## **Embossed Fabric Mats**

by Chris A. Paschke, CPF



Chris A. Paschke, CPF is the owner of Designs Ink in Oxford, Connecticut, specializing in commercial framing, design, consultation and education. Ms. Paschke is a second generation, self-employed professional picture framer who teaches, lectures and demonstrates at various workshops and seminars on mounting, matting and design for manufacturers, distributors and associations including Bienfang, Dahle, Fletcher-Terry, PFM, PPFA, TruVue/Miller Artboard, and Seal Products.

mbossing is the process of ✓ creating a surface design by embellishing, decorating, otherwise enhancing an existing surface with raised ornamentation. Embossing may be achieved by using fine art papers and an etching press, through various relief techniques including deep relief, bas relief, or demirelief. The same effect may also be obtained with wood carvings, relief block prints or collographs. Some of these methods use ink in addition to the embossing, while others are inkless, called blind embossed.

A basic 4ply matboard may be decorated with bevel cut patterns or shapes, and then covered with fabric or paper, to create a three-dimensional surface design, or embossed mat. The process of creating a wrapped embossed fabric mat is an inkless type of embossing, since only the raised patterns create the final design (photo 1).

In last month's mounting column, I reviewed the basics of wrapping a foam board mat with Leather-look papers by using a heat press rather than a spray or wet glue process. Fabric embossing may be completed by using many mounting processes, but using wet glue and cold vacuum frame, or film mechanical or hot vacuum press, appear to be most long lasting, dependable and time effective.

#### **Design Suggestions**

Embellishing a mat by embossing creates a three-dimensional design, one that is raised up from the base mat. Since the raised design creates additional highlights and shadows on the mat surface, this will add intensity to your list of design elements within a given project (see The Design Process in PFM this month).

Successful embossed designs run the gamut of subject matter. Representational designs (such as flowers and teddy bears) will accent a wedding invitation or birth announcement equally as well as a non-representational wrapped panel design (Diagram 1) will an antique photograph. Any time a wrapped mat must contour to fit a series of layers beneath the raised design, it is considered embossing.

#### Preparing The Pattern Template

It does not matter whether the base to be embossed upon is foam or matboard, the process remains the same. The mounting times and/or temperatures may vary depending upon the substrate and adhesive chosen for the process, but the procedure holds constant.

Size two mat blanks of equal dimensions. One will become the actual mat while the other will be used to create the embossed design and pattern template for heat mounting. Cut the base mat window opening. Since fabric will cover the completed mat, overcuts are tolerated and even slightly encouraged. When cutting foam bevels, overcuts help insure a clean 90 degree corner and helps eliminates bunching.

The featured project mat is a <sup>3</sup>/<sub>16</sub> " acid-free foam board cut at a bevel with a 48" straightline mat cutter. I

continued on page 48

continued from page 46

prefer to use acid-free or black foam boards during the heat wrapping processes because of the tooth of the board and its clean bevel cutting. Most any board appears to work, however. Foam was initially selected because of the added window bevel depth, which will contrast and enhance the 4ply emoossed bevel depth. Lay the cut foam mat on top of the pattern or template mat and trace the opening for pattern reference (photo 2).

Transfer or draw the design onto the uncut 4ply mat blank (which has been traced with the actual mat opening) and cut the pattern with a hand held cutter (photo 3). Either the Dexter Mini Mat Cutter or the Dahle Cube are preferred for 180 degree hairpin turn capabilities. As always, cut with your hand in the design opening to ensure proper and consistent bevel angles.

Overcuts where angled pattern lines come together are encouraged; they will insure a clean corner. The fallout will be used as the pattern; the mat blank where the overcuts remain is only a template to be discarded later (photo 4). Try to keep the floral design, teddy bear or panel all in one piece to simplify assembly (photo 5).

