

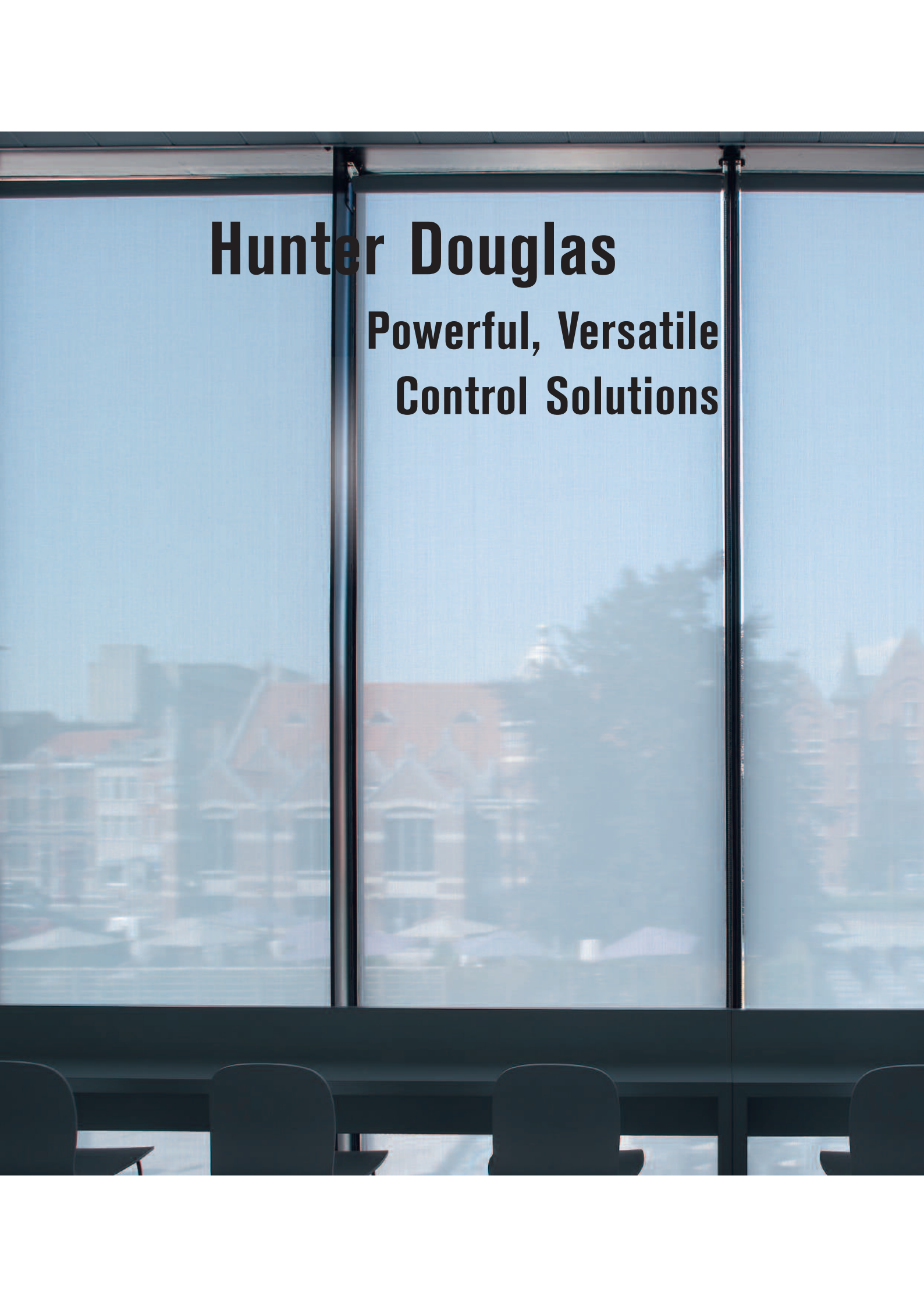


eos™ PRO Control Systems

HunterDouglas

WINDOW COVERINGS

SUN CONTROL

The image shows a large, multi-paned window looking out onto a cityscape. In the foreground, the dark silhouettes of several chairs are visible, suggesting a meeting room or office setting. The text is overlaid on the upper portion of the window.

