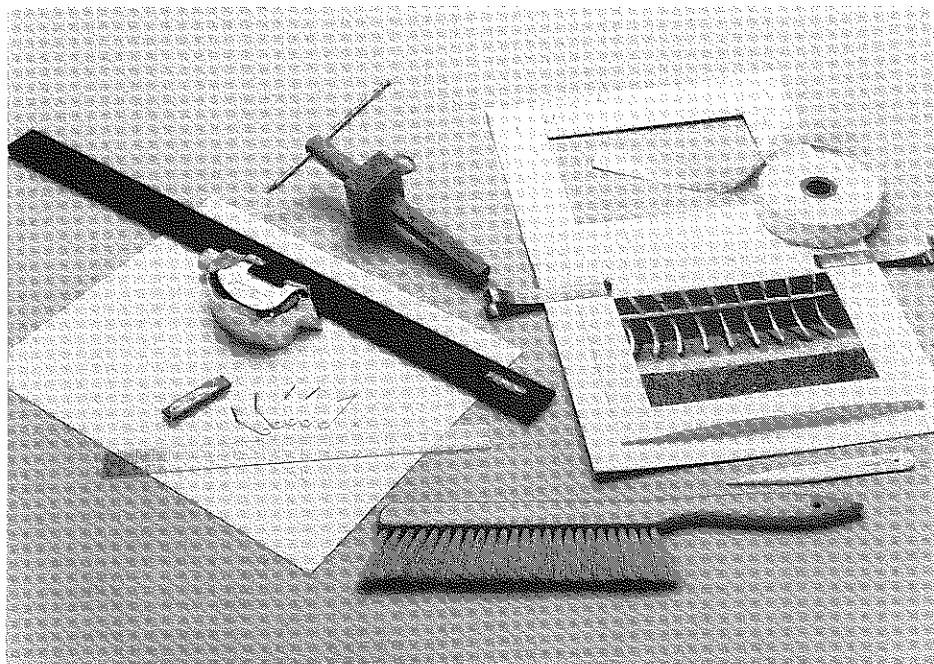


CUTTING WINDOW MATS BY HAND

Preparations



A professional-quality mat is the ideal complement for artwork, photographs, prints, or drawings. Like other skills, cutting a mat takes practice; so, before you begin serious work, we suggest that you practice the techniques described here on pieces of scrap mat board. Set up your work area in a clean, well-lighted location and have the following tools available:

- Dexter mat cutter
- #3 mat cutter blades
- Metal straightedge or guide bar (with non-skid base)
- Mat marking scribe
- Ruler, with at least 1/16-inch increments (preferably with measurement marks that start at the very end of the ruler)
- Utility knife
- Single-edge razor blades
- Mat board
- Scrap mat board
- Masking tape
- Kneaded eraser
- Pencil (3H or harder)
- Linen tape
- Dusting brush (optional)
- Fine sandpaper

Getting Started

There are a few important steps you must take before you can cut your window. You must first prepare your cutting surface, measure and cut your mat board to size, correctly position the blade in the mat cutter, and finally, calculate the width of the borders and mark the back of the mat to show the exact outline of the window you will be cutting.

The Cutting Surface

To prepare the cutting surface, use masking tape to fasten down a large piece of scrap mat board. Your work surface should be about four to six inches longer and wider than the mat you will be cutting. This cutting surface will help prevent broken blades and wavy window edges as the blade of the mat cutter passes through the mat.

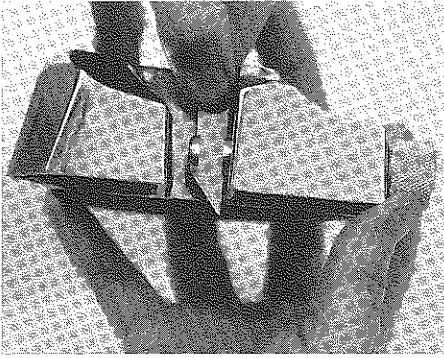
Measuring and Cutting the Mat to Size

Calculate the most economical use of your large sheet of mat board by sketching out on a piece of paper different arrangements of the mat sizes you plan to cut.

