**TEYCE, S.A.**

**Ctra. Terrassa – Rubi Km 19,300 (BP-1503)**
**08194 SANT QUIRZE DEL VALLÉS (BARCELONA)**
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# FITXA TÈCNICA CORTINES ENROTLLABLES

TEYCE, S.A. fabrica totes les seves cortines soldant el teixit al macarró que es fica dins de la ranura del tub d'alumini. Com a tub base es treballa amb tub alumini de diàmetre 43mm però també te les opcions de tub de 30mm, 38mm, 56mm i 70mm (adjuntem alguns del planells del tub comentats (proveïdor Nevaluz - Extrusax) segons l'amplada de la cortina i l'aplicació que s'hagi de fer. Tots els nostres mecanismes es fabriquen en plàstic POM i PA i poden suportar un pes màxim de 8Kg. La contera (part contraria al mecanisme a cadena) és retràctil el que permet col·locar la cortina de forma senzilla. Amb aquest mecanismes, degut a que estan preparats per suportar gran pes, es pot garantir un plegat suau permetin pujar i baixar la cortina sense notar el pes de la mateixa. La cadena que s'utilitza pot ser de plàstic en el quatre colors bàsic o pot ser metàl·lica. Per fitxar l'alçada en el sistema a cadena s'utilitza un topes especials i amb sistema molla s'utilitza la mateixa molla per fitxar l'alçada. El suports del nostre tub son metàl·lics pintats en quatre colors bàsics (blanc, negre, beige i gris) i van recoberts per unes tapes de plàstic en els mateixos colors. Aquest suports permeten instal·lar a sostre o paret d'una manera molt senzilla. A mes a mes en aquest suports podem adaptar un suplement que permet fixar a finestres i portes sense necessitat de fer cap forat. A la part inferior de la cortina es posa un contrapès rodo amb taps de plàstic en colors amb un molt bon pes que permet sempre que el teixit quedi tensat (adjuntem certificat de fitxa tècnica del nostre proveïdor Sistemas Delfin). Qualsevol del components de la cortina pot ser canviat a la mateixa instal·lació de forma molt senzilla. Sempre a l'entrega o instal·lació de les cortines s'explica la forma de treballar correctament amb les cortines . Mes endavant expliquem tots el models de teixits que permeten, en funció de la orientació de la casa, amortir mes o menys l'entrada de llum o calor.

TEYCE, S.A. disposa de diferents sistemes d'accionament :

- sistema cadena TON que permet fer cortines de 2600 x 3400 a cadena (sense necessitat d'usar molla de compensació) amb una gran suavitat de moviment. (adjuntem carta amb característiques tècniques mecanismes i suports)
- sistema a cadena DESMULTIPLICADORA que permet fer cortines de 3200 x 4200 amb cadena metàl·lica amb una gran suavitat de moviment (adjuntem carta amb característiques tècniques mecanismes i suports)
- sistema molla
- sistema manivela
- sistema motor amb interruptor o comandament a distancia

A més a més es pot optar per instal·lar les enrotllables utilitzant els diferents sistemes de calaix que tenim (calaix de 53 x 61, calaix de 80 x 83, calaix de 93 x 99, calaix de 117 x 137) i amb les diferents guies per poder aplicar tant lateralment, frontalment, per el interior de l'oficina, per l'exterior, etc.

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Amb el que respecta al teixits, TEYCE, S.A. te les següents col·leccions ignifugues M1:

-**Teixits Screen** que es característica per rebaixar la temperatura ambient, tamisant la llum i que te els següents models:

- Teixit Screen Natté 300: El teixit amb un factor d'obertura d'un 10% i amb una gama composta per 11 colors
- Teixit Screen Serge 600 : El teixit amb un factor d'obertura d'un 5% i amb una gama composta per 51 colors
- Teixit Screen Natté 380: El teixit amb un factor d'obertura d'un 5% i amb una gama composta per 20 colors
- Teixit Screen Natté 380P: El teixit amb un factor d'obertura d'un 5% i amb una gama composta per 8 colors
- Teixit Screen Verso 3 : El teixit amb un factor d'obertura d'un 3% i amb una gama composta per 7 colors
- Teixit Screen Natté 390 : El teixit amb un factor d'obertura d'un 3% i amb una gama composta per 8 colors
- Teixit Screen Serge 1%: El teixit amb un factor d'obertura d'un 1% i amb una gama composta per 7 colors
- Teixit Screen Natté 390P: El teixit amb un factor d'obertura d'un 3% i amb una gama composta per 9 colors
- Teixit Screen Natté 420P: El teixit amb un factor d'obertura d'un 1% i amb una gama composta per 9 colors
- Teixit Screen Verso 1 : El teixit amb un factor d'obertura d'un 1% i amb una gama composta per 7 colors
- Teixit Natté 420: El teixit amb un factor d'obertura d'un 1% i amb una gama composta per 8 colors

- **Teixit opac** que evita l'entrada de llum i que te els següents models:

- Teixit OPAC 400: El teixit amb un factor d'obertura d'un 0% i amb una gama composta per 8 colors
- Teixit OPAC PE RUKA: El teixit amb un factor d'obertura d'un 0% i amb una gama composta per 5 colors. Teixit metal·litzat per darrera
- Teixit Serge 600 lunar: El El teixit amb un factor d'obertura d'un 0% i amb una gama composta per 5 colors

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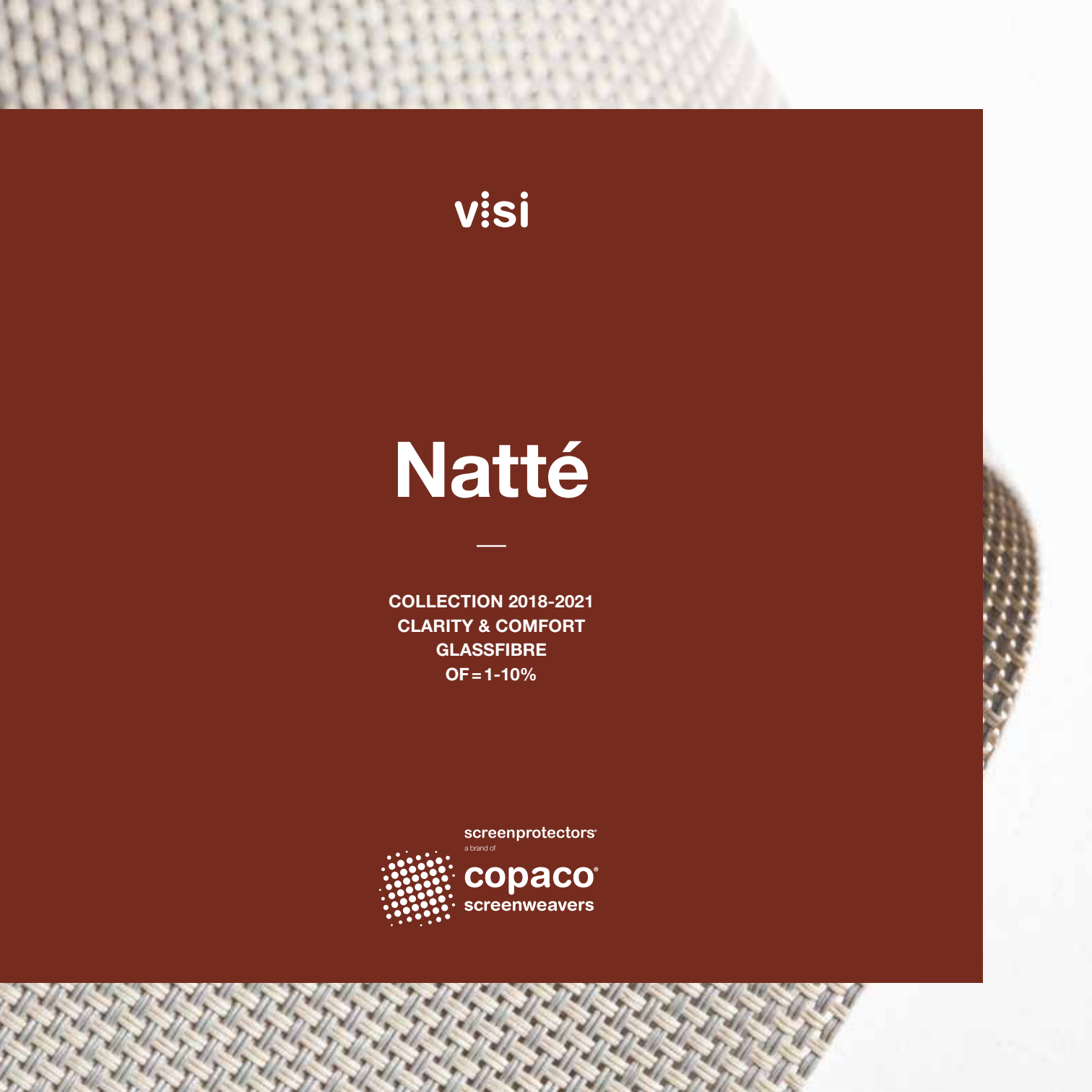
- **Teixit acústic** especial per reduir el so i que te els següents models:

    - Teixit Acoustic 50: El teixit amb un factor d'absorció de 0,35 a 0,80 i amb una gama composta per 6 colors

- **Teixit mediambiental** produït sense PVC, sense halògens ni polièsters i que te els següents models:

    - Teixit Screen Nature El teixit amb un factor d'obertura del 4% i amb una gama composta per 9 colors



visi

# Natté

COLLECTION 2018-2021
CLARITY & COMFORT
GLASSFIBRE
OF = 1-10%

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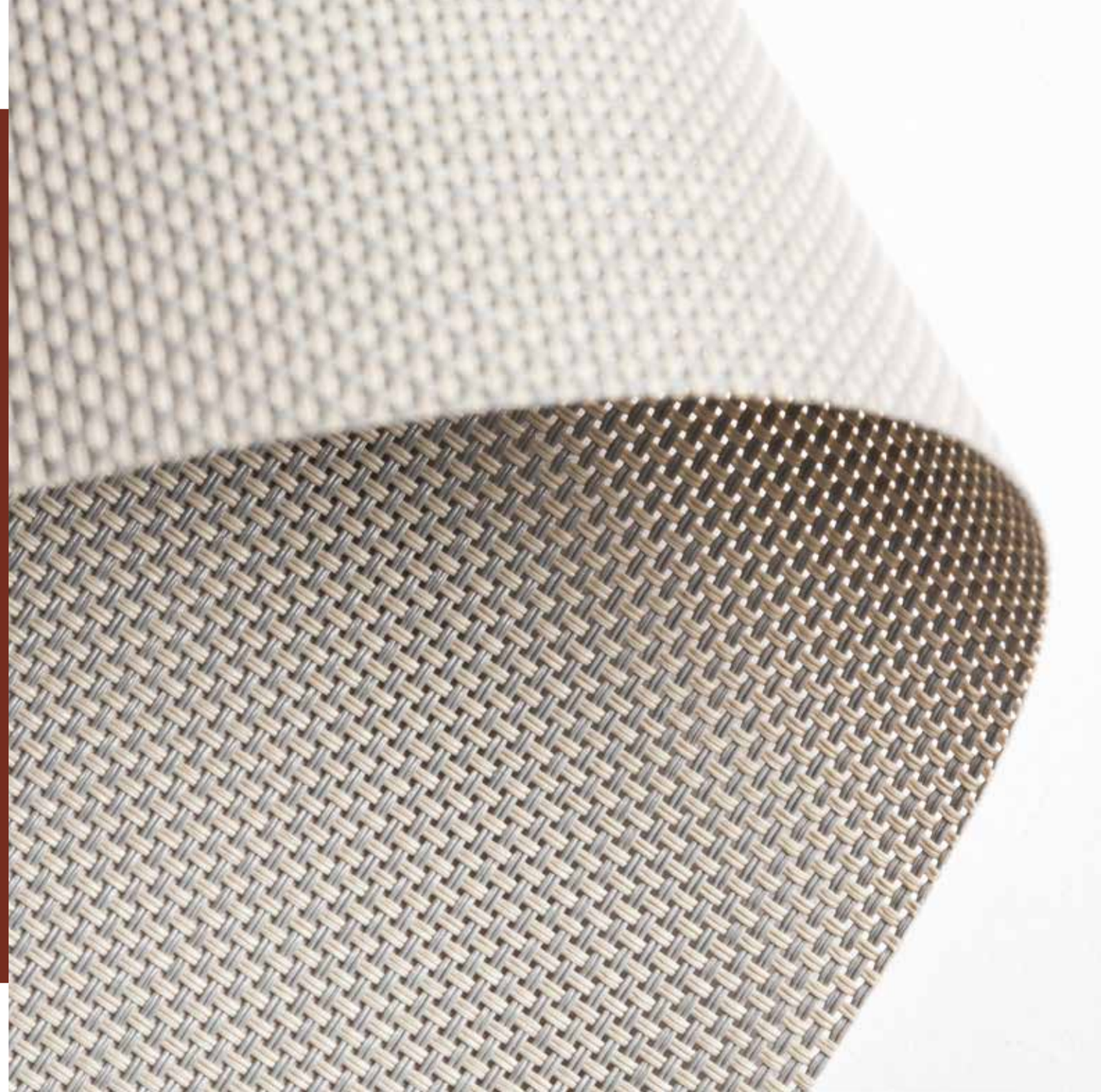


# Natté

**GLASSFIBRE**

**OF = 1-10%**

Natté 300 002002 white | white

Natté 380 002002 white | white

Natté 390 002002 white | white

Natté 420 002002 white | white

# Natté

**GLASSFIBRE**

**OF = 1-10%**

Natté 300 010010 charcoal | charcoal

Natté 380 010010 charcoal | charcoal

Natté 390 010010 charcoal | charcoal

Natté 420 010010 charcoal | charcoal

# Natté 300

**OF = 10%**

## Technical specifications

| TECHNICAL SPECIFICATION | | UNITY | | STANDARD | RESULT |
|---|---|---|---|---|---|
| composition | | | | Glassfibre 36% - PVC 64% | |
| openness factor | | % | | NBN EN 410 | 10% |
| weight | | g/m² | | NF EN 12127 | 345 |
| thickness | | mm | | ISO 2286-3 | 0,45 |
| density | | yarn/cm | warp | ISO 7211/2 | 18 |
| | | | weft | | 18 |
| colour fastness to artificial light | | | | ISO 105 B02 | >7 |
| tear strength | original | daN | warp | ISO 4674-1 method 2 | 4,7 |
| | | | weft | | 4,9 |
| elongation up to break | original | % | warp | ISO 1421 | 2,7 |
| | | | weft | | 2,7 |
| breaking strength | original | daN/5 cm | warp | ISO 1421 | 140 |
| | | | weft | | 135 |
| elongation up to break | after colour fastness to artificial light | % | warp | ISO 1421 | 3,1 |
| | | | weft | | 3,2 |
| breaking strength | after colour fastness to artificial light | daN/5 cm | warp | ISO 1421 | 140 |
| | | | weft | | 140 |
| tear strength | after climatic chamber -30°C | daN | warp | ISO 4674-1 method 2 | 4,8 |
| | | | weft | | 4,9 |
| elongation up to break | after climatic chamber -30°C | % | warp | ISO 1421 | 3,1 |
| | | | weft | | 2,7 |
| breaking strength | after climatic chamber -30°C | daN/5 cm | warp | ISO 1421 | 135 |
| | | | weft | | 130 |
| tear strength | after climatic chamber +70°C | daN | warp | ISO 4674-1 method 2 | 4,8 |
| | | | weft | | 4,9 |
| elongation up to break | after climatic chamber +70°C | % | warp | ISO 1421 | 2,7 |
| | | | weft | | 2,7 |
| breaking strength | after climatic chamber +70°C | daN/5 cm | warp | ISO 1421 | 100 |
| | | | weft | | 120 |
| fire classification | Europe | | | UNE-EN 13501-1:2007 | C-s3,d0 |
| | France | | | NF P92-503 | M2 |
| | Italy | | | UNI 9177 | Class 1 |
| | UK | | | BS 5867 | C |
| | USA | | | NFPA 701 | FR |
| | Spain | | | UNE EN 13773-2003 | Clase 1 |
| roll length | **30 m** | | | | |
| cleaning | with soapy water | | | | |
| confection | by heat, high frequency or ultrasonic welding | | | | |

