

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 W/m² K)

■ **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	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			

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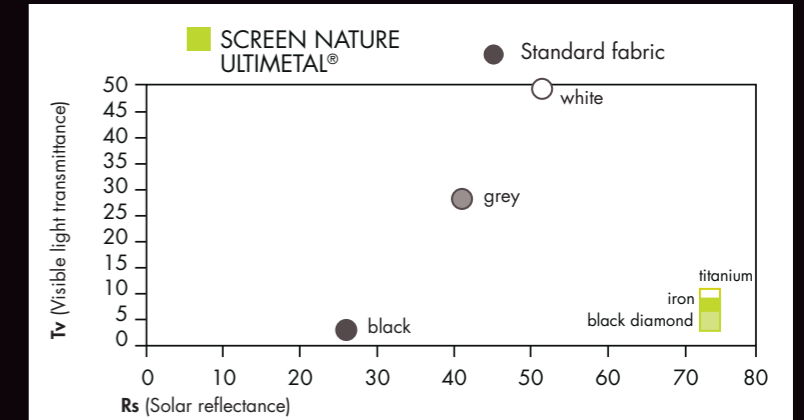
* Reports available on request, please contact Mermet

** Internal procedure derived from ISO 1421 standard

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.

THERMAL AND OPTICAL FACTORS in the European standard EN 14501

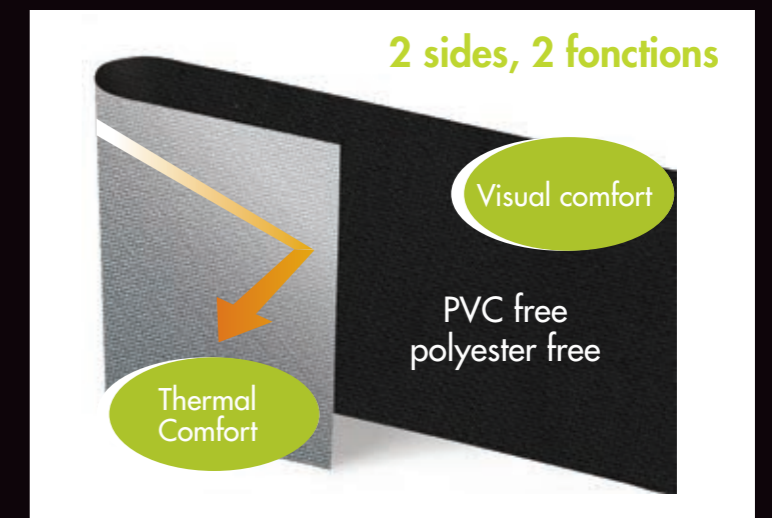
SCREEN NATURE ULTIMETAL® - OF 4%	Thermal factors					Optical factors
	Fabric		Fabric + Glazing / gtot internal blind			Tv
Colours (metalized side factors)	Ts	Rs	As	C : gv = 0,59	D : gv = 0,32	
1301 Titanium	6	74	20	0,28 ②	0,13 ③	6
1303 Platinum	6	74	20	0,27 ②	0,13 ③	6
1302 Inox	6	74	20	0,29 ②	0,14 ③	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".



SCREEN NATURE ULTIMETAL[®]

