SUN CONTROL

# INCAV Impressions HunterDouglas WorldWide

**HunterDouglas** 

It's an exciting time to be an architect. New methods, new materials, and new designs that were not feasible as little as two decades ago.

Throughout the world, Hunter Douglas is helping bring original ideas off the drawing board and into reality. We're working alongside the architecture and design community, creating some of the world's most recognizable buildings.

We know how much work goes into each project.

That's why we've dedicated ourselves to the idea that for architects and designers to create innovative projects, they need innovative, customizable products.

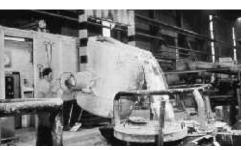
'Innovative Products Make Innovative Projects

'Inspiring environments stimulate creativity and effectiveness of people'

#### **Content**

Introduction	4 - 7
Sustainable Comfort	8 - 11
Sun Control	12 - 44

### History







Innovation lies at the heart of the Hunter Douglas culture through research, as well as actively encouraging new talent.

From our founding in 1919, Hunter Douglas has been a home for innovators. Established by entrepreneurs, our culture has been one of innovation and advancement that attracts the best and the brightest. With global manufacturing and distribution capabilities, our international presence is uniquely multi-cultural, yet distinctly dedicated to a shared vision to meet the ever-changing needs of our customers.

We never stop innovating at Hunter Douglas. Innovation is at the very core of our business. Our decentralized structure actively stimulates innovation throughout the company where we encourage constant experimentation with our products. Many of our most exciting developments are born from the front line of the organization. At our specialized R&D centers in the United States, The Netherlands, Germany and Asia our engineers and designers are working together developing new products. It's fun and exciting to develop and refine products that enhance and manage light but also satisfy design conscious consumers and architects. Even the smallest refinement in a product can bring around big benefits in energy savings and light management for homes and offices.

Architects are our inspiration. At Hunter Douglas we actively collaborate with customers to develop new product concepts and sustainable solutions for window coverings and architectural products. We are continually seeking, testing and developing new concepts and products that will enable us to meet ever-more-demanding standards of performance. Our growing range of sun control solutions, ceilings, facades, motorized products and building management systems help today's architects move their projects to the forefront of sustainable building.

#### Introduction

Business is people. At Hunter Douglas, we pride ourselves in our employees - a worldwide network of experienced, intelligent, passionate and creative men and women in over 100 countries worldwide, working together in the spirit of collaboration that keeps Hunter Douglas at the forefront of innovation for the home and office.

#### New times are ahead

For more than 50 years, the architecture and design community has specified high performance solutions from Hunter Douglas. Our advanced sun control systems, intelligent façade solutions, high performance acoustic ceilings and innovative products and materials, significantly contribute to Indoor Environmental Quality and help conserve energy.

Our expertise in customization, fabrication, installation and technical support delivers outstanding products with our design hallmark, outstanding performance and exceptional durability. With major operation centers in Europe, North America, Latin America, Asia, and Australia, we've contributed to thousands of high profile installations, from retail and commercial facilities to major transit centers and government buildings.

Not only are the world's architects and designers our partners, they're our inspiration. As they continue to raise the bar for excellence, we're creating innovative products to bring their visions to life.

Our Impressions book showcases your exciting projects and designs featuring interior and exterior projects.

Aad Kuiper President & CEO

**Hunter Douglas European Operations** 



'Good indoor environmental quality and substantial energy savings go hand in hand'

# Sustainable Comfort

## Sustainability

#### Comfort, Energy and Materials are at the heart of Hunter Douglas' philosophy to provide sustainable solutions.

Solutions that balance these elements are at the heart of sustainable architecture. Comfort as an integral element of sustainable construction underlined by building rating systems like LEED, BREEAM and DGNB.

Specifying solutions that enhance interior comfort and indoor environmental quality are essential as employees spend more than 90% of their life indoors. Worker productivity is significantly impacted by both good indoor climate (positively) and bad indoor climate (negatively). In a typical office over 80% of the costs are people related but usually less than 1% is spent on energy. Solutions that enhance productivity even by as little as 1% can create significant financial savings and reduce energy consumption by up to 50%.

#### Comfort in the indoor environment is usually composed of four key aspects:

Visual: Visual comfort is a key component as highly glazed facades and the use of daylight can conflict with computer display devices. Glare is frequently experienced in offices and classrooms. Glare can be reduced by managing incoming daylight to reduce brightness ratios. Hunter Douglas window coverings solutions diffuse glare for visual comfort and move daylight into a space, reducing energy used by artificial lights.

Thermal: Air temperature and the temperature of the surrounding window surfaces play an equally important role as both temperatures are influenced by solar heat gain through windows. To create optimal thermal comfort both external and internal shading strategies can to help achieve a balanced thermal environment. Energy-saving building envelopes with award winning Hunter Douglas shading systems, can help control solar heat gain, moderate temperatures and significantly enhance performance and efficiency.

Acoustic: The trend towards open plan offices with individual workstations rather than traditional walled offices workers can mean workers experience poor acoustic comfort, speech intelligibility and speech privacy which can impact productivity. Noise of equipment and conversation have been shown to impact worker comfort and productivity. Hunter Douglas acoustical ceiling systems optimize interior environmental quality a noise reduction coefficients (NRC) up to 0.85.

