Simple Non-Adhesive Methods for Conservation Mounting of Photographs

By Jennifer McGlinchey

Non-adhesive methods for mounting photographs and works on paper are often preferred because common adhesives (i.e. pressure sensitive tape, rubber cement, spray mount, glues and many other types, even when they are labeled "archival") can cause damage. Over time, these adhesives can seep into the prints, discolor, and release acids that will stain, fade and damage a photograph. Even worse, most pressure sensitive adhesives will fail as the adhesive ages, and are not easily (or ever) removed from prints without causing damage. Even wheat starch paste and other water-based adhesives can cause distortion or damage to sensitive photographs.

The methods outlined in this article do require adhesives, but the adhesive never comes into contact with the artwork. Many of these methods support the corners or edges of the print with archival paper or inert plastic, so only the constructed supports require adhesives to secure them beneath a window mat. Below are a few examples of some of the many techniques that can be used for mounting photographs in a window mat for exhibition or storage. Window mats made from archival mat board (4-ply or thicker) are useful for storage and exhibition because they keep the photograph from coming into direct contact with glazing or other materials.

Considerations for mounting photographs

Evaluate each photograph and employ mounting methods that will provide adequate support for the size and weight of the print. The methods outlined in this article can be used for many types of photographs, but may not be adequate for large format prints (larger than 20x24 inches), light-weight prints (such as unmounted albumen prints), prints that are damaged, torn, or mounted. Attachment at the corners or the edges may not provide enough support for such prints, so buckling or sagging may occur. For large or heavy prints, these mounting systems may fail, which may allow the print to slip, causing damage.

Avoid touching the surface of the photograph during the mounting process. Hands should be freshly washed and dried. Well-fitting medical gloves are recommended as even clean hands can leave fingerprints that may mar the surface and cause permanent damage to the photograph.

Add interleaving paper larger than the photograph to protect the surface of the print from dust and abrasion. Papers described below can be used.

Materials for Non-adhesive Mounting

Selecting materials described as "archival" may not be good enough, so look for materials that have passed the photographic activity test (PAT). These materials have undergone more rigorous testing and have proven themselves to be safe for storage of photographic materials.

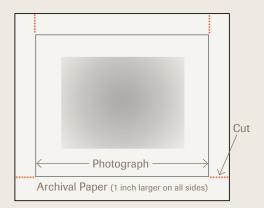Paper and matboard should be unbuffered (neutral pH~7) and free from acids, lignin,

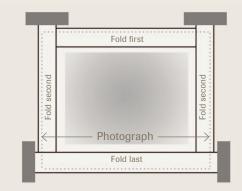Figure 1. Paper pocket. Mark lines as indicated, then remove photograph and cut.
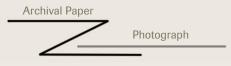
Figure 2. Paper Pocket after folding.
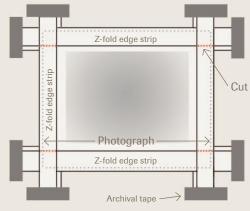
Figure 3. Archival paper Z-fold, end view.

Figure 4. Photograph with Z-fold edge strips in place. Cut vertical strips, leaving bottom fold intact, to accommodate the horizontal strips.

and sulfur. Alkaline buffered materials (pH ~ 8-9) may be used for some types of photographs, but should never be used on cyanotypes, color, digital, or other prints that may be sensitive to a high pH. When in doubt, use unbuffered materials in direct contact with the print. Recommended materials include:

• Paper made from 100% cotton (also known as 100% rag) flax, or alpha cellulose.
• Use mid-weight papers for support strips or corners to provide adequate support and prevent embossing. Use light-weight papers for interleaving.
• Photo-Tex tissue (available from Archivart) is a 100% cotton paper, which is designed exclusively for contact with photographs. Suitable for support strips, corners and interleaving.
• Use only inert plastics like polyester (Mylar), polyethylene, or polypropylene.
• Only stable, acid-free adhesives should be used. These should never come into direct contact with the print.
• Gummed linen or cotton tape with a water soluble adhesive
• Archival quality pressure sensitive adhesive tapes are available. They are easy to use and don't require a moistening step (example: Filmoplast P90.)

Mounting Methods

Paper Pocket
This method uses a sheet of paper that is slightly larger than the photograph. All four edges of the mounting paper are cut and folded to support the print. [Fig. 1] The long edges are then taped in place with archival tape. [Fig. 2] This is a good choice for photographs with damaged, distorted or brittle edges.

Sling or Edge Strips
This method provides excellent support for most photographs. It uses strips of archival paper or clear polyester that have been folded in a "Z" form. [Fig. 3] The print is supported by the inner channel created by the Z-fold and the support strips are adhered in place at the edges. [Fig. 4] This method can be used for prints on light-weight paper or with fragile edges.

