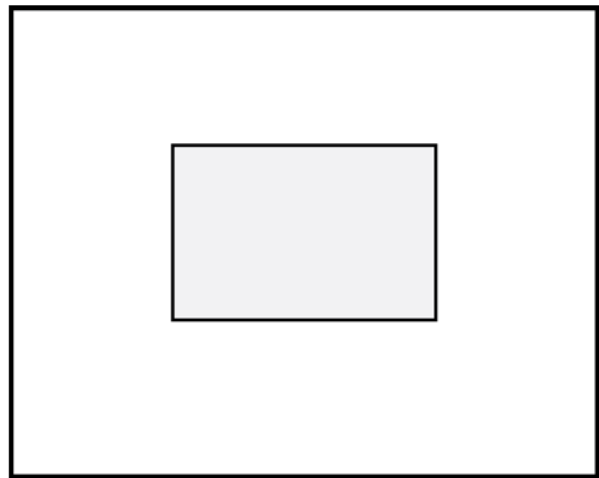
16" x 20" paper overmats onto 20" x 24" board, and so on

Even if your prints are smaller than 8" x 10", don't cut mats smaller than 11" x 14". Larger mats look cushy. Avoid borders of less than 3 and certainly never smaller than 2".

There are certain standard proportions for photographic mats. Obviously, a horizontal print goes into a horizontal mat and a vertical print goes into a vertical mat. The goal is to center the print in the center of the mat. If the print is exactly centered, however, the bottom border will appear smaller than the top border due to some sort of optical illusion. So the bottom is always cut a fraction of an inch larger than the top. The ideal is to have the borders on both sides equal to the top, yet that rarely happens, especially with prints from 35 mm film on boards that conform to the old sheet film sizes, that are a different aspect ratio.



vertical print in vertical mat



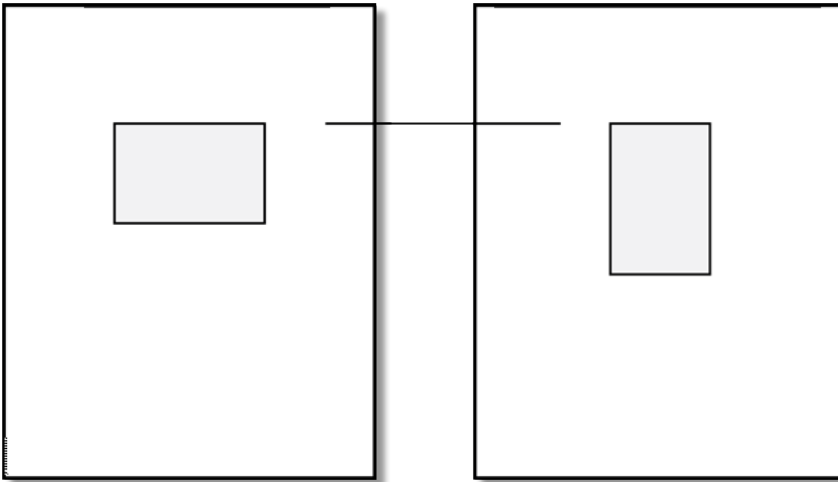
horizontal print in vertical mat

MATTING PROPORTIONS

EXCEPTIONAL PROPORTIONS

The main exception to all this is the placement of a very small horizontal print into a vertical mat with a proportionately large bottom border.