These properties are given as indicative and don't have any contractual value



# Natté 380

**OF = 5%**

## Technical specifications

| TECHNICAL SPECIFICATION | | UNITY | | STANDARD | RESULT |
|---|---|---|---|---|---|
| composition | | | | Glassfibre 36% - PVC 64% | |
| openness factor | | % | | NBN EN 410 | 5% |
| weight | | g/m² | | NF EN 12127 | 380 |
| thickness | | mm | | ISO 2286-3 | 0,45 |
| density | | yarn/cm | warp | ISO 7211/2 | 20 |
| | | | weft | | 20 |
| colour fastness to artificial light | | | | ISO 105 B02 | >7 |
| tear strength | original | daN | warp | ISO 4674-1 method 2 | 4,9 |
| | | | weft | | 4,7 |
| elongation up to break | original | % | warp | ISO 1421 | 3,7 |
| | | | weft | | 3,2 |
| breaking strength | original | daN/5 cm | warp | ISO 1421 | 160 |
| | | | weft | | 160 |
| elongation up to break | after colour fastness to artificial light | % | warp | ISO 1421 | 3,7 |
| | | | weft | | 3 |
| breaking strength | after colour fastness to artificial light | daN/5 cm | warp | ISO 1421 | 150 |
| | | | weft | | 160 |
| tear strength | after climatic chamber -30°C | daN | warp | ISO 4674-1 method 2 | 5,1 |
| | | | weft | | 5,15 |
| elongation up to break | after climatic chamber -30°C | % | warp | ISO 1421 | 4 |
| | | | weft | | 3 |
| breaking strength | after climatic chamber -30°C | daN/5 cm | warp | ISO 1421 | 150 |
| | | | weft | | 140 |
| tear strength | after climatic chamber +70°C | daN | warp | ISO 4674-1 method 2 | 5,3 |
| | | | weft | | 4,8 |
| elongation up to break | after climatic chamber +70°C | % | warp | ISO 1421 | 3,6 |
| | | | weft | | 2,9 |
| breaking strength | after climatic chamber +70°C | daN/5 cm | warp | ISO 1421 | 120 |
| | | | weft | | 120 |
| fire classification | Europe | | | UNE-EN 13501-1:2007 | C-s3,d0 |
| | France | | | NF P92-503 | M2 |
| | Italy | | | UNI 9177 | Class 1 |
| | UK | | | BS 5867 | C |
| | USA | | | NFPA 701 | FR |
| | Spain | | | UNE EN 13773-2003 | Clase 1 |
| roll length | **30 m** | | | | |
| cleaning | with soapy water | | | | |
| confection | by heat, high frequency or ultrasonic welding | | | | |

These properties are given as indicative and don't have any contractual value

# Natté 390

**OF = 3%**

## Technical specifications

| TECHNICAL SPECIFICATION | | UNITY | | STANDARD | RESULT |
|---|---|---|---|---|---|
| composition | | | | Glassfibre 36% - PVC 64% | |
| openness factor | | % | | NBN EN 410 | 3% |
| weight | | g/m² | | NF EN 12127 | 390 |
| thickness | | mm | | ISO 2286-3 | 0,50 |
| density | | yarn/cm | warp | ISO 7211/2 | 25 |
| | | | weft | | 15 |
| colour fastness to artificial light | | | | ISO 105 B02 | >7 |
| tear strength | original | daN | warp | ISO 4674-1 method 2 | 8,22 |
| | | | weft | | 4,83 |
| elongation up to break | original | % | warp | ISO 1421 | 7,05 |
| | | | weft | | 4,45 |
| breaking strength | original | daN/5 cm | warp | ISO 1421 | 259,2 |
| | | | weft | | 178,5 |
| elongation up to break | after colour fastness to artificial light | % | warp | ISO 1421 | 7,3 |
| | | | weft | | 3,6 |
| breaking strength | after colour fastness to artificial light | daN/5 cm | warp | ISO 1421 | 229,6 |
| | | | weft | | 121,3 |
| tear strength | after climatic chamber -30°C | daN | warp | ISO 4674-1 method 2 | 8,49 |
| | | | weft | | 5,22 |
| elongation up to break | after climatic chamber -30°C | % | warp | ISO 1421 | 7,21 |
| | | | weft | | 4,33 |
| breaking strength | after climatic chamber -30°C | daN/5 cm | warp | ISO 1421 | 252,7 |
| | | | weft | | 174,7 |
| tear strength | after climatic chamber +70°C | daN | warp | ISO 4674-1 method 2 | 8,09 |
| | | | weft | | 4,9 |
| elongation up to break | after climatic chamber +70°C | % | warp | ISO 1421 | 7,15 |
| | | | weft | | 3,85 |
| breaking strength | after climatic chamber +70°C | daN/5 cm | warp | ISO 1421 | 259,4 |
| | | | weft | | 156,3 |
| fire classification | Europe | | | UNE-EN 13501-1:2007 | C-s3,d0 |
| | France | | | NF P92-503 | M2 |
| | Italy | | | UNI 9177 | Class 1 |
| | UK | | | BS 5867 | C |
| | USA | | | NFPA 701 | FR |
| | Spain | | | UNE EN 13773-2003 | Clase 1 |
| roll length | **30 m** | | | | |
| cleaning | with soapy water | | | | |
| confection | by heat, high frequency or ultrasonic welding | | | | |

These properties are given as indicative and don't have any contractual value



# Natté 420

**OF = 1%**

## Technical specifications

| TECHNICAL SPECIFICATION | | UNITY | | STANDARD | RESULT |
|---|---|---|---|---|---|
| composition | | | | Glassfibre 36% - PVC 64% | |
| openness factor | | % | | NBN EN 410 | 1% |
| weight | | g/m² | | NF EN 12127 | 420 |
| thickness | | mm | | ISO 2286-3 | 0,50 |
| density | | yarn/cm | warp | ISO 7211/2 | 25 |
| | | | weft | | 18 |
| colour fastness to artificial light | | | | ISO 105 B02 | >7 |
| tear strength | original | daN | warp | ISO 4674-1 method 2 | 5,13 |
| | | | weft | | 3,3 |
| elongation up to break | original | % | warp | ISO 1421 | 6,71 |
| | | | weft | | 4,46 |
| breaking strength | original | daN/5 cm | warp | ISO 1421 | 244,1 |
| | | | weft | | 190,9 |
| elongation up to break | after colour fastness to artificial light | % | warp | ISO 1421 | 6,65 |
| | | | weft | | 4,35 |
| breaking strength | after colour fastness to artificial light | daN/5 cm | warp | ISO 1421 | 243,8 |
| | | | weft | | 180 |
| tear strength | after climatic chamber -30°C | daN | warp | ISO 4674-1 method 2 | 5,19 |
| | | | weft | | 3,44 |
| elongation up to break | after climatic chamber -30°C | % | warp | ISO 1421 | 6,93 |
| | | | weft | | 4,02 |
| breaking strength | after climatic chamber -30°C | daN/5 cm | warp | ISO 1421 | 266,8 |
| | | | weft | | 175,8 |
| tear strength | after climatic chamber +70°C | daN | warp | ISO 4674-1 method 2 | 5,47 |
| | | | weft | | 3,59 |
| elongation up to break | after climatic chamber +70°C | % | warp | ISO 1421 | 6,66 |
| | | | weft | | 3,75 |
| breaking strength | after climatic chamber +70°C | daN/5 cm | warp | ISO 1421 | 244,5 |
| | | | weft | | 162,6 |
| fire classification | Europe | | | UNE-EN 13501-1:2007 | C-s3,d0 |
| | France | | | NF P92-503 | M2 |
| | Italy | | | UNI 9177 | Class 1 |
| | UK | | | BS 5867 | C |
| | USA | | | NFPA 701 | FR |
| | Spain | | | UNE EN 13773-2003 | Clase 1 |
| roll length | **30 m** | | | | |
| cleaning | with soapy water | | | | |
| confection | by heat, high frequency or ultrasonic welding | | | | |

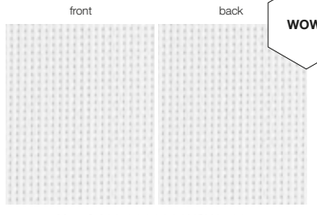
These properties are given as indicative and don't have any contractual value

# Natté 300

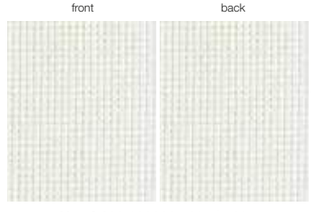
**GLASSFIBRE**

**OF = 10%**

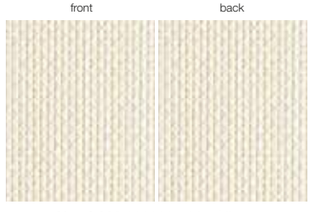
## Colours & references



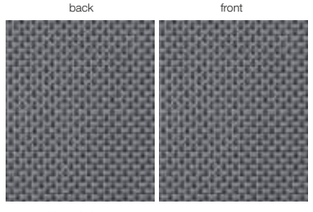

**Natté 300** 092092 WOW white



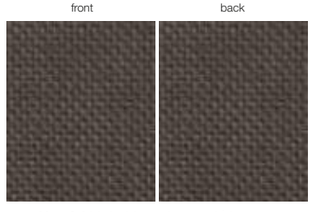

**Natté 300** 002002 white | white



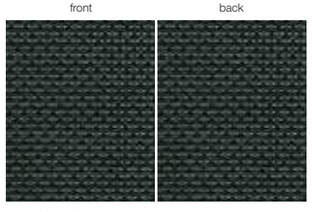

**Natté 300** 002008 white | linen



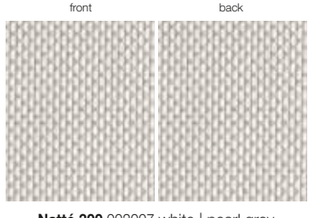

**Natté 300** 010001 charcoal | grey



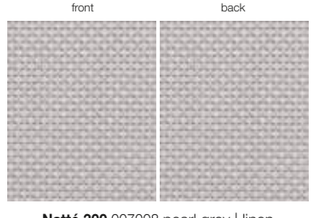

**Natté 300** 010011 charcoal | bronze



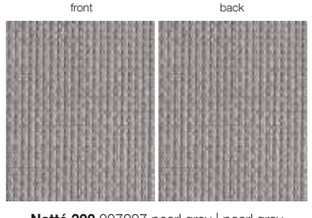

**Natté 300** 010010 charcoal | charcoal




**Natté 300** 002007 white | pearl grey




**Natté 300** 007008 pearl grey | linen




**Natté 300** 007007 pearl grey | pearl grey

| Natté 300 | 200 cm | 250 cm | 320 cm |
|---|---|---|---|
| 092092 WOW white | | • | |
| 002002 white \| white | • | • | • |
| 002008 white \| linen | • | • | • |
| 002007 white \| pearl grey | • | • | • |
| 007008 pearl grey \| linen | • | • | • |
| 007007 pearl grey \| pearl grey | • | • | • |
| 010001 charcoal \| grey | • | • | • |
| 010011 charcoal \| bronze | • | • | • |
| 010010 charcoal \| charcoal | • | • | • |

# Natté 300

**GLASSFIBRE** **OF = 10%**

## Solar energetic properties

| Natté 300<br>European Standard EN 14501<br>Calculation G-value according to EN13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING<br>INTERIOR<br>G-factor =<br>total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 092092 | WOW white | | | front | 10,1 | 65 | 24,9 | 0,37 | 0,38 | 0,36 | 0,25 | 23,6 | 10,7 |
| | | | | back | 10,1 | 65 | 24,9 | 0,37 | 0,38 | 0,36 | 0,25 | 23,6 | 10,7 |
| 002002 | white \| white | | | front | 11,6 | 64,0 | 24,4 | 0,37 | 0,38 | 0,36 | 0,25 | 23,6 | 10,7 |
| | | | | back | 11,6 | 64,0 | 24,4 | 0,37 | 0,38 | 0,36 | 0,25 | 23,6 | 10,7 |
| 002008 | white \| linen | | | front | 19,8 | 57,7 | 22,5 | 0,41 | 0,41 | 0,38 | 0,26 | 20,4 | 11,8 |
| | | | | back | 19,9 | 57,6 | 22,5 | 0,41 | 0,41 | 0,38 | 0,26 | 20,4 | 11,8 |
| 002007 | white \| pearl grey | | | front | 33,1 | 46,6 | 20,3 | 0,47 | 0,47 | 0,42 | 0,27 | 17,7 | 11,8 |
| | | | | back | 33,5 | 46,2 | 20,3 | 0,47 | 0,47 | 0,42 | 0,27 | 17,7 | 11,8 |
| 007008 | pearl grey \| linen | | | front | 41,2 | 38,7 | 20,1 | 0,49 | 0,49 | 0,44 | 0,27 | 17,3 | 13,8 |
| | | | | back | 41,2 | 38,7 | 20,1 | 0,49 | 0,49 | 0,44 | 0,27 | 17,3 | 13,8 |

| Natté 300<br>European Standard EN 14501<br>Calculation G-value according to EN13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING<br>INTERIOR<br>G-factor =<br>total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 007007 | pearl grey \| pearl grey | | | front | 48,2 | 33,6 | 18,2 | 0,54 | 0,53 | 0,46 | 0,28 | 15,4 | 13,0 |
| | | | | back | 48,4 | 33,4 | 18,2 | 0,54 | 0,53 | 0,46 | 0,28 | 15,4 | 13,0 |
| 010001 | charcoal \| grey | | | front | 77,0 | 10,0 | 13,0 | 0,62 | 0,62 | 0,53 | 0,30 | 12,7 | 12,7 |
| | | | | back | 77,0 | 10,0 | 13,0 | 0,62 | 0,62 | 0,53 | 0,30 | 12,7 | 12,7 |
| 010011 | charcoal \| bronze | | | front | 79,5 | 6,7 | 13,8 | 0,64 | 0,64 | 0,54 | 0,30 | 13,6 | 13,6 |
| | | | | back | 79,5 | 6,7 | 13,8 | 0,64 | 0,64 | 0,54 | 0,30 | 13,6 | 13,6 |
| 010010 | charcoal \| charcoal | | | front | 81,5 | 5,7 | 12,8 | 0,70 | 0,67 | 0,55 | 0,30 | 12,7 | 12,7 |
| | | | | back | 81,5 | 5,7 | 12,8 | 0,70 | 0,67 | 0,55 | 0,30 | 12,7 | 12,7 |

| | |
|---|---|
| GLAZING A = clear single glazing 4 mm | Gv = 0,85 |
| GLAZING B = clear double glazing (4/12/4), space filled with air | Gv = 0,76 |
| GLAZING C = double glazing (4/16/4), with a low emissivity coating in position 3, space filled with argon | Gv = 0,59 |
| GLAZING D = reflective double glazing (4/16/4), with a low emissivity coating in position 2, space filled with argon | Gv = 0,32 |

