

Framed Items

Such as prints, drawings on paper, paintings, photographs, and textiles

Identification and General Information

This discussion includes framed items that are flat and in a frame of some sort. They can be art, photographs, maps, textiles, ornaments, or anything that can be fitted into a frame. Items that are framed can have a variety of conservation problems. The more common problems include "mat burn" caused by poor-quality acidic mat materials, damage from light, tears and perforations, and damage or losses to the frame itself.

Basic Care and Storage

Since framed items are usually designed for vertical display, they are best stored in this manner as well. Generally, when not hung on a wall, framed items are best stored with their tops up, not on their sides or flat. The exception to storing framed items upright is when they are torn, flaking, or otherwise unstable. In these cases, it is often best to store items flat and facing upwards on large shelves. When stored flat, they need to have adequate shelf space because they should never be stacked on top of each other or left hanging over the edges of shelves. They should be covered to protect them from the accumulation of dust.

Frames that are stable can be stored in narrow vertical bins. They should be placed upright in the bins, standing on edge. They should be positioned face-to-face and back-to-back, and separated by pieces of sturdy acid-free corrugated board or foam core that are larger than the items they separate. Acid-free cardboard sleeves should be made for items in ornate frames, such as plaster and gold-leaf ones, to prevent pieces from breaking off. Ideally, each bin should not house more than three or four framed items. The bins should be large enough to accommodate



items easily; using bins that are too small may lead to damage to the frames. The bins should also be deep enough so that items do not extend out into walkways. Small items, however, should not be stored in deep bins, as they can be difficult to retrieve and can be damaged by larger items adjacent to them. Having bins of different heights and depths avoids these problems. The bottoms of bins should be covered with a soft carpet, if possible one of preservation quality, to protect the edge of the frames on which they are standing. Clearly marked labels affixed to the exposed sides of the frames will provide ready identification and eliminate the need for haphazard rummaging to find a specific item. Additionally, the bottoms of bins should be several inches above the floor for cleanliness as well as for protection in case of a flood.

Another alternative for the storage of framed items is to hang them on wire screens or racks, stationary or movable. Screens allow many items to be hung in a relatively small space, but depending on the type, they can be expensive to install. Screens work particularly well for the storage of three-dimensional and oversized items and are suitable for ornate plaster and gold-leaf frames as well. They also work well for odd-sized items, which can be hung wherever they fit in order to use all available space; such items tend to take up greater space in a bin. Fragile works, such as pastel, charcoal, and chalk drawings, should not be stored on sliding screens because the vibrations may loosen particles

Ideally, framed items should be stored in a windowless room that is used for no other purpose. When the framed items are not being accessed, the lights should be turned off to prevent unnecessary light damage. Framed items should be kept in as stable an environment as possible, especially paintings that are stretched on cloth supports such as linen or cotton. These paintings can be under extreme tension, and major changes in the humidity or temperature can cause these items to sag and warp, or become so tight that they suddenly tear.



Special Pest Concerns

Frames that are made of wood are susceptible to insect attack. Insects are not usually a problem, however, if proper integrated pest management procedures are followed.

One of the most common concerns with framed items is damage from mold. Mold can easily grow on the back of the frame, the side that faces the wall, where air circulation is poor. Mold growth is a problem in humid areas and where walls are made of masonry, brick, stone, or concrete. Masonry and concrete walls can "wick up" water from the ground, which will then vaporize behind the framed item, creating a space that is high in humidity and favorable for mold to grow. This problem can be avoided by hanging only on interior walls and on walls that are not made of masonry.

Routine Handling

Damage to framed items is usually due to improper handling, poor environment, or a disaster.

Damage includes scrapes, scratches, broken glass, tears, punctures, food spills, water damage, burns, and exposure to smoke from a fire. Possibly the most common handling damage to framing occurs when the screw eyes on the back of a frame scratch the front of another frame or item. Avoid this damage when handling items by placing them back-to-back and front-to-front.

Frames should always be handled with extreme care, because they can be damaged if dropped. Picture frames are often heavy, and the image areas are usually thin, under significant tension, and easily warped, perforated, or torn. Often it is advisable when moving framed items to have a team of at least two people: one to hold the frame, and one to look behind the item and make sure the hanging hooks and wires are free. Often the wires distort after they are released from the hook, and you should be sure to secure them so that they do no damage. Handle and move framed items only when necessary. Check to make sure the item is stable before moving it.



As always when handling items, you should make sure there is a padded, secure place to set the item down before you begin to move it. Make sure your hands are clean and dry before holding the framed item, or wear gloves. Generally, it is best to hold framed items by the sides of the frames, not by the top and bottom moldings.

