# Wrapped And Embossed Mats Part I: Wrappping

In the hierarchy of framing techniques and practices, there are many basic procedures that should always be included in the repertoire of any successful framer. Painted bevels, multiple opening mats, decorative corner cuts, and wrapping mats are all basic, yet excellent ways to increase sales and give a creative edge to your designs.

Creating a basic wrapped mat is quick and easy, especially when using dry mount films. Taking it one level higher—to an embossed wrapped

mat—simply adds another step to the basic wrap and is the ulti-

mate in custom matting.

This two-part article will take you through the basics of wrapping a mat, while clarifying a few confusions.

# What Is Embossing, Exactly?

Embossing is the technique of creating raised figures or designs in relief on a surface. 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 in a press with a pair of matched dies (or patterns). The relief die, or pat-

tern, presses from the underside into the intaglio die or template, in the obverse.

Reliefs are classified according to 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



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

relief, or bas relief, the figures project only slightly and no part is entirely detached from the background. Coins are an example. Between these two is middle relief, or demirelief, which (depending upon your degree of proficiency), is where embossed mats 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 (diagram 1).

Hollow relief is designed to create an illusion of depth and roundness within sculpture and dates back to the Greeks and Romans. 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 (diagram 2).

Though embossing may be done with inks and coloring, such as with an etching press, when there is an

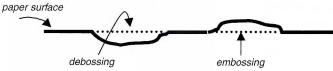


Diagram 2: An example of heavy paper with embossed and debossed designs. Debossing from the paper surface recesses into the background, behind the base plane. Embossing from behind protrudes the paper out from the paper plane, creating a relief.

absence of ink it is known as blind embossing. One example of inkless blind embossing is when we wrap mats with decorative papers and fabrics that have been enhanced by a raised design with no additional color.

#### Designing For Fine Art Vs. Decorative Art

There is a fine line between overdesigning for a piece of artwork and showcasing the possibilities of your shop's design talents (photo 1). Selecting an embossed design integrated into the artwork, as in this project, crosses the

boundary of merely enhancing and protecting the art. This design actually invades the print, turning the framed presentation into decorative art rather than fine art. As an instore sample this piece would dramatically showcase upperend technique and design abil-



Photo 1: "Embossed Magnolias" is a 20" x 24" wrapped and embossed triple matted design shown courtesy of HUNT Corporation. It is triple matted using 3%" and ½" acid free foam board enhanced by 4-ply embossed designs.

ity that would spark extreme customer enthusiasm and motivate sales.

Embossed designs chosen for fine art should be much more subtle to work gently with the art to enhance and protect and never overpower it. Always take into account the degree of acidity and lightfastness of any chosen decorative papers or fabrics. Many beautifully colored materials that are dyed rather than pigmented can rapidly fade, even under normal tungsten lighting.

#### The Sample: "Embossed Magnolias"

Using both matboards and foam boards for embossed mat designs allows for a variety of wrapped mat thickness to be used as contrasts (diagram 3). Using 4 ply, ½", and ½6" variations in bevel thickness can help set off slight

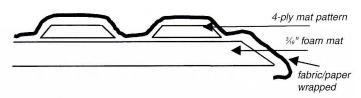


Diagram 3: Foam with pattern applied, wrapped with fabric or decorative paper.

embossed designs. Subtle use of highlight and shadow, the original concept behind relief artwork, may then softly and quietly accent the artwork being framed.

The sample used in this article began as a limited edition print by Burton Dye called "Magnolia Blossoms," and was commissioned by Hunt Corporation, producer of the acid free foam board used in this project, to showcase design potential through embossing. This has been chosen to represent a sample of decorative art, where the framing makes as big a statement as the art itself. The image is framed 20" x 24" using Larson-Juhl X2815 moulding with a triple wrapped and double embossed mat combination.

The bottom window mat is cut in a pattern at the upper and lower corners to reflect the leaves in the background. Then embossed leaves are added with 4-ply matboard atop the leaf shape to accent the dimensionality

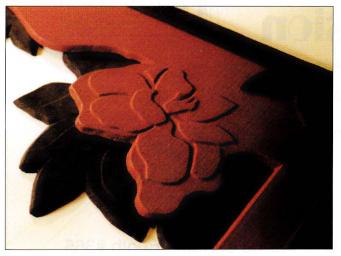
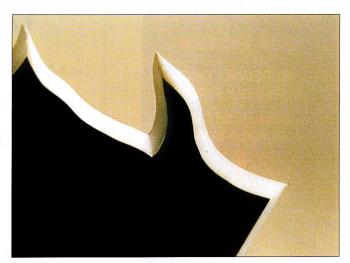


Photo 2: This detail clearly shows the dimensionality of embossing on top of the wrapped base foam mat. By using various thicknesses, there is greater highlight and shadow created.



4A: Notice the extremely clean cut bevel with no irregularities in the



Photo 3: The initial design ideas begin by matching fabrics and sketching floral ideas on tracing paper for later transfer to boards for hand cutting.

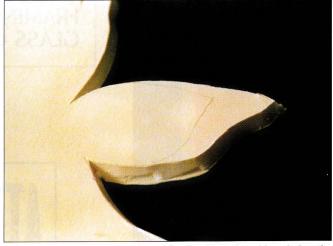


Photo 4B: This detail bevel cut clearly shows bunching during the hand cutting.

(photo 2). The middle mat is wrapped and double embossed, embossing on top of embossing, for additional three-dimensionality for the flower petals and stamen.

The two fabrics were selected to pick up the colors within the image and to vary the textures within the design (photo 3). A soft hunter green velour was chosen for the bottom and top mats to reflect the leaves, while a muted rose linen was used to wrap and emboss the middle mat, to meld with, yet extend the background.

