Installing and displaying fine art

Best practices for collectors
On the following pages, we outline the different types of hanging systems available for artwork—to help you or your curatorial staff choose the right solution for each piece on display. We also identify best practices to reduce the chance of loss, and to help maintain both the value and condition of your collection for years to come.

While this brochure focuses on the safe display of fine art, you can look to AIG Private Client Group, a division of the member companies of American International Group, Inc. (AIG), for assistance with disaster planning, transit advice and much more. Our Risk Management and Appraisal team is at your service.
Imagine this:

A valuable painting was hanging in the living room of a holiday home. The painting, which the collector spent years trying to acquire, was installed by the property caretaker when it arrived at the residence. It had been hanging in the same spot for the last ten years. Although frequently admired, it had never been inspected to make sure it was still securely fixed to the wall.

One day while doing his daily rounds, the collector’s estate manager is horrified to find the painting on the floor with a large tear in it. The hanging hardware failed, and the painting fell from the wall onto an antique table beneath it. The table had an ornate vase displayed on it, which shattered and damaged the canvas.

Get the (surprising) facts

Unfortunately, this scenario is based on a true story. Most of us buy insurance to protect our belongings from "external" factors: flooding, fire, theft, etc. However, our claims experience has shown that over half of fine art damage is due to breakage/accidental damage.*

As insurance providers, we are ready to respond when even the most unlikely losses occur. However, AIG is equally committed to helping you avoid damage in the first place.

Museums have an institutional mission of collections stewardship: to display and preserve works of art and ensure they are here for the enjoyment of future generations. The same commitment should extend to private collections, and the requirements involved in properly displaying and caring for art are no less demanding.

* American International Group, Inc. (AIG) is a leading international insurance organisation serving customers in more than 100 countries and jurisdictions. AIG companies serve commercial, institutional, and individual customers through one of the most extensive worldwide property-casualty networks of any insurer. In addition, AIG companies are leading providers of life insurance and retirement services in the United States. AIG common stock is listed on the New York Stock Exchange and the Tokyo Stock Exchange.
Where to begin

Before choosing the appropriate hardware with which to display your art, inspect each piece to ensure that it does not have inherent damage and that its structural craftsmanship is sound. If possible, we recommend consulting a conservator for assistance with this step.

- Assess any untreated pre-existing damage or previous repairs to reduce future problems.
- Check frame supports or hanging hardware; both can falter due to weight or repeated installation. With older, wood-framed objects, hardware can become loose within the frame. This may require tightening of corner keys, or adjusting or replacing the mounting hardware.
- Consider your frame material. Old hardware can split a wood frame. Metal frames may no longer be attached securely within their joinery.
- Check the miters of old frames to make sure they are not separating. Separating miters can indicate that the artwork or glass is too heavy for the frame, or that the glue/hardware that holds the frame together is failing.
- Replace old hardware, such as eye hooks and wire, with proper hanging hardware.
- Note the overall craftsmanship. Some works of art (especially contemporary art) are constructed with material that can be challenging to maintain over time. If poor construction materials or methods were used, additional support structures can be added to strengthen and stabilise the work.
Working with professional installation companies

Art is most at risk when it is being handled. Always hire professional fine art handlers for projects involving installations, de-installations or re-installations. Be sure to clearly articulate your needs. It is easy to assume that all hanging hardware meets specifications for weight, wall type, security and disaster mitigation. Understanding the specific details, and communicating them to your professional installer, will help guarantee the desired end result.

We suggest the following when working with professional fine art installers at home:

- Provide dimensions, weight and an explanation of the existing hardware.
- Provide photographs of the artwork and the existing hardware and frame.
- Discuss the structural makeup of the location in which the artwork will be installed.
- Discuss installation techniques required and special needs such as security, lighting and disaster mitigation.
- Discuss any access restrictions to assure proper handling equipment is available on site.
- Indicate any special requirements you have such as access schedules, security, insurance, service warranties or guarantees.
- For complicated installations, request that the installer make a visit to the site in advance to clarify the overall project.
- Document complicated installations with photographs and notes for future reference (when de-installing or re-installing the object).