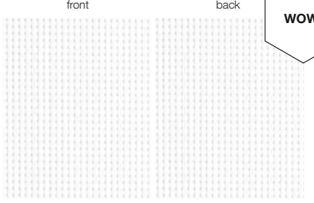
# Natté 380

GLASSFIBRE

OF = 5%

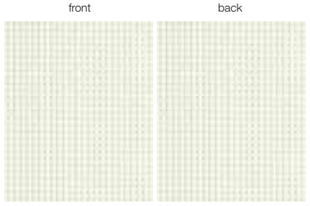
## Colours & references

front back



**Natté 380** 092092 WOW white

front back

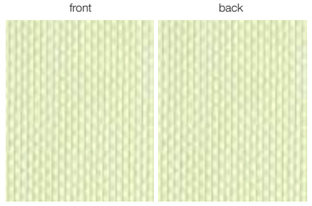


**Natté 380** 002002 white | white

front back

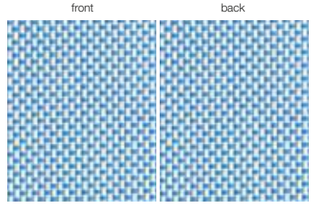
**Natté 380** 002008 white | linen

front back



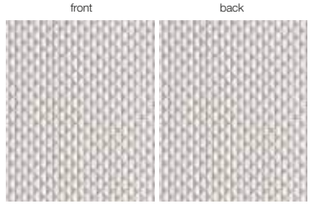
**Natté 380** 002017 white | pistache

front back



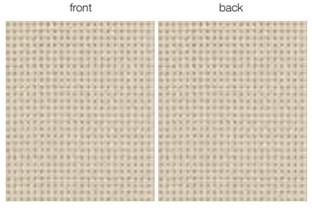
**Natté 380** 002014 white | turquoise

front back



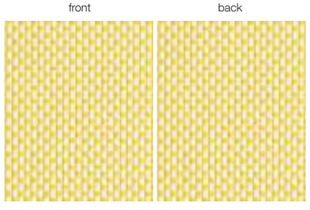
**Natté 380** 002007 white | pearl grey

front back



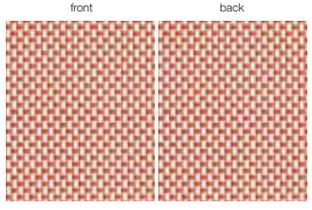
**Natté 380** 008008 linen | linen

front back



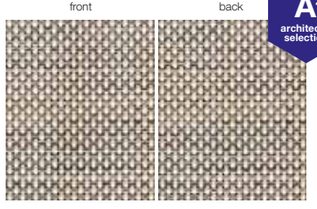
**Natté 380** 002006 white | yellow

front back



**Natté 380** 002005 white | mandarine

front back



**Natté 380 bicolor** 002048 white | sand-bronze

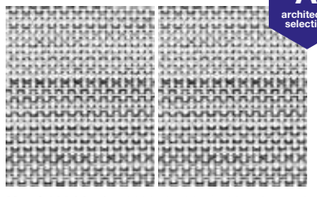
| Natté 380 | 200 cm | 250 cm | 320 cm |
|---|---|---|---|
| 092092 WOW white | | • | |
| 002002 white \| white | • | • | • |
| 002008 white \| linen | • | • | • |
| 008008 linen \| linen | | • | |
| 002006 white \| yellow | | • | |
| 002005 white \| mandarine | | • | |
| 002017 white \| pistache | | • | |
| 002014 white \| turquoise | | • | |
| 002007 white \| pearl grey | • | • | • |
| 002048 white \| sand-bronze | • | • | • |

# Natté 380

GLASSFIBRE

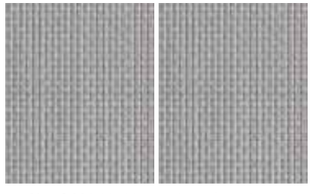
OF = 1-10%

front back



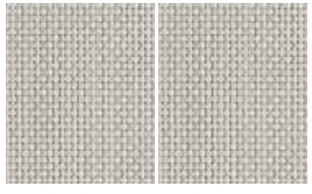
**Natté 380 bicolor** 002049 white | white-charcoal

front back



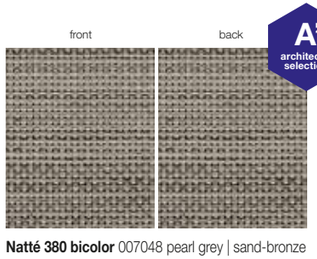
**Natté 380** 007007 pearl grey | pearl grey

front back



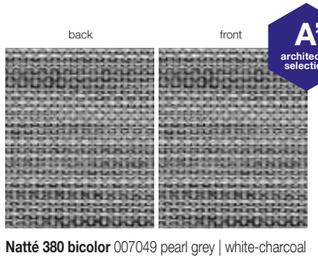
**Natté 380** 007008 pearl grey | linen

front back



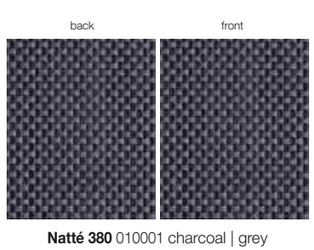
**Natté 380 bicolor** 007048 pearl grey | sand-bronze

back front



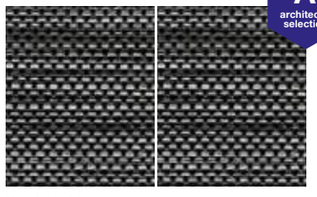
**Natté 380 bicolor** 007049 pearl grey | white-charcoal

back front



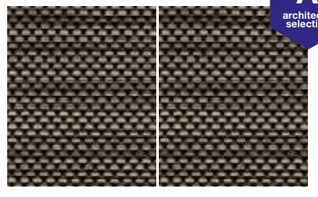
**Natté 380** 010001 charcoal | grey

front back



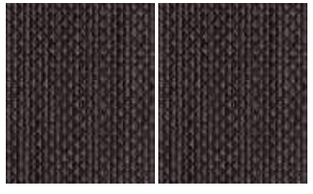
**Natté 380 bicolor** 010049 charcoal | white-charcoal

front back



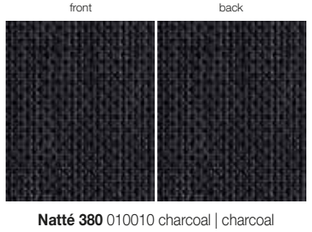
**Natté 380 bicolor** 010048 charcoal | sand-bronze

front back



**Natté 380** 010011 charcoal | bronze

front back



**Natté 380** 010010 charcoal | charcoal

| Natté 380 | 200 cm | 250 cm | 320 cm |
|---|---|---|---|
| 002049 white \| white-charcoal | • | • | • |
| 007007 pearl grey \| pearl grey | • | • | • |
| 007008 pearl grey \| linen | • | • | • |
| 007048 pearl grey \| sand-bronze | • | • | • |
| 007049 pearl grey \| white-charcoal | • | • | • |
| 010001 charcoal \| grey | • | • | • |
| 010049 charcoal \| white-charcoal | • | • | • |
| 010048 charcoal \| sand-bronze | • | • | • |
| 010011 charcoal \| bronze | • | • | • |
| 010010 charcoal \| charcoal | • | • | • |

# Natté 380

**GLASSFIBRE**

**OF = 5%**

## Solar energetic properties

| Natté 380<br>European Standard EN 14501<br>Calculation G-value according to EN 13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING INTERIOR G-factor = total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 092092 | WOW white | | | front | 7,9 | 63,6 | 28,5 | 0,37 | 0,38 | 0,37 | 0,25 | 26,3 | 17,5 |
| | | | | back | 7,9 | 63,6 | 28,5 | 0,37 | 0,38 | 0,37 | 0,25 | 26,3 | 17,5 |
| 002002 | white \| white | | | front | 10,0 | 66,6 | 23,4 | 0,36 | 0,37 | 0,36 | 0,25 | 21,8 | 10,9 |
| | | | | back | 9,9 | 66,8 | 23,4 | 0,35 | 0,37 | 0,36 | 0,25 | 21,8 | 10,9 |
| 002008 | white \| linen | | | front | 21,3 | 59,8 | 18,9 | 0,39 | 0,40 | 0,38 | 0,26 | 16,9 | 7,9 |
| | | | | back | 21,5 | 59,7 | 18,9 | 0,39 | 0,40 | 0,38 | 0,26 | 16,9 | 7,9 |
| 008008 | linen \| linen | | | front | 41,2 | 41,1 | 17,7 | 0,50 | 0,50 | 0,44 | 0,27 | 15,2 | 10,2 |
| | | | | back | 41,2 | 41,1 | 17,7 | 0,50 | 0,50 | 0,44 | 0,27 | 15,2 | 10,2 |
| 002006 | white \| yellow | | | front | 35,6 | 45,5 | 18,9 | 0,47 | 0,47 | 0,42 | 0,27 | 17,9 | 11,0 |
| | | | | back | 35,6 | 45,5 | 18,9 | 0,47 | 0,47 | 0,42 | 0,27 | 17,9 | 11,0 |
| 002005 | white \| mandarine | | | front | 50,8 | 36,4 | 12,8 | 0,52 | 0,52 | 0,45 | 0,28 | 10,0 | 7,9 |
| | | | | back | 50,6 | 36,4 | 12,8 | 0,52 | 0,52 | 0,45 | 0,28 | 10,0 | 7,9 |
| 002017 | white \| pistache | | | front | 39,3 | 45,7 | 15,0 | 0,47 | 0,47 | 0,42 | 0,27 | 11,9 | 8,2 |
| | | | | back | 39,2 | 45,8 | 15,0 | 0,47 | 0,47 | 0,42 | 0,27 | 11,9 | 8,2 |
| 002014 | white \| turquoise | | | front | 58,0 | 29,3 | 12,7 | 0,56 | 0,55 | 0,47 | 0,28 | 10,7 | 9,5 |
| | | | | back | 58,0 | 29,3 | 12,7 | 0,56 | 0,55 | 0,47 | 0,28 | 10,7 | 9,5 |
| 002007 | white \| pearl grey | | | front | 35,2 | 48,8 | 16,1 | 0,45 | 0,45 | 0,41 | 0,27 | 13,6 | 8,5 |
| | | | | back | 35,4 | 48,5 | 16,1 | 0,45 | 0,46 | 0,41 | 0,27 | 13,6 | 8,5 |
| 002048 | white \| sand-bronze | | | front | 41,2 | 41,1 | 17,7 | 0,50 | 0,50 | 0,44 | 0,27 | 15,2 | 10,2 |
| | | | | back | 41,2 | 41,1 | 17,7 | 0,50 | 0,50 | 0,44 | 0,27 | 15,2 | 10,2 |
| 002049 | white \| white-charcoal | | | front | 35,6 | 45,5 | 18,9 | 0,47 | 0,47 | 0,42 | 0,27 | 17,9 | 11,0 |
| | | | | back | 35,6 | 45,5 | 18,9 | 0,47 | 0,47 | 0,42 | 0,27 | 17,9 | 11,0 |

| Natté 380<br>European Standard EN 14501<br>Calculation G-value according to EN 13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING INTERIOR G-factor = total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 007007 | pearl grey \| pearl grey | | | front | 50,8 | 36,4 | 12,8 | 0,52 | 0,52 | 0,45 | 0,28 | 10,0 | 7,9 |
| | | | | back | 50,6 | 36,7 | 12,8 | 0,52 | 0,51 | 0,45 | 0,28 | 10,0 | 7,9 |
| 007008 | pearl grey \| linen | | | front | 39,3 | 45,7 | 15,0 | 0,47 | 0,47 | 0,42 | 0,27 | 11,9 | 8,2 |
| | | | | back | 39,2 | 45,8 | 15,0 | 0,47 | 0,47 | 0,42 | 0,27 | 11,9 | 8,2 |
| 007048 | pearl grey \| sand-bronze | | | front | 58,0 | 29,3 | 12,7 | 0,56 | 0,55 | 0,47 | 0,28 | 10,7 | 9,5 |
| | | | | back | 58,0 | 29,3 | 12,7 | 0,56 | 0,55 | 0,47 | 0,28 | 10,7 | 9,5 |
| 007049 | pearl grey \| white-charcoal | | | front | 55,6 | 30,8 | 13,6 | 0,55 | 0,54 | 0,47 | 0,28 | 12,2 | 10,3 |
| | | | | back | 55,6 | 30,8 | 13,6 | 0,55 | 0,54 | 0,47 | 0,28 | 12,2 | 10,3 |
| 010001 | charcoal \| grey | | | front | 80,9 | 11,3 | 7,8 | 0,66 | 0,64 | 0,53 | 0,30 | 7,7 | 7,4 |
| | | | | back | 81,0 | 11,2 | 7,8 | 0,66 | 0,64 | 0,53 | 0,30 | 7,7 | 7,4 |
| 010049 | charcoal \| white-charcoal | | | front | 71,2 | 17,9 | 10,9 | 0,53 | 0,53 | 0,46 | 0,28 | 10,6 | 9,7 |
| | | | | back | 71,2 | 17,9 | 10,9 | 0,53 | 0,53 | 0,46 | 0,28 | 10,6 | 9,7 |
| 010048 | charcoal \| sand-bronze | | | front | 75,7 | 14,8 | 9,5 | 0,64 | 0,62 | 0,52 | 0,30 | 9,0 | 8,7 |
| | | | | back | 75,7 | 14,8 | 9,5 | 0,64 | 0,62 | 0,52 | 0,30 | 9,0 | 8,7 |
| 010011 | charcoal \| bronze | | | front | 84,8 | 7,3 | 7,9 | 0,68 | 0,66 | 0,55 | 0,30 | 7,6 | 7,5 |
| | | | | back | 84,8 | 7,3 | 7,9 | 0,68 | 0,66 | 0,55 | 0,30 | 7,6 | 7,5 |
| 010010 | charcoal \| charcoal | | | front | 88,0 | 5,7 | 6,3 | 0,69 | 0,67 | 0,55 | 0,30 | 6,3 | 6,3 |
| | | | | back | 88,0 | 5,7 | 6,3 | 0,69 | 0,67 | 0,55 | 0,30 | 6,3 | 6,3 |

| | |
|---|---|
| GLAZING A = clear single glazing 4 mm | Gv = 0,85 |
| GLAZING B = clear double glazing (4/12/4), space filled with air | Gv = 0,76 |
| GLAZING C = double glazing (4/16/4), with a low emissivity coating in position 3, space filled with argon | Gv = 0,59 |
| GLAZING D = reflective double glazing (4/16/4), with a low emissivity coating in position 2, space filled with argon | Gv = 0,32 |

