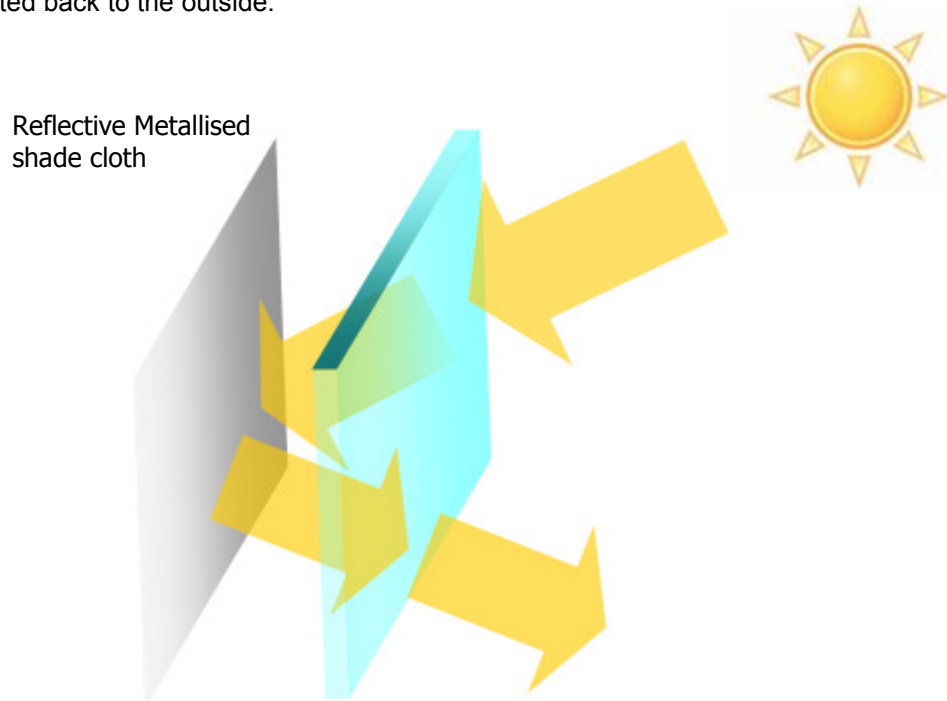


Why reflective indoor solar shading are effective

Glass is transparent for solar radiation

The fact that we can see things (objects) through glass means that light travels through it in both directions. Clear glass is very transparent for solar radiation, not only the visible light, but also the short wave (Near) Infrared is mainly passing. Visibility of objects through windows proves it. Since Glass is transparent it is possible to reflect solar radiation out again. It's a common misconception that the heat will be trapped between glass and shade. With a reflective metallised shade this is not true. The main part is reflected back to the outside.



Energy in Visible Light

Visible light contains 45...50% of the total irradiated solar energy. The coloured area in graph below shows the average energy content of Ultraviolet, Visible Light and Near Infrared. This means that for solar control not only the Near Infrared but also daylight access should be controlled (reflected back out). Metallised fabrics are reflecting the complete solar spectrum. All our performance calculations of e.g. light transmissions, g-values and U-values are taking these reflections into account and are in compliance with standards ISO 9050 and ISO 15099

