

**Non-Invasive,
Non-Adhesive,
Easily Reversible**

**Mounting
With
Clear
Polyester
Film**

Melinex 516 / Mylar-D

CLEAR FILM MOUNTING

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Important documents, books, magazines, newspapers and other difficult-to-mount or fragile items are good candidates for clear film mounting. This is a non-invasive method, which can meet all preservation/conservation mounting standards. Clear film mounting can show all edges of the item, and makes a secure float-mount for even the heaviest books.

A. Clear Film Mount Applications

- ✓ Documents; all edges may be visible
- ✓ Books; secure float-mount for even the heaviest books
- ✓ Magazines; float-mount any size, thickness, stiffness
- ✓ Newspapers; clippings, single sheet or the whole edition
- ✓ Fragile, flat items of any shape

B. Materials – Clear Film

1. DuPont Teijin Mylar® polyester film, Type D
(NO LONGER AVAILABLE; See Melinex 516, below)
 - a. Meets all preservation standards; approved by U.S. Library of Congress
 - b. High Clarity; the film passes more light through to the mounted item.
Therefore, it makes the clearest presentation of the mounted item.
 - c. No coatings that might chemically react within the frame; *Mylar®-D* is inert and chemically stable. Most clear films are coated to give the film certain properties such as scratch resistance, color tint, surface slickness, or bonding ability. Coatings may be chemically unstable, causing reactions within the frame's closed-up environment.
 - d. Strength; *Mylar®-D* is very strong and flexible, yet creases sharply.
2. Melinex® 516
 - a. Replacement product for Mylar®-D, and completely interchangeable.
Has all attributes of its predecessor, Mylar-D;
 - b. Meets all preservation standards; approved by U.S. Library of Congress
3. Other Polyester Films
 - a. Hostaphan 43-SM
Meets all preservation standards; approved by U.S. Library of Congress
Interchangeable with *Mylar®-D*
 - b. Other clear films
Unknown composition; may have invasive coatings or chemical impurities.
May not have suitable clarity
 1. Acetate Film
Lower price; Relatively brittle; cracks when folded; May be chemically-reactive within a frame
 2. Styrene Film
Lower price; Too brittle to be folded; Potential for chemical- reaction harm within a frame; Will discolor and crack with age
 3. Polypropylene & Polyurethane films
Lower price; Poor clarity; Too soft & flexible to be creased sharply
May contain harmful chemical properties

C. Materials – Tape

1. 3M #889 polyester, double-sided tape with neutral-pH, high-quality acrylic adhesive; suitable for use in preservation framing projects, but not in direct contact with valued items.
 - a. Newest and most advanced tape for the best preservation attributes
 - b. Best tape for working with clear polyester film
2. 3M #415 polyester, double-sided tape
 - a. Similar to #889, but tape is heavier, and has older-technology adhesive
3. 3M #665 double-sided tape
 - a. Readily available, inexpensive
 - b. Durable, good quality for general purposes
 - c. Not recommended for preservation due to potential chemical reaction
4. Other double-sided tapes of unknown composition
 - a. Chemical composition uncertain
 - b. May chemically-react within a frame
 - c. Adhesive may migrate, discolor, or weaken with age
5. **DO NOT USE ATG TAPE FOR CLEAR FILM MOUNTING.**
It is too thick and it will fail to hold under stresses of mounting.

D. Mount Types (See samples and Illustrated Instructions)

1. Encapsulation mount
 - a. This mount utilizes two sheets of clear film; one above and one below the item. Double-sided tape is applied between the sheets, no more than 1/4" and no less than 1/8", from the item's edges. (Tape does not contact the item.)
 - b. Recommended for documents and other flat items to be framed with mats.
2. Clear Film Overlay
 - a. Similar to "sandwich" mount, except that mount board is used below the item, with clear film on top. Double-sided tape is applied as with "sandwich" mount above.
 - b. Recommended for very thin, fragile items, where the surface texture (tooth) of the board adds rigid support and helps hold the item in place.
3. Sheet Flange Mount
 - a. A single sheet of film is cut larger than the item, and its sides folded to slightly overlap the item's edges. The film is secured to the mount board, and the folded sides, covered by the mat, hold the item in place.
 - b. Suitable for applications where the face of the item may not be covered with film.
4. Folded Flange
 - a. Strips of clear film are folded to retain the item's edges.
5. Straight Flange
 - a. Strips of clear film are lined with material of thickness similar to the item being mounted
6. Z-Envelope
 - a. Named for shape of folds
 - b. Suitable for thick or heavy items
 - c. Fewest-possible mount components

7. Positionable Corner Mounts

- a. Easy, secure for stable, stiff items
- b. Solves two problems of corner mounts
 - 1) Easy to position precisely; movable until fixed in place
 - 2) No adhesive on artwork-side of mount board

8. Book Mount

- a. Two sheets of film are used; one wraps around the book horizontally; the other wraps around the book vertically and goes under the book's cover. The ends of film sheets are secured together and to the mount board. Vertical sheet's ends may be drawn through slits in the mount board and secured on back for best support.
- b. Suitable for magazines, newspapers and other book-like items.

