

Automated shade - the why and the how

If the history of technology has taught us anything it's that automation is a force to be reckoned with. During the second half of the 20th Century, it became apparent that most procedures, tasks and processes that could viably be automated, eventually would be.

From dishwashing to changing television channels, flying a plane or even driving a car, automation is the basic standard by which we now operate most things.

The same is surely true for shading systems. Automated blinds and curtains deliver a range of benefits, including improved child safety, convenience, security, comfort, energy savings, environmental friendliness, and more.

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Which product types are suitable for automation?

For those deciding to specify automated systems, the first step is to establish whether the product involved is suitable for motorisation. In terms of indoor applications, automated products include Roller Blinds, Pleated Blinds, Curtains, Roman Blinds, and Venetian Blinds. And for external applications, it includes External Roller Blinds, Skylight Systems, Folding Arm Awnings, and Venetian (rack arm) awnings. For external applications, it is important to note that function can be affected by exposure to the elements, such as high or gusty winds, rain and snow.

Other considerations

There are several variables associated with curtain and blind automation. Far from a one-size-all proposition, it involves choices around things like motor size and type, motor placement, and potential integration with building management systems.

It involves selection of appropriate control methods, along with future proofing for smart connectivity, accessibility for installation and future servicing, and the preparation of pre-wiring diagrams.

In addition, decisions regarding fixing points, assurances relating to the structural strength capable of handling products that are heavier than their manual counterparts, and provision of appropriate power supply are critical.

Similarly, a clear understanding of the reasons for including an automated system need to be well understand during the early planning stages; and questions around flexibility and things like group control need to be answered.

Fabric choice

Fabric choice is also critical. While the construction sector's contribution to carbon emissions and climate change is well understood and acknowledged, one key way to reduce these emissions is often overlooked.

It turns out that 30 per cent of heating energy is lost through windows and 76 percent of sunlight that falls on standard double pane windows enters buildings to become heat.

It follows that quality window coverings can play a critical role in cutting energy costs and ensuring that commercial buildings are sustainable. The best way to optimise performance in this sense is by combining performance fabrics with automated shading systems.

The symbiotic relationship here results in having the best performing textiles on a window in the right place at the right time, all the time, without the need for human intervention.

At the same time, such systems help projects to meet several regulations and certifications, including NCC Section J, Green Star, NABERS, and WELL.

The time to automate is now

Motorised and automated shading systems are nothing new. Amazingly, though they were initially restricted to mainly high-end residential (and some commercial) applications, they have been available for more than 50 years.

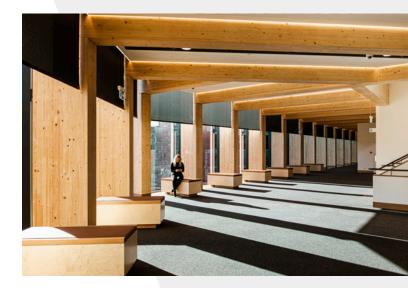
As mentioned, however, their time has surely arrived. In these days of Google, Alexa, and self-driving cars, their potential for widespread appeal is obvious. Beyond this, legislative changes associated with blind safety are expected to hasten the move to motorisation and automation.

Responding to figures that showed that, in the US from 1990 to 2015, nearly 17,000 children below the age of six were treated in hospitals for injuries related to blinds (and 271 of those died from their injuries), authorities in that country decided to act. They implemented a regulation stating that all window-coverings sold in stores and online from December 2018 must be cordless or have inaccessible cords.

Not long after, in May 2019, Canadian authorities went further and applied similar restrictions to all types of window coverings, both mass-produced and made to measure.

Here in Australia, while similar strong legislation has not yet been introduced, it is considered a case of not if but when it will be. Many expect some type of ban on manual products to be introduced within the next 12-24 months.

Considering all of this, the message for specifiers couldn't be clearer. The time to act – and start including automated shading systems in projects – is now. Otherwise, they are likely to be left with systems that are not only less safe than they could be, but also behind the market when it comes to performance and sustainability.



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