

Fading of Colours

Colour fade is principally caused by the ultra violet component of light decomposing the structure of coloured pigments or altering their chemical constituents. It affects some of the bright, fairly intense colours in the "organic" or synthetic group of pigments used in modern coatings by paint and texture manufacturers. Many of these colours are perfectly suited indoors but change differentially on exterior exposure. Previously many of the bright pigments were compounds of lead, chromium, cadmium and other toxic elements and were quite resistant to UV degradation. Health and Safety legislation now prevents the use of these pigments in architectural coating.

In general, the clean and bright gold, red, pink, orange and violet tones can be expected to fade (or darken) significantly more than the blue, green, and terracotta type colours. We refer to the resistance of a coloured pigment to UV degradation as it's "light fastness" and for individual pigment types this is fairly well known. But in practice very few colours are achieved by using just one pigment or colourant so it becomes difficult to predict the likely fading of a mixed colour, particularly since the actual pigments can react chemically with light with one other, either improving or reducing the potential fade. The degree and rate of fade are very much governed by the actual time of exposure to direct sunlight but over enough time all colours will show some change. Further, colours also have varying degrees of "weather-resistance" and their appearance can be altered by moisture, heat and chemical pollutants in the atmosphere. The actual paint or coating also plays a major part. In coatings using a high quality acrylic resin (eg ROCKCOTE Armour and Toscani), the fade or darkening can be significantly inhibited or retarded.

Also, pigment technology is constantly improving and more light-fast pigments are coming onto the market, albeit at a high cost premium.

When selecting a colour scheme for a home or project it is important to keep the potential for colour fade in mind and to seek advice from the manufacturer of the coating to be used.

