Vertilux is Australia’s largest privately owned manufacturer of blinds and window coverings. As such, we pride ourselves on producing only the best products in the very best ways possible. Indeed, we were one of the first in the world to manufacture Spring Assist and Multilink roller blind systems. Vertilux holds a number of patents for cutting edge roller blind systems and is seen to set the benchmark for the window coverings industry.

Given our heritage of innovation and culture of constant improvement we see it is a natural progression to show leadership in the environmental space. This document sets out our current environmental initiatives and working areas.

The way we see it, there are three key ways Vertilux, as a company, can reduce our impact on the environment:

The first is by making better blinds. A quality blind can manage heat and light coming into a building, therefore reducing reliance on heating and air-conditioning, reducing electricity consumption and minimizing greenhouse emissions. So, the more effective the blinds we make, the better the impact of our product. Innovative products such as our Fully Enclosed Kassett System blocks 100% of ambient light and heat. Other systems can be timed so that blinds open and close as the sun moves across the sky, maximizing efficiency.

The second is by making blinds from better materials. To this end, our Greenvision™ fabrics are PVC-free, low-VOC, ecospecifier assessed and can also assist in the achievement of points as set by the Green Building Council of Australia.

The third is how we make our blinds. Every process in our factory is governed by our Waste Not Want Not factory principles, which keep material use and garbage creation to a minimum.

Our environmental impact - including waste, water and energy usage - has been independently assessed. Our suppliers are assessed based on our Sustainable Procurement Policy and chosen accordingly. But that’s not all.

Our Sustainability Action Plan ensures that doing better by the environment is embedded in our business and that all our environmental initiatives are questioned, assessed, extended and improved year on year.

Our GreenvisionTM fabrics are PVC-free, low in VOCs and include our popular Trevira CS fabrics. In addition to achieving the highest possible eco rating assessment from ecospecifier, Vertilux GreenvisionTM fabrics also meet the requirements set out by the international Oeko-Tex 100 certification. They may also assist in achieving points towards the green star ratings from the Green Building Council of Australia.

VOCs (Volatile Organic Compounds) are emitted as gases from certain solids or liquids. These include a variety of chemicals that may have short or long term adverse health effects.

PVC, or Polyvinyl Chloride, is a material whose manufacture creates considerable dioxins one of the deadliest man made toxins and one which is cumulative through the food chain. PVC is also neither biodegradable nor degradable, retaining its form for decades in landfill. Substances called phthalates, which may cause cancer, kidney and reproductive system damage, are added to PVC to make it flexible.
Vertilux is a member of the Green Building Council of Australia. The Green Building Council is responsible for the Green Star™ rating system, a national environmental rating system that evaluates the environmental design and construction of buildings.

Green Star™, developed by the Green Building Council of Australia, is an effective design and operational assessment tool for commercial building. The Green Star™ program has a number of assessments and ratings to monitor the energy efficiency and environmental impact of a building. All of the Vertilux Greenvision™ fabrics meet specific Green Star™ criteria and can assist in achieving Green Star™ credit points for a building. These include:

**Green Star™ – Office Interiors v1.1**

Indoor Environment Quality
IEQ-4 Note 1: Daylight Glare Control: Blinds / Screens:
The use of appropriate Eloquent, Madison, Zing, Euroscreen, Euroscreen Metallised, EuroBloc, Metalo Metallised, Techno-Light, Euroview and Chanell fabrics can contribute to the achievement of one credit point.

**Green Star™ – Office Design v2**

Indoor Environment Quality
IEQ-5 Note 1: Daylight Glare Control: Blinds / Screens:
The use of appropriate Eloquent, Madison, Zing, Euroscreen, Euroscreen Metallised, EuroBloc, Metalo Metallised, Techno-Light, Euroview and Chanell fabrics can contribute to the achievement of one credit point.

**Green Star™ – Office Design v3**

Indoor Environment Quality
IEQ-5 Note 1: Daylight Glare Control: Blinds / Screens:
The use of appropriate Eloquent, Madison, Zing, Euroscreen, Euroscreen Metallised, EuroBloc, Metalo Metallised, Techno-Light, Euroview and Chanell fabrics can contribute to reduced energy consumption.

