

# Wrapped and Embossed Mats

## Part II: Embossing

by Chris A. Paschke, CPF, GCF



Last month we reviewed basic wrapped mats. This month we will complete the triple-matted, double-embossed sample, “Embossed Magnolias” (photo 1). The basic concept of wrapping remains the same, there’s just an additional step in execution. The difficulty is not in the wrapping itself, but rather in the design aspects.

### Design Limitations and Dollars

During the analysis stage of design, the potential limitations of the design must be considered in relation to the materials, time frame, or budget of the customer. Since embossed designs are capable of bringing in much higher dollar sales, this should be a major consideration.

A simple wrapped mat adds the price of the material being wrapped to the price of a window mat, taking into consideration adhesive costs and labor. In this particular piece the same holds true for embossing, but there are additional materials required that do not show up



Photo 1: “Embossed Magnolias” shown courtesy of Hunt Corporation, Bienfang and Seal Products.

in the final framed project. Charges must be added to the job to cover the extra mats used for templates that are discarded after mounting; in the case of a double embossing, there are two templates for one wrapping of a mat.

Basing your charges for wrapping on suggested manufacturer prices is a good place to start. But for embossing add a hefty design fee for the time esti-

## mastering mounting

mated for designing, as well as the cutting, assembly and finishing. Don't forget the extra materials needed when calculating an embossed project price.

A good idea would be to test price a few basic sizes (16" x 20"; 20" x 30"; 32" x 40") then compare it to your pricing chart for specialty mats. If it calculates comfortably into three to four times the price, use that structure.

If you charge by design time, estimate the time to

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cut the embossed design, then automatically add another hour for extra materials. Keep in mind that intricately cut samples in the store showcasing your talents will sell embossed mats for you with very little work on your part. Upper-end custom design like embossing ought to cost the customer more: champagne taste need not be Dom Perignon but shouldn't have to be Andre either.

### Materials

A few notes on board selection. Any thickness of cardboard mat, 4-ply, 8-ply, 12-ply or higher, or any thickness of foam board ( $\frac{1}{8}$ " and  $\frac{3}{16}$ ") may be used to create additional dimensional variations in an embossed design. The window mat may be any depth for effect, as can the embossing; but remember, the thicker the board the more difficult it is to bevel cut.

Also, be certain the selected board is capable of being

bevel cut with a professional level straight line mat cutter or hand cutter. I would love to wrap a bevel cut from  $\frac{1}{2}$ " foam board, but have not located a mat cutter designed to handle that depth. Deeper bevels may be achieved by stacking  $\frac{3}{16}$ " foam board window mats that have been cut independently, but that's another issue.

Consider the color of the board selected for the win-



*Photo 2: The close-up of the embossed flower shows two additional small embossed pieces layered on top of the already embossed flower beneath. This is done by merely adding a second pattern and template to the project.*

dow mat as well as the board for the pattern and template. If using a sheet fabric or thin paper in white, off-white or light colors for the wrap, a dark board 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.

### Designing, Transferring and Cutting

All mats and templates must be sized prior to beginning the design. For this project, three foam board mats will require three matching sized templates to complete the embossed designs. A  $\frac{3}{16}$ " Bienfang Acid Free Foam Board is used for both the bottom and middle mats, while a  $\frac{1}{8}$ " is used as the top mat. The bottom mat needs one 4-ply template for a single level embossing, while the middle

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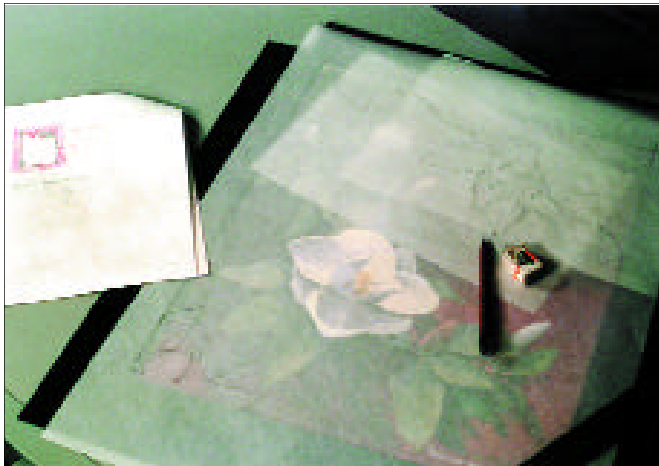


Photo 3: Cover the image with large tracing paper, and design the shapes with a soft 5B art pencil.