Hunter Douglas

**Powerful, Versatile
Control Solutions**



A comfortable and pleasant indoor environment is the goal of virtually any building designer. An office building must provide an attractive and productive working environment for several decades. The same is true for hospitals and schools.

The HunterDouglas® EOS™ PRO Control System helps optimize sun control with uncompromising performance, backed by unmatched engineering. From roller blinds to external blinds and sun louvres, to fully automated control systems, the HunterDouglas® EOS™ PRO Control System integrates the management of daylight and energy.

CONTROL	2
 PRO CONTROL SYSTEM	4
BASIC CONTROL SOLUTION	6
ADVANCED CONTROL SOLUTION	7
SUN TRACKING SYSTEM	8
CASE STUDY SCENARIO	9 - 11

Control

Control over our direct environment turns out to be a very important factor. It strongly influences our appreciation of indoor environmental quality. Easy control over Window Coverings and Sun Control Systems helps to shape a comfortable environment and increase the productivity of the occupants.

CREATING THE RIGHT ENVIRONMENT

The indoor climate in a building is influenced by the outside conditions, such as solar radiation, weather conditions and outdoor air quality.

Window Coverings and Sun Control systems play an important role in modulating the influence of these external conditions on interior comfort.





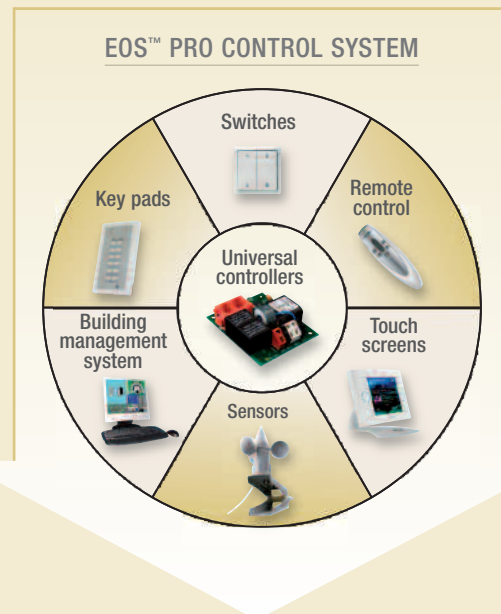
HunterDouglas® EOS™ PRO CONTROL SYSTEM

Through decades of experience, Hunter Douglas has developed extensive knowledge in product systems and controls that optimize Window Coverings and Sun Control solutions.

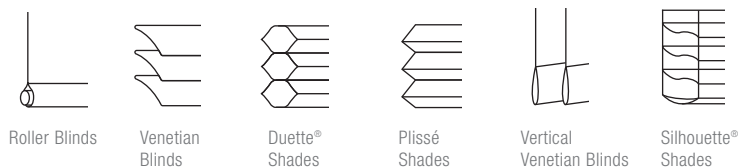
The HunterDouglas® EOS™ PRO Control System is a highly flexible system that offers occupants the type of control they need instead of the type of control that is available.

HunterDouglas® WINDOW COVERINGS AND SUN CONTROL SYSTEMS

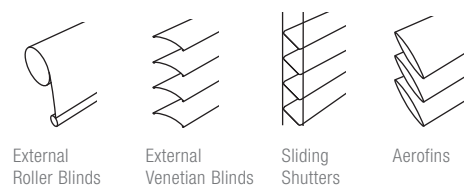
An expert in sun shading solutions, Hunter Douglas offers a wide variety of high performance shading products and solutions including; Venetian Blinds, Roller Blinds, Duette® Shades, Silhouette® Shades, External Blinds, Aerofins, Sliding Shutters that contribute to optimal light and heat control and save energy costs.



Window Coverings



Sun Control Systems





PRO Control System

Key features:

UNIVERSAL

Universal Motor Controllers are the heart of the HunterDouglas® EOS™ PRO Control System. The Universal Motor Controllers can command any type of motor with any type of input device, from basic switches to advanced solar tracking systems.

