

SCREEN NATURE

ULTIMETAL[®]

 **GreenScreen[™]**

SCREEN NATURE ULTIMETAL[®]

SCREEN NATURE



COLLECTION
2018
2021

INTELLIGENT FABRICS FOR SOLAR PROTECTION



INTERNAL
APPLICATION

SCREEN NATURE ULTIMETAL®

THERMAL AND OPTICAL COMFORT,
UNRIVALLED **LEVEL OF EXCELLENCE**

74%

OF SOLAR
REFLECTANCE

EXCELLENT
TRANSPARENCY

■ Mineral composition designed for **MINIMUM ENVIRONMENTAL IMPACT**: made of glass fibre, PVC free, polyester free and halogen* free

■ **INCOMBUSTIBLE**, smoke emission free: BS 476 Pt 6 & 7 Class 0, Euroclass **A2-s1-d0, F0**

■ **TRANSPARENT THERMAL SHIELD**: the **METALIZED SIDE**, facing the window, rejects up to 88% of solar energy in all colours (gtot = 0,12 / glazing g = 0,32 and U = 1,1)

■ **VERY LOW EMISSIVITY OF 10%**. The fabric acts as a **HEAT INSULATOR**, delivering interior comfort in summer and winter

■ Excellent **GLARE CONTROL**: up to 96% of light rays filtered, comfort classification 3 (good effect) according to EN 14501 standard

■ Can be used in a humid or under condensation conditions atmosphere (**DOUBLE-SKIN FAÇADE**)

■ **REDUCED ENERGY CONSUMPTION** for buildings: meets LEED and BREEAM standards

■ Elegant fabric design and **VERY FINE**: ideal for blinds in **COMPACT SPACES**

■ **DIMENSIONAL STABILITY, DURABILITY** (test of 10.000 cycles, class 3 NF EN 13120), **MECHANICAL RESISTANCE**: perfect flatness even in large dimensions

■ Health & Safety: conforms to standard requirements for buildings open to the public

* Contains fluorine

TECHNICAL DATA

SCREEN NATURE ULTIMETAL®			
Composition	Glass fabric with fire-proof PVC-free and halogen-free coating (contains fluorine)		
Fire, smoke classification and other official test reports*	M0-M1 (F) - NFP 92 503 B1 (DE) - DIN 4102-1 BS (GB) - 476 Pt 6 & 7 Class 0 C UNO (IT) - UNI 9177	Euroclass A2-s1-d0 (EU) - EN 13501-1 mounted according to EN 13823 & EN 14716	FR (US) - NFPA 701 FO - NF F 16-101 HHV : 1,59 MJ/kg (0,26 MJ/m²)
Health, safety	Oeko-Tex Standard 100 class IV : No chemicals harmful to health and safety of users Greenguard® GOLD : Guarantee of indoor air quality (VOC) Antibacterial : More than 99% of bacteria destroyed - ASTM E 2180		
Openness factor	4%		
UV screen	Up to 96%		
Emissivity	0,10		
Widths	180 - 240 cm (depending on colours)		
Weight/m²	165 g ± 5% - ISO 2286 - 2		
Thickness	0,21 mm ± 5% - ISO 2286 - 3		
Colour Fastness to light (scale of 8)	7/8 - ISO 105 B02 (white not graded)		
Mechanical resistance	Breaking	Tear	Folding
Warp	> 100 daN/5 cm	≥ 3 daN	≥ 10 daN/5 cm
Weft	> 110 daN/5 cm	≥ 5 daN	≥ 20 daN/5 cm
	ISO 1421	EN 1875-3	ISO 1421**
Elongation (warp and weft)	< 5% - ISO 1421		
Packaging	Rolls of 50 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

THERMAL AND OPTICAL FACTORS in the European standard EN 14501

SCREEN NATURE ULTIMETAL® - OF 4%	Thermal factors					Optical factors
	Fabric		Fabric + Glazing / gtot internal blind			Tv
Colours (metalized side factors)	Ts	Rs	As	C : gv = 0,59	D : gv = 0,32	
1301 Titanium	6	74	20	0,28 2	0,13 3	6
1303 Platinum	6	74	20	0,27 2	0,13 3	6
1302 Inox	6	74	20	0,29 2	0,14 3	5
1304 Iron	5	74	21	0,27 2	0,13 3	5
1305 Carbon	5	74	21	0,28 2	0,14 3	5
1306 Bronze	5	74	21	0,28 2	0,14 3	5
1307 Black Diamond	4	73	23	0,27 2	0,12 3	4

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).