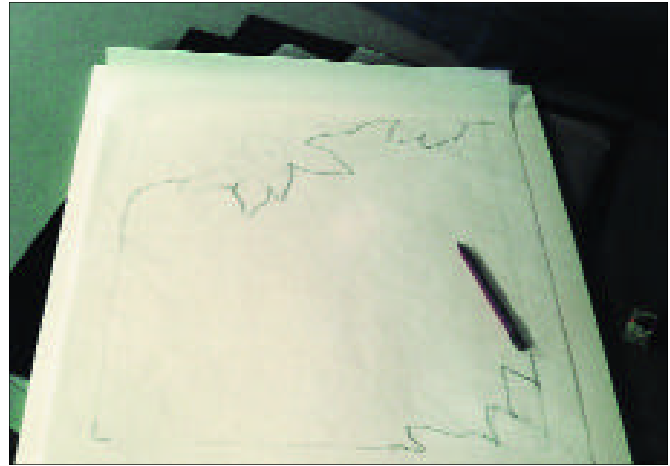


Photo 4: Invert tracing paper (face down) to reverse the pattern for cutting from the back of the foam blank.

flower mat requires two same-sized 4-ply templates to complete its double embossing (photo 2). The top mat has no embossing, only a free-form wrapped window mat. Using 4-ply board as the pattern/template rather than foam allows the heat from the platen to reach and activate the adhesive beneath it. Foam would act as an insulator.

Large sheets of tracing paper are used to lay out the desired mat shapes (photo 3). Draw the designs with a 5B soft lead art pencil so the graphite will easily transfer to the clean mat blank. Size the foam board blanks; they must all be cut exactly the same. Invert the tracing paper onto the sized foam blank (opposite from the desired design,

photo 4). Carefully trace the pattern to the back of the foam to be cut into a window mat. The graphite from the soft lead pencil on the other side will easily transfer the design to the board for cutting.

Once the special design has been drawn, cut all straight mat borders on a professional straight line mat cutter for accuracy. Always use a new, thin 1200 double-sided blade when bevel cutting foam board. Overcutting is highly encouraged for two reasons: first, to ensure the

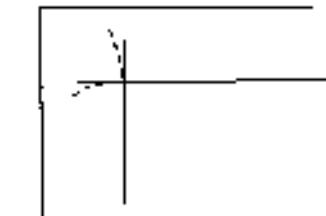
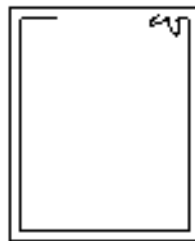


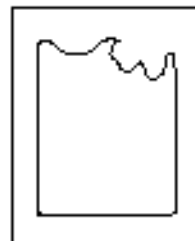
Diagram 1:

Hooks will correct by the time they reach the corner, if overcut.

Diagram 2:



Top mat 1/8" foam, no embossing.



Middle mat 3/16" foam, with single embossing.



Bottom mat 3/16" foam, with double embossing.

corner is cut through cleanly and need not be trimmed out, and secondly, because of the over-extension of the cutter blade to help correct hooks (diagram 1).

These mats are 3/16" foam cut with borders 2 3/4" for the bottom; 2 1/4" for the middle; and a 1/8" foam board with 3/4" wide borders for the top (diagram 2). Always cut all straight sides prior to completing any hand cutting. It is much easier to smoothly transition from a straight into a curve than from a curve into a straight. Always remem-

# mastering mounting

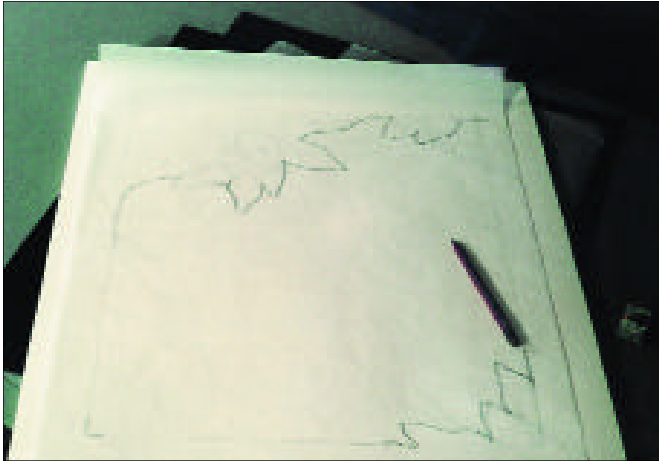


Photo 5: Trace the window opening onto the perfectly sized 4-ply template for designing the embossing pattern. This will give you near exact placement. Do take into account the 3/8" bevel when designing.

