

Composition	Treated fibreglass fabrics PVC-free, halogen-free	
Fire classification	M1 (F) FR (USA) AS (AUS)	NFP 92 503 NFFPA 701-89 Large NFFPA 701-99 TM # 1 California U.S. Title 19 AWTA Tested AS 1530 part 2 and 3
Openness factor	1-2 %	
UV screen	Up to 93 %	
Widths	200 cm / 89 – 127 mm 78" / 3-4"	
Weight per m ²	260 g 7.7 oz/yd² ± 5 %	ISO 2286 - 2
Thickness	0,35 mm 14 mil ± 5 %	ISO 2286 - 3
Breaking strength	Warp > 120 daN/5 cm > 135 lbs/in Weft > 140 daN/5 cm > 157 lbs/in	ISO 1421
Elongation to break point	Warp and weft < 5 %	ISO 1421
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	Internal procedure
Colour fastness to light	scale of 8 7/8 White not graded	ISO 105 B02
Marking	Digital printing / Screen printing Transfer / Paint / Adhesive	
Making-up	Welding plus adhesive (thermal, high frequency, ultrasonic) or sewing	
Standard packaging	Rolls of 27 Im Verticals: 100 Im	

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

T_s 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.

R_s 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.

A_s 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. $T_s + R_s + A_s = 100\%$ 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.

F_s Solar factor or g_{tot} factor*: the percentage of solar energy which actually penetrates into a room through the blind and glazing.

F_s = Sc x F_s of glazing
or in European terminology:
g_{tot} = Fc x g of glazing*

The solar factor of the glazing (F_s 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

T_v 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).

O_f 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.

T_{dif} Diffuse transmission factor*: correlation of the two factors above:

$$T_{dif} = T_v - C_o$$

The diffuse part of total light transmission is indicated as T_{dif} for the aspects of glare and shape recognition (visual contact to the outside/night privacy). However, for natural light control, it is indicated as T_{difh}. 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).

T_{uv} 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

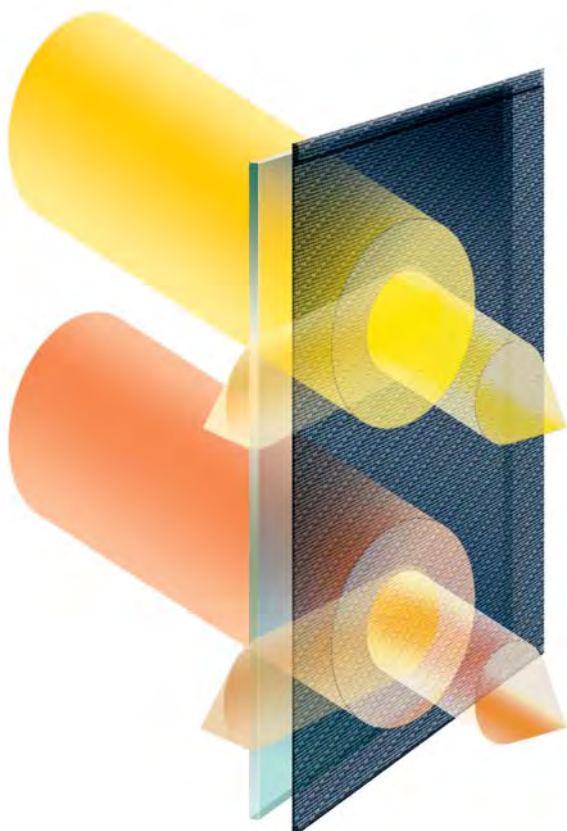
Thermal and optical factors in the American standard Ashrae 74-73

Openness factor (Co) OF 1-2%	Thermal factors					Optical factors		
	Ts	Fabric Rs	As	Fabric + glazing 1/4" Cl. 1/4" H.A. Sc (Fc) internal blind		Tv	Tvndif	Tvdifh
Colours								
101 White	36	53	11	0.47	0.39	25	Not applied in the American standard	
270 Riz	31	48	21	0.49	0.40	22		
272 Semoule	32	51	17	0.47	0.39	21	-	
119 Chanvre	30	51	19	0.46	0.39	20	-	
105 Beige	25	44	31	0.50	0.41	15	-	
553 Chrome	24	39	37	0.53	0.42	16	-	
145 Black	TR*	4	96	0.69	0.50	1	-	

* Trace ≤ 0.5%

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".



Dark colour	Light colour
Black	White
145	101

Visual transmission (Tv or TL)	
Tv = 1 %	Tv = 25 %

Thermal transmission Total solar factor (gtot or fs)	
gtot = 37 %	gtot = 29 %