

# Facts About Fading

## "as a rule of thumb"

To understand the causes of fading, one must know a little about the makeup of sunlight. Sunlight is basically made of three elements:

**Visible light** - the part that we 'see'

**Infra Red** - the part which we 'feel' as heat

**Ultraviolet light** - which we neither see or feel but is the main factor in causing fabrics and furnishings to fade as well as UV damage to the skin.

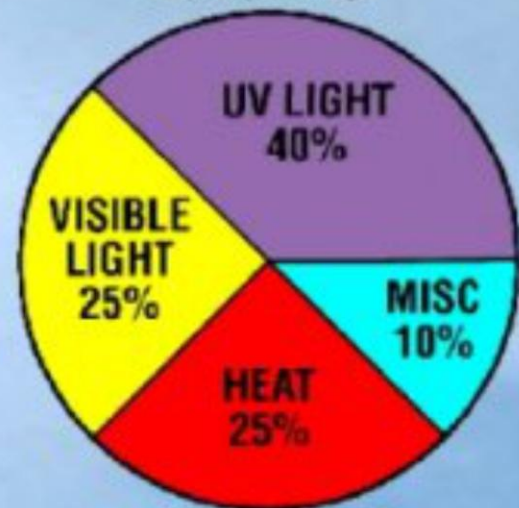
Ultraviolet absorbers are used to stop UV at the film. The type, amount, and location of the absorbers in the product determine the film's ability to reduce fading. Absorbers that are located in the adhesive only (blocking 95%-98%) instead of the film itself (blocking over 99%) are far less stable and enduring. All of our solar control products absorb over 99% of the UV rays. On average, clear glass filters 25%, dual pane filters 40%, and Low-E glass just screens out 56%.

Fading is a complex issue because each and every material has a different propensity to degrade from exposure to ultraviolet radiation and other contributing factors. For example, wood is extremely vulnerable to fading from sunlight (both visible and invisible light affect fading). Different types of hardwood floors have varying tolerance levels to fading from exposure to sunlight.

It is generally accepted that UV radiation can be responsible for roughly 40%-60% of all fading. In addition to ultraviolet radiation, other factors include.

- \*Normal sunlight and indoor artificial lighting.
- \*Humidity / Moisture
- \*Poor dye fastness in the fabric
- \*Chemical vapors in the air

Miscellaneous - indoor artificial lighting, humidity, and poor dye oncharge.



It is important to mention that no window film or glazing product will totally prevent or stop fading.

**PERFORMANCE  
WINDOW FILMS, LLC**  
[PERFORMANCEWINDOWFILMS.COM](http://PERFORMANCEWINDOWFILMS.COM)