

# A guide to Solar Shading Solutions



# Faber Solar Shading Solutions

## The perfect finish For every project

In 1900 Faber began the production of handmade window blinds. Now, over 100 years later, the company is internationally recognised for fabricating outstanding products for commercial premises. Now a part of the Hunter Douglas Group, Faber aims to be the partner of choice when considering solar shading solutions for projects of any size. The UK projects team has decades of manufacturing, specification, technical support and on site project management experience to assist you from concept, through to practical completion.

The Faber projects team are on hand to advise how a combination of internal and external shading solutions, when coupled with automated controls can reduce running costs of a building and integrate with a natural lighting, heating and ventilation strategy.

We look forward to working with you.





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## ROLLER SHADES

Roller shades are extremely adaptable and particularly suitable for commercial applications where there is a need to control solar glare and light transmission through the window. A wide programme of high performance and screen fabrics enables this style of blind to provide an efficient, cost effective form of light control.

A range of modular roller shade systems with various control options provide a flexible solution to suit most installations. These include chain, crank and motorised operation. Fascia, cassette and side channels are also available to screen the blind's hardware from view or to increase the overall light stop of the blind.



# Roller Shades, optimum control of glare and light transmission

Motorised roller shades are an effective solution to large windows. Powered by tubular electric motors that are hidden inside the hardware, such blinds can be made up to 4m square. Multiple blinds can be coupled together to be driven from one motor to keep unit costs competitive.

Diverse electrical control systems can be supplied ranging from low voltage single blind installations to fully automated options that can also be coupled into an existing building management system.



From dim-out to blackout,  
the total solution

## BLACKOUT AND ROOFLIGHT BLINDS

Faber blackout systems are designed specifically to achieve light exclusion. From complete blackout to room darkening shades Faber's systems are a perfect solution for photographic laboratories, conference facilities and audio visual training rooms.

Faber offer an efficient and flexible blackout blind system for internal use, that provides total light exclusion, which can be used in vertical, pitched or horizontal windows. The system is available with a variety of options to suit all applications.

Faber rooflight blinds use a unique motorised FTS system which maintains the dimensional stability and tension of the fabric, even in the largest installation.

Faber Blackout Blinds can be used for both large and small windows, but the system has been specifically designed for large areas of glazing with each blind capable of covering an area up to 6000 x 6000 mm.

Blinds can be coupled together to increase their overall coverage and operated by a single motor or manual gearbox. Coupled motorised blinds can be made to cover an area up to 75 m<sup>2</sup> and being controlled by one motor reduces the price of each shade.

Motorised operation is available for high level or inaccessible installations or where the blinds need to be grouped and centrally controlled.





## VENETIAN BLINDS

Faber venetian blinds offer the best light control of any type of blind, ranging from near darkness when closed to almost full light when completely open. This level of control from individual blinds provides excellent solar protection and offers a high degree of comfort to the building's occupants.

In addition to the standard 16, 25, 35 & 50mm blinds, specialist models are available for use between glazing, tilt & turn windows, computer and audio visual environments.

Flexible control systems ensure that venetian blinds can be installed to suit the specific requirements of each particular application. Manual dual controls with individual operation for the tilt and raise functions are widely specified, but mono control options are also available on most models and include chain, rod and motor operation.

Diverse electrical control systems can be supplied ranging from low voltage single blind installations to fully automated options that can also be coupled into an existing building management system.

Accessories such as light control clips (for 25mm slats), or alternatively a combination of solid and perforated slats can be supplied to create a split view when the blind is tilted. This provides protection from the sun at high level while retaining the outside view at the bottom, or privacy at low level with light entering from above.

The slat width, colour and solar performance characteristics are important factors when deciding on a venetian blind as a solar shading solution. Faber offer a comprehensive gloss and matt colour range in solid and perforated slats.



Mid pane or between glazing venetian blinds have been introduced to eliminate blind cleaning and maintenance. This can be a major factor in the fight to improve hygiene in hospitals. This type of venetian blind is also very popular in glazed partitions, often used in modern offices where trends are moving away from open layouts. The blinds offer privacy but can be tilted to provide an open plan effect.

