

Mastering Mounting



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Embossed Mats: Utilizing Mounting Skills

In last month's column, I wrote about utilizing mounting skills to create a wrapped mat. I discussed the facts that either solid-colored matboards or foam-centered boards can be used as a substrate for the wrapped window mat; that they may be dry mounted or wet mounted; and that both paper and fabric work well as the wrapping material. Once the basic concept of wrapping is understood, stepping up to a more elaborate embossed design is merely the introduction of another step.

Embossing, Debossing, and Relief

Embossing is the technique of creating raised figures, or designs in relief, on various surfaces. The actual process of embossing onto leather, paper, metal, wood, or under cloth (as on book covers) is usually achieved by stamping the surface between a set of rollers with a pair of matched dies (or patterns). The pattern is then pressed from the underside into the intaglio die (or template) onto the face.

When an image has a varied three-dimensional pattern on its surface, it is known as a relief. These reliefs are subclassified according to the degree of projection. In high relief, also

known as deep relief, the figures project at least half of their natural circumference from the background. In low relief, or bas relief, the figures project only slightly and no part is entirely detached from the background, such as relief seen on coins. Between these two categories is middle relief, or demirelief, which, depending upon your degree of proficiency and execution, is where embossed mats would most likely fall. The lowest of all relief, when the projection is scarcely as thick as a sheet of paper, is known as crushed relief.

There is also a reverse relief, called hollow relief, in which the embossing lies in an area that has been hollowed out below the base plane of the art, or mat in this case (see Diagram 1). This technique of reverse embossing has also been called debossing because it is a relief in the opposite direction away from the original plane of the art (see Diagram 2).

Though embossing may be done with inks and coloring as in an etching press, when there is an absence of ink it is known as blind embossing. The concept of inkless blind embossing is what we do when wrapping mats with decorative papers and fabrics that have been enhanced by a raised design with no additional color (see Diagram 3).



Photo 1: Floral Motif—A decorative embossed sample project showcases upper-end techniques that can spark extreme customer enthusiasm and motivate sales. (Sample furnished courtesy of Elmer's Products.)



Photo 2: Floral Detail—This close-up shows a decorative embossing that could be considered invasive to the open edition print. Avoid this level of embellishment in fine art applications.



Photo 3: Clashing Textures and Patterns—Heavily patterned fabrics or textural papers (far right) will clash with embossed designs. Solid colors, subtle patterns, and mild textures such as the cranberry suede (far left) and the natural linen (center) allow the embossing to be maximized.

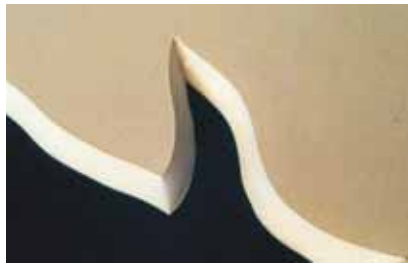


Photo 4: Clean Bevel Cutting—Select a foam center board that will stand up to bevel cutting for a clean window wrap. Porous boards such as acid-free surfaces papers and uncoated boards are best because of their porosity.



Photo 5: Using Old Blades—Same brand of foamboard demonstrated in Photo 4, but cutting was done with an old blade which snagged and pulled the inside.

Decorative Embossed Designs

The practice of hand wrapping window mats for all types of artwork—both decorative and fine—has been used for decades. By selecting the correct neutral pH and preservation-quality materials, you can use both wrapped mats and embossed mats to enhance fine art. For all types of art, the design of an embossed mat should remain simple, tasteful, and non-invasive. The difference between gently enhancing the art and overdesigning a piece of artwork can be difficult to gauge at times. As with other framing design techniques, surrounding mat surface embellishments or embossed designs should be held to a minimum so as not to overpower the art.

The embossed mat design in Photos 1 and 2, for instance, crosses the boundary of merely enhancing and protecting the art. It turns the presentation into decorative art, rather than fine art, which may be acceptable as long as the image is an inexpensive, open edition print.

Textures and Colors

The embossing technique utilizes a delicate design accented by the highlights and shadows created through three-dimensional designs and multiple layers. Hence, heavily patterned fabrics or textural papers have a tendency to clash with, and in some cases nearly obliterate, the embossed designs (see Photo 3). By selecting solid colors, subtle patterns, and mild textures for the wrapping materials, the resulting mat will be a superior visible design.

