



TRANSLUCENT



COLD-CUT, CRUSH-CUT OR
ULTRASONIC



FLAME RETARDANT



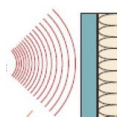
ECOLOGICAL FABRIC
REACH COMPLIANT



HALOGEN-FREE, ANTIMONY-FREE



MANUFACTURED IN THE EU



ACOUSTIC ABSORPTION



PRINTABLE HP LATEX INKS

| TECHNICAL PROPERTIES | | |
|---------------------------------|---|------------------------------|
| Fabric Characteristic | Standard | |
| Composition | - | 100 % PES |
| Weight (g/m ²) | EN 12127 | 210 +/- 5% |
| Thickness (mm) | | 0.36 +/- 5% |
| Fire reaction | DIN 4102-1 NFPA 701 NF P 92 503 EN 13773 | B-1 Pass M1 Class 1 |
| Light fastness (Xenotest grade) | ISO 105 B02:2002 | 6-7/ 8 Snow 4-5/ 8 |
| Openness factor | | 0 % |
| Roll size | | Width 250cm Length 30 m |



SUN CONTROL PROPERTIES

| Colour | THERMAL FACTORS | | | | | | OPTICAL FACTORS | | | | | | | | |
|------------------|---------------------|---------------------|--|------------------|--|---|---------------------|---------------------|--------------------------|-----------------------------|----------------------|------------------|------------------|-------------------|-------------------------|
| | Fabric | | Fabric+Glazing | | | | | | | | | | | | |
| | % T _s | % R _s | G _{TOT} internal Glazing C | | G _{TOT} internal Glazing D | | % T _v | % R _v | % T _{au,n-n} | % T _{au,n-diff} | % t _{uv} | Glare Control | Night Privacy | Visual Contact | Daylight Utilisation |
| | | G _{TOT} | Class | G _{TOT} | Class | | | | | | Class | Class | Class | Class | |
| Snow | 31 | 62 | 0.35 | 1 | 0.24 | 2 | 30 | 67 | 0 | 30 | 15 | 2 | 2 | 0 | 3 |
| Ivory | 32 | 56 | 0.36 | 1 | 0.25 | 2 | 32 | 63 | 0 | 32 | 2 | 2 | 2 | 0 | 3 |
| Linen | 27 | 61 | 0.34 | 2 | 0.24 | 2 | 24 | 61 | 0 | 24 | 9 | 2 | 2 | 0 | 3 |
| Beige | 32 | 51 | 0.38 | 1 | 0.25 | 2 | 31 | 55 | 0 | 31 | 3 | 2 | 2 | 0 | 3 |
| Dove | 29 | 48 | 0.38 | 1 | 0.25 | 2 | 27 | 52 | 0 | 27 | 3 | 2 | 2 | 0 | 2 |
| Sand | 27 | 49 | 0.38 | 1 | 0.25 | 2 | 25 | 53 | 0 | 25 | 2 | 2 | 2 | 0 | 2 |
| Mint | 30 | 48 | 0.38 | 1 | 0.25 | 2 | 26 | 51 | 0 | 26 | 3 | 2 | 2 | 0 | 2 |
| Cinder | 27 | 44 | 0.39 | 1 | 0.25 | 2 | 19 | 41 | 0 | 19 | 3 | 2 | 2 | 0 | 2 |
| Lima | 24 | 44 | 0.39 | 1 | 0.25 | 2 | 18 | 43 | 0 | 18 | 1 | 2 | 2 | 0 | 2 |
| Moka | 22 | 44 | 0.39 | 1 | 0.25 | 2 | 18 | 45 | 0 | 18 | 1 | 2 | 2 | 0 | 2 |
| Pebble | 18 | 33 | 0.42 | 1 | 0.26 | 2 | 13 | 33 | 0 | 13 | 2 | 2 | 3 | 0 | 2 |
| Smoke | 17 | 31 | 0.43 | 1 | 0.26 | 2 | 9 | 26 | 0 | 9 | 2 | 2 | 3 | 0 | 1 |
| Hyacinth | 17 | 33 | 0.45 | 1 | 0.27 | 2 | 4 | 18 | 0 | 4 | 1 | 2 | 3 | 0 | 1 |
| Iron | 5 | 17 | 0.46 | 1 | 0.27 | 2 | 2 | 14 | 0 | 2 | 0 | 4 | 4 | 0 | 0 |
| Chocolate | 4 | 13 | 0.47 | 1 | 0.27 | 2 | 1 | 10 | 0 | 1 | 0 | 4 | 4 | 0 | 0 |

Data measured according to EN 410:2011 and EN 14500:2008

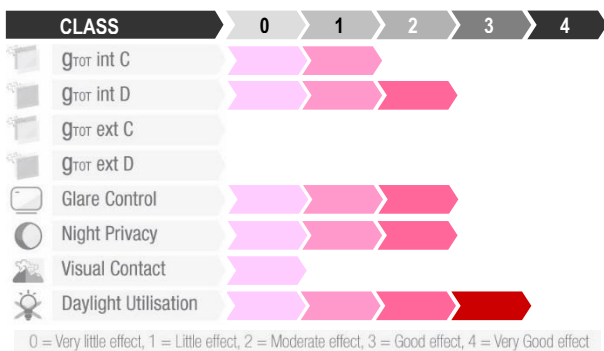
Calculations of g_{TOT} are according to EN 13363-1, with 10% frame area.