# Venetian Blinds, Totally flexible light control





## VERTICAL BLINDS

Vertical blinds are one of the most versatile types of sunscreening available, combining the aesthetic qualities of fabric blinds with the efficiency of louvres. The blinds offer a practical solution to the problems of heat gain and solar glare and can meet the requirements of the modern commercial environment.

The amount of light entering a room through the window is precisely controlled by the louvres, which can be rotated to any angle. The louvres can also be drawn back to one or both sides of the window, or stacked neatly in the centre when the blind is fully open.

In addition to the standard systems for rectangular windows, models are available with horizontally curved head rails for bay windows, vertically curved rails for special shaped windows and sloping rails for openings where the top is inclined.

Occupier comfort and safety are now standard requirements when considering solar shading solutions for commercial buildings. The louvres are available in 89 & 127mm widths and include a range of fabrics that offer:

- Flame retardancy.
- Antibacterial qualities for healthcare environments
- Screen fabrics to filter glare performance
- Coated fabrics to reflect the heat.
- Dim out fabrics to exclude the majority of light.
- Rigid vinyl or aluminium louvres in both solid and perforated finishes.



# Vertical Blinds, functional elegance

Vertical blinds are particularly suitable for areas with wide window spans. Flexible control systems are available to suit most installations and include manual operation with a combination of options for tilting/drawing the louvres, mono control by means of a continuous loop chain or a simple traversing wand.

Electrical systems are also available using mains or low voltage motors. Blinds can be individually operated or group controlled, activated by means of manual switching or remote control.

# Pleated Blinds, soft and stylish control



## PLEATED BLINDS

In commercial buildings with large glass areas in both windows and roofs it is essential that light and heat can be controlled to create an ideal working environment. Pleated & Duette cellular blinds are the perfect solution for sloped, triangular and trapezoidal shaped openings with complex window and roof designs where other systems may not be suitable. It is this ability to shade awkward shaped windows and fit unusual installations that has helped to create a niche in the commercial market for this soft style of blind.

The pleated fabrics offer a soft and unobtrusive appearance. They use a microscopically thin rear coating of aluminium which gives them excellent sunscreening and light regulating properties. The result is a range of fabrics with varying degrees of transparency. The more transparent and semi transparent offer high reflection values to reduce heat and glare and have the benefit of retaining the view outside, whereas the non-transparent fabrics provide superior levels of solar protection creating an ideal environment for concentrated computer use.

There is an extensive range of models with special solutions for tensioned blinds to suit almost any window shape. A range of flexible control systems is offered including manual and motorisation. Electric operation using low voltage 24v motors can be controlled by a wall switch, remote control or automated systems with solar detectors and timers for controlling blinds in groups or centrally.





## ROLLER BLINDS

Keeping the sun's heat away from the external glazed window area is the most efficient way to reduce solar gain within the building. External roller blind systems do exactly this by shielding the entire glazed surface of the window from the sun. Made using the finest quality components and strong and resilient fibreglass fabrics, they allow the occupants to see out through the transparent screen, retaining visual contact with the outside whilst preventing heat and too much light from entering the building. This twofold benefit makes the building far more efficient by reducing the need for cooling of the air internally and improving the working environment by significantly reducing glare.

External roller blinds are normally motorised and can become an integral part of the building with the potential for them to be concealed within the building structure and therefore practically invisible when rolled up. They can easily be controlled by the Building Management System allowing them to be automatically deployed when required for thermal or visual reasons or retracted during high winds or for cleaning purposes.





External Roller Blinds,  
keeping the heat out

# External Venetian, THE optimum shading solution



## VENETIAN BLINDS

The external venetian blind offers the very best of all solutions, providing maximum flexibility for controlling heat gain, visual comfort and glare for the occupants of a building.

Available with slat widths of 50, 60, 80, 88 and 100mm and in a range of 20 colours, the standard range of systems that Faber offer is extensive and meets the requirements of the majority of projects. However where the project demands, Faber's experienced project team have a range of options available to them, including cable or side guiding systems to help meet the technical and aesthetic requirements of most projects.

The blinds are typically motorised so that they may be raised, lowered and adjusted as part of the Building Management System to ensure maximum efficiency is achieved whilst ensuring the best comfort with minimal glare and heat gain for the occupants of the building.





