

Sunscreen® range



M-Screen 8505

**Fire retardant coated
fibreglass yarns fabrics**

Solar Protection:
All types of internal blinds

Tensile structures:
All types of shapes and volumes

modulight®

Collection 2006-2009



internal



printable



Widths 200 250 310 cm / 89 127 mm

> www.sunscreen-mermet.com

Properties



MERMET

M-Screen 8505

Product features

New

- **42 colours** with 2 openness factors of 5% (8505) and 3% (8503) in 2 widths of 200 and 250 cm
- **Extra width (310 cm)** available for 14 colours in the range
- **“Deco effect”** of colours and textures
- Basket weave: **excellent thermal and visual comfort**, optimal transparency
- Economical: 3 widths to **cut waste** when making fabric panels
- **Excellent printing medium**



modulight® intelligent fabrics

Roller blinds



Roman shades



Decorative panels



Vertical blinds



Velums



Skylight blinds



Roof light blinds



Internal blinds

modulight®

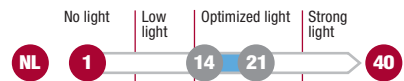
M-Screen 8505 Pinpoint the performance factors

1 rapid selection 40



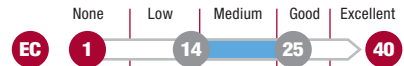
NL natural light

Level of incoming natural light



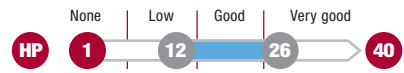
EC eye comfort

Glare control



HP heat protection

Protection against the heat gain from sunlight



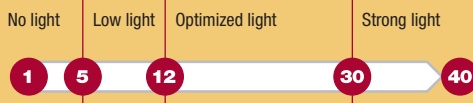
CV contrast vision

Quality of outward visibility



4 comfort factors
to choose the right
fabric for the function
and colour required
and ensure the
success of your solar
protection.

NL natural light



EC eye comfort



HP heat protection



CV contrast vision



The Modulight® Rapid' Selection system, including the 4 comfort factors and their scale of values, is the property of Mermet S.A. It refers solely to solar protection fabric in the Mermet Modulight® collection. Any whole or partial reproduction is forbidden.

NL Level of incoming natural light

To obtain the best out of natural lighting, select in the **12 to 30** factor range. To block out the light completely, select from the **1 to 5** range.

EC Glare control

For adequate glare control, do not select below factor **22**.

HP Protection against the heat gain from sunlight

To be protected from the heat, select in the **20 to 40** factor range.

CV Quality of outward visibility

To make the most of visibility and provide true transparency, start at factor **15**. To ensure privacy, select a factor lower than **5**.

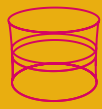
Flat structures



Shaped structures



Volume structures



Tensile structures

M-Screen 8505

Colours and materials for a custom match

M-Screen 8505

offers unlimited choice for a colourful environment in harmony with the outside.

- **A true element of internal design:** 42 colours in a range including pastel, tangy and ethnic. M-Screen 8505 offers a **rich palette of colours, effects of texture** and infinite printing possibilities to create a custom atmosphere, **organize space**, play on light...
- **Maximum transparency:** the secret lies in the uniform coating of the fibreglass yarns, the fineness of the yarn and the regularity of the basket weave, all of which offers **a very clear view to the outside**. M-Screen 8505 creates discreet blinds, even on very big windows, because of the width (310 cm) reducing the number of seams.
- **Optimized natural light:** M-Screen 8505 leaves you all the benefit of natural light and **prevents glare** (94% of the light rays are filtered). Advantage: **high level of comfort with no disturbing on-screen reflections**. Glare is best controlled with dark colours. M-Screen 8505 blocks out 96% of the UV rays, the cause of the discoloring effect of sunlight
- **Thermal comfort:** M-Screen 8505 reflects up to 66% of solar radiation. It prevents heat loss, helps to **save energy** and **reduces greenhouse gas emissions**.
- **A great communication medium:** whatever printing technique is used, **legibility is perfect**, even in artificial light.
- **Economical and flexible:** widths, including an extra-wide 310 cm, for large blinds or structures with a minimum of seams and waste of fabric. **Choose the width for your needs!**
- **Strength and peace of mind guaranteed:** made of coated fibreglass yarns, M-Screen 8505 has **excellent mechanical resistance** allowing it to be tensioned, and **perfect dimensional stability** in panels of all sizes. M-Screen 8505 is unaffected by the heat. **Rot-proof** and labeled **Oekotex Standard 100**, it contains **no chemicals harmful for the health** and safety of users. It is **non-flammable** and easy to maintain.

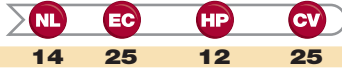


Widths

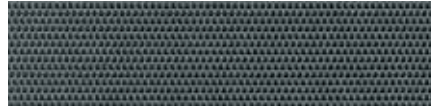
200 250 310 cm / 89 127 mm
78" 98.4" 122" / 3" 4"

200 250 cm / 89 127 mm
78" 98.4" / 3" 4"