9. Newspaper Mount

- a. Similar to the Book Mount concept, except adapted to mount and support a whole newspaper

10. Wrap-Mount

- a. A single sheet of film is trimmed at the corners and wrapped around the item; ends secured on back.
- b. Suitable for thick items, oddly shaped items with straight sides.

11. Object Strap Mounts

- a. Secure, convenient mount for objects
- b. Use instead of plastic clips, monofilament line, or glues
- c. Unobtrusive; nearly invisible in some applications

12. Coin Mount

- a. Two sheets of clear film show both sides of a coin, with window mats front and back

13. Medal Mount

- a. Suitable for medals of all sizes and shapes.
- b. Supports medal without stress of fabric; pinback supported separately.

E. Procedure

1. *Work area preparation* – Work in a clean, dust-free room on a smooth, flat, sturdy tabletop. On the tabletop, lay a piece of glass large enough to serve as a work surface. Clean it thoroughly.
2. *Tools* – Typically, you will need a fresh razor blade; a ruler with metal straightedge; right-triangle; burnishing tool; clean cotton gloves; spray bottle of alcohol/water solution; scrap matboard pieces; release paper strips.
3. *Handling* – Wearing cotton gloves avoids 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 cleaned glass-covered tabletop, release paper, and the item to be mounted. Avoid the clear film rubbing or sliding against itself or other surfaces, as unseen particles may scratch. Do not allow the film to come into contact with abrasive surfaces such as paper, wood, carpet, or synthetic fabrics.
4. *Cutting* – Cut carefully with a fresh razor blade and a metal straightedge. Make sure the cuts are straight & perfectly aligned. If cut edges are out of alignment, then the folds may be, too.

5. *Curvature* -- Clear film comes on rolls and has some curvature, even if purchased in sheets. The item being mounted should contact the outside of the curvature. This way, the cut edges of film will tend to stay away from the item, rather than cutting into it. Also, the film will lay flatter and better conform to the mounted item, like this:



6. *Folding* – position the folds 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.
7. *Taping* – Some clear film mounts require the use of double-sided tape. When applying double-sided tape, make sure the adhesive never comes into contact with the item(s) being mounted. After tape has been applied, burnish it thoroughly to insure permanent adhesion.
8. *Fitting* – Some clear film mounts overlap the edges of item(s) being mounted. 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 to emboss the edges of mounted items (true of any overlapping mount).

F. Sources

1. Melinex 516, Clear Polyester Film

- United Mfrs Supplies
- Local distributors; see Yellow Pages under “Plastics, Sheet & Tube”
Caution: Local distributors may offer a substitute they claim is “equal” to Melinex 516, but there are few equal substitutes.
- Suppliers of mounting materials for framing
- National framing suppliers
- Archival suppliers: University Products; Gaylord; Light Impressions; etc.

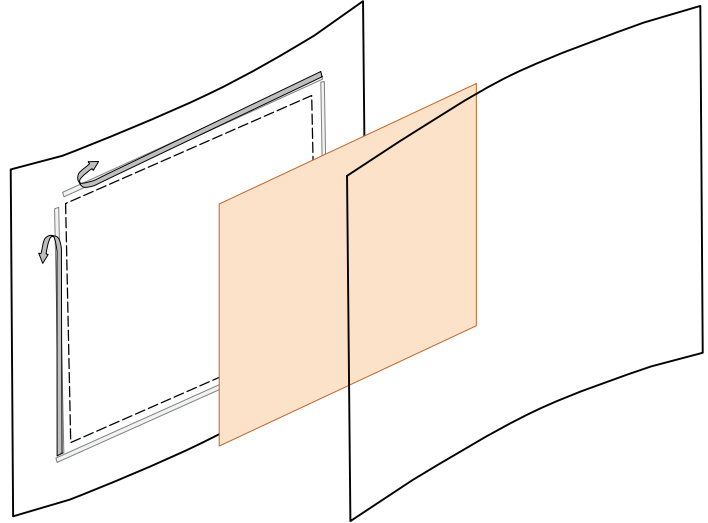
2. 3M Tapes

- United Mfrs Supplies
- Local 3M distributors
- Local framing suppliers
- Archival material suppliers

Fine Art Care & Treatment Standards Institute (FACTS): www.ArtFacts.org
Professional Picture Framers Association (PPFA): www.PPFA.com
The Picture Framers Grumble: www.TheGrumble.com