## AWNINGS

The primary function of exterior window shading is to create both thermal and visual comfort for the occupant of the building.

Managing thermal comfort is a key factor in achieving good indoor environmental quality and a sense of well being for occupants. As more and more buildings are constructed with substantial areas of glazing, developing strategies that enhance natural daylight, reduce glare and regulate thermal gain are essential in managing thermal comfort and save energy.

The use of external awnings is an ideal way to provide shade to an external area as well as preventing solar gain by protecting the glazed area being exposed to direct UV-radiation.

### Folding Arm Awnings

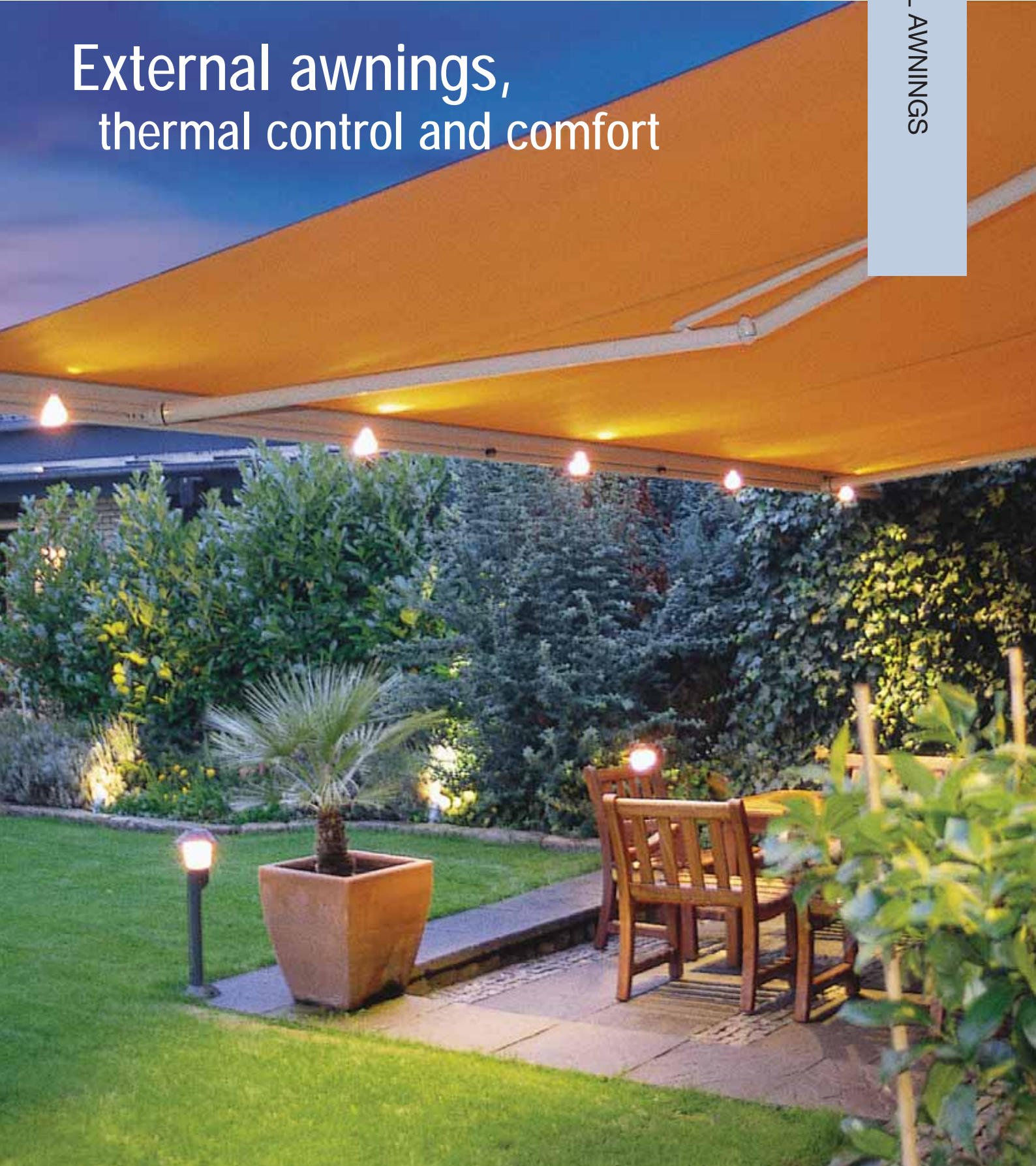
School play areas, shop windows, patios and garden terraces are the ideal places where folding arm awnings can be successfully used. Available in a wide range of colours, fabric patterns and sizes, folding arm awnings have become very popular in both the domestic and commercial markets.