The EOS™ PRO Control System lets you combine different types of motors for Window Covering and Sun Control in an easy way.

For example, DC motors for Roller Blinds & Venetian Blinds can be combined with AC motors for external Aerofoils, both controlled by the Universal Motor Controllers. The control systems can easily be integrated into a Building Management System.

FLEXIBLE

The Control System offers the user optimal flexibility in controlling the shades in the building.

The Universal Motor Controllers will get their input from any type of input device, offering the user unprecedented control: from Switches to Building Management Systems, from Sensor Control to PC Control and Internet Control, from Remote Controls to HunterDouglas® Sun Tracking Systems. The wide array of control possibilities can fulfill virtually any project specification.





SCALABLE

Using the same range of Universal Motor Controllers, the Control System can be used for small projects with several blinds up to large projects covering several buildings and floors.

The scalability of the system also allows easy extension after the system has been installed. So, when the business and office space expand, the Control System seamlessly follows.

EASY INSTALLATION

The Control System is based on a 'plug and play' system with clear instructions on the products that allow easy, hassle free installation.

OPTIMAL FUNCTIONALITY

HunterDouglas® EOS™ PRO Control System offers occupants a high level of functionality including:

- Various intermediate positions for Window Coverings and Sun Control Systems;
- Individual Control, Group Control and Central Control;
- Various tilt positions for tiltable products;
- Security functions for window washers and fire alarms;
- Automatic functions for sensor control.

In addition, EOS® PRO Control system enables facility managers to define the functionality and accessibility of the system as well as the location and type of input devices.

Personal temperature control of +/- 3 °C resulted in a 3% increase in overall productivity and a 7% increase in productivity of repetitive tasks.

Source: Wyon 1996

Basic Control Solution

Well-designed daylighting & shading systems can dramatically reduce power usage and CO₂ from lighting & HVAC

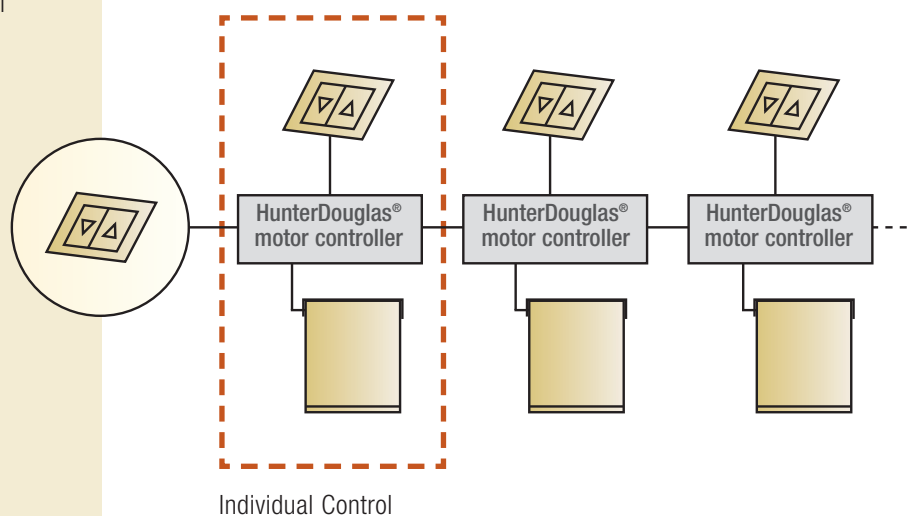
Source: Lighting Research Center at RPI, 2005



BASIC CONTROL SYSTEM

The HunterDouglas® EOS™ PRO Control System offers practically unlimited scalability, allowing control of a single blind up to more than 45,000 units.

The Basic Control solution offers individual control and group control by means of switches and are facilitated by HunterDouglas® Universal Motor Controllers.



