

Care of Artworks on Paper

Documents, manuscripts, and works of art on paper such as prints, drawings, and watercolors are inherently fragile but can be easily and effectively protected from damage.

Proper Care and Handling

Handle paper objects as little and as gently as possible. When doing so, be sure that your hands are freshly washed. Window mats provide maximum protection for works of art on paper because they allow items to be viewed and transported without direct handling. Un-matted artwork and documents are more vulnerable. Transport them in folders and remove individual items with both hands. When viewing documents, place them flat and at least three inches away from the edge of the table on a clean blotter or sheet of paper. Fragile or frequently used documents may be placed in polyester sleeves for added protection; copies may be substituted for the originals for display or use. Do not undertake repairs on your own and never apply pressure-sensitive (self-adhering) tapes to valuable documents or artwork. Use folders to organize documents rather than attaching paper clips, staples, or rubber bands, all of which can cause damage.

Storage

Because paper is damaged by prolonged contact with chemically unstable materials, the choice of materials for storage and exhibition is critical. Mats, folders, and storage boxes should be made of cotton rag or 100 percent chemically purified wood-pulp with an alkali reserve equivalent to two percent calcium carbonate

and buffered to a pH of 7.5 to 10. Mat-board and folders should be rigid enough to provide adequate support. Store artwork in mats or within individual enclosures that are larger than the items.

Documents in good condition may be stored in groups within folders; preferably inter-leaved with acid free tissue, or glassine paper the number of items per folder depends upon their size, thickness, condition, and the depth of the folder. Isolate newsprint and other highly acidic materials by storing them separately. Individual enclosures offer the best protection for damaged and fragile items. Mylar sleeves can be custom made for all paper based documents and artifacts. Store matted works or those in folders, in flat files or in appropriately sized boxes specifically designed for storing works of art or documents. These boxes are called Solander Boxes, and can be made to size or purchased from specialist conservation material suppliers. Oversized objects should be stored flat whenever possible, not rolled or folded. They are best kept in the drawers of flat files (map cases), made of anodized aluminum or powder-coated steel. If done properly with sound materials, matting and framing provides the best protection for art on paper. A brown cut edge at the window opening is a common sign of poor quality mat board. It is essential to choose a framer who uses proper materials and techniques. Adhesives used to attach the artwork to the mat must be chemically stable, non-staining, and readily removable. The essentials of proper matting and framing are described in a companion guide, "Matting and Framing Works of Art and Artifacts on Paper. "

Limiting Light Exposure

Exposure to light can cause fading of media, such as

watercolor and writing inks. Such exposure can also yellow, darken, and weaken paper. Light damage is determined by the wavelength of the light, the length of the exposure, and the intensity of the illumination. Damage is cumulative and irreversible. Because all light causes damage, display works on paper for finite periods of time. Keep light levels low and eliminate daylight whenever possible. Block windows with shades, blinds, or curtains. Light sources containing ultraviolet (UV) rays are especially harmful. UV is found in all daylight, most abundantly in sunlight, and in many fluorescent and metal halogen lamps. Incandescent or tungsten lights are preferred, but because they emit heat, place these light sources a distance from the artwork. UV filters to screen out UV in window films should be used on major windows, or cases.

Controlling Temperature and Relative Humidity

Keep objects in a cool, dry environment. Maintain a temperature below 22 degrees Celsius with relative humidity (RH) around 50 percent. Warm or moist conditions accelerate deterioration, and encourage mould growth and insect activity. Keep temperature and RH within a narrow, constant range. Climatic fluctuations cause papers to expand and contract. This movement, although slight, can lead to structural weakening of paper, undermine the attachment of media, and cause distortions such as buckling of paper. Frames and storage enclosures provide some degree of protection against daily fluctuations but will not protect paper from long-term or seasonal changes. Portable dehumidifiers can help control high levels of RH and fans that help circulate air can discourage mould growth. Humidifiers may be used in areas where extremely low RH occurs during the winter.

Do not store works of art in basements or attics, or hang them in bathrooms or over heat sources.

Limiting Exposure to Gaseous Pollution and Airborne Particulates

Pollutants from industrial gases, car emissions, and heating sources are readily absorbed into paper and media and may form compounds detrimental to their stability. Dust, soot, and soil are difficult to remove safely from delicate, porous paper surfaces. Sources of indoor air pollution, such as ozone from copying machines and fumes from new construction materials, paint, new carpets, cleaning supplies, and wooden cabinets, can also degrade paper and media. One way to protect paper is to fully enclose each object in housing made with appropriate materials. Frames must be glazed and well sealed. Documents and unframed artwork should be protected by storage in folders within containers made of permanent durable material, or Mylar sleeves.

When Disaster Strikes

Most natural or man-made disasters, such as floods or fire, involve water. Even a small amount of water from a leaky roof or pipe can do significant damage to a paper collection. When such a disaster occurs, contact a paper conservator, or cultural institution for assistance. Immediate response within the first 48 hours is crucial to the successful salvage of materials and the prevention of mould growth.

When to Call a Conservator

Some conditions require immediate attention. Wet or

mouldy materials or those with actively flaking media have high priority. If you notice pressure sensitive tapes and labels, brittle mat-board, or changes in condition such as tears, detached hinges, or disfiguring stains, contact a conservator trained to address the special needs of works of art and artifacts on paper. Visit the AICCM website to find a specialised paper conservator in your area, or contact us and we will assist