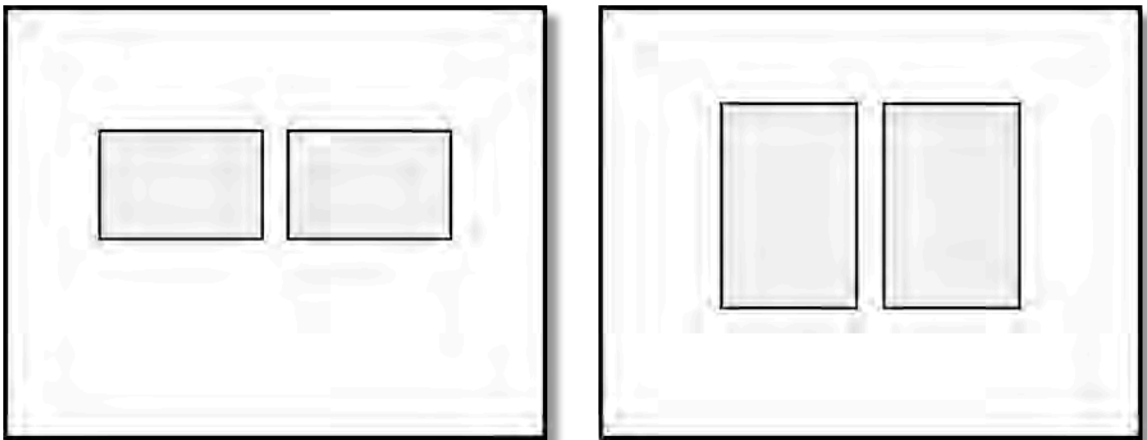
Non-standard Mats - horizontal in vertical frame



for small prints only, top margin equal to sides
position according to the proper vertical placement of print

MULTIPLE IMAGE MATS

Putting more than one image into a mat requires an oversize mat board. Figure the overall dimensions and add about 3 inches for the borders on all sides and then round off to the nearest size standard board.

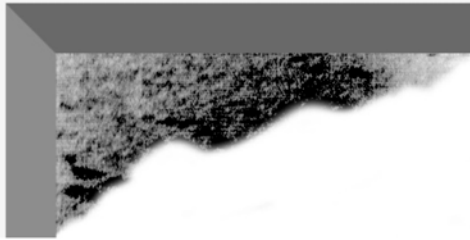


Adjacent double-frame example

IMAGE POSITIONING

Positioning of the edge of the print within the window also becomes an aesthetic consideration, hidden behind the mat, cut by the mat, or exposed by the mat. If you have printed with a filed out negative carrier you may want all of the border to show, leaving about 1/8" or less of white paper exposed. Just a fraction of the border can be left showing to give a clean black hairline all around the image. Some photographers prefer to cover the border and let it remain hidden. The proof that it is a full-frame print is known only to the owner of the print. The latter two cases are the ones most often used.

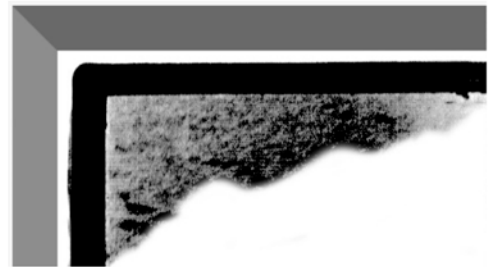
BEVEL AND BLACK LINE RELATIONSHIPS -



bevel hiding black line (don't crop too much)



bevel splits black line (measure carefully)



bevel allows black line to show
(use a gap smaller than the black border)

If you have an image printed with a non-filed out carrier, i.e. one with soft outside edges, you may choose to hide this edge as in example 1 above, or you can let the edge show as in example 3 above. Just make sure the white space of paper between the image and the bevel is not too large (1/8" or smaller).

MATERIALS for MATTING

KNOW YOUR MAT BOARD

Use white or off-white board.

No black, no colors. This is not a course in photojournalism, let alone interior decorating!

Mat board is white all the way through.

If it is grey in the middle it is illustration board, not mat board.

Get board that is smooth or has a slight texture.

If it looks like the moon, forget it..

Use Museum Board (Rag Board) for fiber based prints that are archivally printed

This board is acid free and archival, i.e. it will not stain your prints in the long run.

It comes in 2-ply and 4-ply.

2-ply is easy to deal with, but 4-ply shows the bevel better and has more class.

(It is possible to use 4-ply for the front and 2-ply for the backing board.)

Rag Board costs about twice as much as regular mat board, so try to buy it in bulk.

