How to pick a solar screen fabric:

- The lighter of the fabric the better for reflecting heat
- The darker the fabric the better for glare control

How does a solar screen work:

The fenestration property chart is a compilation of different properties derived in percentages that are based on the openness factor and fabric color. To calculate the effectiveness of each style and color you must take the solar transmittance, solar reflection and solar absorption of each fabric to obtain the shading coefficient of each fabric. The shading coefficient of the fabric will assist engineers in deriving the best fabric for each glazing application and will provide the best solar protection along with glare control. The combination makes for a strong heat and glare control based on the directions of the glass to the suns angle as well as the number of sun hours per day for each facade of the building.

Fenestration Properties:

Ts: Solar Transmittance

measures the proportion of solar energy transmitted through the fabric. A low figure indicates a good filtration of solar energy by the fabric.



Tv: The Visible Light Transmittance

measures the percentage of visible light coming through the fabric that can be seen by the naked eye. It is related to the amount of light (brightness) a person receives through a glazing system. A low figure shows a very efficient fabric.



Rs: Solar Reflectance

measures the proportion of solar energy reflected by the fabric. A high figure indicates a good reflection of solar energy by the fabric.



O-F: The Openness Factor

measures the proportion of holes in a woven fabric. This parameter, together with other technical properties of the fabric, should be considered when determining the degree of visibility and heat and glare control that the fabric offers. The openness factor can vary slightly from color to color in the same fabric, and is often expressed as an Average OF. A low OF shows that the fabric is a very low weave.



As: Solar Absorbencies

measures the proportion of solar energy absorbed by the fabric. A low figure indicates a low absorption of solar energy by the fabric.



Tuv: The UV Transmittance

is closely related to the openness factor and measures the amount of UV that is transmitted through the fabric.

Sc: The Shading Coefficient

is the ratio between the solar factors of the protected window (glazing + sun blind) and the solar factor alone.



