

Verosol

**Sustainability
Awards** 

Sustainability eBook 2022

Verosol

The 2022 Sustainability Awards Gala



It was in 2006, way back before smart phones or social media, when we launched what we now call the Sustainability Awards. Little did we realise that 16 years later, our 'little' awards would become the premier built environment sustainability awards program in Australia.

Not that it's a huge surprise really. With the growing awareness of carbon footprints, climate change and rising sea levels as well as the hard work we have put into promoting these awards, it's no great shock that the Sustainability Awards were always destined for greatness. And not only because of the moral imperative, but also due to the economic one.

Realistically speaking, sustainability is a business approach designed to create long-

term value by taking into consideration how organisations operate in the ecological, social, and economic environments.

Therefore, sustainability is built on the idea that developing such strategies fosters business longevity. Without this notion, neither the planet nor the businesses that thrive on it will have much longevity.

With that in mind, I'd like to thank you for your involvement in our Sustainability Awards programme, one that always has been, and always will be dedicated to promoting sustainability awareness in all its forms across Australia's diverse and vibrant built industry.

BRANKO MILETIC, EDITOR

The Awards Jury



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Director, Positive Footprints



OLIVER STEELE
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CEO, Australia Council of Recycling



Q&A with Jules Di Bartolomeo, the Managing Director at Verosol

With a diverse range of products, unparalleled environmental agenda and ongoing educational commitment, Verosol is a go-to for any design professional looking for window furnishings that perform exceptionally, look the part - and help score points on their Green Star Building project.



Here, Verosol's Managing Director, Jules Di Bartolomeo, talks to us about the shifting nature of innovation, explains why fostering design freedom has always been one of the brand's main priorities - and lets us in on how to achieve best practice with performance window coverings where Environmentally Sustainable Design and Section J are concerned.

A&D: We can't talk about Verosol without talking about innovation. In 1965, Verosol founder Cornelis Verolme developed a process of applying a microscopic layer of aluminium to textile, to create innovative performance fabrics.

This process of metallisation of fabrics is, to this day, completely unique, and while the company has further refined the invention - with SilverScreen as its most coveted expression - the competition has failed to come close. What role does innovation play at Verosol today?

JULES DI BARTOLOMEO: Since glass was becoming a prevalent feature in the built environment at the time, Verosol was born out of the desire to create a better environment inside buildings. That has shifted, and innovation has become not only about creating a better environment on the inside, but also externally. Now, the way we make products is as important as the effect they have on the environment. All of our manufacturing plants in Australia and in Holland are powered by solar energy, and the drive to create sustainable solutions that generate a more sustainable environment is firmly entrenched in our DNA.

But there is also another side of our innovation efforts. Offering architects and designers a true design freedom and ensuring they don't have to forego performance to achieve a beautiful aesthetic has always been one of our main priorities. Over the years, we've enhanced the performance of our products, but we've also become very flexible in terms of enabling industry professionals to tailor colours to their specific project requirements or vision. And because we know that not every building requires a high-performing solution, we have been developing other products, too. We have

pushed our design capabilities and while we are global leaders in performance products, we also offer high-quality non-metallised fabrics and different types of external and internal rollers, shutters and draped curtains, to name a few.

A&D: Do you think this ability to recognise where to focus Verosol's innovation has helped the company maintain its undisputed position as a global leader in this space?

JDB: Regardless of colour, our metallised products offer the same performance, energy savings, reduction of CO₂ - and reduction of costs. We have been innovating it for years, and we're very proud of that achievement. And that also comes down to the fact that we manufacture our products here, in Australia, and spend more time checking them than making them. We take great pride in having extremely low error rates, and take ensuring that our products not only look but work exceptionally well incredibly seriously.

A&D: Between the ongoing commitment to creating better environments for people to work and live, Verosol's long-standing membership with Green Building Council of Australia - and supporting green building schemes such as Greenstar, LEED, WELL and BREEAM with points through products utilising performance fabrics, what's your sustainability focus at the moment? And what role do certifications play in advancing the agenda?