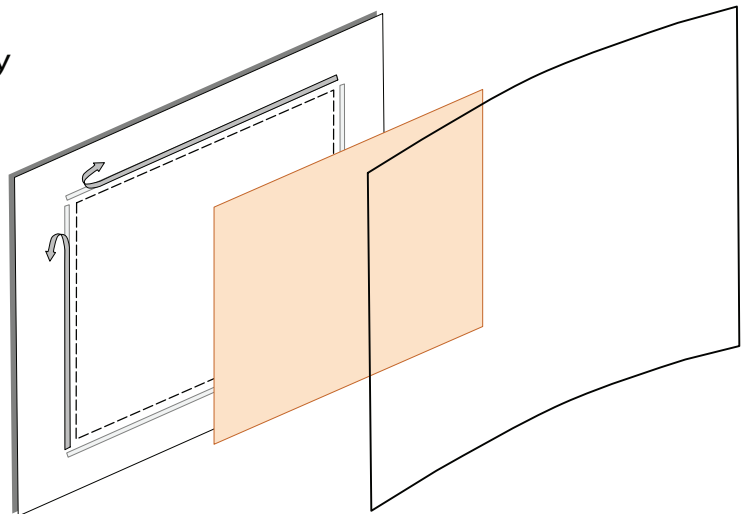
Clear Film Encapsulation Mount

- Easy to assemble; Completely and easily reversible
- Partially isolates the document from elements outside the mount.
- Typically used for documents and fragile, flat items of any shape
- Edges of document may be shown within mat opening
- Back of document may be shown
- Works in Three Ways to hold document in place:
 1. Convex clear film sheets create slight pressure in center of mount.
 2. Static charge of plastic film attracts paper and other materials.
 3. "Pinching action" between document edges and taped film sheets.



Clear Film Overlay

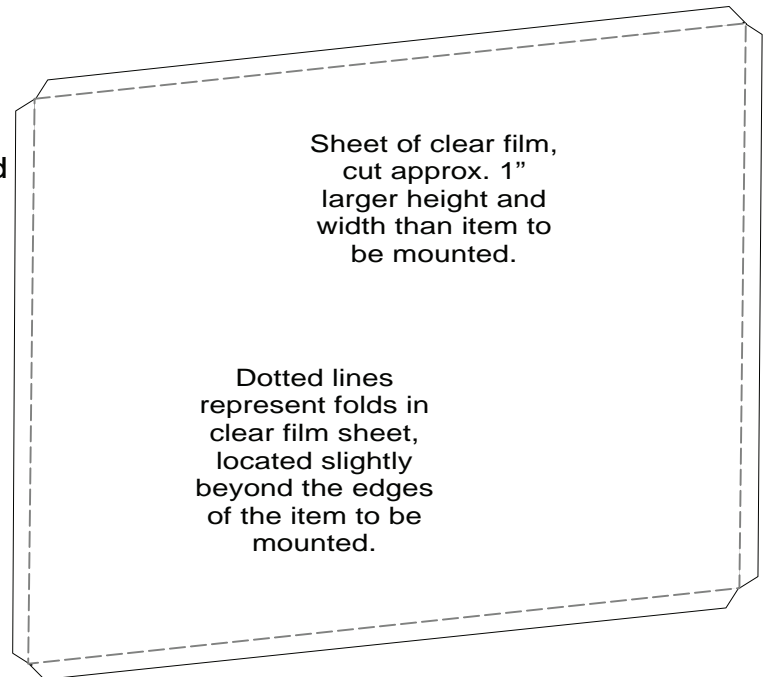
- Similar to Encapsulation mount
- Matboard backer is stiff and sturdy for safer handling
- Easy to assemble
- Completely & easily reversible
- Partially isolates the document from elements outside the mount
- Typically used for documents fragile, flat items of any shape
- Edges of item may be shown within mat opening



Sheet Flange Mount

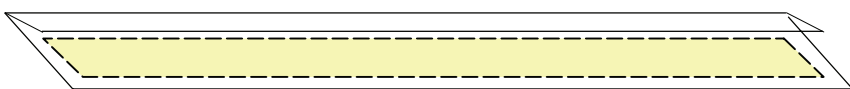
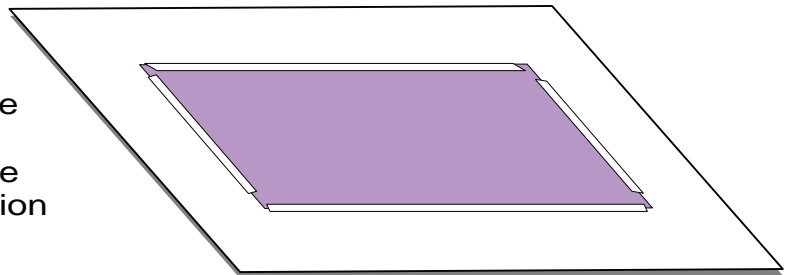


- Suitable for documents; artworks; other flat, thin items
- Completely & easily reversible
- Non-invasive, but film edges could emboss document if the frame were fitted too tightly.
- Completely & easily reversible
- Good for moderate preservation
- Mat required, to cover flanges on item's edges



