# somfy.

# Intelli-shade 2022

### Dear Valued Partners,

Although the world is experiencing one of the most turbulent times with the current geopolitical situation, rising inflation and interest rates and other challenges, there is a silver lining with the world opening up its borders and we are almost back in a Post-COVID world.

Each one of us around the world has learnt many things during the COVID crisis, and one such thing was business as usual by working from home, which had become a way of life during the prolonged pandemic period.

With offices across the globe opening up again, and employers welcoming back employees into workspace environment, every organization is approaching this situation differently. Many organizations have made Hybrid Working their new norm, whereas there are many which want full office working as it was before COVID. The approaches are also varying. While some are making return to office as a strict policy, there are some others who are approaching it very differently. They are trying to make their workspaces more efficient, productive and vibrant, so that employees feel motivated enough to come back to offices. **Dynamic solar shading** with possibility to manually override the shade position plays a critical role in achieving these objectives. These have also been emphasized in workspace performance standards like LEED and WELL.

In this edition, we cover these topics in detail and we hope you enjoy reading the related content. Please feel free to contact your local Somfy representative for any further information you may require.

Best Regards,

#### Vishal ARORA

Projects Channel Director – Asia Pacific

In both the cases, **employee well-being and productivity is taking centre stage in office design** and CXO levels are also getting involved in many cases in workspace planning to ensure the final result is satisfying.

Natural light and its regulation plays an important role in health, well-being and productivity of occupants. And the power to control their own environment is even more desired by them.





# **About Somfy**

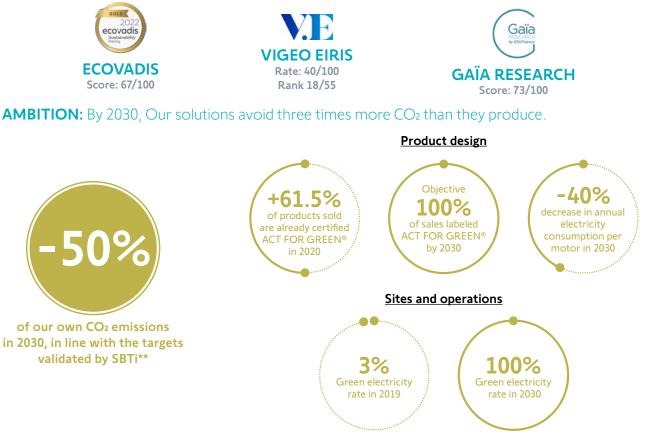
### Helping to preserve the planet by reducing our environmental impact is everyone's business.

Over 50 years, as a key player in automated solar shadings, we know that the fight against global warming starts with building energy performance. A recent OpinionWay survey\* also shows that 90% of consumers expecting brands to commit helping their consumers better.

Since 2015, we have taken further steps to launch sustainability initiative, and developed eco-design products called "Act for Green". It is a voluntary initiative and above the general industry standard, to take account of the environmental impact of its products throughout their lifecycle: from manufacture to recycling, via transport and use. It ensures quality products that responsibly sustain the health and the environment of each user, today and especially for tomorrow.

We act for a better way – by lowering the impact of our operations on the environment, we take our employees' daily lives and their future to heart, and we maintain quality relationships with our partners and the local regions that we call home.

We are committed to ensuring that our path takes the form of a more responsible development model, helping us reach the recognition as follow:



\*OpinionWay survey for Oney conducted among European consumers (February 19, 2020).

\*\*SBT: the goal of the Science-Based Target Initiative (SBTi) is to provide concrete solutions for organizations to commit to reducing their emissions to 1.5°C or 2°C warming trajectories in alignment with the goals of the 2015 Paris agreements.



# **About Somfy**

#### Product design criteria

Every Act for Green product has to meet the following criteria:



#### Power consumption Reduce the product's energy consumption <0.5W for motors.



Chemical substances Select materials which respect health and environmental requirements. (e.g.REACH & ROHS tests)

#### **Responsible purchase**



Average 40% of all of group's purchases made from suppliers located within a radius of less than 500km from our assembly sites

### From a recent internal study



53% of those interviewed suppliers have a real sustainable development policy

48% of interviewed suppliers are evaluated by ECOVADIS with a total score above 50/100 for 100% of them

#### **Green Team**

Turning our employee as ambassadors of this initiative is crucial. Somfy group has organized "Sustainability Week" every year to generate awareness, sharing learnings and engage employee's participation. Coach by doing! Act for better planet!



Taiwan: Beach cleaning activity



Australia: Succulent Terrarium Workshop



Hong Kong: Coffee Grounds Upcycling Workshop





Electronic components Select components with the least environmental impact.



Packaging 100% recycled paper, 50% recycled cardboard, no plastic wedge.



Durability Optimise product lifespan.



Environmental statement An online environmental statement PEPecopassport® is made for our products and verified externally by Bureau Veritas.

# Knowledge

### Somfy solutions for LEED and WELL

The priorities of building design has changed over the recent years, where the focus now is not only creating buildings with sustainable materials, but also creating spaces built to enhance the health and well-being of those inside said spaces.

