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 **Solarmotion®**  
Dynamic Shading



# C/S SOLARMOTION

## Dynamic Shading

For over 50 years, architects have found that by using C/S Solar Shading Systems such as Solarmotion and Airfoil, on buildings and schools they could create comfortable, productive environments for all building occupants. External dynamic sunshades are simply the most effective method of reducing heat and glare in a building's interior. Properly designed sun controls can help reduce heat gain by up to 85% and simultaneously reduce energy consumption by diminishing the need for air conditioning. C/S Solarmotion dynamic shading installations are suitable for both new build and refurbishment projects and will assist in compliance with Building Regulations Approved Document L2 (2002), whilst also addressing client requirements for more energy efficient buildings.



### Company profile

Construction Specialties operates through 22 offices worldwide, and has key manufacturing locations or Sales Offices in most European countries. The UK Head Office, based in Buckinghamshire, is the sales and manufacturing hub for servicing markets across the UK and Ireland (and parts of Europe) through a network of experienced and professional technical sales representatives.

Our product ranges include wall protection systems, entrance matting systems, specialist coatings for walls and floors, expansion joint covers, solar shading, cubicle curtain track and pressure relief systems. These have been successfully installed in many of the world's most prestigious buildings, across a spectrum of business sectors including healthcare, transport, retail, leisure and commercial offices.

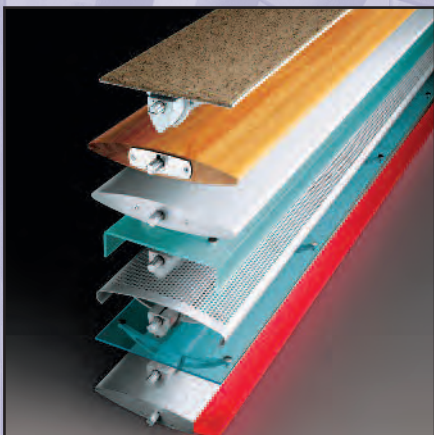
# HIGHLIGHTS



Solarmotion significantly reduces a building's energy consumption.


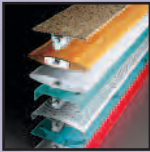

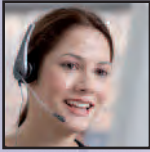



Solarmotion's operating system is so quiet you can't hear it inside the building, even if the windows are open.



Complete design freedom means you don't have to sacrifice aesthetics for performance.

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Use the QR code to take you directly to our website where you can get more information on C/S products, straight to your smart phone.



QR Code  
[www.c-sgroup.co.uk](http://www.c-sgroup.co.uk)

# SOLARMOTION

## Controllable Sunshades

Solarmotion creates a dynamic facade and is the most effective way to reduce energy consumption and maximise occupant comfort in new and refurbished buildings.

C/S Solarmotion Controllable Sunshades track the sun to maximise the control of light and heat entering the building's interior. By effectively controlling the sun on all elevations, at all times of the day throughout the year, Solarmotion significantly reduces a building's energy and capital equipment costs.

Solarmotion prevents over or under shading so building occupants can always enjoy natural daylight. Solarmotion also helps architects gain significant LEED and/or BREEAM Credits and are suitable for use on both new and refurbishment build projects.

### Total Design Freedom

With Solarmotion your building can look exactly the way you want your exterior to look. Whether you prefer a horizontal or vertical system, C/S can offer dozens of mullion, blade and finish options, or we can supply you with a complete custom system for your building project.



### Solarmotion in action

To control heat gain, glare and energy usage at this building in California, C/S Solarmotion was specified. To control the sun on the facility's western elevation, 400mm wide perforated blades were specified. Each vertical blade was pivoted off-centre to achieve a flush appearance when the blades are closed. The blades are operated by motors hidden in the centre mullions. All blades, mullions and trim members have a powder coated finish. The Solarmotion system is operated by and integrated with the facility's building management system.

