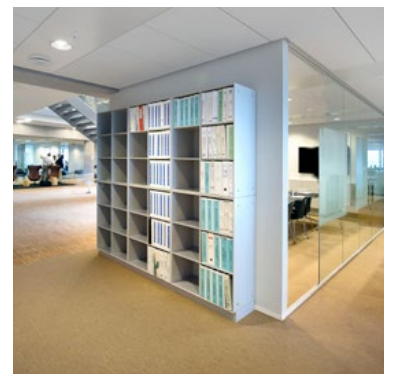
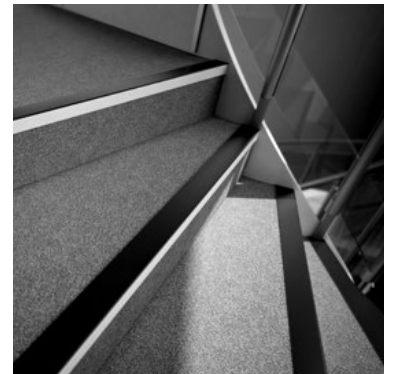




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## LIGHTFASTNESS GUIDE



# WHAT IS FADING?

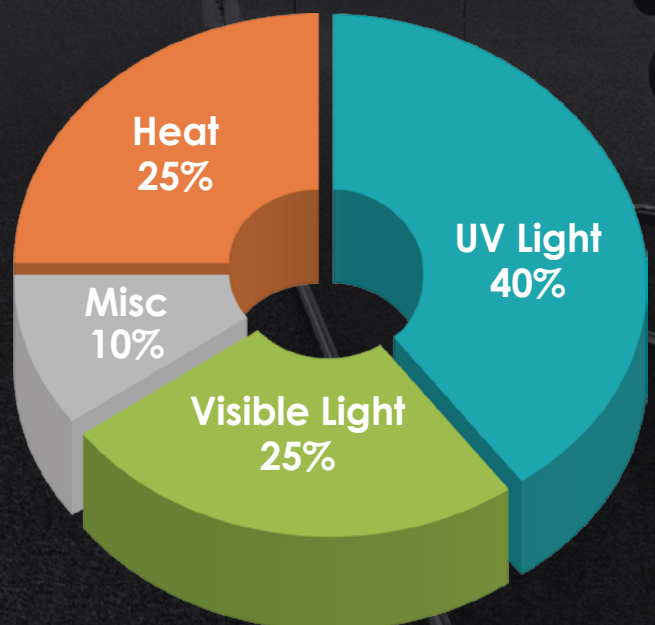
Fading is a change in colour over time. It is measured by evaluating the colour of a material at two or more points in a given period of time. Often the loss of colour, or a reduction in colour saturation, is due to bleaching and this is a dilemma common to all industries and locations with the plain truth being that all colour fades.

While ultraviolet (UV) radiation often causes discolouration and degradation of materials, it is by no means the only cause. Visible light also plays a part, and can be more damaging than UV light.

## Causes of Fading in Carpets

Darker shades of colour, such as blues and reds, will usually be more susceptible to fading than lighter colours. These will absorb more solar energy and reflect less. Primarily, it is the breakdown of the dyes due to their inability to dissipate absorbed energy that ultimately causes fading.

Ultraviolet (UV) light from the sun accounts for approximately 40% of the fading process. Visible light and solar heat each contribute approximately 25% and 10% can be attributed to miscellaneous effects such as indoor artificial lighting, humidity, gassing, heat and poor dye affinity.





# LIGHTFASTNESS EXPLAINED

Lightfastness is the term used to describe how resistant to fading an item is when exposed to light. Light striking a surface can alter or break the chemical bonds of the pigment, causing the colours to bleach or change, in a process known as photo degradation.

Almost every carpet or any textile will lighten in colour or fade over a period of time. The extent of damage depends on a number of factors; colour, dye method, the location, exposure and intensity of light amongst other factors.

A solution-dyed fibre is least susceptible to sun fading. The pigment colours are added to the polymer while in its liquid state before forming the fibres, therefore locking in the colour. Many of our carpets are solution dyed including the Equinox Collection and the ECONOMIX range.

Our carpets undertake a light fastness test where samples are exposed to an intense artificial light generated by a Xenon arc lamp. The light passes through a series of filters to ensure that its spectrum (wavelength make-up) closely matches that of natural daylight through glass. The humidity and temperature of the test atmosphere are controlled.

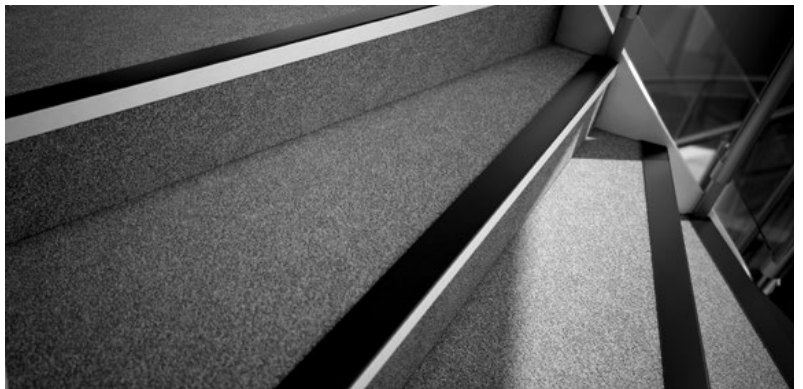
**British Standards state that carpets should reach a lightfastness rating of 5. Our carpets, which included the Equinox Collection and the ECONOMIX range, have a lightfast rating of minimum 5 which means they either meet or exceed British Standards.**

## How to keep fading at bay

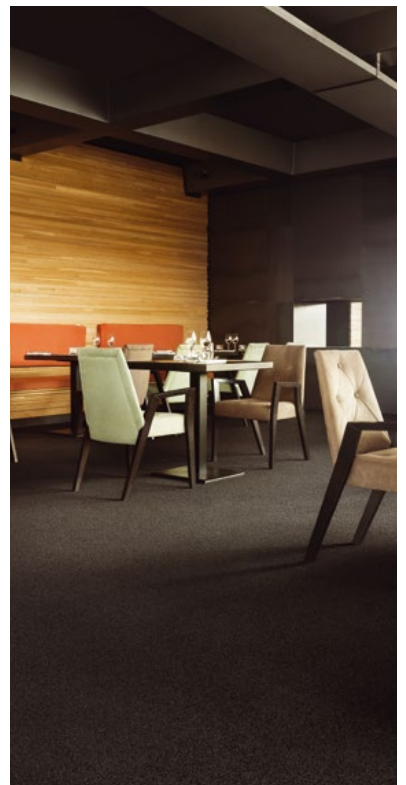
The best method of keeping fading at bay consists of purchasing blinds or drapes for the windows and doors overlooking the carpet during the moments when sunlight reaches its peak (midday). Replacing the windows with UV resistant glass or adding protective films to your windows is also an option, although it will still let sunshine through to a certain extent.

Furthermore, a damaged carpet fibre is unable to maintain its pigment. Fibre damage occurs not only from UV exposure, but also from traffic. If you constantly step on the same spots of the carpet you will eventually weaken its integrity, rendering it susceptible to fading. Try regularly relocating furniture to create different walkways in order to avoid subjecting a single area to intense traffic.





## Innovative Carpet Solutions



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