

Mounting with Clear Film

by James Miller, CPF

An old, valuable, handwritten, double-sided document can be a difficult mounting challenge. Handwriting often covers the entire sheet of paper on both sides, with little or no margins. Because of this, the customer usually wants all of the edges to show, so mat overlap would be a problem. Also, most of these antique documents are fragile and could not support their own weight, so hinging and other common mounting methods are not appropriate.

In cases like this, clear film mounting may be the best choice because it gives good overall support, shows both sides, and the edges are in full view. Clear film is a framing material used for years by framing professionals. Many of us know of Mylar-D® for the encapsulation of items. Most importantly, the mount meets the criteria for maximum preservation: It makes no changes to the item's condition, it is protective, stable long-term, and completely reversible at any time in the future with non-invasive methods.

That's the most popular application, but most framers have yet to discover the full potential of clear film mounting. It seems there's always another framing technique to learn, and clear film offers wonderful possibilities.

What is this stuff? Some framers and suppliers consider "Mylar-D" to be a generic term, but it is in fact a registered trade name of DuPont-Teijin Films, the maker of the film. Technically, it is made of polyethylene terephthalate (aka PET), which is in the polyester family of plastics.* Similar clear films have always been available from other manufacturers, and DuPont Teijin Films has many other polyester films. So, why is Mylar-D special? For framing purposes, it has important attributes:

—It is one of only two films approved for use at the United States Library of Congress. We are assured that a respected authority has thoroughly tested it to the highest framing specifications. Not all LOC specifications are beneficial in our real-world framing, but this one is.

—It has ultra-high clarity; better than other clear films. It is quite clear and smooth and it almost disappears when used properly and neatly in a frame.

—It has no chemical coatings that could offgas in the closed frame package, so it is suitable for maximum preservation framing. Most other films are coated for specific applications; to help certain inks or adhesives adhere to the

film, for example. The coatings on other films do not serve our purposes, and could cause problems over time.

—It is pre-treated (not coated) to help resist scratching, abrasion, and buildup of static electricity by virtue of its reduced contact area. That makes it easier to handle.

—It is very strong; it will not easily stretch, rip, crack, or split in framing applications. But it cuts easily and cleanly with a sharp blade (X-Acto, razor, or matcutter), and creases sharply.

—It is relatively stiff compared to other clear films, which are often flimsy. So, it makes a better overall support for fragile items, such as supple fabric or paper. And yet it conforms to curves such as the rounded fold of a newspaper or the binding of a book.

—It is widely available at competitive prices from traditional framing and conservation suppliers, as well as many local distributors of plastic sheet and tube products.

The bad news, for framers who know the wonders of Mylar-D, is that DuPont-Teijin Films discontinued its production in September 2001. There is probably enough Mylar-D in distribution warehouses to last for at least several months; maybe a year. But when it's gone, it's gone.

The good news is that Melinex®, a European brand purchased by DuPont-Teijin Films some time ago, will continue to manufacture a family of clear films similar to Mylar. Indeed, Melinex 516 is the only other clear film tested and approved at the Library of Congress. It is, for practical framing purposes, identical to Mylar-D. And if that isn't readily available, we can also use Melinex 455 and Melinex 456, which have slightly different pre-treatments, but are still considered to be direct replacements for good old Mylar-D in framing applications.

The best news is that clear film will continue to be available to framers, and we will continue to find new uses for it. Here are some of my favorite clear film mounts, all of which are non-invasive, easily reversible, and suitable for maximum preservation framing:

Overlay Mount: Similar to encapsulation with two sheets of clear film, except that a 100% rag/alphacellulose, preservation-grade mount board replaces the clear film beneath the item (see Figure 1). This is appropriate for very supple, thin, papers or fabrics, where the toothy surface of the board provides better support than the film. Those delicate

Asian paper cutouts come to mind. Double-sided tape attaches the film to the board, but no closer to the item than $\frac{1}{8}$ " away. The adhesive never touches the item.

Wrap Mount: Oddly shaped items or groups of items may be wrapped in clear film and secured to the mount board's surface (see Figure 2). This works for overlapping collages (a snapshot, map, brochure, and postcard, for example) as well as graduation tassels, medallions, medals, sports cards, event passes, etc. No adhesives or tapes touch the items. They are well supported and remain in original condition. These mounts may be overlapped or stacked on one another.