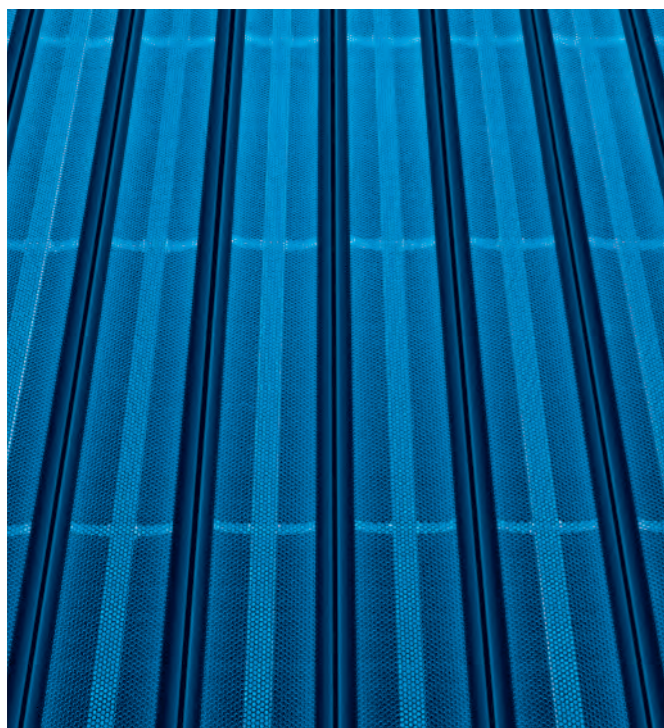


## Aesthetic Options

Solarmotion's aesthetic options can help your building make a dramatic statement.

Solarmotion Controllable Sunshades become an integral part of any building facade and are the single most important exterior design element. That's why C/S offers specifiers a limitless selection of blades, mullions and finish options. The Solarmotion Controllable Sunshade system is completely flexible: blades or mullions can be orientated vertically or horizontally; the system can be mounted flush or extended off the fascia, and can also be lit with LED's. C/S has the proven engineering expertise to provide you with exactly what you want.

Call +44 (0)1296 652800 and speak to a Solarmotion expert.



**A WIDE SELECTION OF BLADE OPTIONS MEANS YOU DON'T HAVE TO SACRIFICE AESTHETICS FOR PERFORMANCE**

Stone Laminate

Red Cedar

Airfoil

Laminated Glass

Perforated

Clear Acrylic

Airfoil with LED Lights



Blades shown are only for guidance, please contact us to discuss custom designs

## Mullion Options

Select from a variety of mullion styles shown, or let C/S assist you with designing your own configuration.



Bull Nose

Flat



LED Lights

Coloured Insert

## Solarmotion Technology

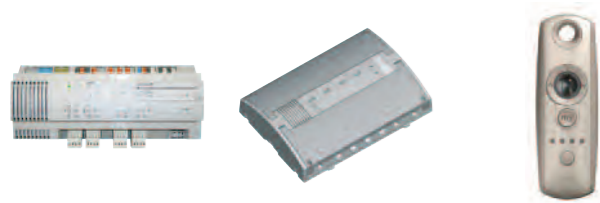
Solarmotion is engineered to provide the ultimate in appearance and performance.

C/S Solarmotion mullions are designed to support typical blade spans. These sunshades are generally attached to the building facade via extruded stand-offs to provide distance between the sunshade and the building. The mullions feature a clean, streamlined design with limited or no exposed fasteners. **Solarmotion's 3-way stand-off accommodates construction tolerances in the building.** See mullion design on right.