JDB: Accountability and transparency are extremely important to us. The majority of our core products are Global Green Tag as well as GREENGUARD Gold certified, and hold Environmental Product Declaration (EPD) and Health Product Declaration (HPD). This commitment to transparency is also why we already provide energy reports, which lay out both energy and cost savings, and we're about to start issuing carbon neutrality reports. So when you buy and you put up one of our products, we'll tell you how many days before it becomes carbon neutral.

We're also committed to ensuring that our supply chain is sustainable. We work with a range of organisations, such as Global Green Tag, who thoroughly check the supply chain - from the chemicals used on the yarn to our factories and production practices - before awarding the certification. We've recently completed work with Global Green Tag on Best Environmental Practice PVC for our PVC-based metallised performance screen fabrics. I believe we are the only brand in Australia to currently hold a Best Practice PVC rating for internal window coverings.

A&D: As part of their potent sustainability profile, performance fabrics can help advance Environmentally Sustainable Design frameworks. How can Verosol products help achieve that?

JDB: This is particularly exciting for us because it really goes back to the founding principles of Verosol, and the focus on the environments inside the buildings.

Our metallised blinds do two important things. The main thing that everyone thinks about is the fact that they can reflect up to 85% of solar radiation, which reduces energy required to cool down the building rather substantially. But in the colder months, our blinds can also be used to harvest the sun. You can put them up to allow the sun in, and then put the blinds down again to keep the warmth in. So there are energy and cost savings where heating is involved, too.

And so our products can help provide a healthier indoor environment by maintaining a consistent climate inside the building, and

minimising heat and glare, while reducing CO₂ and energy consumption all year round - without obstructing the view nor access to natural light. So they can reduce the environmental impact of the construction, generate a healthier environment - and improve energy efficiency while decreasing the costs. One of the recent projects that used our products saw cost savings of over half a million dollars.

A&D: Window coverings can help industry professionals surpass the National Construction Code (NCC 2019) - Section J energy efficiency requirements. Why is it so important to reach beyond compliance itself and what role can automation play in achieving that?

JDB: The standards set out in Section J are the bare minimum, and it's crucial to reach beyond it. Our performance products can definitely help them surpass these basic requirements - and the best way to achieve best practice in terms of window coverings is to use high performance products along with automation technology.

The combination of motorisation, automation, and window furnishing provides enormous benefits with the high performance fabrics. There is a symbiotic relationship here which results in having the best performing textiles on a window in the right place, at the right time, all the time - and without the need for human intervention. And that really is the epitome of integration between humans and their living and working environments - no matter what industry vertical.

A&D: These opportunities around Section J, ESD and automation highlight the importance of education in navigating some of the industry's complexities. Verosol is the only window covering company with formerly accredited CPDs. Two are already in the market - and two more are coming by the end of the year. Why is education so important from your point of view?

JDB: One of the biggest misconceptions out there is that a blind is just a blind. It's really important to give industry professionals the right information so they can make more conscious, better choices. That's why one

of our CPDs is an introduction to window furnishings. It builds a basic understanding of the colours and types of furnishings - and an insight into how window solutions can make or break a project.

Similarly, we're passionate about educating industry on the potential of high performance solutions in the context of ESD, where passive design and occupational comfort are concerned. As an extension of that, we try to take the fear out of Section J and our CPD offers well thought-out solutions on how to take a project to another level, and reduce the construction costs along the way.

Our next CPD will focus on the importance of automation and motorisation. With the ability to connect to the lighting system, the Building Management System (BMS), electronic devices or a phone app, it's really important to educate the industry on what automation can and can't do, how to go about it - and how to maximise its benefits in conjunction with performance fabrics.

And the last CPD we're working on is about sustainability and certifications. It's something we're hoping to engage both Global Green Tag and Green Building Council of Australia, to help architects, designers and specifiers understand different levels of certifications and offer pointers on what to look for.

A&D: And what does the future hold - for, and with, Verosol?

