

Rollerflex Awning Fabric Characteristics

At Rollerflex, we only source out high quality fabrics that can withstand New Zealand conditions which must comply with the following parameters: colour fastness / resistance to light and atmospheric agents / rot-resistance / dimensional stability of the awning / resistance to atmospheric contamination / air permeability / water-repellency / design protection / protection against UV rays / ease of maintenance / self-cleaning finish.

We provide a Spanish 100% solution-dyed acrylic fibre. With this technique the heart of the fibre is impregnated with colour, obtaining bright, light-resistant colours for a very long period of time.

What does 100% solution dyed acrylic fibre mean?

100% solution dyed acrylic fibre is a dying process that impregnates the heart of the fibre, obtaining bright, glowing colours. The coloured pigments impregnate the polymer dissolution before the fibre is formed. This gives high resistance to wear, excellent colour fastness, optimum resistance and exceptional behaviour in outdoor conditions and in the presence of micro-organisms.

The fabric provides excellent solar protection which has UPF from 60 to 80+ and is also water repellent.

QUALITY, LIMITATION AND TECHNICAL POTENTIAL OF ACRYLIC FABRIC FOR SUN PROTECTION

Due to the nature of the fibre, once mounted on the structures, the acrylic fabrics can show small irregularities, sometimes erroneously considered imperfection. The next pages show in a very strong way some effects that fabric could take. These defects are due to the intrinsic characteristics of the fibre, the fabric and the sun awning itself and they can not be considered defects. As part of the technical characteristics of the fibre, all fabrics produced with solution dyed acrylic fibre. It is possible to contain the intensity of these phenomenon with a correct and constant maintenance. It is correct to insist on the fact than none of the aesthetic imperfection that may occur and that will be described, will compromise the value of the fabric, its performances or makes it not suitable for the functions of UV protection described here above, privacy, decoration and energy saving.



UNDULATIONS NEAR THE SEAMS

A continuous action of winding and unwinding of the cloth may cause in the seams area, where the fabrics are overlapped and therefore thicker, an over tension.

This over tension could make folds in the area near the seam. This phenomenon could be accentuated by the humidity and it could have a different visibility depending on the colour or of different light conditions.

The undulations become more likely with the increase of the awning dimensions or with the increase of the tension to what the cloth is subjected.

They are also called embossing.



UNDULATIONS TO THE EDGES OF THE CLOTH

In a common awning the fabric is kept in tension simply by the winding roll and by the bar protrusion. Consequently it is possible that the whole tension moves to the centre of the cloth and that the lateral edges, not subjected to a tensions sufficient to keep them tight, can fold back towards the inside or make a few undulations.

This phenomenon can occur when the awning is often used as protection against the rain. If the inclination of the awning does not allow a correct outflow it can form one or more pockets of water that creates tension in the centre of the awning leaving the borders less tensioned. In case of awning slightly inclined it is not advisable therefore the exposure to rain.



UNDULATIONS IN THE CENTRE OF THE CLOTH OR HONEYCOMB

It is possible that during the winding and unwinding the cloth can suffer some light moving. These moving

can cause during time some folds which can take the shape of honeycomb. The greater the number of fabric layers wrapped on the roll, that is the awning protusion, the greater is the possibility of a movement of the fabric in the phase of opening and closing and therefore that some of these undulations can form. If the cloth is rewound when still wet, this phenomenon is accentuated. It is therefore advisable let the cloth dry before rewind it, also to prevent mould growth that stick to the awning and cause unpleasant odour.



FOLDS OF COMPRESSION AND THE WINDING

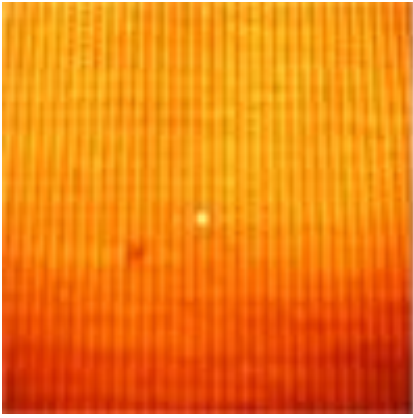
These folds can be formed in the phase of packaging or mounting of awning of big dimensions. In the light colors this phenomenon can be amplified and show on the surface side of the fold some effects of a darker color, so it can look like dirt. The movement of the cloth could accentuate this imperfection in the long term. Many installers and retailers adopt forms of transport and assembly of big cloths that now minimizes the possibility of having these unpleasant effects. However, a fold is often unavoidable even for fabrics made for awnings or structures with length of over 6 meters.



LINES AND WRITE AND EFFECT "PLASTER"

The coating in waterproof fabrics and the finishes adopted to guarantee the performance of fabrics for sun protection can cause some light-colored stripes.

These stripes, also named "writing effect" are formed through handling during packaging and assembly of the cloth. This is an effect more visible on dark colors.



MICROHOLES IN THE CAPPOTINE

The acrylic fabric is treated with a particular finishing that, in addition to ensuring the well-known technical features, makes it rigid and exciting, characteristics that allow the fabric to remain tight during exposure when used in traditional awning.

However this kind of fabric, when used for the manufacture of cappotine can give rise to the formation of micro-holes in correspondence with the folds of fabric that are formed due to cell continuous mechanical action of opening and closing.