



markilux collection

Awning fabrics made from sunsilk snc and sunvas snc

markilux awning covers are highly rated because of their quality and appearance

With the purchase of a markilux awning cover you have chosen a high-class, quality product. All fabrics are produced on state-of-the-art weaving looms. This guarantees near perfection in the manufacturing process. Meticulous checks also ensure that we only ever supply functionally flawless covers. However, awning covers do not only serve as effective protection from the sun. They also have a decisive impact on the colour ambience and hence the atmosphere under an awning. For even greater enjoyment of the colour ambience provided by the shade of an awning, markilux offers an extensive collection



of more than 250 fabrics made from innovative, high-tech polyester yarns sunvas snc and sunsilk snc.

The certificate “Öko Tex Standard 100” guarantees that no harmful dyes or chemicals were used in the making of markilux awning covers.



Effective protection against UV radiation

Due to the increase in UV radiation, healthcare during our leisure time is gaining in importance. Therefore it is important to know just how many harmful UVA and UVB rays will pass through the cover when purchasing an awning. markilux fabrics in dark colours afford 100 per cent protection.

The lighter colours (right through to plain white) stop up to 97 per cent of UV radiation.

These figures are based on research conducted by the Hohenstein Research Institute as well as the manufacturer of our fabric yarns. **All fabrics made of sunsilk snc and sunvas snc achieve the highest possible solar protection factor for textiles (UPF 50+).**

The UPF (Ultraviolet Protection Factor) specifies how much longer one can be exposed to sunlight when protected from it by the given UPF without suffering sunburn. Fabrics with an ultraviolet protection factor of 50+ would enable you to sit out safely in the sun fifty times longer than you would otherwise be able to do without suffering sunburn, if you were to rely solely on the protection provided by your skin.

In order to ascertain the sun protection factor required, you need to know what level of protection is provided by your own skin, as well as the length of time you wish to sit in the sun (your own protection time x sun protection factor = maximum sunbathing time). It is essential to bear in mind that the sun protection (awning) fabric is only able to reduce the effect of direct sunlight and not that resulting from reflected UV radiation (from water, for example).

Superior light and weather fastness values

Our covers made from sunsilk snc and sunvas snc get the best values (marks 7 to 8) when rating their light fastness and weather resistance.



Bonded awning fabrics offer an improved appearance

The new ultrasonic bonding process lends the awning fabrics a vastly improved appearance. It has been tested for its durability. The high

compression bonding process offers many advantages: Under normal conditions the panel joints (formerly seams) are impermeable to light and water and resistant to changes in temperature. Thanks to its smoother surface, the fabric has a longer life-span. In addition bonding avoids the problem of premature ageing of the thread as a result of UV radiation and weathering. Some conservatory awnings are always supplied with stitched seams in certain fabric qualities for technical reasons. Otherwise awning and blind covers are always supplied in bonded form. If you would prefer your awning cover to be produced with the conventional stitched finish, we kindly request you to state this clearly on your order. Exceptions are covers made from perfortex and those from other collections that are also manufactured in a stitched finish for technical reasons.

Both stitched and bonded awning fabrics show inevitable differences in colour due to the double layer of fabric at the seams and panel joints - the fabric appears to be darker in this area. The illustration shows the colour brilliance of the awning fabric when backlit, the way you would experience it while enjoying the luminous shade of your awning. As a rule markilux awning and blind covers are manufactured from panels 120 cm wide.

Care instructions

Awning covers are industrially manufactured textile products which serve both a functional and a decorative role. They are high performance products that meet the strictest technical requirements. Each production cycle undergoes extensive laboratory tests. Criteria such as water impermeability, stiffness, dirt and water-repellent properties, resistance to tearing and tear propagation, colour fastness and numerous other characteristics are defined, assessed and guaranteed for each fabric type by the manufacturer. Although only first-class, quality controlled fabric is used in production, there are limits to the degree of perfection that can be achieved. Awning owners occasionally complain about certain imperfections in the fabric but such phenomena cannot be eradicated completely, even with today's technology.

Creases

can appear during the cover making process and when the fabric has been folded. When viewed against the light, a dark stripe can be seen where the fabric has been folded, especially in the case of light colours; this is due to the fibres having been realigned (altered light refraction).