# Natté 390

**GLASSFIBRE**

**OF = 3%**

## Colours & references

front back

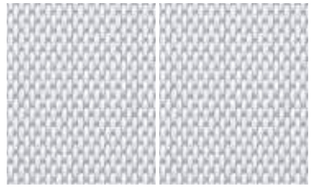


**Natté 390** 002002 white | white

front back

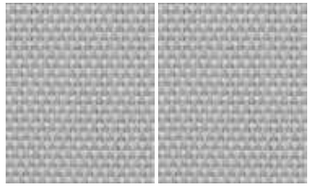
**Natté 390** 002008 white | linen

front back



**Natté 390** 002007 white | pearl grey

front back

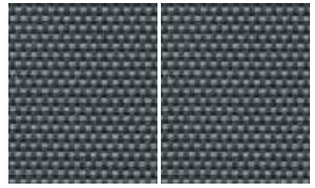


**Natté 390** 007008 pearl grey | linen

front back

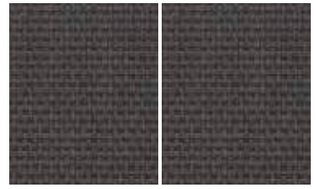
**Natté 390** 007007 pearl grey | pearl grey

front back



**Natté 390** 010001 charcoal | grey

front back



**Natté 390** 010011 charcoal | bronze

front back

**Natté 390** 010010 charcoal | charcoal

| Natté 390 | 200 cm | 250 cm | 320 cm |
|---|---|---|---|
| 002002 white \| white | • | • | • |
| 002008 white \| linen | • | • | • |
| 002007 white \| pearl grey | • | • | • |
| 007008 pearl grey \| linen | • | • | • |
| 007007 pearl grey \| pearl grey | • | • | • |
| 010001 charcoal \| grey | • | • | • |
| 010011 charcoal \| bronze | • | • | • |
| 010010 charcoal \| charcoal | • | • | • |

# Natté 390

**GLASSFIBRE**

**OF = 3%**

## Solar energetic properties

| Natté 390<br>European Standard EN 14501<br>Calculation G-value according to EN 13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING<br>INTERIOR<br>G-factor =<br>total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 002002 | white \| white | | | front | 12,5 | 61,4 | 26,1 | 0,38 | 0,39 | 0,37 | 0,25 | 25,2 | 8,3 |
| | | | | back | 12,5 | 61,4 | 26,1 | 0,38 | 0,39 | 0,37 | 0,25 | 25,2 | 8,3 |
| 002008 | white \| linen | | | front | 20,4 | 55,8 | 23,8 | 0,40 | 0,42 | 0,39 | 0,26 | 21,6 | 9,4 |
| | | | | back | 20,4 | 55,8 | 23,8 | 0,40 | 0,42 | 0,39 | 0,26 | 21,6 | 9,4 |
| 002007 | white \| pearl grey | | | front | 32,2 | 51,4 | 16,4 | 0,41 | 0,43 | 0,40 | 0,26 | 14,3 | 5,5 |
| | | | | back | 32,2 | 51,4 | 16,4 | 0,41 | 0,43 | 0,40 | 0,26 | 14,3 | 5,5 |
| 007008 | pearl grey \| linen | | | front | 51,4 | 37,7 | 10,9 | 0,47 | 0,49 | 0,44 | 0,27 | 8,1 | 5,8 |
| | | | | back | 51,4 | 37,7 | 10,9 | 0,47 | 0,49 | 0,44 | 0,27 | 8,1 | 5,8 |

| Natté 390<br>European Standard EN 14501<br>Calculation G-value according to EN 13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING<br>INTERIOR<br>G-factor =<br>total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 007007 | pearl grey \| pearl grey | | | front | 57,6 | 33,4 | 9,0 | 0,49 | 0,51 | 0,45 | 0,28 | 6,7 | 5,1 |
| | | | | back | 57,6 | 33,4 | 9,0 | 0,49 | 0,51 | 0,45 | 0,28 | 6,7 | 5,1 |
| 010001 | charcoal \| grey | | | front | 83,2 | 8,5 | 8,3 | 0,62 | 0,62 | 0,53 | 0,30 | 8,2 | 8,3 |
| | | | | back | 83,2 | 8,5 | 8,3 | 0,62 | 0,62 | 0,53 | 0,30 | 8,2 | 8,3 |
| 010011 | charcoal \| bronze | | | front | 87,5 | 6,8 | 5,7 | 0,62 | 0,63 | 0,53 | 0,30 | 5,7 | 5,7 |
| | | | | back | 87,5 | 6,8 | 5,7 | 0,62 | 0,63 | 0,53 | 0,30 | 5,7 | 5,7 |
| 010010 | charcoal \| charcoal | | | front | 88,2 | 6,0 | 5,8 | 0,62 | 0,63 | 0,54 | 0,30 | 5,8 | 5,9 |
| | | | | back | 88,2 | 6,0 | 5,8 | 0,62 | 0,63 | 0,54 | 0,30 | 5,8 | 5,9 |

| | |
|---|---|
| GLAZING A = clear single glazing 4 mm | Gv = 0,85 |
| GLAZING B = clear double glazing (4/12/4), space filled with air | Gv = 0,76 |
| GLAZING C = double glazing (4/16/4), with a low emissivity coating in position 3, space filled with argon | Gv = 0,59 |
| GLAZING D = reflective double glazing (4/16/4), with a low emissivity coating in position 2, space filled with argon | Gv = 0,32 |

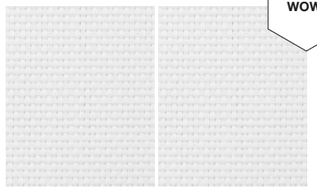
# Natté 420

**GLASSFIBRE**

**OF = 1%**

## Colours & references

front back



**Natté 420** 092092 WOW white

front back

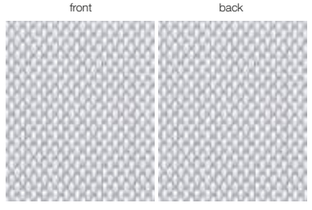


**Natté 420** 002002 white | white

front back

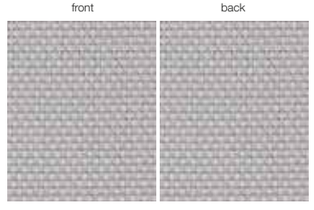
**Natté 420** 002008 white | linen

front back



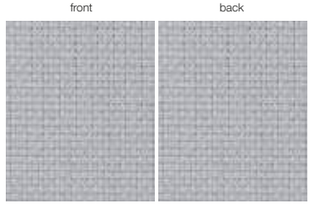
**Natté 420** 002007 white | pearl grey

front back



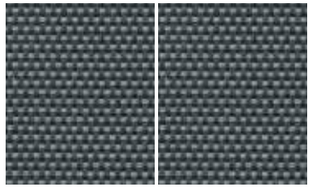
**Natté 420** 007008 pearl grey | linen

front back



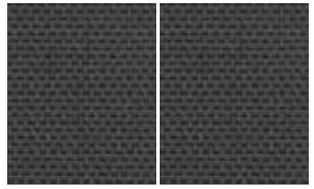
**Natté 420** 007007 pearl grey | pearl grey

front back



**Natté 420** 010001 charcoal | grey

front back



**Natté 420** 010011 charcoal | bronze

front back

**Natté 420** 010010 charcoal | charcoal

| Natté 420 | 200 cm | 250 cm | 320 cm |
|---|---|---|---|
| 092092 WOW white | | • | |
| 002002 white \| white | • | • | • |
| 002008 white \| linen | • | • | • |
| 002007 white \| pearl grey | • | • | • |
| 007008 pearl grey \| linen | • | • | • |
| 007007 pearl grey \| pearl grey | • | • | • |
| 010001 charcoal \| grey | • | • | • |
| 010011 charcoal \| bronze | • | • | • |
| 010010 charcoal \| charcoal | • | • | • |

# Natté 420

**GLASSFIBRE**

**OF = 1%**

## Solar energetic properties

| Natté 420<br>European Standard EN 14501<br>Calculation G-value according to EN 13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING<br>INTERIOR<br>G-factor =<br>total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 092092 | WOW white | | | front | 8,5 | 68,2 | 23,3 | 0,34 | 0,36 | 0,35 | 0,25 | 21,1 | 11,8 |
| | | | | back | 8,5 | 68,2 | 23,3 | 0,34 | 0,36 | 0,35 | 0,25 | 21,1 | 11,8 |
| 002002 | white \| white | | | front | 13,1 | 66,2 | 20,7 | 0,34 | 0,36 | 0,35 | 0,25 | 19,4 | 3,5 |
| | | | | back | 13,1 | 66,2 | 20,7 | 0,34 | 0,36 | 0,35 | 0,25 | 19,4 | 3,5 |
| 002008 | white \| linen | | | front | 23,0 | 59,1 | 17,9 | 0,38 | 0,39 | 0,38 | 0,26 | 15,0 | 4,2 |
| | | | | back | 23,0 | 59,1 | 17,9 | 0,38 | 0,39 | 0,38 | 0,26 | 15,0 | 4,2 |
| 002007 | white \| pearl grey | | | front | 36,4 | 48,9 | 14,7 | 0,42 | 0,44 | 0,41 | 0,26 | 12,2 | 5,1 |
| | | | | back | 36,4 | 48,9 | 14,7 | 0,42 | 0,44 | 0,41 | 0,26 | 12,2 | 5,1 |
| 007008 | pearl grey \| linen | | | front | 52,6 | 39,7 | 7,7 | 0,45 | 0,48 | 0,43 | 0,27 | 5,0 | 3,2 |
| | | | | back | 52,6 | 39,7 | 7,7 | 0,45 | 0,48 | 0,43 | 0,27 | 5,0 | 3,2 |

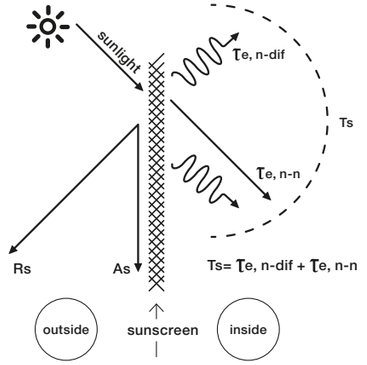
| Natté 420<br>European Standard EN 14501<br>Calculation G-value according to EN 13363-1 version 7.0 | | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FABRIC | | | FABRIC + GLAZING<br>INTERIOR<br>G-factor =<br>total solar energy transmittance | | | | | |
| references | colours | front | back | | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 007007 | pearl grey \| pearl grey | | | front | 60,1 | 33,9 | 6,0 | 0,48 | 0,50 | 0,45 | 0,27 | 4,0 | 2,9 |
| | | | | back | 60,1 | 33,9 | 6,0 | 0,48 | 0,50 | 0,45 | 0,27 | 4,0 | 2,9 |
| 010001 | charcoal \| grey | | | front | 86,8 | 9,8 | 3,4 | 0,60 | 0,61 | 0,52 | 0,29 | 3,3 | 3,3 |
| | | | | back | 86,8 | 9,8 | 3,4 | 0,60 | 0,61 | 0,52 | 0,29 | 3,3 | 3,3 |
| 010011 | charcoal \| bronze | | | front | 89,6 | 7,1 | 3,3 | 0,61 | 0,62 | 0,53 | 0,30 | 3,2 | 3,3 |
| | | | | back | 89,6 | 7,1 | 3,3 | 0,61 | 0,62 | 0,53 | 0,30 | 3,2 | 3,3 |
| 010010 | charcoal \| charcoal | | | front | 90,6 | 6,2 | 3,2 | 0,62 | 0,63 | 0,54 | 0,30 | 3,2 | 3,2 |
| | | | | back | 90,6 | 6,2 | 3,2 | 0,62 | 0,63 | 0,54 | 0,30 | 3,2 | 3,2 |

| | |
|---|---|
| GLAZING A = clear single glazing 4 mm | Gv = 0,85 |
| GLAZING B = clear double glazing (4/12/4), space filled with air | Gv = 0,76 |
| GLAZING C = double glazing (4/16/4), with a low emissivity coating in position 3, space filled with argon | Gv = 0,59 |
| GLAZING D = reflective double glazing (4/16/4), with a low emissivity coating in position 2, space filled with argon | Gv = 0,32 |

# Working of a sunscreen

## Sunscreen = protection against sunrays

Sunscreen means protection against the sunrays, so the function is the protection against light and heat, which is expressed in several properties.




| | |
|---|---|
| **Rs** | Solar reflectance |
| **As** | Solar absorptance |
| **Ts** | Solar transmittance |
| **τe,n-dif** | Diffuse solar transmittance |
| **τe,n-n** | Normal solar transmittance |

## Classes indicate effect of a sunscreen

Based on certain properties, the screen can be split up in classes, from 0 to 4. Those classes are used, starting from the norm EN 14501, to indicate the effect of a certain sunscreen.

| **influence on thermal and visual comfort** | |
|---|---|
| **Class 0** | very little effect |
| **Class 1** | little effect |
| **Class 2** | moderate effect |
| **Class 3** | good effect |
| **Class 4** | very good effect |

## Visual properties

**Openness factor**

The openness of a screen is indicated by the openness factor **= OF.** The openness coefficient is the relative area of the openings in the fabric seen under a given incidence. The openness factor is seen under a normal incidence.


The sunrays are subdivided in: **Visible light, UV-light** and **IR-light.**

**Visible light** (55% of the sun-energy) is that part for which our eyes are most sensitive. How larger the light intensity, how more detrimental for our eyes.

The factor Visible Light Transmittance = **Tv,** is the ratio of visible light that will be transmitted. How lower this factor can be kept, how better for the eyes.

**UV-light** (3% of the sun-energy) is the part of radiation which is detrimental for our health. This factor is indicated by the UV Transmittance = **Tuv.** This is the quantity UV-light transmitted by the sunscreen.

**IR-light** is invisible. This is however 42% of the sun-energy. These rays care for the reheating of solid substances and gases.

