

SV 3% KOOLBLACK™, a Mermet innovation already receiving rave reviews in Finland!

Mermet, the leader in the solar protection market for the design of glass fibre-based fabrics, continues to innovate... as demonstrated by its equipment supplied to a new project in the heart of the Finnish capital Helsinki: the restaurant *Meripaviljonki*.

Constructed on water and with a 100% glass facade, this exceptional location requires optimum visual and thermal protection to counter the problems of glare, thermal comfort and aesthetic integration within the facade.

A tailor-made project for the new patented fabric technology **SV 3% KOOLBLACK™ by Mermet**, the first interior dark-coloured screen able to combine thermal comfort and visual comfort.

KOOLBLACK™ technology - the transparent heat shield

Compared to a "classic" dark-coloured fabric, the patented KOOLBLACK™ technology enables the fabric to retain its optical performance while reflecting back the sun's rays to provide thermal comfort in a much more effective manner than a classic fabric.

Available in a dark colour and therefore invisible in glazed facades from the outside, unlike all of the other solutions traditionally offered on the market (light-coloured and metallic fabrics), the **SV 3% KOOLBLACK™ fabric from Mermet** provides:

- Optimum interior heat control with enhanced solar reflection ($R_s = 29\%$).
Thanks to the KOOLBLACK™ technology, the solar reflexion of the dark shades is enhanced. An advance with regard to classic dark-coloured screens which, for an equivalent fabric, achieve solar reflexion of 5%.
- Guaranteed thermal comfort: 72% of solar energy is reflected back ($g_{tot} = 0.28$ / glass $g = 0.32$ and $U = 1.1$),
- Excellent glare control: 96% of sunlight filtered ($T_v = 4\%$),
- Very good transparency and perfect aesthetic integration within the facade,
- UV protection with 96% of rays filtered.

Furthermore, thanks to its large width size of 310cm, the SV 3% KOOLBLACK™ fabric is able to equip very large glazed areas without requiring a join.

Benefiting from the quality labels Oeko-Tex Standard 100 (no dangerous chemical substances for users' health and safety) and Greenguard® (guaranteed interior air quality), fire classified and with proven durability following mechanical endurance testing over 10,000 cycles (Class 3, EN 13120), the new SV 3% KOOLBLACK™ fabric meets the standards required by public buildings.

A European first at the restaurant Meripaviljonki

Located in the centre of Helsinki and constructed on water-borne pontoons, the restaurant *Meripaviljonki* was opened in April 2015. It stands out through its unique floating architecture and expansive glazed areas some 4.80m in height.

Thanks to its unusual location, the establishment offers a unique panorama over the bay and the city, one which changes with the seasons, but which is exposed to both direct sunlight and significant reflection off the water.

For the architect, Simo Fresse, it was vital that the selected solar protection system should be able to seamlessly integrate itself within the facades while tackling the dual issue of glare and heat.

The **SV 3% KOOLBLACK™ fabric from Mermet** quite simply established itself as "*the best solution to guarantee the comfort of the customers*":

- A combination of excellent glare control and perfect transparency maintaining an outstanding view of the environment thanks to the dark shade,
- Good interior thermal comfort.

But also THE solution for preserving the aesthetics of the building:

- A quasi-invisible fabric from the outside in harmony with the architecture of the panoramic floating restaurant,
- The large width size enabling the installation of generously proportioned blinds without the need of a join.

40 motor-driven blinds and 12 manual blinds of a surface area between 1.8 m² to 7.2 m² manufactured by UK Sunsystems Oy and installed by Aletta Oy were selected to fit out the restaurant.

Only just presented at the R+T Exhibition, the **SV 3% KOOLBLACK™** fabric is set to usher in yet another success story. Mermet, always at the cutting edge of innovation, once again demonstrates its expertise by providing the perfect solution to questions related to solar protection and thermal and visual comfort.