### Drop arm awnings

A simple, but very effective solar shading solution, the drop down awning looks very attractive on multi-storey office developments, where its distinctive design will enhance the aesthetics of the building.



# External awnings, thermal control and comfort



# Brise Soleil, architectural style and function



## BRISE SOLEIL

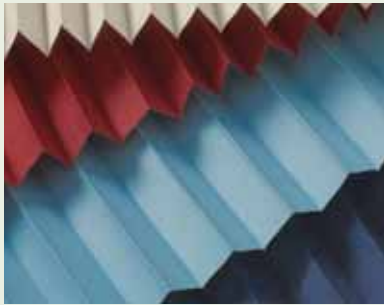
Our Brise Soleil range blends style and functionality, bringing a distinct look to a building's exterior while providing shade and comfort to the people inside. Our high-quality materials produce dependable louvre systems, which can be projected from the façade, parallel to the façade or otherwise designed in relation to the angle of the sun. Faber Brise Soleil systems offer excellent design, functionality and comfort:

- Performance - Optimal shading performance and easy to adapt to specific project requirements.
- Economic value - Highly durable products, designed for fast and efficient installation.
- Green characteristics - Our systems increase personal comfort level and decrease energy consumption.
- Aesthetic product - Colours, shapes and details offer unparalleled design freedom.
- Ease of use - All louvre systems require very little maintenance and the adjustable system can be fully controlled by the building management system.

All panel systems are based on roll formed or extruded single skin panels and are fully integrated and available with a variety of support structures. Options include both horizontal projected and vertically mounted plus a variety of different panel sizes and pitches that ensures an optimal choice can always be found.



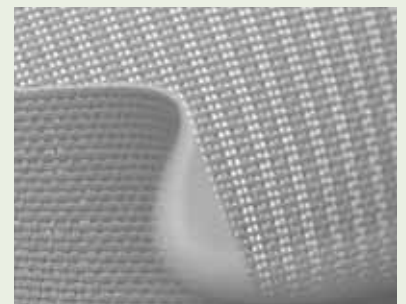
COLOURS & FABRICS



A wide choice of colour palettes, designs and fabrics are available across the complete range of Faber roller blinds and solar shading solutions.

Bold colours, eye catching designs and inspirational weave patterns can add a whole new dimension to a project at fit out stage.

For help and advice on how to create a functional, clean and light environment for your interior, please contact one of our project team for sample swatches and further information.



## ARCHITECTURAL AND SPECIFICATION SERVICES



In the last 50 years, we've been fortunate enough to help turn countless innovative sketches into innovative buildings.

Architects, designers, investors, contractors and real estate owners from around the world have taken advantage of Faber's unmatched product development, service and support. Chances are, you've seen more of Faber than you think.

With major operation centres in Europe, North America, Latin America, Asia and Australia, we've contributed to thousands of high-profile projects, from retail and commercial facilities to major transit centres and government buildings. Not only are the world's architects and designers our partners, they're our inspiration.

### ARCHITECTURAL

We support our business partners with a wide range of technical consulting and support services for architects, developers, installers and, last but not least, owners and occupants.

We assist architects and developers with recommendations regarding materials, shapes and dimensions, colours and finishes. We also help creating design proposals, building simulations and energy calculations.

Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site. For the owners and occupants, we provide comfort and energy savings, which in turn enhances real estate value.

### CONTRACTOR

Faber Blinds are a manufacturer of roller blind systems and being part of the Hunter Douglas Group, is also able to offer an unequalled range of both internal and external solar shading solutions to the commercial market.

As well as offering finished products, Faber Blinds also offer a measure, supply and install service on all of their systems to Main Contractors and End Users. Having many years experience within the commercial sector and being fully CHAS registered, you can rely on a professional service at all times.