Puckering of the fabric

can appear along the side hems, next to the seams and in the centre of the panel. The fabric is twice as thick at the seams. As the cover is wound onto the roller the two layers of fabric are forced to assume different diameters thus creating tension within the fabric. The tension of the folding arms and the weight of the roller and/or front profile can exacerbate this effect. Puckering can also develop if a water trough forms during heavy rainfall.

Water impermeability / resistance to rain

Sunshade fabrics are impregnated with a water-repellent finish and, if properly cared for and used at a pitch of at least 14° (to the horizontal), remain impervious to water during short, light rainfall. During prolonged and/or heavy rainfall the awning must not be extended or should be retracted to prevent damage. If the cover has become wet the awning must be extended again at the earliest opportunity so that it can dry to prevent marking of the fabric.

Tension-induced stretching of the side hems

In most cases an active tensioning system keeps the cover taut almost permanently. Although seams and hems provide reinforcement, they also have to withstand the most strain. When the cover is rolled up the seams and hems roll up on themselves, which increases the pressure and tension even more. They are therefore exposed to considerable tension and this can cause them to stretch slightly. As a consequence the side hems may sag slightly when the awning is extended.

Source: ITRS (BKTex)

Caring properly for your blind or awning cover

So that you may have long and pleasurable use from your markilux awning cover here are a few tips regarding its care: Dust can best be removed when dry by means of a soft brush. Remove leaves, twigs and similar debris immediately. Small stains should be removed using lukewarm water and a commercially accepted, preferably liquid, detergent suitable for delicate fabrics (5% soap solution, water temperature max. 30°C). Rinse thoroughly with water. Comprehensive tips for the cleaning and care of exterior solar protection fabrics can be found in the guidelines laid down by the Industrial Association for Technical Textiles-Shutters-Solar Protection (ITRS e.V.).

Other important information relating to external solar protection fabrics

Small imperfections such as knots, uneven yarn thicknesses, the occasional broken yarn, waviness or uneven rolling up characteristics as well as signs of fabric stretch – especially in the region of hem or panel seam – cannot always be avoided in spite of the state-of-the-art manufacturing processes used. Furthermore, traces of handling such as slight creases, which appear as lines in the fabric when held against the light, are also unavoidable. The intrinsic weight of the fabric may cause it to sag; this effect is exacerbated when the awning is wet. We guarantee that the above phenomena will not have a detrimental effect on the service life of the fabric. In this regard we make reference to the guidelines laid down by the Industrial Association for Technical Textiles-Shutters-Solar Protection (ITRS e.V.).

Source: ITRS (BKTex)

The Fabric Qualities

sunsilk

a special, high-tech polyester material offering outstanding technical values, the SNC self-cleaning effect, a brilliant, unlimited colour spectrum and optimum bonding of the seams. Developed by Schmitz-Werke GmbH + Co. KG in Emsdetten, Germany.

sunvas

the successor to acrylic material, with the same excellent technical characteristics as sunsilk, including the SNC self-cleaning effect and making use of the full colour spectrum while retaining the textile character of the material.

Product characteristic	sunvas	sunsilk
Light fastness* acc. to ISO 1050 B02	Mark 7–8	Mark 7–8
Weather fastness* acc. to ISO 105 B04	Mark 7–8	Mark 7–8
Fabric thickness [Ø]	0.45 mm	0.37 mm
Max. tensile strength (warp/weft) acc. to EN 13934-1	2200 N / 1200 N	2500 N / 1350 N
Max. elongation (W/W) acc. to EN 13934-1	35.0 % / 30.0 %	42.0 % / 34.5 %
Permanent elongation [Ø]	2.3 mm	2.7 mm
Resistance to tear propagation (W/W) acc. to EN 13937-2	35.0 N / 50.0 N	55.0 N / 35.0 N
Water resistance acc. to EN 20811	35 mbar	45 mbar
UPF = Ultraviolet protection factor acc. to EN 13937-2	50+	50+

* sunsilk snc and sunvas snc achieve the best values (Mark 7–8) in the evaluation of light and weather fastness on a scale of 1–8 (8 = very good = top mark)

sunsilk snc and sunvas snc

the innovative awning fabrics with self-cleaning effect in rain (a minimum awning pitch of 14° is required to ensure water drainage). The high-quality, dirt-repelling coating makes sure you can enjoy the luminous colours in the fabric for many years.

sunsilk SNC → the brilliantly luminous technical material

sunvas SNC → the softly glowing textile material

Tried, tested and certified with the test symbol „self-cleaning - inspired by nature“ which was awarded and confirmed by the internationally renowned Institute for Textile Technology and Process Engineering (ITV), Denkendorf.