Energy
Ene-1: Greenhouse Gas Emissions
The use of appropriate Eloquent, Madison, Zing,
EcoSpecIfIer
Our Greenvision fabric range is ecospecifier assessed. ecospecifier is a knowledgebase of eco-products and materials. To be listed a product must satisfy that it has minimal key environmental and health impacts. It must also meet the assessment criteria of current Green Building Schemes. Read more about ecospecifier at ecospecifier.org
Our factory is managed by our Waste Not Want Not principles. In practice this means many initiatives, all designed to reduce material, energy and water inputs and waste outputs. For example:

Metal rods are a key component in Vertilux roller blinds. By ordering these in lengths and custom cutting to size offcuts are kept to a minimum. What does go to waste is recycled.

Materials are a key component in all our blinds. They are delivered on cardboard tubes, much like aluminium foil or glad wrap, only considerably larger. Rather than dispose of these cardboard tubes, we use them to package and despatch completed blinds. They make strong packaging, which reduces damage to blinds in delivery. Reusing materials in this way also reduces waste. We also offer a pickup and reuse or recycle service on these tubes for our larger orders of blinds.

Our factory itself is heated by gas powered hot water running in tubes through the floor, removing the need for energy hungry central heating systems. The same water is then circulated for use in kitchen areas. Our manufacturing process is water-free.

We recycle all paper, metal offcuts, printer cartridges and packaging received from suppliers across our operation. We use recycled paper in our printed order forms and marketing material wherever possible.

Through these and other initiatives, we have been able to reduce waste from four to one dumpsters a month. Water and energy usage have also been lowered significantly.

A number of Vertilux products are reusable and can be recycled. Blind systems for example, are designed for disassembly with all of the components able to be stripped from the blind for other uses. Our 100% polyester Trevira CS fabrics are not blended with any other class of chemical, allowing the fabrics to be successfully recycled.
The Vertilux Trevira CS fabric range (Euroscreen, Euroscreen Metallised, EuroBloc, Metalo Metallised, Techno-Light, Euroview and Chanell) of polyester window coverings is recognised as being very low VOC.

The Vertilux Trevira CS fabric range is:
> free of any chemical coatings
> finished using a special heating process, no chemicals are applied, giving each fabric its own unique quality and feel
> made with yarn that is specifically constructed for use in roller blinds
> PVC free, no halogen

Vertilux Euroscren, Euroscreen Metallised, Metalo Metallised and Chanell Trevira CS fabrics are twice the weight of other Trevira CS fabrics in the marketplace, respectively. The benefit of this specifically constructed fabric property is that it hangs consistently flat and stable, compared to a lighter weighted fabric, essential for use on large window systems.

The construction of the Vertilux Trevira CS fabric, with its weight and density, gives it exceptional solar properties and makes it perfectly equipped for the purpose of roller blinds, panel glides and roman blind systems. A large range of colours in all of the Vertilux Trevira CS ranges achieves excellent solar properties for both metallised and non-metallised fabrics.

Energy efficiency: Trevira CS fabrics reduce heat and glare internally in summer and provide heat insulation in winter. This allows for a significant reduction in the need for air-conditioning, and reduces electricity consumption and greenhouse gases.

VOC emissions: This is a very low VOC product (when this product is used in the typical manner in an office building the resulting airborne total volatile organic compound concentration can be expected to be less than 0.5 mg/m³ as specified by Green Building Council of Australia Green Star Office Interiors IEQ-11.). The product is 100% polyester with no use of PVC.

Green Star™ Criteria: A large selection of fabrics and colours within the Trevira CS range meet Green Star™ requirements for daylight glare control (these must have a visual light transmittance (Vlt/Tv) of less than 10%). Please contact your Vertilux sales representative for more information on these.

As there is no PVC used in the Trevira CS range, the fabrics meet any requirements for PVC minimisation in the design and fit-out of a building.

Trevira CS fabrics can effectively contribute to the energy efficiency and improvements of a building.

Reusability: This product has been designed for disassembly with all components able to be stripped from the blind. The product is reusable and recyclable. Vertilux encourages the reuse of the fabrics for things such as car interior protectors and outdoor furniture covers.

ELOQUENT ROOM DARKENING AND ZING ROOM DARKENING

The Eloquent Room Darkening and Zing Room Darkening fabric ranges are made from 100% polyester with acrylic backing.

Energy efficiency: The Eloquent Room Darkening and Zing Room Darkening fabric ranges effectively
contribute to a reduction in heat and glare internally and assist in reducing the need for air conditioning. As a result these fabrics significantly reduce electricity consumption and greenhouse gas emissions.