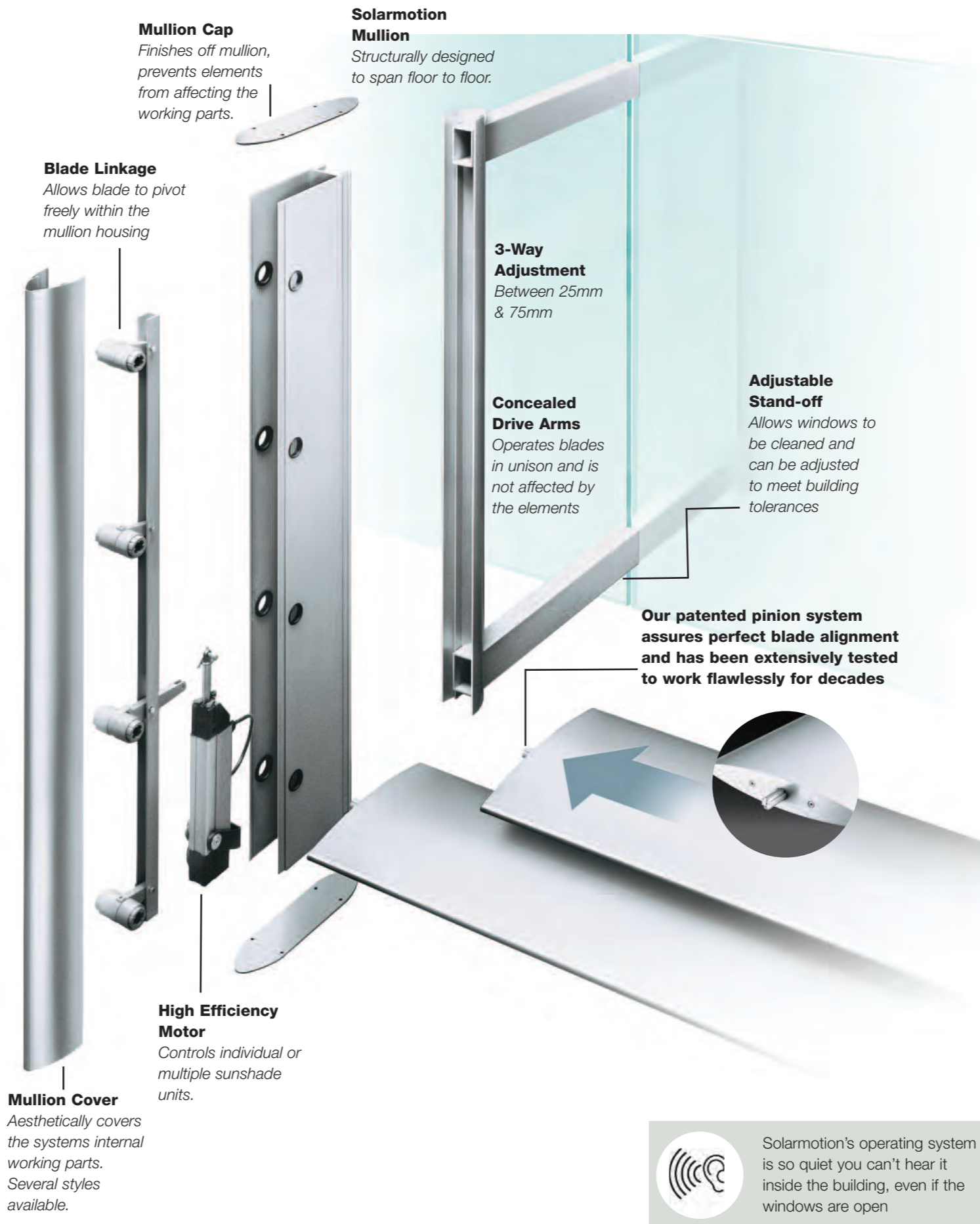
C/S offers several types of blade actuating systems for Solarmotion Sunshades. Designers can **select from simple blade positioning vs. time of day controls to sophisticated control systems** that work with the building management system. We can even provide a **control system designed for different building zones.**


Solarmotion uses cutting-edge technology to turn your building into a dynamic facade, able to monitor weather conditions, optimise functionality of HVAC systems, reduce energy consumption and intelligently adjust our sunshades to provide the most comfortable conditions.

