

GUIDELINES FOR MATTING AND FRAMING PAPER AND PHOTOGRAPHS, PART II

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Introduction

Proper framing can protect exhibited photographs and works on paper from dirt, pollutants, insects and vandalism. Using inappropriate framing materials or techniques can cause irreversible damage. The following information, along with Part I of the technical bulletin in MUSENEWS, October 1994, can be used as a guide for matting and framing museum, archival or private collections.

Frames

Before photographs and works on paper are framed, they should always be properly matted (see Part I). Frames for works on paper can be made of either wood or metal. If using a wooden frame, the inside of the rabbet (the opening where the picture rests) can be sealed to protect the art from acids in the wood. Barrier films (Marvseal 360 or Marvseal 470 plastic/foil laminate) can be adhered inside the rabbet with a hot tacking iron. Purchase Marvseal without the red ink inscriptions if possible, because some tests suggest that the ink is reactive. The rabbet also may be sealed with 4 coats of diluted Polyglaze 1-175 or Sancure 878, water-based urethanes available from Camger Chemicals. Allow the urethane coatings to dry for at least a week before framing. Another protective option, using a sealed package, is described below.

Photographs are readily tarnished and damaged by a variety of materials, including wood. Instead of wood, use non-corrosive metal frames, such as steel, brass, anodized aluminum, and aluminum with an oven-baked enamel finish. Frames for photographs and paper should never be repainted with oil-based paints.

Before framing, check the joints of the frame for looseness or splitting, and make any necessary repairs. Valuable historic frames should be treated by a conservator. When reusing a frame, clean old bits of paper and adhesive residues off the back, unless they contain information of historical significance. It may be necessary to soften the adhesive first with a small amount of moisture, but avoid dampening the wood. Dust the inside and outside of the frame with a soft brush. If the frame is not deep enough to hold the matted art and backing board, nail strips of wood to the back to increase the depth.

Check both the framing hardware and the wall hangers to ensure that they can support the weight of the framed picture. Screw eyes tend to pull loose from the wood, so nickel plated 'D' ring hangers are preferred. 'D' ring hangers with a two-hole design are more secure than single-hole hangers. Measure the frame's entire height and attach the 'D' ring hangers to the vertical frame members one-third of the distance down from the top, using wood screws.

Hang the framed picture from two wall hooks rather than one for added security. Never reuse old picture wire; it may break. If possible, eliminate the wire and hang the frame directly from two wall-mounted picture hooks that attach to the 'D' ring hangers. However, if this is not possible, use new, very heavy copper wire.

Glazing

Framed photographs and works on paper should always be covered with glazing (either glass or an acrylic sheet, such as Plexiglas) to protect them from soiling and other damage.

Glass — When framing a work that has powdery media such as charcoal, pastel, chalk, graphite, and flaking gouache, always use glass. For long term use with black and white photographs, glass is preferred over acrylic.

Before framing, dull the edges of freshly cut glass with a glass seamer tool. Then go over the edges and surfaces of the glass with a razor blade to remove any glass splinters. Clean the glass with either warm water, a very dilute solution of mild detergent (such as Ivory Liquid) in water, or water with a small amount of dilute, clear, non-sudsy ammonia. Let the glass dry well, half a day to a day, before framing the art.

Glass does not scratch readily, but it breaks easily. If transporting framed artwork to another site, tape the glass in a network or crisscrossing fashion with 3M #336 tape (which does not leave a residue) or with masking tape, and position the art to travel vertically in its crate. After unpacking the art and removing the tape, use a razor blade to remove any adhesive residue on the glass.

Acrylic — Do not use acrylic glazing over powdery media because it generates a static electric charge that pulls small pig-

ment particles off the art and onto the glazing. Acrylic is preferred for works on paper with non-powdery media, for color photographs, and for short term use with black and white photographs. It will not shatter when dropped, but is easily scratched. Whenever possible, use acrylic glazing that filters out most ultraviolet light (e.g. Plexiglas UF-3, Acrylite OP-3, Lucite SAR UF-3).