Whether mounting onto a 4-, 8-, or 12-ply mat-

board, consider the color of the board for the window mat as well as the board for the pattern and template. If using a sheer fabric or thin paper that is white, off-white, or a light color as the wrap, take note that a dark board as a substrate, or pencil markings from drawing the embossing design, will ghost through after mounting. Likewise a dark scrap mat used for the pattern against a white foam window mat will also bleed through thin materials.

Substrates

When foamboard is the substrate of choice for the mat window, it must be cut to result in a very clean bevel edge with little or no bunching or pulling (see Photo 4). There are numerous reasons foam bunches up when cut. A dull, burred, or broken tip blade; a blade not extended far enough, or too far; or a foamboard with a soft center prone to pulling will all create frustration. The same foamboard was bevel cut for Photos 4 and 5, but an old blade was used for the sample in Photo 5.

Acid-free foamboard has been used here because of its natural toothed surface. Its porosity has greater tendency to

hold when mounted regardless of the adhesive used. Black core boards also wrap very well due to their toothy surface.

Adhesives

For this technique, a pure film adhesive such as Fusion 4000, Flobond, or Acid Free Mounting Adhesive is used because of its lack of a tissue carrier when mounting in a dry mount or hot vacuum press. The pure film melts easily to conform around odd shapes without resistance. It is clear,

Diagram 1: The image area is often recessed into a concave shape with the embossed image projecting from the back forward, but still behind the base line.



Diagram 2: Example of heavy paper with embossed and debossed designs.

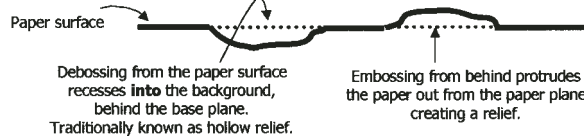
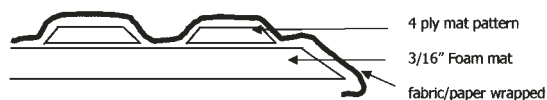


Diagram 3: Foam with pattern applied, wrapped with fabric or decorative paper.



may be pieced, and is removable by reheating, if necessary. Film adhesives bond as they cool, which allows for a little additional time for detailing around the embossed design with a bone burnisher after mounting.

If using cold mounting methods, the steps and template concept may be slightly altered, but will essentially remain as described for heat and dry mounting.

Cold mounting with wet glues allows for mounting over three-dimensional objects by hand that cannot be accomplished in a press. Wet or spray glues are often used in conjunction with bone burnishers to work fabrics into intricate patterns. Beautifully executed embossed mats may have accented narrow strips of moulding or fillets under the fabric to echo patterns of an outer moulding, but these must be done by hand.

Many of the wet glues used for this process reactivate when heat is applied after they have dried. These then will allow for the same basic procedures as listed above. After the project is dry, the bevels may then be ironed to reinforce them as with dry mounting films, though they will most likely be well attached already. The window opening fabric is removed and the tabs are ironed to the back in the same step-by-step manner as was done for a regular wrapped mat in last month's column. (See *PFM*, June 2004, "Mastering Mounting. Or visit the "Latest Issue" section of the *PFM* website.)

