

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 | 5 % | | |
| UV screen | Up to 96% | | |
| Widths | 200–250–310 cm / 89–127 mm (depending on colours) 78–98.4–122" / 3–4" | | |
| Pattern | Basket weave 1 x 2 | | |
| Yarn count | Warp | 22 yarns/cm 56/inch ± 5 % | ISO 7211/2 |
| | Weft | 20 yarns/cm 51/inch ± 5 % | |
| Weight per m ² | 410 g 12.1 oz/yd² ± 5 % | | ISO 2286 - 2 |
| Thickness | 0,55 mm 22 mil ± 5 % | | ISO 2286 - 3 |
| Breaking strength | Warp | > 150 daN/5 cm > 239 lbs/in | ISO 1421 |
| | Weft | > 150 daN/5 cm > 233 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.

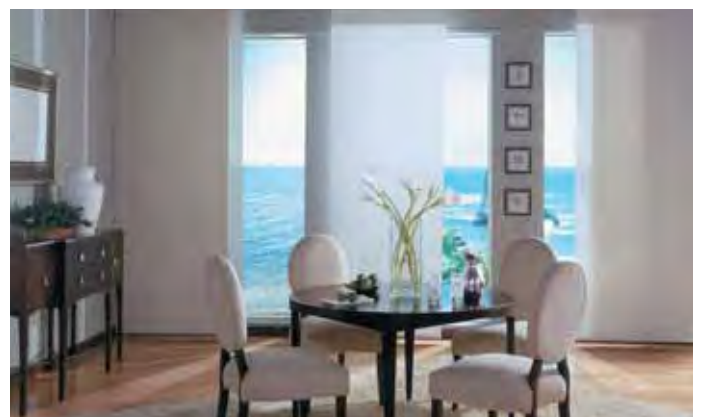
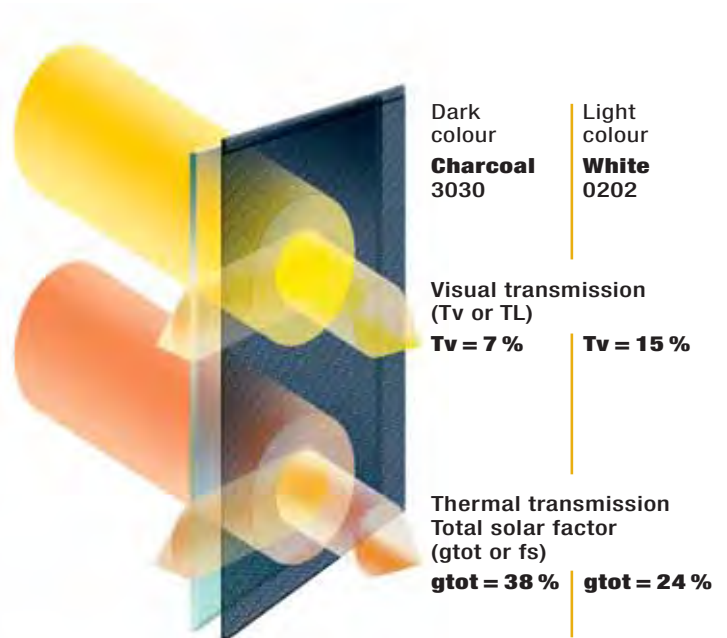
The light intensity, or "luminance", emitted by a fabric can also be measured in candelas/m² (Cd/m²).

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



The technical data at a glance

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

| Openness factor (Co) OF 5% | Thermal factors | | | | | Optical factors | | |
|--------------------------------------|-----------------|--------------|----|---|------|-----------------|--------|---------|
| | Ts | Fabric Rs | As | Fabric + glazing gv=0,59 gv=0,32 got internal blind | | Tv | Tvndif | Tvdifh* |
| Colours | | | | | | | | |
| 0202 White | 21 | 68 | 11 | 0,35 | 0,25 | 20 | 15 | |
| 0220 White Linen | 20 | 61 | 19 | 0,37 | 0,25 | 18 | 14 | |
| 0205 White Canary | 24 | 57 | 19 | 0,38 | 0,26 | 22 | 18 | |
| 2020 Linen | 21 | 53 | 26 | 0,40 | 0,26 | 17 | 13 | |
| 0207 White Pearl | 17 | 54 | 29 | 0,39 | 0,26 | 14 | 9 | |
| 0210 White Sable | 16 | 53 | 31 | 0,39 | 0,26 | 13 | 9 | |
| 2022 Linen Stone | 21 | 53 | 26 | 0,40 | 0,26 | 18 | 11 | |
| 0705 Pearl Canary | 20 | 40 | 40 | 0,43 | 0,27 | 18 | 13 | |
| 0720 Pearl Linen | 17 | 44 | 39 | 0,42 | 0,27 | 14 | 12 | |
| 0201 White Grey | 13 | 45 | 42 | 0,42 | 0,27 | 11 | 6 | |
| 0781 Pearl Parrot | 18 | 39 | 43 | 0,44 | 0,27 | 16 | 13 | |
| 0709 Pearl Mandarin | 20 | 36 | 44 | 0,45 | 0,27 | 13 | 7 | |
| 0707 Pearl | 17 | 35 | 48 | 0,45 | 0,28 | 15 | 11 | |
| 0703 Pearl Turquoise | 17 | 37 | 46 | 0,44 | 0,27 | 11 | 6 | |
| 0701 Pearl Grey | 11 | 30 | 59 | 0,46 | 0,28 | 8 | 5 | |
| 2041 Linen Ultramarine | 11 | 29 | 60 | 0,47 | 0,28 | 10 | 5 | |
| 0141 Grey Ultramarine | 5 | 13 | 82 | 0,52 | 0,29 | 5 | 0 | |
| 0151 Grey Huntergreen | 6 | 13 | 81 | 0,52 | 0,29 | 6 | 0 | |
| 3001 Charcoal Grey | 6 | 10 | 84 | 0,53 | 0,29 | 6 | 1 | |
| 3006 Charcoal Bronze | 5 | 6 | 89 | 0,54 | 0,30 | 5 | 0 | |
| 3030 Charcoal | 6 | 5 | 89 | 0,54 | 0,30 | 6 | 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 5%