Indoor Air Quality: Research shows that poor indoor air quality relates to health problems and reduced human performance in general. IEQ problems are often caused by ventilation system deficiencies, overcrowding, off gassing from materials in the office and mechanical equipment, tobacco smoke, microbiological contamination, and outside air pollutants. Hunter Douglas has a full line of low VOC products that pass the GreenGuard® Air Quality Certified® and GreenGuard® for Children and Schools SM standards. All GreenGuard Certified Products have been tested for their chemical emissions performance including for formaldehyde, volatile organic chemicals (VOCs), respirable particles, ozone, carbon monoxide, nitrogen oxide, and carbon dioxide.

Hunter Douglas solutions can deliver significant environmental benefits by improving buildings' performance, and may contribute to LEED, BREEAM and DGNB certification.

Window Coverings : Controlling light improves visual comfort and energy efficiency

**Ceilings**: Solutions that ensure long product life and excellent acoustical performance **Solar Control Solution**: Systems manage solar thermal gain to save energy and reduce carbon footprint

Facade Systems : Ventilated approaches to cladding offer sustainable benefits for both new construction and building refits



Energy use and supply are of prime importance in building rating systems as LEED, BREEAM and DGNB. They are also at the forefront of many governmental information campaigns derived from Europe's 20-20-20 goals, aiming at 20% reduction of greenhouse gas emissions, a 20% share of energy from renewable resources and a 20% improvement in energy efficiency.

Sometimes one gets the impression that energy savings are the one and only objective. Too single minded an approach might jeopardize indoor climate? Fortunately, energy efficiency and good indoor environmental quality need not be at odds. On the contrary, it just takes an integrated strategy to design a great building that reconciles seemingly incompatible requirements. Harnessing the sun and managing light control are instrumental strategies getting the best from the largest free energy flux available to us: light from our sun.

The environmental impact of the use of materials in the build environment is getting increased attention. This is not surprising as buildings are among the heaviest construction we create and the environmental impact is directly proportional to the amount of material used. At Hunter Douglas our strategy is to pick materials that have good environmental properties. Next, we process them as efficiently as possible to reduce any adverse impact at this stage of their life. The design and quality of our products ensure a long lifespan not only technically but also aesthetically. This aspect often has a decisive influence on the eventual lifetime and therefore environmental impact of a product or material.



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.



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.



The Dutch Green Building Council (DGBC) was founded in 2008 in the Netherlands as a market initiative. The aim was to make Sustainability in the building industry measurable by developing a sustainability label allowing for the uniform rating of buildings throughout the Netherlands.

# Sun Control

'A well-designed solar-control solution will significantly enhance the comfort and well-being of a building's occupants by managing natural light, thermal gain and reducing glare'

HunterDouglas Sun Control a complete sustainable comfort program







**Design, Functionality and Comfort:** 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. 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. By combining integrated building solutions Hunter Douglas can optimise the energy efficiency and worker comfort.



HunterDouglas Sun Control a complete sustainable comfort program

HunterDouglas Sun Control Programm





### Residential the Netherlands Garden Pavilion



In this residential project in the Netherlands the shutter design was combined with a cladding in CorTen steel, integrating the shutters into the façade completely. The result is a stunning little piece of architecture that completely meets with the architect's original ideas and expectations. The shutters work as sun control but also close off windows and doors in an elegant way. This smart new design solves the problem of making an electrical folding shutter close completely to a flat surface.

The combination of the unique and elegant folding principle with complete freedom of design makes the HunterDouglas® flat folding shutter solves a beautiful challenge for architects looking for a dynamic and functional facade. The garden pavilion presents itself modest, but appearances are deceiving. The maximum permitted height of three meters says nothing about the overall dimensions of the recessed building: under the ground is a luxurious, multifunction gym hiding, the size of a squash court.