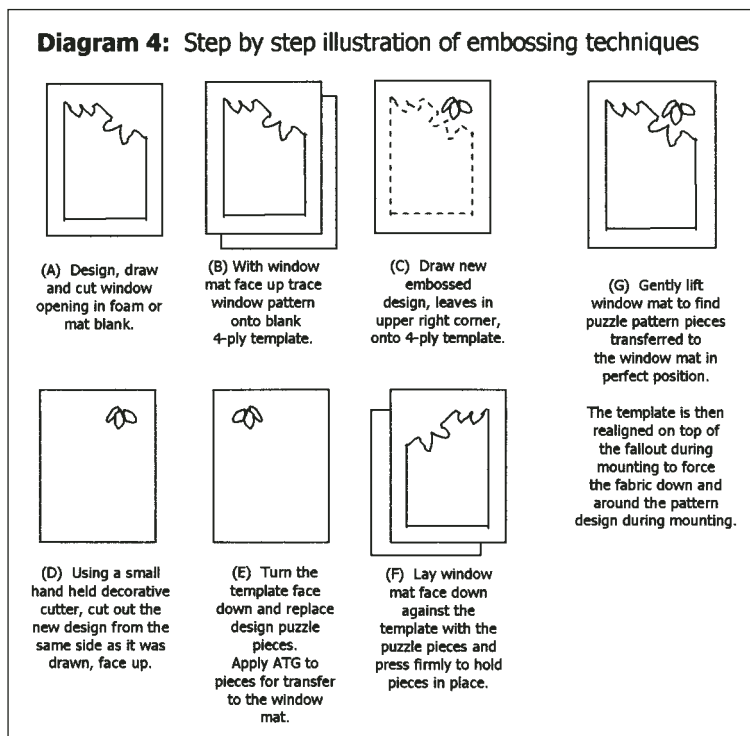
Embossing: Step-by-Step

Since foamboard is an insulator, rather than a conductor, of heat, a 4-ply matboard is used as the pattern/template. This is because the heat from the press platen is able to travel through the template to reach and activate the adhesive beneath it when bonding the wrapping material to the foam mat. Also, the contrast depth between a $\frac{3}{16}$ " window bevel and a 4-ply embossing looks fabulous.

Diagram 4 illustrates the process as it was performed for the embossed leaves design seen in Photo 1. Size the window mat and template blanks to be exactly the same size



Photo 6: Template, Fallout, Mat (l to r)—Mat wrapped with natural-colored Kozo rice paper using a wrinkled paper technique.



and shape (see Diagram 4A). Cut the window opening; then trace the shape of that cut window through the face-up window onto the piece of 4-ply matboard to be used as a template (4B).

Draw the desired embossed design onto the 4-ply template (4C) and cut the pattern with a handheld decorative mat cutter, like a Dexter Mini Mat Cutter.

There is no reversing needed when drawing and cutting this

embossed pattern if done as described in these steps.

Cut the pattern on the same side the pattern has been drawn, keeping your hand inside the opening (4D). Now turn the template face-down and reassemble the puzzle piece cutouts (4E). Apply a small piece of ATG tape to each of the puzzle pieces in preparation for transfer to the window mat.

Align the window mat perfectly square to match the template and turn it face-down against the template, pressing against the cut pattern pieces so they

adhere to the window mat (4F). When the window mat is lifted up, the pattern pieces will have transferred to the mat, temporarily held in place by the pieces of ATG tape. The template will then be used during mounting as a perfect overlay to compress the fabric around the design (4G).

Hot Dry Mounting

The actual mounting technique for dry mounting an embossed mat is the same as when creating a simple wrapped mat. However, here the template is added to the mounting sandwich prior to being placed in the press.

Preheat the press to 190°-200°F. Pre-dry the materials if mounting in a mechanical press. Stack the mounting package bottom to top—release paper; embossed window mat; film dry mount adhesive, or wet glue; fabric or decorative paper for wrapping; fallout; embossing template; and release paper, or board (see Photo 6). Do not use a release board on the bottom.

In a vacuum press, always place a release board on top when mounting to help hold the fallout and template in place while exposed to the suction of the vacuum. Mounting

time will vary depending upon the size and number of boards in any particular embossing project. After mounting, cool under a weight; trim surplus fabric from the window opening; miter tab corners; iron the bevel to melt all adhesive; lay face-down and iron tabs smoothly to the back of the window opening as shown with the basic wrapped mat in last month's column.

A small, pointed tacking iron used in regular dry mounting is recommended, along with a larger household iron in reserve, for remelting the adhesive along the inner bevels and turning back the inner window flaps. A household iron works well for bevel ironing and flap turnbacks because it is heavy and large, allowing for coverage of a greater area. Set the iron just below "wool" for it to heat to the minimum of 190°F required to melt many film adhesives. If set directly on "wool" it will get too hot, damaging the foam that will begin to melt at 230°F.

Pricing

When pricing a wrapped mat, add the price of the fabric to the price of the window mat; take into consideration overhead, mounting costs, and additional labor. The same holds true for an embossed mat, but there are additional materials required. Add charges to cover additional mat templates that are discarded after mounting; in the case of a double embossing, there are two sets of templates for one wrapped mat. Extra design charges should be levied for design time and labor.

Basing the charges for wrapping on suggested manufacturer prices is a good place to start; for embossing, add a design charge for the time to cut, assemble, and finish. Don't forget the extra materials needed when calculating an embossed project price. It is a good idea to test price a few basic sizes (16"x20", 20"x30", 32"x40") then compare it to a pricing chart for specialty mats. If it falls comfortably into a three to four times the price, use that

structure. If you charge by design time, estimate the time to cut the embossed design; then automatically add another hour for extra materials. Showcase embossed mats in wall displays and have small 8"x10" samples on hand. This "touchy-feely sales" technique can be a real winner. ■

Note: Excerpts in this article on embossed matting techniques have been taken from "Creative Mounting, Wrapping and Laminating," by Chris A. Paschke, CPF, GCF available from the PFM PubCo Bookstore.

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