#### **Assembly And Mounting**

Realign the pattern their original cut outs face down, apply ATG tape to the pieces (photo 6), and press the prepared base mat or foam board on top. Press down firmly on the areas to transfer the pieces to the base mat. Invert the base mat burnish the pieces to reinforce the bond.

The pieces can also be dry mounted onto the window mat by pre-mounting film adhesive to the top of the pieces, trimming them to shape, and mounting them onto the Photo 1: Natural linen was used to wrap a 3/16" acid-free foam board (at right). The master template (at left) is required to insure good detail surrounding the raised ornamentation.

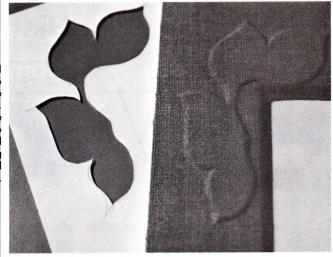


Diagram 1
Fabric ->



Window

A panel design mat using two 4ply mats creates a nonfigurative three dimensional pattern, perfect for delicate, classy accents.

Photo 2: There are approximately 3/4" overcuts in the upper right corner of the /16" foam mat. These will help prevent hooks from an overly extended cutter blade and foam bunching at the corner. Note the pencil lines on the template (left) indicating the actual traced window opening.

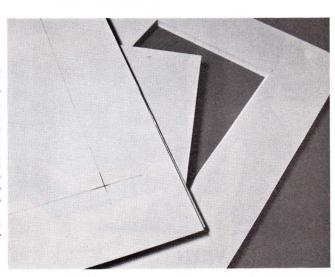
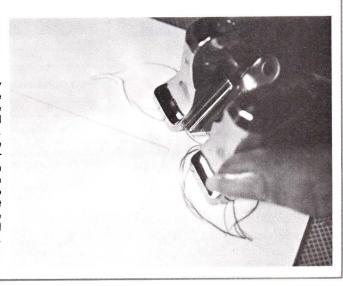


Photo 3: This 4ply mat template will be used first to cut the pattern shapes and then as a mold. When cutting the shapes, the cutter head must remain opening in order to achieve the correct bevel angle for the pattern piece and template.



continued on page 50

continued from page 48

base window mat. This alternative obviously entails an additional mounting step.

In preparation for mounting, remember both the basic TTPM (time, temperature, pressure, moisture) rules and the differences between mechanical and vacuum presses. Items must be predried and the pressure adjustments must be confirmed prior to mounting when using a mechanical press. A vacuum press will automatically draw the moisture out during the suction of the vacuum while the bladder naturally conforms to the substrate thickness for perfect pressure.

Fit together all pieces of the unit from bottom to top (photo 7A): bottom release paper, <sup>3</sup>/<sub>16</sub> " foam mat with pattern attached, pure film adhesive, fabric, foam fallout refitted into mat opening, 4ply mat pattern template (photo 7B), top release paper. Place the mounting package into a heat press set to approximately 190°F for three to five minutes (depending upon the adhesive and substrate selected).

A pure film adhesive (ie: Fusion 4000, TM-3, FloBond, etc.) was used for a number of reasons. It is the only adhesive which allows for piecing or overlapping because there is no tissue core. It's also clear allowing for ghosting control. It's breathable nature works well with paper selected, and it may be removed if necessary. Always cool a film adhesive under a weight, for that is where the bonding actually occurs.

#### Wrapping And Finishing

Once removed from the press and cooled, trim the outer and adhesive from the the mat (photo 8). Cut the inner opening, leaving 3/4" to turn back and miter (photo 9). Reinforce all edges with a tacking or household iron (set just below the and work the fabric cleanly into the

Photo 4: Overcuts in the template will not adversely affect the mounting, but will insure clean acute angles on the pattern itself.

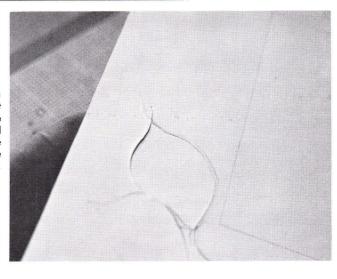


Photo 5: Always attempt to keep the pattern in one piece if the design allows. This makes for easier handling and assembly.