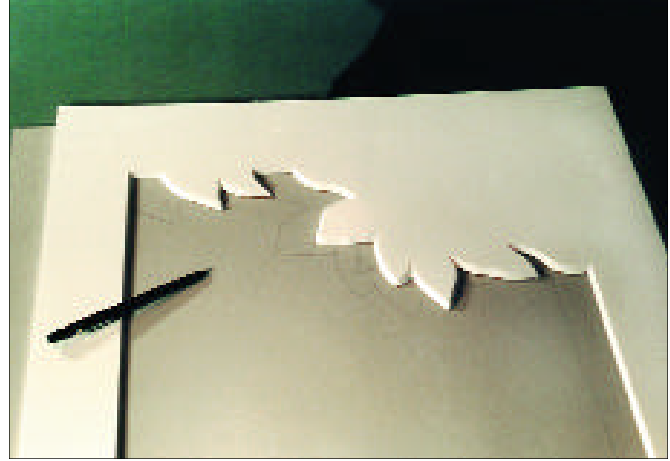


Photo 6: The pattern pieces will be transferred to the window mat with a perfect matching template overlay for later mounting.

ber to cut with your hand inside the opening of the window, otherwise the bevel may be slanting in the wrong direction from the straight line cuts.

## The Embossed Patterns and Templates

Looking at the project as a whole, these mats are cut bottom first, then middle, and finally top. They are not cut stacked as with traditional 4-ply triple mats, but rather one at a time. That way the patterns can be traced and checked for overlapping, integration and overall design. For this reason, the mat cutter must be dependable and

extremely accurate, and all boards must be sized exactly the same in order to work. All mats are cut from the back as usual.

Now let's look at the design and execution of one for a better understanding. After the basic window is cut in

Diagram 3. Reviewing the steps for creating an embossed mat.

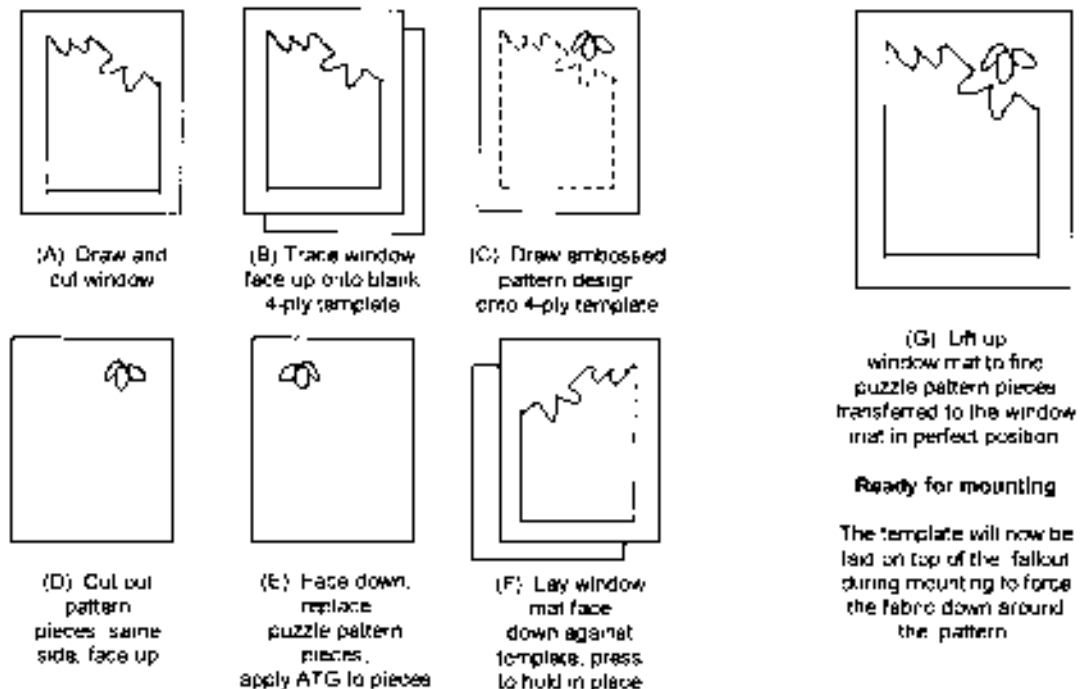




Photo 7: In preparation for mounting, stack the embossed window mat face up, layer with adhesive, fabric, fallout and template. Place all inside a release envelope and mount at 190-200°F for two to five minutes.