VOC emissions: This is a very low VOC product (when this product is used in the typical manner in an office building the resulting airborne total volatile organic compound concentration can be expected to be less than 0.5 mg/m³ as specified by Green Building Council of Australia Green Star Office Interiors IEQ-11.). The product is 100% polyester with no use of PVC.

Green Star™ Criteria: All of the fabrics within the Eloquent Room Darkening and Zing Room Darkening ranges meet Green Star™ requirements for daylight glare control. These requirements state the product must have a visual light transmittance (Vlt/Tv) of less than 10%. All of the fabrics within these ranges have a 0% Vlt.

As there is no PVC used in the Eloquent Room Darkening and Zing ranges, the fabrics meet any requirements for PVC minimisation in design and fit-out of a building.

Eloquent Room Darkening and Zing Room Darkening fabrics can effectively contribute to the energy efficiency and improvements of a building.

Reusability: This product range is reusable. Vertilux encourages its customers to reuse the fabrics for things such as car interior protectors and outdoor furniture covers.

ELOQUENT TRANSLUCENT AND MADISON ROOM

The Eloquent Translucent and Madison Room Darkening fabric ranges are made from 100% polyester.

Energy efficiency: The Eloquent Translucent and Madison Room Darkening fabric ranges effectively contribute to a reduction in heat and glare internally and assist in reducing the need for air conditioning. As a result these fabrics significantly reduce electricity consumption and greenhouse gas emissions.

VOC emissions: This is a very low VOC product (when this product is used in the typical manner in an office building the resulting airborne total volatile organic compound concentration can be expected to be less than 0.5 mg/m³ as specified by Green Building Council of Australia Green Star Office Interiors IEQ-11.). The product is 100% polyester with no use of PVC.

Green Star™ Criteria: All of the Madison Room Darkening range and a selection of the Eloquent Translucent range meet Green Star™ requirements for daylight glare control. These requirements state the product must have a visual light transmittance (Vlt/Tv) of less than 10%. All of the Madison Room Darkening fabrics have a 0% Vlt.

As there is no PVC used in the Eloquent Translucent and Madison Room Darkening ranges, the fabrics meet any requirements for PVC minimisation in design and fit-out of a building.

Eloquent Translucent and Madison Room Darkening fabrics can effectively contribute to the energy efficiency and improvements of a building.

Reusability: This product range is reusable. Vertilux encourages its customers to reuse the fabrics for things such as car interior protectors and outdoor furniture covers.
CONTINUED IMPROVEMENT

Our Sustainability Action Plan ensures that doing better by the environment is embedded in our business and that all our environmental initiatives are questioned, assessed, extended and improved year on year.

It includes, among many other things, measures to improve benchmarking and procurement, reduce transportation, use non-toxic cleaning materials exclusively, recycle unused office materials, decrease power usage and minimize our carbon impact through purchase of Greenpower.

Our Sustainability Action Plan is commercial in confidence but can be supplied for the purposes of tender applications where establishment of a clear environmental path, policy or credentials is a requirement.

GUIDE TO SOLAR OPTICAL PROPERTIES


Shading Coefficient (SC)
This is the ratio of solar heat transmitted through the blind fabric and glass into the room compared to that of the glass alone.

The shading coefficient (SC) was determined for the fabric used with a single light of 3mm clear glass, a single light of 6mm clear glass and a 6mm heat absorbing (HA) glass.

Solar Transmission (Ts)
This is a measure of the percentage of solar energy transmitted through the blind fabric.

A lower Ts value indicates less heat is transmitted through the blind and into the room.

Solar Reflection (Rs)
This is the measure of the percentage of solar energy heat which is reflected by the blind fabric. A higher Rs value indicates the blind is better able to reflect heat back towards the outside environment.

As Solar Absorption This is a measure of the percentage of the solar energy absorbed by the blind fabric.

A higher As value indicates the blind fabric absorbs more heat.

Visible Light Transmission (Tv)
This is a measure of the percentage of visible light transmitted through the blind fabric.

A lower Tv value indicates less light is transmitted through the blind and into the room.

Openness Factor (O-F)
Measures the proportion of holes in a woven fabric. The openness factor can vary slightly from colour to colour.

G Value
Represents the percentage of the incident solar radiation (total energy) that passes through a glazing system.

The G-Value was determined for the fabric used with a single light of 3mm clear glass, a single light of 6mm clear glass and a 6mm heat absorbing (HA) glass.