When choosing hardware, weigh your options

As a general rule, your hanging hardware should support 25–50% more weight than the maximum weight of the artwork. It is critical not to guess here. Determining the weight will assure that the hardware for both the frame type and the wall structure are appropriate. On the following page are some frequently used hanging systems and hardware types. All methods should be re-checked annually to ensure that works remain secure.
### Frequently used hanging systems and hardware types

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Varieties</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-ring; single or strap hardware</td>
<td>Made to be mounted on the back of wood frames; also available for metal frames</td>
<td>Single hole for small frames or multiple-hole attachments for heavier frames</td>
<td>Accommodates individual wall hooks or wire hanging systems</td>
</tr>
<tr>
<td>Floreat hanger</td>
<td>High-quality, versatile, standard wall hanger</td>
<td>Large versions have holed centers for a wall anchor; varieties with flexible clips prevent artwork from lifting off the wall</td>
<td>Supports a framed work hung from a wire hanging system or individual D-rings</td>
</tr>
<tr>
<td>Concrete or masonry hanger</td>
<td>Made to attach securely to concrete</td>
<td>Other similar designs can be purchased for brick and/or stone mortar</td>
<td>Recommended for hanging above fireplace mantels or basement room walls</td>
</tr>
<tr>
<td>Adjustable J-hook</td>
<td>Commonly adaptable to multiple attachment hardware and different wall types</td>
<td>Single variety heavy duty picture hook that allows for height and level adjustments</td>
<td>Best choice for earthquake-prone areas, as it allows works to swivel with the movement of the earth; minimizes damage from vibrations</td>
</tr>
<tr>
<td>Lock-in security hardware</td>
<td>Common security hardware; considered most versatile hanger by museums</td>
<td>Comes in adjustable designs and various sizes for different weight limits</td>
<td>A “T screw” mounted to the wall can be turned to lock in the slotted receiving plate hardware that mounts to the frame</td>
</tr>
<tr>
<td>Ryman hanger</td>
<td>Good choice for artwork with a structurally flat back to hang securely and tightly to the wall</td>
<td>Comes in different sizes for various weights</td>
<td>Slide spring keeper attaches two receiving plates together and is adjustable</td>
</tr>
<tr>
<td>Cleat wall hanger</td>
<td>Designed for heavy and oversized frames; can handle a broader weight load while offering stable attachment to the wall</td>
<td>Also commonly made of wood with interlocking &quot;Z&quot; design; suitable for many different wall and frame types</td>
<td>Large, heavy works that span a broad length</td>
</tr>
<tr>
<td>Picture rail and track hanging systems</td>
<td>Picture rail installed parallel to the ceiling with cables, chains, rods or decorative braided cords</td>
<td>Specially designed hardware and cables offer a variety of options for hanging without damaging walls</td>
<td>Modern and industrial styles are best suited to contemporary art collections</td>
</tr>
<tr>
<td>Custom-made hanging hardware systems</td>
<td>Best for complex, heavy works of contemporary art and old, heavy European frames with deep frame structures or lavish ornamentation</td>
<td>Endless options, but common designs are constructed of flat strap steel; a steel hanger can be shaped to suit hanging or mounting hardware</td>
<td>Recommended for high-value artwork of any kind</td>
</tr>
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</table>

The following two examples, though useful for some hanging purposes, are not recommended for high-value works of art:

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<tr>
<td>Wire hanging systems</td>
<td>Hanging with wire between two eye hooks or D-rings</td>
<td>Braided or stainless steel</td>
</tr>
<tr>
<td>Standard commercial wall hanger/common hanger</td>
<td>Simple wall hanger secured with a single nail</td>
<td>Variety of sizes available to hold different weights</td>
</tr>
<tr>
<td>Weight capacity</td>
<td>Where to purchase</td>
<td>Other notes</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Adhere to manufacturer’s specifications</td>
<td>Frame, hardware or art supply stores</td>
<td>D-rings used with wall hooks are more secure than wire used with wall hooks.</td>
</tr>
<tr>
<td>4-34 kgs</td>
<td>Most quality hardware and framing shops; online resources</td>
<td>These are a good solution for plasterboard and wood-panelled walls. Closed, flexible clip styles are more secure and should be used in earthquake-prone areas.</td>
</tr>
<tr>
<td>Adhere to manufacturer’s specifications</td>
<td>Specialty hardware stores</td>
<td>Screw and anchor designs are the most effective. Do not confuse these with adhesive hangers commonly found in hardware stores.</td>
</tr>
<tr>
<td>The common J-hook can hold 22 kgs per hook</td>
<td>Fine art installation companies; online resources</td>
<td>Southern California museums rely on this hook for earthquake protection.</td>
</tr>
<tr>
<td>Adhere to manufacturer’s specifications</td>
<td>Companies that sell specialised hardware to framing and installation companies</td>
<td>These might appear complicated to install but are quite straightforward if using the manufacturer’s instructions.</td>
</tr>
<tr>
<td>10-45 kgs</td>
<td>Companies that sell specialised hardware to framing and installation companies</td>
<td>A security version is available that locks the two plates together. Another version called a linked hanger can accommodate a deeper framed back.</td>
</tr>
<tr>
<td>Adhere to manufacturer’s specifications</td>
<td>Specialized fine art installation companies</td>
<td>Consult a professional framer or art installer to design cleat hangers for your specific needs.</td>
</tr>
<tr>
<td>Can be custom designed to hold large and heavy works</td>
<td>Specialty design companies; online resources</td>
<td>This option can be expensive. It’s best suited to the collector who changes out artwork frequently.</td>
</tr>
<tr>
<td>Designed to suit the weight of the specific artwork</td>
<td>Art conservator or fine art installer who specialises in custom hanging solutions</td>
<td>Custom hardware will ensure the strongest, safest and most secure display.</td>
</tr>
</tbody>
</table>

**Drawbacks**

- Artwork can shift or slip on the wire (however, double wall hooks do provide additional support)

- Only appropriate for lesser value, small, light items such as photos or posters
Displaying art in other manners

You may have prized works of art in your collection that aren’t intended to hang on a wall. Please note the following:

Paintings leaning on shelves or mantels

While it can be an attractive look, paintings that are not secured to the wall are in danger of falling. To secure the top of the frame to the wall, choose an appropriate hook for the wall type. Hanging wire can be fashioned to attach the frame to the wall hook by interweaving wire and tightening it into position. Small turnbuckles also can be installed and hidden from view. Base supports can be added if the mantel or shelf does not have an appropriate raised lip to prevent sliding.

This type of installation is often seen over fireplaces. Displaying a painting above a fireplace presents additional risks related to excessive heat, smoke residue and the long-term effects from rapid fluctuations in temperature and relative humidity. Consequences of these exposures include cracking and flaking of the medium surface, staining and warping of the wood support structure and/or the frame.

If you still prefer to display art above a fireplace, place spacers behind it to create an area for air-flow exchange. Also, glazing (covering the artwork with Plexiglas or anti-shatter museum glass) can prevent smoke residue buildup on the surface. Another suggestion is to rotate what you display frequently, so items are not exposed for long periods of time. The best protection, of course, is to avoid displaying anything above a working fireplace. Consider only displaying items in the off season, when the fireplace is not in use.

Sculptures or three-dimensional objects

Assess the needs of each piece to ensure proper installation. Objects such as a tall, free-standing sculpture or a ceramic vase with a small base or foot often can be supported by a custom-made contoured mount. The mount can be attached to a display base or the wall to give the object more rigidity and prevent it from toppling. To secure display bases or pedestals, bolt them to the floor or add skid-resistant material. These items are more prone to falling or being accidentally knocked over.
Playing it safe at home

Another aspect of collections care is identifying—and addressing—potential risk factors within your home. Armed with this knowledge, you can minimise the potential for damage. Hiring qualified professionals and training your personal staff is equally critical.

Use the following guidelines to start, but also consider any unique circumstances that may call for additional protocols. AIG Private Client Group’s Risk Management and Appraisal team is a good source of information as well.

General considerations

The standard museum environmental levels best suited for displaying art is 20–21 °C, and 45–65% relative humidity. Damage can result from drastic fluctuations in relative humidity over a short period of time. If you are unable to maintain these ideal conditions in your home, maintaining consistent temperature and relative humidity (or ensuring that changes are gradual) is key.