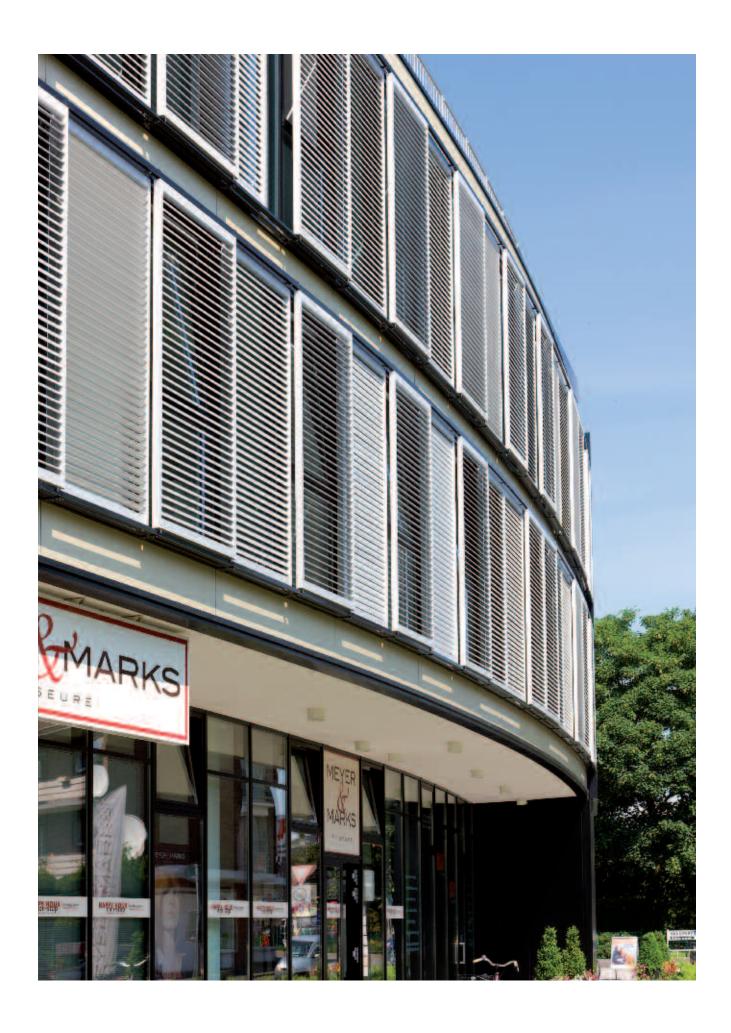


Project : Garden Pavilion Location : the Netherlands

Product : Eccentrically moving Flat Folding Shutter

Architect: Ivo de Bruin (Studio Puur NL)







Project : Büro- und Geschäftshaus Location : Kaarst, Germany Product : Sliding Shutters Architect : Dipl.- Ing. Volker Reichartz



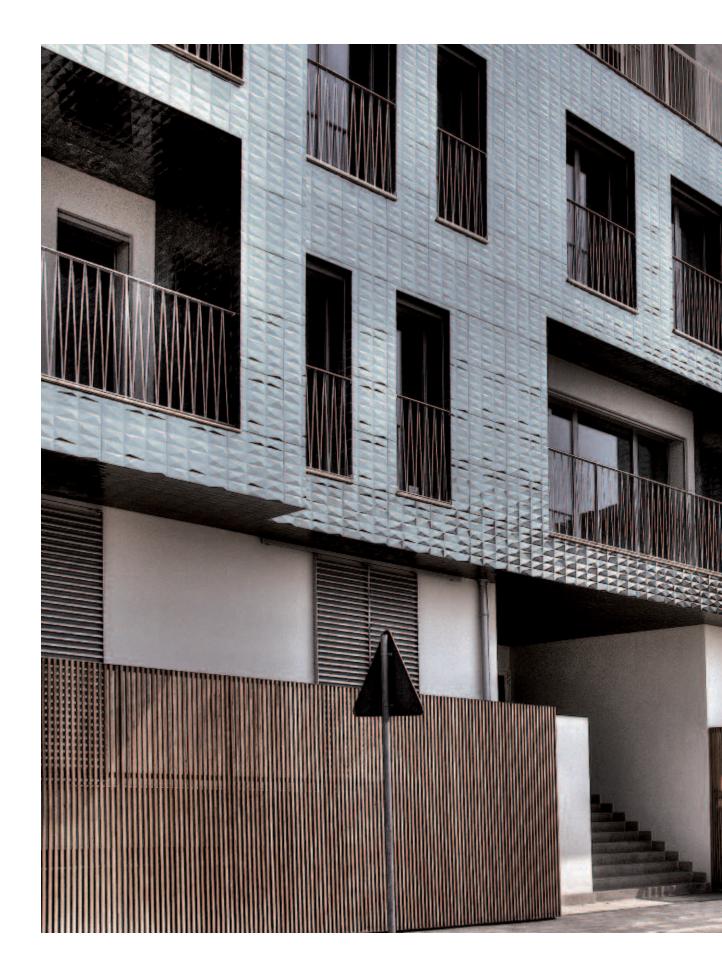
### Büro- und Kaarst, Germany Geschäftshaus

### **APARTMENT BUILDING**

Brescia, Italy



This project combines exciting architecture, colourful façades with a unique Sun Control system.



Apartment Building • Brescia, Italy

This project combines marvelous architecture, colourful façades with 180 manual operated sliding shutters.



The simple modern and lean sliding shutters were specially designed for this facade, which is clad with various materials like 3D carved ceramic tiles glued to the façade, Okumè wood grids, **Swiss Pearl panels and normal painted walls.** The top and bottom rails are visible as a landmark of the style, and every panel is securely blocked when closed to protect privacy and safety.

The combination creates a gracious fairytale mosaic front that triggers the eye to each and every detail.