Before framing, smooth the edges of the new, paper-covered acrylic sheet with a file as necessary, and wipe away the resulting dust with a damp cloth. Peel off the paper just before framing the art to avoid dust and soiling. New acrylic glazing does not need to be washed. However, reused sheets may be cleaned with a lint-free cloth and a very dilute solution of mild detergent (such as Ivory Liquid) in water. Using commercial anti-static polishes on Plexiglas appears to be safe for framed art on paper, but the effects on photographs are unknown.

Non-reflective Glass — Choose one of the newer types, such as Tru-View, Sandel or Denglas, that does not have to be placed directly against the art to prevent reflections. Some of these glasses are shatterproof and/or capable of filtering out ultraviolet light. Most have surface coatings that can be scratched or damaged. Follow the manufacturer's instructions for cleaning, and for whether the glass can be taped during transit. If the glass can not be taped when transporting the object, place a temporary acrylic or taped glass glazing in the frame for the trip, and pack the non-reflective glass in a separate crate.

A note on cleaning glazing — To clean glazing on a framed object, buff it with clean, dry chamois leather or a soft, lint-free cloth. Use a slightly moist cotton swab to remove smudges and marks. For very dirty glazings, unframe the object and wash the glazing separately. If that is not possible, lay the framed art horizontally on a table and wipe the glazing with a lint-free cloth or chamois slightly dampened with water or alcohol. (Do not use ammonia, because it can damage certain frames and works of art.) Wipe the glazing dry. Do not apply the cleaner directly to the glass or use too much on the cloth, because excess liquid can splash onto the frame and drip inside, damaging the mat, frame and object.

Spacers

Paper and photographs should never be framed in direct contact with the glazing. In most cases, adequate space will be provided by a standard window mat made of 4, 6 or 8-ply mat board, or by a sink mat. (Refer to Part I for information on matting.) However, invisible spacers can be placed under the frame rabbet if a window mat is aesthetically inappropriate, or the art has severe bulges and cockling.

Spacers should be made of strips of archival quality materials such as rag board, archival corrugated board, and Plexiglas, that extend around the entire perimeter of the frame rabbet. Multiple layers can be joined together with 3M #415 double-sided tape, or with an archival adhesive, such as Jade 403 or Elvace 40-704. The spacers are attached to the inside of the glazing with 3M #415 tape. Framespace is a commercially available polyester spacer appropriate for museum quality work.

Backing Boards

Backing boards, the materials placed behind the matted work being framed, need to be fairly rigid and of archival quality. Suitable materials include mat board, archival corrugated board and Coroplast, a corrugated polypropylene sheet available from plastic suppliers. Use 4mm thick, natural-colored, archival quality Coroplast. Foam-filled, paper-covered boards, such as Fome-Cor, deteriorate and should not be used as backing boards for paper and photographs.

Assembly

It is best to frame art in a vertical position, so that you can watch the front and back at the same time. Never turn the matted object face down to place it into a horizontal frame. A sturdy painting easel can be used to hold the frame nearly vertical. Set the clean, dry glazing in the frame, making sure that it fits well. If desired, to keep out dust and insects, the glazing can be taped to the inside of the frame rabbet with J-Lar P-910 tape (by Permacel) or 3M Scotch Book Tape #845.

Remove smudges from the mat with a white vinyl eraser (Mars Staedtler or Magic Rub), and brush away eraser crumbs or debris with a soft brush. Insert the mat into the frame, checking the front to ensure that all is well, and that no debris is caught under the glazing. Then place one or more backing boards behind the mat. The mat and backing boards should be slightly smaller (1/16") than the frame rabbet opening.

Securing the Art in Place

Once assembled, place the frame face down on a table that has a soft, padded surface. Then secure the mat and backing board in place by inserting blued (corrosion-resistant) or brass brads (about 19 gauge, 1/2" to 3/4" long) or brass escutcheon pins into the frame rabbet, using a brad pusher or pistol grip framing tool instead of a hammer. A few brads can be inserted before moving the frame from the easel to the table, to hold the framed package together.