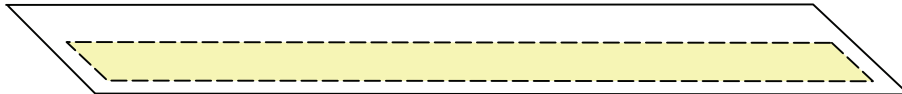
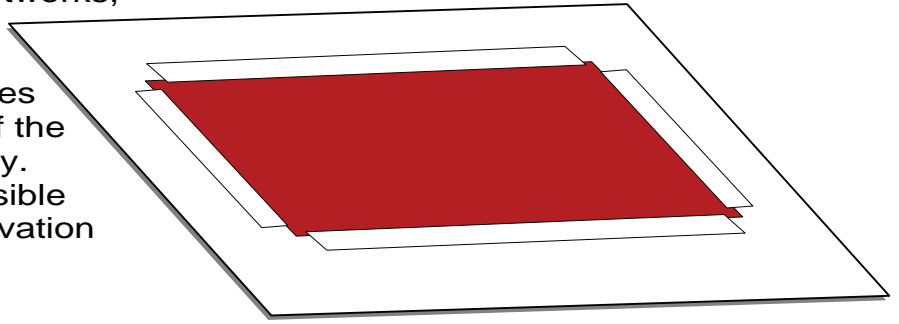
Folded Flange Strips

- Suitable for documents, artworks, other paper items
- Similar to Flange Mount
- Non-invasive, but film edges could emboss document if the frame were fitted too tightly.
- Completely & easily reversible
- Good for moderate preservation
- Mat required



Straight Flange Strips

- Suitable for documents, artworks, other paper items
- Similar to Flange Mount
- Non-invasive, but film edges could emboss document if the frame were fitted too tightly.
- Completely & easily reversible
- Good for moderate preservation
- Mat required

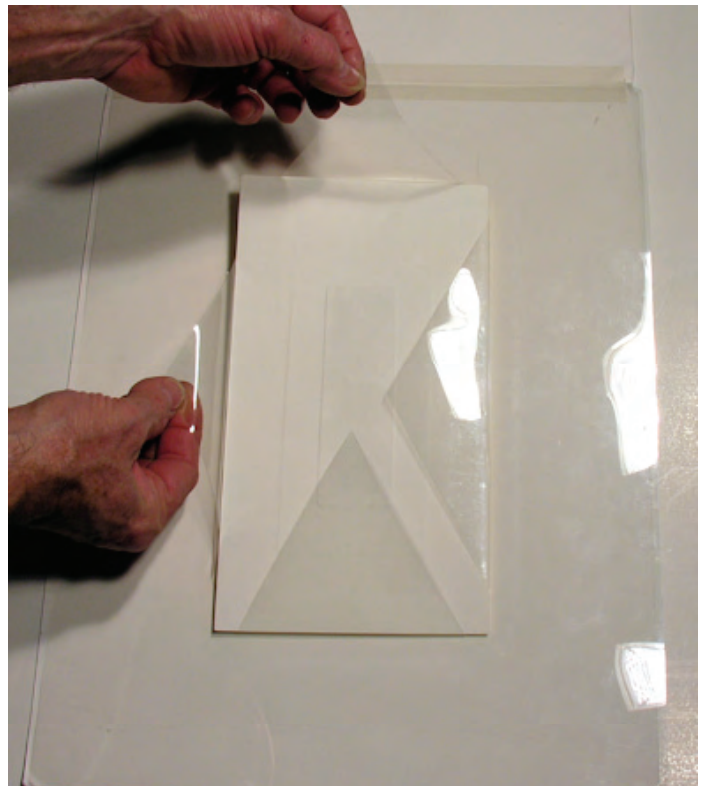
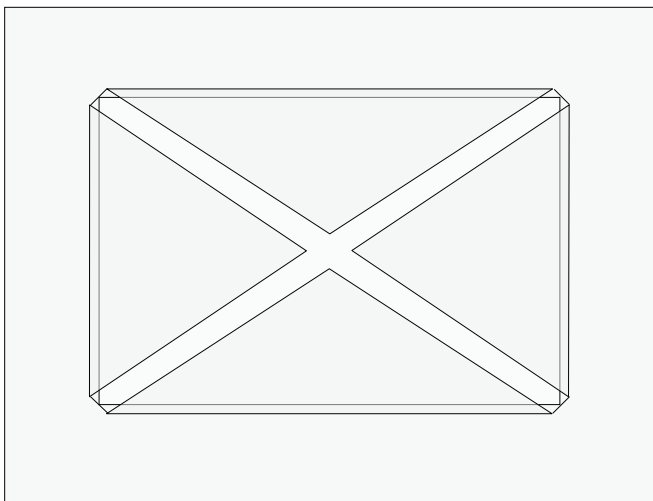


