selecting solar shade fabric

SWFcontract[™] solar shading systems combine function, flexibility and a clean design aesthetic for managing sunlight in today's commercial interiors. A broad collection of high performance, light filtering fabrics contribute to optimizing natural light while controlling heat and glare. State-of-the-art, low VOC emission fabrics can contribute to improved indoor air quality and are often specified in LEED[™] projects. SWF offers PVC free and GREENGUARD[®] certified fabrics.

Solar Optical Properties

Visible Transmittance (T_v)

- Measures the percentage of visible light that passes through the fabric.
- Fabrics with the same openness factor may differ slightly in $T_{\rm v}$ due to the reflectivity of light colors.

Solar Transmittance (T_s)

• Measures the percentage of solar radiation that passes through the fabric.

Solar Reflectance (R_s)

• Measures the percentage of solar radiation reflected back out of the fabric.

Solar Absorbance (A_s)

• Measures the percentage of solar radiation absorbed by the fabric.

 $T_{s} + R_{s} + A_{s} = 100\%$

Building orientation and impact of fabric selection

	Sun Exposure	Fabric Performance	Fabric Openness
North	Less exposure	Less sun control required	>5%
South	Less exposure	Moderate sun control required	5%
East	High exposure	High sun control required	<5%
West	High exposure	High sun control required	<5%

In addition to openness factor, fabric color is a top consideration.

- Light color fabrics reflect more light reducing heat buildup.
- Dark color fabrics reduce interior glare while maintaining the view.