Classification of thermal and visual characteristics according to EN 14501:2005

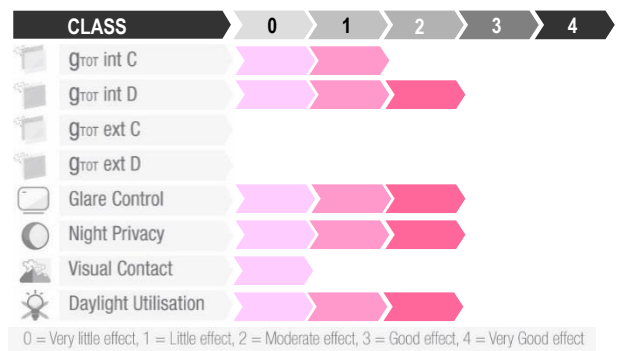
Data of g_{TOT} are given using standard Glazing C and D. though any other combination may be calculated under request.

V.E.S.T. diagrams (Vertisol Efficiency Scale Table), based on standard EN 14501 have been developed by Vertisol as a useful tool in the selection of the right shading for each situation:

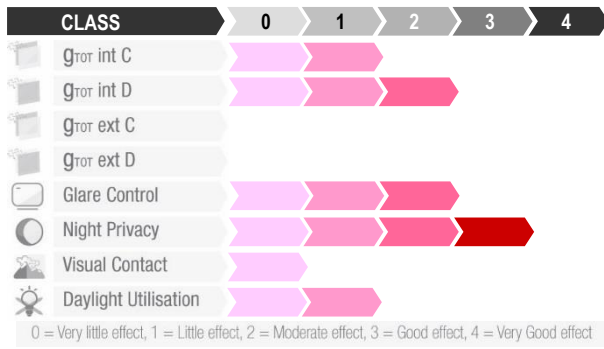
Snow, Ivory, Beige, Linen



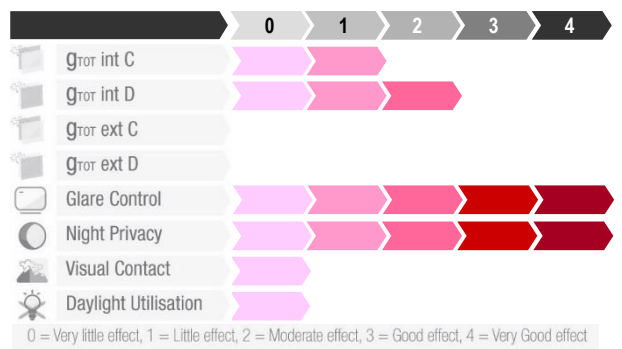
Dove, Moka, Lima, Mint



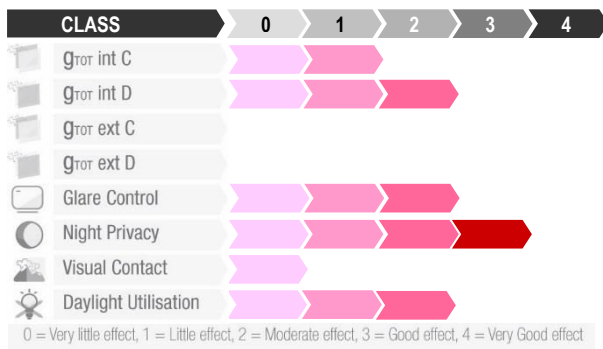
Smoke, Hyacinth



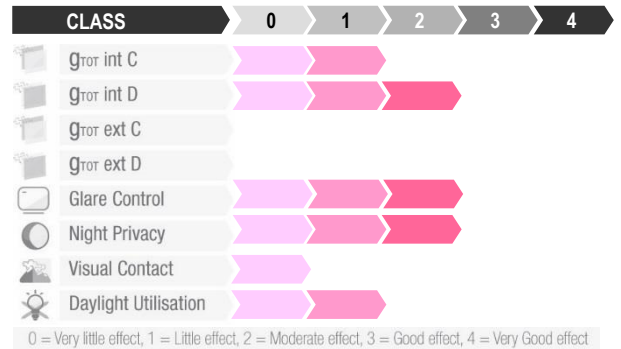
Iron, Chocolate, Navy, Cask



Pebble

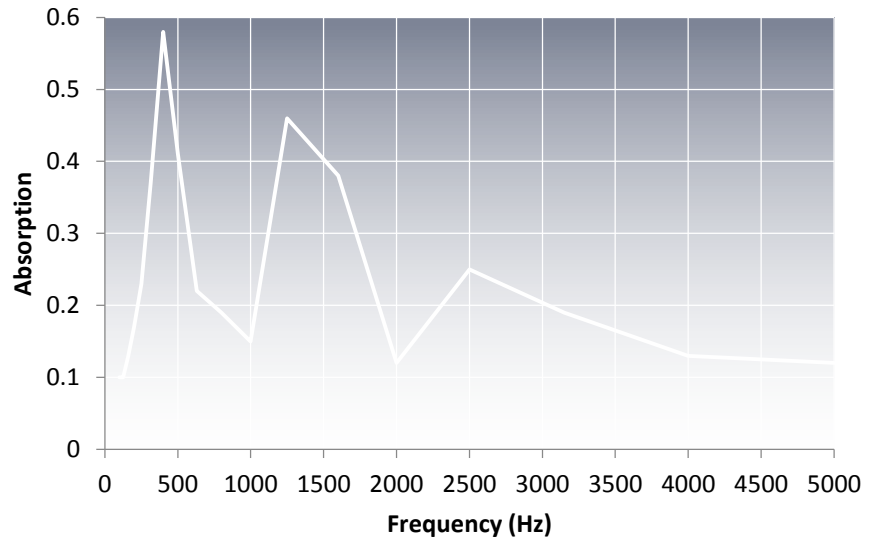


Sand



| | Standard | |
|---------------------|--|-------------------------------------|
| Acoustic Absorption | UNE EN ISO 10534:2 Measured with 150 mm air chamber | $\alpha_w = 0.30^*$ NRC = 0.29** |

* Calculated according to EN ISO 11654
 ** Calculated according to ASTM C-423.



*All specifications are based on average values and may deviate. The values are given for guidance and are not contractual.
 Subject to technical modifications*

Thermal and visual properties

European Standard **EN 14501** states the properties that shall be taken into account when comparing solar protection devices. It also specifies the corresponding parameters and classifications to quantify its properties of **thermal and visual comfort**. Five performance classes are specified:

| Class | Influence on thermal or visual comfort | | | | |
|-------|--|---------------|-----------------|-------------|------------------|
| | 0 | 1 | 2 | 3 | 4 |
| | very little effect | little effect | moderate effect | good effect | very good effect |

- %Ts**
($\tau_{e, n-h}$) Normal/hemispherical **solar** transmittance. Ratio of the **total** transmitted flux to the directional incident global radiation, from 280 nm to 2500 nm (including UV and IR part of the solar spectrum).
- %Rs**
($\rho_{e, n-h}$) Normal-hemispherical **solar** reflectance. Ratio of the **total** reflected flux to the directional incident global radiation, from 280 nm to 2500 nm (including UV and IR part of the solar spectrum).
