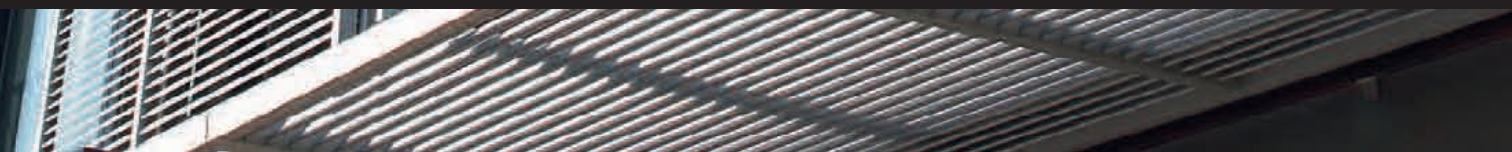




HunterDouglas

| SUN CONTROL



HunterDouglas Sun Control Systems

Innovative Products

Make Innovative Projects

Hunter Douglas is the world market leader in daylight regulation and solar heat control solutions with window covering and exterior sun control.

We're dedicated to continually improving, broadening and enhancing our architectural product portfolio by developing innovative proprietary products. We offer an extensive range of interior and exterior applications, including Ceiling Systems, Façade Systems and Sun Control Systems.

Above : Stadsgehoorzaal, Leiden, the Netherlands
Architect: Architecten van Mourik
Product : Electrical Folding Shutters



Cover : Het Funen Park, Amsterdam, the Netherlands
Architect: De Architekten Cie
Product : Sliding Shutters

DESIGN, FUNCTIONALITY & COMFORT 2

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Design, Functionality and Comfort

With over 50 years of experience with exterior Sun Control Systems, Hunter Douglas provides architects the knowledge and expertise to integrate Sun Control Systems into the building architecture, enhancing the façade while providing highly effective sun protection. From custom sizes and profiles to specialized vertical glass louvres, Hunter Douglas' engineering team will develop innovative and specific Sun Control solutions to meet the aesthetic and performance requirements of any project.

DESIGN

Our Sun Control Systems are engineered for vertical, angled or horizontal applications, including fixed, operable and automated solutions to meet the requirements of any design. A **wide range** of system principles (fixed, sliding, rolling) and **materials** (aluminium, wood, glass) are available, as well as a variety of **shapes, sizes and finishes**.

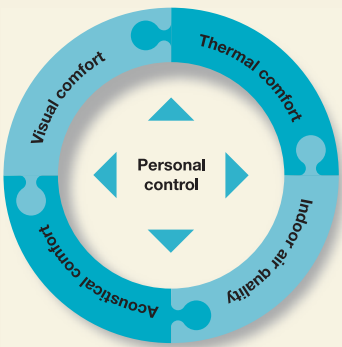
FUNCTIONALITY

Our systems are **tested in real life conditions** against wear and tear, as well as for performance in wind and snow conditions. Our Sun Control Systems are **easy to maintain**, ensuring a system that continues to look and perform well over time.

Our Luxacote® finish is specifically designed to withstand severe external conditions. The topcoat contains a solid UV filter, which guarantees perfect colour and gloss stability. This topcoat provides resistance against scratches and abrasion while the alloy and pre-treatment ensure corrosion resistance. Hunter Douglas products have been subjected to extensive laboratory and real-world testing to ensure the highest quality.

COMFORT

Modern buildings are so well insulated that they have very little need for heating. Heat gain caused by the sun creates a need for vast cooling capacities to ensure **the comfort of a building's occupants**.



Sun Control Systems ensure good working conditions for the occupants of a building while reducing the energy of cooling systems by stopping excess heat on the outside of the building. By using motorised systems controlled by the building management system the amount of heat and light entering the building can even be adjusted to the daily **environmental conditions**. By combining integrated building solutions Hunter Douglas can optimise the energy efficiency and worker comfort.

Unprecedented Protection
LUXACOTE®
for exterior application





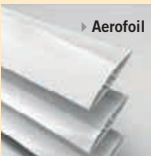
Above : Sinai-Centre, Amstelveen, the Netherlands
Architect: Greiner Van Goor Huijten Architecten bv, Amsterdam
Product : Aerofoils

Sun Louvres

DESIGNED TO PERFORM

Hunter Douglas Sun Louvre System blend 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 to the façade, parallel to the façade or otherwise designed in relation to the angle of the sun.

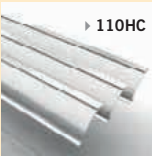
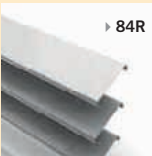
AEROFINS