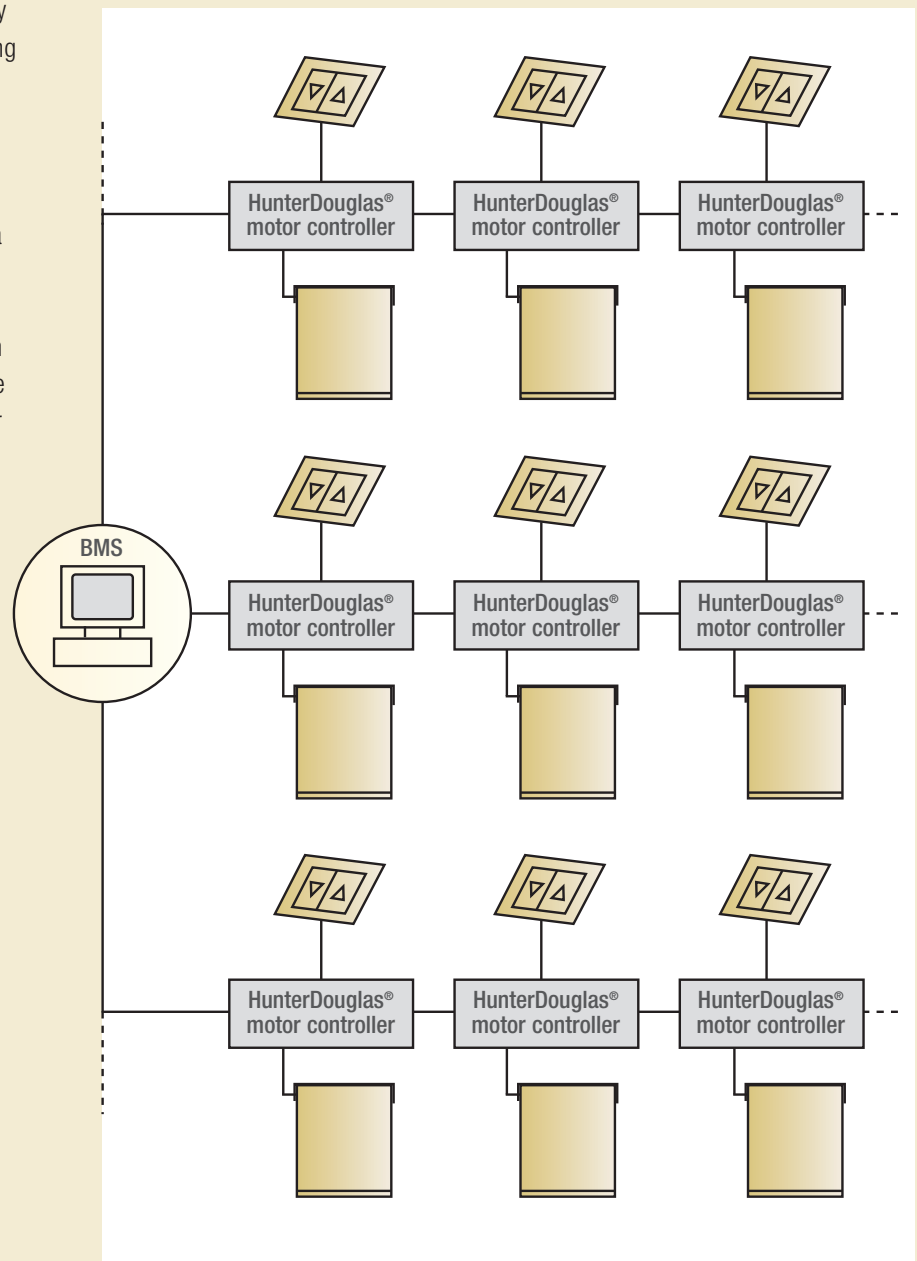
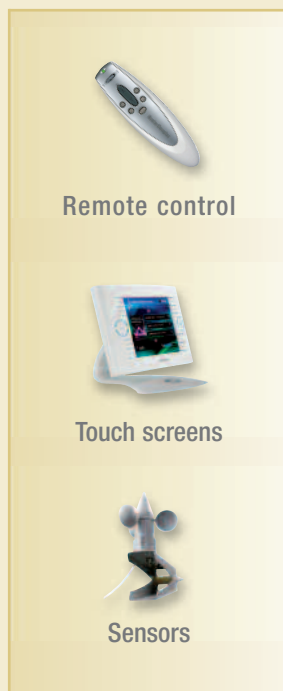
Advanced Control Solution



