ACOUSTICS

ACOUSTIS® 50

INTELLIGENT FABRICS FOR SOLAR PROTECTION

www.sunscreen-mermet.com
ACOUSTIS® 50

TOP ACOUSTIC ABSORPTION FABRIC THAT IS IMMEDIATELY DECORATIVE

ACOUSTICAL SOLUTION WITH A PATENTED SPECIAL WEFT

ACOUSTICS, VISUAL AND THERMAL COMFORT

- EXCELLENT ACOUSTIC ABSORPTION: helps to enhance acoustics whilst blending perfectly with the interior design
- A single product for 3 FUNCTIONS:
  - TECHNICAL: acoustic quality without thermal resistance to ensure a HEALTHY ATMOSPHERE in humid surroundings
  - DESIGN: fabric suitable for all architecture textile application. Excellent printing medium for custom designs
  - COMFORT: helps create an acoustically comfortable atmosphere
- A LIGHT, GOSSAMER-THIN ACOUSTIC SOLUTION, easy and economical to fit to walls and ceilings
- TOTAL GLARE CONTROL: up to 100% of light rays filtered (Tv = 0%)
- THERMAL COMFORT: up to 87% of solar energy eliminated (gtot = 0,13 / glazing g = 0,32 et U = 1,1)
- 6 colours available in 250 cm width
- Excellent MECHANICAL RESISTANCE and good dimensional stability for extra-large roller blinds
- NON FIBROUS: no risk of inhalation
- Resistant to humid environments such as indoor pools
- Health/Safety: conforms to standard requirements for buildings open to the public

INTERNAL APPLICATIONS

- Roller blinds
- Roman shades
- Decorative panels
- Velums
- ZIP Roller blinds
- Printable
- Stretched ceilings
- Space fitting
ACOUSTIS® 50

Colours may be slightly different from the actual ones.

WIDTH: 250 CM
**ACOUSTIS® 50**

**Acoustic absorption factor (αw)** 0.35 to 0.8 - NF EN 20354 (ISO 354) - NF EN ISO 11654

**Composition** Coated fibreglass fabric

**Fire, smoke classification and other official test reports**
- NF EN 20354 Class 1 (EN ISO 11654) - NF EN ISO 11654
- NF EN 13501-1 Mounted Euroclass C-s1-d2-e1 - EN 13823 & EN 14716
- IMO - MED 2014/90/EU
- BS - 476 Pt 6 & 7 Class 0
- FR - NFPA 701

**Health, safety**
- GreenGuard® GOLD: Guarantee of indoor air quality (VOC)

**UV screen** 100%

**Weight/m²** 420 g ± 5% - ISO 2286-2

**Thickness** 0.50 mm ± 5% - ISO 2286-3

**Colour Fastness to light** (Scale of 8) 7/8 - ISO 105 B02 (white not graded)

**Mechanical resistance**
- Breaking: > 140 daN/5 cm
- Tear: ≥ 3 daN
- Folding: ≥ 80 daN/5 cm

**Elongation** (warp & weft) < 5% - ISO 1421

**Packaging** Rolls of 33 ln

**Making up** Advice note on request

* This product’s technical data are in conformity with this brochure as of the date of publication. MERMET SAS reserves the right to change the technical data; only figures provided on the company’s website www.sunscreen-mermet.com shall be deemed to be authentic. Where applicable, MERMET SAS also reserves the right to withdraw this product from sale should any of the technical properties or characteristics set out above prove to be inadequate or rendered impossible as a result of a change in regulations or in knowledge or understanding.

**ACOUSTIC ABSORPTION FACTOR αw**

The acoustic absorption capacity of the material is expressed by its acoustic absorption factor (αw) in the 3 octave bands: bass (below 200 Hz), medium (200 to 2000 Hz), treble (above 2000 Hz). A high absorbing material will tend towards 1.