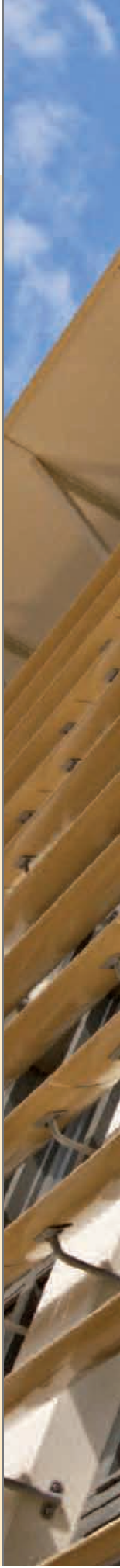
DYNAMIC

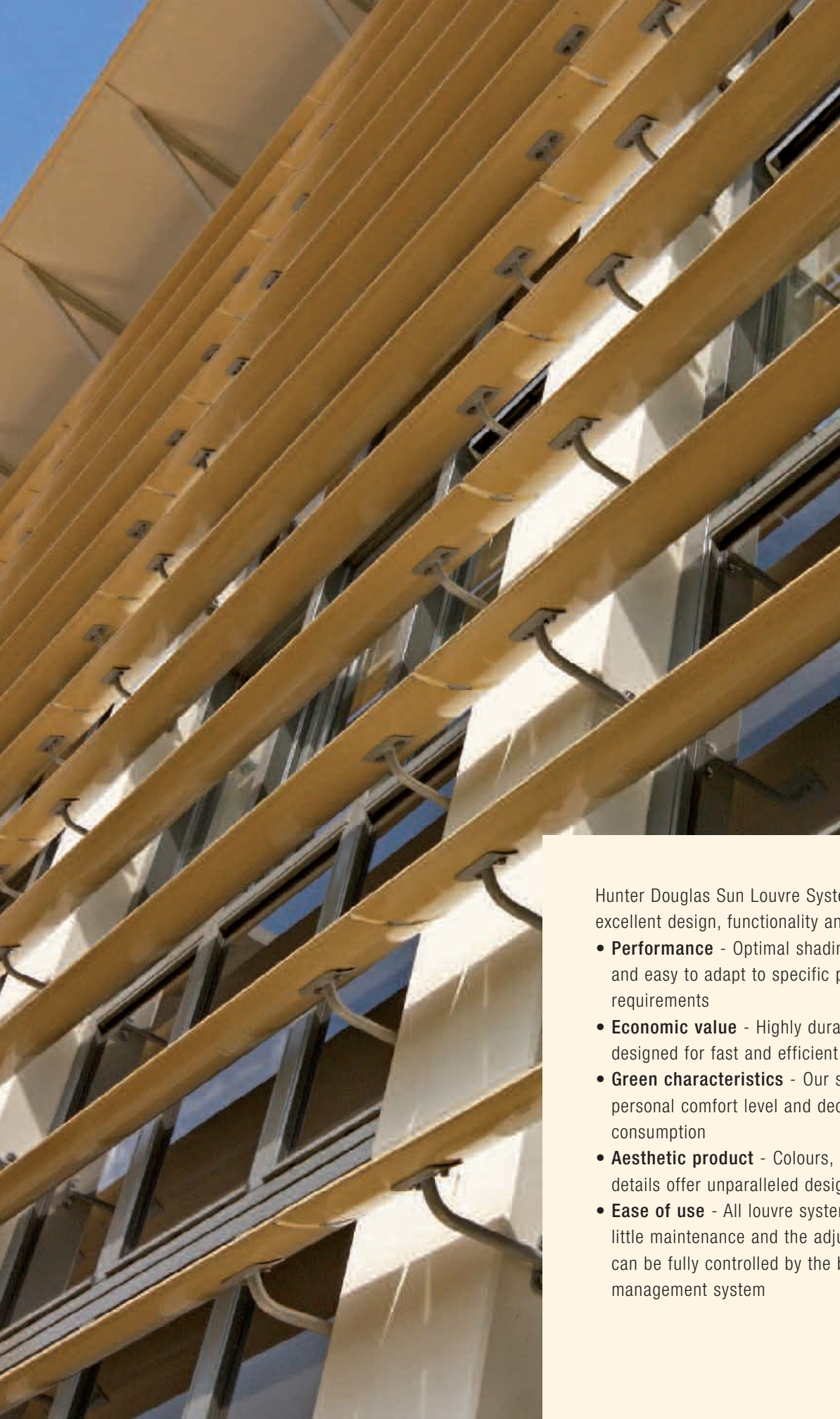


PANEL SYSTEMS



CUSTOM





100% recyclable

Hunter Douglas Sun Louvre 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 decreases 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

Aerofins

Designs that soar



Hunter Douglas Aerofin Systems - Aerofoils, Aerowings and Aeroscreen - are optimized using identical installation components and support systems.

This makes life easy; once you've worked with one of our systems, they are all easy to understand. Based on the specifications it is simple to find the Aerofin that suits and performs best for your project.



AEROFINS

Aerofoil, Aerowing + Aeroscreen

- Wing shaped aluminium profiles
- Optimized shading performance
- Fixed or adjustable (motorized) fins
- Finish: anodized or powder coated to specifications
- Fin orientation horizontal or vertical
- System projected horizontally or mounted vertically
- Aerofoils also available in Western Red Cedar wood



AEROFOILS

- Extruded wing profiles from 100 to 600 mm wide
- Optimized for medium to large spans
- Span at 1000 N/m² wind load; 3.2 m for 200AF to 4.7 m for 450AF
- Hidden installation with Cup and V-brackets

Above : Absa, Johannesburg, South Africa

Architect: TC Design

Product : Aerowing 300AW

AEROWING

- 2 single sided extruded wing profiles 200 and 300 wide
- Optimized for medium spans
- Span at 1000 N/m² wind load 3.0 m for 200AW

AEROSCREEN

- 300 mm wide perforated assembled system
- Optimal light regulation
- Maintaining outside view
- Span at 1000 N/m² wind load 2.5 m

Below : Construction detail

Product : Aeroscreen





Lowered

Stacked

DYNAMIC SUN CONTROL

- Stackable louvre fin system
- 90° tiltable louvre fin system, fully open to fully closed louvre fin position
- Patented technology
- Stylish and compact design
- Large louvre spans
- Application of special designed louvre fin; alternative fins possible
- System contains only lateral guides (no head or bottom rail)
- Tilting and stacking integrated in motor functionality



Dynamic

Maximise your

Project : 3D Impression
Architect: Make it 3D
Product : Dynamic Sun Control



comfort

SUN LOUVRES

HunterDouglas® Dynamic Sun Control has the proprietary functionality of tilting and stacking large span louvre fin applications. The full control over the aperture openings creates excellent flexibility: from a fully closed plane to a clear view in a stacked position.

The sophisticated Dynamic Sun Control provides outstanding shading performance for a building and its occupants and complies with energy conservation requirements.