**Influence of colours**

The choice of the colour has direct influence on the criteria which justify the use of sunscreen protection:

- Protection against visible light, expressed by the factor **Tv.**
- Protection against sun-energy, expressed by the **G** value.
- Protection against secondary heat, expressed by the factor **Qi.**
- Protection against UV-light, expressed by the factor **Tuv.**

## Visual properties: classes

**Glare control**

The capacity of the solar protection device to control the luminance level of openings and to reduce the luminance contrasts between different zones within the field.

| τv,n-n | τv,n-dif | | | |
|---|---|---|---|---|
| | τv,n-dif < 0,02 | 0,02 ≤ τv,n-dif < 0,04 | 0,04 ≤ τv,n-dif < 0,08 | τv,n-dif ≥ 0,08 |
| τv,n-n > 0,10 | 0 | 0 | 0 | 0 |
| 0,05 < τv,n-n ≤ 0,10 | 1 | 1 | 0 | 0 |
| τv,n-n ≤ 0,05 | 3 | 2 | 1 | 1 |
| τv,n-n = 0,00 | 4 | 3 | 2 | 2 |

**Privacy at night**

Night privacy is the capacity of an internal or external blind or a shutter in the fully extended position or fully extended and closed position to protect persons, at night in normal light conditions from external view. External views means the ability of an external observer located 5m from the fully extended and closed product, to distinguish a person or object standing 1m behind the protection device in the room.

| τv,n-n | τv,n-dif | | |
|---|---|---|---|
| | 0 < τv,n-dif ≤ 0,04 | 0,04 < τv,n-dif ≤ 0,15 | τv,n-dif > 0,15 |
| τv,n-n > 0,10 | 0 | 0 | 0 |
| 0,05 < τv,n-n ≤ 0,10 | 1 | 1 | 1 |
| τv,n-n ≤ 0,05 | 2 | 2 | 2 |
| τv,n-n = 0,00 | 4 | 3 | 2 |

**Visual contact with the outside**

Visual contact with the outside is the capacity of the solar protection device to allow an exterior view when it is fully extended. This function is affected by different light conditions during the day.

| τv,n-n | τv,n-dif | | |
|---|---|---|---|
| | 0 < τv,n-dif ≤ 0,04 | 0,04 < τv,n-dif ≤ 0,15 | τv,n-dif > 0,15 |
| τv,n-n > 0,10 | 4 | 3 | 2 |
| 0,05 < τv,n-n ≤ 0,10 | 3 | 2 | 1 |
| τv,n-n ≤ 0,05 | 2 | 1 | 0 |
| τv,n-n = 0,00 | 0 | 0 | 0 |

**Daylight utilisation**

Daylight utilisation is characterised by:

- the capacity of the solar protection device to reduce the time period during the artificial light is required.
- the capacity of the solar protection device to optimise the daylight which is available.

| CLASS | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| τv,dif-h | τv,dif-h < 0,02 | 0,02 ≤ τv,dif-h < 0,10 | 0,10 ≤ τv,dif-h < 0,25 | 0,25 ≤ τv,dif-h < 0,40 | τv,dif-h ≥ 0,40 |

# Working of a sunscreen

## Thermal comfort

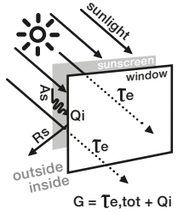
### Fabric

Energy radiated by the sun, will be split up in 3 factors:

| factor 1: | factor 2: | factor 3: |
|---|---|---|
| **As =**<br>**Solar absorptance**<br>is the ratio of the absorbed flux to the incident flux. | **Rs =**<br>**Solar reflectance**<br>is the fraction of the incident solar radiation that is directly reflected by the component. | **Ts =**<br>**Solar transmittance**<br>is the sum of the (normal) direct solar transmittance and the diffuse solar transmittance. This is the fraction of the total transmitted energy to the total incident solar radiation. |
| **These 3 factors together are always 100%** | | |

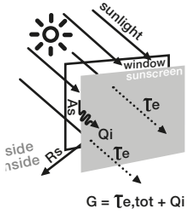
### The G-factor

**exterior sunscreen**




G = Te,tot + Qi

**interior sunscreen**




G = Te,tot + Qi

| | |
|---|---|
| **Rs** | Solar reflectance |
| **As** | Solar absorptance |
| **Te** | Direct solar transmittance |
| **Qi** | Secondary heat transfer factor |
| **G** | G-factor = total solar energy transmittance |

Sunscreens are always used in combination with a glazing. These together will prevent a large quantity of energy, sent by the sun to the earth, which is indicated by the: Total Solar Energy Transmittance, or **G-factor.**

The **G** value is the ratio between the total solar energy transmitted into a room through a window and the incident solar energy on the window. The **Gtot** is the solar factor of the combination of glazing and solar protection device.
The **Gv** is the solar factor of the glazing alone.
The shading coefficient is defined as the ratio of the solar factor of the combined glazing and solar protection device **Gtot** to that of the glazing alone **Gv.**

The total solar energy transmitted through a window consists of two parts:
1) Radiation: measured by the solar transmittance: **Te,tot**
2) Heat: measured by the secondary heat transfer: **Qi**

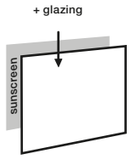
**G = Te,tot + Qi**

The factor **Te,tot,** is the quantity of energy, which will pass the combination solar protection device and window.
The factor **Qi** is the quantity of heat which is released by the absorption of energy in the sunscreen protection system = combination sunscreen + glazing.

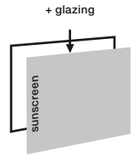
The **G-factor** is the most important factor to explain the efficiency of a combination sunscreen + glazing, as protection against the energy of the sun. The **G-factor** divided into his components explains the difference in efficiency between exterior and interior sunscreen.

**G = Te,tot + Qi**

**exterior sunscreen**




**interior sunscreen**




The direct solar transmittance **Te,tot** is the same for interior and exterior use of sunscreens.
The secondary heat factor **Qi** for interior sunscreen is bigger then for exterior sunscreen. For interior use, the heat, produced by the absorption of energy, will be transmitted to the room inside. By exterior use, the heat will be transmitted to the outside, without any inconvenience at the inside.

Also the colour of the sunscreen has an influence on the **G-factor.** Dark colours will absorb a lot of sun energy and will transmit this to heat. If the screen is used for exterior, heat will have no influence inside the room, contrary to a screen used for interior. This is why a darker screen is ideal for exterior use and a lighter screen for interior use.

## Thermal comfort: classes

**Total Solar energy Transmittance = G-factor**

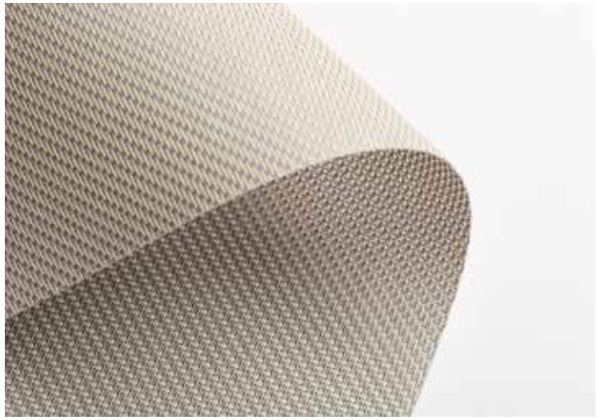
| CLASS | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Gtot | Gtot ≥ 0,50 | 0,35 ≤ Gtot < 0,50 | 0,15 ≤ Gtot < 0,35 | 0,10 ≤ Gtot < 0,15 | Gtot < 0,10 |

**Secondary Heat transfer = Qi**

| CLASS | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Qi | Qi ≥ 0,30 | 0,20 ≤ Qi < 0,30 | 0,10 ≤ Qi < 0,20 | 0,03 ≤ Qi < 0,10 | Qi < 0,03 |

**Normal Solar transmittance = protection against direct transmission**
The ability of a solar protection device to protect persons and surroundings from direct irradiation is measured by the direct/direct solar transmittance of the device in combination with the glazing. Te,n-n is used as measure for this property.

# clarity & visual comfort



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block

# Opac 400 Classic

COLLECTION 2018-2021
BLOCK SUNLIGHT
BLOCKOUT
OF = 0%

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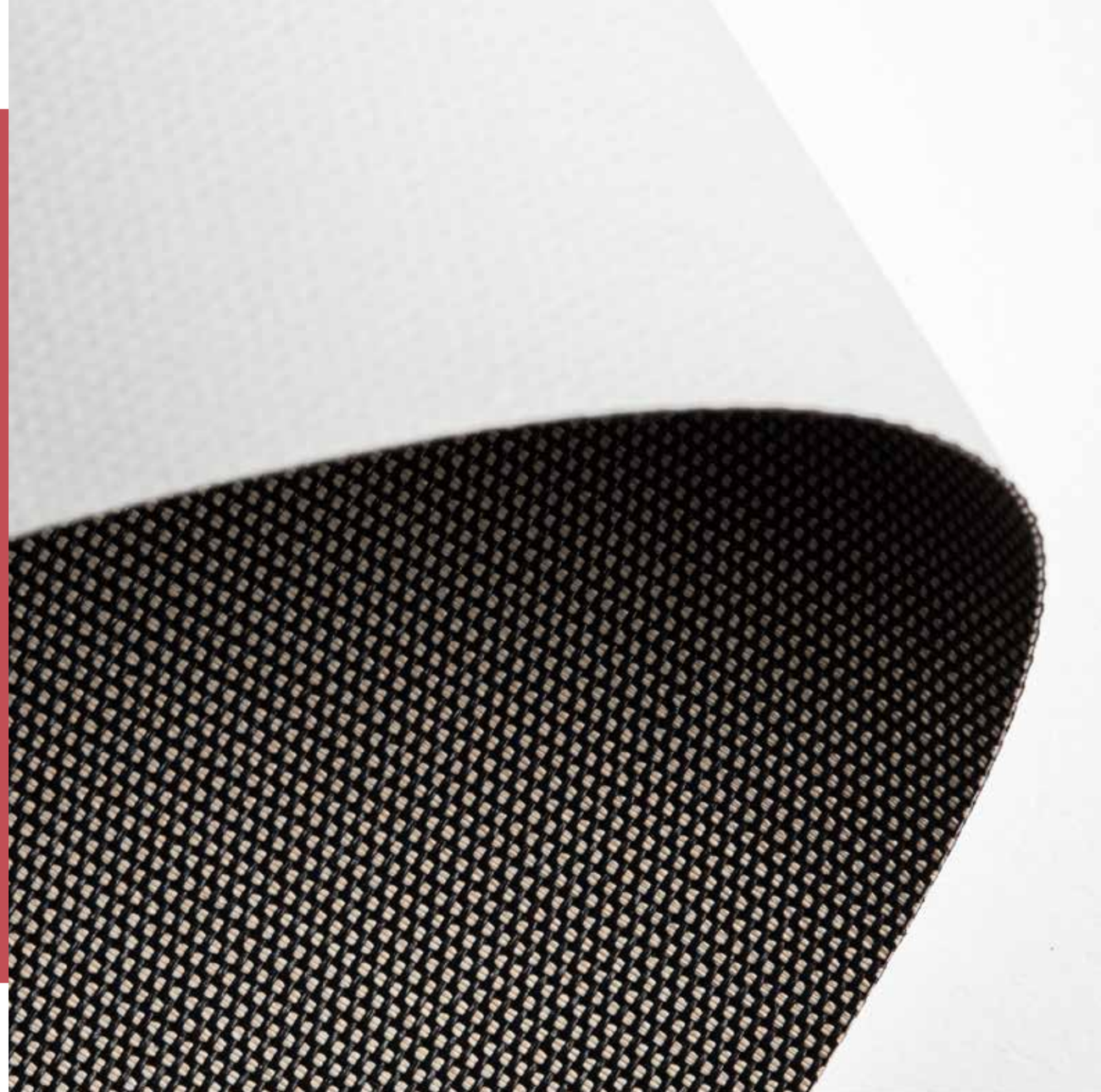
# Keep out sunlight completely. Strike a perfect balance between comfort, stylish and private. Meet Block.



# Opac 400 Classic

**GLASSFIBRE**

**OF = 0%**

## Technical specifications

| TECHNICAL SPECIFICATION | | UNITY | | STANDARD | RESULT |
|---|---|---|---|---|---|
| composition | | | | Fabric of vinyl laminated glassfibre | |
| openness factor | | % | | NBN EN 410 | 0% |
| weight | | g/m² | | NF EN 12127 | 432 |
| thickness | | mm | | ISO 5084 | 0,34 |
| colour fastness to artificial light | | | | ISO 105 B02 | 7 |
| tear strength | original | daN | warp | ISO 4674-1 method 2 | 6,9 |
| | | | weft | | 6,3 |
| elongation up to break | original | % | warp | ISO 1421 | 3,90 |
| | | | weft | | 3,74 |
| breaking strength | original | daN/5 cm | warp | ISO 1421 | 168,6 |
| | | | weft | | 201,3 |
| elongation up to break | after colour fastness to artificial light | % | warp | ISO 1421 | 3,17 |
| | | | weft | | 3,26 |
| breaking strength | after colour fastness to artificial light | daN/5 cm | warp | ISO 1421 | 94,1 |
| | | | weft | | 105,5 |
| tear strength | after climatic chamber -30°C | daN | warp | ISO 4674-1 method 2 | 5,6 |
| | | | weft | | 5,3 |
| elongation up to break | after climatic chamber -30°C | % | warp | ISO 1421 | 3,48 |
| | | | weft | | 4,24 |
| breaking strength | after climatic chamber -30°C | daN/5 cm | warp | ISO 1421 | 151,7 |
| | | | weft | | 221,1 |
| tear strength | after climatic chamber +70°C | daN | warp | ISO 4674-1 method 2 | 6,7 |
| | | | weft | | 5,3 |
| elongation up to break | after climatic chamber +70°C | % | warp | ISO 1421 | 4,32 |
| | | | weft | | 4,16 |
| breaking strength | after climatic chamber +70°C | daN/5 cm | warp | ISO 1421 | 182,8 |
| | | | weft | | 223,9 |
| fire classification | France | | | NF P92-503 | M2 |
| | Italy | | | UNI 9177 | Class 1 |
| | Spain | | | UNE 13773 | Clase 1 |
| roll length | **30 m** | | | | |
| cleaning | with soapy water | | | | |
| confection | by heat, high frequency or ultrasonic welding | | | | |

These properties are given as indicative and don't have any contractual value

## Opac 400 Classic 015015 linen

# Opac 400 Classic

**GLASSFIBRE**

**OF = 0%**

## Colours & references

front back



**Opac 400 Classic** 002002 white

front back



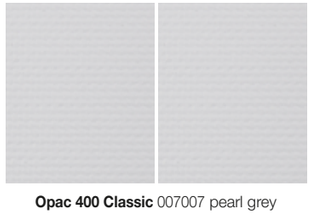
**Opac 400 Classic** 015015 linen

front back



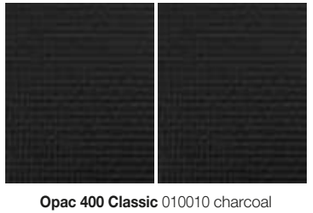
**Opac 400 Classic** 008008 sand

front back



**Opac 400 Classic** 007007 pearl grey

front back



**Opac 400 Classic** 010010 charcoal

| Opac 400 Classic | 200 cm | 300 cm |
|---|---|---|
| 002002 white | • | • |
| 015015 linen | • | • |
| 008008 sand | • | • |
| 007007 pearl grey | • | • |
| 010010 charcoal | • | • |