ADVANCED CONTROL SYSTEM

In the advanced HunterDouglas® EOS® PRO Control System, the same Universal Motor Controllers can be used to build a centrally controlled system integrating into a Building Management System (BMS). EOS™ PRO Control System allows the occupants to control the blinds or Sun Control Systems individually, per group or per zone and the control system can cover one building or a complete campus of buildings.

The input device of the control system can be a switch or another type of input device such as a PC, sensor or remote control for example.

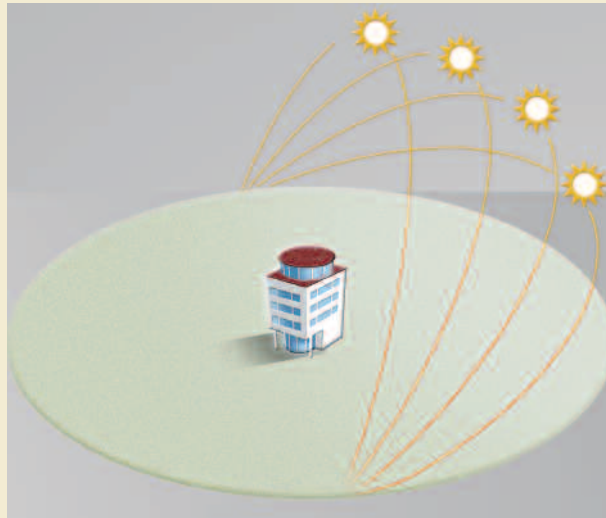


Sun Tracking System

SUN PATH

As the position of the sun varies with the season and the time of day creating optimal indoor climate control requires a Smart Control System. The Hunter Douglas advanced sun tracking system anticipates the sun's position and automatically manages the shading system to create the specified IEQ. The global position of the building is used in conjunction with a weather station to effectively manage the interior comfort.

Advanced sun tracking systems allow optimal sun control and create a perfect balance between visual and thermal comfort in a building.



ENERGY AND DAYLIGHT

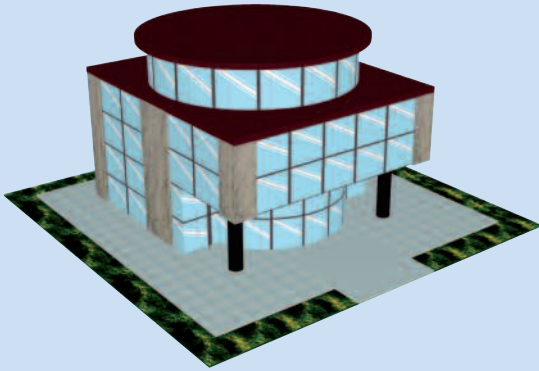
HunterDouglas® Window Coverings and Sun Control systems can play a valuable role in reducing energy consumption and controlling daylight. Hunter Douglas products reduce heating, cooling and electricity consumption in three significant ways:

- Minimize heat flow resulting from temperature differences between inside and outside;
- Control infra red solar heat gain by allowing heat during winter, but minimizing its impact in summer;
- Maximize day lighting efficiency by diffusing and dispersing sunlight deep into a room.

To achieve optimal light and heat control sun shading solutions need to be efficiently deployed. The HunterDouglas® EOS® PRO Control System facilitates the optimal management of sun shading solutions.

