

DURABILITY TEST

Grieger has conducted a durability test in collaboration with a laboratory and artgrey Photoproducts, based on DIN EN 438-2.

Test Climate Chamber

The following material combinations were tested:

A.) Only paper, printed on a modified Mimaki printer equipped with Epson Ultrachrome Pro ink.

B.) Same samples sealed with Diasec® and laminated with Dibond.

Paper 1 = Canson Platine Fibre Gloss

Paper 2 = Ilford Galerie Smooth Pearl

All samples were initially stored in a climate chamber for 30 days at 30°C and 50% humidity. No differences were observed compared to the references.

Since we are discussing tests on artworks, we consider the commonly used temperature of 70°C to be unrealistic.

Result

This experiment aimed to determine if the adhesive film used in the Diasec® process has negative effects on the surface of the vapor-permeable Canson Platine Fibre Gloss. The samples showed no negative effects after storage.

UV Radiation Test

In another test, the samples were exposed to high UV radiation. The pure paper tests were irradiated for 20 hours, equivalent to 5 – 6 years of UV exposure. The Diasec® samples were additionally exposed to the same UV radiation for 7 days, equivalent to a calculated light exposure of 35 – 40 years.

Please note that the measured laboratory values may not be 100% accurate due to the acrylic glass barrier for technical reasons. However, the measurement conditions before and after irradiation are constant, providing reliable results.

It is important to emphasize that these are laboratory values. The natural aging process of an image is influenced by unpredictable factors.

Result and Guarantee

Therefore, these test results should not be understood as a guarantee from Grieger. The results clearly indicate that fading of prints (caused by UV exposure), as seen with C-prints, is almost eliminated.

Regardless of materials and manufacturing processes, artworks should never be exposed to direct sunlight or constantly changing climatic conditions.

Another often overlooked factor is the presence of pollutants in our atmosphere, such as harmful emissions from PVC, ozone, nitrogen oxides, and chlorides. Solvents from composite materials or in pure form can also have detrimental effects on the artwork. These influences can be more damaging to a print than light! These circumstances prevent a reliable durability guarantee.

However, based on our decades of experience, we are confident that the mentioned products currently offer the best combination for a sustainable artwork in XXL inkjet printing.

As of March 2024