### Solarmotion Intelligent Control Options:



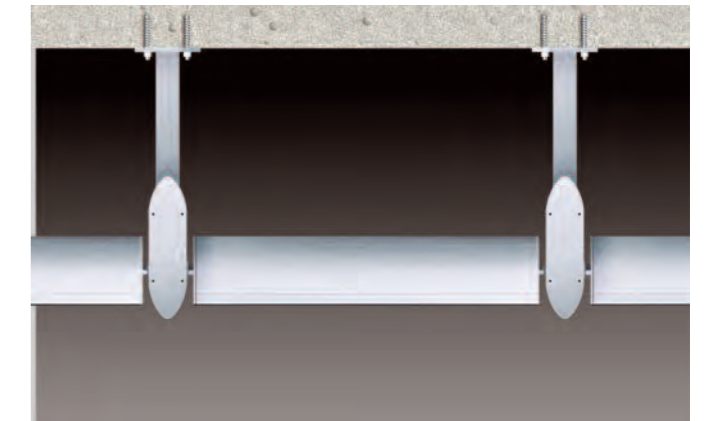
for more information on Intelligent Control Options please see page 10.



 Solarmotion's operating system is so quiet you can't hear it inside the building, even if the windows are open

## Mounting a Solarmotion System

### Plan View



Solarmotion sunshades are attached to the building with extruded stand-offs that have no exposed fasteners. This unique attachment system incorporates 3-dimensional adjustments to allow for construction tolerance on the building's face



Solarmotion sunshades can attach to all building facades including masonry and all types of curtain wall construction. All attachments are engineered to meet specific wind, snow and building loads.



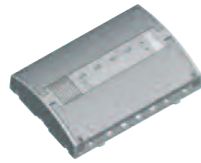
Solarmotion sunshades are designed to let building occupants see out, so our attachment system projects off the building to allow window washers easy access to the windows.

## INTELLIGENT CONTROL OPTIONS



### Building Management Control System

Programmed by a PC this system receives climatic data from a weather station to provide user comfort and energy savings depending on building occupancy.



### Solar Tracking Controller

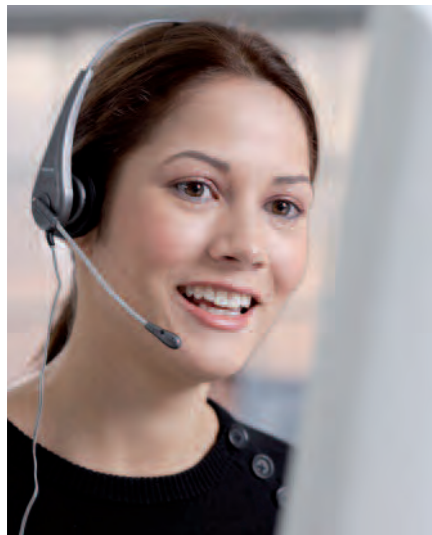
This Control system tracks the sun and positions the sunshade to block direct glare, allowing natural daylight into the interior.



### Universal Remote

Using radio technology, one remote control can control Solarmotion shades individually or collectively.

## OUR SERVICE



### C/S TECHNICAL SUPPORT

We look forward to assisting you with any queries which you may have and ensuring that you have made the right selection for your project. Call us on +44 (0)1296 652800 to speak with our Customer Service Team, Technical Team or Area Representatives.

### C/S SPECIFICATION SUPPORT

Please contact our Customer Service Team for the samples you require.  
info@c-sgroup.co.uk  
+44 (0)1296 652800

### C/S SPECIFICATION SUPPORT

Should you require specification assistance please call us on +44 (0)1296 652800.



NBS Specification Clauses for our products are also available on NBS Plus.

### INSTALLATION SERVICE

We work with a range of partners who can provide an expert project management and installation service.

Please contact us for further details.

### LEGISLATION

#### The Building Regulations 2000 - Part L

The updated Part L 'Conservation of Fuel and Power' came into force in 2002 and since then has impacted the way buildings are designed in terms of their energy efficiency.

Part L, coupled with the government's commitment to reduce the UK carbon dioxide emissions by 80% by 2050, now means that building design will be scrutinised and improved further.

Cooling of buildings due to solar heat gain significantly contributes to CO<sub>2</sub> emissions, and Part L suggests that one good method to reduce solar heat gain is to use solar shading on the external façade.

