

## **The enemy: Solar radiation...alias: Sunshine...alias: ultra-violet light.**

by Jim Fishwick, Manager, Matshop.com and Matshop.ca

Direct sunlight is very, very hard on any mat, but especially non-conservation matboard. Fading of the mat color can occur extremely quickly in late spring, summer and early fall when the sun is high, and is still a major concern at any time of year. The core of the mat will go pre-maturely brown with high exposure.

The artwork itself is also at risk, especially lower quality prints. Photos printed by high volume retailers can fade in a couple of days of strong sun. Photos from higher quality retail photo finishing shops are often of much higher quality, but will still fade with enough exposure to direct sunlight. The cure is easy. Never allow framed art of any type to be exposed to direct sun. Period.

Unfortunately florescent lighting has some of the same harmful qualities of sunlight, though to a lesser extent. If the artwork will be exposed to high volumes of this type of lighting, consider purchasing conservation quality glass. It is available at most glass shops and in custom framing retail stores.

Prepare to be shocked, as the price is very high.

Regular and non-glare glass afford some UV protection, but not much. Acrylics, (plastic, plexiglass, etc.), have inherent properties that reduce some ultraviolet light but cannot be considered conservation quality.

## **The enemy: High relative humidity or excess moisture.**

Definition of Relative Humidity: The amount of water vapor in the air relative to the amount of water vapor the air is capable of holding at a given temperature. If the temperature goes down, the relative humidity will go up. If the temperature goes down enough, the air cannot hold the moisture and condensation occurs. Excess moisture in the air will penetrate the framing package, causing condensation. The problem is most apparent when a slight bit of cooling allows water vapor to condense on the glass. Any adjacent surface will suffer water damage.

If a mat is present at least the artwork is protected from direct damage, which is an excellent reason to use mats. Most artwork will tend to become wavy. Under normal conditions this should not be a big problem. If the temperature inside is warmer than outside, the relative humidity should remain below the danger point.

Unheated areas can sometimes produce relative humidities at or near 100%, and certainly bathrooms and kitchens can be a problem. Shipping artwork, or allowing it to be transported in vehicles during periods of high heat and humidity can be deadly if care is not taken. Moisture absorbers can be packed with artwork to help protect it. Artwork in kitchens and bathrooms can be sealed to some extent by caulking the edges, but this is only a partial help. Never hang valuable artwork in a high humidity area. Ever.

## **The enemy: High heat.**

Most materials shrink or expand with high heat, and the framing package is no exception. Leave a mat out in an area of rising temperature and it will cup, sometimes substantially. The level of relative humidity will also contribute to this effect. High heat combined with excessive humidity can cause artwork to become glued to glass, especially in the case of photos. Once this occurs, the damage is permanent. Use mats to keep the artwork from touching the glazing. Generally, high heat in a home should not be a big problem, especially in dry areas. Transporting artwork can be tricky. Never leave it in a trunk during hot or humid weather, and even the interior of a vehicle can be much too hot. Get it home to a safe environment as quickly as possible. When shipping artwork make sure it will not be subjected to high heat.

## **Summary**

Do not get paranoid about exposing framed artwork in normal settings. Hanging from a wall a few feet from either the floor or ceiling protects it from extremes of temperature and humidity within the house. Be sure the house is never left unheated in cold and damp weather, and never leave it outside or in vehicles any longer than possible. Make sure the sun never sees it directly, and keep your better stuff away from florescent lights. Use conservation glass or acrylic for especially valuable or valued pieces.

## **About MatShop**

MatShop has been supplying mat and framing supplies to photo retailers for 10 years, and through the WEB for 6 years. Its customers are artists, photographers, manufacturers and others who require volume purchases of these products. The purpose of the MatShop.com page is to supply background information on all products, and to suggest how mats and frames can benefit the specific needs of its customers. MatShop is a Division of Island Art Publishers, ( [www.islandart.com](http://www.islandart.com) ). Island Art markets art cards and other products throughout the United States and Canada using the exact products we recommend to our MatShop customers.