WIDTHS: 180 - 240 CM

WIDTH: 240 CM

1301

1302

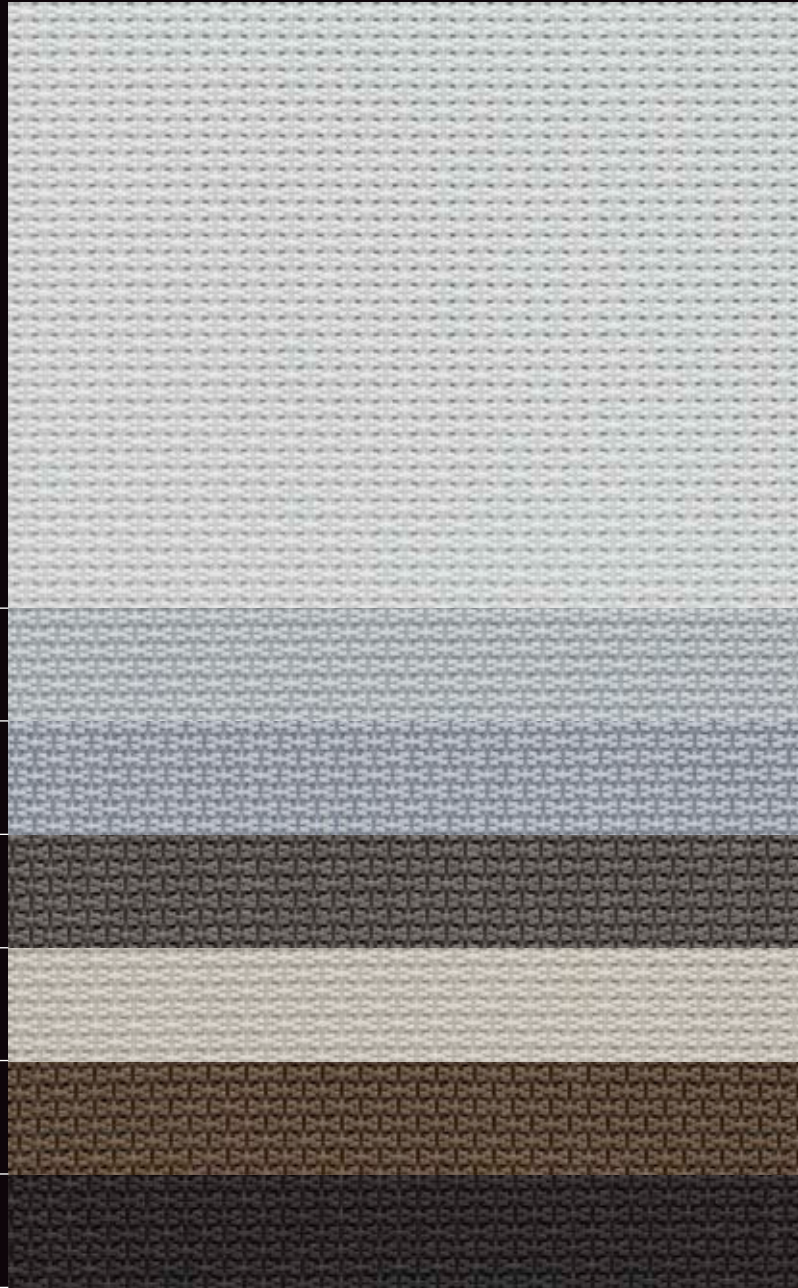
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1305