WHAT TO BUY

- Mat Board - 32" x 40" white or off-white board, with a slight texture.
 - for a Basic Photo class buy at least 3 sheets
 - 6 pieces of 11" x 14" board can be cut from each sheet.
 - with 2 pieces per mat, 3 sheets will be enough board for 9 finished 11" x 14" s
 - for an upper-level Photo class buy at least 4 sheets, depending on desired mat sizes
 - 4 sheets will give you enough board for 12 finished 11" x 14" mats
 - 4 pieces of 16" x 20" board can be cut from each sheet
 - with 2 pieces per mat, each sheet can make 2 finished 16" x 20" mats
- If the store can, have them cut the full sheet into 11" x 14" or 16" x 20" boards
- Logan 270 Mat Cutter Blades -buy half as many as the number of windows you will cut
- Acid-free Framer's tape - three to four yards, depending on mat sizes and quantity
 - share a roll with several friends, you don't need the whole thing
- C-Thru B-85 18" plastic centering ruler with grid markings to position the window
- Lineco Plastic Photo-Corners, or acid-free drawing paper and a little extra Framer's tape.
- A soft Drawing Pencil for marking the position of the window.
- Staedtler Kneader Eraser for removing all pencil marks from the boards.

WHAT THE LAB HAS

Matting tools, to be signed out from the Photo Cage.

If you are finished cutting mats and someone else is waiting to use the tools you have, check out in the Cage and have them re-sign out the tools.

Mat Board cutter, a large machine for cutting your sheets down into smaller boards.

Logan Mat Cutter Machines, a rail mounted on a board for straight and easy cutting.

Logan Mat Cutter and Rail, a hand-held device that makes bevel cuts in mat board

Pencil sharpener.

Knowledgeable Lab Monitors to offer advice without doing it for you.

WHAT TO BRING

Copies of your best photographs.

CUTTING LARGE MAT BOARDS DOWN

The Logan Cutter comes with an additional Straight Cut blade. This holds a blade in a vertical position and is used for cutting a large board down into smaller segments.

remove _____ the piece of scrap board from under the cutting rail

place _____ the board into the Logan Cutter

pull _____ the Straight Cut blade toward you with the vertical handle

For cutting 6 boards of 11" x 14" each:

First cut the 11" segments, resulting in 3 pieces of 11 x 32 " board

cut _____ 11" of the end of the board

cut _____ another 11 " off

cut _____ in 11" from the other edge

this will give more factory edges with cleaner edges

On each of these 3 boards:

cut in _____ 14" from one factory edge

cut in _____ 14" from the other factory edge

essentially removing the middle part of the board

If all 11' cuts are made first, then all the 14" cuts are made,
there is a better chance that all boards will be the same size.

For cutting 4 boards of 16 x 20" each:

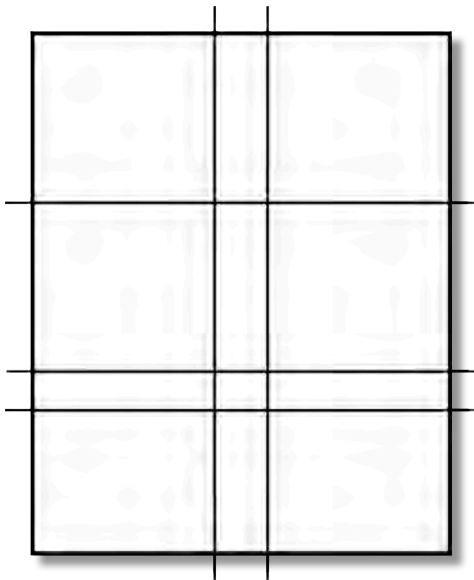
Measure the board first. Not all boards are exactly 32 x 40" so find the exact center and don't depend on just measuring in from one edge.

First cut the board in half the short way, resulting in 2 pieces of 20 x 32 " board.