Display Issues

Framed items are different than many of the other materials discussed here because, in essence, the artwork is already in a protective housing that helps preserve it. The frame usually protects the artwork inside it from physical damage, and the glazing, mat board, and other mounting materials usually protect the artwork from dust, light, and mechanical damage. If the mat boards are made of acid-free materials, they will help to preserve the art. The glazing protects the face of the art from physical damage and can filter out some types of damaging light, such as ultraviolet. If the entire framing package is well designed and made of good-quality materials, it will in effect create a microclimate that helps preserve the item long-term.

It is important to display framed items only in areas with a moderate and stable climate. Avoid areas over radiators, near air vents, over fireplaces, and on exterior masonry walls. Hang framed items away from direct sunlight or high levels of light, as these are very damaging. Kitchens and bathrooms are inappropriate places to hang framed items because of the moisture fluctuations, problems with water condensation, and the food residues present in these places.

Mounts and Supports

Many framed items have raw wood, cardboard, or mat board on the back, as part of the original package. Usually these materials are included to support the item and keep it flat. Ideally, only preservation-quality matting and framing materials should be used for this purpose because poor-



quality materials can deteriorate, become brittle and acidic, and damage the item inside the frame. Poor-quality mat board often causes a mat burn around the edges of prints, and raw wood backing boards frequently transfer an image of the wood grain to the item, which is damaging as well as disfiguring. Unless the original acidic support materials are crucial to the interpretation of a framed item, they should be replaced with preservation-quality materials. Make sure the matting materials are acid-free and lignin-free. They should be 100 percent cotton or linen rag board or an otherwise lignin-free, chemically purified conservation mounting board. Framed items should have a rigid backboard behind them to protect them from damage. For this purpose use acid-free corrugated cardboard, acid-free foam core, or Coroplast, a plastic corrugated board made of polypropylene and polyethylene. Avoid acidic brown cardboard and standard-quality foam core. Lastly, the back of the frame should be sealed from dust with a dust sheet made of good quality paper and sealed to the back of the frame with an adhesive or tape of preservation quality.

Careful consideration should go into the method of attaching the item to the mat, support, or mount that will hold it in the frame. Many different methods are appropriate, depending on the type of item that is being framed. For example, the methods suitable for a work of art on paper are different from those for a textile. In addition, several methods are available for specific types of items. Works of art on paper can be attached to a mat by paper hinges and a starch paste adhesive, or they can be attached to a mat without applying adhesive directly to the paper, using corners made of polyester film. Selecting the appropriate method of attachment is important because the wrong method can prove damaging and lead to serious problems in the future. Contact a conservator for advice on the best method to use for the specific item you want to frame, and pass this information on to your framer, or suggest that the framer contact the



conservator directly.

Most framed items are hung with metal hardware and braided metal wire. Brass or stainless steel mounting hardware is best, though many commonly available types of other metal mounting hardware will work well. Frequently the manufacturer will rate these pieces of hardware for a certain weight. Make sure the hardware you choose is capable of holding significantly more than the weight of your framed item.

Either glass or acrylic glazing is appropriate for framing, though items with loosely bound particles on the surface, most notably pastels, charcoal, or chalk drawings, should be covered with glass rather than acrylic. The static charge in the acrylic sheet can pull particles off the surface. Make sure that the item is not in direct contact with the glass or acrylic glazing in the frame because humidity can cause the item to stick to the glass. Finally, if available and you can afford it, you should consider using glass or acrylic sheeting that will filter out damaging ultraviolet light.

There are many commercial framing companies that use high-quality materials to mount and frame art. Usually their services are quite expensive. In fact, if framers offer their services at an inexpensive price, it is almost certain that preservation procedures will not be followed because preservation-quality materials alone are expensive, and the labor of the framer adds to the cost. Before hiring any commercial framer, get a recommendation from someone who is familiar with museum-quality framing. At the very least, make sure the framer you hire is a Certified Picture Framer and is a member of the Professional Picture Framers Association, and that they use materials of the highest quality. If possible, observe the framer as he or she works and question the materials used.