Panel Systems

The linear solution

All Panel Systems - 84R, 70/132S, 100R and 110HC - are based on roll formed or extruded single skin panels and are fully integrated and available with a variety of support structures. With both horizontal projected and vertically mounted as well as a variety of different panel sizes and pitches, an optimal choice can always be found.

84R: Sun Louvre system is a real classic, used for applications on straight, curved or angled façades. The product has an elegant, light appearance and nicely curved edges.

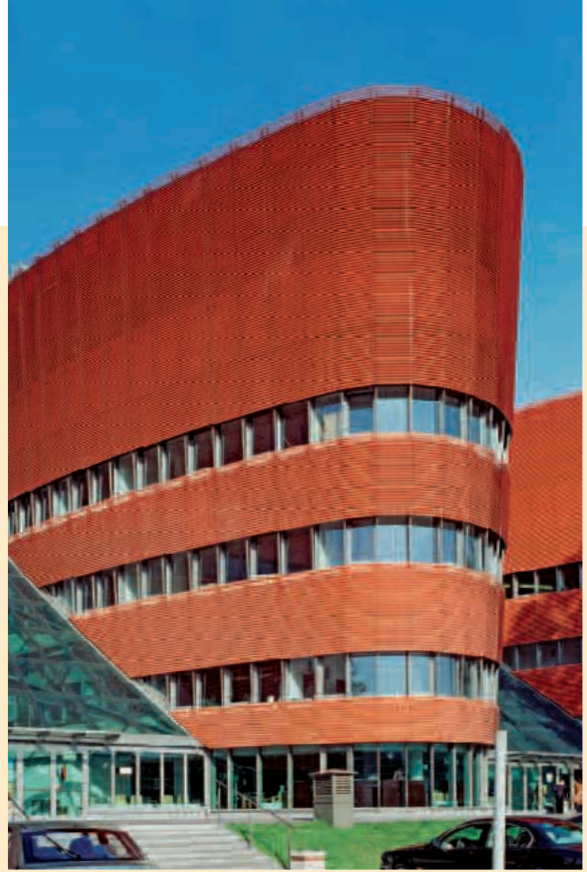
PANEL SYSTEMS

84R, 100R, 72S/132S + 110HC

- Single skin profiles
- Optimized stylish support structure allowing a variable panel pitch
- System projected horizontally or positioned vertically
- Highly flexible corner solutions
- Optimal shading performance
- Ventilated Façade Systems

84R

- Roll formed C-shaped panels 84 mm wide
- Highly reflective white coating at inside
- Coil coated with a UV and scratch resistant Luxacote® coating
- 17 standard modern colours available
- Colour matches on request
- Bent or curved to follow the shape of the building
- Endless linear appearance by connecting the panels
- Span at 1000 N/m² wind load 1.2 m



Above : Management University (WSM), Warsaw, Poland
Architect: Czuba Latoszek
Product : Sun Louvre 84R applied as open facade

Below : Toyota Car Showroom, Warsaw, Poland
Architect: MCA
Product : Sun Louvre 84R





Left : Police Office, Dongen, The Netherlands
 Architect: Storimans Architects, Tilburg
 Product : Sun Louvre 100R

70/132S

- Roll formed panels 70 mm or 132 mm wide
- Highly reflective white coating at inside
- Coil coated with a UV and scratch resistant Luxacote® coating
- 17 standard modern colours available
- Colour matches on request
- Span at 1000 N/m² wind load 1.3 m for the 70S and 1.8 m for the 132S
- 132S optimized for low sun angle façade system

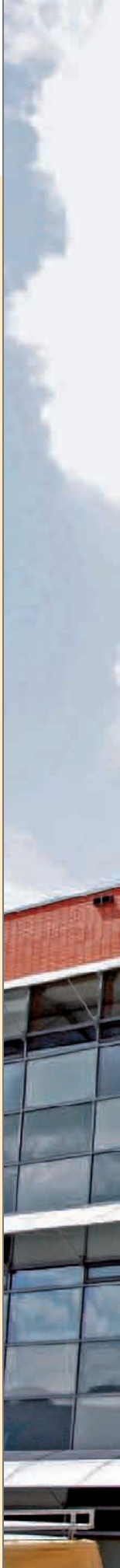
100R

- Extruded C-shaped panels of 100 mm wide
- Finish: Anodized or powder coated to specifications
- Connected panels achieve visually continuous lines
- Span at 1000 N/m² wind load; 2.4 m
- Matching extruded fascia (optional)

110HC

- Extruded H-shaped curved panels of 110 mm wide
- Finish: Anodized or powder coated to specifications
- Optimized for horizontal or angled projected system
- Span at 1000 N/m² wind load; 1.8 m
- Shallow system as the panels are mounted between the supports
- Fascia: U-shaped or bull nose profile

Below : Comair, Kempton Park, South Africa
 Architect: Wim Swart
 Product : Sun Louvre 132S



Panel Systems Lined Up

SUN LOUVRES

100R: Sun Louvre is a fixed system with strong, durable, extruded C-shaped panels. The product has an open and sturdy appearance.

70S and 132S: Sun Louvre Systems consist of Z-shaped sturdy panels. These panels are used in order to achieve a crisp exterior appearance.

110HC: The extruded aluminium panel is fit within a frame resulting in a robust, innovative product designed to impress.

Above : Horizon College, Alkmaar, the Netherlands
Architect: AGS Architecten & Planners B.V
Product : Sun Louvre 100R

Custom Louvre Systems

Creative solutions



When you have a special request, we create a special solution. If your project has specific design or functional requirements, our team of experts has the knowledge and experience to custom engineer unique systems to precisely control heat and light.