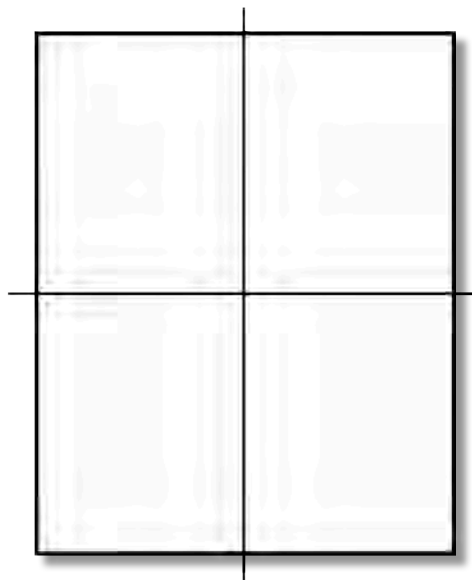
cut _____ 20" off the end of the board

On each of these 2 boards:

cut in _____ 16" off the end of the board (measuring again for the exact center)



6 pieces of 11" x 14" board



4 pieces of 16" x 20" board

CENTERING the MAT WINDOW

SIZING the WINDOW

Measure the exact size of the portion of the image you want to show through the window. You have to take into consideration whether the black line is hidden, partially showing, or totally exposed. If you have no black border on your print, you have to account for how much of the image edge will hide behind the mat, or if you will leave a small amount of white border between the edge of the image and the window bevel.

CONSISTENT PRINTING SIZES

It is suggested that photographs be printed to one of several standard printing sizes that you choose for yourself. Instructions on how to make a print target are available on the berk-edu.com web site that will allow the printing of evenly sized (not irrational fractions of an inch) and perfectly centered images. The advantage of this seemingly overly compulsive behavior is to allow you to cut all your mats to several personally favorite sizes. This saves hours of calculations and makes the mats interchangeable.

POSITIONING the WINDOW *one small phrase for the teacher, one giant step for the student-kind.*

The window should be placed with both side distances even, and with the bottom margin slightly larger than the top. If you put the image dead center, the bottom will look smaller and the picture will appear to be sliding off the mat. For an 11" x 14" mat, borrowing 1/8" from the top and adding that to the bottom should be okay. This will make the bottom 1/4" larger than the top.

the Visual Centering-Ruler Method

- place _____ you photo on the mat board and adjust the placement by eye
- place _____ a C-Thru 18" Centering Ruler on the mat board and
- center it _____ side to side (horizontal)
e.g. on a 14" wide board, the ruler will sit at the 7" mark on both sides
- move _____ the photo around until it is centered horizontally
- remember _____ the distance from each edge
- move _____ the ruler toward the top of the board and
- make _____ 2 dots at the edge distance
- move _____ the ruler toward the bottom of the board and
- make _____ 2 more dots at the edge distance
- draw _____ 2 light pencil lines, each connecting the top and bottom dots on either side

- do the same _____ for the top to bottom placement,
but this time **move the ruler up** 1/8" from the bottom
e.g. on an 11" board this would put the bottom at 5 5/8" rather than 5 1/2"
- repeat _____ the same procedure as above
center the photo; determine the edge distance; mark 2 dots close to the top edge;
mark 2 dots close to the bottom edge; draw 2 light lines

You should now have a rectangle on the back of the mat board.

- measure _____ it to make sure it is the correct size
- measure _____ the distance from the top and bottom edges to
- make sure _____ the bottom border is 1/4" larger than the top border.

CUTTING the MAT

CUTTING the MAT with the LOGAN MAT CUTTER

The Logan Mat Cutter is a hand-held device used to cut bevel-edged windows in mat board. This is a pull-style cutter. Smaller Logan cutters can be purchased for less money that uses a push-style cutter. The process for these is similar.

Make some practice cuts before you tear into your final mats. A little practice can pay off.