If the glazing/matted art/backing board package is thick enough to fill the frame rabbet, it can be held in place with brass mending plates (1/2" by 2"). Thicker packages can be accommodated by attaching wood strips to the back of the frame, increasing the depth of the rabbet. If necessary, the mending plates can be bent slightly to conform to the package shape. The plates are attached only to the frame, not the art, with screws.

Dust Seals

The framed package may be sealed on the back to prevent dust and insects from entering. Apply one of the following types of tape along the gap between the backing board and the frame: J-Lar P-910 tape, Scotch Book Tape, or linen tape. Another option is to place a dust seal of heavy acid-free paper over the back, and attach it to the frame with 3M #415 double-sided tape. Attach rubber spacers, pieces of cork, or push pins to the back of the lower corners to increase air circulation behind the frame and discourage mold growth.

Sealed Packages

If the display area tends to be very damp or dry, the matted paper or photograph can be placed in a sealed package before framing. This will help hold the humidity inside the package at a more constant level, and will keep out dust and insects. However, sealed packages or frames are not recommended for black and white RC (resin coated) photographic prints because the prints give off gases that will build up in an enclosed space, causing accelerated deterioration.

A sealed package is constructed by laying a backing board over a sheet of waterproof outer backing (Coroplast, Marvelseal 470, Mylar Type D, or acrylic sheet), then placing the matted object over both layers, face up. A sheet of acrylic glazing is placed on top of this package. The edges are sealed with transparent J-Lar P-910 tape or Scotch Book Tape #845. The tape should extend only about 1/8" onto the front, so that it is covered by the frame rabbet.

Please note that the matted art and the backing board must be kept at 40% to 55% relative humidity (R.H.) for approximately a week before the package is sealed, to ensure that the humidity inside the package remains moderate. Additional humidity control can be obtained by inserting a sheet of Art Sorb, conditioned to 50% R.H., between the backing board and the outer waterproof backing. If your institution does not have good humidity control, avoid constructing sealed packages after the matted objects and backing boards have been exposed to long periods of dryness or excessive dampness. Instead, wait until the end of a week-long period of 40% to 55% R.H. before constructing the sealed package. If this is not possible, do not use a sealed package. Foxing and mold growth will almost certainly occur if the contents are conditioned to 65% R.H. or higher when the package is sealed.

Additional Suppliers

Brainerd Manufacturing Co., 115 N. Washington St., East Rochester, NY 14445, 716/586-0028 (brass mending plates)

Camger Chemical Systems, Inc., 364 Main St., Norfolk, MA 02056, 508/528-5787 (Polyglaze 1-175)

Denton Vacuum Inc., 8 Springdale Rd., Cherry Hill, NJ 08003, 609/424-1012 (Denglas)

EDCO Supply Co., 323 36th St., Brooklyn, NY 11232, 800/221-0918 (Marvelseal; specify without printing)

Frame Tek, Inc., 5120 #5 Franklin Blvd., Eugene, OR 97403, 800/227-9933 (Framespace)

[editor's addition] The Memorabilia Corner, 1312 McKinley Ave., Norman, OK 73072, 405/321-8366 (frame sealing tape, acid-free backing paper and other supplies)

Office supply & art stores (Scotch Book Tape, vinyl erasers)

Permacel, PO Box 671, New Brunswick, NJ 08903, 800/755-8273 (J-Lar P-910 tape)

Rohm & Haas, 100 Independence Mall West, Philadelphia, PA 19106, 215/592-3000 (Plexiglas)

S & W Framing Supplies, PO Box 340, Garden City Park, NY 11040, 800/645-3399 (framing hardware and supplies)

United Manufacturers Supply, Inc., 80 Gordon Dr., Syosset, NY 11791, 800/645-7260 (framing hardware and supplies, brass escutcheon pins)

Bibliography

Wilhelm, Henry. The Permanence and Care of Color Photographs. Grimmell, Iowa: Preservation Publishing Co., 1993.