Above : Rhein Center Köln, Germany
Architect: Gernot Schulz: Architektur, köln
Product : Custom louvre system

Right : Naviduct Krabbegat, Maritime Lock
control Tower, Enkhuizen, the Netherlands
Architect: RGD and Zwarts & Jansma, Abcoude
Product : Adjustable Custom Louvre System



CUSTOM DESIGNS

Hunter Douglas Custom Designs give you vital space for creativity. In consultation with the architect, Hunter Douglas can create various solutions that are incorporated at the design stage, therefore, forming an integral part of the building architecture. High-quality materials offer the designer a large measure of freedom.

A variety of materials, colours and surface treatments allow the custom Sun Control Systems to conform to the specifications of any project. In addition, our expert support staff is available to assist you throughout the design and construction process.



Right : Da Vinci, Alphen a/d Rijn, the Netherlands
Architect: VHP Architecten Rotterdam
Product : Custom louvre system

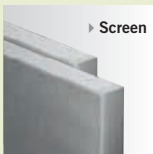
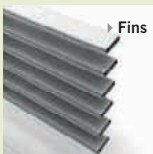
Shutters

THE MODERN SIDE OF CLASSIC

Shutters are a mainstay of traditional construction and were relied upon for their insulation and their appearance. As high-performance glass became available, the extra insulation was no longer necessary, leading architects to move away from their use.

However, with the abundance of glass in modern architecture, proper sun protection and a certain amount of privacy are important to create an internal comfort. Our sliding and custom designed folding shutters provide these elements while creating distinct looks which add to the building's appearance.

SLIDING SHUTTERS



CUSTOM SHUTTERS





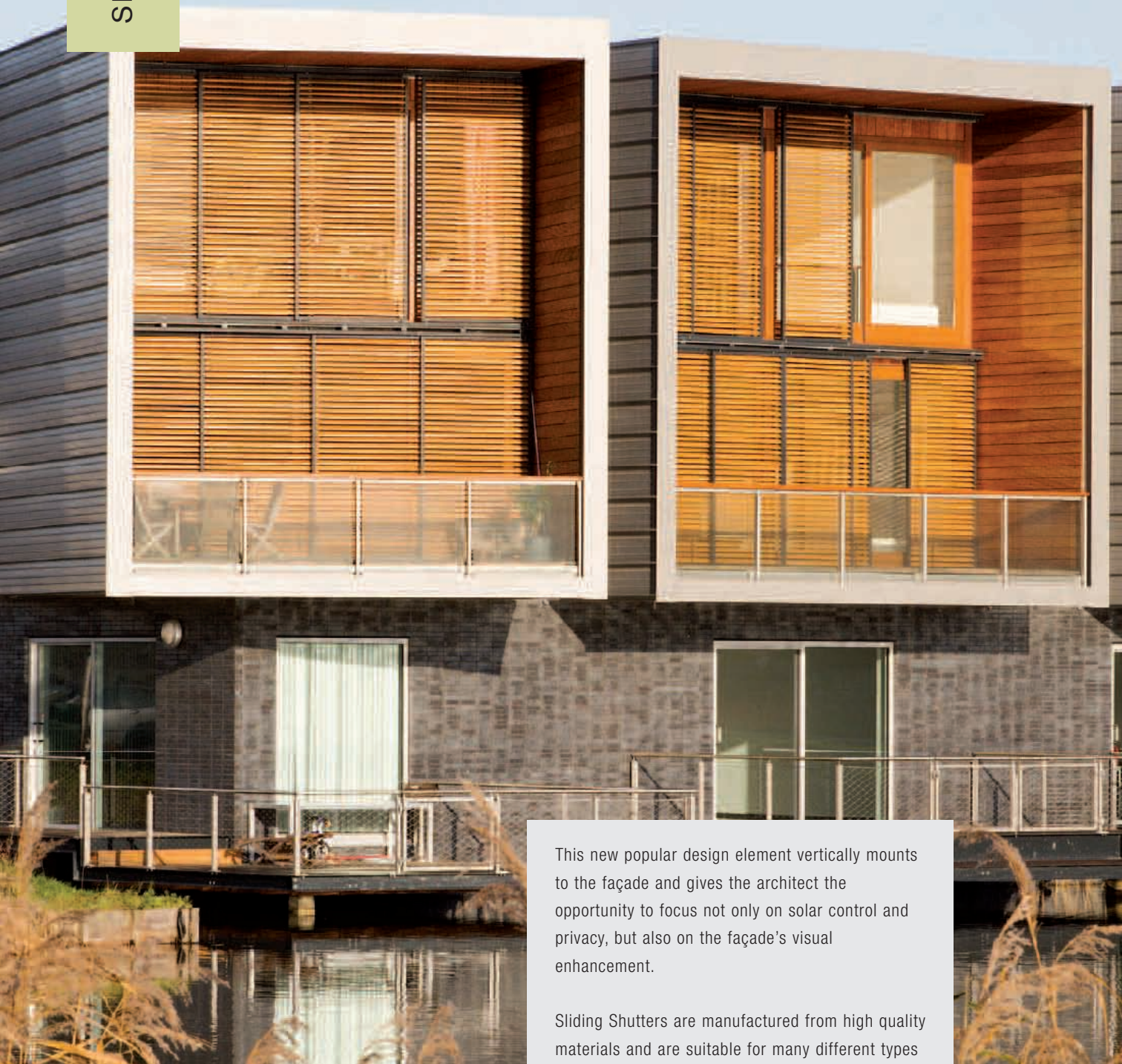
100% recyclable

Hunter Douglas Shutters offer excellent design, functionality and comfort:

- **Performance** - Optimal choice in shading performance and privacy control
- **Economic value** - Highly durable products can be delivered assembled or offered as a kit for local assembly. Installed, the system requires very little maintenance
- **Green characteristics** - Our systems increase personal comfort level and decreases energy consumption
- **Aesthetic product** - Our shutters can be fully integrated in the building design and with the choice of different materials and colours we offer an unparalleled design freedom
- **Ease of use** - The shutters can be operated electrically or manually and a choice of fixed and adjustable fins can be made

Sliding Shutters

Shading & Privacy



This new popular design element vertically mounts to the façade and gives the architect the opportunity to focus not only on solar control and privacy, but also on the façade's visual enhancement.