## Solar energetic properties

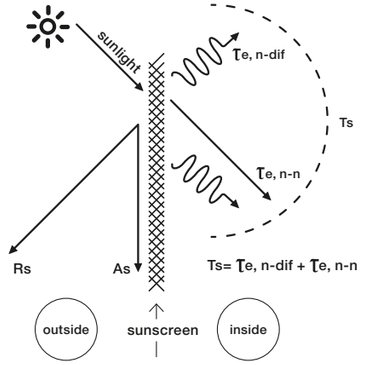
| Opac 400 Classic<br>European Standard EN 14501<br>Calculation G-value according to EN 13363-1 version 7.0 | | | | SOLAR ENERGETIC PROPERTIES | | | | | | | VISUAL PROPERTIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FABRIC | | | FABRIC + GLAZING<br>INTERIOR<br>G-factor =<br>total solar energy transmittance | | | | | |
| references | colours | front | back | As = Solar Absorptance % | Rs = Solar Reflectance % | Ts = Solar Transmittance % | Glazing A - Gv = 0,85 - U = 5,8 | Glazing B - Gv = 0,76 - U = 2,9 | Glazing C - Gv = 0,59 - U = 1,2 | Glazing D - Gv = 0,32 - U = 1,1 | Tv = Visible Light Transmittance % | Tuv = UV Transmittance % |
| 002002 | white | | | front 24,5 | 75,3 | 0,2 | 0,26 | 0,30 | 0,32 | 0,24 | 0,0 | 0,0 |
| | | | | back 21,7 | 78,1 | 0,2 | 0,24 | 0,29 | 0,31 | 0,24 | 0,0 | 0,0 |
| 015015 | linen | | | front 38,7 | 61,3 | 0,0 | 0,33 | 0,37 | 0,36 | 0,25 | 0,0 | 0,0 |
| | | | | back 38,3 | 61,7 | 0,0 | 0,32 | 0,36 | 0,36 | 0,25 | 0,0 | 0,0 |
| 008008 | sand | | | front 43,2 | 56,7 | 0,1 | 0,35 | 0,39 | 0,38 | 0,25 | 0,0 | 0,0 |
| | | | | back 41,8 | 58,1 | 0,1 | 0,34 | 0,38 | 0,37 | 0,25 | 0,0 | 0,0 |
| 007007 | pearl grey | | | front 55,4 | 44,6 | 0,0 | 0,41 | 0,44 | 0,41 | 0,26 | 0,0 | 0,0 |
| | | | | back 55,7 | 44,3 | 0,0 | 0,41 | 0,45 | 0,42 | 0,26 | 0,0 | 0,0 |
| 010010 | charcoal | | | front 95,4 | 4,6 | 0,0 | 0,62 | 0,63 | 0,54 | 0,30 | 0,0 | 0,0 |
| | | | | back 95,4 | 4,6 | 0,0 | 0,62 | 0,63 | 0,54 | 0,30 | 0,0 | 0,0 |

| | |
|---|---|
| GLAZING A = clear single glazing 4 mm | Gv = 0,85 |
| GLAZING B = clear double glazing (4/12/4), space filled with air | Gv = 0,76 |
| GLAZING C = double glazing (4/16/4), with a low emissivity coating in position 3, space filled with argon | Gv = 0,59 |
| GLAZING D = reflective double glazing (4/16/4), with a low emissivity coating in position 2, space filled with argon | Gv = 0,32 |

# Working of a sunscreen

## Sunscreen = protection against sunrays

Sunscreen means protection against the sunrays, so the function is the protection against light and heat, which is expressed in several properties.




| | |
|---|---|
| **Rs** | Solar reflectance |
| **As** | Solar absorptance |
| **Ts** | Solar transmittance |
| **τe,n-dif** | Diffuse solar transmittance |
| **τe,n-n** | Normal solar transmittance |

## Classes indicate effect of a sunscreen

Based on certain properties, the screen can be split up in classes, from 0 to 4. Those classes are used, starting from the norm EN 14501, to indicate the effect of a certain sunscreen.

| **influence on thermal and visual comfort** | |
|---|---|
| **Class 0** | very little effect |
| **Class 1** | little effect |
| **Class 2** | moderate effect |
| **Class 3** | good effect |
| **Class 4** | very good effect |

## Visual properties

**Openness factor**

The openness of a screen is indicated by the openness factor **= OF.** The openness coefficient is the relative area of the openings in the fabric seen under a given incidence. The openness factor is seen under a normal incidence.


The sunrays are subdivided in: **Visible light, UV-light** and **IR-light.**

**Visible light** (55% of the sun-energy) is that part for which our eyes are most sensitive. How larger the light intensity, how more detrimental for our eyes.

The factor Visible Light Transmittance = **Tv,** is the ratio of visible light that will be transmitted. How lower this factor can be kept, how better for the eyes.

**UV-light** (3% of the sun-energy) is the part of radiation which is detrimental for our health. This factor is indicated by the UV Transmittance = **Tuv.** This is the quantity UV-light transmitted by the sunscreen.

**IR-light** is invisible. This is however 42% of the sun-energy. These rays care for the reheating of solid substances and gases.

**Influence of colours**

The choice of the colour has direct influence on the criteria which justify the use of sunscreen protection:

- Protection against visible light, expressed by the factor **Tv.**
- Protection against sun-energy, expressed by the **G** value.
- Protection against secondary heat, expressed by the factor **Qi.**
- Protection against UV-light, expressed by the factor **Tuv.**

## Visual properties: classes

**Glare control**

The capacity of the solar protection device to control the luminance level of openings and to reduce the luminance contrasts between different zones within the field.

| τv,n-n | τv,n-dif | | | |
|---|---|---|---|---|
| | τv,n-dif < 0,02 | 0,02 ≤ τv,n-dif < 0,04 | 0,04 ≤ τv,n-dif < 0,08 | τv,n-dif ≥ 0,08 |
| τv,n-n > 0,10 | 0 | 0 | 0 | 0 |
| 0,05 < τv,n-n ≤ 0,10 | 1 | 1 | 0 | 0 |
| τv,n-n ≤ 0,05 | 3 | 2 | 1 | 1 |
| τv,n-n = 0,00 | 4 | 3 | 2 | 2 |

**Privacy at night**

Night privacy is the capacity of an internal or external blind or a shutter in the fully extended position or fully extended and closed position to protect persons, at night in normal light conditions from external view. External views means the ability of an external observer located 5m from the fully extended and closed product, to distinguish a person or object standing 1m behind the protection device in the room.

| τv,n-n | τv,n-dif | | |
|---|---|---|---|
| | 0 < τv,n-dif ≤ 0,04 | 0,04 < τv,n-dif ≤ 0,15 | τv,n-dif > 0,15 |
| τv,n-n > 0,10 | 0 | 0 | 0 |
| 0,05 < τv,n-n ≤ 0,10 | 1 | 1 | 1 |
| τv,n-n ≤ 0,05 | 2 | 2 | 2 |
| τv,n-n = 0,00 | 4 | 3 | 2 |

**Visual contact with the outside**

Visual contact with the outside is the capacity of the solar protection device to allow an exterior view when it is fully extended. This function is affected by different light conditions during the day.

| τv,n-n | τv,n-dif | | |
|---|---|---|---|
| | 0 < τv,n-dif ≤ 0,04 | 0,04 < τv,n-dif ≤ 0,15 | τv,n-dif > 0,15 |
| τv,n-n > 0,10 | 4 | 3 | 2 |
| 0,05 < τv,n-n ≤ 0,10 | 3 | 2 | 1 |
| τv,n-n ≤ 0,05 | 2 | 1 | 0 |
| τv,n-n = 0,00 | 0 | 0 | 0 |

**Daylight utilisation**

Daylight utilisation is characterised by:

- the capacity of the solar protection device to reduce the time period during the artificial light is required.
- the capacity of the solar protection device to optimise the daylight which is available.

| CLASS | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| τv,dif-h | τv,dif-h < 0,02 | 0,02 ≤ τv,dif-h < 0,10 | 0,10 ≤ τv,dif-h < 0,25 | 0,25 ≤ τv,dif-h < 0,40 | τv,dif-h ≥ 0,40 |

# Working of a sunscreen

## Thermal comfort

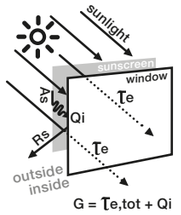
### Fabric

Energy radiated by the sun, will be split up in 3 factors:

| factor 1: | factor 2: | factor 3: |
|---|---|---|
| **As =**<br>**Solar absorptance**<br>is the ratio of the absorbed flux to the incident flux. | **Rs =**<br>**Solar reflectance**<br>is the fraction of the incident solar radiation that is directly reflected by the component. | **Ts =**<br>**Solar transmittance**<br>is the sum of the (normal) direct solar transmittance and the diffuse solar transmittance. This is the fraction of the total transmitted energy to the total incident solar radiation. |
| **These 3 factors together are always 100%** | | |

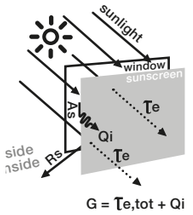
### The G-factor

**exterior sunscreen**




G = τe,tot + Qi

**interior sunscreen**




G = τe,tot + Qi

| | |
|---|---|
| **Rs** | Solar reflectance |
| **As** | Solar absorptance |
| **Te** | Direct solar transmittance |
| **Qi** | Secondary heat transfer factor |
| **G** | G-factor = total solar energy transmittance |

Sunscreens are always used in combination with a glazing. These together will prevent a large quantity of energy, sent by the sun to the earth, which is indicated by the: Total Solar Energy Transmittance, or **G-factor.**

The **G** value is the ratio between the total solar energy transmitted into a room through a window and the incident solar energy on the window. The **Gtot** is the solar factor of the combination of glazing and solar protection device.
The **Gv** is the solar factor of the glazing alone.
The shading coefficient is defined as the ratio of the solar factor of the combined glazing and solar protection device **Gtot** to that of the glazing alone **Gv.**

The total solar energy transmitted through a window consists of two parts:
1) Radiation: measured by the solar transmittance: **τe,tot**
2) Heat: measured by the secondary heat transfer: **Qi**

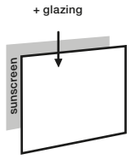
**G = τe,tot + Qi**

The factor **τe,tot,** is the quantity of energy, which will pass the combination solar protection device and window.
The factor **Qi** is the quantity of heat which is released by the absorption of energy in the sunscreen protection system = combination sunscreen + glazing.

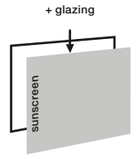
The **G-factor** is the most important factor to explain the efficiency of a combination sunscreen + glazing, as protection against the energy of the sun. The **G-factor** divided into his components explains the difference in efficiency between exterior and interior sunscreen.

**G = τe,tot + Qi**

**exterior sunscreen**




**interior sunscreen**




The direct solar transmittance **τe,tot** is the same for interior and exterior use of sunscreens.
The secondary heat factor **Qi** for interior sunscreen is bigger then for exterior sunscreen. For interior use, the heat, produced by the absorption of energy, will be transmitted to the room inside. By exterior use, the heat will be transmitted to the outside, without any inconvenience at the inside.

Also the colour of the sunscreen has an influence on the **G-factor.** Dark colours will absorb a lot of sun energy and will transmit this to heat. If the screen is used for exterior, heat will have no influence inside the room, contrary to a screen used for interior. This is why a darker screen is ideal for exterior use and a lighter screen for interior use.

## Thermal comfort: classes

**Total Solar energy Transmittance = G-factor**

| CLASS | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Gtot | Gtot ≥ 0,50 | 0,35 ≤ Gtot < 0,50 | 0,15 ≤ Gtot < 0,35 | 0,10 ≤ Gtot < 0,15 | Gtot < 0,10 |

**Secondary Heat transfer = Qi**

| CLASS | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Qi | Qi ≥ 0,30 | 0,20 ≤ Qi < 0,30 | 0,10 ≤ Qi < 0,20 | 0,03 ≤ Qi < 0,10 | Qi < 0,03 |

**Normal Solar transmittance = protection against direct transmission**
The ability of a solar protection device to protect persons and surroundings from direct irradiation is measured by the direct/direct solar transmittance of the device in combination with the glazing. τe,n-n is used as measure for this property.


**Screen Protectors SL** · c/ Alessandro Volta Nau 6A-7ª · Pol. Ind. Plans d'Arau
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SUN CONTROL TEXTILES

# SCREEN
# NATURE

GreenScreen™

COLECCIÓN
2015
2018

TEJIDOS INTELIGENTES DE PROTECCIÓN SOLAR

Anchos: hasta un 240 cm

www.sunscreen-mermet.com

# SCREEN NATURE

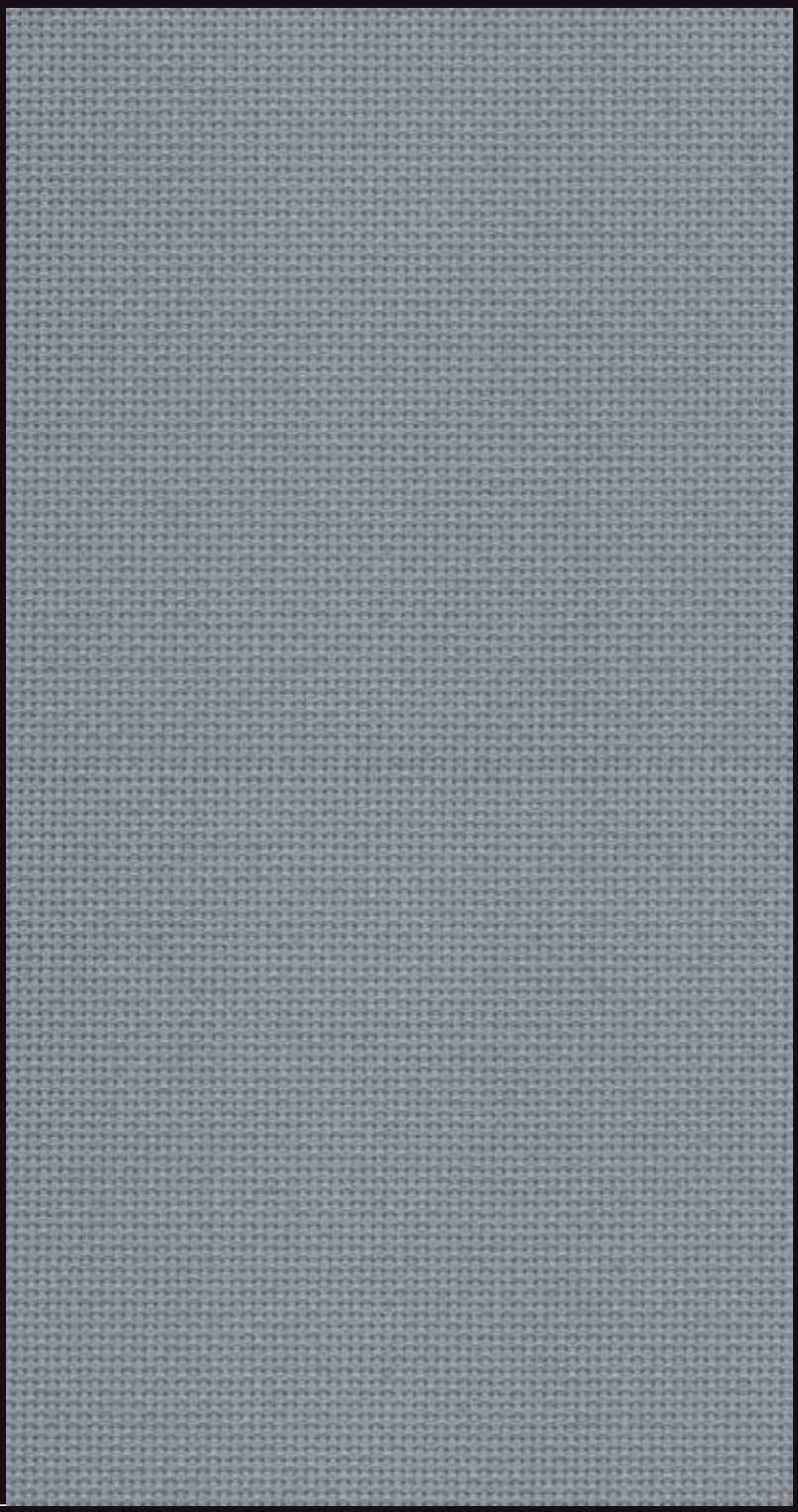
## EL SCREEN DE **"ALTA CALIDAD MEDIOAMBIENTAL"**, SIN PVC, SIN HALÓGENOS, SIN POLIÉSTER

