

The technical data at a glance

Composition	36% Fibreglass 64% PVC		
Fire classification	M1 (F) BS (GB) FR (USA) AS (AUS) C UNO (IT) B1 (CN)	NFP 92 503 476 Pt 6 Class 0 NFFPA 701 – 99 TM # 1 California US Title 19 AWTA Tested AS 1530 part 2 and 3 UNI 9177 GB 50222-95	
Openness factor	3%		
UV screen	Up to 98%		
Widths	200 – 250 cm / 89 – 127 mm 78 – 98.4" / 3 – 4"		
Pattern	Basket weave 1 x 2		
Yarn count	Warp	22 yarns/cm 56/inch ± 5 %	ISO 7211/2
	Weft	22 yarns/cm 56/inch ± 5 %	
Weight per m ²	430 g 12.7 oz/yd² ± 5 %		ISO 2286 - 2
Thickness	0,55 mm 22 mil ± 5 %		ISO 2286 - 3
Breaking strength	Warp	> 150 daN/5 cm > 231 lbs/in	ISO 1421
	Weft	> 150 daN/5 cm > 246 lbs/in	
Elongation to break point	Warp and weft	< 5 %	ISO 1421
Tear resistance	Warp and weft	6=>10 daN	Internal procedure
Resistance to fold	Warp and weft	≥ 20 daN/5 cm	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 (thermal, high frequency, ultrasonic) or sewing		
Standard packaging	Rolls of 27 lm Verticals: 50 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

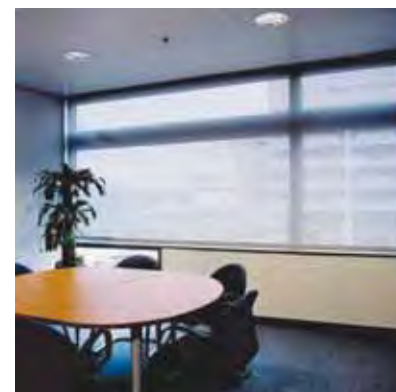
Thermal factors relating to the fabric alone

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.

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 Tvdif 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).

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



Dark colour
Charcoal 3030

Light colour
White 0202

Visual transmission (Tv or TL)

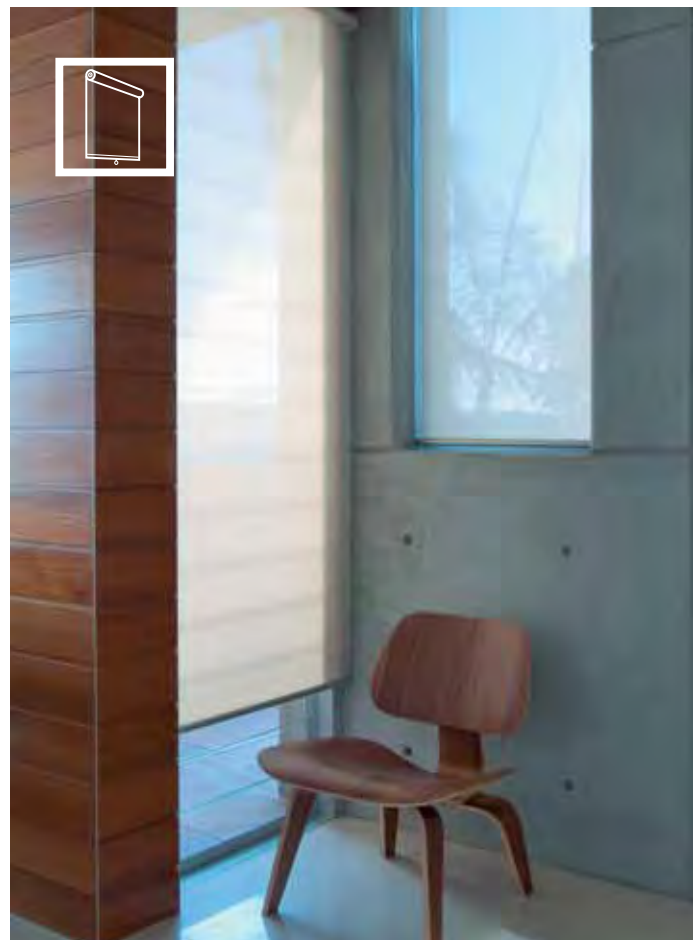
Tv = 4 %

Tv = 12 %

Thermal transmission
Total solar factor (gtot or fs)