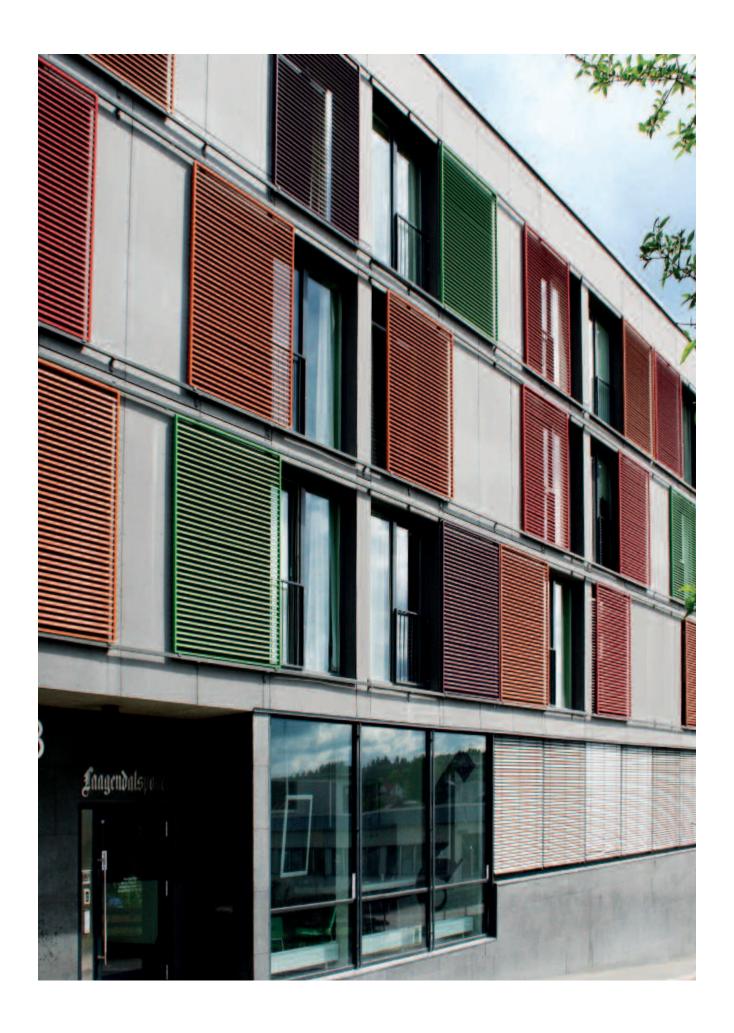


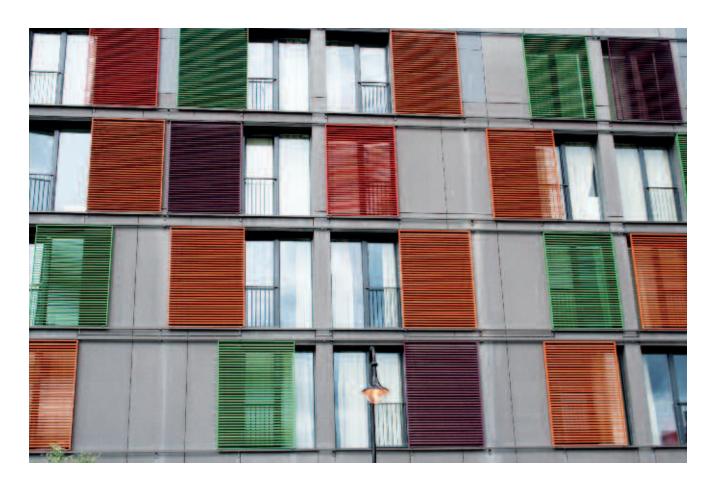






Project : Apartment Building Location : Brescia, Italy Product : Sliding Shutters Architect : 5+1 AA

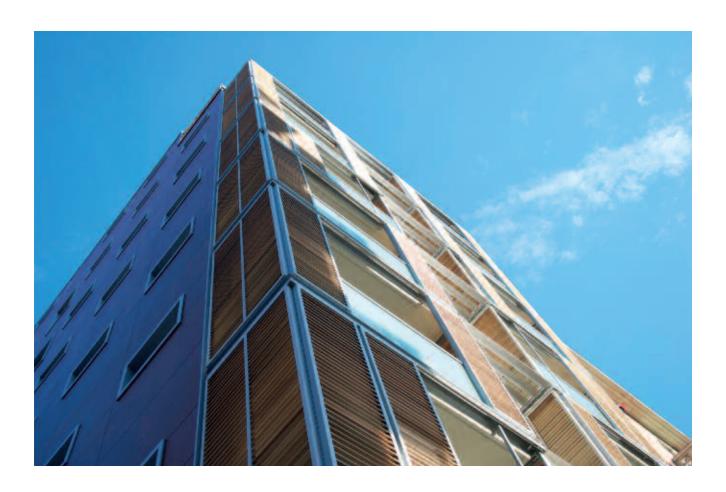




Project : Education Center Papillon locatie : Kongsberg, Norway Product : Sliding Shutters Architect : Link Signatur