Paintings

- Use professional fine art handlers and installers whenever possible.
- Wash hands or wear gloves to prevent oil and dirt from damaging the surface.
- At least two people should handle large works to manage size and weight safely.
- Never stack framed works unless the two frames can be supported at two adjoining points and hanging hardware does not contact the other surface or glazing.
- Place pads between the frame and the wall or floor to protect from abrasion and prevent sliding.
- Plan and clear the pathway and final resting point before moving the artwork.
- Never install a painting near heating vents or frequently used fireplaces; in direct sunlight; or in high-humidity areas such as bathrooms, kitchens or outside doorways to these areas.
- If a painting is not on display, store it in a designated storage area that is above ground, has minimal light exposure and is free of moisture.

Works on paper

- Prints, drawings, watercolors, pastels and photographs are extremely fragile and vulnerable to damage from light, humidity and mishandling.
- Exposure to ultraviolet (UV) or infrared (IR) light can result in long-term damage to physical properties.
- To prevent exposure to sunlight, never install works on paper near windows or doorways.
- Filter interior (especially fluorescent) lighting to reduce UV rays.
- Light levels for sensitive pieces should be no more than 3m candles.
- Rotate works on paper on a regular basis to prevent long-term damage. They should be displayed for six months to one year, maximum, and then stored the same amount of time before reinstalling.
- Contemporary art and some Asian works (scrolls, album leaves and panels) are often displayed unframed or unglazed. For preservation, consider custom displays.
Additional factors: design and décor

The joy of viewing art in your home is the reason most people collect. Creating a secure environment requires you to look beyond display concerns and consider the structural layout, furniture placement and traffic flow patterns of your family and guests. Keep the following in mind, and work with your professional installation staff or interior designer to help determine the best locations for artwork.

- In living rooms, recreational rooms and other high-traffic areas, the pathways between furniture and walls should be wide enough to prevent contact from frequent movement.
- Bedrooms are usually less problematic due to fewer daily activities, but the same basic principles regarding high-traffic areas should be applied.
- Kitchen and dining areas are less desirable locations for displaying art. Works may be subjected to rapid temperature fluctuations, high levels of relative humidity and oily cooking vapors.
- Bathrooms are the least desirable locations because of rapid fluctuations in temperature and high levels of relative humidity produced in a confined space.

Diligence quite literally pays off

A well-maintained collection is more likely to preserve its value over the long term. Making certain that works are properly installed is just as important as periodically checking hardware that was installed years ago. Finally, minimising exposure to light, humidity, temperature fluctuations and all other accident-causing elements can prolong your enjoyment for years to come.
For more information about protecting fine art or other collections (wine, jewellery, antiques and more), please contact your independent insurance advisor or contact Kris Coombes, Head of Risk Management and Appraisal Services at kris.coombes@aig.com

References

PACIN (Packing Art Handling Crating Information Network), a Professional Interest Committee of the American Association of Museums, www.pacin.org


Art Hardware; The Definitive Guide to Artists Materials; Steven L. Saitzyk; C. 1987; Watson-Guptill Publications, New York.

Australian Supplier Sources

M&N Supplies • www.mnsupplies.com.au • P: 03 9553 5888

Art Hanging Systems • www.arthangingsystems.com.au • P: 1800 278 426

Art Hung • www.arthung.com.au • P: 03 9813 4415

Picture Hanging Systems • www.picturehangingsystems.com.au • P: 1300 883 645

AIG Private Client Group wishes to acknowledge Brent Powell for his efforts in developing the content for this brochure.

Brent Powell has worked in the museum and fine art service industry since 1983. He has specialized in collection care in the areas of preparation, installation, packing and storage both in the United States (Nelson-Atkins Museum of Art, Kansas City and Asian Art Museum, San Francisco) and in Australia (National Gallery of Victoria, Melbourne). He has also worked as Director of Special Projects (Fortress Fine Arts, Boston) and Director of Museum Services (International Art Services, Sydney) providing services for private collectors, commercial galleries and national and international museums. Since 1991 Brent has been actively working in training and professional development and he has edited and contributed to various collections care publications. He is Chair of PACIN (Packing Art Handling Crating Information Network) and sits on the Western Museums Association Programs Committee. In his current role as a Senior Project Manager with ARTEX Fine Arts Services, Brent is managing the relocation of the National Museum of Health and Medicine. Brent lives with his wife, Kim, in Washington, DC.
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