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

**ACOUSTIS® 50**

<table>
<thead>
<tr>
<th>Colours</th>
<th>Fabric</th>
<th>Fabric + Glazing / gtot internal blind</th>
<th>Optical factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tb</td>
<td>Rs</td>
<td>As</td>
</tr>
<tr>
<td>0202 White</td>
<td>18</td>
<td>71</td>
<td>11</td>
</tr>
<tr>
<td>0220 Sahara</td>
<td>17</td>
<td>64</td>
<td>19</td>
</tr>
<tr>
<td>0720 Silver</td>
<td>12</td>
<td>41</td>
<td>47</td>
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<td>0710 Sandstone</td>
<td>9</td>
<td>37</td>
<td>54</td>
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<tr>
<td>0730 Slate Grey</td>
<td>4</td>
<td>24</td>
<td>72</td>
</tr>
<tr>
<td>3000 Black</td>
<td>0</td>
<td>5</td>
<td>95</td>
</tr>
</tbody>
</table>

gr = 0.59: Solar factor of standard glazing (C), low-emission 4/16/4 double glazing filled with Argon (U value thermal transmittance = 0.4 W/m²K).

gr = 0.32: Solar factor of standard glazing (D), reflecting low-emission 4/16/4 double glazing filled with Argon (U value thermal transmittance = 0.4 W/m²K).

Comfort classification according to EN 14501: + Very little effect, * Very little effect, + Moderate effect, * Good effect

Samples tested according to EN 14500 standard defining the measurements and calculation methods as specified in the standard EN 13363-2 “Solar protection devices combined with glazing. Calculation of solar and light transmittance - part 2: EN 13363-2 detailed method” and EN 410 “Glass in building - Determination of luminous and solar characteristics of glazing.”
**USE**

**CONFIGURATION**

**ROLLER BLIND**
- **Music Academy:** Franconville / Hay les Roses (FR)
- **Cultural centre:** Chaban Draguignan (FR)
- **Auditorium:** Neuilly sur Seine (FR)

\[ \alpha_w = 0.55 \] (PV Cetram n°N-SC-222_04) - Plenum of 175 mm

**VELUM**
- **Wine bar:** Matakana (NZ)

\[ \alpha_w = 0.45 \] (PV Cetram n°N-SC-222_04)

**ACOUSTIC BAFFLE**
- **Convention center DaeGu Exco:** Corée
- **Alcon offices:** Fribourg (DE)

\[ \alpha_w = 1.1 \]

**FRAME-MOUNTED PARTITION - CEILING**
- **Restaurant:** Cape Town (ZA)
- **Music Academy:** Hay les Roses (FR)
- **Theater and Music Academy:** Fourmies (FR)

\[ \alpha_w = 0.7 \]

**STRETCHED WALL**
- **Auditorium:** Pau (FR)
- **Multimedia library Cabanis:** Toulouse (FR)
- **Commercial building Alcatel:** Velizy (FR)

\[ \alpha_w = 0.7 \] (PV Cetram n°N-SC-222_04)
WOOD CEILING

- Swimming pool: Bordeaux (FR)
- Regional Music Academy: Cergy Pontoise (FR)
- Music Academy: Häy les Roses / Neuilly sur Seine (FR)
- Theater and Music Academy: Fourmies (FR)

\[ \alpha_w = 0.7 \] (PV Cetram n°N-SC-222_04)

FABRIC ON SUPPORTING STRUCTURE

- Escales Thermal baths: Caldéa (AD)
- Auditorium: Pau (FR)
- Atrium, Hotel Tulip Farah: Rabat (MA)
- Water park: Chauray (FR)

\[ \alpha_w = 0.7 \] (PV Cetram n°N-SC-222_04)

STRETCHED CEILING

- Music Academy: Franconville (FR)

\[ \alpha_w = 0.7 \]

FRAME-MOUNTED PARTITION

- Music Academy: Häy les Roses / Fourmies (FR)
- Multimedia library and Music Academy: St Gaudens (FR)
- Cultural centre: St Exupéry, Toulouse / Chabran Draguignan / Neuilly sur Seine (FR)

\[ \alpha_w = 0.7 \]

PARTITION, SCREEN WALL

- Showroom Focal: St Etienne (FR)
- Large dining room: Conseil Général 31 (FR)
- TF1 Company restaurant: Paris (FR)

\[ \alpha_w = 0.7 \] (PV Cetram n°N-SC-222_04)
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THE FABRIC BEST SUITED
to your project

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