# Education Kongsberg, Norway Center Papillon

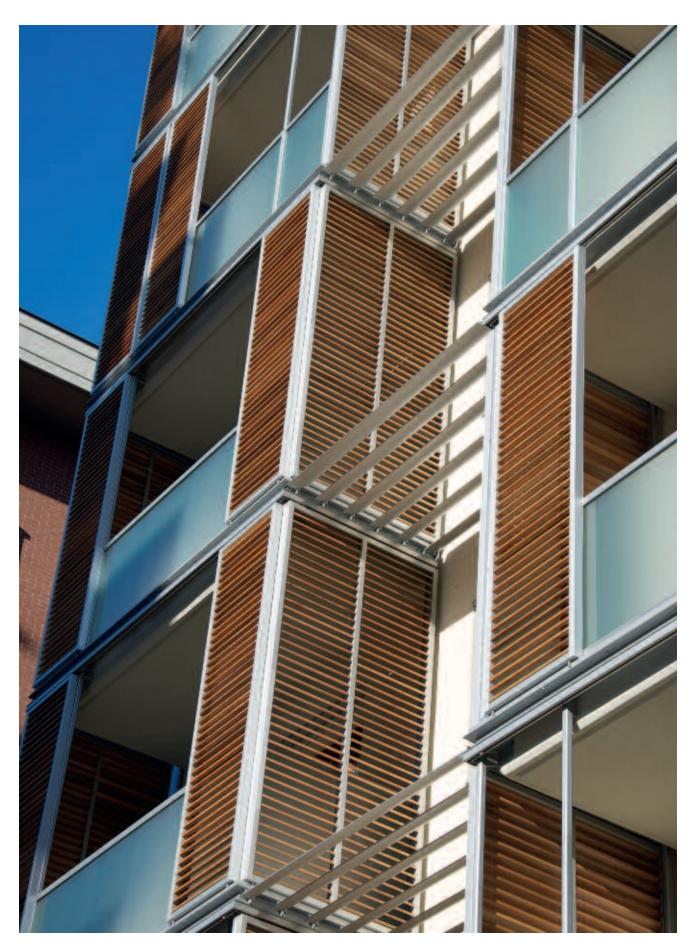




Project : Residenza di via San Marino

Location: Torino, Italy Product : Sliding Shutters Architect: Erica Piacentino

### Residenza Torino, Italy di via San Marino



Sliding Shutters are one of the pillars of traditional construction, they act as insulation, and give the building a unique aesthetic. The abundant use of glass in modern architecture requires protection against the sun and privacy is also important factor. The made-to-measure sliding shutters for this residential building create unique protection and give the building an exclusive appearance.



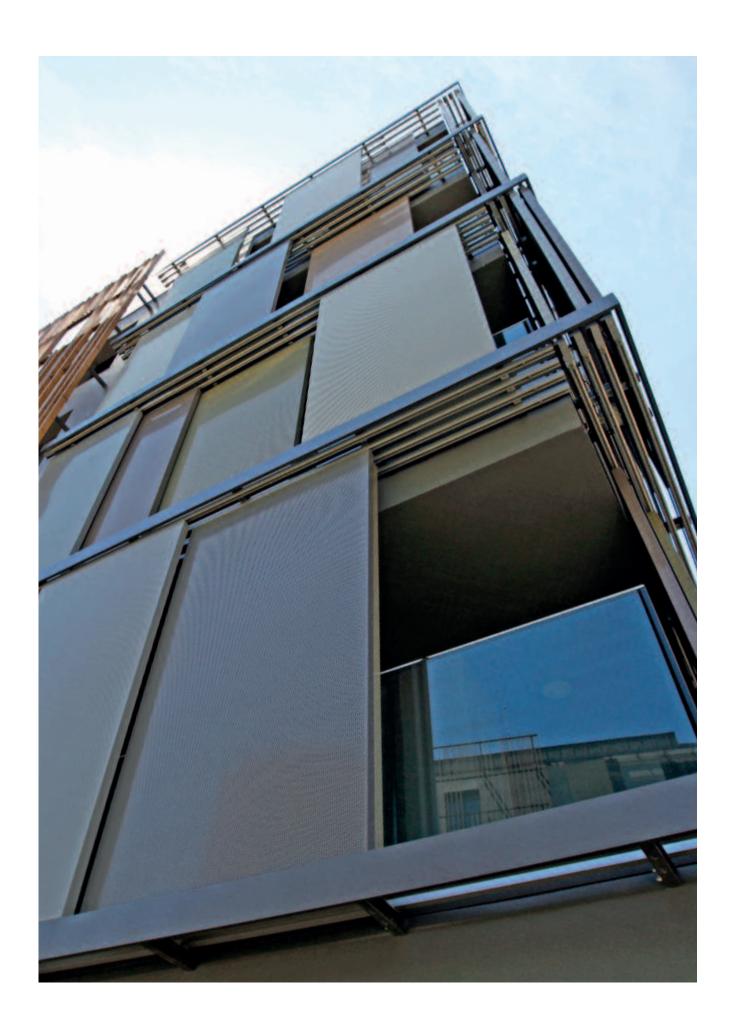
The Lighthouse Apartment is an attractive, 4 1/2 storey, multi-family residence building with an underground parking lot located in the town of Władysławowo. The building's tower was design in the style of a lighthouse, reflecting the Baltic sea traditions in the region. Project specific shutters provide striking façade details, ensuring light and heat regulation whilst providing privacy.



Project : Apartments Latarnia Morska Location : Władysławowo, Poland Product : Sliding Shutters Architect : Warsztat Architektury



# Apartments Władysławowo, Poland Latarnia Morska





Project : Ulus Savoy Residences Location : Istanbul, Turkey Product : Sliding Shutters Architect : Emre Arolat Architects