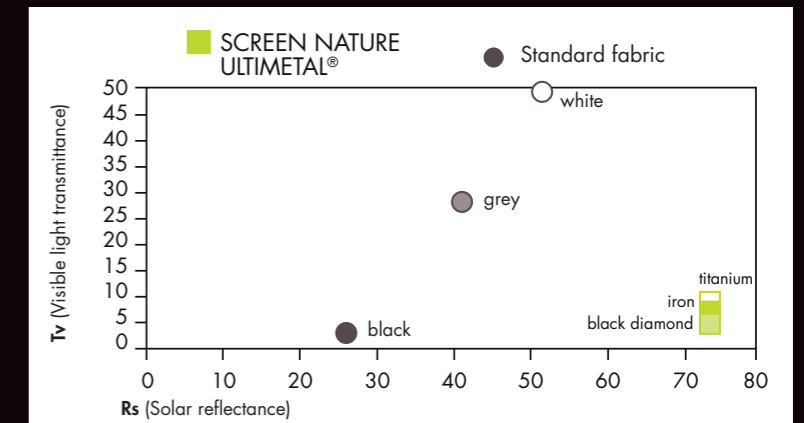
Comfort classification according to EN 14501 standard: 1 very little effect 2 little effect 3 moderate effect 4 good effect 5 very good effect

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".

THERMAL AND OPTICAL PERFORMANCES

Performance of SCREEN NATURE ULTIMETAL®

Thanks to its metallic side, the fabric SCREEN NATURE ULTIMETAL® provides a technical combination of high solar reflection (74%) and excellent visible transmission ($T_v \leq 6$), irrespective of the colour selected for the interior ambiance. Thermal comfort is total and both glare and unwanted reflections are fully controlled.



The fabric SCREEN NATURE ULTIMETAL® compared to standard PVC free fabric

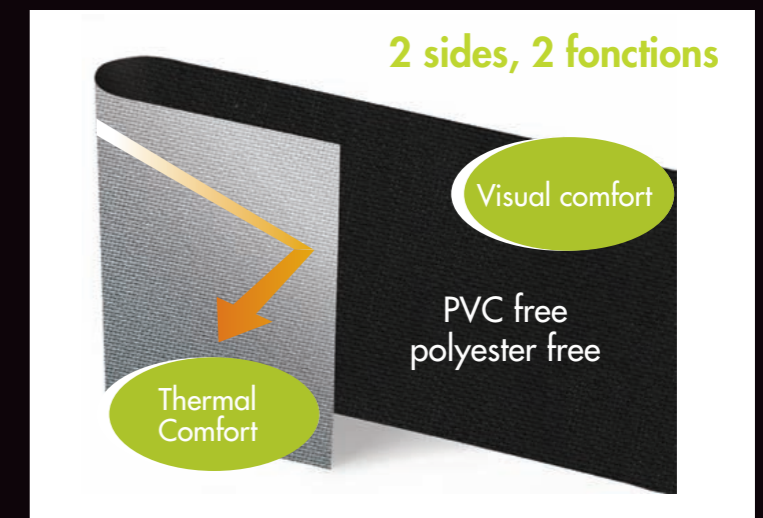
THE ENERGY CONSCIOUS AND ENVIRONMENTAL FRIENDLY SCREEN

SCREEN NATURE ULTIMETAL®: Metallic PVC-free screen with dual effectiveness

The fabric SCREEN NATURE ULTIMETAL® exploits the technology of the fabric Screen Nature and, thanks to its metallic side, offers optimal interior solar protection, a very good compromise between thermal protection and visual comfort:

- the metallic side, facing the glass, reflects sunlight in order to control heat while reducing luminous transmission in order to control glare (especially for computer screens),
- the textile side, darker on the interior, controls the amount of natural light and offers an unrivalled transparency.

The fabric SCREEN NATURE ULTIMETAL® composition meets the requirements of sustainable development initiatives and enables energy savings to be made while enhancing the performances of the glazing of eco-efficient buildings; with a controlled use of air conditioning in summer, heating in winter and artificial lighting. The fabric SCREEN NATURE ULTIMETAL® helps reduce greenhouse gas emissions.