3030 Charcoal



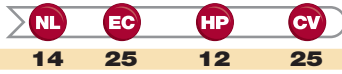
3001 Charcoal Grey



3041 Charcoal Ultramarine



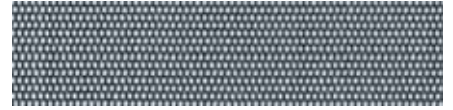
3006 Charcoal Bronze



3010 Charcoal Sable



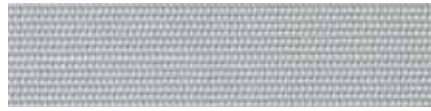
3021 Charcoal Lotus



3071 Charcoal Apricot



0707 Pearl



3003 Charcoal Turquoise



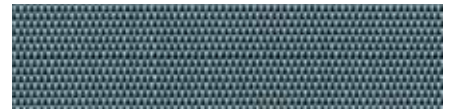
0710 Pearl Sable



0720 Pearl Linen



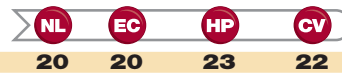
3091 Charcoal Sky



0210 White Sable



0207 White Pearl



3009 Charcoal Mandarin



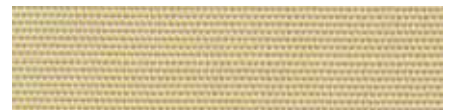
2020 Linen



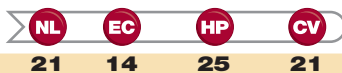
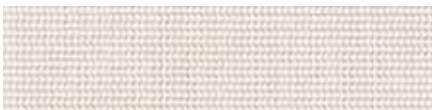
0222 White Stone



0705 Pearl Canary



0220 White Linen



0202 White

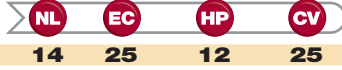


0241 White Ultramarine



NL = Level of incoming natural light, EC = Glare control, HP = Protection against the heat gain from sunlight, CV = Quality of outward visibility.

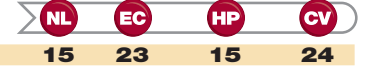
3051 Charcoal Huntergreen



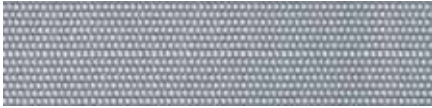
0141 Grey Ultramarine



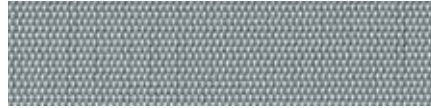
0151 Grey Huntergreen



0121 Grey Lotus



0701 Pearl Grey



2041 Linen Ultramarine



0703 Pearl Turquoise



0203 White Turquoise



0291 White Sky



3081 Charcoal Parrot



0781 Pearl Parrot



0281 White Parrot



0709 Pearl Mandarin



0209 White Mandarin



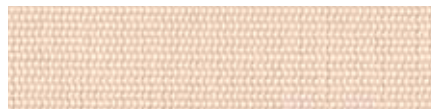
0771 Pearl Apricot



0205 White Canary



0271 White Apricot



2022 Linen Stone



0201 White Grey



0721 Pearl Lotus



0221 White Lotus



The technical data at a glance

Composition	36% Fibreglass 64% PVC		
Fire classification	M1 (F)	NFP 92 503	
	BS (GB)	476 Pt 6 Class 0	
	FR (USA)	NFFPA 701 – 99 TM # 1 California US Title 19	
	AS (AUS)	AWTA Tested AS 1530 part 2 and 3	
	C UNO (IT)	UNI 9177	
	B1 (CN)	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.

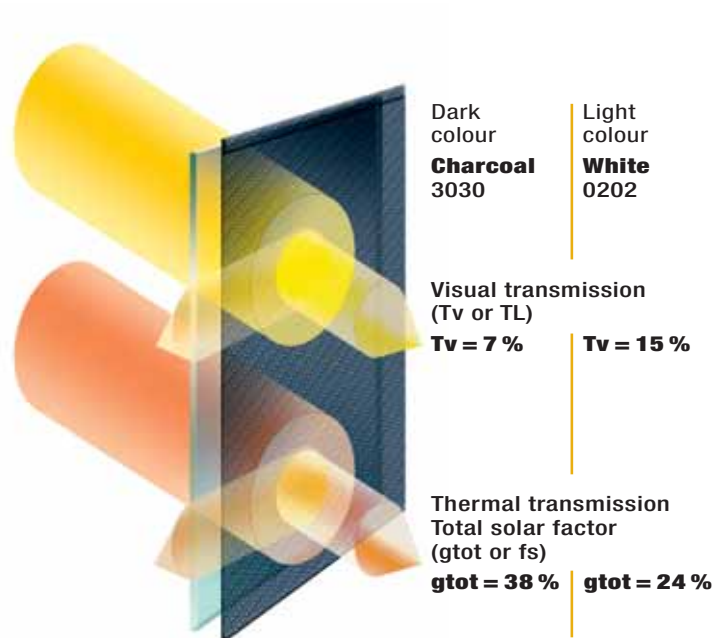
The light intensity, or "luminance", emitted by a fabric can also be measured in candelas/m² (Cd/m²).

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					Optical factors		
	Ts	Fabric Rs	As	Fabric + glazing 1/4" Cl. 1/4" H.A. Sc (Fc) internal blind		Tv	Tvndif	Tvdifh
Colours								
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".

M-Screen 8505

Advice

Storage conditions

The rolls of fabric should be stored horizontally, but not piled up, in a place where the temperature and level of humidity is as constant as possible. The fabric should never be folded.

For long-term storage, it is not advisable to leave rolled or folded panels on top of each other.

Advice for blind making

The panels of fabric are cut by blade or ultrasonically. They can be welded (thermal, high frequency or ultrasonic) or sewn together.

The fabric must be properly squared before it is made up, especially for large blinds or structures.

The blinds can be manufactured normally (vertical warp) or railroaded (vertical weft).

It is advisable to add a strengthening strip of translucent coated fibreglass to welded seams.

Horizontal seams give the best result.

For tensile structures, it is better to make a pocket to fit all the way round the panel.

Very long blinds may need the addition of stiffeners to ensure they will still hang properly after time.

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 fabric.

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

Rinse with clear water.

Leave the blind down until completely dry.

