MERMET
SUN CONTROL TEXTILES

SCREEN VISION

SV 3% KOOLBLACK™

INTELLIGENT FABRICS FOR SOLAR PROTECTION

INTERNAL
APPLICATION

www.sunscreen-mermet.com

SV 3% KOOLBLACK™

SCREEN VISION

SV 3% KOOLBLACK™

THE FIRST DARK-COLOURED SCREEN THAT COMBINES **VISUAL** AND **THERMAL COMFORT**

INVISIBLE
THROUGH GLASS FACADES

THERMAL
COMFORT: 69%
OF SOLAR RADIATION REFLECTED

- **OPTIMAL CONTROL OF INDOOR HEAT** with improved solar reflectance (Rs = 29%), thanks to the patented KOOLBLACK™ technology which increases **SOLAR REFLECTANCE** of dark colours
- **EXCELLENT GLARE CONTROL:** 95% of light rays filtered (Tv = 5%), comfort classification 3 (good effect) according to EN 14501 standard
- Optimum **OUTWARD VISIBILITY**
- **PERFECT VISUAL INTEGRATION** into the building facade when viewed from the exterior
- **EXTRA-WIDE WIDTH: 310 CM** for large windows to create a seamless aesthetic
- **DIMENSIONAL STABILITY, DURABILITY** (test of 10.000 cycles, class 3 NF EN 13120), **MECHANICAL RESISTANCE:** perfect flatness even in large dimensions

TECHNICAL DATA

SV 3% KOOLBLACK™			
Composition	36% Fibreglass - 64% PVC		
Fire, smoke classification and other official test reports*	**FR** (USA) - NFPA 701 **BS** (GB) - 5867		
Health, safety	**Greenguard® GOLD:** Guarantee of indoor air quality (VOC) **Antibacterial:** More than 99% of bacteria destroyed - ASTM E 2180		
Openness factor	3%		
UV screen	95%		
Width	310 cm		
Weight/m²	385 g ± 5% - ISO 2286 - 2		
Thickness	0,51 mm ± 5% - ISO 2286 - 3		
Colour Fasteness to light (scale of 8)	7/8 - ISO 105 B02		
Mechanical resistance	**Breaking**	**Tear**	**Folding**
Warp	> 140 daN/5 cm	≥ 4 daN	≥ 20 daN/5 cm
Weft	> 130 daN/5 cm	≥ 3 daN	≥ 20 daN/5 cm
	ISO 1421	EN 1875-3	ISO 1421**
Elongation (warp and weft)	< 5% - ISO 1421		
Packaging	Rolls of 27 lm		
Making up	Advice note on request		

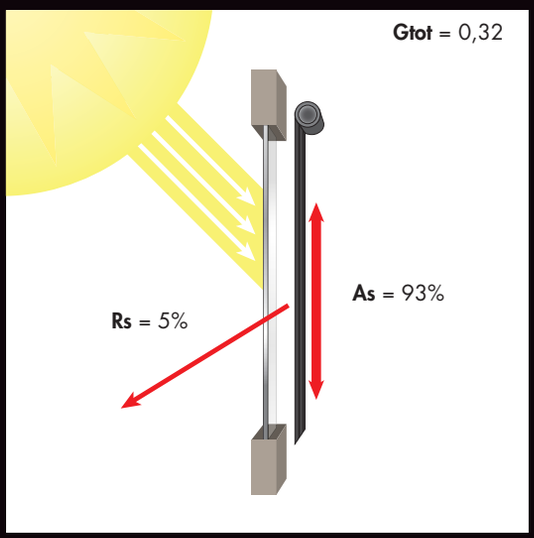
This product's technical data are in conformity with this brochure as of the date of publication. MERMET SAS reserves the right to change the technical data; only those provided on the company's website www.sunscreen-mermet.com shall be deemed to be authentic. Where applicable, MERMET SAS also reserves the right to withdraw this product from sale should any of the technical properties or characteristics set out above prove to be inadequate or rendered impossible as a result of a change in regulations or in knowledge or understanding. * Reports available on request, please contact Mermet ** Internal procedure derived from ISO 1421 standard