# Ulus Savoy Istanbul, Turkey Residences





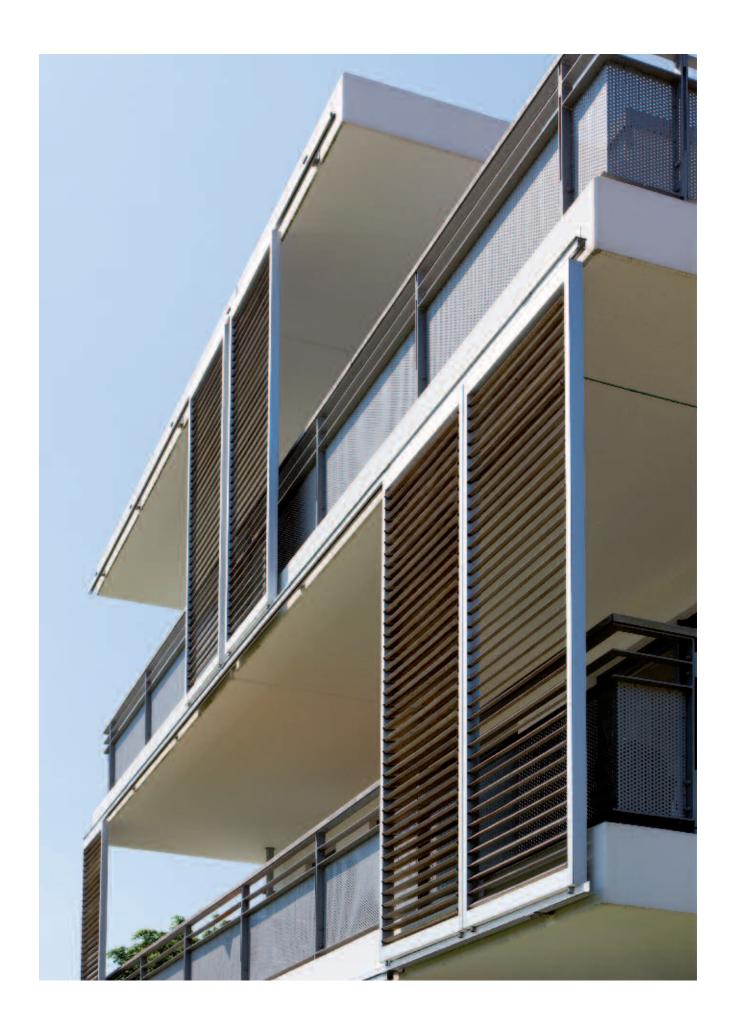
Project : Ferienapartments

Location: Timmendorfer Strand, Germany

Product : Sliding Shutters

Architect: Rüdiger Nickel, Architekten - Ingenieure - Planer

## Ferienapartment Timmendorfer Strand, Germany





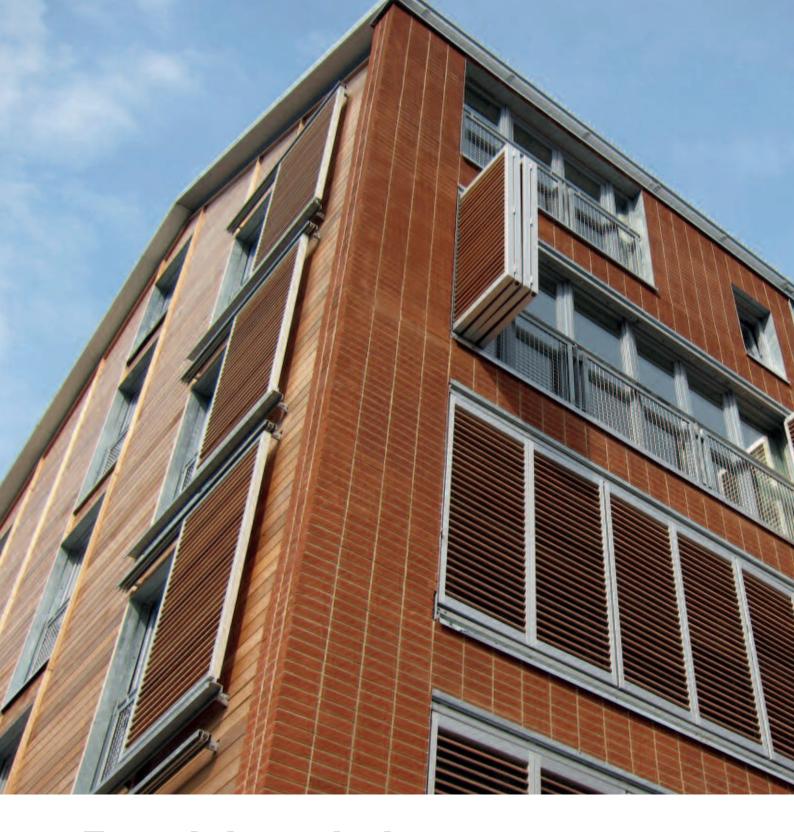
Folding shutters on the façade this building creates an unusual dynamic. Designing the transparent parts of the building envelope with closed or open folding shutters, in combination with colour creates a completely new look. Hunter Douglas folding shutters create a monolithic appearance when they are closed forming flat closing sun screen system. The shutters on the rounded part of the building are fitted with the same hinge construction as the harmonica shutters on the straight facades, but powered by a spindle motor attached to the shutters themselves, so that they can be opened and shut electrically. Hunter Douglas has taken this newly developed technique from flat folding shutters in order to be able to operate shutters on the curve.



Project: Fioretti college
Location: Lisse, the Netherlands
Product: Folding Shutters
Architect: ir. Aldo Vos, Broekbakema



