

Developed in collaboration with Conservator James Bernstein and Golden Artist Colors, Inc.

Selecting Artist Canvas for Painting

FIBER CHOICES: Cotton, Linen and Synthetic Fabrics

Of all natural fibers woven into fabric for painting supports, linen has traditionally been, and remains to this day, the premier artist's canvas choice. Tan-gray in color, long, and springy, it may be lightened in color with bleaching. Since chemical bleaching is an oxidizing process, excessive lightening of the color will weaken the chain-length of the fibers, so "natural" colored linen may be preferred.

In the late 19th century, as the cost of linen fabrics rose dramatically, cotton fiber fabrics gained popularity with artists. Especially affordable for large-scale paintings, artists in the second half of the 20th Century also turned to cotton, finding its warm white color did not require coverage with a pigmented white ground, thus foregoing a preparation step. Cotton fibers, however, are inherently weaker than their longer linen fiber cousins, even more so when wet. Unlike linen, which tends to be elastic, springing back after extension, cotton distends and does not completely return to its former dimension. Cotton also does not resist bacterial growth effectively.

Exposed Canvas vs. Preparatory Grounds

In their exposed state, cotton (or for that matter, bleached linen) fabrics have a beautiful, soft translucent quality of moderate reflectance. Aged canvases, however, such as unpainted passages of fabric on Stain or Color Field paintings of the 1950's and 1960's, remind us that the initial clean white background of cotton will darken upon aging, especially if uncoated, unprotected and exposed to unfavorable conditions.

It is important to distinguish that painting

directly upon bright white cotton or bleached linen canvas is not the same as painting on canvas prepared with a ground (acrylic or oil) or gesso (animal glue). A pigmented ground serves several functions: it fills, smoothes and seals off irregularities and fabric porosity. It also provides a superior continuous, opaque and reflective stage upon which to paint, due to the higher refractive index (RI) and bounce of the white pigments in grounds, especially Titanium, Zinc and Lead.

A white ground however, is not the same as white paint. Grounds are designed to be sufficiently lean, toothy and porous to receive paint well. If it is desired to leave large expanses of white background exposed as an element of a painting composition, consider covering that white ground with white paint. The paint will exhibit better brilliance and scuff/mark resistance than the white of an artist's ground.

Selecting Artist's Canvas

When choosing a fabric to paint upon, select only a fabric intended and tested for artist's use. There are many interesting and beautiful natural and synthetic fiber fabrics manufactured to perform effectively for various purposes. But if a fabric is unfamiliar or has not been tested extensively for art use, it is difficult to predict long-term performance and stability. In some instances, the fabric itself may be excellent but a coating or finish applied to the material has a less-than-desirable effect upon paint adhesion and aging.

A number of canvases are offered that combine natural fibers to achieve a variety of textural effects and to make the canvas more affordable. Linen may be blended with hemp, jute or still other exotic fibers. Almost all of the secondary fiber types, however, are of lesser durability and are to be avoided; they are no match for a high-quality all-linen thread fabric.

Synthetic fiber fabrics are often uniform

and smooth in thread configuration and may be very strong. Generally speaking, they are not as responsive to humidity changes as their natural cellulose fiber counterparts. They may however, have other sensitivities, notably heat, which may produce permanent distortion or contraction.

When selecting a canvas material, look for a textile with a close weave, with similar thread size and comparable strength in both the warp and weft directions. Thread count density and canvas weight numbers are helpful in determining the relative substantiality and weight of a fabric. The fabric should be appropriate to the scale and demands of the project at hand. Do not select a light-weight contender like a thin handkerchief linen, and then work oversized, loading pounds of paint onto it. If considering a fiber-blend canvas, be sure the blending is in the threads, not in the weave. Avoid a natural fiber thread in one weave direction with a synthetic fiber thread used in the tangential direction.

When purchased, canvases often say "unsized" referring to the fact that they come with no coating to speak of. In fact, natural fiber threads and fabric almost invariably have some form of sizing. A thin size coating helps prevent fibers from being too weak or "fuzzy" during processing or from slipping unevenly during weaving or rolling. Some fabrics are pressed or polished after weaving to prevent irregularities of slubs from sticking up, giving the fabric a smooth finished look. Rinsing or wetting a natural linen or cotton canvas with water, or applying a dilute animal glue or acrylic sizing will unlock some of the sizing and will cause the fibers to swell and thread distinctions to stand up, revealing the true character of the canvas weave and texture.

Despite precision manufacturing, by the time fabrics are woven, rolled onto large rollers and then repackaged, there is inevitably some canvas weave and tension variation from passage to passage in the

canvas. It would be ideal if the tautness was identical in the warp and weft direction, but this is rarely the case. Still, it is desirable to seek fabrics where the tautness of weave is as close to equivalent as possible.

Regarding storage of artist canvas stock, keep fabrics neatly rolled on cardboard or PVC tubes. If pre-primed canvas, the ground layer should always be rolled facing outwards. Store tubes standing on end or

horizontally (by the outer ends on a rack, or by cable or nylon rope through the tube centers). Protect the canvases from soiling by protective wrapping in paper and then plastic sheeting.

For further discussion and resources regarding canvas preparation and stretching, see:

Bernstein, James. *A Remarkable Way to Stretch Canvases (and other Essentials of Canvas Preparation)*. JUST PAINT New Berlin, NY: Golden Artist Colors, Inc. Issue 17, September 2007.

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