Case Study Scenario

Basic and Advanced control



PROJECT DESCRIPTION

5 floor office building with a combination of Interior and Exterior Sun Shading Systems requiring:

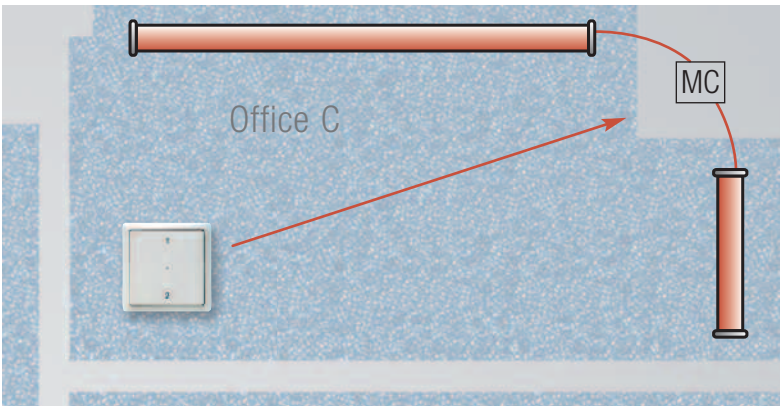
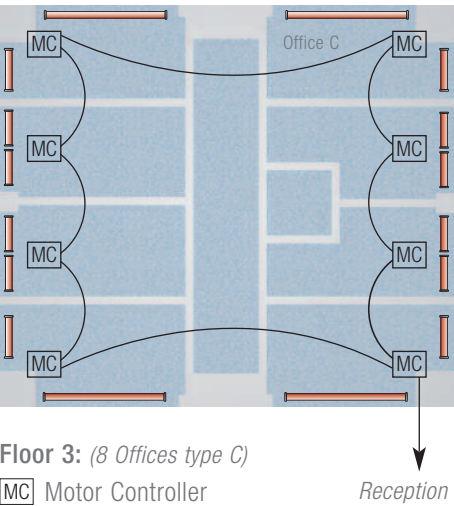
- Central control system at the reception from a desktop PC;
- Central control to manage shading units for the entire building per office;
- Central control to control the units of the entire building per office/per shading unit;
- Each office needs to control the units by a switch;
- The reception and the boardroom at the 5th floor need a higher level of control;
- For maintenance purposes it should be possible to open and lock all the units during maintenance.

PROJECT SPECIFICATIONS

Floor	Room type	Quantity rooms	Shading System type	Units per room	Total Shading Units
1	Reception	1	Interior	8	8
	Offices A	4	Interior	2	8
2	Offices B	8	Interior	2	16
3	Offices C	8	Interior	2	16
4	Offices D	8	Interior	2	16
5	Offices E	4	Exterior	3	12
	Board Room	1	Exterior	4	4
Total number of Units					80

Shading Solution

BASIC CONTROL SOLUTION



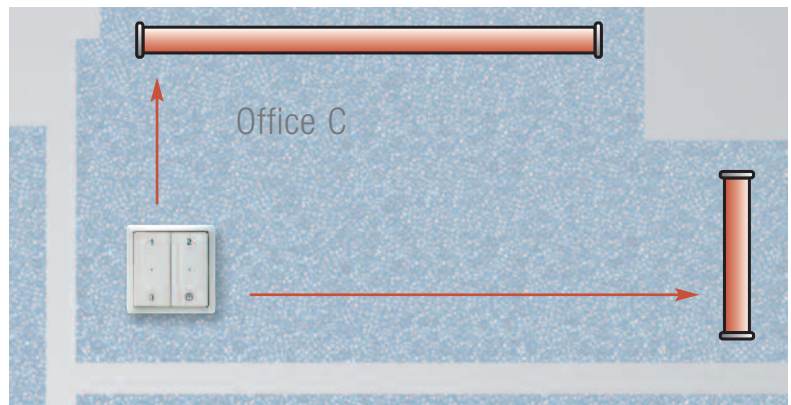
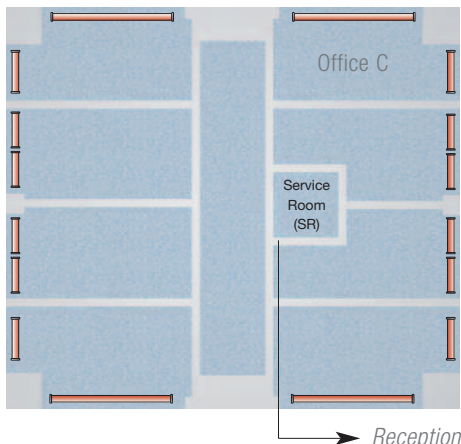
Basic control:
The 2 units are controlled and connected to 1 Universal Motor Controller. The input device in the office is 1 switch for both shading units.