**TEJIDO** DE FIBRA DE VIDRIO, MATERIAL NATURAL Y ABUNDANTE

**INCOMBUSTIBLE**

- Composición mineral **SIN IMPACTO MEDIO AMBIENTAL**
- Tejido de fibra de vidrio que ofrece resistencia mecánica y estabilidad dimensional
- **LAS MEJORES CLASIFICACIONES DE FUEGO Y DE HUMOS,** para superar las exigencias más estrictas en materia de salud y seguridad
- **INCOMBUSTIBLE**, sin emision de humo: **M0** (NFP 92 503), Euroclass **A2-s1-d0, F0**
- Tejido Natté regular: **EXCELENTE VISIÓN HACIA EL EXTERIOR**
- **MUY BUEN CONTROL DEL DESLUMBRAMIENTO:** filtra hasta el 95% de los rayos luminosos (Tv = 5%)
- **CONFORT TÉRMICO:** rechaza hasta el 82% de la energía solar (gtot = 0,18 / acristalamiento g = 0,32 y U = 1,1)
- Tejido elegante y **MUY FINO,** fácil de colocar en **GALERÍAS DE DIMENSIONES REDUCIDAS**
- 9 colores disponibles en anchos de 180 cm y **240 cm**
- **EXCELENTE DURABILIDAD**: prueba de resistencia mecánica de 10.000 ciclos (clase 3 según la norma NF EN 13120)
- Salud/Seguridad: responde a las exigencias de los locales abiertos al público
- Excelente soporte de comunicación

# SCREEN NATURE



**0349**

GREENGUARD GOLD

INCOMBUSTIBLE

GARANTÍA CINCO AÑOS

REACH COMPLIANT

RESISTENCIA A LAS BACTERIAS

10000 CICLOS

# CARACTERÍSTICAS TÉCNICAS

| **SCREEN NATURE** | | | |
|---|---|---|---|
| **Composición** | Tejido de fibra de vidrio ignifugo inducidos libres de PVC y halógenos | | |
| **Clasificación respecto al fuego, al humo y otros informes de pruebas*** | **M0-M1** (F) - NFP 92 503<br>**A2** (DE) - DIN 4102-1<br>**BS** (GB) - 476 Pt 6 Class 0<br>**Euroclass A2-s1-d0** (EU) - EN 13501-1 mediante el montaje EN 13823 & EN 14716 | | **C UNO** (IT) - UNI 9177<br>**FR** (US) - NFPA 701<br>**F0** (F) - NF F 16-101<br>**PCS:** 1,91 MJ/kg (0,31 MJ/m²) |
| **Salud, seguridad** | **Greenguard®:** Garantía de la calidad del aire interior (POV)<br>**Resistencia a las bacterias:** Más de 99% de bacterias destruidas - ASTM E 2180 | | |
| **Coeficiente de apertura** | 4% | | |
| **Bloqueo de rayos UV** | Hasta un 95% | | |
| **Anchos** | 180 - 240 cm | | |
| **Peso/m²** | 165 g ± 5% - ISO 2286 - 2 | | |
| **Grosor** | 0,23 mm ± 5% - ISO 2286 - 3 | | |
| **Resistencia mecánica** | **Rotura** | **Desgarro** | **Plegado** |
| Urdimbre | > 110 daN/5 cm | ≥ 3 daN | ≥ 30 daN/5 cm |
| Trama | > 70 daN/5 cm | ≥ 3 daN | ≥ 30 daN/5 cm |
| | ISO 1421 | EN 1875-3 | ISO 1421** |
| **Alargamiento** (urdimbre y trama) | < 5% - ISO 1421 | | |
| **Solidez de los colores a la luz** (escala de 8) | 7/8 - ISO 105 B02 (color blanco non incluido) | | |
| **Acondicionamiento** | Rollos de 50 metros | | |
| **Confección** | Pestaña de consejos sobre pedido | | |

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* Certificados disponibles, contactar con Mermet

** Procedimiento interno, derivado de ISO 1421

# VALORES TÉRMICOS Y ÓPTICOS según la norma Europea EN 14501

| **SCREEN NATURE - OF 4%** | **Valores térmicos** | | | | | **Valores ópticos** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Tejido** | | | **Tejido + Acristalamiento** | | | **Clasificación de confort óptico (norma EN 14501)** | | | |
| **Colores** | **Ts** | **Rs** | **As** | **gtot interior** | | **Tv** | **Uso de la luz natural** | **Control del deslumbramiento** | **Intimidad de noche** | **Visión hacia el exterior** |
| | | | | **C : gv = 0,59** | **D : gv = 0,32** | | | | | |
| **B119** Blanco | 33 | **58** | 9 | 0,36 ❶ | 0,18 ❷ | **33** | 3 | 1 | 2 | 0 |
| **0319** Lino | 30 | **56** | 14 | 0,36 ❶ | 0,19 ❷ | **30** | 3 | 1 | 2 | 0 |
| **0348** Plata | 29 | **51** | 20 | 0,39 ❶ | 0,20 ❷ | **27** | 2 | 1 | 2 | 0 |
| **0410** Arena | 25 | **46** | 29 | 0,40 ❶ | 0,22 ❷ | **22** | 2 | 1 | 2 | 0 |
| **0349** Perla | 18 | **34** | 48 | 0,46 ❶ | 0,25 ❷ | **13** | 2 | 1 | 2 | 1 |
| **0441** Gris | 8 | **14** | 78 | 0,53 ❶ | 0,29 ❷ | **7** | 1 | 2 | 2 | 2 |
| **1135** Chocolate | 8 | **12** | 80 | 0,54 ❶ | 0,30 ❷ | **6** | 1 | 3 | 2 | 2 |
| **1134** Bronce | 7 | **11** | 82 | 0,54 ❶ | 0,30 ❷ | **6** | 1 | 3 | 2 | 2 |
| **0440** Carbón | 5 | **6** | 89 | 0,55 ❶ | 0,31 ❷ | **5** | 1 | 3 | 2 | 2 |

gv = 0,59: factor solar del acristalamiento de referencia (C), doble acristalamiento 4/16/4 poco emisor, relleno de Argón (factor de transmisión térmica U = 1,2 W/m²K).
gv = 0,32: factor solar del acristalamiento de referencia (D), doble acristalamiento reflectante 4/16/4 poco emisor, relleno de Argón (factor de transmisión térmica U = 1,1 W/m²K).

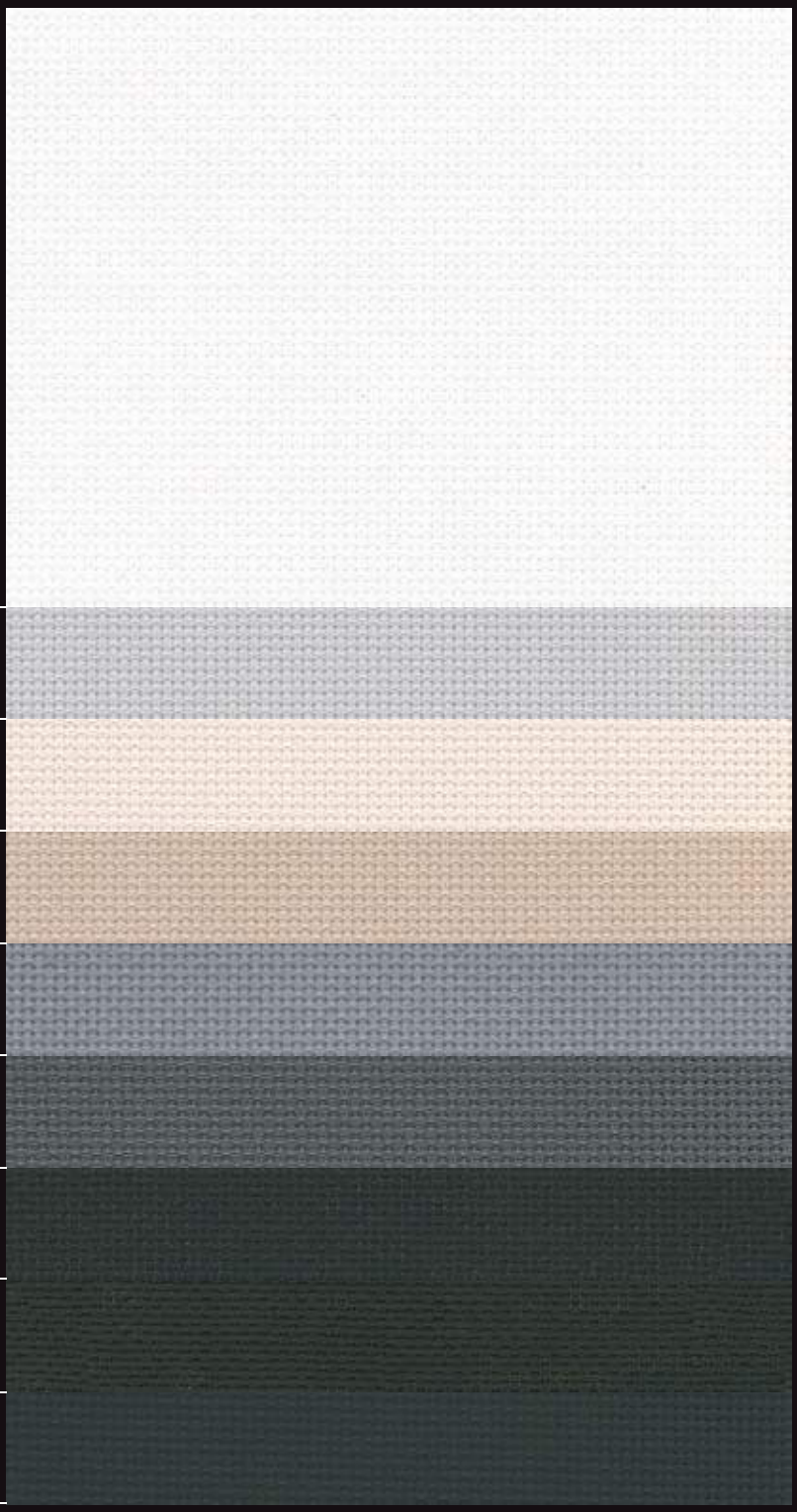
Muestras probadas según la norma EN 14500 fijando los métodos de cálculo conforme a las normas "dispositivos de protección solar combinados con un acristalamiento – cálculo del factor de transmisión solar y luminosa – parte 2: EN 13363-2 método detallado", y la norma EN 410 "cristal en la construcción - Determinación de las características luminosas y solares de los acristalamientos."

Clasificación de confort según la norma EN 14501:

❶ muy poco efecto ❶ poco efecto ❷ efecto moderado
❸ buenos resultados ❹ muy buenos resultados

Disponible bajo petición:
- Valores espectrales
- Cálculo del factor solar gtot (acristalamiento + cortina) según diferentes acristalamientos

# SCREEN NATURE



**B119** ★

**0348** ★

**0319** ★

**0410** ★

**0349** ★

**0441** ★

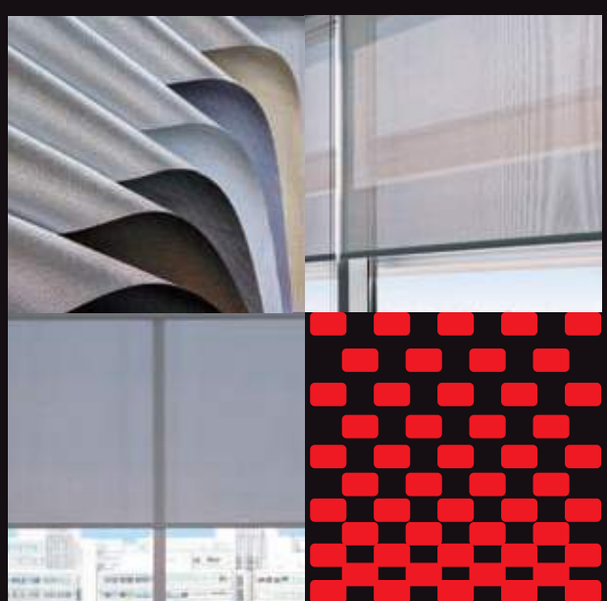
**1135** ★

**1134** ★

**0440** ★

★ **2 anchos**: 180, 240 cm

Los colores pueden no parecerse exactamente a los colores reales



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ACOUSTICS

# ACOUSTIS® 50

TEJIDOS INTELIGENTES DE PROTECCIÓN SOLAR

POSICIÓN
INTERIOR

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ACOUSTIS® 50
ACOUSTICS

# ACOUSTIS® 50

## EL 1ER **TEJIDO DE ABSORCIÓN ACÚSTICA** INMEDIATAMENTE DECORATIVA

TRAMA ESPECIAL, ACÚSTICA **PATENTADA**

**CONFORT** ACÚSTICO, VISUAL Y TÉRMICO

- **EXCELENTE ABSORCIÓN ACÚSTICA :** favorece la buena audición de un discurso integrándose perfectamente en la decoración interior
- Un solo producto para **3 FUNCIONES** :
  - **TÉCNICA** : calidad acústica sin resistencia térmica que garantiza una **ATMÓSFERA SALUDABLE** incluso en ambientes húmedos
  - **DESIGN :** tejido adaptado a todas las aplicaciones de arquitectura textil, excelente soporte de comunicación
  - **CONFORT :** para un ambiente a la vez sereno y cálido
- Una solución acústica **LIGERA,** de **MUY POCO ESPESOR**, fácil y económica al nivel de instalación, tanto en paredes como en techos
- **CONTROL TOTAL DEL DESLUMBRAMIENTO** : filtra hasta el 100 % de los rayos luminosos (Tv = 0 %)
- **CONFORT TÉRMICO** : rechaza hasta el 87 % de la radiación solar (gtot = 0,13 / acristalamiento g = 0,32 y U = 1,1 W/m²K)
- 6 colors disponibles en 250 cm
- Excelente **RESISTENCIA MECÁNICA** y buena estabilidad dimensional para los estores de grandes dimensiones
- **NO FIBROSO,** no presenta ningún riesgo de inhalación
- Resistente a los ambientes húmedos tipo piscinas interiores
- Salud/Seguridad: responde a las exigencias de los locales abiertos al público