Photo 8: Double three-dimensional embossing requires two templates when mounting.

the foam either straight or free form (diagram 3A-G), turn that window mat face up to reveal the pattern as drawn on the top right (photo 5). Trace the shape of the window (face up) onto the piece of 4-ply mat to be used as a template (B). This will give a perfect pattern to determine where to place the embossed design. Draw the desired design onto the 4-ply template (C) and proceed to cut the pattern with an accurate handheld decorative mat cutter such as Dexter Mini Mat Cutter or Dahle Cube. There is no reversing needed when drawing and cutting this embossed pattern. Trust me on this one.

Cut the pattern as designed, on the same side the pattern is drawn on, with your hand inside the opening of each pattern piece (D). That means the pencil line to the left of the cutter blade. The bevel will be slanting in the correct direction for the embossing. Turn the template face down, drop the pattern pieces back into place like a puzzle (E). Apply a small piece of ATG tape to the

puzzle pieces in preparation for transferring them to the main window mat.

Align the window mat perfectly square to match the template and turn it face down against the template (F).

When the window mat is lifted up, the pattern pieces will have transferred to the mat temporarily held in place by the small pieces of ATG tape (photo 6). The template will then be used during mounting as a perfect overlay to compress the fabric around the design (G).

The template will be used during mounting as a perfect overlay to compress the fabric around the design.

### Mounting an Embossing

The technique remains the same for dry mounting an embossed mat as a simple wrapped mat, but this time the template must be added to the mounting sandwich prior to putting in the press. From bottom to top: release paper, window mat with embossed pattern ATGd in place, adhesive, fabric, fallout, pattern template, top release material (photo 7). As with the wrapped mat, a release board is recommended if using a vacuum press to



Photo 9: Once completed, all mats may then be assembled into the design. Templates will be discarded.

help hold the fallout and templates in place. Mount for two minutes in a mechanical press, four minutes in a vacuum press, at 190 to 200°F. Mounting time will vary depending upon the size and number of boards in any particular embossing project.

If double embossing (photo 8), as the flower on the middle mat, a double template layer will be required to press down around each. If the templates and fallout are all aligned perfectly prior to mounting and remain as placed, the resulting embossing will not require any additional finishing or detailing.

If, however, the layers shifted when moving them to the press, the embossing may not be as clean as desired and cleanup with a tacking iron and bone burnisher will often correct the error. Don't rush. It is not difficult, but it is exacting. Everything must line up and fit together like a hand in a glove.

### Mat Finishing and Assembly

After mounting, trim surplus fabric from the window opening miter tabs, iron the bevel to melt all adhesive, lay face down and iron tabs smoothly to the back of the window opening (See Part I, March [PFM](#)). Once completed the mat may now be assembled into the frame (photo 9). The three mats in "Embossed Magnolias" are ATG taped together for placement and then hinged to

the backing support for the print. The narrow top mat serves as a small spacer to level the surface of the embossed mat so it fits level into the moulding rabbet. If a top mat was not selected as part of the design, commercially manufactured spacers or strips of 4-ply matboard could be used as spacers to even it out.

### Embossing Options

There are a number of variations on the approach to embossing a mat. If cold mounting methods are selected, the steps and template concept may be changed. If the embossing is not a two-dimensional board but rather an object, there will not be a template to compress around the shape in a vacuum press. Sometimes extra layers of overlay foam may work to compress around the image, but often the technique must be done by hand.

### Let's Wrap It Up

Whether hand or machine pressed, using wet, spray or dry mount adhesives, a well-executed embossed design is exquisite. Once a basic wrapped mat is understood, turning one into an embossed delight only requires taking the time to sell the idea. Samples will sell them for you, and they are only as intricate or simple as you design them. There are customers to wow. Get in there and emboss your heart out!

"Embossed Magnolias" may be seen during the 1998 show season courtesy of Hunt Corporation, in their booth. Stop by and check out the real thing. The colors are even better than my photographs and the double embossing is worth the visit. ■

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