

## K2 3% & 5%

### PRODUCT FEATURES

- double sided fabric for thermal & visual comfort
- up to 65% of solar energy reflected
- maximized control of incoming natural light
- 2 Openness factors available (3% & 5%)
- width: 250cm
- available in 7 colours
- human & ecologically friendly fabric
- intelligent fabric for internal applications



ROLLER  
BLINDS



ROMAN  
SHADES



DECORATIVE  
PANELS



VELUMS



SKYLIGHT  
BLINDS



ROOF LIGHT  
BLINDS



FLAT  
STRUCTURES



SHAPED  
STRUCTURES



VOLUME  
STRUCTURES

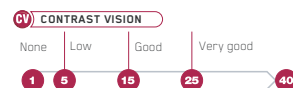
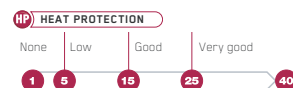
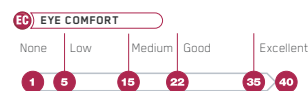
# THERMAL & OPTICAL PROPERTIES (EUROPEAN STANDARD EN 14501)

## COMFORT FACTORS

## PINPOINT THE PERFORMANCE FACTORS

COLOURS		Fabric			Fabric & glazing			Fabric & glazing			Fabric & glazing			
		Ts	Rs	As	gv=0.85	gv=0.59	gv=0.32	Tv	Tvndif	Tvdifh	Tv	Tvndif	Tvdifh	
<b>gtot internal blind</b>														
<b>K2 5% Average Openness Factor of 5%</b>														
0230	Side A dark	7	14	79	0.58	0.51	0.29	7	3	5	14	27	18	24
White Charcoal	Side B	7	45	48	0.42	0.42	0.26	7	3	5	14	25	24	19
0206	Side A dark	10	17	73	0.57	0.50	0.29	9	4	7	15	26	19	23
White Bronze	Side B	10	46	44	0.43	0.41	0.26	9	4	7	15	24	24	19
0201	Side A dark	13	29	58	0.52	0.47	0.28	10	6	8	15	25	21	23
White Grey	Side B	13	51	36	0.41	0.40	0.26	10	6	8	15	23	25	19
0210	Side A dark	17	42	41	0.46	0.43	0.27	13	9	11	18	22	23	20
White Sable	Side B	17	57	26	0.38	0.38	0.26	13	9	11	18	20	26	19
0207	Side A dark	17	42	41	0.46	0.43	0.27	15	10	13	20	20	23	18
White Pearl	Side B	17	57	26	0.39	0.38	0.26	15	10	13	20	18	26	18
0220	Side A dark	23	56	21	0.40	0.39	0.26	21	16	18	23	14	25	17
White Linen	Side B	23	61	16	0.38	0.37	0.25	21	16	18	23	14	26	17
0202	White	23	67	10	0.35	0.35	0.25	22	17	19	23	14	27	17
<b>K2 3%* Average Openness Factor of 3%</b>														
0230	Side A dark	6	13	81	0.59	0.52	0.29	6	3	5	12	28	18	17
White Charcoal	Side B	6	45	49	0.42	0.41	0.26	6	3	5	12	25	25	16
0206	Side A dark	6	16	78	0.57	0.51	0.29	5	3	4	14	30	20	17
White Bronze	Side B	6	47	47	0.42	0.41	0.26	5	3	4	14	26	25	16
0201	Side A dark	11	28	61	0.52	0.47	0.28	8	5	7	14	27	22	17
White Grey	Side B	11	52	37	0.40	0.40	0.26	8	5	7	14	24	25	16
0210	Side A dark	15	41	44	0.46	0.43	0.27	11	8	9	15	25	24	15
White Sable	Side B	15	57	28	0.38	0.38	0.26	11	8	9	15	23	26	14
0207	Side A dark	14	42	44	0.46	0.43	0.27	12	10	11	17	23	24	14
White Pearl	Side B	14	57	29	0.38	0.38	0.26	12	10	11	17	23	26	14
0220	Side A dark	23	55	22	0.41	0.39	0.26	21	16	18	22	16	26	11
White Linen	Side B	23	61	16	0.38	0.37	0.25	21	16	18	22	16	27	11
0202	White	21	67	12	0.34	0.35	0.25	20	17	18	21	16	28	11

\*K2 3% is not displayed in this swatch



- NL LEVEL OF INCOMING NATURAL LIGHT**  
For the same type of fabric, light colours let through more light than dark colours.
- EC GLARE CONTROL**  
For the same type of fabric, dark colours provide better glare control than light.
- HP PROTECTION AGAINST THE HEAT GAIN FROM SUNLIGHT**  
Light colours installed inside give better protection from the heat than dark colours. For external installations, the reverse applies.
- CV QUALITY OF OUTWARD VISIBILITY**  
The quality of visibility does not only depend on the openness or light transmission, it also depends on colour. Darker colours will provide better outward visibility.

## GUIDE TO THERMAL & OPTICAL FACTORS

**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 measures 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 measures the proportion of solar radiation reflected by the fabric. A high percentage means the fabric performs well at reflecting solar energy.