Book Mount: Books, magazines, whole newspapers, and similar items may be wrapped vertically and horizontally with clear film, which is then secured to, or through, the mount board (see Figure 3). This surface-float mount shows the face and all four sides, while giving very good overall support. Bindings of heavy, fragile books are not stressed.

Object Strap Mount: Objects of all kinds may be strapped to the mount board with narrow strips of clear film, fed through slots in the mount board, and secured to the back (see Figure 4). Compared to thread or monofilament line, clear film straps are flatter and have less tendency to cut into soft objects such as rubber; or to abrade delicate surfaces such as wood with deteriorated paint. Clear film straps are very strong and will not stretch easily, so they are equally suitable for, say, a gun or a Mardi Gras mask made of feathers.

Constructing the Mount

Work area preparation is important.

Figure 1

Clear Film Overlay

- Similar to "Encapsulation" mount
- Matboard backer is stiff and sturdy for safer handling
- Quick and easy to assemble
- Suitable for preservation; completely and easily reversible
- Typically used for documents and fragile, flat items of any shape
- Edges of item may be shown within mat opening

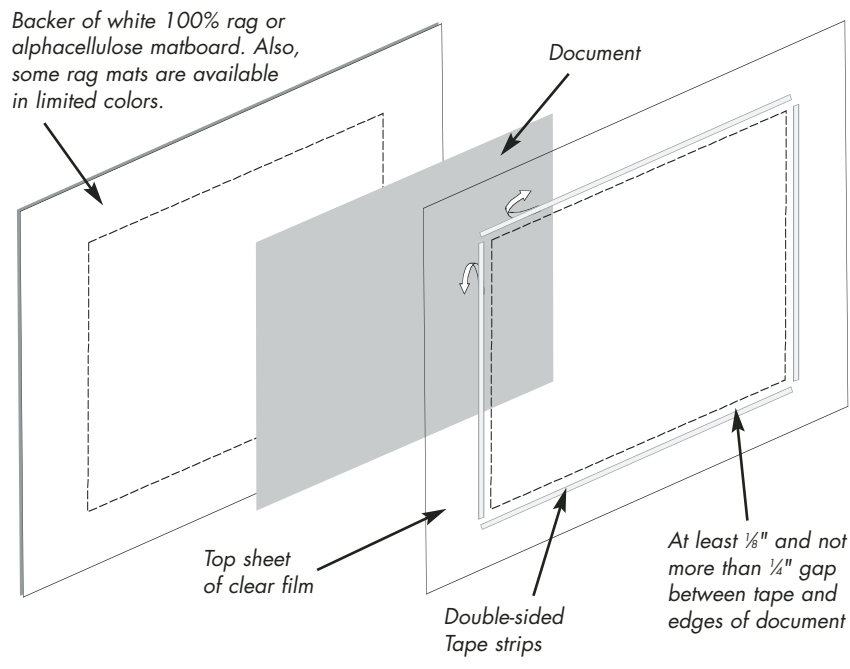
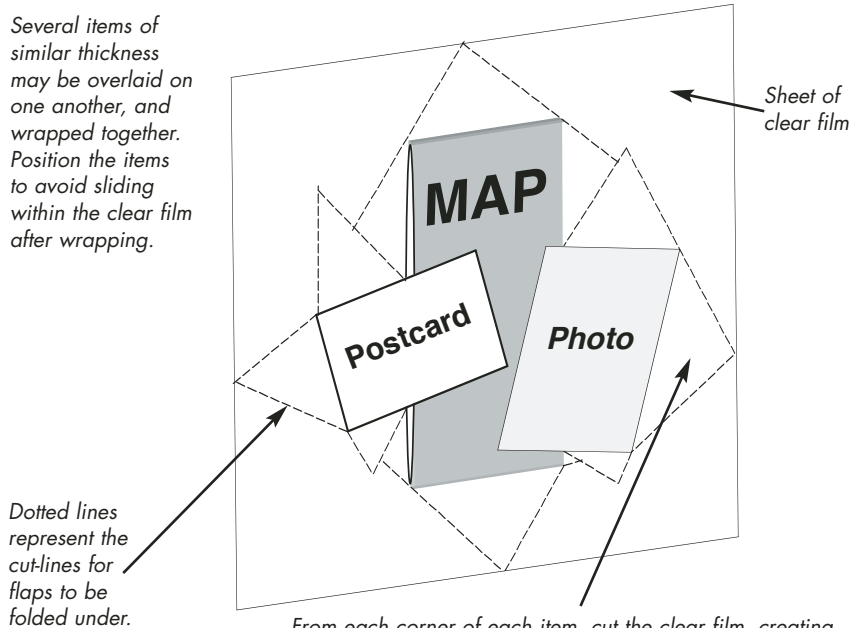


Figure 2

Wrap Mount

- Suitable for oddly-shaped, straight-sided items of moderate thickness
- Similar-thickness items may be wrapped together in a common mount
- Suitable for preservation; completely and easily reversible
- Typically for small books, magazines objects, and fragile, flat items



From each corner of each item, cut the clear film, creating triangular flaps, which will be wrapped under the items and secured to one another with double-sided tape. Apply tape carefully; no tape is to contact the items.