Z-Envelope Clear Film Mount

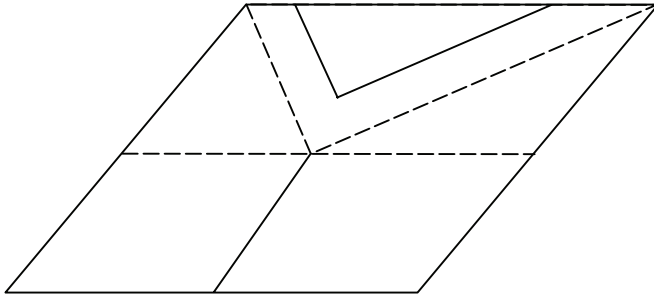
EDGE VIEW OF ASSEMBLY



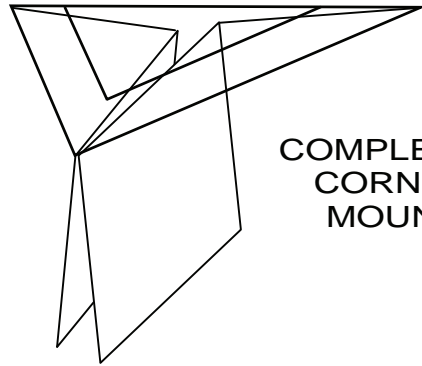
- Named for the shape of the folds
- Suitable for thick or heavy items
- Suitable for items with slight texture
- Fewest-possible mount components
- Mat required, to cover mount's edges
- Good for preservation
- Completely & easily reversible
- No adhesives within the frame



