

A close-up photograph of a healthcare professional in blue scrubs holding a patient's hand. The professional's hands are resting on the patient's hands, which are resting on their lap. The background is bright and out of focus, suggesting a clinical setting. The text 'See shade in a new light' is overlaid on the right side of the image.

See shade in  
a new light

**Environments focused on care, recovery and well-being.**  
Intelligent solutions for connected and automated shading in healthcare environments

**somfy**<sup>®</sup>

# Intelligently managing daylight

## for increased comfort, well-being and sustainability

Controlling light and heat while preserving natural resources is a fundamental human need. However, the way we live is changing and we now spend around 90% of our time indoors - so how can we ensure we still meet this need?

Whether new build or renovation, considering the effective use of daylight is essential when undertaking a building project in the health and care sectors. There are primary requirements and challenges to be addressed: and daylight management plays a role in each of them:

- Health, welfare and well-being of occupants; patients, residents and employees
- Energy consumption
- Sustainability
- Connectivity

Through connected and automated dynamic solar shading, you can help satisfy the demanding requirements of a building's energy efficiency and sustainability by optimizing natural light, preserving the full spectrum of daylight and diffusing light, where required.

With dynamic solar shading, Somfy technology is used to automate and control external and/or internal solar shading devices such as screens, blinds and shades via an intelligent building control system.

Combining dynamic shading with the right type of glass also ensures the occupants get the benefits of daylight and a view to improve comfort, well-being and recovery.



# The Human Factor

## daylight for health, welfare and well-being

Research has shown that natural light is essential in hospitals and care environments. Both for the staff, where the right levels of natural light increases mental capacity and productivity, and for the patients and residents, as daylight aids sleep, promotes recovery and has a positive effect on mood.

### Hospitals and Healthcare

For patient recovery, studies have shown that;

#### Daylight reduces the duration of hospital inpatient stays

(Bron: Beauchemin & Hays 1996)

**Natural light has a positive influence on recovery time following operations – by up to 8.5% (Dr Ulrich 2008)**



### Elderly and specialist care

In a residential care environment, the benefits of daylight could be considered even greater. Natural light increases the feeling of good health and improves quality of life. It can partly compensate for vision loss, promotes the functioning of the human body by producing vitamin D, regulates the biological clock that determines circadian rhythms and has a major influence on mood and body temperature.

Studies have shown;

- A reduction in deterioration of orientation and memory by up to 5%
- A reduction in symptoms of depression by up to 19%
- Decreased decline of functional limitations by up to 53%

Source Van Someren 2008

# Creating energy efficient, sustainable healthcare spaces

Managing energy consumption and creating greener buildings is now a priority. As average outside temperatures increase, there is a real risk of our buildings overheating.

Hospitals typically use more energy than other types of buildings. Managing daylight effectively can play an important role when it comes to lighting, heating and cooling – studies show it can save up to 15-20% of a building's total energy consumption.

Satisfying the first step of the Trias Energetica, dynamic solar shading can drastically reduce the need for active cooling and, through the optimization of daylight, also impacts on the level of artificial light required.

The EPBD (Energy Performance of Buildings Directive) recommends dynamic solar shading as an energy efficient solution.

In Europe, 40% of the total primary energy used is in buildings

Up to two thirds of the energy consumption in buildings is used by heating and cooling

Up to 35% of electricity costs result from the use of artificial light.

## Connected Buildings

Connecting buildings and installations to the Internet of Things makes them more future-proof.

IP devices and sensors collect a lot of data that can be analysed. Using new technologies, this data can be used, for example, to make buildings more energy efficient. There are many advantages to be had; maintenance and repair intervals can be predicted and remote adjustments made, when needed.

- 30% of the world's energy is used by buildings; and
- 20% of global CO<sub>2</sub> emissions are produced by buildings.

The EU Climate and Energy Package, also known as the 20-20-20 targets for 2020 consists of three goals:

- Reduction in energy consumption
- 20% Reduction in CO<sub>2</sub> emissions compared to 1990
- Of energy to come from renewable sources.

# Why choose Somfy as your partner?

Buildings dedicated to healthcare share one objective: to take care of people's lives. Therefore, the design needs to focus on the needs of the occupants and the smooth operation of the building.

We work in close collaboration with designers, contractors and facility managers, together with our industry partners to deliver a solution that works for your project.

We provide the complete solution for dynamic solar shading; from the development, design and manufacture of motors and intelligent building controls; through to installation, commissioning and maintenance. Our locally based expert teams can advise and support your project from the outset, from design and specification, to ensuring your solution stays optimized for your future needs.

By working together in this way, the final solution fits the building and user needs. Occupants have the freedom to easily manage the levels of natural light in their environment; minimising glare, modulating heat and ensuring comfort and privacy. And by limiting the use of artificial lighting, heating and air conditioning, you're optimizing energy efficiency, and thus sustainability.



**THE BUILDING USER**  
Comfort & well-being of the building users



**THE BUILDING**  
Efficient energy management



**THE ENVIRONMENT**  
Sustainability – reduced CO<sub>2</sub> emissions

## About Somfy

Somfy's leading smart management solutions for homes and buildings have been improving people's daily lives for over 50 years.

Developed with comfort, ease of use, security and sustainability in mind, our innovations automate and connect rolling shutters, curtains and blinds, gates and garage doors, lighting and heating, alarms systems and more. We are committed to creating useful solutions that are accessible to all, designed for today and beyond.

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