

SUSTAINABLE SOLAR SHADING

SELECTING THE RIGHT SOLAR SHADING CAN REDUCE ENERGY COSTS BY UP TO 16%

Rising energy costs and the need to reduce carbon footprints has made energy efficiency a top priority. Solar shading is a cost-effective solution to tackle overheating in high-performing buildings.

Solar shading significantly reduces the need for mechanical air conditioning. Aircon does not have an effect on radiant heat exchange and can also negatively impact on indoor air quality. Using solar shading and less of air conditioning saves energy and saves you money.

KEY BENEFITS

- Reduced heat gain in summer.
- Reduced heat loss in winter.
- Controls daylight.
- Controls glare.
- Improved indoor air quality.
- Reduced energy costs (heating, cooling and lighting).
- Building compliance.
- Privacy and security.
- Maintaining views to the outside.
- Allows more glazing to be used.
- Reduced emissions.
- High colour rendering index.
- Improved acoustics.
- Improved glass performance (improve don't replace).
- Improved thermal, visual and acoustic comfort helps to improve overall well-being and productivity of staff.

THE BENEFITS OF SOLAR SHADING IN COMMERCIAL BUILDINGS

S SOLAR GAIN & OVERHEATING

Shading prevents overheating. Solar gain (G TOT) with double glazed windows can be reduced from 0.85 to 0.24 by using shading.

HEAT LOSS & INSULATION

Glazing is a weak point in a building's thermal performance and a major source of heat loss. Shading insulates a building's glazed areas. A single glazed window can have its insulation improved by over 50%.

H HVAC REDUCTION

Building modelling proves substantial HVAC savings of up to 16% for highly-glazed office space using internal shading. With optimal integration the need for airconditioning can be reduced. Shading systems are beneficial all year round as they reduce the need for cooling when hot and reduce the need for heating when cold.

A ARTIFICIAL LIGHTING

Artificial lighting can be reduced by controlling and optimising the amount of daylight with shading. People naturally prefer daylight to other sources of illumination.

CAPITAL SAVING

Solar shading is a self-financing climate control system. An analysis of HVAC systems in three climate zones - Stockholm, Amsterdam and Madrid showed how solar shading paid for itself in less than a year.

G GLARE CONTROL

Light and glare is effectively controlled by shading. Shading regulates luminance according to varying visual comfort needs.

COLOUR RENDERING

Artificial light can cause inadequate colour rendition with detrimental effects in terms of stress levels and productivity.

P PRODUCTIVITY

Work performance diminishes below 19-22°C and above 23-24°C. Shading systems can contribute to superior work performance, increased concentration and well-being in the workplace.

INDOOR COMFORT

Almost 90% of our time is spent indoors. Thermal, visual and acoustic comfort aids emotional, attitudinal and cognitive response in an individual.

D DAYLIGHT HARVESTING

Shading allows harvesting of natural light, which improves indoor comfort, occupants well-being and reduces the use of artificial lighting, saving money.

DAYLIGHT EXPOSURE

Insufficient daylight affects task performance and can cause visual and physiological disorders e.g. headaches, eyestrain, depression and reduced vitality.

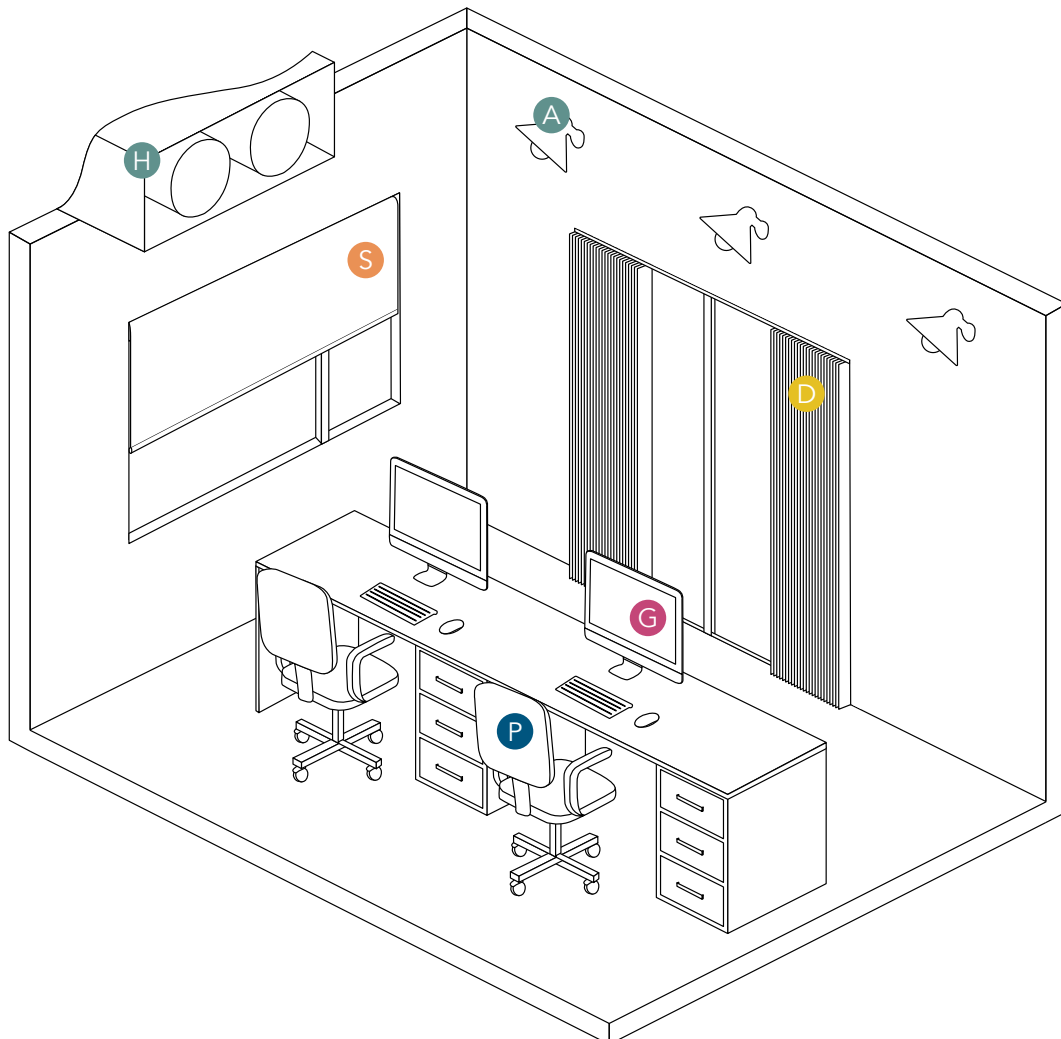
Office workers exposed to daylight and contact with the outside world have been found to sleep an average of 46 minutes more every night compared to those in offices with no natural light.

