

KOOLBLACK A WIN-WIN FOR MELBOURNE HIGH-RISE

A new commercial icon in Melbourne's CBD, fitted out with window coverings by Helioscreen, called for a number of key requirements. Mermet's E Screen with Koolblack technology, which increases the energy efficiency of dark solar shade fabrics to levels comparable with light colours, provided the solution.





The new 26-level office building located at 567 Collins Street, Melbourne is seen as a cutting edge icon of the city, offering state-of-the-art commercial office space as well as retail and recreational spaces.

As Helioscreen business development manager (VIC & TAS) Elizabeth Damcevski confirms, the window coverings project at 'number 567' entailed a very specific brief, involving 13 levels of the building being fitted with dark coloured blinds. "Both sides of the fabric had to be a dark colour, with a high visibility and high co efficiency factors. Mermet's E Screen with Koolblack ticked all those boxes."

Damcevski says the project used Helioscreen internal roller blinds, entailing a combination of chain operated and motorised blinds, for which the fabric used was E Screen with Koolblack Technology 5% openness, colour 3535 Charcoal/Charcoal.

"Helioscreen originally came across the Koolblack technology at the BMAA Superexpo in 2013 where it caused quite a stir," Damcevski says. "When the project at 567 Collins Street came up, we got in touch with Mermet, who provided us with samples. It quickly became apparent that the fabric met the architects' key requirements. They wanted a dark colour fabric, for aesthetic and glare reduction reasons, which also allowed occupants to see out of the building. An added benefit is that, because the fabric is so efficient, it keeps the building cool and therefore reduces energy costs."

"Mermet's Jennifer Elmer provided technical stats for the project and compared the fabric characteristics against competitors' fabrics, in which Koolblack had higher efficiency factors," Damcevski confirms. "Mermet's specification data and sample cuttings enabled

me to specify the project, with Helioscreen producing the prototype blinds. Specification was completed in June of 2013."

A key challenge in the project was the high number of performance requirements required, Damcevski adds. These included a dark fabric requirement, a max of 5% openness factor, less than 6% Visible Light Transmittance (Tv), 30% Solar Reflectance (Rs).

"We had to be able to meet as many of these as possible," she says, adding that key to the project's success was the resolution of the opposing needs of a sustainable building that also required dark fabrics."

"Regular dark shade materials consume energy and raise the solar heat gain in space, thus resulting in a waste of energy and creating an unpleasant

environment. As such, this restricts the use of dark screen fabrics in sustainable building design where heat reflection specifications are presented in a shading solution."

"The new Koolblack technology resolves this issue by making use of new heat reflecting characteristics. Koolblack technology adds to the energy efficiency of solar-shade materials to equivalent levels with light colours, which lowers about 23% of solar heat gain coefficients (SHGC), which means improved heat control and increased energy savings."

Mermet's Jennifer Elmer comments: "While E-Screen with Koolblack Technology was not even available in Australia at the time of the specification in 2013, its benefits were so apparent when it launched at the Superexpo that Helioscreen was quickly committed to utilising it."