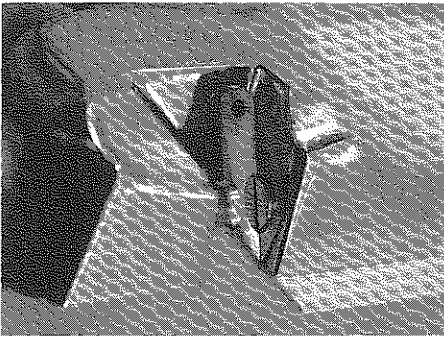
Let the overall size of the piece to be matted determine the size of the mat; never cut the artwork down to fit a mat or frame. Plan the mat so that it is larger than the artwork and large enough to allow for borders at least two inches wide around all four sides of the image.

Working on the back of the board, use a pencil to mark the outside edges of your mat. (Be sure to measure in from a "factory edge" to ensure a square cut.) It isn't necessary to draw a line; simply make small marks at each edge.

Now you are ready to cut the mat board to size, using the utility knife and straightedge. Position the straightedge along the pencil marks and cut from side to side.



Cutting edge of blade faces away from knob, and rounded top rests firmly against wall of inset.



Tip of blade should extend just beyond thickness of board.

Adjusting the Mat Cutter Blade

Insert a #3 blade into the mat cutter. With the cutting edge facing toward the front and away from the knob, adjust the blade so that the top rests firmly against the wall of the inset. This ensures a uniform bevel. Although it's possible to cut a 90-degree edge, bevelled edges offer more beauty and are easier to cut.

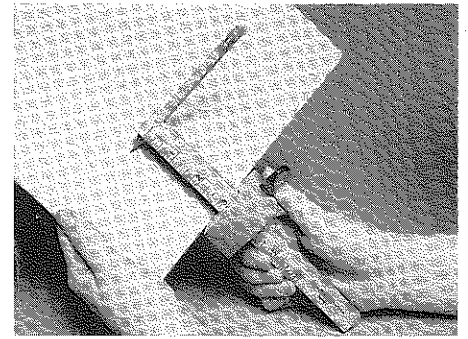
Check the depth of the blade by holding a piece of the mat board you will be using against the underside of the mat cutter. Only the very tip of the blade should extend beyond the thickness of the board. A blade set too deeply will make it impossible to cut a good mat. Make a few test cuts on a piece of scrap board, adjusting the blade so that it cuts all the way through the mat board and leaves only a faint line on your cutting surface.

Measuring and Marking the Window Outline

As a general rule, mat borders should be at least two inches wide. Ideally, the width of the top and the two sides of a window mat should be the same; the bottom should be about $\frac{1}{4}$ inch to $\frac{1}{2}$ inch wider.

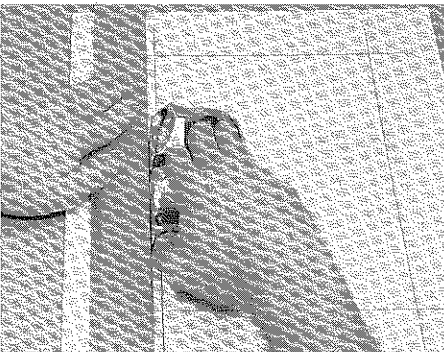
Carefully measure the image size of the artwork to determine the size of the window. To ensure a proper fit, make the window slightly smaller than the image. Make sure that the window overlaps the edges of the artwork by at least $\frac{1}{8}$ inch to prevent the artwork from popping up.

Working on the back of the mat board, set the mat marking scribe at the correct width for the top and two sides of your mat and mark off these three borders. The pencil lines should intersect at the corners and extend a short distance beyond them. Reset the scribe for the width of the bottom border of the mat and mark it off as well.

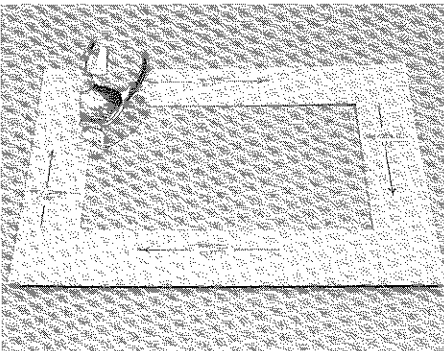


Measure and mark off borders with mat marking scribe.