A clean, dust free room is best; early morning may be a good time to make your clear film mounts, before daily activity kicks up airborne dust. On a smooth, flat, sturdy tabletop lay down a piece of glass large enough to serve as a work surface. Clean it thoroughly. Clean glass is less abrasive than other common framing table coverings, and any debris that settles would be visible.

Tools are easy. You'll want a fresh razor blade, a ruler with metal straightedge, a right triangle, a burnishing tool, clean cotton gloves, a spray bottle of alcohol/water solution, cotton or other non-abrasive cleaning cloth, scrap matboard pieces, and release paper strips.

Cutting should be done carefully with a sharp blade and a metal straight-edge. Make sure your cuts are straight and perfectly aligned. Folding is best guided by the edges we cut, so if the cuts are good, then the folds should be, too. Clear film comes on rolls and has some curvature. Even if you buy it in sheets, they came from a roll. The item being mounted should contact the outside of the curvature. This way, the cut edges of the film will tend to stay away from the item, rather than cutting into it. Also, the film will lay flatter and better conform to shapes as is seen in Figure 5.

Folds should be positioned carefully; a rolling motion with fingers helps to begin folds most precisely. Crease lightly with fingers at first. When you are confident that folds are correctly positioned, crease them sharply with a smooth, flat object such as a burnishing tool. When creasing folds, use an overlay of release paper to avoid abrasion marks from the burnishing tool.

Proper handling assures that your clear film isn't damaged before your mounts are finished. Wearing cotton gloves prevents skin oil fingerprints and scratches from rough skin and/or jewelry. If you choose not to wear cotton gloves, wash hands thoroughly and often to remove all traces of skin oil. The clear film should touch only your gloved hands, the clean glass-covered tabletop, release paper, and the item to be mount-

ed. Keep the clear film from rubbing or sliding against itself or other surfaces. Do not allow film to touch abrasive surfaces such as paper, wood, carpet, or synthetic fabrics.

In some mounts, the clear film's edges overlap the item's edges. Fit the frame carefully, making sure the assembled frame package is not too tight. During normal expansion/contraction cycles, tight fitting could cause the film's edges to emboss the mounted item. That's true of most any overlapping mount, if the frame package is fitted too tightly.

Double-sided tape is the best way to join clear film to

Figure 3

Book Mount Illustrations

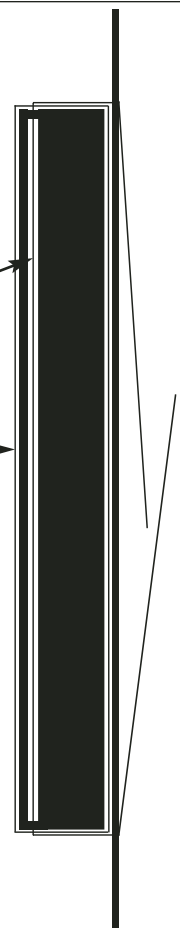
Strip A: This piece of film will be placed under the book's cover; the upper and lower "flaps" will be threaded through horizontal slots cut in the mount board. The "flaps" will be secured on the back of the mount board, giving strong support. For heavy books, the board should be reinforced with additional thicknesses of 4-ply board or archival foam-center board. Sharp creases at the dotted lines make it fold neatly over the book's edges, and onto the back of the board.



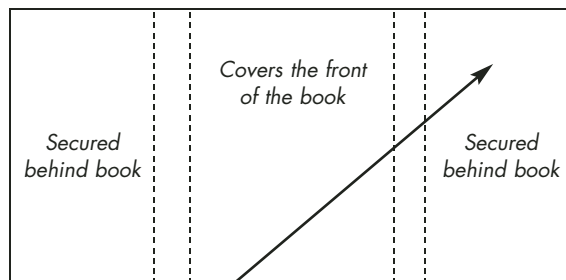
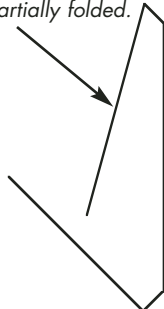
Side View (Open side of the book, opposite the Binding.)