With careful consideration, solar shading design can contribute positively to the reduction of energy waste (heating and cooling) within a building.

### WARRANTY POLICY

Construction Specialties (UK) Limited (the Company) warrants to its purchasers that their Solarmotion products sold will be free from any defects in materials or workmanship and will meet the design criteria noted in our brochures when properly applied, installed and maintained. If, in the sole opinion of the Company, a product covered by this warranty is defective, the Company will replace or repair it free of any charge. This warranty shall extend for a period of two years following the date of shipment by the Company. This in lieu of all other warranties expressed or implied, and is the sole warranty extended by the Company. The liability of the Company under this warranty is limited to repair or replacement, and does not include any responsibility for consequential or other damage of any nature.

#### Disclaimer

The Company reserves the right to make design changes for the purpose of product improvement, or to withdraw any design without notice.

## UK AND GLOBAL PROJECTS

Red Maids' Junior School - Bristol, UK

Hardwicke Pavilions - Shrewsbury, UK

Tottenham Hale Retail Park - London, UK

Hollow Way Medical Centre - Oxford, UK

Todmorden Sports and Leisure Centre - Todmorden, UK

Beaminster School - Beaminster, UK

Ampress Park - Lymington, UK

Hartismere High School - Eye, UK

M I R A - Hinckley, UK

Police Station - Wembley, UK

Frenchay Hospital - Bristol, UK

B & Q Store - Crownhill Retail Development, UK

R Griggs & Co - Wellingborough, UK

Shannon Health Clinic - Limerick, Ireland

Electricity Supply Board Poolbeg - Dublin, Ireland

TWU Institute of Health Sciences - TX, USA

U.C. Davis Performing Arts Center - CA, USA

Brandeis University, Carl & Ruth Shapiro Campus Center - MA, USA

Al-Futtaim Motors - Abu Dhabi, U.A.E.

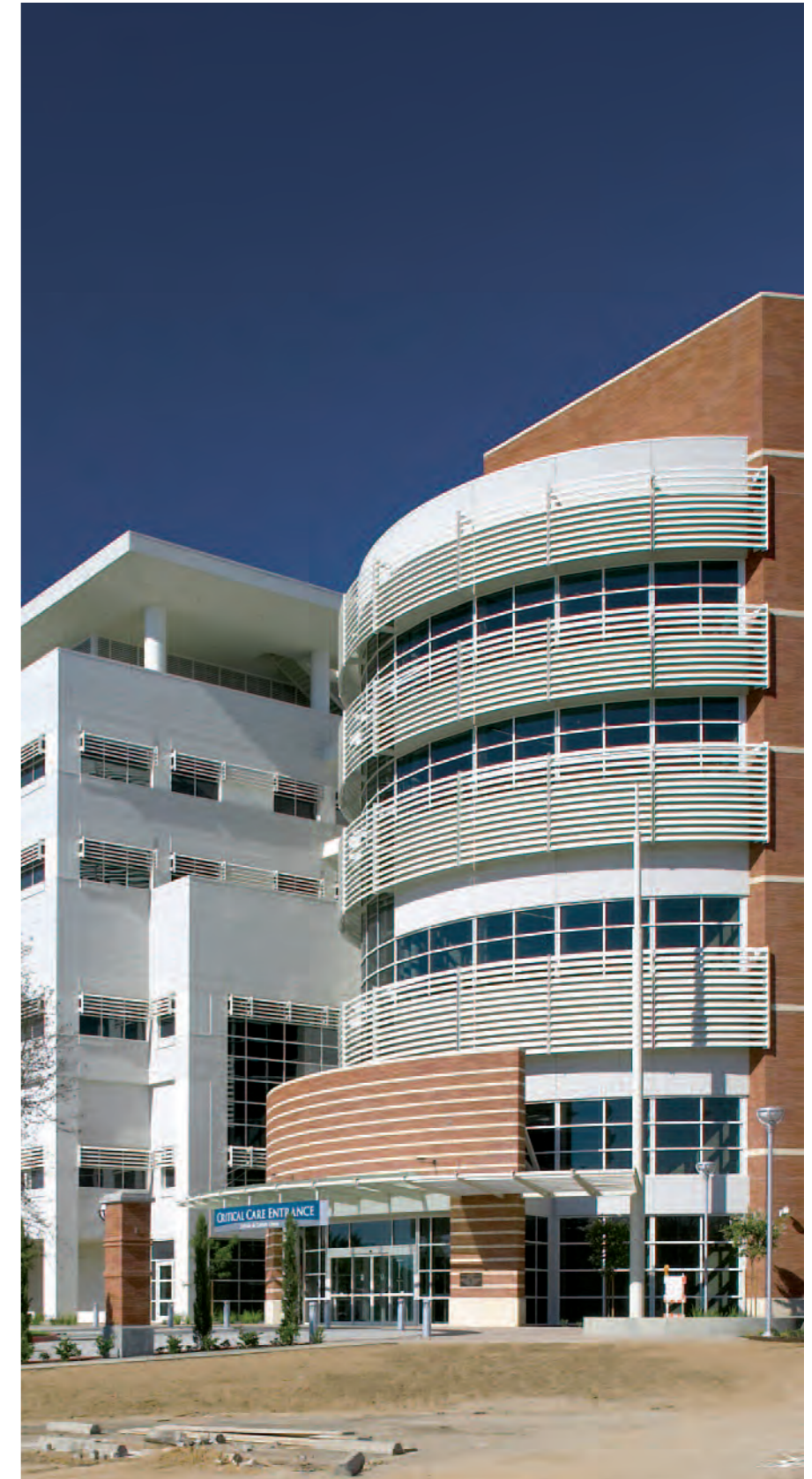
Emirates Driving School - Abu Dhabi, U.A.E.