Cutting the Window



Hold straightedge firmly, and smoothly move mat cutter along its edge.



Direction of cuts.

Four cuts are made to remove the interior part of the mat, creating a window.

Prepare to cut by inserting the cutter blade on the guideline just outside one of the corners (to allow for the bevel). The rounded part of the mat cutter should face away from the edge of the mat.

Align the straightedge with the edge of the mat cutter, outside the guideline. To double check, measure the distance between the guideline and straightedge; it should be the same at all points along its length. Note that the straightedge should be laid *outside* the outline of the window.

Now you are ready to cut. Hold the straightedge down firmly and push the mat cutter smoothly along the straightedge with the heel of your hand. The blade should travel on the guideline. Approach corners carefully. Cut slightly *past* the corner to allow for the bevel, but avoid overcutting too far. (Learning just where to stop is one of the skills of mat cutting.) Remove the mat

cutter and repeat the procedure for each of the remaining sides, going in a clockwise direction.

When you have cut all four sides, remove the material in the center. If your overcuts were too short, it may be necessary to cut through the corners with a razor blade. Work on the front of the mat to make razor cuts.

Don't be discouraged if your mat doesn't look just right. Very few people cut a perfect mat the first time. With practice, you will soon be creating high-quality window mats.

If You're Left-Handed

Left-handed people can use a Dexter mat cutter too. After setting the blade, pull the cutter toward you instead of pushing it away. Use your right hand to hold the straightedge firmly in place.

Fine-Tuning Your Work

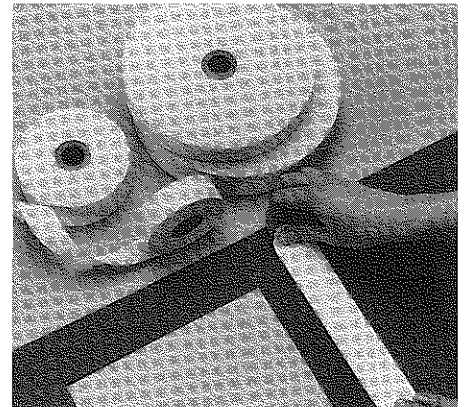
As you practice, remember the following tips. They will help you perfect your work:

- It's worth it to change blades often. A clean, sharp blade will produce the smoothest cut. If there are rough edges on the bevel, the blade is dull or there was no protective cutting surface under the mat. Sanding the bevel lightly will remove slight imperfections.
- Run a burnishing bone lightly along the inside edge of cuts for a smoother look. The bone is also useful for correcting flaws resulting from not overcutting far enough at the window corners. The burnishing bone will remove traces of overcuts on the front of the mat, too. But rub lightly; excessive pressure will leave the surface noticeably shiny.
- Erase the guidelines on the back of the mat. Pencil marks may transfer to the artwork.
- Change your cutting surface frequently. Little grooves left by previous cuts can pull the blade off course.
- If the cutter is difficult to push or flares out at corners, the blade is set too deep. If the cutter is hard to set in the board, check for a broken tip.
- Use a light touch when cutting, and never cut on a hard surface; the blade will break.
- A print can "pop up" through the window unless the mat overlaps all four sides by at least $\frac{1}{8}$ inch. The "pop up" is due to expansion and contraction of the paper caused by changes in humidity.
- Always position the straightedge to the left of the cutting line.
- The mat cutter may show a slight tendency to snag at the end of the last cut. Correct this by filing the leading edge of the cutter.

Assembling the Mat

After the window mat is cut, it must be attached to a backing board. Always cut the backing board to the same size as the window mat.

Using linen tape, hinge the backing board to the window mat so that the boards open like a book. (Don't use masking tape, which will become brittle and may contaminate your print.) Place the backing board face up and the window mat face down, with their top edges butted together. Cut the linen tape about one inch shorter than the top edge, and moisten it. Lay the tape along the seam created by the edges of the two boards and crease it with the burnishing bone. Close the mat like a book, quickly checking the corners for perfect alignment and for any necessary adjustments.