**As Solar Absorbance**  
This factor measures 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.

### gtot Factor

Solar energy which actually penetrates into a room through the blind and glazing. A low figure means good thermal performance.  
**gv = 0.85:** solar factor for clear single glazing.  
**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.

### OPTICAL FACTORS

**Tv Visible Transmittance**  
This factor measures the percentage of visible light coming through the fabric that can be seen by the naked eye. It is related to the amount of light (brightness) a person receives through a glazing system. A low figure shows a very efficient fabric.

**Of Openness Factor**  
This factor measures the proportion of holes in a woven fabric. This parameter, together with other technical properties of the fabric, should be considered when determining the degree of visibility and heat and glare control, that the fabric offers. The openness factor can vary slightly from colour to colour in the same fabric, and is often expressed as an Average OF. A low OF indicates that the fabric has a very close weave.

### Diffuse transmission factor (Tdif)

Correlation of the two factors above:  $Tdif = Tv - Of$ . It is indicated as **Tvndif** for the aspects of glare and shape recognition (outward visibility / night privacy). A low figure shows a better visual comfort. However, for natural light control, it is indicated as **Tvdifh**. It is used to ascertain a fabric's light diffusion capacity. A high figure means more natural light.

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".

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## TECHNICAL DATA

	K2 5%	K2 3%	
COMPOSITION	36% Fibreglass 64% PVC	36% Fibreglass 64% PVC	
FIRE CLASSIFICATION	M1 (F) BS (GB) AS (AUS)	M1 (F) BS (GB) AS (AUS)	NFP 92 503 476 Pt 6 Class 0 AWTA Tested AS 1530 part 3 *^
OPENNESS FACTOR	Average 5%	Average 3%	
UV BLOCKAGE	Up to 93%	Up to 94%	
WIDTH	250cm	250cm	
PATTERN	Twill	Twill	
YARN COUNT	Warp 22 yarns/cm ± 5% Weft 20 yarns/cm ± 5%	22 yarns/cm ± 5% 22 yarns/cm ± 5%	ISO 7211/2
WEIGHT PER M²	400g ± 5%	425g ± 5%	ISO 2286 - 2
THICKNESS	0.59mm ± 5%	0.59mm ± 5%	ISO 2286 - 3
BREAKING STRENGTH	Warp > 125 daN/5cm Weft > 105 daN/5cm	> 125 daN/5cm > 105 daN/5cm	ISO 1421
ELONGATION TO BREAK POINT	Warp & Weft < 5%	< 5%	ISO 1421
TEAR RESISTANCE	Warp & Weft ≥ 5 daN	≥ 5 daN	Internal procedure
RESISTANCE TO FOLD	Warp & Weft ≥ 20 daN/5cm	≥ 20 daN/5cm	Internal procedure
COLOUR FASTNESS TO LIGHT	7/8 Scale of 8 White not graded	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		

## PRODUCT INFORMATION

### K2 3% & 5%

OFFERS THE BEST OF BOTH WORLDS:  
VISUAL COMFORT & THERMAL COMFORT

#### Dual Efficiency

With its strong contrast between both sides, K2 offers outstanding performances: Visual comfort and thermal comfort. The dark side facing in provides great glare protection while the light side, facing out, reflects a large portion of the solar energy for maximum heat protection.

#### Strength and peace of mind guaranteed

Made of coated fibreglass yarns, K2 has excellent mechanical resistance allowing it to be tensioned, and perfect dimensional stability in panels of all sizes. K2 is unaffected by the heat. Labeled Dekotex Standard 100, it contains no chemicals harmful to the health and safety of users. It is nonflammable and easy to maintain.

#### Indoor air quality

Most Mermet fabrics have been tested for their Volatile organic compound emission. When K2 is used in the typical manner in an office building the resulting airborne total volatile organic compound concentration can be expected to be less than 0.5 mg/m<sup>3</sup> as specified by Green Building Council of Australia Green Star Office Interiors IEQ-11. (certificate available at [www.mermet.com.au](http://www.mermet.com.au))

#### A great communication medium

Whatever printing technique is used, legibility is perfect, even in artificial light.

#### CARE INSTRUCTIONS

Remove dust with vacuum cleaner or compressed air. Do not scrub. Do not use solvents or any abrasive substance that might damage the coating of the fabric.

Clean with a sponge or soft brush dipped in soapy water.

Rinse with clear water.

Leave the blind down until completely dry.

\* Complies with the General Requirements of the Building Code of Australia for Fire Hazard Properties of materials in buildings. Not suitable for use in parts of buildings with Special Requirements, i.e. fire isolated exits; public corridors leading to a fire isolated stairway, passageway or ramp; a patient care area of health care buildings; and in a public assembly building (eg. theatre or hall) not protected with a sprinkler system.

^ Available for download at [mermet.com.au](http://mermet.com.au)

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for more detailed ecological  
and/or health information  
on this product refer to  
[www.ecospecifier.org](http://www.ecospecifier.org)



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