City Forum II - Gdansk, Poland



To complement our Solarmotion products, a range of static solar shading products are available and illustrated in our C/S Airfoil® Brochure.

Please contact our Customer Service Team for your copy or visit our web-site  
[www.c-sgroup.co.uk](http://www.c-sgroup.co.uk)



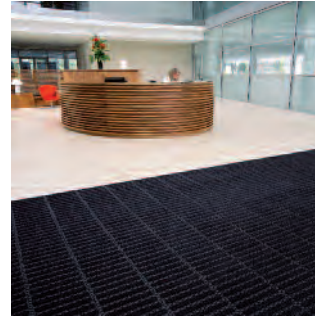
# The complete range of C/S products



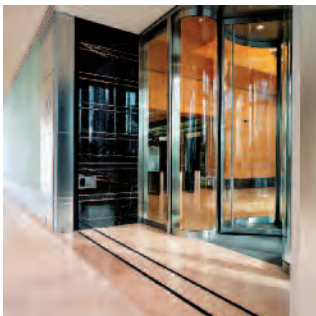
**C/S Acrovyn®**  
Wall, Door and Corner Protection



**C/S Wallglaze®**  
Specialist Coatings for Walls and Floors



**C/S Pedisystems®**  
Entrance Flooring Systems



**C/S Allway®**  
Expansion Joint Covers



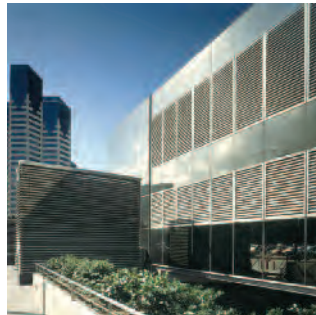
**C/S Airfoil®**  
Solar Shading Systems



**C/S Supertrak®**  
Cubicle Curtain Track



**C/S Explovent®**  
Explosion Venting Systems



**C/S Louvre®**  
Building Ventilation Systems



**C/S Solarmotion®**  
Controllable Solar Shading Systems



**Construction Specialties**

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## C/S worldwide operations

- UK (also servicing: Republic of Ireland, Scandinavia, Malta, Portugal, Iceland)
- France
- Germany
- Austria
- Italy
- Spain
- Poland
- USA
- Canada
- Australia
- Singapore
- Hong Kong
- Taiwan
- UAE
- Uruguay