## POSICIONES INTERIORES


Estores verticales enrollables

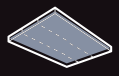

Toldos pérgola

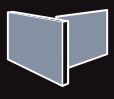

Paneles deslizantes o fijos


Jardín de invierno

Estores ZIP


Imprimible


Techos tensados


Distribución del espacio

# CARACTERÍSTICAS TÉCNICAS

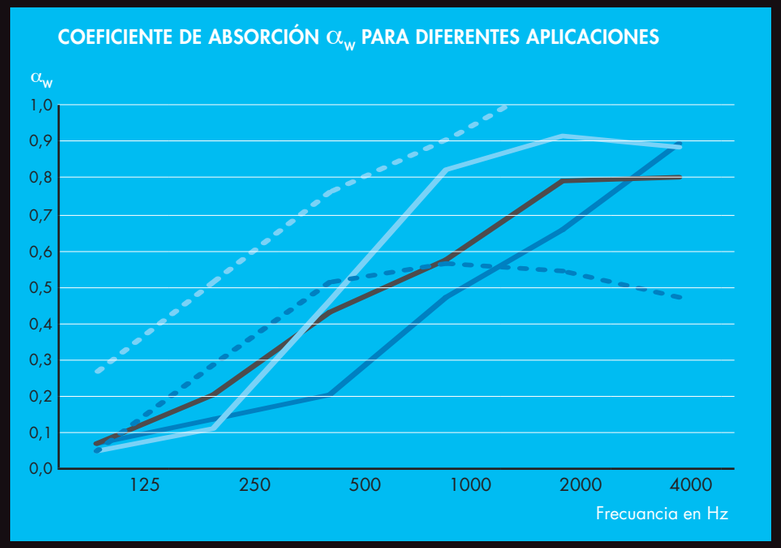
| **ACOUSTIS® 50** | | | |
|---|---|---|---|
| **Coeficiente de absorción acústica** αw | 0,35 a 0,8 - NF EN 20354 (ISO 354) - NF EN ISO 11654 | | |
| **Composición** | Tejido de fibra de vidrio recubierto | | |
| **Clasificación al fuego, al humo y otros informes de pruebas*** | **M1** (F) - NFP 92 503<br>**BS** (GB) - 476 Pt 6 & 7 Class 0<br>**Euroclass C-s3-d0** (EU) - EN 13501-1 mediante el montaje EN 13823 & EN 14716 | **IMO** - MED 2014/90/EU<br>**FR** (US) - NFPA 701<br>**PCS :** 15,7 MJ/kg (6,59 MJ/m²) | |
| **Salud, seguridad** | **Greenguard® GOLD :** Garantía de la calidad del aire interior (POV) | | |
| **Bloqueo de rayos UV** | 100 % | | |
| **Ancho** | 250 cm | | |
| **Peso/m²** | 420 g ± 5 % - ISO 2286 - 2 | | |
| **Espesor** | 0,50 mm ± 5 % - ISO 2286 - 3 | | |
| **Solidez de los colores a la luz** (Escala de 8) | 7/8 - ISO 105 B02 (color blanco non incluido) | | |
| **Resistencia mecánica** | **Rotura** | **Desgarro** | **Plegado** |
| Urdimbre | > 140 daN/5 cm | ≥ 5 daN | ≥ 80 daN/5 cm |
| Trama | > 120 daN/5 cm | ≥ 3 daN | ≥ 50 daN/5 cm |
| | ISO 1421 | EN 1875-3 | ISO 1421** |
| **Alargamiento** (urdimbre y trama) | < 5 % - ISO 1421 | | |
| **Acondicionamiento** | Rollos de 33 metros | | |
| **Confección** | Pestaña de consejos sobre pedido | | |

Las características y cualidades técnicas de este producto están conformes a la fecha de emisión del presente folleto. La sociedad MERMET SAS se reserva el derecho de modificarlas, y únicamente dan fe las que figuran en el sitio web www.sunscreen-mermet.com. La sociedad MERMET SAS se reserva también y si procede el derecho de retirar este producto de la venta si, a razón de una evolución de la reglamentación o de saber o conocimientos, una de las características y cualidades técnicas cualesquiera enunciadas más arriba fallaran o fueran imposibilitadas.

* Certificados disponibles, contactar con Mermet

** Procedimiento interno, derivado de ISO 1421

# COEFICIENTE DE ABSORCIÓN ACÚSTICA $\alpha_w$




Para más detalles pedir la documentación técnica / INFORME CETRAM

**Aplicación en estor**
$0,3 < \alpha_w < 0,55$
(en función de la ventilación, espacio detrás del tejido)

**Tela sobre estructura portante**
$0,4 < \alpha_w < 0,75$
(en función del montaje)

**Tela en toldo**
$\alpha_w = 0,45$

La capacidad del material para absorber es cuantificada por su coeficiente de absorción acústica ($\alpha_w$) según las 3 bandas de octava : graves (inferior a 200 Hz), medios (entre 200 y 2000 Hz), agudos (superior a 2000 Hz). Para un material muy absorbente tiende hacia 1.

# VALORES TÉRMICOS Y ÓPTICOS según la norma Europea EN 14501

| **ACOUSTIS® 50** | **Valores térmicos** | | | | | **Valores ópticos** |
|---|---|---|---|---|---|---|
| **Colores** | **Tejido** | | | **Tejido + Acristalamiento / gtot interior** | | **Tv** |
| | **Ts** | **Rs** | **As** | **C : gv = 0,59** | **D : gv = 0,32** | |
| **0202** Blanco | 18 | **71** | 11 | 0,27 ❷ | 0,13 ❸ | **17** |
| **0220** Sahara | 17 | **64** | 19 | 0,31 ❷ | 0,16 ❷ | **15** |
| **0720** Plata | 12 | **41** | 47 | 0,41 ❶ | 0,22 ❷ | **9** |
| **0710** Galet | 9 | **37** | 54 | 0,43 ❶ | 0,23 ❷ | **6** |
| **0730** Gris Ratón | 4 | **24** | 72 | 0,48 ❶ | 0,26 ❷ | **3** |
| **3030** Negro | 0 | **5** | 95 | 0,55 ❶ | 0,31 ❷ | **0** |

gv = 0,59: factor solar del acristalamiento de referencia (C), doble acristalamiento 4/16/4 poco emisor, relleno de Argón (factor de transmisión térmica U = 1,2 W/m²K).
gv = 0,32: factor solar del acristalamiento de referencia (D), doble acristalamiento reflectante 4/16/4 poco emisor, relleno de Argón (factor de transmisión térmica U = 1,1 W/m²K).

Clasificación de confort según la norma EN 14501 : ❶ muy poco efecto ❶ poco efecto ❷ efecto moderado ❸ buen efecto ❹ muy buen efecto

Muestras probadas según la norma EN 14500 fijando los métodos de cálculo conforme a las normas "dispositivos de protección solar combinados con un acristalamiento – cálculo del factor de transmisión solar y luminosa – parte 2: EN 13363-2 método detallado", y la norma EN 410 "cristal en la construcción - Determinación de las características luminosas y solares de los acristalamientos."

## SERVICIO

- Cálculo del factor solar gtot (acristalamiento + cortina)
- Valores espectrales térmicos y ópticos disponibles bajo petición
- Descripción de los productos
- Muestras A4 y modelos
- Formación sobre la funcionalidad de los tejidos

# **CONFIGURACIONES** DE UTILIZACIÓN

## ESTOR VERTICAL ENROLLABLE

- **Conservatorio de música : Franconville /** Häy les Roses (FR)
- Centro cultural : Chabran Draguignan (FR)
- Sala de espectaculo : Neuilly sur Seine (FR)

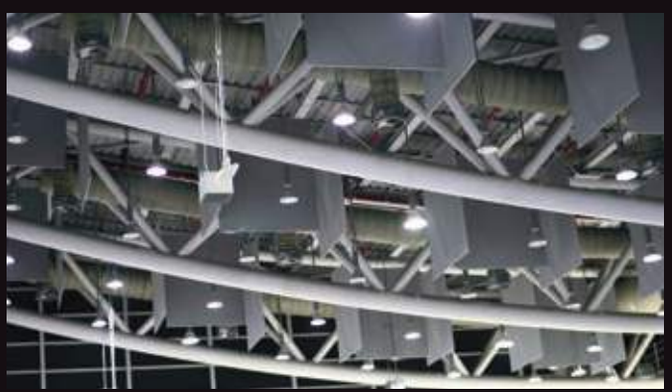
$\alpha_w$ = **0.55** (PV Cetram n°N-SC-222_04) - Ventilación de 175 mm

## JARDÍN DE INVIERNO

- **Bar de degustacíon de vino : Matakana (NZ)**

$\alpha_w$ = **0.45** (PV Cetram n°N-SC-222_04)

## BAFLE ACÚSTICO



- **Palacio de congreso DaeGu Exco : Corea**
- Oficinas Alcon : Fribourg (DE)

$\alpha_w$ = **1,1**

## PANEL ENMARCADO - TECHO

- **Restaurante : Cape town (ZA)**
- Conservatorio de música : Häy les Roses (FR)
- Teatro y Conservatorio de música : Fourmies (FR)

$\alpha_w$ = **0.7**

## REVESTIMIENTO TENSADO PARA PARED

- **Auditorio : Pau (FR)**
- Mediateca Cabanis : Toulouse (FR)
- Edificio terciario Alcatel : Velizy (FR)

$\alpha_w$ = **0.7** (PV Cetram n°N-SC-222_04)

## TECHO DE MADERA

- **Piscina : Bordeaux (FR)**
- Conservatorio regional de música : Cergy Pontoise (FR)
- Conservatorio de música : Häy les Roses / Neuilly sur Seine (FR)
- Teatro y Conservatorio de música : Fourmies (FR)

$\alpha_w$ = **0.7** (PV Cetram n°N-SC-222_04)

## VELA - ARQUITECTURA TEXTIL

- **El Espacio Termolúdico : Caldéa (AD)**
- Auditorio : Pau (FR)
- Atrio, Hotel Tulip Farah : Rabat (MA)
- Centro acuático : Chauray (FR)

$\alpha_w$ = **0.7** (PV Cetram n°N-SC-222_04)

## TECHO TENSADO

- **Conservatorio de música : Franconville (FR)**

$\alpha_w$ = **0.7**

## TEJIDO SOBRE ESTRUCTURA PORTANTE

- **Bolsa : Amsterdam (NL)**
- Oficinas abiertas : Alcatel Nozay (FR)

$\alpha_w$ = **0.75** (PV Cetram n°N-SC-222_04)

## PANEL ENMARCADO - PARED

- **Conservatorio de música : Häy les Roses /** Fourmies **(FR)**
- Mediateca y Conservatorio : St Gaudens (FR)
- Centro cultural : St Exupéry, Toulouse / Chabran Draguignan / Neuilly sur Seine (FR)

$\alpha_w$ = **0.7**

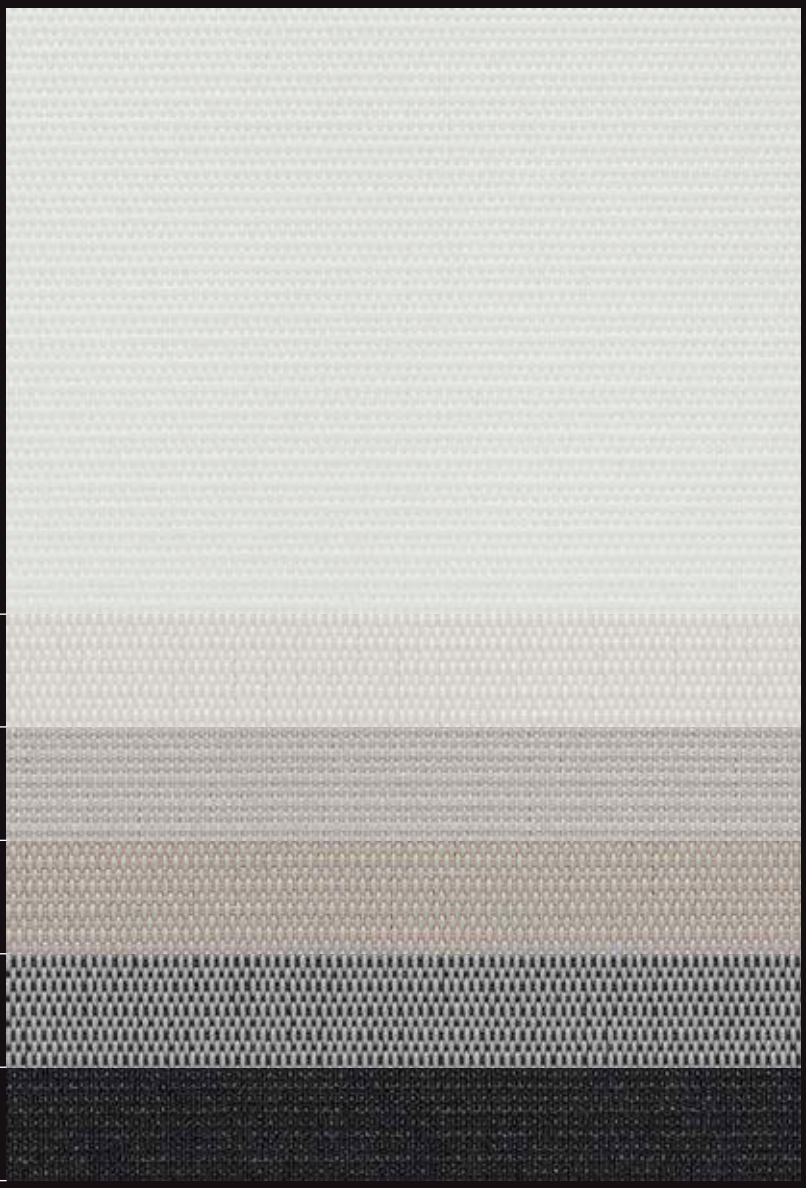
## PARTICION, TABIQUE

- **Showroom Focal : St Etienne (FR)**
- Gran comedor : Conseil Général 31 (FR)
- TF1 Restaurante de empresa : Paris (FR)

$\alpha_w$ = **0.7** (PV Cetram n°N-SC-222_04)

# ACOUSTIS® 50

ANCHO : 250 CM



0202

0220

0720

0710

0730

3030

Los colores pueden no parecerse exactamente a los colores reales

Enduris™ GLASS CORE

GREENGUARD GOLD

GARANTÍA CINCO AÑOS

SIN PLOMO Pb

IGNÍFUGO

IMO BV 2690

REACH COMPLIANT

10 000 CICLOS 10000

CONFORT ACÚSTICO

www.sunscreen-mermet.com

## **ENCUENTRA** EN 3 CLICS EL **TEJIDO MÁS ADAPTADO** a tu proyecto

- Un motor de búsqueda con criterios de selección
- Varios documentos para descargar
- Toda la información del producto disponible
- Una biblioteca de referencias

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LA COLECCIÓN MERMET ofrece **una amplia selección de tejidos** para aplicaciones exteriores o interiores, desde la transparencia hasta la ocultación total, para el confort térmico y óptico. Para recibir otros folletos de la colección, **ponte en contacto con nosotros.**


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

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