Sliding Shutters are manufactured from high quality materials and are suitable for many different types of buildings. Sliding shutters can be integrated into a project during the early design stages.

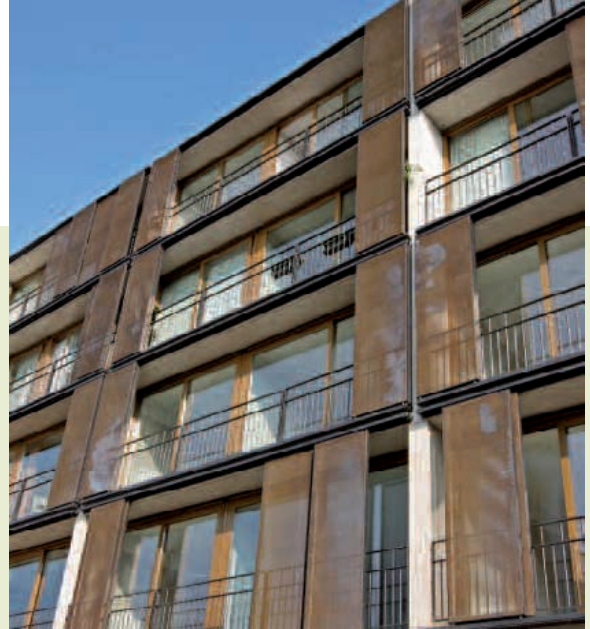
Above : Nesselande, Rotterdam, the Netherlands
Architect: Joke Vos Architecten
Product : Sliding Shutters

SLIDING SHUTTERS

- The fins in the aluminium extruded frame are available in two materials, aluminium and Western Red Cedar wood
- A variety of 6 fins, fixed or adjustable, in aluminium and Western Red Cedar
- Finishing options:
 - Aluminium frames and fins can be anodised or powder coated in a wide range of colours
 - Western Red Cedar is a durable wood, which can be used untreated or oiled
- Top and bottom rails, runners and fixation brackets are part of the system
- Proprietary electrical control system (optional)
- Custom fillings:
 - Stretch Metal
 - Glass
 - Perforated sheet

SLIDING SHUTTERS SCREEN

- Aluminium frame with pre-tensioned fibreglass screen fabric
- 59 fabric colours available
- Enduris® glass core screen fabric
- concealed frame and screen fixing



Above : Meerhoven woningen, Veldhoven, the Netherlands
Architect: Rempt van der Donk architect, Rotterdam
Product : Sliding Shutters with bronzed brass stretch metal

Below : Apartments building
Architect: Make it 3D
Product : Sliding Shutters Screen





Left : Rabobank Goes, the Netherlands
 Architect: archikon | architecten & constructeurs
 Product : Folding Shutters

CUSTOM SHUTTERS

Hunter Douglas Custom Shutters offer a range of materials, textures and colours, which create a great deal of freedom to the architect.

Additionally, we can provide the knowledge of new materials, which can be used for special applications. This allows the development of high performance building components and constructions. Our custom designs create the connection between the three main corner-stones: material, technology and design.



Left : Appartments D'Haenens, Gent, Belgium
 Architect: Bontinck® Architecture & Engineering
 Product : Custom Folding Shutters



Custom Shutters

Creative solutions

Customised Shutters create eye catching façade details, allowing for light and heat control while also ensuring privacy.

From perforated metal sheet to glass fiber fabric, folding vertically or horizontally, our customised shutters offer maximum design flexibility.

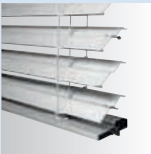
Above : Altis Belém Hotel, Doca do Bom Sucesso,
Lisboa, Portugal
Architect: Risco Architects
Product : Custom Folding Shutters

External Blinds

EXTERNAL BLINDS, INTERNAL COMFORT

Our Venetian blinds and Roller blinds require minimum space for maximum efficiency. The external blinds can be nicely integrated into the Hunter Douglas façade system. The external blinds fulfill all basic requirements for low-rise buildings or in areas with an average windload.

VENETIAN BLINDS



ROLLER BLINDS





100% recyclable

Hunter Douglas External Blind Systems offer excellent design, functionality and comfort;

- **Performance** - Due to the retractable feature external blinds offer when required optimal shading or an optimal outside view
- **Economic value** - High quality products designed for fast and efficient installation
- **Green characteristics** - Our shading systems decrease energy consumption all achieved with a minimum of material use
- **Aesthetic product** - Incorporated in the window design and available in a variety of colours the system coordinates with the design of the building
- **Ease of use** - The blind system can be operated manually or controlled by the building management system
- **Out of sight** - When retracted

External Venetian Blinds

Style from Venice



External Venetian Blind Systems are an extremely discrete, effective and flexible solar shading solution. Its slim design ensures a subtle appearance, which contributes to the overall building aesthetic without overpowering it.

A variety of colours ensures the perfect match for any project.