KOOLBLACK™ TECHNOLOGY:
TRANSPARENT THERMAL PROTECTION

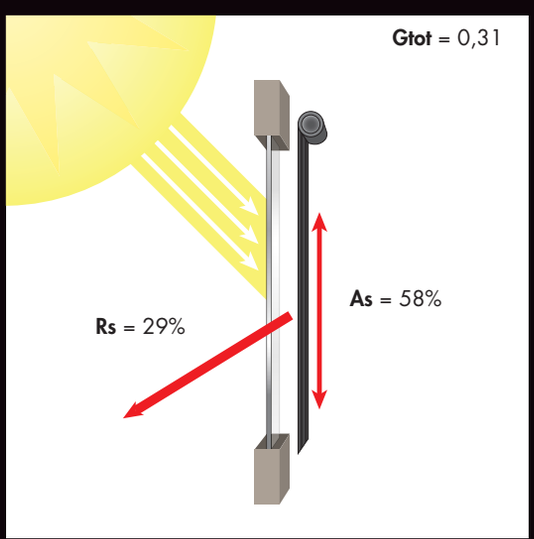
What is **KOOLBLACK™** Technology ?

KOOLBLACK™ Technology is a patented technology that enhances dark coloured yarn's energy reflectivity by increasing its near infrared reflection (NIR). While conventional dark screen fabric provides superior view through and exceptional glare control, it absorbs the energy that is created by near infrared wavelength. KOOLBLACK™ Technology enables the fabric to reflect more solar heat, therefore, absorb less energy.

CONVENTIONAL DARK SCREEN FABRIC



SV 3% KOOLBLACK™ TECHNOLOGY FABRIC
COLOUR CHARCOAL

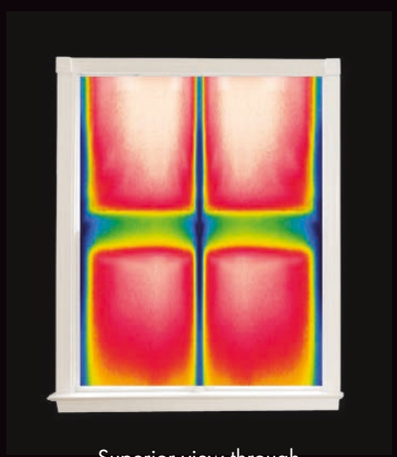


Rs: Solar reflectance **As:** Solar absorbance
Gtot: Solar factor, fabric + glazing

KOOLBLACK™ Technology at Work

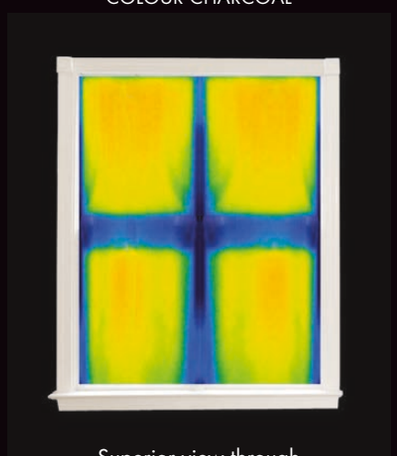
KOOLBLACK™ Technology increases the energy efficiency of dark solar shade fabrics to the levels comparable with light colours ! Only dark solar shade fabrics with KOOLBLACK™ Technology provide exceptional glare control, comfortable view through and elegant streetside aesthetics while reducing heat.

CONVENTIONAL DARK SCREEN FABRIC - 57.8° C



Superior view through
Exceptional glare control
Coordinated exterior building design