Multiple organisations have formed, to consolidate all aspects of research and develop useful tools or rating systems which allow for buildings to be quantified or rated on how well they are designed in order to meet these multiple objectives. Two such organisations include the US Green Building Council, which has developed the LEED certification process – Leadership in Energy and Environmental Design, and the International Well Building Institute which has developed the WELL v2 standard, placing human health and well-being at the very centre of building design.

Whilst LEED focuses on energy efficient, environmentally conscious design and responsible choice of materials, WELL v2 considers all aspects of design from the perspective of enhancing human well-being. With Somfy solutions providing highly customisable automated shading solutions, for a range of end products including operable windows, interior roller blinds and venetian blinds, Somfy solutions contribute greatly towards achieving points on the WELL v2 standard, as well as the LEED certification process.

$\bigcirc$	Integrative Process	<b>Integrative Process</b> Incorporating smart shading and window operability in early stage energy modelling.	1
$\bigcirc$	Sustainable Sites	<b>Light Pollution Reduction</b> Using automated controls for window coverings to close at specific times, preventing light trespassing and light pollution.	1
	Materials and Resources	<b>Environmental Product Declarations</b> Selecting products which disclose their environmental life-cycle impacts and pathways for improvement. Somfy's Act for Green initiative speaks to this point, as well as the EcoPassports provided for Somfy products.	2
	Energy and Atmosphere	<b>Optimise Energy Performance</b> Demonstrate an improvement beyond ASHRAE standards for the building envelope, achieving 50% SHGC reduction, including automated window shading	6
	Indoor Environmental Quality	<b>Daylight</b> Providing automatic shading, with manual override, for all regularly occupied spaces to assist in glare control and achieve required amount of spatial daylight autonomy.	3
		<b>Thermal Comfort</b> Providing the ability, for at least 50% of individual occupant spaces, for occupants to change the positions of their blinds through Somfy Smoove wall switches.	2
		<b>Enhanced Indoor Air Quality Strategies</b> Somfy controls can support improvement of indoor air quality, by providing controls of operable windows catering to 75% of the buildings regularly occupied spaces.	1

#### Somfy shade systems contribution to LEED : 16 pts



# Knowledge

### Somfy shade system contribution to WELL: 12 pts

	Air	A07 Operable Windows Somfy smart operable windows interfaced to a BMS cues suitable use of operable windows to increase supply of high-quality outdoor air and connect to the outdoor environment.
(P)	Thermal Comort	<b>T06 Thermal Comfort Monitoring</b> Somfy smart shading systems can be monitored and provide feedback to the building manager when interfaced with a Building Management System.
		<b>T02 Verified Thermal Comfort</b> Verifying the thermal comfort achieved through automated shading with manual override, through post-occupancy surveys.
	Light	L05 Daylight Design Strategies         Somfy smart shading solutions help ensure 70% of all workstations have VLT higher than         40%. Somfy solutions provide automated, integrated solar shading with manual override,         to prevent glare.
		L06 Daylight Simulation         Implementing Somfy shading solutions to achieve optimised indoor daylight exposure, as seen in simulations conducted which consider such solutions.



# Product

### OVERRIDE - the key to performance

The benefits of a solar shading system in terms of improved indoor comfort, better visual comfort, energy savings and use of natural daylight can only be harvested if the system is automatically controlled.(Source: REHVA) – If so, what happens when we want to be able to control the shading ourselves?



"Override" refers to interrupting the action of (an automatic device), typically in order to take manual control.

To create the optimal indoor environment, the transmission of light and warmth must be addressed early in the design process, when considering the environmental conditions, geographical location and building orientation. The result being that daylight levels can be maximized and controlled, whatever the season or time of day.

However, the aim is for the indoor environment to be as stable and comfortable as possible for the occupants' comfort and to achieve energy savings. The use of real data based on environmental conditions, combined with the correct programming will achieve the optimum result.

#### What happens when the occupants want to be able to control the shading themselves?

Freedom to adjust and control the environment at a local level is a key factor. Our solutions allow for 'personal override', enabling individual, temporary adjustments to be made if needed, such as in a meeting room, when presentation screens are being used.



### Product

#### Example

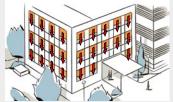
**Op. 1** Priority #1: Automatic control by animeo solution Priority #2: Local control by building user



1. A building user is rolling up the shading device with remote controller



2. If the sensor detected much daylight than set-up value



3. All shading devices are closed by automatic control including rolling up one. (Original automatic control system)





1. Every shading device is being auto controlled (closed) by weather sensor



2. But if occupants want to roll up the shading device for daylighting at the same time



3. Every shading device is operated by automatic control except individual controlled one. (*override*)

#### Local user override through Somfy radio technology RTS

To create the best result, the solution must be considered early in the building's design, when looking at the overall environmental conditions and orientation of the building facades.

For local commands, there will always be a specific Somfy unit available with the required number of channels depending on the number of blinds and the layout of the room. The various technologies (radio, wired, digital, etc.) offer a number of benefits that are tailored to each type of building.