## Fioretti Lisse, the Netherlands college



## Residential Gloucester, United Kingdom Merchant Quay



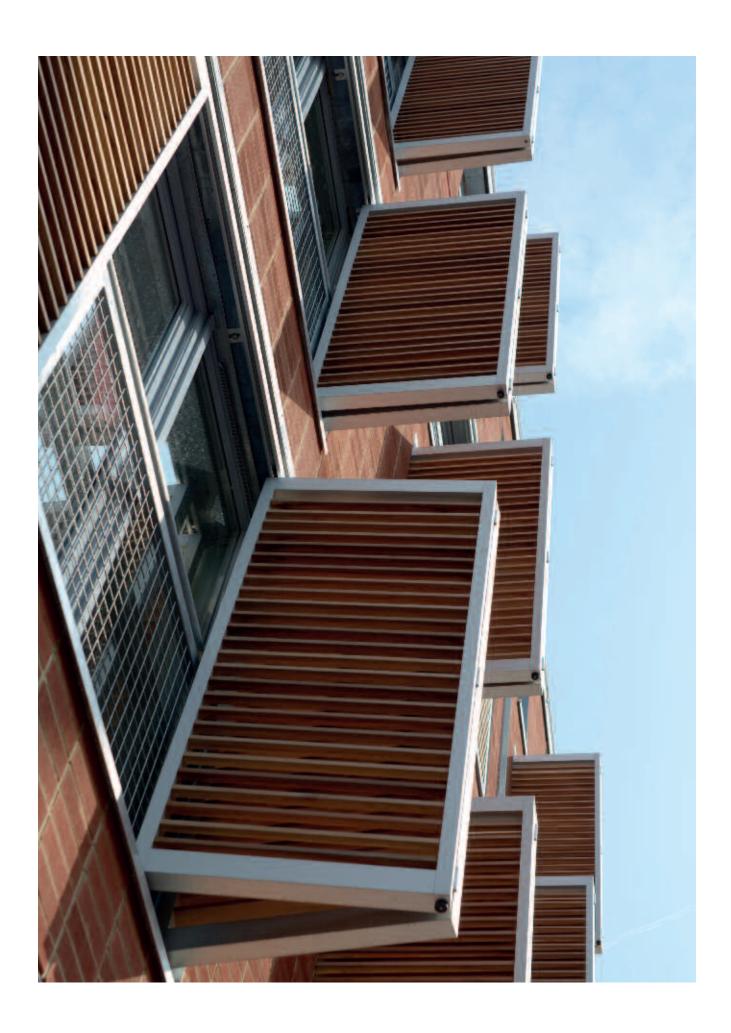
The historic waterfront at Gloucester has undergone a multi-million regeneration and at the heart of the scheme is the rejuvenated Merchants Quay development.

Hunter Douglas has created an innovative shutter system for the new landmark dockside building, which sits in the heart of a Grade II listed environment and has to meet strict planning requirements. The high-profile waterfront scheme allowed Hunter Douglas to highlight the complete shutter system solution it is able to offer. The Hunter Douglas shutters blend style and functionality - inside and out. By providing building exteriors with a distinctive and stylish look as well as offering optimal solar effectiveness for maximum internal comfort.

Using the right system can greatly influence the thermal and visual indoor climate and the Hunter Douglas team worked closely with architects Stride Treglown Tektus and contractors Vinci throughout the process, from specification to installation, to ensure the finished solution met all requirements. 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. Merchants Quay has become a flagship regeneration project for the city's Docks, traditionally a thriving area of Gloucester and now enjoying a new lease of life thanks to such impressive developments.



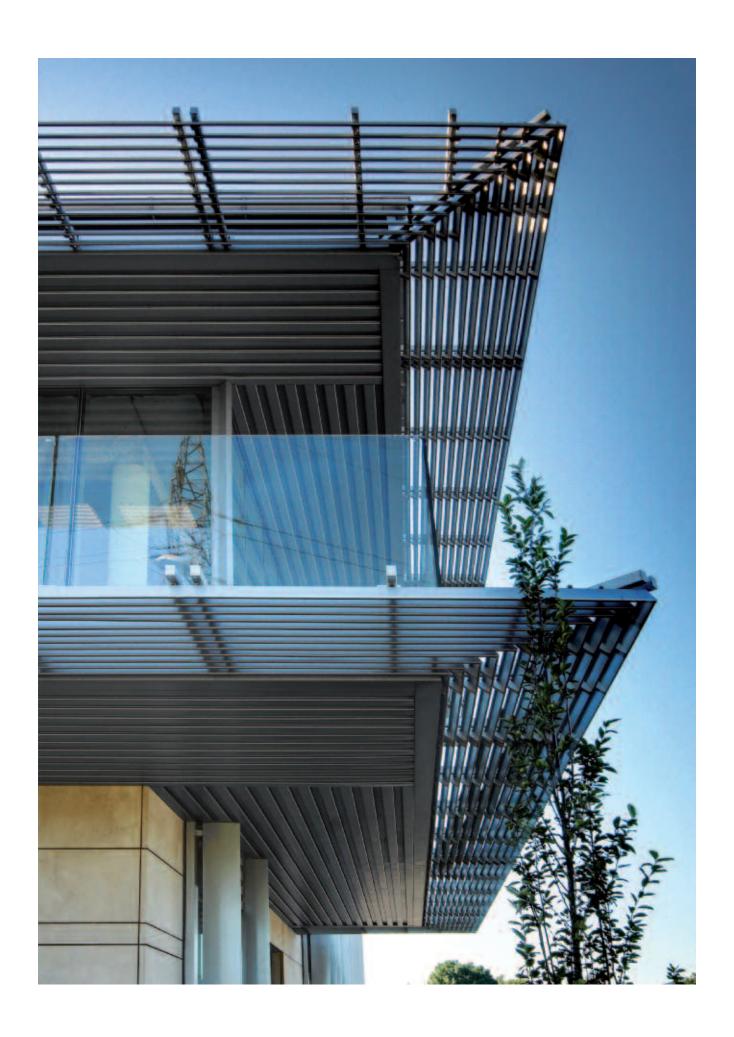






Project : Residential Merchant Quay Location : Gloucester, United Kingdom Product : Sliding and Folding Shutters Architect : Stride Treglown Tektus