SCREEN NATURE ULTIMETAL®

WIDTHS: 180 - 240 CM

WIDTH: 240 CM

1301

1302

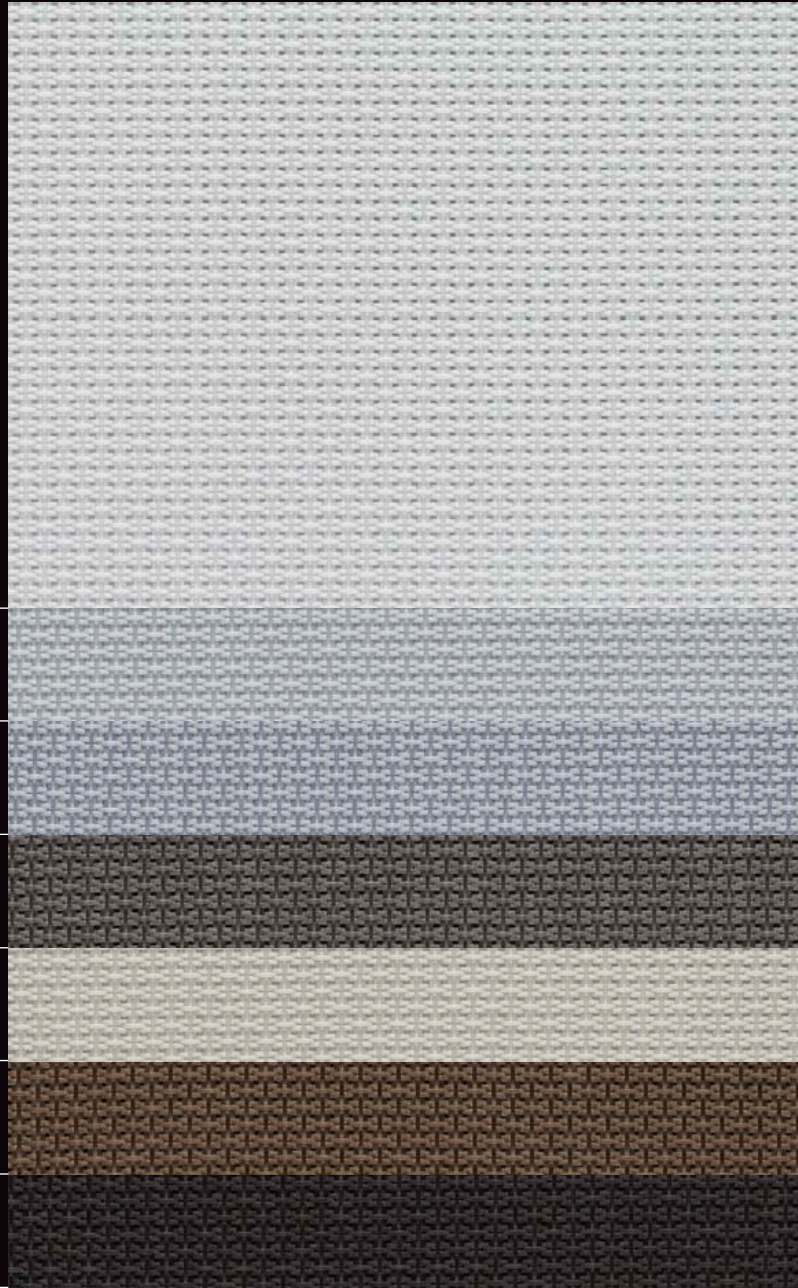
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1305