#### Foam Board, Adhesive And Other Materials

The foam board chosen for wrapping must be capable of

cutting a very clean edge with little or no bunching or pulling (photo 4A). There are numerous reasons why foam will bunch up when cut. A dull, burred or broken tip blade; a blade not extended far enough or extended too far; or a foam board with a soft center prone to pulling; will all create frustrations during cutting. The foam bevel cut in the photo is the same brand in both A and B, but the bunched bevel was cut using a bad blade (photo 4B).

Acid-free foam is used for this project because of its natural toothed surface. Its porosity has greater desire to hold when mounted regardless of the adhesive used.

Black core boards also wrap very well, but unfortunately are not generally designed as upper-end acid-buffered materials.

A pure film adhesive (i.e.; Fusion 4000, TM-3, Flobond, FlexMount, Acid Free Mounting Adhesive, Versamount) is used throughout this project because of the lack of tissue carrier. The pure film melts easily to conform around all odd shapes without resistance. In this case Seal Fusion 4000 was used. It is clear and pieceable, may be removed if necessary by reheating, and will bond as it cools, allowing for any additional detailing time around the embossed design with a bone burnisher after mounting.

A small pointed tacking iron is highly recommended with a larger household iron in reserve for remelting the bevels and turning back the inner window flaps. Any mechanical or hot vacuum press may be used to activate

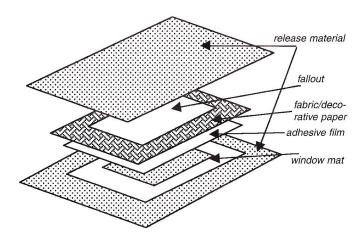


Diagram 4: A wrapped mat stacked into a sandwich for mounting. Remember the fallout.

the film adhesive. If using a vacuum system it is recommended to place a release board or scrap matboard on top of the mounting sandwich to help hold the fallout in place during draw of the vacuum.

Embossing may also be achieved with wet or spray glues and a cold vacuum frame. The technique remains the same as far as patterns and templates, but the times and touch up will vary. Always remember the elements of



Photo 5: Lay the mounted mat face up on a cutting surface, and trim away the window opening following the design and leaving -1" for turnback.

TTPM (Time, Temperature, Pressure, Moisture).

#### Mounting Wrapped or Wrapped/Embossed Mats

Let's review the wrapping of a 4-ply or foam board mat in a heat press. It is extremely quick, painless and profitable. First cut the window mat, then stack (from bottom to top) the release material, mat, adhesive, fabric, fallout and release material into a sandwich (diagram 4). The release materials are always there to protect the press platen, or glass, and base from adhesive migration.

When embossing, the stack also includes the template that the embossed pattern is cut from. Detailed embossing techniques will be discussed in Part 2 of this article.

The fallout is essential to the equation for success. The fallout will force the paper or fabric down into the window opening to establish the shape of the bevel. Once the stack is removed from the press, with the mat face up, cut the fabric following the pattern of the window mat leaving approximately ¾" of material for wrapping (photo 5).

Miter all straight side corners and slit all curves to allow material to smoothly contour around the shapes. When mitering the corners cut close enough to cleanly fold back the material into a nice 90° bend but don't

overcut so the raw foam beneath is exposed. On curves the slits should be cut close enough again for a smooth transition. Between ¼" to ¾" apart is a good average for the slits.

When wrapping foam board, as opposed to matboard, the foam acts as an insulator rather than a conductor of heat. The adhesive will rarely melt to the entire bevel of foam. After trimming away the extra fabric from



Photo 6: Iron the bevel to reactivate unmelted adhesive.

within the window, ironing the bevel will melt any unbonded adhesive to ensure a clean smooth bevel wrap (photo 6).

The two tricks that ensure a successful wrapping are first, to remember to fit the fallout back into the window opening prior to mounting to establish the bevel, and second, iron or reinforce the bevel after trimming to better melt the adhesive and mount it.

#### Finishing the Wrap

When the bevel is ironed and all the corners are flat, clean and nicely pressed, turn the mat face down and proceed to ironing the flaps or turnbacks to the back or inside of the mat window. With the mat face down begin at the center when turning back the tab to complete the wrap and work toward the corners. Pull lightly from the

center toward the outside mat border as you work into the corners. This prevents most bevel puckering.

One of the best things about removable adhesive is having the option to reheat and shift small puckered bevels even after turnbacks have been ironed to the back of the mat.

Never set a household iron too hot. Foam board melts at 230°F, so setting the iron just below the level indicated for wool melts the adhesive and not the foam. Too far off wool won't melt the adhesive.

#### Pricing

When calculating the pricing of a simple wrapped mat, consider the materials and time involved, then add in specialty and expertise. A wrapped mat completed in a heat press should include an additional mounting charge to any standard wrapping charges. Often suggested retail pricing is available through any industry fabric supplier or distributor price lists. Sometimes it's as simple as doubling or tripling a specialty mat column, but always verify that all materials are well covered and profits are added in. Framers rarely charge too much.

As with any technique, the beauty in true custom framing is the excellence and skill with which the framing is completed. Never offer a technique (including wrapped mats) while it remains in its learning stage, and then don't offer it as an in-store sample unless you really want to do it.

Then again, if you never give it a try you'll never learn or realize how easy it is to do. Next month we'll complete the wrapping picture with the addition of embossing.

Chris A. Paschke, CPF, GCF, owns Designs Ink, Oxford, Connecticut, featuring commercial and retail custom framing, product consultation, design and education. Specializing in mounting, matting and design creativity she works with numerous industry leaders, and released her first book, The Mounting and Laminating Handbook, in 1997, available through PFM.