Cleaning and Minor Repairs

Frames should be cleaned as needed but no more than necessary. In parts of the country that are dry, windy, and dusty, frames may need cleaning as often as every few months. As a rule, no cleaning solutions of any type should be used on frames. If frames are simply metal or wood, they can be cleaned with a magnetic wiping cloth, which uses static electricity to draw dust away and hold it on the cloth. Both the front of the frame and the back of the framed item can be cleaned in this way. If, however, the frames are highly carved or gilt ones, they will require more care in cleaning. They can be lightly dusted with a dry, soft-bristled brush. The use of a cloth or a feather duster should be avoided, as they can scratch the fame or catch on loose parts and either leave a part of the cloth or duster on the frame or, even worse, remove part of the frame. A vacuum cleaner can be used to catch the dust as it is brushed, which has the advantage of removing the dust from the area so that it cannot settle on other items nearby. Hold the nozzle of the vacuum close but not touching the frame. A piece of cotton cheesecloth can be stretched over the nozzle and secured with a rubber band so that if any pieces fall off, they will not be sucked into the vacuum. The vacuum should be on as low a suction level as possible. As the frame is brushed, you will see the dust drawn into the vacuum. Once the front of the frame is cleaned, clean the back of the framed item also using a vacuum or a magnetic wiping cloth.

Many framed items will be glazed, or covered with a sheet of glass or acrylic plastic.

Determining whether the glazing is made of one or the other of these materials can be difficult, but the more familiar you become with these two materials, the easier it is. There are a few ways to differentiate the two materials. Generally, a glass sheet is much heavier than an acrylic sheet. It also more commonly has minor imperfections in it, such as small bubbles, lines, or wavy areas, especially if the glass is more than fifty years old. It is rare for glass to be scratched, although it is possible. Also, glass usually feels slightly cold to the touch at room temperature. In



comparison to glass, an acrylic plastic sheet is remarkably lightweight, and it rarely has any imperfections in it, unless it has been scratched, which is easily done. Typically, acrylic will not feel cold at room temperature.

As with cleaning frames, cleaning the glazing should only be done when necessary. If the glazing is glass and there is a heavy accumulation of dust or gritty dirt on it, this should be removed with a magnetic wiping cloth. Be sure to clean the area where the glazing meets the edge of the frame, as dust and dirt will often settle there. A vacuum with a micro-suction attachment may be helpful with this. If the glass needs further cleaning, rub a slightly damp cloth over the surface, using the least amount of pressure possible. Avoid touching the edges of the frame next to the glass, as this can damage the frame after repeated cleanings, and immediately dry the glass with another cloth to avoid streaking. If the dirt on the glass is not removed with a cloth dampened with water, add a few drops of ammonia to a quart of water and dampen a cloth with this solution. Another alternative is to use one part isopropyl (rubbing) alcohol to three parts water. Dry immediately, and make sure that the cleaning solution, no matter which one you use, does not touch the frame, as it may quickly damage the finish on the frame.

If the frame has acrylic glazing, special care must be taken because acrylic is easily scratched. If there is a heavy accumulation of gritty dirt, it may be best to vacuum the surface of the acrylic, as a magnetic wiping cloth will probably scratch it. Then use the mixture of isopropyl alcohol and water mentioned above. Avoid the use of the ammonia mixture on acrylic. Another possibility is the use of a commercial Plexiglas cleaner. Several products are available that are intended for use on acrylic glazing, and the manufacturer's instructions should be followed. When cleaning acrylic, be sure to use the softest, lint-free cloth or paper you can obtain because acrylic scratches easily. When cleaning either glass or acrylic, be very careful that moisture does



not wick between the glazing and the edge of the frame and stain the item inside the frame. It is for this reason that the cloth you use should only be slightly damp.

Before cleaning or repairing an item that is in a frame, contact a conservator for advice. During the process of cleaning, some items in a frame can be irreparably damaged. Cleaning an oil painting, for example, is a procedure that seems straightforward but is not. Household remedies that suggest a freshly cut potato or onion to clean paintings do not work and will cause damage. Oil paintings are usually made up of many different pigments, resins, and other materials, and knowing what these materials are and how they will react with cleaning agents is crucial when cleaning them. Severe and irreversible damage can easily occur if the wrong cleaning agents are used.

The same is true for repairing frames. Frames frequently are damaged during exhibit and display, and commercial frame shops often can repair them. Be sure, however, that the frame shop will do exactly as you desire before you approve the work. Frequently, the appearance of a frame may be changed radically after a frame shop repairs it, and it may look "new." This can be disappointing if the item in it has a distinguished-looking "old" or antique appearance.

Additionally, frame shops will frequently use materials to repair a frame that are difficult if not impossible to remove, so the appearance of a frame before treatment may be completely lost.

Take careful and exacting photographs of a frame before it is brought to a commercial framer for work. Generally, it is inappropriate and risky to have conservation work completed on the art within a frame by a frame shop, unless the shop contracts out that work to a recognized conservator.