1303

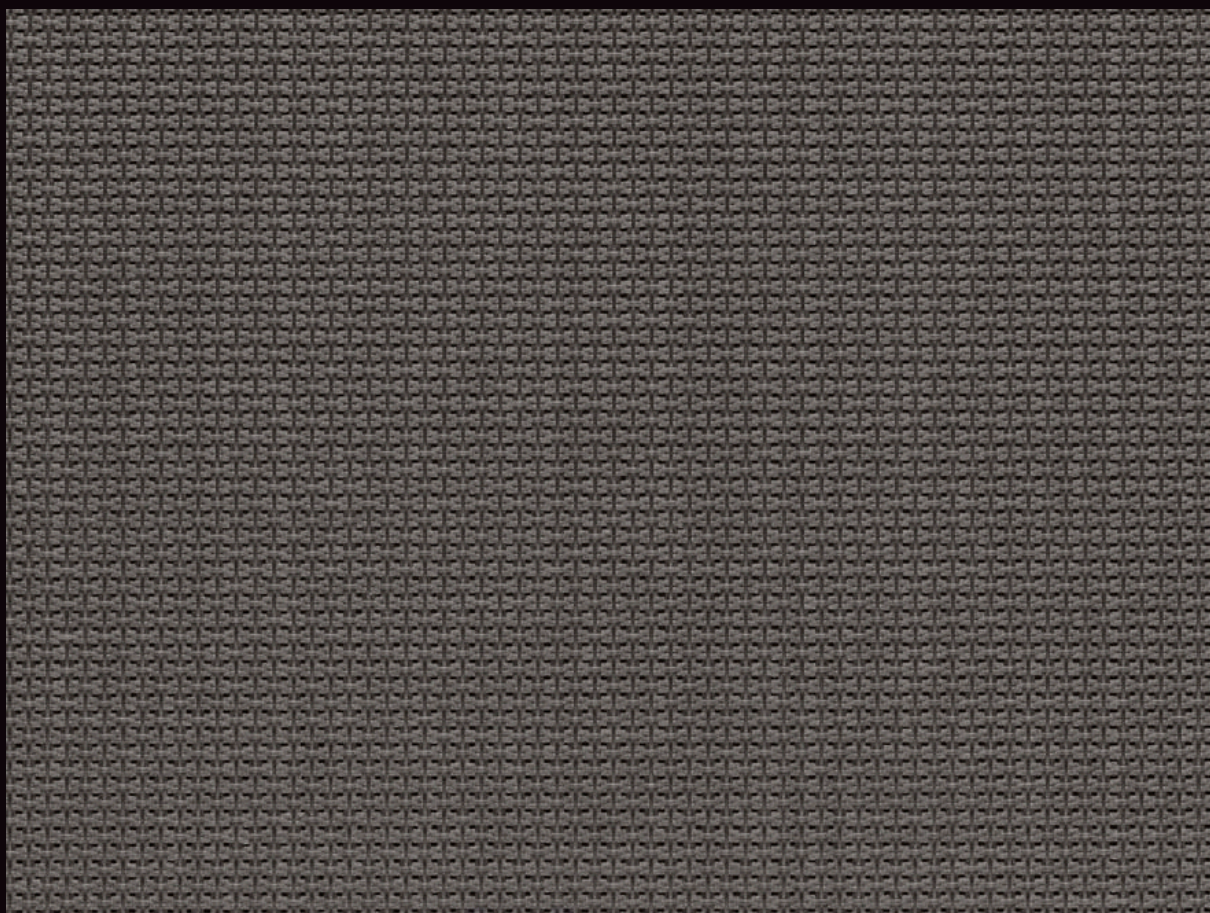
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1307