EXTERNAL VENETIAN BLINDS

- Roll formed aluminium slats of 60, 80 or 88 mm wide
- Available in standard colours, other colours on request
- All profiles are extruded and anodized or powder coated into different colours
- Two operation options:
 - Manual with crank rod
 - Electric (suitable for control systems)
- Shading can be regulated, optimising light entering the building and reducing glare on computer screens
- Transfer of heat to interior is minimal, resulting in low shading coefficients



Above : OLV Hospital, Aalst, Belgium
Architect: VK Studio
Product : External Venetian Blinds

Below : Office Building
Product : External Venetian Blinds



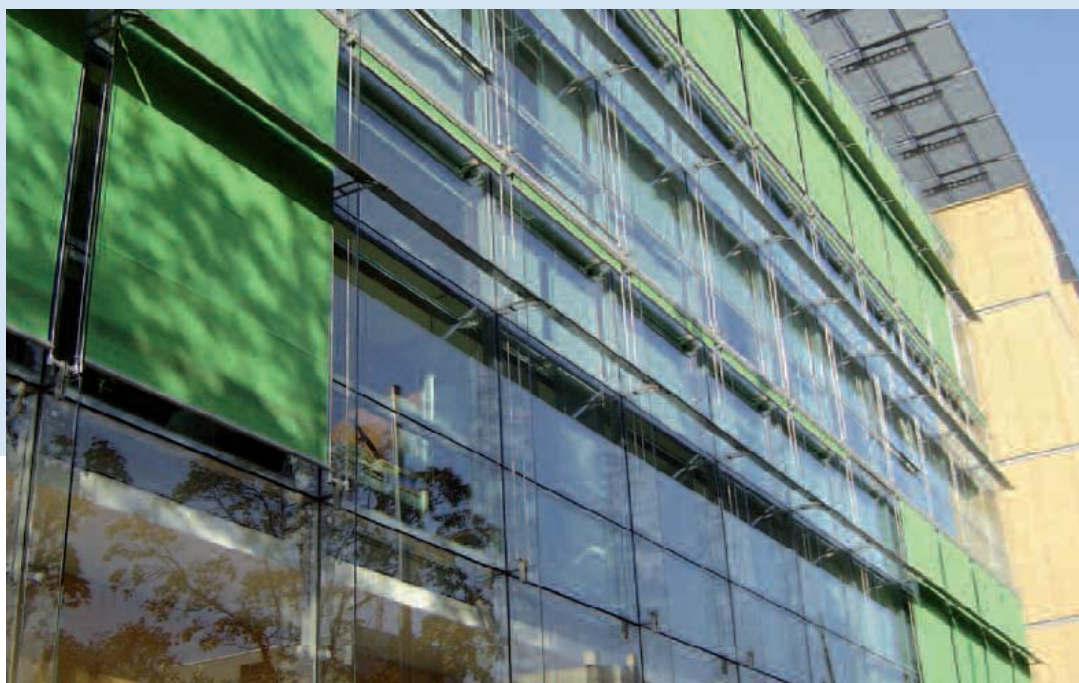


Above : Inbev Headquarters, Leuven, Belgium
 Architect: Poponcini & Lootens
 Product : Motorised Screens

EXTERNAL ROLLER BLINDS

- High quality screen fabric with welded edges for maximum fabric strength in Sergé, Basket and Star woven structure
- A wide range of fabrics for both external and internal solutions
- A wide range of colours
- Elegant 'softline' designed headbox system
- All profiles are anodized or powder coated to specifications

Below : Il Sole 24 Ore, Milan, Italy
 Architect: Renzo Piano
 Product : Screen Classic 525



External Roller Blinds

Reduce light intension

External Roller Blinds contribute to the building's exterior as it contributes with the building design. For the interior environment the system reduces glare and the amount of light and heat that enters.

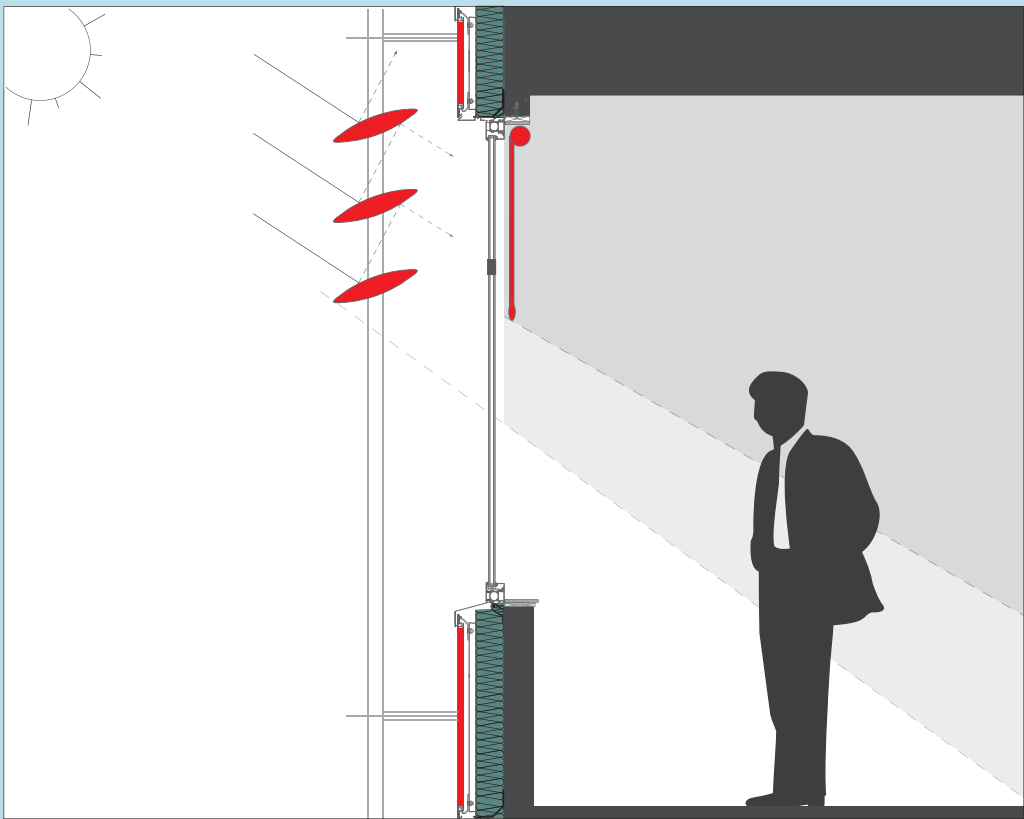
Above : Showroom Y & N Claessens, Wilrijk, Belgium
Architect: Dirk Vanlerberghe
Product : External Roller Blinds, Smartscreen