JDB: As strong believers of achieving carbon neutrality by 2050, we're on a clear path of sustainability. We're focusing on features, and ways to conduct our business, that advance that goal. We also want to continue producing products that keep pushing the boundaries of design and performance, which includes coming up with new window covering solutions to enable architects and designers to be creative and not have to hold back on great design.

As a result, collaboration with architects and designers will become a much bigger part of our business moving forward, because we want to work with people who use our products, and give them the design freedom they need to deliver exceptional - and exceptionally sustainable - results.

Smart Building Ideas Award Shortlist

 proudly partnered by Verosol

A building that uses smart design or a range of automated processes to automatically control the building's operations in order to help improve asset reliability, performance, and energy use.



GABRIELLE'S HOME
BLUKUBE ARCHITECTURE



HOME SOUTHBANK
BATES SMART



THE PHILLIP
GREEN HOMES AUSTRALIA

Award Winner

 WINNER

GABRIELLE'S HOME
BLUKUBE ARCHITECTURE

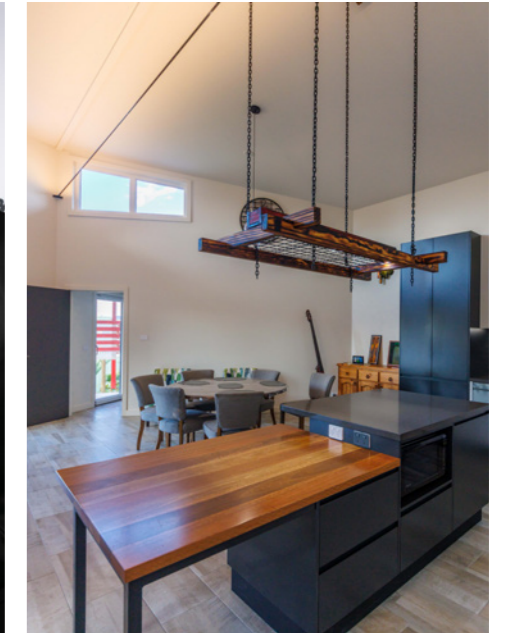
Located in Northern New South Wales near the Richmond River in Ballina, a certified 'classic' passive house home has been built. This sub-tropical location, together with the site environs, aspect and typology fused together with a detailed client's brief and contributed to the final home design. As the client placed accessibility as a high priority, spaces and ideas developed into functional elements that have proven to work well post construction.

The site's characteristics are defined as an irregular heptagon (boot shaped) appearance entering off a cul-de-sac with a stormwater bio-retention cell in a flood zone that could not be built over or altered.

The building is of timber construction and boldly finished externally. The interior is lowkey and has a more relaxed atmosphere, this home caters to the requirements of a client who likes to entertain and have guests stay.

The bulk insulated timber framed dwelling is the first residential building in Australia to be fully built with structural OSB-3 covered with an adhesive water-resistant air tight barrier, followed by continuous wood fiber insulation. A ventilated cavity exists around the whole building cladding (walls and roofing) which enables the building to use convection to keep the cavity dry.

The home has recently been La Niña stress tested due to the flooding in West Ballina, surviving any negative impacts to the dwelling from flood waters.



Shining a light on Environmentally Sustainable Design with Verosol and Smart Design Studio

Walking into Smart Design Studio's (SDS) Alexandria's office, it's clear that the space is an embodiment of Environmentally Sustainable Design (ESD).

In keeping with the studio's overarching design philosophy - firmly anchored by the principles of sustainability - SDS's inner-west headquarters are a mindfully curated expression of the studio's decision not to make environmentally inconsiderate design choices as part of their practice.

"Concern for the environment informs everything we do at Smart Design Studio," explains Maggie Lum, a Team Leader and Associate at SDS. "It's a top priority for all aspects of our operations, from design and material choice to how we handle our own office waste."