PRIVACY

Shading offers two way privacy and a functional/visual divider in buildings.

BENEFITS OF AUTOMATION

Optimal, dynamic performance delivered by motorised window shading significantly reduces the risk of overheating.



ENERGY SAVING FABRICS

SAVING YOU MONEY

All our fabrics have been assessed for their ability to reduce thermal loss when used in conjunction with typical glazing systems.

GOOD

Energy Rating 3 (ER3).
Fabrics that fall into this category perform to a reasonable level and should be the minimum products that customers select to make a tangible difference to thermal loss. Savings of up to 11% per year can be made with these fabrics.

ER3 FABRICS

Voile

BETTER

Energy Rating 2 (ER2).
Fabrics that fall into this category perform better and these fabrics are classed as effective in the reduction of thermal loss. Savings of up to 12% per year can be achieved.

ER2 FABRICS

Carnival
Dapple SPC®+
Daybreak
Guardian®
Oslo 1%
Perspective 1%
Perspective 3%
Perspective 3% White Back
Perspective 5%
Perspective Aluview 3%
Perspective Pureview® 3%
Vermont

BEST

Energy Rating 1 (ER1).
These fabrics offer the best performance and are the most efficient for reducing thermal loss when used in tandem with glazing systems. Savings of up to 15% per year can be achieved with these fabrics.

ER1 FABRICS

Carnival Blackout
Ex-Lite®
Halo FR
Luna FR
Marble
Matrix
Perspective Blackout
Reverie
Romany
Sunset

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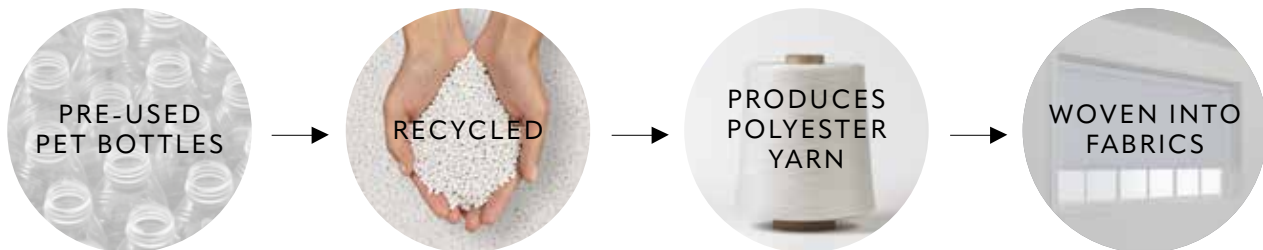
HELPING THE ENVIRONMENT

Sustainability is at the heart of everything we do, whether in our fabrics, our hardware systems, and all of our production processes. This includes introducing recycled and reclaimed materials throughout our product ranges.



4600 BOTTLES MAKE A 20M ROLL OF FABRIC

Carnival and Carnival Blackout are woven entirely from post-consumer plastic bottles, 1% of which is ocean waste. The aim of recycled polyester is to reduce, re-use and recycle, creating sustainable fabrics that contribute to a greener way of living and caring for our planet.



RECYCLED AND RECLAIMED MATERIALS

These are used wherever possible within the production of our fabric and systems, and is a position we will continue to develop.



GREENSHIELD

Our Greenshield fabrics contain no Volatile Organic Compounds (VOCs) or hazardous substances that could be released into the environment in potentially damaging quantities.



HALOGEN FREE

Flame retardant coatings typically contain additives containing halogens. However, Louvolite's Carnival ranges have been certified as halogen free.



OEKO-TEX®

Oeko-Tex® STeP is a globally recognised certification that holds companies to a high standard of sustainability and environmental responsibility.

RESPONSIBLE PRODUCTION FOR PEOPLE AND PLANET

Louvolite fabric is certified Level 3 OEKO-TEX® STeP,
the highest standards for our customers complete confidence.



Environmental and chemical management



Social responsibility and fair working conditions



Safety and protection for workers



Efficiency and continuous improvement of production
processes and efficient use of resources



Louvolite fabric is certified Level 3



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