Light, Heat and Energy

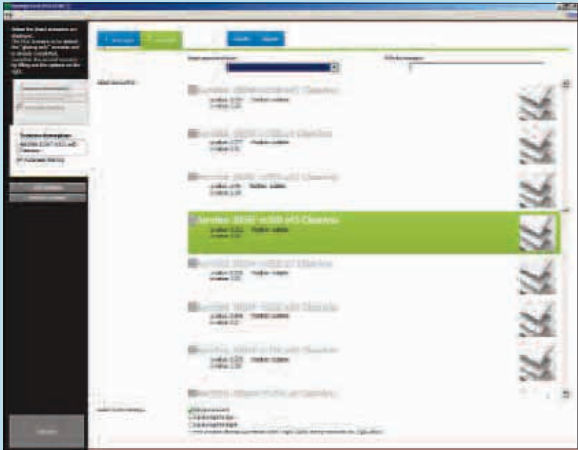
ENERGY AND LIGHT TOOL

Using the right sun control system can greatly influence the thermal and visual indoor climate. Effective reduction of the amount of solar radiation entering the building immediately decreases the amount of energy needed to cool the building. By blocking, transmitting or reflecting direct sunlight and daylight HunterDouglas® Sun Control Systems can optimize the interior brightness and glare levels and maintain the visual contact with the outdoors.

Providing good thermal and visual comfort at a minimum energy cost calls for a careful matching of façade walls, glazing, sun control, lighting and HVAC equipment. This is a distinctly non-trivial exercise. Choices made in the early design phases can have a huge impact on the energy use of a building.



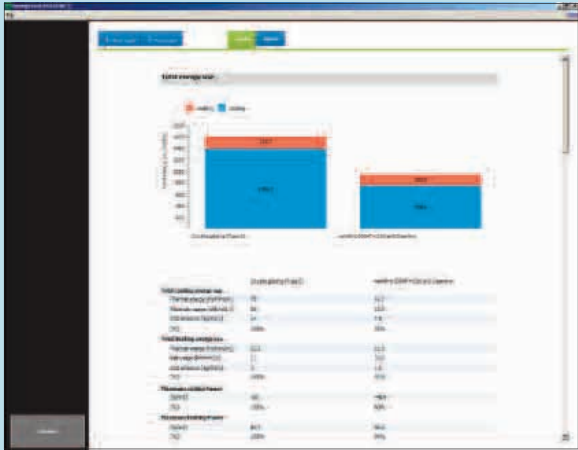
Solar reflectance: solar control and natural ventilation can reduce air-conditioning



Product selection Energy Tool

ENERGY TOOL

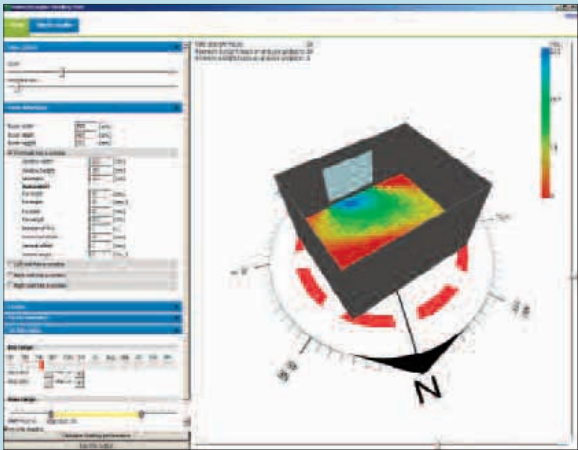
The Hunter Douglas thermal simulation package, the Energy Tool, can calculate how much cooling and heating energy can be saved when using a Sun Control System, compared to a scenario without such an application. The Energy Tool helps make thermal comfort tangible by calculating solar energy transmittance for a model office with and without Sun Control Systems and with different types of glass.



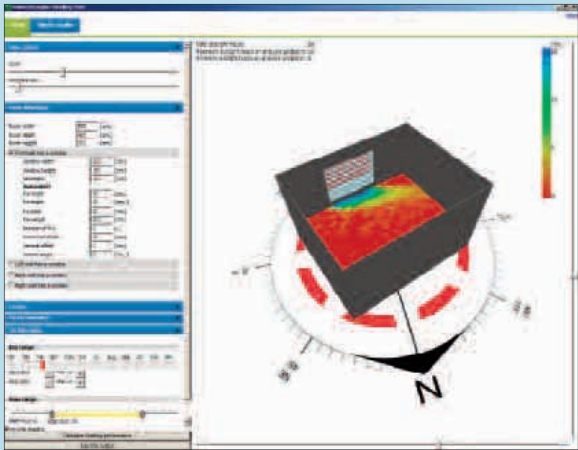
Representative output of Energy Tool

LIGHT TOOL

The Hunter Douglas Light Tool makes visual comfort tangible by calculating luminance levels for a model office with and without sun control. The amount of glass, the orientation of the facade, the location on earth, weather, season and time of day are all taken into account.