With the measured palette boasting a range of bright whites and gentle neutrals, the honest appeal of raw textures and the comfortable allure of natural light permeating the space, the interiors are defined by a calming, comfortable ambience. But this sense of comfort doesn't come solely from the careful selection of colour and materials.

A result of recent renovation, the interiors have been transformed to incorporate the principles of passive design, and feature underfloor cooling, and fans, alongside an extensive selection of Verosol's performance blinds incorporated all throughout. The range in question, Verosol's signature SilverSreen Performance, is renowned for its unmatched ability to reflect up to 85% of solar radiation. This means the blinds can help maintain comfortable temperatures and reduce glare, allowing the studio to function comfortably throughout hot Sydney summers without air conditioning - and reducing the energy required to cool down the building, at the same time.

But the innovative product remains useful all year around. "In the colder months, our blinds can be used to harvest the sun," explains Jules Di Bartolomeo, Verosol's Managing Director. "You can put them up to allow the sun in, and then put the blinds down again to keep the warmth in. So there are energy and cost savings where heating is involved, too."

While the blinds help create a healthier environment on the inside, and reduce energy and CO2 emissions in the process, they also provide a high level of transparency, allowing the occupants to maintain the visual connection with the outdoors. Similarly, while they reduce glare and heat, they don't block natural light - crucial both for the comfort of the occupants, and as a visual element which so clearly forms part of the overarching design of the studio.

As a result, the high-performance product helps generate a pleasant interior that looks good and feels it too. "It's a comfortable, naturally lit environment, in which all the blinds and windows are controlled by a building management system, which in turn, operates according to weather forecasting," says Maggie. And it is the automation element that enables the studio to truly harness the potential of Verosol's innovative fabrics.

"Having the best performing textiles on a window in the right place, at the right time, all the time - and without the need for human intervention really is the epitome of integration between humans and their living and working environments," Jules explains.

The innovative product perfectly underscores the partnership between Smart Design Studio and Verosol. The architectural practice is committed to create spaces in line with the

Environmentally Sustainable Design principles - and prioritising their sustainability agenda as part of their design ethos. Verosol is a brand that not only understands and accommodates these environmental motivations - but enables them through their advanced product range, and prioritises them as part of their own sustainability journey.

The global leader in performance window coverings takes great pride in focusing not only on how their products perform and how they're made - but also what impact they have on the environment. "All of our manufacturing plants in Australia and in Holland are powered by solar energy, and the drive to create sustainable solutions that generate a more sustainable environment is entrenched in our DNA," says Jules.

And while Verosol's extensive product range and business operations are underpinned by the innate commitment to reducing environmental impact, while creating better indoor environments, the brand ensures that architects and designers don't have to compromise on performance, nor their design vision.

"Regardless of colour, our metallised products offer the same performance, energy savings, reduction of CO2 - and reduction of costs," explains Jules. "We have been innovating it for years, and we're very proud of that achievement." He adds that all Verosol products are made in Australia which enables the brand to conduct thorough quality control. "We spend more time checking our blinds than making them," he says with a smile. "We take great pride in having extremely low error rates, and take ensuring that our products not only look but work exceptionally well incredibly seriously."



Automated shade & the pathways to safety, sustainability, and style

Verosol, a nominee in the Smart Building Ideas at the 2022 Sustainability Awards, explains why automation is the way of the future when it comes to windows and blinds.

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

Things that used to be manual – like dishwashing, changing television channels, opening garage doors, and even flying a plane or driving a car – are now either fully automated or heading in that direction.

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. Together, they point to the conclusion that many types of manual blinds and curtains are on the way out.

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. Here, the good news is that this list is a long one. In terms of indoor applications, it includes 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 these 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 understood during the early planning stages; and questions around flexibility and things like group control need to be answered.

FABRIC CHOICE & SUSTAINABILITY

Fabric choice is also critical. While the construction sector's contribution to carbon emissions and climate change is well

understand 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.

[CLICK HERE](#) to stream "Automated Shade – the Why and the How", the CPD Live session presented by Indesign Media and sponsored by Verosol.