- draw _____ the outline of the window to be cut on the BACK side of the board
- measure _____ the size and position of the window using the methods above
- draw _____ the window with light pencil lines
- these lines will have to be erased later
- place _____ a piece of scrap board under the mat being cut
- otherwise the blade will be ruined, and the mat cutter will be damaged
- line up _____ the drawn line on the mat with the edge of the Rail
- make sure _____ the blade is slanting OUT toward the edge of the board
- otherwise the bevel will be undercut in the wrong direction
- hook _____ the feet of the Cutter onto the track of the Rail at the far end of the board
- align _____ the 'Start-Stop Indicator Line' on the Cutter with the pencil line on the mat
- position _____ the Cutter just before the window line by the thickness of the line!
- push down _____ on the 'Crawl Pin' to keep the Cutter from crawling as the blade goes in
- push _____ the tip of the blade all the way through the board
- make sure the blade is absolutely ALL the way through the board
- PULL the Logan until the Start-Stop Indicator Line reaches the near side of the window.
- stop cutting exactly at the end of the window line, not before or after
- apply _____ even downward pressure on the Cutter
- the Logan has a tendency to not cut all the way through for the entire length of a cut
- slow up _____ when you get close to the target line, so you don't over cut
- turn _____ the board counter-clockwise before making the next cut

When the board is lifted up the middle section should fall away. If not then the cut did not go all the way through the board. Very carefully cut with a loose blade to complete the window mat. An emery board can also be used to clean up mediocre corners.

BLADE MANAGEMENT

Never cut more than 2 windows with a single blade point. Each blade has two points. Dull blades are the greatest cause of poor looking mats because the board will start to tear rather than being cut cleanly.

Mark a used point with a sharpie, the turn it around and use the other point. When both points have been used, deposit the dead blade into the SHARPS container for safe disposal.

ASSEMBLING the WINDOW MAT

After the window is cut assemble the backing board and attach the photo to finish the mat.

tape _____ the windowed board to the backing board with FRAMER'S tape

Linen tape can also be used

extend the tape along the entire top edge for a strong mat

score _____ the tape and fold the boards together

attach _____ the photograph to the backing board

use either self-stick plastic photo-corners or folded triangles of acid-free drawing paper

secure plastic corners or paper corners with more tape

erase _____ all pencil lines from the inside surface of the mat, and any marks on the face

graphite is not good for photographic surfaces

IMAGE INFORMATION

Write the following information neatly in the upper left hand corner of each matted print. You can type this up and print it out as well. Just tape the printout securely to the back of the mat. This is especially useful when making multiple mats.

required information:

| | |
|--|---|
| Name | <i>Ansel Adams</i> |
| Address | <i>1234 Pine Street</i> |
| City / State / Zip | <i>Philadelphia, PA 19102</i> |
| Phone Number | <i>215-555-1212</i> |
| Class & Section | <i>Photo II, sec 001</i> |
| Semester & Year | <i>Fall 2012</i> |
| Instructor | <i>Rebecca Michaels</i> |
| Academic Year | <i>Junior</i> |
| Title of Print | <i>untitled</i> |
| Size of Print | <i>8 x 10"</i> |
| Medium (darkroom) | <i>toned silver gelatin print</i> |
| (digital) | <i>permanent pigment print on archival paper</i> |
| Camera & Exposure | <i>Nikon F4 / Nikon D90, f/5.6 1/25th sec.</i> |
| Film type and Processing Info | <i>Tri-X pulled 2 stops in Gamma Plus</i> |
| Paper & Developer (darkroom) | <i>Ilford Warmtone Glossy, in Platinum II developer</i> |
| Printer brand & model number (digital) | <i>Epson 4800</i> |
| Any special processing notes | <i>Pulled 2/3 stops, developed normal in Gamma-Plus split-toned in Selenium</i> |

SIGNATURE

Photographs are most often signed in pencil on the back of the print, typically in the lower right corner.

This signature is written small and along the bottom edge of the print, never directly behind the image area. This means the signature is never seen once the print has been matted.

Photographers do not sign their prints on the front and let it show through the window, as do

Printmakers. They also do not sign the mat board, because it is not attached to the photograph.