gtot = 38 %

gtot = 24 %



The technical data at a glance

Thermal and optical factors in the **European standard EN 14501** **NEW!**

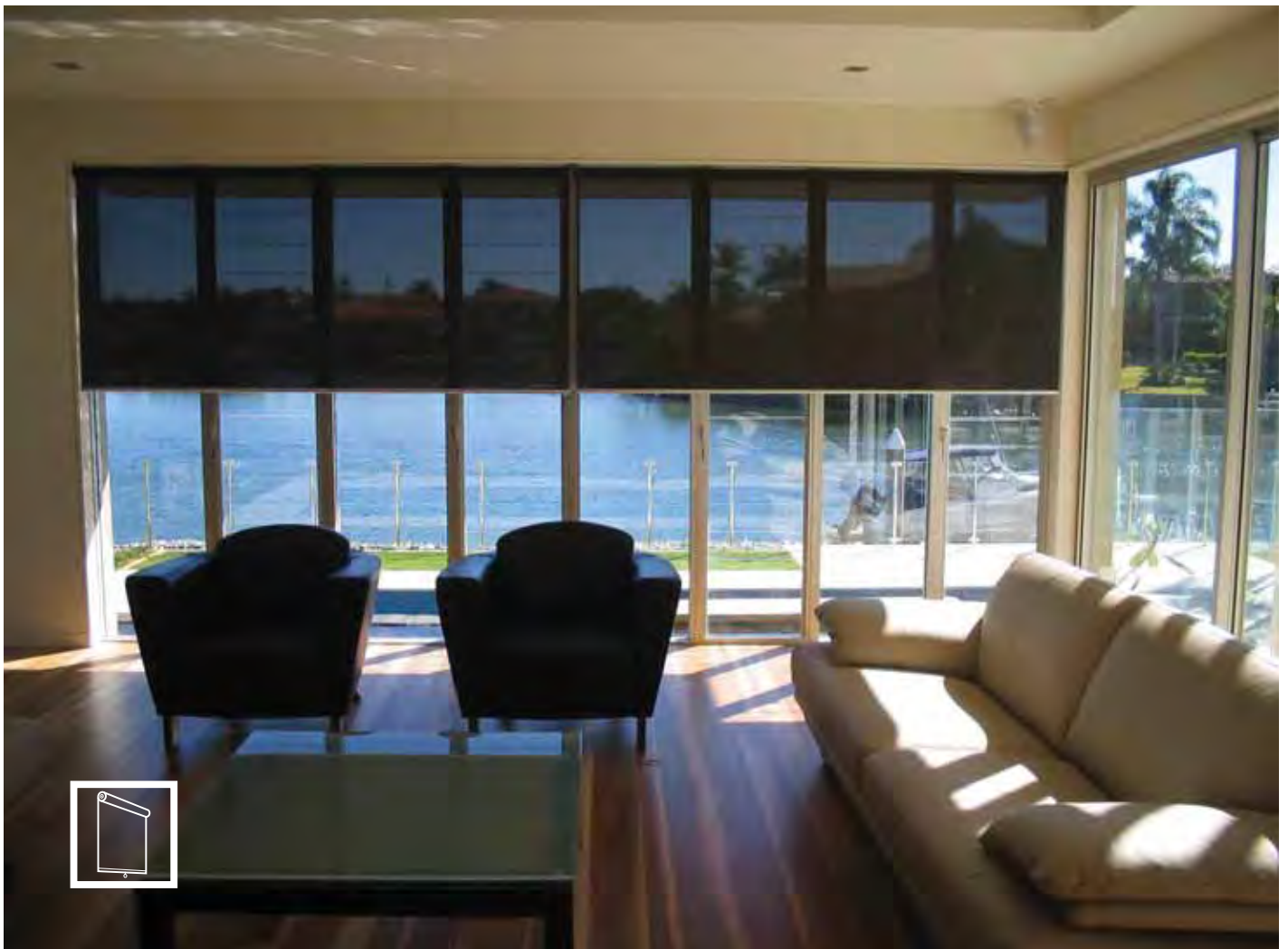
Openness factor (Co) OF 3%	Thermal factors					Optical factors		
	Ts	Fabric		Fabric + glazing		Tv	Tvndif	Tvdifh*
		Rs	As	gv=0,59	gv=0,32			
				got internal blind				
Colours								
0202 White	20	68	12	0,35	0,25	19	15	
0707 Pearl	15	37	48	0,44	0,27	13	10	
3030 Charcoal	4	5	91	0,54	0,30	4	0	