Why sunsilk and sunvas?

sunsilk and sunvas are based on a polyester yarn which has been modified for exterior use. The dyeing process, which in this form is practised only at Schmitz-Werke, makes it possible for us to carry through these modifications in the technical characteristics and thereby achieve excellent results in the finished textile. Suspect additives, such as those used in the manufacture of acrylic fabrics, are not required, meaning that an environmentally sound production process can be guaranteed and the fabric can be recommended without reservation.

Why not spun-dyed, but yarn or piece-dyed instead?

In the spin-dyeing process the raw material in the form of granulate is brought into contact with the dye and then spun into yarn. The disadvantage of this method lies in the large quantities of yarn that have to be produced in each colour, which invariably results in a limited range of colours. In the case of yarn or piece-dyeing a similar process is employed, if, as is the case at Schmitz-Werke, the manufacturer has mastered this process and has the appropriate dyeing technologies and processes at its disposal. Using this process, dyeing also takes place by heating the material and also leads to the material being coloured all the way through - similarly to the way this occurs in the case of granulate. The advantage of the Schmitz-Werke method is that it can be carried out using much smaller quantities and therefore the complete range of colours is at the manufacturer's disposal.



This photo depicts the textile character of sunvas material. In the production of sunsilk, filament yarn is used which is very smooth and from a

technical point of view achieves the best results in tests carried out on sunsilk, sunvas and acrylic fabrics. The latter no longer being manufactured at Schmitz-Werke. But sunsilk also has an unequivocal technical feel to it. For the manufacture of sunvas we use spun yarn (to be seen in the photo by virtue of the fine yarn ends), which lends the sunvas material its textile character.



By way of example, here is a cross section of a spun-dyed acrylic and a yarn-dyed sunvas yarn.



Certified and tested products: both sunsilk and sunvas meet the requirements of Ökotex Certification and carry the ÖKOTEX label. The technical specification of the new sunvas material has been tested both in Germany and abroad by independent institutes and its technical characteristics have been confirmed by them.

Frame colours

Powder coating








The material for the standard colours shown in the matrix (available as standard) is in stock for folding-arm awnings.

Short delivery times, basic price in the current price list.

All other RAL colours including metallic, matt and fluorescing colours as well as pearl finishes are available to order. The exception to this rule is formed by the markilux ES-1, which is made of stainless steel.

Prolonged lead times; Prices available on request or can be found in the current price list.

Frame colours

traffic white	RAL 9016	
metallic aluminium	RAL 9006	
grey brown	similar to RAL 8019	
off-white textured finish	5233	
stone grey metallic	5215	
anthracite metallic	5204	
Havana brown textured finish	5229	

markilux awnings and solar protection systems are powder coated as standard in line with the GISC (German Industrial Standard for Component Surfaces). This powder coating finish has proved itself admirably over the past thirty years in the climate of central Europe!

Increased corrosion protection

If higher demands are to be placed on the powder coating finish e.g. in coastal areas or in places where there is strong industrial pollution, it is recommended that – to improve the resistance to or even prevent the formation of hair-line / crazed corrosion – a suitable chemical pretreatment be used. To this end the GISC has developed over many years an alternative coating process. Aluminium components, for example, are pre-treated in advance of the actual powder coating process. This present stage in technological development has shown that this represents a considerable improvement in the prevention of hairline / crazed corrosion caused by the conditions cited above.

The description of this process is summarised in the **classification and test procedures for the coating of individual components under RAL RG 631 for aluminium and RAL GZ 663 for steel** as well as the stipulations laid down in **Quali-coat**.

In situations such as those cited above we give the option of having the powder coating carried out in line with RAL RG 631 or RAL GZ 663. The lead time is then the same as that for non-standard RAL colours. The surcharge for this varies according to the awning model to be coated. You will receive a quotation upon request. For quick, non-binding quotations the following rule of thumb may be used:

Surcharges	
for standard colours	× a factor of 2* minimum surcharge € 80
for non-standard RAL colours	× a factor of 2.3* minimum surcharge € 150

* over and above the cost for non-standard RAL colours

Please pass your order to us with the additional comment: Powder coating with increased corrosion protection and put an appropriate cross on the order form.