1303

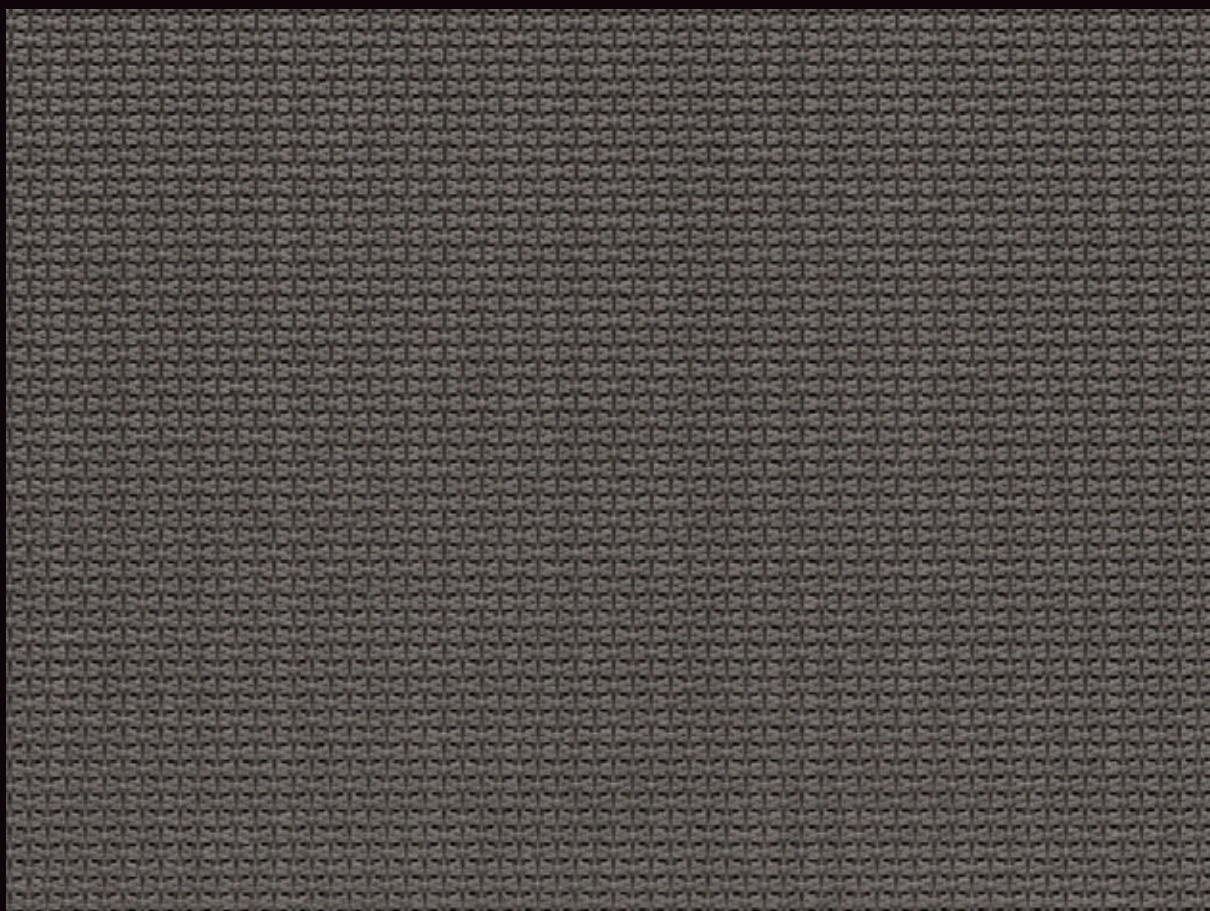
1306

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Colours may be slightly different from the actual ones