gv = 0.59: solar factor of standard glazing, low-emission 4/16/4 double glazing filled with Argon.

gv = 0.32: solar factor of standard glazing, reflecting low-emission 4/16/4 double glazing filled with Argon.

Samples tested by the calculation methods laid down in standards EN 13363-1 "Solar protection devices combined with glazing – calculation of solar and light transmittance – Part 1: simplified method" and EN 410 "Glass in building – Determination of luminous and solar characteristics of glazing".

Tvdifh* Data available on request.



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

Openness factor (Co)

OF 3%

Thermal factors

Ts Fabric As Fabric + glazing
Rs Sc (Fc) internal blind
1/4" Cl. 1/4" H.A.

Optical factors

Tv Tvndif Tvdifh

Colours

Colour	Ts	Fabric Rs	As	Fabric + glazing 1/4" Cl.	1/4" H.A. Sc (Fc) internal blind	Tv	Tvndif	Tvdifh
0202 White	17	63	20	0.36	0.33	12	Not applied in the American standard	
0220 White Linen	14	59	27	0.38	0.34	9		
0222 White Stone	19	56	25	0.41	0.36	13	-	
0205 White Canary	23	57	20	0.41	0.36	16	-	
0209 White Mandarin	21	53	26	0.43	0.37	9	-	
0281 White Parrot	19	52	29	0.43	0.37	15	-	
2020 Linen	11	55	34	0.39	0.35	7	-	
0207 White Pearl	14	49	37	0.44	0.37	10	-	
0210 White Sable	19	48	33	0.46	0.38	11	-	
0203 White Turquoise	15	46	39	0.46	0.39	9	-	
2022 Linen Stone	15	52	33	0.42	0.37	9	-	
0705 Pearl Canary	15	42	43	0.49	0.40	9	-	
0720 Pearl Linen	10	43	47	0.47	0.39	7	-	
0201 White Grey	9	43	48	0.47	0.39	8	-	
0241 White Ultramarine	7	37	56	0.50	0.40	7	-	
0781 Pearl Parrot	15	37	48	0.52	0.42	12	-	
0709 Pearl Mandarin	17	37	46	0.52	0.42	8	-	
0771 Pearl Apricot	20	39	41	0.52	0.42	11	-	
0707 Pearl	11	34	55	0.53	0.42	7	-	
0710 Pearl Sable	15	34	51	0.54	0.43	10	-	
0701 Pearl Grey	9	29	62	0.55	0.43	8	-	
0703 Pearl Turquoise	11	32	57	0.54	0.43	7	-	
2041 Linen Ultramarine	6	33	61	0.52	0.42	5	-	
0141 Grey Ultramarine	5	15	80	0.63	0.47	4	-	
0151 Grey Huntergreen	5	15	80	0.63	0.47	4	-	
3081 Charcoal Parrot	4	14	82	0.63	0.48	5	-	
3009 Charcoal Mandarin	6	13	81	0.65	0.48	4	-	
3071 Charcoal Apricot	5	14	81	0.64	0.48	4	-	
3010 Charcoal Sable	4	12	84	0.65	0.48	4	-	
3091 Charcoal Sky	3	12	85	0.64	0.48	3	-	
3003 Charcoal Turquoise	4	12	84	0.65	0.48	4	-	
3001 Charcoal Grey	4	9	87	0.66	0.49	5	-	
3006 Charcoal Bronze	3	6	91	0.68	0.50	4	-	
3030 Charcoal	3	4	93	0.69	0.51	4	-	

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".