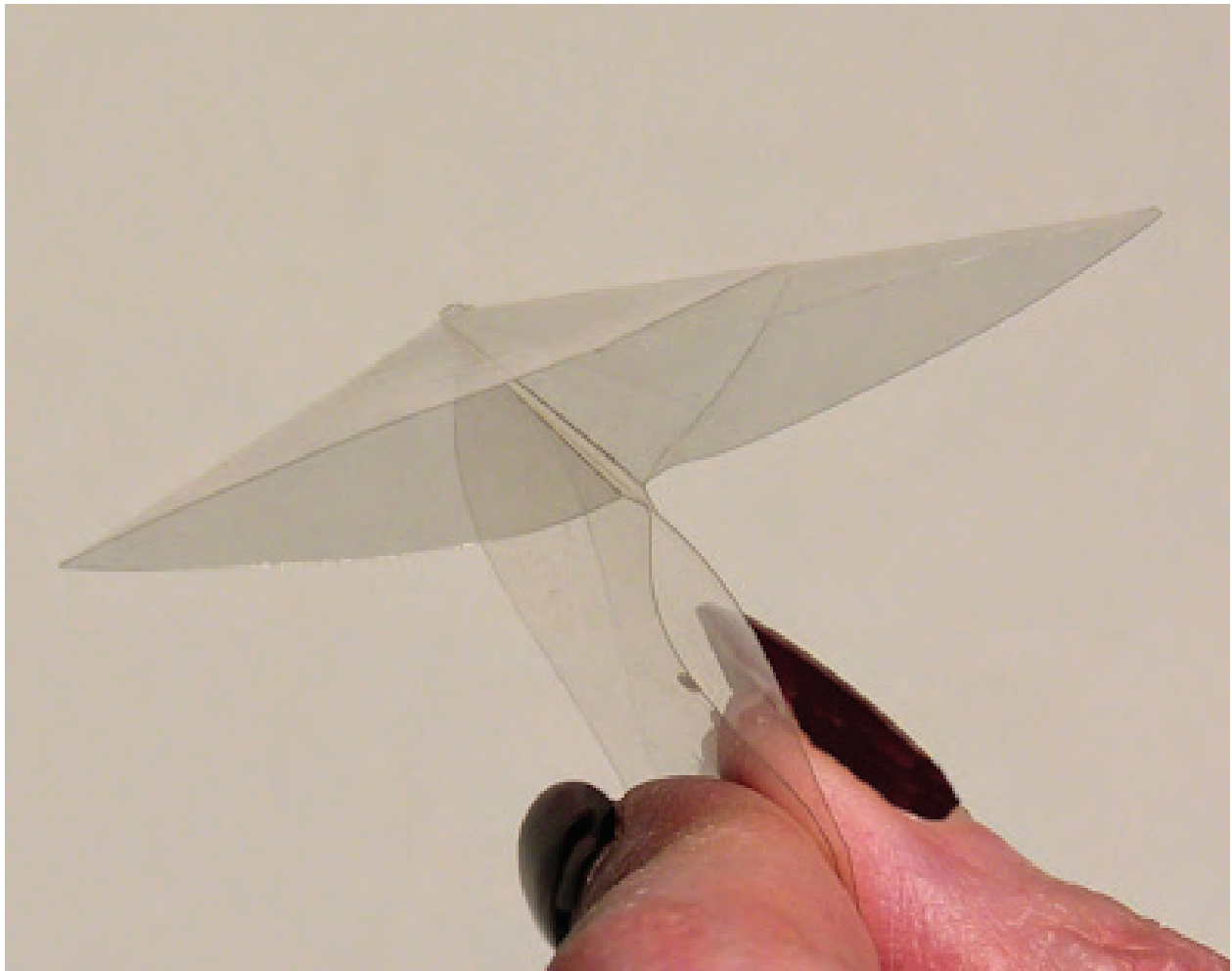
Positionable Corner Mounts



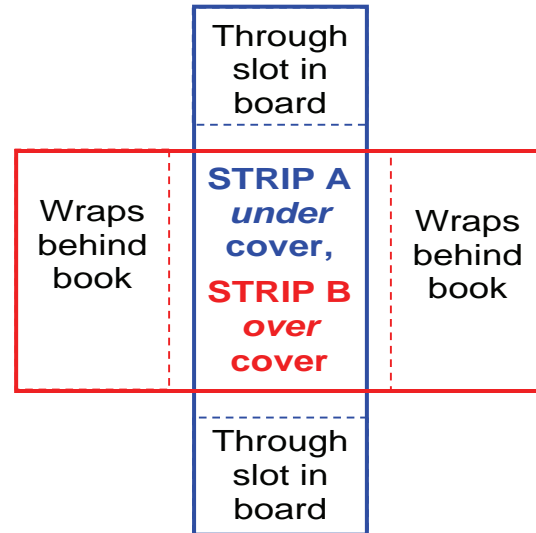
Using a square template, mark and cut diagonal slots slightly beyond each corner of the item's position. Each slot should be approximately $\frac{1}{4}$ " longer than the tabs which will pass through it.



