

The technical data at a glance

Composition	Treated fibreglass fabrics PVC-free, halogen-free	
Fire classification	M1 (F)	NFP 92 503
	FR (USA)	NFPA 701-99 TM # 1 California U.S. Title 19
	AS (AUS)	AWTA Tested AS 1530 part 2 and 3
Openness factor	1-2 %	
UV screen	Up to 84 %	
Widths	200 cm / 89 – 127 mm 78" / 3 – 4"	
Weight per m ²	160 g 4.7 oz/yd² ± 5 %	ISO 2286 - 2
Thickness	0,25 mm 10 mil ± 5 %	ISO 2286 - 3
Breaking strength	Warp	> 100 daN/5 cm > 112 lbs/in
	Weft	> 100 daN/5 cm > 112 lbs/in
Elongation to break point	Warp and weft	< 5 %
Tear resistance	Warp and weft	≥ 3 daN
		Internal procedure
Resistance to fold	Warp and weft	≥ 10 daN/5 cm
		Internal procedure
Dimensional stability for verticals	Twisting	≤ 10°
	Curling	≤ 5 mm
Colour fastness to light	scale of 8	7/8
		White not graded
Making-up	Welding plus adhesive (thermal, high frequency, ultrasonic) or sewing	
Standard packaging	Rolls of 27 lm Verticals: 100 lm	

The data in this document is for information only and may not be considered as binding.

Solar protection and light control indicators are laboratory-tested. The most relevant and widely-used factors are as follows:

➤ Thermal factors

Thermal factors relating to the fabric alone

Ts Solar transmittance: this factor gives the proportion of solar energy transmitted through the fabric. A low percentage means the fabric performs well at reducing solar energy.

Rs Solar reflectance: this factor gives the proportion of solar radiation reflected by the fabric. A high percentage means the fabric performs well at reflecting solar energy.

As Solar absorptance: this factor gives the proportion of solar radiation absorbed by the fabric. A low percentage means the fabric absorbs little solar energy.

Solar radiation is always partially transmitted through, absorbed or reflected by the fabric. The sum of all 3 equals 100. Ts + Rs + As = 100 % of solar energy.

Thermal factors calculation using reference glazing and according to the position of the blind (indoor or outdoor)

Sc Shading coefficient (or Fc shading factor or z*): this factor shows how effective the fabric is at filtering the heat from solar radiation. It is expressed as a factor between 0 and 1. A low figure means high protection from heat flow.



Thermal and optical factors in the American standard Ashrae 74-73

Openness factor (Co) OF 1-2%	Ts	Fabric Rs	As	Thermal factors Fabric + glazing 1/4" Cl. 1/4" H.A. Sc (Fc) internal blind		Optical factors		
						Tv	Tvndif	Tvdifh
Colors								
101 White	41	51	8	0.49	0.40	29	Not applied in the American standard	
270 Riz	39	48	13	0.50	0.41	28		
272 Semoule	39	50	11	0.49	0.40	27	-	
119 Chanvre	39	48	13	0.50	0.41	27	-	
218 Poivre	37	46	17	0.51	0.42	26	-	
105 Beige	35	46	19	0.51	0.41	24	-	
245 Silex	21	33	46	0.56	0.44	19	-	

1/4" Cl: clear 1/4" (6mm) glazing • 1/4" H.A.: heat absorbing 1/4" (6mm) glazing.
Samples tested by the ASHRAE 74-73 standard "Method of measuring solar-optical properties of materials".

Fs Solar factor or gtot factor*: the percentage of solar energy which actually penetrates into a room through the blind and glazing.

Fs = Sc x Fs of glazing
or in European terminology:
gtot = Fc x g of glazing*
The solar factor of the glazing (Fs of glazing or g of glazing) is an indication given by plain glass manufacturers. This is often given randomly as **g of glazing = 0.75** as reference for standard double glazing.

➤ Optical factors

Tv Visible transmittance (or TL Light transmission): this factor gives the total percentage of light radiated through the fabric over a wavelength of 380 to 780nm (nanometers), called the visible spectrum (total illumination).

Of Openness factor (or Co Openness coefficient*): this factor gives, in brief, a percentage of holes in a fabric. In the European standard, it is considered as independent of the colour but, for fabrics with the same weave, it should be measured using the darkest colour in the range.

Tdif Diffuse transmission factor*: correlation of the two factors above:

Tdif = Tv - Co
The diffuse part of total light transmission is indicated as Tvndif for the aspects of glare and shape recognition (visual contact to the outside/night privacy). However, for natural light control, it is indicated as Tvdifh. This is used to ascertain a fabric's light diffusion capacity. Panel becomes a source of light if the sun shines directly on it. The light intensity, or "luminance", emitted by a fabric can also be measured in candelas/m² (Cd/m²).



Dark colour Silex 245	Light colour White 101
Visual transmission (Tv or TL)	
Tv = 19 %	Tv = 29 %
Thermal transmission Total solar factor (gtot or fs)	
gtot = 33 %	gtot = 30 %

Tuv Ultraviolet transmittance factor: this factor gives the percentage of ultraviolet light radiated through the fabric over a wavelength of 280 to 380 nm (nanometers). UV radiation accelerates natural ageing.

All means of solar protection ensure a certain amount of protection from UV rays.

* European terminology