Functions to enh	How does it work?		animeo solution compatibility			
Manual override	Occupants can always control their own blindsWith a RTS cardusing a wall switch, a remote control or aplugged into the Nweb remote in order to avoid feeling a loss ofController by locationcontrol due to the automated system.switch or web remote		ne Motor ocal		IB+ IP KNX	
		IB+	IP/RS4	85	KNX	
Auto/Manual pric	$\checkmark$			$\checkmark$		
Auto/Manual pric	$\checkmark$	-		$\checkmark$		



## Product

#### - Automation system via -



#### Compact Sensor

Intelligent compact size weather station for automatic building control as animeo IB+ or KNX. Monitored communication between building Controller and Compact Sensor is available.

• Compact Sensor includes SUN (90°,180°,270°), WIND without moving parts, OUTSIDE TEMPERATURE, RAIN, GPS RECEIVER for Time Synchronisation



#### Weather Station M8 / M13

Small and discreet new weather station providing weather information to the building automation system. For façade and roof mounting.

- M8 includes WIND SPEED, BRIGHTNESS x4, RAIN, TEMPERATURE, DATE AND TIME for Brightness Correction
- M13 includes WIND SPEED, BRIGHTNESS x8, RAIN, TEMPERATURE, DATE AND TIME for Brightness Correction



### For Override Function

Smoove IB Origin Manual control of several motors over IB bus. Comfortable central control or group operability.



#### Animeo IP Web remote control

Manual user control. Allows control of one blind or a group of blinds via a web page from a user's computer or a smartphone.



#### Situo 1 / Situo 5

To control 1 application or 1 group of applications. To control up to 5 applications or 5 groups of applications.



#### Situo 1 / Situo 5 Variation

To control 1 application or 1 group of applications. To control up to 5 applications or 5 groups of applications.

Include tilting function for venetian slats.



#### Decoflex Digital Keypad

A wired RS485 user interface for local control of individual motors or groups of motors. Provides push button on front for

up to 8 buttons including up, down, stop, eco mode and presets.



### **Case Study**

#### Project Name: China Merchants Bank Hangzhou Branch

Location: Hangzhou, China Total area: 301,389.2 sq ft No. of floor: 17 floors <u>No. of windows: 1,864 approx</u>

#### Completion Year: 2021

Somfy Solution offered: Roller Blinds Somfy SQ6600

Motor: LT 50 6/17-727 no. Sonesse 50 6/17-150 no.

Control: Other brand

### Growing sustainably and achieving sustainable goals is part of The China Merchant Bank (CMB)'s sustainability strategy.

To uphold the concept of bringing green operations and workplace, CMB has considered environmental sustainability in the process of design and construction of each office building. Following the success of obtaining LEED gold accreditation in their Shanghai headquarter tower, Hangzhou office is one of the branches which they obtain the WELL Platinum. Somfy is honored to be appointed as the central blinds suppliers for all China Merchant Bank offices in the China region, following a competitive tendering process.

In this project, Somfy's WT motors was integrated with their system , enabling solar automation with override features. In terms of building system control, the motorized blinds are programmed in such a way that they quietly and unobtrusively respond to changing position of the sun, maximizing natural daylight and improving occupant comfort, while preserving views and eliminating disruptive glare at the same time. The system also gives users in the building the freedom to override the system control, and control the blinds manually to reduce glare and heat gain based on their own preferences.









# **Case Study**

Project Name: GARTNER Location: Gurugram, INDIA Builder: DLF Group Architect: Spacematrix Total area: 203,755 sq ft No. of floor: 4 floors No. of windows: 530 approx

Completion Year: 2022 Somfy Solution Offered: Animeo IP RS485 Motor: Sonesse 50 DC RS485 4/25 motor- 261 nos

Control: RS485 Bridging Adaptor RS485 Terminator BMS Interface Weather Station

### Gartner team is committed to use the latest technology in order to control and manage natural light entering the space. The automated shades increase productivity of employees in an office space.

Animeo IP RS485 is a sustainable & scalable solution with no zone limitation, dedicated to buildings from medium to large size. This system supports digitally addressable motors, which simplifies the wiring & installation efforts. IP RS485 works on a bi-directional technology to provide feedback of motors on a real time basis.

#### Key functionalities requirement:

- 1. Sun Control automatically lower shades to cut direct glare and maintain pre-defined solar depth entrance into the space.
- 2. Position Feedback from each motor
- 3. Error message from every motor in case of failure.
- 4. Individual/Group motor control via BACnet
- 5. Individual Control of shades using smart devices
- Position Control from BMS BACnet over IP to 5%, 10% to 100%
- 7. Centralized Control through Laptop or PC via Somfy software.

Flexible to install, easy to use and scalable, the Somfy digital solution Animeo IP/RS485, installed in Gartner Corporate office, is a perfect match for the needs. For a better comfort, the occupants can override the automatic functions via smart devices configured with the system.







### **Meet Our Team**