PROJECT SOLUTION

					Basic Control Solution		Advanced Control Solution	
Floor	Room type	Quantity rooms	Quantity Shading Units	Input Device	Universal Controller (UC)	Quantity UC	Universal Controller (UC)	Quantity UC
1	Reception	1	8	PC control	Individual control	8	Individual control	8
	Offices A	4	2	Switch control	Group control	4	Individual control	8
2	Offices B	8	2	Switch control	Group control	8	Individual control	16
3	Offices C	8	2	Switch control	Group control	8	Individual control	16
4	Offices D	8	2	Switch control	Group control	8	Individual control	16
5	Offices E	4	3	Switch control	Group control	4	Individual control	12
	Board Room	1	4	Touch pad	Individual control	4	Individual control	4
Total number of Universal Controllers						44		80

Shading Solution

ADVANCED CONTROL SOLUTION



Advanced control:

The 2 units are individually controlled and each unit is connected to 1 Universal Motor Controller, located in the service room.
Each shading unit has 1 switch.

CONCLUSION BASIC CONTROL

- Application of motor controllers, which control 2 motors
- Motor controllers are decentralized in each office
- Easy installation: motor controllers can be prepared and programmed before installation, which saves extensive time in programming on site.

CONCLUSION ADVANCED CONTROL

- Each office has individual unit control
- Flexible in floor plan design due to centralizing the motor controllers and use of one Universal Motor Controller per unit
- Easy installation: motor controllers can be prepared and programmed before installation, which saves extensive time in programming on site.
- Easy maintenance: motor controllers are centralized in the service room
- More additional input devices can be added at a later stage
- Easy implementation of the Building Management System (BMS)

In this case study scenario the HunterDouglas® EOS™ PRO Control System easily created multiple solutions within the same project. The solution delivers flexibility in the general set up of the system and types of input devices used.

The solutions complies fully to the project requirements.

HUNTER DOUGLAS ARCHITECTURAL PROJECTS

Over 40 years, we've been fortunate enough to help turn countless innovative sketches into innovative buildings.



Architects, designers, investors and contractors from around the world have taken advantage of Hunter Douglas' unmatched product development, service and support. Chances are, you've seen more of Hunter Douglas 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. They continue to raise the bar for excellence. We create products that help bring their visions to life: Window Coverings, Ceilings, Sun Control Systems and Façades.



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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 and colours and finishes. We also help creating design proposals, visualisations and mounting drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site.



HUNTER DOUGLAS is a publicly traded company with activities in more than 100 countries with over 150 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 more than 20,000 people in our companies with major operation centres in Europe, North America, Latin America, Asia and Australia.

HunterDouglas

WINDOW COVERINGS | SUN CONTROL

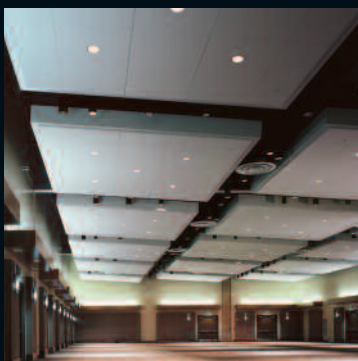
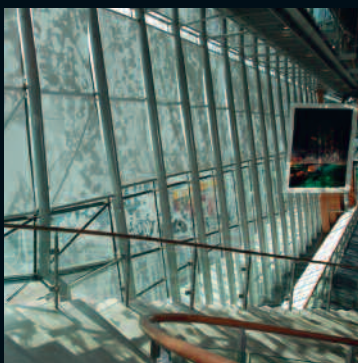


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WINDOW COVERINGS	CEILING	SUN CONTROL	FAÇADES
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