1305

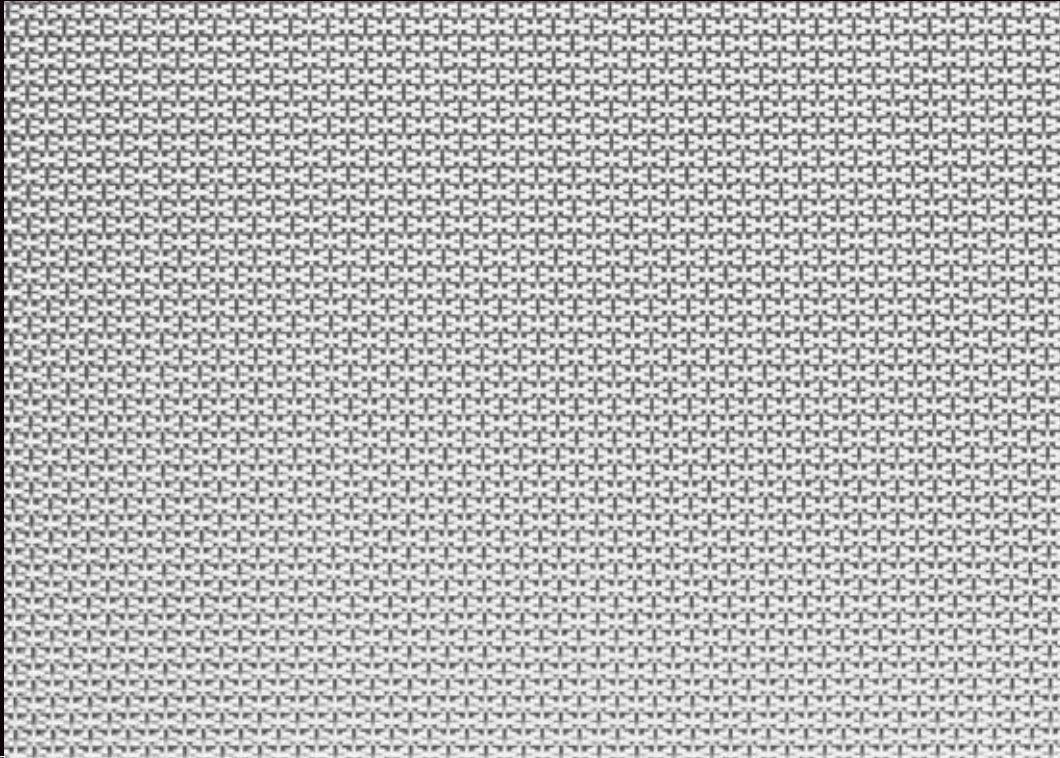


SERVICE

- 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

SCREEN NATURE ULTIMETAL®

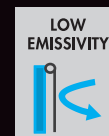
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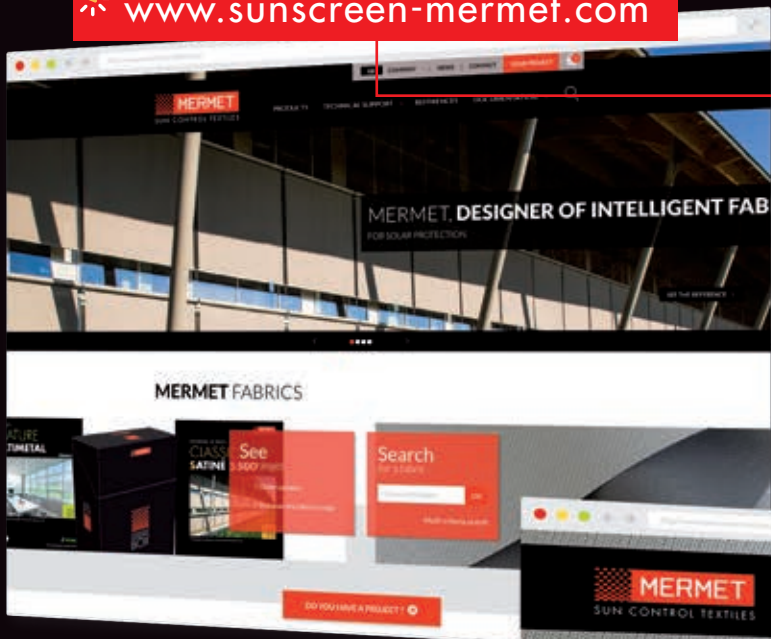
INTERNAL APPLICATION



Roller blinds

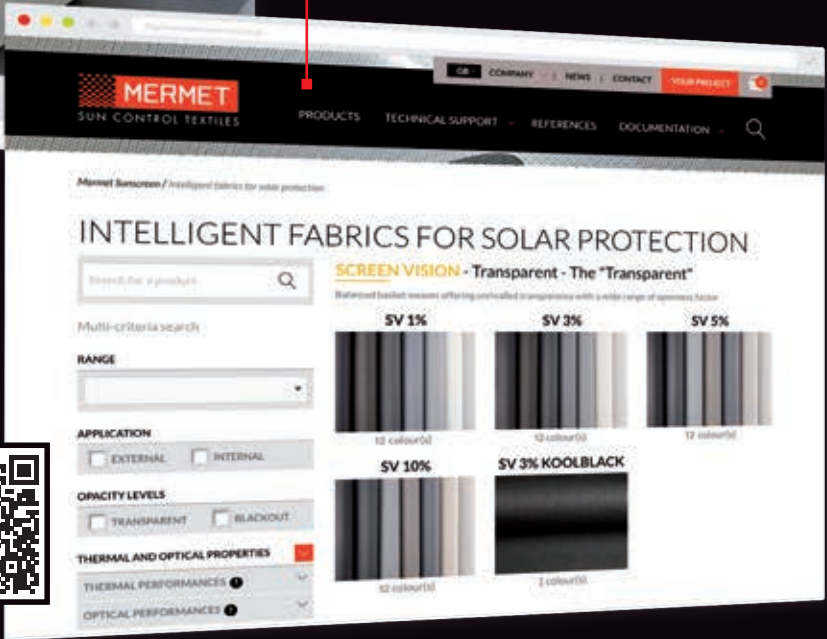


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MERMET COLLECTION offers a wide choice of fabrics for external and internal application, from transparency to total darkness, for thermal and optical comfort. To receive other brochures from the collection, **contact us**.



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