SCREEN VISION

SV 3%
KOOLBLACK™

INTELLIGENT FABRICS FOR SOLAR PROTECTION

www.sunscreen-mermet.com
**SV 3% KOOLBLACK™**

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

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**INVISIBLE THROUGH GLASS FACADES**

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**THERMAL COMFORT**: 69% OF SOLAR RADIATION REFLECTED

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**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>SV 3% KOOLBLACK™</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composition</strong></td>
</tr>
<tr>
<td><strong>Fire, smoke classification and other official test reports</strong></td>
</tr>
<tr>
<td><strong>Health, safety</strong></td>
</tr>
<tr>
<td><strong>Openness factor</strong></td>
</tr>
<tr>
<td><strong>UV screen</strong></td>
</tr>
<tr>
<td><strong>Width</strong></td>
</tr>
<tr>
<td><strong>Weight/m²</strong></td>
</tr>
<tr>
<td><strong>Thickness</strong></td>
</tr>
<tr>
<td><strong>Colour Fastness to light (scale of 8)</strong></td>
</tr>
</tbody>
</table>
| **Mechanical resistance** |  **Breaking**  
| |  > 140 daN/5 cm  |  > 3 daN |
| |  > 130 daN/5 cm  |  ≥ 4 daN |
| **ISO 1421** |  ≥ 20 daN/5 cm  |  ≥ 20 daN/5 cm |
| **Elongation (warp and weft)** |  < 5% - ISO 1421 |
| **Packaging** | Rolls of 27 lm |
| **Making up** | Advice note on request |

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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.

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

SV 3% KOOLBLACK™ TECHNOLOGY FABRIC

RS: Solar reflectance  
AS: Solar absorbance  
Gtot: Solar factor, fabric + glazing

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)
**THERMAL AND OPTICAL FACTORS** in the European standard EN 14501

<table>
<thead>
<tr>
<th>Colour</th>
<th>Fabric</th>
<th>Fabric + Glazing / g tot internal blind</th>
<th>Optical factors</th>
<th>Ts</th>
<th>Rs</th>
<th>As</th>
<th>C : gv = 0.59</th>
<th>D : gv = 0.32</th>
<th>Tv</th>
</tr>
</thead>
<tbody>
<tr>
<td>3535 Charcoal</td>
<td>13</td>
<td>29</td>
<td></td>
<td>58</td>
<td></td>
<td></td>
<td>0.51</td>
<td>0.31</td>
<td>5</td>
</tr>
</tbody>
</table>

**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”.

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**SERVICE**

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

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

Go directly to the products catalog >

www.sunscreen-mermet.com

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