COMPLETED
CORNER
MOUNT

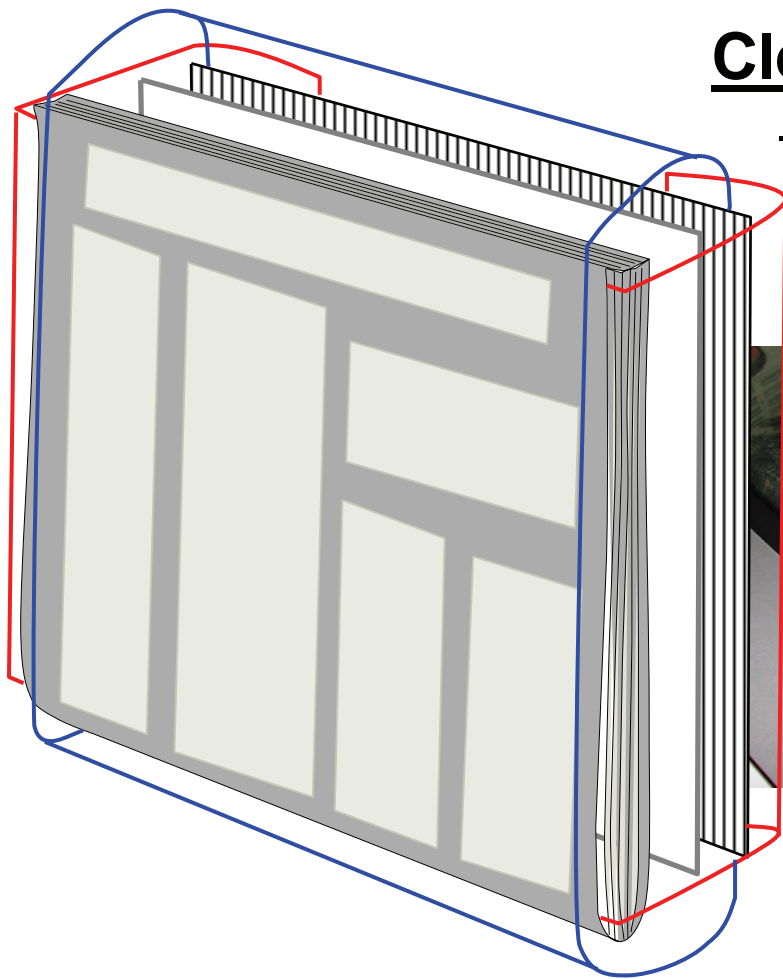


Clear Film Book Mount



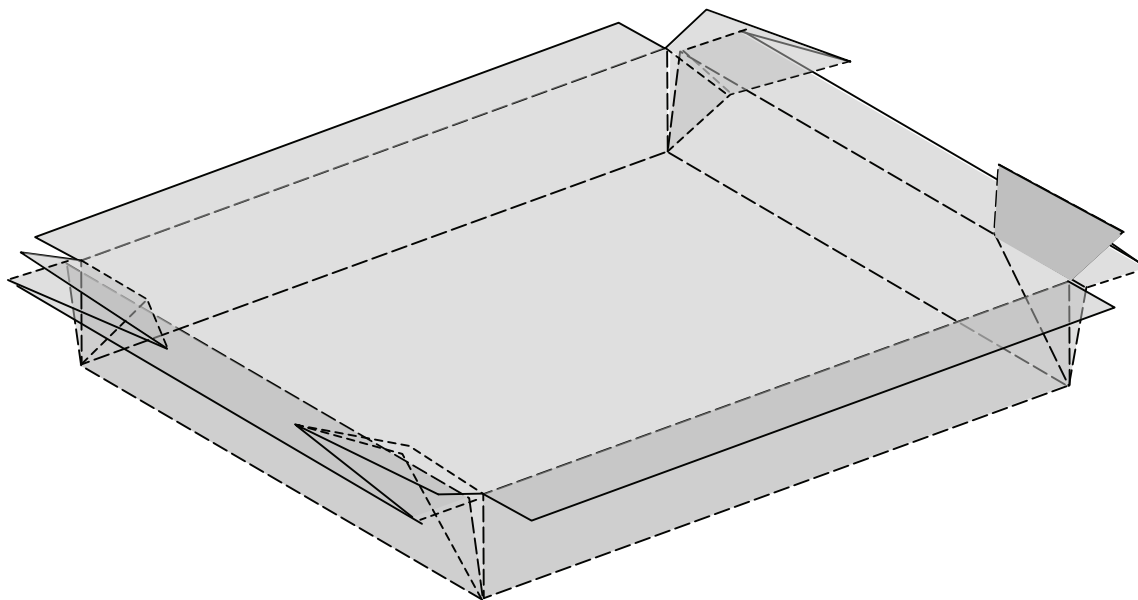
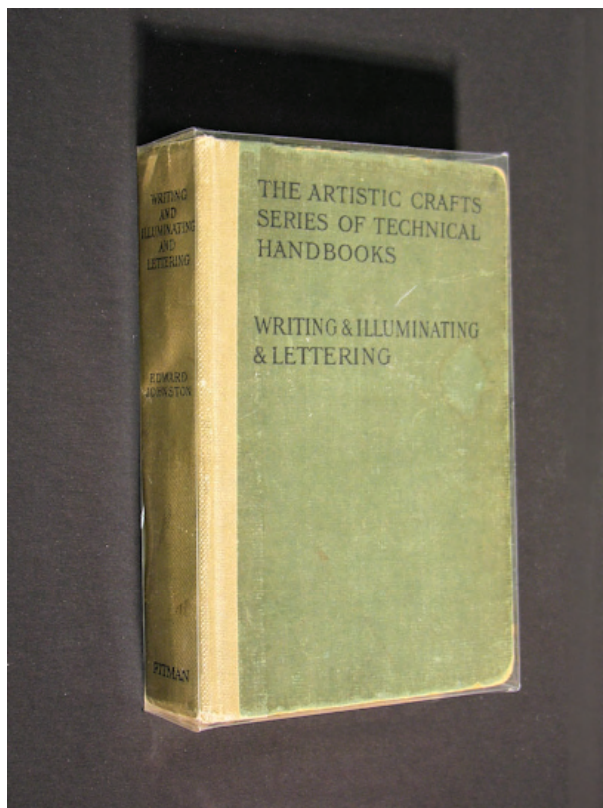
View from the open
side, opposite the

Clear Film Mount For Newspaper



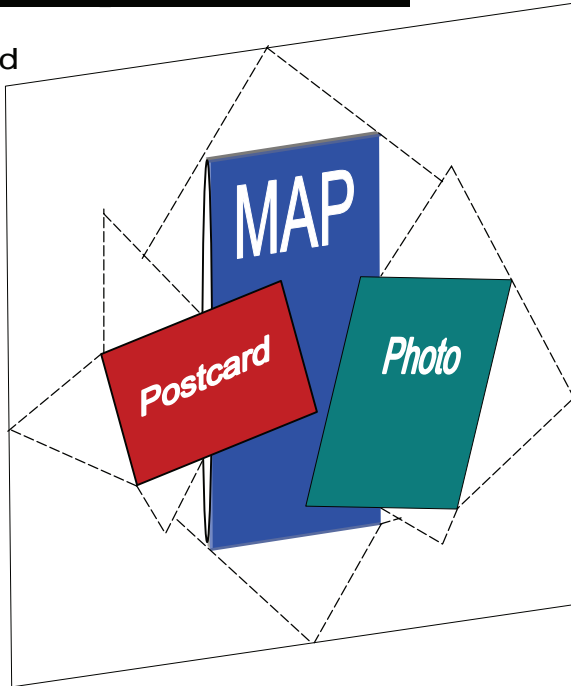
Clear Polyester Film REMOVABLE BOOK MOUNT