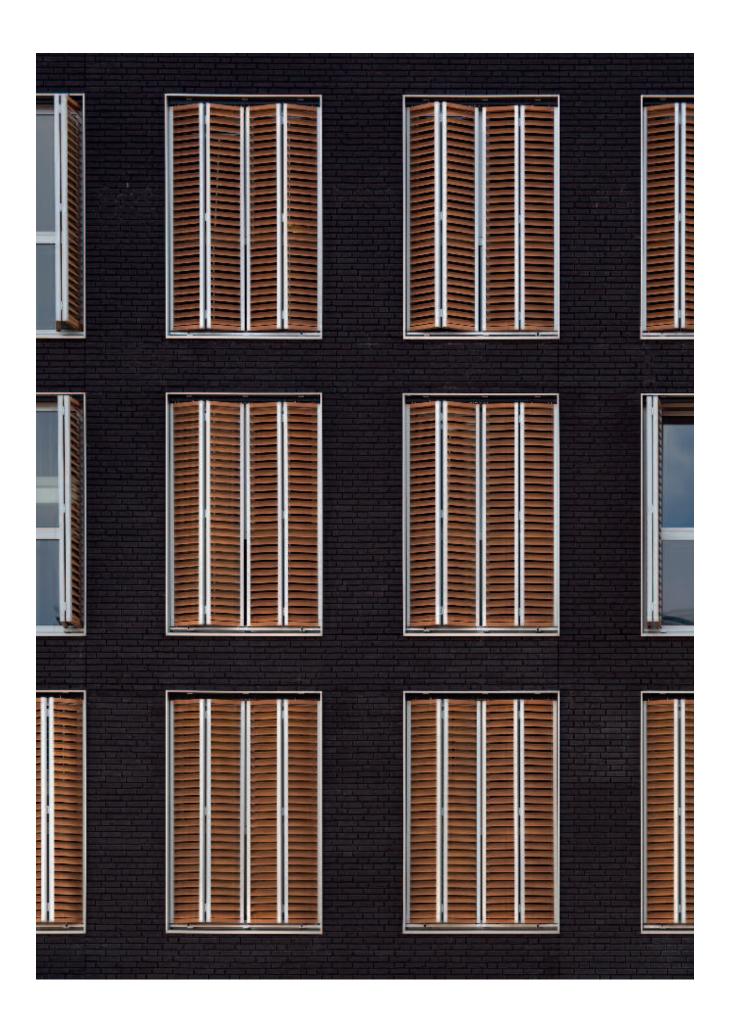
Project : Janmor Office Building Location : Pabianice, Poland

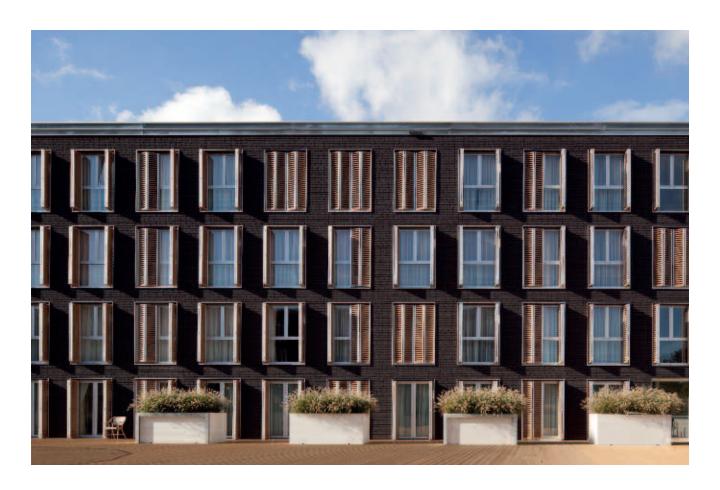
Product : External Venetian Blinds, Aerofoils and 84R Cladding & Sun Louvres

Architect: C-13 Architektura Stosowana



## Janmor Pabianice, Poland Office Building





Project : Care Center 'De Nieuwe Heikant' Location : Tilburg, the Netherlands Product : Folding Shutters Architect : Oomen Architecten



## Care Center Tilburg, the Netherlands De Nieuwe Heikant

Product	Project	Country	Section	Page
Sun Control				
Eccentrically moving Flat Folding Shutter	Garden Pavilion	The Netherlands	Residential	15 - 16
Sliding Shutters	Büro- und Geschäftshaus	Germany	Offices	17 - 18
Sliding Shutters	Apartment Building	Italy	Residential	19 - 24
Sliding Shutters	Education Center Papillon	Norway	Education	25 - 26
Sliding Shutters	Residenza di via San Marino	Italy	Residential	27 - 28
Sliding Shutters	Apartments Latarnia Morska	Poland	Residential	29 - 30
Sliding Shutters	Ulus Savoy Residences	Turkey	Residental	31 - 32
Sliding Shutters	Ferienapartments	Germany	Residential	33 - 34
Folding Shutters	Fioretti college	The Netherlands	Education	35 - 36
Sliding and Folding Shutters	Residential Gloucester Merchant Quay	United Kingdom	Residential	37 - 40
External Venetian Blinds and 84R Cladding & Sun Louvres	Janmor Office Building	Poland	Offices	41 - 42
Folding Shutters	Care Center 'De Nieuwe Heikant'	The Netherlands	Residential / Health	43 - 44













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energy, supporting built environments that are comfortable, healthy, productive, and sustainable.



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Serbia Slovakia Greece Hungary Spain Sweden Italy

Switzerland the Netherlands

Turkey Norway United Kingdom Poland Africa Portugal Middle East Romania

Russia

Asia Australia Latin America North America

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