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 | 20 | 63 | 17 | 0.36 0.33 | 15 | Not applied in the American standard | |
| 0220 White Linen | 21 | 56 | 23 | 0.41 0.36 | 15 | | |
| 0222 White Stone | 22 | 56 | 22 | 0.41 0.36 | 15 | - | |
| 0205 White Canary | 25 | 56 | 19 | 0.42 0.37 | 17 | - | |
| 0209 White Mandarin | 23 | 52 | 25 | 0.44 0.38 | 11 | - | |
| 0281 White Parrot | 21 | 51 | 28 | 0.44 0.38 | 17 | - | |
| 2020 Linen | 18 | 51 | 31 | 0.44 0.37 | 12 | - | |
| 0207 White Pearl | 16 | 49 | 35 | 0.44 0.38 | 12 | - | |
| 0210 White Sable | 20 | 48 | 32 | 0.46 0.39 | 12 | - | |
| 0203 White Turquoise | 16 | 45 | 39 | 0.47 0.39 | 10 | - | |
| 2022 Linen Stone | 23 | 48 | 29 | 0.47 0.39 | 15 | - | |
| 0705 Pearl Canary | 19 | 41 | 40 | 0.50 0.41 | 14 | - | |
| 0720 Pearl Linen | 19 | 40 | 41 | 0.51 0.41 | 13 | - | |
| 0201 White Grey | 11 | 43 | 46 | 0.47 0.39 | 11 | - | |
| 0241 White Ultramarine | 9 | 37 | 54 | 0.50 0.41 | 10 | - | |
| 0781 Pearl Parrot | 17 | 38 | 45 | 0.52 0.41 | 13 | - | |
| 0709 Pearl Mandarin | 18 | 38 | 44 | 0.52 0.42 | 9 | - | |
| 0771 Pearl Apricot | 22 | 38 | 40 | 0.53 0.42 | 13 | - | |
| 0707 Pearl | 15 | 35 | 50 | 0.53 0.42 | 11 | - | |
| 0710 Pearl Sable | 18 | 33 | 49 | 0.55 0.43 | 11 | - | |
| 0701 Pearl Grey | 9 | 29 | 62 | 0.55 0.43 | 8 | - | |
| 0703 Pearl Turquoise | 13 | 32 | 55 | 0.54 0.43 | 9 | - | |
| 2041 Linen Ultramarine | 12 | 27 | 61 | 0.57 0.44 | 9 | - | |
| 0141 Grey Ultramarine | 8 | 15 | 77 | 0.64 0.48 | 7 | - | |
| 0151 Grey Huntergreen | 8 | 16 | 76 | 0.63 0.47 | 7 | - | |
| 3081 Charcoal Parrot | 6 | 13 | 81 | 0.65 0.48 | 6 | - | |
| 3009 Charcoal Mandarin | 7 | 13 | 80 | 0.65 0.48 | 5 | - | |
| 3071 Charcoal Apricot | 7 | 13 | 80 | 0.65 0.48 | 7 | - | |
| 3010 Charcoal Sable | 7 | 12 | 81 | 0.65 0.49 | 7 | - | |
| 3091 Charcoal Sky | 6 | 12 | 82 | 0.65 0.48 | 6 | - | |
| 3003 Charcoal Turquoise | 6 | 12 | 82 | 0.65 0.48 | 6 | - | |
| 3001 Charcoal Grey | 6 | 10 | 84 | 0.66 0.49 | 7 | - | |
| 3006 Charcoal Bronze | 6 | 7 | 87 | 0.68 0.50 | 7 | - | |
| 3030 Charcoal | 6 | 5 | 89 | 0.69 0.51 | 7 | - | |

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".