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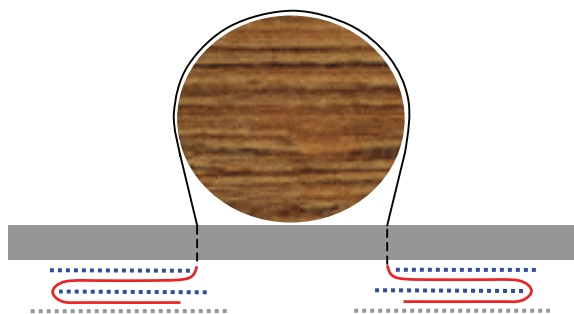
Clear Film Wrap-Mount

- ✓ Suitable for oddly-shaped, straight-sided items of moderate thickness
- ✓ Similar-thickness items often may be wrapped together in a common mount
- ✓ Completely & easily reversible
- ✓ Good for preservation
- ✓ Typically used for books, magazines objects, and fragile, flat items



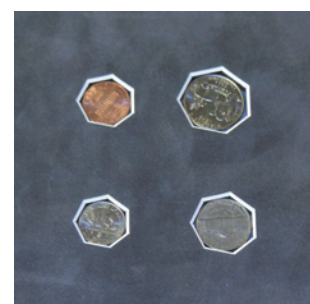
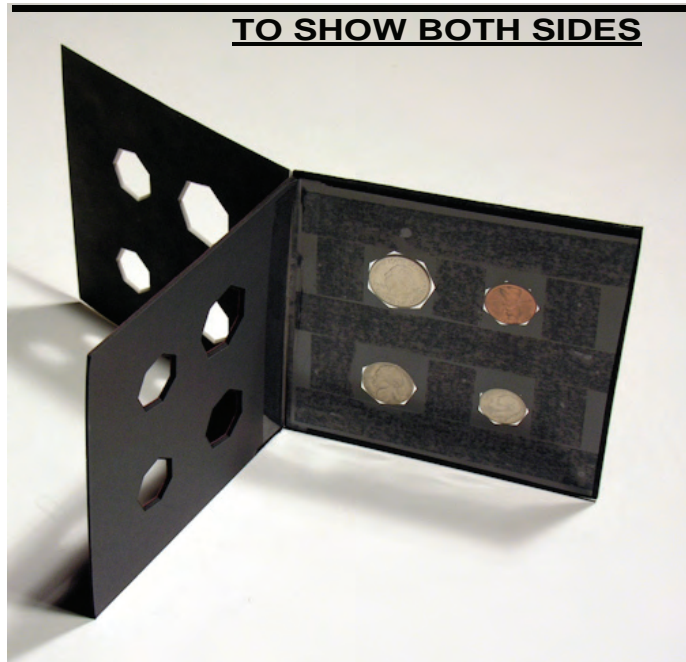
Clear Film Strap Mounts

For Three Dimensional Objects



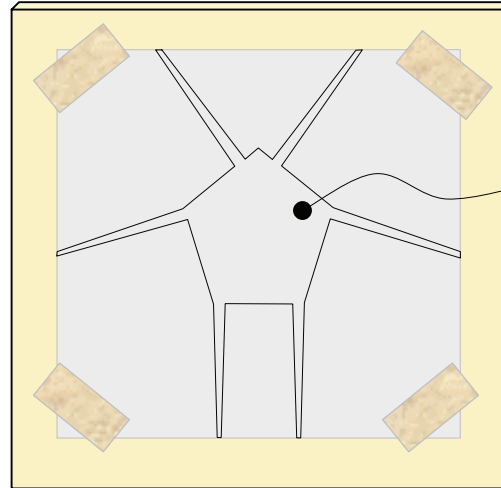
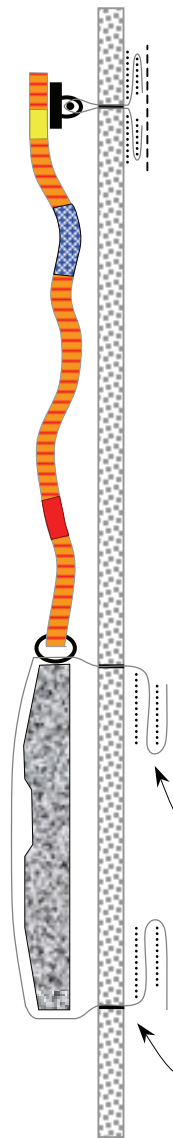
Clear Film Coin Mount

TO SHOW BOTH SIDES



COIN/MEDAL MOUNT

For round, square or oddly-shaped flat items of moderate thickness; such as medals or coins.



A piece of clear film is taped to a scrap of matboard and the item's shape is trimmed out of it, including "legs", which will be pushed through slots in the mount board. This is similar to the way paper doll clothes are made.

Dotted lines represent single-sided and double-sided polyester tapes.

Clear film "legs" are pushed through the mount board, folded over, and secured to the back with three layers of tape: 2 layers of double-sided tape, and one layer of single-sided tape.