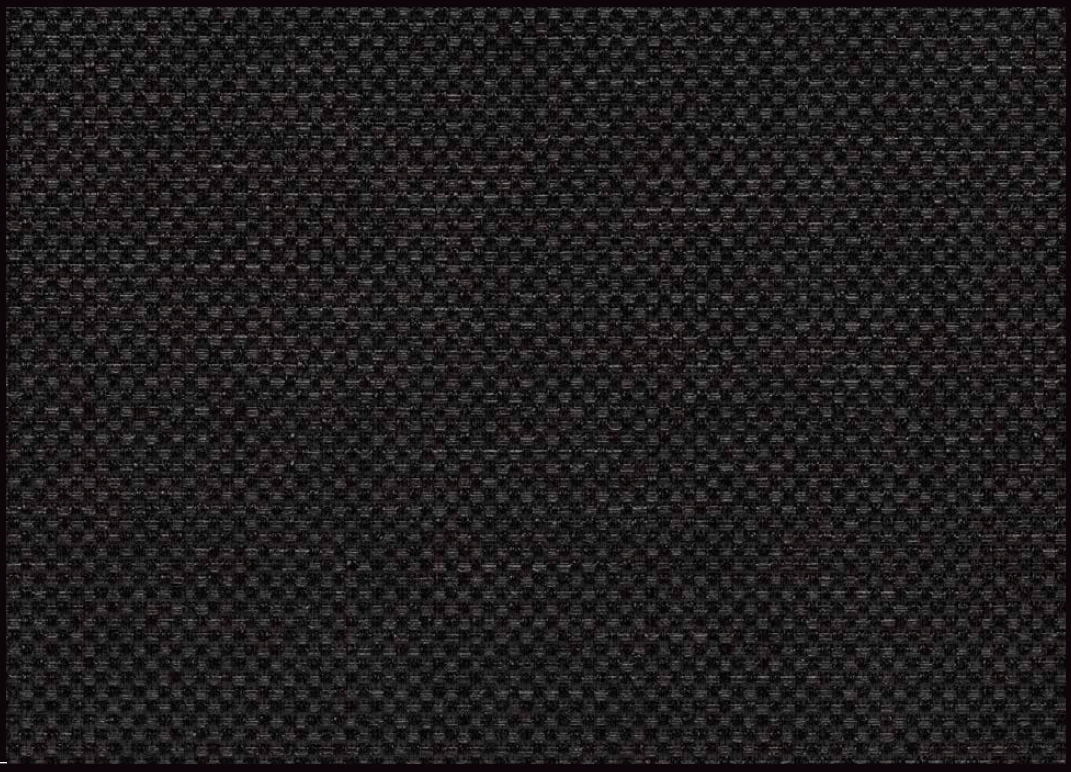
SV 3% KOOLBLACK™ TECHNOLOGY FABRIC - 47.8° C
COLOUR CHARCOAL



Superior view through
Exceptional glare control
Coordinated exterior building design
IMPROVED HEAT CONTROL
INCREASED ENERGY SAVINGS

(East facing window 10:00 am SC USA in April)