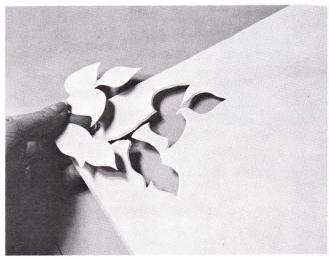
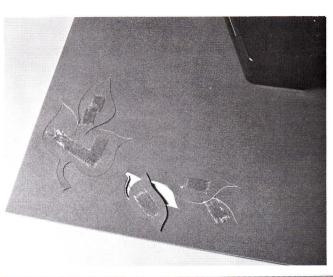


Photo 6: Apply either ATG tape (as pictured) or premount all pattern pieces with dry mount adhesive then trim and reassemble into the cutout mat, face up, on solid surface. Place master window mat on top (with ATG) and press firmly to attach. (When dry mounting, flip unit so that the mat is closest to the plate and mount at 190° for about three minutes. (Remember, the dry mount procedure is optional.)



corners.

Once the bevel looks good, lay the mat face down on a solid surface and begin to turn the inside of the window opening. Begin at the center of each side, ironing

toward the corners. Dry mount film adhesive, being both clean and heat activated, will stay where ironed (all of the flaps are lined with adhesive from the original fabric mounting).

continued on page 52

continued from page 50

Check the mat front, bevel wraps, and embossed pattern. A bone burnisher may be used to reinforce any of the bevel edges of the embossed pattern and to smooth the mat window bevel edges if necessary.

#### Alternatives

This same mounting procedure may be used with any free form, straightline or combination cut window mats using 4, 8 or 12ply mat boards, or ½8" or ³/16" foam boards, as the mat base. A 4ply mat blank works best for the pattern template mainly because of heat transfer, though in some instances single layers of foam have been successful.

Using a heat press is not the only mounting method to emboss a mat. Manual applications with wet and spray glues have been used for years. Wet glues and cold vacuum frames should still make use of the template technique for a clean cornered bevel fit.

The secret to using a heat press to wrap a mat or to create an embossed wrap is the fallout and template combination, which compresses the unit together so that the fabric follows the contours of the bevels. Forget the fallout, and the window miters are nearly impossible to execute cleanly. Forget the template for the embossed pattern, and the fabric will not pick up the crisp bottom bevel details. Wrapping mats in a press should be a part of every custom framer's repertoire. Embossed wrapping is a natural progression: it's fast, clean and predictable.

The creativity made available through embossing of laminates (March 1994 PFM) and fabrics should continue to expand the dollars and design potential available from your heat presses. Keep up the great work!

Photo 7A: From photo right to left: <sup>3</sup>/16" acid-free foam window mat (pattern ATG applied), Fusion 4000 pure film adhesive, velour fabric, pattern template (4ply board).

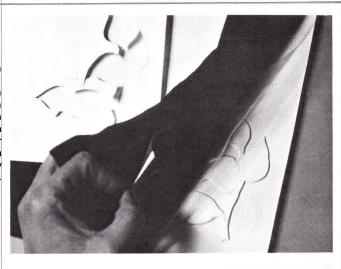


Photo 7B: Template is fitted and aligned. The unit is ready to dry mount.



Photo 8: Once the mat is mounted and has cooled under a weight, trim the excess fabric from exterior mat edges. Note the reflection of the adhesive mounted to the reverse of the fabric inside the window opening.

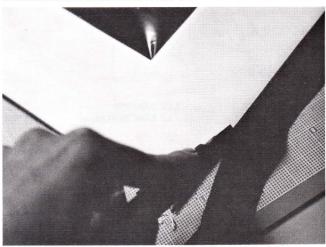


Photo 9: Cut the window opening and miter the corners in preparation for final wrapping.