Linen tape hinges window mat to backing board.

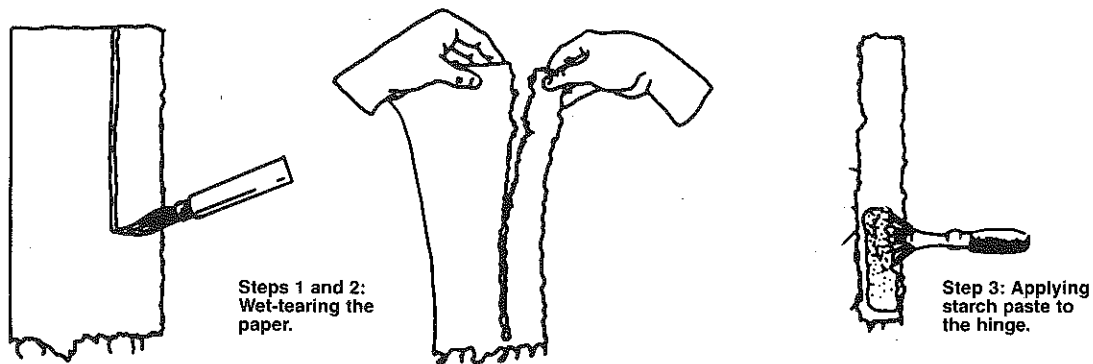
Attaching Artwork to the Mat

Now that the window mat opening is cut and the backing is attached, your next step is to decide on the most appropriate way to attach the artwork. There are many variables to consider. Following is a list of the most common methods used.

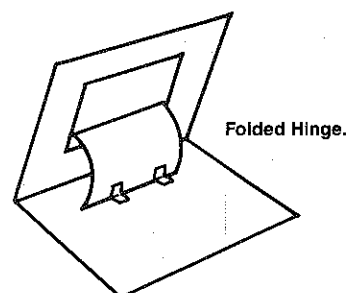
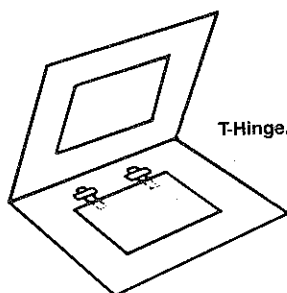
1. Museum Hinging
 - Rice paper hinges and mounting starch
2. Mounting Corners
 - Paper Photo Corners
 - Clear Mounting Corners
 - Cut-To-Size Paper Corners (larger, for additional support)
3. Acid-Free Tapes
 - Acid-Free Linen Tape
 - Acid-Free Paper Tape
 - Filmoplast P
 - Filmoplast P-90
4. Dry Mounting
 - Heat Mounting Tissue
 - Cold Mounting Film (Positionable Mounting Adhesive)
5. Mounting Strips
 - Clear Plastic Strips
 - Paper Mounting Strips
6. Wet Mounting
 - PVA Adhesives
 - Sure-Mount Adhesive
7. Other Adhesives
 - Photo-Mount Spray Adhesive
 - Adhesive Transfer Tape #924
 - Double-Coated Film Tape #415
 - Gudy-O Stickers

NOTE: For further details, see our "Mounting Techniques" information booklet.

**MAKING A
PAPER HINGE**



Step 4: Hinging
artwork to back-
ing board.



More information on matting and mounting can be found in the following books:

A Fully Illustrated Guide to Matting and Hinging of Works of Art on Paper: A Step-By-Step Instruction Manual for Artists, Collectors, Dealers, Framers, Merrily A. Smith, Editor.

The Art of Creative Matting: Techniques, Design, Applications, and Pricing for Profitability, Sean Hunt and Valerie McClure.

The Life of a Photograph: Archival Processing, Matting, Framing, and Storage, Laurence E. Keefe, Jr., and Dennis Inch.

How to Care for Works of Art on Paper, Francis W. Dolloff and Roy L. Perkinson.

Most of the products and books mentioned in this brochure are available from Light Impressions. Write for a free copy of the *Light Impressions Archival Supplies Catalog*.

An informational brochure from Light Impressions. Additional free copies are available upon request.

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