Luminance level output by the Light Tool, situation without Sun Control System

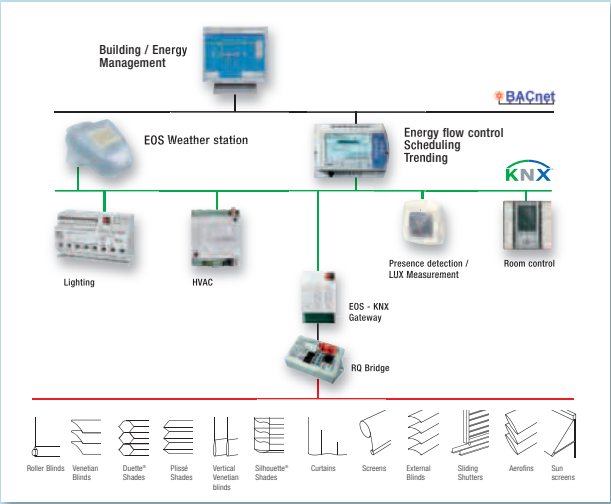


Luminance level output by the Light Tool, situation with Sun Control System

Control Systems

TAKE CONTROL

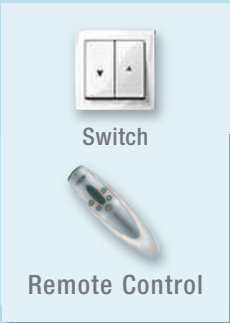
The more personal control a system offers, the more comfortable the building will be. Whether you desire a basic system, related to the sunpath and weather conditions or an intelligent system, which allows full personal light and heat control while taking in account the overall building management, Hunter Douglas has the solution for you.



CONTROL SYSTEMS

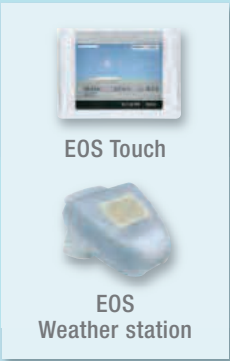
Hunter Douglas EOS® Pro control systems allow powerful and efficient operation of Hunter Douglas Sun Control Systems on any project scale. Because personal control is often an important factor, automated systems can be combined to operate via switches, remote control, desktop, or even smartphone.

BASIC CONTROL SYSTEMS



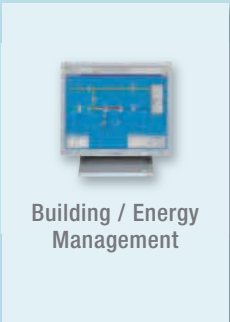
Basic control systems respond to an on-off switch. This switch can be a fixed or a remote controlled unit. The adjustable Sun Control System can be positioned in any angle and therefore this is the optimum personal controllable system.

ADVANCED CONTROL SYSTEMS



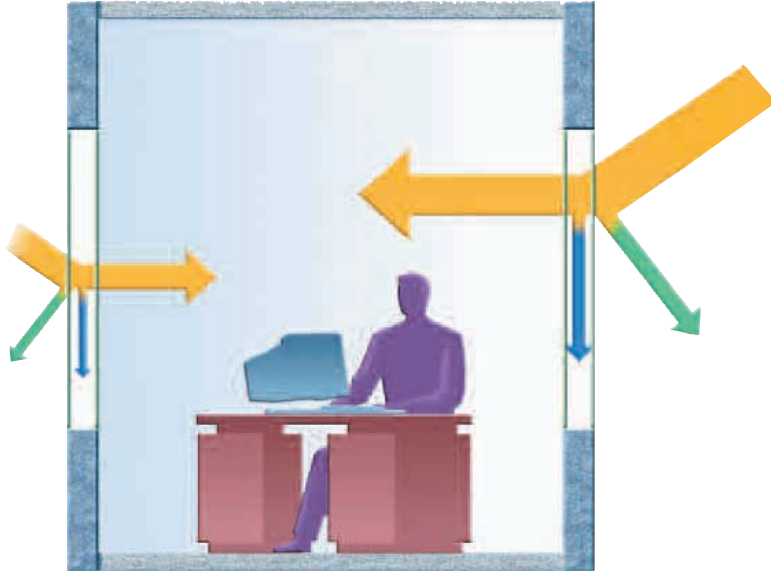
Advanced control systems respond to a range of controls, including switches and timers. This system supports sun and wind sensors in an automated shading and light regulation and allows central control of all sun control systems in a building.

INTEGRATED CONTROL SYSTEMS



Connected to the building management system, sun control systems can be controlled in combination with cooling and heating and even the lighting levels. This allows creating interior comfort with minimum building energy use.

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 the various 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, by making good use of free solar gains, when they are welcome - in winter - while avoiding overheating in summertime.



HUNTER DOUGLAS ARCHITECTURAL PROJECTS

For 50 years, Hunter Douglas has been dedicated to innovation. As the field of Sun Control grows, we pride ourselves on leading the way as pioneers in the area.

We're working alongside architects and designers throughout the globe, discovering new, inventive methods of managing heat, light and energy. We've committed ourselves to crafting products that meet the highest standards of materials, construction and performance because we believe that you need the right tools to create projects that inspire.



Promoting sustainable
forest management
www.pefc.org



Hunter Douglas products and solutions are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable.



Our paint and aluminium melting processes are considered to be one of the industry standards in terms of clean production processes. All aluminium products are 100% recyclable at the end of their lifecycle.



HunterDouglas

SUN CONTROL

ARCHITECTURAL SERVICES

We support our business partners with a wide range of technical consulting and support services for architects, developers, and installers. We assist architects and developers with recommendations regarding materials, shapes and dimensions, colours and finishes. We also help creating design proposals, visualisations, and installation drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site.

Innovative Products Make Innovative Projects



Learn More

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HUNTER DOUGLAS PROJECTS UK

Keys Park Road, Hednesford,
Staffordshire, WS12 2FR
Tel. +44 (0)1543 27 57 57
Fax +44 (0)1543 27 14 14
suncontrol@hunterdouglas.co.uk
www.hunterdouglas.co.uk

HunterDouglas

WINDOW COVERINGS

CEILING

SUN CONTROL

FAÇADES