The book is supported by the vertical Strip A, placed under the cover with its "flaps" secured to the back of the mount board.

Strip B goes over the book's cover; its "flaps" are wrapped horizontally around the book, and secured to the mount board. This strip supports little weight, but keeps the book from moving side-to-side.



Strip A looks like this when partially folded.

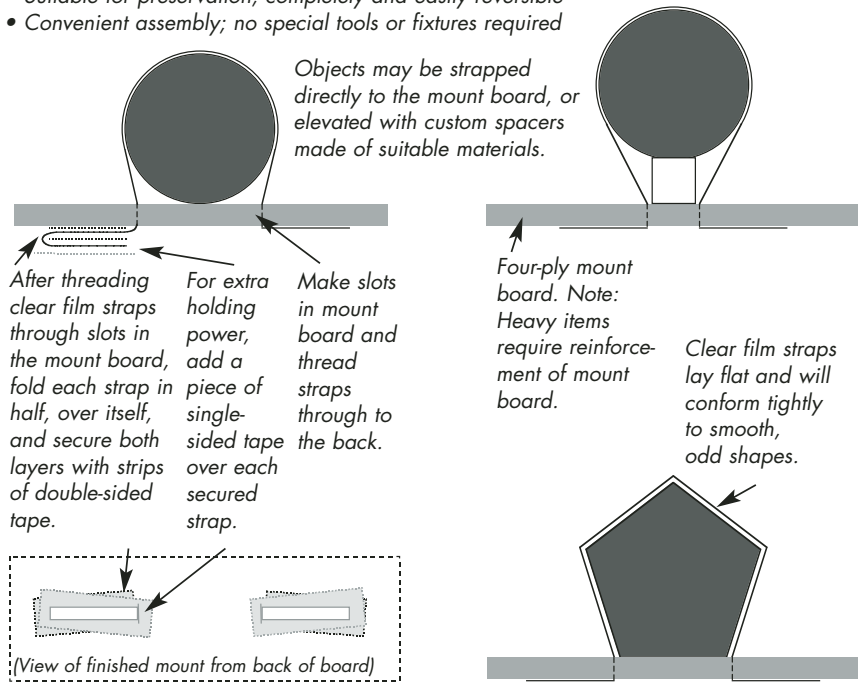


Strip B: This piece of clear film will be placed horizontally over the entire book, including cover, after Strip A is placed under the book's cover. The "flaps" of Strip B will be secured together and to the mount board behind the book (but not to the book itself). Strip B will support little weight of the book; its main purpose is to prevent side-to-side movement of the book after mounting.

Figure 4

Object Strap Mounts

- Suitable for objects that can be strapped, such as: golf clubs and tees, baseball bats, hand tools, pens, pipes, medals, books, hobby items, etc.
- Holds heavy items securely; very strong and stable over time; difficult to elongate
- Unobtrusive; lays flat; conforms to odd shapes; nearly invisible in some applications
- Suitable for preservation; completely and easily reversible
- Convenient assembly; no special tools or fixtures required



itself and to other surfaces. When applying double-sided tape, position it carefully, making sure the adhesive never contacts the item being mounted. After tape is applied, burnish it thoroughly to ensure permanent adhesion. Use the best quality polyester tape that you can find. It should have a non-migrating, acid free acrylic adhesive, such as 3M #889.

Clear film is the best choice for preservation mounting some items. But it may also be the easiest and most economical choice even when preservation is not an issue, especially for objects. If you are new to clear film mounting, experiment and practice to develop your skills before using it in real framing projects. A word of caution: When preservation

is an issue, don't take chances. Like any other kind of mount, a clear film mount can be damaging if it is not done correctly. Before mounting items of significant monetary or sentimental value, a conservator should be consulted.

With imagination, and some practice, you'll find that clear film is suitable for some of the most difficult mounting challenges. Get yourself a roll and have some fun.

**If you would like more specific information about the clear film's composition and characteristics, you are invited to call Mr. Bobby Reekes at DuPont Teijin Films at (800) 635-4639 (select option one). ■*

Jim Miller is teaching a class on mounting with clear film at the National Conference in January 2002.



Figure 5: When encapsulating curved objects, it is important to make sure the clear film adheres to the curvature of the item.