SV 3% KOOLBLACK™



3535

INTERNAL APPLICATIONS

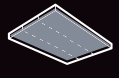
Roller blinds

Roman shades

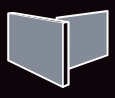
Decorative panels

Velums

Printable



Stretched ceilings



Space fitting

Enduris™ GLASS CORE

GREENGUARD GOLD

FIVE YEAR WARRANTY

ANTIBACTERIAL

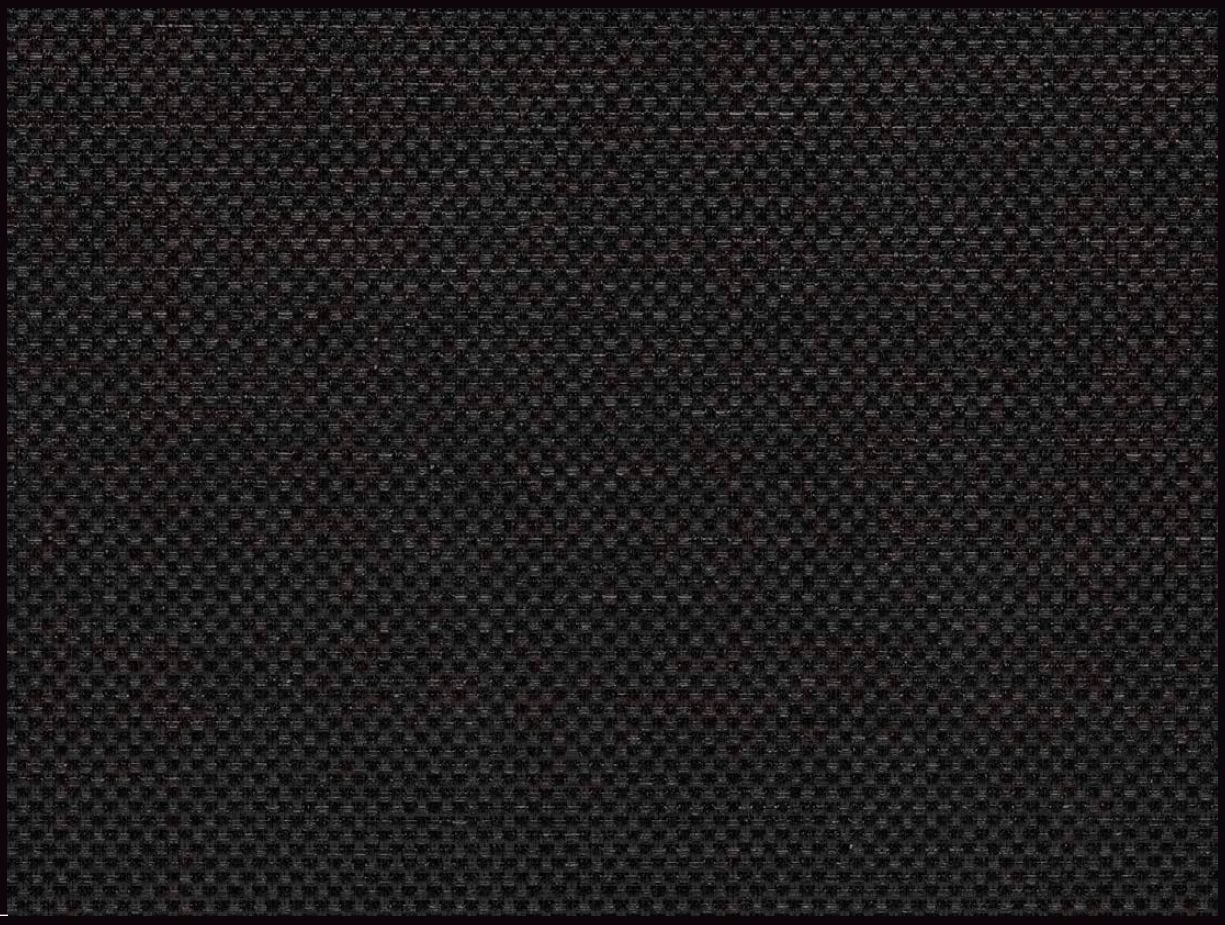
LEAD FREE

FIRE RETARDANT

REACH COMPLIANT

10 000 CYCLES

SV 3% KOOLBLACK™



3535

Colours may be slightly different from the actual ones

WIDTH: 310 CM

THERMAL AND OPTICAL FACTORS in the European standard EN 14501

SV 3% KOOLBLACK™ OF 3%	**Thermal factors**					**Optical factors**
	Fabric			**Fabric + Glazing / gtot internal blind**		**Tv**
Colour	**Ts**	**Rs**	**As**	**C : gv = 0,59**	**D : gv = 0,32**	
3535 Charcoal	13	**29**	58	0,51 ⓪	0,31 ②	**5**

gv = 0,59: Solar factor of standard glazing (C), low-emission 4/16/4 double glazing filled with Argon (U value thermal transmittance = 1,2 W/m²K).
gv = 0,32: Solar factor of standard glazing (D), reflecting low-emission 4/16/4 double glazing filled with Argon (U value thermal transmittance = 1,1 W/m²K).