Photo Corners
When done correctly, photo corners can be a simple and quick way to mount and secure photographs into window mats for exhibition or storage. But beware: significant damage can occur if photo corners are made from inappropriate materials, improperly

applied, or if prints are forced in and out of corners. Paper photo corners are commercially available, but corners are simple to make and can be tailored to the size of your print. The diagrams describe how to make and use photo corners.

Corners are best for prints that have a wide margin and/or can be "over-matted" so the corners can secure the print to the backing board without obscuring the image area. Commercially made corners made from clear polyester may be used if the corners will show, but be careful that it they are not too rigid or have any sharp edges that may damage the print. To soften the sharp cut edges, thin Japanese tissue inserts can be slid into the polyester corner to create a barrier between the print and the edge of the polyester.

Corners should be as large as can be accommodated by the margin and the over-mat. If corners are too small, the print may slip, causing mechanical damage. For example: a typical 8x10 gelatin silver or color print should have a corner that measures at least 1 inch at the height of the triangle. You should increase corner size as the print size goes up.

Mounting a photograph with corners

With the corners constructed, you will need a photograph with prepared mat board and backing board, and archival tape.

Ensure that the corners are large enough to support the weight of the print, but not so large that they obscure the image. If the margins of the print are small, you can cut a triangular notch into the corner (see illustration) to block less of the image while still providing adequate support to the edges.
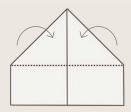
Place the photograph face up on a prepared backing board and position the image in the window mat. It is helpful to secure the print in place with a small soft weight, but place a small piece of clean archival paper or unwoven polyester between the weight and the print to prevent soiling and scratching the surface of the photograph. Never put any weight on a photograph with a sensitive or damaged surface.

Position the photo corners by carefully sliding the open pocket of the photo corner onto each corner of the print. The solid triangle should be on the front of the image. Try not to move the print. The corners should be comfortably snug on the print, but allow some space for the print to expand, about 1/16 inch.
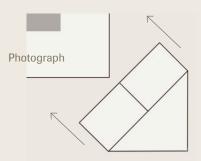
Adhere the corners in place with a strip of tape placed diagonally along the long part of the corner. Position the tape at least 1/4 inch from the edge of the photo corner. If you have cut a notch in the photo corner, you should place two pieces of tape on
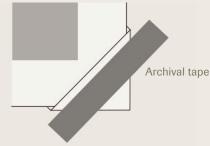

Step 1: Start with a strip of archival paper. Height of strip will determine corner size.
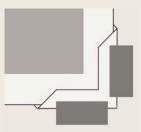

Step 2: Fold into right triangle.

Step 3: Flip the corner over and slide onto photograph

Step 4: Tape corner in place. Tape should not come into contact with print.

Modification: Cut notch to reveal more of the photograph.

the edges of the photo corner. The tape should not come into contact with the photograph. Ensure that the tape has good contact with the photo corners and the backing board.

Print is ready for exhibition or storage. If the corners are the adequate size, they should support the print when displayed vertically.

Removal of photo corners

Extreme care should be taken when removing prints from any mounting system. Improper removal or handling of mounted prints is a common cause of damage, so it is best to limit or eliminate the need to un-mount prints. The simplest way to remove the print from corners is to cut the tape with a sharp blade at least 1/16 inch away from the photo corner to prevent cutting the print. This way, only the tape is being cut, so there is less danger that you will accidentally cut the print. Avoid flexing the corners of the print to slide it out with the corners in place. Flexing and bending of photographs can damage the multi-layered structure of the print, leading to irreversible cracks and micro fissures that will reduce the life of the print and degrade the image.

References

Lavédrine, Bertrand. *A Guide to the Preventive Conservation of Photograph Collections.* Getty Conservation Institute, LA. 2003.

Munro, Susan Nash. "Making Mounting Corners for Photographs and Paper Objects." *Conserve-o-gram 14/1.* National Park Service, US Department of the Interior, July 1993.

Phibbs, Hugh. "Edge Strips and Other Hinge Alternatives for Preservation Framing." Supplement to *Picture Framing Magazine,* April 2001.

Reilly, James M. *Care and Identification of 19th Century Photographic Prints.* Eastman Kodak Company, 1986.

Wilhelm, Henry. *The Permanence and Care of Color Photographs.* Preservation Publishing Company, 1993.

Jennifer McGlinchey was named Assistant Paper and Photograph Conservator at the Williamstown Art Conservation Center in September. Jennifer has an MA in Art Conservation from Buffalo State College, State University of New York, with a concentration in paper and photograph conservation. She comes to WACC from the photograph conservation lab at the Museum of Fine Arts, Houston, where she worked with photograph conservator Toshiaki Koseki. A complete bio is on page 17.