- g_{tot}** Total energy transmittance of the shading device combined with the glazing employed. It can be calculated according to EN 13363-1 (simplified method) or EN 13363-2 (ISO 15099, detailed method).

Most common standard glazing used for calculation (EN 14501):
Glazing Standard C: Double glazing low-e filled with argon 4-16-4.
Glazing Standard D: Reflective double low-e glazing filled with argon 4-12-4.
- %Tv**
($\tau_{v, n-h}$) Normal/hemispherical **light** transmittance. Ratio of the **visual** transmitted flux to the directional incident global radiation, from 380 nm to 780 nm. The total transmitted light is the sum of the direct transmittance through the fabric and the light diffused by it.
- %Rv**
($\rho_{v, n-h}$) Normal/hemispherical **light** reflectance. Ratio of the **visual** reflected flux to the directional incident global radiation, from 380 nm to 780 nm.
- $\tau_{v, n-n}$ Normal/normal light transmittance (direct). Its value is frequently close to the openness factor.
- $\tau_{v, n-dif}$ Normal/diffuse light transmittance.
- τ_{UV} Ultra-Violet transmittance, From 280 to 380 nm.
- %OF** Openness coefficient. Ratio between the area of the openings and the total area of the fabric. It can be approximated by $\tau_{v, n-n}$

Environmental & health properties

- **Halogen-free and Antimony-free**
- **Formaldehyde-free** and lead-free. REACH compliant
- **Mattiz FR is Oeko-tex standard 100** certified, which assures that no harmful substances are used during its production proces

Manufacturing properties

- Always store rolls horizontally
- Cold-cut, crush-cut or ultrasonic
- Sewing or adhesive recommended
- Avoid using components or inappropriate packing of the manufactured blind that may cause marks on the fabric
- Manufacturing direction: Blinds can be manufactured 'drop to length' or railroaded. → ↓
BUT do not place blinds manufactured in different directions in the same area, as this difference will be spotted
- Manufacture panel blinds only 'drop to length' ↓

Maintenance

- **Mattiz FR is not appropriate for wet areas**
- **Not washable**
- **Avoid spraying on the fabric**
- Do not rub
- Do not steam
- Do not dry clean



vertisol
contemporary weavers

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ISO 9001:2015 and
ISO 14001:2015
certified company

Contact vertisol@vertisol.es for technical support