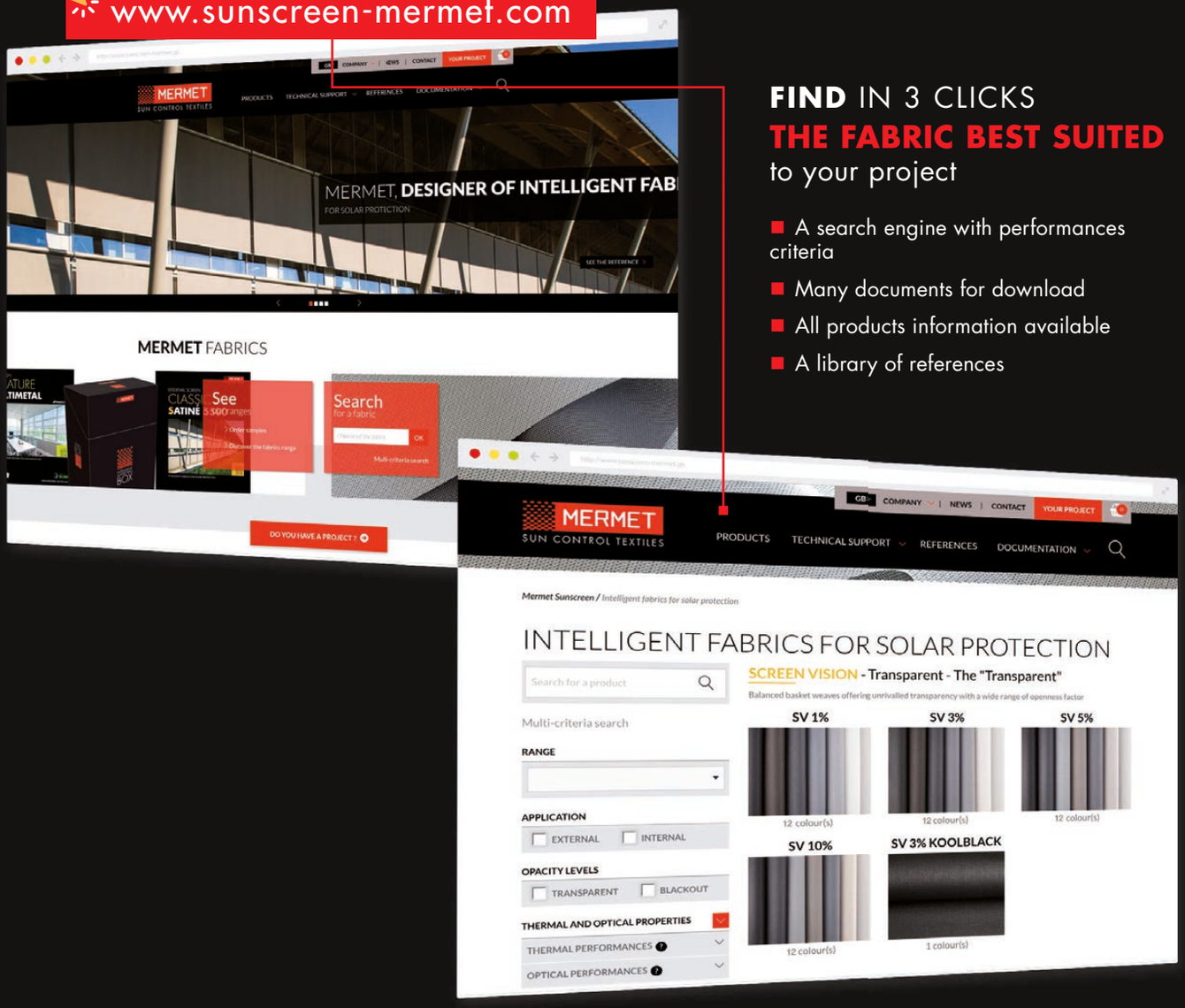
Comfort classification according to EN 14501 standard: ⓪ very little effect ① little effect ② moderate effect ③ good effect ④ very good effect

Samples tested according to EN 14500 standard defining the measurements and calculation methods as specified in the standard EN 13363-2 "Solar protection devices combined with glazing calculation of solar and light transmittance - part 2: EN 13363-2 detailed method" and EN 410 "Glass in building - Determination of luminous and solar characteristics of glazing".

SERVICE

- Calculation of solar factor gtot (glazing + blind)
- Spectral values and thermal & optical factors available on request
- Specification sheet
- A4 samples and prototypes
- Training on fabrics functionality

www.sunscreen-mermet.com



FIND IN 3 CLICKS
THE FABRIC BEST SUITED
to your project

- A search engine with performances criteria
- Many documents for download
- All products information available
- A library of references

MERMET COLLECTION offers **a wide choice of fabrics** for external and internal application, from transparency to total darkness, for thermal and optical comfort.
To receive other brochures from the collection, **contact us**.

SCREEN VISION / DESIGN / THERMIC / LOW E | EXTERNAL SCREEN CLASSIC | SCREEN NATURE | BLACKOUT 100 % | ACOUSTICS

MERMET
58, chemin du Mont Maurin - 38630 Les Avenières Veyrins-Thuellin - France
Tel. +33(0) 474 336 615 - Fax +33(0) 474 339 729