Colours may be slightly different from the actual ones

1305

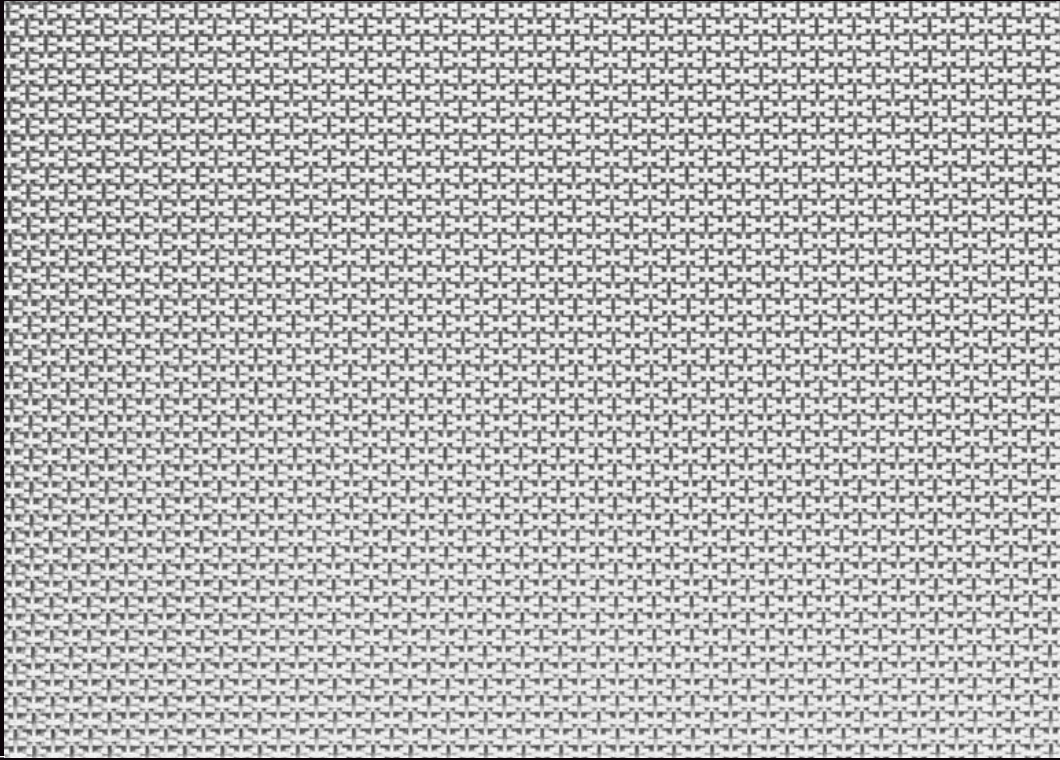


SERVICE

- 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

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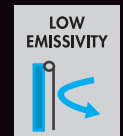
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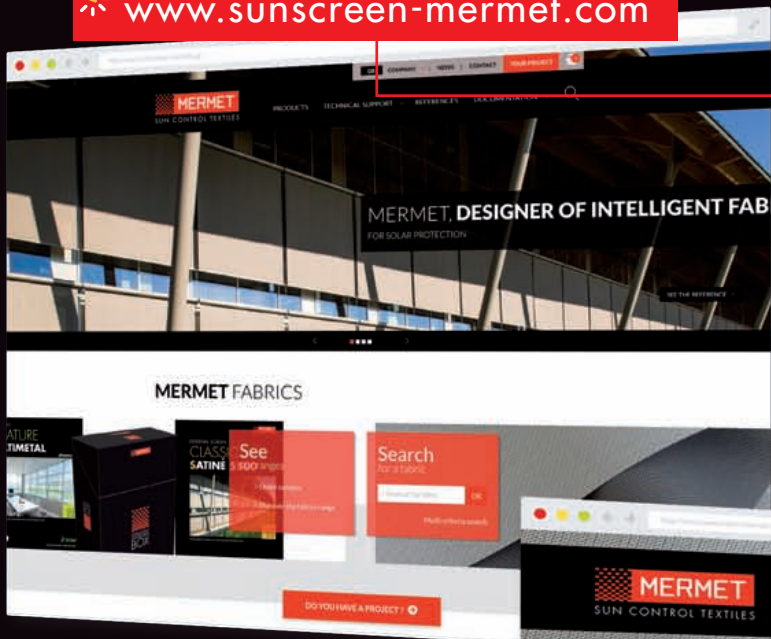
INTERNAL APPLICATION



Roller blinds

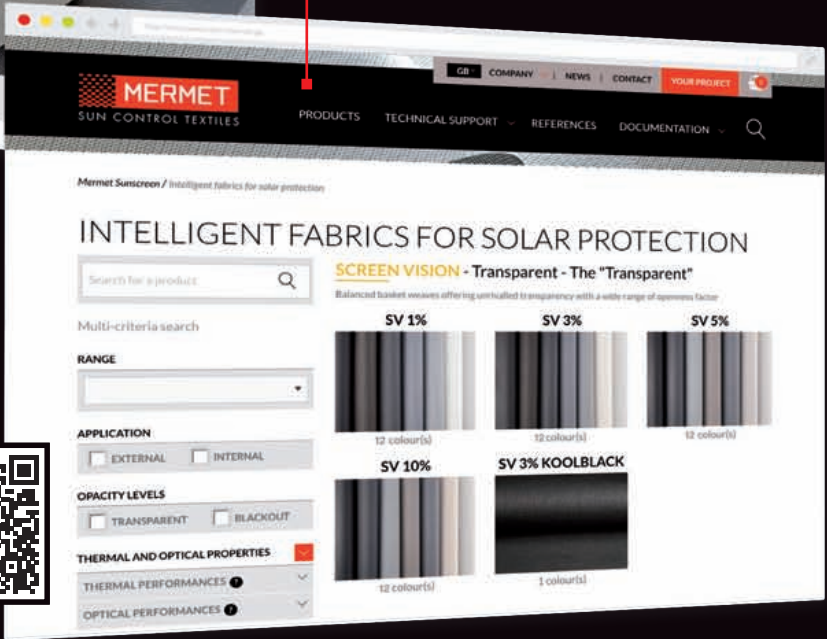


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MERMET COLLECTION offers a wide choice of fabrics for external and internal application, from transparency to total darkness, for thermal and optical comfort. To receive other brochures from the collection, **contact us**.



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