## CONTROL SYSTEMS

### TAKE CONTROL

Personal control is often considered an essential element of comfort. Yet, it often collides with the efficiency that an automatic control promises. The balance can be found by offering a degree of personal choice during office hours, while leaving the automatic control fully in command the rest of the time. Whether you desire a basic system, related to the sunpath and weather conditions or an intelligent system, which allows full personal light and heat control that takes into account the overall building management system, then Faber has the solution for you.

### CONTROL SYSTEMS

Faber Basic, Advanced, and Intelligent Control Systems allow powerful and efficient operation of Faber Sun Control Systems. Personal control is often an important factor when specifying solar control products, so systems can be combined to operate via switches, desktop, or palmtop.

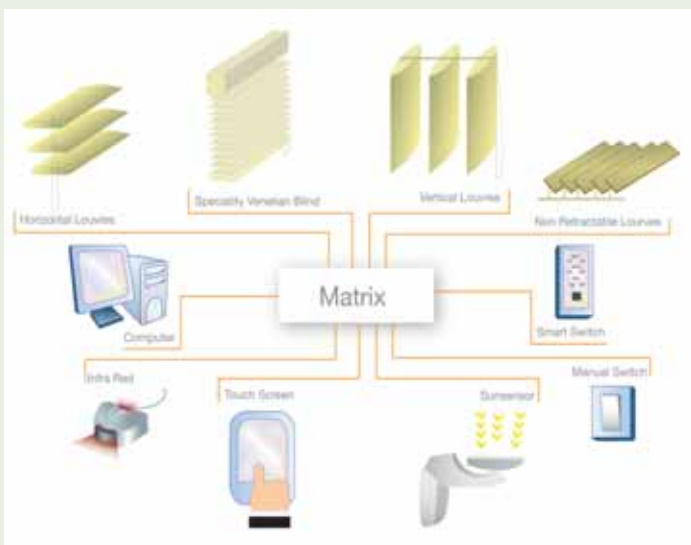
### BASIC CONTROL SYSTEMS

Basic control systems respond to an on-off switch. This switch can be a fixed or a remote controlled unit. The adjustable Sun Control System can be positioned in any angle and therefore this is the optimum personal controllable system.



### ADVANCED CONTROL SYSTEMS

Advanced control systems respond to a range of controls, including switches and timers. This system supports a limited amount of feedback options like sun and wind sensors in an optimal shading and light regulation.

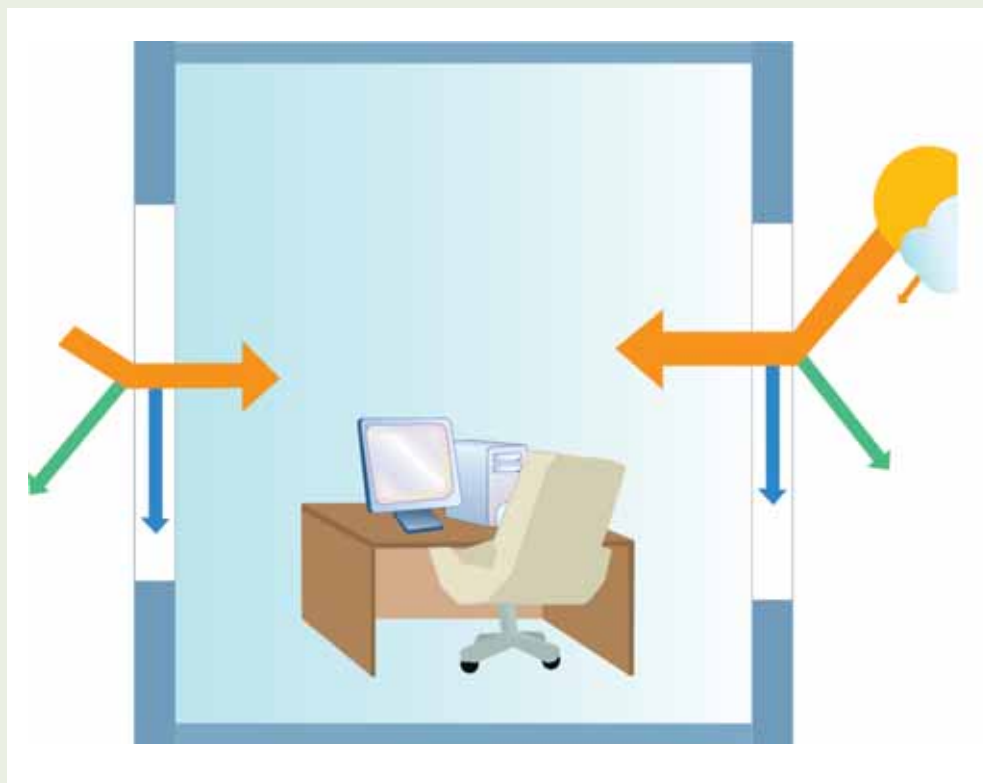


### INTELLIGENT SYSTEMS

Intelligent control systems with programmable software. This allows a high degree of freedom in operating the Sun Control System.

Connected to the building management system, cooling and heating and even the lighting levels can be controlled. All levels can manually be overruled and an overall reset can be programmed on pre-set moments of the day.





## ENVIRONMENTAL CONSIDERATIONS

In several reports, strong and convincing arguments have been made that better thermal insulation of buildings will increase energy efficiency and contribute considerably to the goals of the Kyoto Protocol. Among these measures, improved glazing has been repeatedly recommended, along with more insulation. Glazing, however, remains a static element in the building's envelope, while the outdoor climate conditions alter with the seasons and can vary considerably in the course of a day. Solar shading devices, preferably controlled, mobile and automated, will make the solar transmittance through the windows dynamic and adaptable. In that way, both the cooling energy demand in summer and the heating demand in winter can be substantially reduced.

## IMPROVING INDOOR ENVIRONMENTAL QUALITY

Green Buildings are not only about recycled content or reducing energy. Creating a pleasant and attractive environment and minimising environmental impact is a challenge faced by architects. Indoor environmental quality (IEQ) is an important aspect of such an environment. The overall well-being of a buildings occupants and their associated productivity contributes to the cost benefit of sustainable design. Furthermore workspaces which are comfortable, naturally lit and allow occupant's access to the outdoors can reduce turnover and costly absenteeism.

Faber products and solutions are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable. Our engineering and production processes minimise embodied environmental impact while meeting the highest standards for commercial, hospitality, industrial, institutional, and commercial applications.



CHAS is the Contractors Health and Safety Assessment Scheme. Managed by London Borough of Merton it assesses the Health and Safety element of pre-qualification. It ensures that we comply to the Health and Safety at Work Act 1974 and the Construction (Design and Management) Regulations. As we are re-accessed every two years it guarantees continuing compliance with current Health and Safety standards.



Registered to provide RIBA approved CPD presentations and information.



Faber have entries within NBS Plus.

NBS Plus is a library of manufacturers' product information, linked to specific clauses within the NBS Plus specification software. All product information has been pre-written specifically for NBS Plus clauses and is updated throughout the year to ensure technical data is accurate and up to date; guidance for each clause also appears alongside product data.



Faber operate an environmental management system, certified by BSI to ISO 14001, which identifies and manages the control of environmental aspects throughout the company, including the control of waste, prevention of pollution and compliance with applicable legislation.



BSI is the National Standards Body of the UK, with a globally recognised reputation for independence, integrity and innovation in the production of standards that promote best practice.



The BBSA represents member companies that manufacture and supply interior and exterior blinds, awnings, security grilles and shutters and associated motor and control systems.



## HUNTER DOUGLAS

Faber is part of the Hunter Douglas Group. HUNTER DOUGLAS is a publicly traded company with activities in more than 100 countries with over 160 companies. The origin of our company goes back to 1919, in Düsseldorf, Germany. Throughout our history, we have introduced innovations that have shaped the industry, from the invention of the continuous aluminium caster, to the creation of the first aluminium Venetian Blinds, to the development of the latest high-quality building products. Today we employ 17,000 people in our companies with major operation centres in Europe, North America, Latin America, Asia and Australia.



Roller Shades

Black Out Blinds

Rooflight Blinds

Internal Venetian Blinds



Vertical Blinds

Pleated Blinds

External Roller Blinds



External Venetian Blinds

Awnings

Brise Soleil

